



MilSpecWest

888-428-2188

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Cage Code 8NHG3



5015 STYLE CONNECTORS



The Very Best in Interconnecting Products

Technical Data

Electrical Data

Contact rating

(Assembled in insulator)

Contact size	Current [A]
16	13
12	23
8	46
4	80
0	150

Insulation resistance

The insulation resistance to be tested per EIA364.21 and MIL-DTL-5015 3.18 test condition B: DC500V/5000M Ω min

Operating & Test voltage

The dielectric withstanding voltage to be tested per EIA364.20 and MIL-DTL-5015 3.11

Service rating	Test Voltage AC(rms)		Operating Voltage	
	sea level	70,000ft	DC	AC(rms)
Inst	1000	260	250	200
A	2000	360	700	500
D	2800	400	1250	900
E	3500	440	1750	1250
B	4500	480	2450	1750
C	7000	560	4200	3000

Contact resistance

Voltage drops to be tested with the coupling ring removed per EIA364.06 and MIL-DTL-5015 3.15

Contact size	Test current [A]	Potential drop max.mV	Contact resistance max.m Ω
16	13	49	6
12	23	42	3
8	46	26	1
4	80	23	0.5
0	150	21	0.2

Mechanical Features

Ambient temperature

-55°C/+125°C

Humidity

14-day 71°C $\pm$ 2°C to 95% $\pm$ 3% humidity testing per EIA364.31 Method II and MIL-DTL-5015 3.14

Durability

Test mating / unmating 100 times at the speed of max 60 times / hour.

Per EIA364.09 and MIL-DTL-5015 3.16

Salt spray

Unmated connectors and contacts meet 48hour exposure per EIA364.26 test condition letter B and MIL-DTL-5015 3.17

Sine vibration

10 μ s max at 10 to 500Hz(15g) discontinuity per EIA364.28 test condition II and MIL-DTL-5015 3.12.1

Shock

50g's/11ms duration, three major axes 10 μ s max discontinuity per EIA364.27 test condition A and MIL-DTL-5015 3.13

Contact retention

The contact retention to be tested per EIA364.29 and MIL-DTL-5015 3.10

Contact size	Test force N (lbs)
16	44.5 (10)
12	66.7 (15)
8	89.0 (20)
4	89.0 (20)
0	111.2 (25)

Contact engagement and separation forces

The Contact engagement and separation forces to be tested per EIA364.37 and MIL-DTL 5015 3.25

Contact mating end size	Contact engagement and separation force		
	Min N (lbs)	Average N (lbs)	MAX N (lbs)
16	0.6 (0.13)	2.06(0.46)	13.3 (3)
12	0.8 (0.18)	3.50(0.79)	22.2 (5)
8	1.4 (0.31)	–	44.5 (10)
4	2.8 (0.63)	–	66.7 (15)
0	4.2 (0.94)	–	89.0 (20)

Contact size

Contact size	Pin O.D [mm]	Solder pot [mm]
16	1.6	2.0
12	2.4	3.0
8	3.6	5.4
4	5.7	8.5
0	9.1	12.0

Wire sealing range

Contact size	Wire range accommodations			
	Insulation O.D limit	Wire size	Metric [mm ²]	Conductor [mm]
16	1.6~3.3	16~20	1.3max	1.25~1.7
12	2.9~4.3	12~14	3.5max	1.95~2.4
8	4.2~6.5	8~10	8.0max	4.3~4.8
4	6.9~9.4	4~6	22.0max	5.2~6.0
0	10.5~14.0	0~2	50.0max	9.6~10.7

Materials

Shell

Material	Aluminum alloy Die Castings & Aluminum alloy
Finish	Olive drab chromate coating over zinc plating
Alternative finish	Black coating over zinc plating(RoHS) Electroless nickel

Insulator and grommet

Insulator	Synthetic rubber & polychloroprene Synthetic plastic
Grommet	Synthetic rubber & polychloroprene

Contact

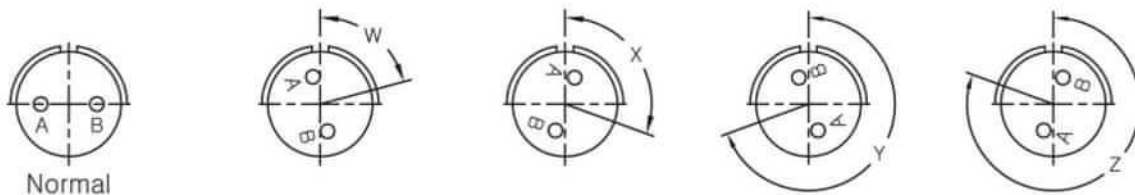
Material	Copper alloy
Finish	Silver plating Gold plating

ORDERING LEGEND

	MSW	3100	A	10SL - 4	P	X	F80
MILSPECWEST DESIGNATION							
SHELL TYPE							
MSW3100 - WALL MOUNT RECEPTACLE							
MSW3101 - IN LINE RECEPTACLE							
MSW3102 - BOX MOUNT RECEPTACLE							
MSW3106 - PLUG, STRAIGHT							
MSW3108 - PLUG, RIGHT ANGLE							
CLASS							
A - GENERAL DUTY							
E - ENVINONMENTAL DUTY							
F - ENVIRONMENTAL DUTY							
R - ENVIRONMENTAL DUTY							
SHELL SIZE / CONTACT ARRANGEMENT							
SEE PAGES							
CONTACT TYPE							
P - PIN							
S - SOCKET							
INSERT ROTATION							
W, X, Y, Z LEAVE BLANK FOR NORMAL POSITION							
SEE PAGE							
MODIFICATIONS							
F80 - CRIMP CONTACTS							
F80 - FO - LESS CRIMP CONTACTS							

Contact Arrangements [For Class A, E/F, R]**Alternate Insert Positions**

※ View shows pin front side or socket rear side



Shell Size	Insert Number	Contacts								Alternate pos.			
		Tot	20	16	12	8	4	0		W	X	Y	Z
10SL	10SL-3	3		3									
	10SL-4	2		2									
12s	12s-3	2		2					70	145	215	290	
	12s-4	1		1									
	12SA10	4		4									
12	12-5	1			1								
14s	14s-1	3		3									
	14s-2	4		4					120	240			
	14s-4	1		1									
	14s-5	5		5					110				
	14s-6	6		6									
	14s-7	3		3				90	180	270			
	14s-9	2		2				70	145	215	290		
	14SA7	7		7									
	14SA10	10	10										
14	14-3	1				1							
16s	16s-1	7		7				80				280	
	16s-4	2		2				35	110	250	325		
	16s-5	3		3				70	145	215	290		
	16s-8	5		5					170	265			
	16s-01	8	8										
16	16-9	4		2	2			35	110	250	325		
	16-10	3			3			90	180	270			
	16-11	2			2			35	110	250	325		
18	18-1	10		10				70	145	215	290		
	18-3	2			2			35	110	250	325		
	18-4	4		4				35	110	250	325		
	18-5	3		1	2			80	110	250	280		
	18-8	8		7	1			70			290		
	18-9	7		5	2			80	110	250	280		

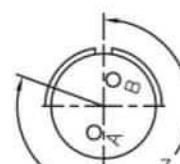
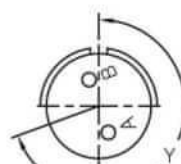
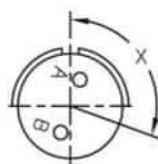
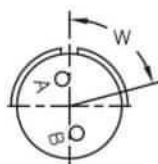
Shell Size	Insert Number	Contacts								Alternate pos.			
		Tot	20	16	12	8	4	0		W	X	Y	Z
18	18-10	4			4					120	240		
	18-11	5			5					170	265		
	18-12	6		6					80			280	
	18-19	10		10					120	240			
	18-20	5		5					90	180	270		
	18-21	3			3								
	18-22	3		3					70	145	215	290	
20	20-2	1						1					
	20-3	3			3				70	145	215	290	
	20-4	4			4				45	110	250		
	20-7	8		8					80	110	250	280	
	20-11	13		13									
	20-15	7			7				80			280	
	20-16	9		7	2				80	110	250	280	
	20-17	6		1	5				90	180	270		
	20-18	9		6	3				35	110	250	325	
	20-19	3				3			90	180	270		
	20-22	6		3		3			80	110	250	280	
	20-23	2				2			35	110	250	325	
	20-24	4		2		2			35	110	250	325	
	20-27	14		14					35	110	250	325	
	20-29	17		17					80			280	
	20-33	11		11									
	20-01	10		10									
	20A24	24	24										
	20A48	19		19						80	280		
22	22-1	2				2			35	110	250	325	
	22-2	3				3			70	145	215	290	
	22-5	6		4	2				35	110	250	325	
	22-7	1						1					

Contact Arrangements [For Class A, E/F, R]**Alternate Insert Positions**

※ View shows pin front side or socket rear side



Normal



Shell Size	Insert Number	Contacts								Alternate pos.			
		Tot	20	16	12	8	4	0		W	X	Y	Z
22	22-8	2			2					35	110	250	325
	22-9	3			3					70	145	215	290
	22-10	4		4						35	110	250	325
	22-14	19		19						80	110	250	280
	22-19	14		14						80	110	250	280
	22-22	4				4				110	250		
	22-23	8			8					35		250	
	22-24	16								80			280
24	24-2	7			7					80			280
	24-5	16		16						80	110	250	280
	24-7	16		14	2					80	110	250	280
	24-9	2					2			35	110	250	325
	24-10	7				7				80			280
	24-11	9			6	3				35	110	250	325
	24-12	5			3		2			80	110	250	280
	24-20	11		9	2					80	110	250	280
	24-21	10		9		1				80	110	250	280
	24-22	4				4				45	110	250	
	24-28	24		24						80	110	250	280
	24-67	19			19					80			335
	24B24	12			12								
	24-13	8								35		250	
	24-14	16								80			280
	24-15	16		14	2					80	110	250	280
28	28-2	14		12	2					35	110	250	325
	28-3	3				3				70	145	215	290
	28-5	5		2	1		2			35	110	250	325
	28-6	3					3			70	145	215	290
	28-9	12		6	6					80	110	250	280
	28-10	7			3	2	2			80	110	250	280
	28-11	22		18	4					80	110	250	280
	28-12	26		26						90	180	270	
	28-15	35		35						80	110	250	280
	28-16	20		20						80	110	250	280
	28-17	15								80	110	250	280
	28-19	10		6	4					80	110	250	280

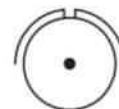
Shell Size	Insert Number	Contacts								Alternate pos.			
		Tot	20	16	12	8	4	0		W	X	Y	Z
28	28-17	15								80	110	250	280
	28-19	10		6	4					80	110	250	280
	28-20	14		4	10					80	110	250	280
	28-21	37		37						80	110	250	280
	28-22	6		3			3			70	145	215	290
	28-51	12			12					80	135	195	
	28-72	72	72							72	144	216	288
	28A16	9		5			4						
32	32-1	5			3			2		80	110	250	280
	32-3	9		4	2		2	1		80	110	250	280
	32-5	2						2		35	110	250	325
	32-6	23		16	2	3	2			80	110	250	280
	32-7	35		28	7					80	125	235	280
	32-8	30		24	6					80	125	235	280
	32-15	8			6			2		35	110	250	280
	32-17	4					4			45	110	250	
	32-59	42		40		2							
	32-63	5					5						
	32-101	101	101							30	142		
	32A10	54		54									
	32-11	22		18	4					80	110	250	280
	32-3	6			3			3		70	145	215	290
	32-4	3						3		70	145	215	290
	32-5	4						4		120	240		
36	36-8	47		46	1					80	110	250	280
	36-9	31		14	14	2	1			80	125	235	280
	36-10	48		48						80	125	235	280
	36-77	7					7						
	36-78	14		2		12				35	106	254	325
	36-1	22		18	4					80	110	250	280
	36-3	6			3			3		70	145	215	290
	36-4	3						3		70	145	215	290
40	40-56	85		85						72	144	216	288

Contact Arrangements

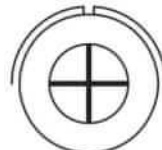
Contact Size

20  16  12  8  4  0 

1 CONTACT



Insert number	12S-4	12-5	14-3	14S-4
No. of contacts	1	1	1	1
Contact size	16	12	8	16
Service rating	D	D	A	D

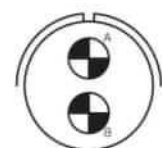
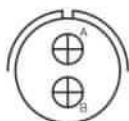


Insert number	16-12	20-2	22-7
No. of contacts	1	1	1
Contact size	4	0	0
Service rating	A	D	E

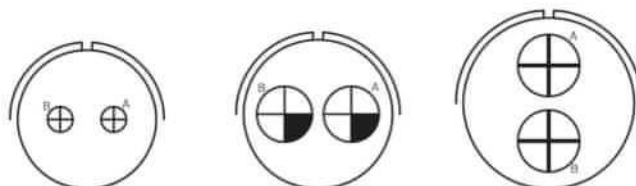
2 CONTACT



Insert number	10SL-4	12S-3	14S-9	16S-4
No. of contacts	2	2	2	2
Contact size	16	16	16	16
Service rating	A	A	A	D



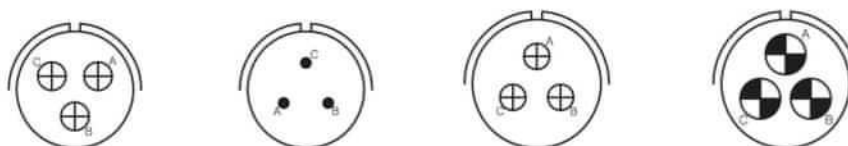
Insert number	16-11	18-3	20-23	22-1
No. of contacts	2	2	2	2
Contact size	12	12	8	8
Service rating	A	D	A	D

Contact Size20  16  12  8  4  0 

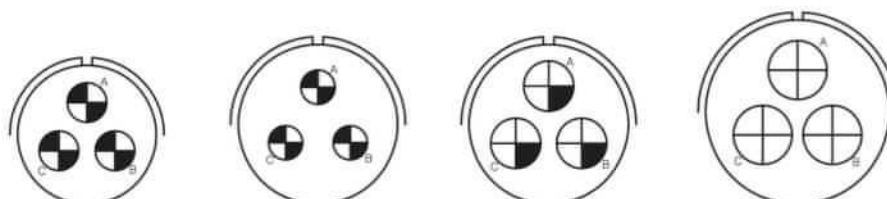
Insert number	22-8	24-9	32-5
No. of contacts	2	2	2
Contact size	12	4	0
Service rating	E	A	D

3 CONTACT

Insert number	10SL-3	14S-1	16S-5	16-10
No. of contacts	3	3	3	3
Contact size	16	16	16	12
Service rating	A	A	A	A



Insert number	18-21	18-22	20-3	20-19
No. of contacts	3	3	3	3
Contact size	12	16	12	8
Service rating	A	D	D	A



Insert number	22-2	28-3	28-6	36-4
No. of contacts	3	3	3	3
Contact size	8	8	4	0
Service rating	D	E	D	D(A) A(B,C)

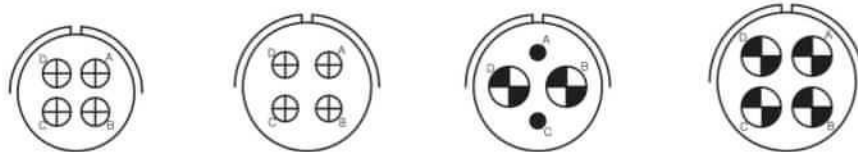
Contact Size

20 ○ 16 ● 12 ⊕ 8 ⊗ 4 ⊕ 0 ⊕

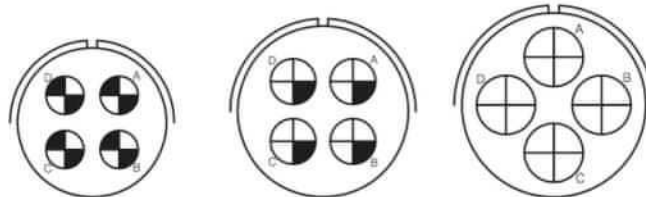
4 CONTACT



Insert number	12SA10	14S-2	16-9	18-4
No. of contacts	4	4	4	4
Contact size	16	16	2-16, 2-12	16
Service rating	INST	INST	A	D



Insert number	18-10	20-4	20-24	22-22
No. of contacts	4	4	4	4
Contact size	12	12	2-16, 2-8	8
Service rating	A	D	A	A

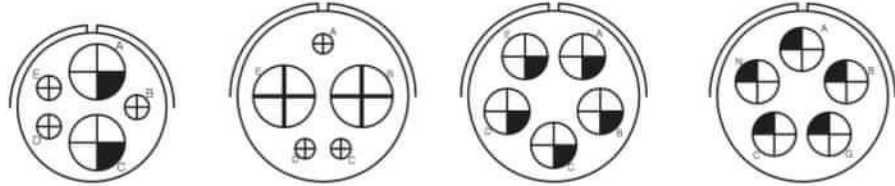


Insert number	24-22	32-17	36-5
No. of contacts	4	4	4
Contact size	8	4	0
Service rating	D	D	A

5 CONTACT



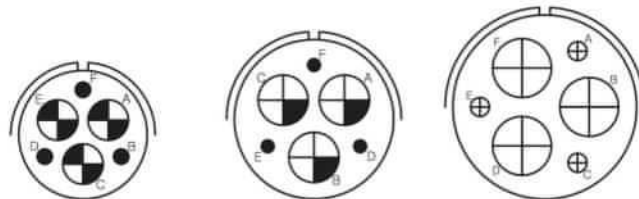
Insert number	14s-5	16s-8	18-11	18-20
No. of contacts	5	5	5	5
Contact size	16	16	12	16
Service rating	INST	A	A	A

Contact Size20  16  12  8  4  0 

Insert number	24-12	32-1	32-63	32A5
No. of contacts	5	5	5	5
Contact size	3-12, 2-4	3-12, 2-0	4	4
Service rating	A	E(A) D(B,C,D,E)	D	D

6 CONTACT

Insert number	14S-6	18-12	20-8	20-17
No. of contacts	6	6	6	6
Contact size	16	16	4-16, 2-8	1-16, 5-12
Service rating	INST	A	INST	A



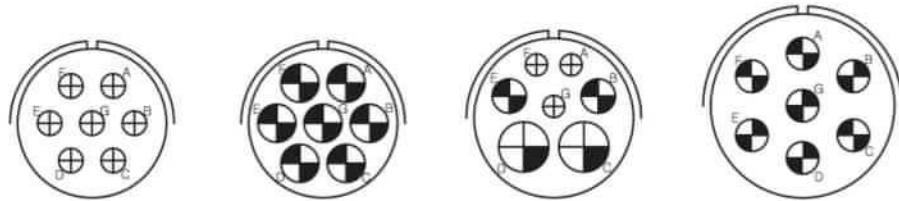
Insert number	20-22	28-22	36-3
No. of contacts	6	6	6
Contact size	3-16, 3-8	3-16, 3-4	12-3, 3-0
Service rating	A	D	D

7 CONTACT

Insert number	14SA7	16s-1	18-9	20-15
No. of contacts	7	7	7	7
Contact size	16	16	5-16, 2-12	12
Service rating	INST	A	INST	A

Contact Size

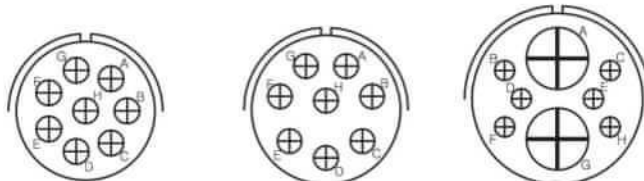
20 ○ 16 ● 12 ⊕ 8 ⊗ 4 ⊕ 0 ⊕



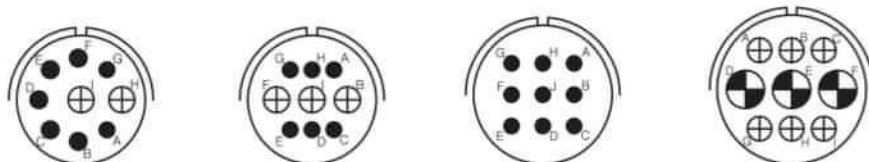
Insert number	24-2	24-10	28-10	36-77
No. of contacts	7	7	7	7
Contact size	12	8	3-12, 2-8, 2-4	4
Service rating	D	A	D(G) A(A,B,C,D,E,F)	D

8 CONTACT

Insert number	16s-01	18-8	20-7	22-18
No. of contacts	8	8	8	8
Contact size	16	7-16, 1-12	16	16
Service rating	A	A	D(A,B,G,H) A(All others)	D(All others) A(C,D,E)



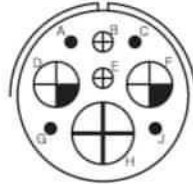
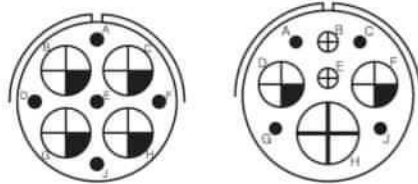
Insert number	22-23	24-6	32-15
No. of contacts	8	8	8
Contact size	12	12	6-12, 2-0
Service rating	D(H) A(All others)	D(A,G,H) A(All others)	D

9 CONTACT

Insert number	20-16	20-18	22-20	24-11
No. of contacts	9	9	9	9
Contact size	7-16, 2-12	6-16, 3-12	16	6-12, 3-8
Service rating	A	A	A	A

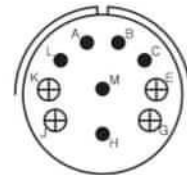
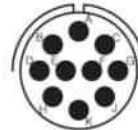
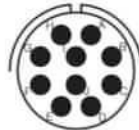
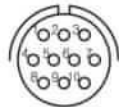
Contact Size

20 ○ 16 ● 12 ⊕ 8 ⊗ 4 ⊕ 0 ⊕



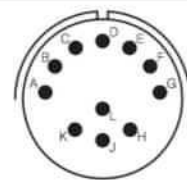
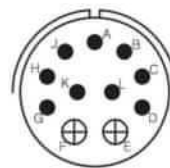
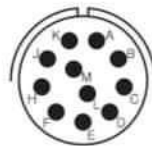
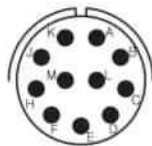
Insert number	28A16	32-3
No. of contacts	9	9
Contact size	5-16, 4-4	4-16, 2-12, 2-4, 1-0
Service rating	A(E) INST(All others)	D

10 CONTACT



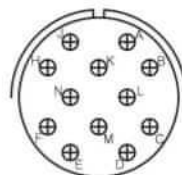
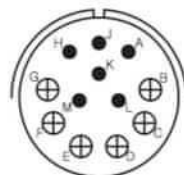
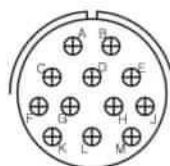
Insert number	14SA10	18-1	18-19	28-19
No. of contacts	10	10	10	10
Contact size	20	16	16	6-16, 4-12
Service rating	INST	A(B,C,F,G) INST(All others)	A	D(A,B) B(H,M) A(All others)

11 CONTACT



Insert number	20-31	20-33	24-20	28-14
No. of contacts	11	11	11	6
Contact size	16	16	9-16, 2-12	16
Service rating	A	A	D	D

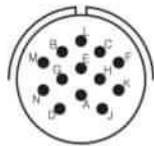
12 CONTACT



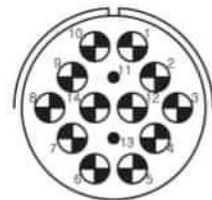
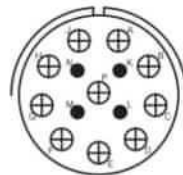
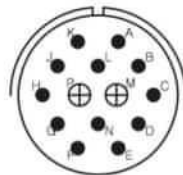
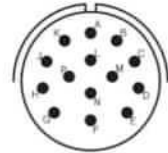
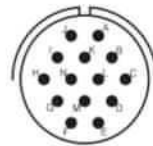
Insert number	24B24	28-9	28-51
No. of contacts	12	12	12
Contact size	12	6-16, 6-12	12
Service rating	A	D	D

Contact Size

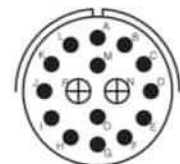
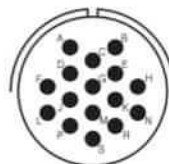
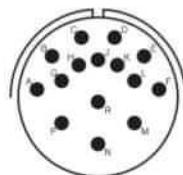
20 ○ 16 ● 12 ⊕ 8 ⊗ 4 ⊕ 0 ⊕

13 CONTACT

Insert number	20-11	20-27	22-19
No. of contacts	13	14	14
Contact size	16	16	16
Service rating	INST	A	A

14 CONTACT

Insert number	28-2	28-20	36-78
No. of contacts	14	14	14
Contact size	12-16, 2-12	4-16, 10-12	2-16, 12-8
Service rating	D	A	D

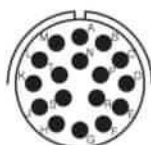
15 CONTACT

Insert number	28-17	24-5	24-7
No. of contacts	15	16	16
Contact size	16	16	14-16, 2-12
Service rating	B(R) D(M,N,P) A(All others)	A	A

Contact Size

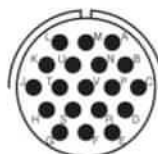
20 ○ 16 ● 12 ⊕ 8 ⊗ 4 ⊕ 0 ⊕

17 CONTACT

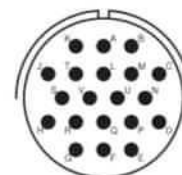


Insert number	20-29	22-14	28-16
No. of contacts	17	19	20
Contact size	16	16	16
Service rating	A	A	A

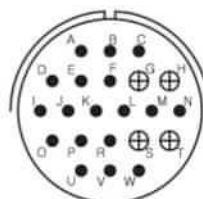
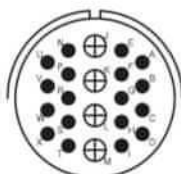
19 CONTACT



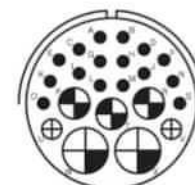
20 CONTACT



22 CONTACT

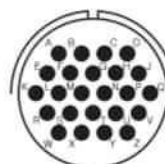
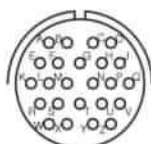


23 CONTACT

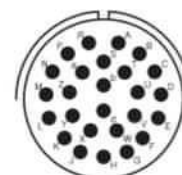


Insert number	28-11	36-1	32-6
No. of contacts	22	22	23
Contact size	18-16, 4-12	18-16, 4-12	16-16, 2-12, 3-8, 2-4
Service rating	A	D	A

24 CONTACT



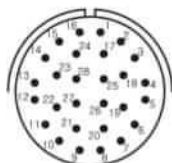
26 CONTACT



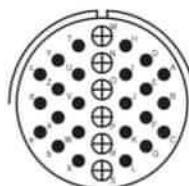
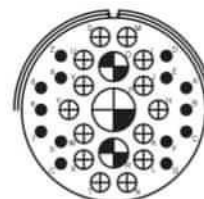
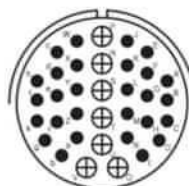
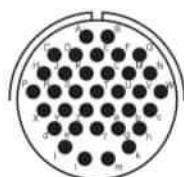
Insert number	20A24	24-28	28-12
No. of contacts	24	24	26
Contact size	20	16	16
Service rating	INST	INST	A

Contact Size

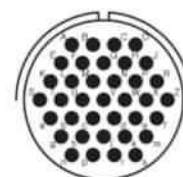
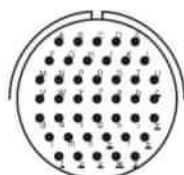
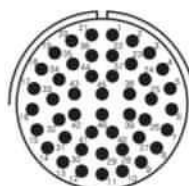
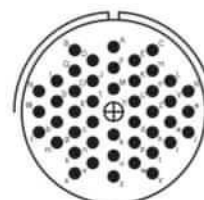
20 ○ 16 ● 12 ⊕ 8 ⊗ 4 ⊕ 0 ⊕

28 CONTACT

Insert number	24A28	32-8	36-9
No. of contacts	28	30	31
Contact size	16	24-16, 6-12	14-16, 14-12, 2-8, 1-4
Service rating	INST	A	A

30 CONTACT**31 CONTACT****35 CONTACT**

Insert number	28-15	32-7	28-21
No. of contacts	35	35	37
Contact size	16	28-16, 7-12	16
Service rating	A	A(all others) INST(A,B,h,i)	A

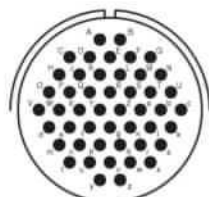
37 CONTACT**43 CONTACT****46 CONTACT****47 CONTACT**

Insert number	28A51	32-73	36-8
No. of contacts	43	46	47
Contact size	16	16	46-16, 1-12
Service rating	A	A	A

Contact Size

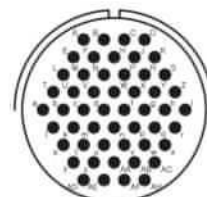
20 ○ 16 ● 12 ⊕ 8 ⊕ 4 ⊕ 0 ⊕

48 CONTACT

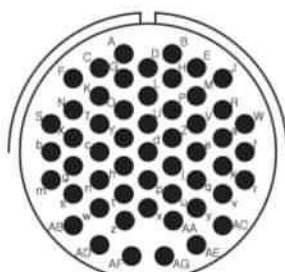


Insert number	36-10	36-52
No. of contacts	48	52
Contact size	16	16
Service rating	A	A

52 CONTACT

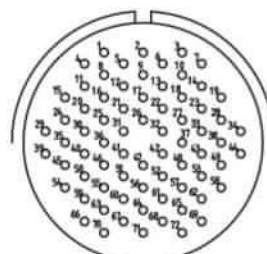


54 CONTACT

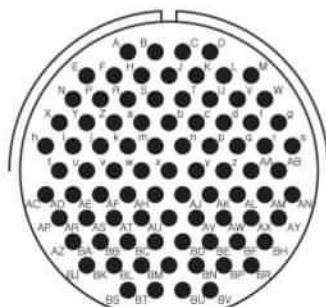


Insert number	32A10 & 32-22	28-72
No. of contacts	54	72
Contact size	16	20
Service rating	A	INST

72 CONTACT

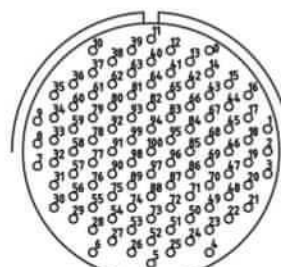


85 CONTACT



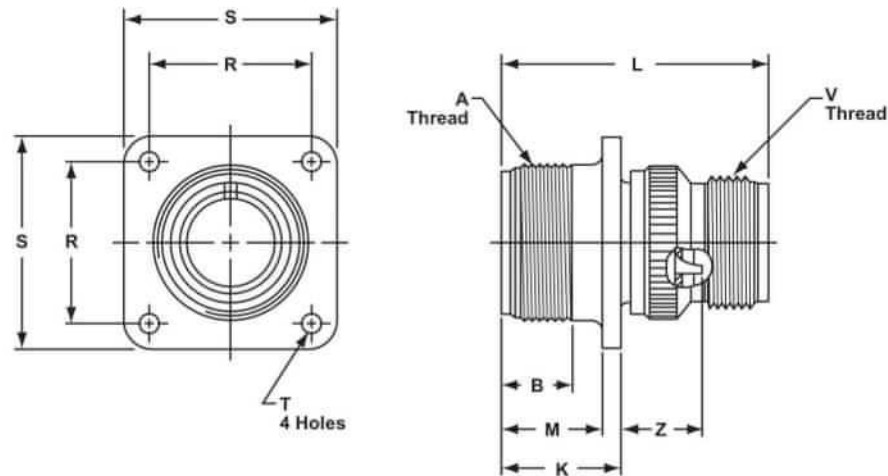
Insert number	40-56	32-101
No. of contacts	16	101
Contact size	85	20
Service rating	A	INST

101 CONTACT



WALL MOUNT RECEPTACLE

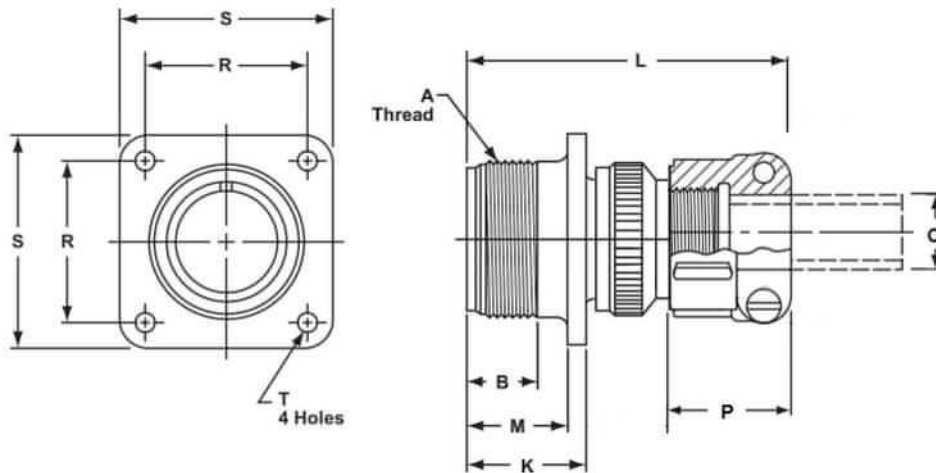
MSW3100A



Shell Size	A Thread Class 2A	B Min Full Thread	K +.020 -.010	L ±.030	M +.010 -.000	R ±.005	S ±.031	T Dia. +.004 -.002	V Thread Class 2A	Z +.050 -.060
8S	.5000-28UNEF	.391	.672	1.391	.562	.594	.875	.120	.5000-28UNEF	.422
10S	.6250-24 UNF	.391	.672	1.468	.562	.719	1.000	.120	.5000-28UNEF	.422
10SL	.6250-24 UNF	.391	.672	1.468	.562	.719	1.000	.120	.6250-24NEF	.422
12S	.7500-20UNEF	.450	.672	1.468	.562	.812	1.094	.120	.6250-24NEF	.422
12	.7500-20UNEF	.625	.860	1.843	.750	.812	1.094	.120	.6250-24NEF	.672
14S	.8750-20UNEF	.450	.672	1.468	.562	.906	1.188	.120	.7500-20UNEF	.422
14	.8750-20UNEF	.625	.860	1.843	.750	.906	1.188	.120	.7500-20UNEF	.672
16S	1.0000-20UNEF	.450	.672	1.468	.562	.969	1.281	.120	.8750-20UNEF	.422
16	1.0000-20UNEF	.625	.860	1.843	.750	.969	1.281	.120	.8750-20UNEF	.672
18	1.1250-18NEF	.625	.891	1.938	.750	1.063	1.375	.120	1.0000-20UNEF	.641*
20	1.2500-18NEF	.625	.891	1.844	.750	1.156	1.500	.120	1.1875-18NEF	.641*
22	1.3750-18NEF	.625	.891	1.938	.750	1.250	1.625	.120	1.1875-18NEF	.641*
24	1.5000-18NEF	.625	.953	1.969	.812	1.375	1.750	.147	1.4375-18NEF	.578*
28	1.7500-18NS	.625	.953	2.188	.812	1.562	2.000	.147	1.4375-18NEF	.578*
32	2.0000-18NS	.625	1.031	2.157	.875	1.750	2.250	.173	1.7500-18NS	.500*
36	2.2500-16UN	.625	1.031	2.219	.875	1.938	2.500	.173	2.0000-18NS	.500*

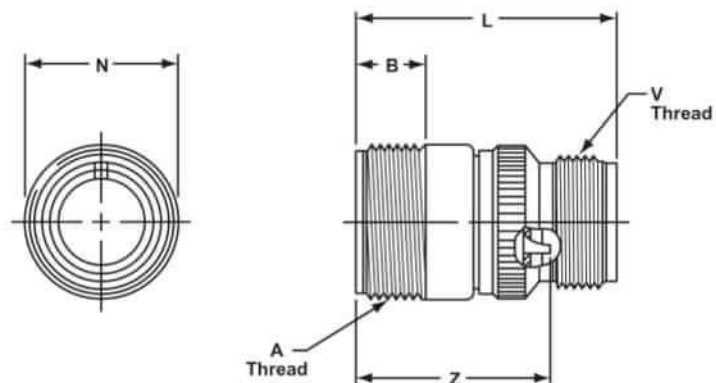
WALL MOUNT RECEPTACLE

MSW3100 E/F/R



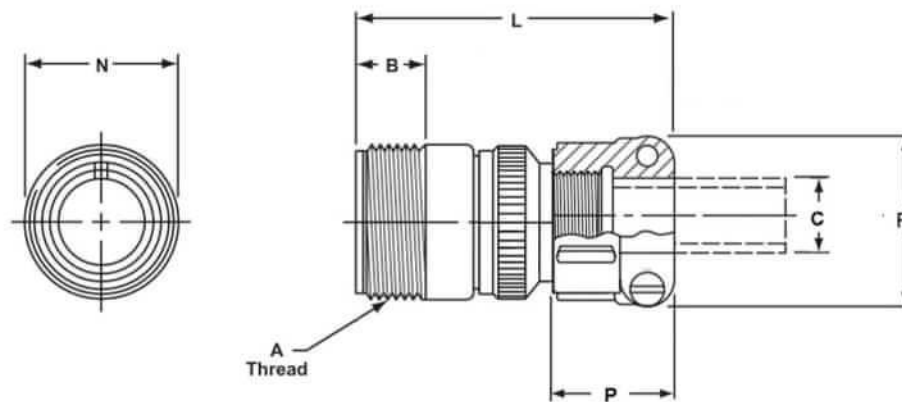
Shell Size	A Thread Class 2A	B Min. Full Thread	K $+.020$ $-.010$	L Max.	M $+.010$ $-.000$	P $+.031$ $-.031$	R $\pm.005$	S $\pm.010$	T Dia. $+.004$ $-.002$	C Min. Cable Clearance
10SL	.6250-24UNEF	.391	.672	2.129	.562	.795	.719	1.000	.120	.3125
12S	.7500-20UNEF	.450	.672	2.129	.562	.795	.812	1.094	.120	.3125
12	.7500-20UNEF	.625	.860	2.129	.750	.795	.812	1.094	.120	.3125
14S	.8750-20UNEF	.450	.672	2.201	.562	.850	.906	1.188	.120	.4375
14	.8750-20UNEF	.625	.860	2.524	.750	.850	.906	1.188	.120	.4375
16S	1.0000-20UNEF	.450	.672	2.201	.562	.920	.969	1.281	.120	.5625
16	1.0000-20UNEF	.625	.860	2.524	.750	.920	.969	1.281	.120	.5625
18	1.1250-18UNEF	.625	.891	2.596	.750	.920	1.063	1.375	.120	.6250
20	1.2500-18UNEF	.625	.891	2.654	.750	.927	1.156	1.500	.120	.7500
22	1.3750-18UNEF	.625	.891	2.654	.750	.927	1.250	1.625	.120	.7500
24	1.5000-18UNEF	.625	.953	2.885	.812	1.015	1.375	1.750	.147	.9375
28	1.7500-18UNS	.625	.953	2.885	.812	1.015	1.562	2.000	.147	.9375
32	2.0000-18UNS	.625	1.031	2.943	.875	1.095	1.750	2.250	.173	1.2500
36	2.2500-16UN	.625	1.031	2.943	.875	1.156	1.938	2.500	.173	1.3750

IN LINE RECEPTACLE MSW3101



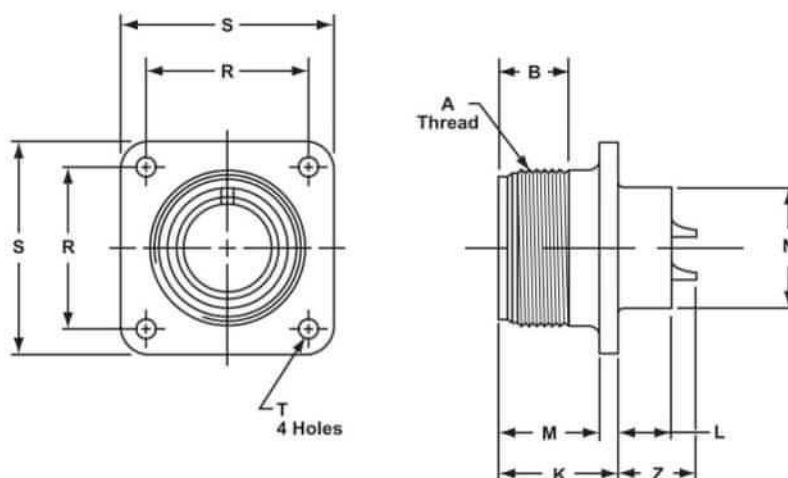
Shell Size	A Thread Class 2A	B Min. Full Thread	L ±.030	N Dia. Max.	V Thread Class 2A	Z ±.040
8S	.5000-28UNEF	.406	1.390	.532	.5000-28UNEF	1.094
10S	.6250-24NEF	.406	1.468	.628	.5000-28UNEF	1.094
10SL	.6250-24NEF	.406	1.468	.755	.6250-24NEF	1.094
12S	.7500-20UNEF	.422	1.468	.755	.6250-24NEF	1.094
12	.7500-20UNEF	.656	1.843	.755	.6250-24NEF	1.532
14S	.8750-20UNEF	.391	1.468	.882	.7500-20UNEF	1.094
14	.8750-20UNEF	.625	1.843	.882	.7500-20UNEF	1.532
16S	1.0000-20UNEF	.391	1.468	1.010	.8750-20UNEF	1.094
16	1.0000-20UNEF	.625	1.843	1.010	.8750-20UNEF	1.532
18	1.1250-18NEF	.625	1.938	1.137	1.0000-20UNEF	1.532*
20	1.2500-18NEF	.625	1.844	1.264	1.1875-18NEF	1.532*
22	1.3750-18NEF	.625	1.938	1.392	1.1875-18NEF	1.532*
24	1.5000-18NEF	.625	1.969	1.519	1.4375-18NEF	1.532*
28	1.7500-18NS	.625	2.188	1.774	1.4375-18NEF	1.532*
32	2.0000-18NS	.625	2.157	1.996	1.7500-18NS	1.532*
36	2.2500-16UN	.625	2.219	2.251	2.0000-18NS	1.532*

IN LINE RECEPTACLE MSW3101E/F/R



Shell Size	A Thread Class 2A	B Min. Full Thread	L ±.030	N Dia. Max.	P +.031 -.031	R Dia. Max.
10SL	.6250-24NEF	.406	1.468	.755	.795	.842
12S	.7500-20UNEF	.422	1.468	.755	.795	.842
12	.7500-20UNEF	.656	1.843	.755	.795	.842
14S	.8750-20UNEF	.391	1.468	.882	.850	.995
14	.8750-20UNEF	.625	1.843	.882	.850	.995
16S	1.0000-20UNEF	.391	1.468	1.010	.920	1.120
16	1.0000-20UNEF	.625	1.843	1.010	.920	1.120
18	1.1250-18NEF	.625	1.938	1.137	.920	1.216
20	1.2500-18NEF	.625	1.844	1.264	.927	1.403
22	1.3750-18NEF	.625	1.938	1.392	.927	1.403
24	1.5000-18NEF	.625	1.969	1.519	1.015	1.683
28	1.7500-18NS	.625	2.188	1.774	1.015	1.683
32	2.0000-18NS	.625	2.157	1.996	1.095	2.050
36	2.2500-16UN	.625	2.219	2.251	1.156	2.245

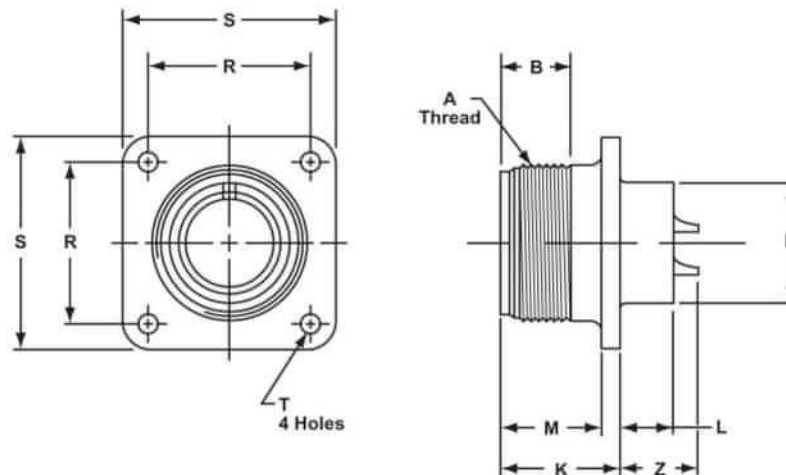
BOX MOUNT RECEPTACLE MSW3102 A



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 $\pm .005$	S $\pm .031$	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*

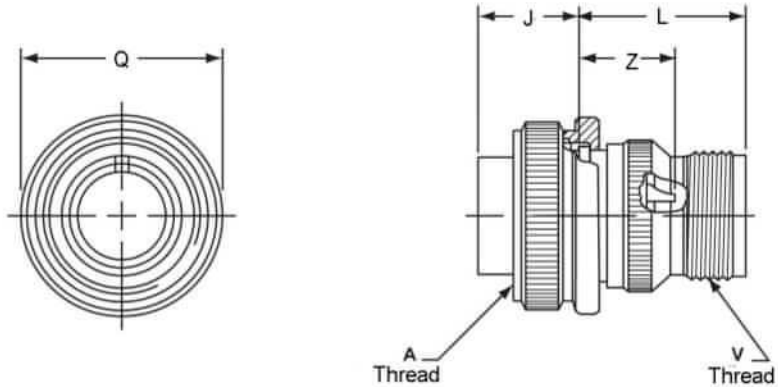
BOX MOUNT RECEPTACLE MSW3102E / R



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

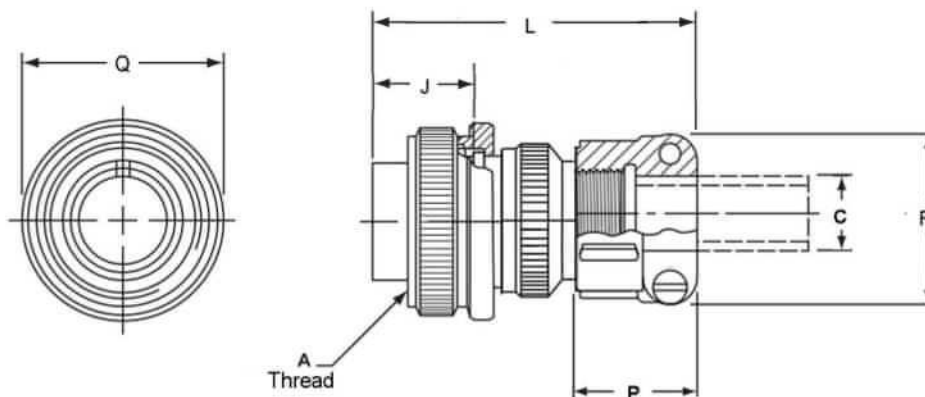
Shell Size	A Thread Class 2A	B Min Full Thread	K $+.020$ $-.010$	L $+.000$ $-.010$	M $+.010$ $-.000$	N Dia. $+.010$ $-.000$	R $\pm .005$	S $\pm .031$	T Dia. $+.004$ $-.002$	Z $+.050$ $-.060$
8S	.5000-28UNEF	.391	.672	.297	.562	.375	.594	.875	.120	.422
10S	.6250-24NEF	.391	.672	.297	.562	.500	.719	1.000	.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*

STRAIGHT PLUG MSW3106A



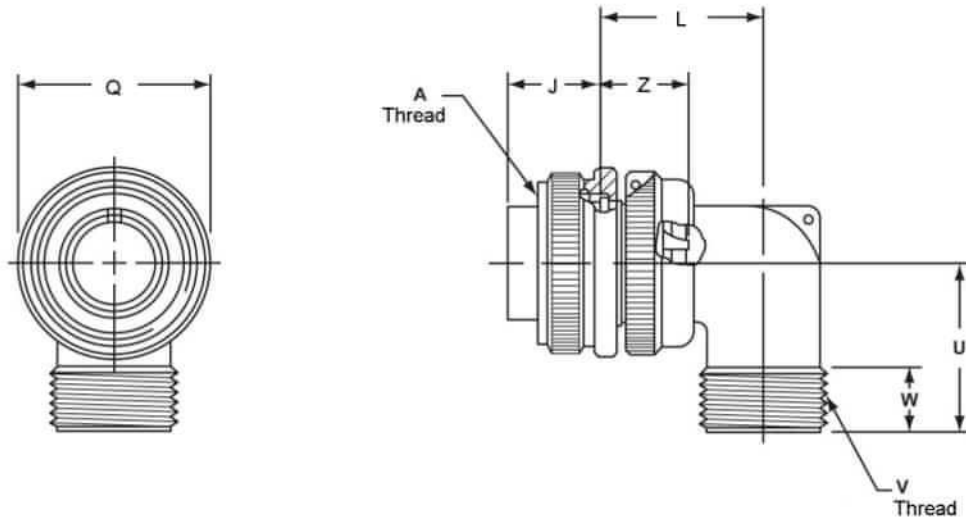
Shell Size	A Thread Class 2B	J $\pm .005$	L $\pm .030$	Q Dia. Max.	V Thread Class 2A	Z $\pm .045$
8S	.5000-28UNEF	.531	.859	.741	.5000-28UNEF	.562
10S	.6250-24NEF	.531	.937	.869	.5000-28UNEF	.562
10SL	.6250-24NEF	.531	.937	.946	.6250-24NEF	.562
12S	.7500-20UNEF	.531	.937	.995	.6250-24NEF	.562
12	.7500-20UNEF	.719	1.124	.995	.6250-24NEF	.812
14S	.8750-20UNEF	.531	.937	1.123	.7500-20UNEF	.562
14	.8750-20UNEF	.719	1.124	1.123	.7500-20UNEF	.812
16S	1.0000-20UNEF	.531	.937	1.250	.8750-20UNEF	.562
16	1.0000-20UNEF	.719	1.124	1.250	.8750-20UNEF	.812
18	1.1250-18NEF	.719	1.219	1.333	1.0000-20UNEF	.812*
20	1.2500-18NEF	.719	1.125	1.461	1.1875-18NEF	.812*
22	1.3750-18NEF	.719	1.219	1.588	1.1875-18NEF	.812*
24	1.5000-18NEF	.719	1.251	1.715	1.4375-18NEF	.812*
28	1.7500-18NS	.719	1.470	1.968	1.4375-18NEF	.812*
32	2.0000-18NS	.719	1.439	2.209	1.7500-18NS	.812*
36	2.2500-16UN	.719	1.500	2.463	2.0000-18NS	.812*

STRAIGHT PLUG MSW3106E/F/R



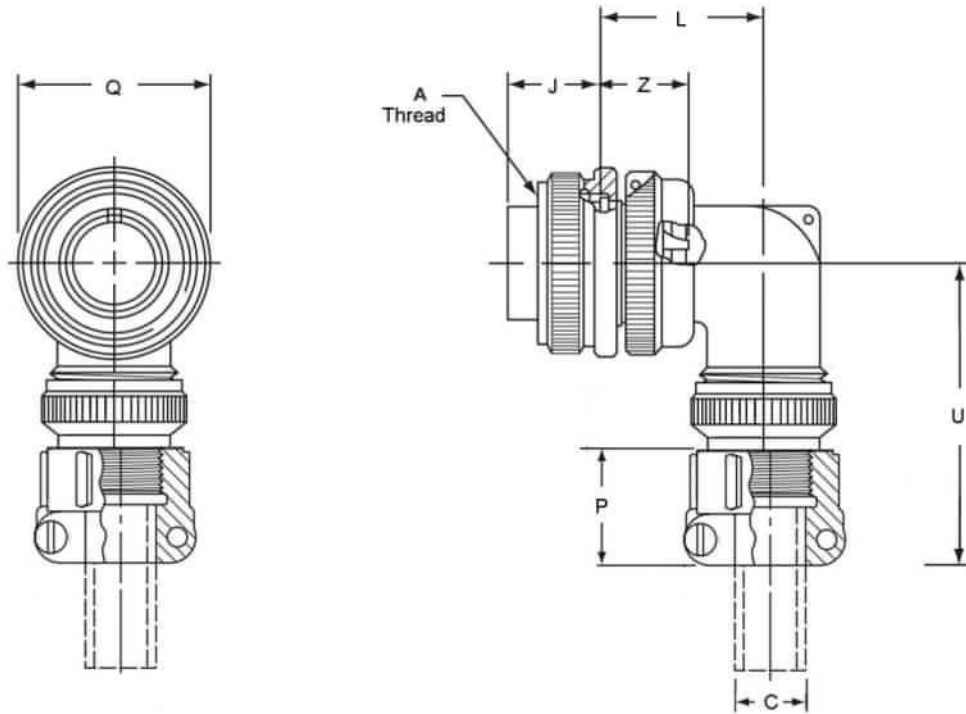
Shell Size	A Thread Class 2B	J ±.005	L Max.	Q Dia. Max.	P +.031 -.031	R ±.005	C Min Cable Clearance
10SL	.6250-24NEF	.531	2.129	.946	.795	.719	.3125
12S	.7500-20UNEF	.531	2.129	.995	.795	.812	.3125
12	.7500-20UNEF	.719	2.129	.995	.795	.812	.3125
14S	.8750-20UNEF	.531	2.201	1.123	.850	.906	.4375
14	.8750-20UNEF	.719	2.254	1.123	.850	.906	.4375
16S	1.0000-20UNEF	.531	2.201	1.250	.920	.969	.5625
16	1.0000-20UNEF	.719	2.524	1.250	.920	.969	.5625
18	1.1250-18NEF	.719	2.596	1.333	.920	1.063	.6250
20	1.2500-18NEF	.719	2.654	1.461	.927	1.156	.7500
22	1.3750-18NEF	.719	2.654	1.588	.927	1.250	.7500
24	1.5000-18NEF	.719	2.885	1.715	1.015	1.375	.9375
28	1.7500-18NS	.719	2.885	1.968	1.015	1.562	.9375
32	2.0000-18NS	.719	2.943	2.209	1.095	1.750	1.2500
36	2.2500-16UN	.719	2.943	2.463	1.156	1.938	1.3750

RIGHT ANGLE PLUG MSW3108A

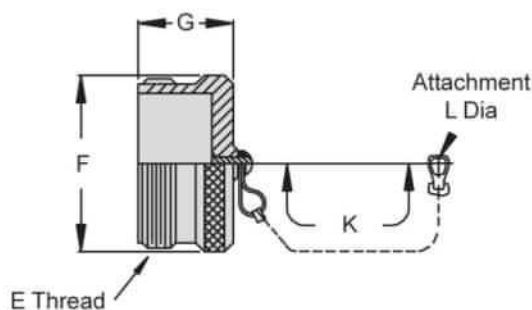
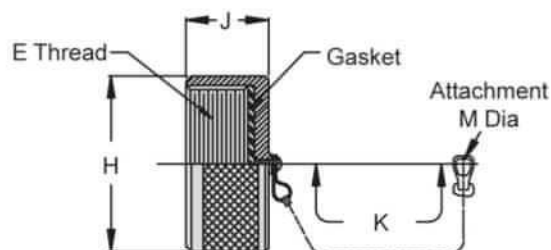


Shell Size	A Thread Class 2B	J ±.005	L Max.	Q Dia. Max.	U Max.	V Thread Class 2A	W	Z ±.045
8S	.5000-28UNEF	.531	.896	.741	.750	.5000-28UNEF	.375	.562
10S	.6250-24NEF	.531	.927	.869	.750	.5000-28UNEF	.375	.562
10SL	.6250-24NEF	.531	.951	.946	.875	.6250-24NEF	.375	.562
12S	.7500-20UNEF	.531	.956	.995	.875	.6250-24NEF	.375	.562
12	.7500-20UNEF	.719	1.143	.995	.875	.6250-24NEF	.375	.812
14S	.8750-20UNEF	.531	1.120	1.123	1.000	.7500-20UNEF	.375	.562
14	.8750-20UNEF	.719	1.207	1.123	1.000	.7500-20UNEF	.375	.812
16S	1.0000-20UNEF	.531	1.146	1.250	1.062	.8750-20UNEF	.375	.562
16	1.0000-20UNEF	.719	1.332	1.250	1.062	.8750-20UNEF	.375	.812
18	1.1250-18NEF	.719	1.395	1.333	1.188	1.0000-20UNEF	.375	.812*
20	1.2500-18NEF	.719	1.645	1.461	1.250	1.1875-18NEF	.375	.812*
22	1.3750-18NEF	.719	1.645	1.588	1.312	1.1875-18NEF	.375	.812*
24	1.5000-18NEF	.719	1.896	1.715	1.438	1.4375-18NEF	.375	.812*
28	1.7500-18NS	.719	1.896	1.968	1.500	1.4375-18NEF	.375	.812*
32	2.0000-18NS	.719	2.118	2.209	1.750	1.7500-18NS	.438	.812*
36	2.2500-16UN	.719	2.176	2.463	1.875	2.0000-18NS	.500	.812*

RIGHT ANGLE PLUG MSW3108E/F/R



Shell Size	A Thread Class 2B	J ±.005	L Max.	Q Dia. Max.	U Max.	V Thread Class 2A	W	Z ±.045
10SL	.6250-24NEF	.531	.951	.946	.875	.6250-24NEF	.375	.562
12S	.7500-20UNEF	.531	.956	.995	.875	.6250-24NEF	.375	.562
12	.7500-20UNEF	.719	1.143	.995	.875	.6250-24NEF	.375	.812
14S	.8750-20UNEF	.531	1.120	1.123	1.000	.7500-20UNEF	.375	.562
14	.8750-20UNEF	.719	1.207	1.123	1.000	.7500-20UNEF	.375	.812
16S	1.0000-20UNEF	.531	1.146	1.250	1.062	.8750-20UNEF	.375	.562
16	1.0000-20UNEF	.719	1.332	1.250	1.062	.8750-20UNEF	.375	.812
18	1.1250-18NEF	.719	1.395	1.333	1.188	1.0000-20UNEF	.375	.812*
20	1.2500-18NEF	.719	1.645	1.461	1.250	1.1875-18NEF	.375	.812*
22	1.3750-18NEF	.719	1.645	1.588	1.312	1.1875-18NEF	.375	.812*
24	1.5000-18NEF	.719	1.896	1.715	1.438	1.4375-18NEF	.375	.812*
28	1.7500-18NS	.719	1.896	1.968	1.500	1.4375-18NEF	.375	.812*
32	2.0000-18NS	.719	2.118	2.209	1.750	1.7500-18NS	.438	.812*
36	2.2500-16UN	.719	2.176	2.463	1.875	2.0000-18NS	.500	.812*

**MW25042 PLUG COVER****MW25043 RECEPTACLE COVER**

Shell Size	E Thread	F Dia Max	G Max	H Max	J Max	K Attachment Length (Inches)	L Dia Min	M Dia Min
8	1/2- 28 UNEF	.562 (14.3)	.656 (16.7)	.688 (17.5)	.469 (11.9)	4.00 (101.6)	.151 (3.8)	.135 (3.4)
10	5/8- 24 UNEF	.687 (17.4)	.656 (16.7)	.815 (20.7)	.469 (11.9)	4.00 (101.6)	.151 (3.8)	.135 (3.4)
12	3/4- 20 UNEF	.812 (20.6)	.844 (21.4)	1.000 (25.4)	.469 (11.9)	4.50 (114.3)	.151 (3.8)	.135 (3.4)
14	7/8- 20 UNEF	.937 (23.8)	.844 (21.4)	1.125 (28.6)	.469 (11.9)	4.50 (114.3)	.151 (3.8)	.135 (3.4)
16	1- 20 UNEF	1.062 (27.0)	.844 (21.4)	1.188 (30.2)	.469 (11.9)	4.50 (114.3)	.151 (3.8)	.135 (3.4)
18	1 1/8- 18 UNEF	1.187 (30.1)	.844 (21.4)	1.344 (34.1)	.469 (11.9)	4.50 (114.3)	.151 (3.8)	.135 (3.4)
20	1 1/4- 18 UNEF	1.312 (33.3)	.844 (21.4)	1.469 (37.3)	.469 (11.9)	5.00 (127.0)	.182 (4.6)	.135 (3.4)
22	1 3/8- 18 UNEF	1.437 (36.5)	.844 (21.4)	1.594 (40.5)	.469 (11.9)	5.00 (127.0)	.182 (4.6)	.135 (3.4)
24	1 1/2- 18 UNEF	1.562 (39.7)	.844 (21.4)	1.719 (43.7)	.469 (11.9)	5.50 (139.7)	.182 (4.6)	.166 (4.2)
28	1 3/4- 18 UNS	1.812 (46.0)	.844 (21.4)	1.969 (50.0)	.531 (13.5)	7.75 (196.9)	.182 (4.6)	.166 (4.2)
32	2- 18 UNS	2.062 (52.4)	.844 (21.4)	2.219 (56.4)	.531 (13.5)	7.75 (196.9)	.213 (5.4)	.182 (4.6)
36	2 1/4- 16 UN	2.312 (58.7)	.844 (21.4)	2.469 (62.7)	.531 (13.5)	7.75 (196.9)	.213 (5.4)	.182 (4.6)

MW25043 - 24 DA

COVER STYLE: _____

MW25042 PLUG COVER**MW25043 RECEPTACLE COVER**

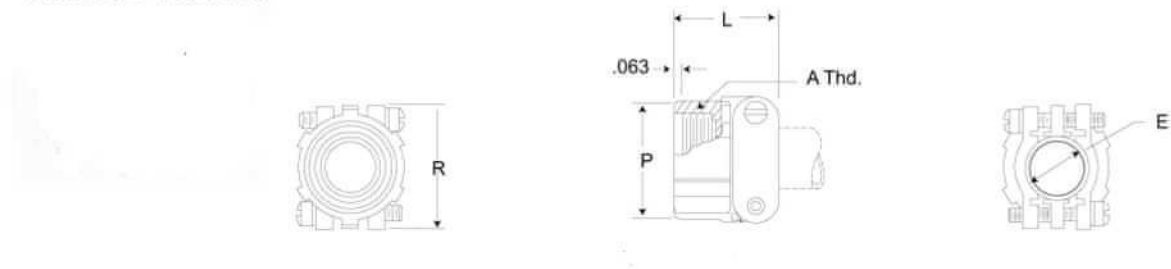
SHELL SIZE: _____

10 - 36

FINISH: _____

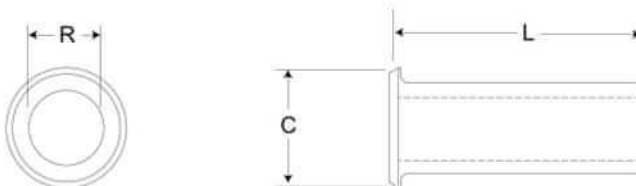
D CADMIUM OLIVE DRAB**DA BLACK ANODIZE**

MS3057 CABLE CLAMP



Part Number	Fits Shell Size	Accommodates MS Bushings	E Min.	E Max.	L ±.031 (0.79)	P ±0.31 (0.79)	R ±0.31 (0.79)	A Thread
MS3057-4A	10SL, 12S, 12	MS3420-4	.140 (3.56)	.312 (7.92)	.812 (20.62)	.812 (20.62)	.875 (22.22)	5/8-24UNEF-2B
MS3057-6A	14S, 14	MS3420-6	.195 (4.95)	.438 (11.13)	.875 (22.22)	.969 (24.61)	1.062 (26.97)	3/4-20UNEF-2B
MS3057-8A	16S, 16	MS3420-8	.255 (6.48)	.562 (14.27)	.938 (23.83)	1.094 (27.79)	1.156 (29.36)	7/8-20UNEF-2B
MS3057-10A	18	MS3420-10	.285 (7.24)	.625 (15.88)	.938 (23.83)	1.188 (30.18)	1.250 (31.75)	1-20UNEF-2B
MS3057-12A	20, 22	MS3420-12	.350 (8.89)	.750 (19.05)	.938 (23.83)	1.375 (34.92)	1.496 (37.31)	1-3/16-18UNEF-2B
MS3057-16A	24, 28	MS3420-16,12	.468 (11.89)	.938 (23.83)	1.031 (26.19)	1.656 (42.06)	1.688 (42.88)	1-7/16-18UNEF-2B
MS3057-20A	32	MS3420-20,16	.664 (16.87)	1.250 (31.75)	1.094 (27.79)	2.031 (51.59)	2.031 (51.59)	1-3/4-18UNS-2B
MS3057-24A	36	MS3420-24,20	.694 (17.63)	1.375 (34.92)	1.156 (29.36)	2.219 (56.36)	2.281 (57.94)	2-18UNS-2B
MS3057-24A	36	MS3420-24,20	.694 (17.63)	1.375 (34.92)	1.156 (29.36)	2.219 (56.36)	2.281 (57.94)	2-18UNS-2B

MS3420 BUSHING



MS Part Number	Fits Shell Size	C ±0.16 (0.41)	L ±0.31 (0.79)	R ±0.16 (0.41)
MS3420-3	8S-10S	.379 (9.63)	2.875 (73.02)	.130 (3.30)
MS3420-4	10SL, 12S, 12	.505 (12.83)	2.750 (69.85)	.200 (5.09)
MS3420-6	14S, 14	.619 (15.72)	2.625 (66.68)	.312 (7.92)
MS3420-8	16S, 16	.744 (18.90)	2.500 (63.50)	.437 (11.10)
MS3420-10	18	.869 (22.07)	2.375 (60.32)	.562 (14.27)
MS3420-12	20, 22	1.064 (27.03)	2.250 (57.15)	.625 (15.88)
MS3420-16	24, 28	1.314 (33.38)	2.125 (53.98)	.750 (19.05)
MS3420-20	32	1.596 (40.54)	2.000 (50.80)	.937 (23.80)
MS3420-24	36	1.847 (46.91)	1.875 (47.62)	1.250 (31.75)
MS3420-28	40	2.085 (52.96)	1.750 (44.45)	1.375 (34.92)
MS3420-32	44	2.335 (59.31)	1.625 (41.28)	1.624 (41.25)
MS3420-40	48	2.835 (72.01)	1.500 (38.10)	1.874 (47.60)