

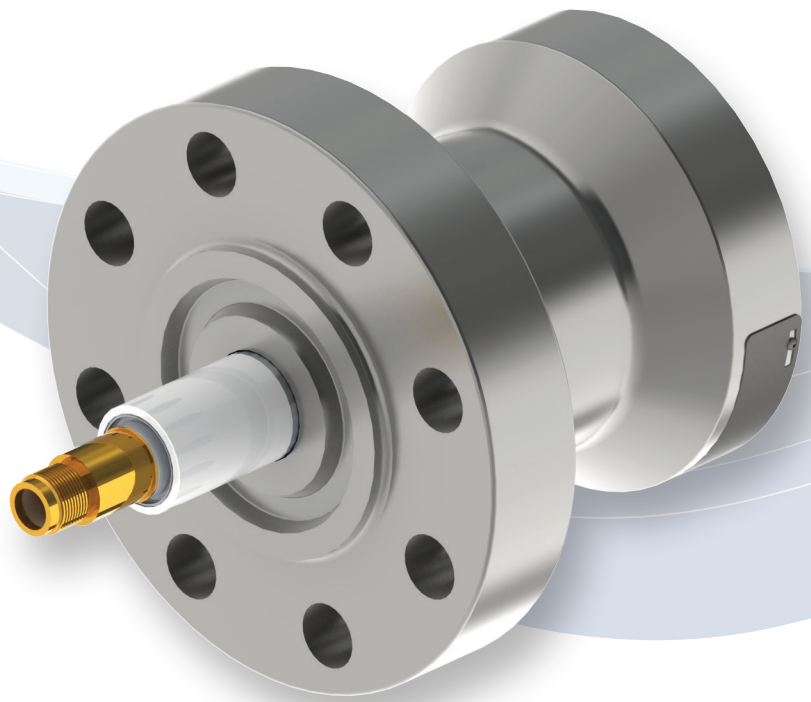
P10-250 Ceramic Penetrator

Designed for use in deep subsea pumping, processing & boosting applications where high pressure and temperature penetrations are necessary – Withstands extreme pressures and temperatures

Teledyne ODI's P10-250 subsea electrical penetrator provides a reliable barrier at high pressures, high temperature and high power. The penetrator extends through the wall or bulkhead of the vessel in which the equipment is located and is connected to medium voltage cables for an external power supply. In subsea pumping applications, the penetrator is exposed to the pumping pressure which creates an extreme environment in terms of pressure, temperature and high power. The penetrator transfers power to the motor as well as maintains a pressure barrier between the internal pressure of the motor and the external seawater pressure.

The unique, patented penetrator design features qualified materials to accommodate expansion and contraction as a result of temperature variations. At the core of the penetrator design is a conductor with a ceramic insulator, which provides the high mechanical strength, high dielectric strength, and superior environmental resistance required by pump applications. Three single phase penetrator assemblies are configured to provide 3 phase AC power. The corrosion-resistant, robust penetrator housing and interface utilize as much standard hardware as possible in order to provide a field-proven interface to subsea equipment.

Additional applications include oil separation units, water injection pumps, and boosting units, and atmospheric chambers.



P10-250 Subsea Power Ceramic Penetrator

PRODUCT FEATURES

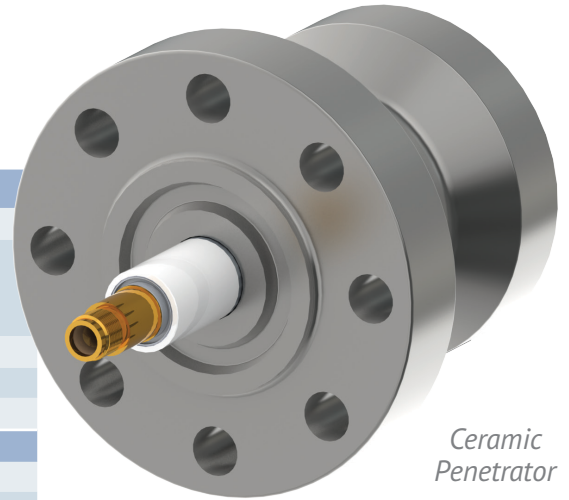
- 6/10(12)kV
- 250 A
- 4, 350 psi Ambient
- Ceramic penetrator withstands extreme pressures and temperatures

P10- 250 Ceramic Penetrator

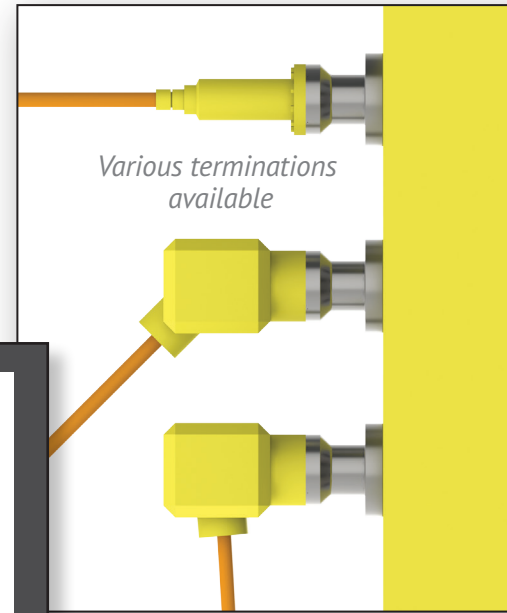
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TECHNICAL SPECIFICATIONS

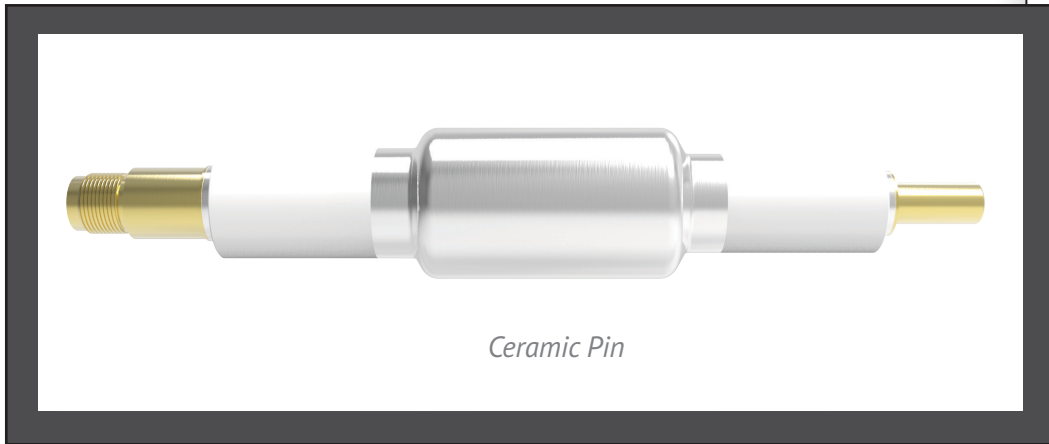
| GENERAL SPECIFICATIONS | |
|---------------------------|--------------------------------------|
| Operational Depth | 10,000 ft. (3,048 m) |
| Operational Pressure | |
| Inboard-to-seawater | 12,880 psi (1,110 bar) |
| Seawater-to-inboard | 5,000 psi (345 bar) (-10°C to +50°C) |
| Operating Temperature | 35°F to 250°F (-1°C to 121°C) |
| Storage Temperature Range | -4°F to 140°F (-20°C to 60°C) |
| Material | Super Duplex |
| ELECTRICAL SPECIFICATIONS | |
| Operational Voltage | 6/10(12) kV |
| Operational Current | 250 Amps |
| Frequency | 0-85 Hz |



Ceramic Penetrator



Various terminations available



Ceramic Pin