# HPHT Vertical XT Electrical Feed-through System

### For Downhole Completions

Teledyne DGO provides a qualified, highly reliable wet-mateable Electrical Feedthrough System for transmitting electrical signal and power from downhole instrumentation through the wellhead. The system incorporates DGO's glass to metal sealing technology in four critical pressure barriers for maximum long term reliability. It establishes a wet-mateable connection between the tubing hanger and running tool, enabling continuous monitoring of instrumentation during run in and initial production.

Key Features:

- Dual-barrier philosophy throughout
- Modular design to suit varying installation envelopes
- API 6A, 16D, and 17D compliant
- NACE MR0175 Compliant Metallic Elements



### **PRIMARY BENEFITS**

- The system is designed for long-term reliaiblity in subsea and downhole environments containing agressive production and packer fluids, artificial lift, as well as sour well (H2S) conditions.
- Three years of rigorous system, component, and material qualification tests have been successfully completed on the design, verifying its robust capability.



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### **TECHNICAL SPECIFICATIONS\***

ENVIRONMENTAL	
Operational Pressure	20,000psi/138MPa
Operational Test Pressure	22,500psig/155MPa
Operational Temperature	0°F to 250°F (-18°C to 121°C)
Storage Temperature	0°F to 120°F (-18°C to 49°C)
Deployment depth	10,000ft/3000m
Mating Durability	100 cycles min.
Service Life	25 years
MECHANICAL SPECIFICATION	NS
Axial Misalignment	±.200" (±5.1mm)
Angular Misalignment	±0.5
Radial Misalignment	±.06" (1.52mm)
Actuation Speed	3 ft/sec (1 m/sec)
ELECTRICAL SPECIFICATION	S
Voltage Rating, working	600 VDC
Test Voltage	2400 VDC
Current Rating, working	2.0 A
Insulation Resistance	> 1GΩ @ 500VDC (20°C)

\*Performance values generally based on historical application requirements

≤ 30mOhms

≤ 10mOhms





Contact Resistance Shell resistance

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