MDBR Rugged D-Sub Series Connectors





Generation 2 Features

- Provides a standard D-Sub interface for enclosures exposed to harsh environments
- Protection is provided for IP68 applications per IEC 60529 specification
- Protection is provided in the mated and unmated conditions
- A sturdy die case shell provides excellent strength and durability in the most demanding applications
- High temperature resistant plastic housing captures high quality gold plated screw machined copper alloy contacts
- Robust construction Zinc die cast shell

















Markets

Amphenol's line of Rugged D-Sub connectors serve many markets and applications across the globe including Transportation, Military, Medical and Industrial.



Amphenol Commercial Products MDBR Rugged D-Sub Series Connectors







Photos Shown: MRJR-5780-01 2, MRJR-3460-0F 2, MRJR-5580-01, MRJ-2586-10BP2

Technical Specifications

External Shell: Die Cast Zinc, Nickel Plated

High Temperature Resistant Nylon, Glass Reinforced, UL94V-0, Black **Insulator Housing:**

Contacts: Machined Phosphor Bronze or Brass Alloy Plated with 0.76μm (30μ") min Gold

> over 1.27µm (50µ") min Nickel Silicone Rubber, Black or Red

Water & Dust Protection Level:

Gaskets & O-rings:

Code IP67 per IEC 60529 **Operating Temperature:**

Contact Insertion Force: -40°C to +105°C

Standard Density - 5.0N (18oz,) max, 3.3N (12oz,) max Average Initial **Durability:**

High Density - 5.0N (18oz,) max, 2.6N (9.5oz,) maxAverage Initial

Vibration: Per EIA 364-09, 500 Mating Cycles

Per EIA 364-28 Condition V, Letter D, 4.5 Hrs, No Discontinuity ≥ 1μs **Shock:**

Temperature Life w/o Load: Per EIA 364-27 Test Condition A (11ms, 50g, ½ Sine), No Discontinuity ≥ 1µs

Thermal Shock: Per EIA-364-17, 105°C, 1000 Hours **Humidity:** Per EIA-364-32, -55°C to +105°C, 25 Cycles

Thermal Cycling: Per EIA-364-31, 10 Cycles, 240 Hrs, 25°C to 65°C, 90-95%RH, with -10°C Cold Shock

Per EIA-364-110, 500 Cycles, 15°C to 85°C **Mixed Flowing Gas:**

Solvent Resistance: Per EIA 364-65 Class IIA (Cl₂, NO₂, H₂S, & SO₂),14 Day Exposure Isopropyl Alcohol & 5% Sodium Hydroxide Solution, 24 Hrs Each **Solderability:** Per EIA-364-52, 95% Coverage after Category 2 Steam Aging

Current Rating: Standard Density - 5A max

High Density - 3A max

Contact Resistance: $20 \text{ m}\Omega \text{ max}$ 5000 M Ω min **Insulation Resistance:**

DWV: Standard Density - 1500 VDC High Density - 1200 VDC

> To learn more about Harsh Environment Connectors: web: amphenolcanada.com email: sales@amphenolcanada.com