

FIBER & POWER

IN ONE CONNECTOR SOLUTION

Amphenol Aerospace MILITARY GRADE HYBRID FIBER & POWER INTERCONNECT SOLUTION



FEATURES

Highly Configurable
Rugged plug and receptacle
combination with:

- **Two Duplex LCs**
(four fiber optic connections)
- **Two Size 12 power pins**

Options for shell material:

- Composite
- Aluminum
- Stainless Steel

All standard platings:

- Nickel
- Olive Drab Cadmium
- Durmalon
- Black Zinc Nickel

Shell Style:

- Jamnut
- Wall Mount
- Box Mount Receptacle

APPLICATIONS

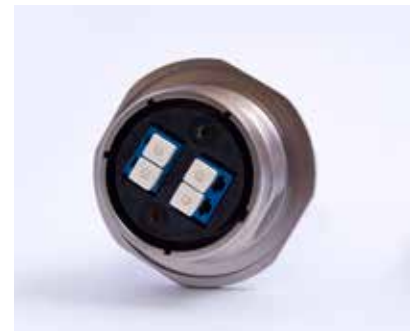
Aircraft Radar Systems
Electronic Warfare
Military Ground Systems
UAV
Naval Radar & Sonar
Naval Missile Launch Systems

QUALIFICATION DATA

Insertion Loss
Return Loss
Copper contact resistance/DWV
Termini retention force
Mating force
Durable through 500 mating
cycles Electrical continuity
Temperature Sealing
Mechanical Shock
Vibration Corrosion
Heat rise



Borne from the foundation of D38999 mil-spec harsh environment connectors, the hybrid fiber & power interconnect solution combines standard fiber optic LC components and copper contacts in a rugged package. This connector series is highly configurable to support a wide range of military applications where fiber and copper connectivity are required in a single connector for rapid deployment and easy maintainability.



OPTICAL/MECHANICAL/ENVIRONMENTAL PERFORMANCE

INSERTION LOSS :

Typical of .1dB at 1310nm and 1550nm

RETURN LOSS :

Minimum of 50dB

TERMINI RETENTION :

Maintain optical transmittance with low attenuation (less than .5dBm) during longitudinal axis forces on the termini.

MATING FORCE :

Maximum force necessary to completely engage or disengage the connector is less than 40 pound-inches. The minimum disengagement force is 5 pound-inches.

DURABILITY :

No evidence of mechanical damage and the coupling mechanism is functional after 100 mating/de-mating cycles.

INSULATION RESISTANCE, CONTACT RESISTANCE, DIELECTRIC WITHSTANDING VOLTAGE, ELECTRICAL CONTINUITY

TEMPERATURE:

Operating and non-operating ranges from -40°C to 85°C

SEALING:

IEC 60529, IPX8

MECHANICAL SHOCK:

50g peak per IEC 60068-2-27

VIBRATION:

IEC 60068-2-6

10-500 Hz frequency range

5gn or 50m/sec² acceleration amplitude

2 hour durations

CYCLICAL CORROSION:

SALT:

Salt Concentration: 5% +/- 1% by weight

Temperature: 35 ± 2OC

Ph: 6.5 to 7.2. (5% solution)

Fallout: 1 to 2 ml per hour

HUMIDITY:

Lower Temperature Dwell: 25°C +5°C/-0°C

Upper Temperature Dwell: 55°C +5°C/-0°C

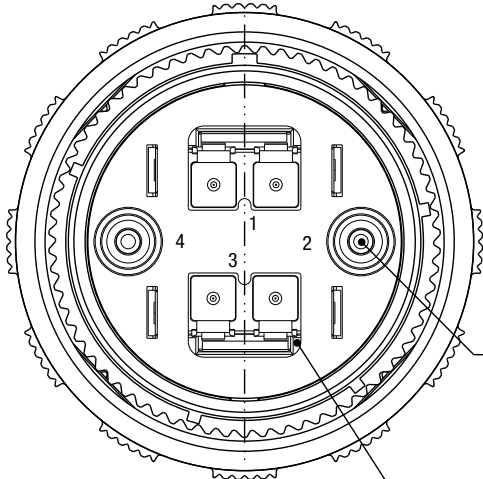
Relative humidity: 92% +2%, -3%

Dwell Duration: 11 hrs

Transition Time: 0.5 hrs

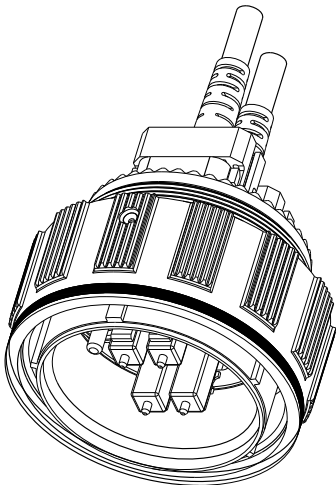
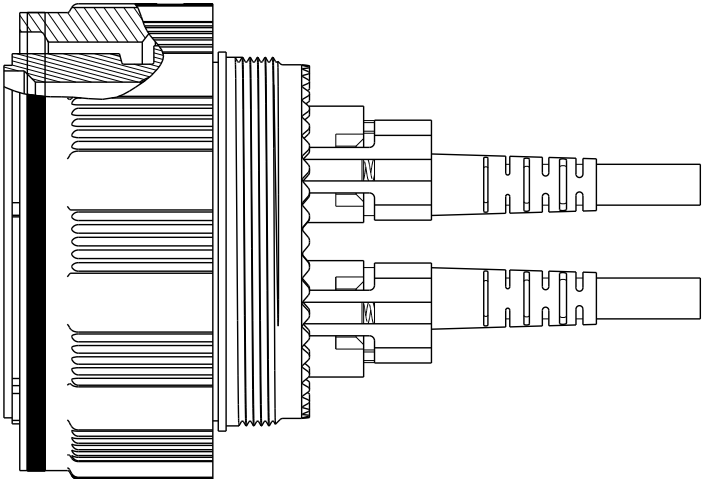


DRAWINGS (PLUG)



SIZE 12 PIN
M39029 / 58 - 365 OR
EQUIVALENT
2 PLACES

LC DUPLEX ADAPTER
2 PLACES



ISOMETRIC VIEW
SCALE 2.000