# 8CM006.12-0

## 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

| Model number | Short description | Figure |
|---|---|---|
| | **0.75 mm² motor cables** | |
| 8CM006.12-0 | Motor cable, length 6 m, 4x 0.75 mm² + 2x 2x 0.34 mm², 8-pin female Intercontec motor connector size 1, can be used in cable drag chains |  |

Table 1: 8CM006.12-0 - Order data

## 3 Technical data

| Model number | 8CM006.12-0 |
|---|---|
| **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 |
| UL | cULus E225616<br>Power conversion equipment |
| **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 |
| Outer jacket | |
| Material | TPU |
| 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 speedtec motor connector |
| Mating cycles | <500 |
| Contacts | 8 (4 power and 4 signal contacts) |
| Degree of protection per EN 60529 | IP66/67 when connected |
| **Electrical properties** | |
| Operating voltage | Max. 1000 V AC (UL) |
| Test voltage | |
| Wire/Wire | 4 kV |
| Wire/Shield | 4 kV |

Table 2: 8CM006.12-0 - Technical data

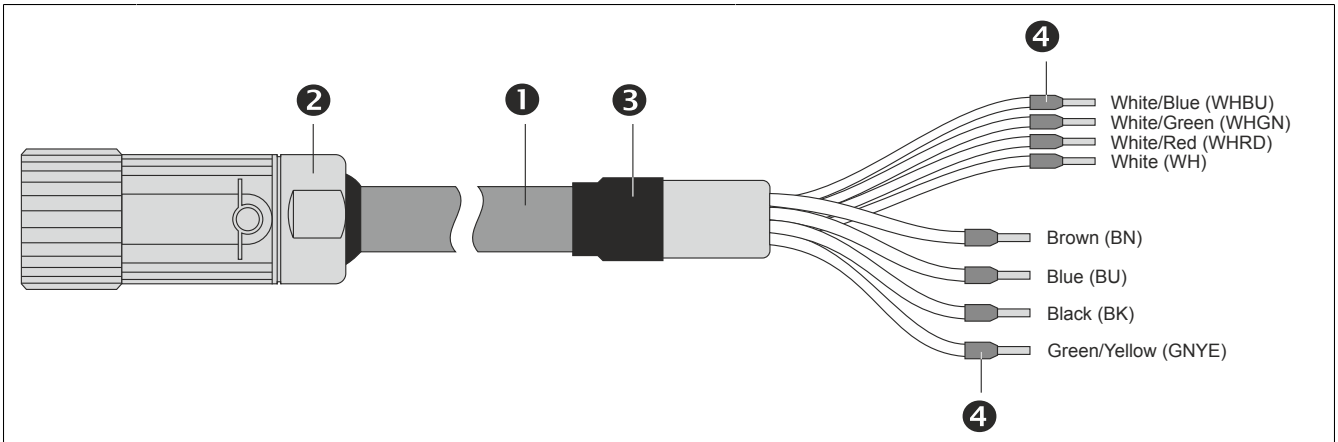
| Model number | 8CM006.12-0 |
|---|---|
| Conductor resistance | |
| Power lines | ≤26.7 Ω/km |
| Signal line | ≤56 Ω/km |
| Insulation resistance | ≥500 MΩ*km |
| Current-carrying capacity per DIN VDE 0298 part 4, table 11 | |
| Wall mounting | 13 A |
| Installed in conduit or cable duct | 11.5 A |
| Installed in cable tray | 13.5 A |
| **Ambient conditions** | |
| Temperature | |
| Moving | -20°C to +80°C |
| Static | -20°C to +90°C |
| **Mechanical properties** [1] | |
| Dimensions | |
| Length | 6 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 |
| Speed | Max. 300 m/min |
| Weight | 1.14 kg |

Table 2: 8CM006.12-0 - 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 line | 4x 0.75 mm² + 2x 2x 0.34 mm²<br>4x 1.5 mm² + 2x 2x 0.75 mm²<br>4x 4 mm² + 2x 0.75 mm² + 2x 1 mm²<br>4x 10 mm² + 2x 0.75 mm² + 2x 1.5 mm² |
| 2 | 8-pin female circular connector | |
| 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

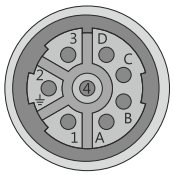
| Circular connector | Pin | Description | Function |
|---|---|---|---|
|  | 1 | U | Motor connection U |
| | 2 | PE | Protective ground conductor |
| | 3 | W | Motor connection W |
| | 4 | V | Motor connection V |
| | A | T+ | Temperature + |
| | B | T- | Temperature - |
| | C | B+ | Brake + |
| | D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



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

## 4.3 8CMxxx.12-0

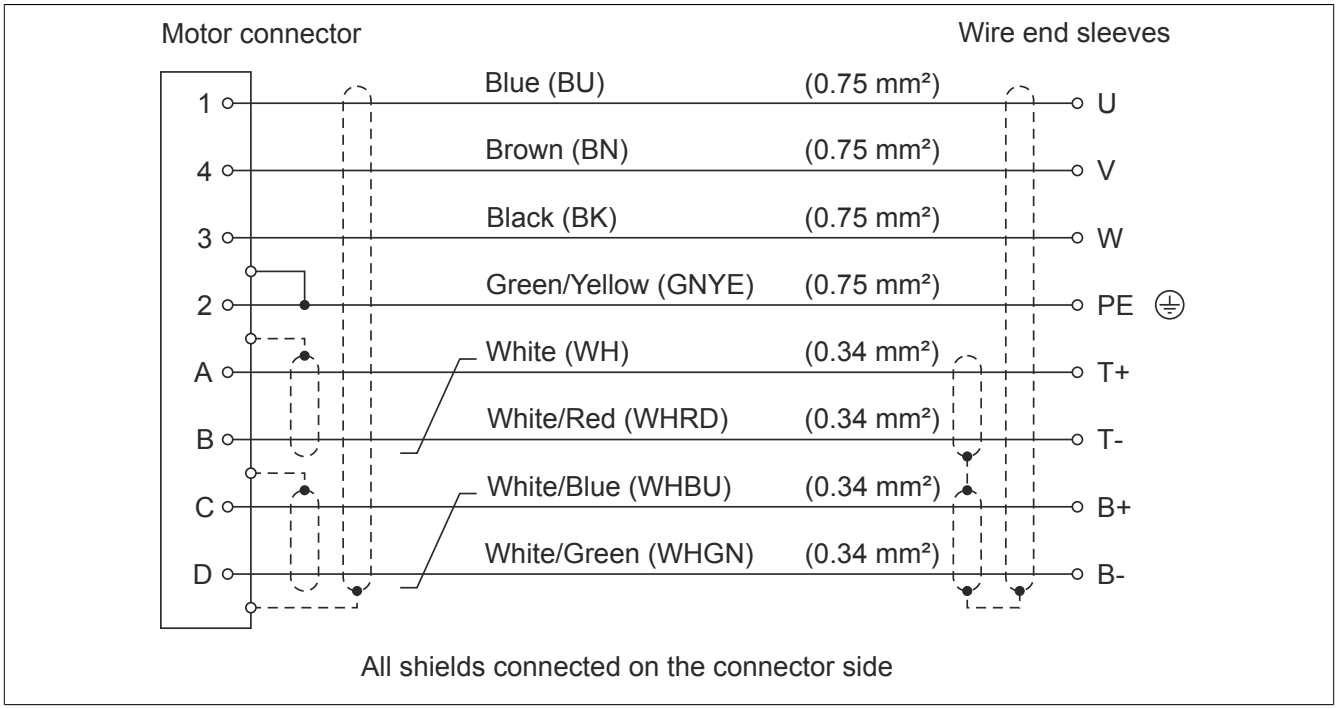



Figure 1: 8CMxxx.12-0 motor cables - Cable diagram