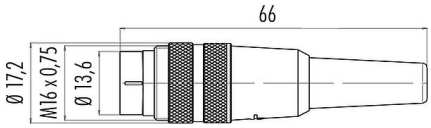
# Product data sheet
## Miniature connectors

| | |
|---|---|
| Product description | **M16 Male cable connector, Contacts: 5 (05-b), 3.0-6.0 mm, unshielded, solder, IP40** |
| Area | **M16 IP40** |
| Series | **680** |
| Part no. | **09 0317 09 05** |

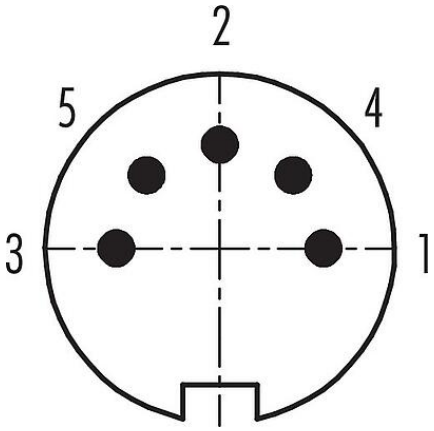
### Illustration (may vary)



### Scale drawing




### Contact arrangement (Plug-in side)




**You can find the assembly instructions on the next page.**

## Technical data

### General features

| | |
|---|---|
| Part no. | 09 0317 09 05 |
| Connector design | Male cable connector |
| Type standard | DIN EN 61076-2-106 |
| Version | Connector pin straight |
| Connector locking system | screw |
| Termination | solder |
| Degree of protection | IP40 |
| Connection cross-section | 0.75 mm² / AWG 18 |
| Cable outlet | 3.0-6.0 mm |
| Temperature range from/to | -40 °C / 85 °C |
| Mechanical operation | > 500 Mating cycles |
| Weight (g) | 18.78 |
| Customs tariff number | 85369010 |
| Country of Origin | DE |

### Electrical parameters

| | |
|---|---|
| Rated voltage | 60 V |
| Rated impulse voltage | 500 V |
| Rated current | 6.0 A |
| Insulation resistance | ≥ $10^{1^{0}}$ Ω |
| Pollution degree | 1 |
| Overvoltage category | I |
| Insulating material group | III |
| EMC compliance | unshielded |

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## Material

| | |
|---|---|
| Housing material | PA |
| Contact body material | PBT (UL94 V-0) |
| Contact material | CuZn (brass) |
| Contact plating | Au (gold) |
| REACH SVHC | CAS 7439-92-1 (Lead) |
| SCIP number | 3cb20852-9457-4c1c-8ebf-ec4fd369167c |

## Classifications

| | |
|---|---|
| eCl@ss 11.1 | 27-44-01-09 |
| ETIM 9.0 | EC003569 |

## Declarations of conformity

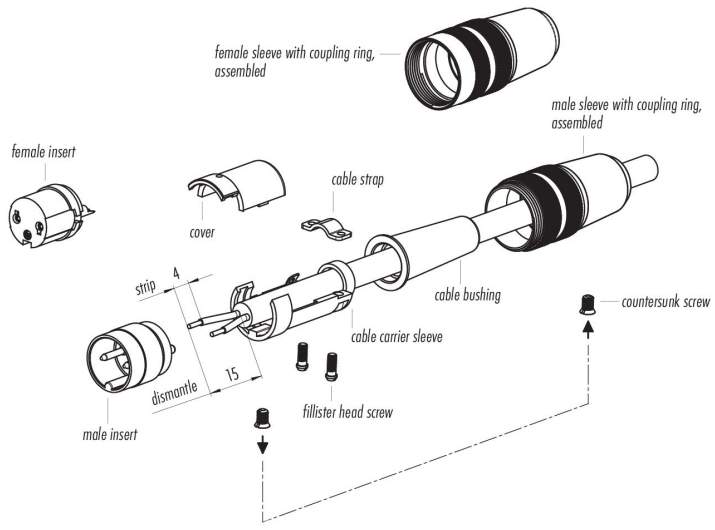
| | |
|---|---|
| Low Voltage Directive | EN 60529:1991 \| EN 60204-1:2018 |

## Trade-Compliance

| | |
|---|---|
| Copper (9903.78.01) | 0.003482 kg |

## Assembly instructions

1. Bead cable carrier sleeve, cable bushing and sleeve with coupling ring to cable.
2. Dismantle cable to 15 mm length.
3. Strip and solder single wires.
4. If necessary, twist shield and solder to solder eye.
5. Place the cover on the cable carrier sleeve and fasten the cable strap with fillister head screws.
6. Push assembled part with contact insert into the sleeve and fasten with countersunk screw.




Date: 03.10.2026

**Product data sheet**

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## Security notices

The connector must not be plugged or unplugged under load. Non-observance and improper use can result in personal injury.

The connectors have been developed for applications in plant engineering, control and electrical equipment construction. The user is responsible for checking whether the connectors can also be used in other areas of application.

To protect against unintentional opening of the connector, the thread between the housing and the connector head must be secured with a suitable cyanoacrylate adhesive when used in circuits with voltages dangerous to the touch. This does not apply to connectors used in SELV and PELV circuits according to IEC 61140 (EN 61140, VDE 0140-1).

Connectors which are used in circuits with voltages dangerous to the touch may only be installed and used by, or under the supervision of, persons with electrical engineering training, taking into account the applicable regulations and standards.

The user must take suitable safety precautions to ensure that the connector cannot be accidentally disconnected.

Please observe the pollution degree and the overvoltage category. For further information, please refer to the download center "Technical Information".

To lock the cable connector with the device connector, the threaded ring is tightened "hand-tight" (approx. 60 cNm).