Your Global Automation Partner

TURCK





Connectivity Portfolio

TURCK

Your Global Automation Partner





The Company

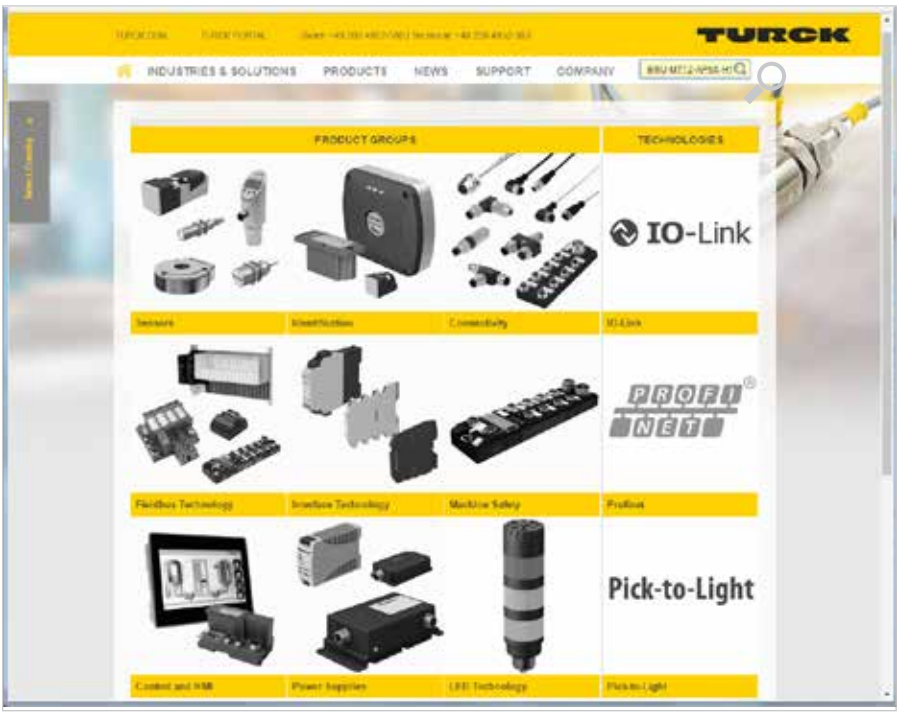
Turck is a leading manufacturer in the industrial automation sector. With more than 4200 employees in 28 countries and with sales partners in a further 60 countries, we are always close to you worldwide. As a specialist in sensor, fieldbus, connection and interface technology, as well as Human Machine Interfaces (HMI) and RFID systems, we offer efficient solutions for factory and process automation. State-of-the-art production facilities in Germany, Switzerland, the USA, Mexico and China enable our family-owned enterprise to meet the requirements of the local markets quickly and flexibly at any time.

The Markets

Whether in mechanical and system engineering, in the automotive, transport and handling, mobile equipment, food and packaging sectors, or in the chemical and pharmaceutical industry: automation solutions and products from Turck increase the availability and efficiency of your machines and plants. The effective standardization of the products also reduces costs for procurement, inventory management, installation and operational reliability selectively. Specific industrial application know-how gained from close dialog with customers, coupled with electronic development and manufacturing at the highest level ensure optimum solutions for your automation tasks.

The Service

With over 50 years of experience and an extensive know-how, we can support you in every project phase with efficient services – from the initial analysis right through to the tailored solution and commissioning of your application. The prime objective of our activities is to continuously improve the efficiency and productivity of your manufacturing process or machine. The excellent quality of our products, combined with the supportive services of our specialists and a fast delivery service, ensures the high availability of your systems.



The Product Database

Whether for sensor, fieldbus, interface or connection technology, for human HMIs or RFID systems – on www.turck.com matching solutions, data and information are only a click away.

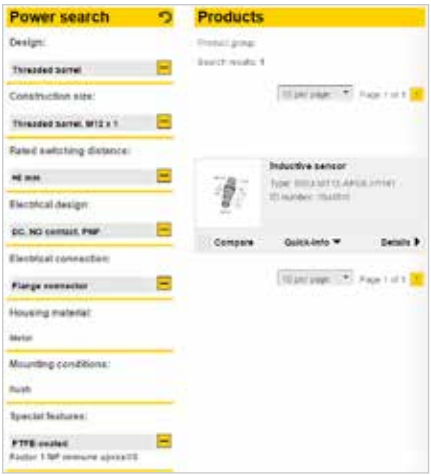
Direct search: Search on full-text
You are looking for a specific product name, a known identification number or a special feature? Then enter the text directly in the search box top right.

Power search: Search features
You are looking for a product that meets certain parameters? Then use the power search. It leads you straight to your solution:
PRODUCTS ▶ PRODUCT CATEGORIES ▶ Power Search.

Direct Search – Full-Text:
Type/ID Number



Power Search:
Technical Parameters



Connectivity – Portfolio

The connectivity portfolio consists of female and male connectors, receptacles and feed-throughs, connection cable and extension cordsets, fieldbus cables and junctions in different designs and types. Field-wireable connectors complement the selection range, allowing you to use them with existing cables.

The product chapters contain the relevant type code and an overview of the particular product group. The "Types and Data" selection tables show the individual products with all the essential features. If you already know the type designation, the type index will guide you directly to the required product.

In the online variant you can access the Turck product database directly on the Internet via a link at the type designation – this provides extensive information on the product groups you require.



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Connectivity for BL ident® RFID System
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Connectivity for PROFIBUS-DP
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Connectivity for CAN/DeviceNet™
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Connectivity for Ethernet
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FOUNDATION™ fieldbus
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PROFIBUS-PA
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Connectivity for Power Supplies
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Sensor and Actuator Cables



For connections in harsh industrial environments, Turck offers standardized and customized solutions for all requirements. The portfolio includes female and male connectors, female and male receptacles, field-wireable female and male connectors as well as connection and extension cables, 4 and 8-way junctions, Y-splitters and block junctions in M8 × 1, Ø 8 mm, M12 × 1, M16 × 0.75, M23 × 1,1/2" and 7/8" designs. Field-wireable connectors round off the range so that the connection can also be carried out with the existing cables. There is a connector for virtually every Turck sensor available.

As a universal product series, the TEL (PVC) and TXL (PUR) connection and extension cables effectively reduce the effort required for installation and stock-keeping. Both the M12 × 1 and M8 × 1 variants are offered as straight and angled female and male connectors as well as 3- and 4-pin variants. The M12 connector is additionally available as a 5-pin variant. The entire product range meets the requirements of protection type IP67.

Note: The figures and dimension drawings of the coupling nuts comply with the design state of 22.10.2016.

Sensor and Actuator Cables – Overview

Connection and Extension Cables		Page
	M8 x 1	14
	Ø 8 mm (Snap-on Type)	74
	M12 x 1	90
	M8 x 1 – M12 x 1	234
	7/8"	242

Field-Wireable Connectors		Page
	M8 x 1	256
	M12 x 1	259
	7/8"	268
	M16 x 0.75	273
	M23 x 1	274
	Design A, B, BI, C, CI	276

Valve connector		Page
	Design A	278
	Design B	286
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	Design C	294

Receptacles		Page
	Receptacles - M8 x 1	298
	Built-in Connector - M8/1/Ø 8 mm	300
	Receptacles - M12 x 1	302

Passive junction box		Page
	Junction box	308
	Junction, 2-port	312

Accessories		Page
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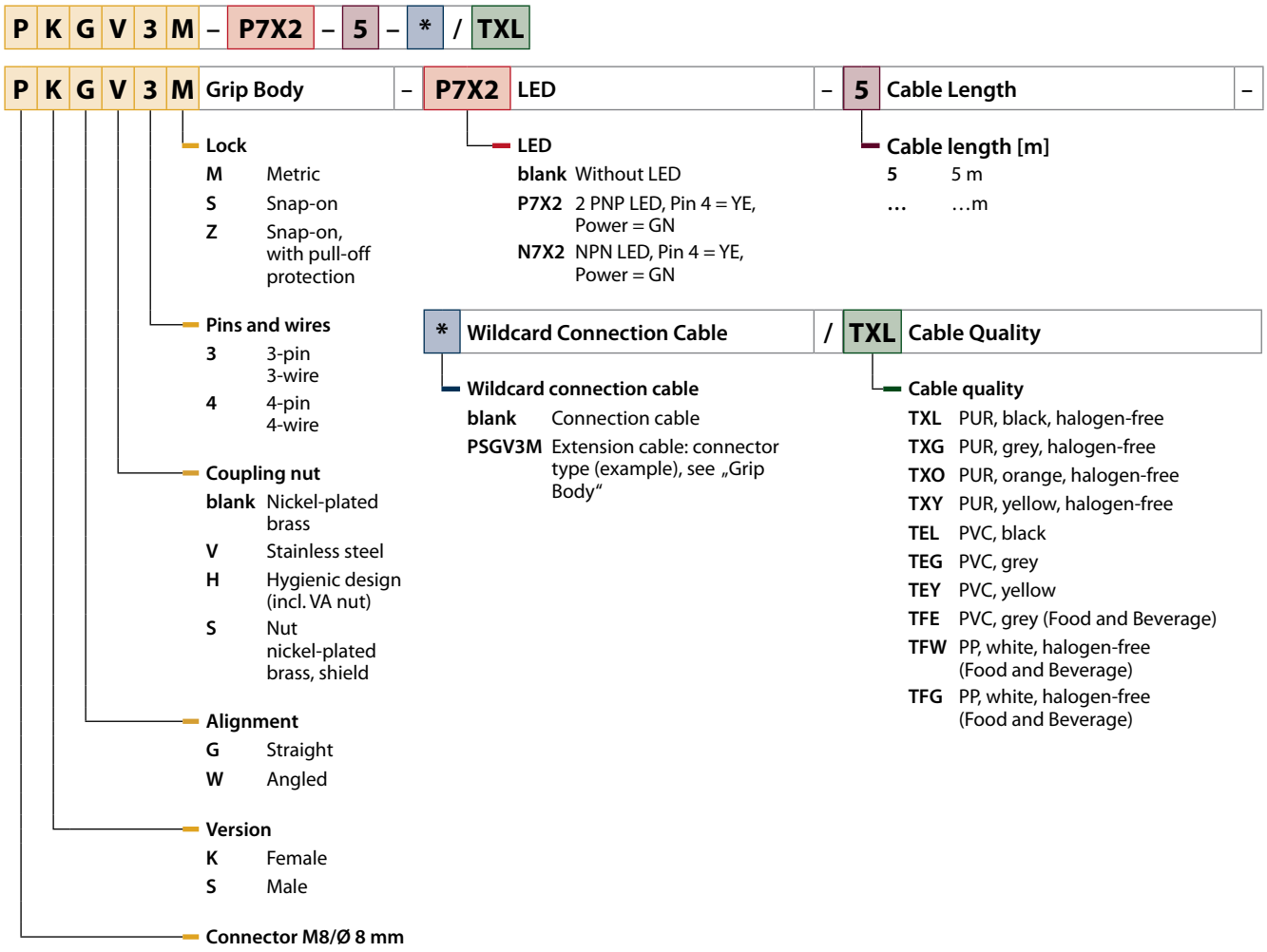
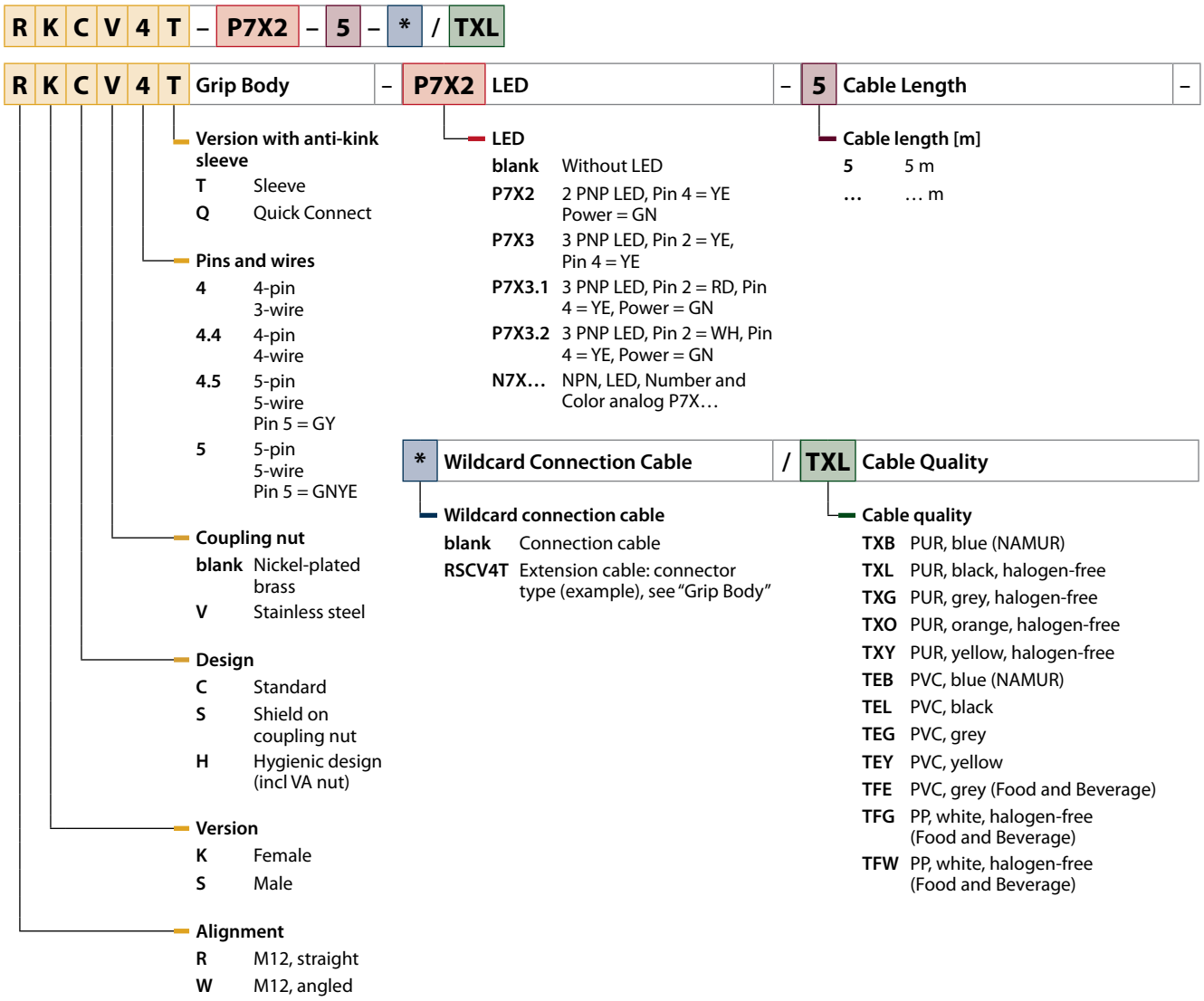
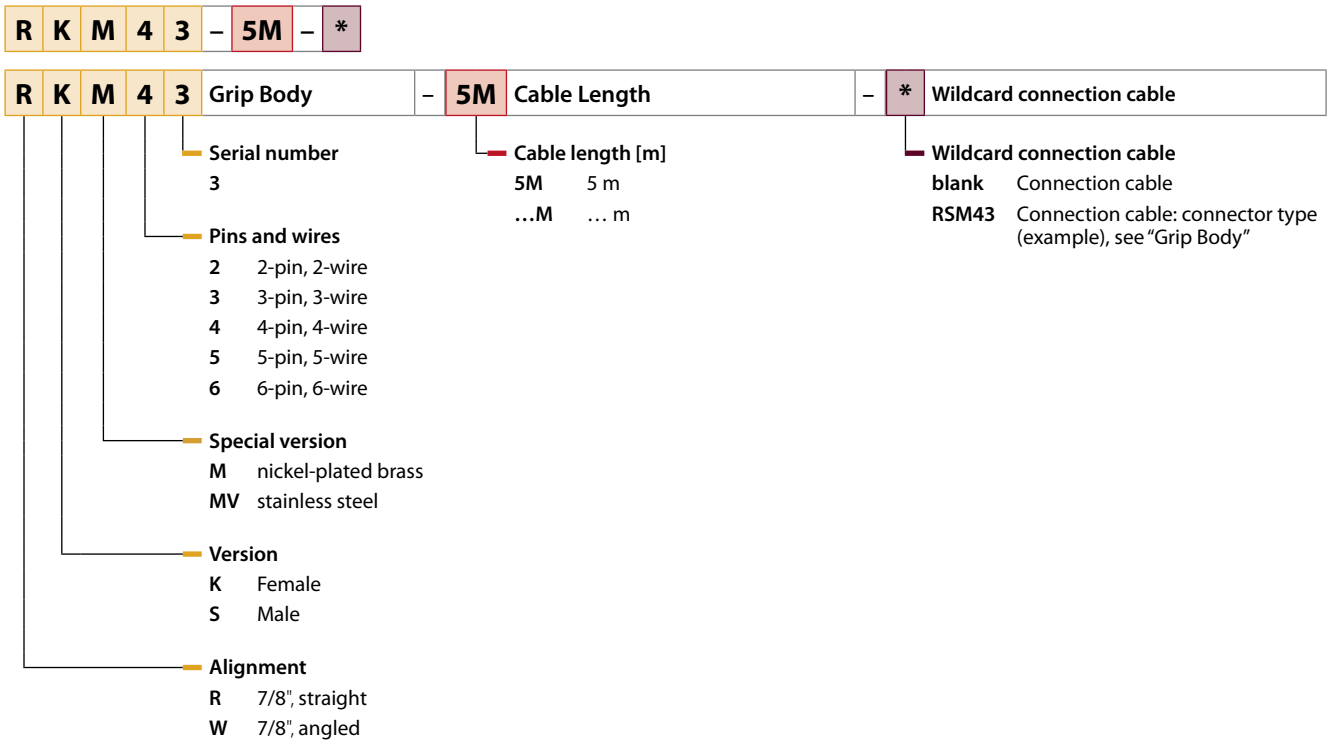
Type Code – Connection and Extension Cables M8



Type Code – Connection and Extension Cables M12



Type Code – 7/8“ Cables



Type Code – Valve Connector

V A S 22 – A 80E – 5 – * /TXL

V DIN 43650 Valve Cordset

DIN 43650 Valve cordset

- **T** Cable outlet on PE
- **V** Cable outlet opposite to PE

A Design

Design

- **A** 27.5 x 27.5 mm; 18 mm contact gap
- **B** 21.5 x 28 mm; 10 mm contact gap
- **I** 21.5 x 28 mm; 11 mm contact gap
- **C8** 16 x 16 mm; 8 mm contact gap
- **C9** 16 x 16 mm; 9.4 mm contact gap

S Housing Material

Housing material

- **S** TPU, translucent black

22 Assignment

Assignment

- **02** 2 contacts + PE
- **03** 3 contacts + PE
- **04** 3 contacts + PE for pressure switches
- **22** 2 contacts + 2 PE bridged

– A Visualization/Wiring

Visualization/Wiring

- **A** no, no, 230 VAC/DC
- **B** LED yellow, no, 24…48 VAC/DC
- **D** LED yellow, Varistor, 24…48 VAC/DC
- **E** LED yellow, Varistor, 230 VAC/DC
- **F** LED yellow, diode, 24…48 VDC
- **K** LED green/red (pressure switch), 24 VDC
- **L** LED yellow, no, 24 VAC/DC
- **M** LED yellow, no, 48 VAC/DC
- **P** LED yellow, Varistor, 24 VAC/DC
- **R** LED yellow, Varistor, 48 VAC/DC
- **S** LED yellow, transil diode, 24 VAC/DC
- **T** LED yellow, Z-diode, 24 VAC/DC

80E Cable Type

Cable type

- **W** Molded connector
- **80E** 3 x 0.75 mm²
- **81E** 4 x 0.75 mm²

5 Cable Length

Cable length [m]

- **5** 5 m
- **…** …m
- ***** Valve cordset = Length between the valve connectors

– * Extension Cable

Extension cable

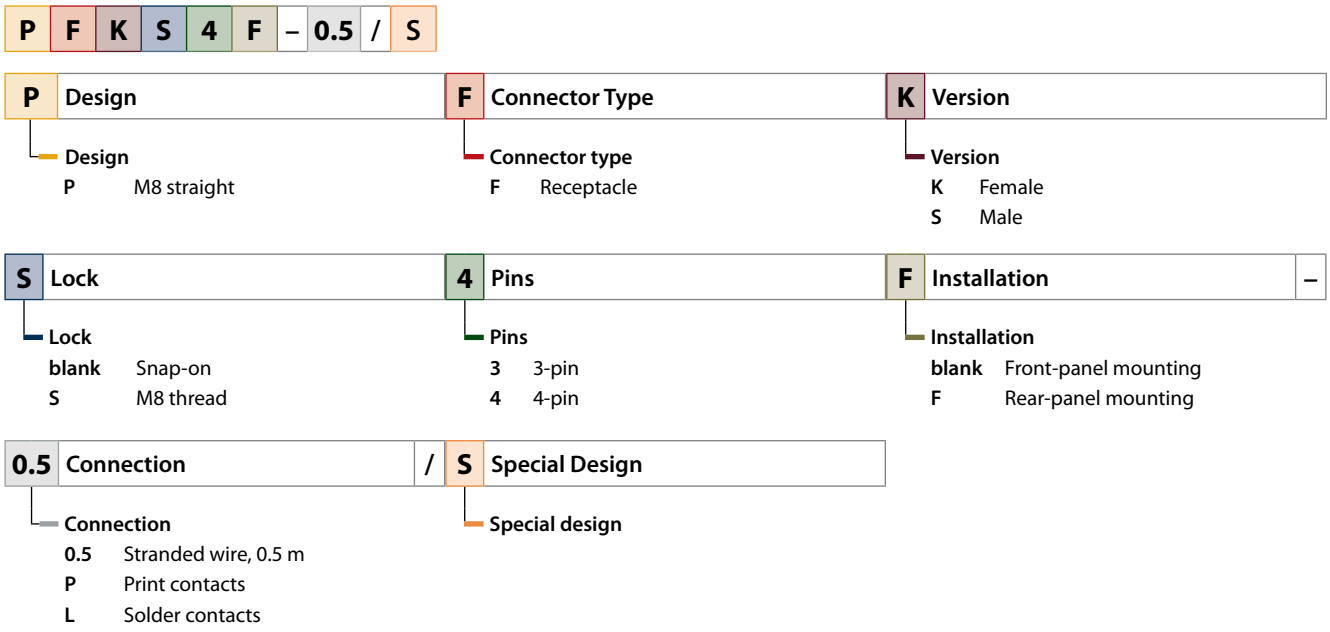
- **RSC5T** Extension cable: connector type/grip body (example)
- **DAS…** Dual valve cable only with connector design type A, cable type 81E, connect cable to valve connector 2

– /TXL Cable Quality

Cable quality

- **TXL** PUR, black, halogen-free
- **TEG** PVC, gray

Type Code – M8 Receptacles



Type Code – M12 Receptacles

EC	–	F	K	D	H	E	4	–	*	/	16	/	S

EC Mounting Thread

Mounting thread
- **EC** Mounting thread, metric
- **blank** Mounting thread PG

– **F** Connector Type

Connector type
- **F** Receptacle

K Version

Version
- **K** Female
- **S** Male

D Alignment

Alignment
- **D** Rotatable

H Alignment

Alignment
- **H** Hight adjustment with locknut

E Housing/Coding

Housing/Coding
- **E** Stainless steel
- **W** B-coded (PROFIBUS-DP)

4 Pins

Pins
- **3** 3-pin
- **4** 4-pin
- **5** 5-pin
- **8** 8-pin
- **12** 12-pin

– ***** Connection

Connection
- **0.5** Stranded wire, 0.5 m
- **L** Solder contacts
- **P** Print contacts

/ **16** Mounting thread /

Mounting thread
- **16** M16
- **20** M20
- **blank** PG9
- **13.5** PG13.5

S Special Design

Special design

Type Code – Sensor/Actuator Junctions, Connectors

TB – 8 M12 V – 5 P 3 – 5 - CSM19 / TXL

TB Product series
- Junction Box

– **8 M12 V** Ports
- **Material threaded bush**
  - **–** brass, nickel-plated
  - **V** stainless steel
- **Connector**
  - **M12** male M12 x 1
- **Number of ports**
  - **4** 4 ports
  - **6** 6 ports
  - **8** 8 ports

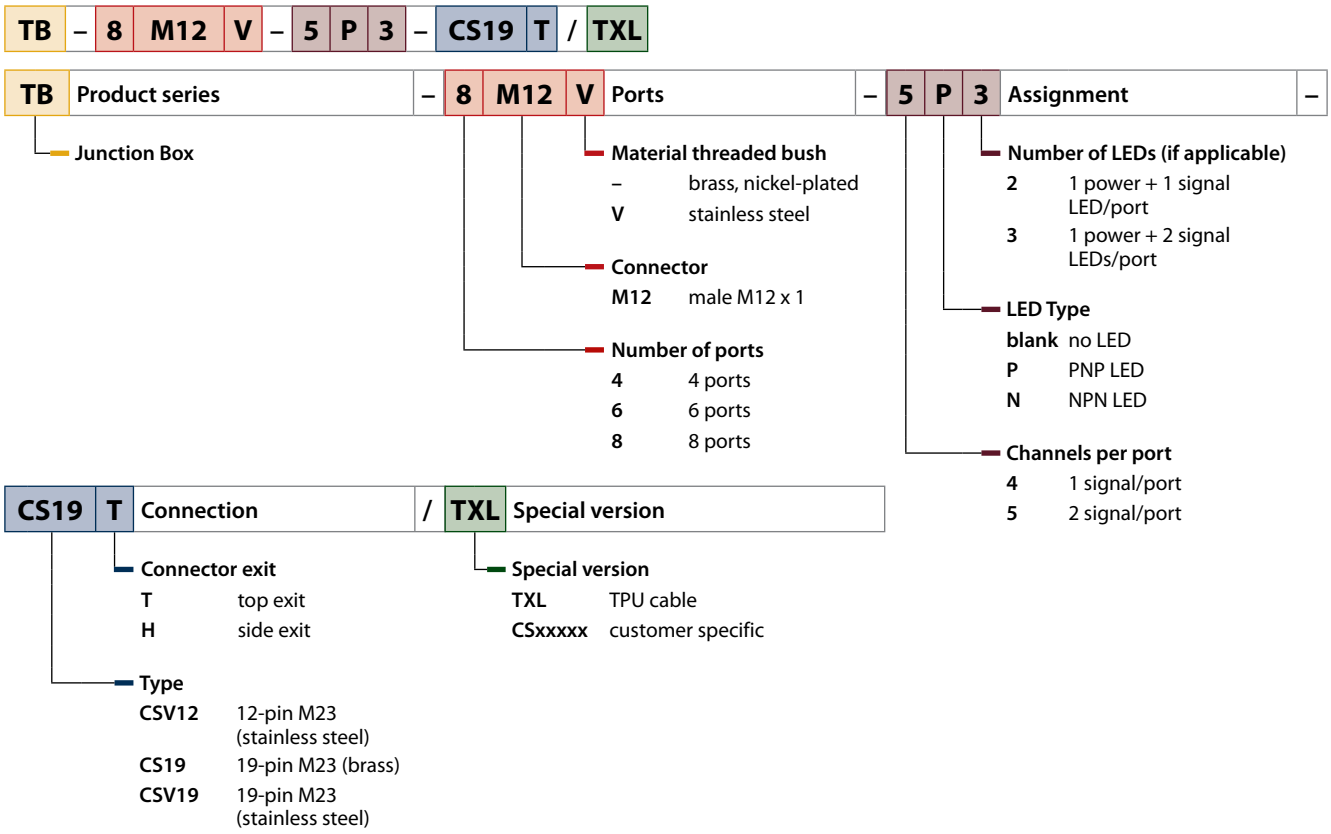
– **5 P 3** Assignment –
- **Number of LEDs (if applicable)**
  - **2** 1 power + 1 signal LED/port
  - **3** 1 power + 2 signal LEDs/port
- **LED Type**
  - **blank** no LED
  - **P** PNP LED
  - **N** NPN LED
- **Channels per port**
  - **4** 1 signal/port
  - **5** 2 signal/port

5 Cable length
- **Cable length**
  - **5** 5 m
  - **…** …m

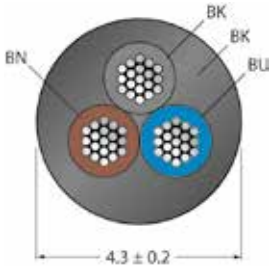
– **CSM19** Connection
- **Molded homerun connector type (if applicable)**
  - **CSM12** 12-pin M23 (brass)
  - **CSM19** 19-pin M23 (brass)

/ **S** Special version
- **Special version**
  - **TXL** TPU cable
  - **CS…** customer specific

Type Code – Sensor/Actuator Junctions, Homerun Cable



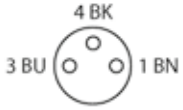
PUR Cable – Black



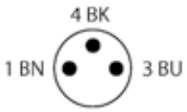
- 3-pin
- Qualified for drag chain use and flame-retardant
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS
- cULus approved



Female connector

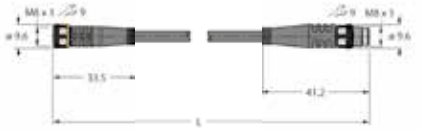
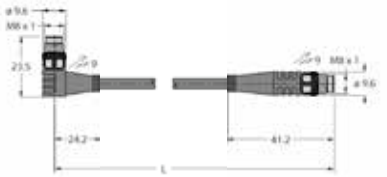


Male connector

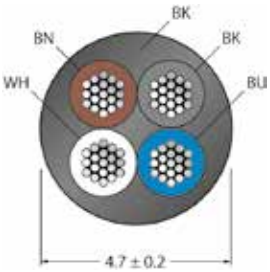


Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	4.3 mm ± 0.20
Cable jacket	PUR, Black
Core insulation	PP (BN, BU, BK)
Core cross-section	3 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	60 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm^2
Max. tensile strength (dynamic)	≤ 20 N/mm^2
Bending cycles	> 5 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s^2
Admissible travel path, horizontal	5 m (at 5 m/s^2)
Admissible travel path, vertical	2 m (at 5 m/s^2)
Admissible traversing speed	3.3 m/s
Torsional stress	± 180 °/m
Ambient temperature	
Stationary usage	-50…+80 °C
Non-stationary usage	-25…+80 °C
Drag chain operation	-25…+60 °C

Types and Features — Selection Table

	Cable length [m]	ID number	Type
	100	6627992	CABLE3X0.34-XX-PUR-BK-100M/TXL
	500	6627993	CABLE3X0.34-XX-PUR-BK-500M/TXL
	2	6625550	PKG3M-2/TXL
	5	6625551	PKG3M-5/TXL
	10	6625552	PKG3M-10/TXL
	2	6625556	PKW3M-2/TXL
	5	6625557	PKW3M-5/TXL
	10	6625558	PKW3M-10/TXL
	2	6625562	PSG3M-2/TXL
	5	6625563	PSG3M-5/TXL
	10	6625564	PSG3M-10/TXL
	2	6625568	PSW3M-2/TXL
	5	6625569	PSW3M-5/TXL
	10	6625570	PSW3M-10/TXL
	0.3	6625665	PKG3M-0.3-PSG3M/TXL
	0.6	6625666	PKG3M-0.6-PSG3M/TXL
	1	6625667	PKG3M-1-PSG3M/TXL
	2	6625668	PKG3M-2-PSG3M/TXL
	5	6627147	PKG3M-5-PSG3M/TXL
	0.3	6627098	PKW3M-0.3-PSG3M/TXL
	0.6	6627101	PKW3M-0.6-PSG3M/TXL
	1	6627110	PKW3M-1-PSG3M/TXL
	2	6627123	PKW3M-2-PSG3M/TXL
	5	6626822	PKW3M-5-PSG3M/TXL

PUR Cable – Black



- 4-pin
- Qualified for drag chain use and flame-retardant
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS
- cULus approved



Female connector



Male connector



Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	4.7 mm ± 0.20
Cable jacket	PUR, Black
Core insulation	PP (BN, WH, BU, BK)
Core cross-section	4 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	30 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm^2
Max. tensile strength (dynamic)	≤ 20 N/mm^2
Bending cycles	> 5 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s^2
Admissible travel path, horizontal	5 m (at 5 m/s^2)
Admissible travel path, vertical	2 m (at 5 m/s^2)
Admissible traversing speed	3.3 m/s
Torsional stress	± 180 °/m
Ambient temperature	
Stationary usage	-50…+80 °C
Non-stationary usage	-25…+80 °C
Drag chain operation	-25…+60 °C

Types and Features — Selection Table

	Cable length [m]	ID number	Type
	100	6627994	CABLE4X0.34-XX-PUR-BK-100M/TXL
	500	6627995	CABLE4X0.34-XX-PUR-BK-500M/TXL
	2	6625553	PKG4M-2/TXL
	5	6625554	PKG4M-5/TXL
	10	6625555	PKG4M-10/TXL
	2	6625559	PKW4M-2/TXL
	5	6625560	PKW4M-5/TXL
	10	6625561	PKW4M-10/TXL
	2	6625565	PSG4M-2/TXL
	5	6625566	PSG4M-5/TXL
	10	6625567	PSG4M-10/TXL
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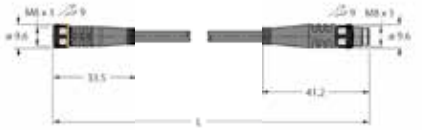
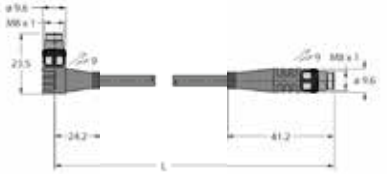
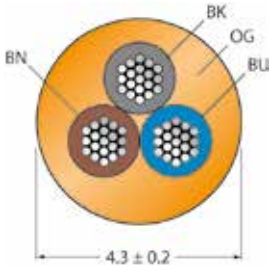
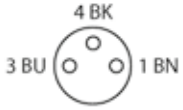
	10	6625573	PSW4M-10/TXL
	0.3	6625670	PKG4M-0.3-PSG4M/TXL
	0.6	6625671	PKG4M-0.6-PSG4M/TXL
	1	6625672	PKG4M-1-PSG4M/TXL
	2	6625673	PKG4M-2-PSG4M/TXL
	5	6627076	PKG4M-5-PSG4M/TXL
	0.3	6626641	PKW4M-0.3-PSG4M/TXL
	0.6	6626646	PKW4M-0.6-PSG4M/TXL
	1	6626851	PKW4M-1-PSG4M/TXL
	2	6626664	PKW4M-2-PSG4M/TXL
	5	6626686	PKW4M-5-PSG4M/TXL

PUR Cable – Orange

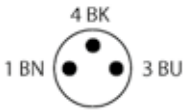


- 3-pin
- Qualified for drag chain use and flame-retardant
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS
- cULus approved

Female connector

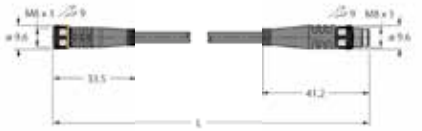
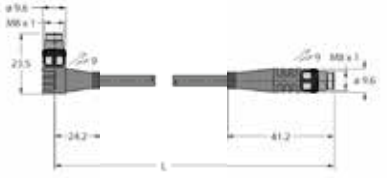


Male connector

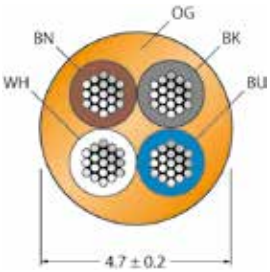


Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	4.3 mm ± 0.20
Cable jacket	PUR, Orange
Core insulation	PP (BN, BU, BK)
Core cross-section	3 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	60 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm^2
Max. tensile strength (dynamic)	≤ 20 N/mm^2
Bending cycles	> 5 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s^2
Admissible travel path, horizontal	5 m (at 5 m/s^2)
Admissible travel path, vertical	2 m (at 5 m/s^2)
Admissible traversing speed	3.3 m/s
Torsional stress	± 180 °/m
Ambient temperature	
Stationary usage	-50…+80 °C
Non-stationary usage	-25…+80 °C
Drag chain operation	-25…+60 °C

Types and Features — Selection Table

	Cable length [m]	ID number	Type
	100	6628620	CABLE3X0.34-XX-PUR-OG-100M/TXO
	500	6628621	CABLE3X0.34-XX-PUR-OG-500M/TXO
	2	6627877	PKG3M-2/TXO
	5	6628595	PKG3M-5/TXO
	10	6629360	PKG3M-10/TXO
	2	6630007	PKW3M-2/TXO
	5	6627901	PKW3M-5/TXO
	10	6630008	PKW3M-10/TXO
	2	6630009	PSG3M-2/TXO
	5	6630010	PSG3M-5/TXO
	10	6630011	PSG3M-10/TXO
	2	6630012	PSW3M-2/TXO
	5	6630013	PSW3M-5/TXO
	10	6630014	PSW3M-10/TXO
	0.3	6630015	PKG3M-0.3-PSG3M/TXO
	0.6	6630016	PKG3M-0.6-PSG3M/TXO
	1	6630017	PKG3M-1-PSG3M/TXO
	2	6630018	PKG3M-2-PSG3M/TXO
	5	6628896	PKG3M-5-PSG3M/TXO
	0.3	6630019	PKW3M-0.3-PSG3M/TXO
	0.6	6630020	PKW3M-0.6-PSG3M/TXO
	1	6630021	PKW3M-1-PSG3M/TXO
	2	6630022	PKW3M-2-PSG3M/TXO
	5	6630023	PKW3M-5-PSG3M/TXO

PUR Cable – Orange



- 4-pin
- Qualified for drag chain use and flame-retardant
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS
- cULus approved

Female connector

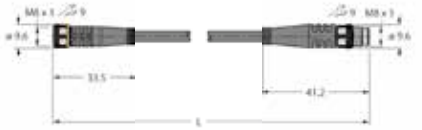
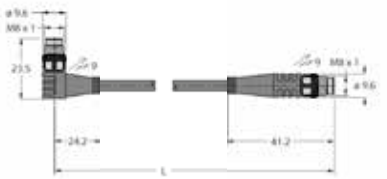


Male connector

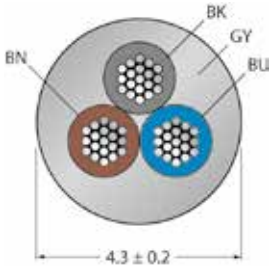


Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	4.7 mm ± 0.20
Cable jacket	PUR, Orange
Core insulation	PP (BN, WH, BU, BK)
Core cross-section	4 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	30 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm^2
Max. tensile strength (dynamic)	≤ 20 N/mm^2
Bending cycles	> 5 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s^2
Admissible travel path, horizontal	5 m (at 5 m/s^2)
Admissible travel path, vertical	2 m (at 5 m/s^2)
Admissible traversing speed	3.3 m/s
Torsional stress	± 180 °/m
Ambient temperature	
Stationary usage	-50…+80 °C
Non-stationary usage	-25…+80 °C
Drag chain operation	-25…+60 °C

Types and Features — Selection Table

	Cable length [m]	ID number	Type
	100	6628622	CABLE4X0.34-XX-PUR-OR-100M/TXO
	500	6628623	CABLE4X0.34-XX-PUR-OR-500M/TXO
	2	6628895	PKG4M-2/TXO
	5	6627003	PKG4M-5/TXO
	10	6629361	PKG4M-10/TXO
	2	6630024	PKW4M-2/TXO
	5	6630025	PKW4M-5/TXO
	10	6629362	PKW4M-10/TXO
	2	6630026	PSG4M-2/TXO
	5	6630027	PSG4M-5/TXO
	10	6630028	PSG4M-10/TXO
	2	6630029	PSW4M-2/TXO
	5	6630030	PSW4M-5/TXO
	10	6630031	PSW4M-10/TXO
	0.3	6630032	PKG4M-0.3-PSG4M/TXO
	0.6	6630033	PKG4M-0.6-PSG4M/TXO
	1	6629264	PKG4M-1-PSG4M/TXO
	2	6630034	PKG4M-2-PSG4M/TXO
	5	6628897	PKG4M-5-PSG4M/TXO
	0.3	6630035	PKW4M-0.3-PSG4M/TXO
	0.6	6630036	PKW4M-0.6-PSG4M/TXO
	1	6630037	PKW4M-1-PSG4M/TXO
	2	6630038	PKW4M-2-PSG4M/TXO
	5	6630039	PKW4M-5-PSG4M/TXO

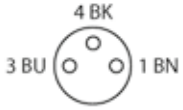
PUR Cable – Gray



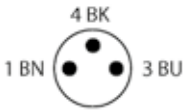
- 3-pin
- Qualified for drag chain use and flame-retardant
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS
- cULus approved



Female connector



Male connector



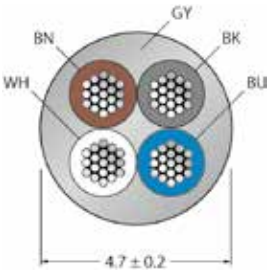
Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	4.3 mm ± 0.20
Cable jacket	PUR, Gray
Core insulation	PP (BN, BU, BK)
Core cross-section	3 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	60 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm^2
Max. tensile strength (dynamic)	≤ 20 N/mm^2
Bending cycles	> 5 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s^2
Admissible travel path, horizontal	5 m (at 5 m/s^2)
Admissible travel path, vertical	2 m (at 5 m/s^2)
Admissible traversing speed	3.3 m/s
Torsional stress	± 180 °/m
Ambient temperature	
Stationary usage	-50…+80 °C
Non-stationary usage	-25…+80 °C
Drag chain operation	-25…+60 °C

Types and Features — Selection Table



Cable length [m]	ID number	Type
100	6628632	CABLE3X0.34-XX-PUR-GY-100M/TXG
500	6628633	CABLE3X0.34-XX-PUR-GY-500M/TXG
2	6628602	PKG3M-2/TXG
5	6628603	PKG3M-5/TXG
10	6628604	PKG3M-10/TXG
2	6628605	PKW3M-2/TXG
5	6628606	PKW3M-5/TXG
10	6628607	PKW3M-10/TXG
2	6630040	PSG3M-2/TXG
5	6629023	PSG3M-5/TXG
10	6630041	PSG3M-10/TXG
2	6630042	PSW3M-2/TXG
5	6630043	PSW3M-5/TXG
10	6630044	PSW3M-10/TXG
0.3	6629082	PKG3M-0.3-PSG3M/TXG
0.6	6629083	PKG3M-0.6-PSG3M/TXG
1	6629084	PKG3M-1-PSG3M/TXG
2	6629086	PKG3M-2-PSG3M/TXG
5	6630045	PKG3M-5-PSG3M/TXG
0.3	6629087	PKW3M-0.3-PSG3M/TXG
0.6	6629088	PKW3M-0.6-PSG3M/TXG
1	6629089	PKW3M-1-PSG3M/TXG
2	6629091	PKW3M-2-PSG3M/TXG
5	6630046	PKW3M-5-PSG3M/TXG

PUR Cable – Gray



- 4-pin
- Qualified for drag chain use and flame-retardant
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS
- cULus approved

Female connector



Male connector



Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	4.7 mm ± 0.20
Cable jacket	PUR, Gray
Core insulation	PP (BN, WH, BU, BK)
Core cross-section	4 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	30 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm^2
Max. tensile strength (dynamic)	≤ 20 N/mm^2
Bending cycles	> 5 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s^2
Admissible travel path, horizontal	5 m (at 5 m/s^2)
Admissible travel path, vertical	2 m (at 5 m/s^2)
Admissible traversing speed	3.3 m/s
Torsional stress	± 180 °/m
Ambient temperature	
Stationary usage	-50…+80 °C
Non-stationary usage	-25…+80 °C
Drag chain operation	-25…+60 °C

Types and Features — Selection Table

	Cable length [m]	ID number	Type
	100	6628634	CABLE4X0.34-XX-PUR-GY-100M/TXG
	500	6628635	CABLE4X0.34-XX-PUR-GY-500M/TXG
	2	6628608	PKG4M-2/TXG
	5	6628609	PKG4M-5/TXG
	10	6628610	PKG4M-10/TXG
	2	6628611	PKW4M-2/TXG
	5	6628612	PKW4M-5/TXG
	10	6628613	PKW4M-10/TXG
	2	6630047	PSG4M-2/TXG
	5	6630048	PSG4M-5/TXG
	10	6630049	PSG4M-10/TXG
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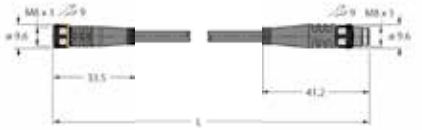
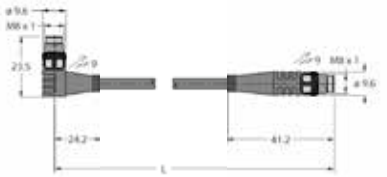
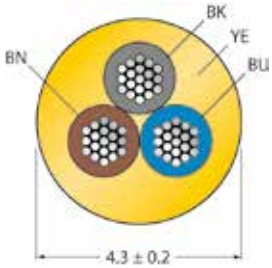
	10	6630052	PSW4M-10/TXG
	0.3	6630053	PKG4M-0.3-PSG4M/TXG
	0.6	6629092	PKG4M-0.6-PSG4M/TXG
	1	6630054	PKG4M-1-PSG4M/TXG
	2	6630055	PKG4M-2-PSG4M/TXG
	5	6630056	PKG4M-5-PSG4M/TXG
	0.3	6630057	PKW4M-0.3-PSG4M/TXG
	0.6	6630520	PKW4M-0.6-PSG4M/TXG
	1	6630058	PKW4M-1-PSG4M/TXG
	5	6630060	PKW4M-5-PSG4M/TXG
	2	6630059	PKW4M-2-PSG4M/TXG

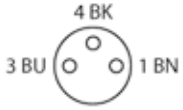
PUR Cable – Yellow



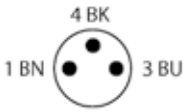
- 3-pin
- Qualified for drag chain use and flame-retardant
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS
- cULus approved



Female connector



Male connector



Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	4.3 mm ± 0.20
Cable jacket	PUR, Yellow
Core insulation	PP (BN, BU, BK)
Core cross-section	3 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	60 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm^2
Max. tensile strength (dynamic)	≤ 20 N/mm^2
Bending cycles	> 5 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s^2
Admissible travel path, horizontal	5 m (at 5 m/s^2)
Admissible travel path, vertical	2 m (at 5 m/s^2)
Admissible traversing speed	3.3 m/s
Torsional stress	± 180 °/m
Ambient temperature	
Stationary usage	-50…+80 °C
Non-stationary usage	-25…+80 °C
Drag chain operation	-25…+60 °C

Types and Features — Selection Table

	Cable length [m]	ID number	Type
	100	6628644	CABLE3X0.34-XX-PUR-YE-100M/TXY
	500	6628645	CABLE3X0.34-XX-PUR-YE-500M/TXY
	2	6630061	PKG3M-2/TXY
	5	6630062	PKG3M-5/TXY
	10	6630063	PKG3M-10/TXY
	2	6630064	PKW3M-2/TXY
	5	6630065	PKW3M-5/TXY
	10	6630066	PKW3M-10/TXY
	2	6630067	PSG3M-2/TXY
	5	6630068	PSG3M-5/TXY
	10	6630069	PSG3M-10/TXY
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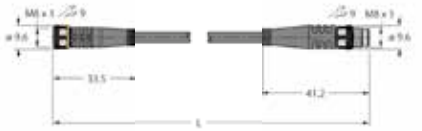
	5	6630071	PSW3M-5/TXY
	10	6630072	PSW3M-10/TXY
	0.3	6630073	PKG3M-0.3-PSG3M/TXY
	0.6	6630074	PKG3M-0.6-PSG3M/TXY
	1	6630075	PKG3M-1-PSG3M/TXY
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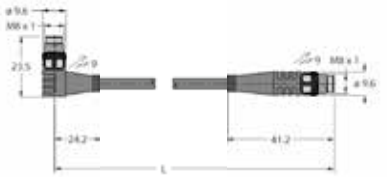
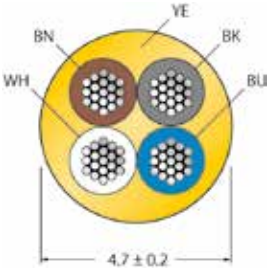
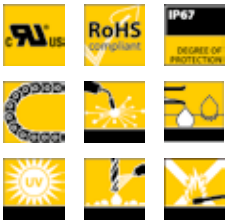
	5	6630077	PKG3M-5-PSG3M/TXY
	0.3	6630078	PKW3M-0.3-PSG3M/TXY
	0.6	6630079	PKW3M-0.6-PSG3M/TXY
	1	6630080	PKW3M-1-PSG3M/TXY
	2	6630081	PKW3M-2-PSG3M/TXY
	5	6630082	PKW3M-5-PSG3M/TXY

PUR Cable – Yellow



- 4-pin
- Qualified for drag chain use and flame-retardant
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS
- cULus approved



Female connector



Male connector



Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	4.7 mm ± 0.20
Cable jacket	PUR, Yellow
Core insulation	PP (BN, WH, BU, BK)
Core cross-section	4 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	30 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm^2
Max. tensile strength (dynamic)	≤ 20 N/mm^2
Bending cycles	> 5 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s^2
Admissible travel path, horizontal	5 m (at 5 m/s^2)
Admissible travel path, vertical	2 m (at 5 m/s^2)
Admissible traversing speed	3.3 m/s
Torsional stress	± 180 °/m
Ambient temperature	
Stationary usage	-50…+80 °C
Non-stationary usage	-25…+80 °C
Drag chain operation	-25…+60 °C

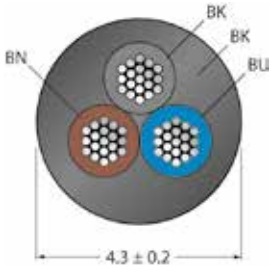
Types and Features — Selection Table





Cable length [m]	ID number	Type
100	6628646	CABLE4X0.34-XX-PUR-YE-100M/TXY
500	6628647	CABLE4X0.34-XX-PUR-YE-500M/TXY
2	6630083	PKG4M-2/TXY
5	6630084	PKG4M-5/TXY
10	6630085	PKG4M-10/TXY
2	6630086	PKW4M-2/TXY
5	6630087	PKW4M-5/TXY
10	6630088	PKW4M-10/TXY
2	6630089	PSG4M-2/TXY
5	6630090	PSG4M-5/TXY
10	6630091	PSG4M-10/TXY
2	6630092	PSW4M-2/TXY
5	6630093	PSW4M-5/TXY
10	6630094	PSW4M-10/TXY
0.3	6630095	PKG4M-0.3-PSG4M/TXY
0.6	6630096	PKG4M-0.6-PSG4M/TXY
1	6630097	PKG4M-1-PSG4M/TXY
2	6630098	PKG4M-2-PSG4M/TXY
5	6630099	PKG4M-5-PSG4M/TXY
0.3	6630100	PKW4M-0.3-PSG4M/TXY
0.6	6630101	PKW4M-0.6-PSG4M/TXY
1	6630102	PKW4M-1-PSG4M/TXY
2	6630103	PKW4M-2-PSG4M/TXY
5	6630104	PKW4M-5-PSG4M/TXY

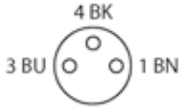
PUR Cable – Black



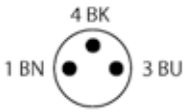
- 3-pin
- Qualified for drag chain use and flame-retardant
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS
- cULus approved



Female connector

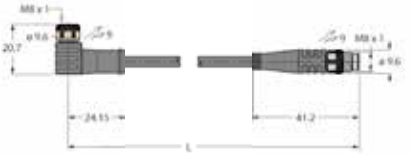


Male connector

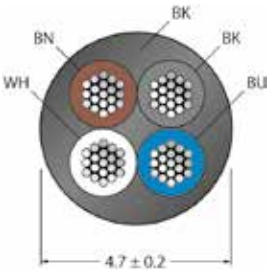


Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	4.3 mm ± 0.20
Cable jacket	PUR, Black
Core insulation	PP (BN, BU, BK)
Core cross-section	3 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	60 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm^2
Max. tensile strength (dynamic)	≤ 20 N/mm^2
Bending cycles	> 5 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s^2
Admissible travel path, horizontal	5 m (at 5 m/s^2)
Admissible travel path, vertical	2 m (at 5 m/s^2)
Admissible traversing speed	3.3 m/s
Torsional stress	± 180 °/m
Ambient temperature	
Stationary usage	-50…+80 °C
Non-stationary usage	-25…+80 °C
Drag chain operation	-25…+60 °C

Types and Features — Selection Table

	Cable length [m]	ID number	Type
	100	6627992	CABLE3X0.34-XX-PUR-BK-100M/TXL
	500	6627993	CABLE3X0.34-XX-PUR-BK-500M/TXL
	2	6626202	PKW3M-P7X2-2/TXL
	5	6626206	PKW3M-P7X2-5/TXL
	10	6626210	PKW3M-P7X2-10/TXL
	0.3	6626190	PKW3M-P7X2-0.3-PSG3M/TXL
	0.6	6626193	PKW3M-P7X2-0.6-PSG3M/TXL
	1	6626195	PKW3M-P7X2-1-PSG3M/TXL
	2	6626133	PKW3M-P7X2-2-PSG3M/TXL
	5	6626138	PKW3M-P7X2-5-PSG3M/TXL

PUR Cable – Black



- 4-pin
- Qualified for drag chain use and flame-retardant
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS
- cULus approved



Female connector

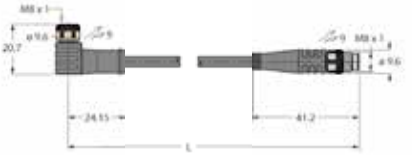


Male connector

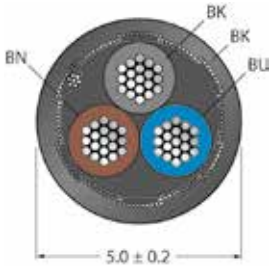


Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	4.7 mm ± 0.20
Cable jacket	PUR, Black
Core insulation	PP (BN, WH, BU, BK)
Core cross-section	4 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	30 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm^2
Max. tensile strength (dynamic)	≤ 20 N/mm^2
Bending cycles	> 5 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s^2
Admissible travel path, horizontal	5 m (at 5 m/s^2)
Admissible travel path, vertical	2 m (at 5 m/s^2)
Admissible traversing speed	3.3 m/s
Torsional stress	± 180 °/m
Ambient temperature	
Stationary usage	-50…+80 °C
Non-stationary usage	-25…+80 °C
Drag chain operation	-25…+60 °C

Types and Features — Selection Table

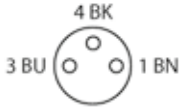
	Cable length [m]	ID number	Type
	100	6627994	CABLE4X0.34-XX-PUR-BK-100M/TXL
	500	6627995	CABLE4X0.34-XX-PUR-BK-500M/TXL
	2	6626108	PKW4M-P7X2-2/TXL
	5	6626112	PKW4M-P7X2-5/TXL
	10	6626187	PKW4M-P7X2-10/TXL
	0.3	6626240	PKW4M-P7X2-0.3-PSG4M/TXL
	0.6	6626241	PKW4M-P7X2-0.6-PSG4M/TXL
	1	6626242	PKW4M-P7X2-1-PSG4M/TXL
	2	6626243	PKW4M-P7X2-2-PSG4M/TXL
	5	6626244	PKW4M-P7X2-5-PSG4M/TXL

PUR Cable – Black, Shielded

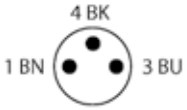


- 3-pin
- Qualified for drag chain use and flame-retardant
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS
- cULus approved

Female connector



Male connector



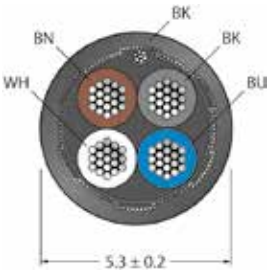
Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	5 mm ± 0.20
Cable jacket	PUR, Black
Core insulation	PP (BN, BU, BK)
Core cross-section	3 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Shield	Aluminum foil, tinned copper braid
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	60 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm^2
Max. tensile strength (dynamic)	≤ 20 N/mm^2
Bending cycles	> 2 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s^2
Admissible travel path, horizontal	5 m (at 5 m/s^2)
Admissible travel path, vertical	2 m (at 5 m/s^2)
Admissible traversing speed	3.3 m/s
Torsional stress	± 180 °/m
Ambient temperature	
Stationary usage	-50…+80 °C
Non-stationary usage	-25…+80 °C
Drag chain operation	-25…+60 °C

Types and Features — Selection Table



Cable length [m]	ID number	Type
100	6627956	CABLE3X0.34-SH-PUR-BK-100M/TXL
500	6627957	CABLE3X0.34-SH-PUR-BK-500M/TXL
2	6627457	PKGS3M-2/TXL
5	6627458	PKGS3M-5/TXL
10	6627459	PKGS3M-10/TXL
2	6627460	PKWS3M-2/TXL
5	6627461	PKWS3M-5/TXL
10	6627462	PKWS3M-10/TXL
2	6627463	PSGS3M-2/TXL
5	6627464	PSGS3M-5/TXL
10	6627465	PSGS3M-10/TXL
2	6627466	PSWS3M-2/TXL
5	6627467	PSWS3M-5/TXL
10	6627468	PSWS3M-10/TXL
0.3	6627469	PKGS3M-0.3-PSGS3M/TXL
0.6	6627470	PKGS3M-0.6-PSGS3M/TXL
1	6627471	PKGS3M-1-PSGS3M/TXL
2	6627472	PKGS3M-2-PSGS3M/TXL
5	6627473	PKGS3M-5-PSGS3M/TXL
0.3	6627474	PKWS3M-0.3-PSGS3M/TXL
0.6	6627475	PKWS3M-0.6-PSGS3M/TXL
1	6627476	PKWS3M-1-PSGS3M/TXL
2	6627477	PKWS3M-2-PSGS3M/TXL
5	6627478	PKWS3M-5-PSGS3M/TXL

PUR Cable – Black, Shielded



- 4-pin
- Qualified for drag chain use and flame-retardant
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS
- cULus approved

Female connector

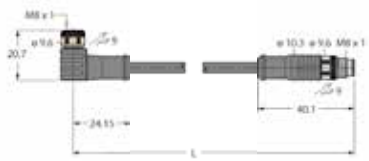


Male connector

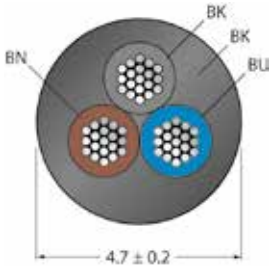


Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	5.3 mm ± 0.20
Cable jacket	PUR, Black
Core insulation	PP (BN, WH, BU, BK)
Core cross-section	4 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Shield	Aluminum foil, tinned copper braid
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	30 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm^2
Max. tensile strength (dynamic)	≤ 20 N/mm^2
Bending cycles	> 2 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s^2
Admissible travel path, horizontal	5 m (at 5 m/s^2)
Admissible travel path, vertical	2 m (at 5 m/s^2)
Admissible traversing speed	3.3 m/s
Torsional stress	± 180 °/m
Ambient temperature	
Stationary usage	-50…+80 °C
Non-stationary usage	-25…+80 °C
Drag chain operation	-25…+60 °C

Types and Features — Selection Table

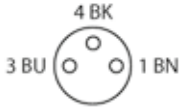
	Cable length [m]	ID number	Type
	100	6627958	CABLE4X0.34-SH-PUR-BK-100M/TXL
	500	6627959	CABLE4X0.34-SH-PUR-BK-500M/TXL
	2	6627479	PKGS4M-2/TXL
	5	6627480	PKGS4M-5/TXL
	10	6627481	PKGS4M-10/TXL
	2	6627482	PKWS4M-2/TXL
	5	6627483	PKWS4M-5/TXL
	10	6627484	PKWS4M-10/TXL
	2	6627485	PSGS4M-2/TXL
	5	6627486	PSGS4M-5/TXL
	10	6627487	PSGS4M-10/TXL
	2	6627488	PSWS4M-2/TXL
	5	6627489	PSWS4M-5/TXL
	10	6627490	PSWS4M-10/TXL
	0.3	6627491	PKGS4M-0.3-PSGS4M/TXL
	0.6	6627492	PKGS4M-0.6-PSGS4M/TXL
	1	6627493	PKGS4M-1-PSGS4M/TXL
	2	6627494	PKGS4M-2-PSGS4M/TXL
	5	6627495	PKGS4M-5-PSGS4M/TXL
	0.3	6627496	PKWS4M-0.3-PSGS4M/TXL
	0.6	6627497	PKWS4M-0.6-PSGS4M/TXL
	1	6627498	PKWS4M-1-PSGS4M/TXL
	2	6627499	PKWS4M-2-PSGS4M/TXL
	5	6627500	PKWS4M-5-PSGS4M/TXL

PVC Cable – Black

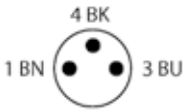


- 3-pin
- Resistant to alkaline solutions, chemicals and oils
- Resistant to microbes and hydrolysis
- Flame-retardant and free from LABS
- cULus approved

Female connector



Male connector



Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable jacket	PVC, Black
Core insulation	PVC (BN, BU, BK)
Core cross-section	3 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	60 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-40…+105 °C
Non-stationary usage	0…+80 °C

Types and Features — Selection Table

	Cable length [m]	ID number	Type
	100	6627984	CABLE3X0.34-XX-PVC-BK-100M/TEL
	500	6627985	CABLE3X0.34-XX-PVC-BK-500M/TEL
	2	6625058	PKG3M-2/TEL
	5	6625059	PKG3M-5/TEL
	10	6625060	PKG3M-10/TEL
	2	6625064	PKW3M-2/TEL
	5	6625065	PKW3M-5/TEL
	10	6625066	PKW3M-10/TEL
	2	6625070	PSG3M-2/TEL
	5	6625071	PSG3M-5/TEL
	10	6625072	PSG3M-10/TEL
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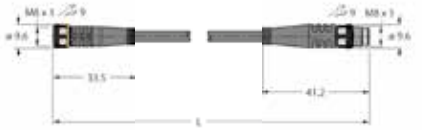
	10	6625078	PSW3M-10/TEL
	0.3	6625300	PKG3M-0.3-PSG3M/TEL
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	1	6625302	PKG3M-1-PSG3M/TEL
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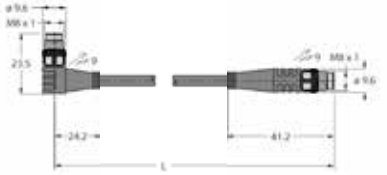
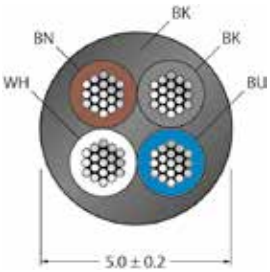
	5	6626547	PKG3M-5-PSG3M/TEL
	0.3	6626512	PKW3M-0.3-PSG3M/TEL
	0.6	6625299	PKW3M-0.6-PSG3M/TEL
	1	6626523	PKW3M-1-PSG3M/TEL
	2	6625297	PKW3M-2-PSG3M/TEL
	5	6625298	PKW3M-5-PSG3M/TEL

PVC Cable – Black



- 4-pin
- Resistant to alkaline solutions, chemicals and oils
- Resistant to microbes and hydrolysis
- Flame-retardant and free from LABS
- cULus approved

Female connector



Male connector



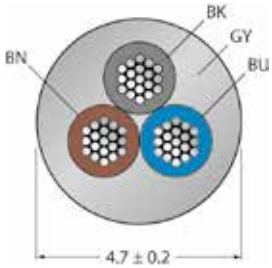
Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable jacket	PVC, Black
Core insulation	PVC (BN, WH, BU, BK)
Core cross-section	4 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	30 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-40…+105 °C
Non-stationary usage	0…+80 °C

Types and Features — Selection Table



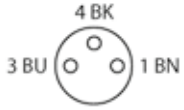
Cable length [m]	ID number	Type
100	6627986	CABLE4X0.34-XX-PVC-BK-100M/TEL
500	6627987	CABLE4X0.34-XX-PVC-BK-500M/TEL
2	6625061	PKG4M-2/TEL
5	6625062	PKG4M-5/TEL
10	6625063	PKG4M-10/TEL
2	6625067	PKW4M-2/TEL
5	6625068	PKW4M-5/TEL
10	6625069	PKW4M-10/TEL
2	6625073	PSG4M-2/TEL
5	6625074	PSG4M-5/TEL
10	6625075	PSG4M-10/TEL
2	6625079	PSW4M-2/TEL
5	6625080	PSW4M-5/TEL
10	6625081	PSW4M-10/TEL
0.3	6625305	PKG4M-0.3-PSG4M/TEL
0.6	6625306	PKG4M-0.6-PSG4M/TEL
1	6625307	PKG4M-1-PSG4M/TEL
2	6625308	PKG4M-2-PSG4M/TEL
5	6626491	PKG4M-5-PSG4M/TEL
0.3	6625291	PKW4M-0.3-PSG4M/TEL
0.6	6625292	PKW4M-0.6-PSG4M/TEL
1	6625293	PKW4M-1-PSG4M/TEL
2	6625294	PKW4M-2-PSG4M/TEL
5	6625295	PKW4M-5-PSG4M/TEL

PVC Cable – Gray

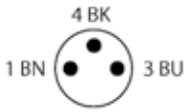


- 3-pin
- Resistant to chemicals, oils, acids and alkaline solutions
- Resistant to microbes and hydrolysis
- Flame-retardant and free from LABS
- cULus approved

Female connector



Male connector



Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	4.7 mm ± 0.20
Cable jacket	PVC, Gray
Core insulation	PVC (BN, BU, BK)
Core cross-section	3 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	60 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-40…+105 °C
Non-stationary usage	0…+80 °C

Types and Features — Selection Table

	Cable length [m]	ID number	Type
	100	6628852	CABLE3X0.34-XX-PVC-GY-100M/TEG
	500	6628853	CABLE3X0.34-XX-PVC-GY-500M/TEG
	2	6629496	PKG3M-2/TEG
	5	6628356	PKG3M-5/TEG
	10	6628922	PKG3M-10/TEG
	2	6628707	PKW3M-2/TEG
	5	6628708	PKW3M-5/TEG
	10	6628709	PKW3M-10/TEG
	2	6630140	PSG3M-2/TEG
	5	6630141	PSG3M-5/TEG
	10	6630142	PSG3M-10/TEG
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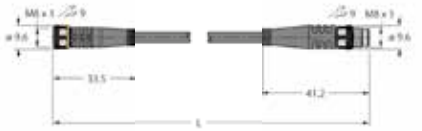
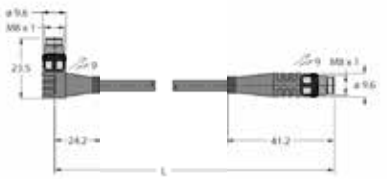
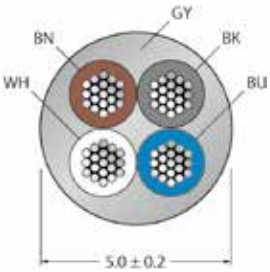
	5	6630144	PSW3M-5/TEG
	10	6630145	PSW3M-10/TEG
	0.3	6628710	PKG3M-0.3-PSG3M/TEG
	0.6	6628711	PKG3M-0.6-PSG3M/TEG
	1	6628712	PKG3M-1-PSG3M/TEG
	1.5	6628713	PKG3M-1.5-PSG3M/TEG
	2	6628714	PKG3M-2-PSG3M/TEG
	5	6628715	PKG3M-5-PSG3M/TEG
	0.3	6630146	PKW3M-0.3-PSG3M/TEG
	0.6	6630147	PKW3M-0.6-PSG3M/TEG
	1	6630148	PKW3M-1-PSG3M/TEG
	2	6630149	PKW3M-2-PSG3M/TEG
	5	6630150	PKW3M-5-PSG3M/TEG

PVC Cable – Gray



- 4-pin
- Resistant to alkaline solutions, chemicals and oils
- Resistant to microbes and hydrolysis
- Flame-retardant and free from LABS
- cULus approved

Female connector

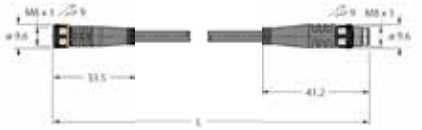
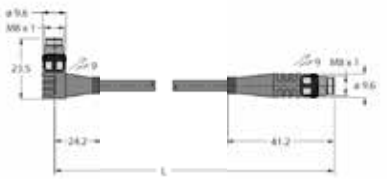


Male connector

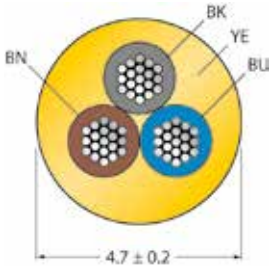


Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	5 mm ± 0.20
Cable jacket	PVC, Gray
Core insulation	PVC (BN, WH, BU, BK)
Core cross-section	4 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	30 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-40…+105 °C
Non-stationary usage	0…+80 °C

Types and Features — Selection Table

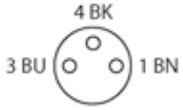
	Cable length [m]	ID number	Type
	100	6628854	CABLE4X0.34-XX-PVC-GY-100M/TEG
	500	6628855	CABLE4X0.34-XX-PVC-GY-500M/TEG
	2	6629497	PKG4M-2/TEG
	5	6628393	PKG4M-5/TEG
	10	6628554	PKG4M-10/TEG
	2	6629498	PKW4M-2/TEG
	5	6628977	PKW4M-5/TEG
	10	6628978	PKW4M-10/TEG
	2	6630151	PSG4M-2/TEG
	5	6630152	PSG4M-5/TEG
	10	6630153	PSG4M-10/TEG
	2	6630154	PSW4M-2/TEG
	5	6630155	PSW4M-5/TEG
	10	6630156	PSW4M-10/TEG
	0.3	6630157	PKG4M-0.3-PSG4M/TEG
	0.6	6630158	PKG4M-0.6-PSG4M/TEG
	1	6630159	PKG4M-1-PSG4M/TEG
	2	6630160	PKG4M-2-PSG4M/TEG
	5	6629053	PKG4M-5-PSG4M/TEG
	0.3	6630161	PKW4M-0.3-PSG4M/TEG
	0.6	6630162	PKW4M-0.6-PSG4M/TEG
	1	6630163	PKW4M-1-PSG4M/TEG
	2	6630164	PKW4M-2-PSG4M/TEG
	5	6630165	PKW4M-5-PSG4M/TEG

PVC Cable – Yellow

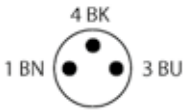


- 3-pin
- Resistant to alkaline solutions, chemicals and oils
- Resistant to microbes and hydrolysis
- Flame-retardant and free from LABS
- cULus approved

Female connector



Male connector



Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	4.7 mm ± 0.20
Cable jacket	PVC, Yellow
Core insulation	PVC (BN, BU, BK)
Core cross-section	3 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	60 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-40…+105 °C
Non-stationary usage	0…+80 °C

Types and Features — Selection Table

	Cable length [m]	ID number	Type
	100	6628660	CABLE3X0.34-XX-PVC-YE-100M/TEY
	500	6628661	CABLE3X0.34-XX-PVC-YE-500M/TEY
	2	6628997	PKG3M-2/TEY
	5	6629483	PKG3M-5/TEY
	10	6630105	PKG3M-10/TEY
	2	6628998	PKW3M-2/TEY
	5	6630106	PKW3M-5/TEY
	10	6630107	PKW3M-10/TEY
	2	6630108	PSG3M-2/TEY
	5	6629485	PSG3M-5/TEY
	10	6630109	PSG3M-10/TEY
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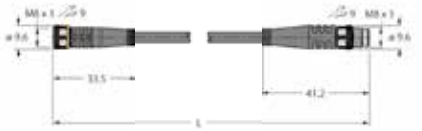
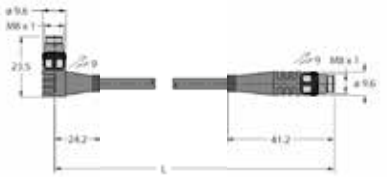
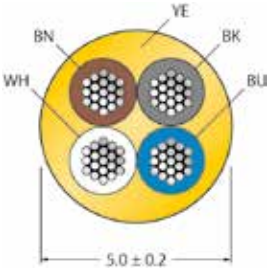
	5	6630111	PSW3M-5/TEY
	10	6630112	PSW3M-10/TEY
	0.3	6630113	PKG3M-0.3-PSG3M/TEY
	0.6	6630114	PKG3M-0.6-PSG3M/TEY
	1	6630115	PKG3M-1-PSG3M/TEY
	2	6630116	PKG3M-2-PSG3M/TEY
	5	6629313	PKG3M-5-PSG3M/TEY
	0.3	6630117	PKW3M-0.3-PSG3M/TEY
	0.6	6630118	PKW3M-0.6-PSG3M/TEY
	1	6630119	PKW3M-1-PSG3M/TEY
	2	6630120	PKW3M-2-PSG3M/TEY
	5	6630121	PKW3M-5-PSG3M/TEY

PVC Cable – Yellow



- 4-pin
- Resistant to alkaline solutions, chemicals and oils
- Resistant to microbes and hydrolysis
- Flame-retardant and free from LABS
- cULus approved

Female connector



Male connector



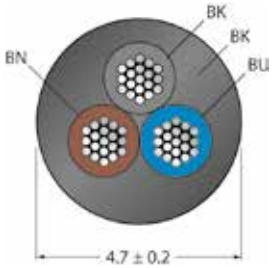
Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	5 mm ± 0.20
Cable jacket	PVC, Yellow
Core insulation	PVC (BN, WH, BU, BK)
Core cross-section	4 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	30 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-40…+105 °C
Non-stationary usage	0…+80 °C

Types and Features — Selection Table



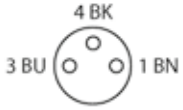
Cable length [m]	ID number	Type
100	6628662	CABLE4X0.34-XX-PVC-YE-100M/TEY
500	6628663	CABLE4X0.34-XX-PVC-YE-500M/TEY
2	6628999	PKG4M-2/TEY
5	6629000	PKG4M-5/TEY
10	6629613	PKG4M-10/TEY
2	6629001	PKW4M-2/TEY
5	6630122	PKW4M-5/TEY
10	6630123	PKW4M-10/TEY
2	6630124	PSG4M-2/TEY
5	6630125	PSG4M-5/TEY
10	6630126	PSG4M-10/TEY
2	6630127	PSW4M-2/TEY
5	6630128	PSW4M-5/TEY
10	6630129	PSW4M-10/TEY
0.3	6630130	PKG4M-0.3-PSG4M/TEY
0.6	6630131	PKG4M-0.6-PSG4M/TEY
1	6630132	PKG4M-1-PSG4M/TEY
2	6630133	PKG4M-2-PSG4M/TEY
5	6630134	PKG4M-5-PSG4M/TEY
0.3	6630135	PKW4M-0.3-PSG4M/TEY
0.6	6630136	PKW4M-0.6-PSG4M/TEY
1	6630137	PKW4M-1-PSG4M/TEY
2	6630138	PKW4M-2-PSG4M/TEY
5	6630139	PKW4M-5-PSG4M/TEY

PVC Cable – Black

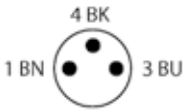


- 3-pin
- Resistant to alkaline solutions, chemicals and oils
- Resistant to microbes and hydrolysis
- Flame-retardant and free from LABS
- cULus approved

Female connector

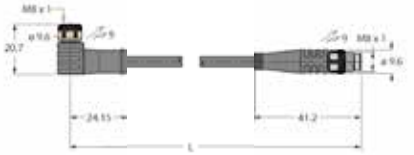


Male connector

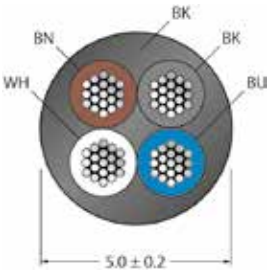


Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable jacket	PVC, Black
Core insulation	PVC (BN, BU, BK)
Core cross-section	3 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	60 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-40…+105 °C
Non-stationary usage	0…+80 °C

Types and Features — Selection Table

	Cable length [m]	ID number	Type
	100	6627984	CABLE3X0.34-XX-PVC-BK-100M/TEL
	500	6627985	CABLE3X0.34-XX-PVC-BK-500M/TEL
	2	6626084	PKW3M-P7X2-2/TEL
	5	6626088	PKW3M-P7X2-5/TEL
	10	6626090	PKW3M-P7X2-10/TEL
	3	6626078	PKW3M-P7X2-0.3-PSG3M/TEL
	0.6	6626079	PKW3M-P7X2-0.6-PSG3M/TEL
	1	6626081	PKW3M-P7X2-1-PSG3M/TEL
	2	6626085	PKW3M-P7X2-2-PSG3M/TEL
	5	6626089	PKW3M-P7X2-5-PSG3M/TEL

PVC Cable – Black



- 4-pin
- Resistant to alkaline solutions, chemicals and oils
- Resistant to microbes and hydrolysis
- Flame-retardant and free from LABS
- cULus approved

Female connector

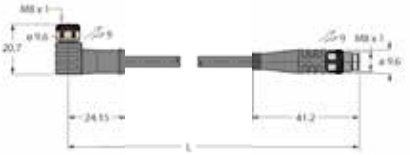


Male connector

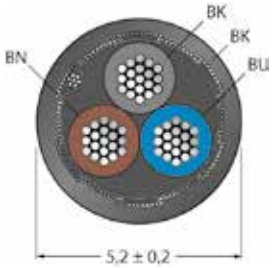


Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable jacket	PVC, Black
Core insulation	PVC (BN, WH, BU, BK)
Core cross-section	4 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	30 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-40…+105 °C
Non-stationary usage	0…+80 °C

Types and Features — Selection Table

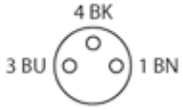
	Cable length [m]	ID number	Type
	100	6627986	CABLE4X0.34-XX-PVC-BK-100M/TEL
	500	6627987	CABLE4X0.34-XX-PVC-BK-500M/TEL
	2	6626067	PKW4M-P7X2-2/TEL
	5	6626071	PKW4M-P7X2-5/TEL
	10	6626231	PKW4M-P7X2-10/TEL
	0.3	6626245	PKW4M-P7X2-0.3-PSG4M/TEL
	0.6	6626246	PKW4M-P7X2-0.6-PSG4M/TEL
	1	6626247	PKW4M-P7X2-1-PSG4M/TEL
	2	6626248	PKW4M-P7X2-2-PSG4M/TEL
	5	6626249	PKW4M-P7X2-5-PSG4M/TEL

PUR Cable – Black, Shielded

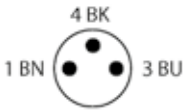


- 3-pin
- Resistant to alkaline solutions, chemicals and oils
- Resistant to microbes and hydrolysis
- Flame-retardant and free from LABS
- cULus approved

Female connector



Male connector



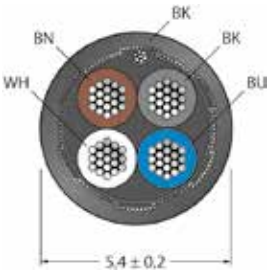
Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	5.2 mm ± 0.20
Cable jacket	PVC, Black
Core insulation	PVC (BN, BU, BK)
Core cross-section	3 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Shield	Aluminum foil, tinned copper braid
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	60 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-40…+105 °C
Non-stationary usage	0…+80 °C

Types and Features — Selection Table



Cable length [m]	ID number	Type
100	6627968	CABLE3X0.34-SH-PVC-BK-100M/TEL
500	6627969	CABLE3X0.34-SH-PVC-BK-500M/TEL
2	6627413	PKGS3M-2/TEL
5	6627414	PKGS3M-5/TEL
10	6627415	PKGS3M-10/TEL
2	6627416	PKWS3M-2/TEL
5	6627417	PKWS3M-5/TEL
10	6627418	PKWS3M-10/TEL
2	6627419	PSGS3M-2/TEL
5	6627420	PSGS3M-5/TEL
10	6627421	PSGS3M-10/TEL
2	6627422	PSWS3M-2/TEL
5	6627423	PSWS3M-5/TEL
10	6627424	PSWS3M-10/TEL
0.3	6627425	PKGS3M-0.3-PSGS3M/TEL
0.6	6627426	PKGS3M-0.6-PSGS3M/TEL
1	6627427	PKGS3M-1-PSGS3M/TEL
2	6627428	PKGS3M-2-PSGS3M/TEL
5	6627429	PKGS3M-5-PSGS3M/TEL
0.3	6627430	PKWS3M-0.3-PSGS3M/TEL
0.6	6627431	PKWS3M-0.6-PSGS3M/TEL
1	6627432	PKWS3M-1-PSGS3M/TEL
2	6627433	PKWS3M-2-PSGS3M/TEL
5	6627434	PKWS3M-5-PSGS3M/TEL

PUR Cable – Black, Shielded



- 4-pin
- Resistant to alkaline solutions, chemicals and oils
- Resistant to microbes and hydrolysis
- Flame-retardant and free from LABS
- cULus approved

Female connector

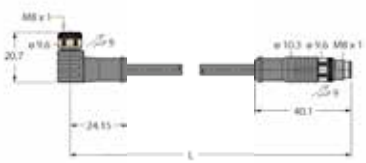


Male connector

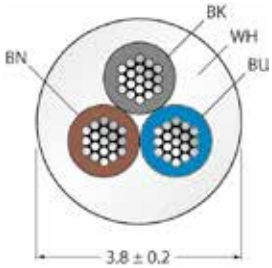


Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	5.4 mm ± 0.20
Cable jacket	PVC, Black
Core insulation	PVC (BN, WH, BU, BK)
Core cross-section	4 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Shield	Aluminum foil, tinned copper braid
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	30 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-40…+105 °C
Non-stationary usage	0…+80 °C

Types and Features — Selection Table

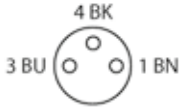
	Cable length [m]	ID number	Type
	100	6627970	CABLE4X0.34-SH-PVC-BK-100M/TEL
	500	6627971	CABLE4X0.34-SH-PVC-BK-500M/TEL
	2	6627435	PKGS4M-2/TEL
	5	6627436	PKGS4M-5/TEL
	10	6627437	PKGS4M-10/TEL
	2	6627438	PKWS4M-2/TEL
	5	6627439	PKWS4M-5/TEL
	10	6627440	PKWS4M-10/TEL
	2	6627441	PSGS4M-2/TEL
	5	6627442	PSGS4M-5/TEL
	10	6627443	PSGS4M-10/TEL
	2	6627444	PSWS4M-2/TEL
	5	6627445	PSWS4M-5/TEL
	10	6627446	PSWS4M-10/TEL
	0.3	6627447	PKGS4M-0.3-PSGS4M/TEL
	0.6	6627448	PKGS4M-0.6-PSGS4M/TEL
	1	6627449	PKGS4M-1-PSGS4M/TEL
	2	6627450	PKGS4M-2-PSGS4M/TEL
	5	6627451	PKGS4M-5-PSGS4M/TEL
	0.3	6627452	PKWS4M-0.3-PSGS4M/TEL
	0.6	6627453	PKWS4M-0.6-PSGS4M/TEL
	1	6627454	PKWS4M-1-PSGS4M/TEL
	2	6627455	PKWS4M-2-PSGS4M/TEL
	5	6627456	PKWS4M-5-PSGS4M/TEL

PTFE Cable – White, Resistant to High Temperatures

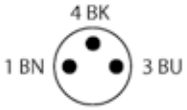


- 3-pin
- Low smoke emission and flame-retardant
- Resistant to chemicals, UV radiation and oils
- LABS free
- Cold and heat-flexible

Female connector



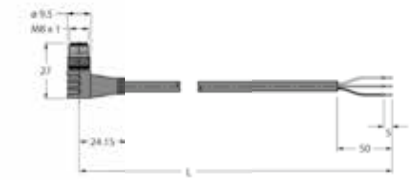
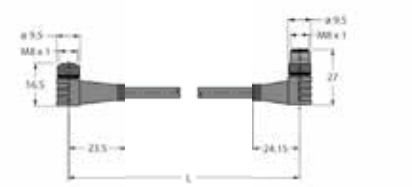
Male connector



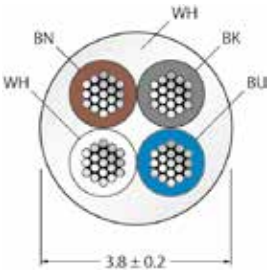
Connector	
Grip	Plastic, PBT GF, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	PBT GF, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP65 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	3.8 mm ± 0.20
Cable jacket	PTFE, White
Core insulation	PTFE (BN, BU, BK)
Core cross-section	3 x 0.34 mm^2
Arrangement of strands	7 x 0.254 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	250 V
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-20…+150 °C

Types and Features — Selection Table



Cable length [m]	ID number	Type
		
2	8036605	HT-SKP3-2/S2430
5	8036097	HT-SKP3-5/S2430
10	8039482	HT-SKP3-10/S2430
		
2	8039484	HT-SWKP3-2/S2430
5	8036099	HT-SWKP3-5/S2430
10	8039485	HT-SWKP3-10/S2430
		
2	8039487	HT-SSP3-2/S2430
5	8036101	HT-SSP3-5/S2430
10	8039488	HT-SSP3-10/S2430
		
2	8039491	HT-SWSP3-2/S2430
5	8036103	HT-SWSP3-5/S2430
10	8039492	HT-SWSP3-10/S2430
		
1	8043355	HT-SKP3-1-HT-SSP3/S2430
2	8039972	HT-SKP3-2-HT-SSP3/S2430
5	8039973	HT-SKP3-5-HT-SSP3/S2430
		
1	8051991	HT-SWKP3-1-HT-SWSP3/S2430
2	8039978	HT-SWKP3-2-HT-SWSP3/S2430
5	8039979	HT-SWKP3-5-HT-SWSP3/S2430

PTFE Cable – White, Resistant to High Temperatures



- 4-pin
- Low smoke emission and flame-retardant
- Resistant to chemicals, UV radiation and oils
- LABS free
- Cold and heat-flexible

Female connector



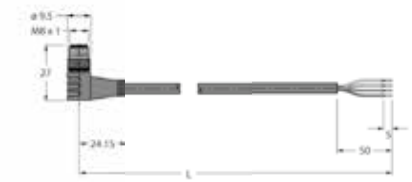
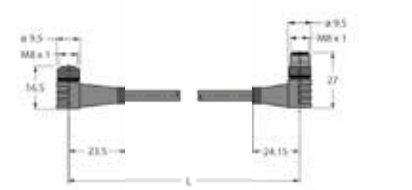
Male connector



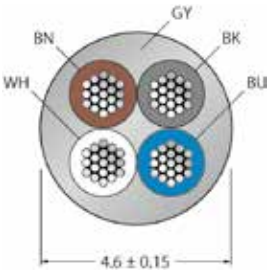
Connector	
Grip	Plastic, PBT GF, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	PBT GF, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP65 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	3.8 mm ± 0.20
Cable jacket	PTFE, White
Core insulation	PTFE (BN, WH, BU, BK)
Core cross-section	4 x 0.34 mm^2
Arrangement of strands	7 x 0.254 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	250 V
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-20…+150 °C

Types and Features — Selection Table



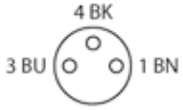
Cable length [m]	ID number	Type
		
2	8039483	HT-SKP4-2/S2430
5	8036098	HT-SKP4-5/S2430
10	8037215	HT-SKP4-10/S2430
		
2	8039486	HT-SWKP4-2/S2430
5	8036100	HT-SWKP4-5/S2430
10	8037216	HT-SWKP4-10/S2430
		
2	8039489	HT-SSP4-2/S2430
5	8036102	HT-SSP4-5/S2430
10	8039490	HT-SSP4-10/S2430
		
2	8039493	HT-SWSP4-2/S2430
5	8036104	HT-SWSP4-5/S2430
10	8039494	HT-SWSP4-10/S2430
		
1	8051990	HT-SKP4-1-HT-SSP4/S2430
2	8039975	HT-SKP4-2-HT-SSP4/S2430
5	8039976	HT-SKP4-5-HT-SSP4/S2430
		
1	8051992	HT-SWKP4-1-HT-SWSP4/S2430
2	8039981	HT-SWKP4-2-HT-SWSP4/S2430
5	8039982	HT-SWKP4-5-HT-SWSP4/S2430

TPE Cable – Gray, Food and Beverage

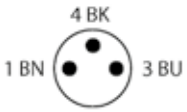


- 3-pin
- Excellent resistance to acids and alkaline solutions
- Resistant to cleaning agents and disinfectant
- Free from halogen, PVC and LABS
- Qualified for drag chain use and torsion stable

Female connector

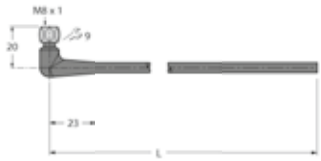
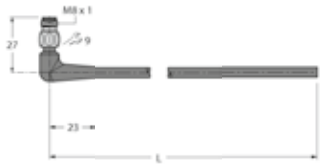
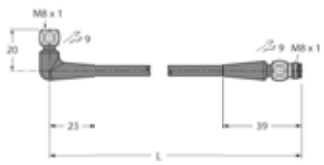


Male connector

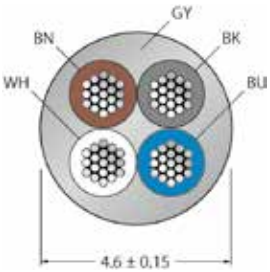


Connector	
Grip	Plastic, PP, Gray
Contacts	Brass, CuZn, Gold-plated
Contact carriers	PP, Gray
Coupling nut/screw	Stainless steel, V4A
Protection class	IP67, IP69K (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	4.6 mm ± 0.15
Cable jacket	TPE-O, Gray
Core insulation	TPE-E (BN, BU, BK)
Core cross-section	4 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	60 V
Test voltage	2000 V
Nom. Capacitance	82 pF/m
Nom. Inductance	0.73 mH/km
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm^2
Max. tensile strength (dynamic)	≤ 20 N/mm^2
Bending cycles	> 4 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s^2
Admissible travel path, horizontal	5 m (at 5 m/s^2)
Admissible travel path, vertical	2 m (at 5 m/s^2)
Admissible traversing speed	3 m/s
Torsional stress	± 180 °/m
Ambient temperature	
Stationary usage	-40…+105 °C
Non-stationary usage	-25…+105 °C
Drag chain operation	-25…+60 °C

Types and Features — Selection Table

	Cable length [m]	ID number	Type
			
	2	6933485	PKGH3M-2/TFG
	5	6933486	PKGH3M-5/TFG
	10	6933487	PKGH3M-10/TFG
	15	6933488	PKGH3M-15/TFG
	20	6933489	PKGH3M-20/TFG
	2	6933500	PKWH3M-2/TFG
	5	6933501	PKWH3M-5/TFG
	10	6933502	PKWH3M-10/TFG
	15	6933503	PKWH3M-15/TFG
	20	6933504	PKWH3M-20/TFG
	2	6933475	PSGH3M-2/TFG
	5	6933476	PSGH3M-5/TFG
	10	6933477	PSGH3M-10/TFG
	15	6933478	PSGH3M-15/TFG
	20	6933479	PSGH3M-20/TFG
	2	6933535	PSWH3M-2/TFG
	5	6933536	PSWH3M-5/TFG
	10	6933540	PSWH3M-10/TFG
	15	6933541	PSWH3M-15/TFG
	20	6933542	PSWH3M-20/TFG
	1	6933513	PKGH3M-1-PSGH3M/TFG
	2	6933514	PKGH3M-2-PSGH3M/TFG
	5	6933510	PKGH3M-5-PSGH3M/TFG
	10	6933515	PKGH3M-10-PSGH3M/TFG
	1	6934409	PKWH3M-1-PSGH3M/TFG
	2	6934410	PKWH3M-2-PSGH3M/TFG
	5	6934411	PKWH3M-5-PSGH3M/TFG
	10	6934412	PKWH3M-10-PSGH3M/TFG

TPE Cable – Gray, Food and Beverage



- 4-pin
- Excellent resistance to acids and alkaline solutions
- Resistant to cleaning agents and disinfectant
- Free from halogen, PVC and LABS
- Qualified for drag chain use and torsion stable

Female connector

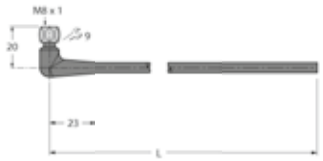
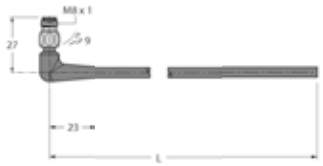
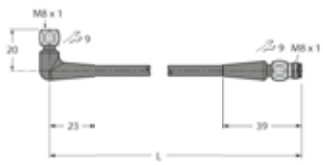


Male connector

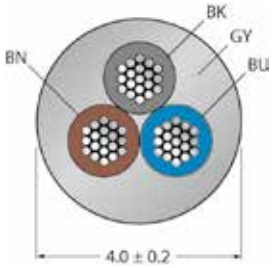


Connector	
Grip	Plastic, PP, Gray
Contacts	Brass, CuZn, Gold-plated
Contact carriers	PP, Gray
Coupling nut/screw	Stainless steel, V4A
Protection class	IP67, IP69K (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	4.6 mm ± 0.15
Cable jacket	TPE-O, Gray
Core insulation	TPE-E (BN, WH, BU, BK)
Core cross-section	4 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	30 V
Test voltage	2000 V
Nom. Capacitance	82 pF/m
Nom. Inductance	0.73 mH/km
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm^2
Max. tensile strength (dynamic)	≤ 20 N/mm^2
Bending cycles	> 4 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s^2
Admissible travel path, horizontal	5 m (at 5 m/s^2)
Admissible travel path, vertical	2 m (at 5 m/s^2)
Admissible traversing speed	3 m/s
Torsional stress	± 180 °/m
Ambient temperature	
Stationary usage	-40…+105 °C
Non-stationary usage	-25…+105 °C
Drag chain operation	-25…+60 °C

Types and Features — Selection Table

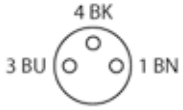
	Cable length [m]	ID number	Type
			
	2	6933490	PKGH4M-2/TFG
	5	6933491	PKGH4M-5/TFG
	10	6933492	PKGH4M-10/TFG
	15	6933493	PKGH4M-15/TFG
	20	6933494	PKGH4M-20/TFG
	2	6933505	PKWH4M-2/TFG
	5	6933506	PKWH4M-5/TFG
	10	6933507	PKWH4M-10/TFG
	15	6933508	PKWH4M-15/TFG
	20	6933509	PKWH4M-20/TFG
	2	6933480	PSGH4M-2/TFG
	5	6933481	PSGH4M-5/TFG
	10	6933482	PSGH4M-10/TFG
	15	6933483	PSGH4M-15/TFG
	20	6933484	PSGH4M-20/TFG
	2	6933495	PSWH4M-2/TFG
	5	6933496	PSWH4M-5/TFG
	10	6933497	PSWH4M-10/TFG
	15	6933498	PSWH4M-15/TFG
	20	6933499	PSWH4M-20/TFG
	1	6933516	PKGH4M-1-PSGH4M/TFG
	2	6933517	PKGH4M-2-PSGH4M/TFG
	5	6933511	PKGH4M-5-PSGH4M/TFG
	10	6933518	PKGH4M-10-PSGH4M/TFG
	1	6934413	PKWH4M-1-PSGH4M/TFG
	2	6934414	PKWH4M-2-PSGH4M/TFG
	5	6934415	PKWH4M-5-PSGH4M/TFG
	10	6934416	PKWH4M-10-PSGH4M/TFG

PVC Cable – Gray, Food and Beverage

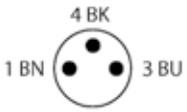


- 3-pin
- Good resistance to acids and alkaline solutions
- Resistant to cleaning agents
- Conditional resistance to oils and chemicals
- High flexibility in unloaded motion

Female connector



Male connector



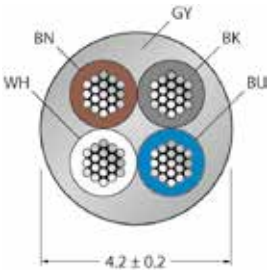
Connector	
Grip	Plastic, PP, Gray
Contacts	Brass, CuZn, Gold-plated
Contact carriers	PP, Gray
Coupling nut/screw	Stainless steel, V4A
Protection class	IP67, IP69K (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	4 mm ± 0.20
Cable jacket	PVC, Gray
Core insulation	PVC (BN, BU, BK)
Core cross-section	3 x 0.25 mm²
Arrangement of strands	14 x 0.15 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	60 V
Test voltage	1500 V
Mechanical and chemical properties	
Bending radius (stationary laying)	> 3 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-25…+80 °C
Non-stationary usage	0…+80 °C

Types and Features — Selection Table



Cable length [m]	ID number	Type
2	6934440	PKGH3M-2/TFE
5	6934441	PKGH3M-5/TFE
10	6934442	PKGH3M-10/TFE
15	6934443	PKGH3M-15/TFE
20	6934444	PKGH3M-20/TFE
2	6934445	PKWH3M-2/TFE
5	6934446	PKWH3M-5/TFE
10	6934447	PKWH3M-10/TFE
15	6934448	PKWH3M-15/TFE
20	6934449	PKWH3M-20/TFE
2	6933688	PSGH3M-2/TFE
5	6933689	PSGH3M-5/TFE
10	6933690	PSGH3M-10/TFE
15	6933691	PSGH3M-15/TFE
20	6933692	PSGH3M-20/TFE
2	6935464	PSWH3M-2/TFE
5	6935465	PSWH3M-5/TFE
10	6935466	PSWH3M-10/TFE
0.3	6935467	PKGH3M-0.3-PSGH3M/TFE
0.6	6935468	PKGH3M-0.6-PSGH3M/TFE
1	6935469	PKGH3M-1-PSGH3M/TFE
2	6935470	PKGH3M-2-PSGH3M/TFE
5	6935471	PKGH3M-5-PSGH3M/TFE
10	6935472	PKGH3M-10-PSGH3M/TFE

PVC Cable – Gray, Food and Beverage



- 4-pin
- Good resistance to acids and alkaline solutions
- Resistant to cleaning agents
- Conditional resistance to oils and chemicals
- High flexibility in unloaded motion

Female connector



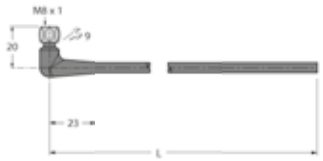
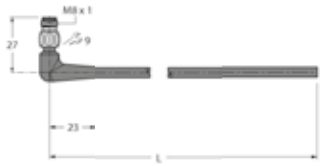
Male connector



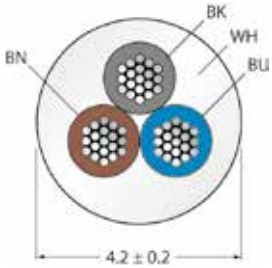
Connector	
Grip	Plastic, PP, Gray
Contacts	Brass, CuZn, Gold-plated
Contact carriers	PP, Gray
Coupling nut/screw	Stainless steel, V4A
Protection class	IP67, IP69K (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	4.2 mm ± 0.20
Cable jacket	PVC, Gray
Core insulation	PVC (BN, WH, BU, BK)
Core cross-section	4 x 0.25 mm^2
Arrangement of strands	14 x 0.15 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	30 V
Test voltage	1500 V
Mechanical and chemical properties	
Bending radius (stationary laying)	> 3 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-25…+80 °C
Non-stationary usage	0…+80 °C

Types and Features — Selection Table



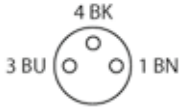
Cable length [m]	ID number	Type
		
2	6934450	PKGH4M-2/TFE
5	6934451	PKGH4M-5/TFE
10	6934452	PKGH4M-10/TFE
15	6934453	PKGH4M-15/TFE
20	6934454	PKGH4M-20/TFE
		
2	6934455	PKWH4M-2/TFE
5	6934456	PKWH4M-5/TFE
10	6934457	PKWH4M-10/TFE
15	6934458	PKWH4M-15/TFE
20	6934459	PKWH4M-20/TFE
		
2	6934460	PSGH4M-2/TFE
5	6934461	PSGH4M-5/TFE
10	6934462	PSGH4M-10/TFE
15	6934463	PSGH4M-15/TFE
20	6934464	PSGH4M-20/TFE
		
2	6935473	PSWH4M-2/TFE
5	6935474	PSWH4M-5/TFE
20	6935475	PSWH4M-10/TFE
		
0.3	6935476	PKGH4M-0.3-PSGH4M/TFE
0.6	6935477	PKGH4M-0.6-PSGH4M/TFE
1	6935478	PKGH4M-1-PSGH4M/TFE
2	6935479	PKGH4M-2-PSGH4M/TFE
5	6935480	PKGH4M-5-PSGH4M/TFE
10	6935481	PKGH4M-10-PSGH4M/TFE

PP-EPDM-Cable – white, Food and Beverage

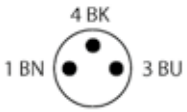


- 3-pin
- Resistant to acids and alkaline solutions
- Resistant to cleaning agents and disinfectant
- Resistant to hydrolysis
- Free from halogen, silicone and PVC

Female connector



Male connector



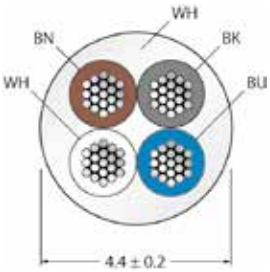
Connector	
Grip	Plastic, PP, White
Contacts	Brass, CuZn, Gold-plated
Contact carriers	PP, White
Coupling nut/screw	Stainless steel, V4A
Protection class	IP67, IP69K (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	4.2 mm ± 0.20
Cable jacket	PP-EPDM, White
Core insulation	PE (BN, BU, BK)
Core cross-section	3 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	60 V
Test voltage	500 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-40…+105 °C
Non-stationary usage	0…+80 °C

Types and Features — Selection Table



Cable length [m]	ID number	Type
2	6934645	PKGV3M-2/TFW
5	6934646	PKGV3M-5/TFW
10	6934647	PKGV3M-10/TFW
15	6934648	PKGV3M-15/TFW
20	6934649	PKGV3M-20/TFW
2	6934650	PKWV3M-2/TFW
5	6934651	PKWV3M-5/TFW
10	6934652	PKWV3M-10/TFW
15	6934653	PKWV3M-15/TFW
20	6934654	PKWV3M-20/TFW
2	6934655	PSGV3M-2/TFW
5	6934656	PSGV3M-5/TFW
10	6934657	PSGV3M-10/TFW
15	6934658	PSGV3M-15/TFW
20	6934659	PSGV3M-20/TFW
2	6935376	PSWV3M-2/TFW
5	6935377	PSWV3M-5/TFW
10	6935378	PSWV3M-10/TFW
0.3	6935379	PKGV3M-0.3-PSGV3M/TFW
0.6	6935380	PKGV3M-0.6-PSGV3M/TFW
1	6935381	PKGV3M-1-PSGV3M/TFW
2	6935382	PKGV3M-2-PSGV3M/TFW
5	6935383	PKGV3M-5-PSGV3M/TFW
10	6935429	PKGV3M-10-PSGV3M/TFW

PP-EPDM-Cable – white, Food and Beverage



- 4-pin
- Resistant to acids and alkaline solutions
- Resistant to cleaning agents and disinfectant
- Resistant to hydrolysis
- Free from halogen, silicone and PVC

Female connector



Male connector



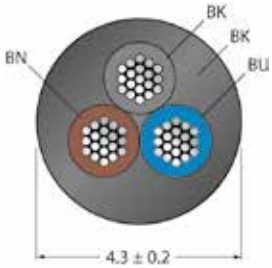
Connector	
Grip	Plastic, PP, White
Contacts	Brass, CuZn, Gold-plated
Contact carriers	PP, White
Coupling nut/screw	Stainless steel, V4A
Protection class	IP67, IP69K (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	4.4 mm ± 0.20
Cable jacket	PP-EPDM, White
Core insulation	PE (BN, WH, BU, BK)
Core cross-section	4 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	30 V
Insulation resistance	> 30.5 MΩ/km
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-40…+105 °C
Non-stationary usage	0…+80 °C

Types and Features — Selection Table

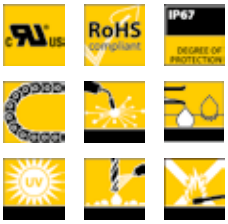


Cable length [m]	ID number	Type
2	6934663	PKGV4M-2/TFW
5	6933694	PKGV4M-5/TFW
10	6933695	PKGV4M-10/TFW
15	6933696	PKGV4M-15/TFW
20	6933697	PKGV4M-20/TFW
2	6933698	PKWV4M-2/TFW
5	6933699	PKWV4M-5/TFW
10	6933700	PKWV4M-10/TFW
15	6933701	PKWV4M-15/TFW
20	6933702	PKWV4M-20/TFW
2	6933703	PSGV4M-2/TFW
5	6933704	PSGV4M-5/TFW
10	6933705	PSGV4M-10/TFW
15	6933706	PSGV4M-15/TFW
20	6933707	PSGV4M-20/TFW
2	6935384	PSWV4M-2/TFW
5	6935385	PSWV4M-5/TFW
10	6935386	PSWV4M-10/TFW
0.3	6935387	PKGV4M-0.3-PSWV4M/TFW
0.6	6935388	PKGV4M-0.6-PSWV4M/TFW
1	6935389	PKGV4M-1-PSWV4M/TFW
2	6935390	PKGV4M-2-PSWV4M/TFW
5	6935391	PKGV4M-5-PSWV4M/TFW
10	6935430	PKGV4M-10-PSWV4M/TFW

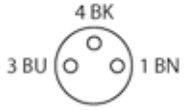
PUR Cable – Black



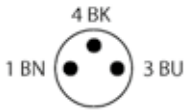
- 3-pin
- Qualified for drag chain use and flame-retardant
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS
- cULus approved (only for bulk cable)



Female connector

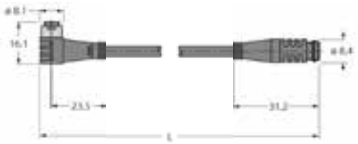


Male connector

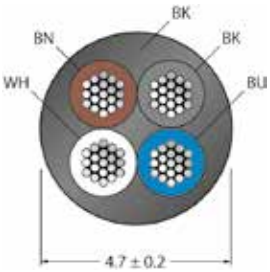


Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Protection class	IP67 (plugged)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	4.3 mm ± 0.20
Cable jacket	PUR, Black
Core insulation	PP (BN, BU, BK)
Core cross-section	3 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	60 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm^2
Max. tensile strength (dynamic)	≤ 20 N/mm^2
Bending cycles	> 5 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s^2
Admissible travel path, horizontal	5 m (at 5 m/s^2)
Admissible travel path, vertical	2 m (at 5 m/s^2)
Admissible traversing speed	3.3 m/s
Torsional stress	± 180 °/m
Ambient temperature	
Stationary usage	-50…+80 °C
Non-stationary usage	-25…+80 °C
Drag chain operation	-25…+60 °C

Types and Features — Selection Table

	Cable length [m]	ID number	Type
	100	6627992	CABLE3X0.34-XX-PUR-BK-100M/TXL
	500	6627993	CABLE3X0.34-XX-PUR-BK-500M/TXL
	2	6627342	PKG3S-2/TXL
	5	6627343	PKG3S-5/TXL
	10	6627344	PKG3S-10/TXL
	2	6627345	PKW3S-2/TXL
	5	6627346	PKW3S-5/TXL
	10	6627347	PKW3S-10/TXL
	2	6627348	PSG3S-2/TXL
	5	6627349	PSG3S-5/TXL
	10	6627350	PSG3S-10/TXL
	2	6627351	PSW3S-2/TXL
	5	6627352	PSW3S-5/TXL
	10	6627353	PSW3S-10/TXL
	0.3	6627362	PKG3S-0.3-PSG3S/TXL
	0.6	6627363	PKG3S-0.6-PSG3S/TXL
	1	6627364	PKG3S-1-PSG3S/TXL
	2	6627365	PKG3S-2-PSG3S/TXL
	5	6627155	PKG3S-5-PSG3S/TXL
	0.3	6627366	PKW3S-0.3-PSG3S/TXL
	0.6	6627367	PKW3S-0.6-PSG3S/TXL
	1	6627368	PKW3S-1-PSG3S/TXL
	2	6627369	PKW3S-2-PSG3S/TXL
	5	6627530	PKW3S-5-PSG3S/TXL

PUR Cable – Black



- 4-pin
- Qualified for drag chain use and flame-retardant
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS
- cULus approved (only for bulk cable)

Female connector

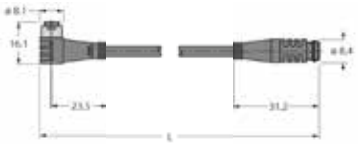


Male connector

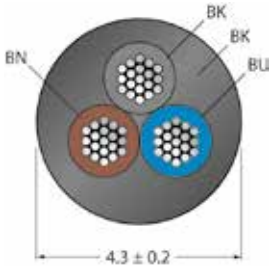


Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Protection class	IP67 (plugged)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	4.7 mm ± 0.20
Cable jacket	PUR, Black
Core insulation	PP (BN, WH, BU, BK)
Core cross-section	4 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	30 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm^2
Max. tensile strength (dynamic)	≤ 20 N/mm^2
Bending cycles	> 5 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s^2
Admissible travel path, horizontal	5 m (at 5 m/s^2)
Admissible travel path, vertical	2 m (at 5 m/s^2)
Admissible traversing speed	3.3 m/s
Torsional stress	± 180 °/m
Ambient temperature	
Stationary usage	-50…+80 °C
Non-stationary usage	-25…+80 °C
Drag chain operation	-25…+60 °C

Types and Features — Selection Table

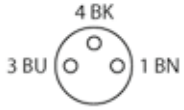
	Cable length [m]	ID number	Type
	100	6627994	CABLE4X0.34-XX-PUR-BK-100M/TXL
	500	6627995	CABLE4X0.34-XX-PUR-BK-500M/TXL
	2	6627382	PKG4S-2/TXL
	5	6627383	PKG4S-5/TXL
	10	6627384	PKG4S-10/TXL
	2	6627385	PKW4S-2/TXL
	5	6627386	PKW4S-5/TXL
	10	6627387	PKW4S-10/TXL
	2	6627388	PSG4S-2/TXL
	5	6627389	PSG4S-5/TXL
	10	6627390	PSG4S-10/TXL
	2	6627391	PSW4S-2/TXL
	5	6627392	PSW4S-5/TXL
	10	6627393	PSW4S-10/TXL
	0.3	6627402	PKG4S-0.3-PSG4S/TXL
	0.6	6627403	PKG4S-0.6-PSG4S/TXL
	1	6627404	PKG4S-1-PSG4S/TXL
	2	6627405	PKG4S-2-PSG4S/TXL
	5	6627156	PKG4S-5-PSG4S/TXL
	0.3	6627406	PKW4S-0.3-PSG4S/TXL
	0.6	6627407	PKW4S-0.6-PSG4S/TXL
	1	6627408	PKW4S-1-PSG4S/TXL
	2	6627409	PKW4S-2-PSG4S/TXL
	5	6627529	PKW4S-5-PSG4S/TXL

PUR Cable – Black

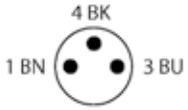


- 3-pin
- Qualified for drag chain use and flame-retardant
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS
- cULus approved (only for bulk cable)

Female connector



Male connector

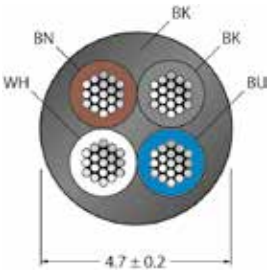


Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Protection class	IP67 (plugged)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	4.3 mm ± 0.20
Cable jacket	PUR, Black
Core insulation	PP (BN, BU, BK)
Core cross-section	3 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	60 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm^2
Max. tensile strength (dynamic)	≤ 20 N/mm^2
Bending cycles	> 5 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s^2
Admissible travel path, horizontal	5 m (at 5 m/s^2)
Admissible travel path, vertical	2 m (at 5 m/s^2)
Admissible traversing speed	3.3 m/s
Torsional stress	± 180 °/m
Ambient temperature	
Stationary usage	-50…+80 °C
Non-stationary usage	-25…+80 °C
Drag chain operation	-25…+60 °C

Types and Features — Selection Table

	Cable length [m]	ID number	Type
	100	6627992	CABLE3X0.34-XX-PUR-BK-100M/TXL
	500	6627993	CABLE3X0.34-XX-PUR-BK-500M/TXL
	2	6627513	PKG3Z-2/TXL
	5	6627514	PKG3Z-5/TXL
	10	6627515	PKG3Z-10/TXL
	2	6627516	PKW3Z-2/TXL
	5	6627517	PKW3Z-5/TXL
	10	6627518	PKW3Z-10/TXL

PUR Cable – Black



- 4-pin
- Qualified for drag chain use and flame-retardant
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS
- cULus approved (only for bulk cable)

Female connector



Male connector

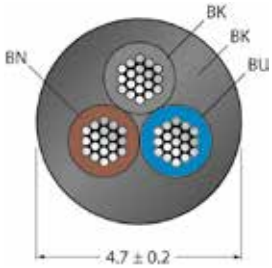


Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Protection class	IP67 (plugged)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	4.7 mm ± 0.20
Cable jacket	PUR, Black
Core insulation	PP (BN, WH, BU, BK)
Core cross-section	4 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	30 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm^2
Max. tensile strength (dynamic)	≤ 20 N/mm^2
Bending cycles	> 5 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s^2
Admissible travel path, horizontal	5 m (at 5 m/s^2)
Admissible travel path, vertical	2 m (at 5 m/s^2)
Admissible traversing speed	3.3 m/s
Torsional stress	± 180 °/m
Ambient temperature	
Stationary usage	-50…+80 °C
Non-stationary usage	-25…+80 °C
Drag chain operation	-25…+60 °C

Types and Features — Selection Table

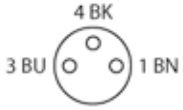
	Cable length [m]	ID number	Type
	100	6627994	CABLE4X0.34-XX-PUR-BK-100M/TXL
	500	6627995	CABLE4X0.34-XX-PUR-BK-500M/TXL
	2	6627519	PKG4Z-2/TXL
	5	6627520	PKG4Z-5/TXL
	10	6627521	PKG4Z-10/TXL
	2	6627522	PKW4Z-2/TXL
	5	6627523	PKW4Z-5/TXL
	10	6627524	PKW4Z-10/TXL

PVC Cable – Black

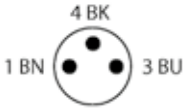


- 3-pin
- Resistant to alkaline solutions, chemicals and oils
- Resistant to microbes and hydrolysis
- Flame-retardant and free from LABS
- cULus approved (only for bulk cable)

Female connector

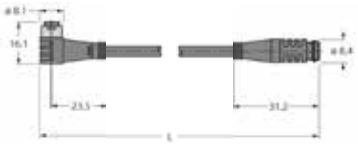


Male connector

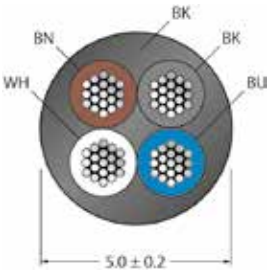


Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Protection class	IP67 (plugged)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable jacket	PVC, Black
Core insulation	PVC (BN, BU, BK)
Core cross-section	3 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	60 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-40…+105 °C
Non-stationary usage	0…+80 °C

Types and Features — Selection Table

	Cable length [m]	ID number	Type
	100	6627984	CABLE3X0.34-XX-PVC-BK-100M/TEL
	500	6627985	CABLE3X0.34-XX-PVC-BK-500M/TEL
	2	6627330	PKG3S-2/TEL
	5	6627331	PKG3S-5/TEL
	10	6627332	PKG3S-10/TEL
	2	6627333	PKW3S-2/TEL
	5	6627334	PKW3S-5/TEL
	10	6627335	PKW3S-10/TEL
	2	6627336	PSG3S-2/TEL
	5	6627337	PSG3S-5/TEL
	10	6627338	PSG3S-10/TEL
	2	6627339	PSW3S-2/TEL
	5	6627340	PSW3S-5/TEL
	10	6627341	PSW3S-10/TEL
	0.3	6627354	PKG3S-0.3-PSG3S/TEL
	0.6	6627355	PKG3S-0.6-PSG3S/TEL
	1	6627356	PKG3S-1-PSG3S/TEL
	2	6627357	PKG3S-2-PSG3S/TEL
	5	6627525	PKG3S-5-PSG3S/TEL
	0.3	6627358	PKW3S-0.3-PSG3S/TEL
	0.6	6627359	PKW3S-0.6-PSG3S/TEL
	1	6627360	PKW3S-1-PSG3S/TEL
	2	6627361	PKW3S-2-PSG3S/TEL
	5	6627526	PKW3S-5-PSG3S/TEL

PVC Cable – Black



- 4-pin
- Resistant to alkaline solutions, chemicals and oils
- Resistant to microbes and hydrolysis
- Flame-retardant and free from LABS
- cULus approved (only for bulk cable)

Female connector

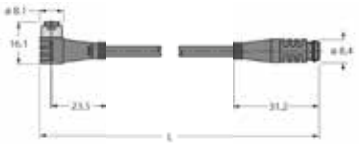


Male connector

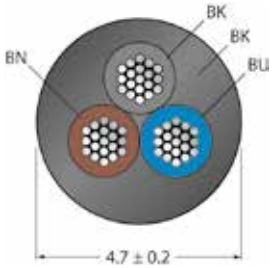


Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Protection class	IP67 (plugged)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable jacket	PVC, Black
Core insulation	PVC (BN, WH, BU, BK)
Core cross-section	4 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	30 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-40…+105 °C
Non-stationary usage	0…+80 °C

Types and Features — Selection Table

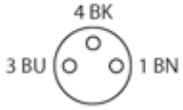
	Cable length [m]	ID number	Type
	100	6627986	CABLE4X0.34-XX-PVC-BK-100M/TEL
	500	6627987	CABLE4X0.34-XX-PVC-BK-500M/TEL
	2	6627370	PKG4S-2/TEL
	5	6627371	PKG4S-5/TEL
	10	6627372	PKG4S-10/TEL
	2	6627373	PKW4S-2/TEL
	5	6627374	PKW4S-5/TEL
	10	6627375	PKW4S-10/TEL
	2	6627376	PSG4S-2/TEL
	5	6627377	PSG4S-5/TEL
	10	6627378	PSG4S-10/TEL
	2	6627379	PSW4S-2/TEL
	5	6627380	PSW4S-5/TEL
	10	6627381	PSW4S-10/TEL
	0.3	6627394	PKG4S-0.3-PSG4S/TEL
	0.6	6627395	PKG4S-0.6-PSG4S/TEL
	1	6627396	PKG4S-1-PSG4S/TEL
	2	6627397	PKG4S-2-PSG4S/TEL
	5	6627527	PKG4S-5-PSG4S/TEL
	0.3	6627398	PKW4S-0.3-PSG4S/TEL
	0.6	6627399	PKW4S-0.6-PSG4S/TEL
	1	6627400	PKW4S-1-PSG4S/TEL
	2	6627401	PKW4S-2-PSG4S/TEL
	5	6627528	PKW4S-5-PSG4S/TEL

PVC Cable – Black

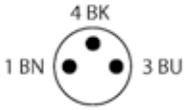


- 3-pin
- Resistant to alkaline solutions, chemicals and oils
- Resistant to microbes and hydrolysis
- Flame-retardant and free from LABS
- cULus approved (only for bulk cable)

Female connector



Male connector

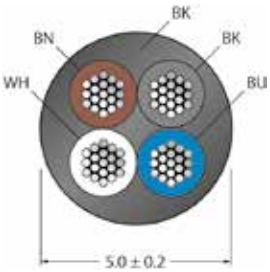


Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Protection class	IP67 (plugged)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable jacket	PVC, Black
Core insulation	PVC (BN, BU, BK)
Core cross-section	3 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	60 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-40…+105 °C
Non-stationary usage	0…+80 °C

Types and Features — Selection Table

	Cable length [m]	ID number	Type
	100	6627984	CABLE3X0.34-XX-PVC-BK-100M/TEL
	500	6627985	CABLE3X0.34-XX-PVC-BK-500M/TEL
	2	6627501	PKG3Z-2/TEL
	5	6627502	PKG3Z-5/TEL
	10	6627503	PKG3Z-10/TEL
	2	6627504	PKW3Z-2/TEL
	5	6627505	PKW3Z-5/TEL
	10	6627506	PKW3Z-10/TEL

PVC Cable – Black



- 4-pin
- Resistant to alkaline solutions, chemicals and oils
- Resistant to microbes and hydrolysis
- Flame-retardant and free from LABS
- cULus approved (only for bulk cable)

Female connector



Male connector

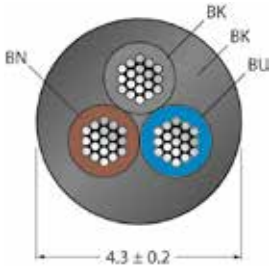


Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Protection class	IP67 (plugged)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable jacket	PVC, Black
Core insulation	PVC (BN, WH, BU, BK)
Core cross-section	4 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	30 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-40…+105 °C
Non-stationary usage	0…+80 °C

Types and Features — Selection Table

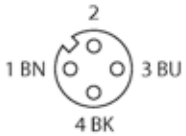
	Cable length [m]	ID number	Type
	100	6627986	CABLE4X0.34-XX-PVC-BK-100M/TEL
	500	6627987	CABLE4X0.34-XX-PVC-BK-500M/TEL
	2	6627507	PKG4Z-2/TEL
	5	6627508	PKG4Z-5/TEL
	10	6627509	PKG4Z-10/TEL
	2	6627510	PKW4Z-2/TEL
	5	6627511	PKW4Z-5/TEL
	10	6627512	PKW4Z-10/TEL

PUR Cable – Black

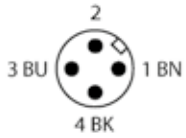


- 3-pin
- Qualified for drag chain use and flame-retardant
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS
- cULus approved

Female connector

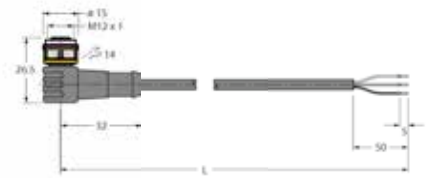
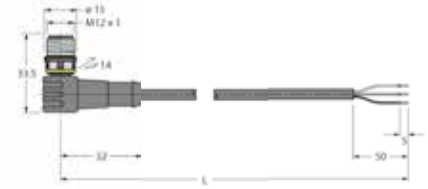
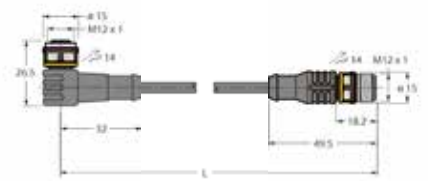


Male connector

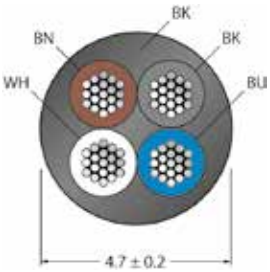


Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	4.3 mm ± 0.20
Cable jacket	PUR, Black
Core insulation	PP (BN, BU, BK)
Core cross-section	3 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	250 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm^2
Max. tensile strength (dynamic)	≤ 20 N/mm^2
Bending cycles	> 5 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s^2
Admissible travel path, horizontal	5 m (at 5 m/s^2)
Admissible travel path, vertical	2 m (at 5 m/s^2)
Admissible traversing speed	3.3 m/s
Torsional stress	± 180 °/m
Ambient temperature	
Stationary usage	-50…+80 °C
Non-stationary usage	-25…+80 °C
Drag chain operation	-25…+60 °C

Types and Features — Selection Table

	Cable length [m]	ID number	Type
	100	6627992	CABLE3X0.34-XX-PUR-BK-100M/TXL
	500	6627993	CABLE3X0.34-XX-PUR-BK-500M/TXL
	2	6625500	RKC4T-2/TXL
	5	6625501	RKC4T-5/TXL
	10	6625502	RKC4T-10/TXL
	2	6625512	WKC4T-2/TXL
	5	6625513	WKC4T-5/TXL
	10	6625514	WKC4T-10/TXL
	2	6625524	RSC4T-2/TXL
	5	6625525	RSC4T-5/TXL
	10	6625526	RSC4T-10/TXL
	2	6625536	WSC4T-2/TXL
	5	6625537	WSC4T-5/TXL
	10	6625538	WSC4T-10/TXL
	0.3	6625601	RKC4T-0.3-RSC4T/TXL
	0.6	6625602	RKC4T-0.6-RSC4T/TXL
	1	6625603	RKC4T-1-RSC4T/TXL
	2	6625604	RKC4T-2-RSC4T/TXL
	5	6625730	RKC4T-5-RSC4T/TXL
	0.3	6625633	WKC4T-0.3-RSC4T/TXL
	0.6	6625634	WKC4T-0.6-RSC4T/TXL
	1	6625635	WKC4T-1-RSC4T/TXL
	2	6625636	WKC4T-2-RSC4T/TXL
	5	6625733	WKC4T-5-RSC4T/TXL

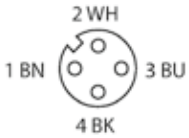
PUR Cable – Black



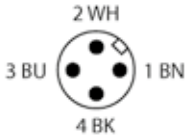
- 4-pin
- Qualified for drag chain use and flame-retardant
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS
- cULus approved



Female connector

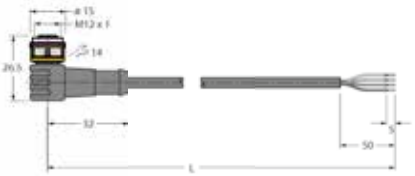
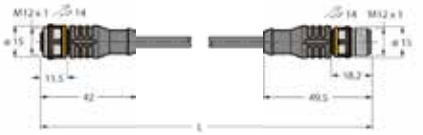
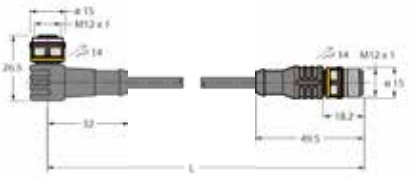


Male connector

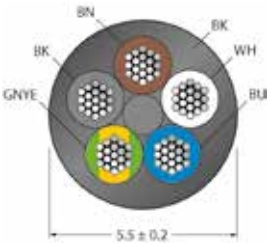


Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	4.7 mm ± 0.20
Cable jacket	PUR, Black
Core insulation	PP (BN, WH, BU, BK)
Core cross-section	4 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	250 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm^2
Max. tensile strength (dynamic)	≤ 20 N/mm^2
Bending cycles	> 5 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s^2
Admissible travel path, horizontal	5 m (at 5 m/s^2)
Admissible travel path, vertical	2 m (at 5 m/s^2)
Admissible traversing speed	3.3 m/s
Torsional stress	± 180 °/m
Ambient temperature	
Stationary usage	-50…+80 °C
Non-stationary usage	-25…+80 °C
Drag chain operation	-25…+60 °C

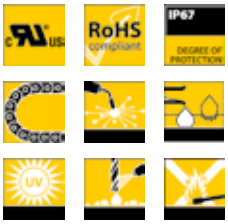
Types and Features — Selection Table

	Cable length [m]	ID number	Type
	100	6627994	CABLE4X0.34-XX-PUR-BK-100M/TXL
	500	6627995	CABLE4X0.34-XX-PUR-BK-500M/TXL
	2	6625503	RKC4.4T-2/TXL
	5	6625504	RKC4.4T-5/TXL
	10	6625505	RKC4.4T-10/TXL
	2	6625515	WKC4.4T-2/TXL
	5	6625516	WKC4.4T-5/TXL
	10	6625517	WKC4.4T-10/TXL
	2	6625527	RSC4.4T-2/TXL
	5	6625528	RSC4.4T-5/TXL
	10	6625529	RSC4.4T-10/TXL
	0.3	6625605	RKC4.4T-0.3-RSC4.4T/TXL
	0.6	6625606	RKC4.4T-0.6-RSC4.4T/TXL
	1	6625607	RKC4.4T-1-RSC4.4T/TXL
	2	6625608	RKC4.4T-2-RSC4.4T/TXL
	5	6625731	RKC4.4T-5-RSC4.4T/TXL
	0.3	6625637	WKC4.4T-0.3-RSC4.4T/TXL
	0.6	6625638	WKC4.4T-0.6-RSC4.4T/TXL
	1	6625639	WKC4.4T-1-RSC4.4T/TXL
	2	6625640	WKC4.4T-2-RSC4.4T/TXL
	5	6626878	WKC4.4T-5-RSC4.4T/TXL

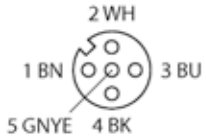
PUR Cable – Black



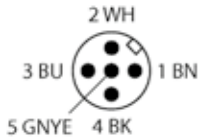
- 4-pin + PE
- Qualified for drag chain use and flame-retardant
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS
- cULus approved



Female connector

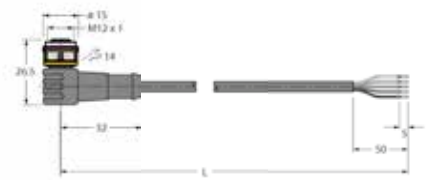
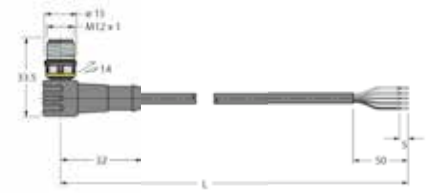
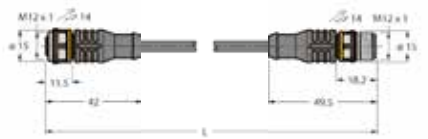
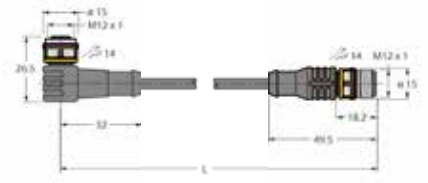


Male connector

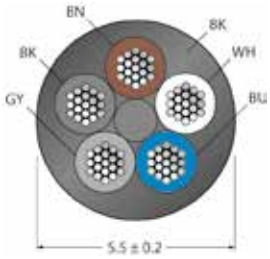


Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable jacket	PUR, Black
Core insulation	PP (BN, WH, BU, BK, GNYE)
Core cross-section	5 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	60 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm^2
Max. tensile strength (dynamic)	≤ 20 N/mm^2
Bending cycles	> 5 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s^2
Admissible travel path, horizontal	5 m (at 5 m/s^2)
Admissible travel path, vertical	2 m (at 5 m/s^2)
Admissible traversing speed	3.3 m/s
Torsional stress	± 180 °/m
Ambient temperature	
Stationary usage	-50…+80 °C
Non-stationary usage	-25…+80 °C
Drag chain operation	-25…+60 °C

Types and Features — Selection Table

	Cable length [m]	ID number	Type
	100	6627996	CABLE(4+1)X0.34-XX-PUR-BK-100M/TXL
	500	6627997	CABLE(4+1)X0.34-XX-PUR-BK-500M/TXL
	2	6625509	RKC5T-2/TXL
	5	6625510	RKC5T-5/TXL
	10	6625511	RKC5T-10/TXL
	2	6625521	WKC5T-2/TXL
	5	6625522	WKC5T-5/TXL
	10	6625523	WKC5T-10/TXL
	2	6625533	RSC5T-2/TXL
	5	6625534	RSC5T-5/TXL
	10	6625535	RSC5T-10/TXL
	2	6625545	WSC5T-2/TXL
	5	6625546	WSC5T-5/TXL
	10	6625547	WSC5T-10/TXL
	0.3	6625613	RKC5T-0.3-RSC5T/TXL
	0.6	6625614	RKC5T-0.6-RSC5T/TXL
	1	6625615	RKC5T-1-RSC5T/TXL
	2	6625616	RKC5T-2-RSC5T/TXL
	5	6627037	RKC5T-5-RSC5T/TXL
	0.3	6625645	WKC5T-0.3-RSC5T/TXL
	0.6	6625646	WKC5T-0.6-RSC5T/TXL
	1	6625647	WKC5T-1-RSC5T/TXL
	2	6625648	WKC5T-2-RSC5T/TXL
	5	6627038	WKC5T-5-RSC5T/TXL

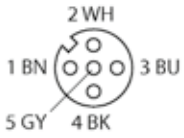
PUR Cable – Black



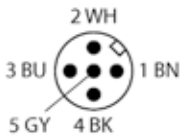
- 5-pin
- Qualified for drag chain use and flame-retardant
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS
- cULus approved



Female connector

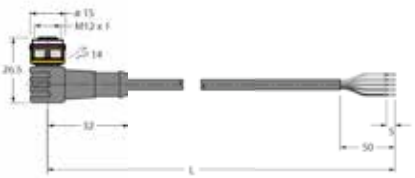
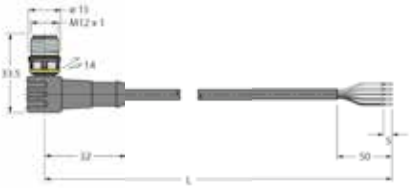
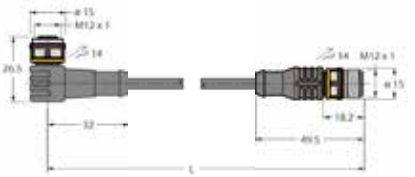


Male connector

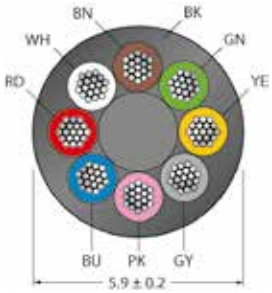


Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable jacket	PUR, Black
Core insulation	PP (BN, WH, BU, BK, GY)
Core cross-section	5 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	60 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm^2
Max. tensile strength (dynamic)	≤ 20 N/mm^2
Bending cycles	> 5 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s^2
Admissible travel path, horizontal	5 m (at 5 m/s^2)
Admissible travel path, vertical	2 m (at 5 m/s^2)
Admissible traversing speed	3.3 m/s
Torsional stress	± 180 °/m
Ambient temperature	
Stationary usage	-50…+80 °C
Non-stationary usage	-25…+80 °C
Drag chain operation	-25…+60 °C

Types and Features — Selection Table

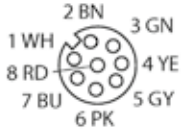
	Cable length [m]	ID number	Type
	100	6627998	CABLE5X0.34-XX-PUR-BK-100M/TXL
	500	6627999	CABLE5X0.34-XX-PUR-BK-500M/TXL
	5	6625507	RKC4.5T-5/TXL
	2	6625506	RKC4.5T-2/TXL
	10	6625508	RKC4.5T-10/TXL
	2	6625518	WKC4.5T-2/TXL
	5	6625519	WKC4.5T-5/TXL
	10	6625520	WKC4.5T-10/TXL
	2	6625530	RSC4.5T-2/TXL
	5	6625531	RSC4.5T-5/TXL
	10	6625532	RSC4.5T-10/TXL
	2	6625542	WSC4.5T-2/TXL
	5	6625543	WSC4.5T-5/TXL
	10	6625544	WSC4.5T-10/TXL
	0.3	6625609	RKC4.5T-0.3-RSC4.5T/TXL
	0.6	6625610	RKC4.5T-0.6-RSC4.5T/TXL
	1	6625611	RKC4.5T-1-RSC4.5T/TXL
	2	6625612	RKC4.5T-2-RSC4.5T/TXL
	5	6625732	RKC4.5T-5-RSC4.5T/TXL
	0.3	6625641	WKC4.5T-0.3-RSC4.5T/TXL
	0.6	6625642	WKC4.5T-0.6-RSC4.5T/TXL
	1	6625643	WKC4.5T-1-RSC4.5T/TXL
	2	6625644	WKC4.5T-2-RSC4.5T/TXL
	5	6625735	WKC4.5T-5-RSC4.5T/TXL

PUR Cable – Black

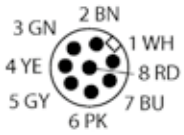


- 8-pin
- Qualified for drag chain use and flame-retardant
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS
- cULus approved

Female connector

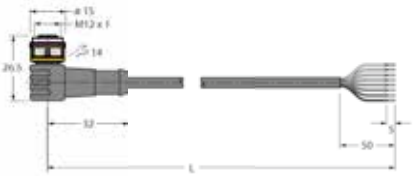
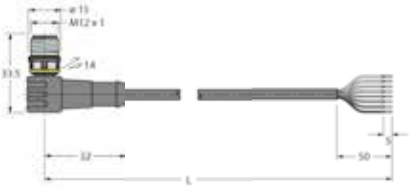
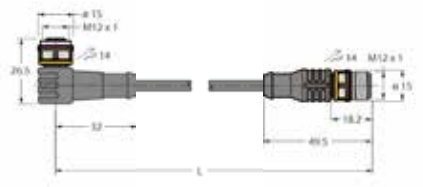


Male connector

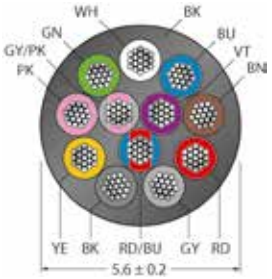


Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	5.9 mm ± 0.20
Cable jacket	PUR, Black
Core insulation	PP (WH, BN, GN, YE, GY, PK, BU, RD)
Core cross-section	8 x 0.25 mm^2
Arrangement of strands	32 x 0.1 mm
Electrical properties at +20 °C	
Current load	2 A
Rated voltage	30 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 79 Ω/km
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm^2
Max. tensile strength (dynamic)	≤ 20 N/mm^2
Bending cycles	> 5 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s^2
Admissible travel path, horizontal	5 m (at 5 m/s^2)
Admissible travel path, vertical	2 m (at 5 m/s^2)
Admissible traversing speed	3.3 m/s
Torsional stress	± 180 °/m
Ambient temperature	
Stationary usage	-50…+80 °C
Non-stationary usage	-25…+80 °C
Drag chain operation	-25…+60 °C

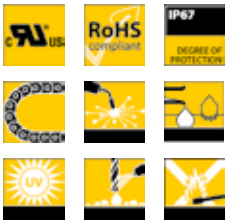
Types and Features — Selection Table

	Cable length [m]	ID number	Type
	100	6628005	CABLE8X0.25-XX-PUR-BK-100M/TXL
	500	6628006	CABLE8X0.25-XX-PUR-BK-500M/TXL
	2	6625142	RKC8T-2/TXL
	5	6625143	RKC8T-5/TXL
	10	6625144	RKC8T-10/TXL
	2	6625145	WKC8T-2/TXL
	5	6625146	WKC8T-5/TXL
	10	6625147	WKC8T-10/TXL
	2	6625148	RSC8T-2/TXL
	5	6625149	RSC8T-5/TXL
	10	6625150	RSC8T-10/TXL
	2	6625151	WSC8T-2/TXL
	5	6625152	WSC8T-5/TXL
	10	6625153	WSC8T-10/TXL
	0.3	6625162	RKC8T-0.3-RSC8T/TXL
	0.6	6625163	RKC8T-0.6-RSC8T/TXL
	1	6625164	RKC8T-1-RSC8T/TXL
	2	6625165	RKC8T-2-RSC8T/TXL
	5	6625172	RKC8T-5-RSC8T/TXL
	0.3	6625166	WKC8T-0.3-RSC8T/TXL
	0.6	6625167	WKC8T-0.6-RSC8T/TXL
	1	6625168	WKC8T-1-RSC8T/TXL
	2	6625169	WKC8T-2-RSC8T/TXL
	5	6625173	WKC8T-5-RSC8T/TXL

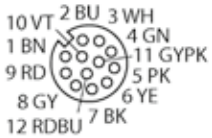
PUR Cable – Black



- 12-pin
- Qualified for drag chain use and flame-retardant
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS
- cULus approved



Female connector



Male connector



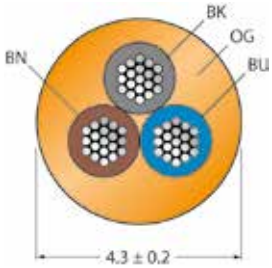
Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	5.6 mm ± 0.20
Cable jacket	PUR, Black
Core insulation	PP (BN, BU, WH, GN, PK, YE, BK, GY, RD, VT, GY/PK, RD/BU)
Core cross-section	12 x 0.14 mm^2
Arrangement of strands	18 x 0.1 mm
Electrical properties at +20 °C	
Current load	1.5 A
Rated voltage	30 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 138 Ω/km
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm^2
Max. tensile strength (dynamic)	≤ 20 N/mm^2
Bending cycles	> 5 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s^2
Admissible travel path, horizontal	5 m (at 5 m/s^2)
Admissible travel path, vertical	2 m (at 5 m/s^2)
Admissible traversing speed	3.3 m/s
Torsional stress	± 180 °/m
Ambient temperature	
Stationary usage	-50…+80 °C
Non-stationary usage	-25…+80 °C
Drag chain operation	-25…+60 °C

Types and Features — Selection Table



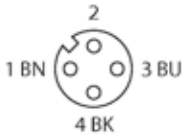
Cable length [m]	ID number	Type
100	6628007	CABLE12X0.14-XX-PUR-BK-100M/TXL
500	6628008	CABLE12X0.14-XX-PUR-BK-500M/TXL
2	6625339	RKC12T-2/TXL
5	6625340	RKC12T-5/TXL
10	6625341	RKC12T-10/TXL
2	6625342	WKC12T-2/TXL
5	6625343	WKC12T-5/TXL
10	6625344	WKC12T-10/TXL
2	6625345	RSC12T-2/TXL
5	6625346	RSC12T-5/TXL
10	6625347	RSC12T-10/TXL
2	6625348	WSC12T-2/TXL
5	6625349	WSC12T-5/TXL
10	6625350	WSC12T-10/TXL
0.3	6625359	RKC12T-0.3-RSC12T/TXL
0.6	6625360	RKC12T-0.6-RSC12T/TXL
1	6625361	RKC12T-1-RSC12T/TXL
2	6625362	RKC12T-2-RSC12T/TXL
5	6625384	RKC12T-5-RSC12T/TXL
0.3	6625363	WKC12T-0.3-RSC12T/TXL
0.6	6625364	WKC12T-0.6-RSC12T/TXL
1	6625365	WKC12T-1-RSC12T/TXL
2	6625366	WKC12T-2-RSC12T/TXL
5	6625367	WKC12T-5-RSC12T/TXL

PUR Cable – Orange

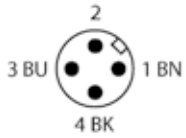


- 3-pin
- Qualified for drag chain use and flame-retardant
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS
- cULus approved

Female connector

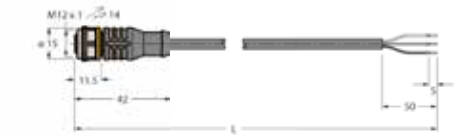
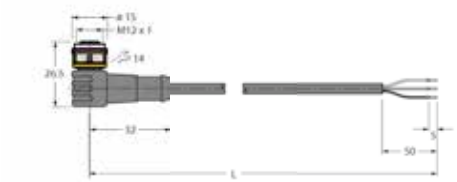
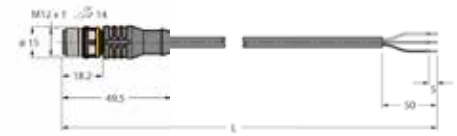
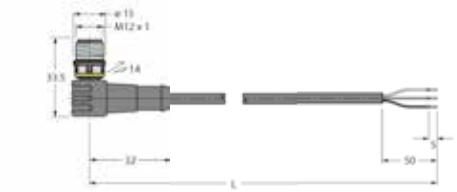
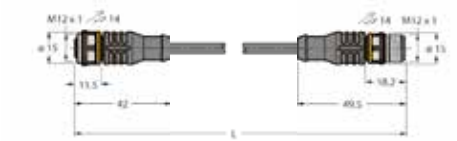
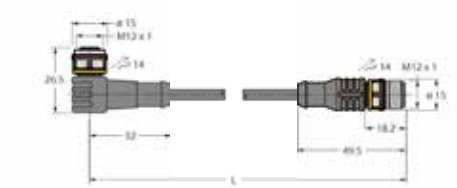


Male connector

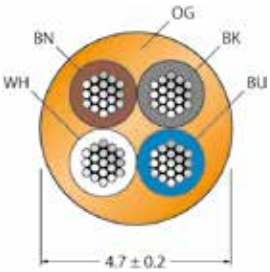


Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	4.3 mm ± 0.20
Cable jacket	PUR, Orange
Core insulation	PP (BN, BU, BK)
Core cross-section	3 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	250 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm^2
Max. tensile strength (dynamic)	≤ 20 N/mm^2
Bending cycles	> 5 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s^2
Admissible travel path, horizontal	5 m (at 5 m/s^2)
Admissible travel path, vertical	2 m (at 5 m/s^2)
Admissible traversing speed	3.3 m/s
Torsional stress	± 180 °/m
Ambient temperature	
Stationary usage	-50…+80 °C
Non-stationary usage	-25…+80 °C
Drag chain operation	-25…+60 °C

Types and Features — Selection Table

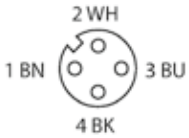
	Cable length [m]	ID number	Type
	100	6628620	CABLE3X0.34-XX-PUR-OG-100M/TXO
	500	6628621	CABLE3X0.34-XX-PUR-OG-500M/TXO
	2	6628683	RKC4T-2/TXO
	5	6628901	RKC4T-5/TXO
	10	6629037	RKC4T-10/TXO
	2	6628684	WKC4T-2/TXO
	5	6629504	WKC4T-5/TXO
	10	6629628	WKC4T-10/TXO
	2	6629629	RSC4T-2/TXO
	5	6629630	RSC4T-5/TXO
	10	6629631	RSC4T-10/TXO
	2	6629632	WSC4T-2/TXO
	5	6629633	WSC4T-5/TXO
	10	6629634	WSC4T-10/TXO
	0.3	6629635	RKC4T-0.3-RSC4T/TXO
	0.6	6629636	RKC4T-0.6-RSC4T/TXO
	1	6629637	RKC4T-1-RSC4T/TXO
	2	6628551	RKC4T-2-RSC4T/TXO
	5	6628552	RKC4T-5-RSC4T/TXO
	0.3	6629638	WKC4T-0.3-RSC4T/TXO
	0.6	6629639	WKC4T-0.6-RSC4T/TXO
	1	6629640	WKC4T-1-RSC4T/TXO
	2	6629641	WKC4T-2-RSC4T/TXO
	5	6629642	WKC4T-5-RSC4T/TXO

PUR Cable – Orange

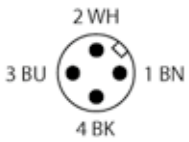


- 4-pin
- Qualified for drag chain use and flame-retardant
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS
- cULus approved

Female connector

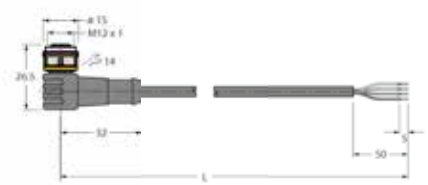
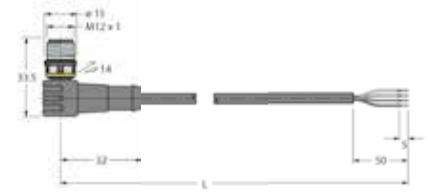
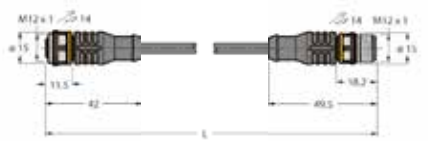
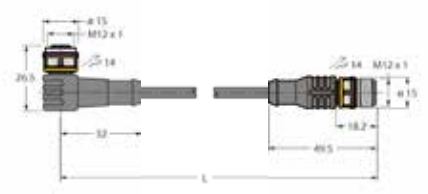


Male connector

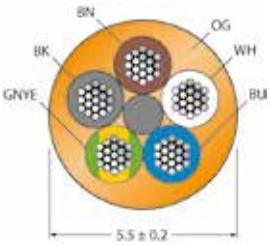


Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	4.7 mm ± 0.20
Cable jacket	PUR, Orange
Core insulation	PP (BN, WH, BU, BK)
Core cross-section	4 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	250 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm^2
Max. tensile strength (dynamic)	≤ 20 N/mm^2
Bending cycles	> 5 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s^2
Admissible travel path, horizontal	5 m (at 5 m/s^2)
Admissible travel path, vertical	2 m (at 5 m/s^2)
Admissible traversing speed	3.3 m/s
Torsional stress	± 180 °/m
Ambient temperature	
Stationary usage	-50…+80 °C
Non-stationary usage	-25…+80 °C
Drag chain operation	-25…+60 °C

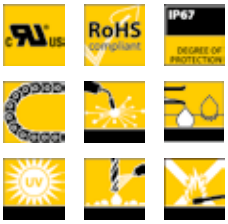
Types and Features — Selection Table

	Cable length [m]	ID number	Type
	100	6628622	CABLE4X0.34-XX-PUR-OR-100M/TXO
	500	6628623	CABLE4X0.34-XX-PUR-OR-500M/TXO
	2	6627304	RKC4.4T-2/TXO
	5	6627305	RKC4.4T-5/TXO
	10	6627278	RKC4.4T-10/TXO
	2	6627307	WKC4.4T-2/TXO
	5	6627308	WKC4.4T-5/TXO
	10	6627309	WKC4.4T-10/TXO
	2	6627556	RSC4.4T-2/TXO
	5	6629643	RSC4.4T-5/TXO
	10	6629644	RSC4.4T-10/TXO
	2	6628294	WSC4.4T-2/TXO
	5	6629645	WSC4.4T-5/TXO
	10	6629646	WSC4.4T-10/TXO
	0.3	6627541	RKC4.4T-0.3-RSC4.4T/TXO
	0.6	6627328	RKC4.4T-0.6-RSC4.4T/TXO
	1	6627250	RKC4.4T-1-RSC4.4T/TXO
	2	6627251	RKC4.4T-2-RSC4.4T/TXO
	5	6627280	RKC4.4T-5-RSC4.4T/TXO
	0.3	6629647	WKC4.4T-0.3-RSC4.4T/TXO
	0.6	6627233	WKC4.4T-0.6-RSC4.4T/TXO
	1	6627234	WKC4.4T-1-RSC4.4T/TXO
	2	6627236	WKC4.4T-2-RSC4.4T/TXO
	5	6627302	WKC4.4T-5-RSC4.4T/TXO

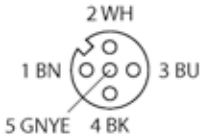
PUR Cable – Orange



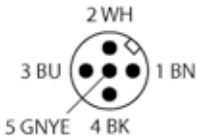
- 4-pin + PE
- Qualified for drag chain use and flame-retardant
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS
- cULus approved



Female connector

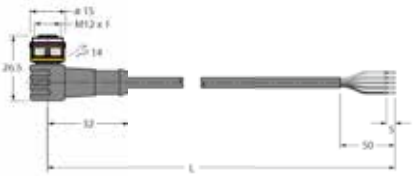
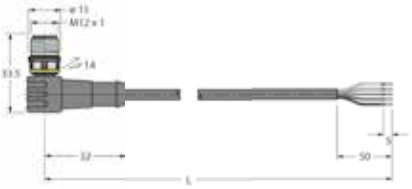
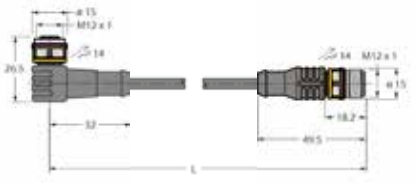


Male connector

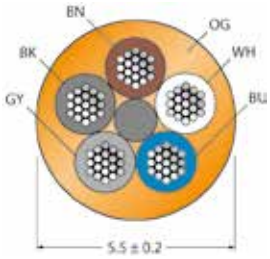


Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	5.5 mm ± 0.20
Cable jacket	PUR, Orange
Core insulation	PP (BN, WH, BU, BK, GNYE)
Core cross-section	5 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	60 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm^2
Max. tensile strength (dynamic)	≤ 20 N/mm^2
Bending cycles	> 5 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s^2
Admissible travel path, horizontal	5 m (at 5 m/s^2)
Admissible travel path, vertical	2 m (at 5 m/s^2)
Admissible traversing speed	3.3 m/s
Torsional stress	± 180 °/m
Ambient temperature	
Stationary usage	-50…+80 °C
Non-stationary usage	-25…+80 °C
Drag chain operation	-25…+60 °C

Types and Features — Selection Table

	Cable length [m]	ID number	Type
	100	6628624	CABLE(4+1)x0.34-XX-PUR-OG-100M/TXO
	500	6628625	CABLE(4+1)x0.34-XX-PUR-OG-500M/TXO
	2	6629648	RKC5T-2/TXO
	5	6629031	RKC5T-5/TXO
	10	6629649	RKC5T-10/TXO
	2	6629650	WKC5T-2/TXO
	5	6629651	WKC5T-5/TXO
	10	6629652	WKC5T-10/TXO
	2	6627893	RSC5T-2/TXO
	5	6629653	RSC5T-5/TXO
	10	6629654	RSC5T-10/TXO
	2	6629655	WSC5T-2/TXO
	5	6629656	WSC5T-5/TXO
	10	6629657	WSC5T-10/TXO
	0.3	6629658	RKC5T-0.3-RSC5T/TXO
	0.6	6629659	RKC5T-0.6-RSC5T/TXO
	1	6628563	RKC5T-1-RSC5T/TXO
	2	6628564	RKC5T-2-RSC5T/TXO
	5	6628565	RKC5T-5-RSC5T/TXO
	0.3	6629660	WKC5T-0.3-RSC5T/TXO
	0.6	6627247	WKC5T-0.6-RSC5T/TXO
	1	6627248	WKC5T-1-RSC5T/TXO
	2	6629661	WKC5T-2-RSC5T/TXO
	5	6629662	WKC5T-5-RSC5T/TXO

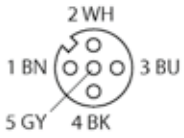
PUR Cable – Orange



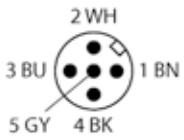
- 5-pin
- Qualified for drag chain use and flame-retardant
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS
- cULus approved



Female connector



Male connector



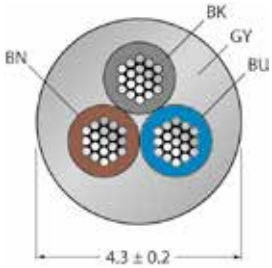
Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	5.5 mm ± 0.20
Cable jacket	PUR, Orange
Core insulation	PP (BN, WH, BU, BK, GY)
Core cross-section	5 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	60 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm^2
Max. tensile strength (dynamic)	≤ 20 N/mm^2
Bending cycles	> 5 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s^2
Admissible travel path, horizontal	5 m (at 5 m/s^2)
Admissible travel path, vertical	2 m (at 5 m/s^2)
Admissible traversing speed	3.3 m/s
Torsional stress	± 180 °/m
Ambient temperature	
Stationary usage	-50…+80 °C
Non-stationary usage	-25…+80 °C
Drag chain operation	-25…+60 °C

Types and Features — Selection Table



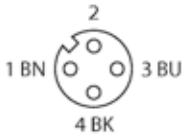
Cable length [m]	ID number	Type
100	6628626	CABLE5 x 0.34-XX-PUR-OG-100M/TXO
500	6628627	CABLE5 x 0.34-XX-PUR-OG-500M/TXO
2	6627290	RKC4.5T-2/TXO
5	6627291	RKC4.5T-5/TXO
10	6627292	RKC4.5T-10/TXO
2	6627293	WKC4.5T-2/TXO
5	6627294	WKC4.5T-5/TXO
10	6627295	WKC4.5T-10/TXO
2	6627254	RSC4.5T-2/TXO
5	6629164	RSC4.5T-5/TXO
10	6629663	RSC4.5T-10/TXO
2	6629664	WSC4.5T-2/TXO
5	6629665	WSC4.5T-5/TXO
10	6629666	WSC4.5T-10/TXO
0.3	6629667	RKC4.5T-0.3-RSC4.5T/TXO
0.6	6627261	RKC4.5T-0.6-RSC4.5T/TXO
1	6627262	RKC4.5T-1-RSC4.5T/TXO
2	6627264	RKC4.5T-2-RSC4.5T/TXO
5	6627266	RKC4.5T-5-RSC4.5T/TXO
0.3	6629668	WKC4.5T-0.3-RSC4.5T/TXO
0.6	6629669	WKC4.5T-0.6-RSC4.5T/TXO
1	6627283	WKC4.5T-1-RSC4.5T/TXO
2	6627284	WKC4.5T-2-RSC4.5T/TXO
5	6627287	WKC4.5T-5-RSC4.5T/TXO

PUR Cable – Gray

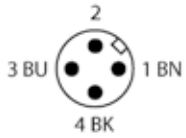


- 3-pin
- Qualified for drag chain use and flame-retardant
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS
- cULus approved

Female connector



Male connector



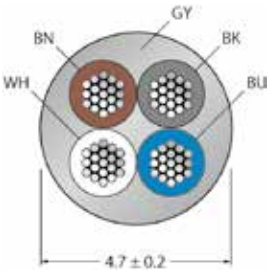
Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	4.3 mm ± 0.20
Cable jacket	PUR, Gray
Core insulation	PP (BN, BU, BK)
Core cross-section	3 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	250 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm^2
Max. tensile strength (dynamic)	≤ 20 N/mm^2
Bending cycles	> 5 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s^2
Admissible travel path, horizontal	5 m (at 5 m/s^2)
Admissible travel path, vertical	2 m (at 5 m/s^2)
Admissible traversing speed	3.3 m/s
Torsional stress	± 180 °/m
Ambient temperature	
Stationary usage	-50…+80 °C
Non-stationary usage	-25…+80 °C
Drag chain operation	-25…+60 °C

Types and Features — Selection Table



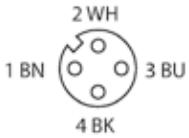
Cable length [m]	ID number	Type
100	6628632	CABLE3X0.34-XX-PUR-GY-100M/TXG
500	6628633	CABLE3X0.34-XX-PUR-GY-500M/TXG
2	6629670	RKC4T-2/TXG
5	6629438	RKC4T-5/TXG
10	6628926	RKC4T-10/TXG
2	6628778	WKC4T-2/TXG
5	6629446	WKC4T-5/TXG
10	6629447	WKC4T-10/TXG
2	6629671	RSC4T-2/TXG
5	6629672	RSC4T-5/TXG
10	6629431	RSC4T-10/TXG
2	6629673	WSC4T-2/TXG
5	6629674	WSC4T-5/TXG
10	6629675	WSC4T-10/TXG
0.3	6629676	RKC4T-0.3-RSC4T/TXG
0.6	6629677	RKC4T-0.6-RSC4T/TXG
1	6629678	RKC4T-1-RSC4T/TXG
2	6629679	RKC4T-2-RSC4T/TXG
5	6629680	RKC4T-5-RSC4T/TXG
0.3	6629681	WKC4T-0.3-RSC4T/TXG
0.6	6629682	WKC4T-0.6-RSC4T/TXG
1	6629683	WKC4T-1-RSC4T/TXG
2	6629684	WKC4T-2-RSC4T/TXG
5	6629685	WKC4T-5-RSC4T/TXG

PUR Cable – Gray

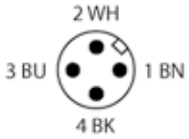


- 4-pin
- Qualified for drag chain use and flame-retardant
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS
- cULus approved

Female connector



Male connector



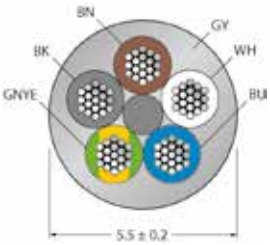
Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	4.7 mm ± 0.20
Cable jacket	PUR, Gray
Core insulation	PP (BN, WH, BU, BK)
Core cross-section	4 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	250 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm^2
Max. tensile strength (dynamic)	≤ 20 N/mm^2
Bending cycles	> 5 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s^2
Admissible travel path, horizontal	5 m (at 5 m/s^2)
Admissible travel path, vertical	2 m (at 5 m/s^2)
Admissible traversing speed	3.3 m/s
Torsional stress	± 180 °/m
Ambient temperature	
Stationary usage	-50…+80 °C
Non-stationary usage	-25…+80 °C
Drag chain operation	-25…+60 °C

Types and Features — Selection Table

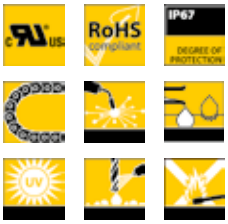


Cable length [m]	ID number	Type
100	6628634	CABLE4X0.34-XX-PUR-GY-100M/TXG
500	6628635	CABLE4X0.34-XX-PUR-GY-500M/TXG
2	6628596	RKC4.4T-2/TXG
5	6628597	RKC4.4T-5/TXG
10	6628598	RKC4.4T-10/TXG
2	6628599	WKC4.4T-2/TXG
5	6628600	WKC4.4T-5/TXG
10	6628601	WKC4.4T-10/TXG
2	6629686	RSC4.4T-2/TXG
5	6629687	RSC4.4T-5/TXG
10	6629688	RSC4.4T-10/TXG
2	6629689	WSC4.4T-2/TXG
5	6629690	WSC4.4T-5/TXG
10	6629691	WSC4.4T-10/TXG
0.3	6629692	RKC4.4T-0.3-RSC4.4T/TXG
0.6	6628282	RKC4.4T-0.6-RSC4.4T/TXG
1	6628283	RKC4.4T-1-RSC4.4T/TXG
2	6628284	RKC4.4T-2-RSC4.4T/TXG
5	6628285	RKC4.4T-5-RSC4.4T/TXG
0.3	6629693	WKC4.4T-0.3-RSC4.4T/TXG
0.6	6629694	WKC4.4T-0.6-RSC4.4T/TXG
1	6629695	WKC4.4T-1-RSC4.4T/TXG
2	6629696	WKC4.4T-2-RSC4.4T/TXG
5	6629697	WKC4.4T-5-RSC4.4T/TXG

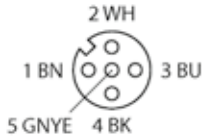
PUR Cable – Gray



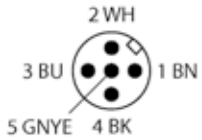
- 4-pin + PE
- Qualified for drag chain use and flame-retardant
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS
- cULus approved



Female connector



Male connector



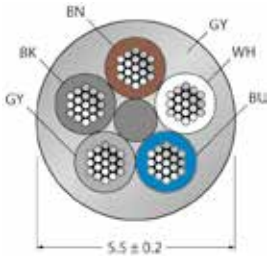
Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	5.5 mm ± 0.20
Cable jacket	PUR, Gray
Core insulation	PP (BN, WH, BU, BK, GNYE)
Core cross-section	5 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	60 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm^2
Max. tensile strength (dynamic)	≤ 20 N/mm^2
Bending cycles	> 5 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s^2
Admissible travel path, horizontal	5 m (at 5 m/s^2)
Admissible travel path, vertical	2 m (at 5 m/s^2)
Admissible traversing speed	3.3 m/s
Torsional stress	± 180 °/m
Ambient temperature	
Stationary usage	-50…+80 °C
Non-stationary usage	-25…+80 °C
Drag chain operation	-25…+60 °C

Types and Features — Selection Table

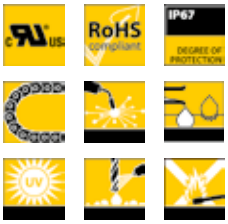


Cable length [m]	ID number	Type
100	6628636	CABLE(4+1)X0.34-XX-PUR-GY-100M/TXG
500	6628637	CABLE(4+1)X0.34-XX-PUR-GY-500M/TXG
2	6629698	RKC5T-2/TXG
5	6629699	RKC5T-5/TXG
10	6629704	RKC5T-10/TXG
2	6629705	WKC5T-2/TXG
5	6629706	WKC5T-5/TXG
10	6629707	WKC5T-10/TXG
2	6629708	RSC5T-2/TXG
5	6629709	RSC5T-5/TXG
10	6629710	RSC5T-10/TXG
2	6629711	WSC5T-2/TXG
5	6629712	WSC5T-5/TXG
10	6629713	WSC5T-10/TXG
0.3	6629714	RKC5T-0.3-RSC5T/TXG
0.6	6629715	RKC5T-0.6-RSC5T/TXG
1	6629375	RKC5T-1-RSC5T/TXG
2	6629379	RKC5T-2-RSC5T/TXG
5	6629716	RKC5T-5-RSC5T/TXG
0.3	6629717	WKC5T-0.3-RSC5T/TXG
0.6	6629718	WKC5T-0.6-RSC5T/TXG
1	6629719	WKC5T-1-RSC5T/TXG
2	6629720	WKC5T-2-RSC5T/TXG
5	6629721	WKC5T-5-RSC5T/TXG

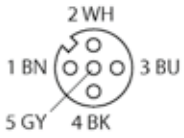
PUR Cable – Gray



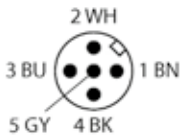
- 5-pin
- Qualified for drag chain use and flame-retardant
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS
- cULus approved



Female connector



Male connector



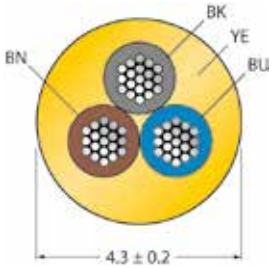
Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	5.5 mm ± 0.20
Cable jacket	PUR, Gray
Core insulation	PP (BN, WH, BU, BK, GY)
Core cross-section	5 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	60 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm^2
Max. tensile strength (dynamic)	≤ 20 N/mm^2
Bending cycles	> 5 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s^2
Admissible travel path, horizontal	5 m (at 5 m/s^2)
Admissible travel path, vertical	2 m (at 5 m/s^2)
Admissible traversing speed	3.3 m/s
Torsional stress	± 180 °/m
Ambient temperature	
Stationary usage	-50…+80 °C
Non-stationary usage	-25…+80 °C
Drag chain operation	-25…+60 °C

Types and Features — Selection Table



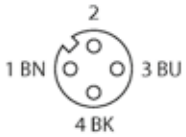
Cable length [m]	ID number	Type
100	6628638	CABLE5X0.34-XX-PUR-GY-100M/TXG
500	6628639	CABLE5X0.34-XX-PUR-GY-500M/TXG
2	6629723	RKC4.5T-2/TXG
5	6628966	RKC4.5T-5/TXG
10	6629724	RKC4.5T-10/TXG
2	6629725	WKC4.5T-2/TXG
5	6629726	WKC4.5T-5/TXG
10	6629727	WKC4.5T-10/TXG
2	6629728	RSC4.5T-2/TXG
5	6629729	RSC4.5T-5/TXG
10	6629730	RSC4.5T-10/TXG
2	6629731	WSC4.5T-2/TXG
5	6629732	WSC4.5T-5/TXG
10	6629733	WSC4.5T-10/TXG
0.3	6629734	RKC4.5T-0.3-RSC4.5T/TXG
0.6	6629735	RKC4.5T-0.6-RSC4.5T/TXG
1	6629425	RKC4.5T-1-RSC4.5T/TXG
2	6629426	RKC4.5T-2-RSC4.5T/TXG
5	6629308	RKC4.5T-5-RSC4.5T/TXG
0.3	6629736	WKC4.5T-0.3-RSC4.5T/TXG
0.6	6629737	WKC4.5T-0.6-RSC4.5T/TXG
1	6629738	WKC4.5T-1-RSC4.5T/TXG
2	6629739	WKC4.5T-2-RSC4.5T/TXG
5	6629740	WKC4.5T-5-RSC4.5T/TXG

PUR Cable – Yellow

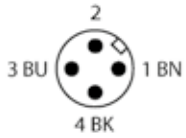


- 3-pin
- Qualified for drag chain use and flame-retardant
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS
- cULus approved

Female connector

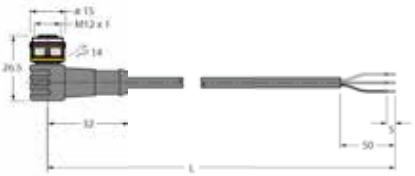
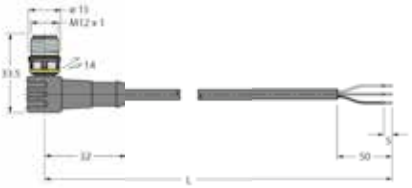
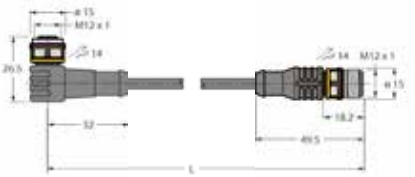


Male connector

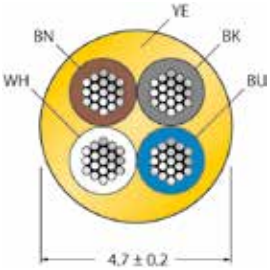


Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	4.3 mm ± 0.20
Cable jacket	PUR, Yellow
Core insulation	PP (BN, BU, BK)
Core cross-section	3 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	250 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm^2
Max. tensile strength (dynamic)	≤ 20 N/mm^2
Bending cycles	> 5 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s^2
Admissible travel path, horizontal	5 m (at 5 m/s^2)
Admissible travel path, vertical	2 m (at 5 m/s^2)
Admissible traversing speed	3.3 m/s
Torsional stress	± 180 °/m
Ambient temperature	
Stationary usage	-50…+80 °C
Non-stationary usage	-25…+80 °C
Drag chain operation	-25…+60 °C

Types and Features — Selection Table

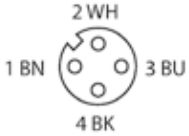
	Cable length [m]	ID number	Type
	100	6628644	CABLE3X0.34-XX-PUR-YE-100M/TXY
	500	6628645	CABLE3X0.34-XX-PUR-YE-500M/TXY
	2	6629576	RKC4T-2/TXY
	5	6629741	RKC4T-5/TXY
	10	6629742	RKC4T-10/TXY
	2	6628718	WKC4T-2/TXY
	5	6629743	WKC4T-5/TXY
	10	6629744	WKC4T-10/TXY
	2	6629745	RSC4T-2/TXY
	5	6629746	RSC4T-5/TXY
	10	6629747	RSC4T-10/TXY
	2	6629748	WSC4T-2/TXY
	5	6629749	WSC4T-5/TXY
	10	6629750	WSC4T-10/TXY
	0.3	6629751	RKC4T-0.3-RSC4T/TXY
	0.6	6629752	RKC4T-0.6-RSC4T/TXY
	1	6629753	RKC4T-1-RSC4T/TXY
	2	6629754	RKC4T-2-RSC4T/TXY
	5	6629419	RKC4T-5-RSC4T/TXY
	0.3	6629755	WKC4T-0.3-RSC4T/TXY
	0.6	6629756	WKC4T-0.6-RSC4T/TXY
	1	6629757	WKC4T-1-RSC4T/TXY
	2	6629758	WKC4T-2-RSC4T/TXY
	5	6629759	WKC4T-5-RSC4T/TXY

PUR Cable – Yellow

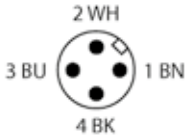


- 4-pin
- Qualified for drag chain use and flame-retardant
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS
- cULus approved

Female connector

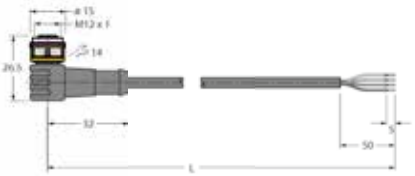
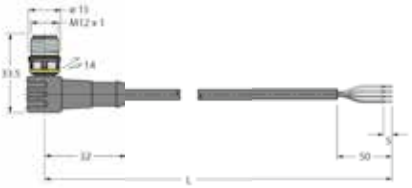
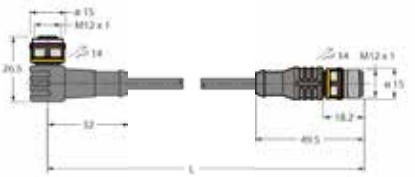


Male connector

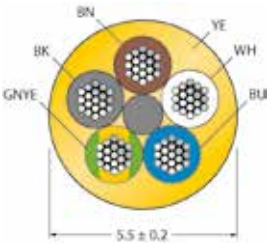


Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	4.7 mm ± 0.20
Cable jacket	PUR, Yellow
Core insulation	PP (BN, WH, BU, BK)
Core cross-section	4 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	250 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm^2
Max. tensile strength (dynamic)	≤ 20 N/mm^2
Bending cycles	> 5 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s^2
Admissible travel path, horizontal	5 m (at 5 m/s^2)
Admissible travel path, vertical	2 m (at 5 m/s^2)
Admissible traversing speed	3.3 m/s
Torsional stress	± 180 °/m
Ambient temperature	
Stationary usage	-50…+80 °C
Non-stationary usage	-25…+80 °C
Drag chain operation	-25…+60 °C

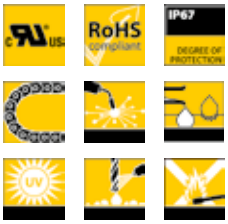
Types and Features — Selection Table

	Cable length [m]	ID number	Type
	100	6628646	CABLE4X0.34-XX-PUR-YE-100M/TXY
	500	6628647	CABLE4X0.34-XX-PUR-YE-500M/TXY
	2	6628687	RKC4.4T-2/TXY
	5	6628719	RKC4.4T-5/TXY
	10	6628688	RKC4.4T-10/TXY
	2	6629760	WKC4.4T-2/TXY
	5	6629370	WKC4.4T-5/TXY
	10	6628690	WKC4.4T-10/TXY
	2	6628678	RSC4.4T-2/TXY
	5	6629761	RSC4.4T-5/TXY
	10	6629762	RSC4.4T-10/TXY
	2	6629763	WSC4.4T-2/TXY
	5	6629764	WSC4.4T-5/TXY
	10	6629765	WSC4.4T-10/TXY
	0.3	6628764	RKC4.4T-0.3-RSC4.4T/TXY
	0.6	6629241	RKC4.4T-0.6-RSC4.4T/TXY
	1	6627694	RKC4.4T-1-RSC4.4T/TXY
	2	6627695	RKC4.4T-2-RSC4.4T/TXY
	5	6627697	RKC4.4T-5-RSC4.4T/TXY
	0.3	6629766	WKC4.4T-0.3-RSC4.4T/TXY
	0.6	6629767	WKC4.4T-0.6-RSC4.4T/TXY
	1	6628555	WKC4.4T-1-RSC4.4T/TXY
	2	6629768	WKC4.4T-2-RSC4.4T/TXY
	5	6629338	WKC4.4T-5-RSC4.4T/TXY

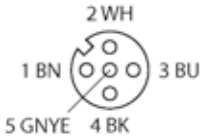
PUR Cable – Yellow



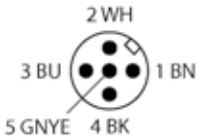
- 4-pin + PE
- Qualified for drag chain use and flame-retardant
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS
- cULus approved



Female connector



Male connector



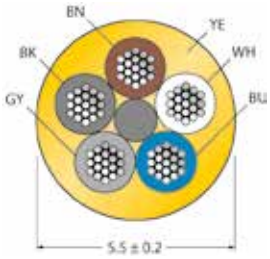
Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	5.5 mm ± 0.20
Cable jacket	PUR, Yellow
Core insulation	PP (BN, WH, BU, BK, GNYE)
Core cross-section	5 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	60 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm^2
Max. tensile strength (dynamic)	≤ 20 N/mm^2
Bending cycles	> 5 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s^2
Admissible travel path, horizontal	5 m (at 5 m/s^2)
Admissible travel path, vertical	2 m (at 5 m/s^2)
Admissible traversing speed	3.3 m/s
Torsional stress	± 180 °/m
Ambient temperature	
Stationary usage	-50…+80 °C
Non-stationary usage	-25…+80 °C
Drag chain operation	-25…+60 °C

Types and Features — Selection Table



Cable length [m]	ID number	Type
100	6628648	CABLE(4+1)X0.34-XX-PUR-YE-100M/TXY
500	6628649	CABLE(4+1)X0.34-XX-PUR-YE-500M/TXY
2	6629769	RKC5T-2/TXY
5	6629770	RKC5T-5/TXY
10	6629771	RKC5T-10/TXY
2	6629772	WKC5T-2/TXY
5	6629773	WKC5T-5/TXY
10	6629774	WKC5T-10/TXY
2	6629775	RSC5T-2/TXY
5	6629776	RSC5T-5/TXY
10	6629777	RSC5T-10/TXY
2	6629778	WSC5T-2/TXY
5	6629779	WSC5T-5/TXY
10	6629780	WSC5T-10/TXY
0.3	6629781	RKC5T-0.3-RSC5T/TXY
0.6	6629782	RKC5T-0.6-RSC5T/TXY
1	6629783	RKC5T-1-RSC5T/TXY
2	6629784	RKC5T-2-RSC5T/TXY
5	6629785	RKC5T-5-RSC5T/TXY
0.3	6629786	WKC5T-0.3-RSC5T/TXY
0.6	6629787	WKC5T-0.6-RSC5T/TXY
1	6629788	WKC5T-1-RSC5T/TXY
2	6629789	WKC5T-2-RSC5T/TXY
5	6629790	WKC5T-5-RSC5T/TXY

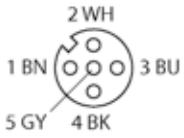
PUR Cable – Yellow



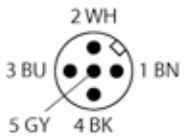
- 5-pin
- Qualified for drag chain use and flame-retardant
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS
- cULus approved



Female connector

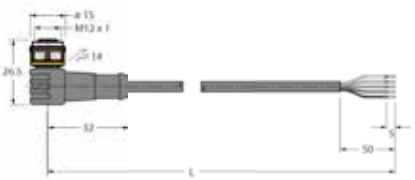
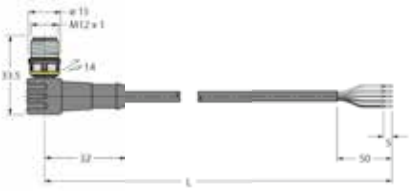
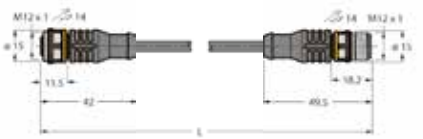
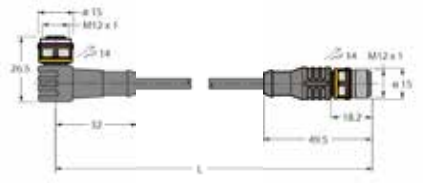


Male connector

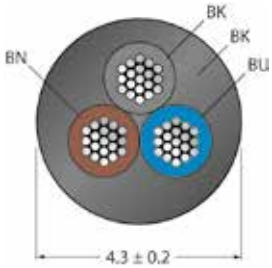


Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	5.5 mm ± 0.20
Cable jacket	PUR, Yellow
Core insulation	PP (BN, WH, BU, BK, GY)
Core cross-section	5 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	60 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm^2
Max. tensile strength (dynamic)	≤ 20 N/mm^2
Bending cycles	> 5 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s^2
Admissible travel path, horizontal	5 m (at 5 m/s^2)
Admissible travel path, vertical	2 m (at 5 m/s^2)
Admissible traversing speed	3.3 m/s
Torsional stress	± 180 °/m
Ambient temperature	
Stationary usage	-50…+80 °C
Non-stationary usage	-25…+80 °C
Drag chain operation	-25…+60 °C

Types and Features — Selection Table

	Cable length [m]	ID number	Type
	100	6628650	CABLE5X0.34-XX-PUR-YE-100M/TXY
	500	6628651	CABLE5X0.34-XX-PUR-YE-500M/TXY
	2	6629791	RKC4.5T-2/TXY
	5	6629792	RKC4.5T-5/TXY
	10	6629793	RKC4.5T-10/TXY
	2	6629794	WKC4.5T-2/TXY
	5	6629795	WKC4.5T-5/TXY
	10	6629796	WKC4.5T-10/TXY
	2	6629797	RSC4.5T-2/TXY
	5	6629352	RSC4.5T-5/TXY
	10	6629353	RSC4.5T-10/TXY
	2	6629798	WSC4.5T-2/TXY
	5	6629799	WSC4.5T-5/TXY
	10	6629801	WSC4.5T-10/TXY
	0.3	6629802	RKC4.5T-0.3-RSC4.5T/TXY
	0.6	6629803	RKC4.5T-0.6-RSC4.5T/TXY
	1	6629804	RKC4.5T-1-RSC4.5T/TXY
	2	6629805	RKC4.5T-2-RSC4.5T/TXY
	5	6629806	RKC4.5T-5-RSC4.5T/TXY
	0.3	6629807	WKC4.5T-0.3-RSC4.5T/TXY
	0.6	6629808	WKC4.5T-0.6-RSC4.5T/TXY
	1	6629809	WKC4.5T-1-RSC4.5T/TXY
	2	6629810	WKC4.5T-2-RSC4.5T/TXY
	5	6629811	WKC4.5T-5-RSC4.5T/TXY

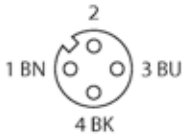
PUR Cable – Black



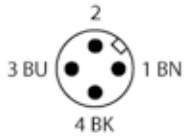
- 3-pin
- Qualified for drag chain use and flame-retardant
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS
- cULus approved



Female connector

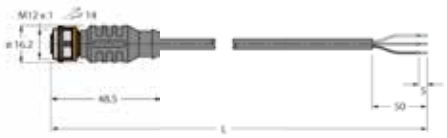
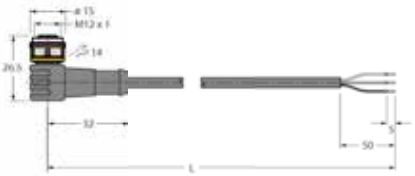
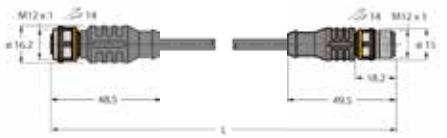
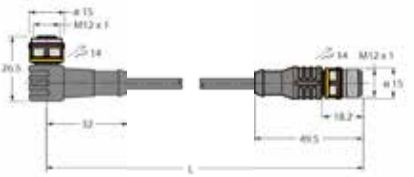


Male connector

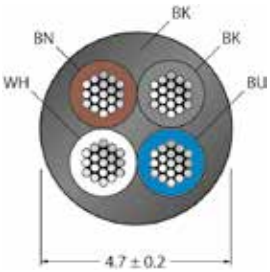


Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	4.3 mm ± 0.20
Cable jacket	PUR, Black
Core insulation	PP (BN, BU, BK)
Core cross-section	3 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	30 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm^2
Max. tensile strength (dynamic)	≤ 20 N/mm^2
Bending cycles	> 5 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s^2
Admissible travel path, horizontal	5 m (at 5 m/s^2)
Admissible travel path, vertical	2 m (at 5 m/s^2)
Admissible traversing speed	3.3 m/s
Torsional stress	± 180 °/m
Ambient temperature	
Stationary usage	-50…+80 °C
Non-stationary usage	-25…+80 °C
Drag chain operation	-25…+60 °C

Types and Features — Selection Table

	Cable length [m]	ID number	Type
	100	6627992	CABLE3X0.34-XX-PUR-BK-100M/TXL
	500	6627993	CABLE3X0.34-XX-PUR-BK-500M/TXL
	2	6626131	RKC4T-P7X2-2/TXL
	5	6626204	RKC4T-P7X2-5/TXL
	10	6626144	RKC4T-P7X2-10/TXL
	2	6626201	WKC4T-P7X2-2/TXL
	5	6626205	WKC4T-P7X2-5/TXL
	10	6626209	WKC4T-P7X2-10/TXL
	0.3	6625881	RKC4T-P7X2-0.3-RSC4T/TXL
	0.6	6625882	RKC4T-P7X2-0.6-RSC4T/TXL
	1	6625883	RKC4T-P7X2-1-RSC4T/TXL
	2	6626776	RKC4T-P7X2-2-RSC4T/TXL
	5	6627221	RKC4T-P7X2-5-RSC4T/TXL
	0.3	6626189	WKC4T-P7X2-0.3-RSC4T/TXL
	0.6	6626050	WKC4T-P7X2-0.6-RSC4T/TXL
	1	6626000	WKC4T-P7X2-1-RSC4T/TXL
	2	6626054	WKC4T-P7X2-2-RSC4T/TXL
	5	6626056	WKC4T-P7X2-5-RSC4T/TXL

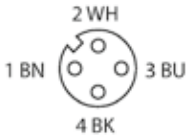
PUR Cable – Black



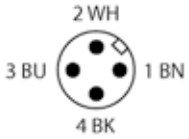
- 4-pin
- Qualified for drag chain use and flame-retardant
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS
- cULus approved



Female connector



Male connector

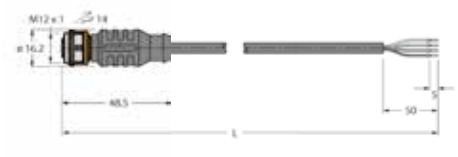


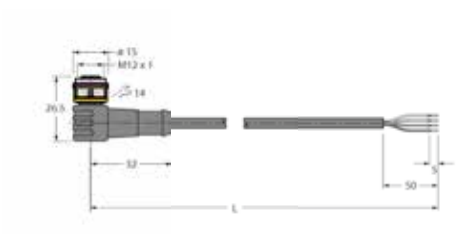
Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	4.7 mm ± 0.20
Cable jacket	PUR, Black
Core insulation	PP (BN, WH, BU, BK)
Core cross-section	4 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	30 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm^2
Max. tensile strength (dynamic)	≤ 20 N/mm^2
Bending cycles	> 5 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s^2
Admissible travel path, horizontal	5 m (at 5 m/s^2)
Admissible travel path, vertical	2 m (at 5 m/s^2)
Admissible traversing speed	3.3 m/s
Torsional stress	± 180 °/m
Ambient temperature	
Stationary usage	-50…+80 °C
Non-stationary usage	-25…+80 °C
Drag chain operation	-25…+60 °C

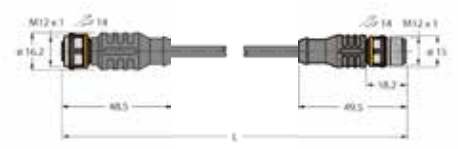
Types and Features — Selection Table







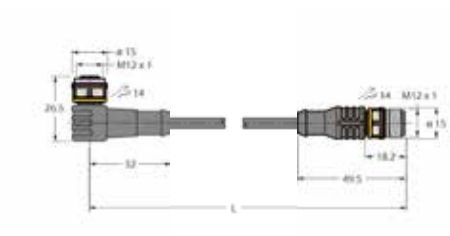




Cable length [m]	ID number	Type
100	6627994	CABLE4X0.34-XX-PUR-BK-100M/TXL
500	6627995	CABLE4X0.34-XX-PUR-BK-500M/TXL
2	6626795	RKC4.4T-P7X2-2/TXL
5	6626177	RKC4.4T-P7X2-5/TXL
10	6626184	RKC4.4T-P7X2-10/TXL
2	6629131	RKC4.4T-P7X3.1-2/TXL
5	6629132	RKC4.4T-P7X3.1-5/TXL
10	6629133	RKC4.4T-P7X3.1-10/TXL
2	6629140	RKC4.4T-P7X3.2-2/TXL320
5	6629141	RKC4.4T-P7X3.2-5/TXL320
10	6629142	RKC4.4T-P7X3.2-10/TXL320
2	6626173	WKC4.4T-P7X2-2/TXL
5	6626178	WKC4.4T-P7X2-5/TXL
10	6626185	WKC4.4T-P7X2-10/TXL
2	6626174	WKC4.4T-P7X3-2/TXL
5	6626179	WKC4.4T-P7X3-5/TXL
10	6626186	WKC4.4T-P7X3-10/TXL
2	6626107	WKC4.4T-P7X3.1-2/TXL
5	6626111	WKC4.4T-P7X3.1-5/TXL
10	6626118	WKC4.4T-P7X3.1-10/TXL
2	6625993	WKC4.4T-P7X3.2-2/TXL
5	6627246	WKC4.4T-P7X3.2-5/TXL
10	6627279	WKC4.4T-P7X3.2-10/TXL
0.3	6625884	RKC4.4T-P7X2-0.3-RSC4.4T/TXL
0.6	6625885	RKC4.4T-P7X2-0.6-RSC4.4T/TXL
1	6625886	RKC4.4T-P7X2-1-RSC4.4T/TXL
2	6625887	RKC4.4T-P7X2-2-RSC4.4T/TXL
5	6625888	RKC4.4T-P7X2-5-RSC4.4T/TXL
0.3	6629134	RKC4.4T-P7X3.1-0.3-RSC4.4T/TXL
0.6	6629135	RKC4.4T-P7X3.1-0.6-RSC4.4T/TXL
1	6629136	RKC4.4T-P7X3.1-1-RSC4.4T/TXL
2	6629137	RKC4.4T-P7X3.1-2-RSC4.4T/TXL
5	6629138	RKC4.4T-P7X3.1-5-RSC4.4T/TXL
0.3	6629143	RKC4.4T-P7X3.2-0.3-RSC4.4T/TX320
0.6	6629144	RKC4.4T-P7X3.2-0.6-RSC4.4T/TX320
1	6629145	RKC4.4T-P7X3.2-1-RSC4.4T/TXL320
2	6629146	RKC4.4T-P7X3.2-2-RSC4.4T/TXL320
5	6629147	RKC4.4T-P7X3.2-5-RSC4.4T/TXL320

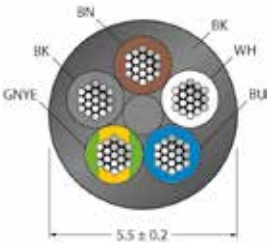
Types and Features — Selection Table



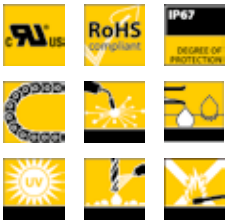


Cable length [m]	ID number	Type
0.3	6626021	WKC4.4T-P7X2-0.3-RSC4.4T/TXL
0.6	6626025	WKC4.4T-P7X2-0.6-RSC4.4T/TXL
1	6625901	WKC4.4T-P7X2-1-RSC4.4T/TXL
2	6625902	WKC4.4T-P7X2-2-RSC4.4T/TXL
5	6625904	WKC4.4T-P7X2-5-RSC4.4T/TXL
0.3	6626023	WKC4.4T-P7X3-0.3-RSC4.4T/TXL
0.6	6626029	WKC4.4T-P7X3-0.6-RSC4.4T/TXL
1	6626035	WKC4.4T-P7X3-1-RSC4.4T/TXL
2	6626042	WKC4.4T-P7X3-2-RSC4.4T/TXL
5	6626046	WKC4.4T-P7X3-5-RSC4.4T/TXL
0.3	6625939	WKC4.4T-P7X3.1-0.3-RSC4.4T/TXL
0.6	6626027	WKC4.4T-P7X3.1-0.6-RSC4.4T/TXL
1	6626033	WKC4.4T-P7X3.1-1-RSC4.4T/TXL
2	6626040	WKC4.4T-P7X3.1-2-RSC4.4T/TXL
5	6626045	WKC4.4T-P7X3.1-5-RSC4.4T/TXL
0.3	6626022	WKC4.4T-P7X3.2-0.3-RSC4.4T/TXL
0.6	6626028	WKC4.4T-P7X3.2-0.6-RSC4.4T/TXL
1	6626034	WKC4.4T-P7X3.2-1-RSC4.4T/TXL
2	6626041	WKC4.4T-P7X3.2-2-RSC4.4T/TXL
5	6625958	WKC4.4T-P7X3.2-5-RSC4.4T/TXL

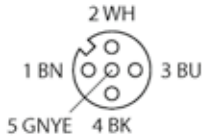
PUR Cable – Black



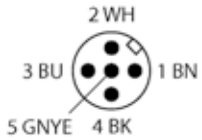
- 4-pin + PE
- Qualified for drag chain use and flame-retardant
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS
- cULus approved



Female connector

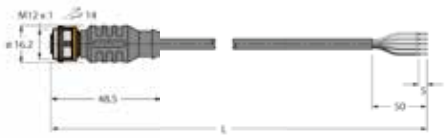
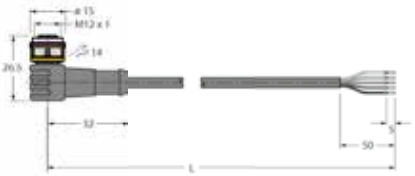
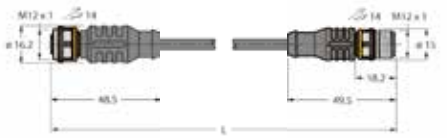
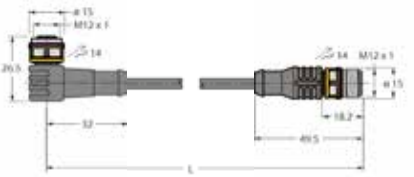


Male connector

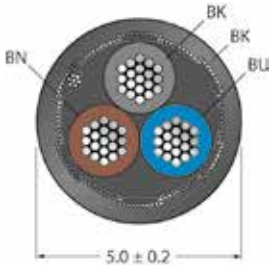


Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable jacket	PUR, Black
Core insulation	PP (BN, WH, BU, BK, GNYE)
Core cross-section	5 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	30 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm^2
Max. tensile strength (dynamic)	≤ 20 N/mm^2
Bending cycles	> 5 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s^2
Admissible travel path, horizontal	5 m (at 5 m/s^2)
Admissible travel path, vertical	2 m (at 5 m/s^2)
Admissible traversing speed	3.3 m/s
Torsional stress	± 180 °/m
Ambient temperature	
Stationary usage	-50…+80 °C
Non-stationary usage	-25…+80 °C
Drag chain operation	-25…+60 °C

Types and Features — Selection Table

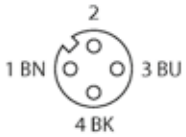
	Cable length [m]	ID number	Type
	100	6627996	CABLE(4+1)X0.34-XX-PUR-BK-100M/TXL
	500	6627997	CABLE(4+1)X0.34-XX-PUR-BK-500M/TXL
	2	6627212	RKC5T-P7X2-2/TXL
	5	6627213	RKC5T-P7X2-5/TXL
	10	6627214	RKC5T-P7X2-10/TXL
	2	6626092	WKC5T-P7X3-2/TXL
	5	6626094	WKC5T-P7X3-5/TXL
	10	6626096	WKC5T-P7X3-10/TXL
	0.3	6627215	RKC5T-P7X2-0.3-RSC5T/TXL
	0.6	6627216	RKC5T-P7X2-0.6-RSC5T/TXL
	1	6627217	RKC5T-P7X2-1-RSC5T/TXL
	2	6627218	RKC5T-P7X2-2-RSC5T/TXL
	5	6625933	RKC5T-P7X2-5-RSC5T/TXL
	0.3	6626101	WKC5T-P7X3-0.3-RSC5T/TXL
	0.6	6626012	WKC5T-P7X3-0.6-RSC5T/TXL
	1	6625905	WKC5T-P7X3-1-RSC5T/TXL
	2	6625906	WKC5T-P7X3-2-RSC5T/TXL
	5	6625908	WKC5T-P7X3-5-RSC5T/TXL

PUR Cable – Black, Shielded

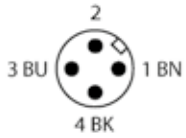


- 3-pin
- Qualified for drag chain use and flame-retardant
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS
- cULus approved

Female connector

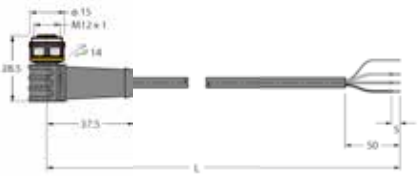
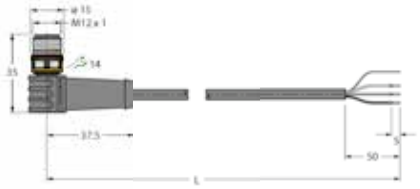
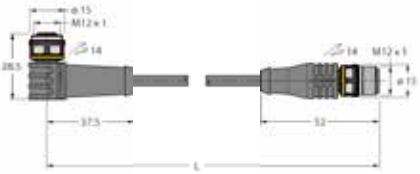


Male connector

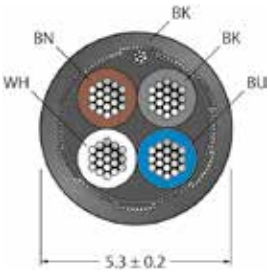


Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	5 mm ± 0.20
Cable jacket	PUR, Black
Core insulation	PP (BN, BU, BK)
Core cross-section	3 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Shield	Aluminum foil, tinned copper braid
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	250 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm^2
Max. tensile strength (dynamic)	≤ 20 N/mm^2
Bending cycles	> 2 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s^2
Admissible travel path, horizontal	5 m (at 5 m/s^2)
Admissible travel path, vertical	2 m (at 5 m/s^2)
Admissible traversing speed	3.3 m/s
Torsional stress	± 180 °/m
Ambient temperature	
Stationary usage	-50…+80 °C
Non-stationary usage	-25…+80 °C
Drag chain operation	-25…+60 °C

Types and Features — Selection Table

	Cable length [m]	ID number	Type
	100	6627956	CABLE3X0.34-SH-PUR-BK-100M/TXL
	500	6627957	CABLE3X0.34-SH-PUR-BK-500M/TXL
	2	6626293	RKS4T-2/TXL
	5	6626294	RKS4T-5/TXL
	10	6626295	RKS4T-10/TXL
	2	6626296	WKS4T-2/TXL
	5	6626297	WKS4T-5/TXL
	10	6626298	WKS4T-10/TXL
	2	6626299	RSS4T-2/TXL
	5	6626300	RSS4T-5/TXL
	10	6626301	RSS4T-10/TXL
	2	6626302	WSS4T-2/TXL
	5	6626303	WSS4T-5/TXL
	10	6626304	WSS4T-10/TXL
	0.3	6626313	RKS4T-0.3-RSS4T/TXL
	0.6	6626314	RKS4T-0.6-RSS4T/TXL
	1	6626315	RKS4T-1-RSS4T/TXL
	2	6626316	RKS4T-2-RSS4T/TXL
	5	6630179	RKS4T-5-RSS4T/TXL
	0.3	6626317	WKS4T-0.3-RSS4T/TXL
	0.6	6626318	WKS4T-0.6-RSS4T/TXL
	1	6626319	WKS4T-1-RSS4T/TXL
	2	6626320	WKS4T-2-RSS4T/TXL
	5	6630180	WKS4T-5-RSS4T/TXL

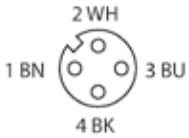
PUR Cable – Black, Shielded



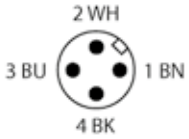
- 4-pin
- Qualified for drag chain use and flame-retardant
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS
- cULus approved



Female connector

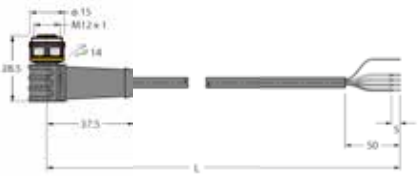
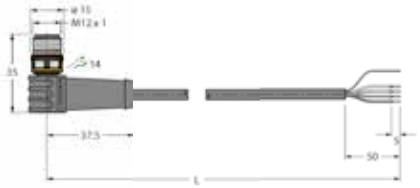
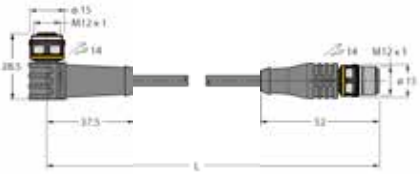


Male connector

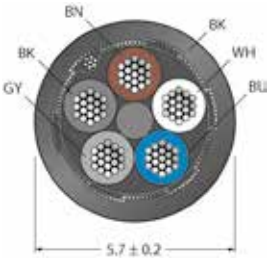


Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	5.3 mm ± 0.20
Cable jacket	PUR, Black
Core insulation	PP (BN, WH, BU, BK)
Core cross-section	4 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Shield	Aluminum foil, tinned copper braid
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	250 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm^2
Max. tensile strength (dynamic)	≤ 20 N/mm^2
Bending cycles	> 2 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s^2
Admissible travel path, horizontal	5 m (at 5 m/s^2)
Admissible travel path, vertical	2 m (at 5 m/s^2)
Admissible traversing speed	3.3 m/s
Torsional stress	± 180 °/m
Ambient temperature	
Stationary usage	-50…+80 °C
Non-stationary usage	-25…+80 °C
Drag chain operation	-25…+60 °C

Types and Features — Selection Table

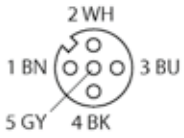
	Cable length [m]	ID number	Type
	100	6627958	CABLE4X0.34-SH-PUR-BK-100M/TXL
	500	6627959	CABLE4X0.34-SH-PUR-BK-500M/TXL
	2	6626333	RKS4.4T-2/TXL
	5	6626334	RKS4.4T-5/TXL
	10	6626335	RKS4.4T-10/TXL
	2	6626336	WKS4.4T-2/TXL
	5	6626337	WKS4.4T-5/TXL
	10	6626338	WKS4.4T-10/TXL
	2	6626339	RSS4.4T-2/TXL
	5	6626340	RSS4.4T-5/TXL
	10	6626341	RSS4.4T-10/TXL
	2	6626342	WSS4.4T-2/TXL
	5	6626343	WSS4.4T-5/TXL
	10	6626344	WSS4.4T-10/TXL
	0.3	6626353	RKS4.4T-0.3-RSS4.4T/TXL
	0.6	6626354	RKS4.4T-0.6-RSS4.4T/TXL
	1	6626355	RKS4.4T-1-RSS4.4T/TXL
	2	6626356	RKS4.4T-2-RSS4.4T/TXL
	5	6626470	RKS4.4T-5-RSS4.4T/TXL
	0.3	6626357	WKS4.4T-0.3-RSS4.4T/TXL
	0.6	6626358	WKS4.4T-0.6-RSS4.4T/TXL
	1	6626359	WKS4.4T-1-RSS4.4T/TXL
	2	6626360	WKS4.4T-2-RSS4.4T/TXL
	5	6627855	WKS4.4T-5-RSS4.4T/TXL

PUR Cable – Black, Shielded

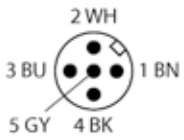


- 5-pin
- Qualified for drag chain use and flame-retardant
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS
- cULus approved

Female connector

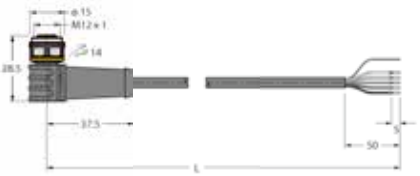
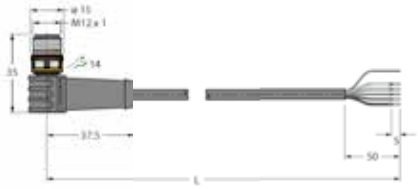
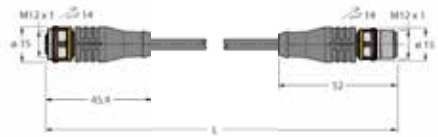
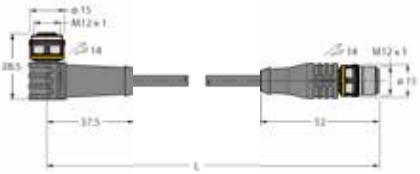


Male connector

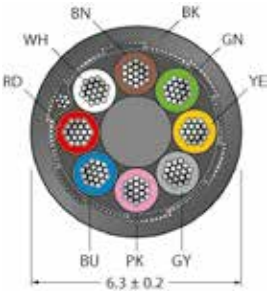


Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	5.7 mm ± 0.20
Cable jacket	PUR, Black
Core insulation	PP (BN, WH, BU, BK, GY)
Core cross-section	5 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Shield	Aluminum foil, tinned copper braid
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	60 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm^2
Max. tensile strength (dynamic)	≤ 20 N/mm^2
Bending cycles	> 2 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s^2
Admissible travel path, horizontal	5 m (at 5 m/s^2)
Admissible travel path, vertical	2 m (at 5 m/s^2)
Admissible traversing speed	3.3 m/s
Torsional stress	± 180 °/m
Ambient temperature	
Stationary usage	-50…+80 °C
Non-stationary usage	-25…+80 °C
Drag chain operation	-25…+60 °C

Types and Features — Selection Table

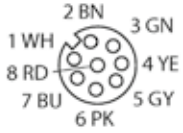
	Cable length [m]	ID number	Type
	100	6627962	CABLE5X0.34-SH-PUR-BK-100M/TXL
	500	6627963	CABLE5X0.34-SH-PUR-BK-500M/TXL
	2	6626373	RKS4.5T-2/TXL
	5	6626374	RKS4.5T-5/TXL
	10	6626375	RKS4.5T-10/TXL
	2	6626376	WKS4.5T-2/TXL
	5	6626377	WKS4.5T-5/TXL
	10	6626378	WKS4.5T-10/TXL
	2	6626379	RSS4.5T-2/TXL
	5	6626380	RSS4.5T-5/TXL
	10	6626381	RSS4.5T-10/TXL
	2	6626382	WSS4.5T-2/TXL
	5	6626383	WSS4.5T-5/TXL
	10	6626384	WSS4.5T-10/TXL
	0.3	6626393	RKS4.5T-0.3-RSS4.5T/TXL
	0.6	6626394	RKS4.5T-0.6-RSS4.5T/TXL
	1	6626395	RKS4.5T-1-RSS4.5T/TXL
	2	6626396	RKS4.5T-2-RSS4.5T/TXL
	5	6627630	RKS4.5T-5-RSS4.5T/TXL
	0.3	6626397	WKS4.5T-0.3-RSS4.5T/TXL
	0.6	6626398	WKS4.5T-0.6-RSS4.5T/TXL
	1	6626399	WKS4.5T-1-RSS4.5T/TXL
	2	6626400	WKS4.5T-2-RSS4.5T/TXL
	5	6627712	WKS4.5T-5-RSS4.5T/TXL

PUR Cable – Black, Shielded

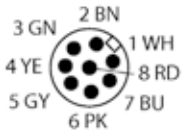


- 8-pin
- Qualified for drag chain use and flame-retardant
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS
- cULus approved

Female connector

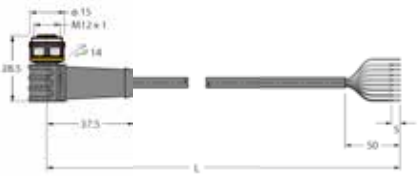
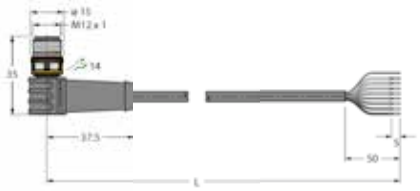
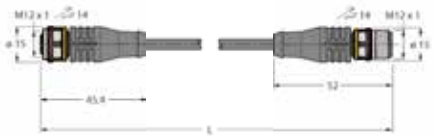
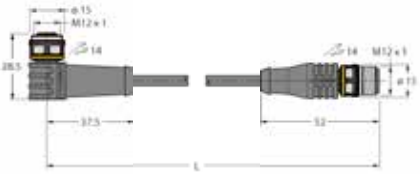


Male connector

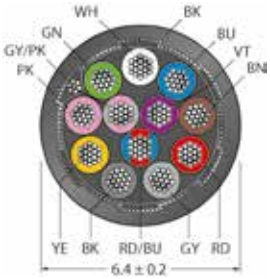


Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	6.3 mm ± 0.20
Cable jacket	PUR, Black
Core insulation	PP (WH, BN, GN, YE, GY, PK, BU, RD)
Core cross-section	8 x 0.25 mm^2
Arrangement of strands	32 x 0.1 mm
Shield	Aluminum foil, tinned copper braid
Electrical properties at +20 °C	
Current load	2 A
Rated voltage	30 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 79 Ω/km
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm^2
Max. tensile strength (dynamic)	≤ 20 N/mm^2
Bending cycles	> 2 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s^2
Admissible travel path, horizontal	5 m (at 5 m/s^2)
Admissible travel path, vertical	2 m (at 5 m/s^2)
Admissible traversing speed	3.3 m/s
Torsional stress	± 180 °/m
Ambient temperature	
Stationary usage	-50…+80 °C
Non-stationary usage	-25…+80 °C
Drag chain operation	-25…+60 °C

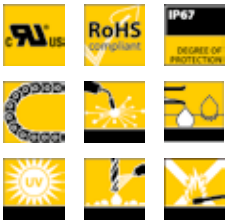
Types and Features — Selection Table

	Cable length [m]	ID number	Type
	100	6627964	CABLE8X0.25-SH-PUR-BK-100M/TXL
	500	6627965	CABLE8X0.25-SH-PUR-BK-500M/TXL
	2	6625458	RKS8T-2/TXL
	5	6625459	RKS8T-5/TXL
	10	6625460	RKS8T-10/TXL
	2	6625461	WKS8T-2/TXL
	5	6625462	WKS8T-5/TXL
	10	6625463	WKS8T-10/TXL
	2	6625464	RSS8T-2/TXL
	5	6625465	RSS8T-5/TXL
	10	6625466	RSS8T-10/TXL
	2	6625467	WSS8T-2/TXL
	5	6625468	WSS8T-5/TXL
	10	6625469	WSS8T-10/TXL
	0.3	6625478	RKS8T-0.3-RSS8T/TXL
	0.6	6625479	RKS8T-0.6-RSS8T/TXL
	1	6625480	RKS8T-1-RSS8T/TXL
	2	6625481	RKS8T-2-RSS8T/TXL
	5	6625487	RKS8T-5-RSS8T/TXL
	0.3	6625482	WKS8T-0.3-RSS8T/TXL
	0.6	6625483	WKS8T-0.6-RSS8T/TXL
	1	6625484	WKS8T-1-RSS8T/TXL
	2	6625485	WKS8T-2-RSS8T/TXL
	5	6630181	WKS8T-5-RSS8T/TXL

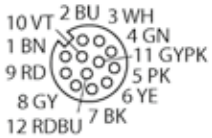
PUR Cable – Black, Shielded



- 12-pin
- Qualified for drag chain use and flame-retardant
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS
- cULus approved



Female connector

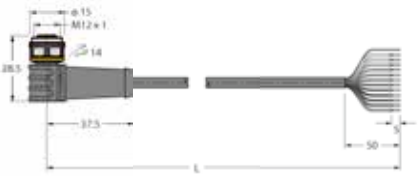
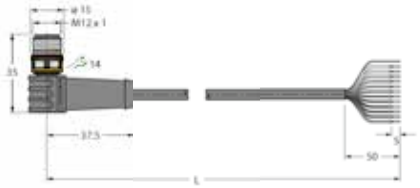
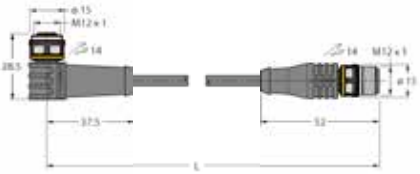


Male connector

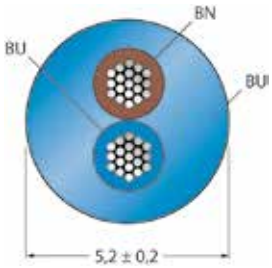


Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	6.4 mm ± 0.20
Cable jacket	PUR, Black
Core insulation	PP (BN, BU, WH, GN, PK, YE, BK, GY, RD, VT, GY/PK, RD/BU)
Core cross-section	12 x 0.14 mm^2
Arrangement of strands	18 x 0.1 mm
Shield	Aluminum foil, tinned copper braid
Electrical properties at +20 °C	
Current load	1.5 A
Rated voltage	30 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 138 Ω/km
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm^2
Max. tensile strength (dynamic)	≤ 20 N/mm^2
Bending cycles	> 2 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s^2
Admissible travel path, horizontal	5 m (at 5 m/s^2)
Admissible travel path, vertical	2 m (at 5 m/s^2)
Admissible traversing speed	3.3 m/s
Torsional stress	± 180 °/m
Ambient temperature	
Stationary usage	-50…+80 °C
Non-stationary usage	-25…+80 °C
Drag chain operation	-25…+60 °C

Types and Features — Selection Table

	Cable length [m]	ID number	Type
	100	6627966	CABLE12X0.14-SH-PUR-BK-100M/TXL
	500	6627967	CABLE12X0.14-SH-PUR-BK-500M/TXL
	2	6626917	RKS12T-2/TXL
	5	6626918	RKS12T-5/TXL
	10	6626919	RKS12T-10/TXL
	2	6626920	WKS12T-2/TXL
	5	6626921	WKS12T-5/TXL
	10	6626922	WKS12T-10/TXL
	2	6626923	RSS12T-2/TXL
	5	6626924	RSS12T-5/TXL
	10	6626925	RSS12T-10/TXL
	2	6626926	WSS12T-2/TXL
	5	6626927	WSS12T-5/TXL
	10	6626928	WSS12T-10/TXL
	0.3	6626937	RKS12T-0.3-RSS12T/TXL
	0.6	6626938	RKS12T-0.6-RSS12T/TXL
	1	6626939	RKS12T-1-RSS12T/TXL
	2	6626940	RKS12T-2-RSS12T/TXL
	5	6626947	RKS12T-5-RSS12T/TXL
	0.3	6626941	WKS12T-0.3-RSS12T/TXL
	0.6	6626942	WKS12T-0.6-RSS12T/TXL
	1	6626943	WKS12T-1-RSS12T/TXL
	2	6626944	WKS12T-2-RSS12T/TXL
	5	6626948	WKS12T-5-RSS12T/TXL

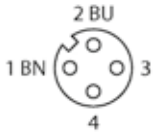
PUR Cable – Blue, Namur



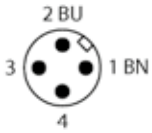
- 2-pin
- Qualified for drag chain use and flame-retardant
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS
- cULus approved



Female connector

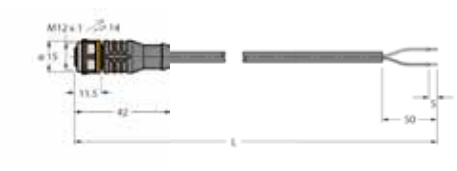
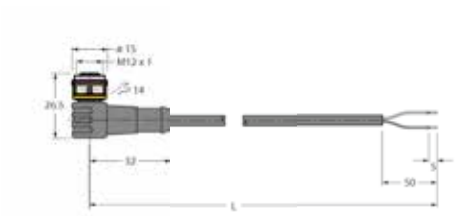


Male connector

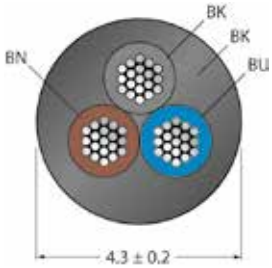


Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	5.2 mm ± 0.20
Cable jacket	PUR, Blue
Core insulation	PP (BN, BU)
Core cross-section	2 x 0.5 mm^2
Arrangement of strands	64 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	250 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm^2
Max. tensile strength (dynamic)	≤ 20 N/mm^2
Bending cycles	> 5 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s^2
Admissible travel path, horizontal	5 m (at 5 m/s^2)
Admissible travel path, vertical	2 m (at 5 m/s^2)
Admissible traversing speed	3.3 m/s
Torsional stress	± 180 °/m
Ambient temperature	
Stationary usage	-50…+80 °C
Non-stationary usage	-25…+80 °C
Drag chain operation	-25…+60 °C

Types and Features — Selection Table

	Cable length [m]	ID number	Type
	100	6626972	CABLE2 x 0.50-XX-PUR-BU-100M/TXB
	500	6626973	CABLE2 x 0.50-XX-PUR-BU-500M/TXB
	2	6626960	RKC4.221T-2/TXB
	3	6626966	RKC4.221T-3/TXB
	4	6626967	RKC4.221T-4/TXB
	5	6626961	RKC4.221T-5/TXB
	6	6626968	RKC4.221T-6/TXB
	10	6626962	RKC4.221T-10/TXB
	15	6630474	RKC4.221T-15/TXB
	20	6626969	RKC4.221T-20/TXB
	25	6630637	RKC4.221T-25/TXB
	30	6630769	RKC4.221T-30/TXB
	2	6626963	WKC4.221T-2/TXB
	5	6626964	WKC4.221T-5/TXB
	6	6629178	WKC4.221T-6/TXB
	10	6626965	WKC4.221T-10/TXB
	15	6630475	WKC4.221T-15/TXB
	20	6626970	WKC4.221T-20/TXB
	30	6630770	WKC4.221T-30/TXB

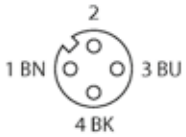
PUR Cable – Black



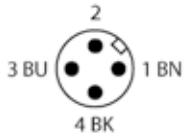
- 3-pin
- Qualified for drag chain use and flame-retardant
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS
- cULus approved (only for bulk cable)



Female connector

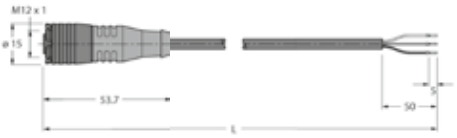
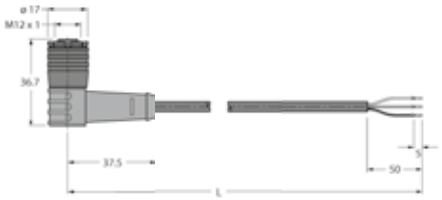
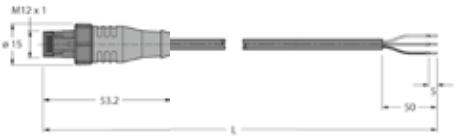
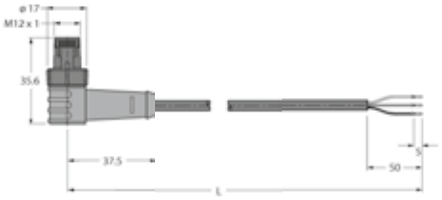
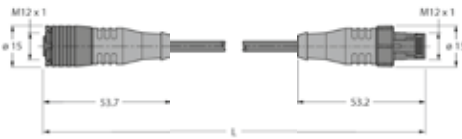
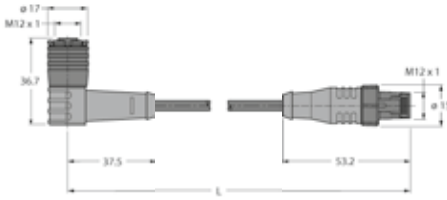


Male connector

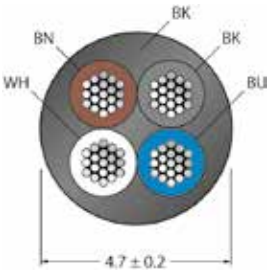


Connector	
Grip	Plastic, TPU, Yellow
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Interlocking sleeve	plastic, PBT, black
Protection class	IP67 (plugged)
Mechanical Lifespan	> 50 mating cycles
Pollution degree	3
Cable	
Cable	4.3 mm ± 0.20
Cable jacket	PUR, Black
Core insulation	PP (BN, BU, BK)
Core cross-section	3 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	250 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm^2
Max. tensile strength (dynamic)	≤ 20 N/mm^2
Bending cycles	> 5 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s^2
Admissible travel path, horizontal	5 m (at 5 m/s^2)
Admissible travel path, vertical	2 m (at 5 m/s^2)
Admissible traversing speed	3.3 m/s
Torsional stress	± 180 °/m
Ambient temperature	
Stationary usage	-50…+80 °C
Non-stationary usage	-25…+80 °C
Drag chain operation	-25…+60 °C

Types and Features — Selection Table

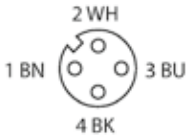
	Cable length [m]	ID number	Type
	100	6627992	CABLE3X0.34-XX-PUR-BK-100M/TXL
	500	6627993	CABLE3X0.34-XX-PUR-BK-500M/TXL
	2	6628010	RKC4Q-2/TXL
	5	6628011	RKC4Q-5/TXL
	10	6628012	RKC4Q-10/TXL
	2	6628013	WKC4Q-2/TXL
	5	6628014	WKC4Q-5/TXL
	10	6628015	WKC4Q-10/TXL
	2	6628016	RSC4Q-2/TXL
	5	6628017	RSC4Q-5/TXL
	10	6628018	RSC4Q-10/TXL
	2	6628019	WSC4Q-2/TXL
	5	6628020	WSC4Q-5/TXL
	10	6628021	WSC4Q-10/TXL
	1	6628022	RKC4Q-1-RSC4Q/TXL
	2	6628023	RKC4Q-2-RSC4Q/TXL
	5	6628024	RKC4Q-5-RSC4Q/TXL
	1	6628025	WKC4Q-1-RSC4Q/TXL
	2	6628026	WKC4Q-2-RSC4Q/TXL
	5	6628027	WKC4Q-5-RSC4Q/TXL

PUR Cable – Black

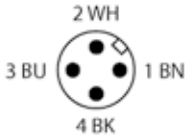


- 4-pin
- Qualified for drag chain use and flame-retardant
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS
- cULus approved (only for bulk cable)

Female connector

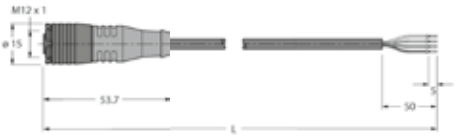
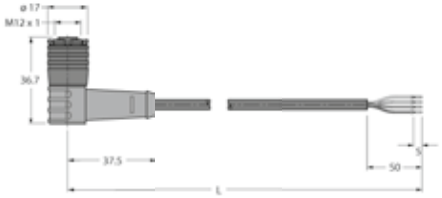
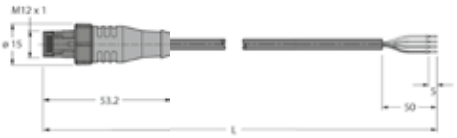
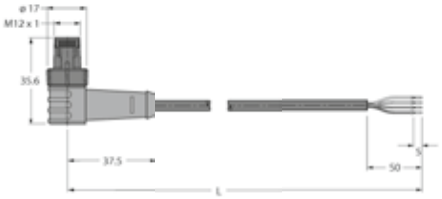
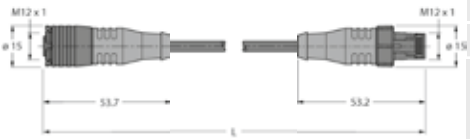
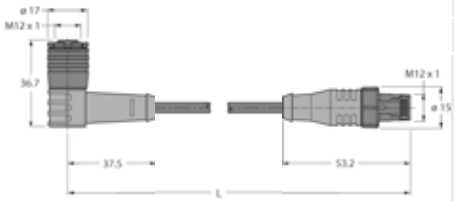


Male connector

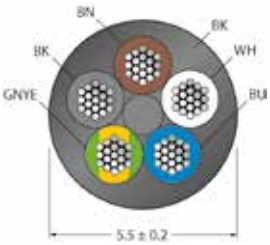


Connector	
Grip	Plastic, TPU, Yellow
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Interlocking sleeve	plastic, PBT, black
Protection class	IP67 (plugged)
Mechanical Lifespan	> 50 mating cycles
Pollution degree	3
Cable	
Cable	4.7 mm ± 0.20
Cable jacket	PUR, Black
Core insulation	PP (BN, WH, BU, BK)
Core cross-section	4 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	250 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm^2
Max. tensile strength (dynamic)	≤ 20 N/mm^2
Bending cycles	> 5 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s^2
Admissible travel path, horizontal	5 m (at 5 m/s^2)
Admissible travel path, vertical	2 m (at 5 m/s^2)
Admissible traversing speed	3.3 m/s
Torsional stress	± 180 °/m
Ambient temperature	
Stationary usage	-50…+80 °C
Non-stationary usage	-25…+80 °C
Drag chain operation	-25…+60 °C

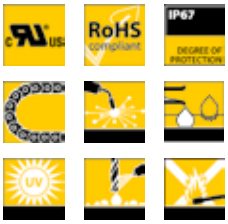
Types and Features — Selection Table

	Cable length [m]	ID number	Type
	100	6627994	CABLE4X0.34-XX-PUR-BK-100M/TXL
	500	6627995	CABLE4X0.34-XX-PUR-BK-500M/TXL
	2	6628028	RKC4.4Q-2/TXL
	5	6628029	RKC4.4Q-5/TXL
	10	6628030	RKC4.4Q-10/TXL
	2	6628031	WKC4.4Q-2/TXL
	5	6628032	WKC4.4Q-5/TXL
	10	6628033	WKC4.4Q-10/TXL
	2	6628034	RSC4.4Q-2/TXL
	5	6628035	RSC4.4Q-5/TXL
	10	6628036	RSC4.4Q-10/TXL
	2	6628037	WSC4.4Q-2/TXL
	5	6628038	WSC4.4Q-5/TXL
	10	6628039	WSC4.4Q-10/TXL
	1	6628040	RKC4.4Q-1-RSC4.4Q/TXL
	2	6628041	RKC4.4Q-2-RSC4.4Q/TXL
	5	6628042	RKC4.4Q-5-RSC4.4Q/TXL
	1	6628043	WKC4.4Q-1-RSC4.4Q/TXL
	2	6628044	WKC4.4Q-2-RSC4.4Q/TXL
	5	6628045	WKC4.4Q-5-RSC4.4Q/TXL

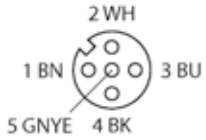
PUR Cable – Black



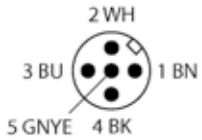
- 4-pin + PE
- Qualified for drag chain use and flame-retardant
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS
- cULus approved (only for bulk cable)



Female connector

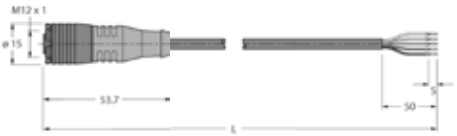
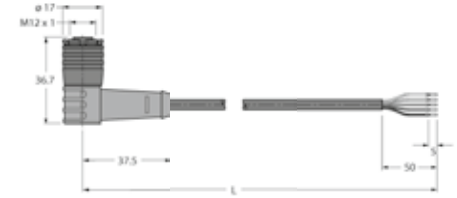
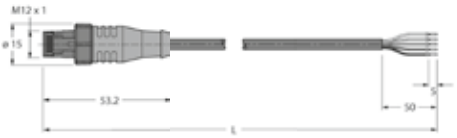
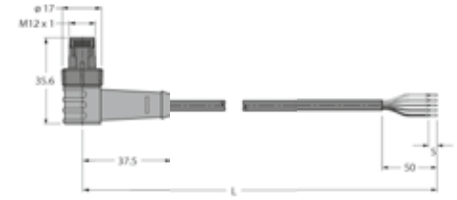
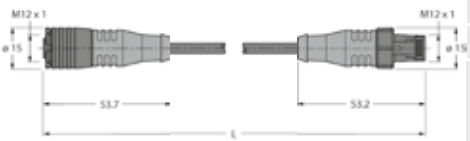
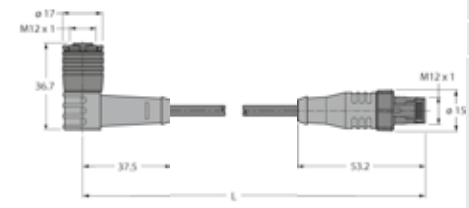


Male connector

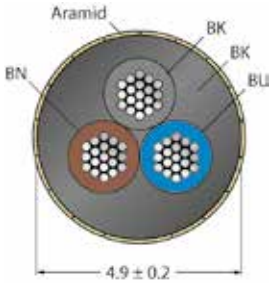


Connector	
Grip	Plastic, TPU, Yellow
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Interlocking sleeve	plastic, PBT, black
Protection class	IP67 (plugged)
Mechanical Lifespan	> 50 mating cycles
Pollution degree	3
Cable	
Cable jacket	PUR, Black
Core insulation	PP (BN, WH, BU, BK, GNYE)
Core cross-section	5 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	60 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm^2
Max. tensile strength (dynamic)	≤ 20 N/mm^2
Bending cycles	> 5 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s^2
Admissible travel path, horizontal	5 m (at 5 m/s^2)
Admissible travel path, vertical	2 m (at 5 m/s^2)
Admissible traversing speed	3.3 m/s
Torsional stress	± 180 °/m
Ambient temperature	
Stationary usage	-50…+80 °C
Non-stationary usage	-25…+80 °C
Drag chain operation	-25…+60 °C

Types and Features — Selection Table

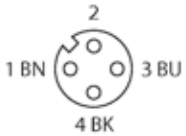
	Cable length [m]	ID number	Type
	100	6627996	CABLE(4+1)X0.34-XX-PUR-BK-100M/TXL
	500	6627997	CABLE(4+1)X0.34-XX-PUR-BK-500M/TXL
	2	6628046	RKC5Q-2/TXL
	5	6628047	RKC5Q-5/TXL
	10	6628048	RKC5Q-10/TXL
	2	6628049	WKC5Q-2/TXL
	5	6628050	WKC5Q-5/TXL
	10	6628051	WKC5Q-10/TXL
	2	6628052	RSC5Q-2/TXL
	5	6628053	RSC5Q-5/TXL
	10	6628054	RSC5Q-10/TXL
	2	6628055	WSC5Q-2/TXL
	5	6628056	WSC5Q-5/TXL
	10	6628057	WSC5Q-10/TXL
	1	6628058	RKC5Q-1-RSC5Q/TXL
	2	6628059	RKC5Q-2-RSC5Q/TXL
	5	6628060	RKC5Q-5-RSC5Q/TXL
	1	6628061	WKC5Q-1-RSC5Q/TXL
	2	6628062	WKC5Q-2-RSC5Q/TXL
	5	6628063	WKC5Q-5-RSC5Q/TXL

PUR Cable – Yellow, Resistant to Welding Sparks

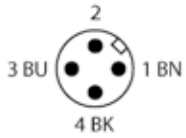


- 3-pin, cable jacketed with aramid fibers
- Resistant to welding sparks and flame-retardant
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS
- Temperature of the cable: -40 °C…+200 °C

Female connector



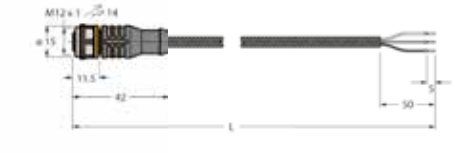
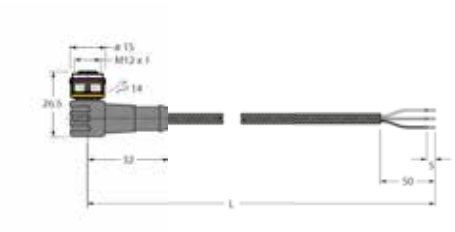
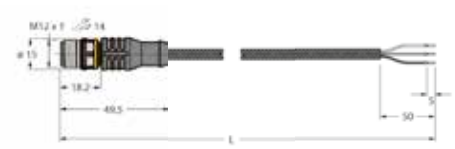
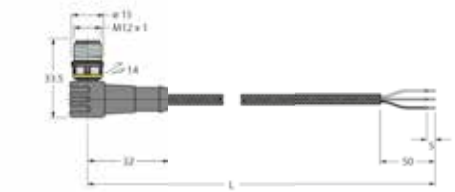
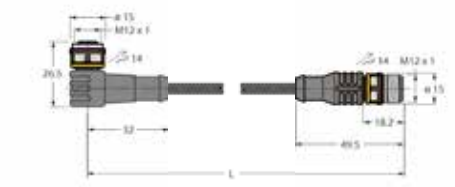
Male connector



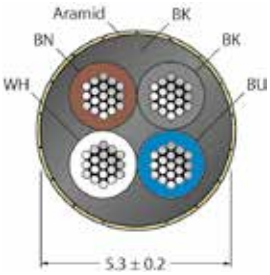
Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	4.9 mm ± 0.20
Cable jacket	PUR, Black
Core insulation	PP (BN, BU, BK)
Core cross-section	3 x 0.34 mm²
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	250 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm²
Max. tensile strength (dynamic)	≤ 20 N/mm²
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-50…+90 °C
Non-stationary usage	-30…+90 °C

Types and Features — Selection Table



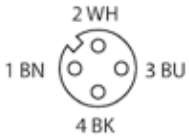
Cable length [m]	ID number	Type
		
2	6630249	RKC4T-2/TXL1001
5	6630250	RKC4T-5/TXL1001
10	6630251	RKC4T-10/TXL1001
		
2	6630219	WKC4T-2/TXL1001
5	6630220	WKC4T-5/TXL1001
10	6630221	WKC4T-10/TXL1001
		
2	6630252	RSC4T-2/TXL1001
5	6630253	RSC4T-5/TXL1001
10	6630254	RSC4T-10/TXL1001
		
2	6630255	WSC4T-2/TXL1001
5	6630256	WSC4T-5/TXL1001
10	6630257	WSC4T-10/TXL1001
		
0.3	6630258	RKC4T-0.3-RSC4T/TXL1001
0.6	6630259	RKC4T-0.6-RSC4T/TXL1001
1	6630260	RKC4T-1-RSC4T/TXL1001
2	6630261	RKC4T-2-RSC4T/TXL1001
5	6630262	RKC4T-5-RSC4T/TXL1001
		
0.3	6630263	WKC4T-0.3-RSC4T/TXL1001
0.6	6630264	WKC4T-0.6-RSC4T/TXL1001
1	6630265	WKC4T-1-RSC4T/TXL1001
2	6630266	WKC4T-2-RSC4T/TXL1001
5	6630267	WKC4T-5-RSC4T/TXL1001

PUR Cable – Yellow, Resistant to Welding Sparks

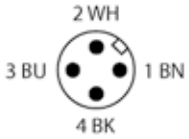


- 4-pin, cable jacketed with aramid fibers
- Resistant to welding sparks and flame-retardant
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS
- Temperature of the cable: -40 °C…+200 °C

Female connector



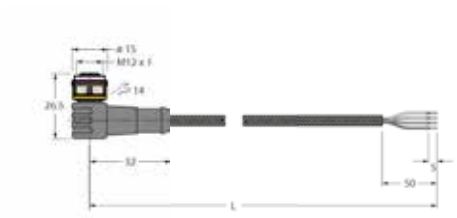
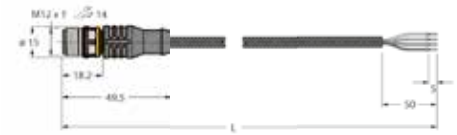
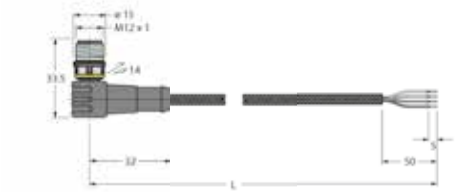
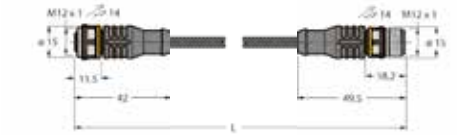
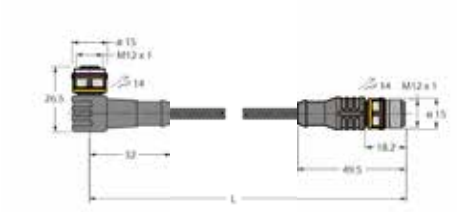
Male connector



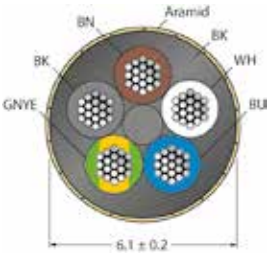
Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	5.3 mm ± 0.20
Cable jacket	PUR, Black
Core insulation	PP (BN, WH, BU, BK)
Core cross-section	4 x 0.34 mm²
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	250 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm²
Max. tensile strength (dynamic)	≤ 20 N/mm²
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-50…+90 °C
Non-stationary usage	-30…+90 °C

Types and Features — Selection Table



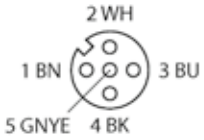
Cable length [m]	ID number	Type
		
2	6628825	RKC4.4T-2/TXL1001
5	6628826	RKC4.4T-5/TXL1001
10	6628827	RKC4.4T-10/TXL1001
		
2	6630223	WKC4.4T-2/TXL1001
5	6630224	WKC4.4T-5/TXL1001
10	6630225	WKC4.4T-10/TXL1001
		
2	6630268	RSC4.4T-2/TXL1001
5	6630269	RSC4.4T-5/TXL1001
10	6630270	RSC4.4T-10/TXL1001
		
2	6630271	WSC4.4T-2/TXL1001
5	6630272	WSC4.4T-5/TXL1001
10	6630273	WSC4.4T-10/TXL1001
		
0.3	6628240	RKC4.4T-0.3-RSC4.4T/TXL1001
0.6	6628241	RKC4.4T-0.6-RSC4.4T/TXL1001
1	6628242	RKC4.4T-1-RSC4.4T/TXL1001
2	6628244	RKC4.4T-2-RSC4.4T/TXL1001
5	6628246	RKC4.4T-5-RSC4.4T/TXL1001
		
0.3	6628247	WKC4.4T-0.3-RSC4.4T/TXL1001
0.6	6628248	WKC4.4T-0.6-RSC4.4T/TXL1001
1	6628249	WKC4.4T-1-RSC4.4T/TXL1001
2	6628251	WKC4.4T-2-RSC4.4T/TXL1001
5	6628253	WKC4.4T-5-RSC4.4T/TXL1001

PUR Cable – Yellow, Resistant to Welding Sparks

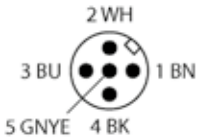


- 4-pin + PE, jacketed with aramid fibers
- Resistant to welding sparks and flame-retardant
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS
- Temperature of the cable: -40 °C…+200 °C

Female connector



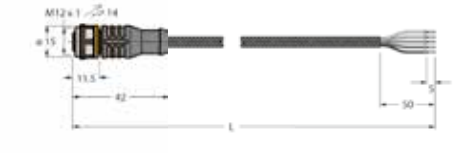
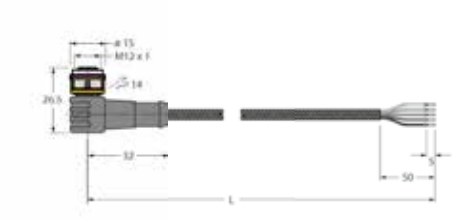
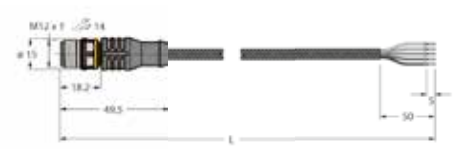
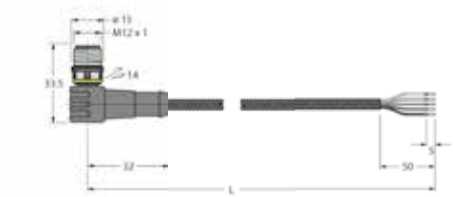
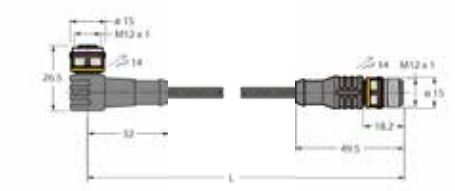
Male connector



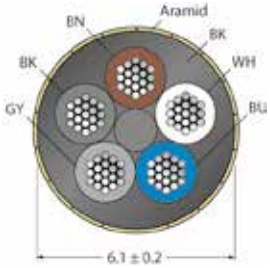
Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	6.1 mm ± 0.20
Cable jacket	PUR, Black
Core insulation	PP (BN, WH, BU, BK, GNYE)
Core cross-section	5 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	60 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm^2
Max. tensile strength (dynamic)	≤ 20 N/mm^2
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-50…+90 °C
Non-stationary usage	-30…+90 °C

Types and Features — Selection Table



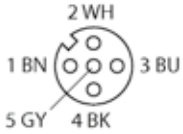
Cable length [m]	ID number	Type
		
2	6630227	RKC5T-2/TXL1001
5	6630228	RKC5T-5/TXL1001
10	6630229	RKC5T-10/TXL1001
		
2	6630274	WKC5T-2/TXL1001
5	6630275	WKC5T-5/TXL1001
10	6630276	WKC5T-10/TXL1001
		
2	6630277	RSC5T-2/TXL1001
5	6630278	RSC5T-5/TXL1001
10	6630279	RSC5T-10/TXL1001
		
2	6630280	WSC5T-2/TXL1001
5	6630281	WSC5T-5/TXL1001
10	6630282	WSC5T-10/TXL1001
		
0.3	6628268	RKC5T-0.3-RSC5T/TXL1001
0.6	6628269	RKC5T-0.6-RSC5T/TXL1001
1	6628270	RKC5T-1-RSC5T/TXL1001
2	6628272	RKC5T-2-RSC5T/TXL1001
5	6628274	RKC5T-5-RSC5T/TXL1001
		
0.3	6628275	WKC5T-0.3-RSC5T/TXL1001
0.6	6628276	WKC5T-0.6-RSC5T/TXL1001
1	6628277	WKC5T-1-RSC5T/TXL1001
2	6628279	WKC5T-2-RSC5T/TXL1001
5	6628281	WKC5T-5-RSC5T/TXL1001

PUR Cable – Yellow, Resistant to Welding Sparks

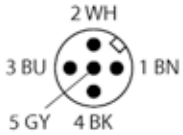


- 5-pin, cable jacketed with aramid fibers
- Resistant to welding sparks and flame-retardant
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS
- Temperature of the cable: -40 °C…+200 °C

Female connector



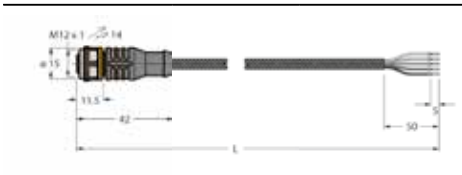
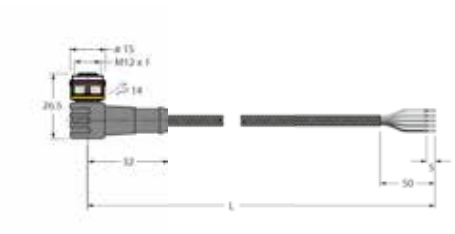
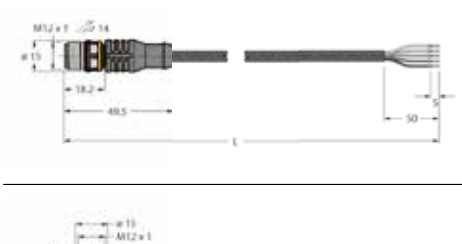
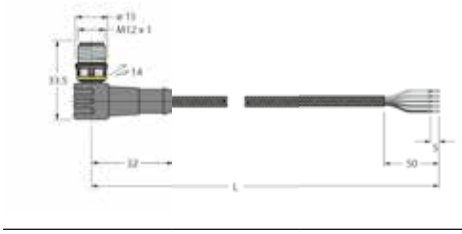
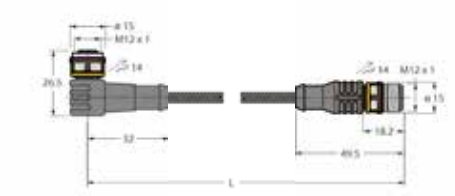
Male connector



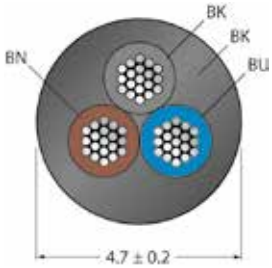
Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	6.1 mm ± 0.20
Cable jacket	PUR, Black
Core insulation	PP (BN, WH, BU, BK, GY)
Core cross-section	5 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	60 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm^2
Max. tensile strength (dynamic)	≤ 20 N/mm^2
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-50…+90 °C
Non-stationary usage	-30…+90 °C

Types and Features — Selection Table



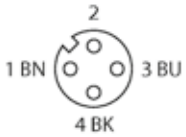
Cable length [m]	ID number	Type
		
2	6630283	RKC4.5T-2/TXL1001
5	6630284	RKC4.5T-5/TXL1001
10	6630285	RKC4.5T-10/TXL1001
		
2	6630286	WKC4.5T-2/TXL1001
5	6630287	WKC4.5T-5/TXL1001
10	6630288	WKC4.5T-10/TXL1001
		
2	6630289	RSC4.5T-2/TXL1001
5	6630290	RSC4.5T-5/TXL1001
10	6630291	RSC4.5T-10/TXL1001
		
2	6630292	WSC4.5T-2/TXL1001
5	6630293	WSC4.5T-5/TXL1001
10	6630294	WSC4.5T-10/TXL1001
		
0.3	6628254	RKC4.5T-0.3-RSC4.5T/TXL1001
0.6	6628255	RKC4.5T-0.6-RSC4.5T/TXL1001
1	6628256	RKC4.5T-1-RSC4.5T/TXL1001
2	6628258	RKC4.5T-2-RSC4.5T/TXL1001
5	6628260	RKC4.5T-5-RSC4.5T/TXL1001
		
0.3	6628261	WKC4.5T-0.3-RSC4.5T/TXL1001
0.6	6628262	WKC4.5T-0.6-RSC4.5T/TXL1001
1	6628263	WKC4.5T-1-RSC4.5T/TXL1001
2	6628265	WKC4.5T-2-RSC4.5T/TXL1001
5	6628267	WKC4.5T-5-RSC4.5T/TXL1001

PVC Cable – Black

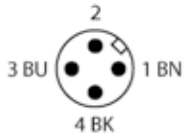


- 3-pin
- Resistant to alkaline solutions, chemicals and oils
- Resistant to microbes and hydrolysis
- Flame-retardant and free from LABS
- cULus approved

Female connector



Male connector



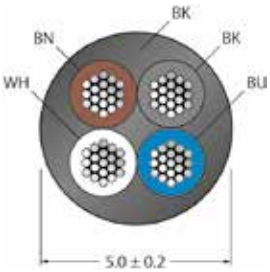
Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable jacket	PVC, Black
Core insulation	PVC (BN, BU, BK)
Core cross-section	3 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	250 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-40…+105 °C
Non-stationary usage	0…+80 °C

Types and Features — Selection Table



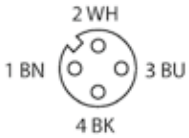
Cable length [m]	ID number	Type
100	6627984	CABLE3X0.34-XX-PVC-BK-100M/TEL
500	6627985	CABLE3X0.34-XX-PVC-BK-500M/TEL
2	6625010	RKC4T-2/TEL
5	6625011	RKC4T-5/TEL
10	6625012	RKC4T-10/TEL
2	6625022	WKC4T-2/TEL
5	6625023	WKC4T-5/TEL
10	6625024	WKC4T-10/TEL
2	6625034	RSC4T-2/TEL
5	6625035	RSC4T-5/TEL
10	6625036	RSC4T-10/TEL
2	6625046	WSC4T-2/TEL
5	6625047	WSC4T-5/TEL
10	6625048	WSC4T-10/TEL
0.3	6625201	RKC4T-0.3-RSC4T/TEL
0.6	6625202	RKC4T-0.6-RSC4T/TEL
1	6625203	RKC4T-1-RSC4T/TEL
2	6625204	RKC4T-2-RSC4T/TEL
5	6625441	RKC4T-5-RSC4T/TEL
0.3	6625233	WKC4T-0.3-RSC4T/TEL
0.6	6625234	WKC4T-0.6-RSC4T/TEL
1	6625235	WKC4T-1-RSC4T/TEL
2	6625236	WKC4T-2-RSC4T/TEL
5	6625443	WKC4T-5-RSC4T/TEL

PVC Cable – Black

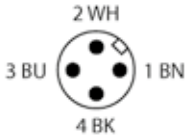


- 4-pin
- Resistant to alkaline solutions, chemicals and oils
- Resistant to microbes and hydrolysis
- Flame-retardant and free from LABS
- cULus approved

Female connector

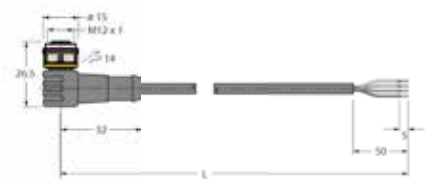
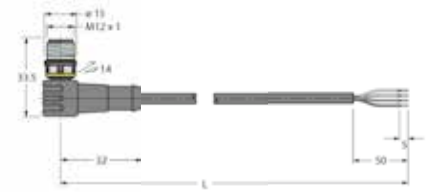
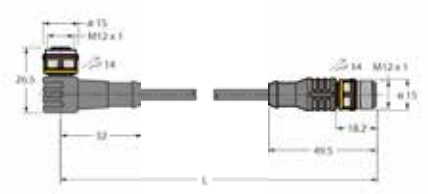


Male connector

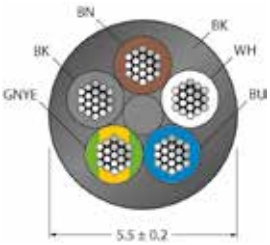


Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable jacket	PVC, Black
Core insulation	PVC (BN, WH, BU, BK)
Core cross-section	4 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	250 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-40…+105 °C
Non-stationary usage	0…+80 °C

Types and Features — Selection Table

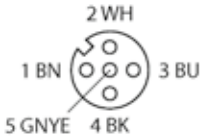
	Cable length [m]	ID number	Type
	100	6627986	CABLE4X0.34-XX-PVC-BK-100M/TEL
	500	6627987	CABLE4X0.34-XX-PVC-BK-500M/TEL
	2	6625013	RKC4.4T-2/TEL
	5	6625014	RKC4.4T-5/TEL
	10	6625015	RKC4.4T-10/TEL
	2	6625025	WKC4.4T-2/TEL
	5	6625026	WKC4.4T-5/TEL
	10	6625027	WKC4.4T-10/TEL
	2	6625037	RSC4.4T-2/TEL
	5	6625038	RSC4.4T-5/TEL
	10	6625039	RSC4.4T-10/TEL
	2	6625049	WSC4.4T-2/TEL
	5	6625050	WSC4.4T-5/TEL
	10	6625051	WSC4.4T-10/TEL
	0.3	6625205	RKC4.4T-0.3-RSC4.4T/TEL
	0.6	6625206	RKC4.4T-0.6-RSC4.4T/TEL
	1	6625207	RKC4.4T-1-RSC4.4T/TEL
	2	6625208	RKC4.4T-2-RSC4.4T/TEL
	5	6625440	RKC4.4T-5-RSC4.4T/TEL
	0.3	6625237	WKC4.4T-0.3-RSC4.4T/TEL
	0.6	6625238	WKC4.4T-0.6-RSC4.4T/TEL
	1	6625239	WKC4.4T-1-RSC4.4T/TEL
	2	6625240	WKC4.4T-2-RSC4.4T/TEL
	5	6625444	WKC4.4T-5-RSC4.4T/TEL

PVC Cable – Black

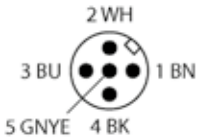


- 4-pin + PE
- Resistant to alkaline solutions, chemicals and oils
- Resistant to microbes and hydrolysis
- Flame-retardant and free from LABS
- cULus approved

Female connector



Male connector



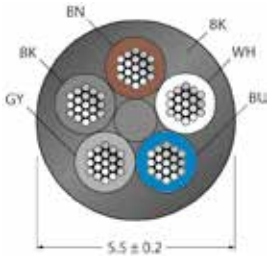
Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable jacket	PVC, Black
Core insulation	PVC (BN, WH, BU, BK, GNYE)
Core cross-section	5 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	60 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-40…+105 °C
Non-stationary usage	0…+80 °C

Types and Features — Selection Table



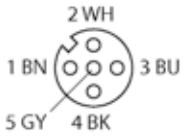
Cable length [m]	ID number	Type
100	6627988	CABLE(4+1)X0.34-XX-PVC-BK-100M/TEL
500	6627989	CABLE(4+1)X0.34-XX-PVC-BK-500M/TEL
2	6625019	RKC5T-2/TEL
5	6625020	RKC5T-5/TEL
10	6625021	RKC5T-10/TEL
2	6625031	WKC5T-2/TEL
5	6625032	WKC5T-5/TEL
10	6625033	WKC5T-10/TEL
2	6625043	RSC5T-2/TEL
5	6625044	RSC5T-5/TEL
10	6625045	RSC5T-10/TEL
2	6625055	WSC5T-2/TEL
5	6625056	WSC5T-5/TEL
10	6625057	WSC5T-10/TEL
0.3	6625213	RKC5T-0.3-RSC5T/TEL
0.6	6625214	RKC5T-0.6-RSC5T/TEL
1	6625215	RKC5T-1-RSC5T/TEL
2	6625216	RKC5T-2-RSC5T/TEL
5	6626448	RKC5T-5-RSC5T/TEL
0.3	6625245	WKC5T-0.3-RSC5T/TEL
0.6	6625246	WKC5T-0.6-RSC5T/TEL
1	6625247	WKC5T-1-RSC5T/TEL
2	6625248	WKC5T-2-RSC5T/TEL
5	6626449	WKC5T-5-RSC5T/TEL

PVC Cable – Black

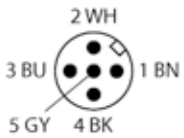


- 5-pin
- Resistant to alkaline solutions, chemicals and oils
- Resistant to microbes and hydrolysis
- Flame-retardant and free from LABS
- cULus approved

Female connector



Male connector



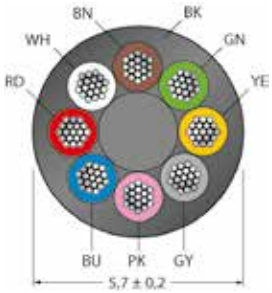
Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable jacket	PVC, Black
Core insulation	PVC (BN, WH, BU, BK, GY)
Core cross-section	5 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	60 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-40…+105 °C
Non-stationary usage	0…+80 °C

Types and Features — Selection Table



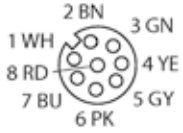
Cable length [m]	ID number	Type
500	6627991	CABLE5X0.34-XX-PVC-BK-500M/TEL
100	6627990	CABLE5X0.34-XX-PVC-BK-100M/TEL
2	6625016	RKC4.5T-2/TEL
5	6625017	RKC4.5T-5/TEL
10	6625018	RKC4.5T-10/TEL
2	6625028	WKC4.5T-2/TEL
5	6625029	WKC4.5T-5/TEL
10	6625030	WKC4.5T-10/TEL
2	6625040	RSC4.5T-2/TEL
5	6625041	RSC4.5T-5/TEL
10	6625042	RSC4.5T-10/TEL
2	6625052	WSC4.5T-2/TEL
5	6625053	WSC4.5T-5/TEL
10	6625054	WSC4.5T-10/TEL
0.3	6625209	RKC4.5T-0.3-RSC4.5T/TEL
0.6	6625210	RKC4.5T-0.6-RSC4.5T/TEL
1	6625211	RKC4.5T-1-RSC4.5T/TEL
2	6625212	RKC4.5T-2-RSC4.5T/TEL
5	6625442	RKC4.5T-5-RSC4.5T/TEL
0.3	6625241	WKC4.5T-0.3-RSC4.5T/TEL
0.6	6625242	WKC4.5T-0.6-RSC4.5T/TEL
1	6625243	WKC4.5T-1-RSC4.5T/TEL
2	6625244	WKC4.5T-2-RSC4.5T/TEL
5	6625445	WKC4.5T-5-RSC4.5T/TEL

PVC Cable – Black

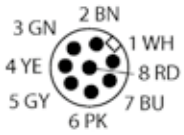


- 8-pin
- Resistant to alkaline solutions, chemicals and oils
- Resistant to microbes and hydrolysis
- Flame-retardant and free from LABS
- cULus approved

Female connector



Male connector



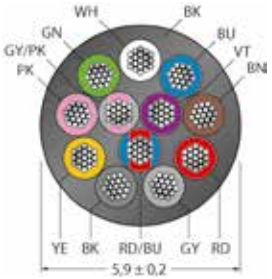
Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable jacket	PVC, Black
Core insulation	PVC (WH, BN, GN, YE, GY, PK, BU, RD)
Core cross-section	8 x 0.25 mm^2
Arrangement of strands	32 x 0.1 mm
Electrical properties at +20 °C	
Current load	2 A
Rated voltage	30 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 79 Ω/km
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-40…+105 °C
Non-stationary usage	0…+80 °C

Types and Features — Selection Table



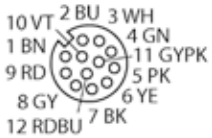
Cable length [m]	ID number	Type
100	6627980	CABLE8 x 0.25-XX-PVC-BK-100M/TEL
500	6627981	CABLE8 x 0.25-XX-PVC-BK-500M/TEL
2	6625130	RKC8T-2/TEL
5	6625131	RKC8T-5/TEL
10	6625132	RKC8T-10/TEL
2	6625133	WKC8T-2/TEL
5	6625134	WKC8T-5/TEL
10	6625135	WKC8T-10/TEL
2	6625136	RSC8T-2/TEL
5	6625137	RSC8T-5/TEL
10	6625138	RSC8T-10/TEL
2	6625139	WSC8T-2/TEL
5	6625140	WSC8T-5/TEL
10	6625141	WSC8T-10/TEL
0.3	6625154	RKC8T-0.3-RSC8T/TEL
1	6625156	RKC8T-1-RSC8T/TEL
2	6625157	RKC8T-2-RSC8T/TEL
5	6625170	RKC8T-5-RSC8T/TEL
0.3	6625158	WKC8T-0.3-RSC8T/TEL
0.6	6625159	WKC8T-0.6-RSC8T/TEL
1	6625160	WKC8T-1-RSC8T/TEL
2	6625161	WKC8T-2-RSC8T/TEL
5	6625171	WKC8T-5-RSC8T/TEL

PVC Cable – Black



- 12-pin
- Resistant to alkaline solutions, chemicals and oils
- Resistant to microbes and hydrolysis
- Flame-retardant and free from LABS
- cULus approved

Female connector



Male connector



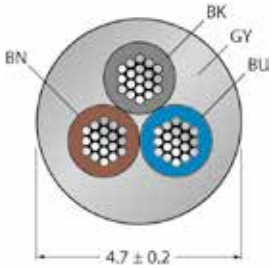
Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable jacket	PVC, Black
Core insulation	PVC (BN, BU, WH, GN, PK, YE, BK, GY, RD, VT, GY/PK, RD/BU)
Core cross-section	12 x 0.14 mm^2
Arrangement of strands	18 x 0.1 mm
Electrical properties at +20 °C	
Current load	1.5 A
Rated voltage	30 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 138 Ω/km
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-40…+105 °C
Non-stationary usage	0…+80 °C

Types and Features — Selection Table



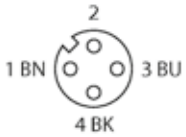
Cable length [m]	ID number	Type
100	6627982	CABLE12 x 0.14-XX-PVC-BK-100M/TEL
500	6627983	CABLE12 x 0.14-XX-PVC-BK-500M/TEL
2	6625327	RKC12T-2/TEL
5	6625328	RKC12T-5/TEL
10	6625329	RKC12T-10/TEL
2	6625330	WKC12T-2/TEL
5	6625331	WKC12T-5/TEL
10	6625332	WKC12T-10/TEL
2	6625333	RSC12T-2/TEL
5	6625334	RSC12T-5/TEL
10	6625335	RSC12T-10/TEL
2	6625336	WSC12T-2/TEL
5	6625337	WSC12T-5/TEL
10	6625338	WSC12T-10/TEL
0.3	6625351	RKC12T-0.3-RSC12T/TEL
0.6	6625352	RKC12T-0.6-RSC12T/TEL
1	6625353	RKC12T-1-RSC12T/TEL
2	6625354	RKC12T-2-RSC12T/TEL
5	6625368	RKC12T-5-RSC12T/TEL
0.3	6625355	WKC12T-0.3-RSC12T/TEL
0.6	6625356	WKC12T-0.6-RSC12T/TEL
1	6625357	WKC12T-1-RSC12T/TEL
2	6625358	WKC12T-2-RSC12T/TEL
5	6625369	WKC12T-5-RSC12T/TEL

PVC Cable – Gray

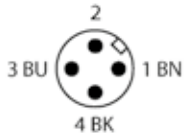


- 3-pin
- Resistant to alkaline solutions, chemicals and oils
- Resistant to microbes and hydrolysis
- Flame-retardant and free from LABS
- cULus approved

Female connector

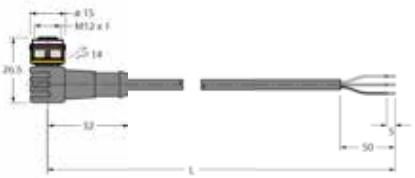
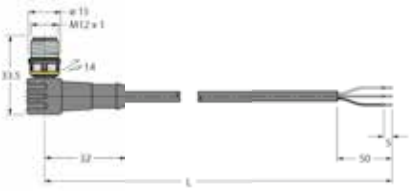
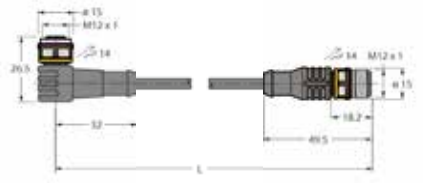


Male connector

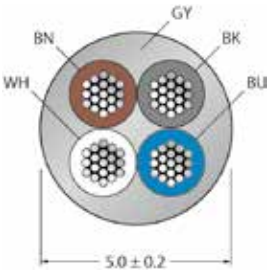


Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	4.7 mm ± 0.20
Cable jacket	PVC, Gray
Core insulation	PVC (BN, BU, BK)
Core cross-section	3 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	250 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-40…+105 °C
Non-stationary usage	0…+80 °C

Types and Features — Selection Table

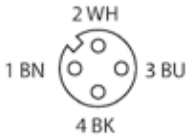
	Cable length [m]	ID number	Type
	100	6628852	CABLE3X0.34-XX-PVC-GY-100M/TEG
	500	6628853	CABLE3X0.34-XX-PVC-GY-500M/TEG
	2	6629499	RKC4T-2/TEG
	5	6628343	RKC4T-5/TEG
	10	6629454	RKC4T-10/TEG
	2	6629503	WKC4T-2/TEG
	5	6628354	WKC4T-5/TEG
	10	6628355	WKC4T-10/TEG
	2	6628349	RSC4T-2/TEG
	5	6628350	RSC4T-5/TEG
	10	6628535	RSC4T-10/TEG
	2	6629812	WSC4T-2/TEG
	5	6629813	WSC4T-5/TEG
	10	6629814	WSC4T-10/TEG
	0.3	6629815	RKC4T-0.3-RSC4T/TEG
	0.6	6629816	RKC4T-0.6-RSC4T/TEG
	1	6629817	RKC4T-1-RSC4T/TEG
	2	6628739	RKC4T-2-RSC4T/TEG
	5	6628351	RKC4T-5-RSC4T/TEG
	0.3	6629818	WKC4T-0.3-RSC4T/TEG
	0.6	6629819	WKC4T-0.6-RSC4T/TEG
	1	6629820	WKC4T-1-RSC4T/TEG
	2	6629821	WKC4T-2-RSC4T/TEG
	5	6628536	WKC4T-5-RSC4T/TEG

PVC Cable – Gray

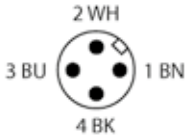


- 4-pin
- Resistant to alkaline solutions, chemicals and oils
- Resistant to microbes and hydrolysis
- Flame-retardant and free from LABS
- cULus approved

Female connector



Male connector



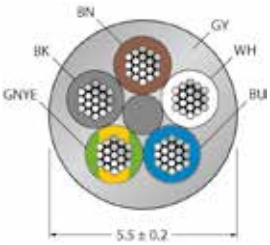
Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	5 mm ± 0.20
Cable jacket	PVC, Gray
Core insulation	PVC (BN, WH, BU, BK)
Core cross-section	4 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	250 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-40…+105 °C
Non-stationary usage	0…+80 °C

Types and Features — Selection Table



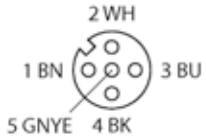
Cable length [m]	ID number	Type
100	6628854	CABLE4X0.34-XX-PVC-GY-100M/TEG
500	6628855	CABLE4X0.34-XX-PVC-GY-500M/TEG
2	6629822	RKC4.4T-2/TEG
5	6628389	RKC4.4T-5/TEG
10	6628390	RKC4.4T-10/TEG
2	6628988	WKC4.4T-2/TEG
5	6628391	WKC4.4T-5/TEG
10	6628392	WKC4.4T-10/TEG
2	6628543	RSC4.4T-2/TEG
5	6628544	RSC4.4T-5/TEG
10	6628918	RSC4.4T-10/TEG
2	6629823	WSC4.4T-2/TEG
5	6628538	WSC4.4T-5/TEG
10	6628539	WSC4.4T-10/TEG
0.3	6629824	RKC4.4T-0.3-RSC4.4T/TEG
0.6	6629825	RKC4.4T-0.6-RSC4.4T/TEG
1	6629341	RKC4.4T-1-RSC4.4T/TEG
2	6629342	RKC4.4T-2-RSC4.4T/TEG
5	6629343	RKC4.4T-5-RSC4.4T/TEG
0.3	6629826	WKC4.4T-0.3-RSC4.4T/TEG
0.6	6629528	WKC4.4T-0.6-RSC4.4T/TEG
1	6629827	WKC4.4T-1-RSC4.4T/TEG
2	6629828	WKC4.4T-2-RSC4.4T/TEG
5	6628546	WKC4.4T-5-RSC4.4T/TEG

PVC Cable – Gray

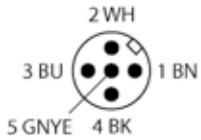


- 4-pin + PE
- Resistant to alkaline solutions, chemicals and oils
- Resistant to microbes and hydrolysis
- Flame-retardant and free from LABS
- cULus approved

Female connector



Male connector



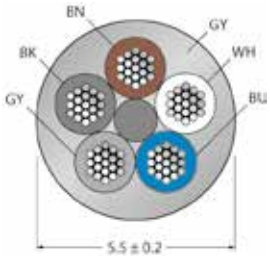
Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	5.5 mm ± 0.20
Cable jacket	PVC, Gray
Core insulation	PVC (BN, WH, BU, BK, GNYE)
Core cross-section	5 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	60 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-40…+105 °C
Non-stationary usage	0…+80 °C

Types and Features — Selection Table



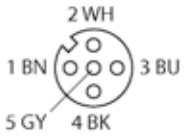
Cable length [m]	ID number	Type
100	6628856	CABLE(4+1)X0.34-XX-PVC-GY-100M/TEG
500	6628857	CABLE(4+1)X0.34-XX-PVC-GY-500M/TEG
2	6629829	RKC5T-2/TEG
5	6629830	RKC5T-5/TEG
10	6629831	RKC5T-10/TEG
2	6629832	WKC5T-2/TEG
5	6629833	WKC5T-5/TEG
10	6629834	WKC5T-10/TEG
2	6629835	RSC5T-2/TEG
5	6629836	RSC5T-5/TEG
10	6629837	RSC5T-10/TEG
2	6629838	WSC5T-2/TEG
5	6629839	WSC5T-5/TEG
10	6629840	WSC5T-10/TEG
0.3	6629841	RKC5T-0.3-RSC5T/TEG
0.6	6629842	RKC5T-0.6-RSC5T/TEG
1	6629843	RKC5T-1-RSC5T/TEG
2	6629844	RKC5T-2-RSC5T/TEG
5	6629845	RKC5T-5-RSC5T/TEG
0.3	6629846	WKC5T-0.3-RSC5T/TEG
0.6	6629847	WKC5T-0.6-RSC5T/TEG
1	6629848	WKC5T-1-RSC5T/TEG
2	6629849	WKC5T-2-RSC5T/TEG
5	6629850	WKC5T-5-RSC5T/TEG

PVC Cable – Gray

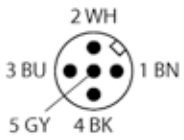


- 5-pin
- Resistant to alkaline solutions, chemicals and oils
- Resistant to microbes and hydrolysis
- Flame-retardant and free from LABS
- cULus approved

Female connector



Male connector



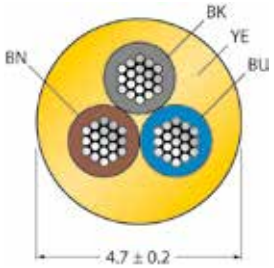
Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	5.5 mm ± 0.20
Cable jacket	PVC, Gray
Core insulation	PVC (BN, WH, BU, BK, GY)
Core cross-section	5 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	60 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-40…+105 °C
Non-stationary usage	0…+80 °C

Types and Features — Selection Table



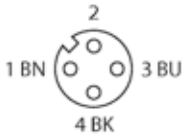
Cable length [m]	ID number	Type
100	6628858	CABLE5X0.34-XX-PVC-GY-100M/TEG
500	6628859	CABLE5X0.34-XX-PVC-GY-500M/TEG
2	6629851	RKC4.5T-2/TEG
5	6628917	RKC4.5T-5/TEG
10	6629501	RKC4.5T-10/TEG
2	6629852	WKC4.5T-2/TEG
5	6629853	WKC4.5T-5/TEG
10	6629854	WKC4.5T-10/TEG
2	6629855	RSC4.5T-2/TEG
5	6629856	RSC4.5T-5/TEG
10	6629857	RSC4.5T-10/TEG
2	6629858	WSC4.5T-2/TEG
5	6629859	WSC4.5T-5/TEG
10	6629860	WSC4.5T-10/TEG
0.3	6629861	RKC4.5T-0.3-RSC4.5T/TEG
0.6	6629862	RKC4.5T-0.6-RSC4.5T/TEG
1	6629863	RKC4.5T-1-RSC4.5T/TEG
2	6629864	RKC4.5T-2-RSC4.5T/TEG
5	6629865	RKC4.5T-5-RSC4.5T/TEG
0.3	6629866	WKC4.5T-0.3-RSC4.5T/TEG
0.6	6629867	WKC4.5T-0.6-RSC4.5T/TEG
1	6629868	WKC4.5T-1-RSC4.5T/TEG
2	6629869	WKC4.5T-2-RSC4.5T/TEG
5	6629870	WKC4.5T-5-RSC4.5T/TEG

PVC Cable – Yellow

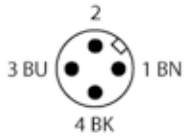


- 3-pin
- Resistant to alkaline solutions, chemicals and oils
- Resistant to microbes and hydrolysis
- Flame-retardant and free from LABS
- cULus approved

Female connector

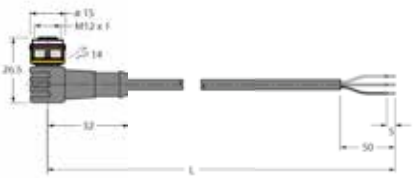
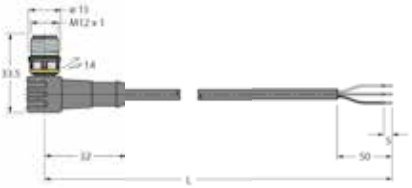
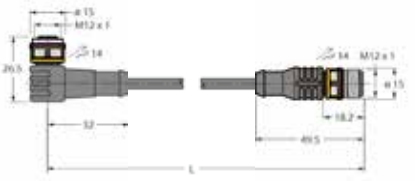


Male connector

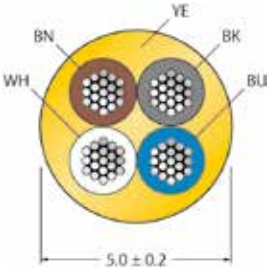


Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	4.7 mm ± 0.20
Cable jacket	PVC, Yellow
Core insulation	PVC (BN, BU, BK)
Core cross-section	3 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	250 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-40…+105 °C
Non-stationary usage	0…+80 °C

Types and Features — Selection Table

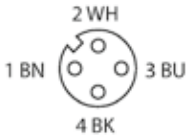
	Cable length [m]	ID number	Type
	100	6628660	CABLE3X0.34-XX-PVC-YE-100M/TEY
	500	6628661	CABLE3X0.34-XX-PVC-YE-500M/TEY
	2	6629871	RKC4T-2/TEY
	5	6629872	RKC4T-5/TEY
	10	6629873	RKC4T-10/TEY
	2	6629874	WKC4T-2/TEY
	5	6629875	WKC4T-5/TEY
	10	6629876	WKC4T-10/TEY
	2	6629877	RSC4T-2/TEY
	5	6629878	RSC4T-5/TEY
	10	6629879	RSC4T-10/TEY
	2	6629880	WSC4T-2/TEY
	5	6629881	WSC4T-5/TEY
	10	6629882	WSC4T-10/TEY
	0.3	6629883	RKC4T-0.3-RSC4T/TEY
	0.6	6629884	RKC4T-0.6-RSC4T/TEY
	1	6629885	RKC4T-1-RSC4T/TEY
	2	6629886	RKC4T-2-RSC4T/TEY
	5	6629887	RKC4T-5-RSC4T/TEY
	0.3	6629888	WKC4T-0.3-RSC4T/TEY
	0.6	6629889	WKC4T-0.6-RSC4T/TEY
	1	6629890	WKC4T-1-RSC4T/TEY
	2	6629891	WKC4T-2-RSC4T/TEY
	5	6629892	WKC4T-5-RSC4T/TEY

PVC Cable – Yellow

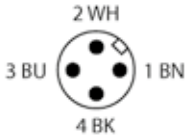


- 4-pin
- Resistant to alkaline solutions, chemicals and oils
- Resistant to microbes and hydrolysis
- Flame-retardant and free from LABS
- cULus approved

Female connector

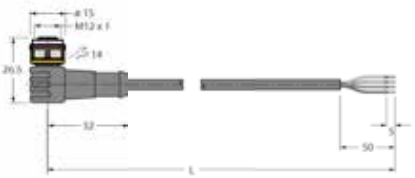
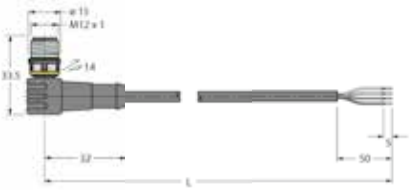
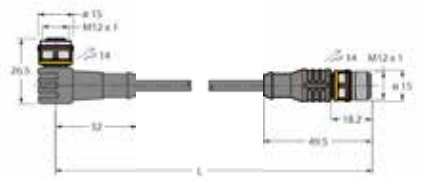


Male connector

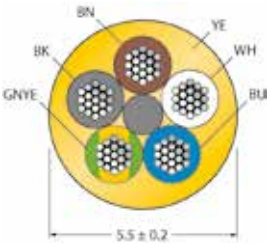


Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	5 mm ± 0.20
Cable jacket	PVC, Yellow
Core insulation	PVC (BN, WH, BU, BK)
Core cross-section	4 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	250 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-40…+105 °C
Non-stationary usage	0…+80 °C

Types and Features — Selection Table

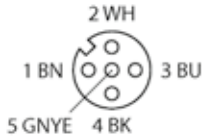
	Cable length [m]	ID number	Type
	100	6628662	CABLE4X0.34-XX-PVC-YE-100M/TEY
	500	6628663	CABLE4X0.34-XX-PVC-YE-500M/TEY
	2	6629002	RKC4.4T-2/TEY
	5	6629003	RKC4.4T-5/TEY
	10	6629004	RKC4.4T-10/TEY
	2	6629005	WKC4.4T-2/TEY
	5	6629006	WKC4.4T-5/TEY
	10	6629315	WKC4.4T-10/TEY
	2	6629893	RSC4.4T-2/TEY
	5	6629894	RSC4.4T-5/TEY
	10	6629895	RSC4.4T-10/TEY
	2	6629896	WSC4.4T-2/TEY
	5	6629897	WSC4.4T-5/TEY
	10	6629898	WSC4.4T-10/TEY
	0.3	6629899	RKC4.4T-0.3-RSC4.4T/TEY
	0.6	6629902	RKC4.4T-0.6-RSC4.4T/TEY
	1	6629387	RKC4.4T-1-RSC4.4T/TEY
	2	6629388	RKC4.4T-2-RSC4.4T/TEY
	5	6629389	RKC4.4T-5-RSC4.4T/TEY
	0.3	6629903	WKC4.4T-0.3-RSC4.4T/TEY
	0.6	6629904	WKC4.4T-0.6-RSC4.4T/TEY
	1	6629905	WKC4.4T-1-RSC4.4T/TEY
	2	6629906	WKC4.4T-2-RSC4.4T/TEY
	5	6629907	WKC4.4T-5-RSC4.4T/TEY

PVC Cable – Yellow

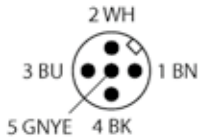


- 4-pin + PE
- Resistant to alkaline solutions, chemicals and oils
- Resistant to microbes and hydrolysis
- Flame-retardant and free from LABS
- cULus approved

Female connector



Male connector



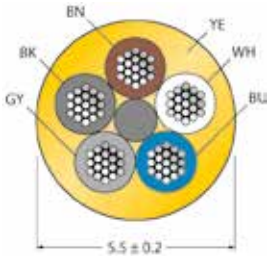
Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	5.5 mm ± 0.20
Cable jacket	PVC, Yellow
Core insulation	PVC (BN, WH, BU, BK, GNYE)
Core cross-section	5 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	60 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-40…+105 °C
Non-stationary usage	0…+80 °C

Types and Features — Selection Table



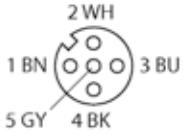
Cable length [m]	ID number	Type
100	6628664	CABLE(4+1)X0.34-XX-PVC-YE-100M/TEY
500	6628665	CABLE(4+1)X0.34-XX-PVC-YE-500M/TEY
2	6629908	RKC5T-2/TEY
5	6629909	RKC5T-5/TEY
10	6629910	RKC5T-10/TEY
2	6629911	WKC5T-2/TEY
5	6629912	WKC5T-5/TEY
10	6629913	WKC5T-10/TEY
2	6629914	RSC5T-2/TEY
5	6629915	RSC5T-5/TEY
10	6629916	RSC5T-10/TEY
2	6629917	WSC5T-2/TEY
5	6629918	WSC5T-5/TEY
10	6629919	WSC5T-10/TEY
0.3	6629920	RKC5T-0.3-RSC5T/TEY
0.6	6629921	RKC5T-0.6-RSC5T/TEY
1	6629922	RKC5T-1-RSC5T/TEY
2	6629923	RKC5T-2-RSC5T/TEY
5	6629924	RKC5T-5-RSC5T/TEY
0.3	6629925	WKC5T-0.3-RSC5T/TEY
0.6	6629926	WKC5T-0.6-RSC5T/TEY
1	6629927	WKC5T-1-RSC5T/TEY
2	6629928	WKC5T-2-RSC5T/TEY
5	6629929	WKC5T-5-RSC5T/TEY

PVC Cable – Yellow

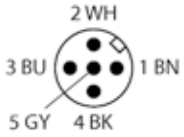


- 5-pin
- Resistant to alkaline solutions, chemicals and oils
- Resistant to microbes and hydrolysis
- Flame-retardant and free from LABS
- cULus approved

Female connector

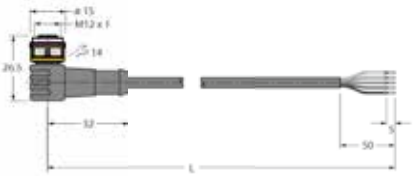
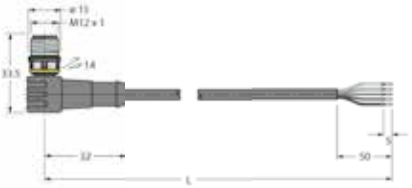
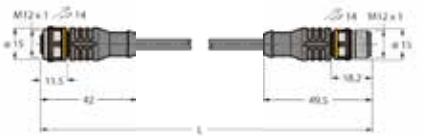
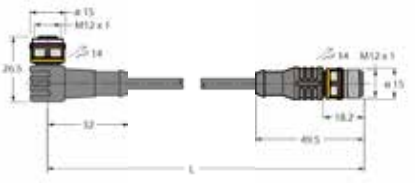


Male connector

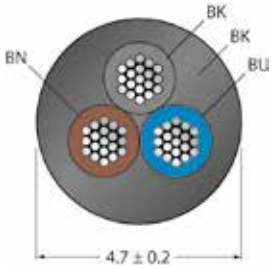


Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	5.5 mm ± 0.20
Cable jacket	PVC, Yellow
Core insulation	PVC (BN, WH, BU, BK, GY)
Core cross-section	5 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	60 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-40…+105 °C
Non-stationary usage	0…+80 °C

Types and Features — Selection Table

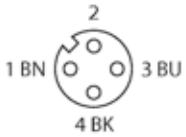
	Cable length [m]	ID number	Type
	100	6628666	CABLE5X0.34-XX-PVC-YE-100M/TEY
	500	6628667	CABLE5X0.34-XX-PVC-YE-500M/TEY
	2	6629007	RKC4.5T-2/TEY
	5	6629008	RKC4.5T-5/TEY
	10	6629930	RKC4.5T-10/TEY
	2	6629931	WKC4.5T-2/TEY
	5	6629009	WKC4.5T-5/TEY
	10	6629932	WKC4.5T-10/TEY
	2	6629933	RSC4.5T-2/TEY
	5	6629934	RSC4.5T-5/TEY
	10	6629935	RSC4.5T-10/TEY
	2	6629936	WSC4.5T-2/TEY
	5	6629937	WSC4.5T-5/TEY
	10	6629938	WSC4.5T-10/TEY
	0.3	6629939	RKC4.5T-0.3-RSC4.5T/TEY
	0.6	6629940	RKC4.5T-0.6-RSC4.5T/TEY
	1	6629941	RKC4.5T-1-RSC4.5T/TEY
	2	6629942	RKC4.5T-2-RSC4.5T/TEY
	5	6629943	RKC4.5T-5-RSC4.5T/TEY
	0.3	6629944	WKC4.5T-0.3-RSC4.5T/TEY
	0.6	6629945	WKC4.5T-0.6-RSC4.5T/TEY
	1	6629946	WKC4.5T-1-RSC4.5T/TEY
	2	6629947	WKC4.5T-2-RSC4.5T/TEY
	5	6629948	WKC4.5T-5-RSC4.5T/TEY

PVC Cable – Black

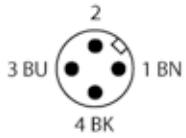


- 3-pin
- Resistant to alkaline solutions, chemicals and oils
- Resistant to microbes and hydrolysis
- Flame-retardant and free from LABS
- cULus approved

Female connector

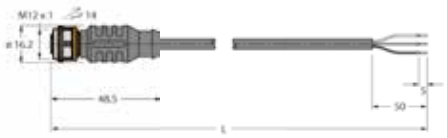
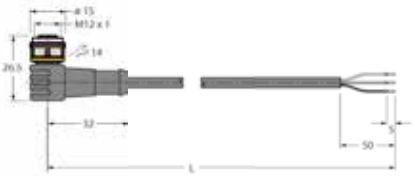
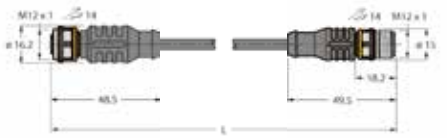
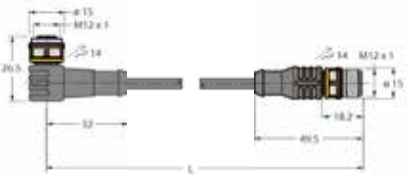


Male connector

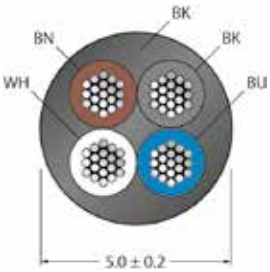


Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable jacket	PVC, Black
Core insulation	PVC (BN, BU, BK)
Core cross-section	3 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	30 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-40…+105 °C
Non-stationary usage	0…+80 °C

Types and Features — Selection Table

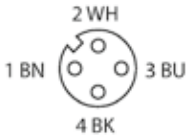
	Cable length [m]	ID number	Type
	100	6627984	CABLE3X0.34-XX-PVC-BK-100M/TEL
	500	6627985	CABLE3X0.34-XX-PVC-BK-500M/TEL
	2	6626536	RKC4T-P7X2-2/TEL
	5	6626545	RKC4T-P7X2-5/TEL
	10	6626555	RKC4T-P7X2-10/TEL
	2	6626168	WKC4T-P7X2-2/TEL
	5	6626169	WKC4T-P7X2-5/TEL
	10	6626171	WKC4T-P7X2-10/TEL
	0.3	6627312	RKC4T-P7X2-0.3-RSC4T/TEL
	0.6	6627313	RKC4T-P7X2-0.6-RSC4T/TEL
	1	6627314	RKC4T-P7X2-1-RSC4T/TEL
	2	6627315	RKC4T-P7X2-2-RSC4T/TEL
	5	6627316	RKC4T-P7X2-5-RSC4T/TEL
	0.3	6626007	WKC4T-P7X2-0.3-RSC4T/TEL
	0.6	6626008	WKC4T-P7X2-0.6-RSC4T/TEL
	1	6625923	WKC4T-P7X2-1-RSC4T/TEL
	2	6626009	WKC4T-P7X2-2-RSC4T/TEL
	5	6626010	WKC4T-P7X2-5-RSC4T/TEL

PVC Cable – Black

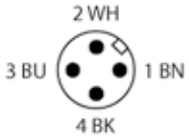


- 4-pin
- Resistant to alkaline solutions, chemicals and oils
- Resistant to microbes and hydrolysis
- Flame-retardant and free from LABS
- cULus approved

Female connector



Male connector

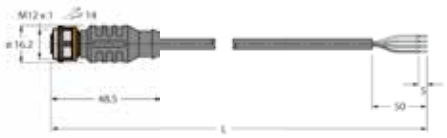


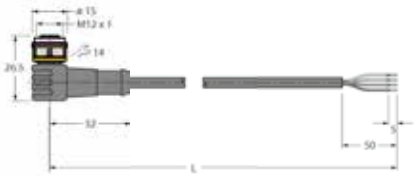
Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable jacket	PVC, Black
Core insulation	PVC (BN, WH, BU, BK)
Core cross-section	4 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	30 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-40…+105 °C
Non-stationary usage	0…+80 °C

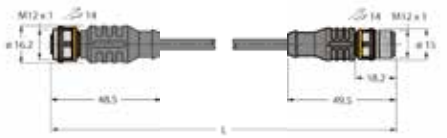
Types and Features — Selection Table

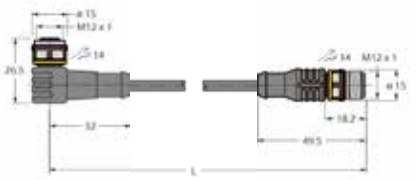






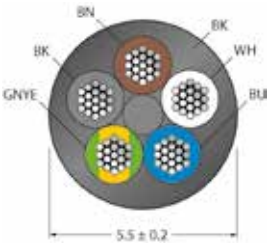






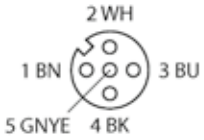
Cable length [m]	ID number	Type
100	6627986	CABLE4X0.34-XX-PVC-BK-100M/TEL
500	6627987	CABLE4X0.34-XX-PVC-BK-500M/TEL
2	6626162	RKC4.4T-P7X2-2/TEL
5	6626164	RKC4.4T-P7X2-5/TEL
10	6626074	RKC4.4T-P7X2-10/TEL
2	6626163	WKC4.4T-P7X2-2/TEL
5	6626165	WKC4.4T-P7X2-5/TEL
10	6626167	WKC4.4T-P7X2-10/TEL
2	6625920	WKC4.4T-P7X3-2/TEL
5	6626166	WKC4.4T-P7X3-5/TEL
10	6626075	WKC4.4T-P7X3-10/TEL
0.3	6627317	RKC4.4T-P7X2-0.3-RSC4.4T/TEL
0.6	6627318	RKC4.4T-P7X2-0.6-RSC4.4T/TEL
1	6627319	RKC4.4T-P7X2-1-RSC4.4T/TEL
2	6627320	RKC4.4T-P7X2-2-RSC4.4T/TEL
5	6627321	RKC4.4T-P7X2-5-RSC4.4T/TEL
0.3	6626106	WKC4.4T-P7X2-0.3-RSC4.4T/TEL
0.6	6625918	WKC4.4T-P7X2-0.6-RSC4.4T/TEL
1	6626051	WKC4.4T-P7X2-1-RSC4.4T/TEL
2	6625921	WKC4.4T-P7X2-2-RSC4.4T/TEL
5	6626006	WKC4.4T-P7X2-5-RSC4.4T/TEL
0.3	6626223	WKC4.4T-P7X3-0.3-RSC4.4T/TEL
0.6	6626224	WKC4.4T-P7X3-0.6-RSC4.4T/TEL
1	6626225	WKC4.4T-P7X3-1-RSC4.4T/TEL
2	6626226	WKC4.4T-P7X3-2-RSC4.4T/TEL
5	6625922	WKC4.4T-P7X3-5-RSC4.4T/TEL

PVC Cable – Black

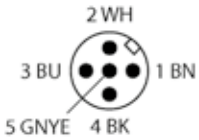


- 4-pin + PE
- Resistant to alkaline solutions, chemicals and oils
- Resistant to microbes and hydrolysis
- Flame-retardant and free from LABS
- cULus approved

Female connector

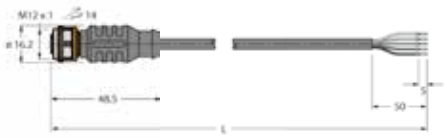
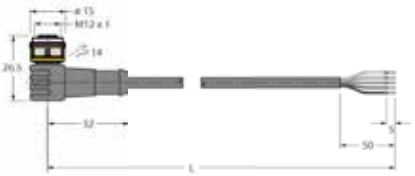
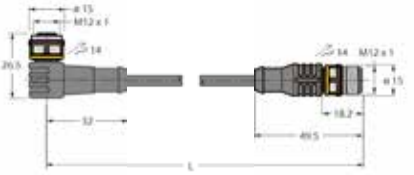


Male connector

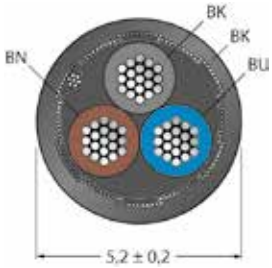


Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable jacket	PVC, Black
Core insulation	PVC (BN, WH, BU, BK, GNYE)
Core cross-section	5 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	30 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-40…+105 °C
Non-stationary usage	0…+80 °C

Types and Features — Selection Table

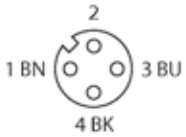
	Cable length [m]	ID number	Type
	100	6627988	CABLE(4+1)X0.34-XX-PVC-BK-100M/TEL
	500	6627989	CABLE(4+1)X0.34-XX-PVC-BK-500M/TEL
	2	6626235	RKC5T-P7X2-2/TEL
	5	6626236	RKC5T-P7X2-5/TEL
	10	6626237	RKC5T-P7X2-10/TEL
	2	6626232	WKC5T-P7X3-2/TEL
	5	6626233	WKC5T-P7X3-5/TEL
	10	6626234	WKC5T-P7X3-10/TEL
	0.3	6627322	RKC5T-P7X2-0.3-RSC5T/TEL
	0.6	6627323	RKC5T-P7X2-0.6-RSC5T/TEL
	1	6627324	RKC5T-P7X2-1-RSC5T/TEL
	2	6627325	RKC5T-P7X2-2-RSC5T/TEL
	5	6627326	RKC5T-P7X2-5-RSC5T/TEL
	0.3	6625910	WKC5T-P7X3-0.3-RSC5T/TEL
	0.6	6626005	WKC5T-P7X3-0.6-RSC5T/TEL
	1	6625912	WKC5T-P7X3-1-RSC5T/TEL
	2	6625914	WKC5T-P7X3-2-RSC5T/TEL
	5	6625916	WKC5T-P7X3-5-RSC5T/TEL

PUR Cable – Black, Shielded

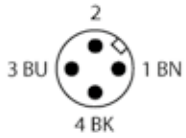


- 3-pin
- Resistant to alkaline solutions, chemicals and oils
- Resistant to microbes and hydrolysis
- Flame-retardant and free from LABS
- cULus approved

Female connector

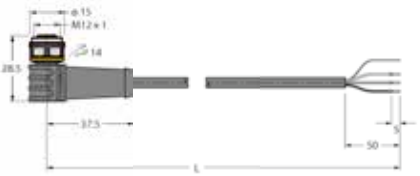


Male connector



Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	5.2 mm ± 0.20
Cable jacket	PVC, Black
Core insulation	PVC (BN, BU, BK)
Core cross-section	3 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Shield	Aluminum foil, tinned copper braid
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	250 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-40…+105 °C
Non-stationary usage	0…+80 °C

Types and Features — Selection Table

	Cable length [m]	ID number	Type
	100	6627968	CABLE3X0.34-SH-PVC-BK-100M/TEL
	500	6627969	CABLE3X0.34-SH-PVC-BK-500M/TEL
	2	6626281	RKS4T-2/TEL
	5	6626282	RKS4T-5/TEL
	10	6626283	RKS4T-10/TEL
	2	6626284	WKS4T-2/TEL
	5	6626285	WKS4T-5/TEL
	10	6626286	WKS4T-10/TEL
	2	6626287	RSS4T-2/TEL
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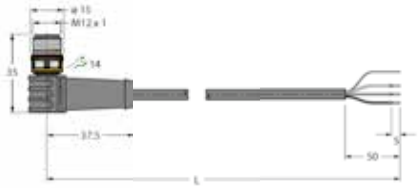
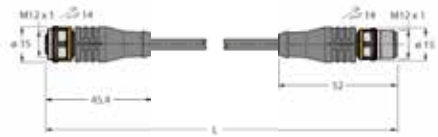
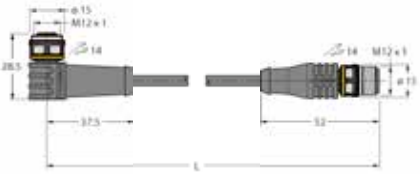
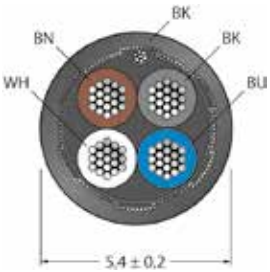
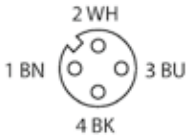
	10	6626289	RSS4T-10/TEL
	2	6626290	WSS4T-2/TEL
	5	6626291	WSS4T-5/TEL
	10	6626292	WSS4T-10/TEL
	0.3	6626305	RKS4T-0.3-RSS4T/TEL
	0.6	6626306	RKS4T-0.6-RSS4T/TEL
	1	6626307	RKS4T-1-RSS4T/TEL
	2	6626308	RKS4T-2-RSS4T/TEL
	5	6630182	RKS4T-5-RSS4T/TEL
	0.3	6626309	WKS4T-0.3-RSS4T/TEL
	0.6	6626310	WKS4T-0.6-RSS4T/TEL
	1	6626311	WKS4T-1-RSS4T/TEL
	2	6626312	WKS4T-2-RSS4T/TEL
	5	6630183	WKS4T-5-RSS4T/TEL

PUR Cable – Black, Shielded

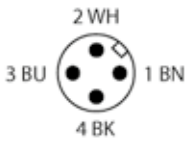


- 4-pin
- Resistant to alkaline solutions, chemicals and oils
- Resistant to microbes and hydrolysis
- Flame-retardant and free from LABS
- cULus approved

Female connector

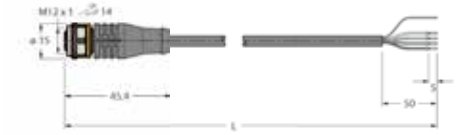
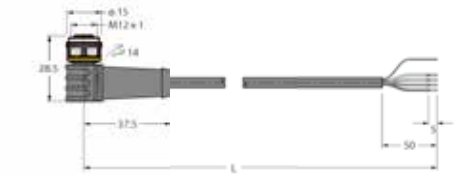
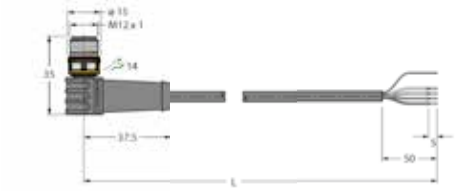
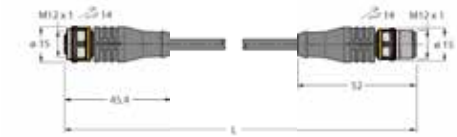
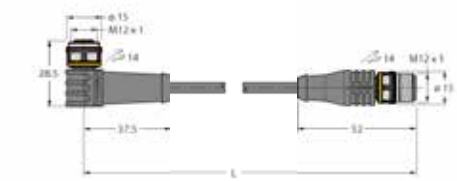


Male connector

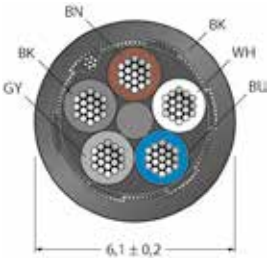


Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	5.4 mm ± 0.20
Cable jacket	PVC, Black
Core insulation	PVC (BN, WH, BU, BK)
Core cross-section	4 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Shield	Aluminum foil, tinned copper braid
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	250 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-40…+105 °C
Non-stationary usage	0…+80 °C

Types and Features — Selection Table

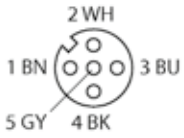
	Cable length [m]	ID number	Type
	100	6627970	CABLE4X0.34-SH-PVC-BK-100M/TEL
	500	6627971	CABLE4X0.34-SH-PVC-BK-500M/TEL
	2	6626321	RKS4.4T-2/TEL
	5	6626322	RKS4.4T-5/TEL
	10	6626323	RKS4.4T-10/TEL
	2	6626324	WKS4.4T-2/TEL
	5	6626325	WKS4.4T-5/TEL
	10	6626326	WKS4.4T-10/TEL
	2	6626327	RSS4.4T-2/TEL
	5	6626328	RSS4.4T-5/TEL
	10	6626329	RSS4.4T-10/TEL
	2	6626330	WSS4.4T-2/TEL
	5	6626331	WSS4.4T-5/TEL
	10	6626332	WSS4.4T-10/TEL
	0.3	6626345	RKS4.4T-0.3-RSS4.4T/TEL
	0.6	6626346	RKS4.4T-0.6-RSS4.4T/TEL
	1	6626347	RKS4.4T-1-RSS4.4T/TEL
	2	6626348	RKS4.4T-2-RSS4.4T/TEL
	5	6629290	RKS4.4T-5-RSS4.4T/TEL
	0.3	6626349	WKS4.4T-0.3-RSS4.4T/TEL
	0.6	6626350	WKS4.4T-0.6-RSS4.4T/TEL
	1	6626351	WKS4.4T-1-RSS4.4T/TEL
	2	6626352	WKS4.4T-2-RSS4.4T/TEL
	5	6628408	WKS4.4T-5-RSS4.4T/TEL

PUR Cable – Black, Shielded

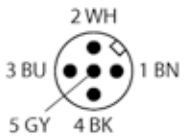


- 5-pin
- Resistant to alkaline solutions, chemicals and oils
- Resistant to microbes and hydrolysis
- Flame-retardant and free from LABS
- cULus approved

Female connector



Male connector



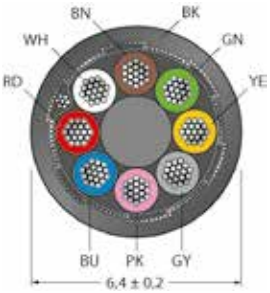
Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	6.1 mm ± 0.20
Cable jacket	PVC, Black
Core insulation	PVC (BN, WH, BU, BK, GY)
Core cross-section	5 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Shield	Aluminum foil, tinned copper braid
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	60 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-40…+105 °C
Non-stationary usage	0…+80 °C

Types and Features — Selection Table



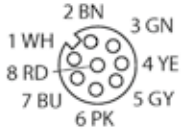
Cable length [m]	ID number	Type
100	6627974	CABLE5X0.34-SH-PVC-BK-100M/TEL
500	6627975	CABLE5X0.34-SH-PVC-BK-500M/TEL
2	6626361	RKS4.5T-2/TEL
5	6626362	RKS4.5T-5/TEL
10	6626363	RKS4.5T-10/TEL
2	6626364	WKS4.5T-2/TEL
5	6626365	WKS4.5T-5/TEL
10	6626366	WKS4.5T-10/TEL
2	6626367	RSS4.5T-2/TEL
5	6626368	RSS4.5T-5/TEL
10	6626369	RSS4.5T-10/TEL
2	6626370	WSS4.5T-2/TEL
5	6626371	WSS4.5T-5/TEL
10	6626372	WSS4.5T-10/TEL
0.3	6626385	RKS4.5T-0.3-RSS4.5T/TEL
0.6	6626386	RKS4.5T-0.6-RSS4.5T/TEL
1	6626387	RKS4.5T-1-RSS4.5T/TEL
2	6626388	RKS4.5T-2-RSS4.5T/TEL
5	6627734	RKS4.5T-5-RSS4.5T/TEL
0.3	6626389	WKS4.5T-0.3-RSS4.5T/TEL
0.6	6626390	WKS4.5T-0.6-RSS4.5T/TEL
1	6626391	WKS4.5T-1-RSS4.5T/TEL
2	6626392	WKS4.5T-2-RSS4.5T/TEL
5	6630184	WKS4.5T-5-RSS4.5T/TEL

PUR Cable – Black, Shielded

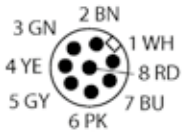


- 8-pin
- Resistant to alkaline solutions, chemicals and oils
- Resistant to microbes and hydrolysis
- Flame-retardant and free from LABS
- cULus approved

Female connector



Male connector



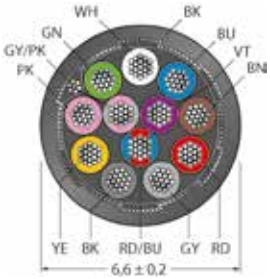
Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	6.4 mm ± 0.20
Cable jacket	PVC, Black
Core insulation	PVC (WH, BN, GN, YE, GY, PK, BU, RD)
Core cross-section	8 x 0.25 mm^2
Arrangement of strands	32 x 0.1 mm
Shield	Aluminum foil, tinned copper braid
Electrical properties at +20 °C	
Current load	2 A
Rated voltage	30 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 79 Ω/km
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-40…+105 °C
Non-stationary usage	0…+80 °C

Types and Features — Selection Table



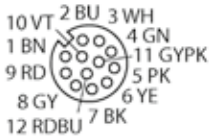
Cable length [m]	ID number	Type
100	6627976	CABLE8 x 0.25-SH-PVC-BK-100M/TEL
500	6627977	CABLE8 x 0.25-SH-PVC-BK-500M/TEL
2	6625446	RKS8T-2/TEL
5	6625447	RKS8T-5/TEL
10	6625448	RKS8T-10/TEL
2	6625449	WKS8T-2/TEL
5	6625450	WKS8T-5/TEL
10	6625451	WKS8T-10/TEL
2	6625452	RSS8T-2/TEL
5	6625453	RSS8T-5/TEL
10	6625454	RSS8T-10/TEL
2	6625455	WSS8T-2/TEL
5	6625456	WSS8T-5/TEL
10	6625457	WSS8T-10/TEL
0.3	6625470	RKS8T-0.3-RSS8T/TEL
0.6	6625471	RKS8T-0.6-RSS8T/TEL
1	6625472	RKS8T-1-RSS8T/TEL
2	6625473	RKS8T-2-RSS8T/TEL
5	6627735	RKS8T-5-RSS8T/TEL
0.3	6625474	WKS8T-0.3-RSS8T/TEL
0.6	6625475	WKS8T-0.6-RSS8T/TEL
1	6625476	WKS8T-1-RSS8T/TEL
2	6625477	WKS8T-2-RSS8T/TEL
5	6630185	WKS8T-5-RSS8T/TEL

PUR Cable – Black, Shielded



- 12-pin
- Resistant to alkaline solutions, chemicals and oils
- Resistant to microbes and hydrolysis
- Flame-retardant and free from LABS
- cULus approved

Female connector

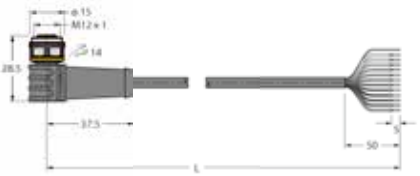
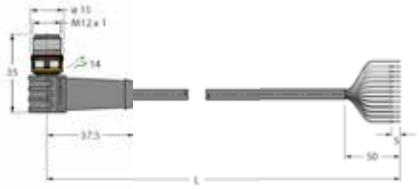
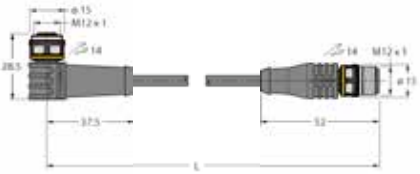


Male connector

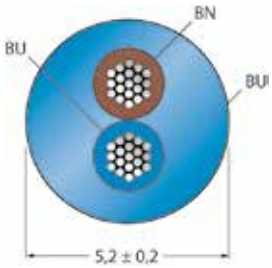


Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	6.6 mm ± 0.20
Cable jacket	PVC, Black
Core insulation	PVC (BN, BU, WH, GN, PK, YE, BK, GY, RD, VT, GY/PK, RD/BU)
Core cross-section	12 x 0.14 mm^2
Arrangement of strands	18 x 0.1 mm
Shield	Aluminum foil, tinned copper braid
Electrical properties at +20 °C	
Current load	1.5 A
Rated voltage	30 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 138 Ω/km
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-40…+105 °C
Non-stationary usage	0…+80 °C

Types and Features — Selection Table

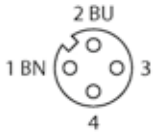
	Cable length [m]	ID number	Type
	100	6627978	CABLE12 x 0.14-SH-PVC-BK-100M/TEL
	500	6627979	CABLE12 x 0.14-SH-PVC-BK-500M/TEL
	2	6626905	RKS12T-2/TEL
	5	6626906	RKS12T-5/TEL
	10	6626907	RKS12T-10/TEL
	2	6626908	WKS12T-2/TEL
	5	6626909	WKS12T-5/TEL
	10	6626910	WKS12T-10/TEL
	2	6626911	RSS12T-2/TEL
	5	6626912	RSS12T-5/TEL
	10	6626913	RSS12T-10/TEL
	2	6626914	WSS12T-2/TEL
	5	6626915	WSS12T-5/TEL
	10	6626916	WSS12T-10/TEL
	0.3	6626929	RKS12T-0.3-RSS12T/TEL
	0.6	6626930	RKS12T-0.6-RSS12T/TEL
	1	6626931	RKS12T-1-RSS12T/TEL
	2	6626932	RKS12T-2-RSS12T/TEL
	5	6626945	RKS12T-5-RSS12T/TEL
	0.3	6626933	WKS12T-0.3-RSS12T/TEL
	0.6	6626934	WKS12T-0.6-RSS12T/TEL
	1	6626935	WKS12T-1-RSS12T/TEL
	2	6626936	WKS12T-2-RSS12T/TEL
	5	6626946	WKS12T-5-RSS12T/TEL

PVC Cable – Blue, Namur

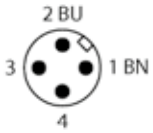


- 2-pin
- Resistant to alkaline solutions, chemicals and oils
- Resistant to microbes and hydrolysis
- Flame-retardant and free from LABS
- cULus approved

Female connector



Male connector

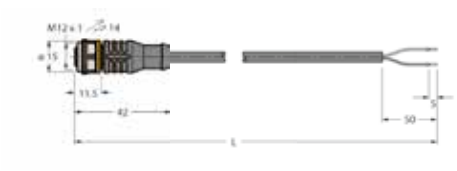


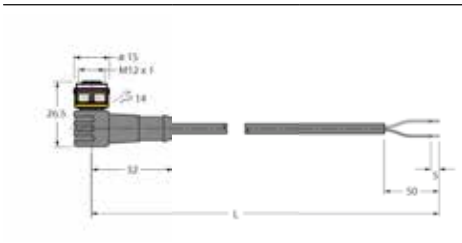
Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	5.2 mm ± 0.20
Cable jacket	PVC, Blue
Core insulation	PVC (BN, BU)
Core cross-section	2 x 0.5 mm^2
Arrangement of strands	64 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	250 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Nom. Capacitance	0.89 pF/m
Nom. Inductance	1.25 mH/km
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-40…+105 °C
Non-stationary usage	0…+80 °C

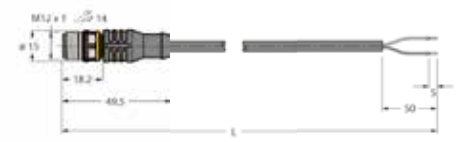
Types and Features — Selection Table

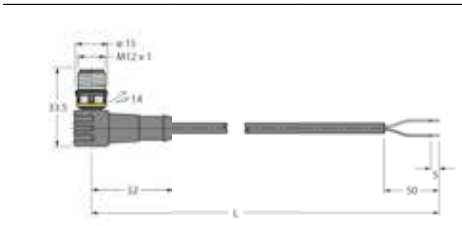


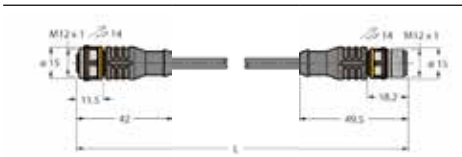






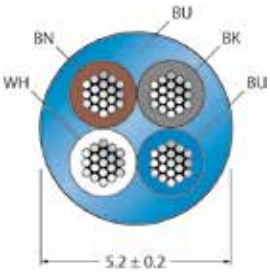






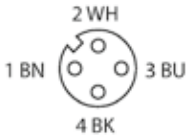
Cable length [m]	ID number	Type
100	6628658	CABLE2X0.50-XX-PVC-BU-100M/TEB
500	6628659	CABLE2X0.50-XX-PVC-BU-500M/TEB
2	6628420	RKC4.221T-2/TEB
5	6628421	RKC4.221T-5/TEB
10	6628422	RKC4.221T-10/TEB
15	6628423	RKC4.221T-15/TEB
20	6628424	RKC4.221T-20/TEB
25	6628425	RKC4.221T-25/TEB
30	6628426	RKC4.221T-30/TEB
2	6628427	WKC4.221T-2/TEB
5	6628428	WKC4.221T-5/TEB
10	6628429	WKC4.221T-10/TEB
15	6628430	WKC4.221T-15/TEB
20	6628431	WKC4.221T-20/TEB
25	6628432	WKC4.221T-25/TEB
30	6628433	WKC4.221T-30/TEB
2	6628434	RSC4.221T-2/TEB
5	6628435	RSC4.221T-5/TEB
10	6628436	RSC4.221T-10/TEB
2	6628437	WSC4.221T-2/TEB
5	6628438	WSC4.221T-5/TEB
10	6628439	WSC4.221T-10/TEB
1	6628440	RKC4.221T-1-RSC4.221T/TEB
2	6628441	RKC4.221T-2-RSC4.221T/TEB
5	6628442	RKC4.221T-5-RSC4.221T/TEB
10	6628443	RKC4.221T-10-RSC4.221T/TEB

PVC Cable – Blue, Namur

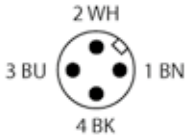


- 4-pin
- Resistant to alkaline solutions, chemicals and oils
- Resistant to microbes and hydrolysis
- Flame-retardant and free from LABS
- cULus approved

Female connector



Male connector



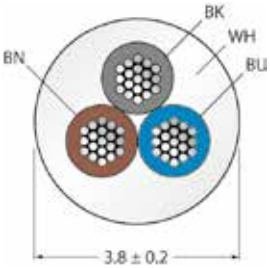
Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	5.2 mm ± 0.20
Cable jacket	PVC, Blue
Core insulation	PVC (BN, WH, BU, BK)
Core cross-section	4 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	250 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Nom. Capacitance	0.49 pF/m
Nom. Inductance	1.08 mH/km
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-40…+105 °C
Non-stationary usage	0…+80 °C

Types and Features — Selection Table



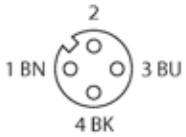
Cable length [m]	ID number	Type
100	6628656	CABLE4X0.34-XX-PVC-BU-100M/TEB
500	6628657	CABLE4X0.34-XX-PVC-BU-500M/TEB
2	6628444	RKC4.441T-2/TEB
5	6628445	RKC4.441T-5/TEB
10	6628446	RKC4.441T-10/TEB
15	6628447	RKC4.441T-15/TEB
20	6628448	RKC4.441T-20/TEB
25	6628449	RKC4.441T-25/TEB
30	6628450	RKC4.441T-30/TEB
2	6628451	WKC4.441T-2/TEB
5	6628452	WKC4.441T-5/TEB
10	6628453	WKC4.441T-10/TEB
15	6628454	WKC4.441T-15/TEB
20	6628455	WKC4.441T-20/TEB
25	6628456	WKC4.441T-25/TEB
30	6628457	WKC4.441T-30/TEB
2	6628458	RSC4.441T-2/TEB
5	6628459	RSC4.441T-5/TEB
10	6628460	RSC4.441T-10/TEB
2	6628461	WSC4.441T-2/TEB
5	6628462	WSC4.441T-5/TEB
10	6628463	WSC4.441T-10/TEB
1	6628464	RKC4.441T-1-RSC4.441T/TEB
2	6628465	RKC4.441T-2-RSC4.441T/TEB
5	6628466	RKC4.441T-5-RSC4.441T/TEB
10	6628467	RKC4.441T-10-RSC4.441T/TEB

PTFE Cable – White, Resistant to High Temperatures

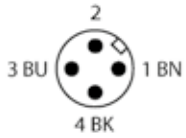


- 3-pin
- Low smoke emission and flame-retardant
- Resistant to chemicals, UV radiation and oils
- LABS free
- Cold and heat-flexible

Female connector

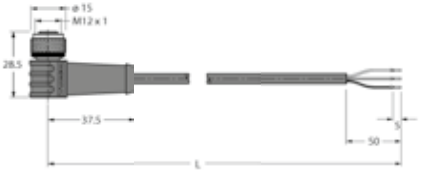
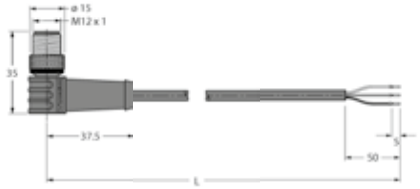
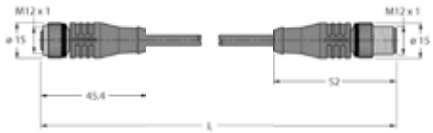
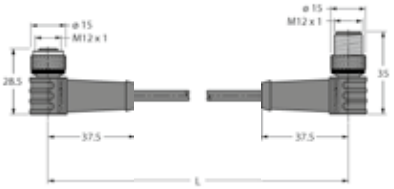


Male connector

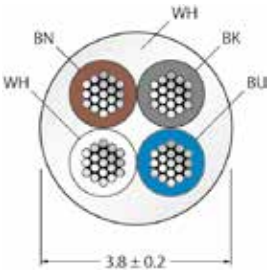


Connector	
Grip	Plastic, PBT GF, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	PBT GF, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP65 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	3.8 mm ± 0.20
Cable jacket	PTFE, White
Core insulation	PTFE (BN, BU, BK)
Core cross-section	3 x 0.34 mm^2
Arrangement of strands	7 x 0.254 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	250 V
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-20…+150 °C

Types and Features — Selection Table

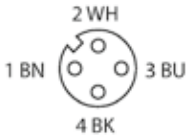
	Cable length [m]	ID number	Type
			
	2	8039210	HT-WAK3-2/S2430
	5	8036085	HT-WAK3-5/S2430
	10	8039211	HT-WAK3-10/S2430
	2	8039224	HT-WWAK3-2/S2430
	5	8036088	HT-WWAK3-5/S2430
	10	8039225	HT-WWAK3-10/S2430
	2	8039231	HT-WAS3-2/S2430
	5	8036091	HT-WAS3-5/S2430
	10	8039232	HT-WAS3-10/S2430
	2	8039467	HT-WWAS3-2/S2430
	5	8036094	HT-WWAS3-5/S2430
	10	8039468	HT-WWAS3-10/S2430
	2	8039479	HT-WAK3-2-HT-WAS3/S2430
	5	8039480	HT-WAK3-5-HT-WAS3/S2430
	10	8039481	HT-WAK3-10-HT-WAS3/S2430
	2	8039958	HT-WWAK3-2-HT-WWAS3/S2430
	5	8039959	HT-WWAK3-5-HT-WWAS3/S2430
	10	8039960	HT-WWAK3-10-HT-WWAS3/S2430

PTFE Cable – White, Resistant to High Temperatures

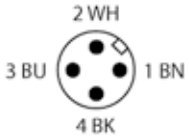


- 4-pin
- Low smoke emission and flame-retardant
- Resistant to chemicals, UV radiation and oils
- LABS free
- Cold and heat-flexible

Female connector

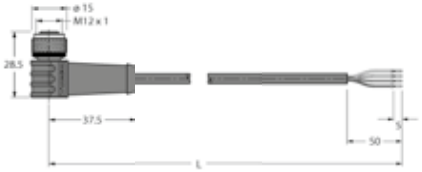
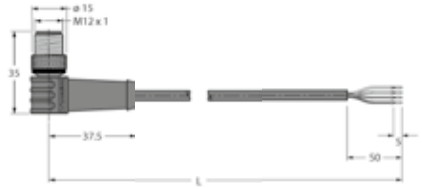
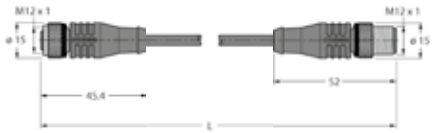
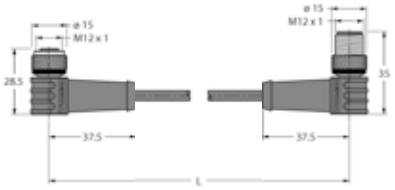


Male connector

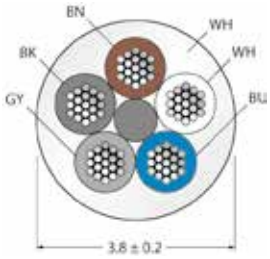


Connector	
Grip	Plastic, PBT GF, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	PBT GF, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP65 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	3.8 mm ± 0.20
Cable jacket	PTFE, White
Core insulation	PTFE (BN, WH, BU, BK)
Core cross-section	4 x 0.34 mm^2
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	250 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-20…+150 °C

Types and Features — Selection Table

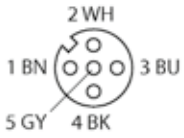
	Cable length [m]	ID number	Type
			
	2	8036518	HT-WAK4-2/S2430
	5	8036086	HT-WAK4-5/S2430
	10	8036154	HT-WAK4-10/S2430
	2	8039226	HT-WWAK4-2/S2430
	5	8036089	HT-WWAK4-5/S2430
	10	8037214	HT-WWAK4-10/S2430
	2	8039233	HT-WAS4-2/S2430
	5	8036092	HT-WAS4-5/S2430
	10	8039234	HT-WAS4-10/S2430
	2	8039469	HT-WWAS4-2/S2430
	5	8036095	HT-WWAS4-5/S2430
	10	8039470	HT-WWAS4-10/S2430
	2	8038668	HT-WAK4-2-HT-WAS4/S2430
	5	8038669	HT-WAK4-5-HT-WAS4/S2430
	10	8038670	HT-WAK4-10-HT-WAS4/S2430
	2	8039961	HT-WWAK4-2-HT-WWAS4/S2430
	5	8039137	HT-WWAK4-5-HT-WWAS4/S2430
	10	8039962	HT-WWAK4-10-HT-WWAS4/S2430

PTFE Cable – White, Resistant to High Temperatures

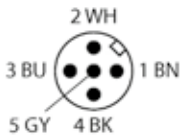


- 5-pin
- Low smoke emission and flame-retardant
- Resistant to chemicals, UV radiation and oils
- LABS free
- Cold and heat-flexible

Female connector



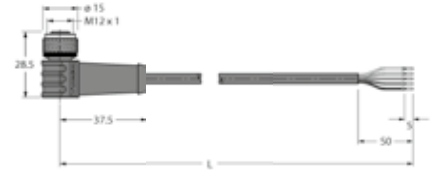
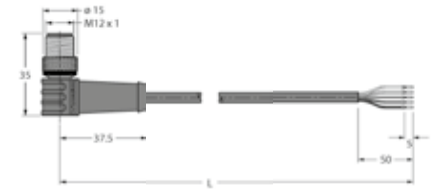
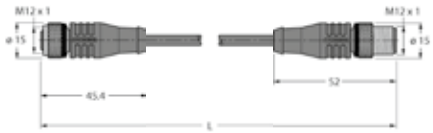
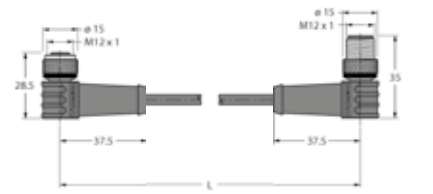
Male connector



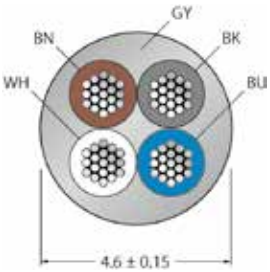
Connector	
Grip	Plastic, PBT GF, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	PBT GF, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP65 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	3.8 mm ± 0.20
Cable jacket	PTFE, White
Core insulation	PTFE (BN, WH, BU, BK, GY)
Core cross-section	5 x 0.34 mm^2
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	60 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-20…+150 °C

Types and Features — Selection Table



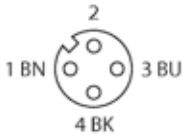
Cable length [m]	ID number	Type
		
2	8039212	HT-WAK4.5-2/S2430
5	8036087	HT-WAK4.5-5/S2430
10	8039213	HT-WAK4.5-10/S2430
		
2	8039227	HT-WWAK4.5-2/S2430
5	8036090	HT-WWAK4.5-5/S2430
10	8039228	HT-WWAK4.5-10/S2430
		
2	8039235	HT-WAS4.5-2/S2430
5	8036093	HT-WAS4.5-5/S2430
10	8038342	HT-WAS4.5-10/S2430
		
2	8039471	HT-WWAS4.5-2/S2430
5	8036096	HT-WWAS4.5-5/S2430
10	8039472	HT-WWAS4.5-10/S2430
		
2	8039949	HT-WAK4.5-2-HT-WAS4.5/S2430
5	8039950	HT-WAK4.5-5-HT-WAS4.5/S2430
10	8039951	HT-WAK4.5-10-HT-WAS4.5/S2430
		
2	8039963	HT-WWAK4.5-2-HT-WWAS4.5/S2430
5	8039964	HT-WWAK4.5-5-HT-WWAS4.5/S2430
10	8039965	HT-WWAK4.5-10-HT-WWAS4.5/S2430

TPE Cable – Gray, Food and Beverage

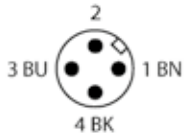


- 3-pin
- Excellent resistance to acids and alkaline solutions
- Resistant to cleaning agents and disinfectant
- Free from halogen, PVC and LABS
- Qualified for drag chain use and torsion stable

Female connector



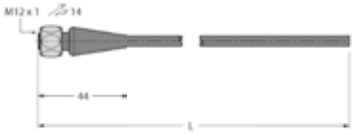
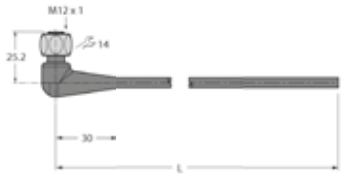
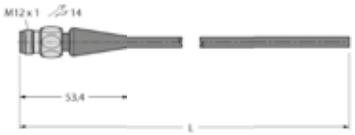
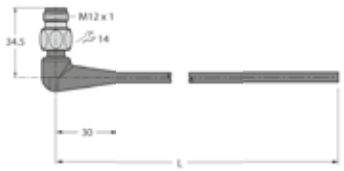
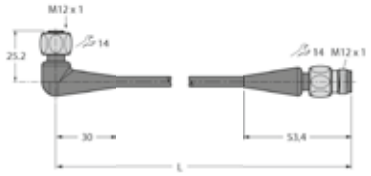
Male connector



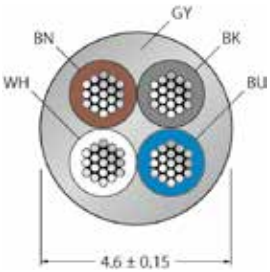
Connector	
Grip	Plastic, PP, Gray
Contacts	Brass, CuZn, Gold-plated
Contact carriers	PP, Gray
Coupling nut/screw	Stainless steel, V4A
Protection class	IP67, IP69K (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	4.6 mm ± 0.15
Cable jacket	TPE-O, Gray
Core insulation	TPE-E (BN, BU, BK)
Core cross-section	4 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	250 V
Test voltage	2000 V
Nom. Capacitance	82 pF/m
Nom. Inductance	0.73 mH/km
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm^2
Max. tensile strength (dynamic)	≤ 20 N/mm^2
Bending cycles	> 4 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s^2
Admissible travel path, horizontal	5 m (at 5 m/s^2)
Admissible travel path, vertical	2 m (at 5 m/s^2)
Admissible traversing speed	3 m/s
Torsional stress	± 180 °/m
Ambient temperature	
Stationary usage	-40…+105 °C
Non-stationary usage	-25…+105 °C
Drag chain operation	-25…+60 °C

Types and Features — Selection Table



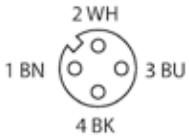
Cable length [m]	ID number	Type
	2	6934384	RKH4-2/TFG
	5	6934385	RKH4-5/TFG
	10	6934386	RKH4-10/TFG
	15	6934387	RKH4-15/TFG
	20	6934388	RKH4-20/TFG
	2	6934389	WKH4-2/TFG
	5	6934390	WKH4-5/TFG
	10	6934391	WKH4-10/TFG
	15	6934392	WKH4-15/TFG
	20	6934393	WKH4-20/TFG
	2	6934394	RSH4-2/TFG
	5	6934395	RSH4-5/TFG
	10	6934396	RSH4-10/TFG
	15	6934397	RSH4-15/TFG
	20	6934398	RSH4-20/TFG
	2	6934399	WSH4-2/TFG
	5	6934400	WSH4-5/TFG
	10	6934401	WSH4-10/TFG
	15	6934402	WSH4-15/TFG
	20	6934403	WSH4-20/TFG
	1	6933465	RKH4-1-RSH4/TFG
	2	6933466	RKH4-2-RSH4/TFG
	5	6933467	RKH4-5-RSH4/TFG
	10	6933468	RKH4-10-RSH4/TFG
	1	6933461	WKH4-1-RSH4/TFG
	2	6933462	WKH4-2-RSH4/TFG
	5	6933463	WKH4-5-RSH4/TFG
	10	6933464	WKH4-10-RSH4/TFG

TPE Cable – Gray, Food and Beverage

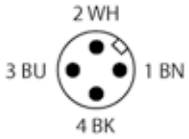


- 4-pin
- Excellent resistance to acids and alkaline solutions
- Resistant to cleaning agents and disinfectant
- Free from halogen, PVC and LABS
- Qualified for drag chain use and torsion stable

Female connector



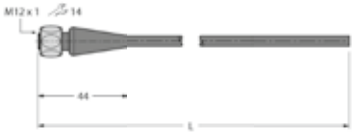
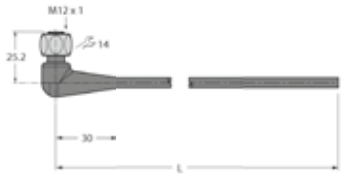
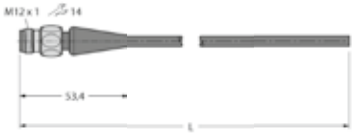
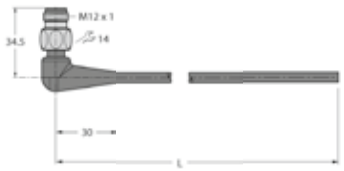
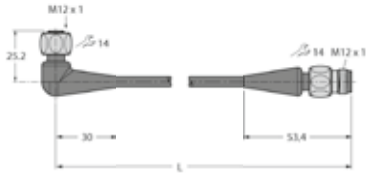
Male connector



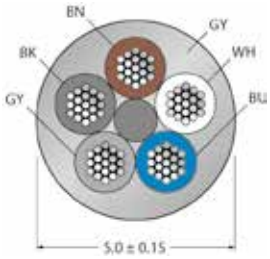
Connector	
Grip	Plastic, PP, Gray
Contacts	Brass, CuZn, Gold-plated
Contact carriers	PP, Gray
Coupling nut/screw	Stainless steel, V4A
Protection class	IP67, IP69K (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	4.6 mm ± 0.15
Cable jacket	TPE-O, Gray
Core insulation	TPE-E (BN, WH, BU, BK)
Core cross-section	4 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	250 V
Test voltage	2000 V
Nom. Capacitance	82 pF/m
Nom. Inductance	0.73 mH/km
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm^2
Max. tensile strength (dynamic)	≤ 20 N/mm^2
Bending cycles	> 4 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s^2
Admissible travel path, horizontal	5 m (at 5 m/s^2)
Admissible travel path, vertical	2 m (at 5 m/s^2)
Admissible traversing speed	3 m/s
Torsional stress	± 180 °/m
Ambient temperature	
Stationary usage	-40…+105 °C
Non-stationary usage	-25…+105 °C
Drag chain operation	-25…+60 °C

Types and Features — Selection Table



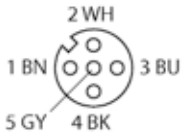
Cable length [m]	ID number	Type
	2	6933086	RKH4.4-2/TFG
	5	6933087	RKH4.4-5/TFG
	10	6933088	RKH4.4-10/TFG
	15	6933089	RKH4.4-15/TFG
	20	6933090	RKH4.4-20/TFG
	2	6933093	WKH4.4-2/TFG
	5	6933094	WKH4.4-5/TFG
	10	6933095	WKH4.4-10/TFG
	15	6933096	WKH4.4-15/TFG
	20	6933097	WKH4.4-20/TFG
	2	6936000	RSH4.4-2/TFG
	5	6936001	RSH4.4-5/TFG
	10	6936002	RSH4.4-10/TFG
	15	6936003	RSH4.4-15/TFG
	20	6933788	RSH4.4-20/TFG
	2	6936004	WSH4.4-2/TFG
	5	6936005	WSH4.4-5/TFG
	10	6936006	WSH4.4-10/TFG
	15	6936007	WSH4.4-15/TFG
	20	6933846	WSH4.4-20/TFG
	1	6933471	RKH4.4-1-RSH4.4/TFG
	2	6933472	RKH4.4-2-RSH4.4/TFG
	5	6933473	RKH4.4-5-RSH4.4/TFG
	10	6933474	RKH4.4-10-RSH4.4/TFG
	1	6933519	WKH4.4-1-RSH4.4/TFG
	2	6933520	WKH4.4-2-RSH4.4/TFG
	5	6933521	WKH4.4-5-RSH4.4/TFG
	10	6933522	WKH4.4-10-RSH4.4/TFG

TPE Cable – Gray, Food and Beverage

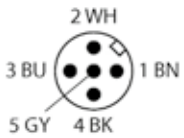


- 5-pin
- Excellent resistance to acids and alkaline solutions
- Resistant to cleaning agents and disinfectant
- Free from halogen, PVC and LABS
- Qualified for drag chain use and torsion stable

Female connector



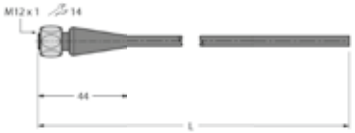
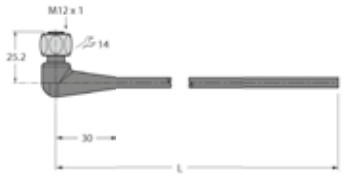
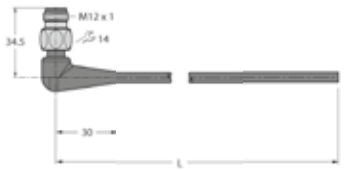
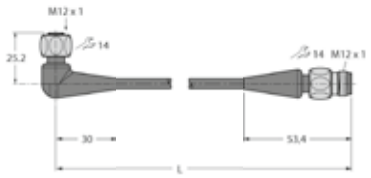
Male connector



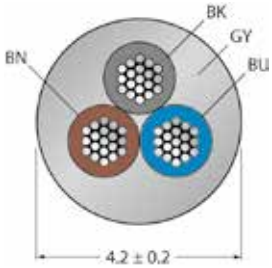
Connector	
Grip	Plastic, PP, Gray
Contacts	Brass, CuZn, Gold-plated
Contact carriers	PP, Gray
Coupling nut/screw	Stainless steel, V4A
Protection class	IP67, IP69K (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	5 mm ± 0.15
Cable jacket	TPE-O, Gray
Core insulation	TPE-E (BN, BU, BK, WH, GY)
Core cross-section	5 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Test voltage	2000 V
Nom. Capacitance	82 pF/m
Nom. Inductance	0.73 mH/km
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm^2
Max. tensile strength (dynamic)	≤ 20 N/mm^2
Bending cycles	> 4 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s^2
Admissible travel path, horizontal	5 m (at 5 m/s^2)
Admissible travel path, vertical	2 m (at 5 m/s^2)
Admissible traversing speed	3 m/s
Torsional stress	± 180 °/m
Ambient temperature	
Stationary usage	-40…+105 °C
Non-stationary usage	-25…+105 °C
Drag chain operation	-25…+60 °C

Types and Features — Selection Table



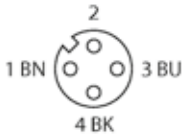
Cable length [m]	ID number	Type
	2	6933455	RKH4.5-2/TFG
	5	6933456	RKH4.5-5/TFG
	10	6933457	RKH4.5-10/TFG
	15	6933458	RKH4.5-15/TFG
	25	6933459	RKH4.5-25/TFG
	2	6933548	WKH4.5-2/TFG
	5	6933549	WKH4.5-5/TFG
	10	6933550	WKH4.5-10/TFG
	15	6933864	WKH4.5-15/TFG
	25	6933865	WKH4.5-25/TFG
	2	6933527	RSH4.5-2/TFG
	5	6933528	RSH4.5-5/TFG
	10	6933529	RSH4.5-10/TFG
	15	6933530	RSH4.5-15/TFG
	20	6933956	RSH4.5-20/TFG
	2	6934404	WSH4.5-2/TFG
	5	6934405	WSH4.5-5/TFG
	10	6934406	WSH4.5-10/TFG
	15	6934407	WSH4.5-15/TFG
	20	6934408	WSH4.5-20/TFG
	1	6933878	RKH4.5-1-RSH4.5/TFG
	2	6933879	RKH4.5-2-RSH4.5/TFG
	5	6933880	RKH4.5-5-RSH4.5/TFG
	10	6933881	RKH4.5-10-RSH4.5/TFG
	1	6933884	WKH4.5-1-RSH4.5/TFG
	2	6933885	WKH4.5-2-RSH4.5/TFG
	5	6933886	WKH4.5-5-RSH4.5/TFG
	10	6933887	WKH4.5-10-RSH4.5/TFG

PVC Cable – Gray, Food and Beverage

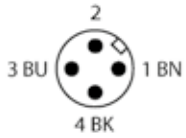


- 3-pin
- Good resistance to acids and alkaline solutions
- Resistant to cleaning agents
- Conditional resistance to oils and chemicals
- High flexibility in unloaded motion

Female connector



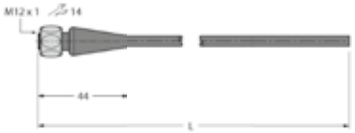
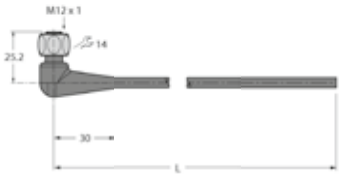
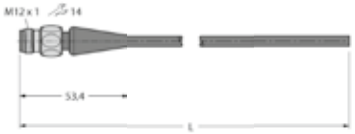
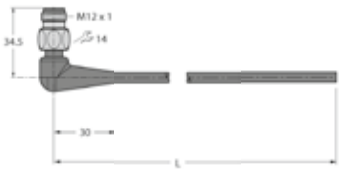
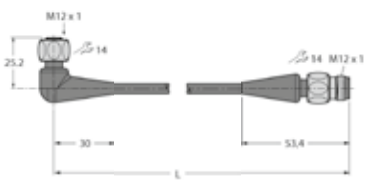
Male connector



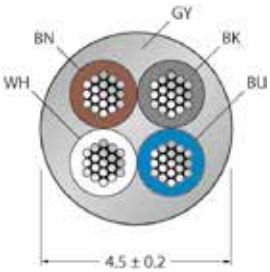
Connector	
Grip	Plastic, PP, Gray
Contacts	Brass, CuZn, Gold-plated
Contact carriers	PP, Gray
Coupling nut/screw	Stainless steel, V4A
Protection class	IP67, IP69K (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	4.2 mm ± 0.20
Cable jacket	PVC, Gray
Core insulation	PVC (BN, BU, BK)
Core cross-section	3 x 0.34 mm^2
Arrangement of strands	19 x 0.15 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	250 V
Test voltage	1500 V
Mechanical and chemical properties	
Bending radius (stationary laying)	> 3 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-25…+80 °C
Non-stationary usage	0…+80 °C

Types and Features — Selection Table



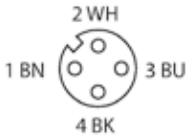
Cable length [m]	ID number	Type
		
2	6935482	RKH4-2/TFE
5	6935483	RKH4-5/TFE
10	6935484	RKH4-10/TFE
		
2	6935485	WKH4-2/TFE
5	6935486	WKH4-5/TFE
10	6935487	WKH4-10/TFE
		
2	6935488	RSH4-2/TFE
5	6935489	RSH4-5/TFE
10	6935490	RSH4-10/TFE
		
2	6935491	WSH4-2/TFE
5	6935492	WSH4-5/TFE
10	6935493	WSH4-10/TFE
		
0.3	6935494	RKH4-0.3-RSH4/TFE
0.6	6935495	RKH4-0.6-RSH4/TFE
1	6934465	RKH4-1-RSH4/TFE
2	6934466	RKH4-2-RSH4/TFE
5	6934467	RKH4-5-RSH4/TFE
10	6934468	RKH4-10-RSH4/TFE
		
1	6934469	WKH4-1-RSH4/TFE
2	6934470	WKH4-2-RSH4/TFE
5	6934471	WKH4-5-RSH4/TFE
10	6934472	WKH4-10-RSH4/TFE

PVC Cable – Gray, Food and Beverage

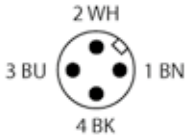


- 4-pin
- Good resistance to acids and alkaline solutions
- Resistant to cleaning agents
- Conditional resistance to oils and chemicals
- High flexibility in unloaded motion

Female connector



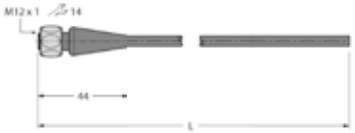
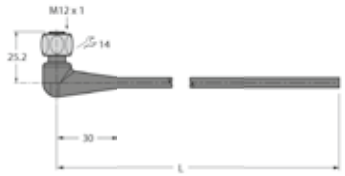
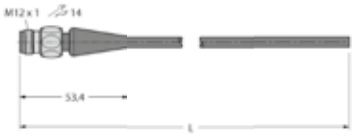
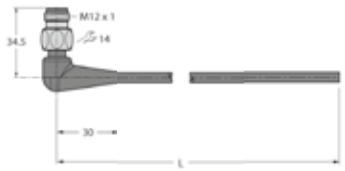
Male connector



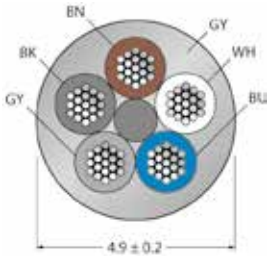
Connector	
Grip	Plastic, PP, Gray
Contacts	Brass, CuZn, Gold-plated
Contact carriers	PP, Gray
Coupling nut/screw	Stainless steel, V4A
Protection class	IP67, IP69K (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	4.5 mm ± 0.20
Cable jacket	PVC, Gray
Core insulation	PVC (BN, WH, BU, BK)
Core cross-section	4 x 0.34 mm^2
Arrangement of strands	19 x 0.15 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	250 V
Test voltage	1500 V
Mechanical and chemical properties	
Bending radius (stationary laying)	> 3 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-25…+80 °C
Non-stationary usage	0…+80 °C

Types and Features — Selection Table



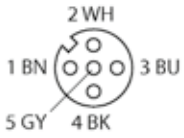
Cable length [m]	ID number	Type
	2	6934473	RKH4.4-2/TFE
	5	6934474	RKH4.4-5/TFE
	10	6934475	RKH4.4-10/TFE
	15	6934476	RKH4.4-15/TFE
	20	6934477	RKH4.4-20/TFE
	2	6934480	WKH4.4-2/TFE
	5	6934481	WKH4.4-5/TFE
	10	6934482	WKH4.4-10/TFE
	15	6934483	WKH4.4-15/TFE
	20	6934484	WKH4.4-20/TFE
	2	6935496	RSH4.4-2/TFE
	5	6935497	RSH4.4-5/TFE
	10	6935498	RSH4.4-10/TFE
	2	6935499	WSH4.4-2/TFE
	5	6935500	WSH4.4-5/TFE
	10	6935501	WSH4.4-10/TFE
	0.3	6934487	RKH4.4-0.3-RSH4.4/TFE
	0.6	6934488	RKH4.4-0.6-RSH4.4/TFE
	1	6934489	RKH4.4-1-RSH4.4/TFE
	2	6934490	RKH4.4-2-RSH4.4/TFE
	5	6934491	RKH4.4-5-RSH4.4/TFE
	10	6934492	RKH4.4-10-RSH4.4/TFE

PVC Cable – Gray, Food and Beverage

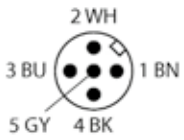


- 5-pin
- Good resistance to acids and alkaline solutions
- Resistant to cleaning agents
- Conditional resistance to oils and chemicals
- High flexibility in unloaded motion

Female connector



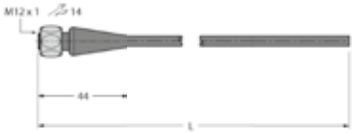
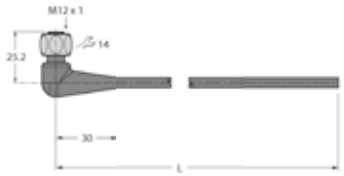
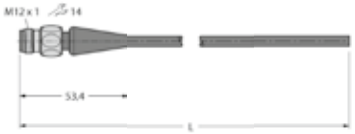
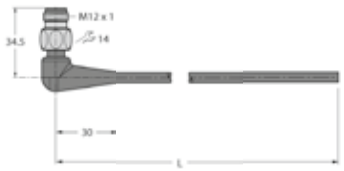
Male connector



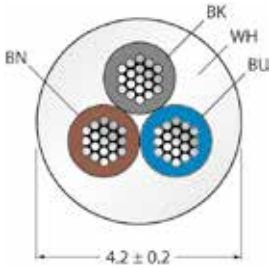
Connector	
Grip	Plastic, PP, Gray
Contacts	Brass, CuZn, Gold-plated
Contact carriers	PP, Gray
Coupling nut/screw	Stainless steel, V4A
Protection class	IP67, IP69K (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	4.9 mm ± 0.20
Cable jacket	PVC, Gray
Core insulation	PVC (BN, WH, BU, BK, GY)
Core cross-section	5 x 0.34 mm^2
Arrangement of strands	19 x 0.15 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	60 V
Test voltage	1500 V
Mechanical and chemical properties	
Bending radius (stationary laying)	> 3 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-25…+80 °C
Non-stationary usage	0…+80 °C

Types and Features — Selection Table



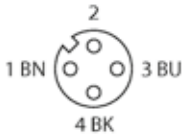
Cable length [m]	ID number	Type
	2	6934514	RKH4.5-2/TFE
	5	6934219	RKH4.5-5/TFE
	10	6934220	RKH4.5-10/TFE
	20	6934515	RKH4.5-20/TFE
	50	6934516	RKH4.5-50-RKH4.5/TFE
	2	6934517	WKH4.5-2/TFE
	5	6934224	WKH4.5-5/TFE
	10	6934225	WKH4.5-10/TFE
	20	6934518	WKH4.5-20/TFE
	50	6934519	WKH4.5-50/TFE
	2	6935502	RSH4.5-2/TFE
	5	6935503	RSH4.5-5/TFE
	10	6935504	RSH4.5-10/TFE
	2	6935505	WSH4.5-2/TFE
	5	6935506	WSH4.5-5/TFE
	10	6935507	WSH4.5-10/TFE
	0.3	6935508	RKH4.5-0.3-RSH4.5/TFE
	0.6	6935509	RKH4.5-0.6-RSH4.5/TFE
	1	6935510	RKH4.5-1-RSH4.5/TFE
	2	6935511	RKH4.5-2-RSH4.5/TFE
	5	6935512	RKH4.5-5-RSH4.5/TFE
	10	6935513	RKH4.5-10-RSH4.5/TFE

PP-EPDM Cable – White, Food and Beverage

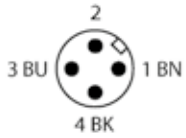


- 3-pin
- Resistant to acids and alkaline solutions
- Resistant to cleaning agents and disinfectant
- Resistant to hydrolysis
- Free from halogen, silicone and PVC

Female connector



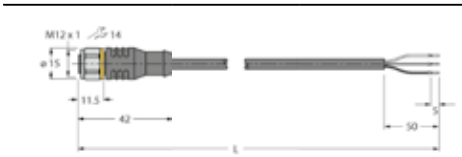
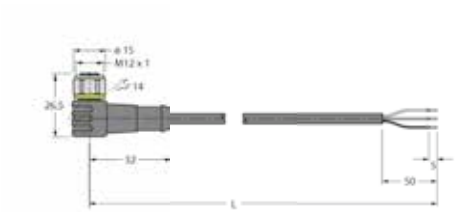
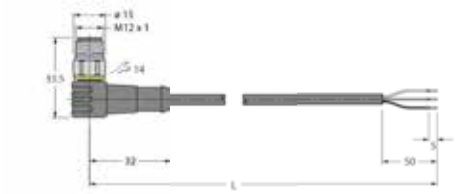
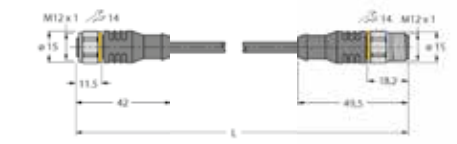
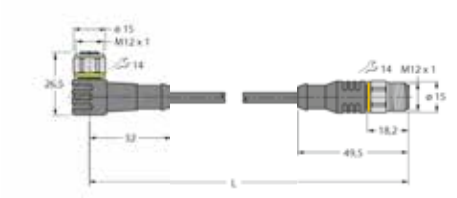
Male connector



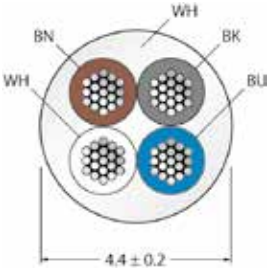
Connector	
Grip	Plastic, PP, White
Contacts	Brass, CuZn, Gold-plated
Contact carriers	PP, White
Coupling nut/screw	Stainless steel, V4A
Protection class	IP67, IP69K (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	4.2 mm ± 0.20
Cable jacket	PP-EPDM, White
Core insulation	PE (BN, BU, BK)
Core cross-section	3 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	250 V
Test voltage	500 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-40…+105 °C
Non-stationary usage	0…+80 °C

Types and Features — Selection Table



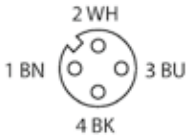
Cable length [m]	ID number	Type
		
2	6935392	RKCV4T-2/TFW
5	6935393	RKCV4T-5/TFW
10	6935394	RKCV4T-10/TFW
		
2	6935395	WKCV4T-2/TFW
5	6935396	WKCV4T-5/TFW
10	6935397	WKCV4T-10/TFW
		
2	6935398	RSCV4T-2/TFW
5	6935399	RSCV4T-5/TFW
10	6935400	RSCV4T-10/TFW
		
2	6935401	WSCV4T-2/TFW
5	6935402	WSCV4T-5/TFW
10	6935403	WSCV4T-10/TFW
		
3	6935404	RKCV4T-0.3-RSCV4T/TFW
0.6	6935405	RKCV4T-0.6-RSCV4T/TFW
1	6933721	RKCV4T-1-RSCV4T/TFW
2	6933722	RKCV4T-2-RSCV4T/TFW
5	6933723	RKCV4T-5-RSCV4T/TFW
10	6933724	RKCV4T-10-RSCV4T/TFW
		
1	6933732	WKCV4T-1-RSCV4T/TFW
2	6933733	WKCV4T-2-RSCV4T/TFW
5	6933734	WKCV4T-5-RSCV4T/TFW
10	6933735	WKCV4T-10-RSCV4T/TFW

PP-EPDM Cable – White, Food and Beverage

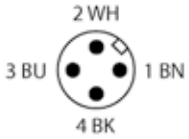


- 4-pin
- Resistant to acids and alkaline solutions
- Resistant to cleaning agents and disinfectant
- Resistant to hydrolysis
- Free from halogen, silicone and PVC

Female connector

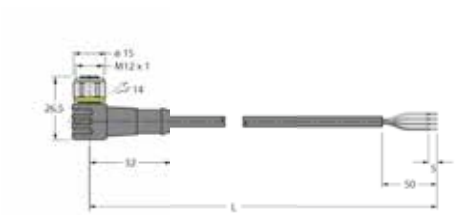
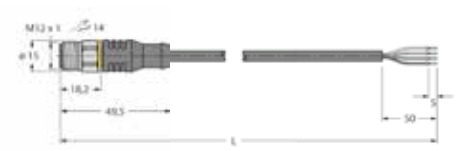
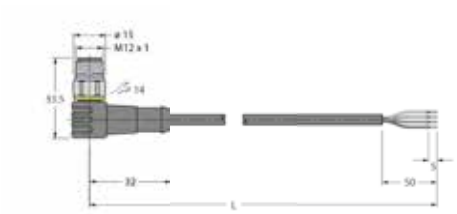


Male connector

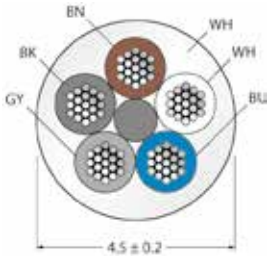


Connector	
Grip	Plastic, PP, White
Contacts	Brass, CuZn, Gold-plated
Contact carriers	PP, White
Coupling nut/screw	Stainless steel, V4A
Protection class	IP67, IP69K (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	4.4 mm ± 0.20
Cable jacket	PP-EPDM, White
Core insulation	PE (BN, WH, BU, BK)
Core cross-section	4 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	250 V
Test voltage	500 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-40…+105 °C
Non-stationary usage	0…+80 °C

Types and Features — Selection Table

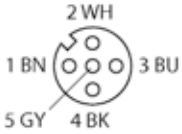
	Cable length [m]	ID number	Type
			
	2	6933714	RKCV4.4T-2/TFW
	5	6933715	RKCV4.4T-5/TFW
	10	6933716	RKCV4.4T-10/TFW
	15	6933717	RKCV4.4T-15/TFW
	20	6933718	RKCV4.4T-20/TFW
	25	6933719	RKCV4.4T-25/TFW
	2	6933725	WKCV4.4T-2/TFW
	5	6933726	WKCV4.4T-5/TFW
	10	6933727	WKCV4.4T-10/TFW
	15	6933728	WKCV4.4T-15/TFW
	20	6933729	WKCV4.4T-20/TFW
	25	6933730	WKCV4.4T-25/TFW
	2	6935406	RSCV4.4T-2/TFW
	5	6935407	RSCV4.4T-5/TFW
	10	6935408	RSCV4.4T-10/TFW
	2	6935409	WSCV4.4T-2/TFW
	5	6935410	WSCV4.4T-5/TFW
	10	6935411	WSCV4.4T-10/TFW
	0.3	6933708	RKCV4.4T-0.3-RSCV4.4T/TFW
	0.6	6933709	RKCV4.4T-0.6-RSCV4.4T/TFW
	1	6933710	RKCV4.4T-1-RSCV4.4T/TFW
	2	6933711	RKCV4.4T-2-RSCV4.4T/TFW
	5	6933712	RKCV4.4T-5-RSCV4.4T/TFW
	10	6933713	RKCV4.4T-10-RSCV4.4T/TFW

PP-EPDM Cable – White, Food and Beverage

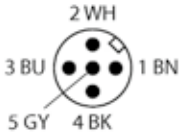


- 5-pin
- Resistant to acids and alkaline solutions
- Resistant to cleaning agents and disinfectant
- Resistant to hydrolysis
- Free from halogen, silicone and PVC

Female connector



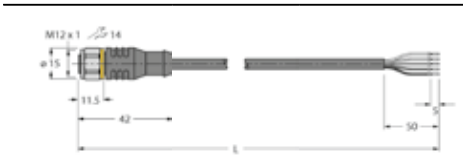
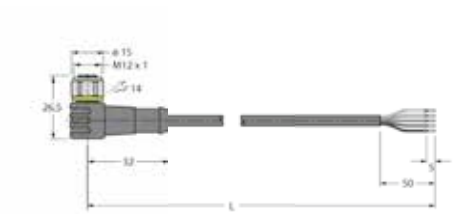
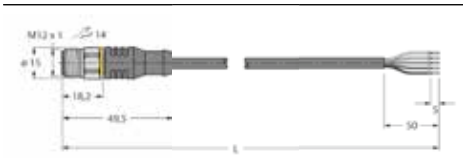
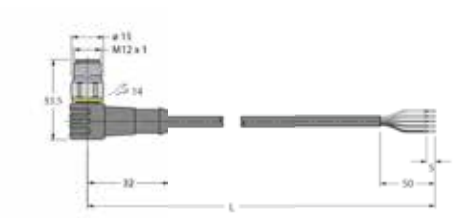
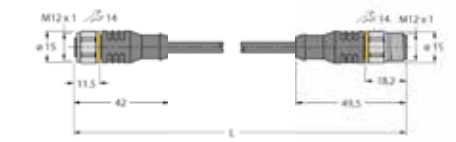
Male connector



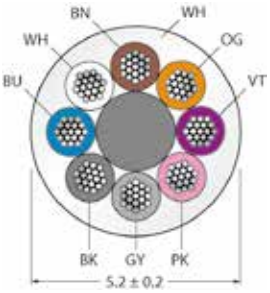
Connector	
Grip	Plastic, PP, White
Contacts	Brass, CuZn, Gold-plated
Contact carriers	PP, White
Coupling nut/screw	Stainless steel, V4A
Protection class	IP67, IP69K (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	4.5 mm ± 0.20
Cable jacket	PP-EPDM, White
Core insulation	PE (BN, WH, BU, BK, GY)
Core cross-section	5 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	60 V
Test voltage	500 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-40…+105 °C
Non-stationary usage	0…+80 °C

Types and Features — Selection Table



Cable length [m]	ID number	Type
		
2	6935412	RKCV4.5T-2/TFW
5	6935413	RKCV4.5T-5/TFW
10	6935414	RKCV4.5T-10/TFW
		
2	6935415	WKCV4.5T-2/TFW
5	6935416	WKCV4.5T-5/TFW
10	6935417	WKCV4.5T-10/TFW
		
2	6935418	RSCV4.5T-2/TFW
5	6935419	RSCV4.5T-5/TFW
10	6935420	RSCV4.5T-10/TFW
		
2	6935421	WSCV4.5T-2/TFW
5	6935422	WSCV4.5T-5/TFW
10	6935423	WSCV4.5T-10/TFW
		
0.3	6935424	RKCV4.5T-0.3-RSCV4.5T/TFW
0.6	6935425	RKCV4.5T-0.6-RSCV4.5T/TFW
1	6935426	RKCV4.5T-1-RSCV4.5T/TFW
2	6935427	RKCV4.5T-2-RSCV4.5T/TFW
5	6935428	RKCV4.5T-5-RSCV4.5T/TFW

PP-EPDM Cable – White, Food and Beverage

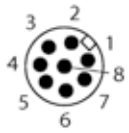


- 8-pin
- Resistant to acids and alkaline solutions
- Resistant to cleaning agents and disinfectant
- Resistant to hydrolysis
- Free from halogen, silicone and PVC

Female connector

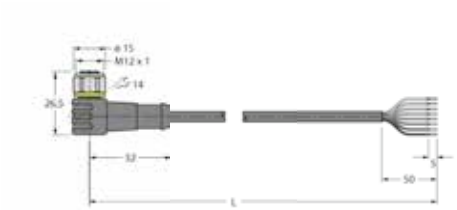
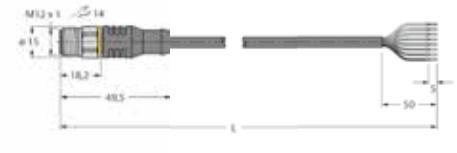
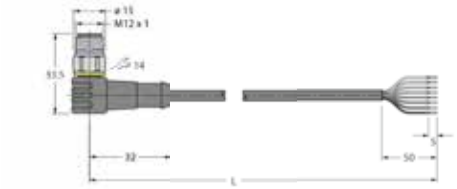


Male connector

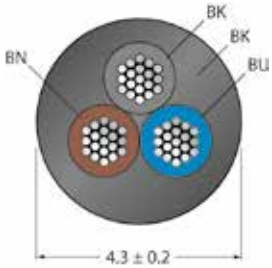


Connector	
Grip	Plastic, PP, White
Contacts	Brass, CuZn, Gold-plated
Contact carriers	PP, White
Coupling nut/screw	Stainless steel, V4A
Protection class	IP67, IP69K (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	5.2 mm ± 0.20
Cable jacket	PP-EPDM, White
Core insulation	PE (BN, WH, BU, BK, GY, PK, VT, OG)
Core cross-section	8 x 0.25 mm^2
Arrangement of strands	32 x 0.1 mm
Electrical properties at +20 °C	
Current load	2 A
Rated voltage	30 V
Test voltage	500 V
Forward resistance	max. 79 Ω/km
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-40…+105 °C
Non-stationary usage	0…+80 °C

Types and Features — Selection Table

	Cable length [m]	ID number	Type
			
	2	6934668	RKCV8T-2/TFW
	5	6934669	RKCV8T-5/TFW
	10	6934670	RKCV8T-10/TFW
	15	6934671	RKCV8T-15/TFW
	20	6934672	RKCV8T-20/TFW
	2	6934673	WKCV8T-2/TFW
	5	6934674	WKCV8T-5/TFW
	10	6934675	WKCV8T-10/TFW
	15	6934676	WKCV8T-15/TFW
	20	6934677	WKCV8T-20/TFW
	2	6934678	RSCV8T-2/TFW
	5	6934679	RSCV8T-5/TFW
	10	6934680	RSCV8T-10/TFW
	15	6934681	RSCV8T-15/TFW
	20	6934682	RSCV8T-20/TFW
	2	6934683	WSCV8T-2/TFW
	5	6934684	WSCV8T-5/TFW
	10	6934685	WSCV8T-10/TFW
	15	6934686	WSCV8T-15/TFW
	20	6934687	WSCV8T-20/TFW

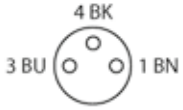
PUR Cable – Black



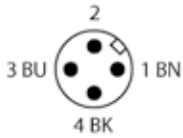
- 3-pin
- Qualified for drag chain use and flame-retardant
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS
- cULus approved



Female connector

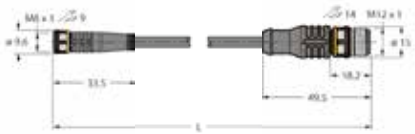
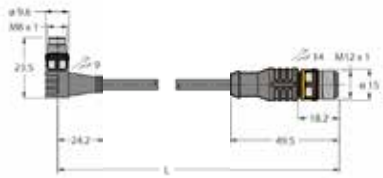
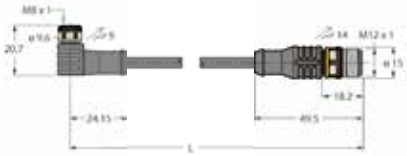


Male connector

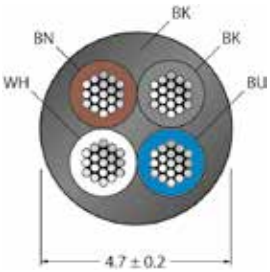


Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	4.3 mm ± 0.20
Cable jacket	PUR, Black
Core insulation	PP (BN, BU, BK)
Core cross-section	3 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	60 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm^2
Max. tensile strength (dynamic)	≤ 20 N/mm^2
Bending cycles	> 5 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s^2
Admissible travel path, horizontal	5 m (at 5 m/s^2)
Admissible travel path, vertical	2 m (at 5 m/s^2)
Admissible traversing speed	3.3 m/s
Torsional stress	± 180 °/m
Ambient temperature	
Stationary usage	-50…+80 °C
Non-stationary usage	-25…+80 °C
Drag chain operation	-25…+60 °C

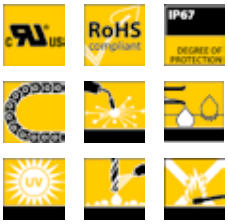
Types and Features — Selection Table

	Cable length [m]	ID number	Type
	100	6627992	CABLE3X0.34-XX-PUR-BK-100M/TXL
	500	6627993	CABLE3X0.34-XX-PUR-BK-500M/TXL
	0.3	6627099	PKG3M-0.3-RSC4T/TXL
	0.6	6627103	PKG3M-0.6-RSC4T/TXL
	1	6626753	PKG3M-1-RSC4T/TXL
	2	6626726	PKG3M-2-RSC4T/TXL
	5	6627150	PKG3M-5-RSC4T/TXL
	0.3	6626734	PKW3M-0.3-RSC4T/TXL
	0.6	6627104	PKW3M-0.6-RSC4T/TXL
	1	6627113	PKW3M-1-RSC4T/TXL
	2	6627126	PKW3M-2-RSC4T/TXL
	5	6626827	PKW3M-5-RSC4T/TXL
	0.3	6626191	PKW3M-P7X2-0.3-RSC4T/TXL
	0.6	6626194	PKW3M-P7X2-0.6-RSC4T/TXL
	1	6626196	PKW3M-P7X2-1-RSC4T/TXL
	2	6626203	PKW3M-P7X2-2-RSC4T/TXL
	5	6626140	PKW3M-P7X2-5-RSC4T/TXL

PUR Cable – Black



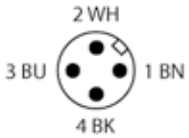
- 4-pin
- Qualified for drag chain use and flame-retardant
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS
- cULus approved



Female connector

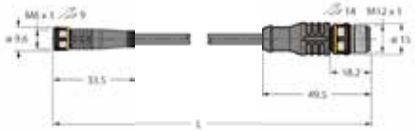
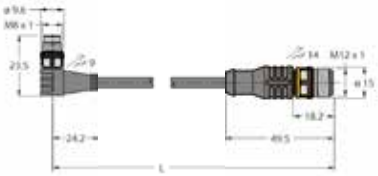
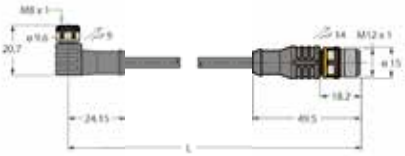


Male connector

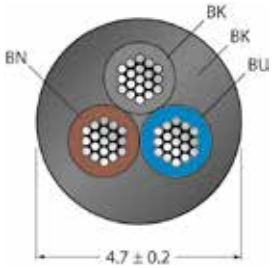


Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	4.7 mm ± 0.20
Cable jacket	PUR, Black
Core insulation	PP (BN, WH, BU, BK)
Core cross-section	4 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	30 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm^2
Max. tensile strength (dynamic)	≤ 20 N/mm^2
Bending cycles	> 5 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s^2
Admissible travel path, horizontal	5 m (at 5 m/s^2)
Admissible travel path, vertical	2 m (at 5 m/s^2)
Admissible traversing speed	3.3 m/s
Torsional stress	± 180 °/m
Ambient temperature	
Stationary usage	-50…+80 °C
Non-stationary usage	-25…+80 °C
Drag chain operation	-25…+60 °C

Types and Features — Selection Table

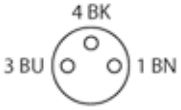
	Cable length [m]	ID number	Type
	100	6627994	CABLE4X0.34-XX-PUR-BK-100M/TXL
	500	6627995	CABLE4X0.34-XX-PUR-BK-500M/TXL
	0.3	6627046	PKG4M-0.3-RSC4.4T/TXL
	0.6	6626647	PKG4M-0.6-RSC4.4T/TXL
	1	6626655	PKG4M-1-RSC4.4T/TXL
	2	6627063	PKG4M-2-RSC4.4T/TXL
	5	6626687	PKG4M-5-RSC4.4T/TXL
	0.3	6626642	PKW4M-0.3-RSC4.4T/TXL
	0.6	6626648	PKW4M-0.6-RSC4.4T/TXL
	1	6626656	PKW4M-1-RSC4.4T/TXL
	2	6626665	PKW4M-2-RSC4.4T/TXL
	5	6630322	PKW4M-5-RSC4.4T/TXL
	0.3	6625768	PKW4M-P7X2-0.3-RSC4.4T/TXL
	0.6	6626100	PKW4M-P7X2-0.6-RSC4.4T/TXL
	2	6625769	PKW4M-P7X2-2-RSC4.4T/TXL
	5	6626113	PKW4M-P7X2-5-RSC4.4T/TXL

PVC Cable – Black

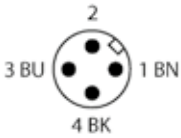


- 3-pin
- Resistant to alkaline solutions, chemicals and oils
- Resistant to microbes and hydrolysis
- Flame-retardant and free from LABS
- cULus approved

Female connector

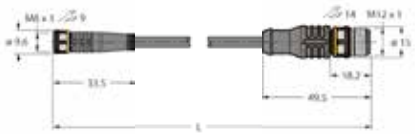
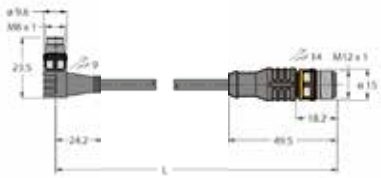
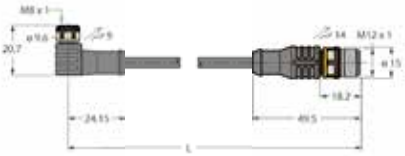


Male connector

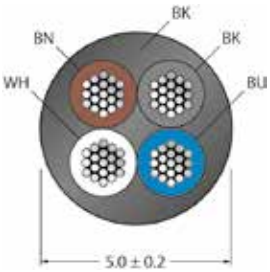


Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable jacket	PVC, Black
Core insulation	PVC (BN, BU, BK)
Core cross-section	3 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	60 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-40…+105 °C
Non-stationary usage	0…+80 °C

Types and Features — Selection Table

	Cable length [m]	ID number	Type
	100	6627984	CABLE3X0.34-XX-PVC-BK-100M/TEL
	500	6627985	CABLE3X0.34-XX-PVC-BK-500M/TEL
	0.3	6626513	PKG3M-0.3-RSC4T/TEL
	0.6	6626520	PKG3M-0.6-RSC4T/TEL
	1	6626524	PKG3M-1-RSC4T/TEL
	2	6626539	PKG3M-2-RSC4T/TEL
	5	6626548	PKG3M-5-RSC4T/TEL
	0.3	6626514	PKW3M-0.3-RSC4T/TEL
	0.6	6626521	PKW3M-0.6-RSC4T/TEL
	1	6626525	PKW3M-1-RSC4T/TEL
	2	6626540	PKW3M-2-RSC4T/TEL
	5	6626549	PKW3M-5-RSC4T/TEL
	0.3	6626161	PKW3M-P7X2-0.3-RSC4T/TEL
	0.6	6625810	PKW3M-P7X2-0.6-RSC4T/TEL
	1	6626082	PKW3M-P7X2-1-RSC4T/TEL
	2	6625802	PKW3M-P7X2-2-RSC4T/TEL
	5	6625803	PKW3M-P7X2-5-RSC4T/TEL

PVC Cable – Black

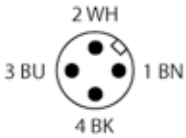


- 4-pin
- Resistant to alkaline solutions, chemicals and oils
- Resistant to microbes and hydrolysis
- Flame-retardant and free from LABS
- cULus approved

Female connector

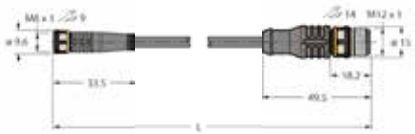
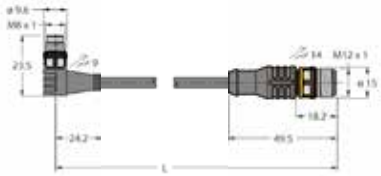
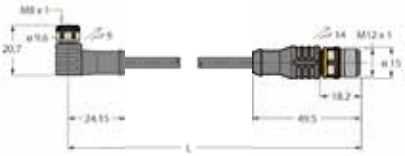


Male connector

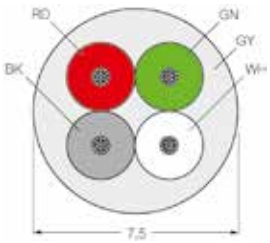


Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable jacket	PVC, Black
Core insulation	PVC (BN, WH, BU, BK)
Core cross-section	4 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	30 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-40…+105 °C
Non-stationary usage	0…+80 °C

Types and Features — Selection Table

	Cable length [m]	ID number	Type
	100	6627986	CABLE4X0.34-XX-PVC-BK-100M/TEL
	500	6627987	CABLE4X0.34-XX-PVC-BK-500M/TEL
	0.3	6627642	PKG4M-0.3-RSC4.4T/TEL
	0.6	6628668	PKG4M-0.6-RSC4.4T/TEL
	1	6626466	PKG4M-1-RSC4.4T/TEL
	2	6626998	PKG4M-2-RSC4.4T/TEL
	5	6627004	PKG4M-5-RSC4.4T/TEL
	0.3	6630189	PKW4M-0.3-RSC4.4T/TEL
	0.6	6626461	PKW4M-0.6-RSC4.4T/TEL
	1	6630519	PKW4M-1-RSC4.4T/TEL
	2	6626474	PKW4M-2-RSC4.4T/TEL
	5	6626492	PKW4M-5-RSC4.4T/TEL
	0.3	6630191	PKW4M-P7X2-0.3-RSC4.4T/TEL
	0.6	6629282	PKW4M-P7X2-0.6-RSC4.4T/TEL
	1	6630192	PKW4M-P7X2-1-RSC4.4T/TEL
	2	6630193	PKW4M-P7X2-2-RSC4.4T/TEL
	5	6630644	PKW4M-P7X2-5-RSC4.4T/TEL

PUR Cable – Gray



- 3-pin
- Qualified for drag chain use
- Oil-resistant and flame-retardant
- Free from halogen, silicone, PVC and LABS
- cULus approved

Female connector



Male connector



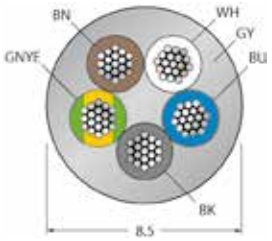
Connector	
Grip	Plastic, TPU, Black
Contacts	Metal, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3/2
Cable	
Cable	7.5 mm ± 0.30
Cable jacket	PUR, Gray
Core insulation	PP (BK, RD, GN, WH)
Core cross-section	4 x 1.5 mm^2
Arrangement of strands	84 x 0.15 mm
Shield	no
Electrical properties at +20 °C	
Current load	5.3 A
Rated voltage	250 V
Test voltage	2000 V
Mechanical and chemical properties	
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-40…+90 °C
Non-stationary usage	-30…+90 °C
Drag chain operation	0…+90 °C

Types and Features — Selection Table



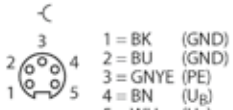
Cable length [m]	ID number	Type
100	8037697	KABEL-DN-43-100M
1000	8020227	KABEL-DN-43-1000M
6	6914307	RKM43-6M
10	6914308	RKM43-10M
15	6914310	RKM43-15M
6	6913940	WKM43-6M
10	6913941	WKM43-10M
15	6913942	WKM43-15M
6	6915621	RSM43-6M
10	6915622	RSM43-10M
15	6915623	RSM43-15M
6	6915844	WSM43-6M
10	6915845	WSM43-10M
15	6915846	WSM43-15M
0.3	6914319	RKM43-0.3-RSM43
0.5	6914311	RKM43-0.5-RSM43
1	6914312	RKM43-1-RSM43
2	6914313	RKM43-2-RSM43
4	6914314	RKM43-4-RSM43
6	6914315	RKM43-6-RSM43
10	6914316	RKM43-10-RSM43

PUR Cable – Gray



- 4-pin + PE
- Qualified for drag chain use
- Oil-resistant and flame-retardant
- Free from halogen, silicone, PVC and LABS
- cULus approved

Female connector



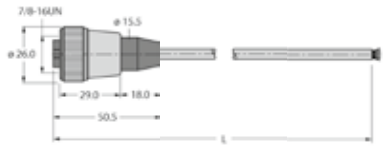
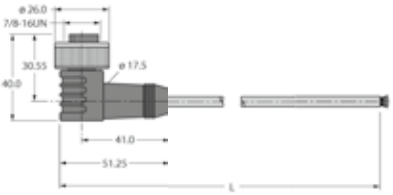
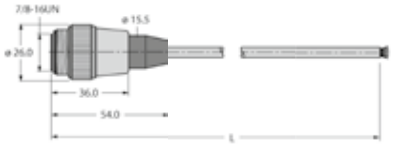
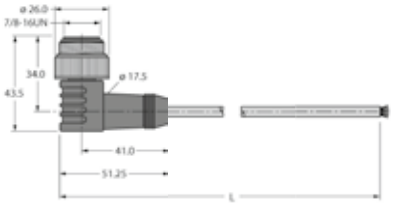
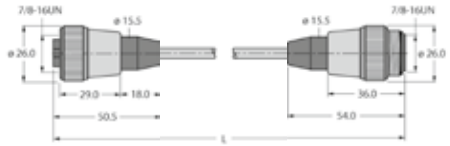
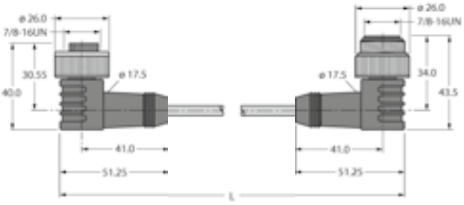
Male connector



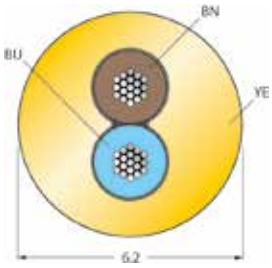
Connector	
Grip	Plastic, TPU, Black
Contacts	Metal, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	8.5 mm ± 0.30
Cable jacket	PUR, Gray
Core insulation	PP (BN, WH, BU, BK, GNYE)
Core cross-section	5 x 1.5 mm^2
Arrangement of strands	84 x 0.15 mm
Shield	no
Electrical properties at +20 °C	
Rated voltage	240 V
Mechanical and chemical properties	
Ambient temperature	
Stationary usage	-40…+90 °C
Non-stationary usage	0…+90 °C

Types and Features — Selection Table



Cable length [m]	ID number	Type
	2	6604711	RKM52-2M
	4	6604714	RKM52-4M
	6	6914145	RKM52-6M
	10	6914146	RKM52-10M
	15	6914147	RKM52-15M
	2	6604765	WKM52-2M
	4	6604768	WKM52-4M
	6	6604770	WKM52-6M
	10	6604772	WKM52-10M
	15	6604773	WKM52-15M
	2	6604712	RSM52-2M
	4	6604732	RSM52-4M
	6	6914142	RSM52-6M
	10	6914143	RSM52-10M
	15	6914144	RSM52-15M
	6	6604788	WSM52-6M
	10	6604790	WSM52-10M
	15	6604791	WSM52-15M
	0.3	6604743	RKM52-0.3-RSM52
	0.5	6914148	RKM52-0.5-RSM52
	1	6914149	RKM52-1-RSM52
	2	6914150	RKM52-2-RSM52
	4	6914151	RKM52-4-RSM52
	6	6914152	RKM52-6-RSM52
	10	6914153	RKM52-10-RSM52
	0.3	6604797	WKM52-0.3-WSM52
	0.5	6604798	WKM52-0.5-WSM52
	1	6604799	WKM52-1-WSM52
	2	6604801	WKM52-2-WSM52
	4	6604804	WKM52-4-WSM52
	6	6604806	WKM52-6-WSM52
	10	6604808	WKM52-10-WSM52

PVC Cable – Yellow



- 2-pin
- Flame-retardant
- UV-resistant
- NEMA 1, 3, 4, 6P and IEC IP67
- UL, CSA approval

Female connector



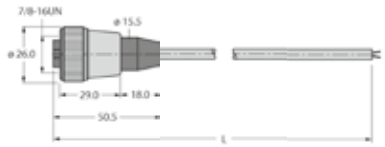
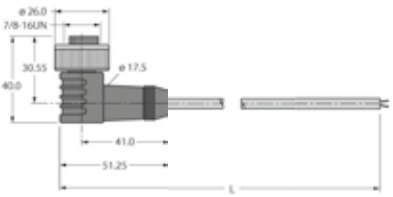
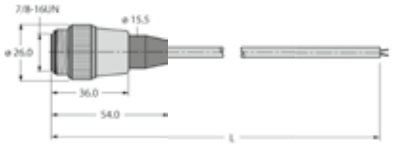
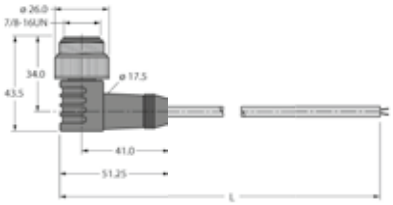
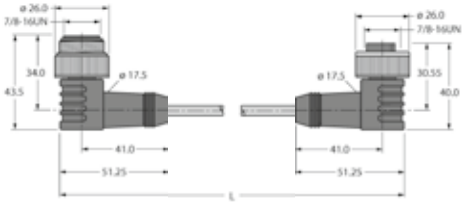
Male connector



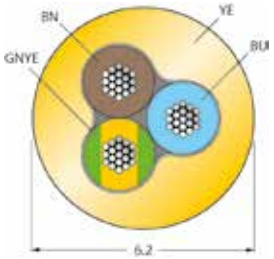
Connector	
Grip	Plastic, TPU, Yellow
Contacts	Metal, CuZn, Gold-plated
Contact carriers	TPU, Yellow
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	6.2 mm ± 0.20
Cable jacket	PVC, Yellow
Core insulation	PVC (BN, BU)
Core cross-section	2 x 0.83 mm²
Arrangement of strands	19 x 0.25 mm
Electrical properties at +20 °C	
Current load	9 A
Rated voltage	600 V
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-40…+105 °C

Types and Features — Selection Table



Cable length [m]	ID number	Type
		
2	6915200	RKM20-2M
5	6915201	RKM20-5M
10	6915202	RKM20-10M
		
2	6915203	WKM20-2M
5	6915204	WKM20-5M
10	6915205	WKM20-10M
		
2	6915206	RSM20-2M
5	6915207	RSM20-5M
10	6915208	RSM20-10M
		
2	6915209	WSM20-2M
5	6915210	WSM20-5M
10	6915211	WSM20-10M
		
2	6915259	RSM-RKM20-2M
5	6915260	RSM-RKM20-5M
10	6915261	RSM-RKM20-10M
		
2	6915268	WSM-WKM20-2M
5	6915269	WSM-WKM20-5M
10	6915270	WSM-WKM20-10M

PVC Cable – Yellow



- 2-pin + PE
- Flame-retardant
- UV-resistant
- NEMA 1, 3, 4, 6P and IEC IP67
- UL, CSA approval

Female connector



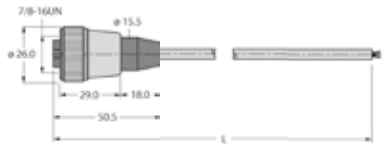
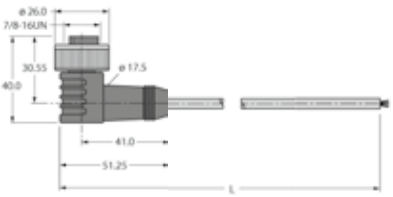
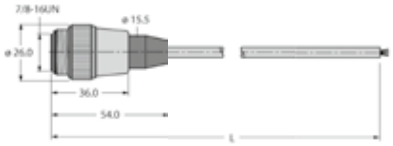
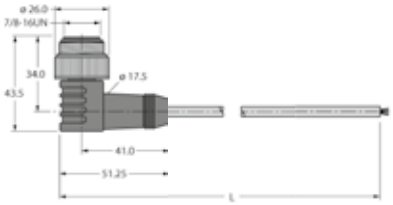
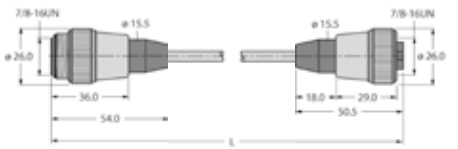
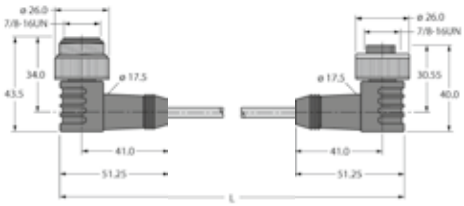
Male connector



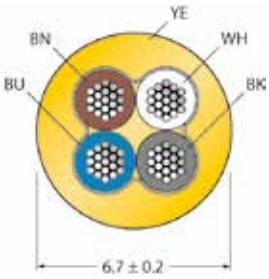
Connector	
Grip	Plastic, TPU, Yellow
Contacts	Metal, CuZn, Gold-plated
Contact carriers	TPU, Yellow
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	6.2 mm ± 0.20
Cable jacket	PVC, Yellow
Core insulation	PVC (BN, BU, GNYE)
Core cross-section	3 x 0.83 mm²
Arrangement of strands	19 x 0.25 mm
Electrical properties at +20 °C	
Current load	9 A
Rated voltage	600 V
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-40…+105 °C

Types and Features — Selection Table



Cable length [m]	ID number	Type
	2	6915212	RKM30-2M
	5	6914422	RKM30-5M
	10	6915213	RKM30-10M
	2	6913308	WKM30-2M
	5	6915214	WKM30-5M
	10	6915215	WKM30-10M
	2	6602321	RSM30-2M
	5	6915217	RSM30-5M
	10	6915218	RSM30-10M
	2	6915023	WSM30-2M
	5	6915220	WSM30-5M
	10	6915221	WSM30-10M
	2	6914928	RSM-RKM30-2M
	5	6915079	RSM-RKM30-5M
	10	6915271	RSM-RKM30-10M
	2	6915278	WSM-WKM30-2M
	5	6915279	WSM-WKM30-5M
	10	6915280	WSM-WKM30-10M

PVC Cable – Yellow



- 4-pin
- Flame-retardant
- UV-resistant
- NEMA 1, 3, 4, 6P and IEC IP67
- UL, CSA approval

Female connector



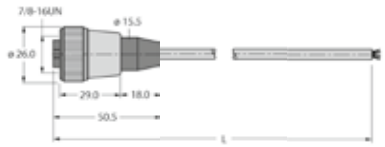
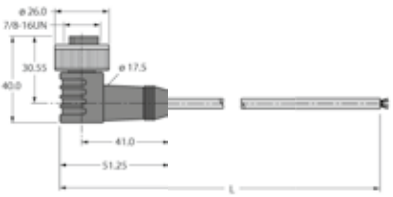
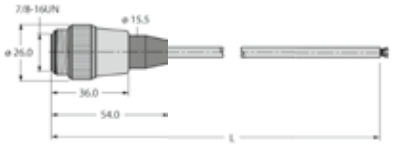
Male connector



Connector	
Grip	Plastic, TPU, Yellow
Contacts	Metal, CuZn, Gold-plated
Contact carriers	TPU, Yellow
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	6.7 mm ± 0.20
Cable jacket	PVC, Yellow
Core insulation	PVC (BN, WH, BU, BK)
Core cross-section	4 x 0.83 mm²
Arrangement of strands	19 x 0.25 mm
Electrical properties at +20 °C	
Current load	9 A
Rated voltage	600 V
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-40…+105 °C

Types and Features — Selection Table



Cable length [m]	ID number	Type
		
2	6915233	RKM40-2M
5	6915234	RKM40-5M
10	6915235	RKM40-10M
		
2	6915236	WKM40-2M
5	6915237	WKM40-5M
10	6915238	WKM40-10M
		
2	6915239	RSM40-2M
5	6915240	RSM40-5M
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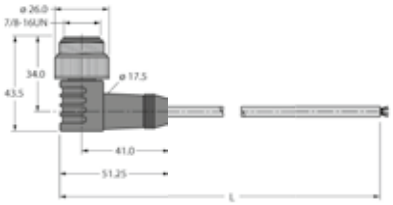
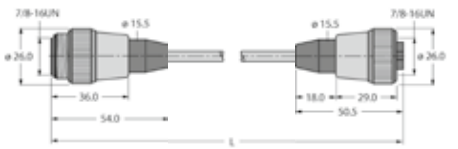
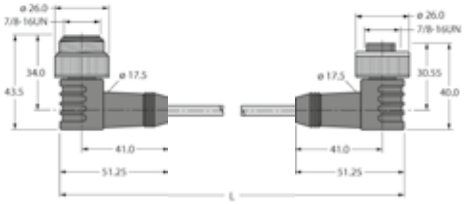
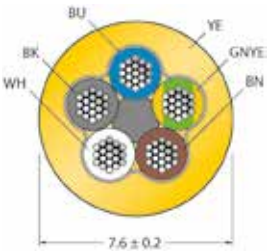
		
2	6915242	WSM40-2M
5	6915243	WSM40-5M
10	6915244	WSM40-10M
		
2	6915281	RSM-RKM40-2M
5	6915282	RSM-RKM40-5M
10	6915283	RSM-RKM40-10M
		
2	6915290	WSM-WKM40-2M
5	6915291	WSM-WKM40-5M
10	6915292	WSM-WKM40-10M

PVC Cable – Yellow



- 4-pin + PE
- Flame-retardant
- UV-resistant
- NEMA 1, 3, 4, 6P and IEC IP67
- UL, CSA approval

Female connector



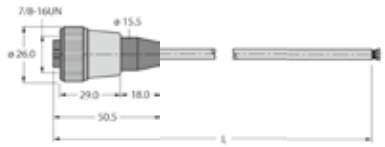
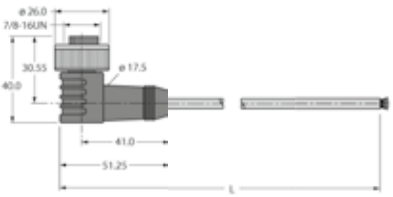
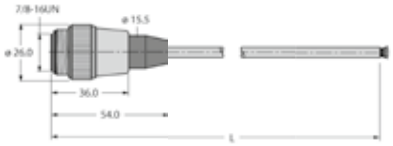
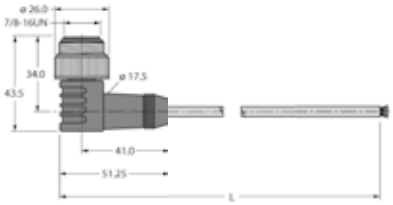
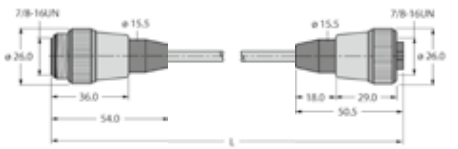
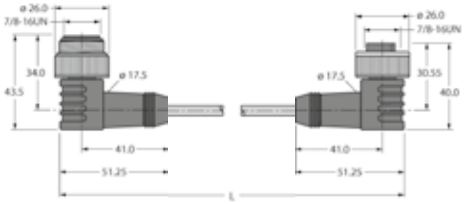
Male connector



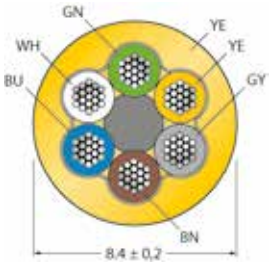
Connector	
Grip	Plastic, TPU, Yellow
Contacts	Metal, CuZn, Gold-plated
Contact carriers	TPU, Yellow
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	7.6 mm ± 0.30
Cable jacket	PVC, Yellow
Core insulation	PVC (BN, WH, BU, BK, GNYE)
Core cross-section	5 x 0.83 mm²
Arrangement of strands	19 x 0.25 mm
Electrical properties at +20 °C	
Current load	9 A
Rated voltage	600 V
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-40…+105 °C

Types and Features — Selection Table



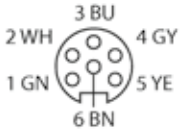
Cable length [m]	ID number	Type
		
2	6914907	RKM50-2M
5	6914968	RKM50-5M
10	6914987	RKM50-10M
		
2	6915245	WKM50-2M
5	6914980	WKM50-5M
10	6604222	WKM50-10M
		
2	6914970	RSM50-2M
5	6914972	RSM50-5M
10	6914975	RSM50-10M
		
2	6915246	WSM50-2M
5	6915247	WSM50-5M
10	6915248	WSM50-10M
		
2	6914936	RSM-RKM50-2M
5	6914938	RSM-RKM50-5M
10	6914934	RSM-RKM50-10M
		
2	6915296	WSM-WKM50-2M
5	6915297	WSM-WKM50-5M
10	6915298	WSM-WKM50-10M

PVC Cable – Yellow

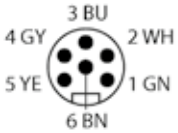


- 6-pin
- Flame-retardant
- UV-resistant
- NEMA 1, 3, 4, 6P and IEC IP67
- UL, CSA approval

Female connector



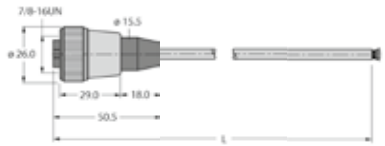
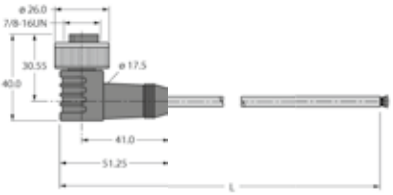
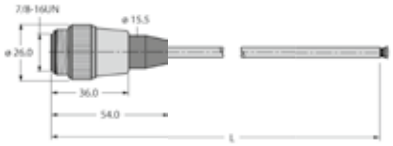
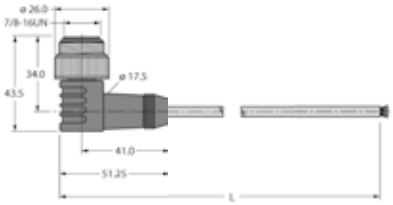
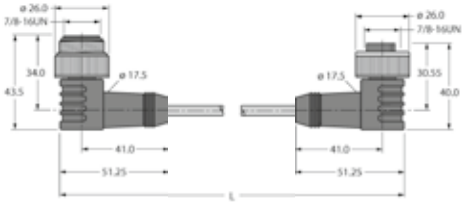
Male connector



Connector	
Grip	Plastic, TPU, Yellow
Contacts	Metal, CuZn, Gold-plated
Contact carriers	TPU, Yellow
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	8.4 mm ± 0.30
Cable jacket	PVC, Yellow
Core insulation	PVC (GN, WH, BU, GY, YE, BN)
Core cross-section	6 x 0.83 mm²
Arrangement of strands	19 x 0.25 mm
Electrical properties at +20 °C	
Current load	8 A
Rated voltage	600 V
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-40…+105 °C

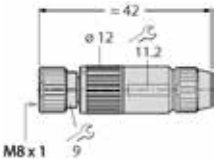
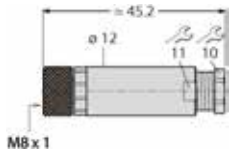
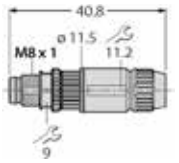
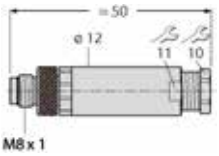
Types and Features — Selection Table

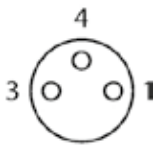
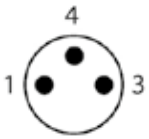


Cable length [m]	ID number	Type
		
2	6914811	RKM61-2
5	6915249	RKM61-5M
10	6915092	RKM61-10M
		
2	6915250	WKM61-2M
5	6915251	WKM61-5M
10	6915252	WKM61-10M
		
2	6915253	RSM61-2M
5	6915254	RSM61-5M
10	6915255	RSM61-10M
		
2	6915256	WSM61-2M
5	6915257	WSM61-5M
10	6915258	WSM61-10M
		
2	6915299	RSM-RKM61-2M
5	6915300	RSM-RKM61-5M
10	6915301	RSM-RKM61-10M
		
2	6915308	WSM-WKM61-2M
5	6915309	WSM-WKM61-5M
10	6915310	WSM-WKM61-10M

Field-Wireable Connectors – M8 × 1



	Number of pins	Rated voltage [V]	ID number	Type	Number of pins	Rated voltage	ID number	Type
Female connector, straight								
								
	3	32	6905404	HA5131-0	3	60	6901030	B5133-0
	4	32	6905405	HA5141-0	4	30	6901031	B5143-0
Male connector, straight								
								
	3	32	6905402	HAS5131-0	3	60	6901012	BS5133-0
	4	32	6905403	HAS5141-0	4	30	6901013	BS5143-0
Connection mode	Insulation displacement connection				Screw/clamp connection			
Grip	Plastic, PA, Black				Plastic, PBT, Black			
Coupling nut/screw	Brass, CuZn, Nickel-plated				Die-cast zinc, GD-Zn			
Contacts	Brass, CuZn, Gold-plated				Brass, CuZn, Gold-plated			
Contact carriers	PA, Black				PA 66 (UL 94 HB), Black			
Protection class	IP67				IP67			
Current load	4 A				4 A			
Terminal cross-section	0.14…0.34 mm²				0.14…0.5 mm²			
Cable external diameter	min. 2.5…5.1 mm				min. 3.5…5 mm			
Storage temperature	-5…+50 °C				-40…+85 °C			

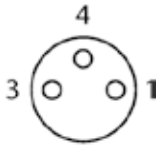
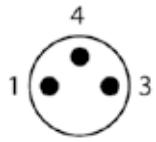
Number of pins	3-pin	4-pin
Female connector		
Male connector		

Field-Wireable Connectors – M8 × 1



	Number of pins	Rated voltage [V]	ID number	Type	Number of pins	Rated voltage	ID number	Type
Female connector, straight								
	3	60	6904910	B5131-0	3	60	6902700	H5131-0
	4	30	6904915	B5141-0	4	30	6902720	H5141-0
Female connector, angled								
	3	60	6904810	B5231-0	3	60	6902800	H5231-0
	4	30	6904815	B5241-0	4	30	6902820	H5241-0
Male connector, straight								
	3	60	6901010	BS5131-0	3	60	6902710	HS5131-0
	4	30	6901011	BS5141-0	4	30	6902730	HS5141-0
Male connector, angled								
	3	60	6901110	BS5231-0	3	60	6902810	HS5231-0
	4	30	6901111	BS5241-0	4	30	6902830	HS5241-0

Connection mode	Solder connection	Penetration technology
Grip	Plastic, PBT, Black	Plastic, PA, Black
Coupling nut/screw	Die-cast zinc, GD-Zn, Nickel-plated	Zinc aluminum, ZnAl, Nickel-plated
Contacts	Bronze, CuSn, Gold-plated	Brass, CuZn, Gold-plated
Contact carriers	PA, Black	PA, Black
Protection class	IP67	IP67
Current load	4 A	4 A
Terminal cross-section	0.14…0.25 mm²	0.14…0.34 mm²
Cable external diameter	min. 3.5…5 mm	min. 4…5 mm
Storage temperature	-40…+85 °C	-25…+70 °C

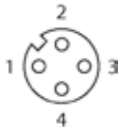
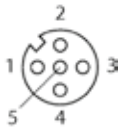
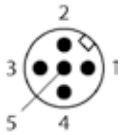
Number of pins	3-pin	4-pin
Female connector		
Male connector		

Field-Wireable Connectors – M12 × 1



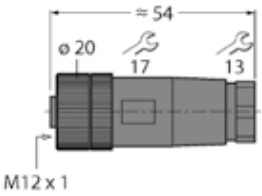
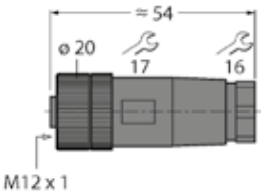
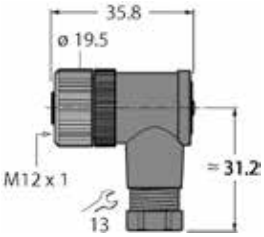
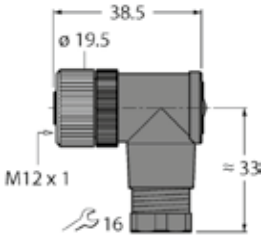
	Number of pins	Rated voltage [V]	ID number	Type	Number of pins	Rated voltage	ID number	Type
Female connector, straight	4	32	6905407	HA8141-0	4	50	6905409	HA8141-16
Female connector, angled	4	32	6905401	HA8241-0				
Male connector, straight	4	32	6905406	HAS8141-0	4	50	6905408	HAS8141-16
Male connector, angled	4	32	6905400	HAS8241-0				

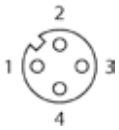
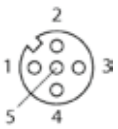
Connection mode	Insulation displacement connection	Insulation displacement connection
Grip	Plastic, PA, Black	Plastic, PA, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated	Brass, CuZn, Nickel-plated
Contacts	Brass, CuZn, Gold-plated	Brass, CuZn, Gold-plated
Contact carriers	PA, Black	PA, Black
Protection class	IP67	IP67
Current load	4 A	6 A
Terminal cross-section	0.14…0.34 mm^2	0.34…0.75 mm^2
Cable external diameter	min. 4…5.1 mm	min. 6…8 mm
Storage temperature	-5…+50 °C	-5…+50 °C

Number of pins	4-pin	5-pin
Female connector		
Male connector		

Field-Wireable Connectors – M12 × 1

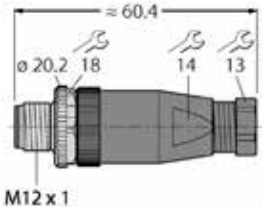
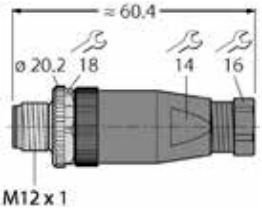
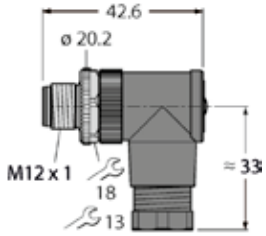
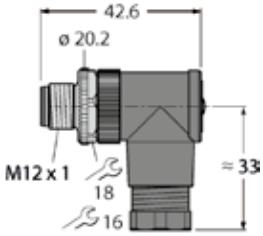


	Number of pins	Rated voltage [V]	ID number	Type	Number of pins	Rated voltage	ID number	Type
Female connector, straight								
	4	250	69049	B8141-0	4	250	6904901	B8141-0/PG9
	5	125	6904601	B8151-0	5	125	6904604	B8151-0/9
Female connector, angled								
	4	250	69048	B8241-0	4	250	6904801	B8241-0/PG9
	5	125	6904602	B8251-0	5	125	6904603	B8251-0/9
Connection mode	Screw/clamp connection				Screw/clamp connection			
Grip	Plastic, PA, Black				Plastic, PA, Black			
Coupling nut/screw	Plastic, PA, Black				Plastic, PA, Black			
Contacts	Brass, CuZn, Optalloy-coated				Brass, CuZn, Optalloy-coated			
Contact carriers	PA, Black				PA, Black			
Protection class	IP67				IP67			
Current load	4 A				4 A			
Terminal cross-section	0.14…0.75 mm²				0.14…0.75 mm²			
Cable external diameter	min. 4…6 mm				min. 6…8 mm			
Storage temperature	-40 … +85 °C				-40 … +85 °C			

Number of pins	4-pin	5-pin
Female connector		

Field-Wireable Connectors – M12 × 1

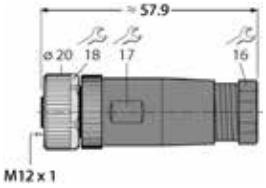
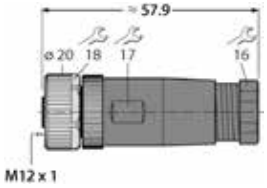
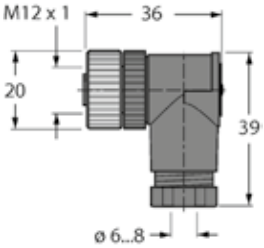
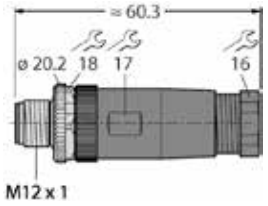
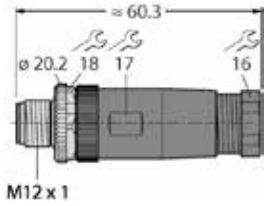
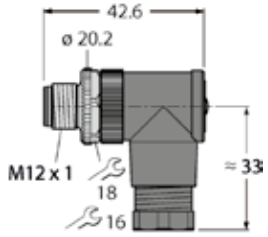
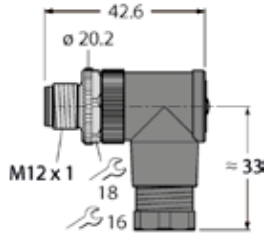


	Number of pins	Rated voltage [V]	ID number	Type	Number of pins	Rated voltage	ID number	Type
Male connector, straight								
	4	250	69010	BS8141-0	4	250	6901003	BS8141-0/PG9
	5	125	6904611	BS8151-0				
Male connector, angled								
	4	250	69011	BS8241-0	4	250	6901103	BS8241-0/PG9
	5	125	6904612	BS8251-0	5	125	6904615	BS8251-0/9
Connection mode	Screw/clamp connection				Screw/clamp connection			
Grip	Plastic, PA, Black				Plastic, PA, Black			
Coupling nut/screw	Die-cast zinc, GD-Zn, Anodized				Die-cast zinc, GD-Zn, Anodized			
Contacts	Brass, CuZn, Optalloy-coated				Brass, CuZn, Optalloy-coated			
Contact carriers	PA, Black				PA, Black			
Protection class	IP67				IP67			
Current load	4 A				4 A			
Terminal cross-section	0.14…0.75 mm²				0.14…0.75 mm²			
Cable external diameter	min. 4…6 mm				min. 6…8 mm			
Storage temperature	-40…+85 °C				-40…+85 °C			

Number of pins	4-pin	5-pin
Male connector		

Field-Wireable Connectors – M12 × 1



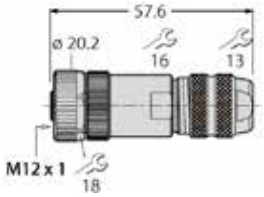
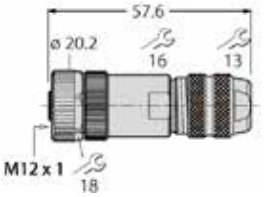
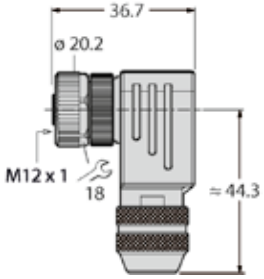
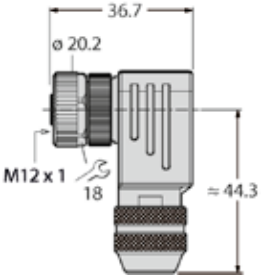
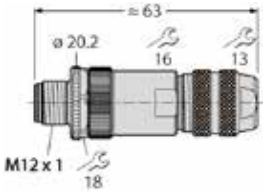
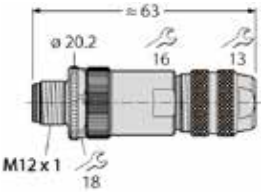
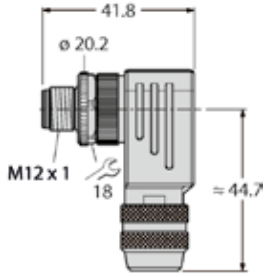
	Number of pins	Rated voltage [V]	ID number	Type	Number of pins	Rated voltage	ID number	Type
Female connector, straight								
	8	60	6904605	B8181-0	12	30	6604052	B81121-0/PG9
Female connector, angled								
	8	60	6934339	B8281-0				
Male connector, straight								
	8	60	6901004	BS8181-0	12	30	6604053	BS81121-0/PG9
Male connector, angled								
	8	60	6930862	BS8281-0	12	30	6936122	BS82121-0/PG9

Connection mode	Screw/clamp connection	Solder connection
Grip	Plastic, PA, Black	Plastic, PA, Black
Coupling nut/screw	Die-cast zinc, GD-Zn, Nickel-plated	Die-cast zinc, GD-Zn, Nickel-plated
Contacts	Brass, CuZn, Gold-plated	Brass, CuZn, Gold-plated
Contact carriers	PA, Black	PA, Black
Protection class	IP67	IP67
Current load	2 A	2 A
Terminal cross-section	0.14…0.5 mm^2	0.14…0.25 mm^2
Cable external diameter	min. 6…8 mm	min. 6…8 mm
Storage temperature	-40…+85 °C	-40…+85 °C

Number of pins	8-pin	12-pin
Female connector		
Male connector		

Field-Wireable Connectors – M12 × 1

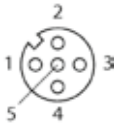
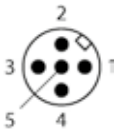


	Number of pins	Rated voltage [V]	ID number	Type	Number of pins	Rated voltage	ID number	Type
Female connector, straight								
								
	4	250	6930375	CMB8141-0	8	60	6931450	CMB8181-0
	5	125	6930145	CMB8151-0				
Female connector, angled								
								
	4	125	6932405	CMB8241-0	8	60	6932024	CMB8281-0
	5	125	6930215	CMB8251-0				
Male connector, straight								
								
	4	250	6604005	CMBS8141-0	8	60	6930792	CMBS8181-0
	5	125	6930161	CMBS8151-0				
Male connector, angled								
								
	4	250	6932581	CMBS8241-0				
	5	125	6930216	CMBS8251-0				

Connection mode	Screw/clamp connection	Screw/clamp connection
Grip	Die-cast zinc, GD-Zn, Nickel-plated	Die-cast zinc, GD-Zn, Nickel-plated
Coupling nut/screw	Die-cast zinc, GD-Zn, Nickel-plated	Die-cast zinc, GD-Zn, Nickel-plated
Contacts	Brass, CuZn, Gold-plated	Brass, CuZn, Gold-plated
Contact carriers	PA, Black	PA, Black
Protection class	IP67	IP67
Current load	4 A	2 A
Terminal cross-section	0.14…0.75 mm²	0.14…0.5 mm²

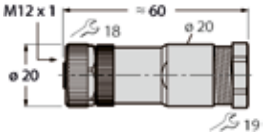
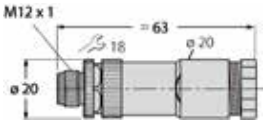
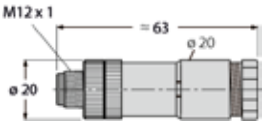


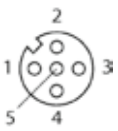
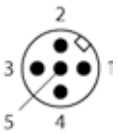
	Number of pins	Rated voltage [V]	ID number	Type	Number of pins	Rated voltage	ID number	Type
Cable external diameter	min. 6…8 mm				min. 6…8 mm			
Storage temperature	-40…+85 °C				-40…+85 °C			

Number of pins	4-pin	5-pin	8-pin
Female connector			
Male connector			

Field-Wireable Connectors – M12 × 1, Duo Cable

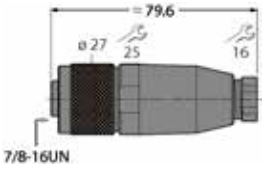
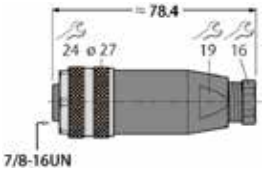
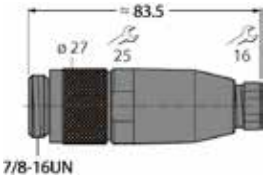
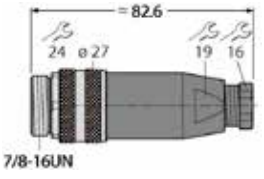


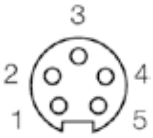
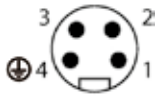
	Number of pins	Rated voltage [V]	ID number	Type	Number of pins	Rated voltage	ID number	Type
Female connector, straight								
								
	4	250	6934720	VBB8141-0				
	5	60	6934722	VBB8151-0				
Male connector, straight								
								
	4	250	6930061	VBBS8141-0	4	250	6930073	DBS8141-0
	5	60	6934721	VBBS8151-0				
Connection mode	Screw/clamp connection				Screw/clamp connection			
Grip	Plastic, PA, Black				Plastic, PA, Black			
Coupling nut/screw	Die-cast zinc, GD-Zn, Nickel-plated				Plastic, PA, Black			
Contacts	Brass, CuZn, Optalloy-coated				Brass, CuZn, Optalloy-coated			
Contact carriers	PA, Black				PA, Black			
Protection class	IP67				IP67			
Current load	4 A				4 A			
Terminal cross-section	0.14…0.75 mm²				0.14…0.75 mm²			
Storage temperature	-25…+85 °C				-25…+85 °C			

Number of pins	4-pin	5-pin
Female connector		
Male connector		

Field-Wireable Connectors – 7/8"



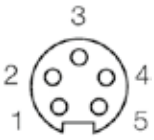
	Number of pins	Current load [A]	ID number	Type	Number of pins	Current load	ID number	Type
Female connector, straight								
	3	12	6914501	B4131-0/9	3	12	6914511	B4131-0/11
	4	9	6914504	B4141-0/9	4	9	6914512	B4141-0/11
					5	9	6932844	B4152-0/11
Male connector, straight								
	3	12	6914502	BS4131-0/9	4	9	6914518	BS4141-0/11
					5	9	6914507	BS4151-0/11
Connection mode	Screw/clamp connection				Screw/clamp connection			
Grip	Plastic, PA, Black				Plastic, PA, Black			
Coupling nut/screw	Aluminum, Al, Anodized				Aluminum, Al, Anodized			
Contacts	Brass, CuZn, Gold-plated				Brass, CuZn, Gold-plated			
Contact carriers	TPU, Black				TPU, Black			
Protection class	IP67				IP67			
Rated voltage	250 V				250 V			
Terminal cross-section	0.14…1 mm²				0.14…1 mm²			
Cable external diameter	min. 6…8 mm				min. 8…10 mm			
Stationary usage	-40…+90 °C				-40…+90 °C			

Number of pins	3-pin	4-pin	5-pin
Female connector			
Male connector			

Field-Wireable Connectors – 7/8"

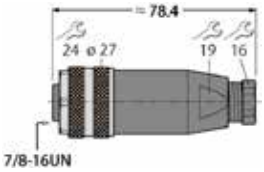
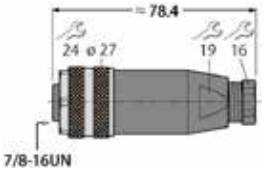
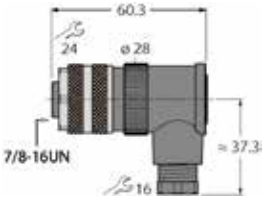
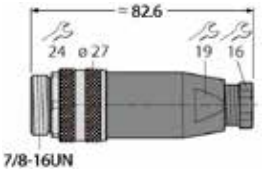
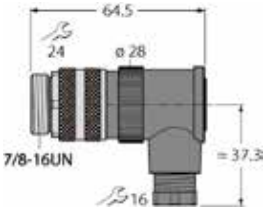


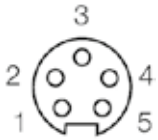
	Number of pins	Current load [A]	ID number	Type	Number of pins	Current load	ID number	Type
Female connector, straight	4	9	6914509	B4141-0/13.5	5	9	6914520	B4151-0/16
Male connector, straight	4	9	6914510	BS4141-0/13.5	5	9	6914519	BS4151-0/16
Connection mode	Screw/clamp connection				Screw/clamp connection			
Grip	Plastic, PA, Black				Plastic, PA, Black			
Coupling nut/screw	Aluminum, Al, Anodized				Aluminum, Al, Anodized			
Contacts	Brass, CuZn, Gold-plated				Brass, CuZn, Gold-plated			
Contact carriers	TPU, Black				TPU, Black			
Protection class	IP67				IP67			
Rated voltage	250 V				250 V			
Terminal cross-section	0.14…1 mm²				0.14…1.5 mm²			
Cable external diameter	min. 10…12 mm				min. 12…14 mm			
Stationary usage	-40…+90 °C				-40…+90 °C			

Number of pins	4-pin	5-pin
Female connector		
Male connector		

Field-Wireable Connectors – 7/8"

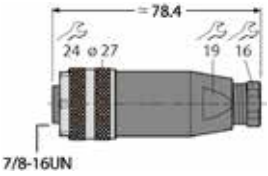
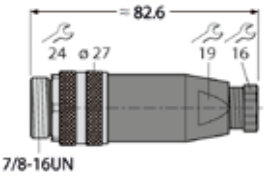


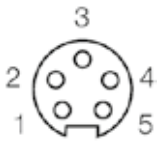
	Number of pins	Current load [A]	ID number	Type	Number of pins	Current load	ID number	Type
Female connector, straight								
								
	5	9	6904717	B4151-0/9	5	9	6914526	B4151-0/11
Female connector, angled								
								
	3	12	6901114	B4231-0/9				
	4	9	6901021	B4241-0/9				
	5	9	6901113	B4251-0/9				
Male connector, straight								
								
	5	9	6904718	BS4151-0/9				
Male connector, angled								
								
	3	12	6933448	BS4231-0/9				
	4	9	6901020	BS4241-0/9				
	5	9	6901112	BS4251-0/9				
Connection mode	Screw/clamp connection				Screw/clamp connection			
Grip	Plastic, PBT(UL 94 V0), Black				Plastic, PBT(UL 94 V0), Black			
Coupling nut/screw	Die-cast zinc, GD-Zn, Nickel-plated				Aluminum, Al, Anodized			
Contacts	Brass, CuZn, Gold-plated				Bronze, CuSn, Gold-plated			
Contact carriers	PA 66 (UL 94 HB), Black				PA 66 (UL 94 HB), Black			
Protection class	IP67				IP67			
Rated voltage	600 V				600 V			
Terminal cross-section	0.14…1.5 mm^2				0.14…1.5 mm^2			
Cable external diameter	min. 6…8 mm				min. 8…10 mm			
Stationary usage	-25…+85 °C				-25…+85 °C			

Number of pins	3-pin	4-pin	5-pin
Female connector			
Male connector			

Field-Wireable Connectors – 7/8"

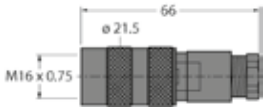
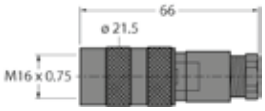
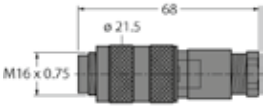
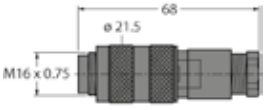


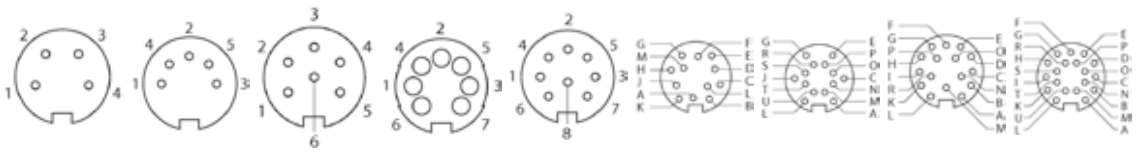
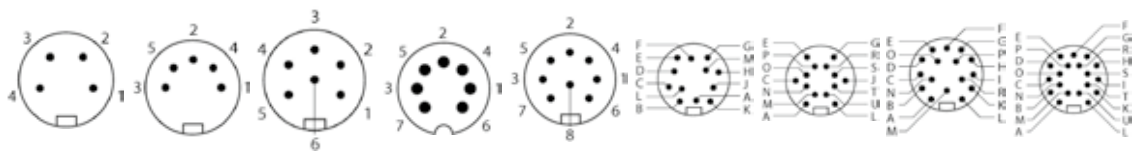
	Number of pins	Current load [A]	ID number	Type
Female connector, straight				
				
	5	9	6904715	B4151-0/13.5
	3	12	6904720	B4131-0/13.5
Male connector, straight				
				
	3	12	6904719	BS4131-0/13.5
	5	9	6904716	BS4151-0/13.5
Connection mode	Screw/clamp connection			
Grip	Plastic, PBT(UL 94 V0), Black			
Coupling nut/screw	Die-cast zinc, GD-Zn, Nickel-plated			
Contacts	Brass, CuZn, Gold-plated			
Contact carriers	PBT UL94-V0, Black			
Protection class	IP67			
Rated voltage	600 V			
Terminal cross-section	0.14…1.5 mm²			
Cable external diameter	min. 10…12 mm			
Stationary usage	-25…+85 °C			

Number of pins	3-pin	5-pin
Female connector		
Male connector		

Field-Wireable Connectors – M16 × 0.75

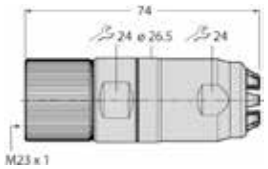
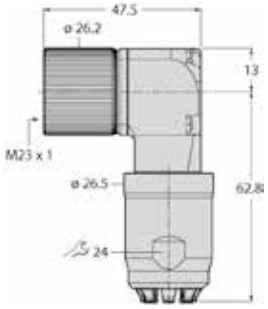
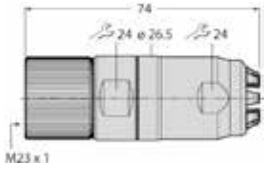
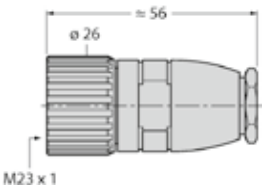
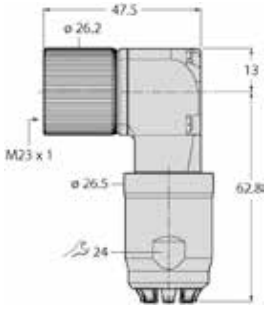


	Number of pins	Current load [A]	ID number	Type	Number of pins	Current load	ID number	Type
Female connector, straight								
	4	6	6934727	BK4-0	12	3	6934741	BK12-0
	5	6	6934729	BK5-0	14	3	6934765	BK14-0
	6	5	6934731	BK6-0	16	3	6934742	BK16-0
	7	5	6934733	BK7-0	19	3	6934766	BK19-0
	8	5	6934736	BK8-0				
Male connector, straight								
	4	6	6934728	BS4-0	12	3	6934767	BS12-0
	5	6	6934730	BS5-0	14	3	6934743	BS14-0
	6	5	6934732	BS6-0	16	3	6934744	BS16-0
	7	5	6934734	BS7-0	19	3	6934745	BS19-0
	8	5	6934737	BS8-0				
Connection mode	Solder connection				Solder connection			
Grip	Plastic, PA, Black				Plastic, PA, Black			
Coupling nut/screw	Die-cast zinc, GD-Zn, Nickel-plated				Die-cast zinc, GD-Zn, Nickel-plated			
Contacts	Bronze, CuSn, Silver-plated				Bronze, CuSn, Gold-plated			
Contact carriers	PBT UL94-V0, Black				PBT UL94-V0, Black			
Protection class	IP67				IP67			
Rated voltage	60 V				60 V			
Terminal cross-section	0.14…0.75 mm²				0.14…0.25 mm²			
Cable external diameter	min. 6…8 mm				min. 6…8 mm			
Stationary usage	-40…+95 °C				-40…+95 °C			

Number of pins	4-pin	5-pin	6-pin	7-pin	8-pin	12-pin	14-pin	16-pin	19-pin
Female connector									
Male connector									

Field-Wireable Connectors – M23 × 1



	Number of pins	Current load [A]	ID number	Type	Number of pins	Current load	ID number	Type
Female connector, straight								
								
	17	9	6604069	FW-M23KU17O-G-CP-ME-SH-14.5				
Female connector, angled								
								
	17	9	6604066	FW-M23KU17O-W-CP-ME-SH-14.5				
Male connector, straight								
								
	17	9	6604067	FW-M23ST17Q-G-CP-ME-SH-14.5	19	8	6604208	FW-M23ST19Q-G-LT-ME-XX-10
					12	8	6604070	FW-M23ST12Q-G-LT-ME-XX-10
					19	8	6604051	FW-M23ST19Q-G-CP-ME-XX-10
					12	8	6604093	FW-M23ST12Q-G-CP-ME-XX-10
Male connector, angled								
								
	17	9	6604068	FW-M23ST17Q-W-CP-ME-SH-14.5				

Connection mode	Crimp connection	Crimp connection/Solder connection
Grip	Brass, CuZn, Nickel-plated	Brass, CuZn, Nickel-plated
Coupling nut/screw	Brass, CuZn, Nickel-plated	Brass, CuZn, Nickel-plated
Contacts	Brass, CuZn, Gold-plated	Brass, CuZn, Gold-plated

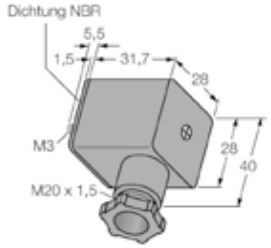
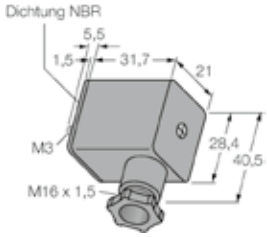
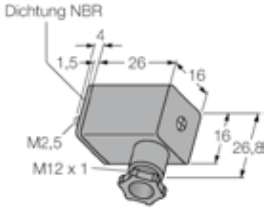
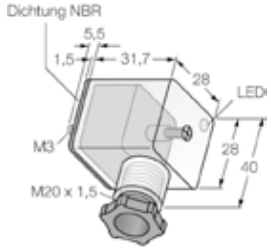
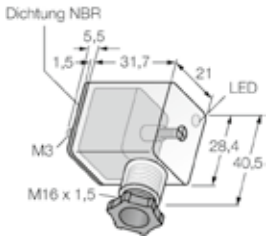
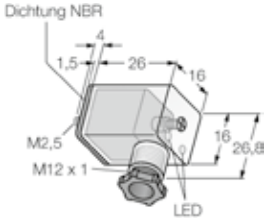


	Number of pins	Current load [A]	ID number	Type	Number of pins	Current load	ID number	Type
Contact carriers	PBT, White				PA, Black			
Protection class	IP67				IP65			
Rated voltage	125 V				150 V			
Terminal cross-section	0.25…1 mm²				0.25…1 mm²			
Cable external diameter	min. 7.7…14.5 mm				min. 6…8 mm			
Stationary usage	-40…+125 °C				-40…+70 °C			

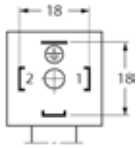
Number of pins	12-pin	17-pin	19-pin
Female connector			
Male connector			

Field-Wireable Valve Connectors

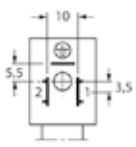


	Number of pins / Rated voltage [V] / ID number / Type	Number of pins / Rated voltage / ID number / Type	Number of pins / Rated voltage / ID number / Type
0.220-K	Design A  2+PE 250 8028723 VC-AC21-0.220-K 3+PE 250 8031583 VC-AC31-0.220-K	Design B + BI  2+PE 250 8028724 VC-BC21-0.220-K 2+PE 250 8028725 VC-IC21-0.220-K	Design C + CI  2+PE 110 8028727 VC-CC9.21-0.220-K 2+PE 230 8028726 VC-CC8.21-0.220-K
11.024-K	 2+PE 24 8028728 VC-AC21-11.024-K 3+PE 24 8031584 VC-AC31-11.024-K	 2+PE 24 8028730 VC-IC21-11.024-K 2+PE 24 8028729 VC-BC21-11.024-K	 2+PE 24 8028731 VC-CC8.21-11.024-K 2+PE 24 8028732 VC-CC9.21-11.024-K
Connection mode	Screw/clamp connection	Screw/clamp connection	Screw/clamp connection
Contacts	Metal	Metal	Metal
Contact carriers	PA6 GF30, Black	PA6 GF30, Black	PA6 GF30, Black
Protection class	IP65	IP65	IP65
Current load	10 A	10 A	5 A
Terminal cross-section	0.25…1 mm²	0.25…1 mm²	0.14…0.34 mm²
Cable external diameter	min. 6…8 mm	min. 6…8 mm	min. 4…6 mm
Storage temperature	-25…+80 °C	-25…+80 °C	-25…+80 °C

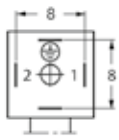
Design A, 2-pin + PE



Design B



Design C



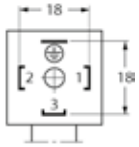
0.220-K, 2-pin + PE



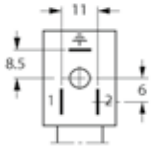
0.220-K, 3-pin + PE



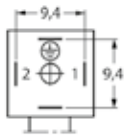
Design A, 3-pin + PE



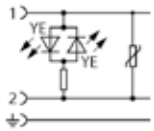
Design BI



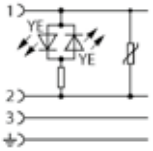
Design CI



11.024-K, 2-pin + PE



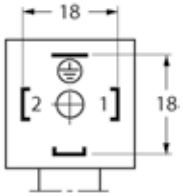
11.024-K, 3-pin + PE



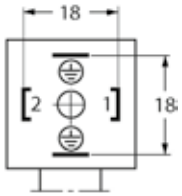
PUR cable, black

- Design according to DIN EN 175301-803
- Qualified for drag chain use and resistant to welding sparks
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS
- Flame-retardant

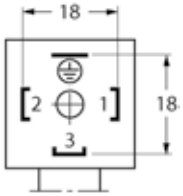
Valve connector (VAS02)



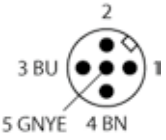
Valve connector (VAS22)



Valve connector (VAS04)

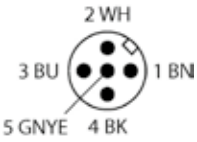


M12 × 1 male connector (5.31T)

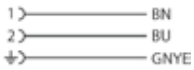


VAS02-A80E

M12 × 1 male connector (5T)



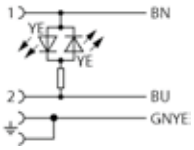
VAS22-A80E



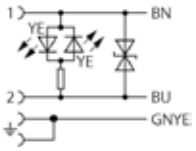
VAS22-L80E



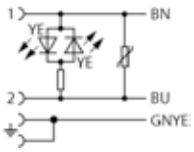
VAS22-S80E

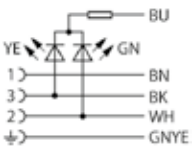


VAS22-E80E



VAS04-K81E



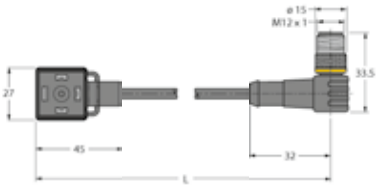


Valve connector	
Grip	Plastic, TPU, Black/Translucent
Contacts	Metal, CuSn, Silver-plated
Contact carriers	Plastic, PA, Black
Seal	Plastic, TPU
Protection class	IP67, IP69K (mounted)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
M12 x 1 connector	
Grip	Plastic, TPU, Black
Locking	Brass, CuZn, Nickel-plated
Contacts	Metal, CuZn, Gold-plated
Contact carriers	Plastic, TPU, Black
Protection class	IP67, IP69K (Only when screwed tight)
Mechanical lifespan	> 100 mating cycles
Pollution degree	3
General data	
Cable quality	PUR (Black)
Core insulation	PP
Electrical properties at +20 °C	
Current load	4 A
Insulation resistance	≥ 10^8 Ω
Test voltage	2000 V
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm²
Max. tensile strength (dynamic)	≤ 20 N/mm²
Bending cycles	> 5 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s²
Admissible travel path, horizontal	5 m (at 5 m/s²)
Admissible travel path, vertical	2 m (at 5 m/s²)
Admissible traversing speed	3.3 m/s
Torsional stress	± 180 °/m
Ambient temperature	
Stationary usage	-50…+80 °C
Non-stationary usage	-30…+90 °C
Drag chain operation	-25…+60 °C



Number of pins	Rated voltage [V]	Core cross-section[mm²]	Cable length [m]	ID number	Type
2+PE	230	3 x 0.75	2	6606656	VAS02-A80E-2/TXL
2+PE	230	3 x 0.75	5	6606657	VAS02-A80E-5/TXL
2+PE	230	3 x 0.75	10	6606658	VAS02-A80E-10/TXL
2+PE, PE bridged	230	3 x 0.75	2	6606593	VAS22-A80E-2/TXL
2+PE, PE bridged	230	3 x 0.75	5	6606572	VAS22-A80E-5/TXL
2+PE, PE bridged	230	3 x 0.75	10	6606573	VAS22-A80E-10/TXL
2+PE, PE bridged	24	3 x 0.75	2	6606584	VAS22-L80E-2/TXL
2+PE, PE bridged	24	3 x 0.75	5	6606601	VAS22-L80E-5/TXL
2+PE, PE bridged	24	3 x 0.75	10	6606586	VAS22-L80E-10/TXL
2+PE, PE bridged	24	3 x 0.75	2	6606503	VAS22-S80E-2/TXL
2+PE, PE bridged	24	3 x 0.75	5	6606504	VAS22-S80E-5/TXL
2+PE, PE bridged	24	3 x 0.75	10	6606505	VAS22-S80E-10/TXL
2+PE, PE bridged	230	3 x 0.75	2	6606768	VAS22-E80E-2/TXL
2+PE, PE bridged	230	3 x 0.75	5	6606682	VAS22-E80E-5/TXL
2+PE, PE bridged	230	3 x 0.75	10	6606769	VAS22-E80E-10/TXL
3+PE	24	4 x 0.75	2	6606770	VAS04-K81E-2/TXL
3+PE	24	4 x 0.75	5	6606771	VAS04-K81E-5/TXL
3+PE	24	4 x 0.75	10	6606693	VAS04-K81E-10/TXL
2+PE, PE bridged	24	3 x 0.34	0.3	6606506	VAS22-S80E-0.3-RSC5.31T/TXL
2+PE, PE bridged	24	3 x 0.34	0.6	6606507	VAS22-S80E-0.6-RSC5.31T/TXL
2+PE, PE bridged	24	3 x 0.34	1	6606508	VAS22-S80E-1-RSC5.31T/TXL
2+PE, PE bridged	24	3 x 0.34	1.5	6606511	VAS22-S80E-1.5-RSC5.31T/TXL
2+PE, PE bridged	24	3 x 0.34	2	6606509	VAS22-S80E-2-RSC5.31T/TXL
2+PE, PE bridged	24	3 x 0.34	5	6606510	VAS22-S80E-5-RSC5.31T/TXL
2+PE, PE bridged	24	3 x 0.34	0.3	6606792	VAS22-S80E-0.3-WSC5.31T/TXL
2+PE, PE bridged	24	3 x 0.34	0.6	6606793	VAS22-S80E-0.6-WSC5.31T/TXL
2+PE, PE bridged	24	3 x 0.34	1	6606794	VAS22-S80E-1-WSC5.31T/TXL
2+PE, PE bridged	24	3 x 0.34	1.5	6606795	VAS22-S80E-1.5-WSC5.31T/TXL
2+PE, PE bridged	24	3 x 0.34	2	6606796	VAS22-S80E-2-WSC5.31T/TXL
2+PE, PE bridged	24	3 x 0.34	5	6606797	VAS22-S80E-5-WSC5.31T/TXL
3+PE	24	4 x 0.34	0.3	6606568	VAS04-K81E-0.3-RSC5T/TXL
3+PE	24	4 x 0.34	0.6	6606726	VAS04-K81E-0.6-RSC5T/TXL
3+PE	24	4 x 0.34	1	6606772	VAS04-K81E-1-RSC5T/TXL
3+PE	24	4 x 0.34	1.5	6606773	VAS04-K81E-1.5-RSC5T/TXL
3+PE	24	4 x 0.34	2	6606774	VAS04-K81E-2-RSC5T/TXL
3+PE	24	4 x 0.34	5	6606775	VAS04-K81E-5-RSC5T/TXL



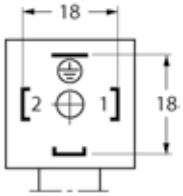


Number of pins	Rated voltage [V]	Core cross-section[mm²]	Cable length [m]	ID number	Type
3+PE	24	4 x 0.34	0.3	6606798	VAS04-K81E-0.3-WSC5T/TXL
3+PE	24	4 x 0.34	0.6	6606799	VAS04-K81E-0.6-WSC5T/TXL
3+PE	24	4 x 0.34	1	6606800	VAS04-K81E-1-WSC5T/TXL
3+PE	24	4 x 0.34	1.5	6606801	VAS04-K81E-1.5-WSC5T/TXL
3+PE	24	4 x 0.34	2	6606802	VAS04-K81E-2-WSC5T/TXL
3+PE	24	4 x 0.34	5	6606803	VAS04-K81E-5-WSC5T/TXL

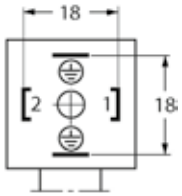
PVC Cable, black

- Design according to DIN EN 175301-803
- Resistant to acids and alkaline solutions
- Resistant to chemicals and oils
- LABS free
- Flame-retardant

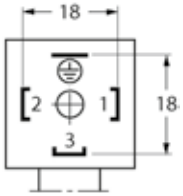
Valve connector (VAS02)



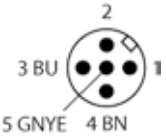
Valve connector (VAS22)



Valve connector (VAS04)

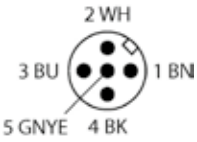


M12 × 1 male connector (5.31T)

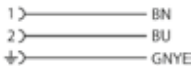


VAS02-A80E

M12 × 1 male connector (5T)



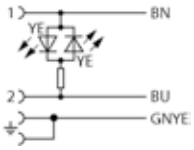
VAS22-A80E



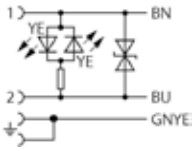
VAS22-L80E



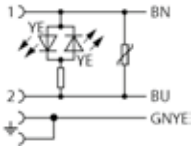
VAS22-S80E

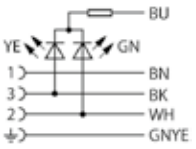


VAS22-E80E



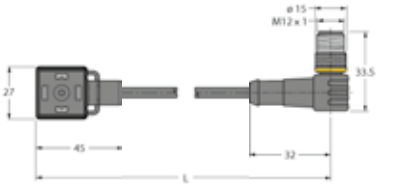
VAS04-K81E



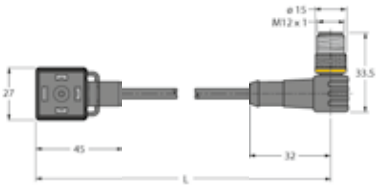


Valve connector	
Grip	Plastic, TPU, Black/Translucent
Contacts	Metal, CuSn, Silver-plated
Contact carriers	Plastic, PA, Black
Seal	Plastic, TPU
Protection class	IP67, IP69K (mounted)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
M12 x 1 connector	
Grip	Plastic, TPU, Black
Locking	Brass, CuZn, Nickel-plated
Contacts	Metal, CuZn, Gold-plated
Contact carriers	Plastic, TPU, Black
Protection class	IP67, IP69K (Only when screwed tight)
Mechanical lifespan	> 100 mating cycles
Pollution degree	3
General data	
Cable quality	PVC (Black)
Core insulation	PVC
Electrical properties at +20 °C	
Current load	4 A
Insulation resistance	≥ 10^8 Ω
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-40…+105 °C
Non-stationary usage	0…+80 °C



	Number of pins	Rated voltage [V]	Core cross-section[mm²]	Cable length [m]	ID number	Type
	2+PE	230	3 x 0.75	2	6606789	VAS02-A80E-2/TEL
	2+PE	230	3 x 0.75	5	6606790	VAS02-A80E-5/TEL
	2+PE	230	3 x 0.75	10	6606791	VAS02-A80E-10/TEL
	2+PE, PE bridged	230	3 x 0.75	2	6606776	VAS22-A80E-2/TEL
	2+PE, PE bridged	230	3 x 0.75	5	6606777	VAS22-A80E-5/TEL
	2+PE, PE bridged	230	3 x 0.75	10	6606778	VAS22-A80E-10/TEL
	2+PE, PE bridged	24	3 x 0.75	2	6606779	VAS22-L80E-2/TEL
	2+PE, PE bridged	24	3 x 0.75	5	6606780	VAS22-L80E-5/TEL
	2+PE, PE bridged	24	3 x 0.75	10	6606781	VAS22-L80E-10/TEL
	2+PE, PE bridged	24	3 x 0.75	2	6606782	VAS22-S80E-2/TEL
	2+PE, PE bridged	24	3 x 0.75	5	6606668	VAS22-S80E-5/TEL
	2+PE, PE bridged	24	3 x 0.75	10	6606669	VAS22-S80E-10/TEL
	2+PE, PE bridged	230	3 x 0.75	2	6606713	VAS22-E80E-2/TEL
	2+PE, PE bridged	230	3 x 0.75	5	6606714	VAS22-E80E-5/TEL
	2+PE, PE bridged	230	3 x 0.75	10	6606715	VAS22-E80E-10/TEL
	3+PE	24	4 x 0.75	2	6606745	VAS04-K81E-2/TEL
	3+PE	24	4 x 0.75	5	6606746	VAS04-K81E-5/TEL
	3+PE	24	4 x 0.75	10	6606747	VAS04-K81E-10/TEL
	2+PE, PE bridged	24	3 x 0.34	0.3	6606783	VAS22-S80E-0.3-RSC5.31T/TEL
	2+PE, PE bridged	24	3 x 0.34	0.6	6606784	VAS22-S80E-0.6-RSC5.31T/TEL
	2+PE, PE bridged	24	3 x 0.34	1	6606785	VAS22-S80E-1-RSC5.31T/TEL
	2+PE, PE bridged	24	3 x 0.34	1.5	6606786	VAS22-S80E-1.5-RSC5.31T/TEL
	2+PE, PE bridged	24	3 x 0.34	2	6606787	VAS22-S80E-2-RSC5.31T/TEL
	2+PE, PE bridged	24	3 x 0.34	5	6606788	VAS22-S80E-5-RSC5.31T/TEL
	2+PE, PE bridged	24	3 x 0.34	0.3	6606804	VAS22-S80E-0.3-WSC5.31T/TEL
	2+PE, PE bridged	24	3 x 0.34	0.6	6606805	VAS22-S80E-0.6-WSC5.31T/TEL
	2+PE, PE bridged	24	3 x 0.34	1	6606806	VAS22-S80E-1-WSC5.31T/TEL
	2+PE, PE bridged	24	3 x 0.34	1.5	6606807	VAS22-S80E-1.5-WSC5.31T/TEL
	2+PE, PE bridged	24	3 x 0.34	2	6606808	VAS22-S80E-2-WSC5.31T/TEL
	2+PE, PE bridged	24	3 x 0.34	5	6606809	VAS22-S80E-5-WSC5.31T/TEL
	3+PE	24	4 x 0.34	0.3	6606748	VAS04-K81E-0.3-RSC5T/TEL
	3+PE	24	4 x 0.34	0.6	6606749	VAS04-K81E-0.6-RSC5T/TEL
	3+PE	24	4 x 0.34	1	6606750	VAS04-K81E-1-RSC5T/TEL
	3+PE	24	4 x 0.34	1.5	6606751	VAS04-K81E-1.5-RSC5T/TEL
	3+PE	24	4 x 0.34	2	6606752	VAS04-K81E-2-RSC5T/TEL
	3+PE	24	4 x 0.34	5	6606753	VAS04-K81E-5-RSC5T/TEL



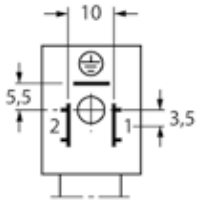


Number of pins	Rated voltage [V]	Core cross-section[mm²]	Cable length [m]	ID number	Type
3+PE	24	4 x 0.34	0.3	6606810	VAS04-K81E-0.3-WSC5T/TEL
3+PE	24	4 x 0.34	0.6	6606811	VAS04-K81E-0.6-WSC5T/TEL
3+PE	24	4 x 0.34	1	6606812	VAS04-K81E-1-WSC5T/TEL
3+PE	24	4 x 0.34	1.5	6606813	VAS04-K81E-1.5-WSC5T/TEL
3+PE	24	4 x 0.34	2	6606814	VAS04-K81E-2-WSC5T/TEL
3+PE	24	4 x 0.34	5	6606815	VAS04-K81E-5-WSC5T/TEL

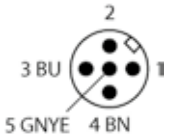
PUR cable, black

- Design according to DIN EN 175301-803
- Qualified for drag chain use and resistant to welding sparks
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS
- Flame-retardant

Valve connector
(VBS02)



M12 × 1 male connector (5.31T)



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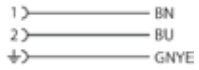

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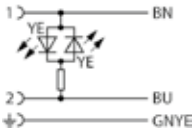

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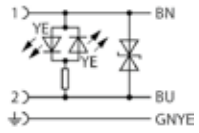

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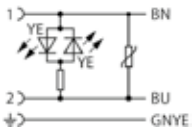


Valve connector	
Grip	Plastic, TPU, Black/Translucent
Contacts	Metal, CuSn, Silver-plated
Contact carriers	Plastic, PA, Black
Seal	Plastic, TPU
Protection class	IP67, IP69K (mounted)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
M12 x 1 connector	
Grip	Plastic, TPU, Black
Locking	Brass, CuZn, Nickel-plated
Contacts	Metal, CuZn, Gold-plated
Contact carriers	Plastic, TPU, Black
Protection class	IP67, IP69K (Only when screwed tight)
Mechanical lifespan	> 100 mating cycles
Pollution degree	3
General data	
Cable quality	PUR (Black)
Core insulation	PP
Electrical properties at +20 °C	
Current load	4 A
Insulation resistance	≥ 10^8 Ω
Test voltage	2000 V
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm²
Max. tensile strength (dynamic)	≤ 20 N/mm²
Bending cycles	> 5 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s²
Admissible travel path, horizontal	5 m (at 5 m/s²)
Admissible travel path, vertical	2 m (at 5 m/s²)
Admissible traversing speed	3.3 m/s
Torsional stress	± 180 °/m
Ambient temperature	
Stationary usage	-50…+80 °C
Non-stationary usage	-30…+90 °C
Drag chain operation	-25…+60 °C

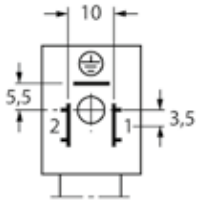


Number of pins	Rated voltage [V]	Core cross-section[mm²]	Cable length [m]	ID number	Type
2+PE	230	3 x 0.75	2	6606816	VBS02-A80E-2/TXL
2+PE	230	3 x 0.75	5	6606817	VBS02-A80E-5/TXL
2+PE	230	3 x 0.75	10	6606818	VBS02-A80E-10/TXL
2+PE	24	3 x 0.75	2	6606822	VBS02-L80E-2/TXL
2+PE	24	3 x 0.75	5	6606823	VBS02-L80E-5/TXL
2+PE	24	3 x 0.75	10	6606824	VBS02-L80E-10/TXL
2+PE	24	3 x 0.75	2	6606512	VBS02-S80E-2/TXL
2+PE	24	3 x 0.75	5	6606513	VBS02-S80E-5/TXL
2+PE	24	3 x 0.75	10	6606514	VBS02-S80E-10/TXL
2+PE	230	3 x 0.75	2	6606819	VBS02-E80E-2/TXL
2+PE	230	3 x 0.75	5	6606820	VBS02-E80E-5/TXL
2+PE	230	3 x 0.75	10	6606821	VBS02-E80E-10/TXL
2+PE	24	3 x 0.34	0.3	6606515	VBS02-S80E-0.3-RSC5.31T/TXL
2+PE	24	3 x 0.34	0.6	6606516	VBS02-S80E-0.6-RSC5.31T/TXL
2+PE	24	3 x 0.34	1	6606517	VBS02-S80E-1-RSC5.31T/TXL
2+PE	24	3 x 0.34	2	6606518	VBS02-S80E-2-RSC5.31T/TXL
2+PE	24	3 x 0.34	5	6606519	VBS02-S80E-5-RSC5.31T/TXL
2+PE	24	3 x 0.34	0.3	6606574	VBS02-S80E-0.3-WSC5.31T/TXL
2+PE	24	3 x 0.34	0.6	6606575	VBS02-S80E-0.6-WSC5.31T/TXL
2+PE	24	3 x 0.34	1	6606576	VBS02-S80E-1-WSC5.31T/TXL
2+PE	24	3 x 0.34	1.5	6606577	VBS02-S80E-1.5-WSC5.31T/TXL
2+PE	24	3 x 0.34	2	6606578	VBS02-S80E-2-WSC5.31T/TXL
2+PE	24	3 x 0.34	5	6606579	VBS02-S80E-5-WSC5.31T/TXL

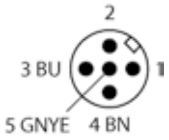
PVC Cable, black

- Design according to DIN EN 175301-803
- Resistant to acids and alkaline solutions
- Resistant to chemicals and oils
- LABS free
- Flame-retardant

Valve connector
(VBS02)



M12 × 1 male connector (5.31T)



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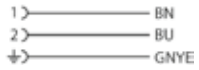

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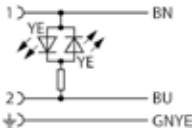

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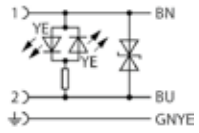

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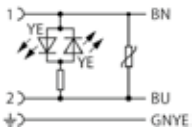


Valve connector	
Grip	Plastic, TPU, Black/Translucent
Contacts	Metal, CuSn, Silver-plated
Contact carriers	Plastic, PA, Black
Seal	Plastic, TPU
Protection class	IP67, IP69K (mounted)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
M12 x 1 connector	
Grip	Plastic, TPU, Black
Locking	Brass, CuZn, Nickel-plated
Contacts	Metal, CuZn, Gold-plated
Contact carriers	Plastic, TPU, Black
Protection class	IP67, IP69K (Only when screwed tight)
Mechanical lifespan	> 100 mating cycles
Pollution degree	3
General data	
Cable quality	PVC (Black)
Core insulation	PVC
Electrical properties at +20 °C	
Current load	4 A
Insulation resistance	≥ 10^8 Ω
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-40…+105 °C
Non-stationary usage	0…+80 °C

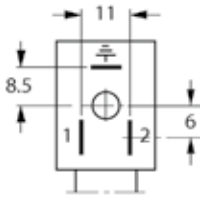


Number of pins	Rated voltage [V]	Core cross-section[mm²]	Cable length [m]	ID number	Type
2+PE	230	3 x 0.75	2	6606831	VBS02-A80E-2/TEL
2+PE	230	3 x 0.75	5	6606832	VBS02-A80E-5/TEL
2+PE	230	3 x 0.75	10	6606833	VBS02-A80E-10/TEL
2+PE	24	3 x 0.75	2	6606837	VBS02-L80E-2/TEL
2+PE	24	3 x 0.75	5	6606838	VBS02-L80E-5/TEL
2+PE	24	3 x 0.75	10	6606839	VBS02-L80E-10/TEL
2+PE	24	3 x 0.75	2	6606727	VBS02-S80E-2/TEL
2+PE	24	3 x 0.75	5	6606728	VBS02-S80E-5/TEL
2+PE	24	3 x 0.75	10	6606729	VBS02-S80E-10/TEL
2+PE	230	3 x 0.75	2	6606834	VBS02-E80E-2/TEL
2+PE	230	3 x 0.75	5	6606835	VBS02-E80E-5/TEL
2+PE	230	3 x 0.75	10	6606836	VBS02-E80E-10/TEL
2+PE	24	3 x 0.34	0.3	6606730	VBS02-S80E-0.3-RSC5.31T/TEL
2+PE	24	3 x 0.34	0.6	6606731	VBS02-S80E-0.6-RSC5.31T/TEL
2+PE	24	3 x 0.34	1	6606732	VBS02-S80E-1-RSC5.31T/TEL
2+PE	24	3 x 0.34	1.5	6606733	VBS02-S80E-1.5-RSC5.31T/TEL
2+PE	24	3 x 0.34	2	6606734	VBS02-S80E-2-RSC5.31T/TEL
2+PE	24	3 x 0.34	5	6606735	VBS02-S80E-5-RSC5.31T/TEL
2+PE	24	3 x 0.34	0.3	6606840	VBS02-S80E-0.3-WSC5.31T/TEL
2+PE	24	3 x 0.34	0.6	6606841	VBS02-S80E-0.6-WSC5.31T/TEL
2+PE	24	3 x 0.34	1	6606842	VBS02-S80E-1-WSC5.31T/TEL
2+PE	24	3 x 0.34	1.5	6606843	VBS02-S80E-1.5-WSC5.31T/TEL
2+PE	24	3 x 0.34	2	6606844	VBS02-S80E-2-WSC5.31T/TEL
2+PE	24	3 x 0.34	5	6606845	VBS02-S80E-5-WSC5.31T/TEL

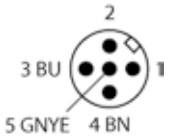
PUR cable, black

- Design according to DIN EN 175301-803
- Qualified for drag chain use and resistant to welding sparks
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS
- Flame-retardant

Valve connector
(VIS02)



M12 × 1 male connector (5.31T)



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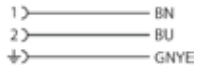

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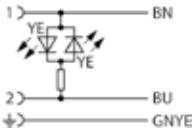

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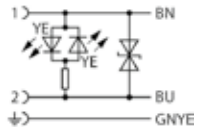


Valve connector	
Grip	Plastic, TPU, Black/Translucent
Contacts	Metal, CuSn, Silver-plated
Contact carriers	Plastic, PA, Black
Seal	Plastic, TPU
Protection class	IP67, IP69K (mounted)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
M12 x 1 connector	
Grip	Plastic, TPU, Black
Locking	Brass, CuZn, Nickel-plated
Contacts	Metal, CuZn, Gold-plated
Contact carriers	Plastic, TPU, Black
Protection class	IP67, IP69K (Only when screwed tight)
Mechanical lifespan	> 100 mating cycles
Pollution degree	3
General data	
Cable quality	PUR (Black)
Core insulation	PP
Electrical properties at +20 °C	
Current load	4 A
Insulation resistance	≥ 10^8 Ω
Test voltage	2000 V
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm²
Max. tensile strength (dynamic)	≤ 20 N/mm²
Bending cycles	> 5 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s²
Admissible travel path, horizontal	5 m (at 5 m/s²)
Admissible travel path, vertical	2 m (at 5 m/s²)
Admissible traversing speed	3.3 m/s
Torsional stress	± 180 °/m
Ambient temperature	
Stationary usage	-50…+80 °C
Non-stationary usage	-30…+90 °C
Drag chain operation	-25…+60 °C

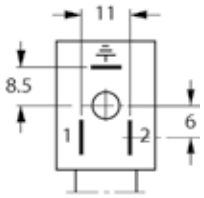


Number of pins	Rated voltage [V]	Core cross-section[mm²]	Cable length [m]	ID number	Type
2+PE	230	3 x 0.75	2	6606846	VIS02-A80E-2/TXL
2+PE	230	3 x 0.75	5	6606847	VIS02-A80E-5/TXL
2+PE	230	3 x 0.75	10	6606848	VIS02-A80E-10/TXL
2+PE	24	3 x 0.75	2	6606849	VIS02-L80E-2/TXL
2+PE	24	3 x 0.75	5	6606850	VIS02-L80E-5/TXL
2+PE	24	3 x 0.75	10	6606851	VIS02-L80E-10/TXL
2+PE	24	3 x 0.75	2	6606520	VIS02-S80E-2/TXL
2+PE	24	3 x 0.75	5	6606521	VIS02-S80E-5/TXL
2+PE	24	3 x 0.75	10	6606522	VIS02-S80E-10/TXL
2+PE	24	3 x 0.34	0.3	6606523	VIS02-S80E-0.3-RSC5.31T/TXL
2+PE	24	3 x 0.34	0.6	6606524	VIS02-S80E-0.6-RSC5.31T/TXL
2+PE	24	3 x 0.34	1	6606525	VIS02-S80E-1-RSC5.31T/TXL
2+PE	24	3 x 0.34	1.5	6606528	VIS02-S80E-1.5-RSC5.31T/TXL
2+PE	24	3 x 0.34	2	6606526	VIS02-S80E-2-RSC5.31T/TXL
2+PE	24	3 x 0.34	5	6606527	VIS02-S80E-5-RSC5.31T/TXL
2+PE	24	3 x 0.34	0.3	6606825	VIS02-S80E-0.3-WSC5.31T/TXL
2+PE	24	3 x 0.34	0.6	6606826	VIS02-S80E-0.6-WSC5.31T/TXL
2+PE	24	3 x 0.34	1	6606827	VIS02-S80E-1-WSC5.31T/TXL
2+PE	24	3 x 0.34	1.5	6606828	VIS02-S80E-1.5-WSC5.31T/TXL
2+PE	24	3 x 0.34	2	6606829	VIS02-S80E-2-WSC5.31T/TXL
2+PE	24	3 x 0.34	5	6606830	VIS02-S80E-5-WSC5.31T/TXL

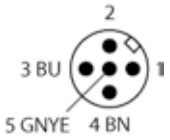
PVC Cable, black

- Design according to DIN EN 175301-803
- Resistant to acids and alkaline solutions
- Resistant to chemicals and oils
- LABS free
- Flame-retardant

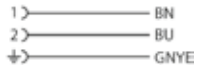
Valve connector
(VIS02)



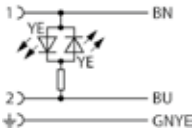
M12 × 1 male connector (5.31T)



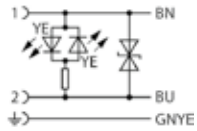
A80E



L80E



S80E



Valve connector	
Grip	Plastic, TPU, Black/Translucent
Contacts	Metal, CuSn, Silver-plated
Contact carriers	Plastic, PA, Black
Seal	Plastic, TPU
Protection class	IP67, IP69K (mounted)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
M12 x 1 connector	
Grip	Plastic, TPU, Black
Locking	Brass, CuZn, Nickel-plated
Contacts	Metal, CuZn, Gold-plated
Contact carriers	Plastic, TPU, Black
Protection class	IP67, IP69K (Only when screwed tight)
Mechanical lifespan	> 100 mating cycles
Pollution degree	3
General data	
Cable quality	PVC (Black)
Core insulation	PVC
Electrical properties at +20 °C	
Current load	4 A
Insulation resistance	≥ 10^8 Ω
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-40…+105 °C
Non-stationary usage	0…+80 °C

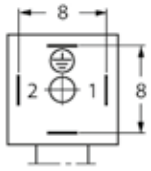


Number of pins	Rated voltage [V]	Core cross-section[mm²]	Cable length [m]	ID number	Type
2+PE	230	3 x 0.75	2	6606852	VIS02-A80E-2/TEL
2+PE	230	3 x 0.75	5	6606853	VIS02-A80E-5/TEL
2+PE	230	3 x 0.75	10	6606854	VIS02-A80E-10/TEL
2+PE	24	3 x 0.75	2	6606855	VIS02-L80E-2/TEL
2+PE	24	3 x 0.75	5	6606856	VIS02-L80E-5/TEL
2+PE	24	3 x 0.75	10	6606857	VIS02-L80E-10/TEL
2+PE	24	3 x 0.75	2	6606858	VIS02-S80E-2/TEL
2+PE	24	3 x 0.75	5	6606859	VIS02-S80E-5/TEL
2+PE	24	3 x 0.75	10	6606692	VIS02-S80E-10/TEL
2+PE	24	3 x 0.34	0.3	6606860	VIS02-S80E-0.3-RSC5.31T/TEL
2+PE	24	3 x 0.34	0.6	6606861	VIS02-S80E-0.6-RSC5.31T/TEL
2+PE	24	3 x 0.34	1	6606862	VIS02-S80E-1-RSC5.31T/TEL
2+PE	24	3 x 0.34	1.5	6606863	VIS02-S80E-1.5-RSC5.31T/TEL
2+PE	24	3 x 0.34	2	6606864	VIS02-S80E-2-RSC5.31T/TEL
2+PE	24	3 x 0.34	5	6606865	VIS02-S80E-5-RSC5.31T/TEL
2+PE	24	3 x 0.34	0.3	6606866	VIS02-S80E-0.3-WSC5.31T/TEL
2+PE	24	3 x 0.34	0.6	6606867	VIS02-S80E-0.6-WSC5.31T/TEL
2+PE	24	3 x 0.34	1	6606868	VIS02-S80E-1-WSC5.31T/TEL
2+PE	24	3 x 0.34	1.5	6606869	VIS02-S80E-1.5-WSC5.31T/TEL
2+PE	24	3 x 0.34	2	6606870	VIS02-S80E-2-WSC5.31T/TEL
2+PE	24	3 x 0.34	5	6606871	VIS02-S80E-5-WSC5.31T/TEL

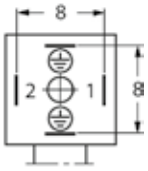
PUR cable, black

- Design according to DIN EN 175301-803
- Qualified for drag chain use and resistant to welding sparks
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS
- Flame-retardant

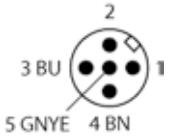
Valve connector (VC8S02)



Valve connector (VC8S22)



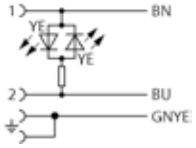
M12 × 1 male connector (5.31T)



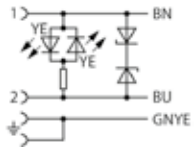
A80E



L80E



T80E



Valve connector	
Grip	Plastic, TPU, Black/Translucent
Contacts	Metal, CuSn, Silver-plated
Contact carriers	Plastic, PA, Black
Seal	Plastic, TPU
Protection class	IP67, IP69K (mounted)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
M12 x 1 connector	
Grip	Plastic, TPU, Black
Locking	Brass, CuZn, Nickel-plated
Contacts	Metal, CuZn, Gold-plated
Contact carriers	Plastic, TPU, Black
Protection class	IP67, IP69K (Only when screwed tight)
Mechanical lifespan	> 100 mating cycles
Pollution degree	3
General data	
Cable quality	PUR (Black)
Core insulation	PP
Electrical properties at +20 °C	
Current load	4 A
Insulation resistance	≥ 10^8 Ω
Test voltage	2000 V
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm²
Max. tensile strength (dynamic)	≤ 20 N/mm²
Bending cycles	> 5 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s²
Admissible travel path, horizontal	5 m (at 5 m/s²)
Admissible travel path, vertical	2 m (at 5 m/s²)
Admissible traversing speed	3.3 m/s
Torsional stress	± 180 °/m
Ambient temperature	
Stationary usage	-50…+80 °C
Non-stationary usage	-30…+90 °C
Drag chain operation	-25…+60 °C

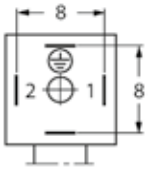


Number of pins	Rated voltage [V]	Core cross-section[mm²]	Cable length [m]	ID number	Type
2+PE	230	3 x 0.75	2	6606683	VC8S02-A80E-2/TXL
2+PE	230	3 x 0.75	5	6606651	VC8S02-A80E-5/TXL
2+PE	230	3 x 0.75	10	6606872	VC8S02-A80E-10/TXL
2+PE, PE bridged	24	3 x 0.75	2	6606873	VC8S22-L80E-2/TXL
2+PE, PE bridged	24	3 x 0.75	5	6606874	VC8S22-L80E-5/TXL
2+PE, PE bridged	24	3 x 0.75	10	6606875	VC8S22-L80E-10/TXL
2+PE, PE bridged	24	3 x 0.75	2	6606529	VC8S22-T80E-2/TXL
2+PE, PE bridged	24	3 x 0.75	5	6606530	VC8S22-T80E-5/TXL
2+PE, PE bridged	24	3 x 0.75	10	6606531	VC8S22-T80E-10/TXL
2+PE, PE bridged	24	3 x 0.34	0.3	6606532	VC8S22-T80E-0.3-RSC5.31T/TXL
2+PE, PE bridged	24	3 x 0.34	0.6	6606533	VC8S22-T80E-0.6-RSC5.31T/TXL
2+PE, PE bridged	24	3 x 0.34	1	6606534	VC8S22-T80E-1-RSC5.31T/TXL
2+PE, PE bridged	24	3 x 0.34	1.5	6606537	VC8S22-T80E-1.5-RSC5.31T/TXL
2+PE, PE bridged	24	3 x 0.34	2	6606535	VC8S22-T80E-2-RSC5.31T/TXL
2+PE, PE bridged	24	3 x 0.34	5	6606536	VC8S22-T80E-5-RSC5.31T/TXL
2+PE, PE bridged	24	3 x 0.34	0.3	6606876	VC8S22-T80E-0.3-WSC5.31T/TXL
2+PE, PE bridged	24	3 x 0.34	0.6	6606877	VC8S22-T80E-0.6-WSC5.31T/TXL
2+PE, PE bridged	24	3 x 0.34	1	6606878	VC8S22-T80E-1-WSC5.31T/TXL
2+PE, PE bridged	24	3 x 0.34	1.5	6606879	VC8S22-T80E-1.5-WSC5.31T/TXL
2+PE, PE bridged	24	3 x 0.34	2	6606880	VC8S22-T80E-2-WSC5.31T/TXL
2+PE, PE bridged	24	3 x 0.34	5	6606881	VC8S22-T80E-5-WSC5.31T/TXL

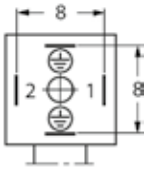
PVC Cable, black

- Design according to DIN EN 175301-803
- Resistant to acids and alkaline solutions
- Resistant to chemicals and oils
- LABS free
- Flame-retardant

Valve connector (VC8S02)



Valve connector (VC8S22)



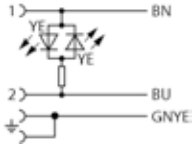
M12 × 1 male connector (5.31T)



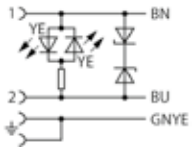
A80E



L80E



T80E



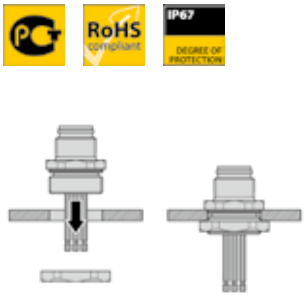
Valve connector	
Grip	Plastic, TPU, Black/Translucent
Contacts	Metal, CuSn, Silver-plated
Contact carriers	Plastic, PA, Black
Seal	Plastic, TPU
Protection class	IP67, IP69K (mounted)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
M12 x 1 connector	
Grip	Plastic, TPU, Black
Locking	Brass, CuZn, Nickel-plated
Contacts	Metal, CuZn, Gold-plated
Contact carriers	Plastic, TPU, Black
Protection class	IP67, IP69K (Only when screwed tight)
Mechanical lifespan	> 100 mating cycles
Pollution degree	3
General data	
Cable quality	PVC (Black)
Core insulation	PVC
Electrical properties at +20 °C	
Current load	4 A
Insulation resistance	≥ 10^8 Ω
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-40…+105 °C
Non-stationary usage	0…+80 °C



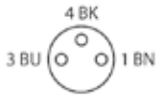
Number of pins	Rated voltage [V]	Core cross-section[mm²]	Cable length [m]	ID number	Type
2+PE	230	3 x 0.75	2	6606882	VC8S02-A80E-2/TEL
2+PE	230	3 x 0.75	5	6606883	VC8S02-A80E-5/TEL
2+PE	230	3 x 0.75	10	6606884	VC8S02-A80E-10/TEL
2+PE, PE bridged	24	3 x 0.75	2	6606885	VC8S22-L80E-2/TEL
2+PE, PE bridged	24	3 x 0.75	5	6606886	VC8S22-L80E-5/TEL
2+PE, PE bridged	24	3 x 0.75	10	6606887	VC8S22-L80E-10/TEL
2+PE, PE bridged	24	3 x 0.75	2	6606888	VC8S22-T80E-2/TEL
2+PE, PE bridged	24	3 x 0.75	5	6606889	VC8S22-T80E-5/TEL
2+PE, PE bridged	24	3 x 0.75	10	6606890	VC8S22-T80E-10/TEL
2+PE, PE bridged	24	3 x 0.34	0.3	6606891	VC8S22-T80E-0.3-RSC5.31T/TEL
2+PE, PE bridged	24	3 x 0.34	0.6	6606892	VC8S22-T80E-0.6-RSC5.31T/TEL
2+PE, PE bridged	24	3 x 0.34	1	6606893	VC8S22-T80E-1-RSC5.31T/TEL
2+PE, PE bridged	24	3 x 0.34	1.5	6606894	VC8S22-T80E-1.5-RSC5.31T/TEL
2+PE, PE bridged	24	3 x 0.34	2	6606895	VC8S22-T80E-2-RSC5.31T/TEL
2+PE, PE bridged	24	3 x 0.34	5	6606896	VC8S22-T80E-5-RSC5.31T/TEL
2+PE, PE bridged	24	3 x 0.34	0.3	6606897	VC8S22-T80E-0.3-WSC5.31T/TEL
2+PE, PE bridged	24	3 x 0.34	0.6	6606898	VC8S22-T80E-0.6-WSC5.31T/TEL
2+PE, PE bridged	24	3 x 0.34	1	6606899	VC8S22-T80E-1-WSC5.31T/TEL
2+PE, PE bridged	24	3 x 0.34	1.5	6606900	VC8S22-T80E-1.5-WSC5.31T/TEL
2+PE, PE bridged	24	3 x 0.34	2	6606901	VC8S22-T80E-2-WSC5.31T/TEL
2+PE, PE bridged	24	3 x 0.34	5	6606902	VC8S22-T80E-5-WSC5.31T/TEL

Receptacles for Front-Panel Mounting — M8 × 1

Contacts	Metal, CuZn, Gold-plated
Seal	Plastic, FPM/FKM
Screw-in thread seal	Plastic, NBR
Protection class	IP67
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Insulation resistance	≥ 10^8 Ω
Contact resistance	≤ 5 mΩ
Ambient temperature	
Stationary usage	-30…+90 °C



3-pin



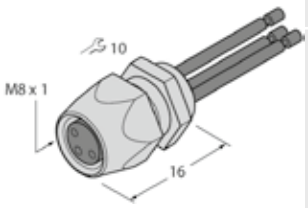
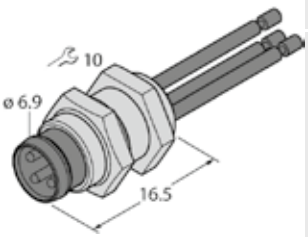


4-pin





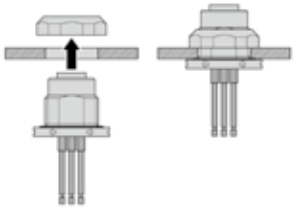
Types and Features — Selection Table

	Design (connector)	Receptacle housing	Number of pins	Connection mode	Rated voltage [V]	Current load [A]	Contact carriers	Cable length [m]	ID number	Type
	Female	Brass	3	L	60	4	PA, Black	0.2	6934785	PFKS3-0.2
	Female	Brass	4	L	30	4	PA, Black	0.2	6934786	PFKS4-0.2
	Male	Brass	3	L	60	4	PA, Black	0.2	6934787	PFS3-0.2
	Male	Brass	4	L	30	4	PA, Black	0.2	6934788	PFS4-0.2

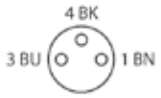
1) L: Stranded wire contact, LK: Solder contact, P: Print contact

Receptacles for Rear-Panel Mounting — M8 × 1

Contacts	Metal, CuZn, Gold-plated
Seal	Plastic, FPM/FKM
Screw-in thread seal	Plastic, NBR
Protection class	IP67
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Insulation resistance	≥ 10^8 Ω
Contact resistance	≤ 5 mΩ
Ambient temperature	
Stationary usage	-30…+90 °C



3-pin





4-pin





Types and Features — Selection Table

	Design (connector)	Receptacle housing	Number of pins	Connection mode	Rated voltage [V]	Current load [A]	Contact carriers	Cable length [m]	ID number	Type
	Male	Brass	3	L	60	4	PA, Transparent	0.2	6934789	PFS3F-0.2
	Male	Brass	4	L	30	4	PA, Transparent	0.2	6934790	PFS4F-0.2

1) L: Stranded wire contact, LK: Solder contact, P: Print contact

Insert Connectors – M8 × 1/Ø 8 mm

Contacts	Metal, CuZn, Gold-plated
Protection class	IP67
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3/2
Insulation resistance	≥ 10^9 Ω
Ambient temperature	
Stationary usage	-30…+90 °C

3-pin



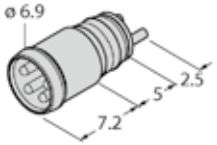
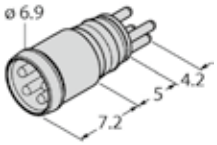
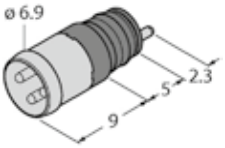
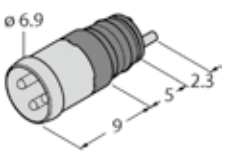


4-pin

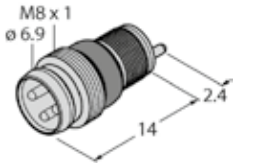
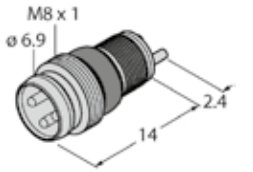
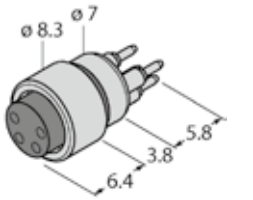
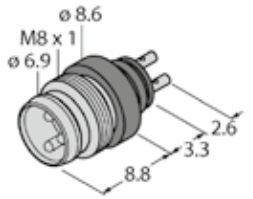




Types and Features — Selection Table

	Design (connector)	Receptacle housing	Number of pins	Connection mode	Rated voltage [V]	Current load [A]	Contact carriers	ID number	Type
	Male	Plastic	3	LK	60	4	PA, Black	6934770	ESP3SL
	Male	Plastic	4	LK	30	4	PA, Black	6934771	ESP4SL
	Male	Plastic	4	P	30	4	PA, Black	6934772	ESP4SP
	Male	Brass	3	P	60	4	PA, Transparent	6934773	ESHP3P
	Male	Brass	4	P	30	4	PA, Transparent	6934774	ESHP4P
	Male	Brass	3	LK	60	4	PA, Transparent	6934775	ESHP3L
	Male	Brass	4	LK	30	4	PA, Transparent	6934776	ESHP4L

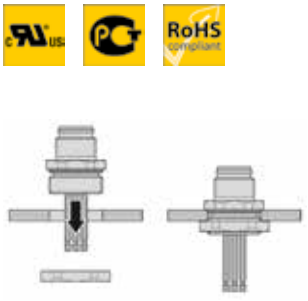
Types and Features — Selection Table

	Design (connector)	Receptacle housing	Number of pins	Connection mode	Rated voltage [V]	Current load [A]	Contact carriers	ID number	Type
	Male	Brass	3	P	60	4	PA, Transparent	6934777	ESGP3P
	Male	Brass	4	P	30	4	PA, Transparent	6934778	ESGP4P
	Male	Brass	3	LK	60	4	PA, Transparent	6934779	ESGP3L
	Male	Brass	4	LK	30	4	PA, Transparent	6934780	ESGP4L
	Female	Plastic	3	P	60	4	PA, Black	6934781	EKP3SP
	Female	Plastic	4	P	30	4	PA, Black	6934782	EKP4SP
	Male	Plastic	3	LK	60	4	PA, Black	6934783	SESP3SL
	Male	Plastic	4	LK	30	4	PA, Black	6934784	SESP4SL

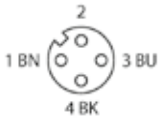
1) L: Stranded wire contact, LK: Solder contact, P: Print contact

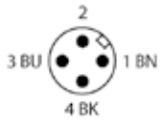
M12 × 1 Receptacles for Front-Panel Mounting

Contacts	Brass, CuZn, Gold-plated
Seal	Plastic, FPM/FKM
Screw-in thread seal	Plastic, NBR
Protection class	IP67
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Insulation resistance	≥ 10^8 Ω
Contact resistance	≤ 5 mΩ
Ambient temperature	
Stationary usage	-30…+90 °C

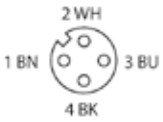


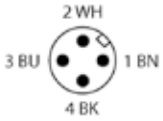
3-pin



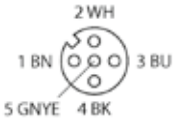


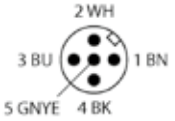
4-pin



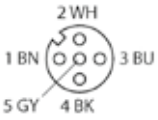


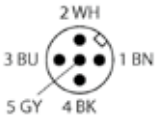
4-pin + PE



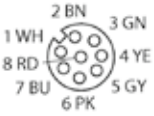


5-pin





8-pin





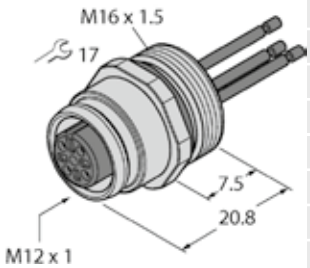
12-pin





Types and Features — Selection Table

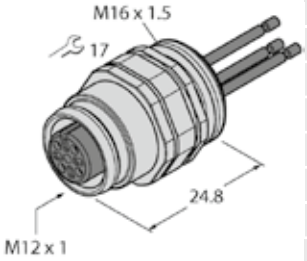
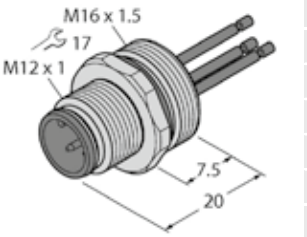
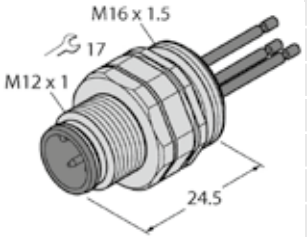
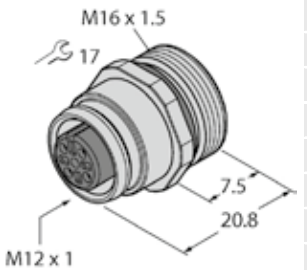




Design (connector)	Receptacle housing	Number of pins	Connection mode	Rated voltage [V]	Current load [A]	Contact carriers	Cable length [m]	ID number	Type
Female	Brass	3	L	250	4	TPU, Black	0.5	6934594	EC-FK3-0.5/16
Female	Stainless steel	3	L	250	4	TPU, Black	0.5	6934595	EC-FKE3-0.5/16
Female	Brass	4	L	250	4	TPU, Black	0.5	6934596	EC-FK4-0.5/16
Female	Stainless steel	4	L	250	4	TPU, Black	0.5	6934597	EC-FKE4-0.5/16
Female	Brass	4+PE	L	60	4	TPU, Black	0.5	6934598	EC-FK5-0.5/16
Female	Stainless steel	4+PE	L	60	4	TPU, Black	0.5	6934599	EC-FKE5-0.5/16
Female	Brass	5	L	60	4	TPU, Black	0.5	6934600	EC-FK4.5-0.5/16
Female	Stainless steel	5	L	60	4	TPU, Black	0.5	6934601	EC-FKE4.5-0.5/16
Female	Brass	8	L	30	2	TPU, Black	0.5	6934602	EC-FK8-0.5/16
Female	Stainless steel	8	L	30	2	TPU, Black	0.5	6934603	EC-FKE8-0.5/16
Female	Brass	12	L	30	1.5	TPU, Black	0.5	6934164	EC-FK12-0.5/16
Female	Stainless steel	12	L	30	1.5	TPU, Black	0.5	6934604	EC-FKE12-0.5/16

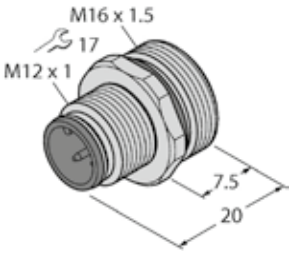
Types and Features — Selection Table



Design (connector)	Receptacle housing	Number of pins	Connection mode	Rated voltage [V]	Current load [A]	Contact carriers	Cable length [m]	ID number	Type
	Female	Brass	3	L	250	4	TPU, Black	0.5	6934605	EC-FKD3-0.5/16
	Female	Brass	4	L	250	4	TPU, Black	0.5	6934606	EC-FKD4-0.5/16
	Female	Stainless steel	4	L	250	4	TPU, Black	0.5	6934607	EC-FKDE4-0.5/16
	Female	Brass	4+PE	L	60	4	TPU, Black	0.5	6934608	EC-FKD5-0.5/16
	Female	Brass	5	L	60	4	TPU, Black	0.5	6934165	EC-FKD4.5-0.5/16
	Female	Stainless steel	5	L	60	4	TPU, Black	0.5	6934609	EC-FKDE4.5-0.5/16
	Female	Brass	8	L	30	2	TPU, Black	0.5	6934610	EC-FKD8-0.5/16
	Female	Brass	12	L	30	1.5	TPU, Black	0.5	6934611	EC-FKD12-0.5/16
	Male	Brass	3	L	250	4	PA GF, Black	0.5	6934612	EC-FS3-0.5/16
	Male	Stainless steel	3	L	250	4	PA GF, Black	0.5	6934613	EC-FSE3-0.5/16
	Male	Brass	4	L	250	4	PA GF, Black	0.5	6934166	EC-FS4-0.5/16
	Male	Stainless steel	4	L	250	4	PA GF, Black	0.5	6934614	EC-FSE4-0.5/16
	Male	Brass	4+PE	L	60	4	PA GF, Black	0.5	6934615	EC-FS5-0.5/16
	Male	Stainless steel	4+PE	L	60	4	PA GF, Black	0.5	6934616	EC-FSE5-0.5/16
	Male	Brass	5	L	60	4	PA GF, Black	0.5	6934617	EC-FS4.5-0.5/16
	Male	Stainless steel	5	L	60	4	PA GF, Black	0.5	6934618	EC-FSE4.5-0.5/16
	Male	Brass	8	L	30	2	PA GF, Black	0.5	6934169	EC-FS8-0.5/16
	Male	Stainless steel	8	L	30	2	PA GF, Black	0.5	6934619	EC-FSE8-0.5/16
	Male	Brass	12	L	30	1.5	PA GF, Black	0.5	6934167	EC-FS12-0.5/16
	Male	Stainless steel	12	L	30	1.5	PA GF, Black	0.5	6934620	EC-FSE12-0.5/16
	Male	Brass	3	L	250	4	PA GF, Black	0.5	6934621	EC-FSD3-0.5/16
	Male	Stainless steel	3	L	250	4	PA GF, Black	0.5	6934622	EC-FSDE3-0.5/16
	Male	Brass	4	L	250	4	PA GF, Black	0.5	6934623	EC-FSD4-0.5/16
	Male	Stainless steel	4	L	250	4	PA GF, Black	0.5	6934624	EC-FSDE4-0.5/16
	Male	Brass	4+PE	L	60	4	PA GF, Black	0.5	6934625	EC-FSD5-0.5/16
	Male	Brass	5	L	60	4	PA GF, Black	0.5	6934168	EC-FSD4.5-0.5/16
	Male	Brass	8	L	30	2	PA GF, Black	0.5	6934626	EC-FSD8-0.5/16
	Male	Brass	12	L	30	1.5	PA GF, Black	0.5	6934627	EC-FSD12-0.5/16
	Male	Stainless steel	12	L	30	1.5	PA GF, Black	0.5	6934628	EC-FSDE12-0.5/16
	Female	Brass	3	LK	250	4	TPU, Black		6934072	EC-FK3-L/16
	Female	Stainless steel	3	LK	250	4	TPU, Black		6934629	EC-FKE3-L/16
	Female	Brass	4	LK	250	4	TPU, Black		6934495	EC-FK4-L/16
	Female	Stainless steel	4	LK	250	4	TPU, Black		6934630	EC-FKE4-L/16
	Female	Brass	4+PE	LK	60	4	TPU, Black		6629540	EC-FK5-L/16
	Female	Stainless steel	4+PE	LK	60	4	TPU, Black		6934631	EC-FKE5-L/16
	Female	Brass	8	LK	30	2	TPU, Black		6934632	EC-FK8-L/16
	Female	Stainless steel	8	LK	30	2	TPU, Black		6934633	EC-FKE8-L/16
	Female	Brass	12	LK	30	1.5	TPU, Black		6934634	EC-FK12-L/16
	Female	Stainless steel	12	LK	30	1.5	TPU, Black		6934155	EC-FKE12-L/16

Types and Features — Selection Table

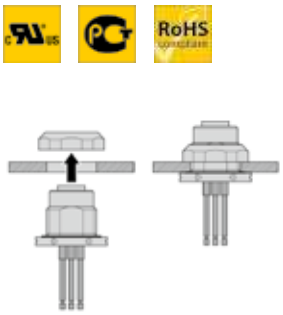


Design (connector)	Receptacle housing	Number of pins	Connection mode	Rated voltage [V]	Current load [A]	Contact carriers	Cable length [m]	ID number	Type
	Male	Brass	3	LK	250	4	PA GF, Black		6934635	EC-FS3-L/16
	Male	Stainless steel	3	LK	250	4	PA GF, Black		6934636	EC-FSE3-L/16
	Male	Brass	4	LK	250	4	PA GF, Black		6934239	EC-FS4-L/16
	Male	Stainless steel	4	LK	250	4	PA GF, Black		6934066	EC-FSE4-L/16
	Male	Brass	4+PE	LK	60	4	PA GF, Black		6934637	EC-FS5-L/16
	Male	Stainless steel	4+PE	LK	60	4	PA GF, Black		6934638	EC-FSE5-L/16
	Male	Brass	5	LK	60	4	PA GF, Black		6934639	EC-FS4.5-L/16
	Male	Stainless steel	5	LK	60	4	PA GF, Black		6934640	EC-FSE4.5-L/16
	Male	Brass	8	LK	30	2	PA GF, Black		6934641	EC-FS8-L/16
	Male	Stainless steel	8	LK	30	2	PA GF, Black		6934642	EC-FSE8-L/16
	Male	Brass	12	LK	30	1.5	PA GF, Black		6934643	EC-FS12-L/16
	Male	Stainless steel	12	LK	30	1.5	PA GF, Black		6934644	EC-FSE12-L/16

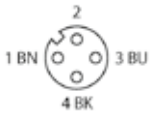
1) L: Stranded wire contact, LK: Solder contact, P: Print contact

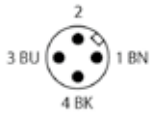
Receptacles for Rear-Panel Mounting — M12 × 1

Contacts	Brass, CuZn, Gold-plated
Seal	Plastic, FPM/FKM
Screw-in thread seal	Plastic, NBR
Protection class	IP67
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Insulation resistance	≥ 10^8 Ω
Contact resistance	≤ 5 mΩ
Ambient temperature	
Stationary usage	-30…+90 °C

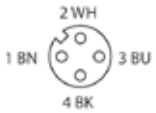


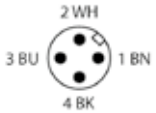
3-pin



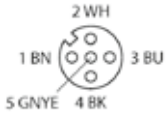


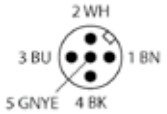
4-pin



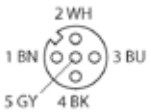


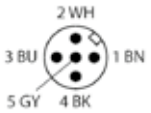
4-pin + PE



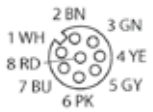


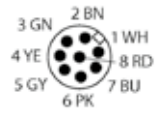
5-pin





8-pin





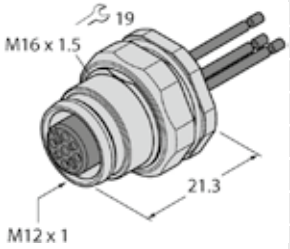
12-pin





Types and Features — Selection Table

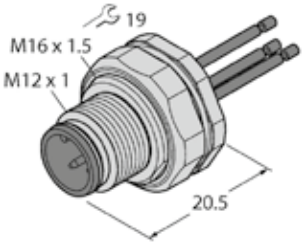
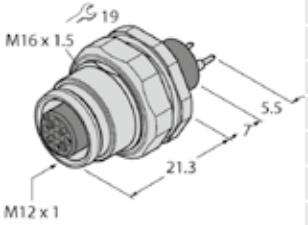
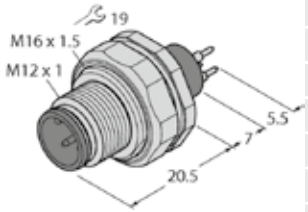




Design (connector)	Receptacle housing	Number of pins	Connection mode	Rated voltage [V]	Current load [A]	Contact carriers	Cable length [m]	ID number	Type
Female	Brass	3	L	250	4	TPU, Black	0.5	6934550	EC-FKFD3-0.5/16
Female	Stainless steel	3	L	250	4	TPU, Black	0.5	6934551	EC-FKFDE3-0.5/16
Female	Brass	4	L	250	4	TPU, Black	0.5	6934552	EC-FKFD4-0.5/16
Female	Stainless steel	4	L	250	4	TPU, Black	0.5	6934553	EC-FKFDE4-0.5/16
Female	Brass	4+PE	L	60	4	TPU, Black	0.5	6934554	EC-FKFD5-0.5/16
Female	Stainless steel	4+PE	L	60	4	TPU, Black	0.5	6934555	EC-FKFDE5-0.5/16
Female	Brass	5	L	60	4	TPU, Black	0.5	6934556	EC-FKFD4.5-0.5/16
Female	Stainless steel	5	L	60	4	TPU, Black	0.5	6934557	EC-FKFDE4.5-0.5/16
Female	Brass	8	L	30	2	TPU, Black	0.5	6934558	EC-FKFD8-0.5/16
Female	Stainless steel	8	L	30	2	TPU, Black	0.5	6934559	EC-FKFDE8-0.5/16
Female	Brass	12	L	30	1.5	TPU, Black	0.5	6934560	EC-FKFD12-0.5/16
Female	Stainless steel	12	L	30	1.5	TPU, Black	0.5	6934561	EC-FKFDE12-0.5/16

Types and Features — Selection Table



Design (connector)	Receptacle housing	Number of pins	Connection mode	Rated voltage [V]	Current load [A]	Contact carriers	Cable length [m]	ID number	Type
									
Male	Brass	3	L	250	4	PA GF, Black	0.5	6934562	EC-FSFD3-0.5/16
Male	Stainless steel	3	L	250	4	PA GF, Black	0.5	6934563	EC-FSFDE3-0.5/16
Male	Brass	4	L	250	4	PA GF, Black	0.5	6934564	EC-FSFD4-0.5/16
Male	Stainless steel	4	L	250	4	PA GF, Black	0.5	6934565	EC-FSFDE4-0.5/16
Male	Brass	4+PE	L	60	4	PA GF, Black	0.5	6934566	EC-FSFD5-0.5/16
Male	Stainless steel	4+PE	L	60	4	PA GF, Black	0.5	6934567	EC-FSFDE5-0.5/16
Male	Brass	5	L	60	4	PA GF, Black	0.5	6934568	EC-FSFD4.5-0.5/16
Male	Stainless steel	5	L	60	4	PA GF, Black	0.5	6934569	EC-FSFDE4.5-0.5/16
Male	Brass	8	L	30	2	PA GF, Black	0.5	6934570	EC-FSFD8-0.5/16
Male	Stainless steel	8	L	30	2	PA GF, Black	0.5	6934571	EC-FSFDE8-0.5/16
Male	Brass	12	L	30	1.5	PA GF, Black	0.5	6934572	EC-FSFD12-0.5/16
Male	Stainless steel	12	L	30	1.5	PA GF, Black	0.5	6934573	EC-FSFDE12-0.5/16
									
Female	Brass	3	P	250	4	TPU, Black		6934574	EC-FKFD3-P/16
Female	Stainless steel	3	P	250	4	TPU, Black		6934575	EC-FKFDE3-P/16
Female	Brass	4	P	250	4	TPU, Black		6934576	EC-FKFD4-P/16
Female	Stainless steel	4	P	250	4	TPU, Black		6934577	EC-FKFDE4-P/16
Female	Brass	4+PE	P	60	4	TPU, Black		6934507	EC-FKFD5-P/16
Female	Stainless steel	4+PE	P	60	4	TPU, Black		6934578	EC-FKFDE5-P/16
Female	Brass	8	P	30	2	TPU, Black		6934579	EC-FKFD8-P/16
Female	Stainless steel	8	P	30	2	TPU, Black		6934580	EC-FKFDE8-P/16
Female	Brass	12	P	30	1.5	TPU, Black		6934581	EC-FKFD12-P/16
Female	Stainless steel	12	P	30	1.5	TPU, Black		6934079	EC-FKFDE12-P/16
									
Male	Brass	3	P	250	4	PA GF, Black		6934582	EC-FSFD3-P/16
Male	Stainless steel	3	P	250	4	PA GF, Black		6934583	EC-FSFDE3-P/16
Male	Brass	4	P	250	4	PA GF, Black		6934584	EC-FSFD4-P/16
Male	Stainless steel	4	P	250	4	PA GF, Black		6934585	EC-FSFDE4-P/16
Male	Brass	4+PE	P	60	4	PA GF, Black		6934586	EC-FSFD5-P/16
Male	Stainless steel	4+PE	P	60	4	PA GF, Black		6934587	EC-FSFDE5-P/16
Male	Brass	5	P	60	4	PA GF, Black		6934588	EC-FSFD4.5-P/16
Male	Brass	8	P	30	2	PA GF, Black		6934590	EC-FSFD8-P/16
Male	Stainless steel	8	P	30	2	PA GF, Black		6934591	EC-FSFDE8-P/16
Male	Brass	12	P	30	1.5	PA GF, Black		6934592	EC-FSFD12-P/16
Male	Stainless steel	12	P	30	1.5	PA GF, Black		6934593	EC-FSFDE12-P/16

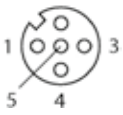
1) L: Stranded wire contact, LK: Solder contact, P: Print contact

M23 Connector for Supply Cable

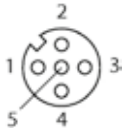


- Housing material: Nylon (PA 6 GF)
- Housing color: black
- RoHS-compliant
- cULus listed
- Protection class IP67

3-polig + PE



4-polig + PE



11-polig + PE



18-polig + PE



Junction box	
Housing	Plastic, PA, Black
I/O Ports	
I/O port	Female connector, M12 x 1
Thread insert	metal, CuZn, nickel-plated
Contact carriers	PA, Black
Contacts	Brass, CuZn, Gold-plated
Seal	Plastic, FPM/FKM
Mechanical Lifespan	> 100 mating cycles
Connector receptacle	
Design	Male receptacle
Contacts	Metal, CuZn, Gold-plated
Seal	plastic, NBR
Technical properties	
Rated voltage	30 V
Ampacity	2 A per signal contact, total current 9 A
Contact resistance	≤ 5 mΩ
Insulation resistance	≥ 10^8 Ω
Ambient temperature	
Stationary usage	-40…+85 °C

Diagram 1

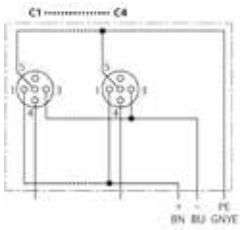


Diagram 2

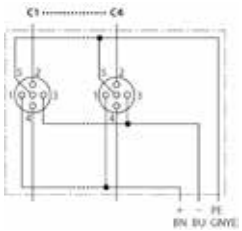


Diagram 3

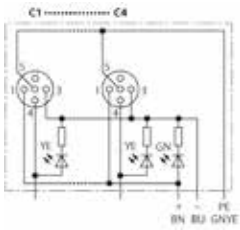
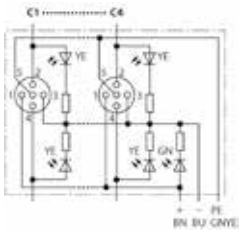
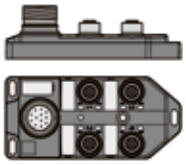
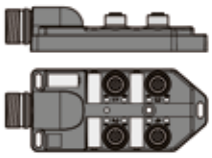
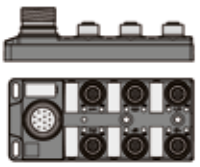
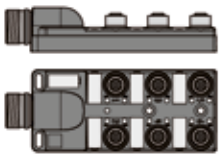
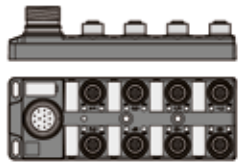
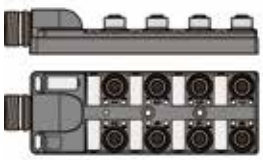


Diagram 4



Types and Features — Selection Table

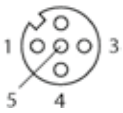
Design	Number of pins	Number of pins	Display switching status	Graph	ID number	Type
	3+PE	12		Diagram 1	6611900	TB-4M12-4-CS12T
	4+PE	19		Diagram 2	6611901	TB-4M12-5-CS19T
	3+PE	12	LED, YE	Diagram 3	6611902	TB-4M12-4P2-CS12T
	4+PE	19	LED, YE	Diagram 4	6611903	TB-4M12-5P3-CS19T
	3+PE	12		Diagram 1	6611956	TB-4M12-4-CS12H
	4+PE	19		Diagram 2	6611957	TB-4M12-5-CS19H
	3+PE	12	LED, YE	Diagram 3	6611958	TB-4M12-4P2-CS12H
	4+PE	19	LED, YE	Diagram 4	6611959	TB-4M12-5P3-CS19H
	3+PE	12		Diagram 1	6611920	TB-6M12-4-CS12T
	4+PE	19		Diagram 2	6611921	TB-6M12-5-CS19T
	3+PE	12	LED, YE	Diagram 3	6611922	TB-6M12-4P2-CS12T
	4+PE	19	LED, YE	Diagram 4	6611923	TB-6M12-5P3-CS19T
	3+PE	12		Diagram 1	6611960	TB-6M12-4-CS12H
	4+PE	19		Diagram 2	6611961	TB-6M12-5-CS19H
	3+PE	12	LED, YE	Diagram 3	6611962	TB-6M12-4P2-CS12H
	4+PE	19	LED, YE	Diagram 4	6611963	TB-6M12-5P3-CS19H
	3+PE	12		Diagram 1	6611940	TB-8M12-4-CS12T
	4+PE	19		Diagram 2	6611941	TB-8M12-5-CS19T
	3+PE	12	LED, YE	Diagram 3	6611942	TB-8M12-4P2-CS12T
	4+PE	19	LED, YE	Diagram 4	6611943	TB-8M12-5P3-CS19T
	3+PE	12		Diagram 1	6611964	TB-8M12-4-CS12H
	4+PE	19		Diagram 2	6611965	TB-8M12-5-CS19H
	3+PE	12	LED, YE	Diagram 3	6611966	TB-8M12-4P2-CS12H
	4+PE	19	LED, YE	Diagram 4	6611967	TB-8M12-5P3-CS19H

Homerun cable for supply cable

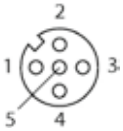


- Housing material: Nylon (PA 6 GF)
- Housing color: black
- Qualified for drag chain use
- RoHS-compliant
- cULus listed
- Protection class IP67

3-polig + PE



4-polig + PE



Junction box	
Housing	Plastic, PA, Black
I/O Ports	
I/O port	Female connector, M12 x 1
Thread insert	metal, CuZn, nickel-plated
Contact carriers	PA, Black
Contacts	Brass, CuZn, Gold-plated
Seal	Plastic, FPM/FKM
Mechanical Lifespan	> 100 mating cycles
Cable	
Cable quality	PUR (Black)
Core insulation	PVC
Technical properties	
Rated voltage	30 V
Contact resistance	≤ 5 mΩ
Insulation resistance	≥ 10^8 Ω
Ambient temperature	
Stationary usage	-40…+85 °C

Diagram 1

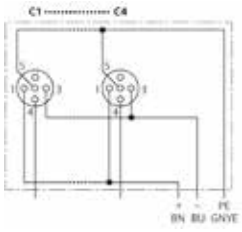


Diagram 2

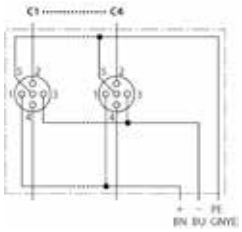


Diagram 3

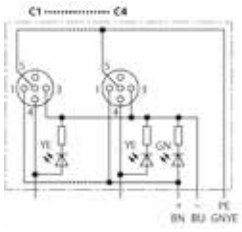
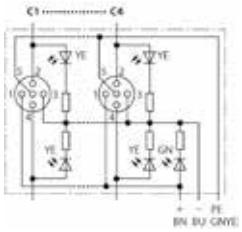
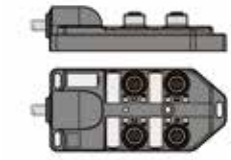
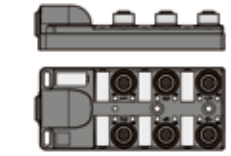
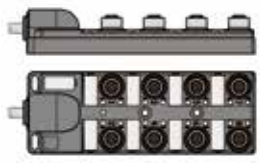


Diagram 4



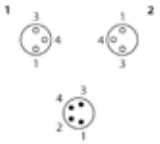
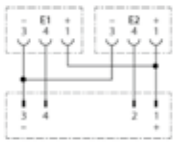
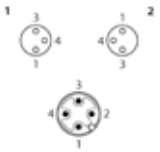
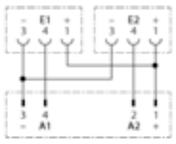
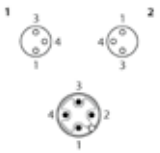
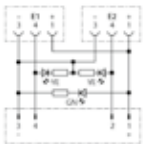
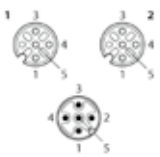
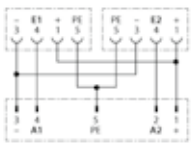
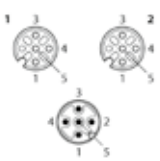
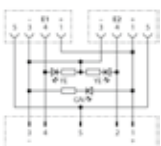
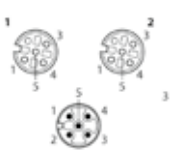
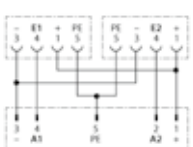
Types and Features — Selection Table

Design	Number of pins	Display switching status	Graph	Cable length [m]	ID number	Type
	3+PE		Diagram 1	2	6611904	TB-4M12-4-2/TXL
	3+PE		Diagram 1	5	6611905	TB-4M12-4-5/TXL
	3+PE		Diagram 1	10	6611906	TB-4M12-4-10/TXL
	4+PE		Diagram 2	2	6611907	TB-4M12-5-2/TXL
	4+PE		Diagram 2	5	6611908	TB-4M12-5-5/TXL
	4+PE		Diagram 2	10	6611909	TB-4M12-5-10/TXL
	3+PE	LED, YE	Diagram 3	2	6611910	TB-4M12-4P2-2/TXL
	3+PE	LED, YE	Diagram 3	5	6611911	TB-4M12-4P2-5/TXL
	3+PE	LED, YE	Diagram 3	10	6611912	TB-4M12-4P2-10/TXL
	4+PE	LED, YE	Diagram 4	2	6611913	TB-4M12-5P3-2/TXL
	4+PE	LED, YE	Diagram 4	5	6611914	TB-4M12-5P3-5/TXL
	4+PE	LED, YE	Diagram 4	10	6611915	TB-4M12-5P3-10/TXL
	3+PE		Diagram 1	2	6611924	TB-6M12-4-2/TXL
	3+PE		Diagram 1	5	6611925	TB-6M12-4-5/TXL
	3+PE		Diagram 1	10	6611926	TB-6M12-4-10/TXL
	4+PE		Diagram 2	2	6611927	TB-6M12-5-2/TXL
	4+PE		Diagram 2	5	6611928	TB-6M12-5-5/TXL
	4+PE		Diagram 2	10	6611929	TB-6M12-5-10/TXL
	3+PE	LED, YE	Diagram 3	2	6611930	TB-6M12-4P2-2/TXL
	3+PE	LED, YE	Diagram 3	5	6611931	TB-6M12-4P2-5/TXL
	3+PE	LED, YE	Diagram 3	10	6611932	TB-6M12-4P2-10/TXL
	4+PE	LED, YE	Diagram 4	2	6611933	TB-6M12-5P3-2/TXL
	4+PE	LED, YE	Diagram 4	5	6611934	TB-6M12-5P3-5/TXL
	4+PE	LED, YE	Diagram 4	10	6611935	TB-6M12-5P3-10/TXL
	3+PE		Diagram 1	2	6611944	TB-8M12-4-2/TXL
	3+PE		Diagram 1	5	6611945	TB-8M12-4-5/TXL
	3+PE		Diagram 1	10	6611946	TB-8M12-4-10/TXL
	4+PE		Diagram 2	2	6611947	TB-8M12-5-2/TXL
	4+PE		Diagram 2	5	6611948	TB-8M12-5-5/TXL
	4+PE		Diagram 2	10	6611949	TB-8M12-5-10/TXL
	3+PE	LED, YE	Diagram 3	2	6611950	TB-8M12-4P2-2/TXL
	3+PE	LED, YE	Diagram 3	5	6611951	TB-8M12-4P2-5/TXL
	3+PE	LED, YE	Diagram 3	10	6611952	TB-8M12-4P2-10/TXL
	4+PE	LED, YE	Diagram 4	2	6611953	TB-8M12-5P3-2/TXL
	4+PE	LED, YE	Diagram 4	5	6611954	TB-8M12-5P3-5/TXL
	4+PE	LED, YE	Diagram 4	10	6611955	TB-8M12-5P3-10/TXL

Y-Splitter – Without Cable

Grip	Plastic, TPU,
Contacts	Brass, CuZn, Gold-plated
Contact carriers	Plastic, TPU, Black
Locking	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3/2
Current load	4 A
Contact resistance	≤ 5 mΩ

Types and Features — Selection Table

Design	Pin Assignment	Graph	Properties	ID number	Type
			M8 × 1 male - 2 × M8 × 1 female 4/3-pin Rated voltage: 30 V Temperature range: -30 °C…+80 °C	6930553	YP2-MFS4-2MFK3
			M12 × 1 male - 2 × M8 × 1 female 4/3-pin Rated voltage: 30 V Temperature range: -30 °C…+80 °C	6930549	YB2-FSM4.4-2PKG3M
			M12 × 1 male - 2 × M8 × 1 female 4/3-pin Rated voltage: 30 V Temperature range: -30 °C…+80 °C With LED (1 × green, 2 × yellow) Grip: plastic, TPU, black/translucent	6930546	YB2-FSM4.4-2PKG3M-P7X3
			M12 × 1 male - 2 × M12 × 1 female 5/4-pin Rated voltage: 30 V Temperature range: -30 °C…+80 °C	6930492	YB2-FSM5-2FKM5.4
			M12 × 1 male - 2 × M12 × 1 female 5/4-pin Rated voltage: 30 V Temperature range: -30 °C…+80 °C With LED (1 × green, 2 × yellow) Grip: plastic, TPU, black/translucent	6930547	YB2-FSM5-2FKM5.4-P7X3
			M12 × 1 male - 2 × M12 × 1 female 5/4-pin Rated voltage: 30 V Temperature range: -30 °C…+80 °C Grip: Plastic, TPU, gray	6930551	YB2-FSM5-2FKM5.4/S1063

Types and Features — Selection Table

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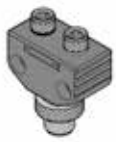
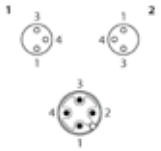
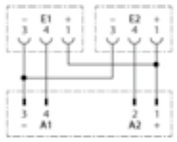
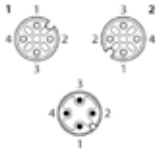
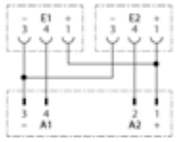
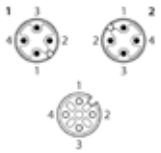
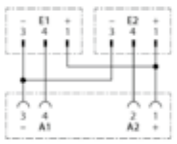
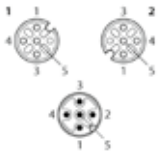
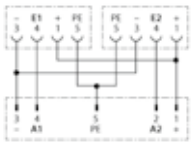
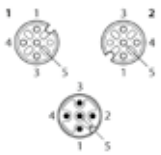
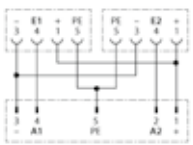
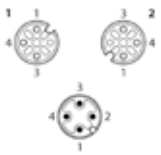
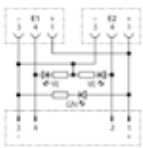
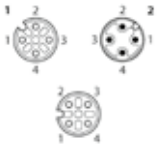
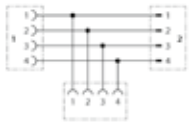
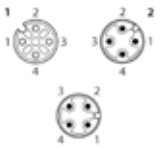
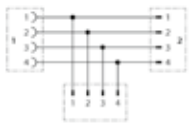
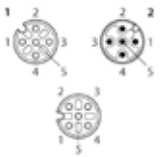
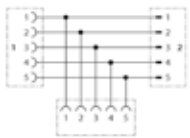
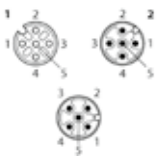
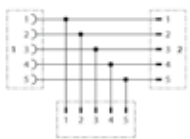
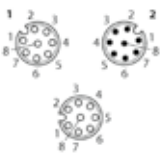
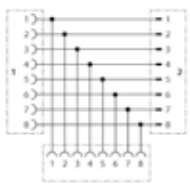
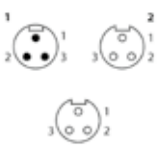
			M12 × 1 male - 2 × M8 × 1 female 4/3-pin Rated voltage: 60 V Temperature range: -30 °C…+90 °C	6930559	VB2-FSM4.4-2MFK3
			M12 × 1 male - 2 × M12 × 1 female 4/3-pin Rated voltage: 250 V Temperature range: -30 °C…+ 90 °C	6930560	VB2-FSM4.4-2FKM4
			M12 × 1 female - 2 × male M12 × 1 4/3-pin Rated voltage: 250 V Temperature range: -30 °C…+90 °C	6930561	VB2-FKM4.4-2FSM4
			M12 × 1 male - 2 × M12 × 1 female 5/4-pin Rated voltage: 60 V Temperature range: -30 °C…+90 °C	6930562	VB2-FSM5-2FKM4.4
			M12 × 1 male - 2 × M12 × 1 female 5/4-pin Rated voltage: 60 V Temperature range: -30 °C…+90 °C With oval borehole	6930563	VB2-FSM5-2FKM4.4/ S2087
			M12 × 1 male - 2 × M12 × 1 female 4/3-pin Rated voltage: 24 V Temperature range: -30 °C…+90 °C With LED (1 × green, 2 × yellow) Grip: plastic, TPU, black/translucent	6930567	VB2-PX3- FSM4.4-2FKM4

T-Splitter – Without Cable

Grip	Plastic, TPU,
Contacts	Brass, CuZn, Gold-plated
Contact carriers	Plastic, TPU,
Locking	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Contact resistance	≤ 5 mΩ

Types and Features — Selection Table

Design	Pin Assignment	Graph	Properties	ID number	Type
			M12 × 1 female - M12 × 1 male - M12 × 1 female 4-pin Rated voltage: 250 V Temperature range: -30 °C…+90 °C	6930571	VT2-FKM4.4-FKM4.4-FSM4.4
			M12 × 1 female - M12 × 1 male - M12 × 1 male 4-pin Rated voltage: 250 V Temperature range: -30 °C…+90 °C	6930572	VT2-FKM4.4-FSM4.4-FSM4.4
			M12 × 1 female - M12 × 1 male - M12 × 1 female 5-pin Rated voltage: 60 V Temperature range: -30 °C…+90 °C	6930573	VT2-FKM5-FKM5-FSM5
			M12 × 1 female - M12 × 1 male - M12 × 1 male 5-pin Rated voltage: 60 V Temperature range: -30 °C…+90 °C	6930574	VT2-FKM5-FSM5-FSM5
			M12 × 1 female - M12 × 1 male - M12 × 1 female 8-pin Rated voltage: 30 V Temperature range: -30 °C…+90 °C	6930575	VT2-FKM8-FKM8-FSM8
			T-Splitter for Auxiliary Power 7/8" connector, 3-pin Current load: 9A Rated voltage: 250V Protection class NEMA 1, 3, 4, 6P and IEC IP67 Temperature range: -40 °C…+80 °C	6999031	RSM-2RKM30

Types and Features — Selection Table

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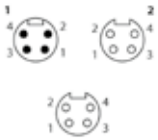
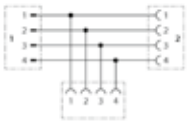
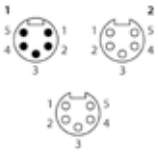
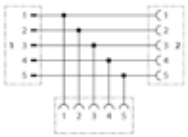
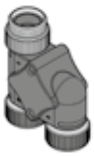
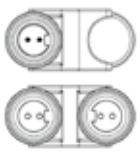
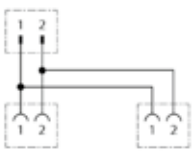
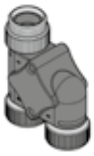
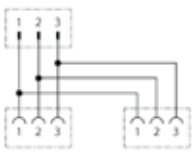
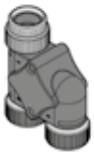
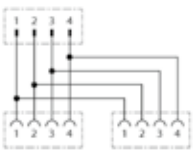
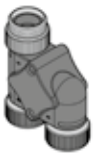
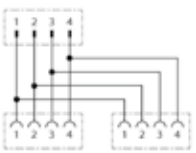
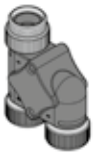
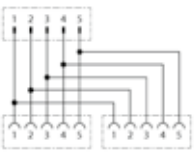
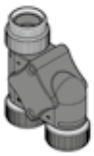
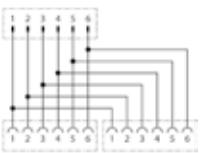
			T-Splitter for Auxiliary Power 7/8" connector, 4-pin Current load: 9A Rated voltage: 250V Protection class NEMA 1, 3, 4, 6P and IEC IP67 Temperature range: -40 °C…+80 °C	6914828	RSM-2RKM40
			T-Splitter for Supply Voltage 7/8" connector, 5-pin Current load: 9A Rated voltage: 250V Protection class NEMA 1, 3, 4, 6P and IEC IP67 Temperature range: -40 °C…+80 °C	6914950	RSM-2RKM50

h-Splitter – without Cable

Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	Plastic, TPU, Black
Locking	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles

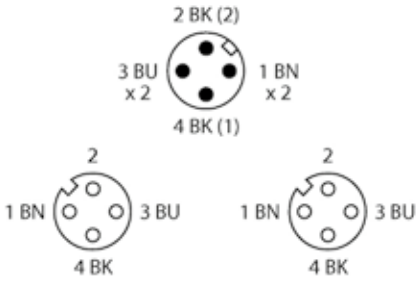
Types and Features — Selection Table

Design	Pin Assignment	Graph	Properties	ID number	Type
			h-Splitter 7/8" connector, 2-pin Current load: 9A Rated voltage: 600V Protection class NEMA 1, 3, 4, 6P and IEC IP67 Temperature range: -40 °C…+105 °C	6934950	XSH-RSM-2RKM20
			h-Splitter 7/8" connector, 3-pin Current load: 9A Rated voltage: 600V Protection class NEMA 1, 3, 4, 6P and IEC IP67 Temperature range: -40 °C…+105 °C	6934951	XSH-RSM-2RKM30
			h-Splitter 7/8" connector, 4-pin Current load: 9A Rated voltage: 600V Protection class NEMA 1, 3, 4, 6P and IEC IP67 Temperature range: -40 °C…+105 °C	6934952	XSH-RSM-2RKM40
			h-Splitter The connector coding is rotated by 180° degrees from the standard 7/8" connector, 4-pin Current load: 9A Rated voltage: 600V Protection class NEMA 1, 3, 4, 6P and IEC IP67 Temperature range: -40 °C…+105 °C	6934953	XSH-RSM-2RKM40/K1T
			h-Splitter 7/8" connector, 5-pin Current load: 9A Rated voltage: 600V Protection class NEMA 1, 3, 4, 6P and IEC IP67 Temperature range: -40 °C…+105 °C	6934954	XSH-RSM-2RKM50
			h-Splitter 7/8" connector, 6-pin Current load: 8A Rated voltage: 600V Protection class NEMA 1, 3, 4, 6P and IEC IP67 Temperature range: -40 °C…+105 °C	6934955	XSH-RSM-2RKM60

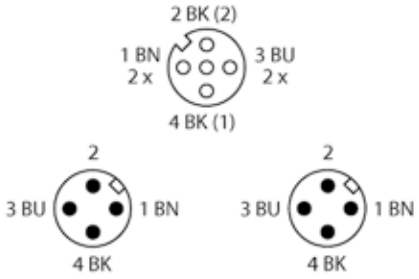
Y-Splitter – M12 × 1 to M12 × 1, PUR Cable

- 4/3-pin
- Series wiring
- Qualified for drag chain use and flame-retardant
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS

VBRS4.4

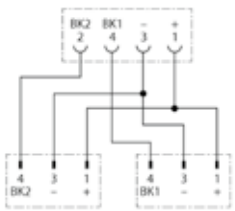


VBRK4.4

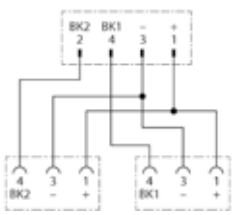


Connector	
Grip	Plastic, TPU, Black
Contacts	Metal, CuZn, Gold-plated
Contact carriers	Plastic, TPU, Black
Locking	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
General data	
Cable quality	PUR (Black)
Core insulation	PP
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	250 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57.5 Ω/km
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm²
Max. tensile strength (dynamic)	≤ 20 N/mm²
Bending cycles	> 5 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s²
Admissible travel path, horizontal	5 m (at 5 m/s²)
Admissible traversing speed	3.3 m/s
Torsional stress	± 180 °/m
Ambient temperature	
Stationary usage	-50…+80 °C
Non-stationary usage	-25…+80 °C
Drag chain operation	-25…+60 °C

VBRS4.4



VBRK4.4



Types and Features — Selection Table

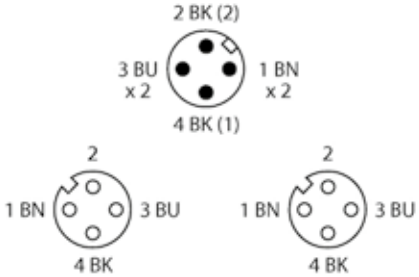


Design	Cable length [m]	ID number	Type
Female connector / 2 × male, straight	0.3	6628115	VBRK4.4-2RSC4T-0.3/0.3/TXL
Female connector / 2 × male, straight	0.6	6628116	VBRK4.4-2RSC4T-0.6/0.6/TXL
Female connector / 2 × male, straight	1	6628117	VBRK4.4-2RSC4T-1/1/TXL
Female connector / 2 × male, straight	1.5	6628118	VBRK4.4-2RSC4T-1.5/1.5/TXL
Female connector / 2 × male, straight	2	6628119	VBRK4.4-2RSC4T-2/2/TXL
Female connector / 2 × male, straight	5	6628151	VBRK4.4-2RSC4T-5/5/TXL
Female connector / 2 × male, angled	0.3	6629960	VBRK4.4-2WSC4T-0.3/0.3/TXL
Female connector / 2 × male, angled	0.6	6629961	VBRK4.4-2WSC4T-0.6/0.6/TXL
Female connector / 2 × male, angled	1	6629962	VBRK4.4-2WSC4T-1/1/TXL
Female connector / 2 × male, angled	1.5	6629963	VBRK4.4-2WSC4T-1.5/1.5/TXL
Female connector / 2 × male, angled	2	6629964	VBRK4.4-2WSC4T-2/2/TXL
Female connector / 2 × male, angled	5	6629965	VBRK4.4-2WSC4T-5/5/TXL
Male connector / 2 × female, straight	0.3	6628110	VBRS4.4-2RKC4T-0.3/0.3/TXL
Male connector / 2 × female, straight	0.6	6628111	VBRS4.4-2RKC4T-0.6/0.6/TXL
Male connector / 2 × female, straight	1	6628112	VBRS4.4-2RKC4T-1/1/TXL
Male connector / 2 × female, straight	1.5	6628113	VBRS4.4-2RKC4T-1.5/1.5/TXL
Male connector / 2 × female, straight	2	6628114	VBRS4.4-2RKC4T-2/2/TXL
Male connector / 2 × female, straight	5	6628122	VBRS4.4-2RKC4T-5/5/TXL
Male connector / 2 × female, angled	0.3	6628130	VBRS4.4-2WKC4T-0.3/0.3/TXL
Male connector / 2 × female, angled	0.6	6628152	VBRS4.4-2WKC4T-0.6/0.6/TXL
Male connector / 2 × female, angled	1	6628153	VBRS4.4-2WKC4T-1/1/TXL
Male connector / 2 × female, angled	1.5	6628185	VBRS4.4-2WKC4T-1.5/1.5/TXL
Male connector / 2 × female, angled	2	6628155	VBRS4.4-2WKC4T-2/2/TXL
Male connector / 2 × female, angled	5	6628156	VBRS4.4-2WKC4T-5/5/TXL

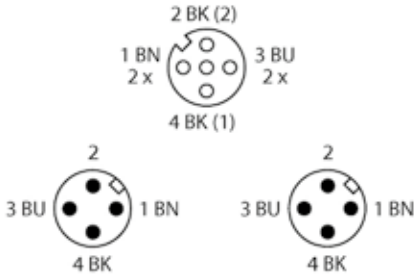
Y-Splitter – M12 × 1 to M12 × 1, PVC Cable

- 4/3-pin
- Series wiring
- Resistant to acids and alkaline solutions
- Resistant to chemicals and oils
- Flame-retardant and free from LABS

VBRS4.4

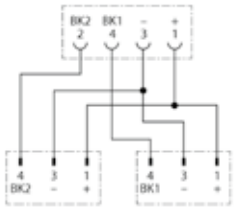


VBRK4.4

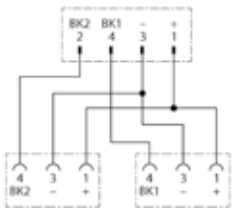


Connector	
Grip	Plastic, TPU, Black
Contacts	Metal, CuZn, Gold-plated
Contact carriers	Plastic, TPU, Black
Locking	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
General data	
Cable quality	PVC (Black)
Core insulation	PVC
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	250 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57.1 Ω/km
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-40…+105 °C
Non-stationary usage	0…+80 °C

VBRS4.4



VBRK4.4



Types and Features — Selection Table

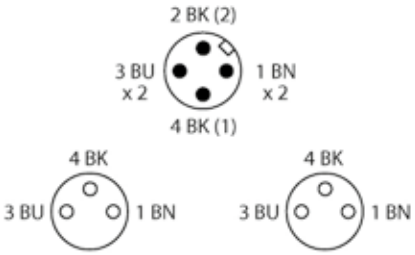


Design	Cable length [m]	ID number	Type
Female connector / 2 × male, straight	0.3	6629966	VBRK4.4-2RSC4T-0.3/0.3/TEL
Female connector / 2 × male, straight	0.6	6629967	VBRK4.4-2RSC4T-0.6/0.6/TEL
Female connector / 2 × male, straight	1	6629968	VBRK4.4-2RSC4T-1/1/TEL
Female connector / 2 × male, straight	1.5	6629969	VBRK4.4-2RSC4T-1.5/1.5/TEL
Female connector / 2 × male, straight	2	6629970	VBRK4.4-2RSC4T-2/2/TEL
Female connector / 2 × male, straight	5	6629971	VBRK4.4-2RSC4T-5/5/TEL
Female connector / 2 × male, angled	0.3	6629984	VBRK4.4-2WSC4T-0.3/0.3/TEL
Female connector / 2 × male, angled	0.6	6629985	VBRK4.4-2WSC4T-0.6/0.6/TEL
Female connector / 2 × male, angled	1	6629986	VBRK4.4-2WSC4T-1/1/TEL
Female connector / 2 × male, angled	1.5	6629987	VBRK4.4-2WSC4T-1.5/1.5/TEL
Female connector / 2 × male, angled	2	6629988	VBRK4.4-2WSC4T-2/2/TEL
Female connector / 2 × male, angled	5	6629989	VBRK4.4-2WSC4T-5/5/TEL
Male connector / 2 × female, straight	0.3	6628197	VBRS4.4-2RKC4T-0.3/0.3/TEL
Male connector / 2 × female, straight	0.6	6628198	VBRS4.4-2RKC4T-0.6/0.6/TEL
Male connector / 2 × female, straight	1	6628199	VBRS4.4-2RKC4T-1/1/TEL
Male connector / 2 × female, straight	1.5	6629188	VBRS4.4-2RKC4T-1.5/1.5/TEL
Male connector / 2 × female, straight	2	6629189	VBRS4.4-2RKC4T-2/2/TEL
Male connector / 2 × female, straight	5	6629190	VBRS4.4-2RKC4T-5/5/TEL
Male connector / 2 × female, angled	0.3	6629991	VBRS4.4-2WKC4T-0.3/0.3/TEL
Male connector / 2 × female, angled	0.6	6629992	VBRS4.4-2WKC4T-0.6/0.6/TEL
Male connector / 2 × female, angled	1	6629993	VBRS4.4-2WKC4T-1/1/TEL
Male connector / 2 × female, angled	1.5	6630005	VBRS4.4-2WKC4T-1.5/1.5/TEL
Male connector / 2 × female, angled	2	6629994	VBRS4.4-2WKC4T-2/2/TEL
Male connector / 2 × female, angled	5	6629995	VBRS4.4-2WKC4T-5/5/TEL

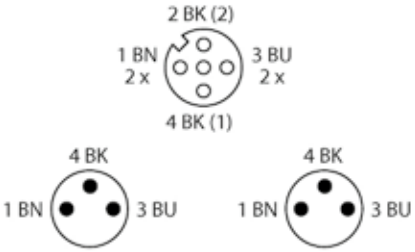
Y-Splitter – M12 × 1 to M8 × 1, PUR Cable

- 4/3-pin
- Series wiring
- Qualified for drag chain use and flame-retardant
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS

VBRS4.4

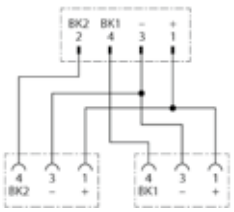


VBRK4.4

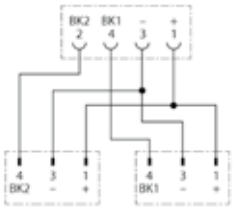


Connector	
Grip	Plastic, TPU, Black
Contacts	Metal, CuZn, Gold-plated
Contact carriers	Plastic, TPU, Black
Locking	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
General data	
Cable quality	PUR (Black)
Core insulation	PP
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	60 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57.5 Ω/km
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm²
Max. tensile strength (dynamic)	≤ 20 N/mm²
Bending cycles	> 5 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s²
Admissible travel path, horizontal	5 m (at 5 m/s²)
Admissible traversing speed	3.3 m/s
Torsional stress	± 180 °/m
Ambient temperature	
Stationary usage	-50…+80 °C
Non-stationary usage	-25…+80 °C
Drag chain operation	-25…+60 °C

VBRS4.4

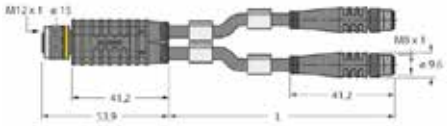
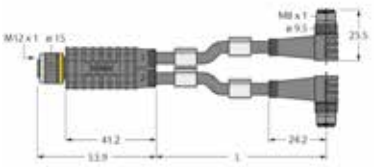
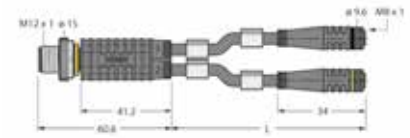
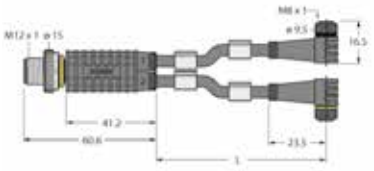


VBRK4.4



Types and Features — Selection Table

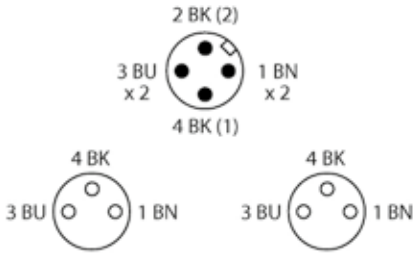


Design	Cable length [m]	ID number	Type
			
Female connector / 2 × male, straight	0.3	6628166	VBRK4.4-2PSG3M-0.3/0.3/TXL
Female connector / 2 × male, straight	0.6	6628167	VBRK4.4-2PSG3M-0.6/0.6/TXL
Female connector / 2 × male, straight	1	6628168	VBRK4.4-2PSG3M-1/1/TXL
Female connector / 2 × male, straight	1.5	6628169	VBRK4.4-2PSG3M-1.5/1.5/TXL
Female connector / 2 × male, straight	2	6628170	VBRK4.4-2PSG3M-2/2/TXL
Female connector / 2 × male, straight	5	6628171	VBRK4.4-2PSG3M-5/5/TXL
			
Female connector / 2 × male, angled	0.3	6630401	VBRK4.4-2PSW3M-0.3/0.3/TXL
Female connector / 2 × male, angled	0.6	6630402	VBRK4.4-2PSW3M-0.6/0.6/TXL
Female connector / 2 × male, angled	1	6630403	VBRK4.4-2PSW3M-1/1/TXL
Female connector / 2 × male, angled	1.5	6630404	VBRK4.4-2PSW3M-1.5/1.5/TXL
Female connector / 2 × male, angled	2	6630405	VBRK4.4-2PSW3M-2/2/TXL
Female connector / 2 × male, angled	5	6630406	VBRK4.4-2PSW3M-5/5/TXL
			
Male connector / 2 × female, straight	0.3	6628175	VBRS4.4-2PKG3M-0.3/0.3/TXL
Male connector / 2 × female, straight	0.6	6628176	VBRS4.4-2PKG3M-0.6/0.6/TXL
Male connector / 2 × female, straight	1	6628177	VBRS4.4-2PKG3M-1/1/TXL
Male connector / 2 × female, straight	1.5	6628178	VBRS4.4-2PKG3M-1.5/1.5/TXL
Male connector / 2 × female, straight	2	6628179	VBRS4.4-2PKG3M-2/2/TXL
Male connector / 2 × female, straight	5	6628180	VBRS4.4-2PKG3M-5/5/TXL
			
Male connector / 2 × female, angled	0.3	6630407	VBRS4.4-2PKW3M-0.3/0.3/TXL
Male connector / 2 × female, angled	0.6	6630408	VBRS4.4-2PKW3M-0.6/0.6/TXL
Male connector / 2 × female, angled	1	6630409	VBRS4.4-2PKW3M-1/1/TXL
Male connector / 2 × female, angled	1.5	6630410	VBRS4.4-2PKW3M-1.5/1.5/TXL
Male connector / 2 × female, angled	2	6630411	VBRS4.4-2PKW3M-2/2/TXL
Male connector / 2 × female, angled	5	6630412	VBRS4.4-2PKW3M-5/5/TXL

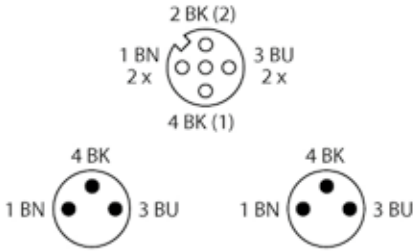
Y-Splitter – M12 × 1 to M8 × 1, PVC Cable

- 4/3-pin
- Series wiring
- Resistant to acids and alkaline solutions
- Resistant to chemicals and oils
- Flame-retardant and free from LABS

VBRS4.4

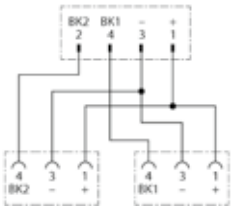


VBRK4.4

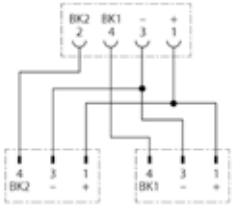


Connector	
Grip	Plastic, TPU, Black
Contacts	Metal, CuZn, Gold-plated
Contact carriers	Plastic, TPU, Black
Locking	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
General data	
Cable quality	PVC (Black)
Core insulation	PVC
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	60 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57.1 Ω/km
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-40…+105 °C
Non-stationary usage	0…+80 °C

VBRS4.4

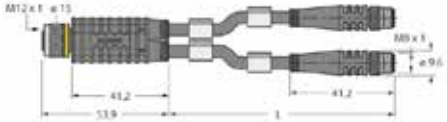
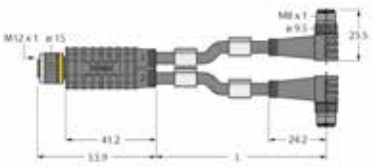
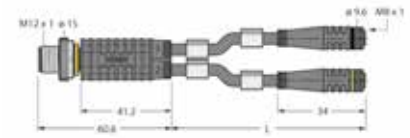
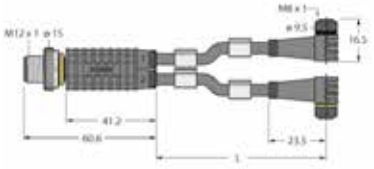


VBRK4.4



Types and Features — Selection Table

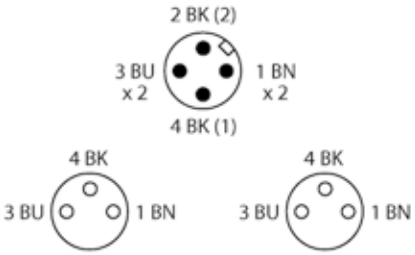


Design	Cable length [m]	ID number	Type
 Female connector / 2 × male, straight	0.3	6629978	VBRK4.4-2PSG3M-0.3/0.3/TEL
Female connector / 2 × male, straight	0.6	6629979	VBRK4.4-2PSG3M-0.6/0.6/TEL
Female connector / 2 × male, straight	1	6629980	VBRK4.4-2PSG3M-1/1/TEL
Female connector / 2 × male, straight	1.5	6629981	VBRK4.4-2PSG3M-1.5/1.5/TEL
Female connector / 2 × male, straight	2	6629982	VBRK4.4-2PSG3M-2/2/TEL
Female connector / 2 × male, straight	5	6629983	VBRK4.4-2PSG3M-5/5/TEL
 Female connector / 2 × male, angled	0.3	6630413	VBRK4.4-2PSW3M-0.3/0.3/TEL
Female connector / 2 × male, angled	0.6	6630414	VBRK4.4-2PSW3M-0.6/0.6/TEL
Female connector / 2 × male, angled	1	6630415	VBRK4.4-2PSW3M-1/1/TEL
Female connector / 2 × male, angled	1.5	6630416	VBRK4.4-2PSW3M-1.5/1.5/TEL
Female connector / 2 × male, angled	2	6630417	VBRK4.4-2PSW3M-2/2/TEL
Female connector / 2 × male, angled	5	6630418	VBRK4.4-2PSW3M-5/5/TEL
 Male connector / 2 × female, straight	0.3	6629192	VBRS4.4-2PKG3M-0.3/0.3/TEL
Male connector / 2 × female, straight	0.6	6629193	VBRS4.4-2PKG3M-0.6/0.6/TEL
Male connector / 2 × female, straight	1	6629194	VBRS4.4-2PKG3M-1/1/TEL
Male connector / 2 × female, straight	1.5	6629195	VBRS4.4-2PKG3M-1.5/1.5/TEL
Male connector / 2 × female, straight	2	6629196	VBRS4.4-2PKG3M-2/2/TEL
Male connector / 2 × female, straight	5	6629197	VBRS4.4-2PKG3M-5/5/TEL
 Male connector / 2 × female, angled	0.3	6630419	VBRS4.4-2PKW3M-0.3/0.3/TEL
Male connector / 2 × female, angled	0.6	6630420	VBRS4.4-2PKW3M-0.6/0.6/TEL
Male connector / 2 × female, angled	1	6630421	VBRS4.4-2PKW3M-1/1/TEL
Male connector / 2 × female, angled	1.5	6630422	VBRS4.4-2PKW3M-1.5/1.5/TEL
Male connector / 2 × female, angled	2	6630423	VBRS4.4-2PKW3M-2/2/TEL
Male connector / 2 × female, angled	5	6630424	VBRS4.4-2PKW3M-5/5/TEL

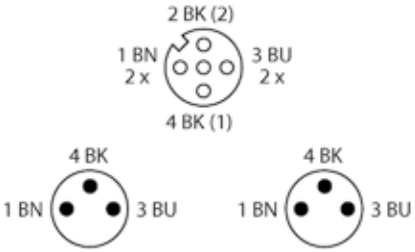
Y-Splitter – M8 × 1 to Ø 8 mm, PUR Cable, Snap-on Type

- 4/3-pin
- Series wiring
- Qualified for drag chain use and flame-retardant
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS

VBRS4.4

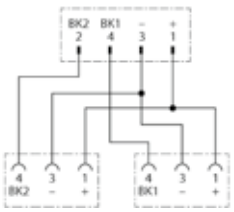


VBRK4.4

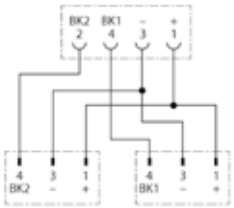


Connector	
Grip	Plastic, TPU, Black
Contacts	Metal, CuZn, Gold-plated
Contact carriers	Plastic, TPU, Black
Locking	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
General data	
Cable quality	PUR (Black)
Core insulation	PP
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	60 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57.5 Ω/km
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm²
Max. tensile strength (dynamic)	≤ 20 N/mm²
Bending cycles	> 5 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s²
Admissible travel path, horizontal	5 m (at 5 m/s²)
Admissible traversing speed	3.3 m/s
Torsional stress	± 180 °/m
Ambient temperature	
Stationary usage	-50…+80 °C
Non-stationary usage	-25…+80 °C
Drag chain operation	-25…+60 °C

VBRS4.4



VBRK4.4



Types and Features — Selection Table

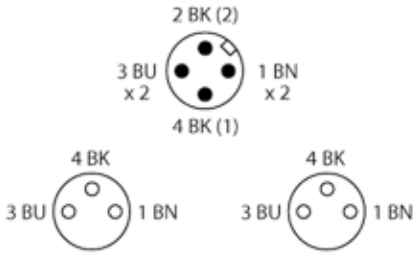


Design	Cable length [m]	ID number	Type
Female connector / 2 × male, straight	0.3	6628139	VBRK4.4-2PSG3S-0.3/0.3/TXL
Female connector / 2 × male, straight	0.6	6628140	VBRK4.4-2PSG3S-0.6/0.6/TXL
Female connector / 2 × male, straight	1	6628141	VBRK4.4-2PSG3S-1/1/TXL
Female connector / 2 × male, straight	1.5	6628142	VBRK4.4-2PSG3S-1.5/1.5/TXL
Female connector / 2 × male, straight	2	6628143	VBRK4.4-2PSG3S-2/2/TXL
Female connector / 2 × male, straight	5	6628144	VBRK4.4-2PSG3S-5/5/TXL
Female connector / 2 × male, angled	0.3	6630425	VBRK4.4-2PSW3S-0.3/0.3/TXL
Female connector / 2 × male, angled	0.6	6630426	VBRK4.4-2PSW3S-0.6/0.6/TXL
Female connector / 2 × male, angled	1	6630427	VBRK4.4-2PSW3S-1/1/TXL
Female connector / 2 × male, angled	1.5	6630428	VBRK4.4-2PSW3S-1.5/1.5/TXL
Female connector / 2 × male, angled	2	6630429	VBRK4.4-2PSW3S-2/2/TXL
Female connector / 2 × male, angled	5	6630430	VBRK4.4-2PSW3S-5/5/TXL
Male connector / 2 × female, straight	0.3	6628145	VBRS4.4-2PKG3S-0.3/0.3/TXL
Male connector / 2 × female, straight	0.6	6628146	VBRS4.4-2PKG3S-0.6/0.6/TXL
Male connector / 2 × female, straight	1	6628147	VBRS4.4-2PKG3S-1/1/TXL
Male connector / 2 × female, straight	1.5	6628148	VBRS4.4-2PKG3S-1.5/1.5/TXL
Male connector / 2 × female, straight	2	6628149	VBRS4.4-2PKG3S-2/2/TXL
Male connector / 2 × female, straight	5	6628150	VBRS4.4-2PKG3S-5/5/TXL
Male connector / 2 × female, angled	0.3	6630431	VBRS4.4-2PKW3S-0.3/0.3/TXL
Male connector / 2 × female, angled	0.6	6630432	VBRS4.4-2PKW3S-0.6/0.6/TXL
Male connector / 2 × female, angled	1	6630433	VBRS4.4-2PKW3S-1/1/TXL
Male connector / 2 × female, angled	1.5	6630434	VBRS4.4-2PKW3S-1.5/1.5/TXL
Male connector / 2 × female, angled	2	6630435	VBRS4.4-2PKW3S-2/2/TXL
Male connector / 2 × female, angled	5	6630436	VBRS4.4-2PKW3S-5/5/TXL
Male connector / 2 × female, straight	0.3	6630455	VBRS4.4-2PKG3Z-0.3/0.3/TXL
Male connector / 2 × female, straight	0.6	6630456	VBRS4.4-2PKG3Z-0.6/0.6/TXL
Male connector / 2 × female, straight	1	6630457	VBRS4.4-2PKG3Z-1/1/TXL
Male connector / 2 × female, straight	1.5	6630458	VBRS4.4-2PKG3Z-1.5/1.5/TXL
Male connector / 2 × female, straight	2	6630459	VBRS4.4-2PKG3Z-2/2/TXL
Male connector / 2 × female, straight	5	6630460	VBRS4.4-2PKG3Z-5/5/TXL

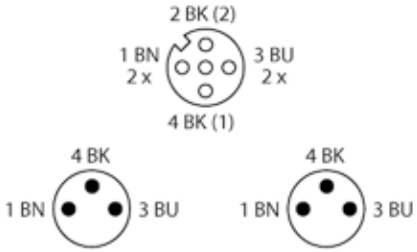
Y-Splitter – M8 × 1 to Ø 8 mm, PVC Cable, Snap-on Type

- 4/3-pin
- Series wiring
- Resistant to acids and alkaline solutions
- Resistant to chemicals and oils
- Flame-retardant and free from LABS

VBRS4.4

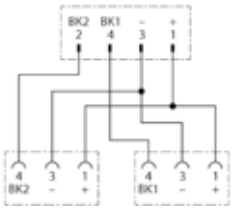


VBRK4.4

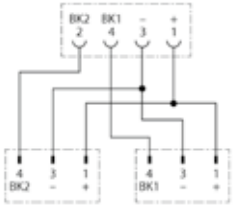


Connector	
Grip	Plastic, TPU, Black
Contacts	Metal, CuZn, Gold-plated
Contact carriers	Plastic, TPU, Black
Locking	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
General data	
Cable quality	PVC (Black)
Core insulation	PVC
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	60 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57.1 Ω/km
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-40…+105 °C
Non-stationary usage	0…+80 °C

VBRS4.4



VBRK4.4



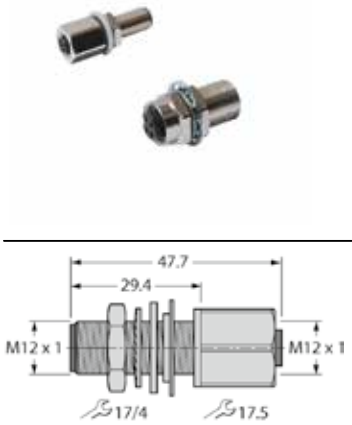
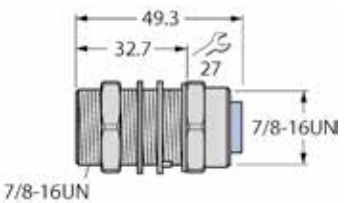
Types and Features — Selection Table



Design	Cable length [m]	ID number	Type
Female connector / 2 × male, straight	0.3	6629972	VBRK4.4-2PSG3S-0.3/0.3/TEL
Female connector / 2 × male, straight	0.6	6629973	VBRK4.4-2PSG3S-0.6/0.6/TEL
Female connector / 2 × male, straight	1	6629974	VBRK4.4-2PSG3S-1/1/TEL
Female connector / 2 × male, straight	1.5	6629975	VBRK4.4-2PSG3S-1.5/1.5/TEL
Female connector / 2 × male, straight	2	6629976	VBRK4.4-2PSG3S-2/2/TEL
Female connector / 2 × male, straight	5	6629977	VBRK4.4-2PSG3S-5/5/TEL
Female connector / 2 × male, angled	0.3	6630437	VBRK4.4-2PSW3S-0.3/0.3/TEL
Female connector / 2 × male, angled	0.6	6630438	VBRK4.4-2PSW3S-0.6/0.6/TEL
Female connector / 2 × male, angled	1	6630439	VBRK4.4-2PSW3S-1/1/TEL
Female connector / 2 × male, angled	1.5	6630440	VBRK4.4-2PSW3S-1.5/1.5/TEL
Female connector / 2 × male, angled	2	6630441	VBRK4.4-2PSW3S-2/2/TEL
Female connector / 2 × male, angled	5	6630442	VBRK4.4-2PSW3S-5/5/TEL
Male connector / 2 × female, straight	0.3	6630443	VBRS4.4-2PKG3S-0.3/0.3/TEL
Male connector / 2 × female, straight	0.6	6630444	VBRS4.4-2PKG3S-0.6/0.6/TEL
Male connector / 2 × female, straight	1	6630445	VBRS4.4-2PKG3S-1/1/TEL
Male connector / 2 × female, straight	1.5	6630446	VBRS4.4-2PKG3S-1.5/1.5/TEL
Male connector / 2 × female, straight	2	6630447	VBRS4.4-2PKG3S-2/2/TEL
Male connector / 2 × female, straight	5	6630448	VBRS4.4-2PKG3S-5/5/TEL
Male connector / 2 × female, angled	0.3	6630449	VBRS4.4-2PKW3S-0.3/0.3/TEL
Male connector / 2 × female, angled	0.6	6630450	VBRS4.4-2PKW3S-0.6/0.6/TEL
Male connector / 2 × female, angled	1	6630451	VBRS4.4-2PKW3S-1/1/TEL
Male connector / 2 × female, angled	1.5	6630452	VBRS4.4-2PKW3S-1.5/1.5/TEL
Male connector / 2 × female, angled	2	6630453	VBRS4.4-2PKW3S-2/2/TEL
Male connector / 2 × female, angled	5	6630454	VBRS4.4-2PKW3S-5/5/TEL
Male connector / 2 × female, straight	0.3	6630461	VBRS4.4-2PKG3Z-0.3/0.3/TEL
Male connector / 2 × female, straight	0.6	6630462	VBRS4.4-2PKG3Z-0.6/0.6/TEL
Male connector / 2 × female, straight	1	6630463	VBRS4.4-2PKG3Z-1/1/TEL
Male connector / 2 × female, straight	1.5	6630464	VBRS4.4-2PKG3Z-1.5/1.5/TEL
Male connector / 2 × female, straight	2	6630465	VBRS4.4-2PKG3Z-2/2/TEL
Male connector / 2 × female, straight	5	6630466	VBRS4.4-2PKG3Z-5/5/TEL

Wall Feed-through

Types and Features — Selection Table

	Description	ID number	Type
	■ M12 × 1 wall feed-through, 4-pin ■ Material: Stainless steel ■ Male on female ■ Voltage: 150 V ■ Current load: 4 A ■ Temperature: -40 °C…+80 °C ■ IEC IP68; NEMA 1, 3, 4, 6P ■ Approval: UL, CSA	6939625	FKV-FSV4.4/M12
	■ M12 × 1 wall feed-through, 4-pin ■ Male on female ■ Voltage: 150 V ■ Current load: 4 A ■ Temperature: -40 °C…+80 °C ■ IEC IP68; NEMA 1, 3, 4, 6P ■ Approval: UL, CSA	6922806	FK-FS4.4/M12
	■ M12 × 1 wall feed-through, 5-pin ■ Male on female ■ Voltage: 150 V ■ Current load: 4 A ■ Temperature range: -40 °C…+80 °C ■ IEC IP68; NEMA 1, 3, 4, 6P ■ Approval: UL, CSA	6922807	FK-FS4.5/M12
	■ M12 × 1 wall feed-through, 8-pin ■ Male on female ■ Voltage: 36 V ■ Current load: 1.5 A ■ Temperature: -40 °C…+80 °C ■ IEC IP68; NEMA 1, 3, 4, 6P ■ Approval: UL, CSA	6922808	FK-FS8/M12
	■ 7/8" wall feed-through, 3-pin ■ Male on female ■ Voltage: 600 V ■ Current load: 10 A ■ Temperature: -40…+105°C ■ IEC IP67; NEMA 1, 3, 4	6604206	RSF-RKF30/22
	■ 7/8" wall feed-through, 4-pin ■ Male on female ■ Voltage: 600 V ■ Current load: 9 A ■ Temperature: -40 °C…+105°C ■ IEC IP67; NEMA 1, 3, 4	6915014	RSF-RKF40/22
	■ 7/8" wall feed-through, 5-pin ■ Male on female ■ Voltage: 600 V ■ Current load: 9 A ■ Temperature: -40 °C…+105°C ■ IEC IP67; NEMA 1, 3, 4	6914891	RSF-RKF50/22

Adapter

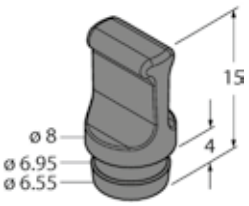
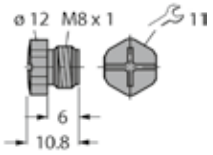
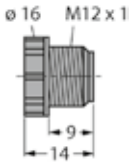
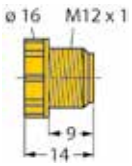
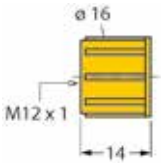
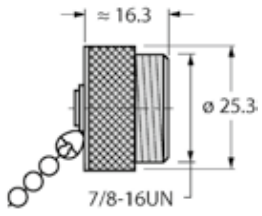
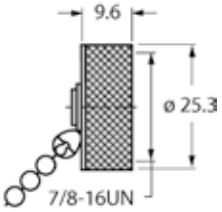
Types and Features — Selection Table



Description	ID number	Type
	■ Robust, plastic-coated adapter ■ M12 × 1 female - M12 × 1 male Ø 8 mm ■ 3-pin ■ Protection class IP67 ■ Voltage: 60 V ■ Current load: 4 A ■ Temperature: -30 °C…+90 °C	8008083	FKM3-ESP3S
	■ Robust, plastic-coated adapter ■ M12 × 1 female - M12 × 1 male Ø 8 mm ■ 4-pin ■ Protection class IP67 ■ Voltage: 30 V ■ Current load: 4 A ■ Temperature: -30 °C…+90 °C	8008084	FKM4-ESP4S
	■ Robust, plastic-coated adapter ■ M12 × 1 male - M8 × 1 female ■ 3-pin ■ Protection class IP67 ■ Voltage: 60 V ■ Current load: 4 A ■ Temperature: -30 °C…+90 °C	8008079	FSM3-SKP3
	■ Robust, plastic-coated adapter ■ M12 × 1 male - M8 × 1 female ■ 3-pin ■ Protection class IP67 ■ Voltage: 30 V ■ Current load: 4 A ■ Temperature: -30 °C…+90 °C	8008138	FSM4-SKP4

Closure Cap

Types and Features — Selection Table

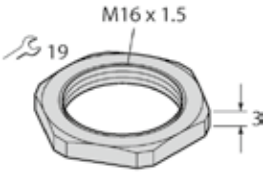
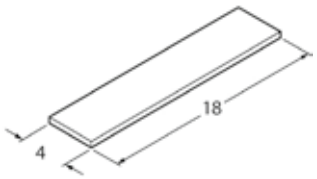
	Description	ID number	Type
			
	■ Closure caps for Ø 8mm snap, black ■ Protection class: IP67 (installed) ■ 100 pcs. per bag	8010971	SCHUTZSTOPFEN 8MM SNAP. SCHWARZ
	■ Closure cap for M8 × 1 female connectors ■ No internal wiring ■ Nylon, black ■ Protection class: IP67 (installed)	6936046	Schutzstopfen ISK-M8
	■ Closure cap for M12 × 1 female connectors ■ Material: Polyurethane, black ■ Protection class: IP67 (installed)	6936055	VS-M12-BK
	■ Closure cap for M12 × 1 female connectors ■ Material: Polyurethane, yellow ■ Protection class: IP67 (installed) ■ 100 pcs. per bag	6999003	VS-M12-YE
	■ Closure caps for M12 × 1 connector ■ Material: Polyurethane, yellow ■ Protection class: IP67 (installed) ■ 100 pcs. per bag	6999025	VK-M12 (100 pcs)VERSCHLUSSKAPPE
	■ Closure cap for 7/8" female connectors ■ Nickel plated brass, black ■ With stainless steel chain, 150 mm	6914829	RSM-CC
	■ Closure cap for 7/8" male connector ■ Nickel plated brass, black ■ With stainless steel chain, 150 mm	6914831	RKM-CC

Types and Features — Selection Table

	Description	ID number	Type
	■ Closure cap for 7/8" female connectors ■ Material: polyamide, black ■ Protection class: IP67 (installed)	6936051	VZ8

Fastening nut and labels

Types and Features — Selection Table

	Description	ID number	Type
	■ Material: Metal, CuZn, nickel-plated ■ Screw-in thread: M16 × 1.5 ■ Wrench size: SW17 ■ Height: 6mm	6936166	SECHSKANTMUTTER M16X1.5. SW17
	■ Material: Metal, CuZn, nickel-plated ■ Screw-in thread: M16 × 1.5 ■ Wrench size: SW19 ■ Height: 3mm	6936389	SECHSKANTMUTTER M16X1.5. SW19
	■ Material: Polycarbonate (PC) ■ Color: white, similar to RAL 9016 ■ Label length: 18 mm ■ Label height: 4 mm ■ Halogen-free ■ Flame-retardant (fire class V0) ■ Temperature range: -40 °C…+140 °C ■ RoHS-compliant ■ Single line labeling (labeling technology: Plotter, laser, ink jet, waterproof pen)	6936206	BLANK-LABEL-FOR-CORD-SETS-TEL-TXL

Torque wrench

Types and Features — Selection Table

	Description	ID number	Type
	■ 1 × grip with adjustable torque 0.4 -1.0 Nm ■ 1 × wrench set, torque ■ 1 × open-end wrench for M8 (SW9) ■ SW9 for all cables with M8 female or male connectors and both brass and stainless steel nuts ■ 1 × open-end wrench for M12 (SW14) ■ SW14 for sensor and actuator cables with M12 female or male connectors and both brass and stainless steel nuts	6936170	TORQUE-WRENCH-SET-AS
	■ 1 × grip with adjustable torque 0.4 -1.0 Nm ■ 1 × wrench set, torque ■ 1 × open-end wrench for M8 (SW9) ■ SW9 for all cables with M8 female or male connectors and both brass and stainless steel nuts ■ 1 × open-end wrench for M12 bus (SW13) ■ SW13 for bus cables and cables with the designation AL-W*, which have a brass nut as an M12 female or male connector ■ 1 × open-end wrench for M12 (SW14) ■ SW14 for sensor and actuator cables with M12 female or male connectors and both brass and stainless steel nuts	6936171	TORQUE-WRENCH-SET-BUS
	■ 1 × SW9 open-end wrench ■ For all cables with M8 female or male connectors and both brass and stainless steel nuts	6936172	WRENCH-M8/SIZE 9MM
	■ 1 × SW13 open-end wrench ■ For bus cables and cables with the designation AL-W*, which have a brass nut as an M12 female male connector	6936173	WRENCH-M12AL/SIZE 13MM
	■ 1 × SW14 open-end wrench ■ For sensor and actuator cables with M12 female or male connectors and both brass and stainless steel nuts	6936174	WRENCH-M12/SIZE 14MM
	■ 1 × SW17 open-end wrench ■ For cables with M12 female or male connectors and both brass and stainless steel nuts	6936175	WRENCH-FW/SIZE 17MM

Connectivity for BL ident® RFID System



BL ident® is a complete RFID system that offers particular benefits particularly in industrial environments. Whether deployed in production control, logistics or automation processes: Turck's BL ident® enables you to use the tried and tested HF technology (13.56 MHz, acc. to ISO 15693) and the wide range UHF technology (865…928 MHz, acc. to ISO 18000-6C/EPCglobal Class 1 Gen 2) simultaneously in an RFID system. Even under industrial conditions and for the data exchange of fast moving tags, considerably greater ranges are now possible.

Each BL ident system can be flexibly composed from data carriers (tags), read/write heads, connectivity products and interfaces (gateway and RFID modules) to form a custom-made RFID solution. The selection not only includes extremely fast, FRAM data carriers with a virtually unlimited write capacity, but also high-temperature variants up to +240 °C, that can be used for example in painting lines. Gateways are available for all typical fieldbus protocols and enable BL ident® to be integrated in existing plant configurations without any problem.

BL ident® operation is wear-free and contactless. It is also insensitive to temperature fluctuations, dirt, water and oils, and thus ensures an exceptionally long lifespan. Thanks to its compliance with international standards BL ident® is future-proof and interoperable.

Pre-assembled BL ident® connection cables are available for reliable communication between interface and read/write head. The connection cables are optimally designed for the individual components and ensure interference-free operation for the entire system. Furthermore, the Turck connectivity program also offers pre-assembled bus and supply cables. The use of the ready-to-connect cables enables the user to considerably reduce the risk of wiring errors.

Connectivity for BL ident® RFID System – Overview

Extension cables	Page
	340

Field-Wireable Connectors	Page
	342

Type Code

RK4.5T – 5 / S2503

RK4.5T	**Connector type**	–	**5**	**Cable length**	/	**S2503**	**Connector quality**

Connector type

RK4.5T female straight; 5-pin
WK4.5T female angled; 5-pin

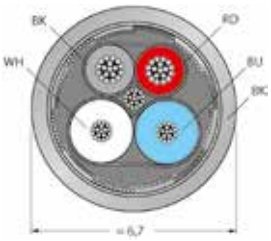
Cable length

0.3 0.3 m
2 2 m
5 5 m
10 10 m
25 25 m
50 50 m

Connector quality

S2503 economic version: cable: UL 20549; cable jacket: PUR, black; qualified for drag chain use, oil-resistant, flexible

PUR Cable – Black



- 4-pin, AWG 19/24 (data cable), AWG 19/22 (supply cable)
- Jacket material: PUR, color: black
- Halogen and LABS free
- Shield: Aluminum foil, tinned copper braid
- Jacket diameter: 6.7 mm
- Suitable for drag chain use, oil-resistant, highly flexible
- Cable UL Style 20549

Female connector

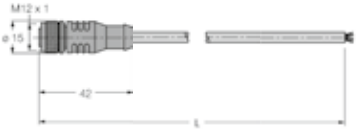
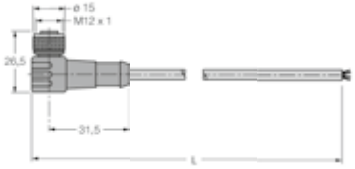
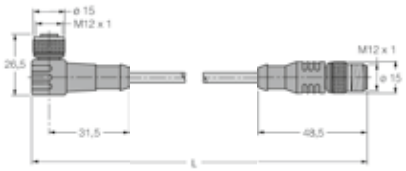


Male connector



Connector	
Number of pins	5
Grip	Plastic, TPU, Black
Contacts	Metal, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn-Ni, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
General data	
Cable quality	PUR (Black)
Core cross-section	2 x 0.25 mm^2
Electrical properties at +20 °C	
Rated voltage	300 V
Mechanical and chemical properties	
Bending cycles	> 1 mil.
Bending radius (flexible use)	> 10 x Ø
Storage temperature	-50…+80 °C
Ambient temperature	-25…+80 °C

Types and Features — Selection Table

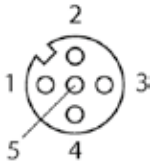
	Cable length [m]	ID number	Type
	100	7030351	KABEL-E-BLIDENT-100M
	2	7030341	RK4.5T-2/S2503
	5	7030342	RK4.5T-5/S2503
	10	7030343	RK4.5T-10/S2503
	25	7030344	RK4.5T-25/S2503
	50	7030345	RK4.5T-50/S2503
	2	7030331	RK4.5T-2-RS4.5T/S2503
	5	7030332	RK4.5T-5-RS4.5T/S2503
	10	7030333	RK4.5T-10-RS4.5T/S2503
	25	7030334	RK4.5T-25-RS4.5T/S2503
	50	7030335	RK4.5T-50-RS4.5T/S2503
	2	7030346	WK4.5T-2/S2503
	5	7030347	WK4.5T-5/S2503
	10	7030348	WK4.5T-10/S2503
	25	7030349	WK4.5T-25/S2503
	50	7030350	WK4.5T-50/S2503
	2	7030336	WK4.5T-2-RS4.5T/S2503
	5	7030337	WK4.5T-5-RS4.5T/S2503
	10	7030338	WK4.5T-10-RS4.5T/S2503
	25	7030339	WK4.5T-25-RS4.5T/S2503
	50	7030340	WK4.5T-50-RS4.5T/S2503

Field-Wireable Connectors – M12 × 1

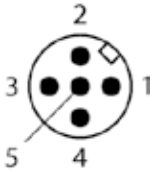


	Number of pins	Rated voltage [V]	ID number	Type	Number of pins	Rated voltage	ID number	Type
Female connector, straight	5	125	6904604	B8151-0/9				
Female connector, angled	5	125	6904603	B8251-0/9				
Male connector, straight	5	125	6904613	B8151-0/9				
Male connector, angled					5	125	6904615	BS8251-0/9
Connection mode	Screw/clamp connection				Screw/clamp connection			
Grip	Plastic, PA, Black				Plastic, PA, Black			
Coupling nut/screw	Plastic, PA, Black				Die-cast zinc, GD-Zn, Anodized			
Contacts	Brass, CuZn, Optalloy-coated				Brass, CuZn, Optalloy-coated			
Contact carriers	PA, Black				PA, Black			
Protection class	IP67				IP67			
Current load	4 A				4 A			
Terminal cross-section	0.14…0.75 mm²				0.14…0.75 mm²			
Cable external diameter	min. 6…8 mm				min. 6…8 mm			
Storage temperature	-40…+85 °C				-40…+85 °C			

Female connector



Male connector



Connectivity for PROFIBUS-DP

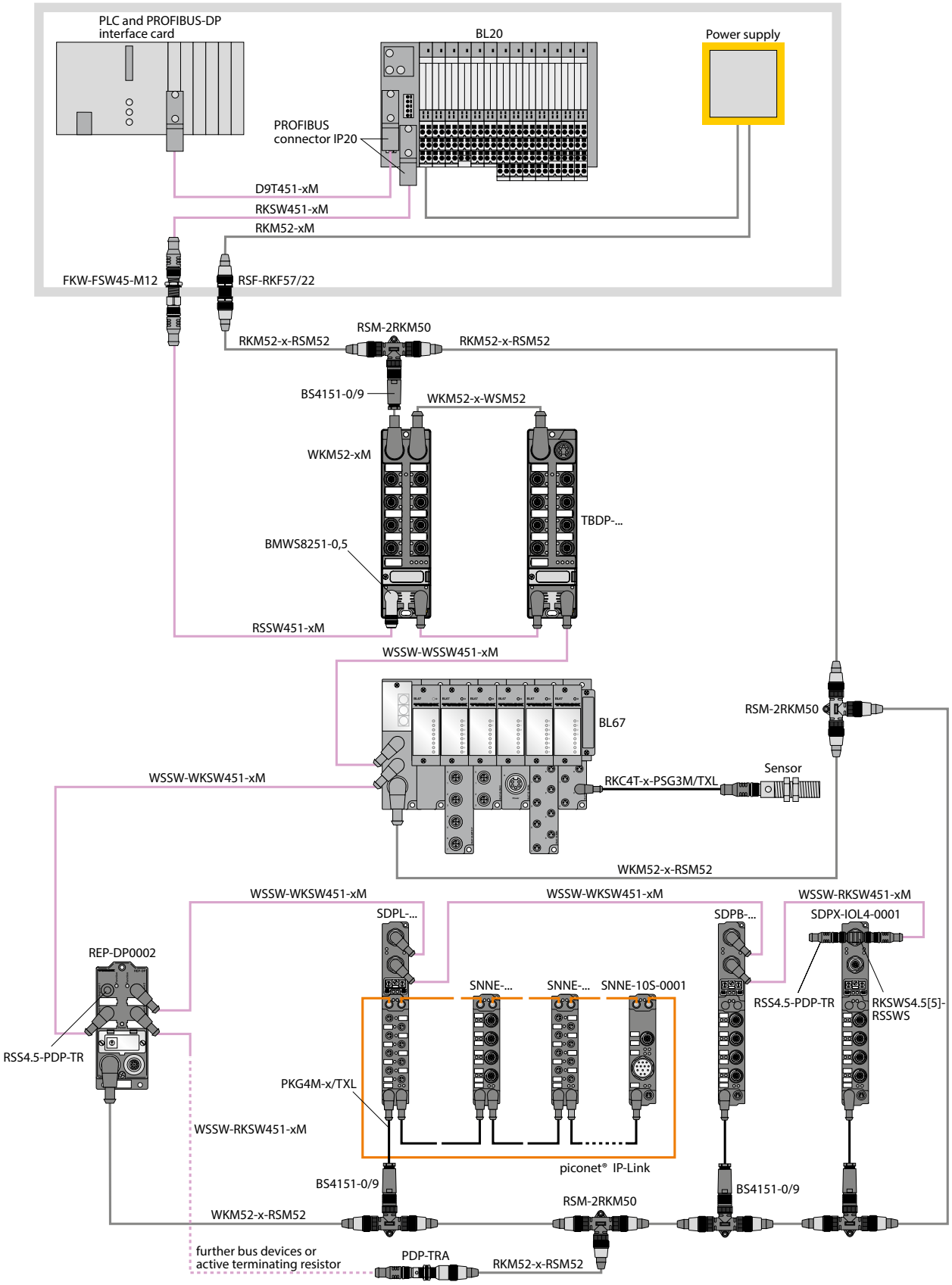


PROFIBUS (Process Fieldbus) is a universal fieldbus with a broad application range in factory, process and building automation. The fieldbus was developed by Siemens and the PROFIBUS user organization and standardized in the international standard series IEC 61158. PROFIBUS allows devices of different manufacturers to communicate with each other without any particular interface adaption. PROFIBUS-DP is designed for efficient data exchange at the field level. In this level the central automation devices such as PLC/PC communicate via a fast serial connection with remote field devices such as I/Os, drives, valves and measuring transmitters. Data exchange with the distributed devices is mainly cyclical. Essential features:

- Transmission medium: cable, 2-wire, twisted, shielded
- Transmission technology: RS485
- Bus topology: Linear structure with bus termination at both ends
- Bus access procedure: Master slave/master-master with token passing
- 32 stations per segment, max. 126 stations
- Use of repeaters for signal refreshing
- Addressing via coding switches
- Configuration/parameter setting of devices with standard device master data files (GSD files)

Turck provides all the necessary components for creating the network – from fieldbus stations with IP67 and IP20 protection to repeaters, power supplies right through to the appropriate connection technology. These include bus cables, power supply cables, passive and active junctions, control cabinet feed-throughs and mounting flange. Field-wireable connectors and terminating resistors round off the product line.

PROFIBUS-DP – Application Example



Type Code – PROFIBUS-DP

R	S	S	W	V	–	*	–	451	–	5M

R S S W V	Grip Body	–	*	Wildcard Connection Cable	–	451	Cable type	–

Coupling nut

M/ blank	Coupling nut: nickel-plated brass
V	Coupling nut: stainless steel

Coding

W	B coded

Shield

S	Shield on coupling nut

Version

K	Female
S	Male

Alignment

R	M12, straight
W	M12, angled

Wildcard connection cable

blank	Connection cable
RKSW	Extension cable: female

5M	Cable Length

Cable length [m]

5M	5 m
…M	…m

Cable type

451	PROFIBUS-DP, PUR, qualified for drag chain use
452	PROFIBUS-DP, PVC, only rigid installation
458	PROFIBUS-DP, PUR, qualified for drag chain use and torsional load

Connectivity for PROFIBUS-DP – Overview

Fieldbus Cables M12 x 1, Sub-D	Page
	348

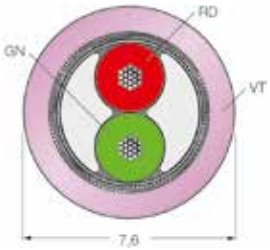
Field-Wireable Connectors - M12 x 1, Sub-D	Page
	360

Receptacles M12 x 1	Page
	364

Repeater, Y- and T-Splitters	Page
	368

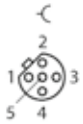
Accessories	Page
	370

PUR Cable – Purple, Type 451



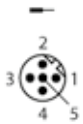
- 5-pin, B-coded, 2 × 0.34 mm²
- Qualified for drag chain use and flame-retardant
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS
- cULus approved

Female connector



1 = n.c.
2 = GN (Bus A)
3 = n.c.
4 = RD (Bus B)
5 = n.c.
Shield connected to coupling nut

Male connector



1 = n.c.
2 = GN (Bus A)
3 = n.c.
4 = RD (Bus B)
5 = n.c.
Shield connected to coupling nut

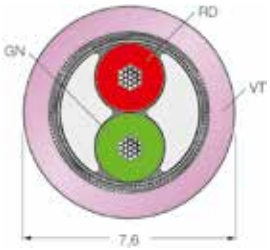
Connector	
Grip	Plastic, TPU, Black
Contacts	Metal, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	7.6 mm ± 0.30 mm
Cable jacket	PUR, Purple
Core insulation	PE (GN, RD)
Core cross-section	2 x 0.34 mm²
Arrangement of strands	19 x 0.15 mm
Shield	Aluminum foil, tinned copper braid
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	250 V
Test voltage	2000 V
DC resistance (loop)	110 Ω /km
Nom. Impedance	160 (16 MHz)
Nom. Capacitance	28 pF/m
Nom. Inductance	0.78 mH/km
Damping	< 43.60 dB/km @ 16.0 MHz
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm²
Max. tensile strength (dynamic)	≤ 20 N/mm²
Bending cycles	> 1 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s²
Admissible travel path, horizontal	5 m (at 5 m/s²)
Admissible travel path, vertical	2 m (at 5 m/s²)
Admissible traversing speed	3.33 m/s
Ambient temperature	
Stationary usage	-50…+80 °C
Non-stationary usage	-25…+80 °C
Drag chain operation	-25…+60 °C

Types and Features — Selection Table



Cable length [m]	ID number	Type
30	6915601	KABEL451-30M
75	6915602	KABEL451-75M
150	6915603	KABEL451-150M
300	6915605	KABEL451-300M
500	6915606	KABEL451-500M
1	8029320	RSSW451-1M
2	6914229	RSSW451-2M
3	6914402	RSSW451-3M
6	6914111	RSSW451-6M
10	6914112	RSSW451-10M
15	6914113	RSSW451-15M
5	6933799	WSSW451-5M
6	6914128	WSSW451-6M
10	6914129	WSSW451-10M
15	6914130	WSSW451-15M
20	6914237	WSSW451-20M
30	6914240	WSSW451-30M
1	6915609	RKSW451-1M
2	6915611	RKSW451-2M
3	6915613	RKSW451-3M
6	6914114	RKSW451-6M
10	6914115	RKSW451-10M
15	6914116	RKSW451-15M
2	6914209	WKSW451-2M
5	6933798	WKSW451-5M
6	6914131	WKSW451-6M
10	6914132	WKSW451-10M
15	6914133	WKSW451-15M
20	6914238	WKSW451-20M
1.5	6933325	RSSW-WKSW451-1.5M
4	6914275	RSSW-WKSW451-4M
7	6914250	RSSW-WKSW451-7M
10	6934878	RSSW-WKSW451-10M

PUR Cable – Purple, Type 451



- 5-pin, B-coded, 2 × 0.34 mm²
- Qualified for drag chain use and flame-retardant
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS
- cULus approved

Female connector



1 = n.c.
2 = GN (Bus A)
3 = n.c.
4 = RD (Bus B)
5 = n.c.
Shield connected to coupling nut

Male connector

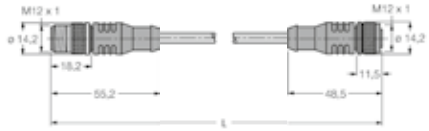


1 = n.c.
2 = GN (Bus A)
3 = n.c.
4 = RD (Bus B)
5 = n.c.
Shield connected to coupling nut

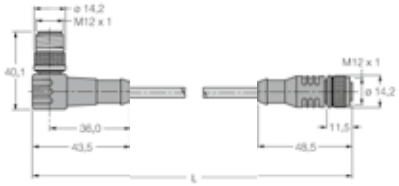
Connector	
Grip	Plastic, TPU, Black
Contacts	Metal, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	7.6 mm ± 0.30 mm
Cable jacket	PUR, Purple
Core insulation	PE (GN, RD)
Core cross-section	2 x 0.34 mm²
Arrangement of strands	19 x 0.15 mm
Shield	Aluminum foil, tinned copper braid
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	250 V
Test voltage	2000 V
DC resistance (loop)	110 Ω /km
Nom. Impedance	160 (16 MHz)
Nom. Capacitance	28 pF/m
Nom. Inductance	0.78 mH/km
Damping	< 43.60 dB/km @ 16.0 MHz
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm²
Max. tensile strength (dynamic)	≤ 20 N/mm²
Bending cycles	> 1 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s²
Admissible travel path, horizontal	5 m (at 5 m/s²)
Admissible travel path, vertical	2 m (at 5 m/s²)
Admissible traversing speed	3.33 m/s
Ambient temperature	
Stationary usage	-50…+80 °C
Non-stationary usage	-25…+80 °C
Drag chain operation	-25…+60 °C

Types and Features — Selection Table

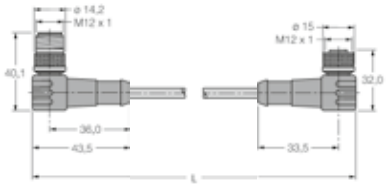




Cable length [m]	ID number	Type
0.2	6915901	RSSW-RKSW451-0.2M
0.3	6915655	RSSW-RKSW451-0.3M
0.5	6914117	RSSW-RKSW451-0.5M
1	6914118	RSSW-RKSW451-1M
1.5	6915656	RSSW-RKSW451-1.5M
2	6914119	RSSW-RKSW451-2M
3	6915658	RSSW-RKSW451-3M
4	6914120	RSSW-RKSW451-4M
5	6915659	RSSW-RKSW451-5M
6	6914121	RSSW-RKSW451-6M
8	6915660	RSSW-RKSW451-8M
10	6914122	RSSW-RKSW451-10M
15	6914123	RSSW-RKSW451-15M
20	6914182	RSSW-RKSW451-20M
30	6914124	RSSW-RKSW451-30M

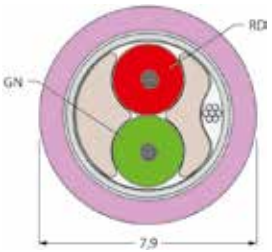


Cable length [m]	ID number	Type
0.5	6914244	WSSW-RKSW451-0.5M
1	6914245	WSSW-RKSW451-1M
2	6914246	WSSW-RKSW451-2M
2.5	6933326	WSSW-RKSW451-2.5M
4	6914249	WSSW-RKSW451-4M
5	6914247	WSSW-RKSW451-5M
7	6914274	WSSW-RKSW451-7M



Cable length [m]	ID number	Type
0.3	6915680	WSSW-WKSW451-0.3M
0.5	6914134	WSSW-WKSW451-0.5M
1	6914135	WSSW-WKSW451-1M
2	6914136	WSSW-WKSW451-2M
3	6915946	WSSW-WKSW451-3M
4	6914137	WSSW-WKSW451-4M
6	6914138	WSSW-WKSW451-6M
10	6914139	WSSW-WKSW451-10M
15	6914140	WSSW-WKSW451-15M
30	6914141	WSSW-WKSW451-30M

PUR Cable – Purple, Type 456



- 5-pin, B-coded, 2 × 0.34 mm²
- Flame-retardant
- UV-resistant
- cULus approved

Female connector



1 = n.c.
2 = GN (Bus A)
3 = n.c.
4 = RD (Bus B)
5 = n.c.
Shield connected to coupling nut

Male connector



1 = n.c.
2 = GN (Bus A)
3 = n.c.
4 = RD (Bus B)
5 = n.c.
Shield connected to coupling nut

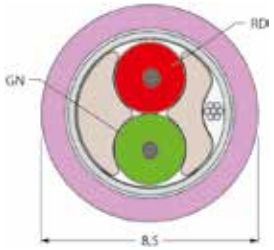
Connector	
Grip	Plastic, TPU, Black
Contacts	Metal, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	7.9 mm ± 0.30
Cable jacket	PUR, Purple
Core insulation	PE (GN, RD)
Core cross-section	2 x 0.34 mm²
Arrangement of strands	19 x 0.15 mm
Shield	Aluminum foil, tinned copper braid
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	250 V
DC resistance (loop)	50 Ω /km
Nom. Impedance	150 (1 MHz)
Nom. Capacitance	29.53 pF/m
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 15 x Ø
Ambient temperature	
Stationary usage	-40…+80 °C
Non-stationary usage	-40…+80 °C

Types and Features — Selection Table



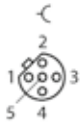
Cable length [m]	ID number	Type
30	6604291	KABEL456-30M
225	6604294	KABEL456-225M
500	6604296	KABEL456-500M
1	6603841	RSSW456-1M
2	6602500	RSSW456-2M
3	6603844	RSSW456-3M
4	6602537	RSSW456-4M
5	6602501	RSSW456-5M
10	6602502	RSSW456-10M
15	6602693	RSSW456-15M
25	6603846	RSSW456-25M
1	6603852	RKSW456-1M
2	6602497	RKSW456-2M
3	6603855	RKSW456-3M
4	6602538	RKSW456-4M
5	6602498	RKSW456-5M
10	6602499	RKSW456-10M
15	6602645	RKSW456-15M
25	6603859	RKSW456-25M
3	6603480	WSSW456-3M
5	6932282	WSSW456-5M
10	6603974	WSSW456-10M
0.3	6602516	RSSW-RKSW456-0.3M
0.5	6602517	RSSW-RKSW456-0.5M
1	6602518	RSSW-RKSW456-1M
2	6602519	RSSW-RKSW456-2M
3	6602520	RSSW-RKSW456-3M
4	6602521	RSSW-RKSW456-4M
5	6602522	RSSW-RKSW456-5M
10	6602525	RSSW-RKSW456-10M
15	6602526	RSSW-RKSW456-15M
20	6603865	RSSW-RKSW456-20M

PUR Cable – Purple, Type 458



- 5-pin, B-coded, 2 × 0.34 mm²
- Qualified for drag chain use
- Flame-retardant
- UV-resistant
- cULus approved

Female connector



1 = n.c.
2 = GN (Bus A)
3 = n.c.
4 = RD (Bus B)
5 = n.c.
Shield connected to coupling nut

Male connector



1 = n.c.
2 = GN (Bus A)
3 = n.c.
4 = RD (Bus B)
5 = n.c.
Shield connected to coupling nut

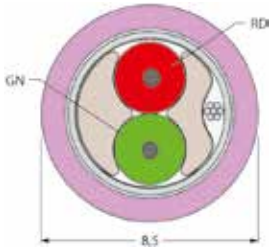
Connector	
Grip	Plastic, TPU, Black
Contacts	Metal, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	8.5 mm ± 0.30
Cable jacket	PUR, Purple
Core insulation	PE (GN, RD)
Core cross-section	2 x 0.34 mm²
Arrangement of strands	65 x 0.079 mm
Shield	Aluminum foil, tinned copper braid
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	250 V
DC resistance (loop)	50 Ω /km
Nom. Impedance	150 (1MHz)
Nom. Capacitance	29.53 pF/m
Mechanical and chemical properties	
Bending cycles	> 10 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 15 x Ø
Ambient temperature	
Stationary usage	-40…+80 °C
Non-stationary usage	-40…+60 °C
Drag chain operation	-25…+60 °C

Types and Features — Selection Table



Cable length [m]	ID number	Type
30	6604298	KABEL458-30M
150	6604300	KABEL458-150M
2	6602494	RSSW458-2M
4	6603876	RSSW458-4M
5	6602495	RSSW458-5M
6	6602064	RSSW458-6M
8	6603877	RSSW458-8M
10	6602496	RSSW458-10M
30	6602382	RSSW458-30M
2	6602491	RKSW458-2M
3	6603887	RKSW458-3M
5	6602492	RKSW458-5M
6	6602318	RKSW458-6M
8	6603889	RKSW458-8M
10	6602493	RKSW458-10M
15	6603890	RKSW458-15M
30	6602322	RKSW458-30M
0.5	6603896	RSSW-RKSW458-0.5M
1	6603897	RSSW-RKSW458-1M
2	6603899	RSSW-RKSW458-2M
3	6603901	RSSW-RKSW458-3M
4	6603902	RSSW-RKSW458-4M
5	6602460	RSSW-RKSW458-5M
10	6603905	RSSW-RKSW458-10M
15	6602570	RSSW-RKSW458-15M
25	6603907	RSSW-RKSW458-25M

PVC Cable – Purple, Type 455



- 5-pin, B-coded, 2 × 0.34 mm²
- Flame-retardant
- UV-resistant
- cULus approved

Female connector



1 = n.c.
2 = GN (Bus A)
3 = n.c.
4 = RD (Bus B)
5 = n.c.
Shield connected to coupling nut

Male connector



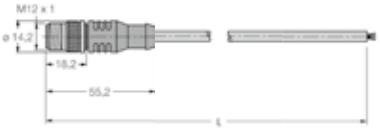
1 = n.c.
2 = GN (Bus A)
3 = n.c.
4 = RD (Bus B)
5 = n.c.
Shield connected to coupling nut

Connector	
Grip	Plastic, TPU, Black
Contacts	Metal, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	8.5 mm ± 0.15
Cable jacket	PVC, Purple
Core insulation	PE (GN, RD)
Core cross-section	2 x 0.34 mm²
Arrangement of strands	19 x 0.15 mm
Shield	Aluminum foil, tinned copper braid
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	250 V
DC resistance (loop)	50 Ω /km
Nom. Impedance	150 (1 MHz)
Nom. Capacitance	29.53 pF/m
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 15 x Ø
Ambient temperature	
Stationary usage	-40…+80 °C
Non-stationary usage	-40…+80 °C

Types and Features — Selection Table





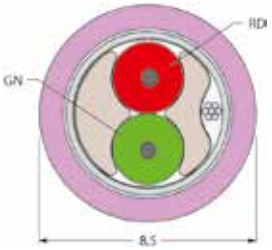






Cable length [m]	ID number	Type
30	6604284	KABEL455-30M
150	6604286	KABEL455-150M
300	6604288	KABEL455-300M
1	6602312	RSSW455-1M
2	6603803	RSSW455-2M
3	6602311	RSSW455-3M
5	6603806	RSSW455-5M
20	6602556	RSSW455-20M
5	6602435	RKSW455-5M
1	6602310	RKSW455-1M
2	6603818	RKSW455-2M
3	6602313	RKSW455-3M
4	6603820	RKSW455-4M
6	6603821	RKSW455-6M
50	6603829	RKSW455-50M
0.3	6603830	RSSW-RKSW455-0.3M
0.5	6602694	RSSW-RKSW455-0.5M
1	6603831	RSSW-RKSW455-1M
2	6602222	RSSW-RKSW455-2M
3	6603834	RSSW-RKSW455-3M
4	6602619	RSSW-RKSW455-4M
5	6602221	RSSW-RKSW455-5M
6	6603835	RSSW-RKSW455-6M
8	6602620	RSSW-RKSW455-8M
10	6602617	RSSW-RKSW455-10M
15	6602695	RSSW-RKSW455-15M
20	6602618	RSSW-RKSW455-20M
25	6602696	RSSW-RKSW455-25M
30	6603836	RSSW-RKSW455-30M
50	6603838	RSSW-RKSW455-50M

PVC Cable – Purple, Type 455



- 5-pin, B-coded, 2 × 0.34 mm²
- Flame-retardant
- UV-resistant
- cULus approved

Female connector



1 = n.c.
2 = GN (Bus A)
3 = n.c.
4 = RD (Bus B)
5 = n.c.
Shield connected to coupling nut

Male connector



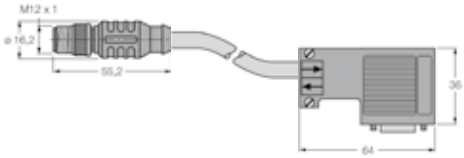
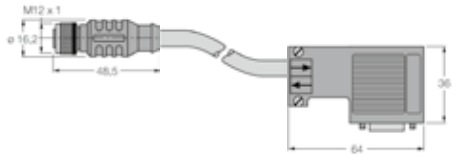
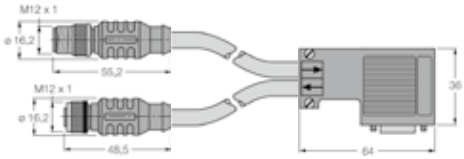
1 = n.c.
2 = GN (Bus A)
3 = n.c.
4 = RD (Bus B)
5 = n.c.
Shield connected to coupling nut



1 = n.c.
2 = n.c.
3 = RD (Bus B)
4 = n.c.
5 = GND
6 = 5 VDC
7 = n.c.
8 = GN (Bus A)
9 = n.c.
Shield connected to housing

Connector	
Grip	TPU, Black
Contacts	Metal, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	8.5 mm ± 0.15
Cable jacket	PVC, Purple
Core insulation	PE (GN, RD)
Core cross-section	2 x 0.34 mm²
Arrangement of strands	19 x 0.15 mm
Shield	Aluminum foil, tinned copper braid
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	250 V
DC resistance (loop)	50 Ω /km
Nom. Impedance	150 (1 MHz)
Nom. Capacitance	29.53 pF/m
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 15 x Ø
Ambient temperature	
Stationary usage	-40…+80 °C
Non-stationary usage	-40…+80 °C

Types and Features — Selection Table

	Cable length [m]	ID number	Type
			
	0.3	6604096	RSSW-D9S/T455-0.3M
	0.5	6602616	RSSW-D9S/T455-0.5M
	2	6603221	RSSW-D9S/T455-2M
	4	6602336	RSSW-D9S/T455-4M
	0.3	6604097	RKSW-D9S/T455-0.3M
	1	6603222	RKSW-D9S/T455-1M
	2	6602671	RKSW-D9S/T455-2M
	4	6602337	RKSW-D9S/T455-4M
	10	6602690	RKSW-D9S/T455-10M
	20	6602691	RKSW-D9S/T455-20M
	50	6603955	RKSW-D9S/T455-50M
	0.5	6602625	RSSW-D9S-RKSW455-0.5M-0.5M
	1	6603358	RSSW-D9S-RKSW455-1M-1M
	2	6603977	RSSW-D9S-RKSW455-2M-2M
	4	6602338	RSSW-D9S-RKSW455-4M-4M

Field-Wireable Connectors – M12 × 1



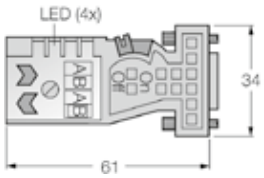
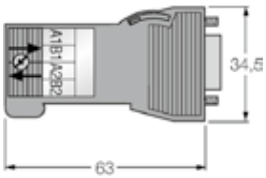
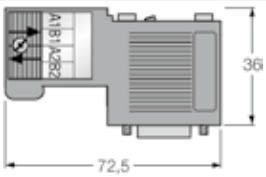
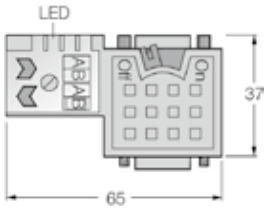
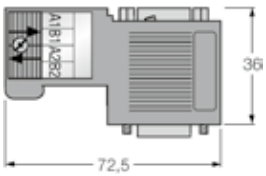
	Number of pins	Current load [A]	ID number	Type	Number of pins	Current load	ID number	Type
Female connector, straight	5	4	6904721	BMWS8151-8.5	5	4	6604210	FW-M12KU5W-G-ZF-ME-SH-9
Female connector, angled	5	4	6904723	BMWS8251-8.5				
Male connector, straight	5	4	6904722	BMSWS8151-8.5	5	4	6604211	FW-M12ST5W-G-ZF-ME-SH-9
Male connector, angled	5	4	6904724	BMSWS8251-8.5				

Connection mode	Screw/clamp connection	Tension spring connection
Grip	Die-cast zinc, GD-Zn, Nickel-plated	Die-cast zinc, GD-Zn, Nickel-plated
Coupling nut/screw	Die-cast zinc, GD-Zn, Nickel-plated	Die-cast zinc, GD-Zn, Nickel-plated
Contacts	Brass, CuZn, Gold-plated	Metal, CuZn, Gold-plated
Contact carriers	PA, Black	PA, Black
Protection class	IP67	IP67
Rated voltage	125 V	125 V
Terminal cross-section	0.14…0.75 mm²	0.14…0.75 mm²
Cable external diameter	min. 6…8.5 mm	min. 7…9 mm
Stationary usage	-25…+85 °C	-40…+85 °C

Female connector	Male connector
	

Field-Wireable Connectors – Sub-D



	Number of pins	Current load [A]	ID number	Type	Number of pins	Current load	ID number	Type
Male connector, straight								
	9	4	6604221	FW-D9TLEDKU9XX-G-FC-ME-SH-8.5	9	2	6780088	6GK1500-0FC10
Male connector, angled								
					9	2	6780102	6ES7972-0BA52-0XA0-IP20FC
Male connector, angled, PG connector socket								
	9	4	6604220	FW-D9TLEDKU9PG-W-FC-ME-SH-8.5	9	2	6780101	6ES7972-0BB52-0XA0-IP20FC-PG
Connection mode	Insulation displacement connection				Insulation displacement connection			
Grip	Die-cast zinc, GD-Zn				Plastic, Gray			
Contacts	Metal, CuZn, Gold-plated				Metal, CuZn, Gold-plated			
Contact carriers	PA, Black				White			
Protection class	IP20				IP20			
Rated voltage	12 V				24 V			
Cable external diameter	min. 6…8 mm				min. 6…8 mm			
Stationary usage	-20…+75 °C				-25…+60 °C			

Female connector

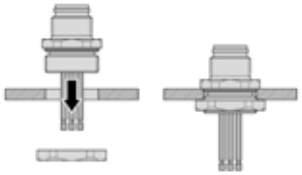


Male connector



M12 × 1 Receptacles for Front-Panel Mounting

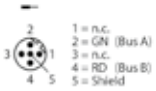
Screw-in thread seal	Plastic, NBR
Protection class	IP67
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Insulation resistance	≥ 10^8 Ω
Contact resistance	≤ 5 mΩ
Ambient temperature	
Stationary usage	-30…+90 °C



Female connector

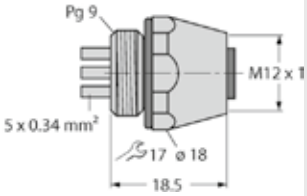
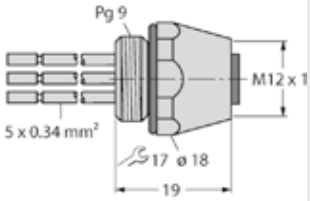
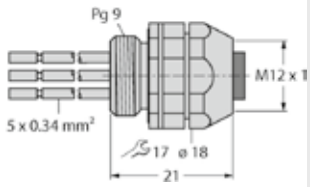
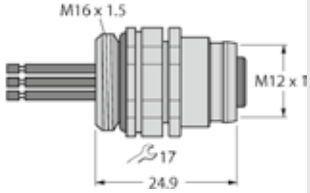


Male connector

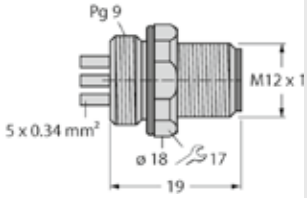
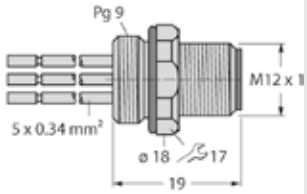
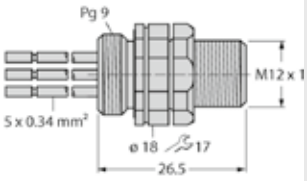
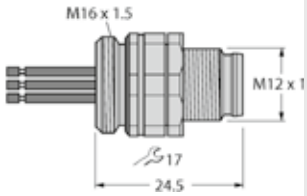


Types and Features — Selection Table



	Design	Receptacle housing	Number of pins	Connection mode	Rated voltage [V]	Current load [A]	Contact carriers	Cable length [m]	ID number	Type
	Female connector	Brass	5	LK	60	4	TPU, Black		6935916	FKW5L
	Female connector	Brass	5	L	60	4	TPU, Black	0.5	6935718	FKW4.54-0.5
	Female connector	Brass	5	L	60	4	TPU, Black	0.5	6935159	FKDW4.54-0.5
	Female connector	Brass	5	L	60	4	TPU, Black	0.5	6935753	EC-FKDW4.54-0.5/16

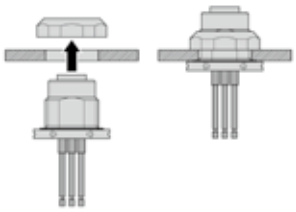
Types and Features — Selection Table

	Design	Receptacle housing	Number of pins	Connection mode	Rated voltage [V]	Current load [A]	Contact carriers	Cable length [m]	ID number	Type
	Male connector	Brass	5	LK	60	4	TPU, Black		6935979	FSW5L
	Male connector	Brass	5	L	60	4	TPU, Black	0.5	6935717	FSW4.54-0.5
	Male connector	Brass	5	L	60	4	TPU, Black	0.5	6935716	FSDW4.54-0.5
	Male connector	Brass	5	L	60	4	TPU, Black	0.5	6935755	EC-FS-DW4.54-0.5/16

1) L: Stranded wire contact, LK: Solder contact, P: Print contact

M12 × 1 – Receptacles for Rear Panel Installation

Screw-in thread seal	Plastic, NBR
Protection class	IP67
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Insulation resistance	≥ 10^8 Ω
Contact resistance	≤ 5 mΩ
Ambient temperature	
Stationary usage	-30…+90 °C



Female connector

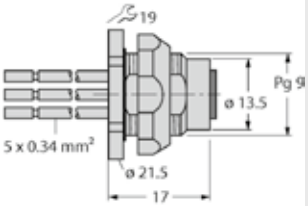
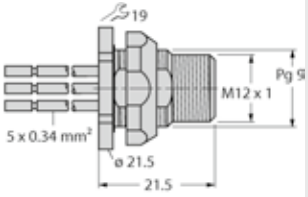
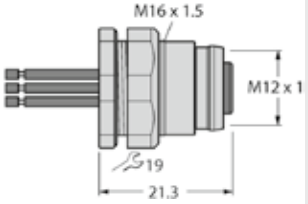


Male connector

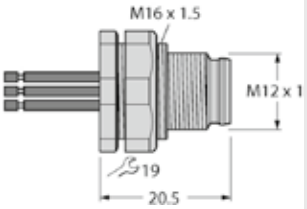


Types and Features — Selection Table



Design	Receptacle housing	Number of pins	Connection mode	Rated voltage [V]	Current load [A]	Contact carriers	Cable length [m]	ID number	Type
	Female connector	Brass	5	L	60	4	TPU, Black	0.5	6935249	FKFDW4.54-0.5
	Male connector	Brass	5	L	60	4	TPU, Black	0.5	6935250	FSFDW4.54-0.5
	Female connector	Brass	5	L	60	4	TPU, Black	0.5	6935754	EC-FKFDW4.54-0.5/16

Types and Features — Selection Table

	Design	Receptacle housing	Number of pins	Connection mode	Rated voltage [V]	Current load [A]	Contact carriers	Cable length [m]	ID number	Type
	Male connector	Brass	5	L	60	4	TPU, Black	0.5	6936231	EC-FSFDW4.54-0.5/16

1) L: Stranded wire contact, LK: Solder contact, P: Print contact

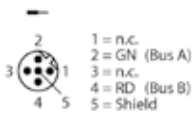
Repeater, Y- and T-Splitters



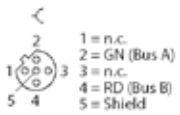
F001



F008



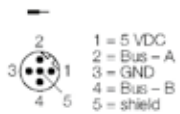
F034



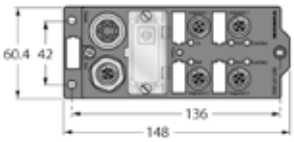
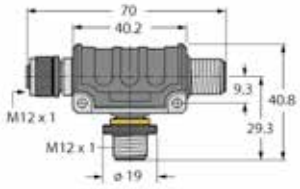
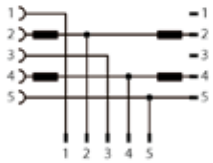
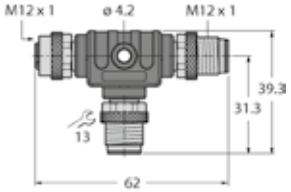
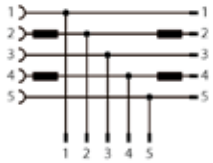
F083



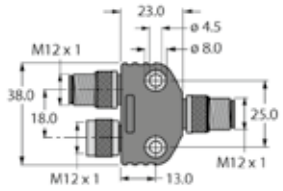
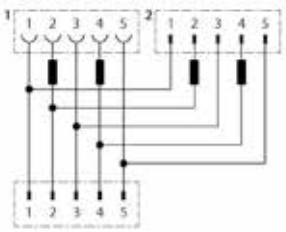
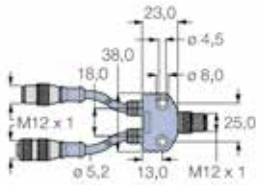
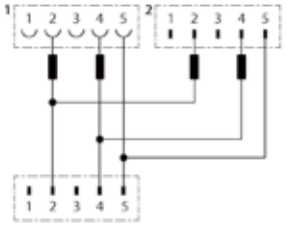
F100



Types and Features — Selection Table

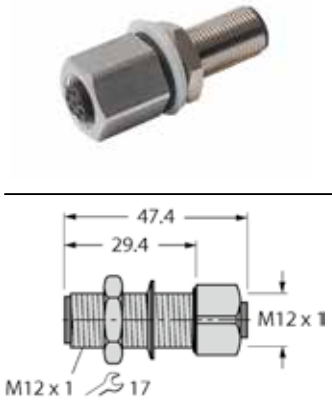
Design	Pin Assignment	Graph	Properties	ID number	Type
			PROFIBUS-DP repeater, M12 × 1 B-coded Glass fiber reinforced polyamide (PA6-GF30) Protection class IP67 Up to 12 Mbps	6825354	REP-DP 0002
	F100 F001 F008		PROFIBUS-DP T-splitter, M12 × 1 B-coded Fully shielded, 12 Mbps Current load: 4A Rated voltage: 60V Protection class IP67, (mounted) Temperature range: -30 °C… +90 °C	6914180	RKSW-2RSSW45-0001
	F001 F100		PROFIBUS-DP T-splitter, M12 × 1 B-coded Fully shielded, 12 Mbps Current load: 4A Rated voltage: 60V Protection class IP67, (mounted) Temperature range: -30 °C… +90 °C	6934899	RKSWS4.5[5]-2RSSWS

Types and Features — Selection Table

Design	Pin Assignment	Graph	Properties	ID number	Type
	F100 F083		PROFIBUS DP Y-splitter without cable M12 × 1 B-coded, fully shielded, 12 Mbps Current load: 150mA (pins 2, 4), 4A (pins 1, 3, 5) Rated voltage: 150V (pins 2, 4), 250V (pins 1, 3, 5) Protection class IP67 Temperature range: -40 °C… +105 °C	6996009	VB2-FSW-FKW-FSW-45
	F034 F008		PROFIBUS DP Y-splitter with cable M12 × 1 B-coded, fully shielded Cable: PVC, purple, AWG 22/1 Jacket diameter: 8.5 mm UL approved	6996038	VB2-FSW/RSSW-RKSW455-0.5M-0.5M

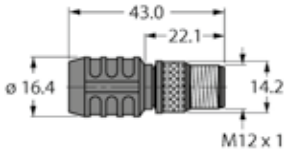
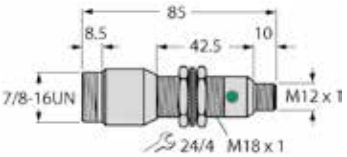
Wall Feed-through

Types and Features — Selection Table

	Description	ID number	Type
	■ Design: M12 adapter, reverse-keyed ■ 5-pin feed-through male/female ■ For use in PROFIBUS-DP applications ■ Voltage: 60 V ■ Current load: 4 A ■ Temperature: -40 °C…+80 °C ■ Protection class IP67, (screwed together)	6602309	FKW-FSW45-M12

Terminating Resistor

Types and Features — Selection Table

	Description	ID number	Type
	■ Terminating resistor, M12 × 1 male connector ■ For use in PROFIBUS-DP applications ■ 5-pin, reverse keyed ■ Protection class IP67, (screwed together)	6601590	RSS4.5-PDP-TR
	■ Terminating resistor for use in PROFIBUS-DP applications ■ 5-pin, reverse-keyed, active ■ M12 × 1 male to 7/8" male ■ 7/8" male to power supply ■ Protection class: IP6 (screwed together) ■ Temperature: -40 °C…+75 °C	6825346	PDP-TRA

Connectivity for CAN/DeviceNet™

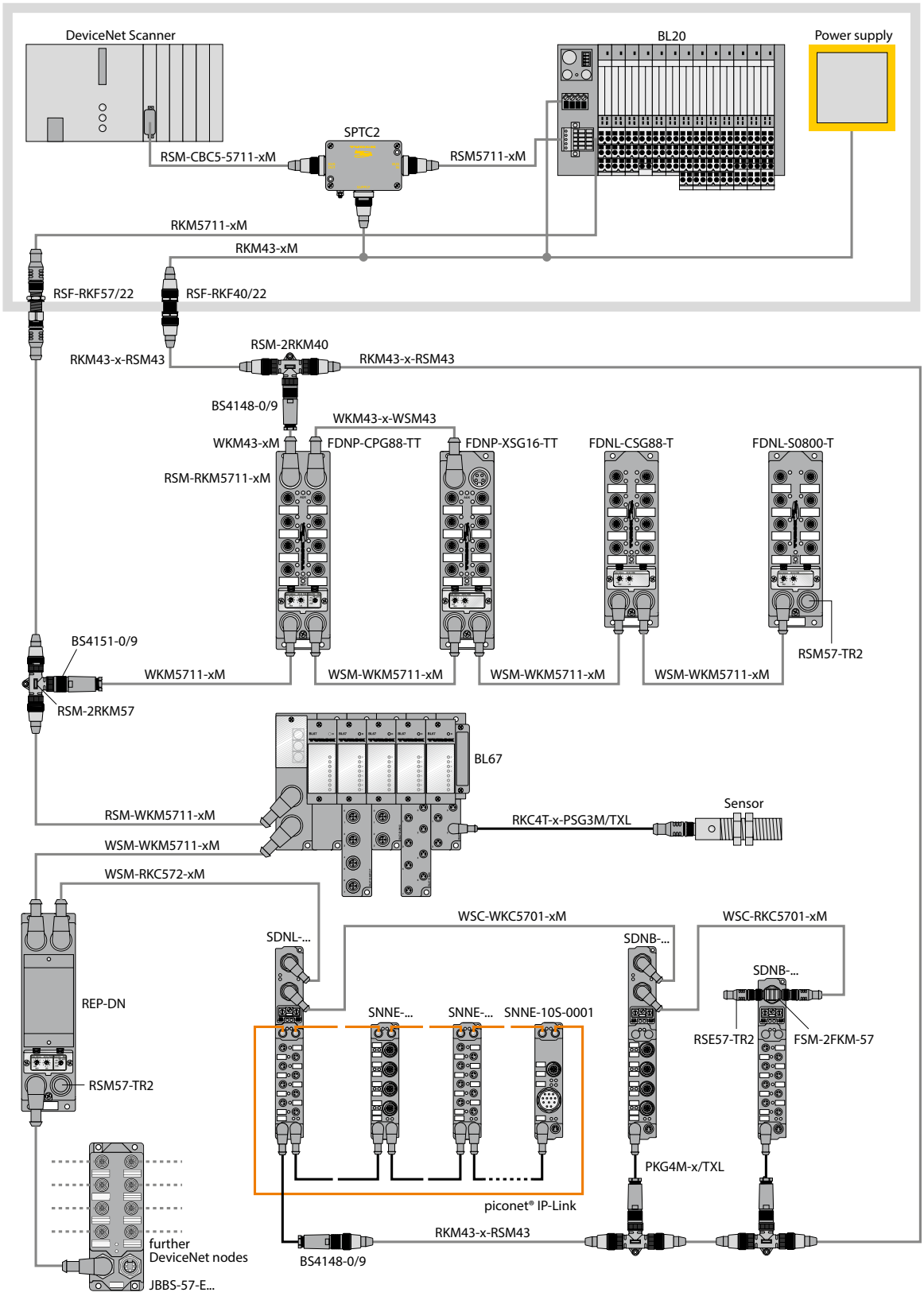


DeviceNet™ is an open bus system standardized according to EN 50325, which is based on the CAN specification (Controller Area Network). The system was developed by Rockwell Automation and the ODVA (Open DeviceNet Vendor Association) as an open fieldbus standard based on the CAN protocol. DeviceNet™ is standardized in the European standard EN 50325. The specification and maintenance of the DeviceNet™ standard is the responsibility of the ODVA. DeviceNet™ is an object-oriented bus system and operates on the producer/consumer principle. DeviceNet™ devices can be clients (masters) or servers (slaves) or both. Clients and servers can be producers, consumers, or both.

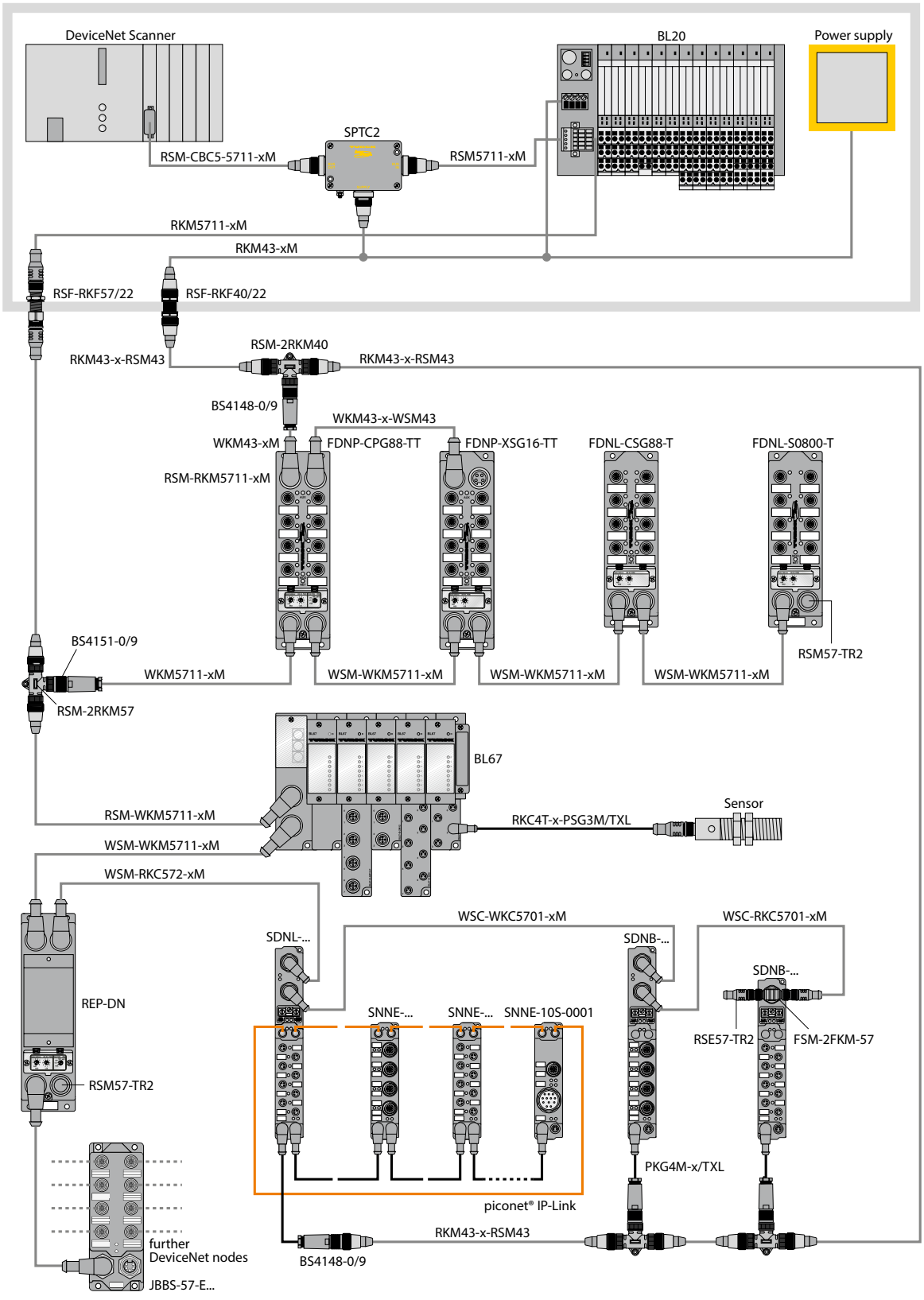
- Transmission medium: Cable, 2 × 2-wire, twisted, shielded, for data transmission and power supply (24 V)
- Transmission technology: CAN
- Bus topology: Linear structure (bus termination at both ends) with spur lines
- Bus access procedure: Multi-master-system with CSMA/CA procedure network wide multi-/broadcasting
- Use of repeaters to extend the main and spur line
- Max. 64 nodes (incl. master)
- Addressing via coding switches
- Configuration/parameter setting of devices with standard device EDS files (Electronic Data Sheets)

Turck provides all the necessary components for creating the network – from fieldbus stations with IP67 and IP20 protection to repeaters, power supplies right through to the appropriate connection technology. These include bus cables, power supply cables, passive and active junctions, control cabinet feed-throughs and mounting receptacles. Field-wireable connectors and terminating resistors round off the product line.

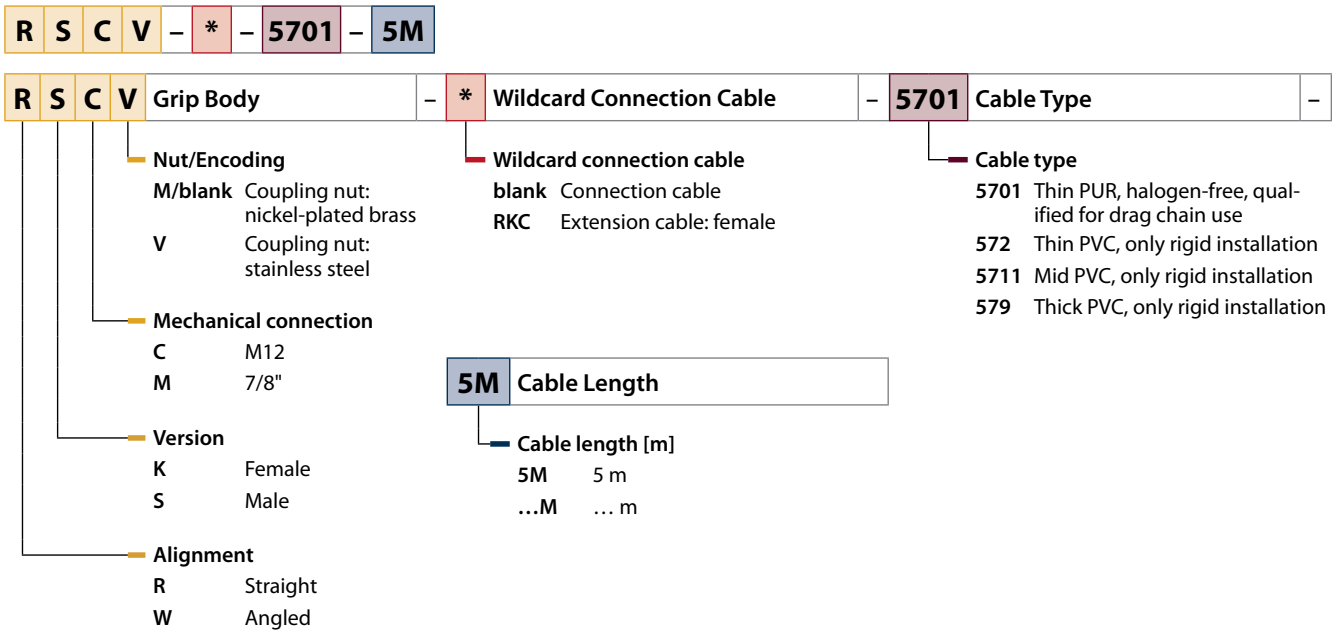
DeviceNet™ – Application Example



CAN – Application Example



Type Code – DeviceNet™



Connectivity for CAN/DeviceNet™ – Overview

Fieldbus Cables M12 x 1, 7/8“	Page
	378

Field-Wireable Connectors - M12 x 1, 7/8“	Page
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Receptacles - M12 x 1, 7/8“	Page
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Repeaters, Power Clamps, Y and T-Splitters	Page
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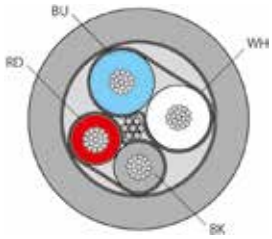
Accessories	Page
	396

PUR Cable – Anthracite, Type 5701



- 5-pin, A-coded
- Power pair: 2 × 22 AWG, data pair: 2 × 24 AWG
- Qualified for drag chain use and UV resistant
- Free from halogens and LABS
- cULus approved

Female connector



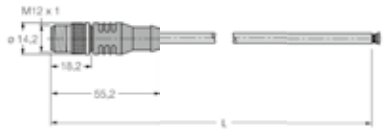
Male connector

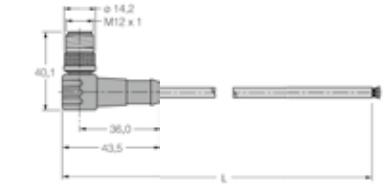


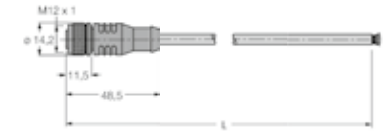
Connector	
Grip	Plastic, TPU, Black
Contacts	Metal, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	6.7 mm
Cable jacket	PUR, Anthracite
Core insulation	PE (Power: RD, BK, Data: WH, BU)
Core cross-section	2 x 0.25 mm²
Shield	yes
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	250 V
DC resistance (loop)	82 Ω /km
Nom. Impedance	120 (1 MHz)
Nom. Capacitance	37 pF/m
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-40…+80 °C
Non-stationary usage	-25…+60 °C

Types and Features — Selection Table

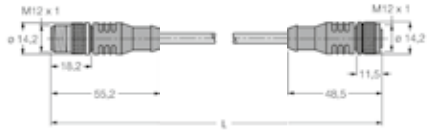






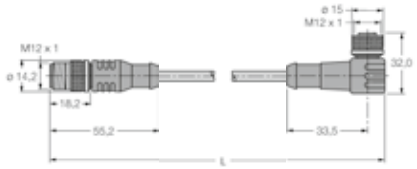
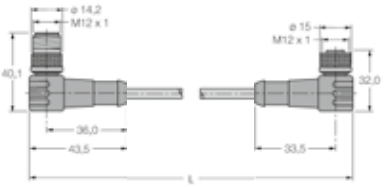




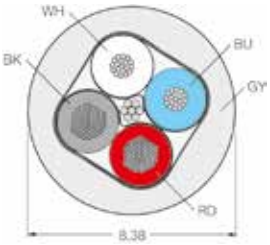


Cable length [m]	ID number	Type
5	6931036	RSC5701-5M
10	6931037	RSC5701-10M
2	6931132	WSC5701-2M
5	6933247	WSC5701-5M
10	6933248	WSC5701-10M
2	6931922	RKC5701-2M
5	6931034	RKC5701-5M
10	6931035	RKC5701-10M
3	6904964	WKC5701-3M
5	6933244	WKC5701-5M
10	6933245	WKC5701-10M
0.3	6604829	RSC-RKC5701-0.3M
0.5	6604830	RSC-RKC5701-0.5M
1	6604831	RSC-RKC5701-1M
1.5	6604832	RSC-RKC5701-1.5M
2	6604833	RSC-RKC5701-2M
3	6604834	RSC-RKC5701-3M
4	6604835	RSC-RKC5701-4M
5	6604836	RSC-RKC5701-5M
6	6604837	RSC-RKC5701-6M
8	6604838	RSC-RKC5701-8M
10	6931038	RSC-RKC5701-10M
15	6604839	RSC-RKC5701-15M
20	6604840	RSC-RKC5701-20M
30	6604841	RSC-RKC5701-30M

Types and Features — Selection Table

	Cable length [m]	ID number	Type
			
	0.3	6604842	RSC-WKC5701-0.3M
	1	6931039	RSC-WKC5701-1M
	0.3	6604822	WSC-WKC5701-0.3M
	0.5	6604823	WSC-WKC5701-0.5M
	1	6604824	WSC-WKC5701-1M
	1.5	6933252	WSC-WKC5701-1.5M
	2	6604825	WSC-WKC5701-2M
	3	6931126	WSC-WKC5701-3M
	4	6604826	WSC-WKC5701-4M
	5	6935600	WSC-WKC5701-5M
	6	6604827	WSC-WKC5701-6M
	7	6933254	WSC-WKC5701-7M
	10	6604828	WSC-WKC5701-10M
	15	6933255	WSC-WKC5701-15M

PUR Cable – Gray, Type 5723



- 5-pin, A-coded
- Power pair: 2 × 22 AWG, data pair: 2 × 22 AWG
- Qualified for drag chain use
- Flame-retardant
- cULus approved

Female connector

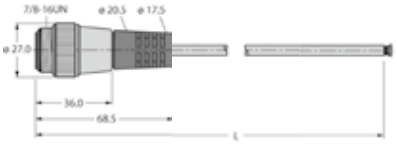
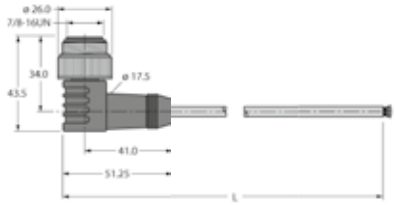
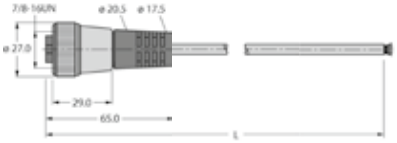
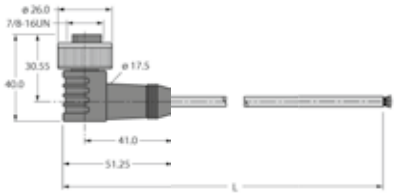
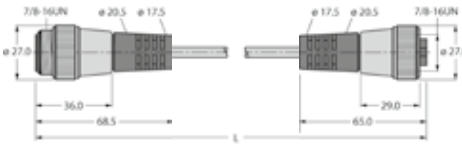


Male connector

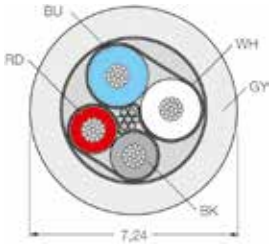


Connector	
Grip	Plastic, TPU, Blue
Contacts	Metal, CuZn, Gold-plated
Contact carriers	TPU, Blue
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	8.38 mm
Cable jacket	TPU, Gray
Core insulation	PE (Data), PVC (Power) (Power: RD, BK, Data: WH, BU)
Core cross-section	2 x 0.52 mm^2
Arrangement of strands	41 x 0.1 mm
Arrangement of strands	82 x 0.1 mm
Shield	yes
Electrical properties at +20 °C	
Current load	7 A
Rated voltage	300 V
DC resistance (loop)	34.1 Ω /km
Nom. Impedance	110 (1 MHz)
Nom. Capacitance	40.52 pF/m
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 15 x Ø
Ambient temperature	
Stationary usage	-40…+80 °C

Types and Features — Selection Table

	Cable length [m]	ID number	Type
			
	30	6604923	KABEL5723-30M
	150	6604925	KABEL5723-150M
	500	6604928	KABEL5723-500M
	6	6606933	RSM5723-6M
	10	6606935	RSM5723-10M
	15	6606936	RSM5723-15M
	6	6606055	WSM5723-6M
	10	6606057	WSM5723-10M
	15	6606058	WSM5723-15M
	6	6605189	RKM5723-6M
	10	6605191	RKM5723-10M
	15	6605192	RKM5723-15M
	6	6605314	WKM5723-6M
	10	6605316	WKM5723-10M
	15	6605317	WKM5723-15M
	0.3	6605544	RSM-RKM5723-0.3M
	0.5	6605545	RSM-RKM5723-0.5M
	1	6605546	RSM-RKM5723-1M
	2	6605548	RSM-RKM5723-2M
	4	6605551	RSM-RKM5723-4M
	6	6605553	RSM-RKM5723-6M
	10	6605555	RSM-RKM5723-10M
	15	6605556	RSM-RKM5723-15M
	30	6605559	RSM-RKM5723-30M

PVC Cable – Gray, Type 572



- 5-pin, A-coded
- Power pair: 2 × 22 AWG, data pair: 2 × 22 AWG
- UV-resistant
- LABS free
- cULus approved

Female connector



Male connector



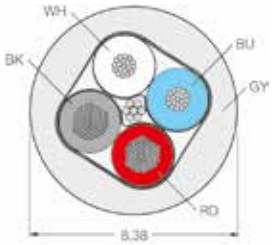
Connector	
Grip	Plastic, TPU, Blue
Contacts	Metal, CuZn, Gold-plated
Contact carriers	TPU, Blue
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	7.2 mm
Cable jacket	PVC, Gray
Core insulation	PE (Data), PVC (Power) (Power: RD, BK, Data: WH, BU)
Core cross-section	2 x 0.32 mm^2
Arrangement of strands	19 x 0.15 mm
Arrangement of strands	19 x 0.15 mm
Shield	yes
Electrical properties at +20 °C	
Current load	4 A
DC resistance (loop)	59.3 Ω /km
Nom. Impedance	126 (1 MHz)
Nom. Capacitance	39 pF/m
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 15 x Ø
Ambient temperature	
Stationary usage	-40…+80 °C
Non-stationary usage	-30…+75 °C

Types and Features — Selection Table



Cable length [m]	ID number	Type
30	6958118	KABEL572-30M
150	6958120	KABEL572-150M
500	6604900	KABEL572-500M
0.3	6602485	RSC572-0.3M
1.5	6602449	RSC572-1.5M
2	6602486	RSC572-2M
5	6602644	RSC572-5M
6	6602447	RSC572-6M
10	6602640	RSC572-10M
15	6603623	RSC572-15M
1	6602220	WSC572-1M
2	6602688	WSC572-2M
5	6602682	WSC572-5M
6	6603635	WSC572-6M
10	6603636	WSC572-10M
15	6603637	WSC572-15M
1	6602487	RKC572-1M
2	6602076	RKC572-2M
5	6602084	RKC572-5M
6	6603624	RKC572-6M
10	6602428	RKC572-10M
15	6604933	RKC572-15M
1	6602705	WKC572-1M
2	6602687	WKC572-2M
5	6602641	WKC572-5M
6	6603638	WKC572-6M
10	6602637	WKC572-10M
15	6603640	WKC572-15M
0.3	6602473	RSC-RKC572-0.3M
0.5	6602332	RSC-RKC572-0.5M
1	6603628	RSC-RKC572-1M
2	6603629	RSC-RKC572-2M
4	6603630	RSC-RKC572-4M
6	6603631	RSC-RKC572-6M
10	6603632	RSC-RKC572-10M
15	6603633	RSC-RKC572-15M
20	6603816	RSC-RKC572-20M
30	6603395	RSC-RKC572-30M

PVC Cable – Gray, Type 5711



- 5-pin, A-coded
- Power pair: 2 × 16 AWG, data pair: 2 × 20 AWG
- UV-resistant
- LABS free
- cULus approved

Female connector

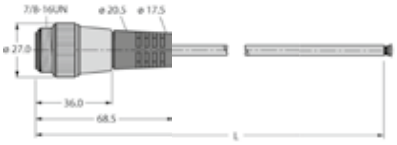
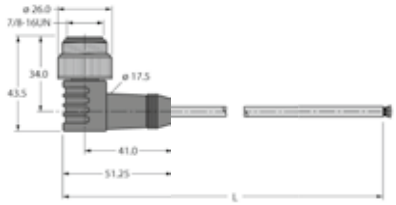
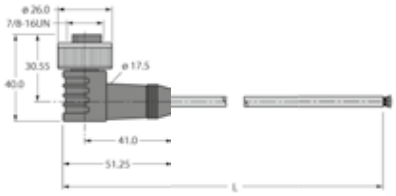
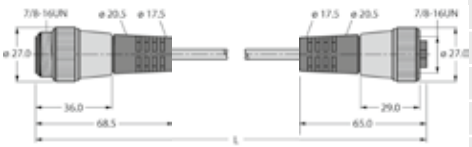


Male connector



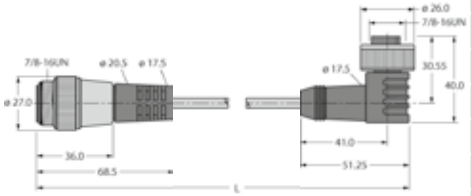
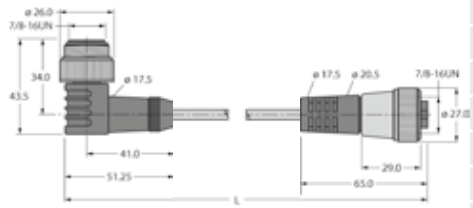
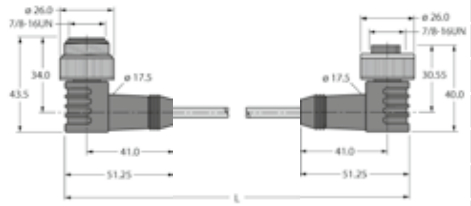
Connector	
Grip	Plastic, TPU, Blue
Contacts	Metal, CuZn, Gold-plated
Contact carriers	TPU, Blue
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	8.38 mm
Cable jacket	PVC, Gray
Core insulation	PE (Data), PVC (Power) (Power: RD, BK, Data: WH, BU)
Core cross-section	2 x 0.52 mm^2
Arrangement of strands	19 x 0.19 mm
Arrangement of strands	65 x 0.16 mm
Shield	yes
Electrical properties at +20 °C	
Current load	7 A
Rated voltage	300 V
DC resistance (loop)	34.1 Ω /km
Nom. Impedance	110 (1 MHz)
Nom. Capacitance	40.52 pF/m
Mechanical and chemical properties	
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 15 x Ø
Ambient temperature	
Stationary usage	-40…+80 °C

Types and Features — Selection Table

	Cable length [m]	ID number	Type
			
	30	6602453	KABEL5711-30M
	150	6602455	KABEL5711-150M
	500	6604922	KABEL5711-500M
	1	6602043	RSM5711-1M
	3	6604419	RSM5711-3M
	6	6603649	RSM5711-6M
	10	6603650	RSM5711-10M
	15	6603651	RSM5711-15M
	1	6932647	WSM5711-1M
	6	6606039	WSM5711-6M
	10	6602718	WSM5711-10M
	15	6603225	WSM5711-15M
	1	6602391	RKM5711-1M
	6	6603652	RKM5711-6M
	10	6603653	RKM5711-10M
	15	6602395	RKM5711-15M
	1	6602355	WKM5711-1M
	6	6605296	WKM5711-6M
	10	6605298	WKM5711-10M
	15	6605299	WKM5711-15M
	0.5	6602050	RSM-RKM5711-0.5M
	1	6602356	RSM-RKM5711-1M
	2	6602045	RSM-RKM5711-2M
	4	6602051	RSM-RKM5711-4M
	6	6602052	RSM-RKM5711-6M
	10	6602023	RSM-RKM5711-10M
	15	6602504	RSM-RKM5711-15M

Types and Features — Selection Table



	Cable length [m]	ID number	Type
	0.5	6602608	RSM-WKM5711-0.5M
	1	6601700	RSM-WKM5711-1M
	2	6603603	RSM-WKM5711-2M
	4	6603266	RSM-WKM5711-4M
	6	6601701	RSM-WKM5711-6M
	10	6931857	RSM-WKM5711-10M
	15	6611629	RSM-WKM5711-15M
	0.5	6603265	WSM-RKM5711-0.5M
	1	6602424	WSM-RKM5711-1M
	2	6602423	WSM-RKM5711-2M
	4	6603985	WSM-RKM5711-4M
	6	6935948	WSM-RKM5711-6M
	10	6602715	WSM-RKM5711-10M
	15	6935949	WSM-RKM5711-15M
	0.5	6602014	WSM-WKM5711-0.5M
	1	6602016	WSM-WKM5711-1M
	2	6602018	WSM-WKM5711-2M
	4	6605654	WSM-WKM5711-4M
	6	6602401	WSM-WKM5711-6M
	10	6602022	WSM-WKM5711-10M
	15	6603447	WSM-WKM5711-15M

Field-Wireable Connectors



	Number of pins	Rated voltage [V]	ID number	Type	Number of pins	Rated voltage	ID number	Type
Female connector, straight	5	125	6904604	B8151-0/9				
Female connector, angled	5	125	6904603	B8251-0/9				
Male connector, straight	5	125	6904613	B8151-0/9				
Male connector, angled					5	125	6904615	BS8251-0/9
Connection mode	Screw/clamp connection				Screw/clamp connection			
Grip	Plastic, PA, Black				Plastic, PA, Black			
Coupling nut/screw	Plastic, PA, Black				Die-cast zinc, GD-Zn, Anodized			
Contacts	Brass, CuZn, Optalloy-coated				Brass, CuZn, Optalloy-coated			
Contact carriers	PA, Black				PA, Black			
Protection class	IP67				IP67			
Current load	4 A				4 A			
Terminal cross-section	0.14…0.75 mm²				0.14…0.75 mm²			
Cable external diameter	min. 6…8 mm				min. 6…8 mm			
Storage temperature	-40…+85 °C				-40…+85 °C			

Female connector

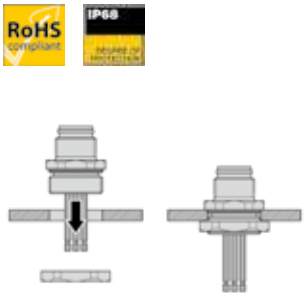


Male connector



Receptacles for Front-Panel Mounting – M12 × 1

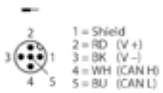
Contacts	Metal, CuZn, Gold-plated
Seal	Plastic, FPM/FKM
Screw-in thread seal	Plastic, NBR
Protection class	IP68
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Insulation resistance	≥ 10^8 Ω
Contact resistance	≤ 5 mΩ
Ambient temperature	
Stationary usage	-40…+90 °C



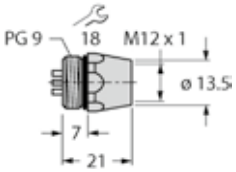
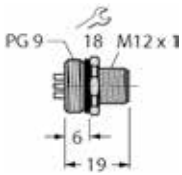
Female connector



Male connector



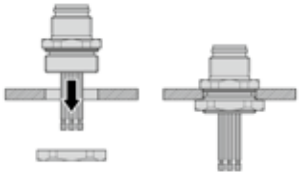
Types and Features — Selection Table

	Design	Receptacle housing	Number of pins	Connection mode	Rated voltage [V]	Current load [A]	Contact carriers	ID number	Type
	Female connector	Brass	5	LK	250	4	TPU, Black	6602216	FK57
	Male connector	Brass	5	LK	250	4	TPU, Black	6602314	FS57

1) L: Stranded wire contact, LK: Solder contact, P: Print contact

7/8" Receptacles for Front-Panel Mounting

Contacts	Metal, CuZn, Gold-plated
Seal	Plastic, FPM/FKM
Screw-in thread seal	Plastic, NBR
Protection class	IP67
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Insulation resistance	≥ 10^8 Ω
Contact resistance	≤ 5 mΩ
Ambient temperature	
Stationary usage	-40…+80 °C



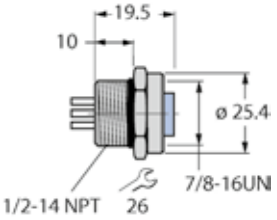
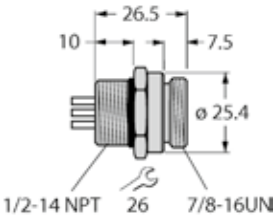
Female connector



Male connector



Types and Features — Selection Table

	Design	Receptacle housing	Number of pins	Connection mode	Rated voltage [V]	Current load [A]	Contact carriers	ID number	Type
	Female connector	Brass	5	LK	300	9	TPU, Black	6602217	RKF57
	Male connector	Brass	5	LK	300	9	TPU, Black	6602342	RSF57

1) L: Stranded wire contact, LK: Solder contact, P: Print contact

Repeaters, Power Clamps, Y and T-Splitters



F059



F060



F061



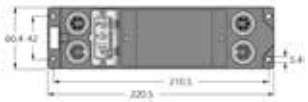
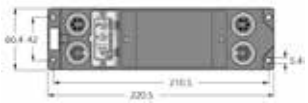
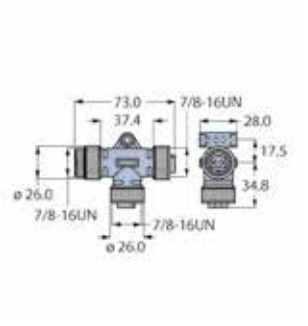
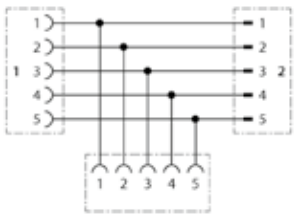
F065



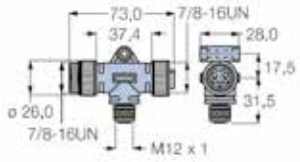
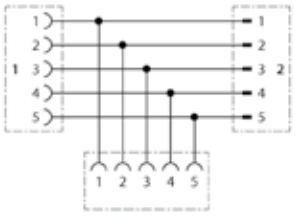
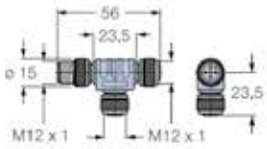
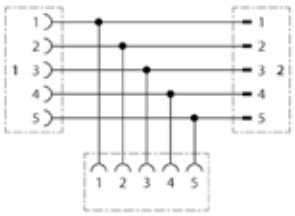
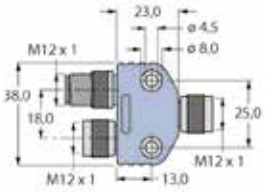
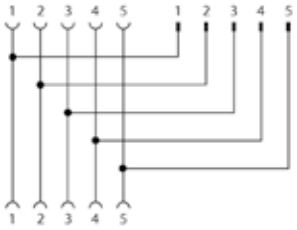
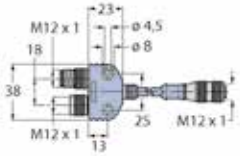
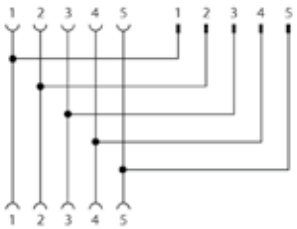
F098



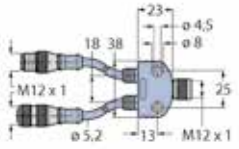
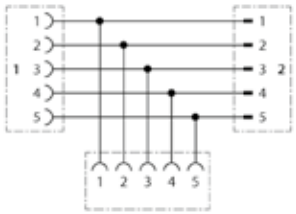
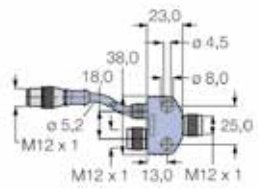
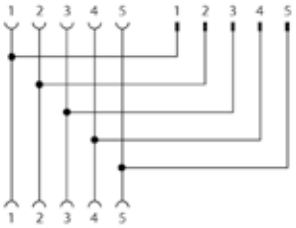
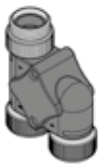
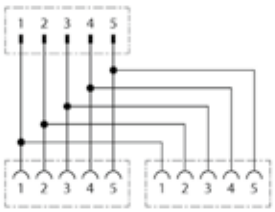
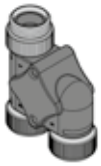
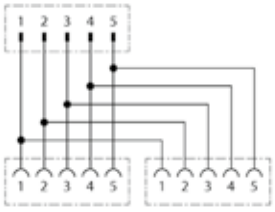
Types and Features — Selection Table

Design	Pin Assignment	Graph	Properties	ID number	Type
	F061 F065 F060		CAN/DeviceNet repeater, 7/8" connector, 5-pin Glass fiber reinforced polyamide housing Protection class NEMA 1, 3, 4, 6, 6P and IEC IP67, IP68, IP69K Up to 500 kbps Temperature range: -40 °C… +70 °C	6825349	REP-DN
	F059		CAN/DeviceNet power clamp, 7/8" connector, 5-pin Glass fiber reinforced polyamide housing Protection class NEMA 1, 3, 4, 6, 6P and IEC IP67, IP68, IP69K Up to 128 byte memory Temperature range: -40 °C… +70 °C	6603596	FDN-DN1
	F098 F065 F060		T-splitter for CAN/DeviceNet™ 7/8" connector, 5-pin Current load: 9A Rated voltage: 600V Protection class NEMA 1, 3, 4, 6, 6P and IEC IP67 Temperature range: -40 °C… +80 °C	6602007	RSM-2RKM57

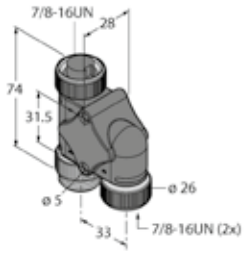
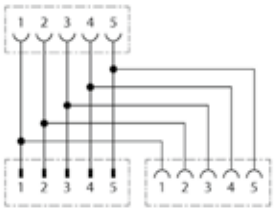
Types and Features — Selection Table

Design	Pin Assignment	Graph	Properties	ID number	Type
	F065 F060 F061		T-splitter for CAN/DeviceNet™ 7/8" male and M12 × 1 female, 5-pin Current load: 4A Rated voltage: 250V Protection class NEMA 1, 3, 4, 6, 6P and IEC IP67 Temperature range: -40 °C… +75°C	6602392	RSM-FKM-RKM57
	F060 F098 F061		T-splitter for CAN/DeviceNet™ M12 × 1 connector, 5-pin Current load: 4A Rated voltage: 60V Protection class IP67 Temperature range: -30 °C… +90 °C	6622101	FSM-2FKM57
	F098 F061		Y-splitter for CAN/DeviceNet M12 × 1 connector, 5-pin Current load: 4A Rated voltage: 250V Protection class NEMA 1, 3, 4, 6P and IEC IP67 Temperature range: -40 °C… +105 °C	6602331	VB2-FKM-FKM-FSM57
	F098 F061		Y-Splitter with PVC cable for CAN/DeviceNet M12 × 1 connector, 5-pin Current load: 4A Rated voltage: 250V Protection class NEMA 1, 3, 4, 6P and IEC IP67 Temperature range: -40 °C… +80 °C	6996011	VB2-RKC572-1M-FKM-FSM

Types and Features — Selection Table

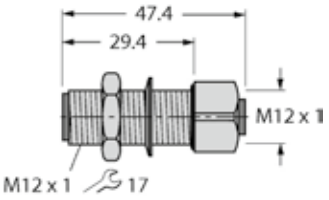
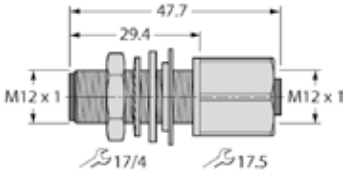
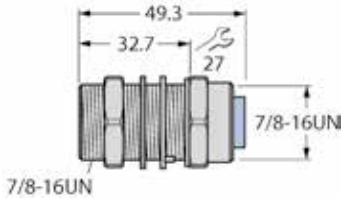
Design	Pin Assignment	Graph	Properties	ID number	Type
	F098 F061		Y-splitter with PVC cable for CAN/DeviceNet M12 × 1 connector, 5-pin Current load: 4A Rated voltage: 250V Protection class NEMA 1, 3, 4, 6P and IEC IP67 Temperature range: -40 °C… +105 °C	6602490	VB2-FKM-RKC-RSC572-0.5M-0.5M
	F098 F061		Y-splitter with PVC cable for CAN/DeviceNet M12 × 1 connector, 5-pin Current load: 4A Rated voltage: 250V Protection class NEMA 1, 3, 4, 6P and IEC IP67 Temperature range: -40 °C… +80 °C	6602613	VB2-FKM-FKM-RSC572-1M
	F098		h-Splitter for CAN/DeviceNet 7/8" connector, 5-pin Current load: 9A Rated voltage: 600V Protection class NEMA 1, 3, 4, 6P and IEC IP67 Temperature range: -40 °C… +105 °C	6934956	XSH-RSM-2RKM57
	F098		h-Splitter for CAN/DeviceNet The connector coding is rotated by 180° degrees from the standard 7/8" connector, 5-pin Current load: 9A Rated voltage: 600V Protection class NEMA 1, 3, 4, 6P and IEC IP67 Temperature range: -40 °C… +105 °C	6934957	XSH-RSM-2RKM57/K1T

Types and Features — Selection Table

Design	Pin Assignment	Graph	Properties	ID number	Type
	F098		h-Splitter for CAN/DeviceNet 7/8" connector, 5-pin Current load: 9A Rated voltage: 600V Protection class NEMA 1, 3, 4, 6P and IEC IP67 Temperature range: -40 °C… +105 °C	6934958	XSH-RKM/RSM/ RKM57

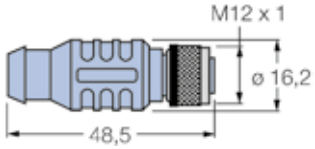
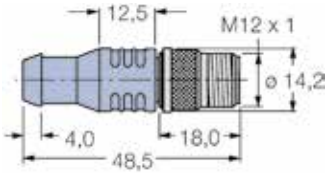
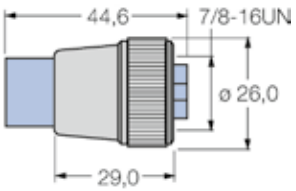
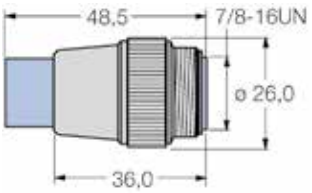
Wall Feed-through

Types and Features — Selection Table

	Description	ID number	Type
			
	■ Design: M12 adapter ■ 5-pin feed-through male/female ■ For use in CAN (DeviceNet™, CANopen) applications ■ Current load: 4 A ■ Rated voltage: 150 V ■ Temperature range: -40 °C…+105 °C ■ Protection class: NEMA 1, 3, 4, 6P and IEC IP67	6602223	FKM-FS57-M12
	■ Design: M12 adapter ■ Housing material: Stainless steel ■ 5-pin feed-through male/female ■ For use in CAN (DeviceNet™, CANopen) applications ■ Current load: 4 A ■ Rated voltage: 150 V ■ Temperature range: -40 °C…+80 °C ■ Protection class: NEMA 1, 3, 4, 6P and IEC IP68	6934508	FKV-FSV57/M12
	■ Design: 7/8" adapter ■ 5-pin feed-through male/female ■ For use in CAN (DeviceNet™, CANopen) applications ■ Current load: 9 A ■ Rated voltage: 600 V ■ Temperature range: -40 °C…+105 °C ■ Protection class: NEMA 1, 3, 4 and IEC IP67	6602218	RSF-RKF-57/22

Terminating Resistor

Types and Features — Selection Table

	Description	ID number	Type
	■ Design: M12 × 1 female, 5-pin ■ For use in CAN (DeviceNet™, CANopen) applications ■ Rated voltage: 10…30 VDC (max. 7.6 VDC on pins with resistor) ■ Internal resistor 120 Ω, 1/2 W ■ Protection class: NEMA 1, 3, 4, 6P and IEC IP68, IP69K ■ Temperature range: -40 °C…+80 °C	6602629	RKE57-TR2
	■ Design: M12 × 1 male connector, 5-pin ■ For use in CAN (DeviceNet™, CANopen) applications ■ Rated voltage: 10…30 VDC (max. 7.6 VDC on pins with resistor) ■ Internal resistor 120 Ω, 1/2 W ■ Protection class: NEMA 1, 3, 4, 6P and IEC IP68, IP69K ■ Temperature range: -40 °C…+80 °C	6602308	RSE57-TR2
	■ Design: 7/8″ female, 5-pin ■ For use in CAN (DeviceNet™, CANopen) applications ■ Rated voltage: 300 VDC (max. 7.6 VDC on pins with resistor) ■ Internal resistor 120 Ω, 1/2 W ■ Protection class: NEMA 1, 3, 4, 6P and IEC IP67 ■ Temperature range: -40 °C…+80 °C	6602065	RKM57-TR2
	■ Design: 7/8″ male connector, 5-pin ■ For use in CAN (DeviceNet™, CANopen) applications ■ Rated voltage: 250 VDC (max. 7.6 VDC on pins with resistor) ■ Internal resistor 120 Ω, 1/2 W ■ Protection class: NEMA 1, 3, 4, 6P and IEC IP67 ■ Temperature range: -40 °C…+80 °C	6602011	RSM57-TR2

Connectivity for Ethernet



Industrial Ethernet standards such as Modbus TCP, EtherNet/IP, PROFINET and EtherCAT® have firmly established themselves in automation technology. These real-time Ethernet solutions differ both in terms of the fieldbuses on which they are based as well as the application fields for which they are designed.

Modbus TCP relies exclusively on open standards: The combination of a versatile and widely used network (Ethernet) with an international network standard (TCP/IP) and a vendor-neutral representation of the data (Modbus) results in a truly open system for fast, flexible, and effective communication in industrial networks.

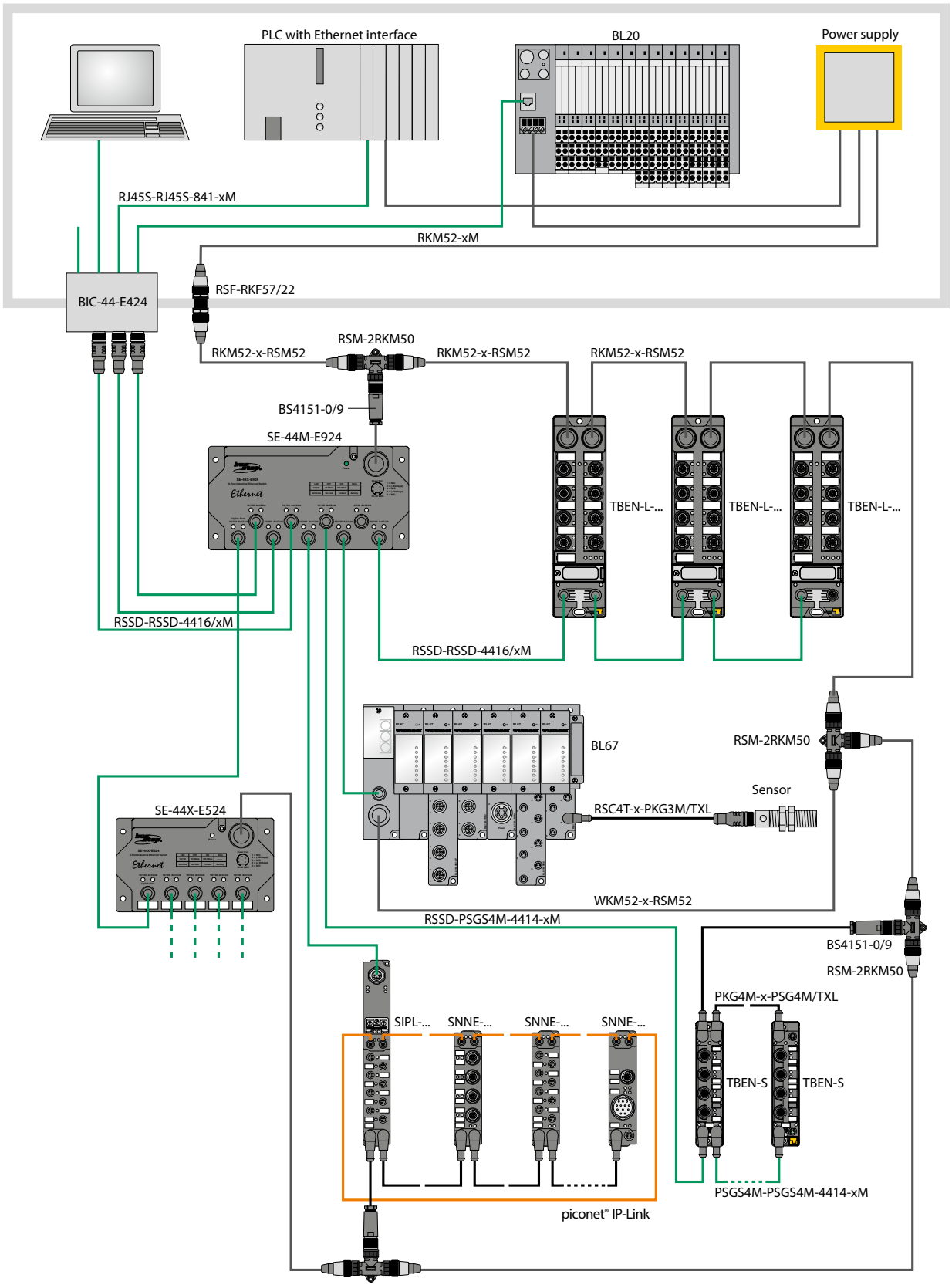
EtherNet/IP™ is the Industrial Ethernet standard ODVA (Open DeviceNet Vendor Association) and standardized in the IEC 61158 international. CIP (Common Industrial Protocol), which is well-known from DeviceNet™ and ControlNet, is used as an application protocol. EtherNet/IP™ is suitable for all standard industrial applications in the field up to the networking of PLCs or SCADA and ERP/MES systems.

PROFINET is based on the PROFIBUS-DP model and is the open Industrial Ethernet standard of Profibus & Profinet International (PI). The modular customizable system uses TCP/IP and IT standards and enables the integration of fieldbus systems. With PROFINET, solutions can be implemented for manufacturing technology, process automation, building automation as well as for the entire range of drive engineering right through to motion control applications.

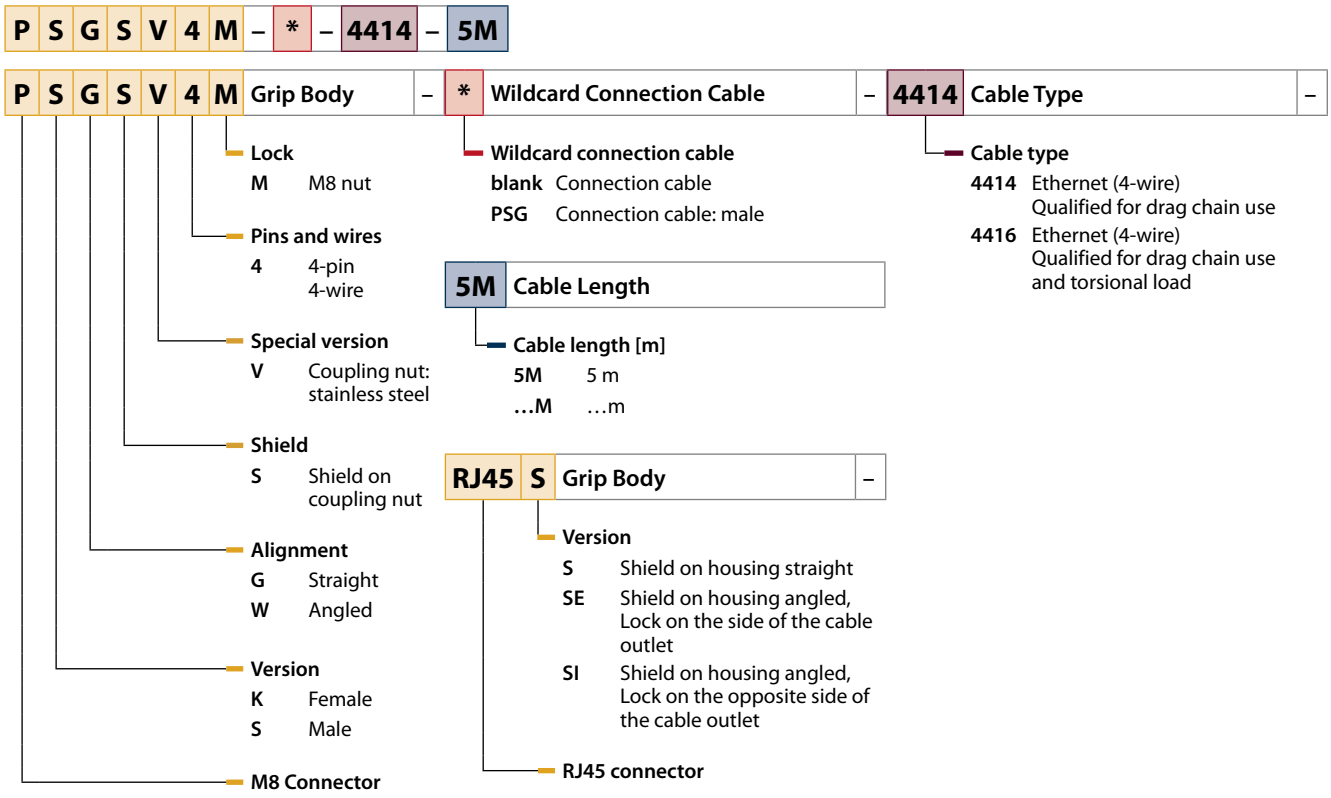
EtherCAT® is an open standard of the EtherCAT Technology Group (ETG) and is internationally standardized in IEC 61158, IEC 61784 and ISO 15745-4. The main features include ease of use, and especially the speed of the system. As a result, EtherCAT® is particularly suitable for use in time-critical motion control applications. Typical applications include packaging machines, injection molding machines, fast presses, CNC machining, robotics and hydraulic controls.

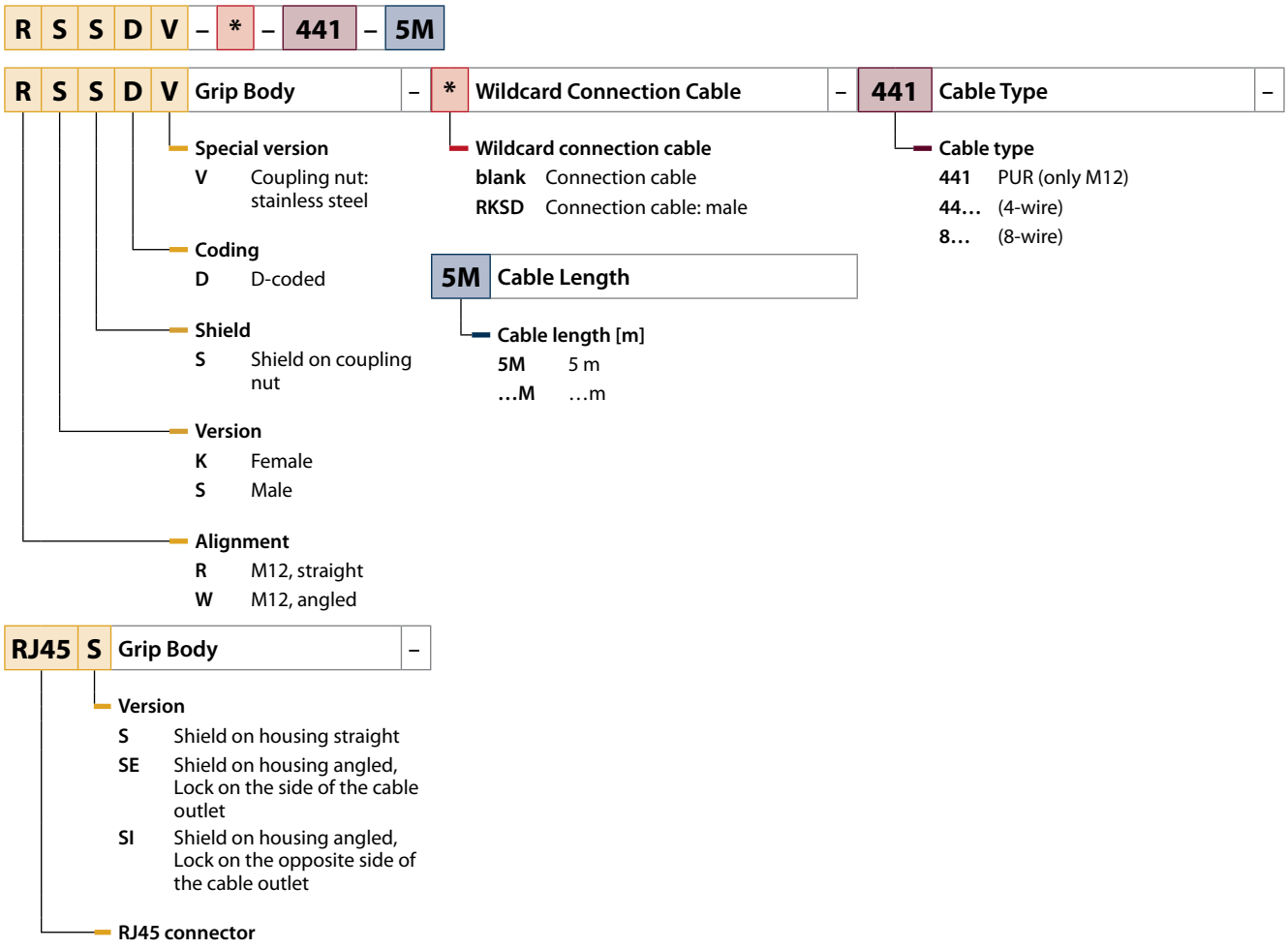
Turck provides all the necessary components for creating the network – from fieldbus stations with IP67 and IP20 protection right through to the appropriate connection technology. These include bus cables, power supply cables, hubs and switches, as well as control cabinet feed-throughs and mounting receptacles. Field-wireable connectors round off the range.

Ethernet – Application Example



Type Code – Ethernet




R S S D V – * – 441 – 5M
R S S D V Grip Body
–
* Wildcard Connection Cable
–
441 Cable Type
–
Special version
V Coupling nut: stainless steel
Coding
D D-coded
Shield
S Shield on coupling nut
Version
K Female
S Male
Alignment
R M12, straight
W M12, angled
Wildcard connection cable
blank Connection cable
RKSD Connection cable: male
5M Cable Length
Cable length [m]
5M 5 m
…M …m
Cable type
441 PUR (only M12)
44… (4-wire)
8… (8-wire)
RJ45 S Grip Body
–
Version
S Shield on housing straight
SE Shield on housing angled, Lock on the side of the cable outlet
SI Shield on housing angled, Lock on the opposite side of the cable outlet
RJ45 connector

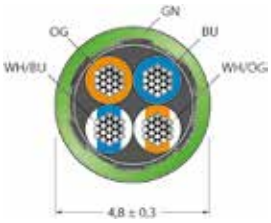
Connectivity for Ethernet – Overview

Extension cables M8 x 1/M12 x 1 - RJ45	Page
	404

Field-Wireable Connectors M12 x 1 - RJ45	Page
	410

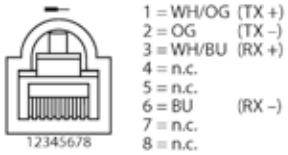
Accessories	Page
	411

PUR Cable – Green, Type 4414



- 4-pin, 4 x 26 AWG, CAT 5E
- Qualified for drag chain use and flame-retardant
- Resistant to UV radiation and oils
- Free from halogen, silicone, PVC and LABS
- cULus approved

Female connector



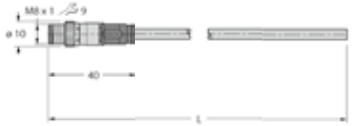
Male connector



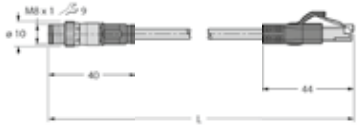
Connector	
Contacts	Metal, CuZn, Gold-plated
Coupling nut/screw	Zinc, GD-Zn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3/2
Cable	
Cable	4.8 mm ± 0.30
Cable jacket	PUR, Green
Core insulation	PP (WHOG, WHBU, BU, OG)
Core cross-section	4 x 0.15 mm^2
Arrangement of strands	19 x 0.102 mm
Shield	Aluminum foil, tinned copper braid
Electrical properties at +20 °C	
Current load	3 A
Rated voltage	30 V
Test voltage	700 V
Nom. Impedance	100 (1MHZ)
Nom. Capacitance	51 pF/m
Mechanical and chemical properties	
Bending radius (stationary laying)	> 15 x Ø
Ambient temperature	
Stationary usage	-40…+80 °C
Non-stationary usage	-25…+80 °C

Types and Features — Selection Table





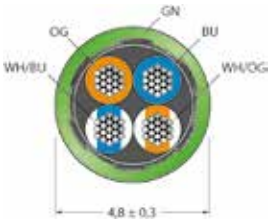






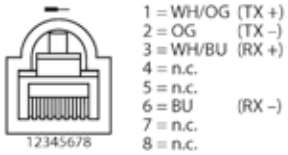
Cable length [m]	ID number	Type
0.5	6932986	PSGS4M-4414-0.5M
1	6932987	PSGS4M-4414-1M
2	6932988	PSGS4M-4414-2M
4	6932989	PSGS4M-4414-4M
6	6932990	PSGS4M-4414-6M
10	6933305	PSGS4M-4414-10M
15	6933646	PSGS4M-4414-15M
20	6933647	PSGS4M-4414-20M
0.2	6932991	PSGS4M-PSGS4M-4414-0.2M
0.5	6932992	PSGS4M-PSGS4M-4414-0.5M
1	6932993	PSGS4M-PSGS4M-4414-1M
2	6932994	PSGS4M-PSGS4M-4414-2M
4	6932995	PSGS4M-PSGS4M-4414-4M
5	6932996	PSGS4M-PSGS4M-4414-5M
6	6932997	PSGS4M-PSGS4M-4414-6M
8	6932998	PSGS4M-PSGS4M-4414-8M
10	6932999	PSGS4M-PSGS4M-4414-10M
15	6933000	PSGS4M-PSGS4M-4414-15M
20	6933001	PSGS4M-PSGS4M-4414-20M
0.2	6933002	PSGS4M-RJ45S-4414-0.2M
0.5	6933003	PSGS4M-RJ45S-4414-0.5M
1	6933004	PSGS4M-RJ45S-4414-1M
2	6933005	PSGS4M-RJ45S-4414-2M
4	6933006	PSGS4M-RJ45S-4414-4M
5	6933768	PSGS4M-RJ45S-4414-5M
6	6933007	PSGS4M-RJ45S-4414-6M
10	6934252	PSGS4M-RJ45S-4414-10M
15	6933308	PSGS4M-RJ45S-4414-15M
0.5	6441421	RJ45S-RJ45S-4414-0.5M
1	6441422	RJ45S-RJ45S-4414-1M
2	6441423	RJ45S-RJ45S-4414-2M
3	6441424	RJ45S-RJ45S-4414-3M
5	6441425	RJ45S-RJ45S-4414-5M
10	6441426	RJ45S-RJ45S-4414-10M
15	6441427	RJ45S-RJ45S-4414-15M
20	6441428	RJ45S-RJ45S-4414-20M
25	6441429	RJ45S-RJ45S-4414-25M

PUR Cable – Green, Type 4414

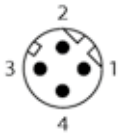


- 4-pin, D-coded, 4 x 26 AWG, CAT 5E
- Qualified for drag chain use and flame-retardant
- Resistant to UV radiation and oils
- Free from halogen, silicone, PVC and LABS
- cULus approved

Female connector

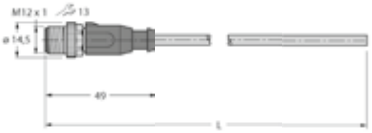
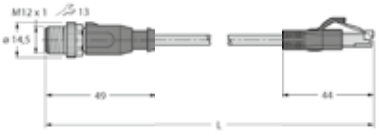


Male connector

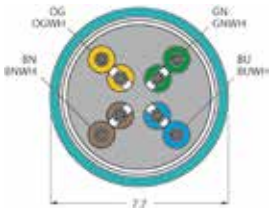


Connector	
Grip	Plastic, TPU, UL 94, Black
Contacts	Metal, CuZn, Gold-plated
Contact carriers	PA, UL 94, Black
Coupling nut/screw	Brass, GD-Zn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3/2
Cable	
Cable	4.8 mm ± 0.30
Cable jacket	PUR, Green
Core insulation	PP (WHOG, WHBU, BU, OG)
Core cross-section	4 x 0.15 mm^2
Arrangement of strands	19 x 0.102 mm
Shield	Aluminum foil, tinned copper braid
Electrical properties at +20 °C	
Current load	3 A
Rated voltage	30 V
Test voltage	700 V
Nom. Impedance	100 (1MHZ)
Nom. Capacitance	51 pF/m
Mechanical and chemical properties	
Bending radius (stationary laying)	> 15 x Ø
Ambient temperature	
Stationary usage	-40…+80 °C
Non-stationary usage	-25…+80 °C

Types and Features — Selection Table

	Cable length [m]	ID number	Type
			
	1	6441400	RSSD-4414-1M
	2	6441401	RSSD-4414-2M
	5	6441402	RSSD-4414-5M
	10	6441403	RSSD-4414-10M
	1	6441404	RSSD-RSSD-4414-1M
	2	6441405	RSSD-RSSD-4414-2M
	5	6441406	RSSD-RSSD-4414-5M
	7	6441407	RSSD-RSSD-4414-7M
	10	6441408	RSSD-RSSD-4414-10M
	15	6441409	RSSD-RSSD-4414-15M
	20	6441410	RSSD-RSSD-4414-20M
	25	6441411	RSSD-RSSD-4414-25M
	1	6441412	RSSD-RJ45S-4414-1M
	2	6441413	RSSD-RJ45S-4414-2M
	5	6935267	RSSD-RJ45S-4414-5M
	7	6441414	RSSD-RJ45S-4414-7M
	8	6935268	RSSD-RJ45S-4414-8M
	10	6441415	RSSD-RJ45S-4414-10M
	12	6935269	RSSD-RJ45S-4414-12M
	15	6441416	RSSD-RJ45S-4414-15M
	20	6441417	RSSD-RJ45S-4414-20M
	25	6441418	RSSD-RJ45S-4414-25M
	30	6441419	RSSD-RJ45S-4414-30M
	35	6441420	RSSD-RJ45S-4414-35M

TPE Cable – Green, Type 841



- 4-pin, D-coded, 8 x 24 AWG
- Qualified for drag chain use
- Flame-retardant
- Resistant to UV radiation and oils
- UL approved

Female connector



1 = WH/BU
2 = WH/BN
3 = BN
4 = OG (TX –)
5 = WH/GN (RX +)
6 = WH/OG (TX +)
7 = BU
8 = GN (RX –)

Male connector



1 = WH/BU
2 = WH/BN
3 = BN
4 = OG (TX –)
5 = WH/GN (RX +)
6 = WH/OG (TX +)
7 = BU
8 = GN (RX –)



12345678

1 = WH/OG (+Tx)
2 = OG (–Tx)
3 = WH/GN (+Rx)
4 = BU
5 = WH/BU
6 = GN (–Rx)
7 = WH/BN
8 = BN

Connector	
Grip	Plastic, TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	7.7 mm
Cable jacket	TPE, Green
Core insulation	PE (WH/BU, WH/BN, BN, OG, WH/GN, WH/OG, BU, GN)
Core cross-section	8 x 0.21 mm²
Shield	yes
Electrical properties at +20 °C	
Current load	2 A
Rated voltage	60 V
DC resistance (loop)	94 Ω /km
Nom. Impedance	100 (1 MHz)
Nom. Capacitance	46 pF/m
Mechanical and chemical properties	
Bending cycles	> 1 mil.
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-40…+80 °C
Non-stationary usage	-40…+80 °C

Types and Features — Selection Table



Cable length [m]	ID number	Type
6	6603696	RSS-841-6M
10	6603697	RSS-841-10M
15	6603698	RSS-841-15M
30	6830997	RSS-841-30M
1	6932354	RKS-841-1M
2	6933329	RKS-841-2M
5	6933369	RKS-841-5M
6	6603699	RKS-841-6M
10	6603700	RKS-841-10M
0.5	6603702	RSS-RSS-841-0.5M
1	6603703	RSS-RSS-841-1M
2	6603704	RSS-RSS-841-2M
3	6603878	RSS-RSS-841-3M
4	6603705	RSS-RSS-841-4M
5	6830949	RSS-RSS-841-5M
6	6603706	RSS-RSS-841-6M
10	6603707	RSS-RSS-841-10M
15	6603708	RSS-RSS-841-15M
0.5	6603721	RSS-RJ45S-841-0.5M
1	6611356	RSS-RJ45S-841-1M
2	6611338	RSS-RJ45S-841-2M
3	6611339	RSS-RJ45S-841-3M
4	6611550	RSS-RJ45S-841-4M
5	6611263	RSS-RJ45S-841-5M
10	6611008	RSS-RJ45S-841-10M
15	6604411	RSS-RJ45S-841-15M
0.5	6603713	RJ45S-RJ45S-841-0.5M
1	6603714	RJ45S-RJ45S-841-1M
2	6603715	RJ45S-RJ45S-841-2M
4	6603716	RJ45S-RJ45S-841-4M
6	6603717	RJ45S-RJ45S-841-6M
10	6603718	RJ45S-RJ45S-841-10M
15	6603719	RJ45S-RJ45S-841-15M

Field-Wireable Connectors – M12 × 1 and RJ45



	Number of pins	Rated voltage [V]	ID number	Type	Number of pins	Rated voltage	ID number	Type
Female connector, straight	4	125	6604219	FW-M12KU5D-G-SB-ME-SH-8				
Male connector, straight	4	125	6604218	FW-M12ST5D-G-SB-ME-SH-8				
RJ45 male connector, straight					30		6780031	6GK1901-1BB10-2AA0/FC-RJ45
Connection mode	Screw/clamp connection				Insulation displacement connection			
Grip	Die-cast zinc, GD-Zn, Nickel-plated				Metal			
Coupling nut/screw	Die-cast zinc, GD-Zn, Nickel-plated							
Contacts	Brass, CuZn, Gold-plated							
Contact carriers	PA, Black							
Protection class	IP67				IP20			
Current load	4 A				2 A			
Terminal cross-section	0.14…0.75 mm²							
Cable external diameter	min. 6…8 mm				min. 6…8 mm			
Storage temperature	-25…+85 °C							

M12 × 1 female connector



M12 × 1 male connector

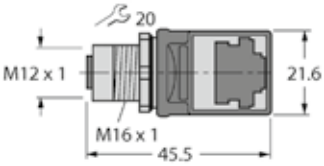
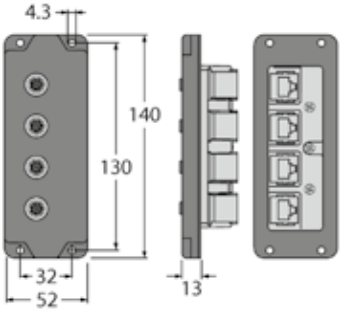
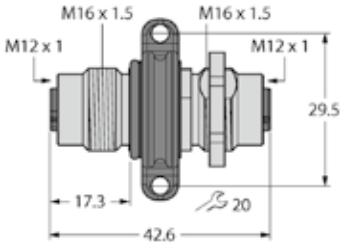


RJ45 connector



Wall Feed-through

Types and Features — Selection Table

	Description	ID number	Type
	■ For Industrial Ethernet ■ RJ45 on M12 × 1, 4-pin ■ Permissible wall thickness: 1.5 - 3 mm ■ Mounting thread: M16 × 1, 8-pin ■ D-coding ■ Voltage: 42 V ■ Current load: 1.5 A ■ Temperature: -40 °C…+75°C ■ Protection class: IP20/67 ■ Scope of delivery: Wall feed-through, seal and nut	6611523	FKSDD-RJ45SF-44
	■ For Industrial Ethernet ■ RJ45 on M12 × 1, 4-port ■ 4-pin ■ Voltage: 125 V ■ Current load: 1.5 A ■ Temperature: -30 °C…+75 °C ■ D-coding ■ Protection class: IP20/67	6604407	BIC-44-E424
	■ For Industrial Ethernet ■ M12 × 1 female connector to M12 × 1 female connector, 4-pin ■ Mounting thread: M16 × 1.5 ■ D-coding ■ Voltage: 50 V ■ Current load: 4 A ■ Temperature: -25 °C…+85 °C ■ Protection class: IP67	6932692	FKD-FKD44/M12

FOUNDATION™ fieldbus



The FOUNDATION fieldbus™ system meets the requirements of the chemical, pharmaceutical and petrochemical industry. Essential features:

- Standardized application profile
- Use in hazardous areas
- Bus power supply and fieldbus communication via shielded and twisted pair cables
- Online device replacement without impairing plant processes
- Diagnostic functions for asset management

Turck's FOUNDATION fieldbus™ components are specially designed for use in harsh industrial environments and enable the plug and play connection of field devices to the control system. Whether junction boxes, connectivity products or complete systems are required: The user can select the right bus product for the particular application from an extensive product range.

You will find the complete solution spectrum at Turck for process automation with FOUNDATION fieldbus™: The portfolio includes power supplies, power conditioners, multibarriers as well as junction boxes in IP20 and IP67. The range also includes passive connectivity products such as fieldbus cables, field distributors and terminating resistors. The components are suitable for use in harsh environments and can be mounted directly on the machine or in the process.

FOUNDATION™ fieldbus – Overview

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Field-Wireable Connectors - M12 x 1, 7/8“	Page
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Isolated Device Coupler - Multibarriers	Page
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Junctions - IP67, IP20	Page
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Accessories	Page
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FOUNDATION™ fieldbus – Basics

FOUNDATION™ fieldbus – Bus Physics

With the release of the international standard IEC 61158-2 in October 1994, a suitable transmission technology for FOUNDATION™ fieldbus and PROFIBUS-PA applications was found and internationally specified. This was later included as EN 61158-2 in the European standards. Both systems operate according to IEC 61158-2 and use the voltage mode with a transmission speed of 31.25 kbps. The data packets are modulated upon the supply voltage for the fieldbus devices and transmitted via a 2-wire shielded cable.

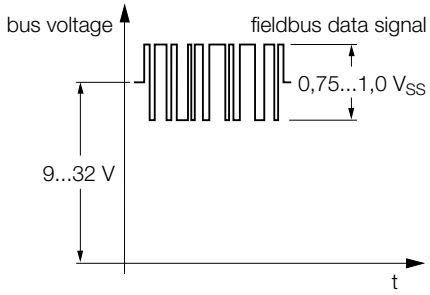


Fig. 1 Transmission of data packets according to IEC 61158-2

These bus characteristics provide a decisive advantage: Fieldbus communication and power supply of the bus stations can be implemented via a single cable. Compared to the usual fieldbus solution involving additional wiring effort, these bus characteristics provide increased reliability and lower costs.

Physical Layer according to IEC 61158-2

Characteristic features of the IEC 61158-2 transmission physics IEC 61158-2	
Data transmission	digital, bit synchronous, Manchester coding
Transmission speed	31.25 kBit/s, voltage mode
Data security	preamble, fault protected start and end delimiter
Cable	shielded and twisted 2-wire cable
Remote supply of the stations	optionally via signal cables
Protection classes	intrinsically safe (Ex ia/ib or Ex ic), increased safe (Ex e or Ex nA) and explosion protected (Ex d/m/p/q)
Topology	spur and tree topologies; also in combination
Number of stations	up to 32 stations per cable segment
Repeater	can be extended with a maximum of 4 repeaters

FOUNDATION™ fieldbus – Topology

The FOUNDATION™ fieldbus network is implemented either

- directly via a FOUNDATION™ fieldbus segment card from the process control system and supplied via the Turck DPC system (Diagnostic Power Conditioner System) (Fig. 2 and 3) or
- by the high speed Ethernet (HSE) via a „linking device“.

For a FOUNDATION™ fieldbus application in Ex areas, we recommend the use of the Turck multibarrier which “cascades” up to 32 field devices in the explosion-hazardous area.

The advantage over a simple intrinsically safe power supply is mainly the increased number of field devices in the bus segment.

The number of connectible multibarriers and the usable cable length depends on the output power of the power conditioner, as well as the type of cable used. For the main cable (trunk-line) Turck recommends the use of the long distance cable type FBY…/LD, for the outputs the standard cable type FBY.../SD.

System Assemblies in the Non-Hazardous Area and Hazardous Area

Installations in the non-hazardous area as well as in the hazardous area are operated with the Turck DPC system (Diagnostic Power Conditioner system.

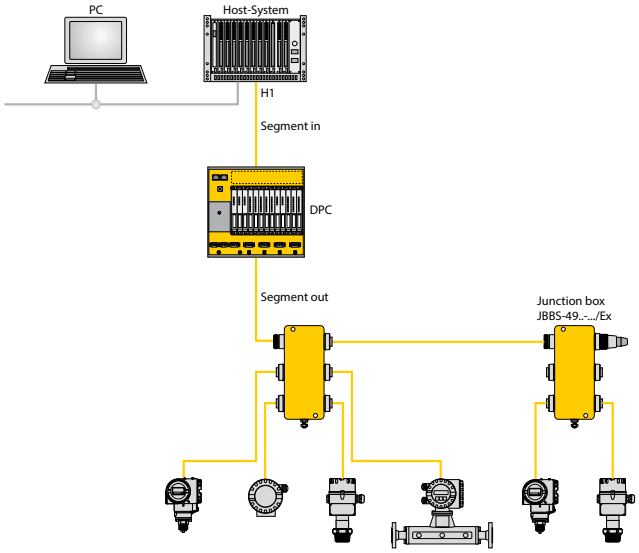


Fig. 2 Topology – FOUNDATION™ in the non-hazardous area

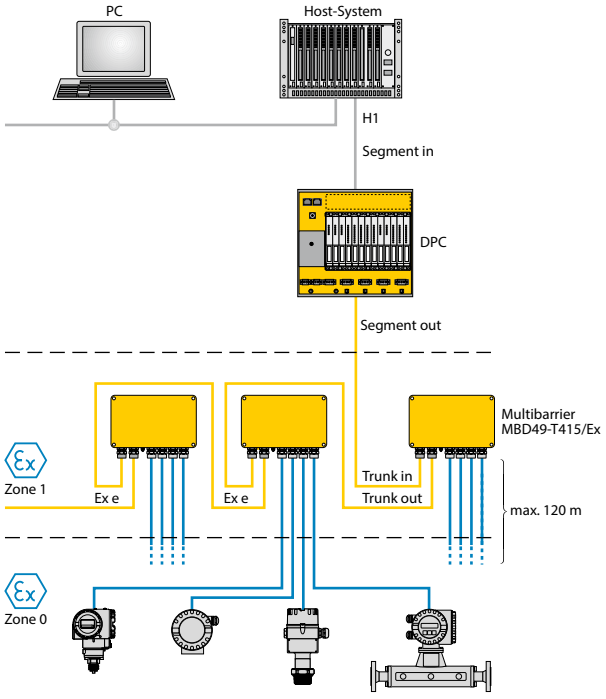


Fig. 3 Topology – FOUNDATION™ in the hazardous area

Segment expansions up to 1900 m are possible due to the high output power of the DPC system.

A FOUNDATION™ fieldbus network can also be implemented in the non-hazardous and hazardous area also via an HSE-H1-Link. HSE stands for "High Speed Ethernet" and enables the implementation of Ethernet-based fieldbus solutions. Besides the Ethernet protocol family, HSE also contains the FOUNDATION™ fieldbus H1 protocol. This makes it possible to access H1 fieldbus segments from any Ethernet-based network with a transmission rate of 10…1000 Mbps. HSE and H1 were essentially developed as supplementary networks. While H1 was optimized for applications in traditional process automation, HSE is designed for high performance process control applications. HSE applications enable the use of inexpensive commercial standard Ethernet devices.

The combined fieldbus solution consisting of H1 and HSE enables the complete integration of elementary and complex process control systems on the higher control level. Besides the improved diagnostics functions and operator information, the benefit of the integrated architecture results in fewer plant downtimes.

FOUNDATION™ fieldbus – Multibarrier
The MBD40-T…/Ex multibarrier increases the maximum number of fieldbus stations in the FOUNDATION™ fieldbus network to 32 field devices. The fieldbus supply is implemented with increased safety and is looped from multibarrier to multibarrier. The fieldbus devices in Zone 0 are fed via four or eight intrinsically safe outputs.

The possibility of cascading the multibarrier on a single segment in the Ex area and thus utilizing the complete range of functions of the bus systems provides considerable cost benefits. All field devices can be operated on a single fieldbus segment in the Ex area.The multibarrier is supplied via the bus, a separate supply cable is unnecessary.

Thanks to the Ex e protection class, the Turck multibarrier can be installed in Zone 1 (II 2 G) according to Directive 94/9/EC (ATEX 95a). Inside Zone 1 the multibarrier is connected to the trunk line of a fieldbus according to IEC 61158-2 via cables and terminals with increased safety protection (Ex e). This has the benefit that the same performance is available in both the Ex- and non-Ex area.

Through the integrated short circuit protection only the affected output is disconnected in the event of a short circuit in a fieldbus station; the trunk line and the other outputs of the fieldbus segment remain operational.

The multibarrier is designed with protection to IP66 and can be installed directly in the plant. The Ex e cable glands in combination with high quality removable screw terminals ensure a rapid and safe connection.

Functions that Supplement the Standard:
- FISCO Conformity: The outputs of the multibarrier comply with the requirements of an Ex power supply and are FISCO-compliant.
- Connectible terminating resistor: The multibarriers have an integrated terminating resistor. This resistor must be activated if the multibarrier is the last device on the trunk line.
- Climatic compensation: The multibarrier is provided with a pressure compensation element with protection class IP67 to prevent condensation. The ePTFE diaphragm inside the breather has a very high water inlet pressure and is oil resistant. Salt crystals are also kept out 100 %.

FOUNDATION™ fieldbus – Junction Boxes
The Turck junction boxes can be used in Zone 2 and Zone 1 and can be easily and safely connected to the fieldbus. Junctions for the distribution of power and data are available in various types, offering different numbers of channels, designs and other features such as integrated short-circuit protection, connectible terminating resistor and selectable shielding. Special solutions are available on request.

Junction boxes and T-splitters in IP67 with and without short circuit protection (1-, 4- and 6-channel):
- Ex junction box (use in Zone 1 or 2, distribution of Ex ia signals in Zone 0)
- Non-Ex junction box
- Protection class IP67
- Connectible terminating resistor
- Optional shield concept (solid or capacitive ground)
- Short circuit current limitation per spur
- Pressure compensation element protects against condensation

- Housing material: powder coated die-cast aluminum (4- and 6-channel)
- Connectivity: 7/8" stainless steel receptacles, M12 or cage clamp terminals
- Cable glands made from plastic, stainless steel or nickel-plated brass, EMC cable glands
- Temperature range: -25 °C…+70 °C

Junction boxes in IP20 with and without short circuit protection (4-, 6-, 8- and 12-channel):

- Suitable for use in Ex and non-Ex areas, use in Zone 1 or 2, distribution of Ex ia signals in Zone 0
- Protection class IP20
- Connectible terminating resistor
- Optional shield concept (solid or capacitive ground)
- Short circuit current limitation per spur
- Housing material: aluminum
- Connectivity: cage clamp terminals or removable screw terminals
- Temperature range: -40 °C…+70 °C

FOUNDATION™ fieldbus – Bus Terminating Resistors

Data transmission on bus cables is frequently affected by signal reflections which can be caused by unterminated bus ends. To prevent these reflections, the fieldbus must be provided with a bus terminating resistor at both ends. For this Turck offers pluggable terminating resistors in M12 × 1 and 7/8" connector types, for intrinsically safe and non intrinsically safe circuits.

Use of Intrinsically Safe Bus Terminating Resistors:
The fieldbus terminating resistors are intrinsically safe and can also be used in the Ex area in category 1G (Zone 0) 2G (Zone 1) or 3G (Zone 2). In Zone 0 the supply circuit must comply with ignition protection category "ia". The RSV-49TR-Ex terminating resistor can be used in networks based on the FISCO model.

FOUNDATION™ fieldbus – Cable Technology

Cable Technology – Basics

The transmission of energy and data via a fieldbus requires a IEC 61158-2-compliant 2-wire cable as the transmission medium.

Cable Parameters

Although electrical specifications are not stated, they determine the achievable properties of the fieldbus such as bridgeable distances, the number of stations and electromagnetic compatibility. The table „Types of cable according to IEC 61158-2" shows four types of standard cable (at +25 °C).

Cable types to IEC 61158-2	Type A (Reference)	Type B
Cable design	Twisted conductor pair	One/multiple twisted conductor pairs, overall shield
Conductor cross-section (nominal)	> 0.8 mm² (AWG 18)	0.32 mm² (AWG 22)
Loop impedance (DC current)	44 Ω/km	112 Ω/km
Wave resistance at 31.25 kHz	100 Ω ± 20 %	100 Ω ± 30 %
Wave attenuation at 39 kHz	3 dB/km	5 dB/km
Capacitive asymmetry	2 nF/km	2 nF/km
Group delay distortion (7.9…39 kHz)	1.7 µs/km	not specified
Degree of shield coverage	90 %	not specified
Recommended network expansion (incl. spur lines)	1900 m	1200 m
Cable types to IEC 61158-2	**Type C**	**Type D**
Cable design	Multiple twisted conductor pairs, not shielded	Multiple twisted conductor pairs, not shielded
Conductor cross-section (nominal)	0.13 mm² (AWG 26)	1.25 mm² (AWG 16)
Loop impedance (DC current)	264 Ω/km	40 Ω/km
Wave resistance at 31.25 kHz	not specified	not specified
Wave attenuation at 39 kHz	8 dB/km	8 dB/km
Capacitive asymmetry	not specified	not specified
Group delay distortion (7.9…39 kHz)	not specified	not specified
Degree of shield coverage	not specified	not specified
Recommended network expansion (incl. spur lines)	400 m	200 m

Tab. 1: Cable types according to IEC 61158-2

Using the Individual Cable Types

New equipment installations require the use of cables that meet the minimum requirements of type A. Cable types C and D should only be used in so-called „retrofit applications" (use of already installed cables) for greatly reduced network expansions. However, it should be noted that in these cases, the interference immunity of the transmission often does not meet the requirements described in the standard.

Installations according to the FISCO Model

The installations according to the FISCO model are not subject to safety restrictions when the limits given in Tab. 2 are complied with. Operation outside these limits is not generally excluded, but does require the consideration of each individual case. All cables offered by Turck for fieldbus systems according to IEC 61158-2 are at least equal to the type A quality.

Limit values for attenuation, distortion, reflection, signal propagation time

Each fieldbus installation must comply with certain rules, the „Network configuration rules“ (see IEC 61158-2, chap. 11.2.2). They define limit values for the attenuation, reflection and distortion permissible in the network (rule 8) as well as the maximum signal delay (rule 4) (see table „Limit values“).

Limit values for attenuation, distortion, reflection and propagation delay	
Attenuation between any two bus interfaces (at 31.25 kHz)	10.5 dB
Attenuation distortion a (f = 39 kHz) – a (f = 7.8 kHz), monotonic increasing with frequency	6 dB
Reflection factor at any point (7.8...39 kHz)	0.2
Signal delay between any two bus interfaces	640 µs

Tab. 2 Limit values for attenuation, reflection, signal propagation time

Maximum Cable Length

The sum of the trunk cable length and all spur lengths gives the total cable length.

Maximum cable lengths (main cable and spur lines)	
Cable	**Max. cable lengths (incl. spur lines)**
Type A	1900 m
Type B	1200 m
Type C	400 m
Type D	200 m

Tab. 3 Maximum cable length (trunk cable and spurs)

Recommendation: Always use cable type A.

Maximum Spur Length

The maximum spur length depends on the number of field devices per spur and is stated in the following table.

Maximum spur line lengths				
Number of Devices	**1 device per spur line**	**2 devices per spur line**	**3 devices per spur line**	**4 devices per spur line**
25…32	1 m	1 m	1 m	1 m
19…24	30 m	1 m	1 m	1 m
15…18	60 m	30 m	1 m	1 m
13…14	90 m	60 m	30 m	1 m
1…12	120 m	90 m	60 m	30 m

Tab. 4 Maximum spur length

Recommendation: Use only one device per spur and max. 12 devices per segment.

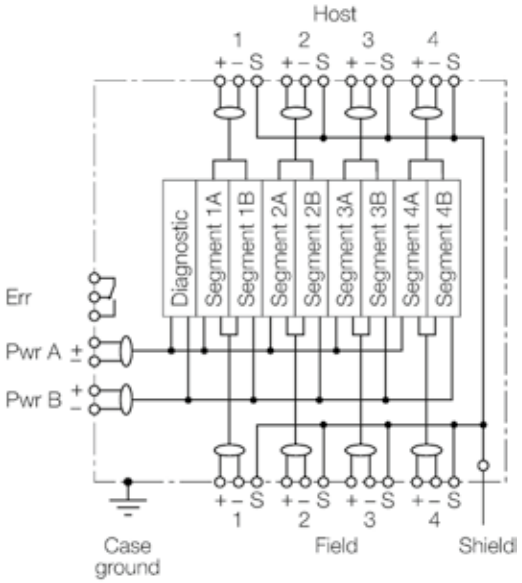
Instrumentation according to FISCO

In an Ex i instrumentation according to FISCO, the maximum extent of the trunk line in the hazardous area is 1000 m. The maximum spur length should not exceed 60 m.

Topology

Within the limits shown on the previous page different topologies such as star, tree or linear structure and any cable is accepted. For an optimum design the individual calculation of the four variables in the table „Limit values“ for all possible connections between two bus interfaces involves considerable effort. It is advisable to specify rules for a close to optimal basic topology, which when followed guarantees that the limits stated above are not exceeded. A tree or line topology, or a combination of both, is chosen as the basic network model. Such a network is composed of a main cable (trunk line), a number of spurs (FOUNDATION™ fieldbus), connecting elements (connectors or junction boxes) and a terminating resistor.

Backplane for the DPC system



- Module rack for up to eight power supply modules and one diagnostic module for up to four redundant H1 segments.
- Redundant power supply
- Removable terminal blocks with screw connections
- RJ45 connector for HSE fieldbus diagnostics

The DPC system (Diagnostic Power Conditioner) is a power supply system for the installation of FOUNDATION™ fieldbus H1 segments. It provides extensive diagnostic options for monitoring FOUNDATION™ fieldbus segments and thus supports plantwide asset management.

A DPC system consists of one or more module racks, each of which can take up to eight DPC-49-IPS1 power supply modules and one DPC-49-ADU or DPC-49-DU diagnostic module. Up to four H1 segments per module rack can be operated and monitored redundantly in the FOUNDATION™ fieldbus network. The diagnostic data of the H1 segments can be transmitted via the DPC-49-HSEFD/24VDC HSE field device to the higher level Asset Management System (only in conjunction with the diagnostic module DPC-49-ADU).

The module rack consists of a backplane and the actual rack system for the power supply modules and the diagnostics module.

The single components of the system are electrically linked via the connection terminals of the backplane. From an electrical perspective, the backplane is considered passive.

The power can be supplied via two 2-pin screw connectors. The connection of the host system is established per segment via removable 3-pin screw terminals. For the connection of the H1 segments to the fieldbus side, each segment is individually connected with a removable 3-pin screw terminal.

NOTE: If H1 applications are to be set up redundantly at the DPC system, they must be connected to the field port as the host port is limited to 21 mA.

The shielding is achieved via an insulated shield bus or via the 3-pin screw terminal, which is internally connected with the M5 threaded bolt for equipotential bonding. A further M5 threaded bolt for equipontential bonding is simply connected to the housing.

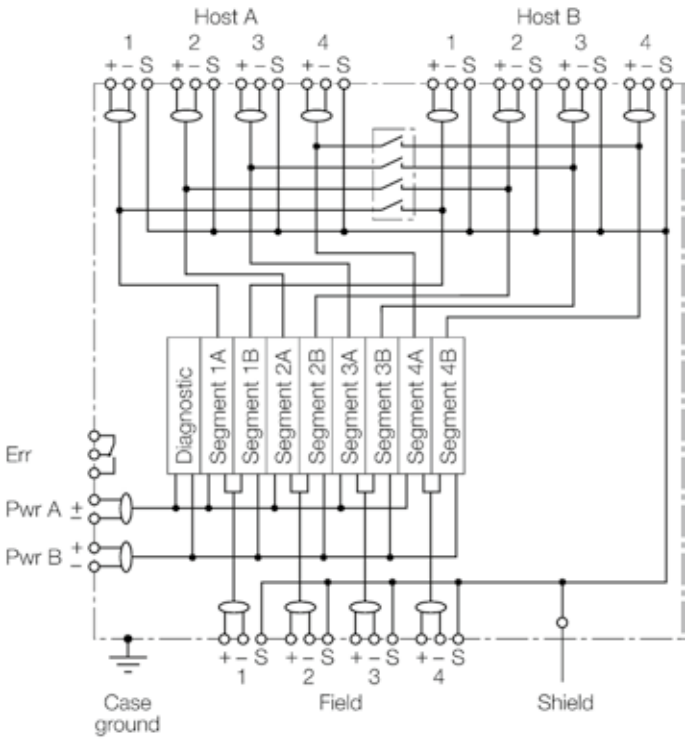
For simple diagnostics processing, a connection is provided to the relay alarm contact of the diagnostics module.



Technical Data

Type	DPC-49-4RMB
ID number	6882024
Operating voltage range	18…32 VDC
Surge protection	> 250 VDC
Electrical connection	removable terminal block, reverse polarity protected, screw connection
	RJ45 socket
Protection class	IP20
MTTF	115 years acc. to SN 29500 (Ed. 99) 40 °C
Ambient temperature	-20…+60 °C
Housing material	Aluminium
Housing color	black / yellow
Dimensions	210 x 220 x 113 mm
Connection mode	snap-fit on DIN rail (DIN 60715)

Backplane for the DPC system



- Module rack for up to eight power supply modules and one diagnostics module for up to four redundant H1 segments.
- Redundant power supply
- Redundant HOST connection
- Removable terminal blocks with screw connections
- RJ45 connector for HSE fieldbus diagnostics

The DPC system (Diagnostic Power Conditioner) is a power supply system for the installation of FOUNDATION™ fieldbus H1 segments. It provides extensive diagnostic options for monitoring FOUNDATION™ fieldbus segments and thus supports plantwide asset management.

A DPC system consists of one or more module racks, each of which can take up to eight DPC-49-IPS1 power supply modules and one DPC-49-ADU or DPC-49-DU diagnostic module. Up to four H1 segments per module rack can be operated and monitored redundantly in the FOUNDATION™ fieldbus network. The diagnostic data of the H1 segments can be transmitted via the DPC-49-HSEFD/24VDC HSE field device to the higher level Asset Management System (only in conjunction with the diagnostic module DPC-49-ADU).

The module rack consists of a backplane and the actual rack system for the power supply modules and the diagnostics module.

The single components of the system are electrically linked via the connection terminals of the backplane. From an electrical perspective, the backplane is considered passive.

The power can be supplied via two 2-pin screw connectors. The connection to the host system is provided via two system cables. Ready-made system cables are optionally available at TURCK.

For the connection of the H1 segments to the fieldbus side, each segment is individually connected with a removable 3-pin screw terminal.

The shielding is achieved via an insulated shield bus or via the 3-pin screw terminal, which is internally connected with the M5 threaded bolt for equipotential bonding. A further M5 threaded bolt for equipontential bonding is simply connected to the housing.

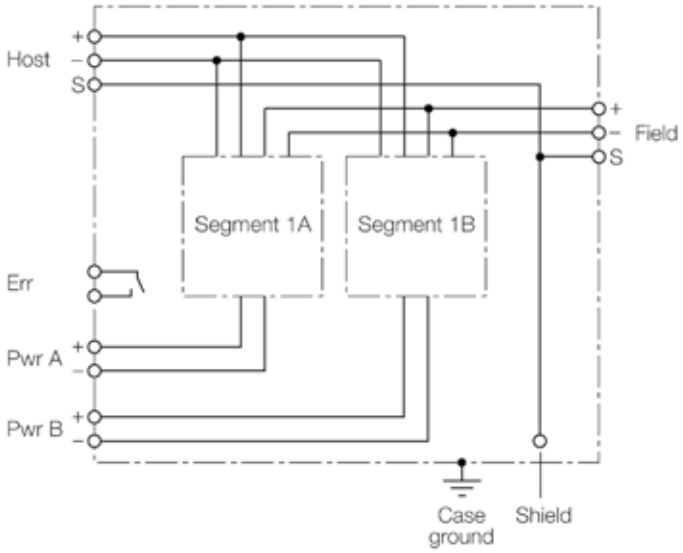
For simple diagnostics processing, a connection is provided to the relay alarm contact of the diagnostics module.



Technical Data

Type	DPC-49-4RMB/SY
ID number	6882025
Operating voltage range	18…32 VDC
Surge protection	> 250 VDC
Electrical connection	removable terminal block, reverse polarity protected, screw connection
	RJ45 socket
Protection class	IP20
MTTF	115 years acc. to SN 29500 (Ed. 99) 40 °C
Ambient temperature	-20…+60 °C
Housing material	Aluminium
Housing color	black / yellow
Dimensions	210 x 220 x 113 mm
Connection mode	snap-fit on DIN rail (DIN 60715)

Backplane for the DPC system



- Module rack for two power supply modules to connect a redundant H1 segment
- Redundant power supply
- Removable terminal blocks with screw connections

The DPC system (Diagnostic Power Conditioner) is a power supply system for the installation of FOUNDATION™ fieldbus H1 segments.

The module rack consist of a backplane and the actual rack system for the power supply modules.

The single components of the system are electrically linked via the connection terminals of the backplane.

Redundant power supply via two 6-pin screw connectors. The connection to the host system is established via a removable 3-pin screw terminal.

The H1 segment is connected separately on the fieldbus side via a removable 3-pin screw terminal.

The shielding is achieved via an insulated shield bus or via the 3-pin screw terminal, which is internally connected with the M5 threaded bolt for equipotential bonding. A further M5 threaded bolt for equipontential bonding is simply connected to the housing.

A connection to the relay alarm contact is provided for redundancy monitoring of the external power supply and the H1 power supply modules. In "good-condition" (no error) the relay is energized and in "bad-condition" the relay is de-energized.

The following error states are possible:

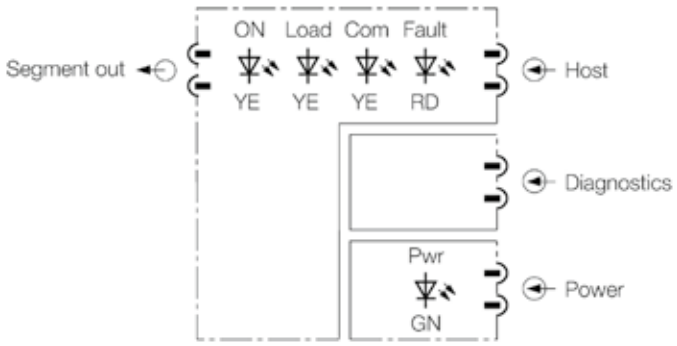
- External power supply < 18 VDC
- Power supply module, drop out or lacking



Technical Data

Type	DPC-49-1RMB
ID number	6882026
Operating voltage range	18…32 VDC
Surge protection	> 250 VDC
Electrical connection	removable terminal block, reverse polarity protected, screw connection
Protection class	IP20
MTTF	115 years acc. to SN 29500 (Ed. 99) 40 °C
Ambient temperature	-20…+60 °C
Housing material	Aluminium
Housing color	black / yellow
Dimensions	210 x 220 x 113 mm
Connection mode	snap-fit on DIN rail (DIN 60715)

Power supply module



- Power supply of a FOUNDATION™ fieldbus H1-segment
- Output current: 800 mA
- Output voltage: 28…30 VDC
- Local diagnostics via LEDs
- Complete galvanic isolation

The DPC system (Diagnostic Power Conditioner) is a power supply system for the installation of FOUNDATION™ fieldbus H1 segments. It provides extensive diagnostic options for monitoring FOUNDATION™ fieldbus segments and thus supports plantwide asset management.

A DPC system consists of one or more module racks, each of which can take up to eight DPC-49-IPS1 power supply modules and one DPC-49-ADU or DPC-49-DU diagnostic module. Up to four H1 segments per module rack can be operated and monitored redundantly in the FOUNDATION™ fieldbus network. The diagnostic data of the H1 segments can be transmitted via the DPC-49-HSEFD/24VDC HSE field device to the higher level Asset Management System (only in conjunction with the diagnostic module DPC-49-ADU).

The power supply module provides up to 30 VDC and 800 mA for the installation of a H1 segment. The network topology can be extended to 1900 m, due to the high output power.

If two power supply modules are connected, the segment can be operated redundantly. The modules can thus be plugged and unplugged during operation (hot-swappable in run).

All-round galvanic isolation
- H1 to H1,
- H1 to internal supply,
- H1 to the diagnostics module,
- H1 to HSE diagnostic bus,

formation of parasitic voltages is avoided and error-free communication is guaranteed.

Local comissioning and diagnostics are supported by the following LED indications:

Pwr: green: Operational readiness

On/Off: yellow: Output ON:

Load: yellow: Load (field device) detected at segment:

Com: yellow: Communication display

Fault: red Short-circuit message



Technical Data

Type	DPC-49-IPS1
ID number	6882023
Supply voltage	via the backplane
Current consumption	0.8…1.7 A
Galvanic isolation	All-round galvanic separation, test voltage 500 VAC
Output circuits	Field
Output current	≤ 800 mA
Output voltage	> 28 VDC
Short-circuit protection	≤ 850 mA
Efficiency	80 %
Output circuits	HOST
Output current	< 30 mA
Output voltage	27 VDC
Operational readiness	1 x green
Output active	1 x yellow
Output current	1 x yellow
Short-circuit message	1 x red
Bus communication	1 x yellow
Protection class	IP20
MTTF	57 years acc. to SN 29500 (Ed. 99) 40 °C
Ambient temperature	-20…+60 °C
Relative humidity	≤ 95% at 55 °C acc. to EN 60069-2
Housing material	Plastic
	flammability class V-0UL 94
Housing color	yellow
Dimensions	118 x 18 x 103 mm

Diagnostic module



- Redundancy monitoring for 4 H1 segments
- Local diagnostics via LEDs
- Alarm signal via relay contact
- Complete galvanic isolation

The DPC system (Diagnostic Power Conditioner) is a power supply system for the installation of FOUNDATION™ fieldbus H1 segments. It provides extensive diagnostic options for monitoring FOUNDATION™ fieldbus segments and thus supports plantwide asset management.

A DPC system consists of one or more module racks, each of which can take up to eight DPC-49-IPS1 power supply modules and one DPC-49-ADU or DPC-49-DU diagnostic module. Up to four H1 segments per module rack can be operated and monitored redundantly in the FOUNDATION™ fieldbus network. The diagnostic data of the H1 segments can be transmitted via the DPC-49-HSEFD/24VDC HSE field device to the higher level Asset Management System (only in conjunction with the diagnostic module DPC-49-ADU).

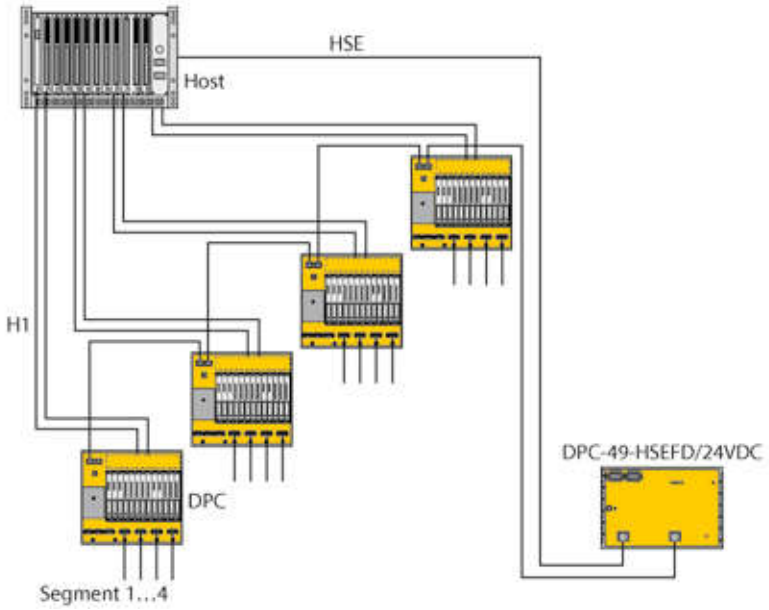
The DPC-49-DU monitors the external power supply at the module rack, the FOUNDATION™ fieldbus-H1 power modules and their redundant operation mode. The diagnostic function can be switched off separately for each segment.

The device features three LEDs indicating the status operating mode. Alarm messages are indicated by a red LED. Alarm signals are also output via a relay contact.

Technical Data

Type	DPC-49-DU
ID number	6882021
Supply voltage	via the backplane
Current consumption	< 100 mA
Galvanic isolation	All-round galvanic separation, test voltage 500 VAC
Diagnostics	1 x relay
Switching current	≤ 1000 mA
Switching voltage	≤ 30 VDC
	Galvanically separated against other electronic parts
Operational readiness	2 x green
Alarm	1 x red
Protection class	IP20
Ambient temperature	-20…+60 °C
Housing material	Plastic
	flammability class V-0UL 94
Housing color	yellow
Dimensions	118 x 18 x 103 mm

Diagnostic module



- Long-term diagnostics for 4 H1 segments
- Local diagnostics via LEDs
- Alarm signal via relay contact
- Complete galvanic isolation

The DPC system (Diagnostic Power Conditioner) is a power supply system for the installation of FOUNDATION™ fieldbus H1 segments. It provides extensive diagnostic options for monitoring FOUNDATION™ fieldbus segments and thus supports plantwide asset management.

A DPC system consists of one or more module racks, each of which can take up to eight DPC-49-IPS1 power supply modules and one DPC-49-ADU or DPC-49-DU diagnostic module. Up to four H1 segments per module rack can be operated and monitored redundantly in the FOUNDATION™ fieldbus network. The diagnostic data of the H1 segments can be transmitted via the DPC-49-HSEFD/24VDC HSE field device to the higher level Asset Management System (only in conjunction with the diagnostic module DPC-49-ADU).

The diagnostics module DPC-49-ADU is used as a diagnostic interface between H1 segments and the HSE interface module. The diagnostics module monitors the electrical and the communication parameters of the H1 segments. Operation without diagnostics module is possible.

The diagnostic information is collected in the device and transmitted via the HSE interface module to the higher fieldbus level (e.g. the host) as diagnostic and alarm data. The diagnostics module can be plugged and unplugged during operation (hot- swappable in run).

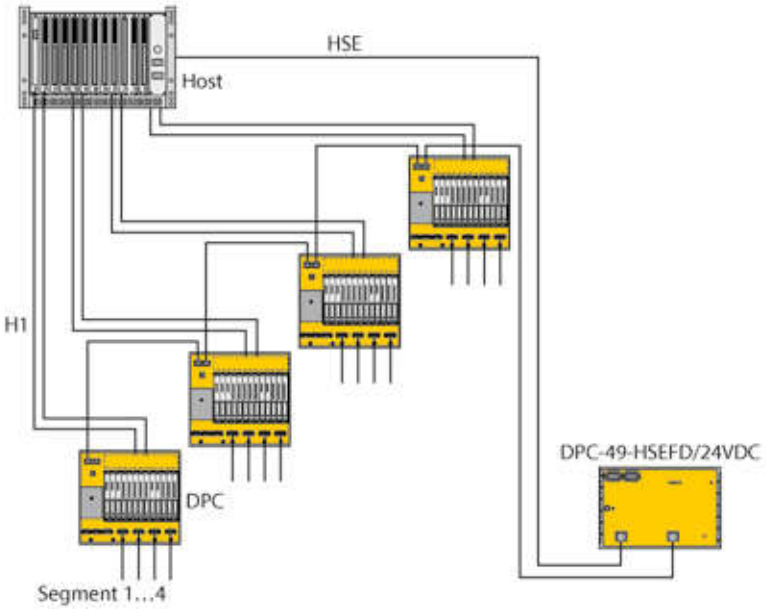
The device features LEDs indicating the operating status of the H1 segments. A pre-alarm is indicated by a yellow LED, the main alarm by a red LED. Additionally, alarm signals can be analyzed via a relay contact.



Technical Data

Type	DPC-49-ADU
ID number	6882012
Power consumption	≤ 0.8 W
Supply voltage	via the backplane
Current consumption	< 100 mA
Galvanic isolation	All-round galvanic separation, test voltage 500 VAC
Diagnostics	1 x relay
Switching current	≤ 1000 mA
Switching voltage	≤ 30 VDC
	Galvanically separated against other electronic parts
Operational readiness	1 x green / red
Alarm	4 x yellow / red
Protection class	IP20
MTTF	126 years acc. to SN 29500 (Ed. 99) 40 °C
Ambient temperature	-20…+60 °C
Housing material	Plastic
	flammability class V-0UL 94
Housing color	yellow
Dimensions	118 x 18 x 103 mm

HSE field device



- HSE field device for the transmission of diagnostic data
- FOUNDATION™ fieldbus function blocks for remote diagnostics
- Local diagnostics via LEDs
- Long-term diagnostics for 16 H1 segments
- Complete galvanic isolation

The DPC system (Diagnostic Power Conditioner) is a power supply system for the installation of FOUNDATION™ fieldbus H1 segments. It provides extensive diagnostic options for monitoring FOUNDATION™ fieldbus segments and thus supports plantwide asset management.

A DPC system consists of one or more module racks, each of which can take up to eight DPC-49-IPS1 power supply modules and one DPC-49-ADU or DPC-49-DU diagnostic module. Up to four H1 segments per module rack can be operated and monitored redundantly in the FOUNDATION™ fieldbus network. The diagnostic data of the H1 segments can be transmitted via the DPC-49-HSEFD/24VDC HSE field device to the higher level Asset Management System (only in conjunction with the diagnostic module DPC-49-ADU).

The DPC-49-HSEFD/24VDC HSE field device transmits the diagnostic data of up to 16 H1 segments via the FOUNDATION™ fieldbus HSE interface module to the higher level Asset Management system. Only diagnostic data of the DPC-49-ADU diagnostic modules are transmitted via the HSE interface module but not the process data of the H1 field devices. Each diagnostics module monitors up to four H1 segments.

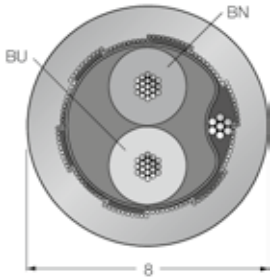
As a FOUNDATION™ fieldbus device, the HSE interface module features a resource and transducer block as well as several standard function blocks. On the basis of these standard function blocks, suitable applications can be programmed in the control system for the analysis of diagnostic data.



Technical Data

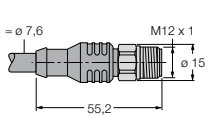
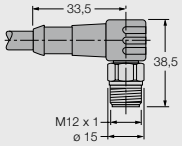
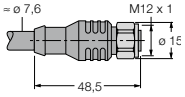
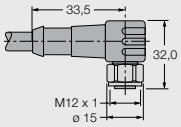
Type	DPC-49-HSEFD/24VDC
ID number	6882014
Operating voltage range	18…32 VDC
Power consumption	≤ 2 W
Current consumption	< 100 mA
Galvanic isolation	All-round galvanic separation, test voltage 500 VAC
Operational readiness	2 x green
State/ Fault	1 x yellow / red
Bus communication	1 x green / yellow
Int. communication (CAN)	1 x yellow / red
Electrical connection	removable terminal block, reverse polarity protected, screw connection
	RJ45 female
Protection class	IP20
MTTF	88 years acc. to SN 29500 (Ed. 99) 40 °C
Ambient temperature	-20…+60 °C
Housing material	Aluminium
Housing color	black / yellow
Dimensions	105 x 176 x 31 mm
Connection mode	snap-fit on DIN rail (DIN 60715)

PVC Cable - Yellow, Orange, Blue or Black



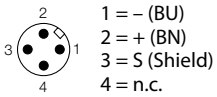
- Fieldbus cable, type A, acc. to IEC 61158-2
- PVC jacket, color orange, yellow, blue or black
- Oil, gas and sunlight resistant
- For use in the hazardous areas classified as Zone 1 and Zone 2, group II, acc. to IEC 60079-14
- Cable cross section: 18/7 AWG (0.8 mm^2)
- Bulk cable: 100, 250, 500, and 1000 meters

Connector	
Number of pins	4
Grip	Plastic, PUR, Black
Contacts	Metal, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, 1.4404
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	8 mm – 0.30
Cable jacket	PVC, BU, BK, OG, YE
Core insulation	PE-foam with PE-jacket
Core cross-section	2 x 0.8 mm^2
Shield	plastic-covered aluminum foil, metal side outside, makes contact with drain wire and tinned copper wire
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	300 V
Shield resistance	Nom. 9 Ω /km
DC resistance (loop)	43.6 Ω /km
Nom. Impedance	100 ± 20 (31.25 kBit/s)
Working capacitance	Nom. 60 nF/km
Capacitive earthing	max. 2 nF/km
Nom. Inductance	0.7 mH/km
Damping	max. 3.0 dB/km (with f = 39 kHz]
skew	max. 1.7 µs/km (7.9 kHz -39 kHz)
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 90 N/mm^2
Bending radius (stationary laying)	> 5 x Ø
Ambient temperature	
Stationary usage	-40…+75 °C
Non-stationary usage	-5…+50 °C

M12 × 1	one-sided premoulded	RSCV	WSCV	RKCV	WKCV
					
RSCV	RSCV-FBY49x-*M/5D	RSCV-RSCV-FBY49x-*M/5D	—	RSCV-RKCV-FBY49x-*M/5D	—
WSCV	WSCV-FBY49x-*M/5D	—	WSCV-WSCV-FBY49x-*M/5D	—	WSCV-WKCV-FBY49x-*M/5D
RKCV	RKCV-FBY49x-*M/5D	—	—	RKCV-RKCV-FBY49x-*M/5D	—
WKCV	WKCV-FBY49x-*M/5D	—	—	—	WKCV-WKCV-FBY49x-*M/5D

Note: Type code (structure): housing – cable type FBY49x (x = color BU/BK/OG/YE) – *M = variable length in m

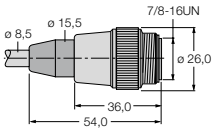
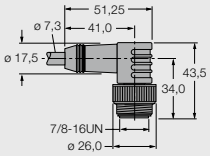
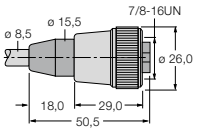
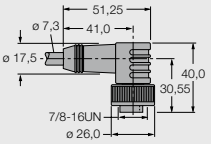
Pin configuration: male female



1 = – (BU)
2 = + (BN)
3 = S (Shield)
4 = n.c.



1 = – (BU)
2 = + (BN))
3 = S (Shield)
4 = n.c.

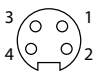
7/8"	one-sided premoulded	RSV	WSV	RKV	WKV
					
RSV	RSV-FBY49x-*M/5D	RSV-RSV-FBY49x-*M/5D	—	RSV-RKV-FBY49x-*M/5D	—
WSV	WSV-FBY49x-*M/5D	—	WSV-WSV-FBY49x-*M/5D	—	WSV-WKV-FBY49x-*M/5D
RKV	RKV-FBY49x-*M/5D	—	—	RKV-RKV-FBY49x-*M/5D	—
WKV	WKV-FBY49x-*M/5D	—	—	—	WKCV-WKV-FBY49x-*M/5D

Note: Type code (structure): housing – cable type FBY49x (x = color BU/BK/OG/YE) – *M = variable length in m

Pin configuration: male female

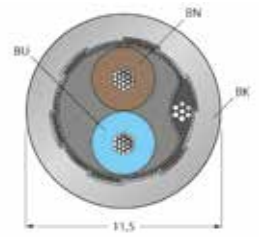


1 = – (BU)
2 = + (BN)
3 = S (Shield)
4 = n.c.



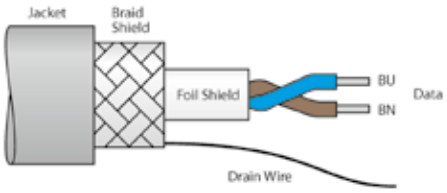
1 = – (BU)
2 = + (BN))
3 = S (Shield)
4 = n.c.

PVC Cable – Black, Long Distance

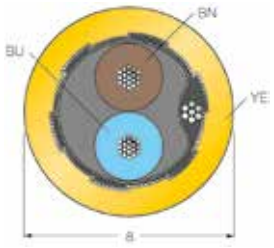


- Long distance fieldbus cable, type A according to IEC 611582
- PVC jacket, black
- Oil, gas and sunlight resistant
- Temperature range -40 °C…+75 °C
- Cable cross section: 14/7AWG (2.1 mm²)

Cable	
Cable	8 mm – 0.30
Cable jacket	PVC, Black
Core insulation	PE-foam with PE-jacket
Core cross-section	2 x 2.1 mm²
Shield	plastic-covered aluminum foil, metal side outside, makes contact with drain wire and tinned copper wire
Electrical properties at +20 °C	
Rated voltage	300 V
Shield resistance	Nom. 6 Ω /km
DC resistance (loop)	17.2 Ω /km
Nom. Impedance	100 ± 20 (31.25 kBit/s)
Working capacitance	Nom. 60 nF/km
Capacitive earthing	max. 2 nF/km
Nom. Inductance	0.7 mH/km
Damping	max. 3.0 dB/km (with f = 39 kHz]
skew	max. 1.7 µs/km (7.9 kHz -39 kHz)
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 90 N/mm²
Bending radius (stationary laying)	> 5 x Ø
Ambient temperature	
Stationary usage	-40…+75 °C
Non-stationary usage	-5…+50 °C

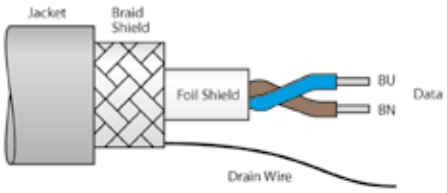
	Cable length [m]	ID number	Type
	100	6611320	CABLE FBY-BK/LD-100M
	250	6611321	CABLE FBY-BK/LD-250M
	500	6611322	CABLE FBY-BK/LD-500M
	1000	6611256	CABLE FBY-BK/LD-1000M

LSZH Cable – Yellow, LSZH (Low Smoke, Zero Halogen)

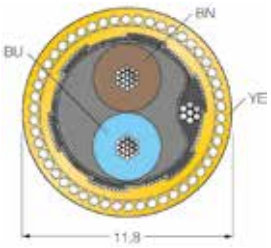


- Fieldbus cable, type A, acc. to IEC 61158-2
- LSZH (low smoke zero halogen) mixture
- Jacket color, yellow
- Oil, gas and sunlight resistant
- Temperature range -40 °C…+75 °C
- Cable cross section: 18/7 AWG (0.8 mm²)

Cable	
Cable	8 mm – 0.30
Cable jacket	LSZH (low smoke zero halogen) mixture, Yellow
Core insulation	PE-foam with PE-jacket
Core cross-section	2 x 0.8 mm²
Shield	plastic-covered aluminum foil, metal side outside, makes contact with drain wire and tinned copper wire
Electrical properties at +20 °C	
Rated voltage	300 V
Shield resistance	Nom. 9 Ω /km
DC resistance (loop)	43.6 Ω /km
Nom. Impedance	100 ± 20 (31.25 kBit/s)
Working capacitance	Nom. 60 nF/km
Capacitive earthing	max. 2 nF/km
Nom. Inductance	0.7 mH/km
Damping	max. 3.0 dB/km (with f = 39 kHz]
skew	max. 1.7 µs/km (7.9 kHz -39 kHz)
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 90 N/mm²
Bending radius (stationary laying)	> 5 x Ø
Ambient temperature	
Stationary usage	-40…+75 °C
Non-stationary usage	-5…+50 °C

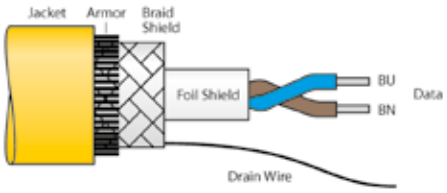
	Cable length [m]	ID number	Type
	100	6611541	CABLE FBH-YE/SD-100M
	250	6611542	CABLE FBH-YE/SD-250M
	500	6611543	CABLE FBH-YE/SD-500M
	1000	6611299	CABLE FBH-YE/SD-1000M

PVC Cable – Yellow, Armoring Steel Round Wires



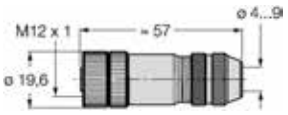
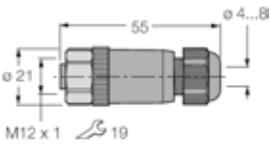
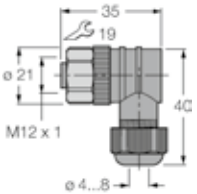
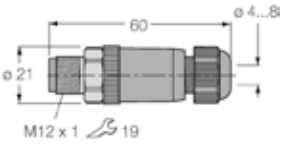
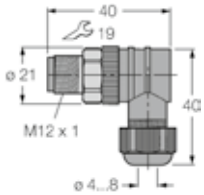
- Fieldbus cable, type A, acc. to IEC 61158-2
- PVC jacket, yellow
- Armoring: round steel wires
- Oil, gas and sunlight resistant
- Temperature range -40 °C…+75 °C
- Cable cross section: 18/7 AWG (0.8 mm²)

Cable	
Cable jacket	PVC, Yellow
Armouring	Round steel wires, zinc plated
Diameter	0.9 mm
Core insulation	PE-foam with PE-jacket
Core cross-section	2 x 0.8 mm²
Shield	plastic-covered aluminum foil, metal side outside, makes contact with drain wire and tinned copper wire
Electrical properties at +20 °C	
Rated voltage	300 V
Shield resistance	Nom. 9 Ω /km
DC resistance (loop)	43.6 Ω /km
Nom. Impedance	100 ± 20 (31.25 kBit/s)
Working capacitance	Nom. 60 nF/km
Capacitive earthing	max. 2 nF/km
Nom. Inductance	0.7 mH/km
Damping	max. 3.0 dB/km (with f = 39 kHz]
skew	max. 1.7 µs/km (7.9 kHz -39 kHz)
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 90 N/mm²
Ambient temperature	
Stationary usage	-40…+75 °C
Non-stationary usage	-5…+50 °C

	Cable length [m]	ID number	Type
	100	6611490	CABLE FBA-YE/SD 100M
	250	6611491	CABLE FBA-YE/SD 250M
	500	6611492	CABLE FBA-YE/SD 500M
	1000	6611493	CABLE FBA-YE/SD 1000M

Field-Wireable Connectors – M12 × 1

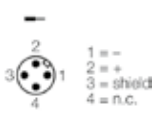


	Number of pins	Rated voltage [V]	ID number	Type	Number of pins	Rated voltage	ID number	Type
Female connector, straight								
	4	125	6904702	BMS8141-0/9	4	250	6914538	BKV8140-0/9
Female connector, angled								
					4	250	6914540	BKV8240-0/9
Male connector, straight								
	4	125	6904701	BMSS8141-0/9	4	250	6914537	BSV8140-0/9
Male connector, angled								
					4	250	6914539	BSV8240-0/9
Connection mode	Screw/clamp connection				Screw/clamp connection			
Grip	Metal, GD-ZnAL, Gray				Plastic, PA, Black			
Coupling nut/screw	Brass, CuZn, Nickel-plated				Stainless steel, 1.4404			
Contacts	Metal, CuZn,CuSnZn, Optalloy-coated				Metal, CuZn,CuSnZn, Optalloy-coated			
Contact carriers	PA, Gray				PA, Black			
Protection class	IP67				IP67			
Current load	4 A				4 A			
Terminal cross-section	0.14…0.75 mm²				0.14…0.75 mm²			
Cable external diameter	min. 4…9 mm				min. 4…8 mm			
Storage temperature	-25…+90 °C				-25…+90 °C			

Female connector

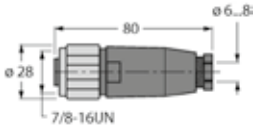
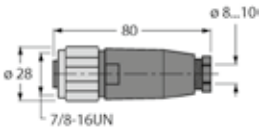
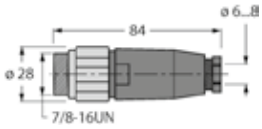
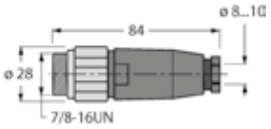


Male connector



Field-Wireable Connectors – 7/8"



	Number of pins	Rated voltage [V]	ID number	Type	Number of pins	Rated voltage	ID number	Type
Female connector, straight								
	4	240	6914543	BKV4140-0/9	4	240	6914566	BKV4140-0/11
Male connector, straight								
	4	250	6914542	BSV4140-0/9	4	250	6914565	BSV4140-0/11
Connection mode	Screw/clamp connection				Screw/clamp connection			
Grip	Plastic, PA, Black				Plastic, PA, Black			
Coupling nut/screw	Stainless steel, 1.4404				Stainless steel, 1.4404			
Contacts	Metal, CuZn, Gold-plated				Metal, CuZn, Gold-plated			
Contact carriers	TPU, Black				TPU, Black			
Protection class	IP67				IP67			
Current load	9 A				9 A			
Terminal cross-section	0.14…1 mm²				0.14…1 mm²			
Cable external diameter	min. 6…8 mm				min. 8…10 mm			
Storage temperature	-40…+90 °C				-40…+90 °C			

Female connector

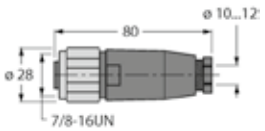
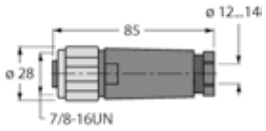
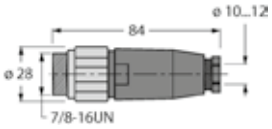
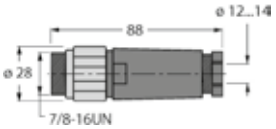


Male connector

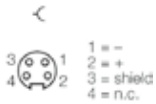


Field-Wireable Connectors – 7/8"



	Number of pins	Rated voltage [V]	ID number	Type	Number of pins	Rated voltage	ID number	Type
Female connector, straight								
	4	240	6914563	BKV4140-0/13.5	4	240	6914544	BKV4140-0/16
Male connector, straight								
	4	250	6914562	BSV4140-0/13.5	4	250	6914541	BSV4140-0/16
Connection mode	Screw/clamp connection				Screw/clamp connection			
Grip	Plastic, PA, Black				Plastic, PA, Black			
Coupling nut/screw	Stainless steel, 1.4404				Stainless steel, 1.4404			
Contacts	Metal, CuZn, Gold-plated				Metal, CuZn, Gold-plated			
Contact carriers	TPU, Black				TPU, Black			
Protection class	IP67				IP67			
Current load	9 A				9 A			
Terminal cross-section	0.14…1 mm²				0.14…1 mm²			
Cable external diameter	min. 10…12 mm				min. 12…14 mm			
Storage temperature	-40…+90 °C				-40…+90 °C			

Female connector



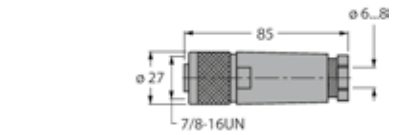
Male connector

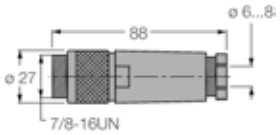


Field-Wireable Connectors – 7/8"

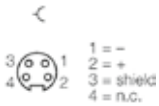


	Number of pins	Rated voltage [V]	ID number	Type
Female connector, straight				
	4	250	6914551	BK4140-0/9
Male connector, straight				
	4	250	6914550	BS4140-0/9
Connection mode	Screw/clamp connection			
Grip	Plastic, PA, Black			
Coupling nut/screw	Aluminum, Al, Anodized			
Contacts	Metal, CuZn, Gold-plated			
Contact carriers	TPU, Black			
Protection class	IP67			
Current load	9 A			
Terminal cross-section	0.14…1 mm²			
Cable external diameter	min. 6…8 mm			
Storage temperature	-40…+90 °C			





Female connector

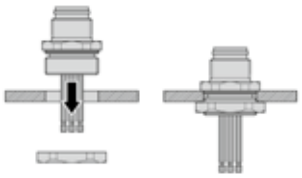


Male connector



Receptacles for Front-Panel Mounting – M12 × 1

Contacts	Metal, CuZn, Gold-plated
Seal	Plastic, NBR
Protection class	IP68
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Insulation resistance	≥ 10^8 Ω
Contact resistance	≤ 5 mΩ
Ambient temperature	
Stationary usage	-40…+105 °C
Non-stationary usage	-40…+90 °C



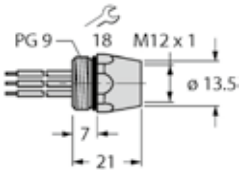
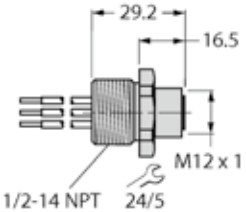
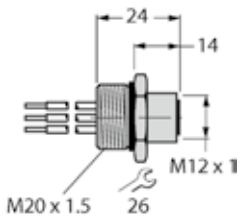
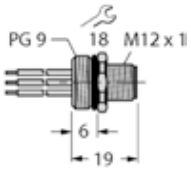
Female connector

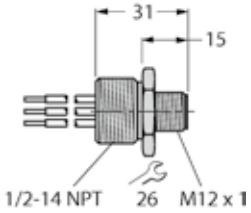
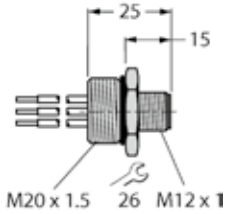


Male connector





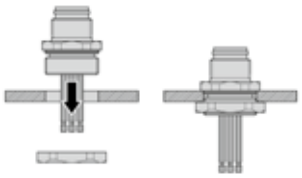
	Design	Receptacle housing	Number of pins	Connection mode[1]	Rated voltage [V]	Current load [A]	Contact carriers	Cable length [m]	ID number	Type
	Female connector	Stainless steel	4	LK	250	4	TPU, Yellow		6603426	FKV49
	Female connector	Stainless steel	4	L	250	4	TPU, Yellow	0.3	6603298	FKV49-0.3M/14.5/C1117
	Female connector	Stainless steel	4	L	250	4	TPU, Yellow	0.3	6603683	FKV49-0.3M/M20/C1117
	Male connector	Stainless steel	4	LK	250	4	TPU, Black		6604378	FSV49

	Design	Receptacle housing	Number of pins	Connection mode[1]	Rated voltage [V]	Current load [A]	Contact carriers	Cable length [m]	ID number	Type
										
	Male connector	Stainless steel	4	L	250	4	TPU, Black	0.3	6602107	FSV49-0.3M/14.5/C1117
	Male connector	Stainless steel	4	L	250	4	TPU, Yellow	0.3	6603682	FSV49-0.3M/M20/C1117

1) L: Stranded wire contact, LK: Solder contact, P: Print contact

Receptacles for Front-Panel Mounting – 7/8"

Contacts	Metal, CuZn, Gold-plated
Seal	Plastic, NBR
Protection class	IP67
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Insulation resistance	≥ 10^8 Ω
Contact resistance	≤ 5 mΩ
Ambient temperature	
Stationary usage	-40…+105 °C
Non-stationary usage	-40…+105 °C



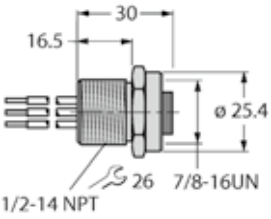
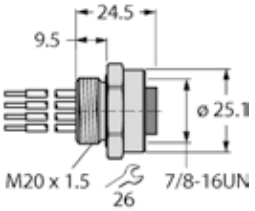
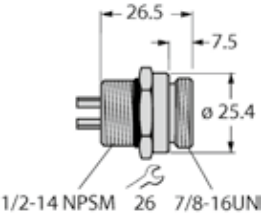
Female connector

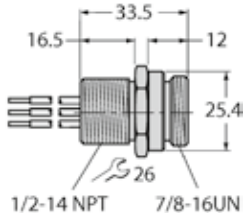
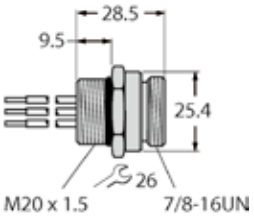
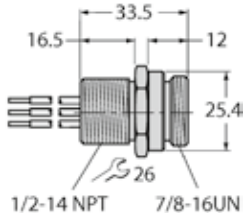


Male connector



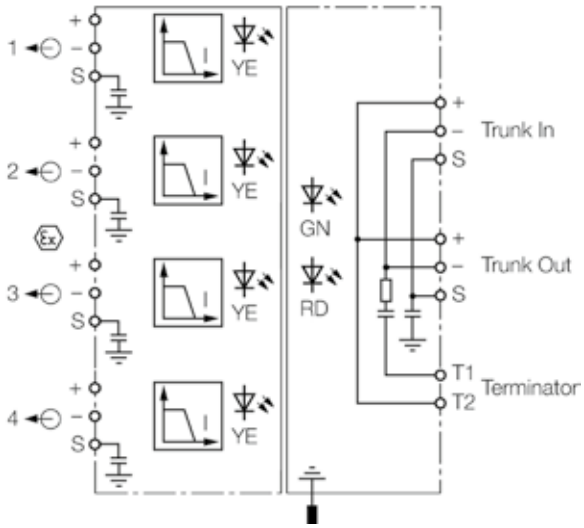


	Design	Receptacle housing	Number of pins	Connection mode[1]	Rated voltage [V]	Current load [A]	Contact carriers	Cable length [m]	ID number	Type
	Female connector	Stainless steel	4	L	600	9	TPU, Black	0.3	6602475	RKFV49-0.3M/14.5/C1117
	Female connector	Stainless steel	4	L	600	9	TPU, Black	0.3	6603584	RKFV49-0.3M/M20/C1117
	Male connector	Stainless steel	4	LK	600	9	TPU, Black		6602199	RSFV49

	Design	Receptacle housing	Number of pins	Connection mode[1]	Rated voltage [V]	Current load [A]	Contact carriers	Cable length [m]	ID number	Type
										
	Male connector	Stainless steel	4	L	600	9	TPU, Black	0.3	6603396	RSFV49-0.3M/14.5/C1117
	Male connector	Stainless steel	4	L	600	9	TPU, Black	0.3	6603583	RSFV49-0.3M/M20/C1117
	Male connector	Stainless steel	4	L	600	9	TPU, Black	0.25	6603875	RSFV49-0.25M/14.5/C1117

1) L: Stranded wire contact, LK: Solder contact, P: Print contact

Multibarrier, 4-channel



- Galvanically separated Ex e bus cables and Ex i outputs
- Powder-coated die-cast aluminum housing
- Pressure compensation element protects against condensation
- Connection of the housing potential via M5 × 1 bolt
- Temperature range: -20 °C…+70 °C(-4 °F…+158 °F)
- Integrated terminating resistor (optional activation)
- output data: 10V/40mA (short-circuit proof)

The 4-channel multibarrier enables the connection of a large number of field devices to one fieldbus in the Ex area, according to IEC 61158-2.

4 Ex i field devices can be connected to each multibarrier. Up to 16 Ex i field devices can be connected to the bus. The number of nodes can be augmented thanks to the High Power Trunk Concept, through which Ex e fieldbus power is looped from multibarrier to multibarrier. In order to limit inrush currents at the moment of turn-on, the drop lines/spurs are switched on one after the other.

Inputs and outputs of the trunk line feature enhanced safety protection (Ex e) and the spurs to the field devices are intrinsically safe (Ex i).

The multibarrier is equipped with an activatable terminating resistor for the bus. The terminating resistor is switched on/off by means of a jumper.

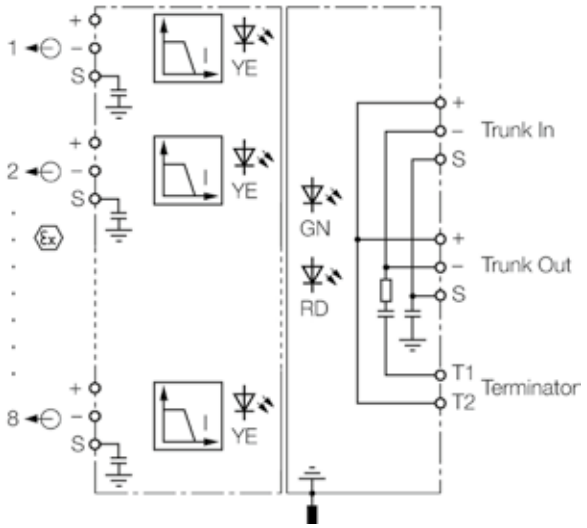
Status and error messages of the single spurs are indicated via LEDs at the front.



Technical Data

Type	MBD40-T0415/EX/000
ID number	6611757
Fieldbus standard	IEC 61158-2
Operating voltage range	16…32 VDC
Power loss	≤ 1.8 W
Galvanic isolation	Input circuit (Ex e) to output circuits (Ex i)
Test voltage	1.5 kV AC
Output circuits	
Output current	≤ 40 mA
Output voltage	≥ 10 VDC
Short-circuit protection	≤ 50 mA
Operational readiness	1 x green
State/ Fault	1 x red
Short-circuit message	4 x yellow, flashing
Ex approval acc. to conformity certificate	PTB 09 ATEX 1069
Device designation	Ⓔx II 2(1G/D)G Ex eb ib [ia] mb IIC T4
	FISCO Power Supply
Max. output voltage U_o	≤ 15.7
Max. output current I_o	≤ 245
Max. output power P_o	≤ 960
Characteristic	linear
Internal inductance/capacitance L_i/C_i	negligible / 1.1 nF
Electrical connection	4 x 3-pin removable terminal blocks, reverse polarity protected, screw connection
Segment IN	1 x M20 x 1.5 (Ø 7…13 mm); plastic; black
Segment OUT	1 x M20 x 1.5 (Ø 7…13 mm); plastic; black
Spur line	4 x M20 x 1.5 (Ø 7…13 mm); plastic; blue
Terminal cross-section	0.2…2.5 mm^2 (24…13 AWG)
Earthing bolt	M5 x 1
Protection class	IP66
Ambient temperature	-20…+70 °C
Relative humidity	≤ 95 %, non-condensing
Housing material	Powder-coated die-cast aluminium
Housing color	black / yellow
Dimensions	160 x 260 x 90 mm
Connection mode	wall mounting

Multibarrier, 8-channel



- Galvanically separated Ex e bus cables and Ex i outputs
- Powder-coated die-cast aluminium housing
- Pressure compensation element protects against condensation
- Connection of the housing potential via M5 × 1 bolt
- Temperature range: -20 °C…+70 °C(-4 °F…+158 °F)
- Integrated terminating resistor (optional activation)
- output data: 10V/40mA (short-circuit proof)

The 8-channel multibarrier enables the connection of a larger number of field devices to one fieldbus, according to IEC 61158-2.

8 Ex i field devices can be connected to each multibarrier. Up to 32 Ex i field devices can be connected to the bus. The number of nodes can be augmented thanks to the High Power Trunk Concept, through which Ex e fieldbus power is looped from multibarrier to multibarrier. In order to limit inrush currents at the moment of turn-on, the drop lines/spurs are switched on one after the other. The field devices can be supplied with maximally 40 mA. Each spur is short-circuit protected through 50 mA current limitation. Altogether 160 mA are maximally available for nominal operation. This current can be spread to the connected field devices, for example:

- 8 × 20 mA
- 1 × 40 mA, 7 × 16 mA
- 1 × 30 mA, 7 × 18 mA
- 6 × 23 mA
- 5 × 28 mA

Inputs and outputs of the trunk line feature enhanced safety protection (Ex e) and the spurs to the field devices are intrinsically safe (Ex i).

The multibarrier is equipped with an activatable terminating resistor for the bus. The terminating resistor is switched on/off by means of a jumper.

Status and error messages of the single spurs are indicated via LEDs at the front.



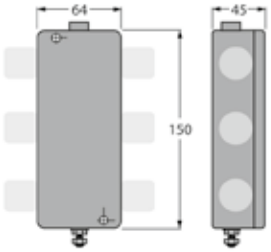
Technical Data

Type	MBD40-T0815/EX/000
ID number	6611786
Fieldbus standard	IEC 61158-2
Operating voltage range	16…32 VDC
Power loss	≤ 1.8 W
Galvanic isolation	Input circuit (Ex e) to output circuits (Ex i)
Test voltage	1.5 kV AC
Output circuits	
Output current	≤ 40 mA
Output voltage	≥ 10 VDC
Short-circuit protection	≤ 50 mA
Operational readiness	1 x green
State/ Fault	1 x red
Short-circuit message	8 x yellow, flashing
Ex approval acc. to conformity certificate	PTB 09 ATEX 1069
Device designation	Ⓔx II 2(1G/D)G Ex eb ib [ia] mb IIC T4
	FISCO Power Supply
Max. output voltage U_o	≤ 15.7
Max. output current I_o	≤ 245
Max. output power P_o	≤ 960
Characteristic	linear
Internal inductance/capacitance L_i/C_i	negligible / 1.1 nF
Electrical connection	8 x 3-pin removable terminal blocks, screw connection
Segment IN	1 x M20 x 1.5 (Ø 7…13 mm); plastic; black
Segment OUT	1 x M20 x 1.5 (Ø 7…13 mm); plastic; black
Spur line	8 x M20 x 1.5 (Ø 7…13 mm); plastic; blue
Terminal cross-section	0.2…2.5 mm^2 (24…13 AWG)
Earthing bolt	M5 x 1
Protection class	IP66
Ambient temperature	-20…+70 °C
Relative humidity	≤ 95 %, non-condensing
Housing material	Powder-coated die-cast aluminium
Housing color	black / yellow
Dimensions	160 x 260 x 90 mm
Connection mode	wall mounting

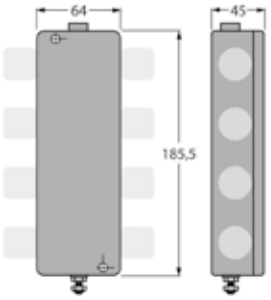
Junction with short-circuit protection



4-channel



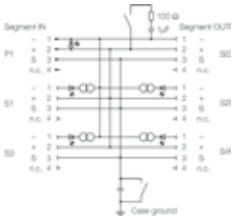
6-channel



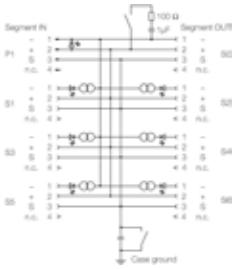
- Junction box for wall mounting
- Short-circuit protection per drop line/spur
- Powder-coated die-cast aluminium housing
- Breather to prevent condensation
- Connection of the housing potential via M5 × 1 bolt
- Integrated terminating resistor (switchable)
- Cable shielding: Capacitive or direct connection to housing potential selectable via switch
- Isolated support terminal for optional protective conductor incorporated in cable
- Entity and FISCO compliant according to IEC 60079-11

Operating voltage range	12…32 VDC
Current self-consumption	≤ 7 mA
Voltage drop	≤ 0.3 V
Short-circuit protection	≤ 30, 35, 45, 60 mA
Operational readiness	1 x green
Short-circuit message	n x red
Protection class	IP67
Connection mode	wall mounting
Earthing bolt	M5 x 1
MTTF	117 years acc. to SN 29500 (Ed. 99) 40 °C

4-channel



6-channel

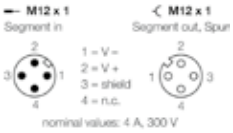


Terminal Connection

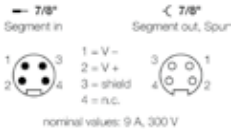


1 = n.c.
2 = Shield
3 = +
4 = –

7/8" connector



M12 connector



Types and Features — Selection Table

Segment IN	Segment OUT	Spur line	Ambient temperature [°C]	Dimensions [mm]	Number of channels	ID number	Type
1 x M20 x 1.5 (Ø 7…13 mm)	1 x M20 x 1.5 (Ø 7…13 mm)	4 x M20 x 1.5 (Ø 7…13 mm)	-25…+70	150 x 64 x 45	4	6611440	JBBS-49SC-T415/3G
1 x M20 x 1.5 (Ø 7…13 mm)	1 x M20 x 1.5 (Ø 7…13 mm)	6 x M20 x 1.5 (Ø 7…13 mm)	-25…+70	150 x 64 x 45	6	6611442	JBBS-49SC-T615/3G
1 x M12 - male	1 x M12 - female	4 x M12 - female	-25…+70	150 x 64 x 45	4	6611432	JBBS-49SC-E413/3G
1 x M12 - male	1 x M12 - female	6 x M12 - female	-25…+70	185.5 x 64 x 45	6	6611434	JBBS-49SC-E613/3G
1 x 7/8 "- male	1 x 7/8 "- female	4 x 7/8 "- female	-25…+70	150 x 64 x 45	4	6611436	JBBS-49SC-M413/3G
1 x 7/8 "- male	1 x 7/8 "- female	6 x 7/8 "- female	-25…+70	185.5 x 64 x 45	6	6611438	JBBS-49SC-M613/3G

Marking of devices
TURCK Ex-13016H X

Ⓔx II 3 G Ex nA II T4 Gc ■ II 3 G Ex ic IIC T4 Gc

Segment IN	Segment OUT	Spur line	Ambient temperature [°C]	Dimensions [mm]	Number of channels	ID number	Type
1 x M20 x 1.5 (Ø 7…13 mm)	1 x M20 x 1.5 (Ø 7…13 mm)	4 x M20 x 1.5 (Ø 7…13 mm)	-40…+70	150 x 64 x 45	4	6611441	JBBS-49SC-T415B/EX
1 x M20 x 1.5 (Ø 7…13 mm)	1 x M20 x 1.5 (Ø 7…13 mm)	6 x M20 x 1.5 (Ø 7…13 mm)	-40…+70	150 x 64 x 45	6	6611443	JBBS-49SC-T615B/EX
1 x M12 - male	1 x M12 - female	4 x M12 - female	-30…+70	150 x 64 x 45	4	6611433	JBBS-49SC-E413/EX
1 x M12 - male	1 x M12 - female	6 x M12 - female	-30…+70	185.5 x 64 x 45	6	6611435	JBBS-49SC-E613/EX
1 x 7/8 "- male	1 x 7/8 "- female	4 x 7/8 "- female	-30…+70	150 x 64 x 45	4	6611437	JBBS-49SC-M413/EX
1 x 7/8 "- male	1 x 7/8 "- female	6 x 7/8 "- female	-30…+70	185.5 x 64 x 45	6	6611439	JBBS-49SC-M613/EX

Marking of devices
PTB 03 ATEX 2236

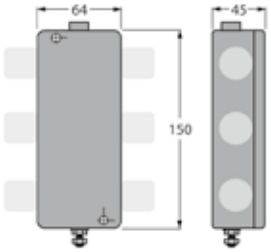
Ⓔx II 2 G Ex ib IIC T4 Gb ■ II 2 (1) G Ex ia [ia Ga] IIC T4 Gb ■ II 2 (1D) G Ex ia [ia IIIC Da] IIB T4 Gb ■ II 2 (2D) G Ex ib [ib IIIC Db] IIB T4 Gb ■ FISCO / Entity field device

Junction without short-circuit protection

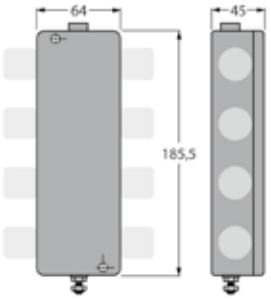


- Junction box for wall mounting
- Powder-coated die-cast aluminium housing
- Breather to prevent condensation
- Connection of the housing potential via M5 × 1 bolt
- Integrated terminating resistor (switchable)
- Cable shielding: Capacitive or direct connection to housing potential selectable via switch
- Isolated support terminal for optional protective conductor incorporated in cable
- Entity and FISCO compliant according to IEC 60079-11

4-channel

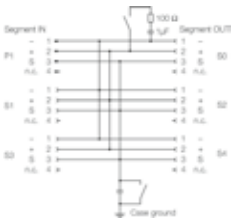


6-channel

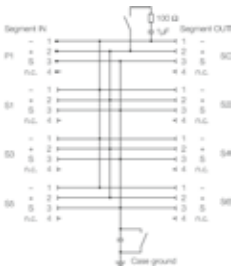


Operating voltage range	9…32 VDC
Protection class	IP67
Connection mode	wall mounting
Earthing bolt	M5 x 1
MTTF	705 years acc. to SN 29500 (Ed. 99) 40 °C

4-channel



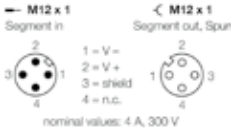
6-channel



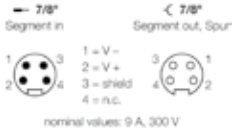
Terminal Connection



7/8" connector



M12 connector



Types and Features — Selection Table

Segment IN	Segment OUT	Spur line	Ambient temperature [°C]	Dimensions [mm]	Number of channels	ID number	Type
1 x M20 x 1.5 (Ø 7…13 mm)	1 x M20 x 1.5 (Ø 7…13 mm)	4 x M20 x 1.5 (Ø 7…13 mm)	-25…+70	150 x 64 x 45	4	6611444	JBBS-49-T415/3G
1 x M20 x 1.5 (Ø 7…13 mm)	1 x M20 x 1.5 (Ø 7…13 mm)	6 x M20 x 1.5 (Ø 7…13 mm)	-25…+70	150 x 64 x 45	6	6611446	JBBS-49-T615/3G
1 x M12 - male	1 x M12 - female	4 x M12 - female	-25…+70	150 x 64 x 45	4	6611424	JBBS-49-E413/3G
1 x M12 - male	1 x M12 - female	6 x M12 - female	-25…+70	185.5 x 64 x 45	6	6611426	JBBS-49-E613/3G
1 x 7/8 "- male	1 x 7/8 "- female	4 x 7/8 "- female	-25…+70	150 x 64 x 45	4	6611428	JBBS-49-M413/3G
1 x 7/8 "- male	1 x 7/8 "- female	6 x 7/8 "- female	-25…+70	185.5 x 64 x 45	6	6611430	JBBS-49-M613/3G

Marking of devices
TURCK Ex-13016H X

Ⓔx II 3 G Ex nA II T4 Gc ■ II 3 G Ex ic IIC T4 Gc

Segment IN	Segment OUT	Spur line	Ambient temperature [°C]	Dimensions [mm]	Number of channels	ID number	Type
1 x M20 x 1.5 (Ø 7…13 mm)	1 x M20 x 1.5 (Ø 7…13 mm)	4 x M20 x 1.5 (Ø 7…13 mm)	-40…+70	150 x 64 x 45	4	6611445	JBBS-49-T415B/EX
1 x M20 x 1.5 (Ø 7…13 mm)	1 x M20 x 1.5 (Ø 7…13 mm)	6 x M20 x 1.5 (Ø 7…13 mm)	-40…+70	150 x 64 x 45	6	6611447	JBBS-49-T615B/EX
1 x M12 - male	1 x M12 - female	4 x M12 - female	-30…+70	150 x 64 x 45	4	6611425	JBBS-49-E413/EX
1 x M12 - male	1 x M12 - female	6 x M12 - female	-30…+70	185.5 x 64 x 45	6	6611427	JBBS-49-E613/EX
1 x 7/8 "- male	1 x 7/8 "- female	4 x 7/8 "- female	-30…+70	150 x 64 x 45	4	6611429	JBBS-49-M413/EX
1 x 7/8 "- male	1 x 7/8 "- female	6 x 7/8 "- female	-30…+70	185.5 x 64 x 45	6	6611431	JBBS-49-M613/EX

Marking of devices
PTB 03 ATEX 2236

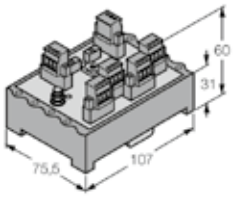
Ⓔx II 2 G Ex ib IIC T4 Gb ■ II 2 (1) G Ex ia [ia Ga] IIC T4 Gb ■ II 2 (1D) G Ex ia [ia IIIC Da] IIB T4 Gb ■ II 2 (2D) G Ex ib [ib IIIC Db] IIB T4 Gb ■ FISCO / Entity field device

Junction with short-circuit protection

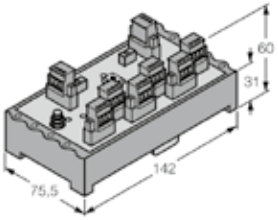


- Junction box for DIN rail mounting
- Short-circuit protection per drop line/spur
- Aluminium housing
- Connection of the housing potential via M5 × 1 bolt
- Integrated terminating resistor (switchable)
- Cable shielding: Capacitive or direct connection to housing potential selectable via switch
- Entity and FISCO compliant according to IEC 60079-11

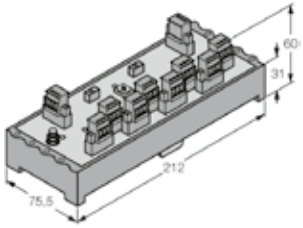
4-channel



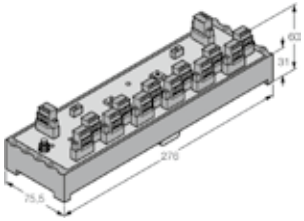
6-channel



8-channel

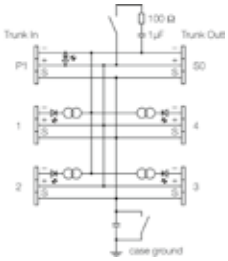


12-channel

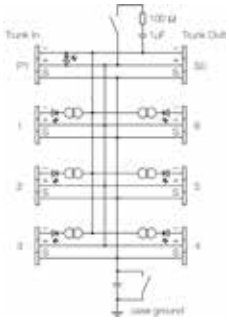


Operating voltage range	12…32 VDC
Current self-consumption	≤ 7 mA
Voltage drop	≤ 0.3 V
Short-circuit protection	≤ 30, 35, 45, 60 mA
Operational readiness	1 x green
Short-circuit message	n x red
Protection class	IP20
Connection mode	snap-fit on DIN rail (DIN 60715)
Earthing bolt	M5 x 1
MTTF	117 years acc. to SN 29500 (Ed. 99) 40 °C

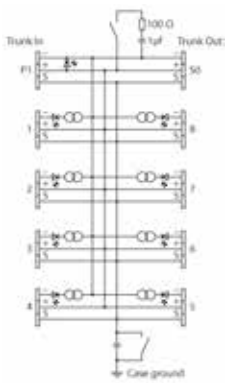
4-channel



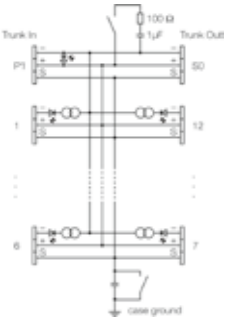
6-channel



8-channel



12-channel



Terminal Connection



Types and Features — Selection Table

Segment IN	Segment OUT	Spur line	Ambient temperature [°C]	Dimensions [mm]	Number of channels	ID number	Type
4 x cage clamp terminal	1 x cage clamp terminal	1 x cage clamp terminal	-25…+70	31 x 107 x 75.5	4	6611451	JRBS-40SC-4C/EX
6 x cage clamp terminal	1 x cage clamp terminal	1 x cage clamp terminal	-25…+70	31 x 142 x 75.5	6	6611452	JRBS-40SC-6C/EX
8 x cage clamp terminal	1 x cage clamp terminal	1 x cage clamp terminal	-25…+70	31 x 177 x 75.5	8	6611453	JRBS-40SC-8C/EX
12 x cage clamp terminal	1 x cage clamp terminal	1 x cage clamp terminal	-25…+70	31 x 276 x 75.5	12	6611455	JRBS-40SC-12C/EX
4 x screw connection	1 x screw connection	1 x screw connection	-25…+70	31 x 107 x 75.5	4	6611459	JRBS-40SC-4R/EX
6 x screw connection	1 x screw connection	1 x screw connection	-25…+70	31 x 142 x 75.5	6	6611460	JRBS-40SC-6R/EX
8 x screw connection	1 x screw connection	1 x screw connection	-25…+70	31 x 212 x 75.5	8	6611461	JRBS-40SC-8R/EX
12 x screw connection	1 x screw connection	1 x screw connection	-25…+70	31 x 276 x 75.5	12	6611463	JRBS-40SC-12R/EX

Marking of devices
PTB 05 ATEX 2002

Ⓔx II 2 G Ex ib IIC/IIB T4 ■ II 2(1) G Ex ia IIC/IIB T4 ■ II 2 G (2D) Ex ib [ibD] IIB T4 ■ II 2(1) G (1D) Ex ia [iaD] IIB T4 ■ FISCO / Entity field device

TURCK Ex-13002H X

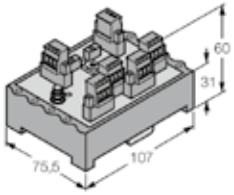
Ⓔx II 3 G Ex nA IIC T4 Gc ■ II 3 G Ex ic IIC T4 Gc

Junction without short-circuit protection

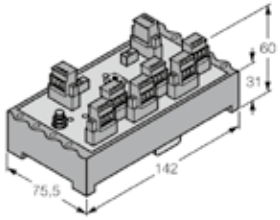


- Junction box for DIN rail mounting
- Aluminium housing
- Connection of the housing potential via M5 × 1 bolt
- Integrated terminating resistor (switchable)
- Cable shielding: Capacitive or direct connection to housing potential selectable via switch
- Entity and FISCO compliant according to IEC 60079-11

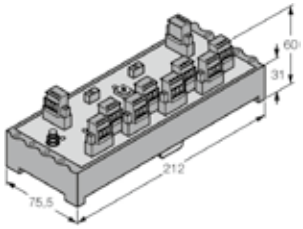
4-channel



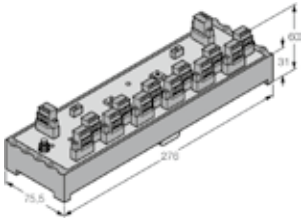
6-channel



8-channel

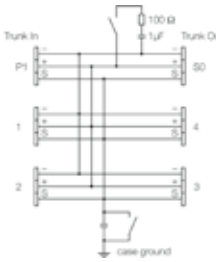


12-channel

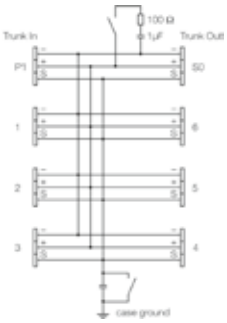


Operating voltage range	9…32 VDC
Protection class	IP20
Connection mode	snap-fit on DIN rail (DIN 60715)
Earthing bolt	M5 x 1
MTTF	705 years acc. to SN 29500 (Ed. 99) 40 °C

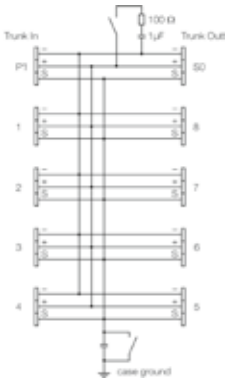
4-channel



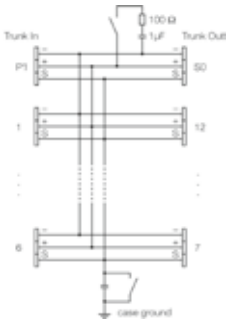
6-channel



8-channel



12-channel



Terminal Connection



Types and Features — Selection Table

Segment IN	Segment OUT	Spur line	Ambient temperature [°C]	Dimensions [mm]	Number of channels	ID number	Type
4 x cage clamp terminal	1 x cage clamp terminal	1 x cage clamp terminal	-25…+70	31 x 107 x 75.5	4	6611448	JRBS-40-4C/EX
6 x cage clamp terminal	1 x cage clamp terminal	1 x cage clamp terminal	-25…+70	31 x 142 x 75.5	6	6611449	JRBS-40-6C/EX
8 x cage clamp terminal	1 x cage clamp terminal	1 x cage clamp terminal	-25…+70	31 x 177 x 75.5	8	6611450	JRBS-40-8C/EX
12 x cage clamp terminal	1 x cage clamp terminal	1 x cage clamp terminal	-25…+70	31 x 276 x 75.5	12	6611454	JRBS-40-12C/EX
4 x screw connection	1 x screw connection	1 x screw connection	-25…+70	31 x 107 x 75.5	4	6611456	JRBS-40-4R/EX
6 x screw connection	1 x screw connection	1 x screw connection	-25…+70	31 x 142 x 75.5	6	6611457	JRBS-40-6R/EX
8 x screw connection	1 x screw connection	1 x screw connection	-25…+70	31 x 212 x 75.5	8	6611458	JRBS-40-8R/EX
12 x screw connection	1 x screw connection	1 x screw connection	-25…+70	31 x 276 x 75.5	12	6611462	JRBS-40-12R/EX

Marking of devices
PTB 05 ATEX 2002

Ⓔx II 2 G Ex ib IIC/IIB T4 ■ II 2(1) G Ex ia IIC/IIB T4 ■ II 2 G (2D) Ex ib [ibD] IIB T4 ■ II 2(1) G (1D) Ex ia [iaD] IIB T4 ■ FISCO / Entity field device

TURCK Ex-13002H X

Ⓔx II 3 G Ex nA IIC T4 Gc ■ II 3 G Ex ic IIC T4 Gc

Fieldbus display, 3 channel



- Digital fieldbus display for the indication of process values
- Powder-coated die-cast aluminium housing
- Connection of the housing potential via external earthing

The 3 channel FD-49-T317/EX fieldbus display shows the process information of the fieldbus nodes of a FOUNDATION™ fieldbus network.

The device (listener) receives and displays the values of the adjusted fieldbus addresses. Parameterization is code word protected and implemented via a keypad on the front side. Adjustements can be done for each port separately. The process value of the actuator/sensor is displayed as a 5-digit number and the process value status is displayed via limit value markers.

Apart from a measuring value indicator, the display contains a 41-segment bargraph for trend monitoring, which can be scaled separately from the display value.

The FD-49-T317/EX performs as a "listener", i.e. initialization by the host is not required (integration via software redundant) and does not appear in the network as a node with an own address.

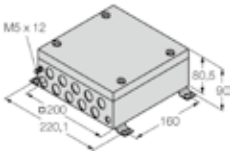
The device is supplied with power by the fieldbus (< 10 mA) and can be applied in Ex areas up to temperatures of the class T6.

Technical Data

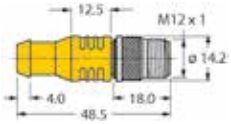
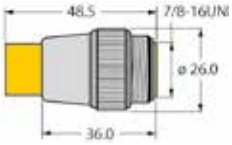
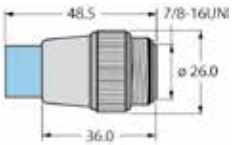
Type	FD-49-T317/EX
ID number	6901312
Fieldbus standard	IEC 61158-2
Operating voltage range	9…30 VDC
Current self-consumption	≤ 10 mA
Indication	placeholder
Display	LCD, 5-digit, 7-segment
Ex approval acc. to conformity certificate	TÜV 07 ATEX 553588
Device designation	⟨Ex⟩ II 2 (1) G EEx ia IIC T6 resp. T5
Device marking	⟨Ex⟩ II 2 D IP65 T70°C
	FISCO / Entity field device
Max. input voltage U_i	≤ 30
Max. input current I_i	≤ 660
Max. input power P_i	≤ 1600
Internal inductance/capacitance L_i/C_i	negligible
Electrical connection	cable gland
	1 x M16 x 1.5 (Ø 5…9 mm), nickel-plated brass
Terminal cross-section	2.5 mm^2
Protection class	IP66
Ambient temperature	-10…+60 °C
Housing material	Powder-coated die-cast aluminium
Housing color	black
Dimensions	140 x 140 x 71 mm
Connection mode	wall mounting

Stainless Steel Housing



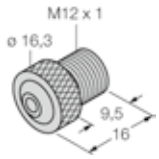
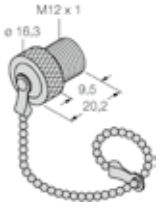
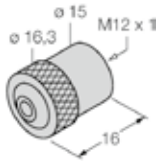
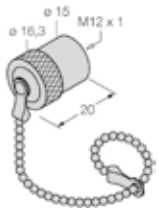
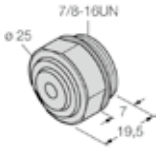
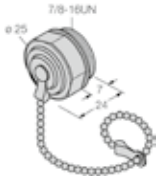
Description	ID number	Type
 ■ Stainless steel housing to accommodate Turck IP20 junction boxes ■ Protection class IP66 (IEC/EN 60529) ■ 10 plastic cable glands M20 × 1.5 for cable feed-through ■ Insulated shield rail ■ Wall mounting ■ Pressure compensation element ■ Connection of the housing potential via M5 × 1 bolt	6884135	EG-VA2020/BV67-T105
■ Stainless steel housing to accommodate Turck IP20 junction boxes ■ Protection class IP66 (IEC/EN 60529) ■ 10 stainless steel cable glands M20 × 1.5 for cable feed-through ■ Insulated shield rail ■ Wall mounting ■ Pressure compensation element ■ Connection of the housing potential via M5 × 1 bolt	6884136	EG-VA2020/BV67-T103

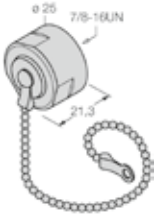
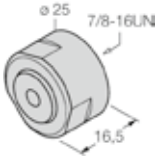
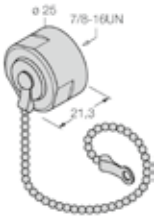
Terminating Resistor

	Description	ID number	Type
	■ Design: 7/8" male connector ■ Stainless steel coupling nut, straight, 4-pin ■ For use in FOUNDATION™ fieldbus applications ■ Temperature range: -40 °C…+70 °C ■ Protection class: IP67	6602096	RSEV49-TR
	■ Design: 7/8" male connector ■ Stainless steel coupling nut, straight, 4-pin ■ For use in FOUNDATION™ fieldbus applications ■ Temperature range: -40 °C…+70 °C ■ Protection class: IP67	6602094	RSV49-TR
	■ Design: 7/8" male connector ■ Stainless steel coupling nut, straight, 4-pin ■ For use in FOUNDATION™ fieldbus applications ■ Temperature range: -40 °C…+70 °C ■ Protection class: IP67	6602709	RSV-49TR-EX

Closure Cap



Description	ID number	Type
 ■ M12 × 1 closure cap, stainless steel ■ Male connector ■ Oil-resistant ■ IP67 acc. to IEC 60529/ EN 60529 and Nema 1,3,4,6P	6902305	RSEV-BC
 ■ M12 × 1 closure cap, stainless steel ■ Male connector ■ Oil-resistant ■ IP67 acc. to IEC 60529/ EN 60529 and Nema 1,3,4,6P ■ With fastening chain, approx. 210 mm	6604174	RSEV-CC
 ■ M12 × 1 closure cap, stainless steel ■ Female connector ■ Oil-resistant ■ IP67 acc. to IEC 60529/ EN 60529 and Nema 1,3,4,6P	6902304	RKEV-BC
 ■ M12 × 1 closure cap, stainless steel ■ Female connector ■ Oil-resistant ■ IP67 acc. to IEC 60529/ EN 60529 and Nema 1,3,4,6P ■ With fastening chain, approx. 210 mm	6604175	RKEV-CC
 ■ 7/8" closure cap, stainless steel ■ Male connector ■ Oil-resistant ■ IP67 acc. to IEC 60529/ EN 60529 and Nema 1,3,4,6P	6603783	RSMV-BC
 ■ 7/8" closure cap, stainless steel ■ Male connector ■ Oil-resistant ■ IP67 acc. to IEC 60529/ EN 60529 and Nema 1,3,4,6P ■ With fixing rope	6604030	RSMV-CC
 ■ 7/8" closure cap, stainless steel ■ Male connector ■ Oil-resistant ■ IP67 acc. to IEC 60529/ EN 60529 and Nema 1,3,4,6P ■ With fastening chain, approx. 210 mm	6604490	RSMV-CCC

	Description	ID number	Type
	■ 7/8" closure cap, stainless steel ■ Male connector ■ Oil-resistant ■ IP67 acc. to IEC 60529/ EN 60529 and Nema 1,3,4,6P ■ With fastening chain, approx. 210 mm, clasp open	6604489	RSMV-CCO
	■ 7/8" closure cap, stainless steel ■ Female connector ■ Oil-resistant ■ IP67 acc. to IEC 60529/ EN 60529 and Nema 1,3,4,6P	6603784	RKMV-BC
	■ 7/8" closure cap, stainless steel ■ Female connector ■ Oil-resistant ■ IP67 acc. to IEC 60529/ EN 60529 and Nema 1,3,4,6P ■ With fixing rope	6604038	RKMV-CC
	■ 7/8" closure cap, stainless steel ■ Female connector ■ Oil-resistant ■ IP67 acc. to IEC 60529/ EN 60529 and Nema 1,3,4,6P ■ With fastening chain, approx. 210 mm	6604488	RKMV-CCC
	■ 7/8" closure cap, stainless steel ■ Female connector ■ Oil-resistant ■ IP67 acc. to IEC 60529/ EN 60529 and Nema 1,3,4,6P ■ With fastening chain, approx. 210 mm, clasp open	6604485	RKMV-CCO

PROFIBUS-PA



The PROFIBUS PA fieldbus system meets the requirements of the chemical, pharmaceutical and petrochemical industry. Essential features:

- Standardized application profile
- Use in hazardous areas
- Bus power supply and fieldbus communication via shielded and twisted pair cables
- Online device replacement without impairing plant processes
- Diagnostic functions for asset management

Turck's PROFIBUS PA fieldbus components are specially designed for use in harsh industrial environments and enable the plug and play connection of field devices to the control system. Whether junction boxes, connectivity products or complete systems are required: The user can select the right bus product for the particular application from an extensive product range.

You will find the complete solution spectrum at Turck for process automation with PROFIBUS-PA: The portfolio includes power supplies, power conditioners, multibarriers as well as junction boxes in IP20 and IP67. The range also includes passive connectivity products such as fieldbus cables, field distributors and terminating resistors. The components are suitable for use in harsh environments and can be mounted directly on the machine or in the process.

PROFIBUS-PA – Overview

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Receptacles - M12 x 1, 7/8“	Page
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Fieldbus display	Page
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Accessories	Page
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PROFIBUS-PA – Basics

PROFIBUS-PA – Bus Physics

With the release of the international standard IEC 61158-2 in October 1994, a suitable transmission technology for FOUNDATION™ fieldbus and PROFIBUS-PA applications was found and internationally specified. This was later included as EN 61158-2 in the European standards. Both systems operate according to IEC 61158-2 and use the voltage mode with a transmission speed of 31.25 kbps. The data packets are modulated upon the supply voltage for the fieldbus devices and transmitted via a 2-wire shielded cable.

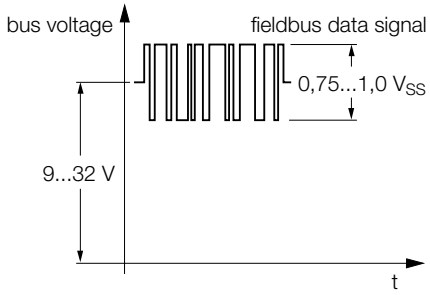


Fig. 1 Transmission of data packets according to IEC 61158-2

These bus characteristics provide a decisive advantage: Fieldbus communication and power supply of the bus stations can be implemented via a single cable. Compared to the usual fieldbus solution involving additional wiring effort, these bus characteristics provide increased reliability and lower costs.

Physical Layer according to IEC 61158-2

Characteristic features of the IEC 61158-2 transmission physics IEC 61158-2	
Data transmission	digital, bit synchronous, Manchester coding
Transmission speed	31.25 kBit/s, voltage mode
Data security	preamble, fault protected start and end delimiter
Cable	shielded and twisted 2-wire cable
Remote supply of the stations	optionally via signal cables
Protection classes	intrinsically safe (Ex ia/ib or Ex ic), increased safe (Ex e or Ex nA) and explosion protected (Ex d/m/p/q)
Topology	spur and tree topologies; also in combination
Number of stations	up to 32 stations per cable segment
Repeater	can be extended with a maximum of 4 repeaters

PROFIBUS-PA – Topology

With PROFIBUS-PA, system integration is implemented using a DP/PA segment coupler, starting from the PROFIBUS-DP fieldbus. The segment coupler adapts the RS485 transmission characteristics to IEC 61158-2 transmission technology.
If the DP segment operates at a higher speed, an additional link (coupler) is required. The segment coupler for non-Ex applications provides adequate power for a sufficient number of fieldbus stations. (Fig. 2).

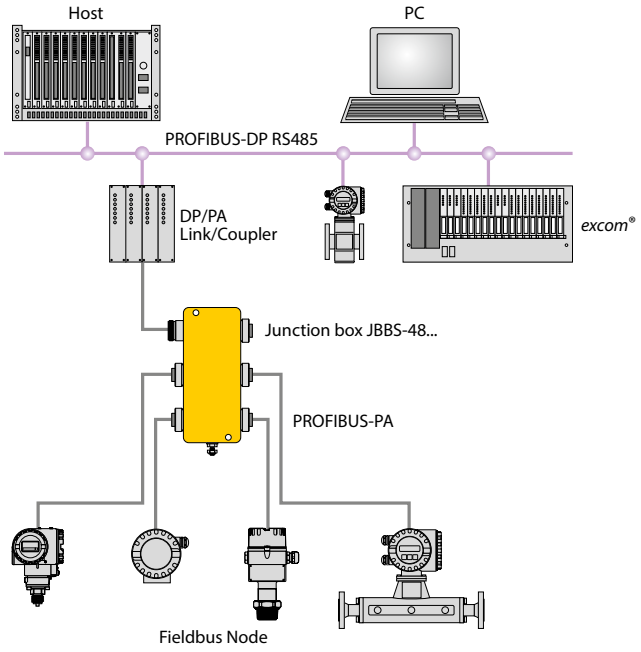


Fig. 2 Topology – PROFIBUS-DP in the non-hazardous area with DP/PA coupler

A coupler with an intrinsically safe output is required for Ex applications, which reduces the output power and thus reduces the number of connected fieldbus devices. Only a few stations can be supplied, depending on the current consumption of the fieldbus devices (Fig. 3).

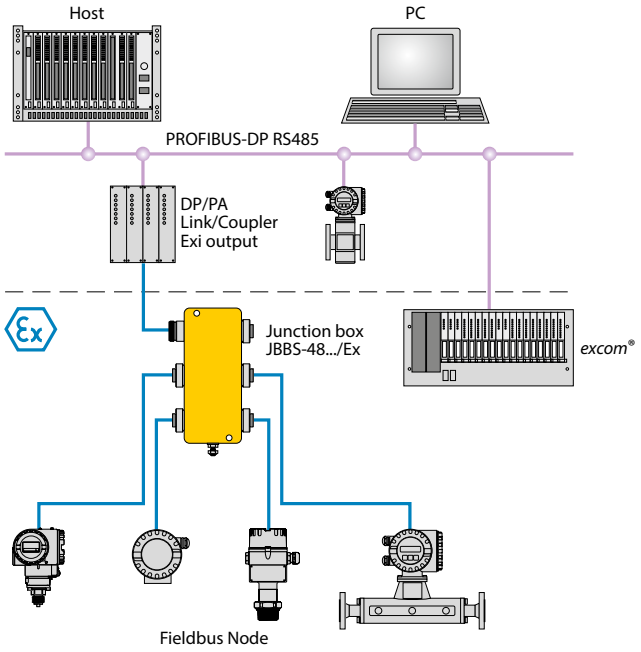


Fig. 3 Topology – PROFIBUS DP in the Ex area with DP/PA coupler (equipped with intrinsically safe outputs)

A topology providing the combination of a trunk line with "increased safety" and intrinsically safe outputs provides a solution. The multibarrier is used for this, which allows in the trunk line area a current of up to 10 A and – connected in series – up to 32 intrinsically safe stations in the Ex area. Fig. 4 shows the typical configuration of a PROFIBUS-PA network with Turck multibarriers. The number of connectible multibarriers and the usable cable length depend on the output power of the DP/PA coupler, as well as on the type of cable used. For the trunk line Turck recommends the use of the type FBY.../LD long distance cable, for the outputs the type FBY…/SD standard cable.

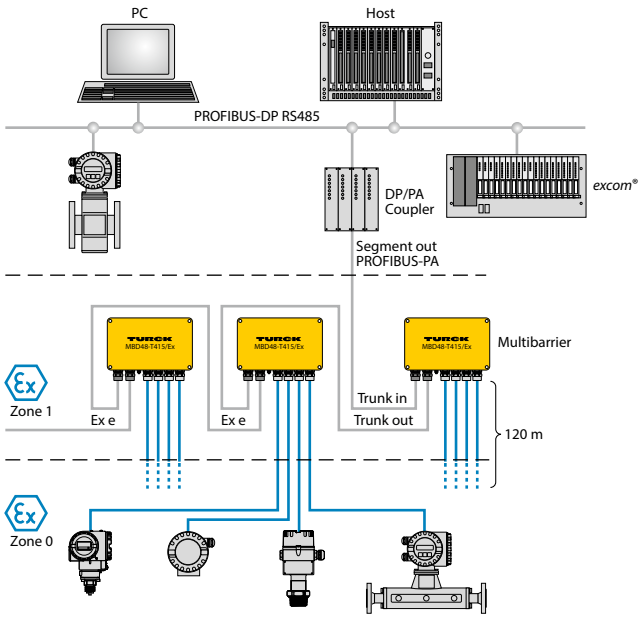


Fig. 4 Topology – PROFIBUS-PA in the Ex area with multibarriers

PROFIBUS-PA – Multibarrier

The MBD40-T…/Ex multibarrier increases the maximum number of fieldbus stations in the PROFIBUS-PA network to 32 field devices. The fieldbus supply is implemented with increased safety and is looped from multibarrier to multibarrier. The fieldbus stations in Zone 0 are fed via four or eight intrinsically safe outputs.

The possibility of cascading the multibarrier on a single segment in the Ex area and thus utilizing the complete range of functions of the bus systems provides considerable cost benefits. All field devices can be operated on a single fieldbus segment in the Ex area.The multibarrier is supplied via the bus, a separate supply cable is unnecessary.

Thanks to the Ex e protection class, the Turck multibarrier can be installed in Zone 1 (II 2 G) according to Directive 94/9/EC (ATEX 95a). Inside Zone 1 the multibarrier is connected to the trunk line of a fieldbus according to IEC 61158-2 via cables and terminals with increased safety protection (Ex e). This has the benefit that the same performance is available in both the Ex- and non-Ex area.

Through the integrated short circuit protection only the affected output is disconnected in the event of a short circuit in a fieldbus station; the trunk line and the other outputs of the fieldbus segment remain operational.

The multibarrier is designed with protection to IP66 and can be installed directly in the plant. The Ex e cable glands in combination with high quality removable screw terminals ensure a rapid and safe connection.

Functions That Supplement the Standard:

- FISCO Conformity: The outputs of the multibarrier comply with the requirements of an Ex power supply and are FISCO-compliant.
- Connectible terminating resistor: The multibarriers have an integrated terminating resistor. This resistor must be activated if the multibarrier is the last device on the trunk line.
- Climatic compensation: The multibarrier is provided with a pressure compensation element with protection class IP66 to prevent condensation. The ePTFE diaphragm inside the breather has a very high water inlet pressure and is oil resistant. Salt crystals are also kept out 100 %.

PROFIBUS-PA – Junction Boxes

The Turck junction boxes can be used in Zone 2 and Zone 1 and can be easily and safely connected to the fieldbus. Junctions for the distribution of power and data are available in various types, offering different numbers of channels, designs and other features such as integrated short-circuit protection, connectible terminating resistor and selectable shielding. Special solutions are available on request.

Junction boxes and T-splitters in IP67 with and without short circuit protection (1-, 4- and 6-channel):

- Ex junction box (use in Zone 1 or 2, distribution of Ex ia signals in Zone 0)
- Non-Ex junction box
- Protection class IP67
- Connectible terminating resistor
- Optional shield concept (solid or capacitive ground)
- Short circuit current limitation per spur
- Pressure compensation element protects against condensation
- Housing material: powder coated die-cast aluminum (4- and 6-channel)
- Connectivity: 7/8" stainless steel receptacles, M12 or cage clamp terminals
- Cable glands made from plastic, stainless steel or nickel-plated brass, EMC cable glands
- Temperature range: -25 °C…+70 °C

Junction boxes in IP20 with and without short circuit protection (4-, 6-, 8- and 12-channel):

- Suitable for use in Ex and non-Ex areas, use in Zone 1 or 2, distribution of Ex ia signals in Zone 0
- Protection class IP20
- Connectible terminating resistor
- Optional shield concept (solid or capacitive ground)
- Short circuit current limitation per spur
- Housing material: aluminum
- Connectivity: cage clamp terminals or removable screw terminals
- Temperature range: -40 °C…+70 °C

PROFIBUS-PA – Cable Technology

Cable Technology – Basics

The transmission of energy and data via a fieldbus requires a IEC 61158-2-compliant 2-wire cable as the transmission medium.

Cable Parameters

Although electrical specifications are not stated, they determine the achievable properties of the fieldbus such as bridgeable distances, the number of stations and electromagnetic compatibility. The table „Types of cable according to IEC 61158-2" shows four types of standard cable (at +25 °C).

Cable types to IEC 61158-2	Type A (Reference)	Type B
Cable design	Twisted conductor pair	One/multiple twisted conductor pairs, overall shield
Conductor cross-section (nominal)	> 0.8 mm² (AWG 18)	0.32 mm² (AWG 22)
Loop impedance (DC current)	44 Ω/km	112 Ω/km
Wave resistance at 31.25 kHz	100 Ω ± 20 %	100 Ω ± 30 %
Wave attenuation at 39 kHz	3 dB/km	5 dB/km
Capacitive asymmetry	2 nF/km	2 nF/km
Group delay distortion (7.9…39 kHz)	1.7 µs/km	not specified
Degree of shield coverage	90 %	not specified
Recommended network expansion (incl. spur lines)	1900 m	1200 m
Cable types to IEC 61158-2	**Type C**	**Type D**
Cable design	Multiple twisted conductor pairs, not shielded	Multiple twisted conductor pairs, not shielded
Conductor cross-section (nominal)	0.13 mm² (AWG 26)	1.25 mm² (AWG 16)
Loop impedance (DC current)	264 Ω/km	40 Ω/km
Wave resistance at 31.25 kHz	not specified	not specified
Wave attenuation at 39 kHz	8 dB/km	8 dB/km
Capacitive asymmetry	not specified	not specified
Group delay distortion (7.9…39 kHz)	not specified	not specified
Degree of shield coverage	not specified	not specified
Recommended network expansion (incl. spur lines)	400 m	200 m

Tab. 1 Cable types according to IEC 61158-2

Using the Individual Cable Types

New equipment installations require the use of cables that meet the minimum requirements of type A. Cable types C and D should only be used in so-called „retrofit applications" (use of already installed cables) for greatly reduced network expansions. However, it should be noted that in these cases, the interference immunity of the transmission often does not meet the requirements described in the standard.

Installations according to the FISCO Model

The installations according to the FISCO model are not subject to safety restrictions when the limits given in Tab. 2 are complied with. Operation outside these limits is not generally excluded, but does require the consideration of each individual case. All cables offered by Turck for fieldbus systems according to IEC 61158-2 are at least equal to the type A quality.

Limit values for attenuation, distortion, reflection, signal propagation time

Each fieldbus installation must comply with certain rules, the „Network configuration rules" (see IEC 61158-2, chap. 11.2.2). They define limit values for the attenuation, reflection and distortion permissible in the network (rule 8) as well as the maximum signal delay (rule 4) (see table „Limit values").

Limit values for attenuation, distortion, reflection and propagation delay	
Attenuation between any two bus interfaces (at 31.25 kHz)	10.5 dB
Attenuation distortion a (f = 39 kHz) – a (f = 7.8 kHz), monotonic increasing with frequency	6 dB
Reflection factor at any point (7.8...39 kHz)	0.2
Signal delay between any two bus interfaces	640 µs

Tab. 2 Limit values for attenuation, reflection, signal propagation time

Maximum Cable Length

The sum of the trunk cable length and all spur lengths gives the total cable length.

Maximum cable lengths (main cable and spur lines)	
Cable	**Max. cable lengths (incl. spur lines)**
Type A	1900 m
Type B	1200 m
Type C	400 m
Type D	200 m

Tab. 3 Maximum cable length (trunk cable and spurs)

Recommendation: Always use cable type A.

Maximum Spur Length

The maximum spur length depends on the number of field devices per spur and is stated in the following table.

Maximum spur line lengths				
Number of Devices	**1 device per spur line**	**2 devices per spur line**	**3 devices per spur line**	**4 devices per spur line**
25…32	1 m	1 m	1 m	1 m
19…24	30 m	1 m	1 m	1 m
15…18	60 m	30 m	1 m	1 m
13…14	90 m	60 m	30 m	1 m
1…12	120 m	90 m	60 m	30 m

Tab. 4 Maximum spur length

Recommendation: Use only one device per spur and max. 12 devices per segment.

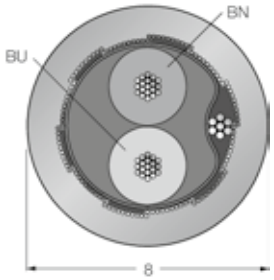
IInstrumentation according to FISCO

In an EEx i instrumentation according to FISCO, the maximum extent of the trunk line in the hazardous area is 1000 m. The maximum spur length should not exceed 60 m.

Topology

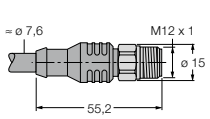
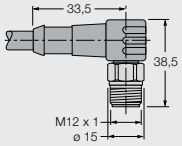
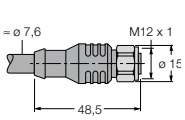
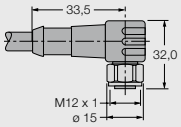
Within the limits shown on the previous page different topologies such as star, tree or linear structure and any cable is accepted. For an optimum design the individual calculation of the four variables in the table „Limit values" for all possible connections between two bus interfaces involves considerable effort. It is advisable to specify rules for a close to optimal basic topology, which when followed guarantees that the limits stated above are not exceeded. A tree or line topology, or a combination of both, is chosen as the basic network model. Such a network is composed of a main cable (trunk line), a number of spurs, connecting elements (connectors or junction boxes) and a terminating resistor.

PVC Cable - Black, Orange, Yellow or Blue



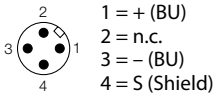
- Fieldbus cable, type A, acc. to IEC 61158-2
- PVC jacket, color orange, yellow, blue or black
- Oil, gas and sunlight resistant
- For use in the hazardous areas classified as Zone 1 and Zone 2, group II, acc. to IEC 60079-14
- Cable cross section: 18/7 AWG (0.8 mm^2)
- Bulk cable: 100, 250, 500, and 1000 meters

Connector	
Number of pins	4
Grip	Plastic, PUR, Black
Contacts	Metal, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, 1.4404
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	8 mm – 0.30
Cable jacket	PVC, BU, BK, OG, YE
Core insulation	PE-foam with PE-jacket
Core cross-section	2 x 0.8 mm^2
Shield	plastic-covered aluminum foil, metal side outside, makes contact with drain wire and tinned copper wire
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	300 V
Shield resistance	Nom. 9 Ω /km
DC resistance (loop)	43.6 Ω /km
Nom. Impedance	100 ± 20 (31.25 kBit/s)
Working capacitance	Nom. 60 nF/km
Capacitive earthing	max. 2 nF/km
Nom. Inductance	0.7 mH/km
Damping	max. 3.0 dB/km (with f = 39 kHz]
skew	max. 1.7 µs/km (7.9 kHz -39 kHz)
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 90 N/mm^2
Bending radius (stationary laying)	> 5 x Ø
Ambient temperature	
Stationary usage	-40…+75 °C
Non-stationary usage	-5…+50 °C

M12 × 1	one-sided premoulded	RSCV	WSCV	RKCV	WKCV
					
RSCV	RSCV-FBY48x-*M/5D	RSCV-RSCV-FBY48x-*M/5D	—	RSCV-RKCV-FBY48x-*M/5D	—
WSCV	WSCV-FBY48x-*M/5D	—	WSCV-WSCV-FBY48x-*M/5D	—	WSCV-WKCV-FBY48x-*M/5D
RKCV	RKCV-FBY48x-*M/5D	—	—	RKCV-RKCV-FBY48x-*M/5D	—
WKCV	WKCV-FBY48x-*M/5D	—	—	—	WKCV-WKCV-FBY48x-*M/5D

Note: Type code (structure): housing – cable type FBY48x (x = color BU/BK/OG/YE) – *M = variable length in m

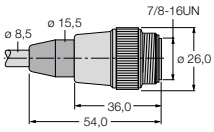
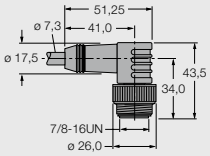
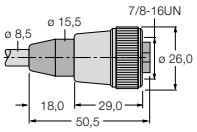
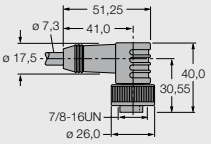
Pin configuration: male female



1 = + (BU)
2 = n.c.
3 = – (BU)
4 = S (Shield)



1 = + (BU)
2 = n.c.
3 = – (BU)
4 = S (Shield)

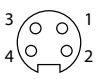
7/8"	one-sided premoulded	RSV	WSV	RKV	WKV
					
RSV	RSV-FBY48x-*M/5D	RSV-RSV-FBY48x-*M/5D	—	RSV-RKV-FBY48x-*M/5D	—
WSV	WSV-FBY48x-*M/5D	—	WSV-WSV-FBY48x-*M/5D	—	WSV-WKV-FBY48x-*M/5D
RKV	RKV-FBY48x-*M/5D	—	—	RKV-RKV-FBY48x-*M/5D	—
WKV	WKV-FBY48x-*M/5D	—	—	—	WKCV-WKV-FBY48x-*M/5D

Note: Type code (structure): housing – cable type FBY48x (x = color BU/BK/OG/YE) – *M = variable length in m

Pin configuration: male female

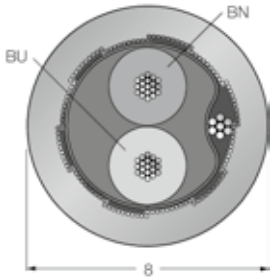


1 = + (BU)
2 = n.c.
3 = – (BU)
4 = S (Shield)



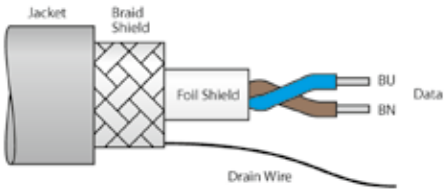
1 = + (BU)
2 = n.c.
3 = – (BU)
4 = S (Shield)

PVC Cable – Black, Long Distance



- Fieldbus cable, type A, acc. to IEC 61158-2
- PVC jacket, black
- Oil, gas and sunlight resistant
- For use in the hazardous areas classified as Zone 1 and Zone 2, group II, acc. to IEC 60079-14
- Cable cross section: 14/7 AWG (2.1 mm^2)
- Bulk cable: 100, 250, 500, and 1000 meters

Cable	
Cable	8 mm – 0.30
Cable jacket	PVC, Black
Core insulation	PE-foam with PE-jacket
Core cross-section	2 x 2.1 mm^2
Shield	plastic-covered aluminum foil, metal side outside, makes contact with drain wire and tinned copper wire
Electrical properties at +20 °C	
Rated voltage	300 V
Shield resistance	Nom. 6 Ω /km
DC resistance (loop)	17.2 Ω /km
Nom. Impedance	100 ± 20 (31.25 kBit/s)
Working capacitance	Nom. 60 nF/km
Capacitive earthing	max. 2 nF/km
Nom. Inductance	0.7 mH/km
Damping	max. 3.0 dB/km (with f = 39 kHz]
skew	max. 1.7 µs/km (7.9 kHz -39 kHz)
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 90 N/mm^2
Bending radius (stationary laying)	> 5 x Ø
Ambient temperature	
Stationary usage	-40…+75 °C
Non-stationary usage	-5…+50 °C

	Cable length [m]	ID number	Type
	100	6611320	CABLE FBY-BK/LD-100M
	250	6611321	CABLE FBY-BK/LD-250M
	500	6611322	CABLE FBY-BK/LD-500M
	1000	6611256	CABLE FBY-BK/LD-1000M

Field-Wireable Connectors – M12 × 1



	Number of pins	Rated voltage [V]	ID number	Type	Number of pins	Rated voltage	ID number	Type
Female connector, straight	4	125	6904702	BMS8141-0/9	4	250	6914538	BKV8140-0/9
Female connector, angled					4	250	6914540	BKV8240-0/9
Male connector, straight	4	125	6904701	BMSS8141-0/9	4	250	6914537	BSV8140-0/9
Male connector, angled					4	250	6914539	BSV8240-0/9
Connection mode	Screw/clamp connection				Screw/clamp connection			
Grip	Metal, GD-ZnAL, Gray				Plastic, PA, Black			
Coupling nut/screw	Brass, CuZn, Nickel-plated				Stainless steel, 1.4404			
Contacts	Metal, CuZn,CuSnZn, Optalloy-coated				Metal, CuZn,CuSnZn, Optalloy-coated			
Contact carriers	PA, Gray				PA, Black			
Protection class	IP67				IP67			
Current load	4 A				4 A			
Terminal cross-section	0.14…0.75 mm²				0.14…0.75 mm²			
Cable external diameter	min. 4…9 mm				min. 4…8 mm			
Storage temperature	-25…+90 °C				-25…+90 °C			

Female connector

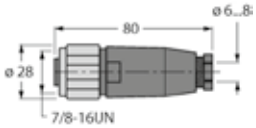
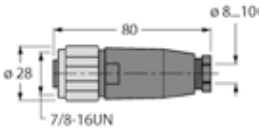
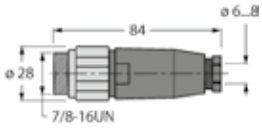
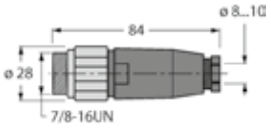


Male connector



Field-Wireable Connectors – 7/8"



	Number of pins	Rated voltage [V]	ID number	Type	Number of pins	Rated voltage	ID number	Type
Female connector, straight								
	4	240	6914543	BKV4140-0/9	4	240	6914566	BKV4140-0/11
Male connector, straight								
	4	250	6914542	BSV4140-0/9	4	250	6914565	BSV4140-0/11
Connection mode	Screw/clamp connection				Screw/clamp connection			
Grip	Plastic, PA, Black				Plastic, PA, Black			
Coupling nut/screw	Stainless steel, 1.4404				Stainless steel, 1.4404			
Contacts	Metal, CuZn, Gold-plated				Metal, CuZn, Gold-plated			
Contact carriers	TPU, Black				TPU, Black			
Protection class	IP67				IP67			
Current load	9 A				9 A			
Terminal cross-section	0.14…1 mm²				0.14…1 mm²			
Cable external diameter	min. 6…8 mm				min. 8…10 mm			
Storage temperature	-40…+90 °C				-40…+90 °C			

Female connector

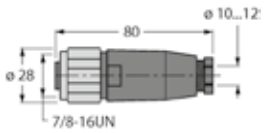
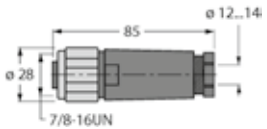
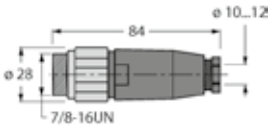
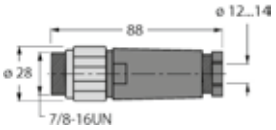


Male connector



Field-Wireable Connectors – 7/8"



	Number of pins	Rated voltage [V]	ID number	Type	Number of pins	Rated voltage	ID number	Type
Female connector, straight								
	4	240	6914563	BKV4140-0/13.5	4	240	6914544	BKV4140-0/16
Male connector, straight								
	4	250	6914562	BSV4140-0/13.5	4	250	6914541	BSV4140-0/16
Connection mode	Screw/clamp connection				Screw/clamp connection			
Grip	Plastic, PA, Black				Plastic, PA, Black			
Coupling nut/screw	Stainless steel, 1.4404				Stainless steel, 1.4404			
Contacts	Metal, CuZn, Gold-plated				Metal, CuZn, Gold-plated			
Contact carriers	TPU, Black				TPU, Black			
Protection class	IP67				IP67			
Current load	9 A				9 A			
Terminal cross-section	0.14…1 mm²				0.14…1 mm²			
Cable external diameter	min. 10…12 mm				min. 12…14 mm			
Storage temperature	-40…+90 °C				-40…+90 °C			

Female connector



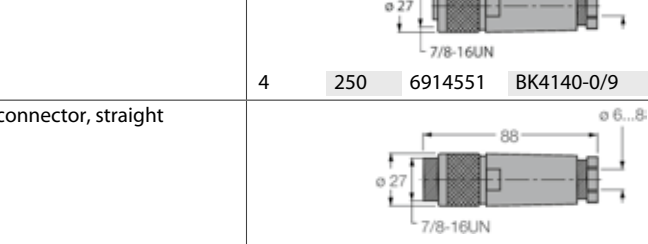
Male connector



Field-Wireable Connectors – 7/8"



	Number of pins	Rated voltage [V]	ID number	Type
Female connector, straight	4	250	6914551	BK4140-0/9
Male connector, straight	4	250	6914550	BS4140-0/9
Connection mode	Screw/clamp connection			
Grip	Plastic, PA, Black			
Coupling nut/screw	Aluminum, Al, Anodized			
Contacts	Metal, CuZn, Gold-plated			
Contact carriers	TPU, Black			
Protection class	IP67			
Current load	9 A			
Terminal cross-section	0.14…1 mm²			
Cable external diameter	min. 6…8 mm			
Storage temperature	-40…+90 °C			

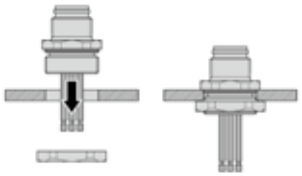


Female connector Male connector



M12 × 1 Receptacles for Front-Panel Mounting

Contacts	Metal, CuZn, Gold-plated
Seal	Plastic, NBR
Protection class	IP68
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Insulation resistance	≥ 10^8 Ω
Contact resistance	≤ 5 mΩ
Ambient temperature	
Stationary usage	-40…+105 °C



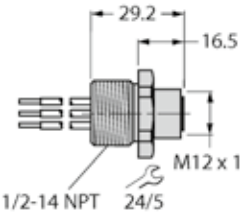
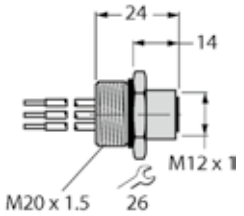
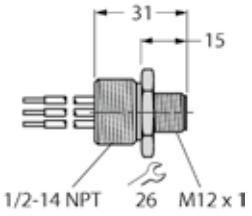
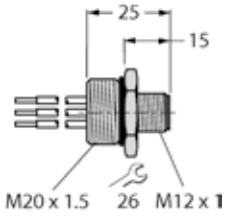
Female connector



Male connector



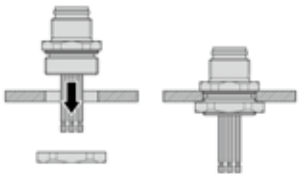


	Design	Receptacle housing	Number of pins	Connection mode	Rated voltage [V]	Current load [A]	Contact carriers	Cable length [m]	ID number	Type
	Female connector	Stainless steel	4	L	250	4	TPU, Black	0.3	6611025	FKV48-0.3M/14.5/C1117
	Female connector	Stainless steel	4	L	250	4	TPU, Black	0.3	6611027	FKV48-0.3M/M20/C1117
	Male connector	Stainless steel	4	L	250	4	TPU, Black	0.3	6611024	FSV48-0.3M/14.5/C1117
	Male connector	Stainless steel	4	L	250	4	TPU, Black	0.3	6611026	FSV48-0.3M/M20/C1117

1) L: Stranded wire contact, LK: Solder contact, P: Print contact

7/8" Receptacles for Front-Panel Mounting

Contacts	Metal, CuZn, Gold-plated
Seal	Plastic, NBR
Protection class	IP67
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Insulation resistance	≥ 10^8 Ω
Contact resistance	≤ 5 mΩ
Ambient temperature	
Stationary usage	-40…+105 °C
Non-stationary usage	-40…+105 °C



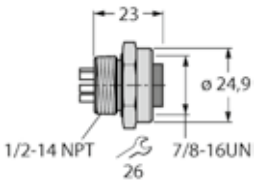
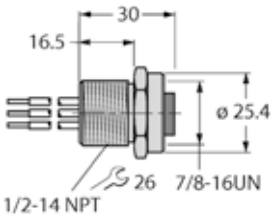
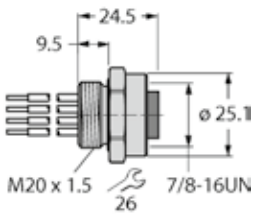
Female connector

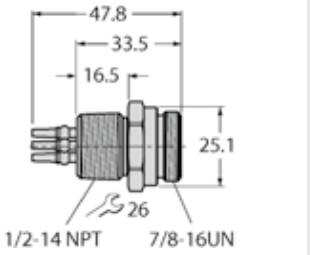
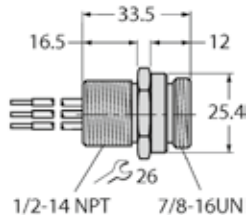
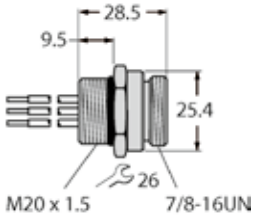


Male connector



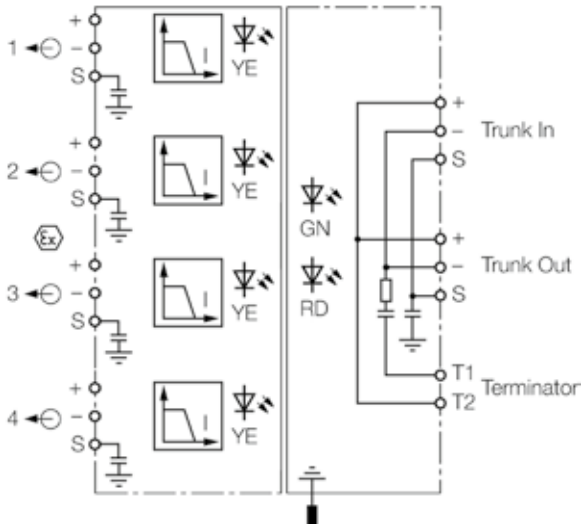


Design	Receptacle housing	Number of pins	Connection mode	Rated voltage [V]	Current load [A]	Contact carriers	Cable length [m]	ID number	Type
 Female connector	Stainless steel	4	LK	600	9	TPU, Black		6604406	RKFV48
 Female connector	Stainless steel	4	L	600	9	TPU, Black	0.3	6611023	RKFV48-0.3M/14.5/C1117
 Female connector	Stainless steel	4	L	600	9	TPU, Black	0.3	6603610	RKFV48-0.3M/M20/C1117

	Design	Receptacle housing	Number of pins	Connection mode	Rated voltage [V]	Current load [A]	Contact carriers	Cable length [m]	ID number	Type
	Male connector	Stainless steel	4	LK	600	9	TPU, Black		6604441	RSFV48
	Male connector	Stainless steel	4	L	600	9	TPU, Black	0.3	6611022	RSFV48-0.3M/14.5/C1117
	Male connector	Stainless steel	4	L	600	9	TPU, Black	0.3	6603617	RSFV48-0.3M/M20/C1117

1) L: Stranded wire contact, LK: Solder contact, P: Print contact

Multibarrier, 4-channel



- Galvanically separated Ex e bus cables and Ex i outputs
- Powder-coated die-cast aluminum housing
- Pressure compensation element protects against condensation
- Connection of the housing potential via M5 × 1 bolt
- Temperature range: -20 °C…+70 °C(-4 °F…+158 °F)
- Integrated terminating resistor (optional activation)
- output data: 10V/40mA (short-circuit proof)

The 4-channel multibarrier enables the connection of a large number of field devices to one fieldbus in the Ex area, according to IEC 61158-2.

4 Ex i field devices can be connected to each multibarrier. Up to 16 Ex i field devices can be connected to the bus. The number of nodes can be augmented thanks to the High Power Trunk Concept, through which Ex e fieldbus power is looped from multibarrier to multibarrier. In order to limit inrush currents at the moment of turn-on, the drop lines/spurs are switched on one after the other.

Inputs and outputs of the trunk line feature enhanced safety protection (Ex e) and the spurs to the field devices are intrinsically safe (Ex i).

The multibarrier is equipped with an activatable terminating resistor for the bus. The terminating resistor is switched on/off by means of a jumper.

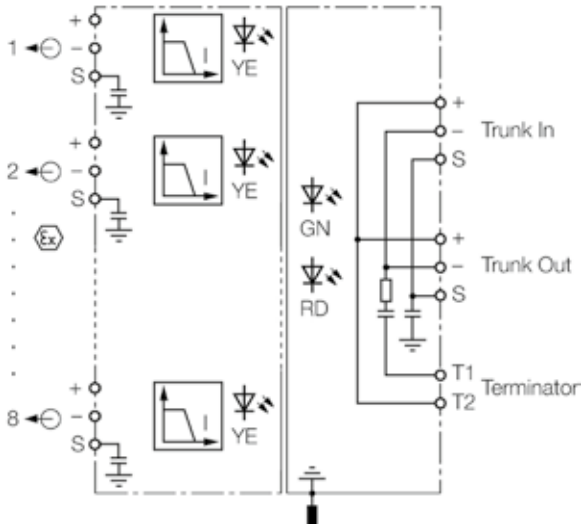
Status and error messages of the single spurs are indicated via LEDs at the front.



Technical Data

Type	MBD40-T0415/EX/000
ID number	6611757
Fieldbus standard	IEC 61158-2
Operating voltage range	16…32 VDC
Power loss	≤ 1.8 W
Galvanic isolation	Input circuit (Ex e) to output circuits (Ex i)
Test voltage	1.5 kV AC
Output circuits	
Output current	≤ 40 mA
Output voltage	≥ 10 VDC
Short-circuit protection	≤ 50 mA
Operational readiness	1 x green
State/ Fault	1 x red
Short-circuit message	4 x yellow, flashing
Ex approval acc. to conformity certificate	PTB 09 ATEX 1069
Device designation	Ⓔx II 2(1G/D)G Ex eb ib [ia] mb IIC T4
	FISCO Power Supply
Max. output voltage U_o	≤ 15.7
Max. output current I_o	≤ 245
Max. output power P_o	≤ 960
Characteristic	linear
Internal inductance/capacitance L_i/C_i	negligible / 1.1 nF
Electrical connection	4 x 3-pin removable terminal blocks, reverse polarity protected, screw connection
Segment IN	1 x M20 x 1.5 (Ø 7…13 mm); plastic; black
Segment OUT	1 x M20 x 1.5 (Ø 7…13 mm); plastic; black
Spur line	4 x M20 x 1.5 (Ø 7…13 mm); plastic; blue
Terminal cross-section	0.2…2.5 mm^2 (24…13 AWG)
Earthing bolt	M5 x 1
Protection class	IP66
Ambient temperature	-20…+70 °C
Relative humidity	≤ 95 %, non-condensing
Housing material	Powder-coated die-cast aluminium
Housing color	black / yellow
Dimensions	160 x 260 x 90 mm
Connection mode	wall mounting

Multibarrier, 8-channel



- Galvanically separated Ex e bus cables and Ex i outputs
- Powder-coated die-cast aluminium housing
- Pressure compensation element protects against condensation
- Connection of the housing potential via M5 × 1 bolt
- Temperature range: -20 °C…+70 °C(-4 °F…+158 °F)
- Integrated terminating resistor (optional activation)
- output data: 10V/40mA (short-circuit proof)

The 8-channel multibarrier enables the connection of a larger number of field devices to one fieldbus, according to IEC 61158-2.

8 Ex i field devices can be connected to each multibarrier. Up to 32 Ex i field devices can be connected to the bus. The number of nodes can be augmented thanks to the High Power Trunk Concept, through which Ex e fieldbus power is looped from multibarrier to multibarrier. In order to limit inrush currents at the moment of turn-on, the drop lines/spurs are switched on one after the other. The field devices can be supplied with maximally 40 mA. Each spur is short-circuit protected through 50 mA current limitation. Altogether 160 mA are maximally available for nominal operation. This current can be spread to the connected field devices, for example:

- 8 × 20 mA
- 1 × 40 mA, 7 × 16 mA
- 1 × 30 mA, 7 × 18 mA
- 6 × 23 mA
- 5 × 28 mA

Inputs and outputs of the trunk line feature enhanced safety protection (Ex e) and the spurs to the field devices are intrinsically safe (Ex i).

The multibarrier is equipped with an activatable terminating resistor for the bus. The terminating resistor is switched on/off by means of a jumper.

Status and error messages of the single spurs are indicated via LEDs at the front.



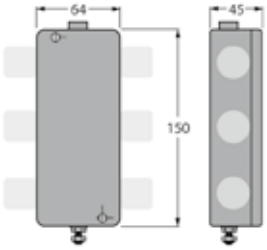
Technical Data

Type	MBD40-T0815/EX/000
ID number	6611786
Fieldbus standard	IEC 61158-2
Operating voltage range	16…32 VDC
Power loss	≤ 1.8 W
Galvanic isolation	Input circuit (Ex e) to output circuits (Ex i)
Test voltage	1.5 kV AC
Output circuits	
Output current	≤ 40 mA
Output voltage	≥ 10 VDC
Short-circuit protection	≤ 50 mA
Operational readiness	1 x green
State/ Fault	1 x red
Short-circuit message	8 x yellow, flashing
Ex approval acc. to conformity certificate	PTB 09 ATEX 1069
Device designation	Ⓔx II 2(1G/D)G Ex eb ib [ia] mb IIC T4
	FISCO Power Supply
Max. output voltage U_o	≤ 15.7
Max. output current I_o	≤ 245
Max. output power P_o	≤ 960
Characteristic	linear
Internal inductance/capacitance L_i/C_i	negligible / 1.1 nF
Electrical connection	8 x 3-pin removable terminal blocks, screw connection
Segment IN	1 x M20 x 1.5 (Ø 7…13 mm); plastic; black
Segment OUT	1 x M20 x 1.5 (Ø 7…13 mm); plastic; black
Spur line	8 x M20 x 1.5 (Ø 7…13 mm); plastic; blue
Terminal cross-section	0.2…2.5 mm^2 (24…13 AWG)
Earthing bolt	M5 x 1
Protection class	IP66
Ambient temperature	-20…+70 °C
Relative humidity	≤ 95 %, non-condensing
Housing material	Powder-coated die-cast aluminium
Housing color	black / yellow
Dimensions	160 x 260 x 90 mm
Connection mode	wall mounting

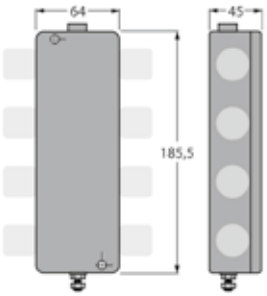
Junction with short-circuit protection



4-channel



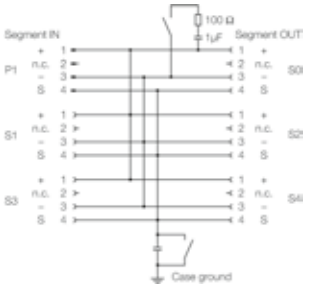
6-channel



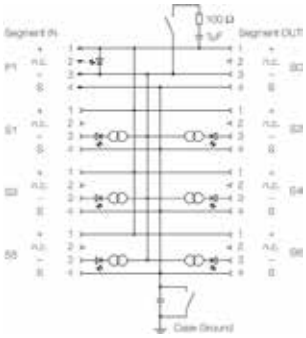
- Junction box for wall mounting
- Short-circuit protection per drop line/spur
- Powder-coated die-cast aluminum housing
- Breather to prevent condensation
- Connection of the housing potential via M5 × 1 bolt
- Integrated terminating resistor (switchable)
- Cable shielding: Capacitive or direct connection to housing potential selectable via switch
- Isolated support terminal for optional protective conductor incorporated in cable
- Entity and FISCO compliant according to IEC 60079-11

Operating voltage range	12…32 VDC
Current self-consumption	≤ 7 mA
Voltage drop	≤ 0.3 V
Short-circuit protection	≤ 30, 35, 45, 60 mA
Operational readiness	1 x green
Short-circuit message	4 x red
Protection class	IP67
Connection mode	wall mounting
Earthing bolt	M5 x 1
MTTF	117 years acc. to SN 29500 (Ed. 99) 40 °C

4-channel



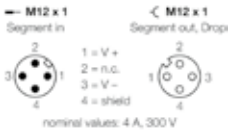
6-channel



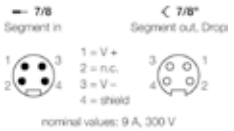
Terminal Connection



7/8" connector



M12 connector



Types and Features — Selection Table

Segment IN	Segment OUT	Spur line	Ambient temperature [°C]	Dimensions [mm]	Number of channels	ID number	Type
1 x M20 x 1.5 (Ø 7…13 mm)	1 x M20 x 1.5 (Ø 7…13 mm)	4 x M20 x 1.5 (Ø 7…13 mm)	-25…+70	150 x 64 x 45	4	6611416	JBBS-48SC-T415/3G
1 x M20 x 1.5 (Ø 7…13 mm)	1 x M20 x 1.5 (Ø 7…13 mm)	6 x M20 x 1.5 (Ø 7…13 mm)	-25…+70	150 x 64 x 45	6	6611418	JBBS-48SC-T615/3G
1 x M12 - male	1 x M12 - female	4 x M12 - female	-25…+70	150 x 64 x 45	4	6611408	JBBS-48SC-E413/3G
1 x M12 - male	1 x M12 - female	6 x M12 - female	-25…+70	185.5 x 64 x 45	6	6611410	JBBS-48SC-E613/3G
1 x 7/8 "- male	1 x 7/8 "- female	4 x 7/8 "- female	-25…+70	150 x 64 x 45	4	6611412	JBBS-48SC-M413/3G
1 x 7/8 "- male	1 x 7/8 "- female	6 x 7/8 "- female	-25…+70	185.5 x 64 x 45	6	6611414	JBBS-48SC-M613/3G

Marking of devices
TURCK Ex-13016H X

Ⓔx II 3 G Ex nA II T4 Gc ■ II 3 G Ex ic IIC T4 Gc

Segment IN	Segment OUT	Spur line	Ambient temperature [°C]	Dimensions [mm]	Number of channels	ID number	Type
1 x M20 x 1.5 (Ø 7…13 mm)	1 x M20 x 1.5 (Ø 7…13 mm)	4 x M20 x 1.5 (Ø 7…13 mm)	-40…+70	150 x 64 x 45	4	6611417	JBBS-48SC-T415B/EX
1 x M20 x 1.5 (Ø 7…13 mm)	1 x M20 x 1.5 (Ø 7…13 mm)	6 x M20 x 1.5 (Ø 7…13 mm)	-40…+70	150 x 64 x 45	6	6611419	JBBS-48SC-T615B/EX
1 x M12 - male	1 x M12 - female	4 x M12 - female	-30…+70	150 x 64 x 45	4	6611409	JBBS-48SC-E413/EX
1 x M12 - male	1 x M12 - female	6 x M12 - female	-30…+70	185.5 x 64 x 45	6	6611411	JBBS-48SC-E613/EX
1 x 7/8 "- male	1 x 7/8 "- female	4 x 7/8 "- female	-30…+70	150 x 64 x 45	4	6611413	JBBS-48SC-M413/EX
1 x 7/8 "- male	1 x 7/8 "- female	6 x 7/8 "- female	-30…+70	185.5 x 64 x 45	6	6611415	JBBS-48SC-M613/EX

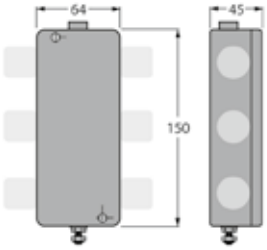
Marking of devices
PTB 03 ATEX 2236

Ⓔx II 2 G Ex ib IIC T4 Gb ■ II 2 (1) G Ex ia [ia Ga] IIC T4 Gb ■ II 2 (1D) G Ex ia [ia IIIC Da] IIB T4 Gb ■ II 2 (2D) G Ex ib [ib IIIC Db] IIB T4 Gb ■ FISCO / Entity field device

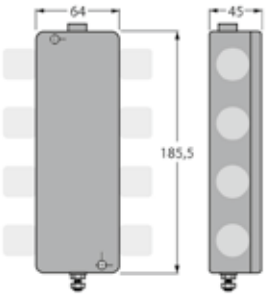
Junction without short-circuit protection



4-channel



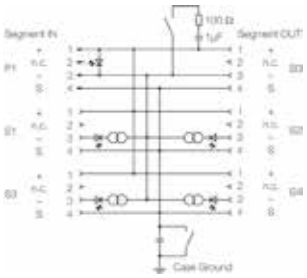
6-channel



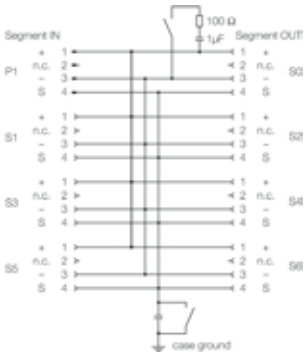
- Junction box for wall mounting
- Powder-coated die-cast aluminium housing
- Breather to prevent condensation
- Connection of the housing potential via M5 × 1 bolt
- Integrated terminating resistor (switchable)
- Cable shielding: Capacitive or direct connection to housing potential selectable via switch
- Isolated support terminal for optional protective conductor incorporated in cable
- Entity and FISCO compliant according to IEC 60079-11

Operating voltage range	9…32 VDC
Protection class	IP67
Connection mode	wall mounting
Earthing bolt	M5 x 1
MTTF	705 years acc. to SN 29500 (Ed. 99) 40 °C

4-channel



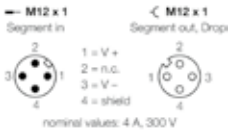
6-channel



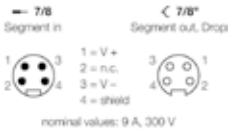
Terminal Connection



7/8" connector



M12 connector



Types and Features — Selection Table

Segment IN	Segment OUT	Spur line	Ambient temperature [°C]	Dimensions [mm]	Number of channels	ID number	Type
1 x M20 x 1.5 (Ø 7…13 mm)	1 x M20 x 1.5 (Ø 7…13 mm)	4 x M20 x 1.5 (Ø 7…13 mm)	-25…+70	150 x 64 x 45	4	6611420	JBBS-48-T415/3G
1 x M20 x 1.5 (Ø 7…13 mm)	1 x M20 x 1.5 (Ø 7…13 mm)	6 x M20 x 1.5 (Ø 7…13 mm)	-25…+70	150 x 64 x 45	6	6611422	JBBS-48-T615/3G
1 x M12 - male	1 x M12 - female	4 x M12 - female	-25…+70	150 x 64 x 45	4	6611400	JBBS-48-E413/3G
1 x M12 - male	1 x M12 - female	6 x M12 - female	-25…+70	185.5 x 64 x 45	6	6611402	JBBS-48-E613/3G
1 x 7/8 "- male	1 x 7/8 "- female	4 x 7/8 "- female	-25…+70	150 x 64 x 45	4	6611404	JBBS-48-M413/3G
1 x 7/8 "- male	1 x 7/8 "- female	6 x 7/8 "- female	-25…+70	185.5 x 64 x 45	6	6611406	JBBS-48-M613/3G

Marking of devices
TURCK Ex-13016H X

Ⓔx II 3 G Ex nA II T4 Gc ■ II 3 G Ex ic IIC T4 Gc

Segment IN	Segment OUT	Spur line	Ambient temperature [°C]	Dimensions [mm]	Number of channels	ID number	Type
1 x M20 x 1.5 (Ø 7…13 mm)	1 x M20 x 1.5 (Ø 7…13 mm)	4 x M20 x 1.5 (Ø 7…13 mm)	-40…+70	150 x 64 x 45	4	6611421	JBBS-48-T415B/EX
1 x M20 x 1.5 (Ø 7…13 mm)	1 x M20 x 1.5 (Ø 7…13 mm)	6 x M20 x 1.5 (Ø 7…13 mm)	-40…+70	150 x 64 x 45	6	6611423	JBBS-48-T615B/EX
1 x M12 - male	1 x M12 - female	4 x M12 - female	-30…+70	150 x 64 x 45	4	6611401	JBBS-48-E413/EX
1 x M12 - male	1 x M12 - female	6 x M12 - female	-30…+70	185.5 x 64 x 45	6	6611403	JBBS-48-E613/EX
1 x 7/8 "- male	1 x 7/8 "- female	4 x 7/8 "- female	-30…+70	150 x 64 x 45	4	6611405	JBBS-48-M413/EX
1 x 7/8 "- male	1 x 7/8 "- female	6 x 7/8 "- female	-30…+70	185.5 x 64 x 45	6	6611407	JBBS-48-M613/EX

Marking of devices
PTB 03 ATEX 2236

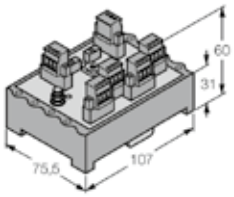
Ⓔx II 2 G Ex ib IIC T4 Gb ■ II 2 (1) G Ex ia [ia Ga] IIC T4 Gb ■ II 2 (1D) G Ex ia [ia IIIC Da] IIB T4 Gb ■ II 2 (2D) G Ex ib [ib IIIC Db] IIB T4 Gb ■ FISCO / Entity field device

Junction with short-circuit protection

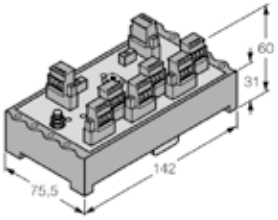


- Junction box for DIN rail mounting
- Short-circuit protection per drop line/spur
- Aluminium housing
- Connection of the housing potential via M5 × 1 bolt
- Integrated terminating resistor (switchable)
- Cable shielding: Capacitive or direct connection to housing potential selectable via switch
- Entity and FISCO compliant according to IEC 60079-11

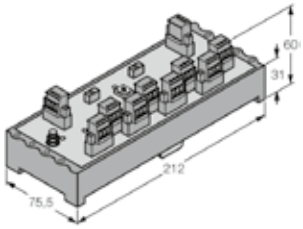
4-channel



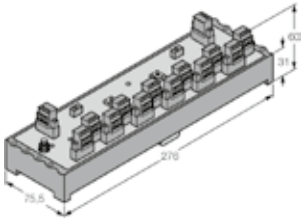
6-channel



8-channel

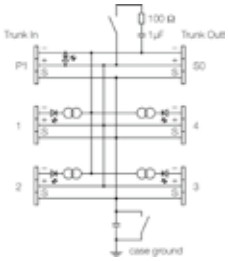


12-channel

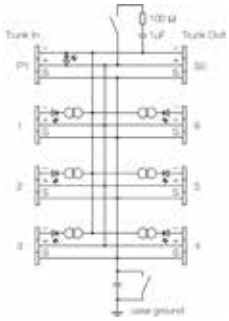


Operating voltage range	12…32 VDC
Current self-consumption	≤ 7 mA
Voltage drop	≤ 0.3 V
Short-circuit protection	≤ 30, 35, 45, 60 mA
Operational readiness	1 x green
Short-circuit message	n x red
Protection class	IP20
Connection mode	snap-fit on DIN rail (DIN 60715)
Earthing bolt	M5 x 1
MTTF	117 years acc. to SN 29500 (Ed. 99) 40 °C

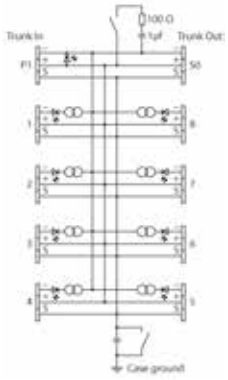
4-channel



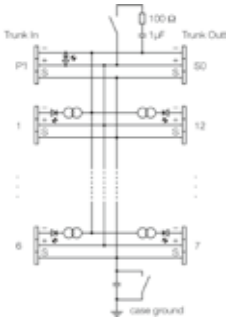
6-channel



8-channel



12-channel



Terminal Connection



Types and Features — Selection Table

Segment IN	Segment OUT	Spur line	Ambient temperature [°C]	Dimensions [mm]	Number of channels	ID number	Type
4 x cage clamp terminal	1 x cage clamp terminal	1 x cage clamp terminal	-25…+70	31 x 107 x 75.5	4	6611451	JRBS-40SC-4C/EX
6 x cage clamp terminal	1 x cage clamp terminal	1 x cage clamp terminal	-25…+70	31 x 142 x 75.5	6	6611452	JRBS-40SC-6C/EX
8 x cage clamp terminal	1 x cage clamp terminal	1 x cage clamp terminal	-25…+70	31 x 177 x 75.5	8	6611453	JRBS-40SC-8C/EX
12 x cage clamp terminal	1 x cage clamp terminal	1 x cage clamp terminal	-25…+70	31 x 276 x 75.5	12	6611455	JRBS-40SC-12C/EX
4 x screw connection	1 x screw connection	1 x screw connection	-25…+70	31 x 107 x 75.5	4	6611459	JRBS-40SC-4R/EX
6 x screw connection	1 x screw connection	1 x screw connection	-25…+70	31 x 142 x 75.5	6	6611460	JRBS-40SC-6R/EX
8 x screw connection	1 x screw connection	1 x screw connection	-25…+70	31 x 212 x 75.5	8	6611461	JRBS-40SC-8R/EX
12 x screw connection	1 x screw connection	1 x screw connection	-25…+70	31 x 276 x 75.5	12	6611463	JRBS-40SC-12R/EX

Marking of devices
PTB 05 ATEX 2002

Ⓔx II 2 G Ex ib IIC/IIB T4 ■ II 2(1) G Ex ia IIC/IIB T4 ■ II 2 G (2D) Ex ib [ibD] IIB T4 ■ II 2(1) G (1D) Ex ia [iaD] IIB T4 ■ FISCO / Entity field device

TURCK Ex-13002H X

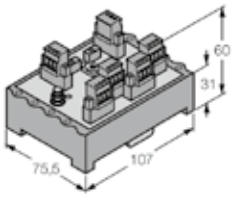
Ⓔx II 3 G Ex nA IIC T4 Gc ■ II 3 G Ex ic IIC T4 Gc

Junction without short-circuit protection

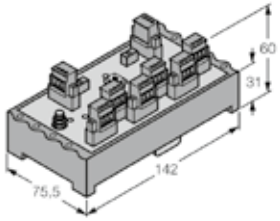


- Junction box for DIN rail mounting
- Aluminum housing
- Connection of the housing potential via M5 × 1 bolt
- Integrated terminating resistor (switchable)
- Cable shielding: Capacitive or direct connection to housing potential selectable via switch
- Entity and FISCO compliant according to IEC 60079-11

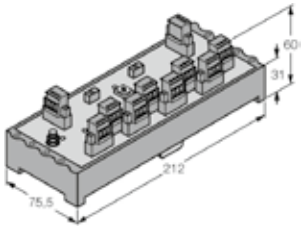
4-channel



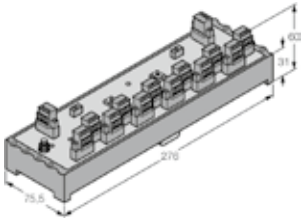
6-channel



8-channel

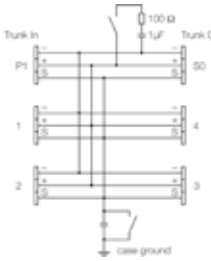


12-channel

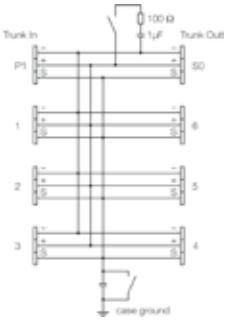


Operating voltage range	9…32 VDC
Protection class	IP20
Connection mode	snap-fit on DIN rail (DIN 60715)
Earthing bolt	M5 x 1
MTTF	705 years acc. to SN 29500 (Ed. 99) 40 °C

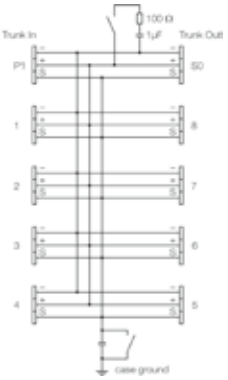
4-channel



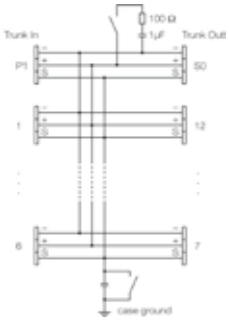
6-channel



8-channel



12-channel



Terminal Connection



Types and Features — Selection Table

Segment IN	Segment OUT	Spur line	Ambient temperature [°C]	Dimensions [mm]	Number of channels	ID number	Type
4 x cage clamp terminal	1 x cage clamp terminal	1 x cage clamp terminal	-25…+70	31 x 107 x 75.5	4	6611448	JRBS-40-4C/EX
6 x cage clamp terminal	1 x cage clamp terminal	1 x cage clamp terminal	-25…+70	31 x 142 x 75.5	6	6611449	JRBS-40-6C/EX
8 x cage clamp terminal	1 x cage clamp terminal	1 x cage clamp terminal	-25…+70	31 x 177 x 75.5	8	6611450	JRBS-40-8C/EX
12 x cage clamp terminal	1 x cage clamp terminal	1 x cage clamp terminal	-25…+70	31 x 276 x 75.5	12	6611454	JRBS-40-12C/EX
4 x screw connection	1 x screw connection	1 x screw connection	-25…+70	31 x 107 x 75.5	4	6611456	JRBS-40-4R/EX
6 x screw connection	1 x screw connection	1 x screw connection	-25…+70	31 x 142 x 75.5	6	6611457	JRBS-40-6R/EX
8 x screw connection	1 x screw connection	1 x screw connection	-25…+70	31 x 212 x 75.5	8	6611458	JRBS-40-8R/EX
12 x screw connection	1 x screw connection	1 x screw connection	-25…+70	31 x 276 x 75.5	12	6611462	JRBS-40-12R/EX

Marking of devices
PTB 05 ATEX 2002

Ⓔx II 2 G Ex ib IIC/IIB T4 ■ II 2(1) G Ex ia IIC/IIB T4 ■ II 2 G (2D) Ex ib [ibD] IIB T4 ■ II 2(1) G (1D) Ex ia [iaD] IIB T4 ■ FISCO / Entity field device

TURCK Ex-13002H X

Ⓔx II 3 G Ex nA IIC T4 Gc ■ II 3 G Ex ic IIC T4 Gc

Fieldbus display, 3 channel



- Digital fieldbus display for the indication of process values
- Powder-coated die-cast aluminium housing
- Connection of the housing potential via external earthing

The 3 channel digital indicator FD-48-T317/EX displays the process information of the fieldbus nodes of a PROFIBUS-PA network.

The device (listener) receives and displays the values of the adjusted fieldbus addresses. Parameterization is code word protected and implemented via a keypad on the front side. Adjustements can be done for each port separately. The process value of the actuator/sensor is displayed as a 5-digit number and the process value status is displayed via limit value markers.

Apart from a measuring value indicator, the display contains a 41-segment bargraph for trend monitoring, which can be scaled separately from the display value.

The FD-48-T317/EX fieldbus display performs as a "listener", i.e. initialization by the host is not required (integration via software redundant) and does not appear in the network as a node with an own address.

The device is supplied with power by the fieldbus (< 10 mA) and can be applied in Ex areas up to temperatures of the class T6.

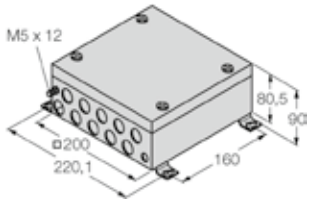
Technical Data

Type	FD-48-T317/EX
ID number	6901315
Fieldbus standard	IEC 61158-2
Operating voltage range	9…30 VDC
Current self-consumption	≤ 10 mA
Indication	placeholder
Display	LCD, 5-digit, 7-segment
Ex approval acc. to conformity certificate	TÜV 07 ATEX 553588
Device designation	⟨Ex⟩ II 2 (1) G EEx ia IIC T6 resp. T5
Device marking	II 2 D IP65 T70°C
	FISCO / Entity field device
Max. input voltage U_i	≤ 30
Max. input current I_i	≤ 660
Max. input power P_i	≤ 1600
Internal inductance/capacitance L_i/C_i	negligible
Electrical connection	cable gland
Terminal cross-section	2.5 mm^2
Protection class	IP66
Ambient temperature	-10…+60 °C
Housing material	Powder-coated die-cast aluminium
Housing color	black
Dimensions	140 x 140 x 71 mm
Connection mode	wall mounting

Stainless Steel Housing

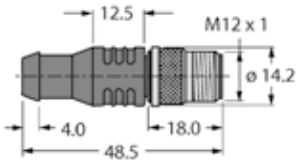
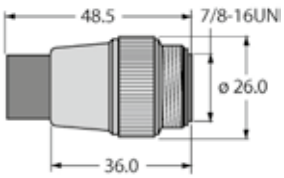


Description	ID number	Type
■ Stainless steel housing to accommodate Turck IP20 junction boxes ■ Protection class IP66 (IEC/EN 60529) ■ 10 plastic cable glands M20 × 1.5 for cable feed-through ■ Insulated shield rail ■ Wall mounting ■ Pressure compensation element ■ Connection of the housing potential via M5 × 1 bolt	6884135	EG-VA2020/BV67-T105
■ Stainless steel housing to accommodate Turck IP20 junction boxes ■ Protection class IP66 (IEC/EN 60529) ■ 10 stainless steel cable glands M20 × 1.5 for cable feed-through ■ Insulated shield rail ■ Wall mounting ■ Pressure compensation element ■ Connection of the housing potential via M5 × 1 bolt	6884136	EG-VA2020/BV67-T103



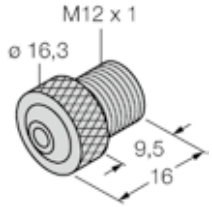
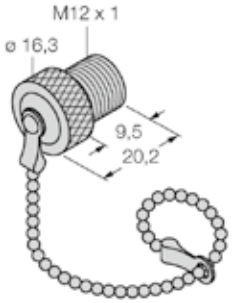
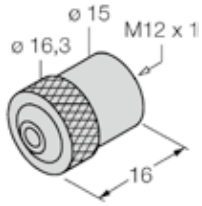
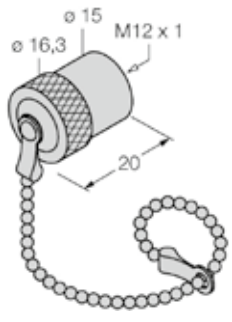
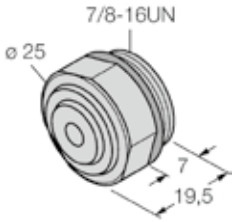
Terminating Resistor

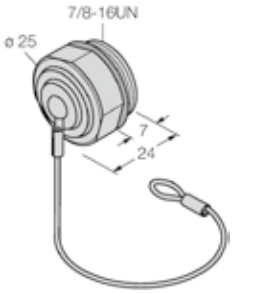
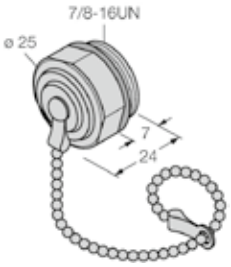
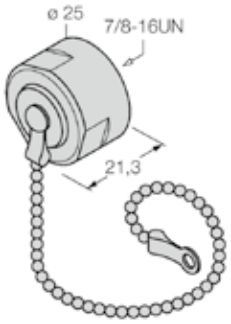
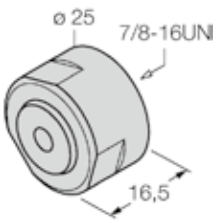
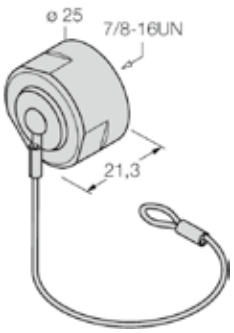


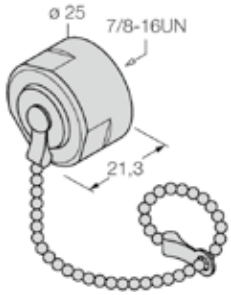
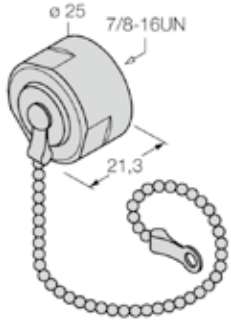
Description	ID number	Type
 ■ Design: M12 male connector ■ 4-pin, straight, nickel-plated brass coupling nut ■ For use in PROFIBUS-PA applications ■ Temperature range: -40 °C…+70 °C ■ Protection class: NEMA 1, 3, 4, 6P and IEC IP67	6602250	RSE-48TR-EX
■ Design: M12 male connector ■ Stainless steel coupling nut, straight, 4-pin ■ For use in PROFIBUS-PA applications ■ Temperature range: -40 °C…+70 °C ■ Protection class: NEMA 1, 3, 4, 6P and IEC IP67	6602560	RSEV-48TR-EX
 ■ Design: 7/8" male connector ■ Stainless steel coupling nut, straight, 4-pin ■ For use in PROFIBUS-PA applications ■ Temperature range: -40 °C…+70 °C ■ Protection class: IP67	6602370	RSMV-48TR-EX

Closure Cap



Description	ID number	Type
	■ M12 × 1 closure cap, stainless steel ■ Male connector ■ Oil-resistant ■ IP67 acc. to IEC 60529/ EN 60529 and Nema 1,3,4,6P	6902305	RSEV-BC
	■ M12 × 1 closure cap, stainless steel ■ Male connector ■ Oil-resistant ■ IP67 acc. to IEC 60529/ EN 60529 and Nema 1,3,4,6P ■ With fastening chain, approx. 210 mm	6604174	RSEV-CC
	■ M12 × 1 closure cap, stainless steel ■ Female connector ■ Oil-resistant ■ IP67 acc. to IEC 60529/ EN 60529 and Nema 1,3,4,6P	6902304	RKEV-BC
	■ M12 × 1 closure cap, stainless steel ■ Female connector ■ Oil-resistant ■ IP67 acc. to IEC 60529/ EN 60529 and Nema 1,3,4,6P ■ With fastening chain, approx. 210 mm	6604175	RKEV-CC
	■ 7/8" closure cap, stainless steel ■ Male connector ■ Oil-resistant ■ IP67 acc. to IEC 60529/ EN 60529 and Nema 1,3,4,6P	6603783	RSMV-BC

	Description	ID number	Type
	■ 7/8" closure cap, stainless steel ■ Male connector ■ Oil-resistant ■ IP67 acc. to IEC 60529/ EN 60529 and Nema 1,3,4,6P ■ With fixing rope	6604030	RSMV-CC
	■ 7/8" closure cap, stainless steel ■ Male connector ■ Oil-resistant ■ IP67 acc. to IEC 60529/ EN 60529 and Nema 1,3,4,6P ■ With fastening chain, approx. 210 mm	6604490	RSMV-CCC
	■ 7/8" closure cap, stainless steel ■ Male connector ■ Oil-resistant ■ IP67 acc. to IEC 60529/ EN 60529 and Nema 1,3,4,6P ■ With fastening chain, approx. 210 mm, clasp open	6604489	RSMV-CCO
	■ 7/8" closure cap, stainless steel ■ Female connector ■ Oil-resistant ■ IP67 acc. to IEC 60529/ EN 60529 and Nema 1,3,4,6P	6603784	RKMV-BC
	■ 7/8" closure cap, stainless steel ■ Female connector ■ Oil-resistant ■ IP67 acc. to IEC 60529/ EN 60529 and Nema 1,3,4,6P ■ With fixing rope	6604038	RKMV-CC

	Description	ID number	Type
	■ 7/8" closure cap, stainless steel ■ Female connector ■ Oil-resistant ■ IP67 acc. to IEC 60529/ EN 60529 and Nema 1,3,4,6P ■ With fastening chain, approx. 210 mm	6604488	RKMV-CCC
	■ 7/8" closure cap, stainless steel ■ Female connector ■ Oil-resistant ■ IP67 acc. to IEC 60529/ EN 60529 and Nema 1,3,4,6P ■ With fastening chain, approx. 210 mm, clasp open	6604485	RKMV-CCO

Connectivity – Power Supply



Turck's compact connectors guarantee robust connectivity for signal and voltage transfers up to 42 A and 600 V. The cables and connectors offered as 7/8", M16, 13/8" and M40 variants enable the user to implement the signal and voltage supply in a pluggable terminal and with a reduced size.

To prevent interference in both directions Turck also offers shielded solutions as well as the standard cables. Moreover, receptacles for the transition to cabinets and devices as well as T-splitters for branching within the installation are available. The robust connectors are suitable for use in a wide range of industrial application fields, from logistics right through to large construction machinery which, for example, are used in tunneling. Thanks to the elimination of terminal boxes and the possibility for pre-assembly, the user benefits from the considerably reduced time required for installation. The secure connection coding reliably prevents the possibility of wiring errors.

Connectivity for Power Supplies – Overview

Connection and Extension Cables M8 x 1, 7/8“	Page
	508

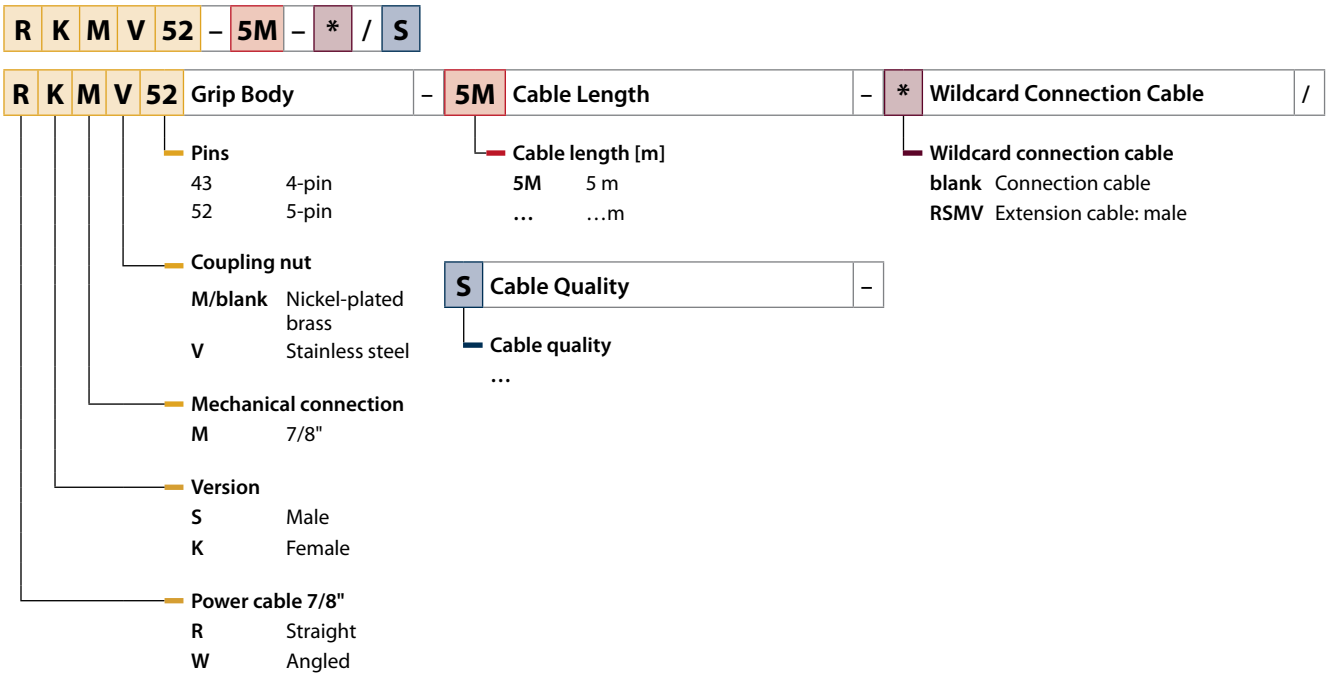
Field-Wireable Connectors 7/8“	Page
	514

Receptacle 7/8“	Page
	516

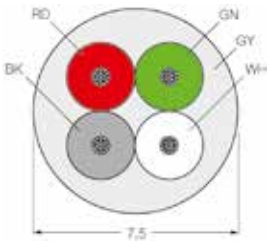
Junctions	Page
	518

Accessories	Page
	520

Type Code


R K M V 52 – 5M – * / S
R K M V 52 Grip Body
–
5M Cable Length
–
* Wildcard Connection Cable
/
Pins
43 4-pin
52 5-pin
Coupling nut
M/blank Nickel-plated brass
V Stainless steel
Mechanical connection
M 7/8"
Version
S Male
K Female
Power cable 7/8"
R Straight
W Angled
Cable length [m]
5M 5 m
... ...m
S Cable Quality
–
Cable quality
...
Wildcard connection cable
blank Connection cable
RSMV Extension cable: male

PUR Cable – Gray



- 3-pin
- Qualified for drag chain use
- Oil-resistant and flame-retardant
- Free from halogen, silicone, PVC and LABS
- cULus approved

Female connector



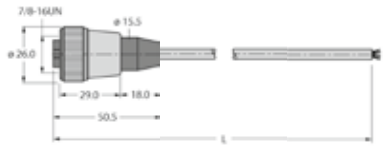
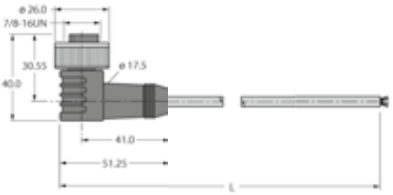
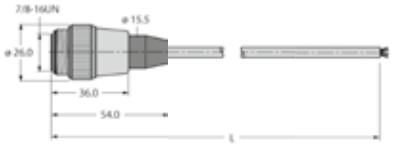
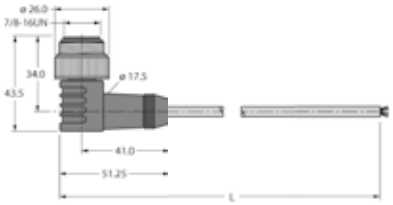
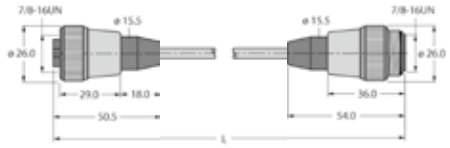
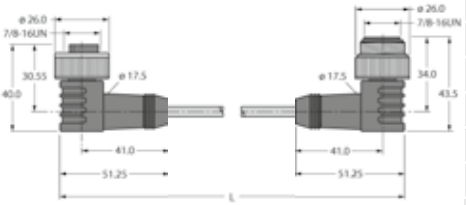
Male connector



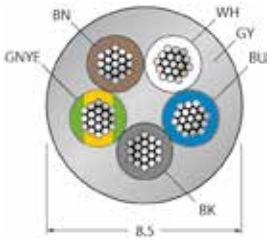
Connector	
Grip	Plastic, TPU, Black
Contacts	Metal, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3/2
Cable	
Cable	7.5 mm ± 0.30
Cable jacket	PUR, Gray
Core insulation	PP (BK, RD, GN, WH)
Core cross-section	4 x 1.5 mm^2
Arrangement of strands	84 x 0.15 mm
Shield	no
Electrical properties at +20 °C	
Current load	5.3 A
Rated voltage	250 V
Test voltage	2000 V
Mechanical and chemical properties	
Bending radius (flexible use)	> 10 x Ø
Ambient temperature	
Stationary usage	-40…+90 °C
Non-stationary usage	-30…+90 °C
Drag chain operation	0…+90 °C

Types and Features — Selection Table



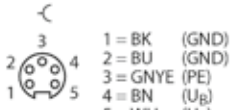
Cable length [m]	ID number	Type
	6	6914307	RKM43-6M
	10	6914308	RKM43-10M
	15	6914310	RKM43-15M
	6	6913940	WKM43-6M
	10	6913941	WKM43-10M
	15	6913942	WKM43-15M
	6	6915621	RSM43-6M
	10	6915622	RSM43-10M
	15	6915623	RSM43-15M
	6	6915844	WSM43-6M
	10	6915845	WSM43-10M
	15	6915846	WSM43-15M
	0.3	6914319	RKM43-0.3-RSM43
	0.5	6914311	RKM43-0.5-RSM43
	1	6914312	RKM43-1-RSM43
	2	6914313	RKM43-2-RSM43
	4	6914314	RKM43-4-RSM43
	6	6914315	RKM43-6-RSM43
	10	6914316	RKM43-10-RSM43
	15	6914317	RKM43-15-RSM43
	0.3	6913948	WKM43-0.3-WSM43
	0.5	6913949	WKM43-0.5-WSM43
	1	6913950	WKM43-1-WSM43
	2	6913951	WKM43-2-WSM43
	4	6913916	WKM43-4-WSM43
	6	6913918	WKM43-6-WSM43
	10	6913917	WKM43-10-WSM43

PUR Cable – Gray, Type 52



- 4-pin + PE
- Qualified for drag chain use
- Oil-resistant and flame-retardant
- Free from halogen, silicone, PVC and LABS
- cULus approved

Female connector



Male connector



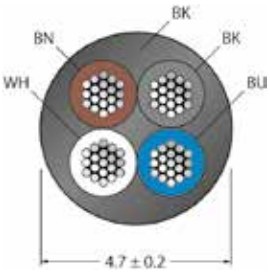
Connector	
Grip	Plastic, TPU, Black
Contacts	Metal, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	8.5 mm ± 0.30
Cable jacket	PUR, Gray
Core insulation	PP (BN, WH, BU, BK, GNYE)
Core cross-section	5 x 1.5 mm^2
Arrangement of strands	84 x 0.15 mm
Shield	no
Electrical properties at +20 °C	
Rated voltage	240 V
Mechanical and chemical properties	
Ambient temperature	
Stationary usage	-40…+90 °C
Non-stationary usage	0…+90 °C

Types and Features — Selection Table



Cable length [m]	ID number	Type
100	6604716	KABEL-PDP-52-100M
500	6604717	KABEL-PDP-52-500M
1	6604710	RKM52-1M
2	6604711	RKM52-2M
4	6604714	RKM52-4M
10	6914146	RKM52-10M
15	6914147	RKM52-15M
30	6604722	RKM52-30M
0.5	6604762	WKM52-0.5M
2	6604765	WKM52-2M
4	6604768	WKM52-4M
6	6604770	WKM52-6M
10	6604772	WKM52-10M
15	6604773	WKM52-15M
2	6604712	RSM52-2M
4	6604732	RSM52-4M
6	6914142	RSM52-6M
10	6914143	RSM52-10M
15	6914144	RSM52-15M
30	6604740	RSM52-30M
6	6604788	WSM52-6M
10	6604790	WSM52-10M
15	6604791	WSM52-15M
0.3	6604743	RKM52-0.3-RSM52
0.5	6914148	RKM52-0.5-RSM52
1	6914149	RKM52-1-RSM52
2	6914150	RKM52-2-RSM52
4	6914151	RKM52-4-RSM52
5	6604751	RKM52-5-RSM52
6	6914152	RKM52-6-RSM52
10	6914153	RKM52-10-RSM52
15	6914154	RKM52-15-RSM52

PUR Cable – Black



- 4-pin
- Qualified for drag chain use and flame-retardant
- Resistant to chemicals, UV radiation and oils
- Free from halogen, silicone, PVC and LABS
- cULus approved



Female connector

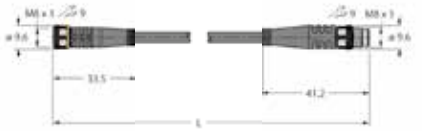
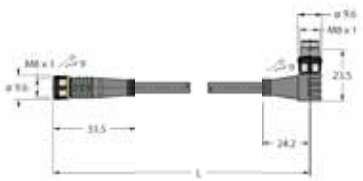
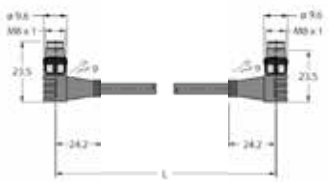


Male connector



Connector	
Grip	Plastic, TPU, Black
Contacts	Brass, CuZn, Gold-plated
Contact carriers	TPU, Black
Coupling nut/screw	Brass, CuZn, Nickel-plated
Protection class	IP67 (only when screwed tight)
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Cable	
Cable	4.7 mm ± 0.20
Cable jacket	PUR, Black
Core insulation	PP (BN, WH, BU, BK)
Core cross-section	4 x 0.34 mm^2
Arrangement of strands	42 x 0.1 mm
Electrical properties at +20 °C	
Current load	4 A
Rated voltage	30 V
Insulation resistance	> 30.5 MΩ/km
Test voltage	2000 V
Forward resistance	max. 57 Ω/km
Mechanical and chemical properties	
Max. tensile strength (static)	≤ 50 N/mm^2
Max. tensile strength (dynamic)	≤ 20 N/mm^2
Bending cycles	> 5 mil.
Bending radius (stationary laying)	> 5 x Ø
Bending radius (flexible use)	> 10 x Ø
Admissible acceleration	max. 5 m/s^2
Admissible travel path, horizontal	5 m (at 5 m/s^2)
Admissible travel path, vertical	2 m (at 5 m/s^2)
Admissible traversing speed	3.3 m/s
Torsional stress	± 180 °/m
Ambient temperature	
Stationary usage	-50…+80 °C
Non-stationary usage	-25…+80 °C
Drag chain operation	-25…+60 °C

Types and Features — Selection Table

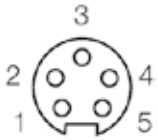
	Cable length [m]	ID number	Type
	100	6627994	CABLE4X0.34-XX-PUR-BK-100M/TXL
	500	6627995	CABLE4X0.34-XX-PUR-BK-500M/TXL
	2	6625553	PKG4M-2/TXL
	5	6625554	PKG4M-5/TXL
	10	6625555	PKG4M-10/TXL
	2	6625559	PKW4M-2/TXL
	5	6625560	PKW4M-5/TXL
	10	6625561	PKW4M-10/TXL
	0.12	6627043	PKG4M-0.12-PSG4M/TXL
	0.15	6625669	PKG4M-0.15-PSG4M/TXL
	0.2	6627044	PKG4M-0.2-PSG4M/TXL
	0.25	6627045	PKG4M-0.25-PSG4M/TXL
	0.3	6625670	PKG4M-0.3-PSG4M/TXL
	0.5	6627049	PKG4M-0.5-PSG4M/TXL
	0.6	6625671	PKG4M-0.6-PSG4M/TXL
	1	6625672	PKG4M-1-PSG4M/TXL
	2	6625673	PKG4M-2-PSG4M/TXL
	5	6627076	PKG4M-5-PSG4M/TXL
	10	6626708	PKG4M-10-PSG4M/TXL
	0.15	6625678	PKG4M-0.15-PSW4M/TXL
	0.3	6625679	PKG4M-0.3-PSW4M/TXL
	0.6	6625680	PKG4M-0.6-PSW4M/TXL
	1	6625681	PKG4M-1-PSW4M/TXL
	2	6625682	PKG4M-2-PSW4M/TXL
	0.15	6625687	PKW4M-0.15-PSW4M/TXL
	0.3	6625688	PKW4M-0.3-PSW4M/TXL
	0.5	6627050	PKW4M-0.5-PSW4M/TXL
	0.6	6625689	PKW4M-0.6-PSW4M/TXL
	1	6625690	PKW4M-1-PSW4M/TXL
	2	6625691	PKW4M-2-PSW4M/TXL
	3	6626674	PKW4M-3-PSW4M/TXL
	5	6627077	PKW4M-5-PSW4M/TXL

Field-Wireable Connectors – 7/8"



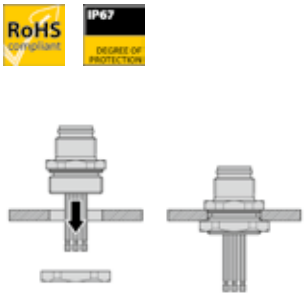
	Number of pins	Rated voltage [V]	ID number	Type	Number of pins	Rated voltage	ID number	Type
Female connector, straight	5	600	6904717	B4151-0/9	4	250	6914551	BK4140-0/9
Female connector, angled	5	600	6901113	B4251-0/9				
Male connector, straight	5	600	6904718	BS4151-0/9	4	250	6914550	BS4140-0/9
Male connector, angled	5	600	6901112	BS4251-0/9				

Connection mode	Screw/clamp connection	Screw/clamp connection
Grip	Plastic, PBT(UL 94 V0), Black	Plastic, PA, Black
Coupling nut/screw	Die-cast zinc, GD-Zn, Nickel-plated	Aluminum, Al, Anodized
Contacts	Brass, CuZn, Gold-plated	Metal, CuZn, Gold-plated
Contact carriers	PA 66 (UL 94 HB), Black	TPU, Black
Protection class	IP67	IP67
Current load	9 A	9 A
Terminal cross-section	0.14…1.5 mm²	0.14…1 mm²
Cable external diameter	min. 6…8 mm	min. 6…8 mm
Storage temperature	-25…+85 °C	-40…+90 °C

Number of pins	4-pin	5-pin
Female connector		
Male connector		

7/8" Receptacles for Front-Panel Mounting

Contacts	Metal, CuZn, Gold-plated
Seal	Plastic, FPM/FKM
Screw-in thread seal	Plastic, NBR
Protection class	IP67
Mechanical Lifespan	> 100 mating cycles
Pollution degree	3
Insulation resistance	≥ 10^8 Ω
Contact resistance	≤ 5 mΩ
Ambient temperature	
Stationary usage	-40…+80 °C



4-pin





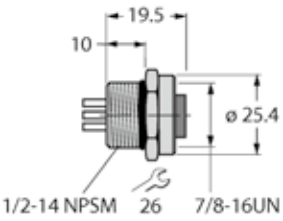
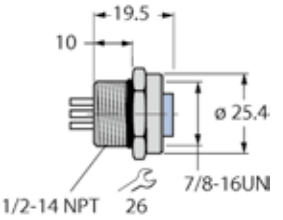
5-pin



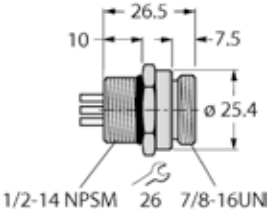
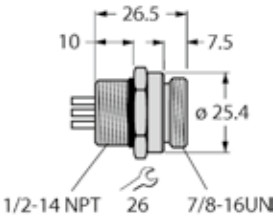


Types and Features — Selection Table



Design	Receptacle housing	Number of pins	Connection mode[1)]	Rated voltage [V]	Current load [A]	Contact carriers	ID number	Type
 Female connector	Brass	4	LK	600	9	TPU, Black	6915086	RKFL46
 Female connector	Brass	5	LK	300	9	TPU, Black	6602217	RKF57

Types and Features — Selection Table

	Design	Receptacle housing	Number of pins	Connection mode[1]	Rated voltage [V]	Current load [A]	Contact carriers	ID number	Type
	Male connector	Brass	4	LK	600	9	TPU, Black	6914836	RSFL46
	Male connector	Brass	5	LK	300	9	TPU, Black	6602342	RSF57

1) L: Stranded wire contact, LK: Solder contact, P: Print contact

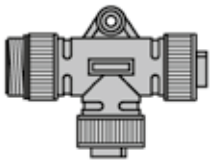
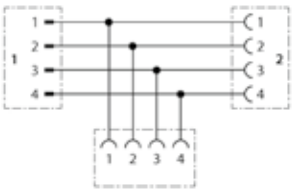
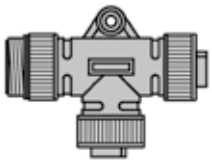
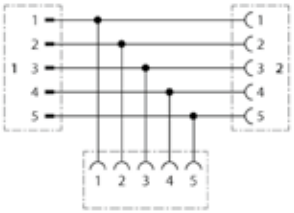
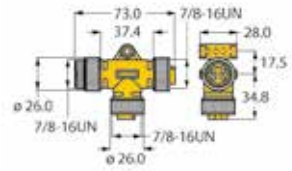
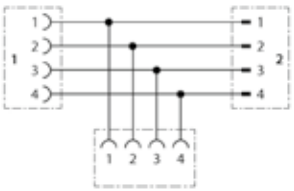
Junctions



F015 1

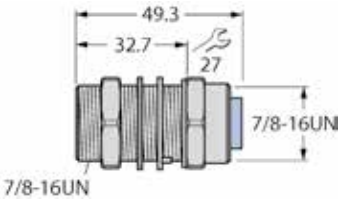


Types and Features — Selection Table

Design	Properties	Graph	ID number	Type
	T-Splitter for Auxiliary Power 7/8" connector, 4-pin Current load: 9A Rated voltage: 250V Protection class NEMA 1, 3, 4, 6P and IEC IP67 Temperature range: -40 °C…+80 °C		6914828	RSM-2RKM40
	T-Splitter for Supply Voltage 7/8" connector, 5-pin Current load: 9A Rated voltage: 250V Protection class NEMA 1, 3, 4, 6P and IEC IP67 Temperature range: -40 °C…+80 °C		6914950	RSM-2RKM50
	T-Splitter for Auxiliary Power Coding female connector J2 is rotated clockwise by 90 ° 7/8" connector, 4-pin Current load: 9A Rated voltage: 250V Protection class NEMA 1, 3, 4, 6P and IEC IP67 Temperature range: -40 °C…+80 °C		6914866	RKM40-RKM40-L-RSM40

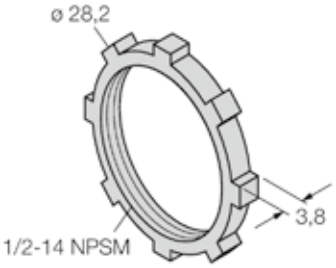
Wall Feed-through

Types and Features — Selection Table

	Description	ID number	Type
	■ 7/8" wall feed-through, 4-pin ■ Male on female ■ Voltage: 600 V ■ Current load: 9 A ■ Temperature: -40 °C…+105°C ■ IEC IP67; NEMA 1, 3, 4	6915014	RSF-RKF40/22
	■ 7/8" wall feed-through, 5-pin ■ Male on female ■ Voltage: 600 V ■ Current load: 9 A ■ Temperature: -40 °C…+105°C ■ IEC IP67; NEMA 1, 3, 4	6914891	RSF-RKF50/22

Counter Nut

Types and Features — Selection Table

	Description	ID number	Type
	■ 1/2" counter nut for G-thread	6900493	LOCKNUT G1/2"
	■ 1/2" counter nut for NPT-thread ■ Material: Die-cast zinc	6961002	LN1/2-14NPT/10

Standards and Directives

The particular requirements of the user's device regulations are binding for the use of connectors. The essential standards and regulations for the manufacture and testing of Turck products are stated below.

DIN VDE 0627: 2012- 03 – Connectors and Plug Devices
After lengthy revision this standard will soon be valid as an international standard. The standard applies to connectors and plug devices for rated voltages up to 1000 V~ and 1500 V– and rated currents up to 125 A per contact for connecting modules or components in or on equipment in or on measurement and instrumentation circuits, taking safety aspects into account. The standard also applies to connectors and plug devices for household devices as well as for devices used in IT.

IEC 60664-1: 2008-01 – Insulation Coordination
This international standard, which complies with the German standard DIN VDE 0110-1, edition April 97, is a generic safety standard for insulation coordination. It contains the information required for specifying clearances, creepage distances and fixed insulation for electrical equipment (e.g. connectors). This takes into account the micro ambient conditions and other factors to which they will probably be exposed during their expected lifespan. This includes procedures for voltage testing in relation to insulation coordination.

IEC 60512: 2001-01 – Measurement and Test Procedures
This international standard complies with the European standard EN 60512 and has replaced the previous German standard DIN 41640. It defines the measuring and test procedures for electromechanical components (e.g. connectors). The standard is very comprehensive and consists in all of nine sections, containing descriptions of all electrical, mechanical and climatic tests. The standard also contains tests on the solderability, sealing, shielding and cable strain relief.

IEC 60529: 2000-09 – Protection Classes by Housing (IP Code)
This international standard corresponds to the European standard DIN EN 60529 and complies with the previous German standard DIN VDE 0470-1, edition Nov. 92. The standard defines the designations, requirements and tests for the classification of protection types by housings for electrical equipment (e.g. connectors). It also covers the evaluation of protection from access to hazardous parts, protection from foreign bodies and protection from water. The protection class is stated by means of an IP code.

IEC 60068-1: 1995-03 – Environmental Tests
This international standard, which complies with the German standard DIN EN 60068-1, is a fundamental specification of environmental tests and test levels of severity. These test procedures are used to test the resistance of components to expected environmental influences under operating conditions. Typical tests include: Cold, dry and damp heat, impact, vibration, temperature change etc.

Notes on the technical information

Turck reserves the right to make design changes due to quality improvements, further developments or production requirements without previous notice. The technical information stated in the catalog refers to connectors, i.e. components that must not be plugged or disconnected under live conditions. The technical data is provided to ensure correct use of the products.
The information enables the correct selection of products. Although the products are described with the data, their particular features are not guaranteed. The devices are designed for use in large industrial plants and equipment and also for use in industrial automation.
Information on the properties and sealing is based on tightening torques of 0.8…1.0 Nm for M12 × 1 round connectors and 0.4…0.6 Nm for M8 × 1 round connectors. The IP protection classes stated are only guaranteed for the connections of Turck products.

Notes on the Technical Information in the Catalog:

Characteristic values	Standard	Remark
Housing protection class	IEC 60529	When fitted. Further information on IP protection types overleaf
Mechan. lifespan	IEC 60512-5/9a	Test completed without electrical load
Rated voltage	IEC 60664-1	The stated value is defined in conjunction with the pollution degree and the operating voltage category
Pollution degree	IEC 60664-1	
Ampacity	IEC 60512-3/5b	
Forward resistance	IEC 60512-2/2a	Contact resistance of contact pin/contact socket when fitted over a defined range.

Note: The technical data represents initial values that may change after load conditions apply. When installing electrically conductive receptacle housings, these must be included in the device protection measures. The cables to be connected must only be stripped so that the clearances to the electrically conductive parts are not reduced. When soldering cables it must be ensured that no individual wires stick out and thus may cause short circuits.

Protection types to IEC/EN 60529 and DIN 40050 Part 9
The IEC/EN 60529 and DIN 40050-9 standards define the classification of protection types for electrical equipment. The following properties are defined:

- Contact protection: Protection of persons from contact with fixed or moving live parts inside enclosures
- Protection from foreign objects: Protection of the equipment from the ingress of solid particles, including dust
- Liquid ingress protection: Protection of the equipment from the ingress of liquids

The IP code is used for rating the protection class. This code consists of the two letters "IP" and a two-digit code, e.g. "IP67". The tables below explain the meaning of the two digits (refer to the respective standards for further information):

First digit of the IP code

1st digit			
DIN 40050-9	IEC/EN 60529	Meaning of the IP code: Protection from foreign bodies	Meaning of the IP code: Protection from contact
0	0	No protection	No protection
1	1	Protection from solid foreign bodies with Ø > 50 mm	Protection from back of hand contact
2	2	Protection from solid foreign bodies with Ø > 12.5 mm	Protection from finger contact
3	3	Protection from solid foreign bodies with Ø > 2.5 mm	Protection from contact with tool
4	4	Protection from solid foreign bodies with Ø > 1.0 mm	Protection from contact with wire
5K	5	Protection from dust in a harmful quantity	Complete protection from contact
6K	6	Dust-tight	Complete protection from contact

Second digit of the IP code

2nd digit		
DIN 40 050-9	IEC/EN 60529	Meaning of the IP code: Protection from water
0	0	No protection
1	1	Protection from vertically dripping water
2	2	Protection from dripping water when housing tilted up to 15°
3	3	Protection against vertical spray water up to 60° from vertical
4	4	Protection from spray water on all sides
4K		Protection from pressurized spray water on all sides
5	5	Protection from water jets from any angle
6	6	Protection from strong water jets
6K		Protection from strong powerful water jets with increased pressure, specifically for road vehicles
7	7	Protection from intermittent immersion
8	8	Protection from continuous immersion
9K		Protection from water with high pressure/ steam cleaning, specifically for road vehicles

PG thread and metric thread

The transition period for DIN 46320 "Cable Glands for cables and conductors with PG standard threads" expired on 31.12.1999. Since then, glands for cables and conductors had first to comply with the national standard 46319 before this was replaced by EN 50262 on 01.03.2001.

PG thread and metric thread

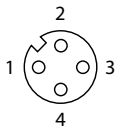
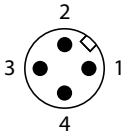
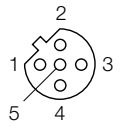
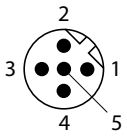
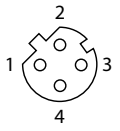
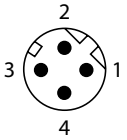
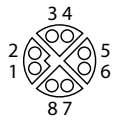
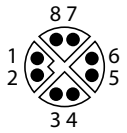
PG	metric [mm]
PG7	M12 x 1.5/ M10 x 1.5
PG9	M16 x 1.5
PG11	M16 x 1.5
PG13.5	M20 x 1.5

Wrench width for cable glands acc. to EN 50262

Thread	max. wrench size [mm]	max. across flats [mm]
M12 x 1.5	16	18
M16 x 1.5	21	23
M20 x 1.5	25	28

M12 × 1 Connector – Coding

Connectors are coded in order to ensure a fault-free connection. This coding is set using a pin and slot on the contact carrier. Different codings are used:

	Female connector	Male connector
A coding		
B coding		
D coding		
X coding		

Note: B-coded female and male connectors from Turck are marked with a W (see type code).

Approvals and Certificates

UL (Underwriter Laboratories Inc.)
UL approvals are primarily required for the US and Canadian market. Certification by the Underwriter Laboratories Inc. verifies that the tested products, components or materials meet the specific safety requirements.
UL component approvals (UL Recognized Component), which identify these products as UL-approved components for mounting in UL-approved systems, apply to a number of Turck products. This component approval also applies to suitably used cable qualities. Individual cable qualities carry the UL Listing test mark (so-called device approval), which guarantees compliance with the applicable UL safety requirements.

GOST-R (ГОСТ - Государственный Стандарт)
Certification by the Federal Agency for Technical Regulation and Metrology is required for the import of goods to the Russian Federation. The Federal Agency verifies compliance of the products with Russian requirements, standards and quality standards.

Directive 2002/95/EU (RoHS - Restriction of [the use of certain] hazardous substances)
The EU Directive for restricting the use of certain hazardous substances in electrical and electronic devices prohibits hazardous substances in devices and components above the specified limits. These include lead, cadmium, mercury, hexavalent chromium, polybrominated biphenyl (PBB), and polybrominated diphenyl ethers (PBDE). For Turck products, this means the lead-free soldering and avoidance of toxic flame retardants in plastics and cables.

General Technical Features

Rated voltage
Specifies the maximum value of the electrical voltage in normal operation. The information on the operating characteristics of the connector are based on the rated voltage.

Insulation resistance
The insulation capacity of a material according to IEC 60512-2, 3a and DIN EN 60512-2 is defined as the ability to isolate adjacent contacts or a contact against ground at as high-impedance as possible.

Current load
The ampacity of a connector according to DIN ISO IEC 60512-3 defines the maximum power which may constantly flow across all contacts at the same time at an ambient temperature of 40 °C. The sum of the current-dependent self heating of the contacts and the ambient temperature must not exceed the maximum limit temperature of a connector - defined by the thermal properties of the materials used. The so-called derating curve shows the interrelationship between the current load of a connector and its ambient temperature.
In practice higher currents per contact are permissible in certain circumstances since not all contacts are energized permanently at the same time at the maximum current.
The precise values must be determined by testing in individual cases.Extract of the current load table for the cables of industrial machines according to DIN VDE 0113, EN 60204T1.

Nominal Ø Cable [mm²]	Ampacity for cables with machines...			
	for normal use		for large series production	
	in cable duct	in air	in cable duct	in air
0.10	1.20	1.3	1.0	1.1
0.14[1]	1.50	2.0	1.5	2.0
0.25[1]	3.00	4.0	3.0	4.0
0.34[1]	4.50	6.0	4.5	6.0
0.50	6.00	6.5	5.0	5.5
0.75	9.00	10.0	7.5	8.5
1.00	12.00	13.5	10.0	11.5
1.50	15.50	17.5	13.0	15.0
2.50	21.00	24.0	18.0	20.0
4.00	28.00	32.0	24.0	27.0
6.00	36.00	41.0	31.0	34.0
10.00	50.00	57.0	43.0	48.0

[1] These nominal cross sections are not covered by the standard. The ampacity is selected in compliance with VDE 0891.

Nominal Ø Cable [mm²]	Nominal currents of fuses according to IEC 269-2 and IEC 269-3		
	gII	gI	aM
0.10	–	–	–
0.14	–	–	–
0.25	–	–	–
0.34	–	–	–
0.50	12	10	8
0.75	16	12	12
1.00	25	20	16
1.50	32	25	20
2.50	40	40	32
4.00	50	50	40
6.00	80	80	63
10.00	100	100	100

Insulation Coordination (Clearance and Creepage Distances)
For electrical equipment in low-voltage installations (< 1kV), DIN EN 60664 (DIN VDE 0110) describes the procedure for measuring the isolating clearance and creepage distances. The standard defines the minimum clearances (minimum distance between live parts in air) and minimum creepage distances (minimum distance between live parts along an insulating surface) to prevent electrical arcing. Minimum creepage distances depend on insulation material and degree of pollution.

Pollution degree
The degree of pollution (value 1 to 4) states the amount of pollution (solid, liquid or gaseous foreign bodies) in which the dielectric strength and/or surface resistance are reduced. For industrial applications degree of pollution 3 typical: conductive or dry, non-conductive pollution is present. This becomes conductive due to expected condensation.

Mechanical lifespan
States the number of mating cycles (mechanical plugging and removal of a connector), in which the wear of contact surfaces and thus the increase of the contact resistance does not occur.

Cable structure

Cable structure data
Only the maximum single wire diameter for the particular cable and the assigned maximum permissible electrical resistance cross section are specified in the VDE standard 0295. Other cable cross sections and designs on request.

Cable cross section [mm]	Cable from bare or tinned copper wire – number of wires × diameter [mm] – VDE 0295			
	solid Class 1 Column 2	stranded Class 2 Column 1	fine wire[1] Class 5	extra fine wire[1] Class 6
0.10			14 × 0.10 26 × 0.07	50 × 0.05
0.14			18 × 0.10 36 × 0.07	72 × 0.05
0.25			14 × 0.15 32 × 0.10 65 × 0.07	128 × 0.05
0.34		7 × 0.25	19 × 0.15 43 × 0.10 88 × 0.07	180 × 0.05
0.50	1 × 0.80	7 × 0.30	16 × 0.20 28 × 0.15 63 × 0.10 129 × 0.07	258 × 0.05
0.75	1 × 1.00	7 × 0.37	24 × 0.20 42 × 0.15 95 × 0.10 196 × 0.07	384 × 0.05
1.00	1 × 1.13	7 × 0.43	32 × 0.20 56 × 0.15 127 × 0.10 258 × 0.07	512 × 0.05
1.50	1 × 1.38	7 × 0.52	30 × 0.25 84 × 0.15 191 × 0.10 385 × 0.07	768 × 0.05
2.50	1 × 1.78	7 × 0.67	50 × 0.25 140 × 0.15 320 × 0.10 651 × 0.07	1281 × 0.05
4.00	1 × 2.26	7 × 0.85	56 × 0.30 224 × 0.15 512 × 0.10 1036 × 0.07	
6.00	1 × 2.77	7 × 1.05	84 × 0.30 192 × 0.20 765 × 0.10 1561 × 0.07	
10.00	1 × 3.57	7 × 1.35	80 × 0.40 320 × 0.20 1275 × 0.10	

[1] The number of wires in fine wire and extra fine wire conductor designs are preferred numbers.

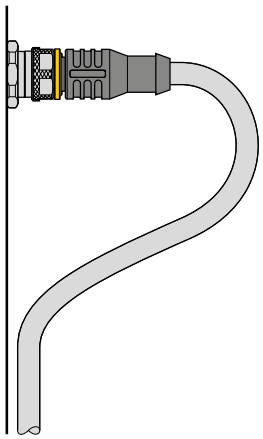
Conversion: US cable designations AWG in mm²
IAWG (American Wire Gauge) cables are used in some industrial areas. The following table is used for the conversion from AWG to mm². Cables with the same AWG number and a different cable structure have slightly different cross sections!

AWG	Conductor design [mm]	Conductor diameter [mm]	Conductor cross section [mm²]
30	1 × 0.25 7 × 0.10	0.25 0.36	0.05 0.06
28	1 × 0.32 7 × 0.13	0.32 0.38	0.08 0.09
26	1 × 0.4 7 × 0.16 19 × 0.10	0.40 0.48 0.51	0.13 0.14 0.15
24	1 × 0.51 17 × 0.20 19 × 0.13	0.51 0.61 0.64	0.21 0.22 0.25
22	1 × 0.64 7 × 0.25 19 × 0.16	0.64 0.76 0.81	0.33 0.34 0.38
20	1 × 0.81 7 × 0.32 19 × 0.20	0.81 0.97 1.02	0.52 0.56 0.60
18	1 × 1.02 19 × 0.25	1.02 1.27	0.82 0.93
16	19 × 0.29	1.44	1.25
14	19 × 0.36	1.80	1.93
12	19 × 0.46	2.29	3.16
10	37 × 0.40	3.10	4.65

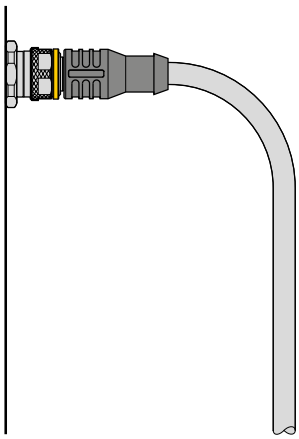
Mounting

Wiring Instructions

Use of fixed cable
Minimum 5 x cable diameter

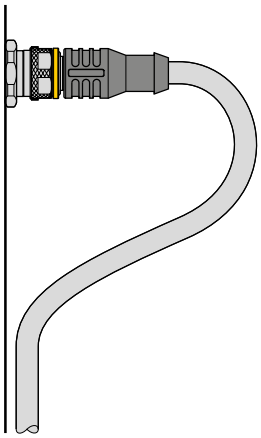


Use of free cable
Minimum 10 x cable diameter

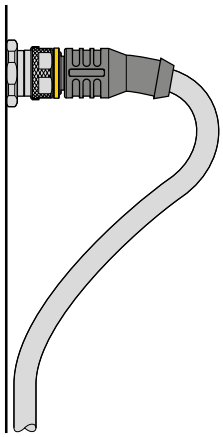


Bending radius of cable

Bending radius correct:

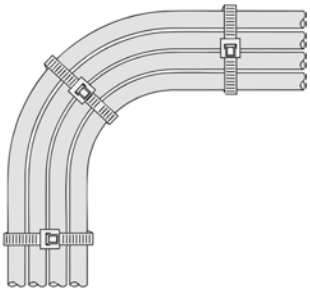


Bending radius incorrect:

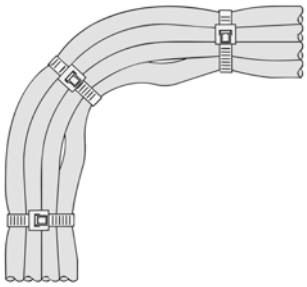


Bundling of multiple cables

Bundling correct:

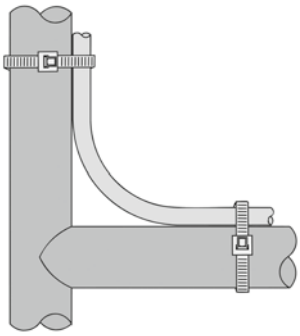


Bundling incorrect:

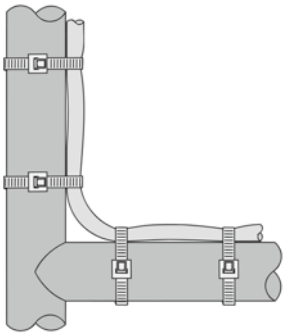


Fixed cabling

Fixed cable correct:



Fixed cable incorrect:



Note: The properties guaranteed by the manufacturer with regard to the correctly sealed and reliable electrical connection require the correct mounting of connectors and proper connection of cables. The use of a torque wrench is recommended for tightening and loosening round connectors.

Tightening torques:
- 0.4…0.6 Nm for M8 × 1 round connectors
- 0.8…1.0 Nm for M12 × 1 round connectors

To prevent damage to connectors and cables, the minimum bending radius (rmin) of the cable must be observed during wiring.
To avoid short circuits, cable breaks or a reduction in dielectric strength, cable ties used for bundling cables or fixed

wiring must not cut or deform the cable. A sufficient cable length between the terminals of cables must be observed in order to absorb the applied energy during movement.
The use of cable loops, spiral cables or cable carriers guarantees the greater lifespan of the connector system.

Material Information

The connectors described in the catalog consist of two material groups:
- Metals for contacts and housings
- Plastics for connector inserts and housings

Materials for Contacts
The properties of the contacts are largely determined by the materials used. Key features include
- Strength and spring properties
- Electrical conductivity
- Max. operating temperature

In line with these requirements, Turck uses tried and tested copper alloys for the manufacture of contacts (CuZn).
CuZn combines optimum strength with conductivity and temperature resistance.

Materials for Metal Housings
Brass, die-cast zinc or stainless steel housings are used depending on the application area.
Brass is primarily used for round housing components due its easy machining properties and strength.

Plastics for Connector Inserts
Thermoplastic polyurethane is primarily used for connector inserts and contact carriers on Turck connectors.

Surface Treatment
The surfaces of contacts and housings are optimally designed for protection against corrosive environmental influences and to improve conductivity. The contacts are gold-plated or silver-plated and thus highly conductive and resistant to corrosion.

For applications in the mA range as well as for extra low voltages, the use of gold-plated contacts is recommended in order to improve the electrical properties and increase corrosion resistance. Housings are nickel-plated, chrome-plated, PTFE coated or made from stainless steel for improved corrosion resistance and visual appearance.

Materials for Seals
To ensure the required protection types all Turck round connectors are fitted with elastomer seal rings. Depending on the application area, these are nitrile butadiene rubber (NBR) or flouro rubber (FPM, Viton).

Plastics for Housings
Glass fiber reinforced polyamide PA (polyamide) is primarily used for plastic housings. This long-proven plastic is very tough, abrasion-resistant, resistant to solvents, oils and fats and can be used up to continuous temperatures of +100 °C…+120 °C. Other benefits of this material are:
- high mechanical strength
- high rigidity
- high thermal resistance
- good electrical insulation properties
- good resistance to some chemicals

Characteristics of Materials Used
Surfaces

Material	Symbol	Conductivity [mm/Ω × mm²]	Tensile strength [N/mm²]	Limit temperature [°C]	Corrosion resistance
Gold	Au	44	–	–	very good
Silver	Ag	62	–	–	good
Nickel	Ni	10	–	–	very good

Surfaces Basic material

Material	Symbol	Conductivity [mm/Ω × mm²]	Tensile strength [N/mm²]	Limit temperature [°C]	Corrosion resistance
Copper	Cu	55	approx. 400	90	limited resistance, surface treatment recommended
Brass	CuZn	15	approx. 500	90	limited resistance, surface treatment recommended
Tin bronze	CuSn	9	approx. 700	120	good
Die-cast zinc	GD-Zn	16	approx. 300	–	no resistance, surface treatment required

Chemical resistance of plastics and elastomers used

		Thermoplastic polyurethane (TPU)	Polyamide (PA)	Nitrile butadiene rubber (NBR)	Flouro rubber (FPM)
Hydrocarbons					
Gasoline, normal		+	+	+	+
Heating oil, diesel oil		+	+	+	+
Benzene		–	+	–	+
Naphthalene		–	+	+	+
Alcohols					
Ethyl alcohol			○	+	+
Isopropanol		○	○	+	+
Glycol		+	–	+	+
Glycerine		+	+	+	○
Ketone		–	+	–	–
Acetone		–	+	–	–
Acids					
Hydrochloric acid	20 %	+ 3 %	–	○	+
Nitric acid	10 %	+ 3 %	–	○	+
Phosphoric acid	30 %	+ 3 %	–	+	+
Sulphuric acid	30 %	+ 3 %	–	+	+
Citric acid		+ 3 %	+	+	+
Lactic acid	10 %	+ 3 %	+	○	+
Acetic acid	10 %	+ 3 %	○	+	+
Bases					
Soda lye	10 %	+ 3 %	+	○	○
Ammonia solution, diluted		+ 3 %	+	+	+
Oils, lubricants					
Mineral oils		+	+	+	○
ASTM oil 1		+	–	–	–
ASTM oil 2		+	–	–	–
ASTM oil 3		+	–	–	–
Hydraulic oils		+	+	–	–
Detergents					
Washing agents		–	+	+	+
Detergents		–	+	+	+
Sea water		+	+	+	+

+ resistant ○ conditionally resistant – not resistant

Cable qualities

Chemical resistance of the outer jacket

Outer jacket Chemical	Soft PVC	PUR elastomer
+ + resistant + largely resistant ○ conditionally resistant – not resistant		
Acetone	–	–
Aluminum chloride 10 %	+ +	+
Formic acid	–	–
Ammoniac	○	
Ammonium chloride	+ +	+
Aniline	–	–
ASTM oil I	+ +	+ +
ASTM oil II	+ +	+ +
ASTM oil III	+ +	+ +
ASTM fuel no. 1	+ +	+ +
ASTM fuel II	+	○
ASTM fuel III	+	○
Benzene	–	–
Brake fluid ATE	+	
Butanol	–	–
Butyl acetate	–	–
Calcium chloride 40 %	+ +	+
Chlorobenzene	–	–
Chloroform	–	–
Chromic acid	–	–
Cyclohexane	–	○
Cyclohexanone	–	–
Diesel oil	–	+
Dimethyl formamide	–	–
Iron II chloride 10 %	+ +	+
Acetic acid 10 %	+	+
Ethanol	–	–
Ethyl ether	–	○
Ethyl acetate	–	○
Ethylene chloride	–	+
Freon 12	+	○
Freon 22	+	○
Gear oil SAE90	+	–
Glycerine	+ +	+ +

Outer jacket Chemical	Soft PVC	PUR elastomer
+ + resistant + largely resistant ○ conditionally resistant – not resistant		
Glycol	○	+ +
Isopropanol	–	○
Lye 10 %	+ +	+ +
Potassium dichromate	+ +	+ +
Potassium nitrate	+ +	+ +
Potassium permanganate	○	–
Magnesium chloride 30 %	+ +	+
Methanol	–	○
Methyl acetate	–	–
Methylene chloride	–	–
Methyl ethyl ketone	–	○
Methyl glycol	–	–
Methyl glycol acetate	–	–
Lactic acid 10 %	+ +	○
Sodium chloride 10 %	+ +	+
Sodium hypochlorite solution	○	+ +
Soda lye 10 %	+ +	+ +
Ozone	+ +	+ +
Perchloroethylene	+ +	–
Petrol ether	–	+ +
Petroleum	–	+
Phosphoric acid	+ +	–
Nitric acid	–	–
Hydrochloric acid	+ +	+ +
Carbon disulfide	–	–
Sulphuric acid 30 %	+ +	+ +
Tetrachloroethylene	–	–
Carbon tetrachloride	–	–
Tetrahydrofuran	–	–
Trichloroethylene	–	–
Hydrogen peroxide 3 %	+ +	+ +
Xylene	–	–

The suitability for certain applications must always be examined through appropriate testing by the user. The specified chemical resistance is only applicable in non-pressurized storage and unless otherwise stated, at room temperature.

Cables – Application and Features

	Food and Beverage			PUR, free of halogen		
	TFG	**TFE**	**TFW**	**TXL**	**TXG**	**TXO**
						
Machine and plant building	+	+	+	++++	++++	++++
Automotive industry	+	+	+	++++	++++	++++
Robot applications	+	+	+	++++	++++	++++
Food industry	++++	++++	++++	+	+	+
Packaging machines	++++	++++	++++	+	+	+
Jacket material	TPE	PVC	TPE	PUR	PUR	PUR
Jacket color	Gray (GY)	GY	White (WH)	BK	GY	OR
Conductor insulation	PP	PVC	PP	PP	PP	PP
IP67	**yes**	**yes**	**yes**	**yes**	**yes**	**yes**
IP69K	yes	yes	yes	yes	yes	yes
ecolab	yes	yes	yes	–	–	–
FDA	yes	–	yes	–	–	–
Temperature range						
…at rest [°C]	-40…105	-25…105	-40…105	-50…80	-50…80	-50…80
…in motion [°C]	-25…105	-25…105	-25…105	-25…80	-25…80	-25…80
…in drag chain operation [°C]	-25…60	–	–	-25…60	-25…60	-25…60
Shielded versions	**–**	**–**	optional	optional	optional	optional
Free of halogen, silicone, PVC	–	–	–	yes	yes	yes
Qualified for drag chain use	+++	–	–	++++	++++	++++
Torsion resistant	–	–	–	++++	++++	++++
Flame-retardant	–	yes	–	++++	++++	++++
Resistant to welding sparks	–	–	–	++++	++++	++++
Resistant to chemicals (detergents)	++++	++++	++++	+	+	+
Oil-resistant	+	+	+	++++	++++	++++
Resistant to acids/alkaline solutions	++	++++	++++	+	+	+
Resistant to sea water	++++	++++	++++	++++	++++	++++
UV and ozone resistant	++++	++	++++	++++	+++	+++
Resistant to hydrolysis	++++	++	++++	++++	++++	++++
Microbe resistant	++++	++	++++	++++	++++	++++
Directives/approvals						
cULus	–	–	–	AWM STYLE 20549 80C 300V UL# OR AWM I/II A/B 80C 300V FT2		
RoHS/Reach compliant	yes	yes	yes	yes	yes	yes

++++ very good +++ very good to good ++ good + conditionally resistant

				PVC			
	TXY	**TXB**	**TXN**	TEL	TEG	TEY	TEB
							
	++++	++++	++++	++++	++++	++++	++++
	++++	++++	++++	++	++	++	++
	++++	++++	++++	+	+	+	+
	+	+	+	++++	++++	++++	++++
	+	+	+	++++	++++	++++	++++
	PUR	PUR	PUR	PVC	PVC	PVC	PVC
	YE	BU	GN	BK	GY	YE	BU
	PP	PP	PP	PVC	PVC	PVC	PVC
	yes	**yes**	**yes**	**yes**	**yes**	**yes**	**yes**
	yes	yes	yes	yes	yes	yes	yes
	–	–	–	–	–	–	–
	–	–	–	–	–	–	–
	-50…80	-50…80	-50…80	-40…105	-40…105	-40…105	-40…105
	-25…80	-25…80	-25…80	-30…80	-30…80	-30…80	-30…80
	-25…60	-25…60	-25…60	–	–	–	–
	optional	optional	optional	optional	optional	optional	optional
	yes	yes	yes	–	–	–	–
	++++	++++	++++	–	–	–	–
	++++	++++	++++	–	–	–	–
	++++	++++	++++	++++	++++	++++	++++
	++++	++++	++++	+	+	+	+
	+	+	+	++	++	++	++
	++++	++++	++++	++	++	++	++
	+	+	+	++++	++++	++++	++++
	++++	++++	++++	++	++	++	++
	+++	+++	+++	+	+	+	+
	++++	++++	++++	++	++	++	++
	++++	++++	++++	++	++	++	++
	AWM STYLE 20549 80C 300V UL# OR AWM I/II A/B 80C 300V FT2			AWM STYLE 2517 105C 300V UL# OR AWM I/II A/B 105C 300V FT1			
	yes	yes	yes	yes	yes	yes	yes

Fieldbus Cables – Application and Features

	PROFIBUS-DP			
	451	**451B**	**452**	**458**
				
Machine and plant building	++++	++++	++++	++++
Automotive industry	++++	++++	++++	++++
Robot applications	++	++	++	++
Food industry	+	+	+	+
Packaging machines	+	+	+	+
Jacket material	PUR	PUR	PVC	PUR
Jacket color	VT	BU	VT	VT
Conductor insulation	PP	PP	PVC	PP
IP67	yes	yes	yes	yes
IP69K	–	–	–	–
ecolab	–	–	–	–
FDA	–	–	–	–
Temperature range				
…at rest [°C]	-40…+80	-40…+80	-40…+100	-40…+100
…in motion [°C]	0…+80	0…+80	-30…+80	-30…+80
…in drag chain operation [°C]	0…+60	0…+60	–	0…+60
Shielded versions	shielded	shielded	shielded	shielded
Free of halogen, silicone, PVC	yes	yes	–	yes
Qualified for drag chain use	+++	+++	–	++++
Torsion resistant	++	++	–	+++
Flame-retardant	++++	++++	++++	++++
Resistant to welding sparks	++	++	+	++
Resistant to chemicals (detergents)	+	+	++	+
Oil-resistant	++++	++++	++	++++
Resistant to acids/alkaline solutions	+	+	+	+
Resistant to sea water	++++	++++	++	++++
UV and ozone resistant	+++	+++	+	+++
Resistant to hydrolysis	++++	++++	++	++++
Microbe resistant	++++	++++	++	++++
Directives/approvals				
cULus	yes	yes	–	AWM20233
RoHS/Reach compliant	yes	yes	yes	yes

++++ very good +++ very good to good ++ good + conditionally resistant

	DeviceNet™/CANopen			Ethernet			
	Thin Cable 5701	Thin Cable 572	Thick Cable 5723	4414	4416	441	841
							
	++++	++++	++++	++++	++++	++++	++++
	++++	++++	++++	++++	++++	++++	++++
	++	++	++	++	++	++	++
	+	+	+	+	+	+	+
	+	+	+	+	+	+	+
	PUR	PVC	PVC	PUR	PUR	PVC	PVC
	SW	GY	GY	GN	GN	GN	GN
	PP	PP	PP	PP	PP	PP	PP
	yes	yes	yes	yes	yes	yes	yes
	yes	yes	yes	yes	yes	yes	yes
	–	–	–	–	–	–	–
	–	–	–	–	–	–	–
	-40…+80	-40…+100	-40…+100	-40…+100	-40…+100	-40…+100	-40…+100
	0…+80	-30…+80	-30…+80	-30…+80	-30…+80	-30…+80	-30…+80
	0…+60	-	-	-	-	-	-
	shielded	shielded	shielded	shielded	shielded	shielded	shielded
	yes	–	–	yes	yes	yes	–
	+++	–	++++	+++	+++	+++	–
	++	–	++++	++	++	++	–
	++++	++++	++++	++++	++++	++++	++++
	++	+	+	++	++	++	+
	+	++	++	+	+	+	++
	++++	++	++	++++	++++	++++	++
	+	+	+	+	+	+	+
	++++	++	++	++++	++++	++++	++
	+++	+	+	+++	+++	+++	+
	++++	++	++	++++	++++	++++	++
	++++	++	++	++++	++++	++++	++
	yes	AWM 246475°C 300V		yes	yes	AWM75°C 300V	
	yes	yes	yes	yes	yes	yes	yes

Contact Assignments and Color Codes

Number of pins	Note	Contacts/Wires 1	2	3	4	5	6	7	8
3	Actuator-sensor cable	BN		BU	BK				
4	Actuator-sensor cable	BN	WH	BU	BK				
5	Actuator-sensor cable	BN	WH	BU	BK	GNYE			
5	Power cable	BK1	BK2	BK3	BK4	GNYE			
5	Type 4.5	BN	WH	BU	BK	GY			
8	DIN EN 60947-5-2	BN	WH	BU	BK	GY	PK	VT	OG[1]
8	DIN 47100[2]	WH	BN	GN	YE	GY	PK	BU	RD
12	DIN EN 60947-5-2	BN	WH	BU	BK	GY	PK	VT	OG[1]
12	DIN 47100[2]	BN	BU	WH	GN	PK	YE	BK	GY
14	Multicore cables	VT	RD	GY	GN	BK	WH	PK	YE
19	e.g. passive boxes	VT	RD	GY	GN	BK	WH	PK	YE

1 alternatively GNYE, if PE required

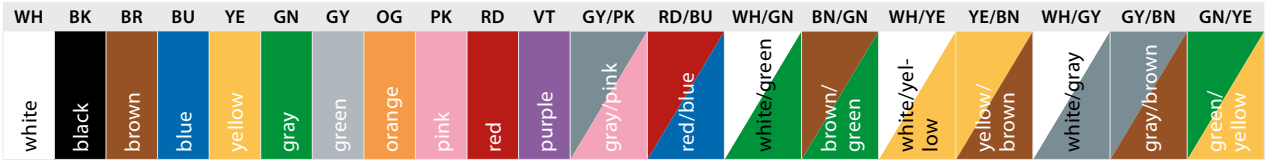
2 The DIN 47100 telecommunications standard is no longer used in automation

Number of pins	Note	Contacts/Wires 1	2	3	4	5	6	7	8
PROFINET									
4	M12, D-coded	YE	WH	OG	BU				
8	RJ45	YE	OG	WH	n.c.	n.c.	BU	n.c.	n.c.
EtherNet/IP									
4	M12, A-coded	WH/OG	WH/BU	OG	BU				
8	RJ45	WH/OG	OG	WH/BU	n.c.	n.c.	BU	n.c.	n.c.
Industrial Ethernet									
8	M12	WH/BU	WH/BN	BN	OG	WH/GN	WH/OG	BU	GN
8	M12, X-coded	WH/OG	OG	WH/GN	BU	WH/BU	GN	WH/BN	BN

Number of pins	Note	Contacts/Wires 1	2	3	4	5
PROFIBUS-DP						
5	M12, B-coded	n.c.	GN	n.c.	RD	n.c.
DeviceNet™						
5	7/8″	Drain wire	RD	BK	WH	BU
5	M12	Drain wire	RD	BK	WH	BU

9	10	11	12	13	14	15	16	17	18	19
GY/PK	WH/BU	WH/GY	GY/BN							
RD	VT	GY/PK	RD/BU							
RD/BU	GY/PK	WH/GN	WH/YE	WH/GY	YE/BN					
RD/BU	GY/PK	WH/GN	WH/YE	WH/GY	YE/BN	BN/GN	GY/BN	BN	BU	GN/YE

Number of pins	Note	Contacts/Wires 1	2	3	4
PROFIBUS-PA					
4	7/8″	BN	n.c.	BU	Drain wire
4	M12, A-coded	BN	n.c.	BU	Drain wire
Foundation Fieldbus					
4	7/8″	BU	BN	Drain wire	n.c.
4	M12, A-coded	BU	BN	Drain wire	n.c.



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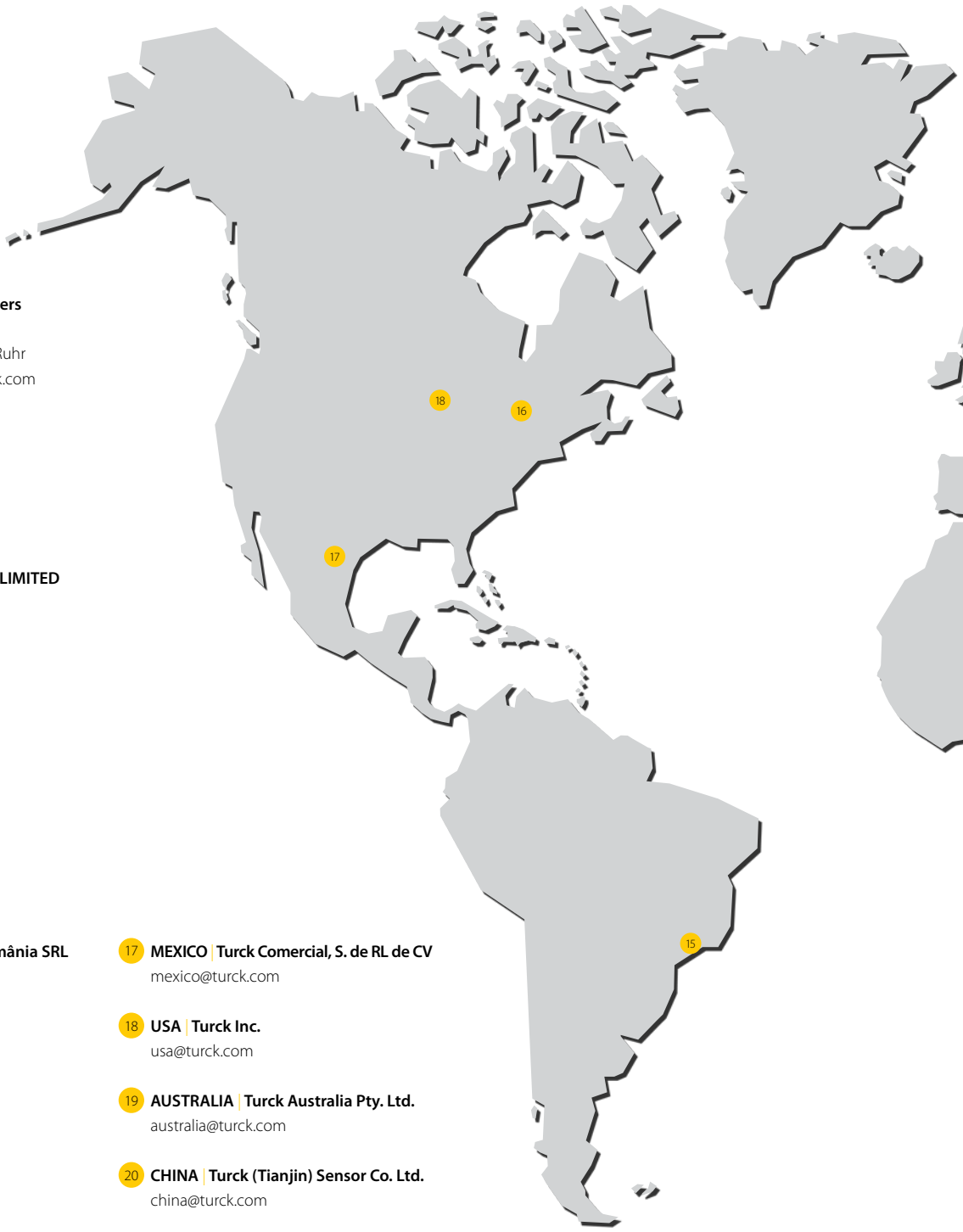

1 **GERMANY | Corporate Headquarters**
Hans Turck GmbH & Co. KG
Witzlebenstraße 7, Mülheim an der Ruhr
Telefon +49 208 4952-0, more@turck.com

2 **BELGIUM | Turck Multiprox N. V.**
mail@multiprox.be

3 **FRANCE | Turck Banner S. A. S.**
info@turckbanner.fr

4 **UNITED KINGDOM | Turck Banner LIMITED**
enquiries@turckbanner.com

5 **ITALY | Turck Banner S. r. l.**
info@turckbanner.it

6 **NETHERLANDS | Turck B. V.**
netherlands@turck.com

7 **AUSTRIA | Turck GmbH**
austria@turck.com

8 **POLAND | Turck sp. z o. o.**
poland@turck.com

9 **ROMANIA | Turck Automation România SRL**
romania@turck.com

10 **RUSSIA | O. O. O. Turck Rus**
russia@turck.com

11 **SWITZERLAND | Bachofen AG**
info@bachofen.ch

12 **CZECH REPUBLIC | Turck s. r. o.**
czech@turck.com

13 **TURKEY | Turck Otomasyon Tic. Ltd. Şti.**
turkey@turck.com

14 **HUNGARY | Turck Hungary Kft.**
hungary@turck.com

15 **BRAZIL | Turck do Brasil Ltda.**
brazil@turck.com

16 **CANADA | Turck Chartwell Canada Inc.**
sales@chartwell.ca

17 **MEXICO | Turck Comercial, S. de RL de CV**
mexico@turck.com

18 **USA | Turck Inc.**
usa@turck.com

19 **AUSTRALIA | Turck Australia Pty. Ltd.**
australia@turck.com

20 **CHINA | Turck (Tianjin) Sensor Co. Ltd.**
china@turck.com

21 **INDIA | Turck India Automation Pvt. Ltd.**
india@turck.com

22 **JAPAN | Turck Japan Office**
japan@turck.com

23 **KOREA | Turck Korea Co. Ltd.**
korea@turck.com

24 **SINGAPORE | Turck Singapore Pte. Ltd.**
singapore@turck.com


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