

Receptacle with break-away and push-pull locking for front or rear panel mounting

Size: 1, IP50, Keying: C, Number of contacts: 2, PCB, Contact type: Sockets, Signal

Basic information

| | |
|--------------------|---|
| Part number | G51MC8-P02QP00-0050 |
| Category | Connector |
| Type of connector | Receptacle |
| Assembly situation | Front panel mounting, Rear panel mounting |
| Size | 1 |

Contact insert description

| | |
|----------------------|-------------------------------|
| Special features | IEC 60601-1 (1 MOPP & 2 MOOP) |
| Transmission type | Signal |
| Number of contacts | 2 |
| Contact type | Sockets |
| Contact diameter | 1.3 mm |
| Termination type | PCB |
| Termination diameter | 0.7 mm |

Reverse gender on request

Technical information

| | | |
|--|-----------------------------|--|
| Nominal current single contact | 12 A | IEC 60512-5-2:2002 (DIN EN 60512-5-2:2003) |
| Max. current insert | 12 | VDE 0298-4:2003 |
| Test voltage | 1.4 kV AC | EIA-364-20F:2019-02 |
| Max. creepage distance (contact to contact) | 1.3 mm (Contact to housing) | |
| Max. creepage distance (contact to housing) | IEC 60601-1: 1MOPP. 2MOOP* | |
| Max. clearance distance (contact to contact) | 1.3 mm (Contact to contact) | |
| Max. clearance distance (contact to housing) | IEC 60601-1: 1MOPP. 2MOOP* | |

All shown connectors are rated to a safety extra low voltage (SELV) of less than 50 V AC / 75 V DC, according to IEC 61140:2016 (VDE 0140-1:2016) Protection against electric shock - Common aspects for installation and equipment. In case other standards rule a specific use of the connector, the application specific safety criteria shall be considered first. In this context, lower voltage ratings may be valid. Warning: Danger to life for operating voltages above 50 V AC / 120 V DC!

* As per IEC 60601-1:2012 (VDE 0750-1:2013-12). Max working voltage of the medical electrical device 250 V AC (degree of pollution 2).

Mechanical and environmental data

| | |
|----------------------------|------------------------|
| Locking principle | Break-Away , Push-Pull |
| Keying | C |
| Mating cycles | 5000 |
| IP class | IP50 |
| Max. operating temperature | 120 °C |
| Min. operating temperature | 50 °C |

*mated & unmated condition

Material and surface treatments

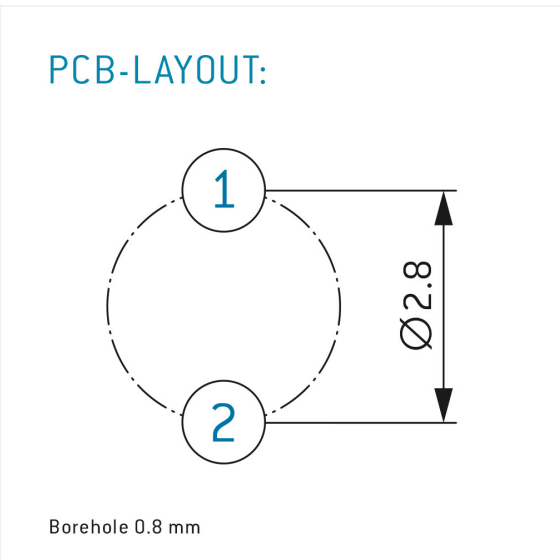
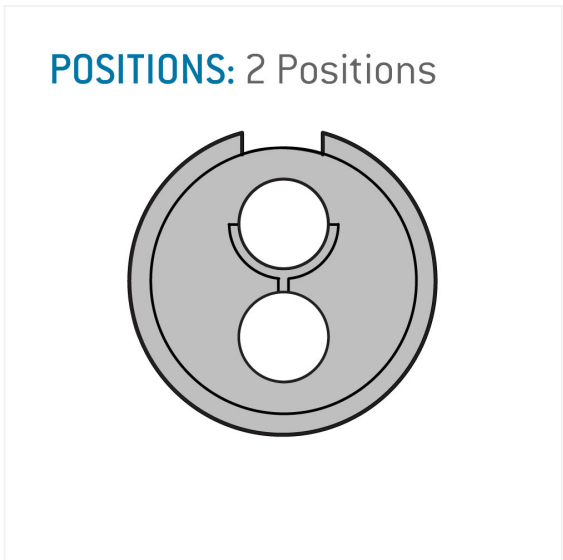
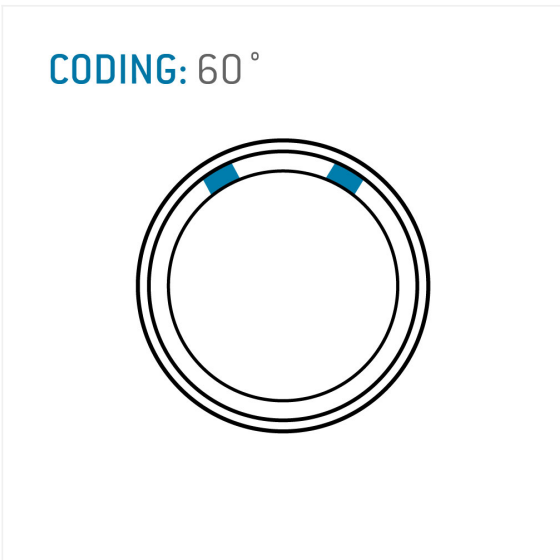
| | |
|----------------------------------|---------------------------|
| Material | PSU black |
| Insulator material | PEEK |
| Contact material | Cu-alloy with gold finish |
| Color option (Front or back nut) | Green |

Insulator materials MEDI-SNAP®

| | Standard | PEEK |
|--|---|-----------------------------|
| Flammability rating | UL 94 | V-0/1.5 |
| Operation temperature | | -50 to +250 °C |
| Dielectric strength | IEC 60243-1:2013 (VDE 0303-21:2014) | 19 kV/mm |
| Comparative figure of the creep resistance CTI | IEC 60112: 2009 (VDE 0303-11:2010) | 175 |
| Water absorption | ASTM D 570:1998 / ISO 62:2008 | 0.1 % |
| Insulation resistance | IEC 60512-3-1:2002 (DIN EN 60512-3-1:2003-01) | $> 1 \times 10^{12} \Omega$ |

ODU reserves the right to make changes based on the current state of knowledge without prior notice without being obliged to provide replacement deliveries or refinements of older designs.

All shown connectors are defined without breaking capacity (COC) according to IEC 61984:2008 (VDE 0627:2009).



PCB Layout with socket contacts: Top view (from component side). Unless otherwise numbered, numbering starts at the contact marked by the bracket and follows the spiral clockwise.

Further technical information and downloads

[3D-File \(STP File\)](#)