8ECM0005.1031C-0

Information:

Due to their assembly, these cables can only be used with the following ACOPOS P3 servo drives:

- **8EI1X6xxSxx.xxxx-1**
- **8EI2X2xxxxx.xxxx-1**
- **8EI4X5xxxxx.xxxx-1**
- **8EI8X8xxxxx.xxxx-1**

1 General information

- Can be used in cable drag chains
- Assembled specifically for use with ACOPOS P3 servo drives and B&R servo motors with series 915 built-in connectors
- itec - Innovative connector system for fast and secure connections

Information:

8ECMxxxx.1031C-0 motor cables are not suitable for B&R servo motors with connector size 1.

2 Order data

Order number	Short description	Figure
	0.75 mm² motor cables	
8ECM0005.1031C-0	ACOPOS P3 motor cable, length 5 m, 4x 0.75 mm² + 2x 2x 0.34 mm², 8-pin series 915 power connector, can be used in cable drag chains	

Table 1: 8ECM0005.1031C-0 - Order data

3 Technical data

Order number	8ECM0005.1031C-0
General information	
Cable cross section	4x 0.75 mm² + 2x 2x 0.34 mm²
Durability	Oil resistance per HD 22.10 appendix A, DIN EN 60811-404 [1)]
Certification	E170315 cRUus AWM STYLE 21223 AWM I/II A/B 80°C 1000 V FT1 [1)]
Certifications	
CE	Yes
UKCA	Yes
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	0.75 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	0.34 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

Table 2: 8ECM0005.1031C-0 - Technical data

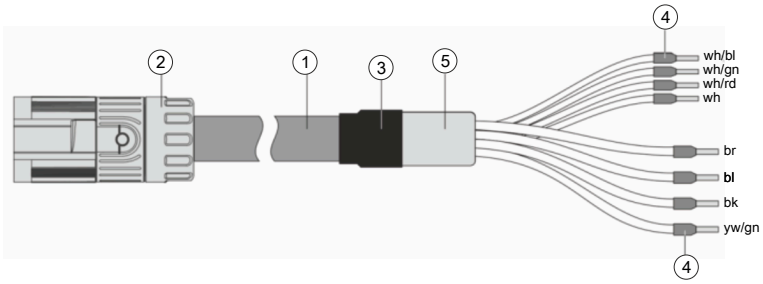
Order number	8ECM0005.1031C-0
Outer jacket	
Material	PUR
Color	Orange, similar to RAL 2003 flat
Labeling	B&R 4 G 0.75 + 2 x (2x0.34)C C E170315 cRUus AWM STYLE 21223 AWM I/II A/B 80°C 1000 V FT1 production order number [1]
Connector	
Type	8-pin female series 915 power connector
Mating cycles	<500
Contacts	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	≤26.7 Ω/km
Signal line	≤56 Ω/km
Insulation resistance	≥500 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
Ambient conditions [1]	
Temperature	
Moving	-20°C to +80°C
Static	-20°C to +90°C
Mechanical properties [1]	
Dimensions	
Length	5 m
Diameter	10.1 mm ±0.3 mm
Bend radius	
Single bend	>32 mm
Moving	>78 mm
Drag chain data	
Acceleration	Max. 50 m/s² (depends on the length of the travel path)
Flex cycles [2]	≥5,000,000
Velocity	Max. 300 m/min
Weight	0.5 kg

Table 2: 8ECM0005.1031C-0 - Technical data

1) Values refer to the raw cable being used.
2) At an ambient temperature from -20°C to +60°C.

4 Wiring

4.1 Cable construction



Pos.	Description	Note
1	Motor cable	4 x 0.75 mm² + 2 x 2 x 0.34 mm²
2	8-pin female circular connector	
3	Self-adhesive heat shrink tubing	
4	Wire end sleeves	
5	Aluminum strip	

Table 3: 0.75 mm² motor cables - Cable construction

4.2 Pinout

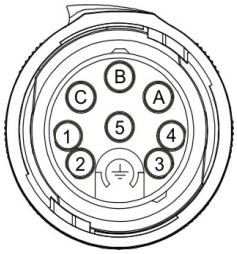
Circular connector	Pin	Description	Function
	A	U	Motor connection U
	B	V	Motor connection V
	C	W	Motor connection W
	⏚	PE	Protective ground conductor
	1	T+	Temperature +
	2	T-	Temperature -
	3	B+	Brake +
	4	B-	Brake -
	5	---	---

Table 4: 0.75 mm² motor cables - Pinout

4.3 Cable diagram

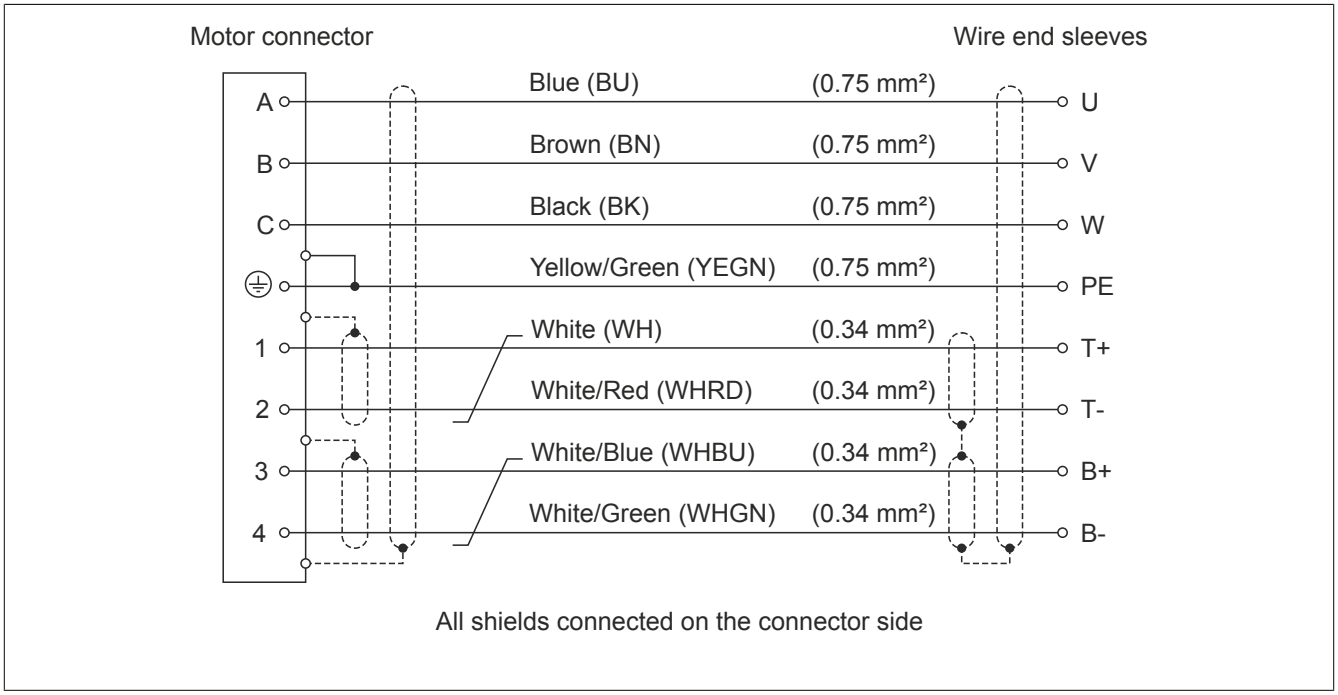


Figure 1: 0.75 mm² ESTB motor cables - Cable diagram