

80CMxx003.25-01 - ABR incremental encoder cable

1 Order data


Model number	Short description	Figure
	Incremental encoder cables	
80CM01003.25-01	Incremental encoder cable, length 1 m, 4x 0.14 mm ² , 2x 0.35 mm ² , 8-pin connector on the motor side, 9-pin DSUB connector on the drive side, can be used in cable drag chains, UL listed	
80CM02003.25-01	Incremental encoder cable, length 2 m, 4x 0.14 mm ² , 2x 0.35 mm ² , 8-pin connector on the motor side, 9-pin DSUB connector on the drive side, can be used in cable drag chains, UL listed	
80CM03003.25-01	Incremental encoder cable, length 3 m, 4x 0.14 mm ² , 2x 0.35 mm ² , 8-pin connector on the motor side, 9-pin DSUB connector on the drive side, can be used in cable drag chains, UL listed	
80CM05003.25-01	Incremental encoder cable, length 5 m, 4x 0.14 mm ² , 2x 0.35 mm ² , 8-pin connector on the motor side, 9-pin DSUB connector on the drive side, can be used in cable drag chains, UL listed	
80CM10003.25-01	Incremental encoder cable, length 10 m, 4x 0.14 mm ² , 2x 0.35 mm ² , 8-pin connector on the motor side, 9-pin DSUB connector on the drive side, can be used in cable drag chains, UL listed	
80CM15003.25-01	Incremental encoder cable, length 15 m, 4x 0.14 mm ² , 2x 0.35 mm ² , 8-pin connector on the motor side, 9-pin DSUB connector on the drive side, can be used in cable drag chains, UL listed	
80CM20003.25-01	Incremental encoder cable, length 20 m, 4x 0.14 mm ² , 2x 0.35 mm ² , 8-pin connector on the motor side, 9-pin DSUB connector on the drive side, can be used in cable drag chains, UL listed	
80CM25003.25-01	Incremental encoder cable, length 25 m, 4x 0.14 mm ² , 2x 0.35 mm ² , 8-pin connector on the motor side, 9-pin DSUB connector on the drive side, can be used in cable drag chains, UL listed	

Table 1: 80CM01003.25-01, 80CM02003.25-01, 80CM03003.25-01, 80CM05003.25-01, 80CM10003.25-01, 80CM15003.25-01, 80CM20003.25-01, 80CM25003.25-01 - Order data

2 Technical data

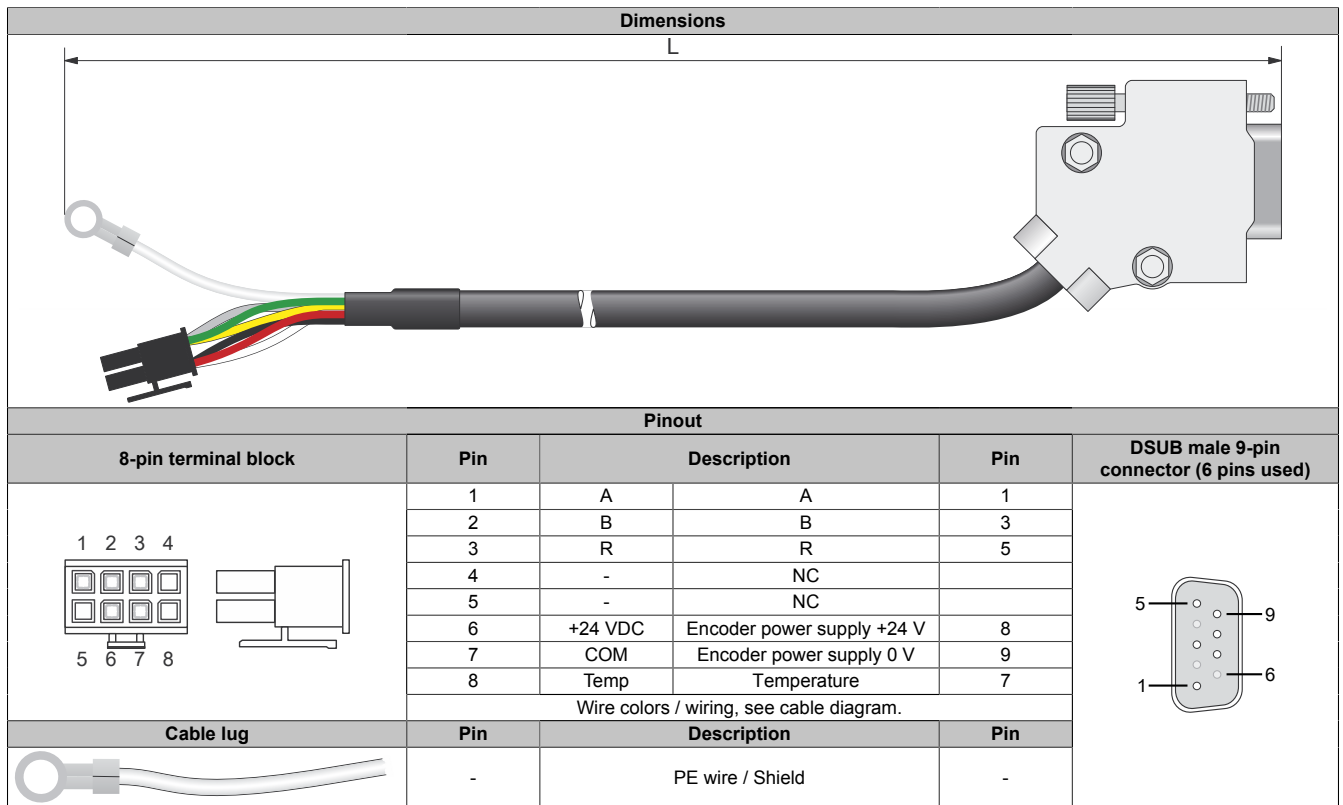
Model number	80CM01003.25-01	80CM02003.25-01	80CM03003.25-01	80CM05003.25-01	80CM10003.25-01	80CM15003.25-01	80CM20003.25-01	80CM25003.25-01
General information								
Cable cross section	4x 0.14 mm ² + 2x 0.35 mm ²							
Durability	Oil resistance per VDE 0472 Part 803 as well as standard hydraulic oils							
Certification	UL AWM Style 20963, 80°C, 30 V, E63216							
Cable construction								
Supply lines								
Quantity	2							
Wire insulation	Special thermoplastic material							
Wire colors	Red, black							
Variant	Tinned copper stranded wire							
Cross section	0.35 mm ²							
Shield	No							
Stranding	No							
Signal line								
Quantity	4							
Wire insulation	Special thermoplastic material							
Wire colors	Gray, yellow, green, white							
Variant	Tinned copper stranded wire							
Shield	No							
Stranding	All 4 wires together							
Cable stranding	With terminating foil shield							
Cable shield	Copper braiding, optical coverage ≥ 85% and foil shield							
Outer jacket								
Material	PUR							
Color	Gray							
Labeling	B&R 4x0,14+2x0,35 FLEX UL AWM STYLE 20963 80°C 30 V E63216							
Electrical properties								
Test voltage								
Wire/Wire	1.5 kV							
Wire/Shield	0.8 kV							
Conductor resistance								
0.14 mm ²	≤134 Ω/km							
0.34 mm ²	>55 Ω/km							
Insulation resistance								
	>200 MΩ/km							
Ambient conditions								
Temperature								
Moving	-10 to 50°C							
Static	-20 to 80°C							
Mechanical properties								
Dimensions								
Length	1 m	2 m	3 m	5 m	10 m	15 m	20 m	25 m
Diameter	5.8 mm ±0.2 mm							
Bend radius								
Single bend	≥20 mm							
Moving	≥50 mm							
Drag chain data								
Acceleration	<60 m/s ²							
Flex cycles ¹⁾	≥3,000,000							
Velocity	≤4 m/s							
Weight	0.045 kg/m							

Table 2: 80CM01003.25-01, 80CM02003.25-01, 80CM03003.25-01, 80CM05003.25-01, 80CM10003.25-01, 80CM15003.25-01, 80CM20003.25-01, 80CM25003.25-01 - Technical data

1) At an ambient temperature of 20°C and bend radius of 65 mm.

3 Wiring

3.1 Pinout



Cable lengths (L)	
Model number	Length [m]
80CM01003.25-01	1
80CM02003.25-01	2
80CM03003.25-01	3
80CM05003.25-01	5
80CM10003.25-01	10
80CM15003.25-01	15
80CM20003.25-01	20
80CM25003.25-01	25

3.2 Cable diagram

