

SEACON Contact Penetrator

Glass To Metal (GM) Penetrators

ROBUST CONNECTIVITY SOLUTION

- GM4 - 4 contacts
- GM12 - 12 contacts
- GM24 - 24 contacts
- All contacts rated for 1500kVDC
- Reliable connections in high pressure environments
- Water tight glass to metal seal

HIGH RELIABILITY

- Qualified for 3,000m water depth
- Design life time: Up to 25 years
- Dual barrier sealing system
- Assembly with AWG14 - AWG28 wires
- Ethernet 100Mbit/Cat.5e compliance
- Factory Acceptance Testing (FAT) prior to delivery

TE Connectivity (TE)'s SEACON GM4, GM12 and GM24 penetrators provide electrical power and signals from ambient pressure to an atmospheric environment while providing a water tight glass to metal seal. Available in custom configurations for specific requirements. The glass, electrical contact and metal shell help to give a reliable connection in harsh environments.

GENERAL SPECIFICATIONS

- **Design Life:** Up to 25 Years
- **Operational Depth (Max):** 3,000m
- **Operational Temperature:** -18°C to +70°C
- **Storage Temperature installed in Assembly:** -30°C to +70°C
- **Shell Material:** Stainless Steel 316L, UNS S31603
- **Boot Seal Material:** Natural Rubber and HNBR

TE Components . . . TE Technology . . . TE Know-how . . .
AMP | AGASTAT | CII | HARTMAN | KILOVAC | MICRODOT | NANONICS | POLAMCO | Raychem | Rochester | DEUTSCH
SEACON Phoenix | Phoenix Optix | AFP | SEACON

Empower Engineers to Solve Problems, Moving the World Forward.

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QUALIFICATION & VERIFICATION TESTING

- **Hyperbaric Pressure Tested:** To 690 bar
- **Qualification Temperature Rise Tested in accordance with ISO 13628-6**
- **Q1 Shock and Vibration Tested in accordance with ISO13628-6**
- **Temperature Test With Current Load on All Pins:** 1A/24VDC
- **Helium Leak Rate:** $<1,5 \times 10$
- **Ethernet Standard Compliance and Performance Tested:** 100Mbit Cat.5e

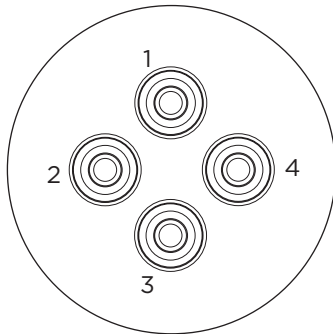
ELECTRICAL PERFORMANCE

- **Dielectric Withstand Voltage 1500VDC:** $<5\mu\text{A}$
- **Minimum Insulation Resistance (1000VDC/ $<1\text{A}$):** $>2 \text{ G}\Omega$
- **Maximum Contact Resistance (24VDC/6,5A):** $<10 \text{ m}\Omega$
- **Ethernet:** Cat.5e

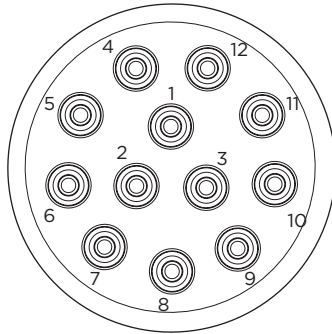
CONFIGURATIONS

- **4, 12 or 24 off Electrical Circuits per Penetrator:** AWG14 to AWG28
- **Contact TE for further details**

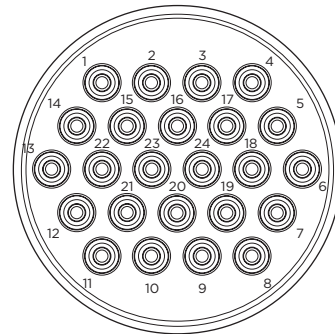
GM4



GM12



GM24



NOTE: All pin patterns are seen from pressure side

www.te.com/MOG

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Consult TE for the latest dimensions and design specifications.

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