

# 8BCM0002.15250-0

## 1 General information

- Can be used in cable drag chains
- Extension cable for 8BCMxxxx.1523A-0 / 8ECMxxxx.1523C-0
- speedtec - Innovative connector system for secure connections

## 2 Order data

| Order number     | Short description                                                                                                                                                                    | Figure                                                                              |
|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 8BCM0002.15250-0 | <b>Motor cables 10 mm<sup>2</sup></b><br>Cable extension for 10 mm <sup>2</sup> motor cables with speedtec/standard connector size 1.5, length 2 m, can be used in cable drag chains |  |

Table 1: 8BCM0002.15250-0 - Order data

## 3 Technical data

| Order number                      | 8BCM0002.15250-0                                                                                                         |
|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| <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                     | UL AWM style 20234, 80°C, 1000 V, E63216 and CSA AWM I/II A/B, 90°C, 1000 V, FT2 LL46064                                 |
| Certifications                    |                                                                                                                          |
| CE                                | Yes                                                                                                                      |
| UKCA                              | Yes                                                                                                                      |
| UL                                | cULus E225616                                                                                                            |
| EAC                               | Power conversion equipment                                                                                               |
|                                   | Yes                                                                                                                      |
| <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                            | 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                          | BERNECKER + RAINER 4x10,0+2x2x1,5 FLEX UL AWM STYLE 20234<br>80°C 1000 V E63216 CSA AWM I/II A/B 90°C 1000 V FT2 LL46064 |
| <b>Connector</b>                  |                                                                                                                          |
| Type                              | 8-pin female speedtec motor connector, size 1.5                                                                          |
| Mating cycles                     | <500                                                                                                                     |
| Contacts                          | 8 (4 power and 4 signal contacts)                                                                                        |
| Additional connectors             | 8-pin male coupling<br>Mating cycles: <500<br>Contacts: 8                                                                |
| Degree of protection per EN 60529 | Degree of protection per EN 60529: IP66/67 when connected<br>IP66/67 when connected                                      |

Table 2: 8BCM0002.15250-0 - Technical data

| Order number                                                | 8BCM0002.15250-0                                                    |
|-------------------------------------------------------------|---------------------------------------------------------------------|
| Electrical properties <sup>1)</sup>                         |                                                                     |
| Operating voltage                                           | Max. 1000 VAC (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                                                      | 2 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                                                          |
| Velocity                                                    | Max. 300 m/min                                                      |
| Weight                                                      | 1.1 kg                                                              |

Table 2: 8BCM0002.15250-0 - 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

#### Construction

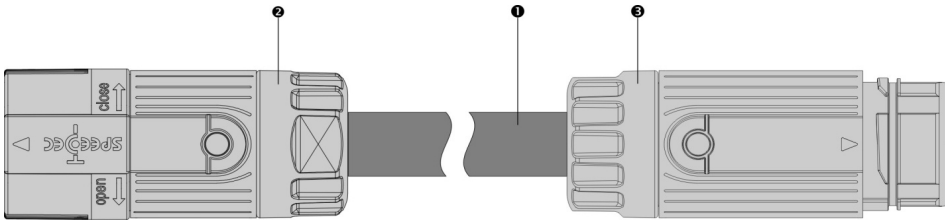
|  |                                 |                                                                          |
|--------------------------------------------------------------------------------------|---------------------------------|--------------------------------------------------------------------------|
| 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                                                                                    | 8-pin male coupling             |                                                                          |

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

4.2 Pinout

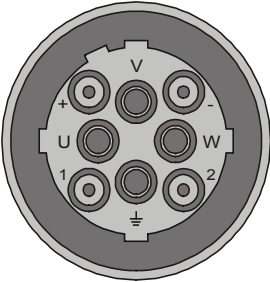
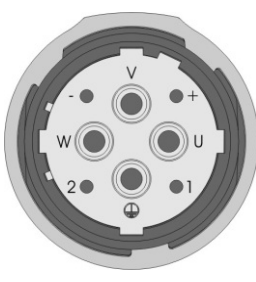
| Circular connector                                                                | Pin           | Description | Function                    | Coupling                                                                            |
|-----------------------------------------------------------------------------------|---------------|-------------|-----------------------------|-------------------------------------------------------------------------------------|
|  | U             | U           | Motor connection U          |  |
|                                                                                   | Ground symbol | 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: Pinout

4.3 Cable diagram

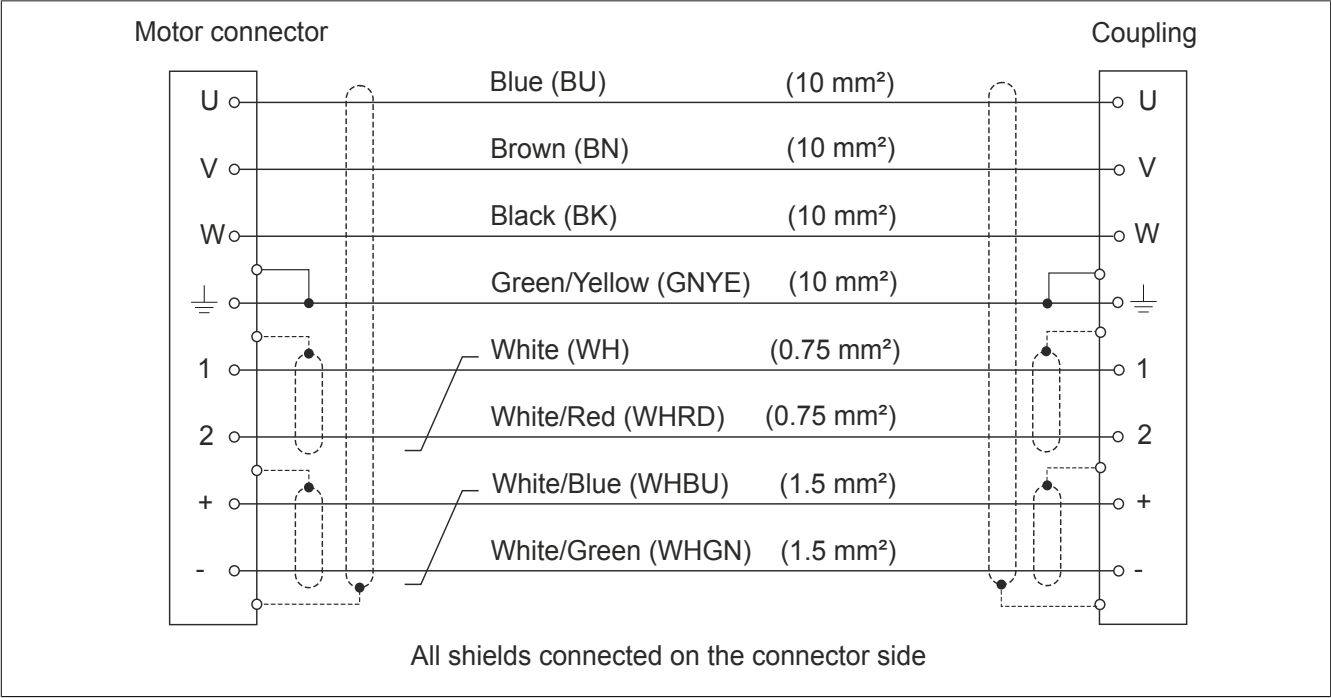


Figure 1: 8BCMxxxx.15250-0 - Cable diagram