

Motor cable (incl. brake lines)

1 Order data

Model number	Short description	Figure
	Motor cables with brake	
80CM01002.21-01	Motor cable, length 1 m, 5x 0.75 mm ² , 2x 0.5 mm ² , for stepper motors with brake, 4-pin and 2-pin connectors on the motor side, can be used in cable drag chains, UL listed	
80CM02002.21-01	Motor cable, length 2 m, 5x 0.75 mm ² , 2x 0.5 mm ² , for stepper motors with brake, 4-pin and 2-pin connectors on the motor side, can be used in cable drag chains, UL listed	
80CM03002.21-01	Motor cable, length 3 m, 5x 0.75 mm ² , 2x 0.5 mm ² , for stepper motors with brake, 4-pin and 2-pin connectors on the motor side, can be used in cable drag chains, UL listed	
80CM05002.21-01	Motor cable, length 5 m, 5x 0.75 mm ² , 2x 0.5 mm ² , for stepper motors with brake, 4-pin and 2-pin connectors on the motor side, can be used in cable drag chains, UL listed	
80CM10002.21-01	Motor cable, length 10 m, 5x 0.75 mm ² , 2x 0.5 mm ² , for stepper motors with brake, 4-pin and 2-pin connectors on the motor side, can be used in cable drag chains, UL listed	
80CM15002.21-01	Motor cable, length 15 m, 5x 0.75 mm ² , 2x 0.5 mm ² , for stepper motors with brake, 4-pin and 2-pin connectors on the motor side, can be used in cable drag chains, UL listed	
80CM20002.21-01	Motor cable, length 20 m, 5x 0.75 mm ² , 2x 0.5 mm ² , for stepper motors with brake, 4-pin and 2-pin connectors on the motor side, can be used in cable drag chains, UL listed	

Table 1: 80CM01002.21-01, 80CM02002.21-01, 80CM03002.21-01, 80CM05002.21-01, 80CM10002.21-01, 80CM15002.21-01, 80CM20002.21-01 - Order data

2 Technical data

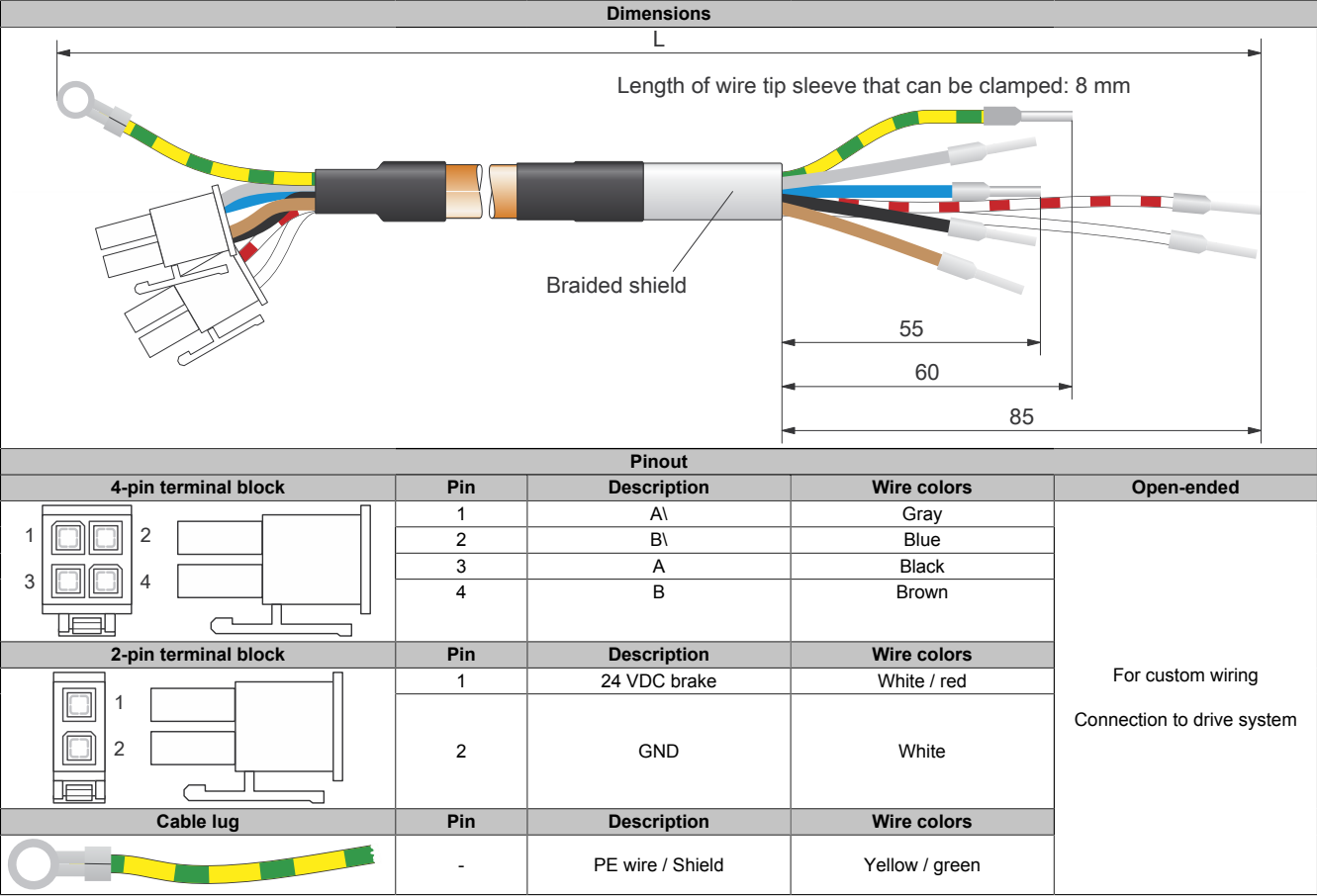
Model number	80CM01002. 21-01	80CM02002. 21-01	80CM03002. 21-01	80CM05002. 21-01	80CM10002. 21-01	80CM15002. 21-01	80CM20002. 21-01
General information							
Cable cross section	5x 0.75 mm² + 1x 2x 0.5 mm²						
Durability	Oil resistance per VDE 0472 Part 803 as well as standard hydraulic oils						
Certification	UL AWM Style 20234, 80°C, 1000 V, E63216 and CSA AWM I/II A/B, 90°C, 1000 V, FT2 LL46064						
Cable construction							
Power lines							
Quantity	5						
Wire insulation	Special thermoplastic material						
Wire colors	Black, brown, blue, gray, yellow/green						
Design	Tinned copper stranded wire						
Cross section	0.75 mm²						
Shield	No						
Stranding	No						
Signal lines							
Quantity	2						
Wire insulation	Special thermoplastic material						
Wire colors	White, white/red						
Design	Tinned copper stranded wire						
Cross section	0.5 mm²						
Shield	Individually shielded in pairs, tinned copper braiding, optical coverage > 85% and foil shield						
Stranding	White with white/red						
Cable stranding	With filler elements and foil shield						
Complete shielding	Tinned copper braiding, optical coverage > 85% and foil shield						
Outer jacket							
Material	PUR						
Color	Orange, similar to RAL 2003 flat						
Labeling	B&R 5x0,75+1x2x0,5 FLEX UL AWM STYLE 20234 80°C 1000 V E63216 CSA AWM I/II A/B 90°C 1000 V FT2 LL46064						
Electrical characteristics							
Test voltage							
Wire/Wire	3 kV						
Wire/Shield	3 kV						
Conductor resistance							
Power lines	≤29 Ω/km						
Signal lines	≤39 Ω/km						
Insulation resistance	>200 MΩ/km						
Current-carrying capacity per DIN VDE 0298 part 4, table 11							
Wall mounting	13 A						
Installed in conduit or cable duct	11.5 A						
Installed in cable tray	13.5 A						
Environmental conditions							
Temperature							
Moving	-10 to 70°C						
Static	-20 to 90°C						
Mechanical properties							
Dimensions							
Length	1 m	2 m	3 m	5 m	10 m	15 m	20 m
Diameter	10.8 mm ±0.4 mm						
Bend radius							
Single bend	>34 mm						
Moving	≥85 mm						
Drag chain data							
Acceleration	<60 m/s²						
Flex cycles ¹⁾	≥3,000,000						
Speed	≤4 m/s						
Weight	0.26 kg/m						

Table 2: 80CM01002.21-01, 80CM02002.21-01, 80CM03002.21-01, 80CM05002.21-01, 80CM10002.21-01, 80CM15002.21-01, 80CM20002.21-01 - Technical data

1) At an ambient temperature of 20°C and bend radius of 125 mm.

3 Wiring

3.1 Pinout



Cable lengths (L)	
Model number	Length [m]
80CM01002.21-01	1
80CM02002.21-01	2
80CM03002.21-01	3
80CM05002.21-01	5
80CM10002.21-01	10
80CM15002.21-01	15
80CM20002.21-01	20

3.2 Cable diagram

