

MS/Standard MS-E/F



wall mounting receptacle



cable connecting plug



box mounting receptacle



straight plug



90 degree plug

MS-E & F

MS Class F connectors satisfy all the performance requirements of MIL-DTL-5015. Class E, environmental is also produced, but is no longer listed on the qualified products listing (QPL). These connectors are recommended for conditions where vibration, moisture, pressure and/or temperature are extreme. Strain relief is supplied on most shell sizes.

Shells:

Shell components are fabricated from high grade aluminum alloy. The standard hardware plating is electrically conductive cadmium plated finish with an olive drab chromate after-treatment for corrosion resistance. Consult Amphenol, Sidney, NY for other plating options.

Contacts:

Contacts are silver plated copper alloy for maximum corrosion resistance, maximum current carrying capacity and low millivolt drop. Size 16 and 12 socket contacts incorporate a closed entry design. Crimp and solder versions are available. Refer to pages 49, 67 and 68 for additional contact information.

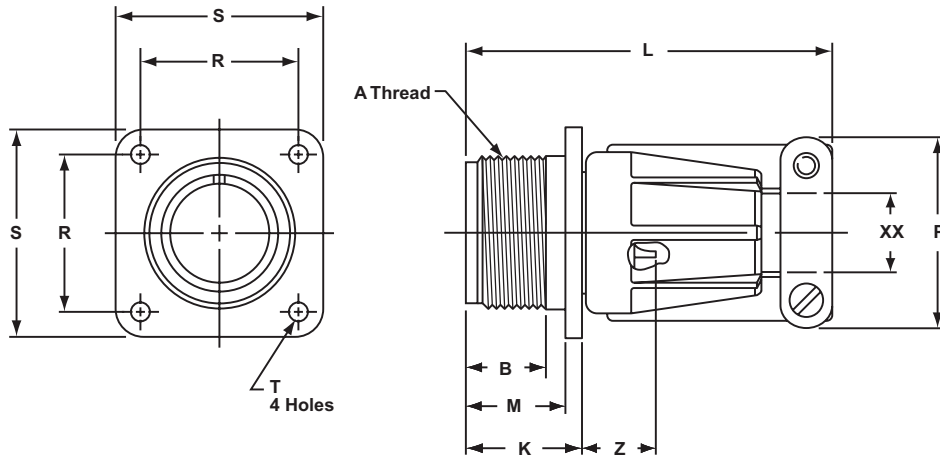
Inserts:

Resilient neoprene inserts provide an outstanding moisture barrier, high dielectric strength, and resistance to vibration. Either pin or socket insert can be pressurized.

Strain Relief Clamp:

Strain relief clamps minimize tension at the solder well connection and provide a positive mechanical moisture seal. Complete field serviceability is possible with the strain relief clamp.

MS/Standard MS3100E /F wall mounting receptacle

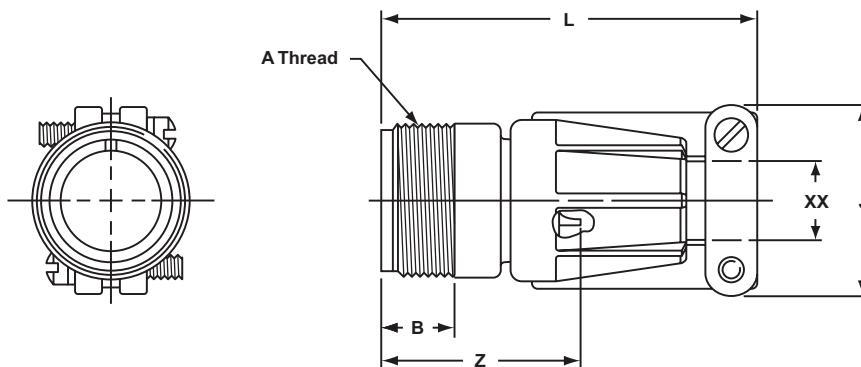


To complete order number, see "how to order" pg. 70.
For solder well data, see page 67.

Shell Size	A Thread Class 2A	B Min. Full Thread	K +.020 - .010	L Max.	M +.010 - .000	P Max.	R ±.005	S ±.010	T Dia. +.004 - .002	Z* Max.	XX Min. Cable Clearance
10SL	.6250-24UNEF	.391	.672	2.129	.562	.896	.719	1.000	.120	.472	.281
12S	.7500-20UNEF	.450	.672	2.129	.562	.896	.812	1.094	.120	.472	.281
12	.7500-20UNEF	.625	.860	2.129	.750	.896	.812	1.094	.120	.722	.281
14S	.8750-20UNEF	.450	.672	2.201	.562	1.021	.906	1.188	.120	.472	.406
14	.8750-20UNEF	.625	.860	2.524	.750	1.021	.906	1.188	.120	.722	.406
16S	1.0000-20UNEF	.450	.672	2.201	.562	1.151	.969	1.281	.120	.472	.500
16	1.0000-20UNEF	.625	.860	2.524	.750	1.151	.969	1.281	.120	.722	.500
18	1.1250-18UNEF	.625	.891	2.596	.750	1.242	1.063	1.375	.120	.691	.531
20	1.2500-18UNEF	.625	.891	2.654	.750	1.499	1.156	1.500	.120	.691	.656
22	1.3750-18UNEF	.625	.891	2.654	.750	1.499	1.250	1.625	.120	.691	.740
24	1.5000-18UNEF	.625	.953	2.885	.812	1.781	1.375	1.750	.147	.628	.781
28	1.7500-18UNS	.625	.953	2.885	.812	1.781	1.562	2.000	.147	.628	.922
32	2.0000-18UNS	.625	1.031	2.943	.875	2.087	1.750	2.250	.173	.550	1.156
36	2.2500-16UN	.625	1.031	2.943	.875	2.281	1.938	2.500	.173	.550	1.250
40	2.5000-16UN	.625	1.031	3.068	.875	2.581	2.188	2.750	.173	.550	1.562

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

MS/Standard MS3101E/F cable connecting plug

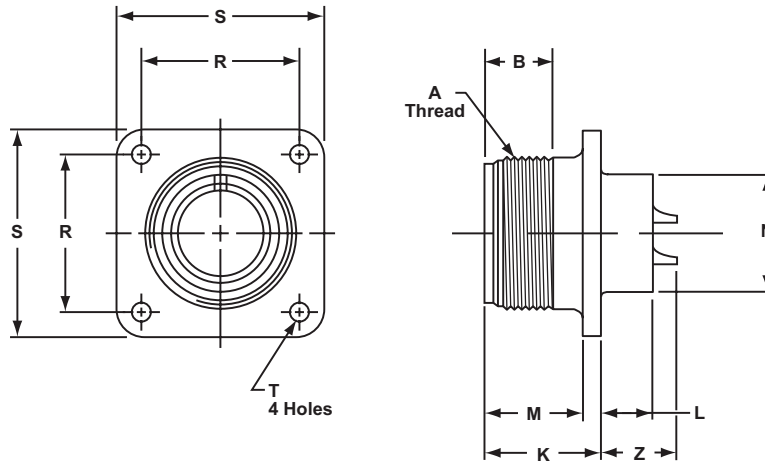


To complete order number, see "how to order" pg. 70.
For solder well data, see page 67.

Shell Size	A Thread Class 2A	B Min. Full Thread	J Max.	L Max.	Z* Max.	XX Min. Cable Clearance
10SL	.6250-24UNEF	.406	.896	2.129	1.134	.281
12S	.7500-20UNEF	.422	.896	2.129	1.134	.281
12	.7500-20UNEF	.656	.896	2.129	1.572	.281
14S	.8750-20UNEF	.391	1.021	2.201	1.134	.406
14	.8750-20UNEF	.625	1.021	2.524	1.572	.406
16S	1.0000-20UNEF	.391	1.151	2.201	1.134	.500
16	1.0000-20UNEF	.625	1.151	2.524	1.572	.500
18	1.1250-18UNEF	.625	1.242	2.596	1.572	.531
20	1.2500-18UNEF	.625	1.499	2.654	1.572	.656
22	1.3750-18UNEF	.625	1.499	2.654	1.572	.740
24	1.5000-18UNEF	.625	1.781	2.885	1.572	.781
28	1.7500-18UNS	.625	1.781	2.885	1.572	.922
32	2.0000-18UNS	.625	2.087	2.943	1.572	1.156
36	2.2500-16UN	.625	2.281	2.943	1.572	1.250
40	2.5000-16UN	.625	2.581	3.068	1.572	1.562

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

MS/Standard MS3102E box mounting receptacle

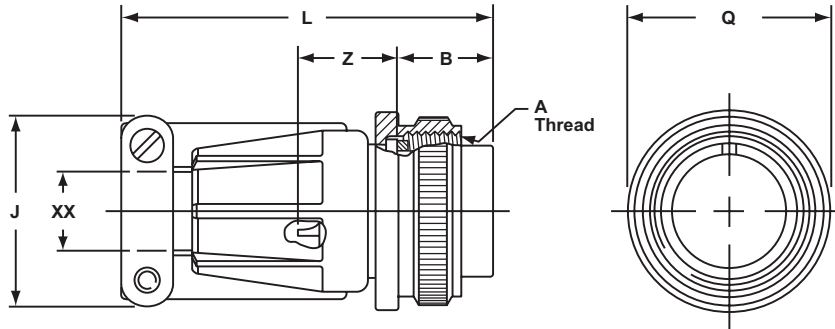


To complete order number, see "how to order" pg. 70.
For solder well data, see page 67.

Shell Size	A Thread Class 2A	B Min. Full Thread	K +.020 - .010	L +.000 - .010	M +.010 - .000	N Dia. +.010 - .000	R ±.005	S ±.031	T Dia. +.004 - .002	Z +.050 - .060
8S	.5000-28UNEF	.391	.672	.297	.562	.375	.594	.875	.120	.422
10S	.6250-24NEF	.391	.672	.297	.562	.500	.719	1.000	.120	.422
10SL	.6250-24NEF	.391	.672	.297	.562	.625	.719	1.000	.120	.422
12S	.7500-20UNEF	.450	.672	.297	.562	.625	.812	1.094	.120	.422
12	.7500-20UNEF	.625	.860	.484	.750	.625	.812	1.094	.120	.672
14S	.8750-20UNEF	.450	.672	.297	.562	.750	.906	1.188	.120	.422
14	.8750-20UNEF	.625	.860	.484	.750	.750	.906	1.188	.120	.672
16S	1.0000-20UNEF	.450	.672	.297	.562	.875	.969	1.281	.120	.422
16	1.0000-20UNEF	.625	.860	.484	.750	.875	.969	1.281	.120	.672
18	1.1250-18NEF	.625	.891	.453	.750	1.000	1.062	1.375	.120	.641*
20	1.2500-18NEF	.625	.891	.453	.750	1.125	1.156	1.500	.120	.641*
22	1.3750-18NEF	.625	.891	.453	.750	1.250	1.250	1.625	.120	.641*
24	1.5000-18NEF	.625	.953	.453	.812	1.375	1.375	1.750	.147	.578*
28	1.7500-18NS	.625	.953	.453	.812	1.625	1.562	2.000	.147	.578*
32	2.0000-18NS	.625	1.031	.438	.875	1.875	1.750	2.250	.173	.500*
36	2.2500-16UN	.625	1.031	.438	.875	2.062	1.938	2.500	.173	.500*
40	2.5000-16UN	.625	1.031	.438	.875	2.312	2.188	2.750	.173	.500*

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

MS/Standard MS3106E /F straight plug

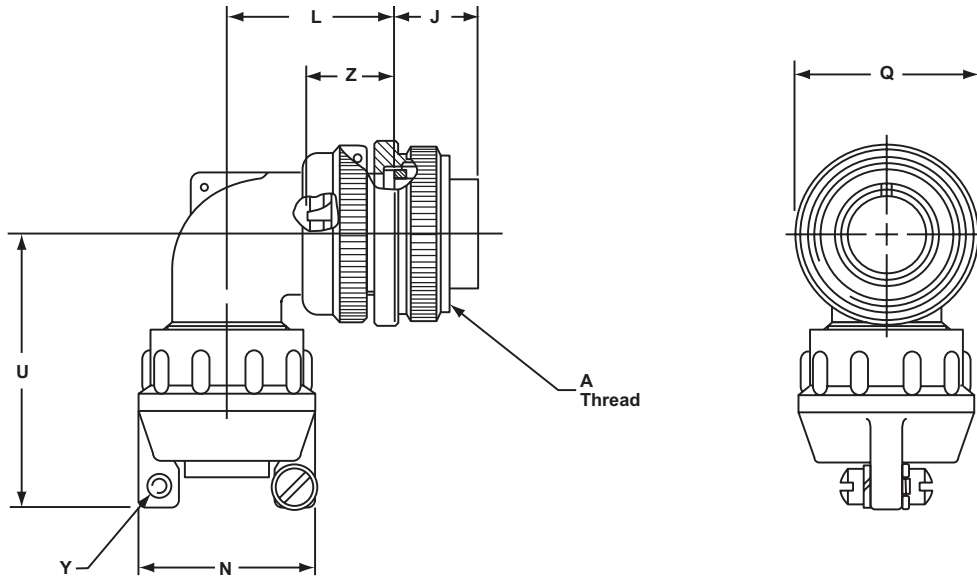


To complete order number, see "how to order" pg. 70.
For solder well data, see page 67.
All lockwire holes are .045 dia. min.

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.

MS/Standard MS3108E 90 degree 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 2B	J ±.005	L Max.	N Max.	Q Dia. Max.	U Max.	Y Thread Class 2B	Z ±.045
8S	.5000-28UNEF	.531	.927	.807	.741	1.445	6-32NC	.562
10S	.6250-24NEF	.531	.927	.807	.869	1.445	6-32NC	.562
10SL	.6250-24NEF	.531	.951	.901	.946	1.508	6-32NC	.562
12S	.7500-20UNEF	.531	.956	.901	.995	1.508	6-32NC	.562
12	.7500-20UNEF	.719	1.143	.901	.995	1.508	6-32NC	.812
14S	.8750-20UNEF	.531	1.020	1.026	1.123	1.570	6-32NC	.562
14	.8750-20UNEF	.719	1.207	1.026	1.123	1.570	6-32NC	.812
16S	1.0000-20UNEF	.531	1.146	1.119	1.250	1.633	6-32NC	.562
16	1.1000-20UNEF	.719	1.333	1.119	1.250	1.633	6-32NC	.812
18	1.1250-18NEF	.719	1.395	1.229	1.333	1.759	6-32NC	.812*
20	1.2500-18NEF	.719	1.598	1.479	1.461	1.931	8-32NC	.812*
22	1.3750-18NEF	.719	1.598	1.479	1.588	1.993	8-32NC	.812*
24	1.5000-18NEF	.719	1.786	1.666	1.729	2.119	8-32NC	.812*
28	1.7500-18NS	.719	1.786	1.666	1.968	2.181	8-32NC	.812*
32	2.0000-18NS	.719	2.020	2.135	2.209	2.570	10-32NF	.812*
36	2.2500-16UN	.719	2.145	2.260	2.463	2.695	10-32NF	.812*
40	2.5000-16UN	.719	2.270	2.510	2.719	2.851	10-32NF	.812*

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