

OPTIMIZED
FOR USE WITH

MILSTAR
HIGH-PERFORMANCE HOOKUP WIRE AND CABLE



High-Pressure /
High-Temperature (HPHT)
Glass-Sealed Feedthrus
and Penetrators



Glass sealed penetrators and feedthrus provide high-pressure sealed interconnect interfaces for downhole drilling and logging instruments used in LWD and MWD applications. Supplied in various formats including multi-conductor feedthrus, penetrators, and single-pin designs for temperatures approaching 300°C (570°F) under conditions of elevated shock and vibration. HTHP connectors utilize environmentally-resistant materials including Inconel and stainless steel shells and glass hermetic inserts. Standard terminations include wire leads, solder cups, and PC tails.

- Available in 7 shell sizes and 17 insert arrangements
- Standard penetrators with hermeticity of $<1 \times 10^{-7}$ sccHe/sec @ 1 atmosphere differential and rated to 10,000 psi
- High-pressure penetrators rated to 25,000 psi and hermeticity of $<1 \times 10^{-8}$ sccHe/sec @ 1 atmosphere differential
- Available in unidirectional and bidirectional pressures
- Solder cup, line, and PCB terminations

DOWNHOLE
High-Pressure / High-Temperature
(HPHT) Hermetic Connectors

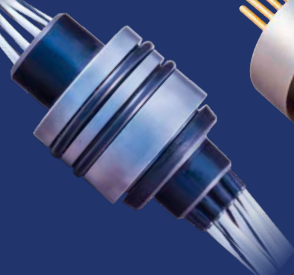


For use in LWD and MWD applications

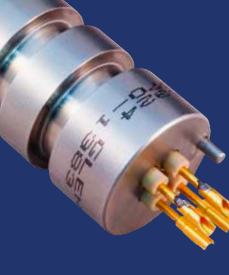
AVAILABLE CONFIGURATIONS



High temperature/high pressure glass-sealed feedthrough



High temperature/high pressure glass-sealed feedthrough



4 pin high temperature/high pressure glass-sealed feedthrough



Single pin glass-sealed hermetic feedthroughs



HTHP environmental boot assembly

INSERT ARRANGEMENTS AND PERFORMANCE SPECIFICATIONS

All high-density signal and standard-density power contact arrangements are available across the complete range of connector styles (CCP, FCR, and BCR). High-speed Ethernet inserts as well as Pressure Balanced Oil Filled (PBOF) configurations and a purpose-designed family of pressure caps, accessories and backshells are also available.

HTHP bulkhead connector receptacles (BCR) and flange connector receptacles (FCR) are equipped with high-pressure glass-to-metal sealed inserts with solder contact wire termination and 10K psi open-face rating. Cable connector plugs (CCP) utilize environmental O-ring sealed inserts and are rated to 10K psi in the mated condition.

CONTACT ARRANGEMENT TABLE				
Shell Size	Contact Size			
	#22	#20	#16	Hybrid
G	10	8		
K	19	14	4	One 75 Ohm Coax • Six #22
L			9	
M	37	26	12	
O	61	44	19	6 #16, 9 #20, 29 #22
Q	109		30	
R	129			
CURRENT RATING (AMPS)				
	3	5	10	

HTHP PERFORMANCE SPECIFICATIONS		
Pressure Rating	Plug: 10,000 psi, mated condition Receptacles: 10,000 psi mated and open face	per ISO 13628-6
Electrical	600 V typical 5 GOhm insulation resistance at 500 VDC DWV test voltage 1275 VAC / 1800 VDC	per MIL-STD-202, Method 301 per MIL-STD-202, Method 302
Materials	Salt Spray (corrosion) Humidity (steady state) Thermal Cycle	MIL-STD-202, Method 101 MIL-STD-202, Method 103 ISO 13628-6

H
I
J
K
L
M
N
O
P
Q
R
S
T
U
V
W
X
Y
Z