

# 12 Channel Hermaphroditic Fiber Optic Cable Connectors

### Description

Fiber optic cable connectors for harsh environment applications

### Typical Applications

- Commercial broadcast cable
- Military tactical field usage
- Petroleum field exploration
- Field deployment
- Shipboard/pierside

### Benefits/Features

- Genderless connection . . . . . Cable connectors will link (concatenate) to identical connectors without regard to connector gender
- Channel count . . . . . 8 or 12 fiber optic channels
- Fiber type compatibility . . . . . Both single and multimode compatible in the same connector
- Ruggedness . . . . . Designed to withstand crush, impact, cable pull-out, cable twist, bending moment, water and mud immersion, and many other harsh environments
- Reliability . . . . . Proven field performance in harsh environment applications



For more information, please contact us or visit our website at [www.delphi.com/connect](http://www.delphi.com/connect).

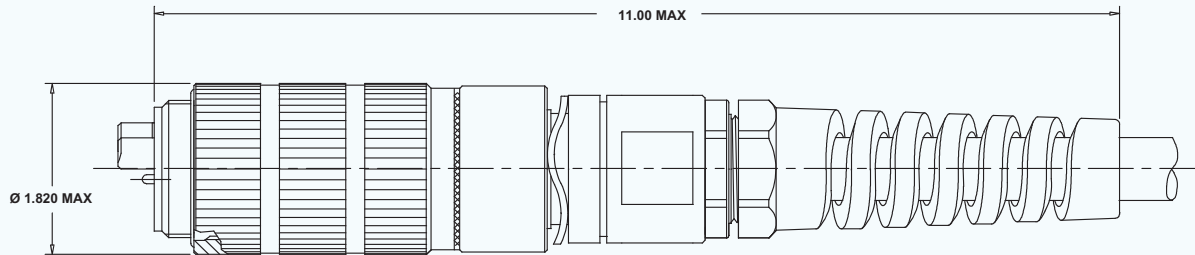
### Connector Performance Criteria

<b>Optical Insertion Loss</b>	9/125 SM Fiber -0.25 dB avg., 62.5/125 MM Fiber -0.6 dB avg. Note - Values measured at 1300 nm per TIA/EIA-455-34
<b>Optical Backreflection (sm)</b>	Better than -40 dB with PC polish, better than -50 dB with enhanced PC polish
Mating Durability	1000 cycles minimum per TIA/EIA-455-21
Temperature Cycling	-40°C to +65°C* per TIA/EIA-455-3
Operating Temperature Range	-54°C to +85°C*
Storage Temperature	-65°C to +85°C*
Corrosion Resistance	500 hours salt spray per TIA/EIA-455-16
Ozone Exposure	ASTM-D-1149, 100-150 PPM for 2 hours
Temperature Humidity	Per TIA/EIA-455-5, type 2
Crush Resistance	225 pounds per TIA/EIA-455-26
Maintenance Aging	10 contact insertions/removals per MIL-STD-1344, Method 2002
Terminus (Contact) Retention Force	22 pounds minimum per MIL-STD-1344, Method 2007
Cable Retention	400 pounds minimum per TIA/EIA-455-6 (depending on cable construction)
Cable Seal Flexing	100 cycles per MIL-STD-1344, Method 2017
Cable Twist	1000 cycles per TIA/EIA-455-36
External Bending Moment	50 ft-lb at mounting panel
Impact	Per TIA/EIA-455-2
Water Pressure Sealing	Up to 25 PSI for 48 hours
Fluid Immersion	24 hours per fluid, per TIA/EIA-455-12

\* Temperature ranges listed above are limited by the fiber optic cable performance window.

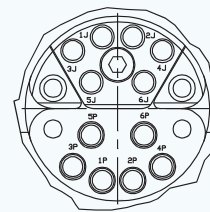
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## Cable Plug

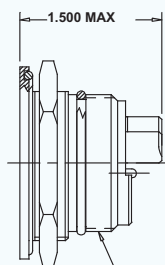


Coupling Nut Shown in Retracted Position

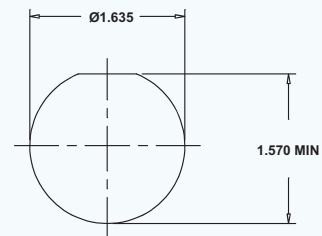
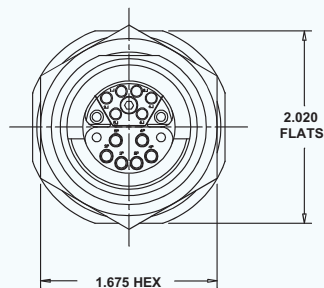
## Interface View



## Receptacle, Jam Nut Mount



1.4375-12UN-2B THD



Recommended Panel Mounting Cutout

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## Connection Systems

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