8BCF0001.12230-0

1 General information

- Can be used in cable drag chains
- Assembled specifically for 8BCFxxxx.1221B-0 EnDat 2.2 cables
- itec - Innovative connector system for secure connections

2 Order data

Order number	Short description	Figure
	EnDat 2.2 cables	
8BCF0001.12230-0	Cable extension for EnDat 2.2 cables with series 615 signal connector, length 1 m, can be used in cable drag chains	

Table 1: 8BCF0001.12230-0 - Order data

3 Technical data

Order number	8BCF0001.12230-0
General information	
Cable cross section	4x 0.14 mm² + 4x 0.35 mm²
Durability	Oil resistance per DIN EN 50363-10-2 (VDE 0207-363-10-2) as well as standard cleaning agents and hydraulic oil [1)]
Certification	UL AWM Style 20963, 80°C, 30 V, E63216 [1)]
Certifications	
CE	Yes
UKCA	Yes
Cable construction	
Supply lines	
Quantity	4
Wire insulation	Special thermoplastic material
Wire colors	White/Green, brown/green, blue, white
Variant	Tinned copper stranded wire
Cross section	0.35 mm²
Shield	No
Stranding	No
Signal line	
Quantity	4
Wire insulation	Polyolefin foam
Wire colors	Yellow, gray, pink, violet
Variant	Tinned copper stranded wire
Cross section	0.14 mm²
Shield	No
Stranding	All 4 wires together
Cable stranding	With terminating foil shield
Cable shield	Copper/Tin braiding, optical coverage ≥85%
Outer jacket	
Material	PUR
Color	Green flat
Labeling	B&R 4x0,14 + 4x0,35 FLEX (UL) AWM STYLE 20963 80°C 30 V E63216 [1)]
Connector	
Type	12-pin female series 615 signal connector
Mating cycles	<500
Contacts	12 (4 power supply and 4 signal contacts)
Additional connectors	12-pin male coupling Mating cycles: <500 Contacts: 12 Degree of protection per EN 60529: IP66/67 when connected
Degree of protection per EN 60529	IP66/67 when connected
Electrical properties [1)]	
Operating voltage	≤30 V
Test voltage	
Wire - Wire	1 kV
Wire - Shield	0.5 kV

Table 2: 8BCF0001.12230-0 - Technical data

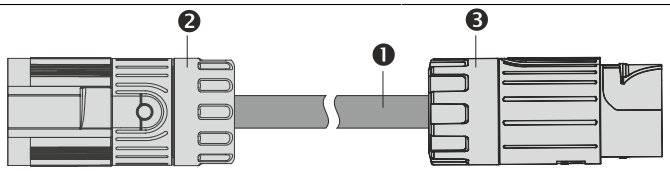
Order number	8BCF0001.12230-0
Conductor resistance	
Supply lines	≤55 Ω/km
Signal line	≤134 Ω/km
Insulation resistance	>200 MΩ*km
Ambient conditions [1]	
Temperature	
Moving	-20°C to +80°C
Static	-20°C to +80°C
Mechanical properties [1]	
Dimensions	
Length	1 m
Diameter	6 mm ±0.2 mm
Bend radius	
Single bend	≥19 mm
Moving	≥47 mm
Drag chain data	
Acceleration	≤6 g
Flex cycles [2]	≥3000000
Velocity	≤4 m/s
Weight	0.06 kg

Table 2: 8BCF0001.12230-0 - Technical data

1) Values refer to the raw cable being used.
2) Valid at an ambient temperature of 20°C and bend radius of 78 mm.

4 Wiring

4.1 Cable construction



Item	Description	Note
1	Encoder line	4x 0.14 mm² + 4x 0.35 mm²
2	12-pin female circular connector	
3	12-pin coupling	

Table 3: EnDat 2.2 8BCFxxxx.12230-0 - Cable construction

4.2 Pinout

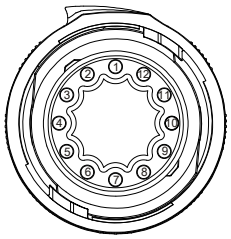
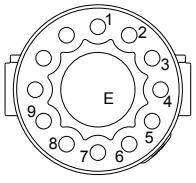
Circular connector	Pin	Description	Function	Pin	Coupling
	1	+12 V out	Encoder power supply +12 V	1	
	2	D	Data input	2	
	3	D\	Data inverted	3	
	4	T	Clock output	4	
	5	T\	Clock output inverted	5	
	6	Batt COM	Battery buffer 0 V	6	
	7	COM	Encoder power supply 0 V	7	
	8	---	Coding contact	8	
	9	---	---	9	
	10	---	---	10	
	11	---	---	11	
	12	VBatt	Backup battery power supply	12	

Table 4: EnDat 2.2 8BCFxxxx.12230-0 - Pinout

4.3 Cable diagram

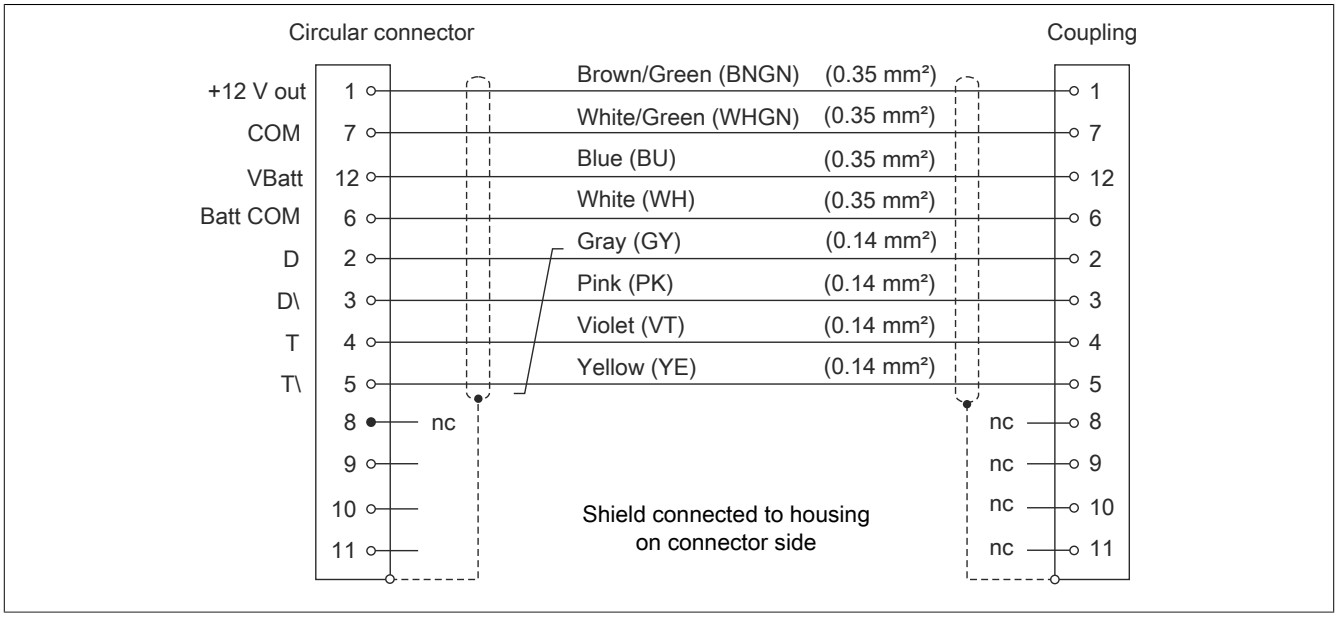


Figure 1: EnDat 2.2 BCFxxxx.12230-0 - Cable diagram