

# 8BCM0010.1523A-0

## 1 General information

- Can be used in cable drag chains
- Assembled specifically for use with ACOPOSmulti drive systems and B&R servo motors with motor connector size 1.5
- speedtec - Innovative connector system for secure connections
- Integrated shield plate

### Information:

A shield plate is attached to ACOPOSmulti 8BCM motor cables. If this shield plate is correctly installed on the respective ACOPOSmulti 8BVI inverter module, no additional shielding measures are necessary.

### Information:

Shield set 8SCS007.0000-00 is required for installation of 10 mm<sup>2</sup> motor cables!

## 2 Order data

| Model number     | Short description                                                                                                                                                                                                          | Figure                                                                               |
|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
|                  | <b>10 mm<sup>2</sup> motor cables</b>                                                                                                                                                                                      |                                                                                      |
| 8BCM0010.1523A-0 | ACOPOSmulti motor cable, length 10 m, 4x 10 mm <sup>2</sup> + 2x 0.75 mm <sup>2</sup> + 2x 1.5 mm <sup>2</sup> , 8-pin female speedtec motor connector size 1.5, integrated shield plate, can be used in cable drag chains |  |

Table 1: 8BCM0010.1523A-0 - Order data

## 3 Technical data

| Model number               | 8BCM0010.1523A-0                                                                            |
|----------------------------|---------------------------------------------------------------------------------------------|
| <b>General information</b> |                                                                                             |
| Cable cross section        | 4x 10 mm <sup>2</sup> + (2x 0.75 mm <sup>2</sup> )C + (2x 1.5 mm <sup>2</sup> )C            |
| Durability                 | Oil resistance per HD 22.10 appendix A DIN EN 60811-404 <sup>1)</sup>                       |
| Certification              | E170315 cRUus AWM STYLE 21223 AWM I/II A/B 80°C 1000 V FT1 <sup>1)</sup>                    |
| Certifications             |                                                                                             |
| CE                         | Yes                                                                                         |
| UL                         | cULus E225616<br>Power conversion equipment                                                 |
| <b>Cable construction</b>  |                                                                                             |
| Power lines                |                                                                                             |
| Quantity                   | 4                                                                                           |
| Wire insulation            | PP                                                                                          |
| Wire colors                | Black, brown, blue, yellow/green                                                            |
| Variant                    | Tinned copper stranded wire                                                                 |
| Cross section              | 10 mm <sup>2</sup>                                                                          |
| 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              | 2x 0.75 mm <sup>2</sup> + 2x 1.5 mm <sup>2</sup>                                            |
| Shield                     | Separate shielding for 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: 8BCM0010.1523A-0 - Technical data

| Model number                                                | 8BCM0010.1523A-0                                                                                              |
|-------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| Outer jacket                                                |                                                                                                               |
| Material                                                    | TPU                                                                                                           |
| Color                                                       | Orange, similar to RAL 2003 flat                                                                              |
| Labeling                                                    | B&R 4 G 10 + (2x0.75)C + (2x1.5)C C E170315 cRU-us AWM STYLE 21223 AWM I/II A/B 80°C 1000 V FT1 <sup>1)</sup> |
| Connector                                                   |                                                                                                               |
| Type                                                        | 8-pin female speedtec motor connector, size 1.5                                                               |
| Mating cycles                                               | <500                                                                                                          |
| Contacts                                                    | 8 (4 power and 4 signal contacts)                                                                             |
| Degree of protection per EN 60529                           | IP66/67 when connected                                                                                        |
| Electrical properties <sup>1)</sup>                         |                                                                                                               |
| Operating voltage                                           | Max. 1000 V AC (UL)                                                                                           |
| Test voltage                                                |                                                                                                               |
| Wire/Wire                                                   | 4 kV                                                                                                          |
| Wire/Shield                                                 | 4 kV                                                                                                          |
| Conductor resistance                                        |                                                                                                               |
| Power lines                                                 | ≤2 Ω/km                                                                                                       |
| Signal line                                                 | 0.75 mm <sup>2</sup> : ≤26.7 Ω/km, 1.5 mm <sup>2</sup> : ≤13.7 Ω/km                                           |
| Insulation resistance                                       | ≥500 MΩ*km                                                                                                    |
| Current-carrying capacity per DIN VDE 0298 part 4, table 11 |                                                                                                               |
| Wall mounting                                               | 64.6 A                                                                                                        |
| Installed in conduit or cable duct                          | 54.6 A                                                                                                        |
| Installed in cable tray                                     | 68.3 A                                                                                                        |
| Ambient conditions <sup>1)</sup>                            |                                                                                                               |
| Temperature                                                 |                                                                                                               |
| Moving                                                      | -20°C to +80°C                                                                                                |
| Static                                                      | -20°C to +90°C                                                                                                |
| Mechanical properties <sup>1)</sup>                         |                                                                                                               |
| Dimensions                                                  |                                                                                                               |
| Length                                                      | 10 m                                                                                                          |
| Diameter                                                    | 20.1 mm ± 0.4 mm                                                                                              |
| Bend radius                                                 |                                                                                                               |
| Single bend                                                 | >62 mm                                                                                                        |
| Moving                                                      | >154 mm                                                                                                       |
| Drag chain data                                             |                                                                                                               |
| Acceleration                                                | Max. 50 m/s <sup>2</sup> (depends on the length of the travel path)                                           |
| Flex cycles <sup>2)</sup>                                   | ≥5,000,000                                                                                                    |
| Speed                                                       | Max. 300 m/min                                                                                                |
| Weight                                                      | 5.4 kg                                                                                                        |

Table 2: 8BCM0010.1523A-0 - Technical data

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

## 4 10 mm<sup>2</sup> motor cables

### Construction

| Pos. | Description                     | Note                                                                     |
|------|---------------------------------|--------------------------------------------------------------------------|
| 1    | Motor line                      | 4x 10 mm <sup>2</sup> + 2x 0.75 mm <sup>2</sup> + 2x 1.5 mm <sup>2</sup> |
| 2    | 8-pin female circular connector |                                                                          |
| 3    | Heat shrink tubing              |                                                                          |
| 4    | Wire end sleeves                |                                                                          |
| 5    | Cable clamp                     |                                                                          |
| 6    | Shield plate                    |                                                                          |

Table 3: 10 mm<sup>2</sup> motor cables - Construction

## Pinout

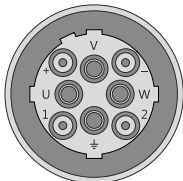
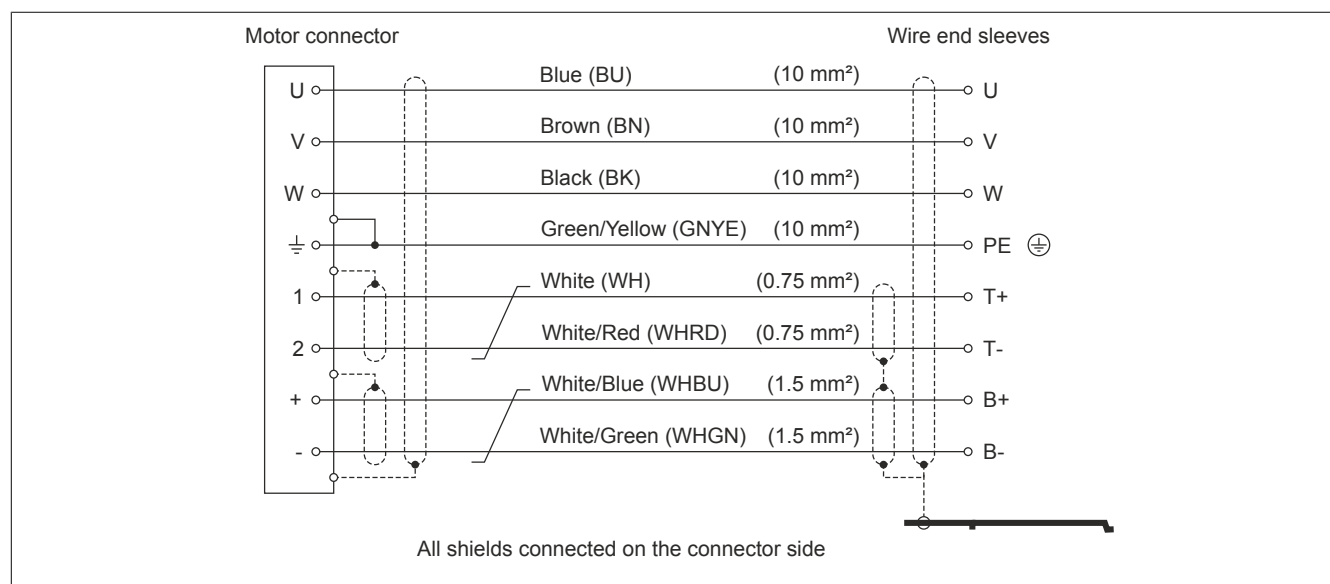
| Circular connector                                                                | Pin | Description | Function                    |
|-----------------------------------------------------------------------------------|-----|-------------|-----------------------------|
|  | U   | U           | Motor connection U          |
|                                                                                   | ⏏   | PE          | Protective ground conductor |
|                                                                                   | W   | W           | Motor connection W          |
|                                                                                   | V   | V           | Motor connection V          |
|                                                                                   | 1   | T+          | Temperature +               |
|                                                                                   | 2   | T-          | Temperature -               |
|                                                                                   | +   | B+          | Brake +                     |
|                                                                                   | -   | B-          | Brake -                     |

Table 4: 10 mm<sup>2</sup> motor cables - Pinout

## Cable diagram

Figure 1: 10 mm<sup>2</sup> motor cables - Cable diagram