

8CM014.12-1

1 General information

- Can be used in cable drag chains
- Assembled specifically for use with ACOPOS 1010/1016/1022/1045/1090 servo drives and B&R servo motor with motor connector size 1

2 Order data

Order number	Short description	Figure
	1.5 mm² motor cables	
8CM014.12-1	Motor cable, length 14 m, 4x 1.5 mm ² + 2x 2x 0.75 mm ² , 8-pin female Intercontec motor connector size 1, can be used in cable drag chains	

Table 1: 8CM014.12-1 - Order data

3 Technical data

Order number	8CM014.12-1
General information	
Cable cross section	4x 1.5 mm ² + 2x 2x 0.75 mm ²
Durability	Oil resistance per VDE 0472 Part 803 as well as standard hydraulic oils
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
UL	cULus E225616
EAC	Power conversion equipment
	Yes
Cable construction	
Power lines	
Quantity	4
Wire insulation	Special thermoplastic material
Wire colors	Black, brown, blue, yellow/green
Variant	Tinned copper stranded wire
Cross section	1.5 mm ²
Shield	No
Stranding	No
Signal line	
Quantity	4
Wire insulation	Special thermoplastic material
Wire colors	White, white/red, white/blue, white/green
Variant	Tinned copper stranded wire
Cross section	0.75 mm ²
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	PUR
Color	Orange, similar to RAL 2003 flat
Labeling	BERNECKER & RAINER 4x1,5+2x2x0,75 FLEX
Connector	
Type	8-pin female speedtec motor connector, size 1.0
Mating cycles	<500
Contacts	8 (4 power and 4 signal contacts)
Degree of protection per EN 60529	IP67 when connected
Electrical properties	
Operating voltage	Max. 1000 V
Test voltage	
Wire - Wire	1500 VAC
Wire - Shield	1500 VAC

Table 2: 8CM014.12-1 - Technical data

Order number	8CM014.12-1
Conductor resistance	
Power lines	≤0.07 Ω
Signal line	≤0.09 Ω
Insulation resistance	>40 GΩ
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	
Temperature	
Moving	-10 to 70°C
Static	-20 to 90°C
Mechanical properties	
Dimensions	
Length	14 m
Diameter	12.8 mm ±0.4 mm
Bend radius	
Single bend	>40 mm
Moving	≥99 mm
Drag chain data	
Acceleration	<60 m/s ²
Flex cycles	≥3,000,000
Velocity	≤4 m/s
Weight	4.00 kg

Table 2: 8CM014.12-1 - Technical data

4 Wiring

4.1 Cable construction

Pos.	Description	Note
1	Motor line	8CMxxx.12-0: 4x 0.75 mm ² + 2x 2x 0.34 mm ² 8CMxxx.12-1: 4x 1.5 mm ² + 2x 2x 0.75 mm ² 8CMxxx.12-3, 8CMxxx.19-3: 4x 4 mm ² 2x 0.75 mm ² + 2x 1 mm ² 8CMxxx.12-5: 4x 10 mm ² + 2x 0.75 mm ² + 2x 1.5 mm ²
2	8-pin female circular connector	Dimensions 8CMxxx.12-0: ø 28 x 76 mm 8CMxxx.12-1: ø 28 x 76 mm 8CMxxx.12-3: ø 28 x 76 mm 8CMxxx.19-3: ø 46 x 93 mm 8CMxxx.12-5: ø 46 x 93 mm
3	Heat shrink tubing	
4	Wire end sleeves	

Table 3: Motor cables - Cable construction

4.2 8CMxxx.12-0, 8CMxxx.12-1, 8CMxxx.12-3

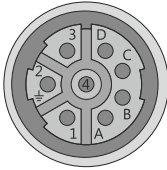
Circular connector	Pin	Description	Function
	1	U	Motor connection U
	2	PE	Protective ground conductor
	3	W	Motor connection W
	4	V	Motor connection V
	A	T+	Temperature +
	B	T-	Temperature -
	C	B+	Brake +
	D	B-	Brake -

Table 4: 8CMxxx.12-0, 8CMxxx.12-1, 8CMxxx.12-3 motor cables - Pinout

4.3 8CMxxx.12-1, 8CMxxx.12-3

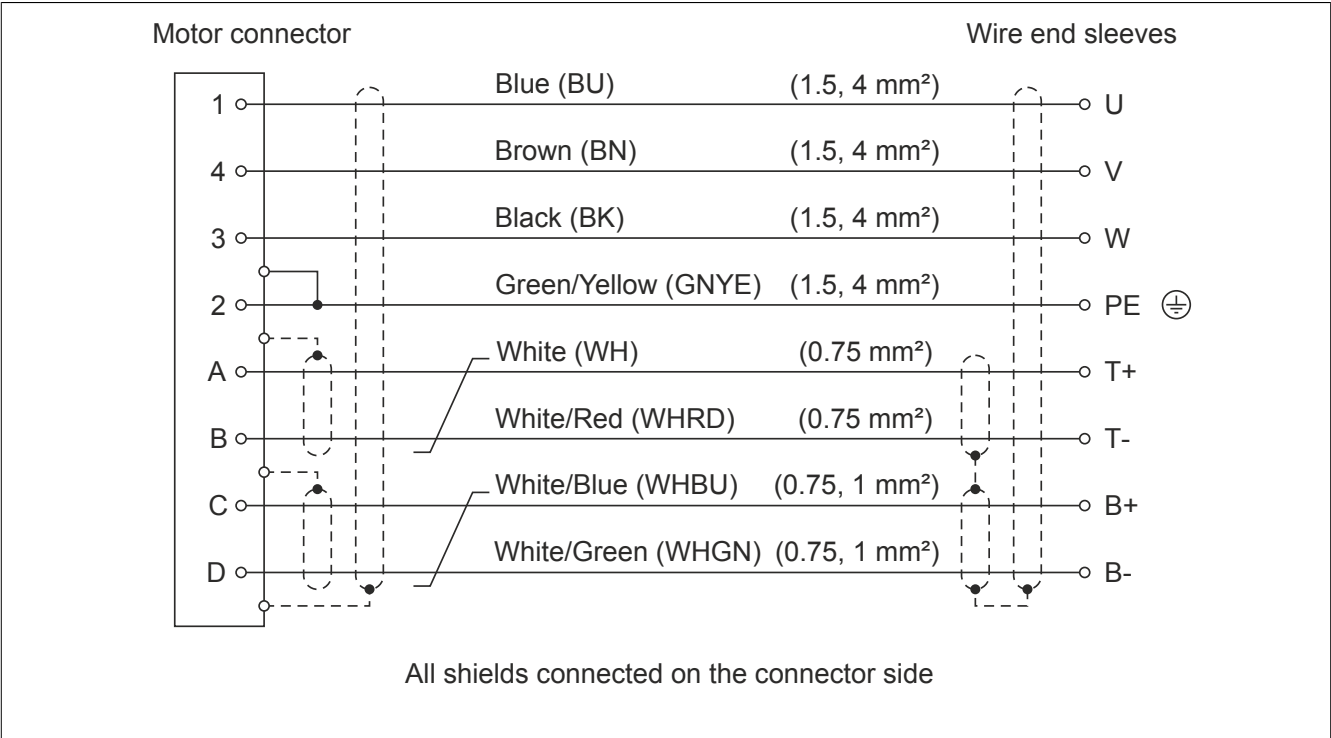


Figure 1: 8CMxxx.12-1, 8CMxxx.12-3 motor cables - Cable diagram