

ID Rugged Bulkhead Adaptor Series Connector

RUGGED INDUSTRIAL/MILITARY RJ45 (ETHERNET) CONNECTORS

Amphenol's line of Rugged Bulkhead Adaptors serve many markets and applications across the globe including Transportation, Military, Medical and Industrial.

- Ideal options to seal connection interface
- Available for Modular Jack or USB Type A
- Wide operating temperature (-40 °C to +85 °C)
- RoHS



TARGET MARKETS



FEATURES

- Provides a sealed adapter at the panel of bulkhead of equipment
- Interface is sealed in both the mated and un-mated conditions
- Adapter interface is available in modular jack or USB type A in a receptable to receptable configuration
- External plug kit can be assembled over most standard plug terminated cables after the cable is complete
- Spring loaded external cover of the receptable provides a positive lock for the mated plug, yet closes the mating area tightly when not in use

BENEFITS

- Great solution for sealing
- All condition covered
- Wide application
- Flexible application
- Reliable solution

TECHNICAL INFORMATION

MATERIAL

- External Shell: Die Cast Zinc, Nickel Plated
- Internal Shield:
 - Modular Jack – Stainless Steel
 - USB Type A – Copper Alloy, Nickel Plated
- Inserts: Engineering Thermoplastic, Glass Reinforced, UL94V-0, Black
- Contacts: Copper Alloy Plated with 0.76um (30u”) min Gold over 1.27um (50u”) min Nickel on the Mating Area
- Internal Over-moulding: USB Type A Only – Thermoplastic over UL1007 Wiring
- Gaskets, O-rings, Split Washers: Silicone Rubber
- Mounting Screws: Stainless Steel

ELECTRICAL PERFORMANCE

- Current Rating: 1.5A max per Contact (delta T < 30°C)
- Contact Resistance:
 - Modular Jack – 20mΩ max
 - USB Type A – 30mΩ max
- Insulation Resistance:
 - Modular Jack – 500mΩ min
 - USB Type A – 1000mΩ min
- Dielectric Withstanding Voltage:
 - Modular Jack – 1000 VAC rms (between adjacent contacts), 1500 VAC rms (contacts to ground)
 - USB Type A – 500 VAC rms

ENVIRONMENTAL

- Temperature Life: Per EIA-364-17, Without Load, 85 °C, 10 Cycles
- Thermal Shock: Per EIA-364-32, -55°C to +85 °C, 10 Cycles
- Humidity: Per EIA-364-31, 10 Cycles, 240 Hrs, 25 °C to 65°C, 90-95%RH, with -10°C Cold Shock

MECHANICAL PERFORMANCE

- Operating Temperature: -40°C to +85°C
- Insertion Force:
 - Modular Jack – 20N (4.5lbf) max
 - USB Type A – 30N (7.9lbf) max
- Extraction Force:
 - Modular Jack – 20N (4.5lbf) max with Latch Disengaged
 - USB Type A – 10N (2.2lbf) min
- Durability: Per EIA 364-09, 1500 Cycles
- Vibration: Per EIA 364-28 Condition II (10g, 10-500Hz), No Discontinuity > 1us
- Shock: Per EIA 364-27 Test Condition A (11ms, 50g, 1/2 Sine), No Discontinuity > 1us

PACKAGING

- Tray

SPECIFICATION

- Amphenol Product Specification: USB, RJ

APPROVALS AND CERTIFICATIONS

- RoHS

TARGET MARKETS/APPLICATIONS



Transportation



Industrial



Medical



Military

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PART NUMBERS

Description	Type	Part Numbers
Rugged bulkhead adapter	Receptacle half, RJ45	ID450-000
Rugged bulkhead adapter	Receptacle half, USB	ID451-000
Rugged bulkhead adapter	Plug half, RJ45	ID550-000
Rugged bulkhead adapter	Plug half, USB	ID651-000
Rugged bulkhead adapter	Plug & Receptacle, RJ	ID750-000
Rugged bulkhead adapter	Plug & Receptacle, USB	ID751-000

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For more information,
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Disclaimer

Please note that the above information is subject to change without notice.