

Datenblatt

C L12FG-xM-PUR

Versorgungs- und I/O-Leitung für Aktoren und Sensoren, geschirmte Ausführung, schleppkettene geeignet, speziell für Robotik-Applikationen



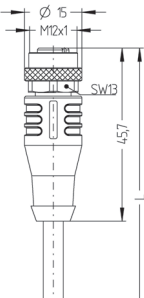
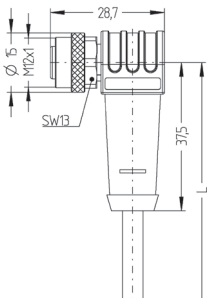
Vibrationsbeständig, schleppkettene geeignet, robotikgeeignet, ölbeständig, säure- u. laugenbeständig, ozon- u. UV-beständig, hydrolysefest, seewasserbeständig, flammwidrig, schweißfunkenfest, recyclingfähig, RoHS-konform, halogenfrei, silikonfrei, LABS-frei



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SensoPart Industriesensorik GmbH  
Nägelsestr. 16  
D-79288 Gottenheim  
Tel.: +49 (0) 7665 94769-0  
info@sensopart.de | www.sensopart.com

| ALLGEMEINE DATEN (TYP.)                        |                                                       |
|------------------------------------------------|-------------------------------------------------------|
| Typ                                            | Versorgungs- und I/O-Leitung für Aktoren und Sensoren |
| Länge                                          | 2 m / 5 m / 10 m / 20 m / 30 m                        |
| Anschluss                                      | M12                                                   |
| Polzahl                                        | 12                                                    |
| TECHNISCHE DATEN (TYP.)                        |                                                       |
| Art des Steckerkontaktes                       | M12 Buchse                                            |
| Kodierung der Steckverbinder                   | gerade / 90 ° gewinkelt                               |
| Mechanische Lebensdauer                        | A                                                     |
| Außendurchmesser Leitung                       | ≥ 100 Steckzyklen                                     |
| Leiteranzahl x Leiterquerschnitt               | 6 mm                                                  |
| Schirmung                                      | 12 x 0.14 mm <sup>2</sup>                             |
| Anzugsdrehmoment                               | ✓ 360 ° Kontaktierung                                 |
|                                                | 1 Nm                                                  |
| UMGEBUNGSBEDINGUNGEN (TYP.)                    |                                                       |
| Schleppkettene geeignet                        | ✓                                                     |
| Robotikgeeignet                                | ✓                                                     |
| Biegezyklen [Mio.]                             | > 2                                                   |
| Torsionszyklen [Mio.]                          | < 1                                                   |
| Temperaturbereich fest / bewegt / Schleppkette | -40 ... +90 °C / -30 ... +90 °C / -25 ... +60 °C      |
| Biegeradius fest / bewegt                      | 5 x Ø / 10 x Ø                                        |
| Schutzart montiert                             | IP 65, IP 67, IP 68                                   |
| Verschmutzungsgrad                             | 3                                                     |
| WERKSTOFFE (TYP.)                              |                                                       |
| Material Gehäuse, Griffkörper                  | TPU                                                   |
| Material Kontakträger                          | TPU                                                   |
| Kontaktmaterial Oberflächenveredelung          | CuZn, vergoldet                                       |
| Material (Mutter) Verschraubung                | CuZn, vernickelt                                      |
| Material Dichtung                              | FPM / FKM                                             |
| Steckerfarbe (Gehäusefarbe)                    | schwarz                                               |
| Leitungsmaterial                               | PUR                                                   |
| Leitungsfarbe                                  | schwarz                                               |
| Halogenfrei                                    | ✓                                                     |
| ELEKTRISCHE DATEN (TYP.)                       |                                                       |
| Nennstrom (40 °C)                              | 1,5 A                                                 |
| Nennspannung                                   | ≤ 300 V                                               |
| Bemessungsspannung                             | 30 V                                                  |
| Isolationswiderstand                           | ≥ 10 <sup>8</sup> Ω                                   |
| Durchgangswiderstand                           | ≤ 5 mΩ                                                |

| MASSBILD                                                                           |                                                                                     |  | PINBELEGUNG                                                                           |                                                                                                                               |
|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| M12 gerade                                                                         | M12 90 ° gewinkelt                                                                  |  | M12                                                                                   |                                                                                                                               |
|  |  |  |  | 1 = BN<br>2 = BU<br>3 = WH<br>4 = GN<br>5 = PK<br>6 = YE<br>7 = BK<br>8 = GY<br>9 = RD<br>10 = VT<br>11 = GY/PK<br>12 = RD/BU |

| BESTELLBEZEICHNUNG | ARTIKEL-NR. | BESCHREIBUNG                             | LEITUNGSLÄNGE |
|--------------------|-------------|------------------------------------------|---------------|
| C L12FG-2m-PUR     | 902-51801   | M12, 12-polig, gerade, A-codiert         | 2 m           |
| C L12FG-5m-PUR     | 902-51796   |                                          | 5 m           |
| C L12FG-10m-PUR    | 902-51797   |                                          | 10 m          |
| C L12FG-S-20m-PUR  | 902-51805   |                                          | 20 m          |
| C L12FG-S-30m-PUR  | 902-51845   |                                          | 30 m          |
| C L12FW-2m-PUR     | 902-51798   | M12, 12-polig, 90 ° gewinkelt, A-codiert | 2 m           |
| C L12FW-5m-PUR     | 902-51799   |                                          | 5 m           |
| C L12FW-10m-PUR    | 902-51800   |                                          | 10 m          |
| C L12FW-S-20m-PUR  | 902-51821   |                                          | 20 m          |
| C L12FW-S-30m-PUR  | 902-51846   |                                          | 30 m          |

**Data sheet**

# C L12FG-xM-PUR

Supply and I/O lines for actuators and sensors, shielded, suitable for drag chains and robotic applications



Vibration resistant, suitable for drag chains and robotic applications, oil-resistant, acid- and alkali-resistant, ozon and UV-resistant, hydrolysis resistant, sea water resistant, flame retardant, welding spark proof, recyclable, RoHS compliant, halogen-free, silicone-free, LABS-free

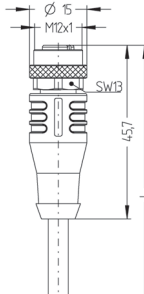
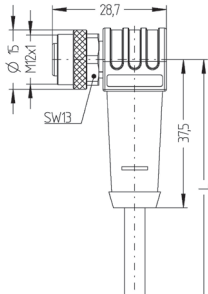


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| GENERAL DATA (TYP.)                          |                                                  |
|----------------------------------------------|--------------------------------------------------|
| Type                                         | Supply and I/O lines for actuators and sensors   |
| Length                                       | 2 m / 5 m / 10 m / 20 m / 30 m                   |
| Connection                                   | M12                                              |
| Number of poles                              | 12                                               |
| TECHNICAL DATA (TYP.)                        |                                                  |
| Type of plug contact                         | M12 female                                       |
| Coding of the connectors                     | A                                                |
| Mechanical life                              | ≥ 100 mating cycles                              |
| Outer diameter cable                         | 6 mm                                             |
| Number of conductors x cross section         | 12 x 0.14 mm <sup>2</sup>                        |
| Shielding                                    | ✓ 360 ° bonding                                  |
| Tightening torque                            | 1 Nm                                             |
| ENVIRONMENTAL CONDITIONS (TYP.)              |                                                  |
| Suitable for drag chains                     | ✓                                                |
| Suitable for Robotics                        | ✓                                                |
| Bending cycles [Mio.]                        | > 2                                              |
| Torsion [Mio]                                | < 1                                              |
| Temperature range fixed / moved / drag chain | -40 ... +90 °C / -30 ... +90 °C / -25 ... +60 °C |
| Bending radius fixed / moved                 | 5 x Ø / 10 x Ø                                   |
| Degree of protection (IP) mounted            | IP 65, IP 67, IP 68                              |
| Pollution degree                             | 3                                                |
| MATERIALS (TYP.)                             |                                                  |
| Material housing, handle body                | TPU                                              |
| Material contact carrier                     | TPU                                              |
| Contact material surface finishing           | CuZn, gold plated                                |
| Material (nut) screw connection              | CuZn, nickel plated                              |
| Material sealing                             | FPM / FKM                                        |
| Connector color (housing color)              | Black                                            |
| Material cable                               | PUR                                              |
| Cable color                                  | Black                                            |
| Halogen-free                                 | ✓                                                |
| ELECTRICAL DATA (TYP.)                       |                                                  |
| Rated current (40 °C)                        | 1.5 A                                            |
| Nominal voltage                              | ≤ 300 V                                          |
| Rated voltage                                | 30 V                                             |
| Insulation resistance                        | ≥ 10 <sup>8</sup> Ω                              |
| Contact resistance                           | ≤ 5 mΩ                                           |

| DIMENSION DRAWING                                                                  |                                                                                     |  | PIN ASSIGNMENT                                                                        |                                                                                                                               |
|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| M12 straight                                                                       | M12 90 ° angled                                                                     |  | M12                                                                                   |                                                                                                                               |
|  |  |  |  | 1 = BN<br>2 = BU<br>3 = WH<br>4 = GN<br>5 = PK<br>6 = YE<br>7 = BK<br>8 = GY<br>9 = RD<br>10 = VT<br>11 = GY/PK<br>12 = RD/BU |

| PART CODE         | ARTICLE NUMBER | DESCRIPTION                       | CABLE LENGTH |
|-------------------|----------------|-----------------------------------|--------------|
| C L12FG-2m-PUR    | 902-51801      | M12, 12-pin, straight, A-coded    | 2 m          |
| C L12FG-5m-PUR    | 902-51796      |                                   | 5 m          |
| C L12FG-10m-PUR   | 902-51797      |                                   | 10 m         |
| C L12FG-S-20m-PUR | 902-51805      |                                   | 20 m         |
| C L12FG-S-30m-PUR | 902-51845      |                                   | 30 m         |
| C L12FW-2m-PUR    | 902-51798      | M12, 12-pin, 90 ° angled, A-coded | 2 m          |
| C L12FW-5m-PUR    | 902-51799      |                                   | 5 m          |
| C L12FW-10m-PUR   | 902-51800      |                                   | 10 m         |
| C L12FW-S-20m-PUR | 902-51821      |                                   | 20 m         |
| C L12FW-S-30m-PUR | 902-51846      |                                   | 30 m         |