



Array PW Series

Solder/Bayonet Coupling Connectors

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

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

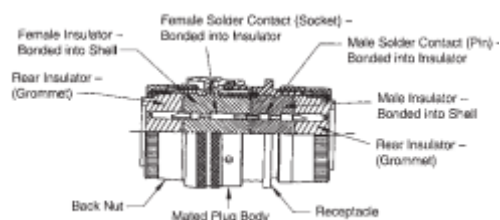
Contact Size	AWG Wire Size	Min.	Max.
20	24, 22 and 20	.060 (1.52)	.083 (2.11)
16	20, 18 and 16	.066 (1.68)	.109 (2.77)
12	14 and 12	.097 (2.46)	.142 (3.61)

Contact Rating

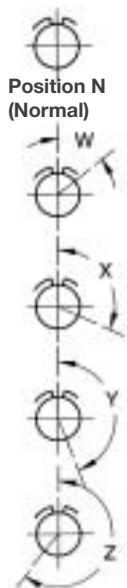
Contact Size	Rated Amps	Test current	Max. Millivolt Drop
20	7.5	7.5	55
16	13.0	13.0	49
12	23.0	23.0	42

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



Engaging Face-Pin Inserts



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.

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°
22	41	45°	126°	225°	-
	21	16°	135°	175°	349°
	41	39°	135°	264°	-
24	55	30°	142°	226°	314°
	61	90°	180°	270°	324°

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

Standard Material and Finishes

Shell (Mil-Std)	Aluminum alloy, conductive olivedrab chromate over cadmiumfinish per QQ-P-416. (Consultfactory 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

Nomenclature Guide

Example	#1	PW	06	E	22-	55	P	C	Y	
	#2	PW	*6	E	22-	55	P	C	Y	K001**
	#3	MS	3116	E	22-	55	P		Y	
SERIES PREFIX PW = Cinch MS = MILITARY		SHELL STYLE 00 = wall mount receptacle 01 = in-line receptacle 02 = box mount receptacle 06 = straight plug 07 = jam nut receptacle 08 = 90° plug 09 = flange mount plug PWB = thru-bulkhead receptacle		CONTACT ARRANGEMENT (See page 5)		SHELL SIZE 8 thru 24 available		MODIFICATION CODES A602 = Black Anodize Plating A610 = Aluminate Plating A611 = Nickel Plating A612 = Electroless Nickel Plating A617 = Tin Plating F602 = Clinch Nuts M901 = Stainless Steel Construction ** For modification codes not listed, consult factory.		
SERVICE TYPE (Class) A = general duty B = general duty with strain relief C = pressurized (commercial) E = grommet seal F = same as E with strain relief		INDUSTRIAL CRIMP		CONTACT TYPE P= pins S = sockets		POLARIZATION (See Chart, page 3)				
		J = straight backshell see note** JF = commercial only P = potting shell N = no back end, threaded with no cable termination hardware W = moisture resistant with gland seal **MS = includes "F" strain relief **PW = commercial "E" type endbell								

*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.					
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 2 No. 20 Contacts 	3 3 No. 20 Contacts 	33 3 No. 20 Contacts 	4 4 No. 20 Contacts 		
10	6 6 No. 20 Contacts 	98 6 No. 20 Contacts 	7 7 No. 20 Contacts 			
12	3 3 No. 16 Contacts 	8 8 No. 20 Contacts 	10 10 No. 20 Contacts 	14 14 No. 20 Contacts 		
14	5 5 No. 16 Contacts 	8 4 No. 20 Contacts 4 No. 12 Contacts 	12 4 No. 16 Contacts 8 No. 20 Contacts 	15 1 No. 16 Contact 14 No. 20 Contacts 	18 18 No. 20 Contacts 	19 19 No. 20 Contacts 
16	8 8 No. 16 Contacts 	23 1 No. 16 Contact 22 No. 20 Contacts 	26 26 No. 20 Contacts 			
18	11 11 No. 16 Contacts 	32 32 No. 20 Contacts 	30 1 No. 16 Contact 29 No. 20 Contacts 			
20	16 16 No. 16 Contacts 	24 24 No. 20 Contacts 	25 25 No. 20 Contacts 	27 27 No. 20 Contacts 	39 2 No. 16 Contacts 37 No. 20 Contacts 	41 41 No. 20 Contacts 
22	21 21 No. 16 Contacts 	32 32 No. 20 Contacts 	34 34 No. 20 Contacts 	41 14 No. 16 Contacts 27 No. 20 Contacts 	55 55 No. 20 Contacts 	
24	61 61 No. 20 Contacts 					

** Commercial arrangement.

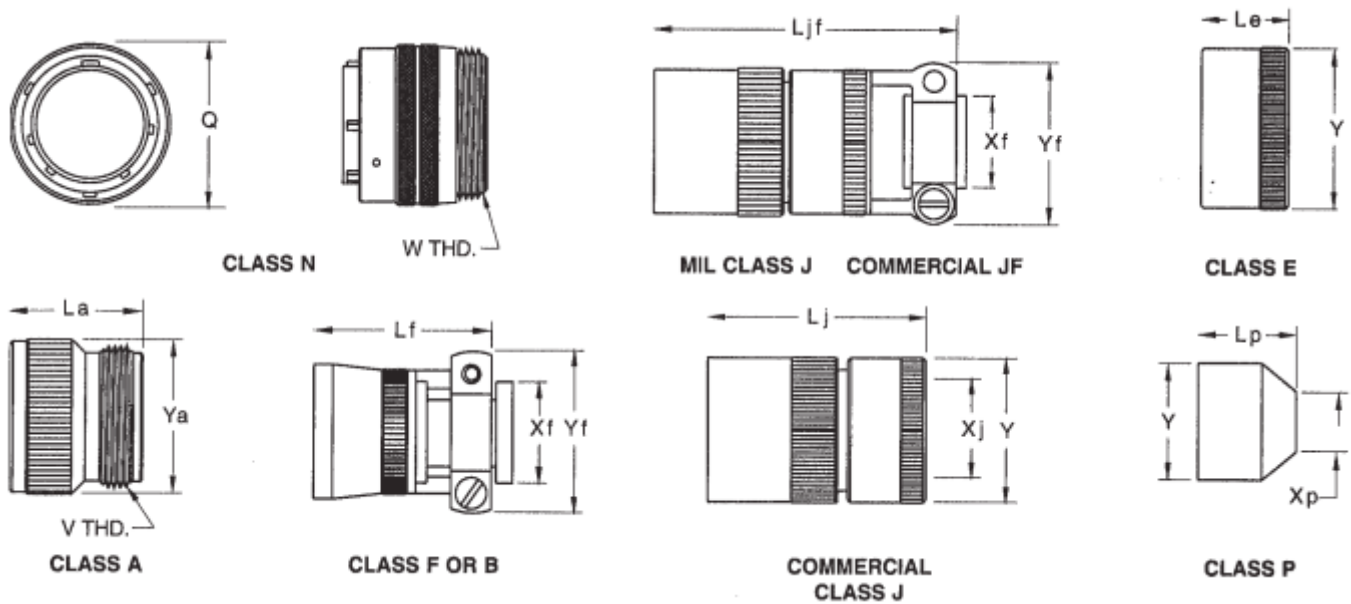
□ Available with solder or straight PC contacts.

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

* Consult with factory.

** Commercial arrangement.  
□ Available with solder or straight PC contacts.  
◦ MIL-C-26482 Series 1 Contact arrangements, per MIL-STD-1669.  
* Consult with factory.

# 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 MIN.	MAX.	YMAX.	Yf MAX.	Ya MAX.	Le MAX.	Lf MAX.	Lp MAX.	Lj MAX.	La MAX.	Ljf MAX.	QMAX.	V THREAD	VW THREAD
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 MIN.	MAX.		Yf	Ya	Le	Lf	Lp		La	Ljf		V THREAD	VV THREAD
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