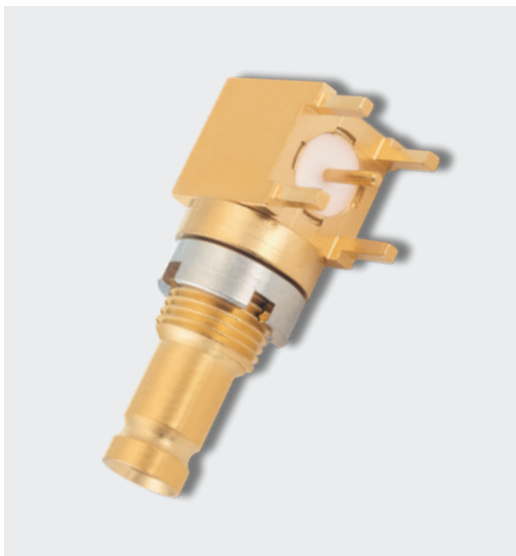


DIN Series Connector

Aptiv's 7/16 DIN Series are high-power, low-PIM connectors designed for cellular, broadcast and other RF systems. With its threaded coupling, it provides a vibration- and weather-proof connection with very low signal loss. 7/16 with up to 7.5 GHz operation, these connectors are useful where power handling and excellent PIM performance are required.



KEY FEATURES & BENEFITS

- High Power – Handles significant RF power for transmit applications
- Low PIM – Minimizes interference for optimal cellular network performance
- Secure Coupling – Threaded design provides vibration-resistant, reliable connections
- Weatherproof – Resistant to moisture and dust for outdoor use
- Low Signal Loss – Maintains excellent electrical performance
- 50 Ω Standard – Compatible with most RF systems
- Durable Construction – Heavy-duty materials ensure long-term reliability
- Versatile Use – Ideal for mobile, broadcast, and satellite applications

PRODUCT SPECIFICATIONS

Electrical Properties*	
Impedance	50 Ohms
Frequency Range	DC to 7.5 GHz (typical); some designs up to 10 GHz
Voltage Rating	2700 VRMS (max.)
Dielectric Withstanding Voltage	4000 VRMS (min.)
Contact Resistance	Center Contact: $\leq 0.4 \text{ m}\Omega$ Outer Contact: $\leq 0.4 \text{ m}\Omega$
Insulation Resistance	$\geq 10000 \text{ M}\Omega$
VSWR (Voltage Standing Wave Ratio)	Typical: ≤ 1.15 @ 6 GHz; ≤ 1.25 @ 7.5 GHz
Insertion Loss	$\leq 0.05 \text{ dB}$ @ 3 GHz (typical)
RF Leakage	$\geq -120 \text{ dB}$ @ 1 GHz (typical)
PIM (Passive Intermodulation)	$\leq -155 \text{ dBc}$ (typical for high-performance versions)

*reference website for specific part number specifications

PRODUCT SPECIFICATIONS CONTD.

Environmental Properties*	
Temperature Range	-55°C to +155°C (standard)
Thermal Shock	MIL-STD-202, Method 107, Test Condition B (from -55°C to +155°C)
Vibration	MIL-STD-202, Method 204, Test Condition B (15 G's)
Shock	MIL-STD-202, Method 213, Test Condition I (100 G's)
Moisture Resistance	MIL-STD-202, Method 106 (excellent sealing for outdoor use)
Corrosion (Salt Fog)	MIL-STD-202, Method 101, Test Condition B (48 hours)
Water Immersion	IP67 or IP68 rated when properly mated (dependent on specific product)
Durability	Engineered for extreme environmental conditions common in telecommunications infrastructure.

*reference website for specific part number specifications

PRODUCT SPECIFICATIONS CONTD.

Mechanical Properties*	
Coupling Mechanism	Threaded (M29 x 1.5 metric thread)
Mating Cycles	≥ 500 cycles (standard); higher for test-grade
Recommended Mating Torque	25-30 Nm (18-22 ft-lbs) (use calibrated torque wrench for best performance)
Cable Retention	Varies significantly by cable type and termination method (designed for large diameter cables).
Body Material	Brass, Stainless Steel, or Bronze (typically plated with nickel or silver)
Center Contact Material	Brass, Stainless Steel, or Bronze (typically plated with nickel or silver)
Dielectric/Insulator Material	PTFE (Polytetrafluoroethylene)
Interface Dimensions	Conforms to IEC 61169-4 and DIN 47223.

*reference website for specific part number specifications