

Connecting cable NEBA-M8G4-U-2.5-N-M12G4

Part number: 8078291

FESTO



 [General operating condition](#)

Data sheet

| Feature | Value |
|---|--|
| Conforms to standard | EN 61076-2-101 EN 61076-2-104 EN 61984 |
| Certification | c UL us - Listed (OL) |
| Intended use | The connecting cable connects field devices (sensors, actuators) with controllers. |
| Certificate issuing authority | UL E253748 |
| Cable designation | Without label holder |
| Contact durability | 100 |
| Product weight | 77 g |
| Application note | Meets the requirements of IEC 61010-1 and 61010-2-202, in particular for electrically operated valves from Festo. Only energy-limited circuits with a maximum current of 4 A at a max. open circuit voltage of 30 VDC are permitted to be used for supplying electrically actuated valves from Festo. |
| Electrical connection 1, function | Field device end |
| Electrical connection 1, design | Round |
| Electrical connection 1, connection type | Socket |
| Electrical connection 1, cable outlet | Straight |
| Electrical connection 1, connection technology | M8x1 A-coded as per EN 61076-2-104 |
| Electrical connection 1, number of pins/wires | 4 |
| Electrical connection 1, occupied pins/wires | 4 |
| Electrical connection 1, type of mounting | Screw-type lock with hexagon AF 9 and longitudinal knurl rotatable |
| Electrical connection 1, type of mounting | Compatible with rotatable/non-rotatable screw lock |
| Electrical connection for input 1, connection pattern | 00991872 |
| Electrical connection 1, terminal allocation | Pin 1 = BN Pin 2 = WH Pin 3 = BU Pin 4 = BK |
| Electrical connection 1, display | without |
| Electrical connection 2, function | Control side |
| Electrical connection 2, design | Round |
| Electrical connection 2, connection type | Plug |
| Electrical connection 2, cable outlet | Straight |
| Electrical connection 2, connection technology | M12x1 A-coded as per EN 61076-2-101 |
| Electrical connection 2, number of pins/wires | 4 |
| Electrical connection 2, occupied pins/wires | 4 |

| Feature | Value |
|--|---|
| Electrical connection 2, type of mounting | Screw-type lock with hexagon AF 13 and longitudinal knurl rotatable |
| Electrical connection 2, type of mounting | Compatible with rotatable/non-rotatable screw lock |
| Electrical connection 2, connection pattern | 00995386 |
| Electrical connection 2, terminal allocation | Pin 1 = BN Pin 2 = WH Pin 3 = BU Pin 4 = BK |
| Electrical connection 2, display | without |
| DC operating voltage range | 0 V ... 60 V |
| Note on operating voltage range DC | 0 - 30 V for UL applications |
| Operating voltage range AC | 0 V ... 48 V |
| Note on operating voltage range AC | 0 - 30 V for UL applications |
| Current rating at 40° C | 4 A |
| Surge resistance | 1.5 kV |
| Cable length | 2.5 m |
| Cable characteristic | Suitable for energy chains/robot applications abrasion-resistant low adhesion Flame-retardant and self-extinguishing |
| Connector cable test conditions | Test conditions on request Torsional resistance: > 300 000 cycles, ±270°/0.1 m Bending fatigue strength: > 50000 cycles, bending radius 5 mm Energy chain > 5 million cycles, bending radius 28 mm |
| Note on connector cable test conditions | tested at 23 °C |
| Bending radius, fixed cable installation | ≥14 mm |
| Bending radius, flexible cable installation | ≥46 mm |
| Cable diameter | 4.5 mm |
| Cable design | 4 x 0.25 mm ² |
| Nominal conductor cross section | 0.25 mm ² |
| Degree of protection | IP65 IP68 IP69K |
| Note on degree of protection | In mounted state |
| Special features | UV-resistant hydrolysis resistant Resistant to cooling lubricants Resistant to microbes Oil-resistant Ozone-resistant |
| Use in exterior area | Locations of use with direct outdoor climatic exposure Class D1 based on IEC 60654-1 |
| Ambient temperature | -40 °C ... 85 °C |
| Note on ambient temperature | -40 - 50 °C for UL applications Note derating |
| Ambient temperature with flexible cable installation | -20 °C ... 85 °C |
| Note on ambient temperature with flexible cable installation | -20 - 50 °C for UL applications |
| Storage temperature | -25 °C ... 55 °C |
| Note on storage temperature | short-term for transport in packaging -40 ... 85 °C |
| Relative air humidity | Max. 93% at 40 °C |
| Nominal altitude of use above sea level | ≤ 2000 m NHN |
| Overvoltage category | II |
| CE marking (see declaration of conformity) | As per EU RoHS directive |
| UKCA 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% by mass of copper, zinc or nickel by mass are excluded from use. Exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils |

| Feature | Value |
|----------------------------------|---|
| Cleanroom class | Class 4 according to ISO 14644-1 |
| Note on materials | CFC-free RoHS-compliant Cadmium-free Halogen-free Free of phosphoric acid ester |
| Contamination level | 3 |
| Corrosion resistance class (CRC) | 1 - Low corrosion stress |
| Material of cable sheath | TPE-U(PUR) |
| Color cable sheath | Gray |
| Housing material | TPE-U(PUR) |
| Housing colour | Black |
| Material of screw-type lock | Die-cast zinc, nickel-plated |
| Seals material | FPM |
| Material of pin contacts | Copper alloy, gold-plated |
| Insulating sheath material | PP |