

Connecting cable NEBA-M12G5-U-2.5-N-M12G5

Part number: 8078276

FESTO



Data sheet

| Feature | Value |
|--|--|
| Conforms to standard | EN 61076-2-101 EN 61984 |
| Approval | c UL us listed (OL) |
| Intended use | Die Verbindungsleitung verbindet Feldgeräte (Sensoren, Aktoren) mit Steuerungen. |
| Certificate issuing authority | UL E253748 |
| Cable designation | Without inscription label holder |
| Frequency of connection | 100 |
| Product weight | 87 g |
| Instructions on use | 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 V DC are permissible for supplying electrically 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 | Straight |
| Electrical connection 1, connector system | M12x1, A-coded to EN 61076-2-101 |
| Electrical connection 1, number of connections/cores | 5 |
| Electrical connection 1, used connections/cores | 5 |
| Electrical connection 1, type of mounting | Screw-type lock with 13 mm hexagon and longitudinal knurl |
| Electrical connection 1, terminal allocation | Pin 1 = BN Pin 2 = WH Pin 3 = BU Pin 4 = BK Pin 5 = GY |
| Electrical connection 1, display | ohne |
| Electrical connection 2, function | Controller side |
| Electrical connection 2, design | Round |
| Electrical connection 2, connection type | Plugs |
| Electrical connection 2, cable outlet | Straight |
| Electrical connection 2, connector system | M12x1, A-coded to EN 61076-2-101 |
| Electrical connection 2, number of connections/cores | 5 |

| Feature | Value |
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| Electrical connection 2, used connections/cores | 5 |
| electrical connection 2, type of mounting | Screw-type lock with 13 mm hexagon and longitudinal knurl |
| Electrical connection 2, terminal allocation | Pin 1 = BN Pin 2 = WH Pin 3 = BU Pin 4 = BK Pin 5 = GY |
| Electrical connection 2, display | ohne |
| Operational voltage range DC | 0 V...60 V |
| Operational voltage range AC | 0 V...48 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 | 2.5 m |
| Cable characteristic | Suitable for energy chains/robot applications Abrasion-resistant Low adhesion Flame-retardant and self-extinguishing |
| Test conditions cable | 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 |
| 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 | 5 x 0.25 mm ² |
| Nominal cross section conductor | 0.25 mm ² |
| Degree of protection | IP65 IP68 IP69K |
| Special characteristics | UV resistant Hydrolysis-resistant Resistant to cooling lubricants Resistant to microbes Oil resistant Ozone-resistant |
| Outdoor applications | Application areas with direct exposure to outdoor climatic influences 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 moving cable | -20 °C...85 °C |
| Note on the ambient temperature with flexible cable installation | -20 - 50 °C for UL applications |
| Storage temperature | -25 °C...55 °C |
| 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 | II |
| 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 from use. Exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils |
| Cleanroom class | Class 4 according to ISO 14644-1 |

| Feature | Value |
|--------------------------------|--|
| Note on materials | CFC-free RoHS-compliant Cadmium-free Free of halogen 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 | PP |