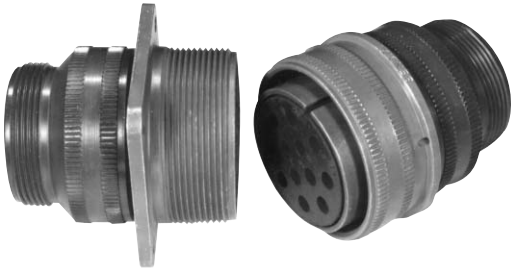


Amphenol® MIL-DTL-5015 and MIL-5015 Type Standard Cylindrical Connectors



MS-A, MS-C



MS-E/F



MS-R

DESIGN CHARACTERISTICS

- Medium to heavy weight cylindrical
- Durable, field-proven design
- Environmental resistant
- Resilient inserts
- Operating voltage to 3000 VAC (RMS) at sea level
- Threaded couplings
- Single key/keyway shell polarization
- Cost effective

CUSTOMER OPTIONS

- Five shell styles
- Nineteen shell sizes
- 305 contact arrangements from 1 to 104 circuits
- Solder or crimp contacts, sizes 16-0 accepting 22-0 AWG.
- Coaxial and thermocouple contact options
- Five class designations
- Alternate insert positioning
- Hermetic configurations available
- Zinc alloy plating (cadmium-free) available

MS connectors meet the latest performance requirements of MIL-DTL-5015. These connectors represent well-proven electrical capability at an acceptable cost for most equipment where durability is important.

MIL-DTL-5015 features threaded couplings and single key/keyway polarization, representing maximum simplicity in design. Applications include military ground support equipment, ordnance and shipboard installations.

Amphenol Industrial Operations manufactures five classes of connectors to meet different requirements. Class designations and brief descriptions are listed below.

A – Solid Shell – for general, non-environmental applications.

C – Pressurized – for use on pressurized bulkheads or pressure barriers; limits air leakage regardless of type and class of plug mated with them.

E/F – Environmental Resisting with Strain Relief – designed for applications where the connector will be exposed to moisture, vibration, and rapid changes in pressure and temperature.

R – Lightweight Environmental Resisting – shorter in length and lighter in weight than the E and F classes, the MS-R offers a high degree of reliability under adverse conditions: recommended for new design applications.

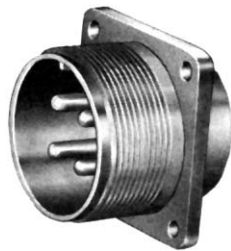
MS/Standard MS-A and MS-C



wall mounting receptacle



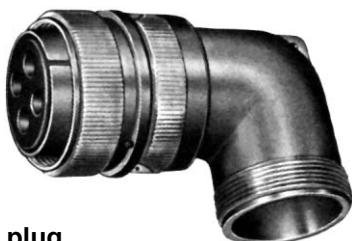
cable connecting plug



box mounting receptacle



straight plug



90 degree plug

MS-A and MS-C

MS-A and MS-C class connectors perform many of the vital functions in powering, testing and ground support systems. Class A applications include communications equipment, computers and shipboard installations where mechanical forces and physical parameters are not subject to extreme or rapid environmental changes.

Class C connectors are most frequently used on pressurized bulkheads or pressure barriers at elevated altitudes or maritime applications. Air leakage is limited to one cubic inch per hour at a pressure differential of 30 lbs. per square inch.

Shells:

Shell components are fabricated from high grade aluminum alloy. Electrically conductive cadmium plate finish with an olive drab chromate after-treat offers corrosion resistance.

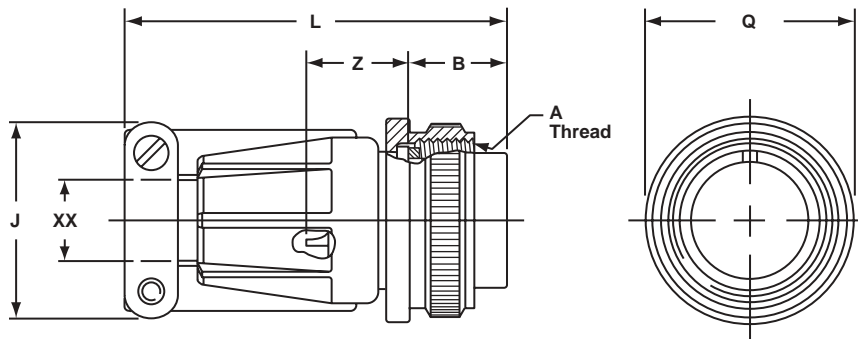
Contacts:

Contacts are available in both solder and crimp versions. Pins and sockets are machined from copper alloy with a silver plated finish. Size 16 and 12 socket contacts incorporate a closed entry design. Refer to pages 49, 67 and 68 for additional contact information.

Inserts:

Inserts are resilient neoprene, offering high dielectric strength, high arc resistance and resistance to vibration. Proprietary design permits pressurization of either pin or socket insert.

MS/Standard MS3106E/F straight plug



To complete order number, see "how to order" pg. 70.
For solder well data, see page 67.
All lockwire holes are .045 dia. min.

Shell Size	A Thread Class 2A	B ±.005	J Max.	L Max.	Q Max.	Z* ±.045	XX Min. Cable Clearance
10SL	.6250-24UNEF	.531	.896	2.129	.946	.607	.281
12S	.7500-20UNEF	.531	.896	2.129	.995	.607	.281
12	.7500-20UNEF	.719	.896	2.129	.995	.857	.281
14S	.8750-20UNEF	.531	1.021	2.201	1.123	.607	.406
14	.8750-20UNEF	.719	1.021	2.524	1.123	.857	.406
16S	1.0000-20UNEF	.531	1.151	2.201	1.250	.607	.500
16	1.0000-20UNEF	.719	1.151	2.524	1.250	.857	.500
18	1.1250-18UNEF	.719	1.242	2.596	1.333	.857	.531
20	1.2500-18UNEF	.719	1.499	2.654	1.461	.857	.656
22	1.3750-18UNEF	.719	1.499	2.654	1.588	.857	.740
24	1.5000-18UNEF	.719	1.781	2.885	1.715	.857	.781
28	1.7500-18UNS	.719	1.781	2.885	1.968	.857	.922
32	2.0000-18UNS	.719	2.087	2.943	2.209	.857	1.156
36	2.2500-16UN	.719	2.281	2.943	2.463	.857	1.250
40	2.5000-16UN	.719	2.581	3.068	2.718	.857	1.562

* Increase Z dimension by .312 for size "0" contact only.