

1080227

https://www.phoenixcontact.com/us/products/1080227

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Power connector, Power, 3-position, shielded, Socket straight M12, S, Push-lock spring connection, knurl material: Brass, nickel-plated, external cable diameter 6 mm ... 11 mm

Your advantages

- Time-saving Push-Lock connection: Tool-free connection and disconnection of conductors by opening the contact levers
- · Intuitive connection: Easy assignment of individual litz wires with color-coded and numerical identification of the contact levers
- · Integrated Push-in Technology: Wire rigid and pretreated conductors easily by means of simple, direct insertion
- Shock- and vibration-resistant connection: Proven spring-cage technology guarantees secure and reliable contacting
- · Increased protection against electric shock: PE connection to all metal components
- Safely shielded: Reliable 360° shield connection even under extreme mechanical strain
- · Protected seal in the M12 socket

Commercial data

| Item number | 1080227 |
|--------------------------------------|---------------|
| Packing unit | 1 pc |
| Minimum order quantity | 1 pc |
| Sales key | BF33 |
| Product key | BF2CFP |
| GTIN | 4055626802947 |
| Weight per piece (including packing) | 90.7 g |
| Weight per piece (excluding packing) | 90 g |
| Customs tariff number | 85366990 |
| Country of origin | DE |



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Technical data

Notes

| General | NOTE: Observe the permissible bending radii when laying conductors, since the degree of protection may be put in jeopardy if the bending forces are too high. Alleviate mechanical loads upstream of the connector, e.g. by using cable ties. |
|---------|---|
|---------|---|

Mounting

| Assembly instructions | The wires can be connected both with ferrules and without ferrules |
|-----------------------|--|
| Connection method | Push-lock spring connection |

Product properties

| Product type | Circular connector (cable-side) |
|----------------------|---------------------------------|
| Sensor type | Power |
| Number of positions | 3 |
| Application | Power supply |
| No. of cable outlets | 1 |
| Shielded | yes |
| Coding | S |
| Cable outlet | straight |

Insulation characteristics

| Overvoltage category | III |
|----------------------|-----|
| Degree of pollution | 3 |

Dimensions

| Dimensional drawing | 21 L 20 L |
|-------------------------|------------|
| Length | 68 mm |
| External dimensions | |
| Outside diameter | 6 mm 11 mm |
| Housing | |
| Diameter housing | 23 mm |
| Actorial appoifications | |

Material specifications

| Flammability rating according to UL 94 | V0 |
|--|----------------------|
| Material of grip body | Brass, nickel-plated |
| Contact surface material | Au |
| Material for screw connection | Brass, nickel-plated |



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Connection data

Conductor connection

| Connection method | Push-lock spring connection |
|---|---|
| Connection cross section | 1.5 mm² 1.5 mm² |
| | 0.75 mm ² 2.5 mm ² (with ferrule) |
| | 1.5 mm² 1.5 mm² (solid) |
| Connection cross section AWG | 16 16 (without ferrule) |
| | 18 14 (with ferrule) |
| Stripping length of the individual wire | 10 mm |
| Tightening torque | 0.6 Nm (M12 knurl) |
| | 5 Nm (Pressure nut with connector housing) |

Pin assignment

| Contact Color (signal designation) Contact (optional) | 1 = BK1 |
|---|-----------|
| | 3 = BK3 |
| | PE = GNYE |

Electrical properties

| Rated surge voltage | 6 kV |
|--------------------------------|--------------------------------------|
| Nominal voltage U _N | 230 V AC |
| Nominal current I _N | 12 A (when using 1.5 mm² conductors) |
| | 12 A (at 40 °C) |

Mechanical properties

Mechanical data

| Insertion/withdrawal cycles ≥ 100 | |
|-----------------------------------|--|
|-----------------------------------|--|

Connector

Connection 1

| Head design | Socket |
|-------------------|----------|
| Head cable outlet | straight |
| Head thread type | M12 |
| Coding | S |

Cable/line

| Signal type/category | Power |
|---|-------|
| Stripping length of the individual wire | 10 mm |

Environmental and real-life conditions

Ambient conditions

| Degree of protection | IP65 |
|---------------------------------|------------------------------|
| Ambient temperature (operation) | -40 °C 85 °C (Plug / socket) |



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Standards and regulations

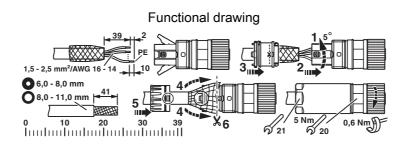
| Standard designation | M12 connector |
|--------------------------|--------------------------|
| Standards/specifications | based on IEC 61076-2-111 |



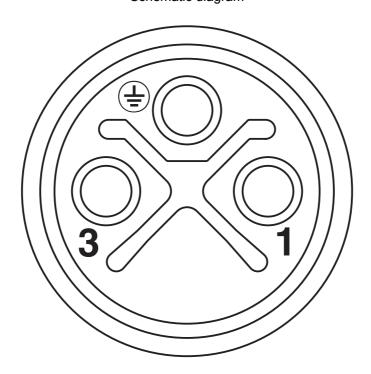
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Drawings



Schematic diagram



Pin assignment of M12 socket, 3-pos., S-coded, socket side view



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M12 x 1 socket, straight, shielded



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Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1080227



EAC

Approval ID: RU C-DE.BL08.B.00511



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Classifications

UNSPSC 21.0

ECLASS

| | ECLASS-11.0 | 27440102 |
|------|-------------|----------|
| | ECLASS-12.0 | 27440116 |
| | ECLASS-13.0 | 27440116 |
| ETIM | | |
| | ETIM 8.0 | EC002635 |
| UN | SPSC | |

39121400



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Environmental product compliance

| China RoHS | Environmentally friendly use period: unlimited = EFUP-e |
|------------|---|
| | No hazardous substances above threshold values |



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Accessories

AI 2,5 -10 BU - Ferrule

3202533

https://www.phoenixcontact.com/us/products/3202533



Ferrule, sleeve length: 10 mm, length: 17 mm, color: blue

AI 1,5 -10 BK - Ferrule

3200195

https://www.phoenixcontact.com/us/products/3200195



Ferrule, sleeve length: 10 mm, length: 16 mm, color: black



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TSD-M 1,2NM - Torque screwdriver

1212224

https://www.phoenixcontact.com/us/products/1212224



Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 0. 3 - 1.2 Nm

TSD-M SAC-BIT ADAPTER - Adapter insert

1212600

https://www.phoenixcontact.com/us/products/1212600



Adapter bit for TSD-M...torque tools, E6.3-1/4" drive with 4 mm hexagon to accommodate SAC bits



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SACC BIT M12-D23 - Tool

1202885

https://www.phoenixcontact.com/us/products/1202885

Nut for assembling M12 connectors for assembly with a knurl diameter of 23 mm, for 4 mm hexagonal drive



WIREFOX 2,5 - Stripping tool

1212368

https://www.phoenixcontact.com/us/products/1212368



Stripping tool, for conductors and cables with a conductor cross section from 0. 08 to 2.5 mm, self-adjusting, stripping length adjustable up to 15 mm, cutting capacity up to 6 mm^2 stranded/1.5 mm^2 solid



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WIREFOX SAC - Stripping tool

1212623

https://www.phoenixcontact.com/us/products/1212623



Stripping pliers, for halogen-free sensor/actuator cables (SAC cables), with PUR and PVC insulation, from \emptyset of 4.4 to 7 mm, any stripping length

CRIMPFOX VARIO 4S - Crimping pliers

1108766

https://www.phoenixcontact.com/us/products/1108766



Crimping pliers, contact connection type: Insulated and uninsulated ferrules, min. cross section: $0.25~\text{mm}^2$, max. cross section: $4~\text{mm}^2$, compression: Square crimp, black/green



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CRIMPFOX CENTRUS 10S - Crimping pliers

1213154

https://www.phoenixcontact.com/us/products/1213154



Crimping pliers, for uninsulated and insulated ferrules, DIN 46228 Part 1 and 4, from 0.14 mm^2 ... 10 mm^2 , also for TWIN ferrules up to 2 x 4 mm^2 , automatic cross section adjustment, lateral insertion, equipped with fall protection

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