

# 8BCR0005.11120-0

## 1 General information

- Can be used in cable drag chains
- Assembled specifically for 8BCRxxxx.1111A-0 resolver cables
- speedtec - Innovative connector system for secure connections

## 2 Order data

| Order number     | Short description                                                                                                                              | Figure                                                                              |
|------------------|------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 8BCR0005.11120-0 | <b>Resolver cables</b><br>Cable extension for resolver cable with speedtec or standard connector, length 5 m, can be used in cable drag chains |  |

Table 1: 8BCR0005.11120-0 - Order data

## 3 Technical data

| Order number                               | 8BCR0005.11120-0                                                                                                         |
|--------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| <b>General information</b>                 |                                                                                                                          |
| Cable cross section                        | 3x 2x 24 19 AWG                                                                                                          |
| Durability                                 | Oil resistance per VDE 0472 Part 803 as well as standard hydraulic oils <sup>1)</sup>                                    |
| Certifications                             |                                                                                                                          |
| CE                                         | Yes                                                                                                                      |
| UKCA                                       | Yes                                                                                                                      |
| UL                                         | cULus E225616<br>Power conversion equipment                                                                              |
| <b>Cable construction</b>                  |                                                                                                                          |
| Signal line                                |                                                                                                                          |
| Quantity                                   | 6                                                                                                                        |
| Wire insulation                            | Special thermoplastic material                                                                                           |
| Wire colors                                | White/Brown, green/yellow, gray/pink                                                                                     |
| Variant                                    | Tinned copper stranded wire                                                                                              |
| Cross section                              | 24 AWG / 19 AWG                                                                                                          |
| Shield                                     | No                                                                                                                       |
| Stranding                                  | White with brown, green with yellow, gray with pink                                                                      |
| Cable stranding                            | The 3 pairs together covered by foil shield                                                                              |
| Cable shield                               | Copper braiding, optical coverage ≥90% and foil shield                                                                   |
| Outer jacket                               |                                                                                                                          |
| Material                                   | PUR                                                                                                                      |
| Color                                      | Green, similar to RAL 6018 flat                                                                                          |
| <b>Connector</b>                           |                                                                                                                          |
| Type                                       | 12-pin female speedtec circular connector                                                                                |
| Mating cycles                              | <500                                                                                                                     |
| Contacts                                   | 12                                                                                                                       |
| Additional connectors                      | 12-pin male coupling<br>Mating cycles: <500<br>Contacts: 12<br>Degree of protection per EN 60529: IP66/67 when connected |
| Degree of protection per EN 60529          | IP66/67 when connected                                                                                                   |
| <b>Electrical properties <sup>1)</sup></b> |                                                                                                                          |
| Operating voltage                          | ≤30 V <sub>eff</sub>                                                                                                     |
| Test voltage                               |                                                                                                                          |
| Wire - Wire                                | 1.5 kV                                                                                                                   |
| Wire - Shield                              | 0.8 kV                                                                                                                   |
| Conductor resistance                       |                                                                                                                          |
| Signal line                                | ≤86 Ω/km                                                                                                                 |
| Insulation resistance                      | >200 MΩ*km                                                                                                               |
| <b>Ambient conditions <sup>1)</sup></b>    |                                                                                                                          |
| Temperature                                |                                                                                                                          |
| Moving                                     | -20°C to +80°C                                                                                                           |
| Static                                     | -20°C to +90°C                                                                                                           |

Table 2: 8BCR0005.11120-0 - Technical data

| Order number                        | 8BCR0005.11120-0 |
|-------------------------------------|------------------|
| Mechanical properties <sup>1)</sup> |                  |
| Dimensions                          |                  |
| Length                              | 5 m              |
| Diameter                            | 6.5 mm ±0.2 mm   |
| Bend radius                         |                  |
| Single bend                         | ≥20 mm           |
| Moving                              | ≥50 mm           |
| Drag chain data                     |                  |
| Acceleration                        | ≤6 g             |
| Flex cycles <sup>2)</sup>           | >3,000,000       |
| Velocity                            | ≤4 m/s           |
| Weight                              | 0.4 kg           |

Table 2: 8BCR0005.11120-0 - Technical data

- 1) Values refer to the raw cable being used.  
2) At an ambient temperature of 20°C and bend radius of 65 mm.

4 Wiring

4.1 Cable construction

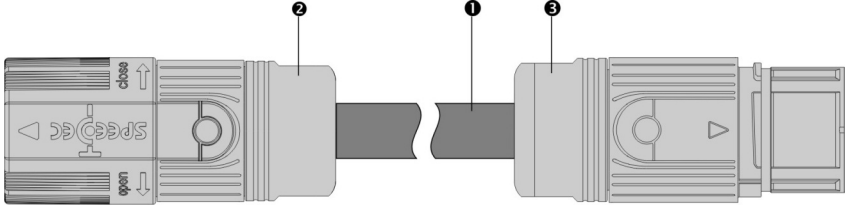
|  |                                  |                 |
|------------------------------------------------------------------------------------|----------------------------------|-----------------|
| Pos.                                                                               | Description                      | Note            |
| 1                                                                                  | Encoder line                     | 3x 2x 24 AWG/19 |
| 2                                                                                  | 12-pin female circular connector |                 |
| 3                                                                                  | 12-pin male coupling             |                 |

Table 3: 8BCR cable extension - Construction

4.2 Pinout

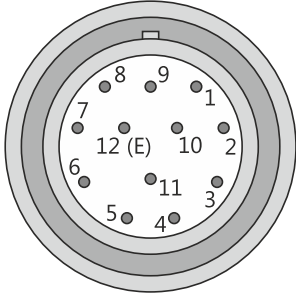
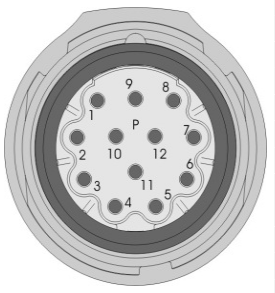
| Circular connector                                                                  | Pin | Description | Function                  | Pin | Coupling                                                                              |
|-------------------------------------------------------------------------------------|-----|-------------|---------------------------|-----|---------------------------------------------------------------------------------------|
|  | 1   | ---         |                           | 1   |  |
|                                                                                     | 2   | ---         |                           | 2   |                                                                                       |
|                                                                                     | 3   | Sin         | Sine input                | 3   |                                                                                       |
|                                                                                     | 4   | Cos\        | Cosine input inverted     | 4   |                                                                                       |
|                                                                                     | 5   | Ref         | Reference output          | 5   |                                                                                       |
|                                                                                     | 6   | ---         |                           | 6   |                                                                                       |
|                                                                                     | 7   | Sin\        | Sine input inverted       | 7   |                                                                                       |
|                                                                                     | 8   | Cos         | Cosine input              | 8   |                                                                                       |
|                                                                                     | 9   | Ref\        | Reference output inverted | 9   |                                                                                       |
|                                                                                     | 10  | ---         |                           | 10  |                                                                                       |
|                                                                                     | 11  | ---         |                           | 11  |                                                                                       |
|                                                                                     | 12  | ---         |                           | 12  |                                                                                       |

Table 4: 8BCR cable extension - Pinout

### 4.3 Cable diagram

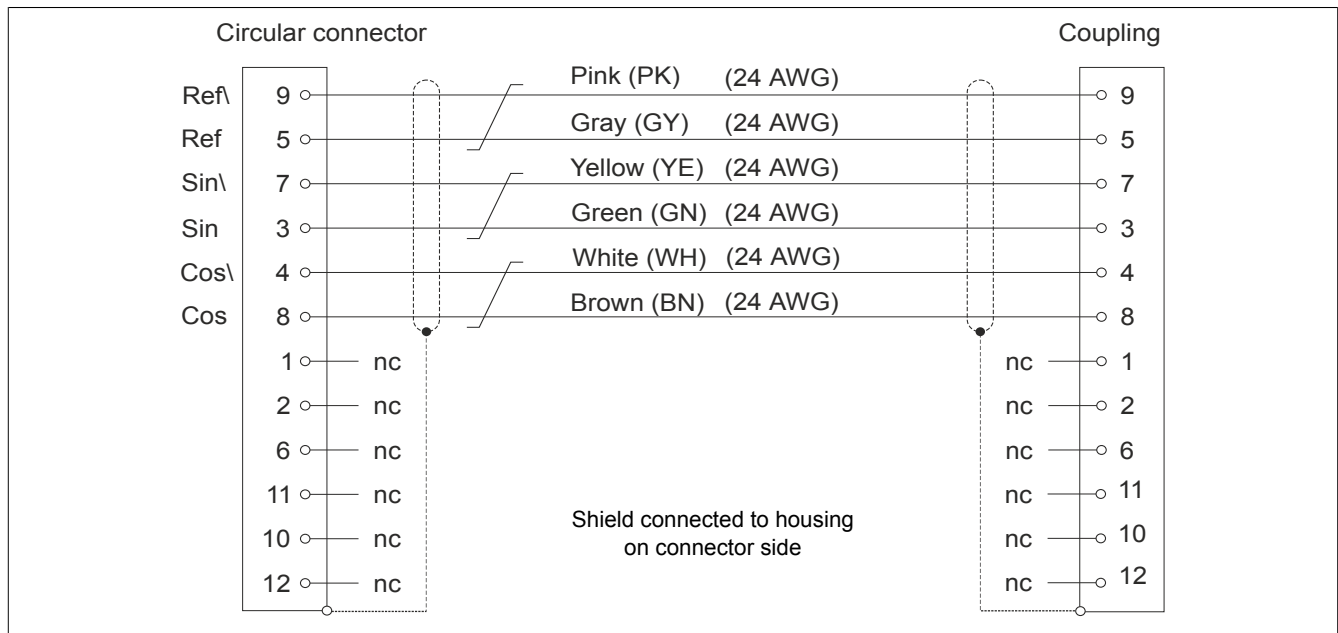


Figure 1: 8BCR cable extension - Cable diagram