



PW00/MS3110
Wall Mount Receptacle



PW01/MS3111
In-Line Receptacle



PW02/MS3112
Box Mount Receptacle



PW06/MS3116
Straight Plug



PW07A
Jam Nut Receptacle
(General Duty)



PW07/MS3114
Jam Nut Receptacle
(Environmental)



PW08
90° Plug



PW09
Flange Mount Plug

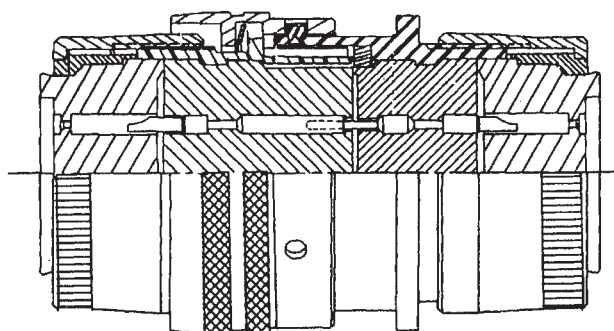


PWB/MS3119
Thru-Bulkhead
Receptacle

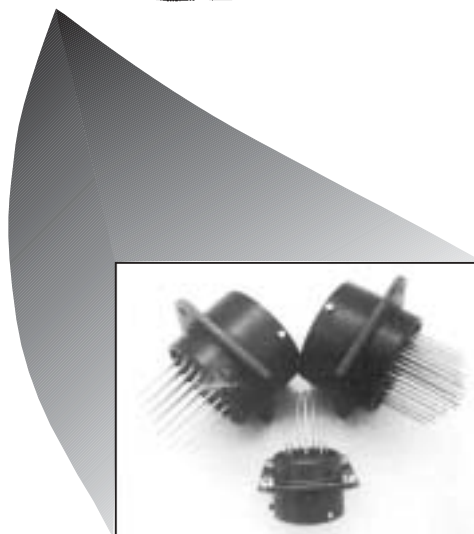
Array PW Series

Solder/Bayonet Coupling Connectors

MIL-C-26482, Series I
Commercial and Military QPL'd



Array Connector Corporation manufactures an extensive line of Bayonet Coupling Connectors which meet or exceed the requirements for qualification to MIL-C-26482 Series 1 Solder.



Nine shell sizes are available and over thirty insert arrangements with both pin and socket contacts.

PW/MS Receptacle and Plug Connectors



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Array PW Series

Solder/Bayonet Coupling Connectors Commercial and MIL-C-26482, Series I

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FEATURES

Array's "MS" series connectors meet or exceed all of the requirements for qualification to MIL-C-26482 Series I Solder and are listed in the U.S. Government's Qualified Product List. They are available in nine shell sizes and over thirty insert arrangements with both pin or socket contacts.

Shells and hardware are made of high strength aluminum alloys, cadmium plated with a chromate overplate as standard. Shells are provided with five keyways to insure proper alignment when mated. Mated shells are held together by three bayonet pins on receptacles and bayonet locking coupling nuts on plugs. These provide visual and audible confirmation of complete mating.

All "PW/MS" receptacle and plug connectors can be ordered with pin or socket contacts. Contact sizes are 20, 16, and 12 gauge, available with either solder cup or PC tail termination. Contacts are made of copper alloy, gold plated per MIL-G-45204, with closed entry design for socket contacts.

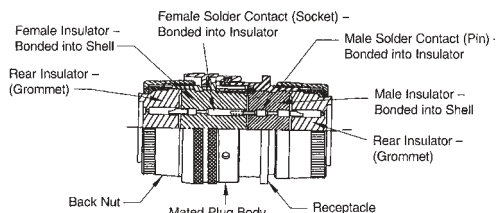
Many special features are available such as electroless nickel or colored anodized finish, stainless steel shells, clinch nuts, Viton or silicone inserts. For modifications or materials not shown in the catalog, contact your Array sales representative.

Array Connector Corporation produces high quality products. These products are intended to be used in accordance with the specifications described in this catalog. Any use or application that deviates from the stated operating specifications is not recommended and may be unsafe. A limited warranty is applicable. Except for obligations assumed by Array Connector Corporation under warranty, Array will be not be liable for any loss, damage, repairs, incidental or consequential damages of any kind, whether or not based upon expressed or implied warranty, contract, negligence, or liability arising from the application or manufacture or repair of these products. This catalog is not a contractual offering; it is for informational purposes only.

Product Data

Electrical

Contact Termination		(PW) Solder or PC Tail			
Number of Contacts		2 to 61			
Wire Size, AWG		12 to 24			
Wire Range Accomodations		Insulation O.D. Limits			
Contact Size	AWG Wire Size	Min.	Max.		
20	24, 22 and 20	.060 (1.52)	.083 (2.11)		
16	20, 18 and 16	.066 (1.68)	.109 (2.77)		
12	14 and 12	.097 (2.46)	.142 (3.61)		
Contact Rating					
Contact Size	Rated Amps	Test current	Max. Millivolt Drop		
20	7.5	7.5	55		
16	13.0	13.0	49		
12	23.0	23.0	42		
Voltage Rating					
Altitude	Service Rating	Test Voltage		Max. Working Voltage	
		AC(rms)	DC	AC(rms)	DC
Sea Level	1	1500	2100	600	850
	2	2300	3200	1000	1400
70,000 ft.	1	375	535	300	510
	2	500	770	450	740



Standard Material and Finishes

Shell (Mil-Std)	Aluminum alloy, conductive olive drab chromate over cadmium finish per QQ-P-416. (Consult factory for commercial options.)
Insulator	Synthetic rubber
Grommet and Seal	Synthetic rubber
Contacts	Copper alloy, gold plate over nickel
Temperature Range	-55°C to +125°C

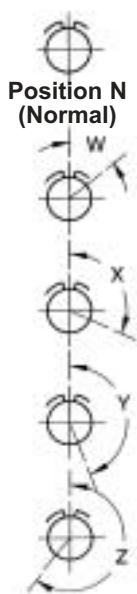
Mechanical

Shell Styles	00 - Wall mount receptacle 01 - Cable in line receptacle 02 - Box mount receptacle 06 - Straight plug 07 - Jam nut receptacle 08 - 90° Angle plug 09 - Flange mount plug PWB - Thru-bulkhead receptacle
Shell Size	8 thru 24
Polarization/Coupling	Five keyway/three point bayonet
Service Classes	A - General duty B - General duty with strain relief C - Pressurized commercial "PW" only E - Grommet seal F - Grommet seal with strain relief J - Straight backshell see note* JF - Commercial only N - No back end, no termination hardware P - Potted W - Moisture resistant with gland seal * MS - Includes "F" strain relief * PW - Commercial "E" type endbell

Polarization

The diagrams indicate alternate insert positions. The five positions (W, X, Y, Z and Normal) differ in degree of rotation for various size and layouts. The exact angle of rotation for the combinations are listed in the table below.

Engaging Face-Pin Inserts



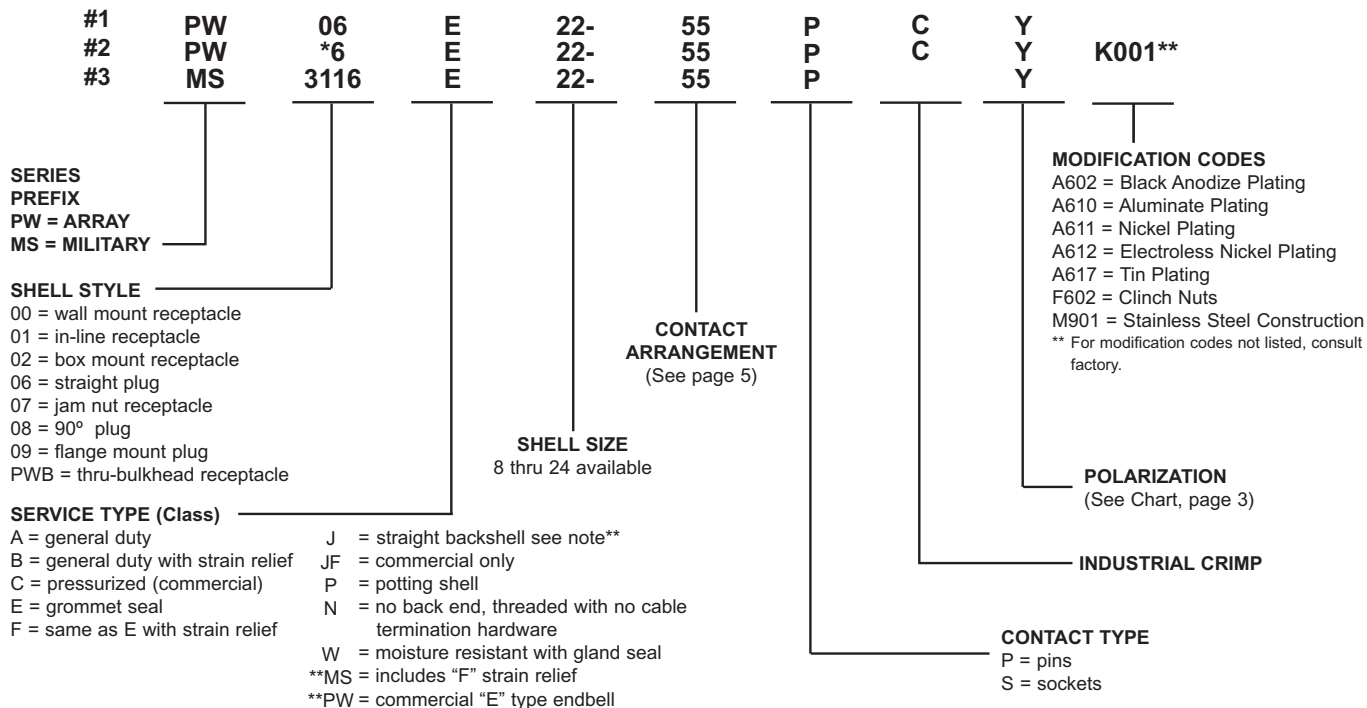
Shell Size	Layout	Position			
		W	X	Y	Z
8	2	58°	122°	-	-
	3	60°	210°	-	-
	4	45°	-	-	-
	33	90°	-	-	-
10	6	90°	-	-	-
	98	90°	180°	240°	270°
12	3	-	-	180°	-
	8	90°	112°	203°	292°
	10	60°	155°	270°	295°
	14	-	-	-	-
14	5	40°	92°	184°	273°
	8	-	-	-	-
	12	43°	90°	-	-
	15	17°	110°	155°	234°
	18	15°	90°	180°	270°
	19	30°	165°	315°	-
	22	45°	-	-	-

Shell Size	Layout	Position			
		W	X	Y	Z
16	8	54°	152°	180°	331°
	23	158°	270°	-	-
	26	60°	-	275°	338°
18	11	62°	119°	241°	340°
	32	85°	138°	222°	265°
20	16	238°	318°	333°	347°
	24	70°	145°	215°	290°
	27	72°	144°	216°	288°
	39	63°	144°	252°	333°
	41	45°	126°	225°	-
22	21	16°	135°	175°	349°
	41	39°	135°	264°	-
	55	30°	142°	226°	314°
24	61	90°	180°	270°	324°

Note: For polarization data for the other contact arrangements, consult factory.

Nomenclature Guide

Example



*NOTE: When modification to a standard plug or receptacle is required, delete the "0" between the PW and the "6" as in example #2.

Cross Reference

MIL SPEC PART NOS.	LEADING SUPPLIERS' COMMERCIAL EQUIVALENT				
	ARRAY	AMPHENOL- BENDIX	CANNON	FCI/BURNDY	SOURIAU
MS3110A***	PW00A*	PT00A*	KPT00A*	BT00A*	851-00A*50*
MS3110B***	PW00B*	PT00A**(SR)	KPT00B*	BT00AC*	851-0AC*50
MS3110E*	PW00E*	PT00E*	KPT00E*	BT00E*	851-0E*50
MS3110F*	PW00F*	PT00E**(SR)	KPT00F*	BT00EC*	851-0EC*50
MS3110P*	PW00P*	PT00P*	KPT00P*	BT00P*	851-0P*50
MS3110J*	PW00JF*	~~~~~	KPT00J*	BT00JF*	851-00JC*50
~~~~~	PW00J*	PT00W*	~~~~~	BT00J*	851-00J*50
MS3111A***	PW01A*	PT01A*	KPT01A*	BT01A*	851-01A*50
MS3111B***	PW01B*	PT01A**(SR)	KPT01B*	BT01AC*	851-01AC*
MS3111E*	PW01E*	PT01E*	KPT01E*	BT01E*	851-01E*50
MS3111F*	PW01F*	PT01E**(SR)	KPT01F*	BT01EC*	851-01EC*50
MS3111P*	PW01P*	PT01P*	KPT01P*	BT01P*	851-01P*50
MS3111J*	PW01JF*	~~~~~	KPT01J*	BT01JF*	851-01JC*50
~~~~~	PW01J*	PT01W*	~~~~~	BT01J*	851-01J*50
MS3112A***	PW02A*	PT02A*	KPT02A*	BT02A*	851-02A*50
MS3112E*	PW02E*	PT02E*	KPT02E*	BT02E*	851-02E*50
~~~~~	PW07A*	PT07A*	KPT07A*	BT07A*	851-07A*50
MS3114E*	PW07E*	PT07E*	KPT07E*	BT07E*	851-07E*50
MS3114F*	PW07F*	PT07E**(SR)	KPT07F*	BT07EC*	851-07EC*50
MS3114P*	PW07P*	PT07P*	KPT07P*	BT07P*	851-07P*50
MS3116A***	PW06A*	PT06A*	KPT06A*	BT06A*	851-06A*50
MS3116B***	PW06B*	PT06A**(SR)	KPT06B*	BT06AC*	851-06AC*50
MS3116E*	PW06E*	PT06E*	KPT06E*	BT06E*	851-06E*50
MS3116F*	PW06F*	PT06E**(SR)	KPT06F*	BT06EC*	851-06EC*50
MS3116P*	PW06P*	PT06P*	KPT06P*	BT06P*	851-06P*50
MS3116J*	PW06JF*	~~~~~	KPT06J*	BT06JF*	851-06JC*50
~~~~~	PW06J*	PT06W*	~~~~~	BT06J*	851-06J*50
MS3119E*	PWB*	PTB*	KPTB*	~~~~~	~~~~~
~~~~~	PW08E*	PT08E*	KPT08E*	~~~~~	851-08E*50
~~~~~	PW08F*	PT08E**(SR)	KPT08F*	~~~~~	851-08EC*50
~~~~~	PW09N*	PT09E*	~~~~~	~~~~~	851-09E*50

***Obsolete for new design but still available.

**Insert Arrangement.

# Contact Arrangement (Engaging Face of Pin Insert)

(For contact arrangements not shown, contact factory)

**08**

2 No. 20 Contacts      3 No. 20 Contacts      3 No. 20 Contacts      4 No. 20 Contacts






**10**

6 No. 20 Contacts      6 No. 20 Contacts      7 No. 20 Contacts





**12**

3 No. 16 Contacts      8 No. 20 Contacts      10 No. 20 Contacts      14 No. 20 Contacts






**14**

5 No. 16 Contacts      4 No. 20 Contacts      4 No. 16 Contacts      1 No. 16 Contact      18 No. 20 Contacts      19 No. 20 Contacts

4 No. 12 Contacts      8 No. 20 Contacts      14 No. 20 Contacts








**16**

8 No. 16 Contacts      1 No. 16 Contact      26 No. 20 Contacts

23 No. 20 Contacts





**18**

11 No. 16 Contacts      32 No. 20 Contacts      1 No. 16 Contact

30 No. 20 Contacts





**20**

16 No. 16 Contacts      24 No. 20 Contacts      25 No. 20 Contacts      27 No. 20 Contacts      2 No. 16 Contacts      41 No. 20 Contacts

37 No. 20 Contacts








**22**

21 No. 16 Contacts      32 No. 20 Contacts      34 No. 20 Contacts      14 No. 16 Contacts      55 No. 20 Contacts

27 No. 20 Contacts

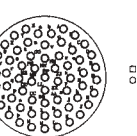






**24**

61 No. 20 Contacts



** Commercial arrangement.

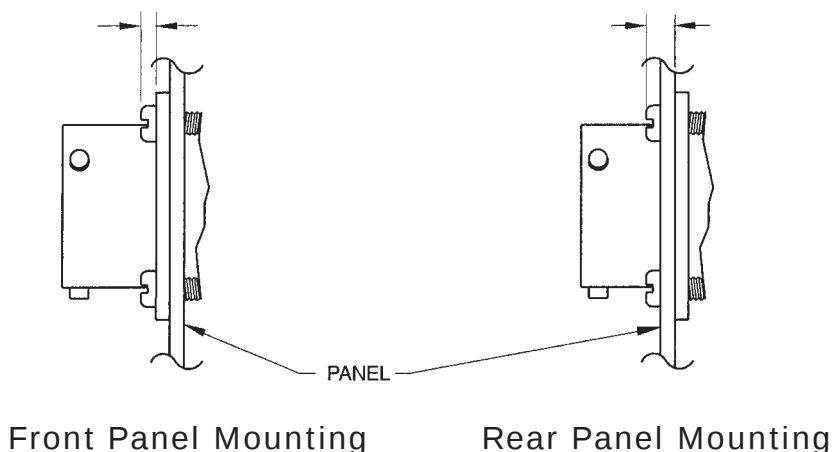
□ Available with solder or straight PC contacts.

○ MIL-C-26482 Series 1 Contact arrangements, per MIL-STD-1669.

* Consult with factory.

## Panel Mounting Data

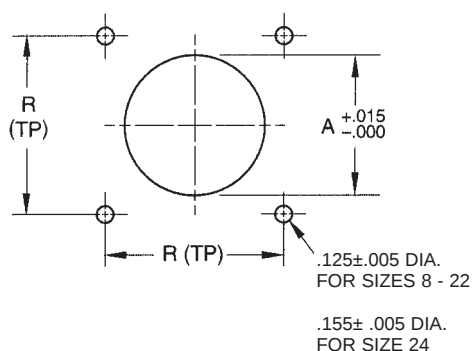
### Max Panel & Screw Heads



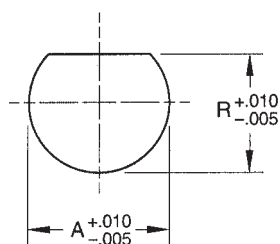
SHELL SIZE	PW00	PW02	PWB
8	0.087	0.087	0.218
10			
12			
14			
16			
18			
20	0.212	0.212	0.344
22			
24			0.311

Note: All dimensions relate to distance in front of flange required for proper mating.

## Series PW Panel Cutout Dimensions

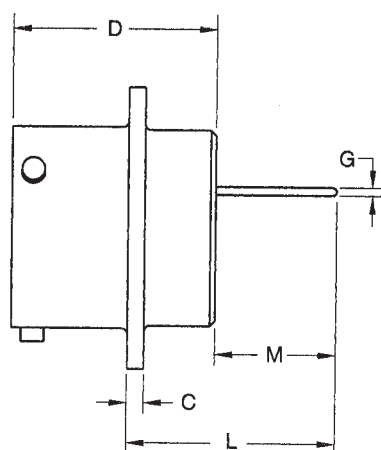


SHELL SIZE	INCHES		MILLIMETERS	
	A	R	A	R
8	.479	.594	12.17	15.08
10	.603	.719	15.32	18.28
12	.730	.812	18.54	20.61
14	.855	.906	21.72	23.00
16	.979	.969	24.87	24.60
18	1.103	1.062	28.02	27.00
20	1.223	1.156	30.56	29.36
22	1.350	1.250	33.78	31.75
24	1.475	1.375	36.96	33.98



SHELL SIZE	INCHES		MILLIMETERS	
	A	R	A	R
8	.572	.540	14.53	13.72
10	.697	.665	17.70	16.90
12	.885	.828	22.45	21.03
14	1.010	.952	25.67	24.20
16	1.135	1.076	28.87	27.35
18	1.260	1.201	32.00	30.75
20	1.385	1.326	35.18	33.65
22	1.510	1.451	38.35	36.83
24	1.635	1.576	41.50	40.00

## Printed Circuit Termination



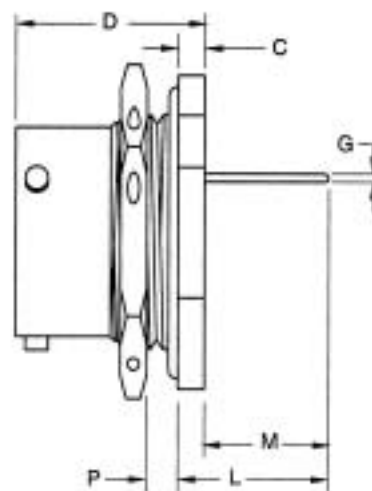
PW02  
(Any Class)

Note: to define PC tail length(s), specify either "L" or "M" and "G" dimensions.

Recommended PC Tail Diameter "G"

CONTACT SIZE	DIAMETER
16 gauge	.040
20 gauge	.030

Other dimensions available.  
Consult with factory.



PW07  
(A and C Class only)

PW02 - Shell Dimensions

SHELL SIZE	C ±.016	D +.005 -.015	Customer to Specify		
			G ±.001	L	M
8	.062	.755			
10	.062	.755			
12	.062	.755			
14	.062	.755			
16	.062	.755			
18	.062	.755			
20	.094	1.005			
22	.094	1.005			
24	.094	1.040			

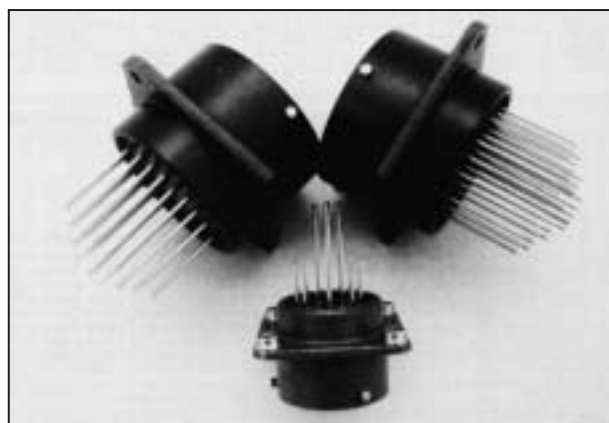
PW07 - Shell Dimensions

SHELL SIZE	C ±.020	D MAX.	P		Customer to Specify		
			MIN.	MAX.	G ±.001	L	M
8	.117	.859	.062	.125			
10	.117	.859	.062	.125			
12	.117	.859	.062	.125			
14	.117	.859	.062	.125			
16	.117	.859	.062	.125			
18	.117	.859	.062	.125			
20	.148	1.078	.062	.250			
22	.148	1.078	.062	.250			
24	.148	1.111	.062	.250			

Array Connector Corporation stocks a wide range of contacts for printed circuit board mounting in a variety of lengths and diameters. The PC types PW02 and PW07 (with printed circuit termination) mate with all MIL-C-26482 plugs. They are competitively priced with the solder version, and a substantial savings can be realized when terminated by wave or reflow soldering.

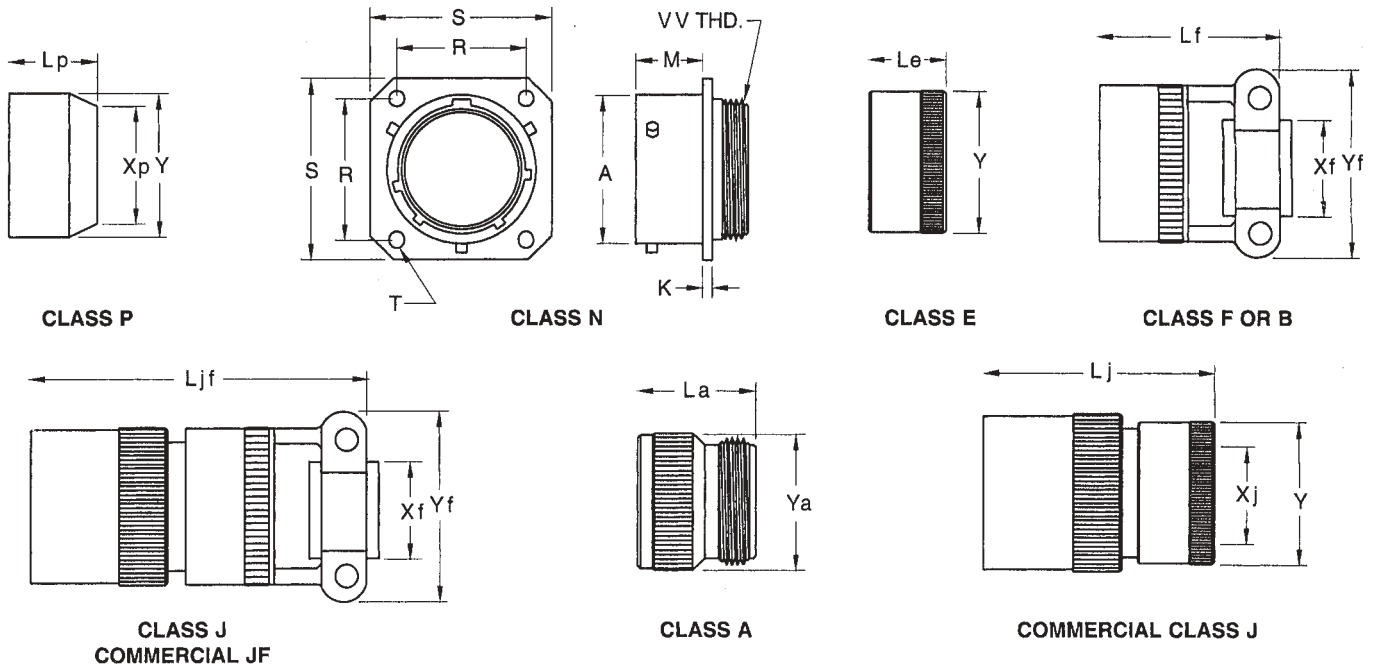
If you require special plating (other than cadmium) or other modifications (i.e., clinch nuts), please advise requirements.

Array can also supply these connectors with custom flex circuitry attached. Please discuss your requirements with your local Array Sales Representative.



Combinations of different PC tail lengths can be provided.

## Series PW00/MS3110 Wall Mount Receptacle



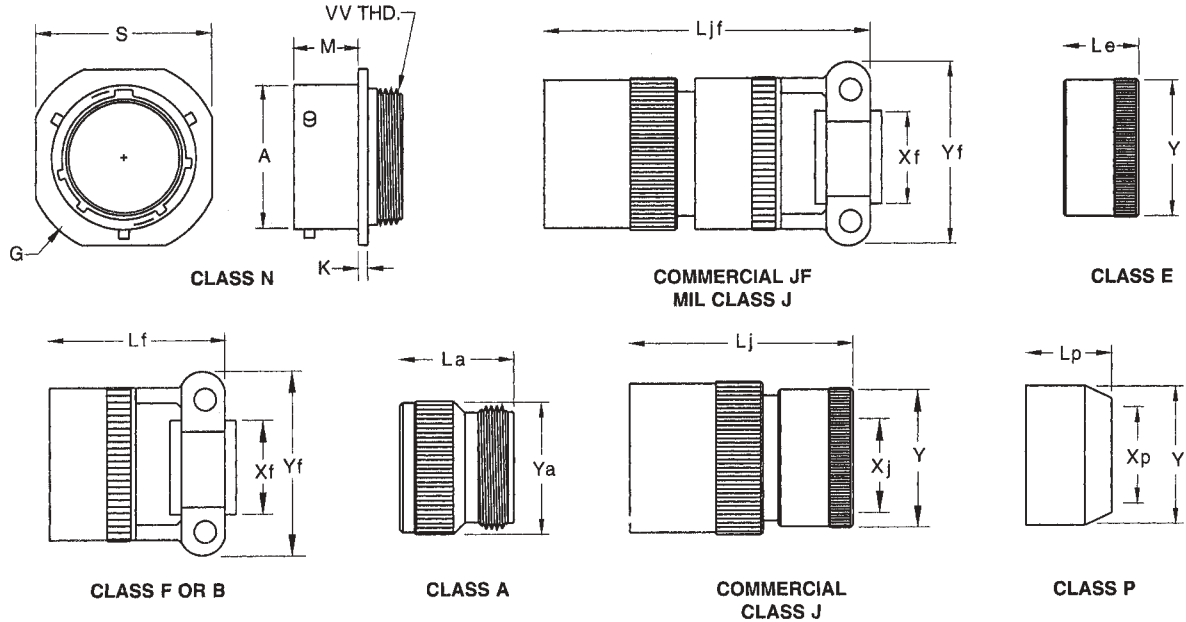
Application: Wall Mounting Connector. Suggested mates are PW06/MS3116 and PW08 styles.

Note: L* = Total connector length including cable accessory.

DIMENSIONS IN INCHES																					
SHELL SIZE	Xf MIN. DIA.	Xp MIN. DIA.	Xj		K ±.016	Y MAX.	Yf MAX.	Ya MAX.	Le MAX.	Lf MAX.	Lp MAX.	Lj MAX.	Ljf MAX.	La MAX.	M +.031 -.000	A ±.003	R (Tp)	S MAX.	T ±.005	V THREAD CLASS 2A	V V THREAD CLASS 2A
			MIN. CLOSED I.D.	MAX. FREE I.D.																	
8	.234	.317	.168	.230	.062	.608	.828	.590	1.281	1.844	1.453	1.781	2.271	1.554	.431	.471	.594	.828	.120	1/2-28 UNEF	7/16-28 UNEF
10	.297	.434	.205	.312	.062	.734	.891	.717	1.281	1.844	1.453	1.781	2.271	1.554	.431	.588	.719	.954	.120	5/8-24 UNEF	9/16-24 UNEF
12	.422	.548	.338	.442	.062	.858	1.016	.834	1.281	1.844	1.453	1.921	2.411	1.554	.431	.748	.812	1.047	.120	3/4-20 UNEF	11/16-24 UNEF
14	.547	.673	.416	.539	.062	.984	1.141	.970	1.281	1.844	1.453	2.109	2.599	1.554	.431	.873	.906	1.141	.120	7/8-20 UNEF	13/16-20 UNEF
16	.609	.798	.550	.616	.062	1.110	1.203	1.088	1.281	1.969	1.453	2.328	2.943	1.554	.431	.998	.969	1.234	.120	1-20 UNEF	15/16-20 UNEF
18	.734	.899	.600	.672	.062	1.234	1.469	1.216	1.281	1.969	1.453	2.562	3.172	1.554	.431	1.123	1.062	1.328	.120	1 3/16-18 UNEF	1 1/16-18 UNEF
20	.734	1.024	.635	.747	.094	1.360	1.469	1.332	1.531	2.234	1.672	3.000	3.610	1.771	.556	1.248	1.156	1.453	.120	1 3/16-18 UNEF	1 3/16-18 UNEF
22	.922	1.149	.670	.846	.094	1.484	1.656	1.460	1.531	2.234	1.672	3.156	3.766	1.771	.556	1.373	1.250	1.578	.120	1 7/16-18 UNEF	1 5/16-18 UNEF
24	.984	1.274	.740	.894	.094	1.610	1.750	1.585	1.594	2.297	1.734	3.375	3.985	1.834	.589	1.498	1.375	1.703	.147	1 7/16-18 IMEF	1 7/16-18 UNEF

DIMENSIONS IN MILLIMETERS																					
SHELL SIZE	Xf MIN. DIA.	Xp MIN. DIA.	Xj		K ±.406	Y MAX.	Yf MAX.	Ya MAX.	Le MAX.	Lf MAX.	Lp MAX.	Lj MAX.	Ljf MAX.	La MAX.	M +.787 -.000	A ±.076	R (Tp)	S MAX.	T ±.127	V THREAD CLASS 2A	V V THREAD CLASS 2A
			MIN. CLOSED I.D.	MAX. FREE I.D.																	
8	5.95	8.05	4.27	5.84	1.57	15.44	21.03	14.99	32.54	46.84	36.91	45.24	57.68	36.12	10.95	11.99	15.09	21.03	3.05	1/2-28 UNEF	7/16-28 UNEF
10	7.54	11.02	5.21	7.92	1.57	18.64	22.63	18.21	32.54	46.84	36.91	45.24	57.68	36.12	10.95	14.94	18.26	24.23	3.05	5/8-24 UNEF	9/16-24 UNEF
12	10.72	13.92	8.59	11.23	1.57	21.79	25.81	21.18	32.54	46.84	36.91	48.79	61.24	36.12	10.95	19.00	20.63	26.59	3.05	3/4-20 UNEF	11/16-24 UNEF
14	13.89	17.09	10.57	13.69	1.57	24.99	28.98	24.61	32.54	46.84	36.91	53.57	66.01	36.12	10.95	22.17	23.01	28.98	3.05	7/8-20 UNEF	13/16-20 UNEF
16	15.47	20.27	13.97	15.65	1.57	28.19	30.56	27.64	32.54	50.01	36.91	59.13	74.75	48.82	10.95	25.35	24.61	31.34	3.05	1-20 UNEF	15/16-20 UNEF
18	18.64	22.83	15.24	17.07	1.57	31.34	37.31	30.89	32.54	50.01	36.91	65.07	80.57	48.82	10.95	28.52	26.98	33.73	3.05	1 3/16-18 UNEF	1 1/16-18 UNEF
20	18.64	26.01	16.13	18.97	2.39	34.54	37.31	33.83	38.89	56.74	42.47	76.20	91.69	43.26	14.12	31.70	29.36	36.91	3.05	1 3/16-18 UNEF	1 3/16-18 UNEF
22	23.42	29.18	17.02	21.49	2.39	37.82	42.06	37.08	38.89	56.74	42.47	80.16	65.66	43.26	14.12	34.27	31.75	40.08	3.05	1 7/16-18 UNEF	1 5/16-18 UNEF
24	24.99	32.36	18.80	22.71	2.39	40.89	44.45	40.26	40.49	58.34	44.04	85.73	101.22	44.83	14.96	38.05	34.93	43.26	3.73	1 7/16-18 UNEF	1 7/16-18 UNEF

## Series PW01/MS3111 In-Line Receptacle



Application: Cable-to-Cable Connector. Suggested mates are PW06/MS3116 and PW08 styles.  
Note: L* = Total connector length including cable accessory.

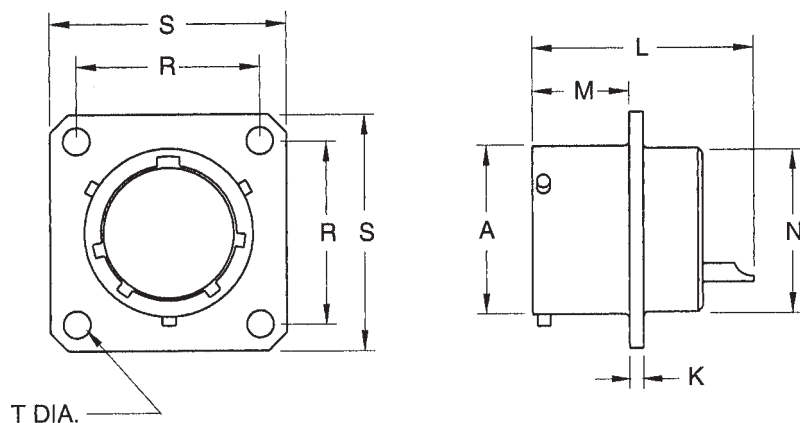
### DIMENSIONS IN INCHES

SHELL SIZE	Xf MIN.	Xp MIN.	Xj		K ±.010	Y MAX.	Yf MAX.	Ya MAX.	Le MAX.	Lf MAX.	Lp MAX.	Lj MAX.	La MAX.	Ljf MAX.	M +.031 - .000	A ±.003	G ±.020	S MAX.	V THREAD CLASS 2A	V V THREAD CLASS 2A
			MIN. CLOSED I.D.	MAX. CLOSED I.D.																
8	.234	.317	.168	.230	.094	.608	.828	.590	1.281	1.844	1.453	1.781	1.554	2.271	.400	.471	.938	.828	1/2-28 UNEF	7/16-28 UNEF
10	.297	.434	.205	.312	.094	.734	.891	.717	1.281	1.844	1.453	1.781	1.554	2.271	.400	.588	1.062	.954	5/8-24 UNEF	9/16-24 UNEF
12	.422	.548	.338	.442	.094	.858	1.016	.834	1.281	1.844	1.453	1.921	1.554	2.411	.400	.748	1.156	1.047	3/4-20 UNEF	11/16-24 UNEF
14	.547	.673	.416	.539	.094	.984	1.141	.970	1.281	1.844	1.453	2.109	1.554	2.599	.400	.873	1.250	1.141	7/8-20 UNEF	13/16-20 UNEF
16	.609	.798	.550	.616	.094	1.110	1.203	1.088	1.281	1.969	1.453	2.328	1.554	2.943	.400	.998	1.344	1.234	1-20 UNEF	15/16-20 UNEF
18	.734	.899	.600	.672	.094	1.234	1.469	1.216	1.281	1.969	1.453	2.562	1.554	3.172	.400	1.123	1.438	1.328	1 3/16-18 UNEF	1 1/16-18 UNEF
20	.734	1.024	.635	.747	.115	1.360	1.469	1.332	1.531	2.234	1.672	3.000	1.771	3.610	.535	1.248	1.562	1.453	1 3/16-18 UNEF	1 3/16-18 UNEF
22	.922	1.149	.670	.846	.115	1.484	1.656	1.460	1.531	2.234	1.672	3.156	1.771	3.766	.535	1.373	1.688	1.578	1 7/16-18 UNEF	1 5/16-18 UNEF
24	.984	1.274	.740	.894	.115	1.610	1.750	1.585	1.594	2.297	1.734	3.375	1.834	3.985	.568	1.498	1.812	1.70	1 7/16-18 UNEF	1 7/16-18 UNEF

### DIMENSIONS IN MILLIMETERS

SHELL SIZE	Xf	Xp	Xj		K ±.254	Y MAX.	Yf MAX.	Ya MAX.	Le MAX.	Lf MAX.	Lp MAX.	Lj MAX.	La MAX.	Ljf MAX.	M +.787 - .000	A ±.076	G ±.508	S MAX.	V THREAD CLASS 2A	V V THREAD CLASS 2A
			MIN. CLOSED I.D.	MAX. CLOSED I.D.																
8	5.94	8.05	4.27	5.84	2.39	15.44	21.03	14.99	32.54	46.84	36.91	45.24	36.12	57.68	10.16	11.99	23.83	21.03	1/2-28 UNEF	7/16-28 UNEF
10	7.54	11.02	5.21	7.92	2.39	18.64	22.63	18.21	32.54	46.84	36.91	45.24	36.12	57.68	10.16	14.94	26.97	24.23	5/8-24 UNEF	9/16-24 UNEF
12	10.72	13.92	8.59	11.23	2.39	21.79	25.81	21.18	32.54	46.84	36.91	48.79	36.12	61.24	10.16	19.00	29.36	26.59	3/4-20 UNEF	11/16-24 UNEF
14	13.89	17.09	10.57	13.69	2.39	24.99	28.98	24.64	32.54	46.84	36.91	53.57	36.12	66.01	10.16	22.17	31.75	28.98	7/8-20 UNEF	13/16-20 UNEF
16	15.47	20.27	13.97	15.65	2.39	28.19	30.56	27.64	32.54	50.01	36.91	59.13	48.82	74.75	10.16	25.35	34.14	31.34	1-20 UNEF	15/16-20 UNEF
18	18.64	22.83	15.24	17.07	2.39	31.34	37.31	30.89	32.54	50.01	36.91	65.07	48.82	80.57	10.16	28.52	36.53	33.73	1 3/16-18 UNEF	1 1/16-18 UNEF
20	18.64	26.01	16.13	18.97	2.92	34.54	37.31	33.83	38.89	56.74	42.47	76.20	43.26	91.69	13.59	31.70	39.67	36.91	1 3/16-18 UNEF	1 3/16-18 UNEF
22	23.42	29.18	17.02	21.49	2.92	37.82	42.06	37.08	38.89	56.74	42.47	80.16	43.26	65.66	13.59	34.87	42.88	40.08	1 7/16-18 UNEF	1 5/16-18 UNEF
24	24.99	32.36	18.80	22.71	2.92	40.89	44.45	40.26	40.49	58.34	44.04	85.73	44.83	101.22	14.43	38.05	46.02	43.26	1 7/16-18 UNEF	1 7/16-18 UNEF

## Series PW02/MS 3112 Box Mount Receptacle

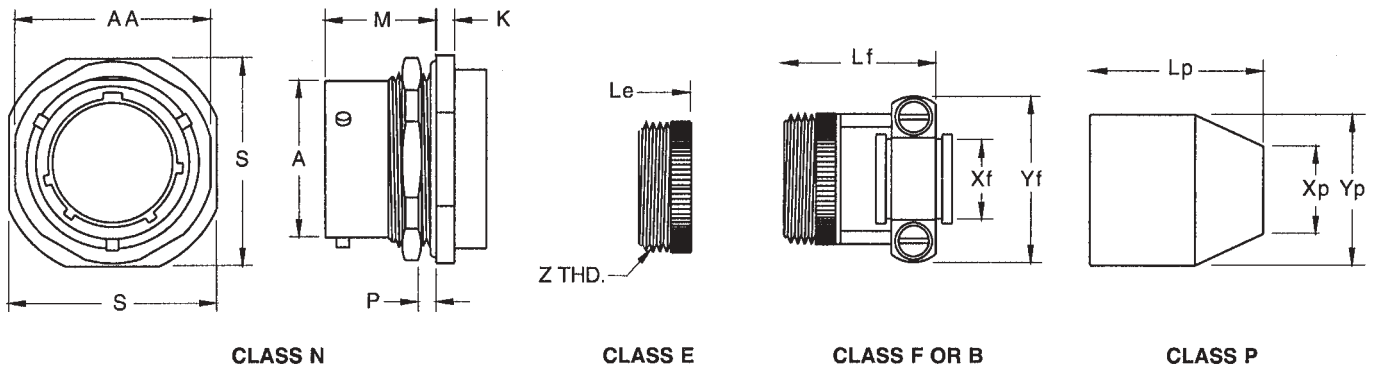


Application: Box Mount Receptacle. Suggested mates are PW06/MS3116 and PW08 styles.  
For printed circuit board terminations, see page 7.

DIMENSIONS IN INCHES								
SHELL SIZE	A ±.003	K ±.010	L MAX.	M +.031 -.000	N ±.015	R (Tp)	S MAX.	T ±.005
8	.471	.062	.978	.431	.438	.594	.828	.120
10	.588	.062	.978	.431	.558	.719	.954	.120
12	.748	.062	.978	.431	.688	.812	1.047	.120
14	.873	.062	.978	.431	.812	.906	1.141	.120
16	.998	.062	.978	.431	.938	.969	1.234	.120
18	1.123	.062	.978	.431	1.062	1.062	1.328	.120
20	1.248	.094	1.196	.556	1.188	1.156	1.453	.120
22	1.373	.094	1.196	.556	1.312	1.250	1.578	.120
24	1.498	.094	1.196	.589	1.438	1.375	1.703	.147

DIMENSIONS IN MILLIMETERS								
SHELL SIZE	A ±.076	K ±.254	L MAX.	M +.787 -.000	N ±.381	R (Tp)	S MAX.	T ±.127
8	12.01	1.57	24.84	10.95	11.13	15.09	21.03	3.05
10	14.99	1.57	24.84	10.95	14.27	18.26	24.23	3.05
12	19.05	1.57	24.84	10.95	17.48	20.62	26.59	3.05
14	22.23	1.57	24.84	10.95	20.62	23.01	28.98	3.05
16	25.40	1.57	24.84	10.95	23.83	24.61	31.34	3.05
18	28.58	1.57	24.84	10.95	26.97	26.97	33.73	3.05
20	31.75	2.39	30.38	14.12	30.18	29.36	36.91	3.05
22	34.93	2.39	30.38	14.12	33.32	31.75	40.08	3.05
24	38.10	2.39	30.38	14.96	36.53	34.93	43.26	3.73

## Series PW07/MS 3114 Jam Nut Receptacle



Application: Jam Nut Mounting with O-ring to D-shaped Chassis Hole. See panel cutout dimensions on page 6.

Suggested mates are PW06/MS3116 and PW08 styles.

Note: L* = Total connector length including cable accessory.

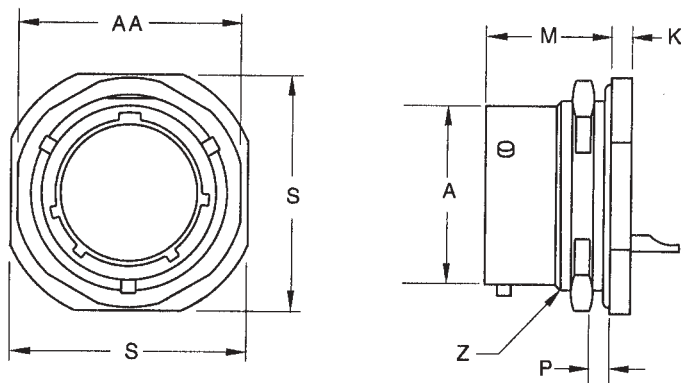
### DIMENSIONS IN INCHES

SHELL SIZE	Xf MIN.	P		Xp MIN.	K ±.020	Yf MAX.	Yp MAX.	Le MAX.	Lf MAX.	Lp MAX.	M +.031 -.000	A ±.003	AA MAX.	S MAX.	Z THREAD
		MIN.	MAX.												
8	.234	.062	.125	.317	.117	.828	.608	1.281	1.750	1.391	.691	.471	.767	.954	5/8-24 UNEF
10	.297	.062	.125	.434	.117	.891	.734	1.281	1.750	1.391	.691	.588	.892	1.078	3/4-20 UNEF
12	.422	.062	.125	.548	.117	1.016	.858	1.281	1.750	1.391	.691	.748	1.079	1.266	7/8-20 UNEF
14	.547	.062	.125	.673	.117	1.141	.984	1.281	1.750	1.391	.691	.873	1.205	1.391	1-20 UNEF
16	.609	.062	.125	.798	.117	1.203	1.110	1.281	1.875	1.391	.691	.998	1.329	1.516	1 1/8-18 UNEF
18	.734	.062	.125	.899	.117	1.469	1.234	1.281	1.875	1.391	.691	1.123	1.455	1.641	1 1/4-18 UNEF
20	.734	.062	.250	1.024	.148	1.469	1.360	1.531	2.125	1.641	.879	1.248	1.579	1.828	1 3/8-18 UNEF
22	.922	.062	.250	1.149	.148	1.656	1.484	1.531	2.125	1.641	.879	1.373	1.705	1.954	1 1/2-18 UNEF
24	.984	.062	.250	1.274	.148	1.750	1.610	1.593	2.187	1.703	.912	1.498	1.829	2.078	1 5/8-18 UNEF

### DIMENSIONS IN MILLIMETERS

SHELL SIZE	Xf MIN.	P		Xp MIN.	K ±.508	Yf MAX.	Yp MAX.	Le MAX.	Lf MAX.	Lp MAX.	M +.787 -.000	A ±.076	AA MAX.	S MAX.	Z THREAD
		MIN.	MAX.												
8	5.94	1.57	3.18	8.05	2.97	21.03	15.44	32.53	44.45	35.33	17.55	11.99	19.48	24.23	5/8-24 UNEF
10	7.54	1.57	3.18	11.02	2.97	22.63	18.64	32.53	44.45	35.33	17.55	14.94	22.66	27.38	3/4-20 UNEF
12	10.72	1.57	3.18	13.92	2.97	25.81	21.79	32.53	44.45	35.33	17.55	19.00	27.41	32.16	7/8-20 UNEF
14	13.89	1.57	3.18	17.09	2.97	29.98	24.99	32.53	44.45	35.33	17.55	22.17	30.61	35.33	1-20 UNEF
16	15.47	1.57	3.18	20.27	2.97	30.56	28.19	32.53	47.63	35.33	17.55	25.35	33.76	38.51	1 1/8-18 UNEF
18	18.64	1.57	3.18	22.83	2.97	37.31	31.34	32.53	47.63	35.33	17.55	28.52	36.96	41.68	1 1/4-18 UNEF
20	18.64	1.57	6.35	26.01	3.76	37.31	34.54	38.90	53.98	41.68	22.33	31.70	40.11	46.43	1 3/8-18 UNEF
22	23.42	1.57	6.35	29.18	3.76	42.06	39.69	38.90	53.98	41.68	22.33	34.87	43.31	49.63	1 1/2-18 UNEF
24	24.99	1.57	6.35	32.36	3.76	44.45	40.89	40.50	55.55	43.26	23.16	38.05	46.46	52.78	1 5/8-18 UNEF

## Series PW07A/C Jam Nut Receptacle



Note: Available in 2 Classes:  
PW07A—Unsealed  
PW07C—Air Pressure Seal

Specify "A" or "C" in part number.

Application: Jam Nut Mounting with O-ring to D-shaped Chassis Hole. See panel cutout dimensions on page 6.

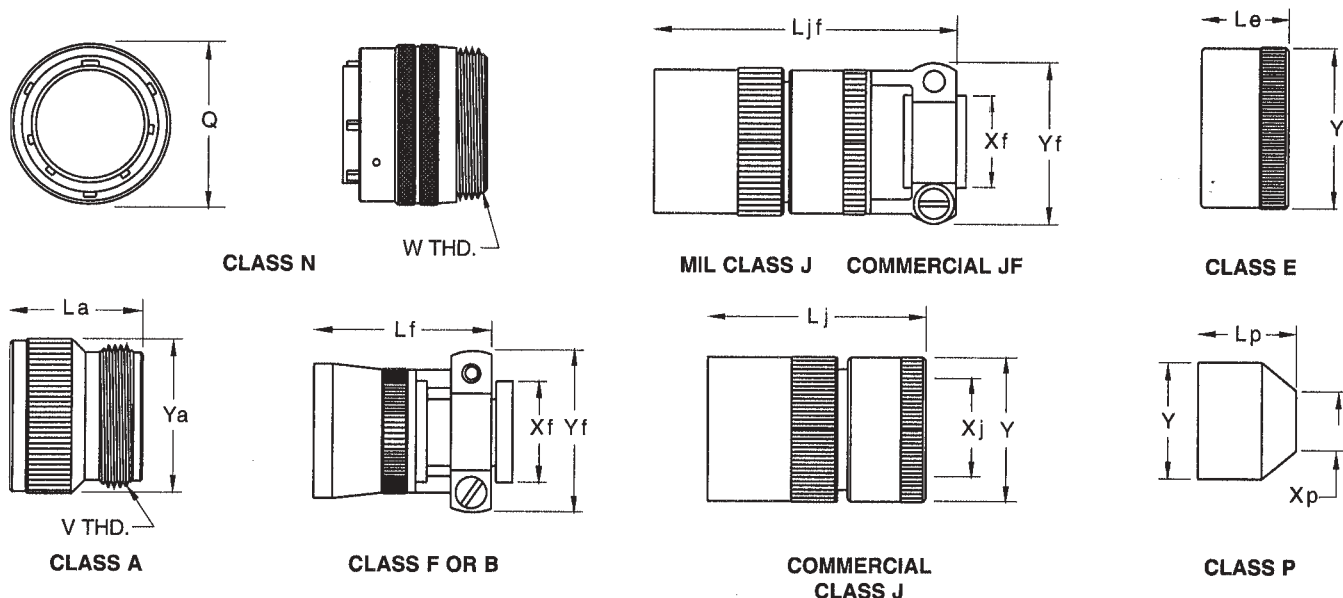
Suggested mates are PW06/MS3116 and PW08 styles.

For printed circuit terminations, see page 7.

DIMENSIONS IN INCHES								
SHELL SIZE	A ±.003	AA MAX.	K ±.020	M +.031 -.000	P		S MAX.	Z THREAD
					MIN.	MAX.		
8	.471	.767	.117	.691	.062	.125	.954	9/16-24 UNEF
10	.588	.892	.117	.691	.062	.125	1.078	11/16-24 UNEF
12	.748	1.079	.117	.691	.062	.125	1.266	7/8-20 UNEF
14	.873	1.205	.117	.691	.062	.125	1.391	1-20 UNEF
16	.998	1.329	.117	.691	.062	.125	1.516	1 1/8-18 UNEF
18	1.123	1.455	.117	.691	.062	.125	1.641	1 1/4-18 UNEF
20	1.248	1.579	.148	.879	.062	.250	1.828	1 3/8-18 UNEF
22	1.373	1.705	.148	.879	.062	.250	1.954	1 1/2-18 UNEF
24	1.498	1.829	.148	.912	.062	.250	2.078	1 5/8-18 UNEF

DIMENSIONS IN MILLIMETERS								
SHELL SIZE	A ±.076	AA MAX.	K ±.508	M ±.787 -.000	P		S MAX.	Z THREAD
					MIN.	MAX.		
8	11.99	19.48	2.97	17.55	1.57	3.18	24.23	9/16-24 UNEF
10	14.94	22.66	2.97	17.55	1.57	3.18	27.38	11/16-24 UNEF
12	19.00	27.41	2.97	17.55	1.57	3.18	32.16	7/8-20 UNEF
14	22.17	30.61	2.97	17.55	1.57	3.18	35.33	1-20 UNEF
16	25.35	33.76	2.97	17.55	1.57	3.18	38.51	1 1/8-18 UNEF
18	28.52	36.96	2.97	17.55	1.57	3.18	41.68	1 1/4-18 UNEF
20	31.70	40.11	3.76	22.33	1.57	6.35	46.43	1 3/8-18 UNEF
22	34.87	43.31	3.76	22.33	1.57	6.35	49.63	1 1/2-18 UNEF
24	38.05	46.46	3.76	23.16	1.57	6.35	52.78	1 5/8-18 UNEF

## Series PW06/MS3116 Straight Plug



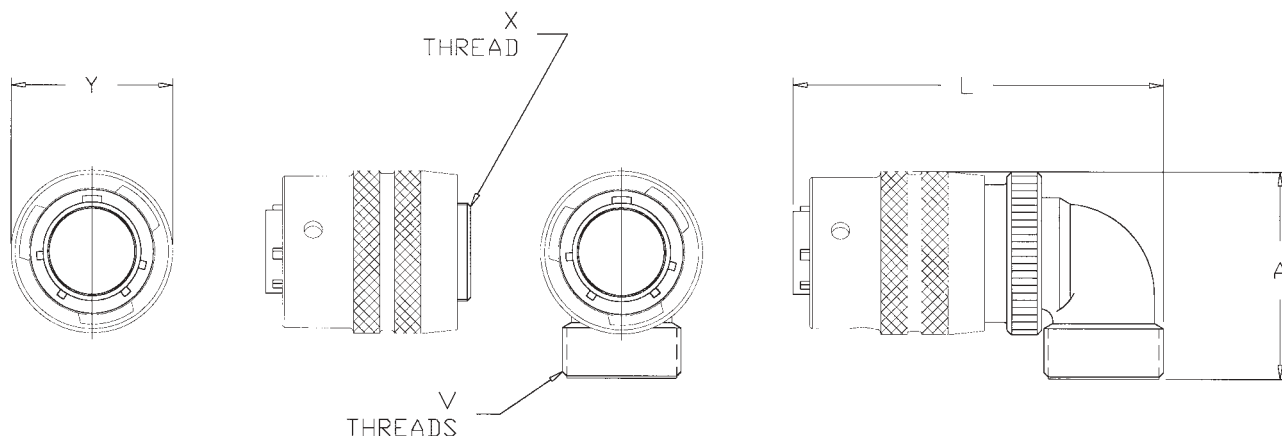
Application: Straight Plug Connector; General Cable Coupling. Suggested mates are PW00/MS3110, PW01/MS3111, PW02/MS3112, PW07/MS3114 and PW09/MS3119 styles.

Note: L* = Total connector length including cable accessory.

DIMENSIONS IN INCHES																
SHELL SIZE	Xf MIN.	Xp MIN.	Xj		Y MAX.	Yf MAX.	Ya MAX.	Le MAX.	Lf MAX.	Lp MAX.	Lj MAX.	La MAX.	Ljf MAX.	Q MAX.	V THREAD	V V THREAD
			MIN. CLOSED I.D.	MAX. CLOSED I.D.												
8	.234	.317	.168	.230	.608	.828	.590	1.281	1.828	1.500	1.781	1.609	2.271	.782	1/2-28 UNEF	7/16-28 UNEF
10	.297	.434	.205	.312	.734	.891	.717	1.281	1.828	1.500	1.781	1.609	2.271	.926	5/8-24 UNEF	9/16-24 UNEF
12	.422	.548	.338	.442	.858	1.016	.834	1.281	1.828	1.500	1.921	1.609	2.411	1.043	3/4-20 UNEF	11/16-24 UNEF
14	.547	.673	.416	.539	.984	1.141	.970	1.281	1.828	1.500	2.109	1.609	2.599	1.183	7/8-20 UNEF	13/16-20 UNEF
16	.609	.798	.550	.616	1.110	1.203	1.088	1.281	1.969	1.500	2.328	1.609	2.943	1.305	1-20 UNEF	15/16-20 UNEF
18	.734	.899	.600	.672	1.234	1.469	1.216	1.281	1.969	1.500	2.562	1.609	3.172	1.391	1 3/16-18 UNEF	1 1/16-18 UNEF
20	.734	1.024	.635	.747	1.360	1.469	1.332	1.453	2.141	1.609	3.000	1.656	3.610	1.531	1 3/16-18 UNEF	1 3/16-18 UNEF
22	.922	1.149	.670	.846	1.484	1.656	1.460	1.453	2.141	1.609	3.156	1.656	3.766	1.656	1 7/16-18 UNEF	1 5/16-18 UNEF
24	.984	1.274	.740	.894	1.610	1.750	1.585	1.510	2.219	1.687	3.375	1.750	3.985	1.777	1 7/16-18 UNEF	1 7/16-18 UNEF

DIMENSIONS IN MILLIMETERS																
SHELL SIZE	Xf MIN.	Xp MIN.	Xj		Y MAX.	Yf MAX.	Ya MAX.	Le MAX.	Lf MAX.	Lp MAX.	Lj MAX.	La MAX.	Ljf MAX.	Q MAX.	V THREAD	V V THREAD
			MIN. CLOSED I.D.	MAX. CLOSED I.D.												
8	5.94	8.05	4.27	5.84	15.44	21.03	14.99	32.54	46.43	38.10	45.24	40.87	57.68	19.86	1/2-28 UNEF	7/16-28 UNEF
10	7.54	11.02	5.21	7.92	18.64	22.63	18.21	32.54	46.43	38.10	45.24	40.87	57.68	23.52	5/8-24 UNEF	9/16-24 UNEF
12	10.27	13.92	8.59	11.23	21.79	25.81	21.18	32.54	46.43	38.10	48.79	40.87	61.24	26.49	3/4-20 UNEF	11/16-24 UNEF
14	13.89	17.09	10.57	13.69	24.99	28.98	24.64	32.54	46.43	38.10	53.57	40.87	66.01	30.05	7/8-20 UNEF	13/16-20 UNEF
16	15.47	20.27	13.97	15.65	28.19	30.56	27.64	32.54	50.01	38.10	59.13	40.87	74.75	33.15	1-20 UNEF	15/16-20 UNEF
18	18.64	22.83	15.24	17.07	31.34	37.31	30.89	32.54	50.01	38.10	65.07	40.87	80.57	35.33	1 3/16-18 UNEF	1 1/16-18 UNEF
20	18.64	26.01	16.13	18.97	34.54	37.31	33.83	36.91	54.38	40.87	76.20	42.06	91.69	38.89	1 3/16-18 UNEF	1 3/16-18 UNEF
22	23.42	29.18	17.02	21.49	37.69	42.06	37.08	36.91	54.38	40.87	80.16	42.06	95.66	42.06	1 7/16-18 UNEF	1 5/16-18 UNEF
24	24.99	32.36	18.80	22.71	40.89	44.45	40.26	38.35	56.36	42.85	85.73	44.45	101.22	45.14	1 7/16-18 UNEF	1 7/16-18 UNEF

## Series PW08 90° Angle Plug



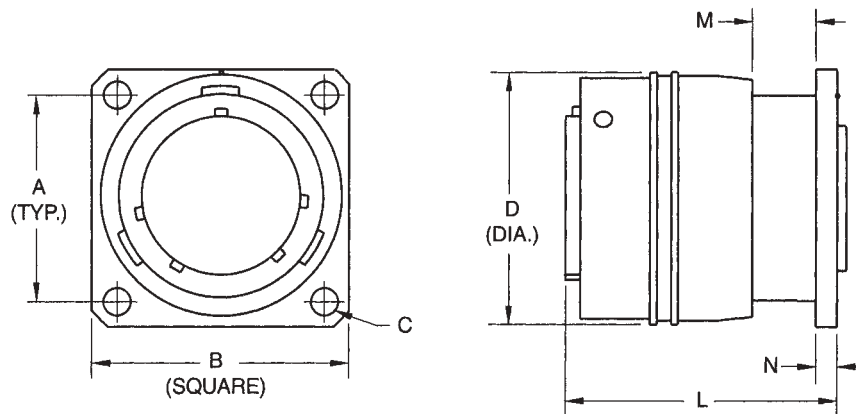
Application: 90° Cable Plug. Suggested mates are PW00/MS3110, PW01/MS3111, PW02/MS3112, PW07/MS3114 and PW09/MS3119 styles.

Note: L* = Total connector length including cable accessory.

DIMENSIONS IN INCHES					
SHELL SIZE	Y MAX.	X THREAD CLASS 2A	V THREAD CLASS 2A	L REF.	A REF.
8	.782	7/16-28 UNEF	.5000-28 UNEF	1.644	1.157
10	.926	9/16-24 UNEF	.6250-24 UNEF	1.746	1.407
12	1.043	11/16-24 UNEF	.7500-20 UNEF	1.868	1.580
14	1.183	13/16-20 UNEF	.8750-20 UNEF	2.060	1.703
16	1.305	15/16-20 UNEF	1.0000-20 UNEF	2.227	1.865
18	1.391	1 1/16-18 UNEF	1.1875-18 UNEF	2.440	1.978
20	1.531	1 3/16-18 UNEF	1.1875-18 UNEF	2.694	2.191
22	1.656	1 5/16-18 UNEF	1.4375-18 UNEF	2.819	2.232
24	1.777	1 7/16-18 UNEF	1.4375-18 UNEF	2.979	2.372

DIMENSIONS IN MILLIMETERS					
SHELL SIZE	Y MAX.	V THREAD CLASS 2A	V THREAD CLASS 2A	L REF.	A REF.
8	19.86	7/16-28 UNEF	.5000-28 UNEF	41.76	29.39
10	23.52	9/16-24 UNEF	.6250-24 UNEF	44.35	35.74
12	26.49	11/16-24 UNEF	.7500-20 UNEF	47.45	40.13
14	30.05	13/16-20 UNEF	.8750-20 UNEF	52.32	43.26
16	33.15	15/16-20 UNEF	1.0000-20 UNEF	56.57	47.37
18	35.33	1 1/16-18 UNEF	1.1875-18 UNEF	61.98	50.24
20	38.89	1 3/16-18 UNEF	1.1875-18 UNEF	68.43	55.65
22	42.06	1 5/16-18 UNEF	1.4375-18 UNEF	71.60	56.69
24	45.14	1 7/16-18 UNEF	1.4375-18 UNEF	75.67	60.25

## Series PW09 Flange Mount Plug



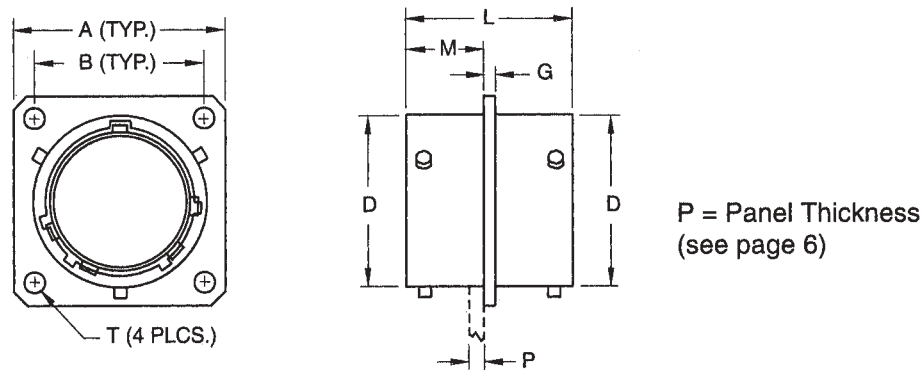
Application: Flange Mount Plug. Suggested mate is PW01/MS3111 style.

Note: Consult with factory for PC terminated versions.

DIMENSIONS IN INCHES							
SHELL SIZE	A (TP)	B MAX.	C $\pm.005$	D MAX.	L $\pm.005$	M MIN.	N $\pm.005$
8	.594	.828	.120	.782	1.060	.014	.065
10	.719	.954	.120	.926	1.060	.014	.065
12	.812	1.047	.120	1.043	1.060	.031	.065
14	.906	1.141	.120	1.183	1.060	.031	.065
16	.969	1.234	.120	1.305	1.060	.031	.065
18	1.062	1.328	.120	1.391	1.060	.050	.065
20	1.156	1.453	.120	1.531	1.060	.050	.100
22	1.250	1.578	.120	1.656	1.060	.050	.100
24	1.375	1.703	.147	1.777	1.060	.050	.100

DIMENSIONS IN MILLIMETERS							
SHELL SIZE	A (TP)	B MAX.	C $\pm.127$	D MAX.	L $\pm.762$	M MIN.	N $\pm.127$
8	15.09	21.03	3.05	19.86	26.92	.36	1.65
10	18.26	24.23	3.05	23.52	26.92	.36	1.65
12	20.62	26.59	3.05	26.49	26.92	.79	1.65
14	23.01	28.98	3.05	30.05	26.92	.79	1.65
16	24.61	31.34	3.05	33.15	26.92	.79	1.65
18	26.97	33.73	3.05	35.33	26.92	1.27	1.65
20	29.36	36.91	3.05	38.39	26.92	1.27	2.54
22	31.75	40.08	3.05	42.06	26.92	1.27	2.54
24	34.93	43.26	3.73	45.14	26.92	1.27	2.54

## Series PWB Thru-Bulkhead Receptacle/ (MS3119 Commercial)



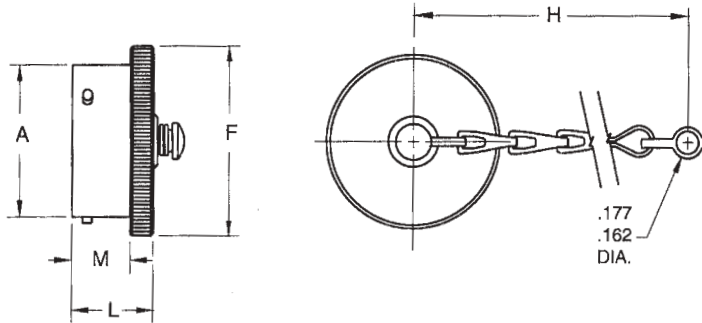
Application: Thru-Bulkhead. Suggested mates are PW06/MS3116 and PW08 styles.  
The socket end of the insert always appears at the "M" dimension end of shell.

DIMENSIONS IN INCHES							
SHELL SIZE	A MAX.	B TP	D ±.003	G ±.016	L MAX.	M +.031 -.000	T ±.005
8	.828	.594	.471	.062	1.125	.562	.120
10	.954	.719	.588	.062	1.125	.562	.120
12	1.047	.812	.748	.062	1.125	.562	.120
14	1.141	.906	.873	.062	1.125	.562	.120
16	1.234	.969	.998	.062	1.125	.562	.120
18	1.328	1.062	1.123	.062	1.125	.562	.120
20	1.453	1.156	1.248	.094	1.406	.688	.120
22	1.578	1.250	1.373	.094	1.406	.688	.120
24	1.703	1.375	1.498	.094	1.406	.688	.147

DIMENSIONS IN MILLIMETERS							
SHELL SIZE	A MAX.	B TP	D ±.076	G ±.406	L MAX.	M +.787 -.000	T ±.127
8	21.03	15.09	11.96	1.57	25.58	14.27	3.05
10	24.23	18.26	14.94	1.57	25.58	14.27	3.05
12	26.59	20.62	19.00	1.57	25.58	14.27	3.05
14	28.98	23.01	22.17	1.57	25.58	14.27	3.05
16	31.34	24.61	25.35	1.57	25.58	14.27	3.05
18	33.73	26.97	28.52	1.57	25.58	14.27	3.05
20	36.91	29.36	31.70	2.39	35.71	17.48	3.05
22	40.08	31.75	34.87	2.39	35.71	17.48	3.05
24	43.26	34.93	38.05	2.39	35.71	17.48	3.73

# PW80/MS3180 and PW81/MS3181 Protective Caps

## (MS 3180)

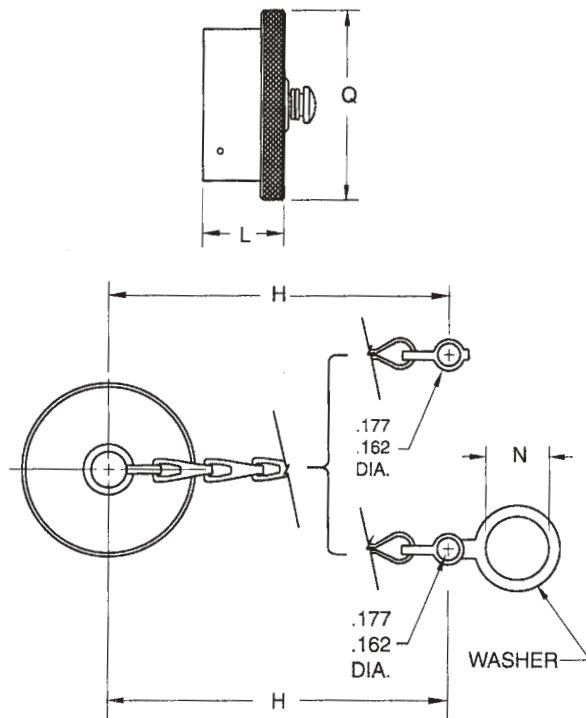


Part No. PW80-** or MS3180-**  
**= "Dash Number"

DIMENSIONS IN INCHES							
SHELL SIZE	DASH NO.		A +.001 -.005	F MAX.	H ±.25	L MAX.	M ±.010
	WITHOUT CHAIN	WITH CHAIN					
8	G1	G11	.473	.719	3.00	.562	.378
10	G2	G12	.590	.844	3.00	.562	.378
12	G3	G13	.750	1.000	3.50	.562	.378
14	G4	G14	.875	1.125	3.50	.562	.378
16	G5	G15	1.000	1.250	3.50	.562	.378
18	G6	G16	1.125	1.375	3.50	.562	.378
20	G7	G17	1.250	1.500	4.00	.625	.440
22	G8	G18	1.375	1.625	4.00	.625	.440
24	G9	G19	1.500	1.750	4.00	.658	.473

DIMENSIONS IN MILLIMETERS							
SHELL SIZE	DASH NO.		A +.03 -.13	F MAX.	H ±6.35	L MAX.	M ±.25
	WITHOUT CHAIN	WITH CHAIN					
8	G1	G11	12.01	18.28	76.20	14.27	9.60
10	G2	G12	14.98	21.41	76.20	14.27	9.60
12	G3	G13	19.05	25.40	88.90	14.27	9.60
14	G4	G14	22.21	28.58	88.90	14.27	9.60
16	G5	G15	25.40	31.75	88.90	14.27	9.60
18	G6	G16	28.58	34.93	88.90	14.27	9.60
20	G7	G17	31.75	38.10	101.60	15.87	11.17
22	G8	G18	34.93	41.28	101.60	15.87	11.17
24	G9	G19	38.10	44.45	101.60	16.71	12.01

## (MS 3181)



Part No. PW81-** or MS3181-**  
**= "Dash Number"

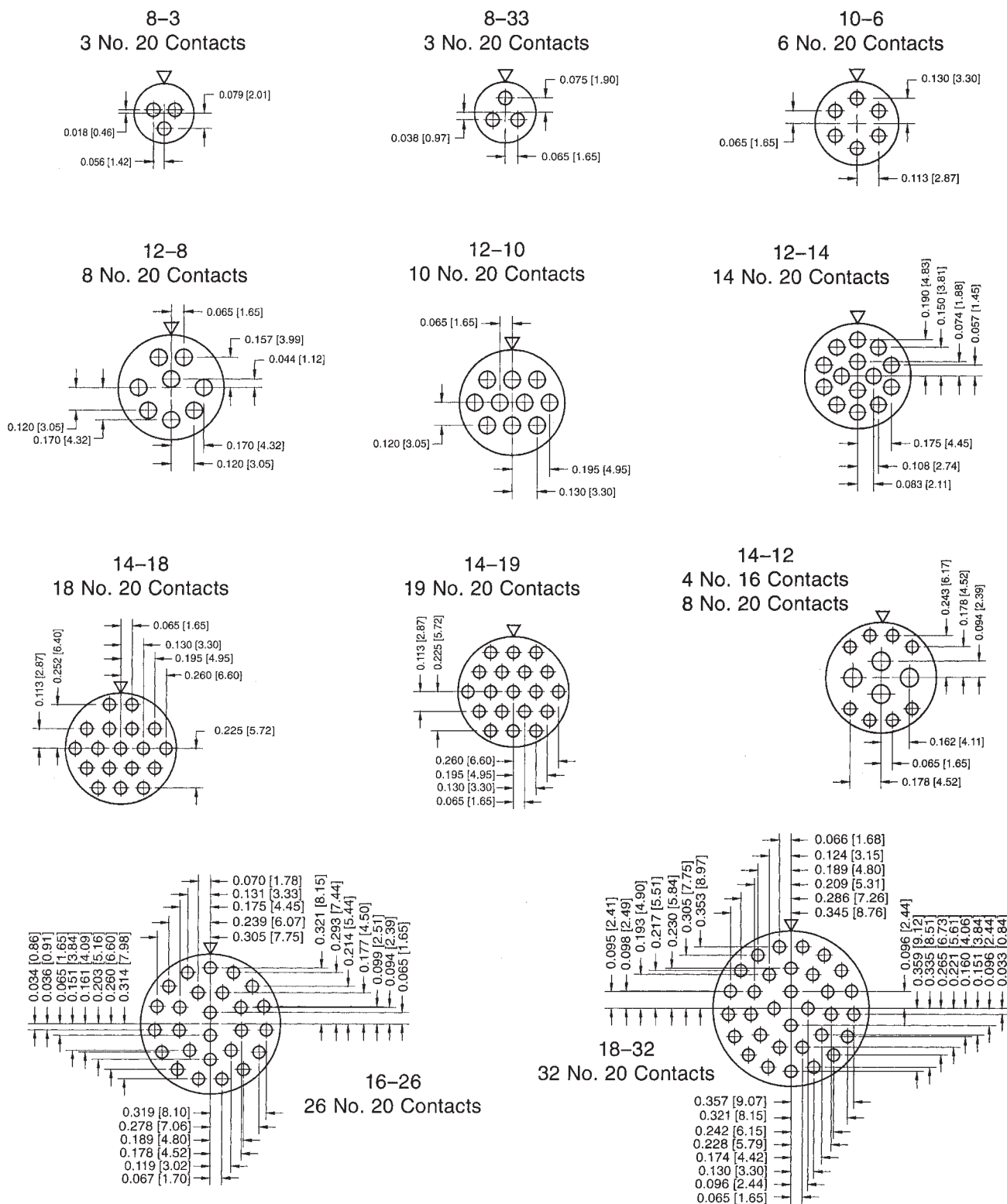
DIMENSIONS IN INCHES							
SHELL SIZE	DASH NO.			H	L MAX.	N MIN.	Q MAX.
	WITHOUT CHAIN	WITH CHAIN	WITH CHAIN & WASHER				
8	G1	G11	G21	3.00	.562	.578	.719
10	G2	G12	G22	3.00	.562	.703	.812
12	G3	G13	G23	3.50	.562	.891	1.000
14	G4	G14	G24	3.50	.562	1.016	1.125
16	G5	G15	G25	3.50	.562	1.141	1.250
18	G6	G16	G26	3.50	.562	1.266	1.375
20	G7	G17	G27	4.00	.562	1.391	1.500
22	G8	G18	G28	4.00	.562	1.516	1.625
24	G9	G19	G29	4.00	.602	1.641	1.750

DIMENSIONS IN MILLIMETERS							
SHELL SIZE	DASH NO.			H	L MAX.	N MIN.	Q MAX.
	WITHOUT CHAIN	WITH CHAIN	WITH CHAIN & WASHER				
8	G1	G11	G21	76.20	14.27	14.68	18.26
10	G2	G12	G22	76.20	14.27	17.86	20.64
12	G3	G13	G23	88.90	14.27	22.63	25.40
14	G4	G14	G24	88.90	14.27	25.80	28.58
16	G5	G15	G25	88.90	14.27	28.98	31.75
18	G6	G16	G26	88.90	14.27	32.15	34.93
20	G7	G17	G27	101.60	14.27	35.33	38.10
22	G8	G18	G28	101.60	14.27	38.50	41.28
24	G9	G19	G29	101.60	15.29	41.68	44.45

## Contact Locations

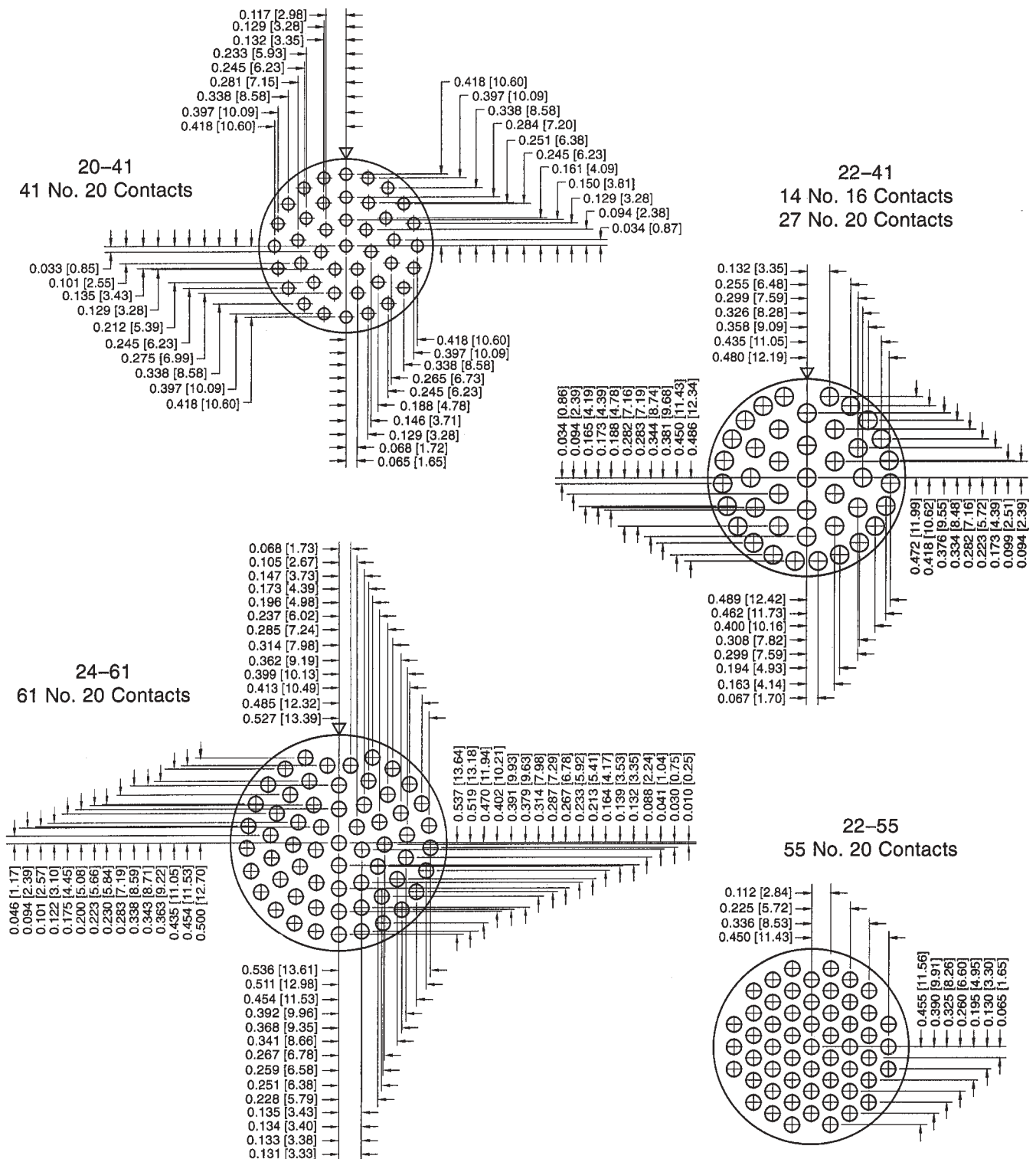
### Contact Co-ordinate Dimensions

Viewed from rear face of male insert (termination side)



## Contact Locations

### Contact Co-ordinate Dimensions Viewed from rear face of male insert (termination side)



# Other Quality Connectors

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**QPL'd MIL-C-5015  
and Special Connectors  
for Commercial Applications**



**Quick Disconnect Connectors  
Solder and Crimp Types**



**Rugged Acme Thread Connectors  
for Industrial Electrical Equipment**

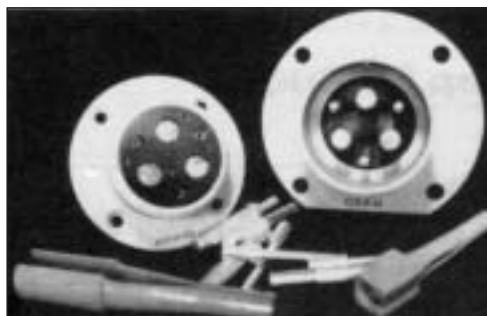
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Solder and Crimp Connectors**



**Special Cryogenic Connectors**



**Buffet/Galley Connectors  
Solder and Crimp Connectors**

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