8BCM0020.11140-0

1 General information

- Can be used in cable drag chains
- Assembled specifically for 8BCMxxxx.11140-0 / 8BCMxxxx.13140-0 motor cables
- speedtec - Innovative connector system for secure connections

2 Order data

Order number	Short description	Figure
	Motor cables 1.5 mm²	
8BCM0020.11140-0	Cable extension for 1.5 mm² motor cables with speedtec/standard connector size 1, length 20 m, can be used in cable drag chains	

Table 1: 8BCM0020.11140-0 - Order data

3 Technical data

Order number	8BCM0020.11140-0
General information	
Cable cross section	4x 1.5 mm² + 2x 2x 0.75 mm²
Durability	Oil resistance per HD 22.10 appendix A DIN EN 60811-404 [1)]
Certification	UL AWM style 20234, 80°C, 1000 V, E63216 and CSA AWM I/II A/B, 90°C, 1000 V, FT2 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	Black, brown, blue, yellow/green
Variant	Tinned copper stranded wire
Cross section	1.5 mm²
Shield	No
Stranding	No
Signal line	
Quantity	4
Wire insulation	PP
Wire colors	White, white/red, white/blue, white/green
Variant	Tinned copper stranded wire
Cross section	0.75 mm²
Shield	Individually shielded in pairs, tinned copper braiding, optical coverage >85% and foil shield
Stranding	White with white/red and white/blue with white/green
Cable stranding	With filler elements and foil shield
Cable shield	Tinned copper braiding, optical coverage >85% and foil shield
Outer jacket	
Material	TPU
Color	Orange, similar to RAL 2003 flat
Labeling	BERNECKER + RAINER 4x1,5+2x2x0,75 FLEX UL AWM STYLE 20234 80°C 1000 V E63216 CSA AWM I/II A/B 90°C 1000 V FT2 LL46064
Connector	
Type	8-pin female speedtec motor connector
Mating cycles	<500
Contacts	8 (4 power and 4 signal contacts)
Additional connectors	8-pin male coupling Mating cycles: <500 Contacts: 8 Degree of protection per EN 60529: IP66/67 when connected
Degree of protection per EN 60529	IP66/67 when connected

Table 2: 8BCM0020.11140-0 - Technical data

Order number	8BCM0020.11140-0
Electrical properties [1]	
Operating voltage	Max. 1000 VAC (UL)
Test voltage	
Wire - Wire	4 kV
Wire - Shield	4 kV
Conductor resistance	
Power lines	≤13.7 Ω/km
Signal line	≤26.7 Ω/km
Insulation resistance	≥500 MΩ*km
Current-carrying capacity per DIN VDE 0298 part 4, table 11	
Wall mounting	20 A
Installed in conduit or cable duct	17.8 A
Installed in cable tray	20.9 A
Ambient conditions [1]	
Temperature	
Moving	-20°C to +80°C
Static	-20°C to +90°C
Mechanical properties [1]	
Dimensions	
Length	20 m
Diameter	12.2 mm ±0.3 mm
Bend radius	
Single bend	>38 mm
Moving	>94 mm
Drag chain data	
Acceleration	Max. 50 m/s² (depends on the length of the travel path)
Flex cycles [2]	≥5,000,000
Velocity	Max. 300 m/min
Weight	2.9 kg

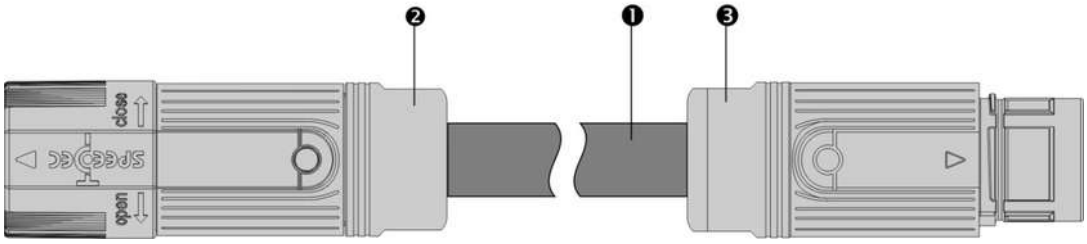
Table 2: 8BCM0020.11140-0 - Technical data

1) Values refer to the raw cable being used.
2) At an ambient temperature from -20°C to +60°C.

4 Wiring

4.1 Cable construction

Construction



Pos.	Description	Note
1	Motor line	4x 1.5 mm² + 2x 2x 0.75 mm² (8BCMxxxx.11140-0) 4x 4 mm² + 2x 0.75 mm² + 2x 1 mm² (8BCMxxxx.13140-0)
2	8-pin female circular connector	
3	8-pin male coupling	

Table 3: Cable construction

4.2 Pinout

Pinout

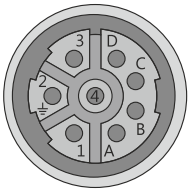
Circular connector	Pin	Description	Function	Coupling
	1	U	Motor connection U	
	4	V	Motor connection V	
	3	W	Motor connection W	
	2	PE	Protective ground conductor	
	A	T+	Temperature +	
	B	T-	Temperature -	
	C	B+	Brake +	
	D	B-	Brake -	

Table 4: Pinout

4.3 Cable diagram

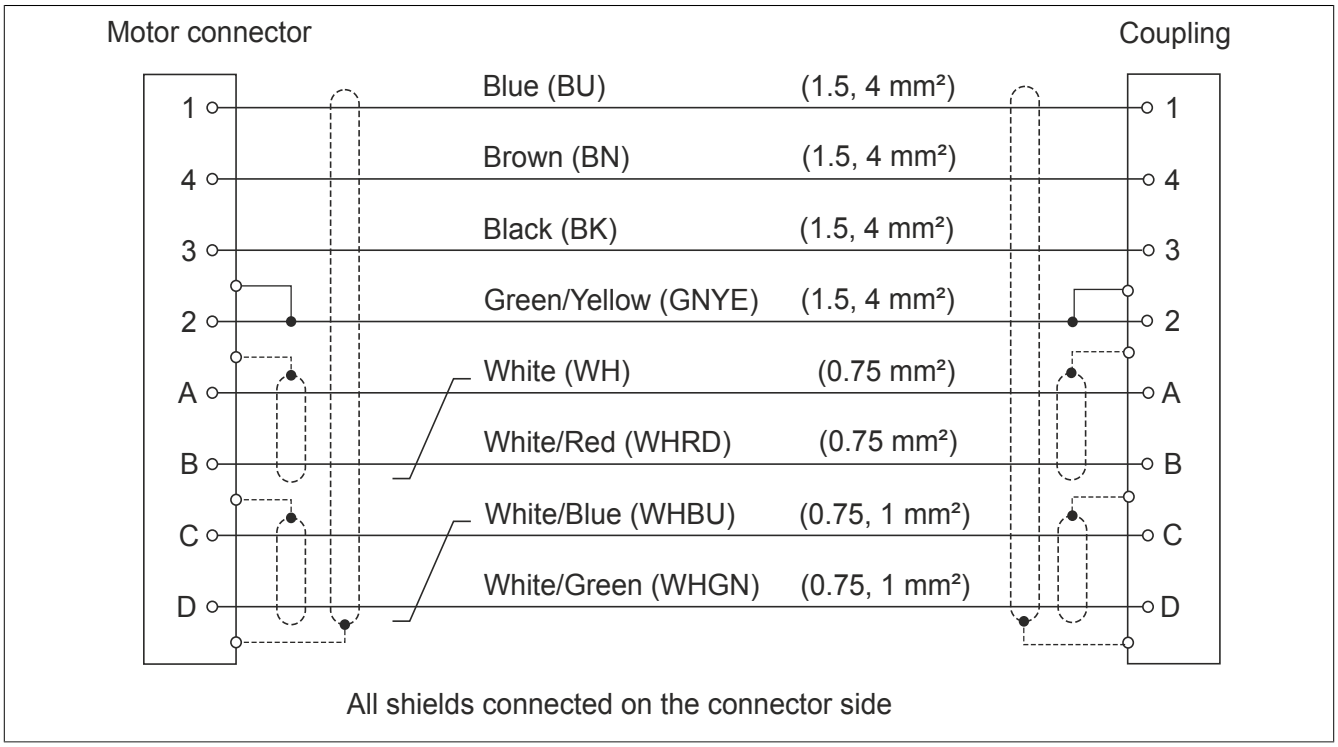


Figure 1: Motor cables - Cable diagram