8BCM0020.1322A-0

1 General information

- 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
- speedtec - Innovative connector system for secure connections
- 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

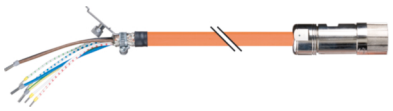
Order number	Short description	Figure
	4 mm² motor cables with size 1.5 motor connector	
8BCM0020.1322A-0	ACOPOSmulti motor cable, length 20 m, 4x 4 mm² + 2x 0.75 mm² + 2x 1 mm², 8-pin female speedtec motor connector size 1.5, integrated shield plate, can be used in cable drag chains	

Table 1: 8BCM0020.1322A-0 - Order data

3 Technical data

Order number	8BCM0020.1322A-0
General information	
Cable cross section	4 x 4.0 mm² + 2 x 0.75 mm² + 2 x 1.0 mm²
Durability	Oil resistance per HD 22.10 appendix A and 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
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	4 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	2 x 0.75 mm² + 2 x 1.0 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 4x4,0+2x2x1,0 FLEX UL AWM STYLE 20234 80°C 1000 V E63216 CSA AWM I/II A/B 90°C 1000 V FT2 LL46064

Table 2: 8BCM0020.1322A-0 - Technical data

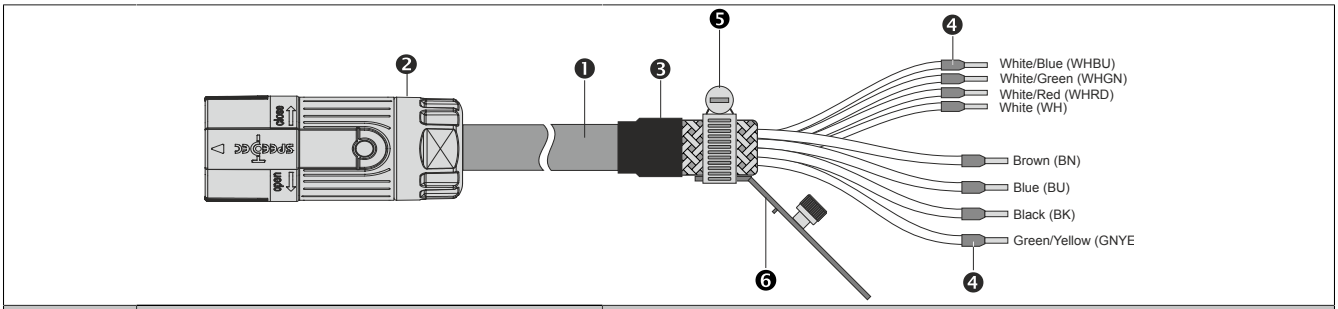
Order number	8BCM0020.1322A-0
Connector	
Type	8-pin female speedtec motor connector, size 1.5
Mating cycles	<500
Contacts	8 (4 power and 4 signal contacts)
Degree of protection per EN 60529	IP66/67 when connected
Electrical properties [1]	
Operating voltage	Max. 1000 VAC (UL)
Test voltage	
Wire - Wire	4 kV
Wire - Shield	4 kV
Conductor resistance	
Power lines	≤5.1 Ω/km
Signal line	0.75 mm²: ≤26.7 Ω/km, 1 mm²: ≤20 Ω/km
Insulation resistance	≥500 MΩ*km
Current-carrying capacity per DIN VDE 0298 part 4, table 11	
Wall mounting	30 A [2]
Installed in conduit or cable duct	30 A [2]
Installed in cable tray	30 A [2]
Ambient conditions [1]	
Temperature	
Moving	-20°C to +80°C
Static	-20°C to +90°C
Mechanical properties [1]	
Dimensions	
Length	20 m
Diameter	15.4 mm ±0.4 mm
Bend radius	
Single bend	>48 mm
Moving	>119 mm
Drag chain data	
Acceleration	Max. 50 m/s² (depends on the length of the travel path)
Flex cycles [3]	≥5,000,000
Velocity	Max. 300 m/min
Weight	5.5 kg

Table 2: 8BCM0020.1322A-0 - Technical data

1) Values refer to the raw cable being used.
2) Limited to 30 A by the motor connector.
3) At an ambient temperature from -20°C to +60°C.

4 4 mm² motor cables with size 1.5 connector

Construction



Pos.	Description	Note
1	Motor line	4x 4 mm² + 2x 0.75 mm² + 2x 1 mm²
2	8-pin female circular connector	Dimensions: ø 46 x 99 mm
3	Heat shrink tubing	
4	Wire end sleeves	
5	Cable clamp	
6	Shield plate	

Table 3: 4 mm² motor cables with size 1.5 connector - Construction

Pinout

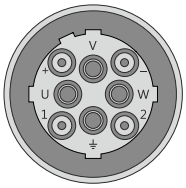
Circular connector	Pin	Description	Function
	U	U	Motor connection U
	⏚	PE	Protective ground conductor
	W	W	Motor connection W
	V	V	Motor connection V
	1	T+	Temperature +
	2	T-	Temperature -
	+	B+	Brake +
	-	B-	Brake -

Table 4: 4 mm² motor cables with size 1.5 connector - Pinout

Cable diagram

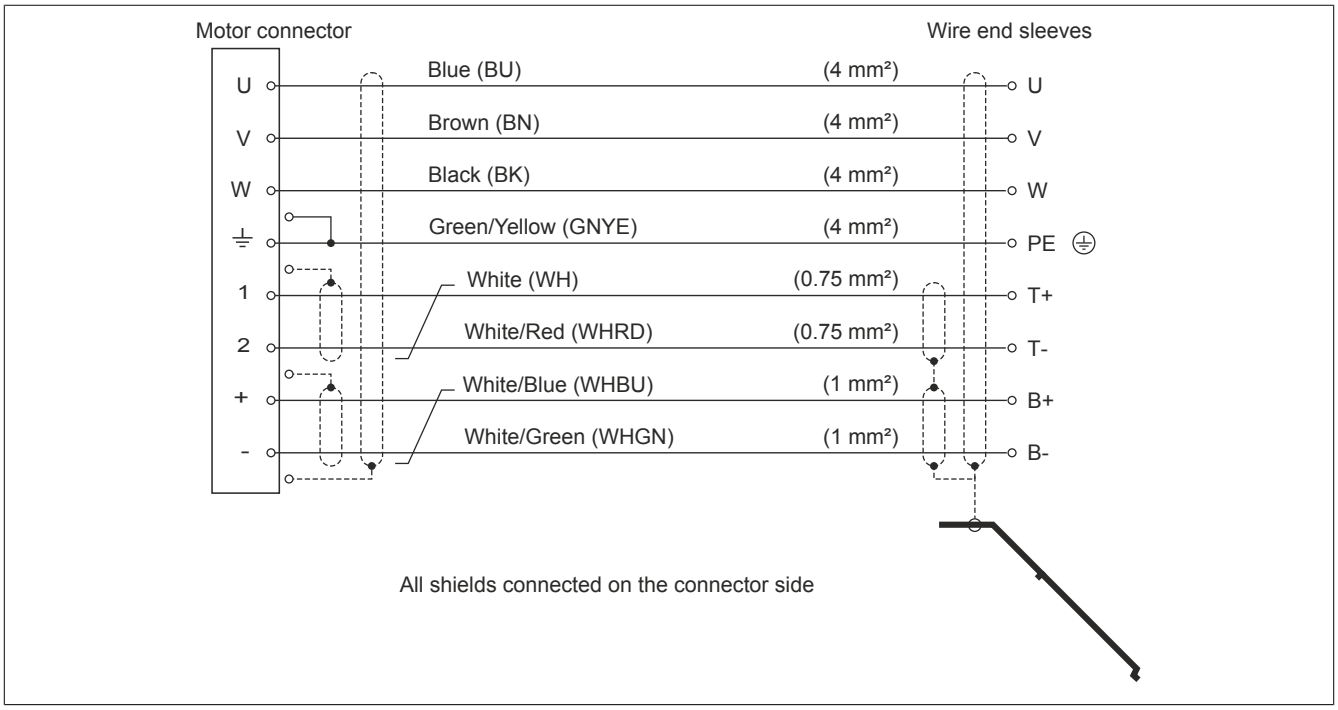


Figure 1: 4 mm² motor cables with size 1.5 connector - Cable diagram