8BCM0012.3312A-0

1 General information

- UL/CSA listed
- Extremely flexible
- Assembled specifically for use with ACOPOSmulti drive systems and B&R servo motors with motor connector size 1
- speedtec - Innovative connector system for secure connections
- Integrated shield plate

Information:

A shield plate is attached to ACOPOSmulti 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

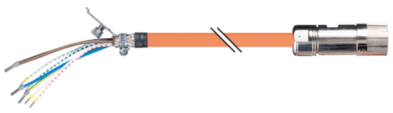
Model number	Short description	Figure
	4 mm² motor cables	
8BCM0012.3312A-0	ACOPOSmulti motor cable, length 12 m, 4x 4 mm² + 2x 2x 1 mm², 8-pin female speedtec motor connector size 1 integrated shield plate, UL/CSA listed	

Table 1: 8BCM0012.3312A-0 - Order data

3 Technical data

Model number	8BCM0012.3312A-0
General information	
Cable cross section	4x 4 mm² + 2x 2x 1 mm² VZN (C)
Durability	Oil resistance TM5 per VDE 0281 Part 1 / HD21.1 Flame resistance per IEC 60332-1-2 / UL 2556 (VW-1) / CSA C22.2 No. 2556 (FT-1) [1]
Certification	E130266 cRUus AWM STYLE I/II A/B 80°C 1000 V FT1 [1]
Certifications	
CE	Yes
UL	cULus E225616 Power conversion equipment
Cable construction	
Power lines	
Quantity	4
Wire insulation	PP
Wire colors	Black, brown, blue, yellow/green
Design	Tinned copper stranded wire
Cross section	4 mm²
Shield	No
Stranding	No
Signal lines	
Quantity	4
Wire insulation	PP
Wire colors	White, white/red, white/blue, white/green
Design	Tinned copper stranded wire
Cross section	1 mm²
Shield	Separate shielding for 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
Complete shielding	Tinned copper braiding, optical coverage >85% and foil shield
Outer jacket	
Material	PVC
Color	Orange, similar to RAL 2003 flat
Labeling	B&R 4x4,0+2x2x1,0 XX/YYYY E130266 cURus AWM STYLE 2570 I/II A/B 80°C 1000 V FT-1 [1][2]

Table 2: 8BCM0012.3312A-0 - Technical data

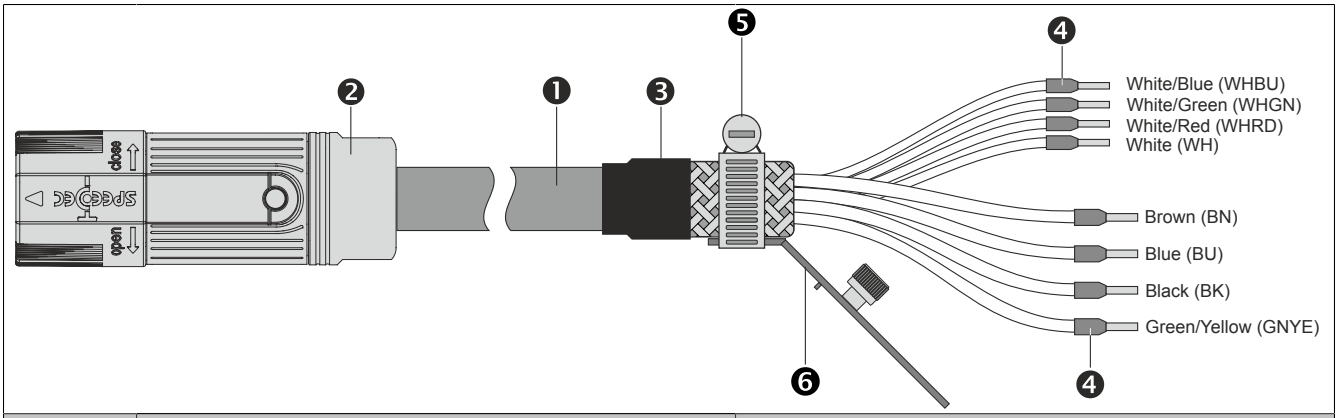
Model number	8BCM0012.3312A-0
Connector	
Type	8-pin female speedtec motor connector, size 1
Connection cycles	<500
Contacts	8 (4 power and 4 signal contacts)
Degree of protection per EN 60529	IP66/67 when connected
Electrical characteristics [1]	
Test voltage	
Wire/Wire	4 kV
Wire/Shield	3 kV
Conductor resistance	
Power lines	≤5.1 Ω/km
Signal lines	≤20 Ω/km
Insulation resistance	≥100 MΩ*km
Current-carrying capacity per DIN VDE 0298 part 4, table 11	
Wall mounting	28 A
Installed in conduit or cable duct	23 A
Installed in cable tray	30 A
Environmental conditions [1]	
Temperature	
Moving	-20°C to +80°C
Static	-20°C to +90°C
Mechanical characteristics [1]	
Dimensions	
Length	12 m
Diameter	15.6 mm ± 0.6 mm
Bend radius	
Single bend	>81 mm
Moving	≥243 mm
Weight	4.8 kg

Table 2: 8BCM0012.3312A-0 - Technical data

1) Values refer to the raw cable being used.
2) XX ... Week of manufacture, YYYY ... Year of manufacture

4 Wiring

Construction



Pos.	Description	Note
1	Motor line	4x 0.75 mm² + 2x 2x 0.34 mm² 4x 1.5 mm² + 2x 2x 0.75 mm² 4x 4 mm² + 2x 0.75 mm² + 2x 1 mm²
2	8-pin female speedtec motor connector	
3	Heat shrink tubing	
4	Wire end sleeves	
5	Cable clamp	
6	Shield plate	

Table 3: ACOPOSmulti motor cables with speedtec connector size 1 - Construction

Pinout

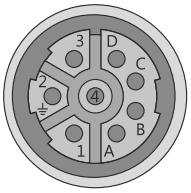
Circular connector	Pin	Description	Function
	1	U	Motor connection U
	2	PE	Protective ground conductor
	3	W	Motor connection W
	4	V	Motor connection V
	A	T+	Temperature +
	B	T-	Temperature -
	C	B+	Brake +
	D	B-	Brake -

Table 4: ACOPOSmulti motor cables with speedtec connector size 1 - Pinout

Cable diagram

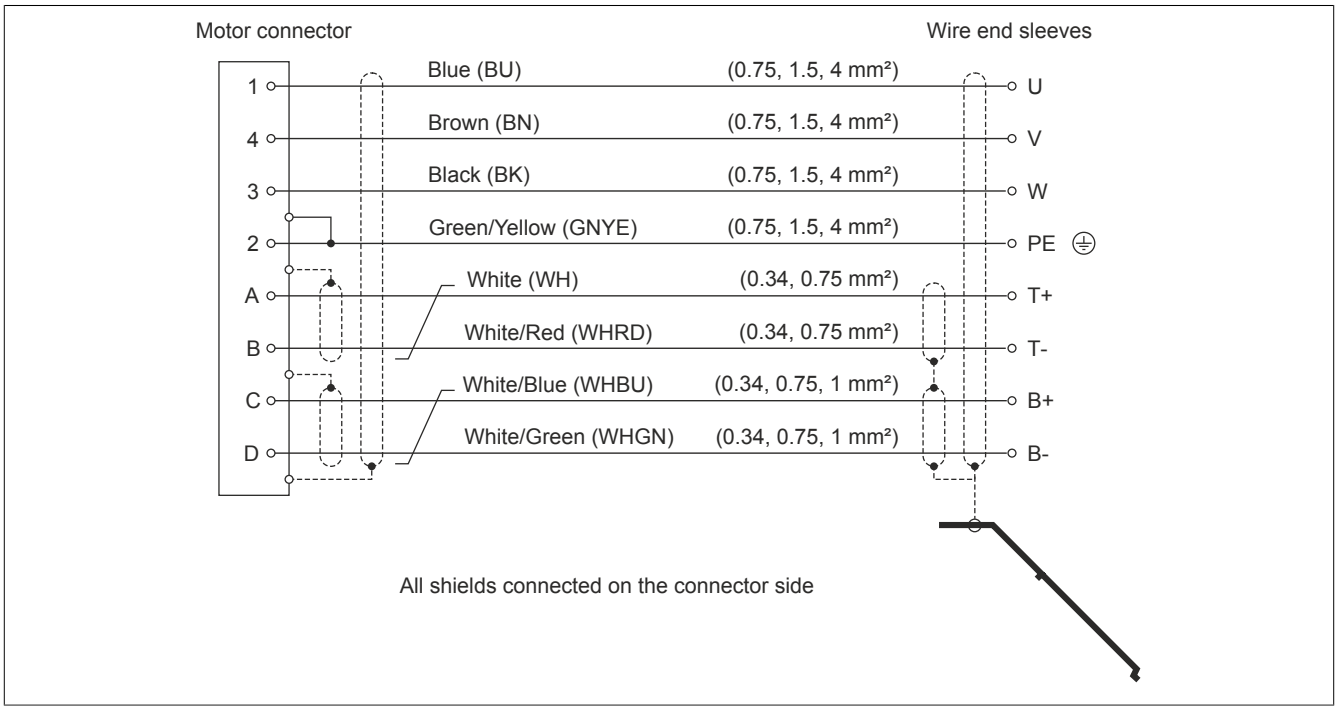


Figure 1: ACOPOSmulti motor cables with speedtec connector size 1 - Cable diagram