

# 8BCF0010.12230-0

## 1 General information

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

## 2 Order data


Model number	Short description	Figure
8BCF0010.12230-0	EnDat 2.2 cables Cable extension for EnDat 2.2 cables with springtec connector, length 10 m, can be used in cable drag chains	

Table 1: 8BCF0010.12230-0 - Order data

## 3 Technical data

Model number	8BCF0010.12230-0
<b>General information</b>	
Cable cross section	4x 0.14 mm <sup>2</sup> + 4x 0.35 mm <sup>2</sup>
Durability	Oil resistance per DIN EN 50363-10-2 (VDE 0207-363-10-2) as well as standard cleaning agents and hydraulic oil <sup>1)</sup>
Certification	UL AWM style 20963, 80°C, 30 V, E63216 <sup>1)</sup>
Certifications	
CE	Yes
<b>Cable construction</b>	
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 mm <sup>2</sup>
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 mm <sup>2</sup>
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 <sup>1)</sup>
<b>Connector</b>	
Type	12-pin female springtec circular connector
Mating cycles	<500
Contacts	12
Additional connectors	12-pin male coupling Connection cycles: <500 Contacts: 12 Degree of protection per EN 60529: IP66/67 when connected
Degree of protection per EN 60529	IP66/67 when connected
<b>Electrical properties <sup>1)</sup></b>	
Operating voltage	≤30 V
Test voltage	
Wire/Wire	1 kV
Wire/Shield	0.5 kV

Table 2: 8BCF0010.12230-0 - Technical data

Model number	8BCF0010.12230-0
Conductor resistance	
Supply lines	≤55 Ω/km
Signal line	≤134 Ω/km
Insulation resistance	>200 MΩ*km
<b>Ambient conditions <sup>1)</sup></b>	
Temperature	
Moving	-20°C to +80°C
Static	-20°C to +80°C
<b>Mechanical properties <sup>1)</sup></b>	
Dimensions	
Length	10 m
Diameter	6 mm ± 0.2 mm
Bend radius	
Single bend	≥19 mm
Moving	≥47 mm
Drag chain data	
Acceleration	≤6 g
Flex cycles <sup>2)</sup>	≥3,000,000
Speed	≤4 m/s
Weight	0.6 kg

Table 2: 8BCF0010.12230-0 - 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 mm <sup>2</sup> + 4x 0.35 mm <sup>2</sup>
2	12-pin female circular connector	
3	12-pin coupling	

Table 3: EnDat 2.2 with springtec connector - 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 with springtec connector - Pinout

### 4.3 Cable diagram

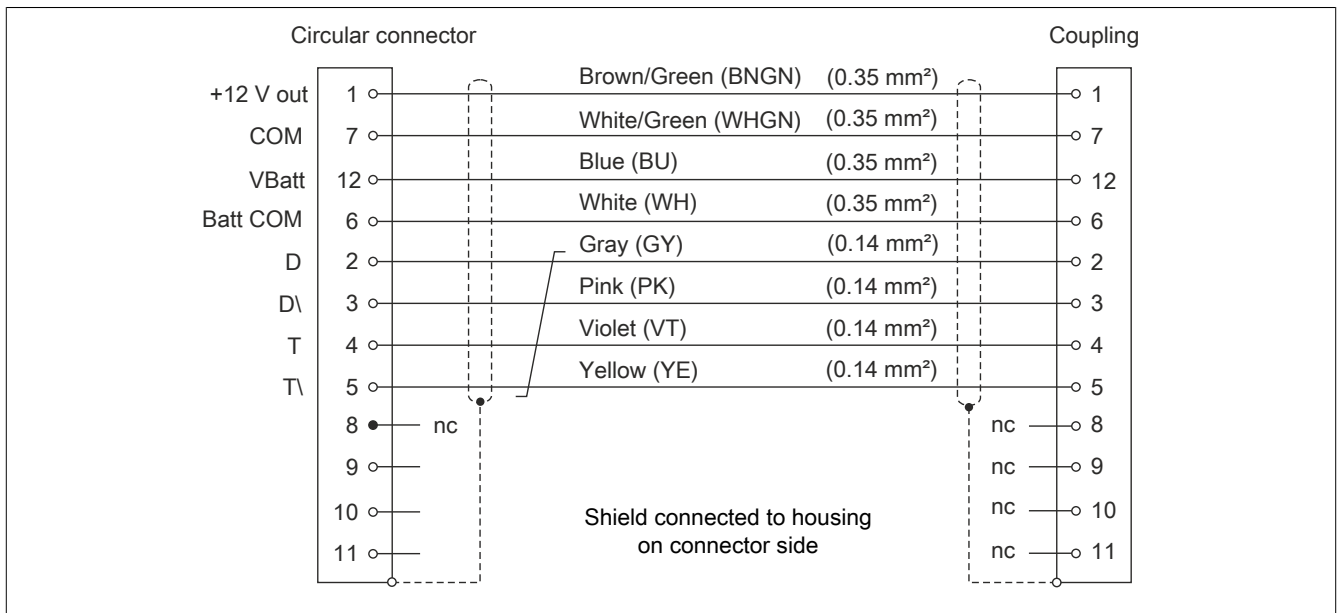


Figure 1: EnDat 2.2 with springtec connector - Cable diagram