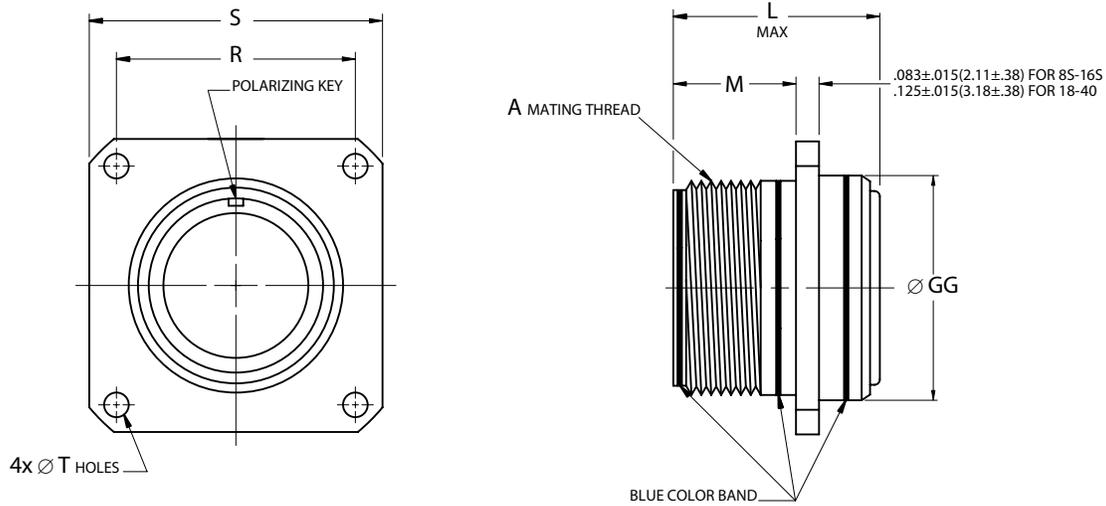


MS3452 per AS34521 Box Mount Receptacle

Threaded Coupling, Crimp Removable, Rear Release



Note 1: The insulation material shall be above, flush with, or no more than .015 inches (.38 mm) below the metal shell.

5015 S III

| Shell Size | A | Ø GG | | L MAX | | | | M | | R | | S | | Ø T | |
|------------|------------------------|-------|-------|------------------|-------|-------------------|-------|--------------|-------------|-------|-------|-------|-------|--------------|--------------|
| | Mating Thread Class 2A | ±.016 | ±.41 | 16 & 12 Contacts | | 8, 4 & 0 Contacts | | +031 -000 | +079 -00 | (TP) | | ±.031 | ±.79 | +010 -005 | +025 -013 |
| | | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm | inch | mm |
| 8S | 1/2-28 UNEF | .500 | 12.70 | 1.662 | 42.21 | - | - | .562 | 14.27 | .594 | 15.09 | .875 | 22.23 | .120 | 3.05 |
| 10S | 5/8-24 UNEF | .625 | 15.88 | 1.662 | 42.21 | - | - | .562 | 14.27 | .719 | 18.26 | 1.000 | 25.40 | .120 | 3.05 |
| 10SL | 5/8-24 UNEF | .625 | 15.88 | 1.662 | 42.21 | - | - | .562 | 14.27 | .719 | 18.26 | 1.000 | 25.40 | .120 | 3.05 |
| 12 | 3/4-20 UNEF | .750 | 19.05 | 1.662 | 42.21 | - | - | .750 | 19.05 | .812 | 20.62 | 1.094 | 27.79 | .120 | 3.05 |
| 12S | 3/4-20 UNEF | .750 | 19.05 | 1.662 | 42.21 | - | - | .562 | 14.27 | .812 | 20.62 | 1.094 | 27.79 | .120 | 3.05 |
| 14 | 7/8-20 UNEF | .875 | 22.23 | 1.662 | 42.21 | - | - | .750 | 19.05 | .906 | 23.01 | 1.188 | 30.18 | .120 | 3.05 |
| 14S | 7/8-20 UNEF | .875 | 22.23 | 1.662 | 42.21 | - | - | .562 | 14.27 | .906 | 23.01 | 1.188 | 30.18 | .120 | 3.05 |
| 16 | 1-20 UNEF | 1.000 | 25.40 | 1.662 | 42.21 | 1.937 | 49.20 | .750 | 19.05 | .969 | 24.61 | 1.281 | 32.54 | .120 | 3.05 |
| 16S | 1-20 UNEF | 1.000 | 25.40 | 1.662 | 42.21 | - | - | .562 | 14.27 | .969 | 24.61 | 1.281 | 32.54 | .120 | 3.05 |
| 18 | 1 1/8-18 UNEF | 1.062 | 26.97 | 1.662 | 42.21 | 1.937 | 49.20 | .750 | 19.05 | 1.062 | 26.97 | 1.375 | 34.93 | .120 | 3.05 |
| 20 | 1 1/4-18 UNEF | 1.187 | 30.15 | 1.662 | 42.21 | 1.937 | 49.20 | .750 | 19.05 | 1.156 | 29.36 | 1.500 | 38.10 | .120 | 3.05 |
| 22 | 1 3/8-18 UNEF | 1.312 | 33.32 | 1.662 | 42.21 | 1.937 | 49.20 | .750 | 19.05 | 1.250 | 31.75 | 1.625 | 41.28 | .120 | 3.05 |
| 24 | 1 1/2-18 UNEF | 1.437 | 36.50 | 1.662 | 42.21 | 1.937 | 49.20 | .812 | 20.62 | 1.375 | 34.93 | 1.750 | 44.45 | .147 | 3.73 |
| 28 | 1 3/4-18 UNS | 1.750 | 44.45 | 1.662 | 42.21 | 1.937 | 49.20 | .812 | 20.62 | 1.562 | 39.67 | 2.000 | 50.80 | .147 | 3.73 |
| 32 | 2-18 UNS | 2.000 | 50.80 | 1.662 | 42.21 | 1.937 | 49.20 | .875 | 22.23 | 1.750 | 44.45 | 2.250 | 57.15 | .173 | 4.39 |
| 36 | 2 1/4-16 UN | 2.250 | 57.15 | 1.662 | 42.21 | 1.937 | 49.20 | .875 | 22.23 | 1.938 | 49.23 | 2.500 | 63.50 | .173 | 4.39 |
| 40 | 2 1/2-16 UN | 2.500 | 63.50 | 1.662 | 42.21 | 1.937 | 49.20 | .875 | 22.23 | 2.188 | 55.58 | 2.750 | 69.85 | .173 | 4.39 |

MIL-DTL-5015 /AS50151

Features and Application

Series III



Features and Application

The threaded coupling, environmentally sealed MIL-DTL-5015 Series III connector with rear-removable crimp contacts was developed to replace the earlier solder type. This redesigned connector is intermateable and intermountable with the MIL-DTL-5015 Series I solder type (MS310*) as well as the MIL-DTL- 83723 Series II (USAF) crimp type and MIL-DTL-5015 Series II Front Release (MS340*). Thus, it provides for a minimum effort and high economy upgrade for existing applications.

These connectors are recommended for a wide range of applications, from commercial/industrial and mass transportation systems to the most stringent high reliability defense and aerospace requirements.

This family of connectors is offered in four receptacle mounting configurations. They include two square flange receptacles, both wall and box mounting; cable connecting receptacles; and jam nut receptacles which incorporate “O” ring seals, designed for rear panel “D” hole mounting.

Two plug styles are offered - standard plug with free rotating coupling nut with safety wire holes, and a self-locking, anti-decoupling plug, which eliminates the need for safety wiring.

Eighty-eight insert arrangements per MIL-STD-1651 are tooled and qualified to MIL-DTL-5015, utilizing 1 to 85 contacts. Contacts come in sizes 16, 12, 8, 4 and 0, terminating wire sizes from 20 gauge to 0 gauge.

These connectors are available in wide range of shell materials and finishes. Aluminum shells are offered in both electroless nickel and olive drab cadmium to both commercial and MS callouts. Other finishes such as anodic and zinc cobalt are available upon request to commercial callouts only. In addition, we offer passivated stainless steel shells with both standard and firewall-rated inserts, and carbon steel shells with firewall inserts.

Lockwiring Eliminated – Self-locking plug eliminates the need for lockwiring.

Universal I/R Tool – A single, expendable plastic tool is used for both insertion and removal of contacts.

Insert Polarization – Alternate insert clocking positions aid in mating of adjacent connectors having identical insert arrangement.

Closed-Entry Socket Insert – Hard dielectric socket face has lead-in chamfers for positive alignment of pins (even partially bent within pre-established limits) with sockets.

Interfacial Pin Insert Seal – Raised moisture barriers around each pin, which mate into lead-in chamfers of hard face socket insert, provide individual contact sealing. Interfacial seal is never touched by service tools.

Elastomer Wire Sealing Grommet – Sealing over a wide range of wire diameters is assured by a triple wire seal in each cavity at the rear of the connector.

Superior Contact Stability – Rear release crimp contact system features a stamped beryllium-copper retaining clip captivated by molded-in shoulders of each contact cavity in the insulator. A rear-inserted M81969 plastic tool expands the tines beyond the shoulder, releasing the contact.

