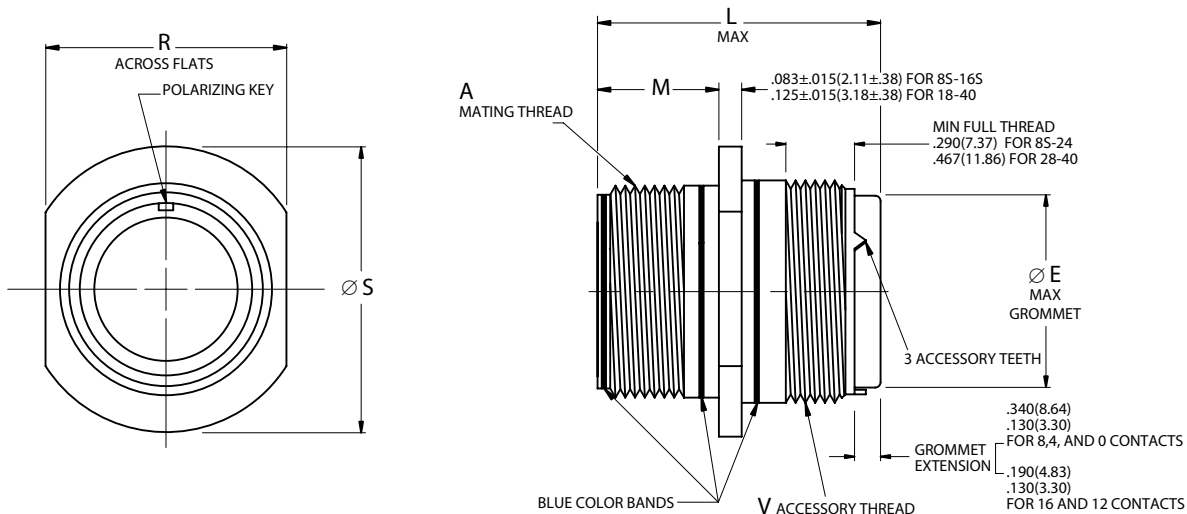


MS3451 per AS34511

Cable Connecting Receptacle

Threaded Coupling, Crimp Removable, Rear Release



Shell Size	A	Ø E		L MAX				M		R		Ø S		V
	Mating Thread Class 2A	Maximum		16 & 12 Contacts		8, 4 & 0 Contacts		+ .031 - .000				± .031 ± .79		Accessory Thread Class 2A
		inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	
8S	1/2-28 UNEF	.305	7.75	2.031	51.59	—	—	.562	14.27	.504/.496	12.80/12.60	.729	18.52	1/2-20UNF
10S	5/8-24 UNEF	.405	10.29	2.031	51.59	—	—	.562	14.27	.629/.621	15.98/15.77	.854	21.69	5/8-24UNEF
10SL	5/8-24 UNEF	.405	10.29	2.031	51.59	—	—	.562	14.27	.629/.621	15.98/15.77	.854	21.69	5/8-24UNEF
12	3/4-20 UNEF	.549	13.94	2.125	53.98	—	—	.750	19.05	.754/.746	19.15/18.95	.974	24.74	3/4-20UNEF
12S	3/4-20 UNEF	.549	13.94	2.031	51.59	—	—	.562	14.27	.754/.746	19.15/18.95	.974	24.74	3/4-20UNEF
14	7/8-20 UNEF	.665	16.89	2.125	53.98	—	—	.750	19.05	.879/.871	22.33/22.12	1.099	27.91	7/8-20UNEF
14S	7/8-20 UNEF	.665	16.89	2.031	51.59	—	—	.562	14.27	.879/.871	22.33/22.12	1.099	27.91	7/8-20UNEF
16	1-20 UNEF	.790	20.07	2.125	53.98	2.500	63.50	.750	19.05	1.005/.996	25.53/25.30	1.224	31.09	1-20UNEF
16S	1-20 UNEF	.790	20.07	2.031	51.59	—	—	.562	14.27	1.005/.996	25.53/25.30	1.224	31.09	1-20UNEF
18	1 1/8-18 UNEF	.869	22.07	2.125	53.98	2.500	63.50	.750	19.05	1.131/1.121	28.73/28.47	1.349	34.26	1-1/16-18UNEF
20	1 1/4-18 UNEF	.994	25.25	2.125	53.98	2.500	63.50	.750	19.05	1.256/1.246	31.90/31.65	1.474	37.44	1-3/16-18UNEF
22	1 3/8-18 UNEF	1.119	28.42	2.125	53.98	2.500	63.50	.750	19.05	1.381/1.371	35.08/34.82	1.599	40.61	1-5/16-18UNEF
24	1 1/2-18 UNEF	1.244	31.60	2.125	53.98	2.500	63.50	.812	20.62	1.506/1.496	38.25/38.00	1.715	43.56	1-7/16-18UNEF
28	1 3/4-18 UNS	1.465	37.21	2.125	53.98	2.500	63.50	.812	20.62	1.756/1.746	44.60/44.35	1.974	50.14	1-3/4-18UNS
32	2-18 UNS	1.715	43.56	2.125	53.98	2.500	63.50	.875	22.23	2.007/1.996	50.98/50.70	2.224	56.49	2-18UNS
36	2 1/4-16 UN	1.930	49.02	2.125	53.98	2.500	63.50	.875	22.23	2.257/2.246	57.33/57.05	2.474	62.84	2-1/4-16UN
40	2 1/2-16 UN	2.145	54.48	2.125	53.98	2.500	63.50	.875	22.23	2.511/2.496	63.78/63.40	2.724	69.19	2-1/2-16UN

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.

