8BCM0010.1625B-0

1 General information

- UL/CSA listed
- Can be used in cable drag chains
- Assembled specifically for use with ACOPOSmulti drive systems and B&R servo motors with motor connector size 1.5
- Pre-assembled power line connections on the servo side with M8 ring terminal ends
- Integrated shield plate

Information:

A shield plate is attached to ACOPOSmulti 8BCM motor cables. If this shield plate is correctly installed on the respective ACOPOSmulti 8BVI inverter module, no additional shielding measures are necessary.

2 Order data

Order number	Short description	Figure
	16 mm² motor cables with ring terminal ends	
8BCM0010.1625B-0	ACOPOSmulti motor cable, length 10 m, 4x 16 mm² + 2x (2x 1.5 mm²), 8-pin female speedtec motor connector size 1.5, integrated shield plate, M8 ring terminal ends on the servo side, can be used in cable drag chains	

Table 1: 8BCM0010.1625B-0 - Order data

3 Technical data

Order number	8BCM0010.1625B-0
General information	
Note	Pre-assembled power line connections on the servo side with M8 ring terminal ends
Cable cross section	4 x 16 mm² + 2x (2 x 1.5 mm²)
Durability	Hydrolysis resistance per EN 50396 Halogen-free per EN 60754-1 PWIS per VW PV 3.10.7 Oil resistance per EN 60811-404 Flame propagation per EN 60332-1-2
Certification	UL AWM STYLE 20234, 80°C, 1000 V, E63216 and CSA AWM I/II A/B, 90°C, 1000 V, FT1 LL46064 [1)]
Certifications	
CE	Yes
UKCA	Yes
UL	cULus E225616 Power conversion equipment
EAC	Yes
Cable construction	
Power lines	
Quantity	4
Wire insulation	PP
Wire colors	Green/Yellow, Black, labeled in white U/L1/C/L+, V/L2, W/L3/D/L-
Variant	Copper stranded wire
Cross section	16 mm²
Shield	No
Stranding	No

Table 2: 8BCM0010.1625B-0 - Technical data

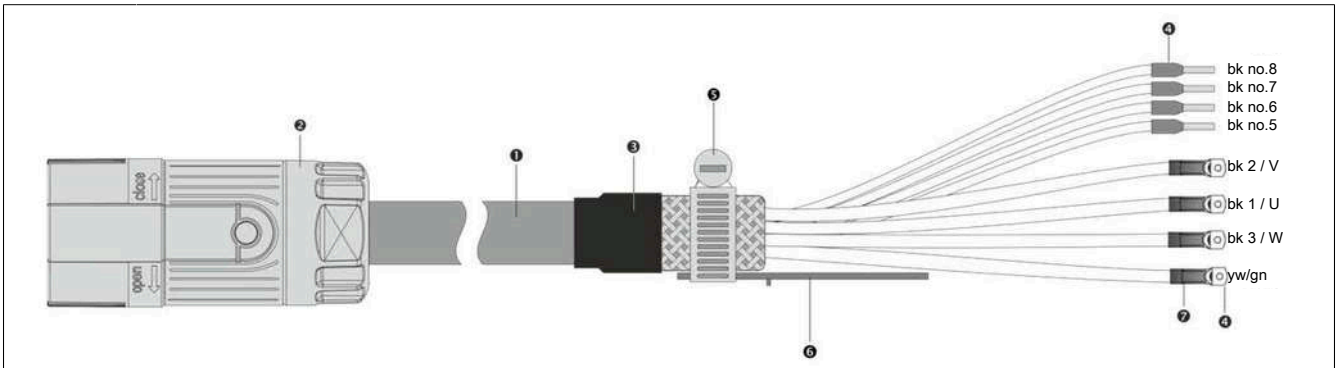
Order number	8BCM0010.1625B-0
Signal line	
Quantity	4
Wire insulation	PP
Wire colors	Black, labeled in white 5, 6, 7, 8
Variant	Copper stranded wire
Cross section	4x 1.5 mm²
Shield	Shielded in pairs, tinned copper braiding, optical coverage approx. 85%
Stranding	No. 5+6, no. 7+8
Cable stranding	With filler elements and foil shield
Cable shield	Tinned copper braiding, optical coverage approx. 85%
Outer jacket	
Material	PUR
Color	Orange, similar to RAL 2003 flat
Labeling	B&R 4x16.0 + 1x2x0.75 + 1x2x1.5 FLEX (UL) AWM STYLE 20234 80°C 1000 V E63216 CSA AWM I/II A/B 90°C 1000 V FT1 LL46064 1)
Connector	
Type	Intercontec 8-pin female motor connector, size 1.5
Mating cycles	<500
Contacts	8 (4 power and 4 signal contacts)
Degree of protection per EN 60529	IP66/67 when connected
Electrical properties 1)	
Operating voltage	Max. 1000 VAC (UL)
Test voltage	
Wire - Wire	4 kV
Wire - Shield	4 kV
Conductor resistance	
Power lines	16 mm²: ≤1.21 Ω/km
Signal line	1.5 mm²: ≤13.3 Ω/km
Insulation resistance	≥500 MΩ*km
Current-carrying capacity per DIN VDE 0298 part 4, table 11	
Wall mounting	87.36 A
Installed in conduit or cable duct	72.8 A
Installed in cable tray	91.00 A
Max. current-carrying capacity per IEC 60364-5-52 (cable) and IEC 60512 (connector) 2)	68 A 3)
Ambient conditions 1)	
Temperature	
Storage	-30°C to +90°C
Transport	-30°C to +90°C
Moving	-30°C to +90°C
Static	-50°C to +90°C
Mechanical properties 1)	
Dimensions	
Length	10 m
Diameter	23.6 mm ±0.4 mm
Bend radius	
Single bend	≥96 mm
Moving	≥180 mm
Drag chain data	
Acceleration	50 m/s² up to 3 m travel path 15 m/s² up to 10 m travel path 5 m/s² up to 20 m travel path
Flex cycles 4)	>10,000,000
Velocity	≤5 m/s
Weight	10.86 kg

Table 2: 8BCM0010.1625B-0 - Technical data

1) Values refer to the raw cable being used.
2) Rated current at 40°C. Use at higher temperatures is possible with derating.
3) It is recommended to leave a reserve of 15%.
4) With a bend radius of 180 mm.

4 Wiring

Construction



Pos.	Description	Note
1	Motor line	4x 16 mm² + 2x (2x 1.5 mm²)
2	8-pin female circular connector	
3	Heat shrink tubing	
4	Wire end sleeves Ring terminal end	
5	Cable clamp	
6	Shield plate	
7	Heat shrink tubing	

Table 3: 8BCMxxxx.1625B-0 motor cables - Construction

Pinout

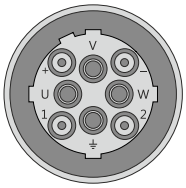
Circular connector	Pin	Description	Function
	U	U	Motor connection U
	⏚	PE	Protective ground conductor
	W	W	Motor connection W
	V	V	Motor connection V
	1	T+	Temperature +
	2	T-	Temperature -
	+	B+	Brake +
	-	B-	Brake -

Table 4: 8BCMxxxx.1625B-0 motor cables - Pinout

Cable diagram

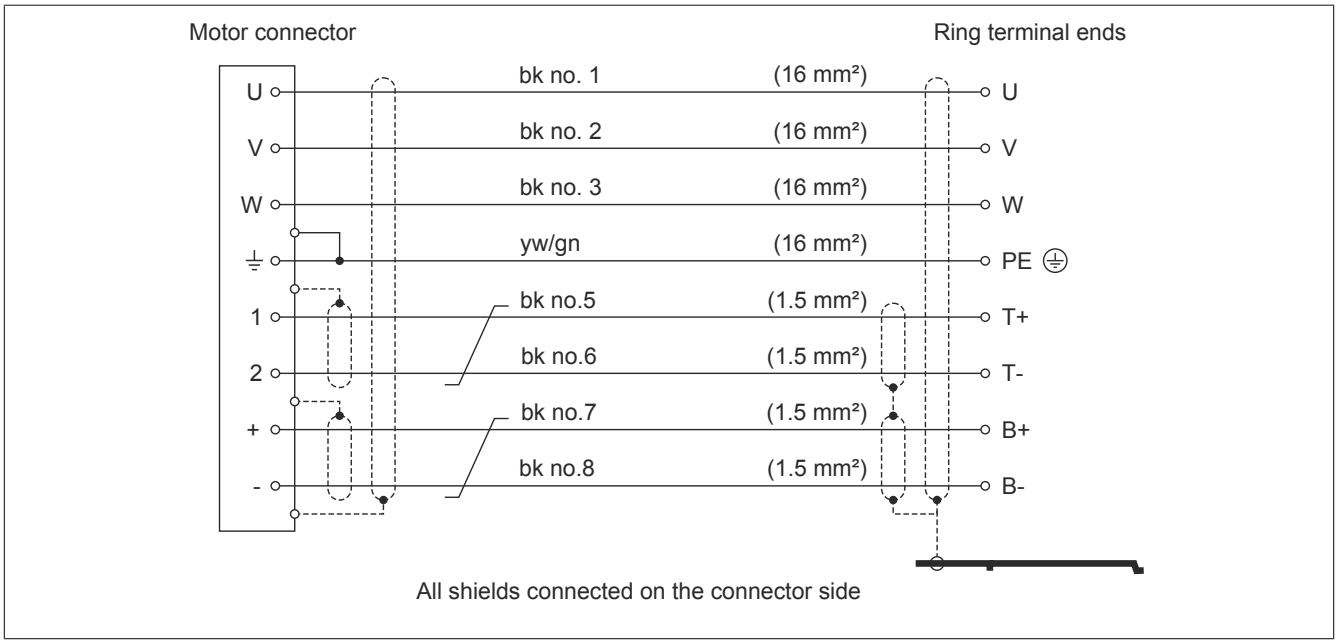


Figure 1: 8BCMxxxx.1625B-0 motor cables - Cable diagram