

Microminiature Solutions

The last few decades in military and aerospace engineering have seen clearances and pitches become smaller, tighter, and lighter as manufacturers opt for smaller, more compact platforms to preserve size and weight. However, performance must remain the same or even exceed what came before it.

In response to this urgent need for compact and lightweight yet robust, high performance military and aerospace connectors, Amphenol developed a complete family of ruggedized Micro-Miniature Circular Connectors to meet the needs of modern harsh environment applications.



2M Microminiature

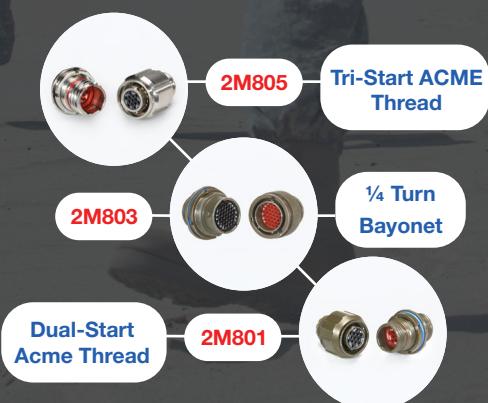
Series of compact, high-performance circular connectors specially designed to address SWaP needs.



The 2M Series offers the unwavering performance and reliability of Amphenol's D38999 series in a smaller, lighter package that is ruggedized for harsh environments and optimized for space.

- Up to 71% lighter and 52% smaller than MIL-DTL-38999 connectors
- Supports up to 130 contacts, providing 60% more contact density

Legacy 2M



Applications

Amphenol Microminiature Solutions excel in a wide range of harsh environment applications, including:

Soldier-Worn Gear



Our ultra-compact microminiature connectors support advanced wearable electronics with secure, lightweight connections.

Military Aircraft



Reliable in-flight performance under extreme vibration and temperature for avionics, controls, and power systems.

Missile Systems



Withstands shock, EMI, and environmental exposure for mission-critical guidance and targeting interfaces.

Ground Vehicles



Ruggedized for durability in harsh terrain for dependable data and power delivery across ground vehicle platforms.

Series Five

The next evolution of military circular connectors, lighter and smaller than MTL-DTL-3899.

Standard

High Temperature



An innovation of MIL-DTL-38999 Series III that's Up to 20% smaller and 50% lighter than its D38999 Series III counterpart. Available in multiple configurations and with higher voltage capabilities.

- 38999-Qualified Insulator and EMI Spring
- No Dielectric Bond Joint
- Triple Wire Seal
- AS39029-Qualified Gold-Plated Contacts
- Full Metal Clip Contact Retention
- And more

Series Five High Temperature

Able to withstand exposure at 572 °F (300 °C) for up to 24 hours, and 500 °F (260 °C) continuous duty, High Temperature Series Five connectors are the ideal solution for interconnect and electrical wire assemblies near engines, firewalls, and other high-heat sources.

Microminiature Plus

2M High Vibration



Optimized to perform under high vibration conditions and meet the same harsh environmental requirements of D38999.

2M Hermetic



Provides an exceptional airtight seal without sacrificing ruggedness and meets or exceeds most MIL-DTL-38999 requirements.

Compact Power

2M Space Saver



Reduces the profile of your plug by 50% compared to a standard 2M801 while maintaining ruggedization and dependable shielding.

2M Python



A low profile EMI/RFI plug and backshell combo providing superior low profile cable routing and microminiature performance.

AP-93 Plating



Meets 1000 hours of dynamic salt spray, 500 mating cycles, and meets the millivolt drop shell-to-shell conductivity of nickel (Class F).

Soldier Worn

Warrior Grip



Soldier-Worn Push-Pull connectors qualified for the U.S. Army's NETT Warrior Program.

2M804



Ruggedized, push-pull miniature connectors with multiple options for soldier-worn applications.

2M Accessories



A complete line of accessories for all 2M connectors including backshells, protection caps, strain reliefs, micro-band adapters, as well as the 2M Python - the low-profile EMI/RFI plug and backshell combination.

Custom and Modification Codes

The Amphenol 2M connector is engineered for versatility, offering 100% customization to meet specific application needs. Users can tailor plating options, such as electroless nickel or black zinc nickel, and choose from various shell structures, including standard, reduced flange or any design.