## Connecting cable NEBA-M8W4-U-5-N-LE4 Part number: 8078234



## **Data sheet**

| Feature  | Value   |
|--|---|
| Conforms to standard                                 | EN 61076-2-104<br>EN 61984  |
| Approval   | c UL us listed (OL)   |
| Intended use   | Die Verbindungsleitung verbindet Feldgeräte (Sensoren, Aktoren) mit<br>Steuerungen.   |
| Certificate issuing authority                        | UL E253748  |
| Cable designation                                    | Without inscription label holder  |
| Frequency of connection                              | 100   |
| Product weight                                       | 129 g   |
| Instructions on use                                  | Meets the requirements of IEC 61010-1 and 61010-2-202, in particular<br>for electrically operated valves from Festo.<br>Only energy-limited circuits with a maximum current of 4 A at a max.<br>open circuit voltage of 30 V DC are permissible for supplying electrically<br>actuated valves from Festo. |
| Electrical connection 1, function                    | Field device side   |
| Electrical connection 1, design                      | Round   |
| Electrical connection 1, connection type             | Socket  |
| Electrical connection 1, cable outlet                | Angled  |
| Electrical connection 1, connector system            | M8x1, A-coded, to EN 61076-2-104  |
| Electrical connection 1, number of connections/cores | 4   |
| Electrical connection 1, used connections/cores      | 4   |
| Electrical connection 1, type of mounting            | Screw-type lock with hexagon A/F 9 mm and longitudinal knurl  |
| Electrical connection 1, terminal allocation         | Pin 1 = BN<br>Pin 2 = WH<br>Pin 3 = BU<br>Pin 4 = BK  |
| Electrical connection 1, display                     | ohne  |
| Electrical connection 2, function                    | Controller side   |
| Electrical connection 2, connection type             | Cable   |
| Electrical connection 2, connector system            | Open end  |
| Electrical connection 2, number of connections/cores | 4   |
| Electrical connection 2, used connections/cores      | 4   |

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| Feature  | Value   |
|--|---|
| Electrical connection 2, terminal allocation                     | Pin 1 = BN<br>Pin 2 = WH<br>Pin 3 = BU<br>Pin 4 = BK  |
| Electrical connection 2, display                                 | ohne  |
| Operational voltage range DC                                     | 0 V60 V   |
| Note on operational voltage range DC                             | 0 - 30 V for UL applications  |
| Operational voltage range AC                                     | 0 V48 V   |
| Note on operational voltage range AC                             | 0 - 30 V for UL applications  |
| Current rating at 40° C  | 4 A   |
| Immunity to surge  | 1.5 kV  |
| Cable length   | 5 m   |
| Cable characteristic   | Suitable for energy chains/robot applications<br>Abrasion-resistant<br>Low adhesion<br>Flame-retardant and self-extinguishing   |
| Test conditions cable  | Test conditions on request<br>Torsional resistance: > 300,000 cycles, ± 270°/0.1 m<br>Bending fatigue strength: > 50000 cycles, bending radius 5 mm<br>Energy chain: > 5 million cycles, bending radius 28 mm                   |
| Notes on test conditions cable                                   | Tested at 23 °C   |
| Bending radius, fixed cable                                      | 14 mm   |
| Bending radius, moving cable                                     | 46 mm   |
| Cable diameter   | 4.5 mm  |
| Cable structure  | 4 x 0.25 mm <sup>2</sup>  |
| Nominal cross section conductor                                  | 0.25 mm <sup>2</sup>  |
| Wire ends  | Sheath removed<br>Cut off bluntly   |
| Degree of protection   | IP65<br>IP68<br>IP69K   |
| Note on degree of protection                                     | In assembled state  |
| Special characteristics  | UV resistant<br>Hydrolysis-resistant<br>Resistant to cooling lubricants<br>Resistant to microbes<br>Oil resistant<br>Ozone-resistant  |
| Outdoor applications   | Application areas with direct exposure to outdoor climatic influences<br>Class D1 based on IEC 60654-1  |
| Ambient temperature  | -40 °C85 °C   |
| Note on ambient temperature                                      | -40 - 50 °C for UL applications<br>Note derating  |
| Ambient temperature with moving cable                            | -20 °C85 °C   |
| Note on the ambient temperature with flexible cable installation | -20 - 50 °C for UL applications   |
| Storage temperature  | -25 ℃55 ℃   |
| Note on storage temperature                                      | Temporarily during transport in packaging -40 85 °C   |
| Relative air humidity  | Max. 93% at 40 °C   |
| Nominal altitude of use  | <= 2000 m NHN   |
| Overvoltage category   | Н   |
| CE mark (see declaration of conformity)                          | In accordance with EU RoHS Directive  |
| CE marking (see declaration of conformity)                       | To UK RoHS instructions   |
| LABS (PWIS) conformity   | VDMA24364-B2-L  |
| Suitability for the production of Li-ion batteries               | Metals with more than 1% copper, zinc or nickel by mass are excluded<br>from use. Exceptions are nickel in steel, chemically nickel-plated<br>surfaces, printed circuit boards, cables, electrical plug connectors and<br>coils |
|  | CONS  |

| Feature                        | Value  |
|--------------------------------|--|
| Note on materials              | CFC-free<br>RoHS-compliant<br>Cadmium-free<br>Free of halogen<br>Free of phosphoric acid ester |
| Pollution degree               | 3  |
| Corrosion resistance class CRC | 1 - Low corrosion stress   |
| Material cable sheath          | TPE-U(PUR)   |
| Cable sheath colour            | grey   |
| Material housing               | TPE-U(PUR)   |
| Housing colour                 | Black  |
| Material screw-type lock       | Die-cast zinc, nickel-plated   |
| Material seals                 | FPM  |
| Material electrical contact    | Gold-plated copper alloy   |
| Material insulating sheath     | РР   |