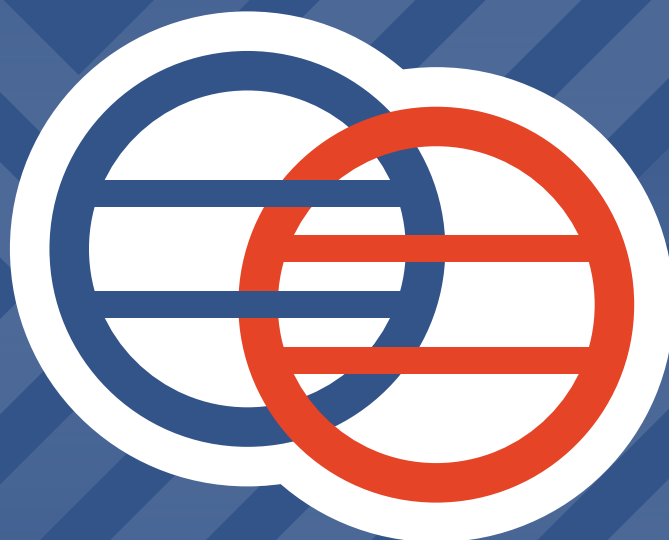




MATENG

MIL-C-5015 SERIES

CATALOG

MIL-C-5015



PART NUMBER

Basic series	MS	3106	A	18	10	P	Y
Type of Shell	3100 = Wall mounting receptacle 3101 = In-line receptacle 3102 = Box mounting receptacle 3106 = Straight plug 3108 = Elbow plug						
Service Class	A = Solid shell, solder contacts and non-pressurized B = Split shell, solder contacts and non-pressurized E = Environmental F = R with clamp R = Solder contacts with grommet seal and without clamp						
Shell Size	10SL, 12S, 12, 14S, 14, 16S, 16, 18, 20, 22, 24, 28, 32, 36						
Contact layout (See below)							
Type of contact	P = Pin S = Socket						
Alternate positioning	W, X, Y, Z						

TECHNICAL SPECIFICATIONS

A. MATERIALS

Shell: Aluminum alloy; Olive drab cadmium or zinc plating
 Insulator: Synthetic rubber
 Contact: Copper alloy; Silver plating
 Gasket & Grommet: Synthetic rubber

B. ELECTRICAL SPECIFICATIONS

Operating voltage & Test voltage,

Service class	Operating voltage		Test voltage	Air Spacing	Cree page
	DC (V)	AC (V)	AC (V)	Nominal (Inches)	Nominal (Inches)
Inst.	250	200	1000	-	1/16
A	700	500	2000	1/16	1/8
D	1250	900	2800	1/8	3/16
E	1750	1250	3500	3/16	1/4
B	2450	1750	4500	1/4	5/16
C	4200	3000	7000	5/16	1

Rated current (+20°C),

Contact size	Contact resistance (mΩ)	Test current (A)	Potential drop (mV)
16	16	13	49
12	3	23	42
8	1	46	26
4	0.5	80	23
0	0.2	150	21

Insulator resistance: +25°C ≥ 5000MΩ

C. MECHANICAL SPECIFICATIONS

Operating temperature: -55°C ~ +125°C

Sealing: Under water (6 feet in water): 48 hours per MIL-DTL-5015, 4.6.19. Meet 20 days extreme humidity testing per

Contact size	Outside dia. of insulation			
	Min.		Max.	
	inches	mm	inches	mm
16	0.064	1.63	0.130	3.30
12	0.114	2.90	0.170	4.32
8	0.164	4.17	0.255	6.48
4	0.275	6.98	0.370	9.40
0	0.415	10.54	0.550	13.97

Durability: ≥ 100 cycles

Salt spray: MIL-STD-1344 method 1001, condition B, ≥ 48 hours (Cadmium plating)

Heat: at +125°C, 60 hours; at +85°C, 1000 hours

Chemical resistance: in Hydraulic fluid or lubricating oil, 20 hours

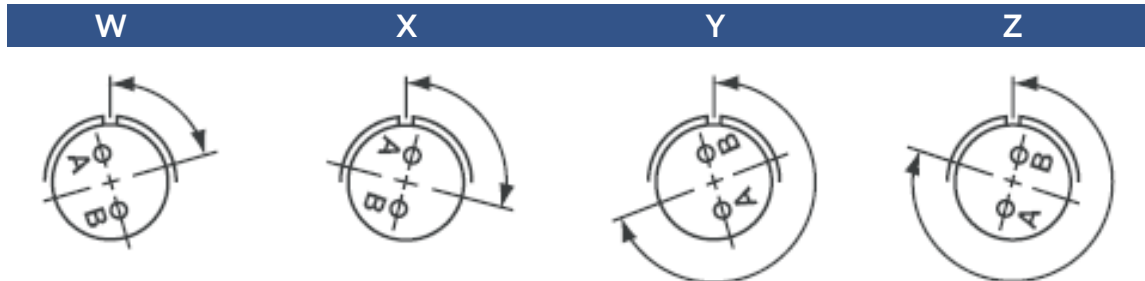
Vibration: 10 ~ 2000Hz, acceleration: 10 g's

Shock: acceleration: 50g

Contact retention & Separation force

Contact size	Retention		Separation force min.	
	N	Lbs.	N	Lbs.
16	44	10	1	0.25
12	67	15	2	0.50
8	89	20	3	0.75
4	89	20	4	1.00
0	111	25	9	2.00

POLARIZATION



Contact layout	Service class	Cores	Contact size					Angle			
			0	4	8	12	16	W	X	Y	Z
10SL-3	A	3					3				
10SL-4	A	2					2				
12S-3	A	2					2	70	145	215	290
12S-4	D	1					1				
12-5	D	1				1					
14S-1	A	3					3				
14S-2	Inst.	4					4		120	240	
14S-4	D	1					1				
14S-5	Inst.	5					5		110		
14S-6	Inst.	6					6				
14S-7	A	3					3	90	180	270	
14S-9	A	2					2	70	140	215	290
14-3	A	1			1						
16S-1	A	7					7	80			280
16S-3	B	1					1				
16S-4	D	2					2	35	110	250	325
16S-5	A	3					3	70	145	215	290
16S-6	A	3					3	90	180	270	
16S-8	A	5					5		170	265	
16-2	E	1				1					
16-7	A	3			1		2	80	110	250	280
16-9	A	4				2	2	35	110	250	325
16-10	A	3				3		90	180	270	
16-11	A	2				2		35	110	250	325
16-12	A	1		1							
16-13	A	2				2		35	110	250	325
18-1	A/Inst.	10					10	70	145	215	290
18-3	D	2				2		35	110	250	325
18-4	D	4					4	35	110	250	325
18-5	D	3				2	1	80	110	250	280
18-6	D	1		1							
18-7	B	1			1						



18-8	A	8				1	7	70			290
18-9	Inst.	7				2	5	80	110	215	290
18-10	A	4				4			120	240	
18-11	A	5				5			170	265	
18-12	A	6					6	80			280
18-13	A	4			1	3		80	110	250	280
18-14	A	2		1			1	80	110	250	280
18-15	A	4				4			120	240	
18-16	C	1				1					
18-20	A	5					5	90	180	270	
18-22	D	3					3	70	145	215	290
18-29	A	5					5	90	180	270	
20-2	D	1	1								
20-3	D	3				3		70	145	215	290
20-4	D	4				4		45	110	250	
20-6	D	3					3	70	145	215	290
20-7	D/A	8					8	80	110	250	280
20-8	Inst.	6			2		4	80	110	250	280
20-9	D/A	8				1	7	80	110	250	280
20-11	Inst.	13					13				
20-12	A	2		1			1	80	110	250	280
20-14	A	5			2	3		80	110	250	280
20-15	A	7				7		80			280
20-16	A	9				2	7	80	110	250	280
20-17	A	6				5	1	90	180	270	
20-18	A	9				3	6	35	110	250	325
20-19	A	3			3			90	180	270	
20-20	A	4		1		3		80	110	250	280
20-21	A	9				1	8	35	110	250	325
20-22	A	6			3		3	80	110	250	280
20-23	A	2			2			35	110	250	325
20-24	A	4			2		2	35	110	215	325
20-27	A	14					14	35	110	250	325
20-29	A	17					17	80			280
20-33	A	11					11				
22-1	D	2			2			35	110	250	325
22-2	D	3			3			70	145	215	290
22-4	A	4			2	2		35	110	250	325
22-5	D	6				2	4	35	110	250	325
22-6	D	3			2		1	80	110	250	280
22-7	E	1	1								
22-8	E	2				2		35	110	250	325
22-9	E	3				3		70	145	215	290
22-10	E	4					4	35	110	250	325
22-11	B	2					2	35	110	250	325
22-12	D	5			2		3	80	110	250	280
22-13	B	5				4	1	35	110	250	325
22-14	D/A	19					19	80	110	250	325
22-15	A	6				5	1	80	110	250	280

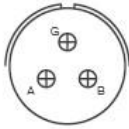
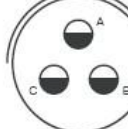
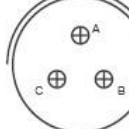
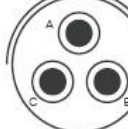
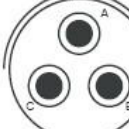
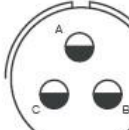
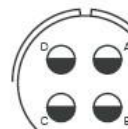
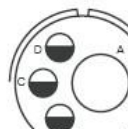
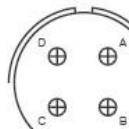
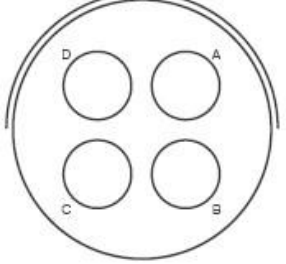
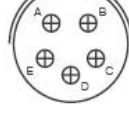
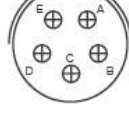
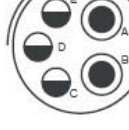
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22-17	D/A	9				1	8	80	110	25	280
22-18	A/D	8					8	80	110	250	280
22-19	A	14					14	80	110	250	280
22-20	A	9					9	35	110	250	325
22-21	A	3	1				2	80	110	250	280
22-22	A	4			4				110	250	
22-23	D/A	8				8		35		250	
22-24	D/A	6				2	4	80	110	250	280
22-27	D/A	9			1		8	80		250	280
22-28	A	7				7		80			280
22-33	D/A	7					7	80	110	250	280
22-34	A	5				3	2	80	110	250	280
22-36	D/A	8				8		90		270	
24-2	D	7				7		80			280
24-3	D	7				2	5	80	110	250	280
24-5	A	16					16	80	110	250	280
24-6	D/A	8				8		80	110	250	280
24-7	A	16				2	14	80	110	250	280
24-9	A	2		2				35	110	250	325
24-10	A	7			7			80			280
24-11	A	9			3	6		35	110	250	325
24-12	A	5		2		3		80	110	250	280
24-16	D/A	7			1	3	3	80	110	250	280
24-17	D	5				2	3	80	110	250	280
24-20	D	11				2	9	80	110	250	280
24-21	D	10			1		9	80	110	250	280
24-22	D	4			4			45	110	250	
24-27	E	7					7	80			280
24-28	Inst.	24					24	80	110	250	280
28-1	D/A	9			3	6		80	110	250	280
28-2	D	14				2	12	35	110	250	325
28-3	E	3			3			70	145	215	290
28-4	E/D	9				2	7	35	110	250	325
28-5	D	5		2		1	2	35	110	250	325
28-6	D	3		3				70	145	215	290
28-8	E/D/A	12				2	10	80	110	250	280
28-9	D	12				6	6	80	110	250	280
28-10	D/A	7		2	2	3		80	110	250	280
28-11	A	22				4	18	80	110	250	280
28-12	A	26					26	90	180	270	
28-15	A	35					35	80	110	250	280
28-16	A	20					20	80	110	250	280
28-17	B/D/A	15					15	80	110	250	280
28-18	C/D/A/Inst.	12					12	70	145	215	290
28-19	B/D/A	10				4	6	80	110	250	280
28-20	A	14				10	4	80	110	250	280
28-21	A	37					37	80	110	250	280
28-22	D	6		3			3	70	145	215	290



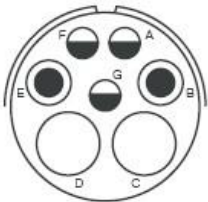
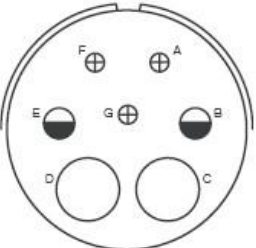
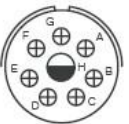
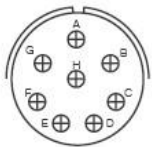
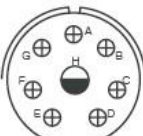
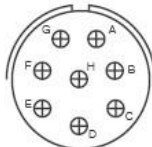
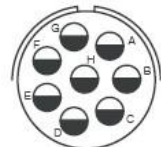
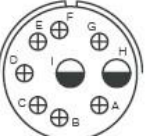
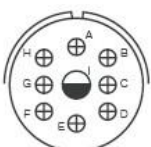
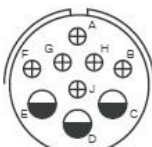
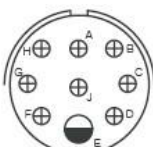
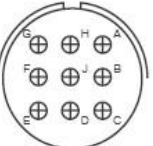
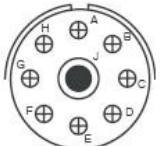
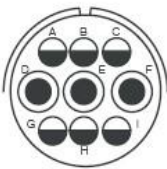
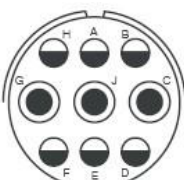
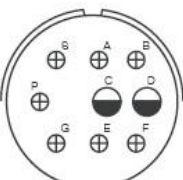
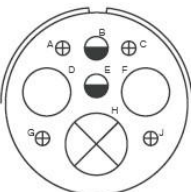
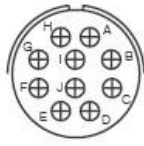
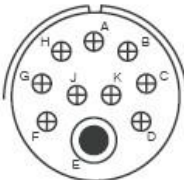
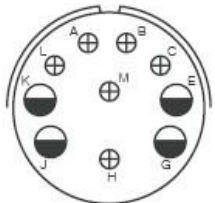
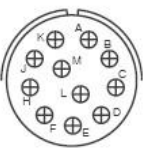
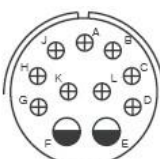
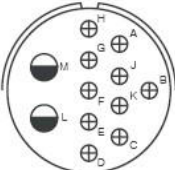
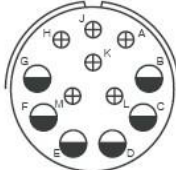
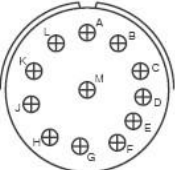
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32-2	E	9				1	8	80	110	25	280
32-3	D	8					8	80	110	250	280
32-4	A/D	14					14	80	110	250	280
32-5	D	9					9	35	110	250	325
32-6	A	3	1				2	80	110	250	280
32-7	Inst./A	4			4				110	250	
32-8	A	8				8		35		250	
32-9	D	6				2	4	80	110	250	280
32-10	E/B/D/A	9			1		8	80		250	280
32-12	A/D	7				7		80			280
32-13	D	7					7	80	110	250	280
32-15	D	5				3	2	80	110	250	280
32-17	D	8				8		90		270	
32-22	A	7				7		80			280
36-1	D	7				2	5	80	110	250	280
36-3	D	16					16	80	110	250	280
36-4	D/A	8				8		80	110	250	280
36-5	A	16				2	14	80	110	250	280
36-6	A	2		2				35	110	250	325
36-7	A	7			7			80			280
36-8	A	8				8		90		270	
36-9	A	7				7		80			280
36-10	A	7				2	5	80	110	250	280
36-13	E/A	16					16	80	110	250	280
36-14	D	8				8		80	110	250	280
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36-52	A	2		2				35	110	250	325

CONTACT LAYOUTS

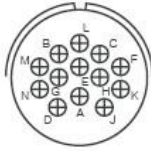
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18-7		18-16		22-7		
#8-1		#12-1		#0-1		
10SL-4	12S-3	14S-9	16S-4	16-11	16-13	18-3
#16-2	#16-2	#16-2	#16-2	#12-2	#12-2	#12-2
18-14		20-12	20-23	22-1	22-8	
#16-1, #4-1		#16-1, #4-1	#8-2	#8-2	#12-2	
22-11		24-9	32-5		36-4	
#16-2		#4-2	#0-2		#0-3	
10SL-3	14S-1	14S-7	16S-5	16S-6	16-7	16-10
#16-3	#16-3	#16-3	#16-3	#16-3	#16-2	#12-3

18-5	18-22	20-3	20-6	20-19	22-2
					
#12-2	#16-3	#12-3	#16-3	#8-3	#8-3
22-6	22-9	22-21	28-3	28-6	
					
#16-1; #8-2	#12-3	#16-2; #0-1	#8-3	#4-3	
14S-2	16-9	18-4	18-10	18-13	18-15
					
#16-4	#16-2; #12-2	#16-4	#12-4	#12-3; #8-1	#12-4
20-4	22-20	20-24	22-4	22-10	
					
#12-4	#12-3; #4-1	#16-2; #8-2	#12-2; #8-2	#16-4	
22-22	24-22	32-17			
					
#8-4	#8-4	#4-4			
14S-5	16S-8	18-11	18-20	18-29	20-14
					
#16-5	#16-5	#12-5	#16-5	#16-5	#12-3; #8-2

22-12		22-13		22-34		24-12		24-17	
#16-3; #8-2		#16-1; #12-4		#16-2; #12-3		#12-3; #4-2		#16-3; #12-2	
28-5		32-1		32-2		36-6			
#16-2; #12-1; #4-2		#12-3; #0-2		#16-2; #4-3		#4-4; #0-2			
14S-6		18-12		20-8		20-17		20-22	
#16-6		#16-6		#16-4; #8-2		#16-1; #12-5		#16-3; #8-3	
22-15		22-24		28-22		36-3			
#16-1; #12-2		#16-4; #12-2		#16-3; #4-3		#12-3; #0-3			
16S-1		18-9		20-15		22-28		22-33	
#16-7		#16-5; #12-2		#12-7		#12-7		#16-7	
24-2		24-3		24-10		24-16		24-27	
#12-7		#16-5; #12-2		#8-7		#16-3; #12-3; #8-1		#16-7	

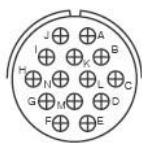
28-10		32-10		
				
#12-3; #8-2; #4-2		#16-3; #8-2; #4-2		
18-8	20-7	20-9	22-18	22-23
				
#16-7; #12-1	#16-8	#16-7; #12-1	#16-8	#12-8
20-16	20-18	20-21	22-16	22-17
				
#16-7; #12-2	#16-6; #12-3	#16-8; #12-1	#16-6; #12-3	#16-8; #12-1
22-20	22-27	24-11	28-1	28-4
				
#16-9	#16-8; #8-1	#12-6; #8-3	#12-6; #8-3	#16-7; #12-2
32-3	18-1	24-21	28-19	
				
#16-4; #12-2; #4-2; #0-1	#16-10	#16-9; #8-1	#16-6; #12-4	
20-33	24-20	28-8	28-9	28-18
				
#16-11	#16-9; #12-2	#16-10; #12-2	#16-6; #12-6	#16-12

20-11



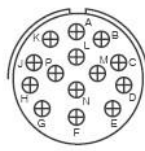
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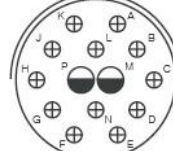
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22-19



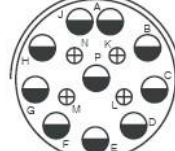
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28-2



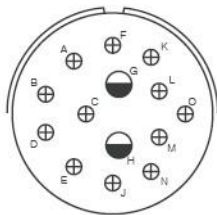
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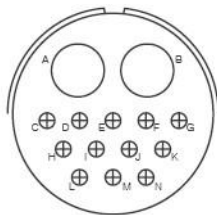
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32-4



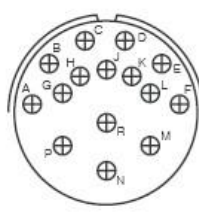
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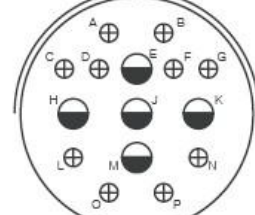
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28-17



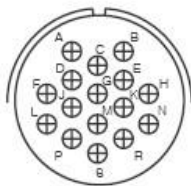
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32-12



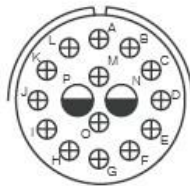
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24-5



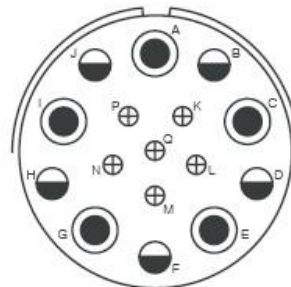
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24-7



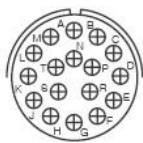
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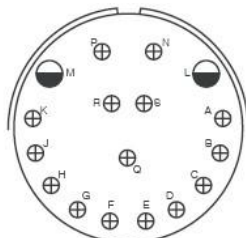
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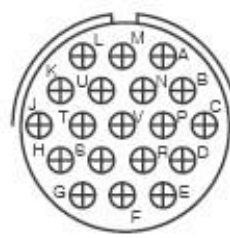
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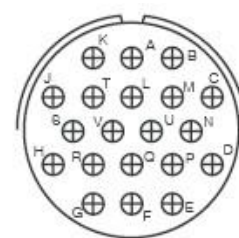
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22-14



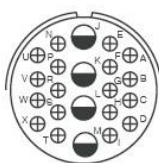
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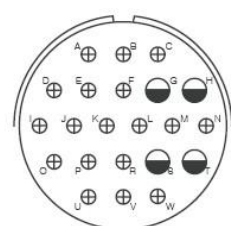
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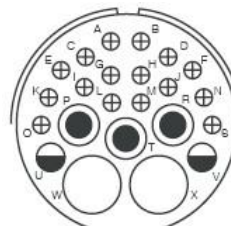
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36-1



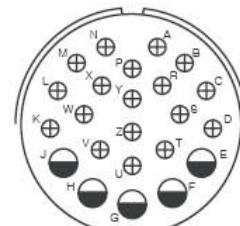
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32-6

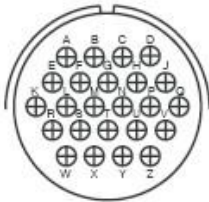


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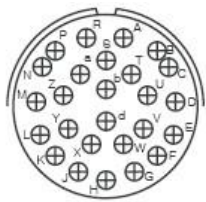
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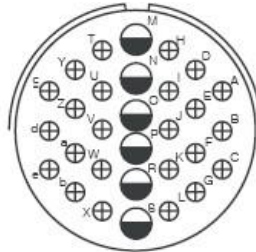
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24-28
28-12
32-8
36-9


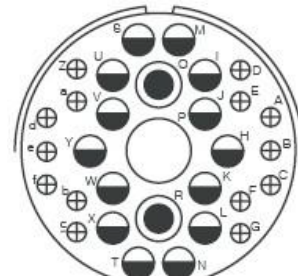
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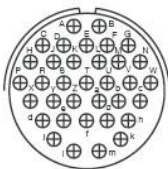
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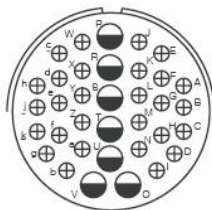
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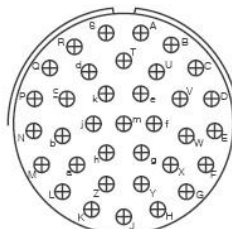
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28-15
32-7
36-15
28-21


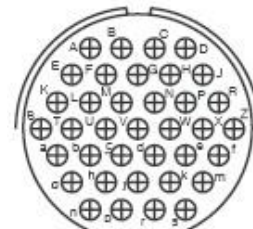
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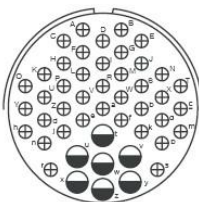
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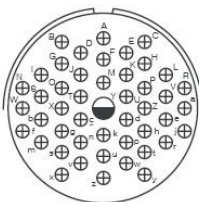
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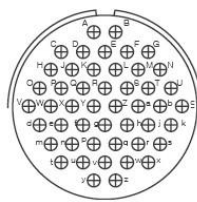
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36-7
36-8
36-10
36-52


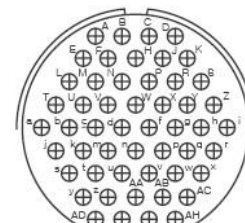
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#16-48



#16-52


16

12

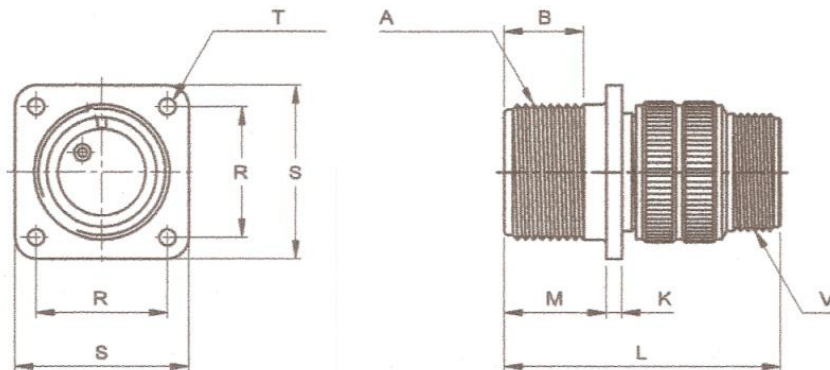
8

4

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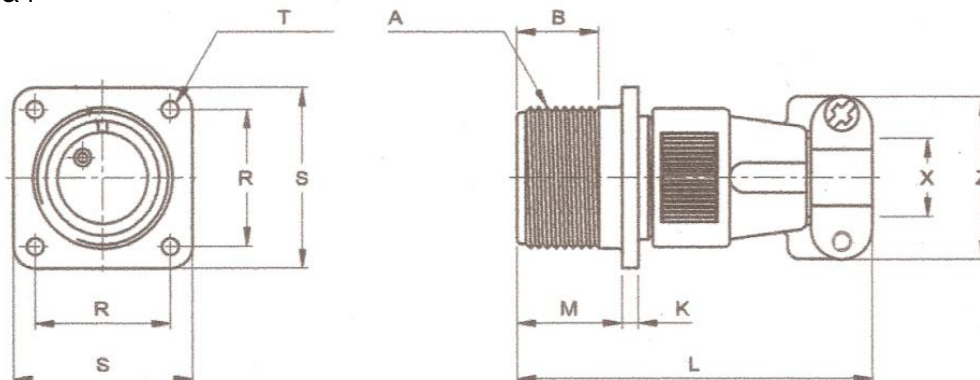
SHELL SIZE

a. Wall mounting receptacle
MS3100 Class A



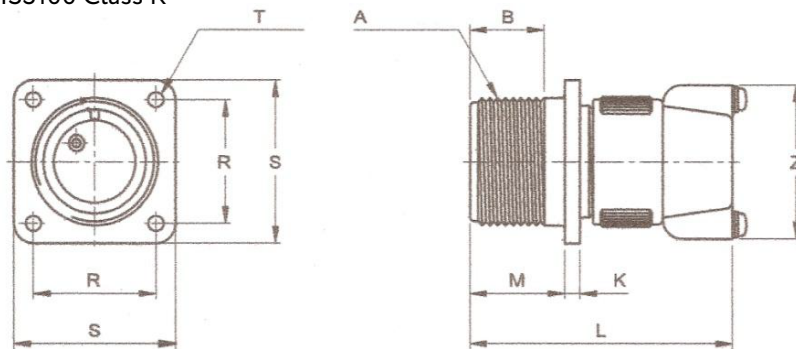
Part No.	A Thread Class 2A	B (Min)	K Min/Max	L Max	M+0.79 /-0.00	R ±0.12	S ±0.79	T+0.25 /-0.12	V Thread Class 2A
MS3100A 10SL	5/8-24 UNF	9.53	1.58/3.96	38.88	14.28	18.26	25.40	3.05	5/8-24NEF
MS3100A 12S	3/4-20 UNEF	9.53	1.58/3.96	42.87	14.28	20.62	27.79	3.05	5/8-24NEF
MS3100A 12	3/4-20 UNEF	15.88	1.58/3.96	52.37	19.05	20.62	27.79	3.05	5/8-24NEF
MS3100A 14S	7/8-20 UNEF	9.53	1.58/3.96	42.87	14.28	23.01	30.18	3.05	3/4-20 UNEF
MS3100A 14	7/8-20 UNEF	15.88	1.58/3.96	52.37	19.05	23.01	30.18	3.05	3/4-20 UNEF
MS3100A 16S	1-20 UNEF	9.53	1.58/3.96	42.87	14.28	24.61	32.54	3.05	7/8-20 UNEF
MS3100A 16	1-20 UNEF	15.88	1.58/3.96	52.37	19.05	24.61	32.54	3.05	7/8-20 UNEF
MS3100A 18	1 1/8-18 NEF	15.88	2.39/5.15	52.37	19.05	26.97	34.93	3.05	1-20 UNEF
MS3100A 20	1 1/4-18 NEF	15.88	2.39/5.15	55.57	19.05	29.36	38.10	3.05	1 3/16-18 NEF
MS3100A 22	1 3/8-18 NEF	15.88	2.39/5.15	55.57	19.05	31.75	41.28	3.05	1 3/16-18 NEF
MS3100A 24	1 1/2-18 NEF	15.88	2.39/5.15	58.72	20.63	34.93	44.45	3.73	1 7/16-18 NEF
MS3100A 28	1 3/4-18 NEF	15.88	2.39/5.15	58.72	20.63	39.67	50.80	3.73	1 7/16-18 NEF
MS3100A 32	2-18 UNS	15.88	3.18/9.11	61.92	22.23	44.45	57.15	4.39	1 3/4-18 UNS
MS3100A 36	2 1/4-16UN	15.88	3.18/9.11	61.92	22.23	49.23	63.50	4.39	2-18 UNS

MS3100 Class E & F



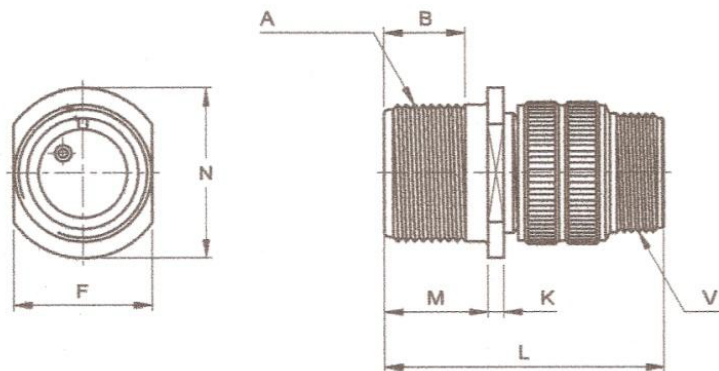
Part No.	A Thread Class 2A	B (Min)	K Min/Max	L Max	M+0.79 /-0.00	R ±0.12	S ±0.79	T+0.25 /-0.12	X Min	Z Max
MS3100A 10SL	5/8-24 UNF	9.53	1.58/3.96	57.15	14.28	18.26	25.40	3.05	7.14	28.57
MS3100A 12S	3/4-20 UNEF	9.53	1.58/3.96	57.15	14.28	20.62	27.79	3.05	7.14	28.57
MS3100A 12	3/4-20 UNEF	15.88	1.58/3.96	66.67	19.05	20.62	27.79	3.05	7.14	28.57
MS3100A 14S	7/8-20 UNEF	9.53	1.58/3.96	57.15	14.28	23.01	30.18	3.05	10.32	34.11
MS3100A 14	7/8-20 UNEF	15.88	1.58/3.96	66.67	19.05	23.01	30.18	3.05	10.32	34.11
MS3100A 16S	1-20 UNEF	9.53	1.58/3.96	57.15	14.28	24.61	32.54	3.05	12.70	37.69
MS3100A 16	1-20 UNEF	15.88	1.58/3.96	66.67	19.05	24.61	32.54	3.05	12.70	37.69
MS3100A 18	1 1/8-18 NEF	15.88	2.39/5.15	68.27	19.05	26.97	34.93	3.05	13.49	40.86
MS3100A 20	1 1/4-18 NEF	15.88	2.39/5.15	69.85	19.05	29.36	38.10	3.05	16.67	48.00
MS3100A 22	1 3/8-18 NEF	15.88	2.39/5.15	69.85	19.05	31.75	41.28	3.05	16.86	48.00
MS3100A 24	1 1/2-18 NEF	15.88	2.39/5.15	75.41	19.05	34.93	44.45	3.73	19.84	55.11
MS3100A 28	1 3/4-18 NEF	15.88	2.39/5.15	76.98	19.05	39.67	50.80	3.73	23.42	55.11
MS3100A 32	2-18 UNS	15.88	3.18/9.11	76.98	19.05	44.45	57.15	4.39	29.36	67.46
MS3100A 36	2 1/4-16UN	15.88	3.18/9.11	83.33	19.05	46.68	63.50	4.39	31.75	74.21

MS3100 Class R



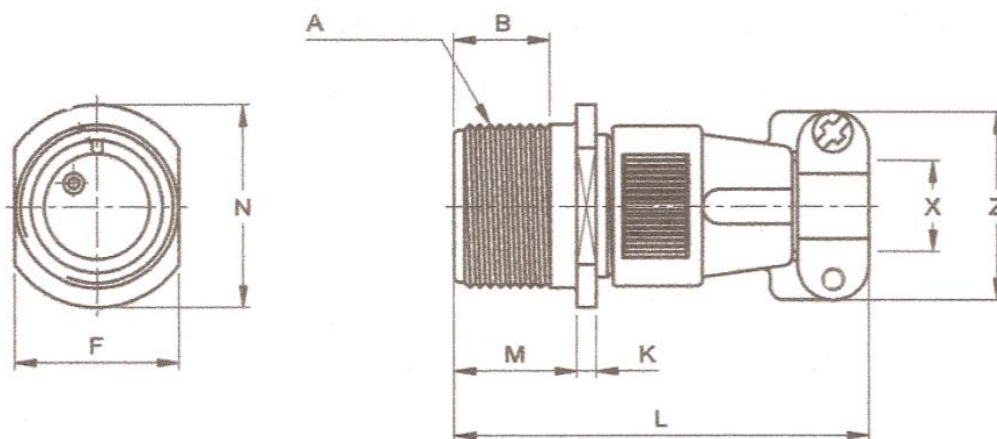
Part No.	A Thread Class 2A	B (Min)	K Min/Max	L Max	M+0.79 /-0.00	R ±0.12	S ±0.79	T+0.25 /-0.12	Z Max
MS3100A 10SL	5/8-24 UNF	9.53	1.58/3.96	46.68	14.28	18.26	25.40	3.05	28.57
MS3100A 12S	3/4-20 UNEF	9.53	1.58/3.96	46.68	14.28	20.62	27.79	3.05	28.57
MS3100A 12	3/4-20 UNEF	15.88	1.58/3.96	55.39	19.05	20.62	27.79	3.05	28.57
MS3100A 14S	7/8-20 UNEF	9.53	1.58/3.96	46.68	14.28	23.01	30.18	3.05	34.11
MS3100A 14	7/8-20 UNEF	15.88	1.58/3.96	55.39	19.05	23.01	30.18	3.05	34.11
MS3100A 16S	1-20 UNEF	9.53	1.58/3.96	46.68	14.28	24.61	32.54	3.05	37.69
MS3100A 16	1-20 UNEF	15.88	1.58/3.96	55.39	19.05	24.61	32.54	3.05	37.69
MS3100A 18	1 1/8-18 NEF	15.88	2.39/5.15	57.93	19.05	26.97	34.93	3.05	40.86
MS3100A 20	1 1/4-18 NEF	15.88	2.39/5.15	57.93	19.05	29.36	38.10	3.05	48.00
MS3100A 22	1 3/8-18 NEF	15.88	2.39/5.15	57.93	19.05	31.75	41.28	3.05	48.00
MS3100A 24	1 1/2-18 NEF	15.88	2.39/5.15	57.93	19.05	34.93	44.45	3.73	55.11
MS3100A 28	1 3/4-18 NEF	15.88	2.39/5.15	57.93	19.05	39.67	50.80	3.73	55.11
MS3100A 32	2-18 UNS	15.88	3.18/9.11	58.97	19.05	44.45	57.15	4.39	67.46
MS3100A 36	2 1/4-16UN	15.88	3.18/9.11	58.97	19.05	49.23	63.50	4.39	74.21

b. In-line receptacle MS3101 Class A



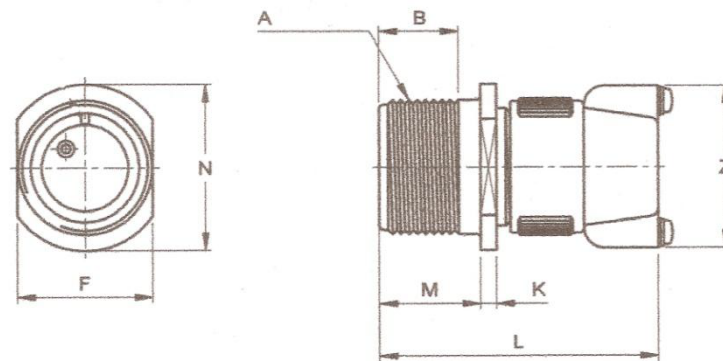
Part No.	A Thread Class 2A	B (Min)	F (Ref)	K Min /Max	L Max	M+0.79 /-0.00	N Max	V Thread Class 2A
MS3100A 10SL	5/8-24 UNF	9.53	16.2	1.58/3.96	38.88	14.28	24.61	5/8-24 UNF
MS3100A 12S	3/4-20 UNEF	9.53	19.9	1.58/3.96	42.87	14.28	26.97	5/8-24 NEF
MS3100A 12	3/4-20 UNEF	15.88	19.9	1.58/3.96	52.37	19.05	26.97	5/8-24 NEF
MS3100A 14S	7/8-20 UNEF	9.53	22.6	1.58/3.96	42.87	14.28	29.36	3/4-20 UNEF
MS3100A 14	7/8-20 UNEF	15.88	22.6	1.58/3.96	52.37	19.05	29.36	3/4-20 UNEF
MS3100A 16S	1-20 UNEF	9.53	25.7	1.58/3.96	42.87	14.28	31.75	7/8-20 UNEF
MS3100A 16	1-20 UNEF	15.88	25.7	1.58/3.96	52.37	19.05	31.75	7/8-20 UNEF
MS3100A 18	1 1/8-18 NEF	15.88	28.8	2.39/5.15	52.37	19.05	34.13	1-20 UNEF
MS3100A 20	1 1/4-18 NEF	15.88	32.0	2.39/5.15	55.57	19.05	37.31	1 3/16-18 NEF
MS3100A 22	1 3/8-18 NEF	15.88	35.2	2.39/5.15	55.57	19.05	40.48	1 3/16-18 NEF
MS3100A 24	1 1/2-18 NEF	15.88	38.4	2.39/5.15	58.72	19.05	43.66	1 7/16-18 NEF
MS3100A 28	1 3/4-18 NEF	15.88	44.8	2.39/5.15	58.72	19.05	50.01	1 7/16-18 NEF
MS3100A 32	2-18 UNS	15.88	51.2	3.18/9.11	61.92	19.05	56.36	1 3/4-18 UNS
MS3100A 36	2 1/4-16UN	15.88	57.5	3.18/9.11	61.92	19.05	62.71	2-18 UNS

MS3101 Class E & F



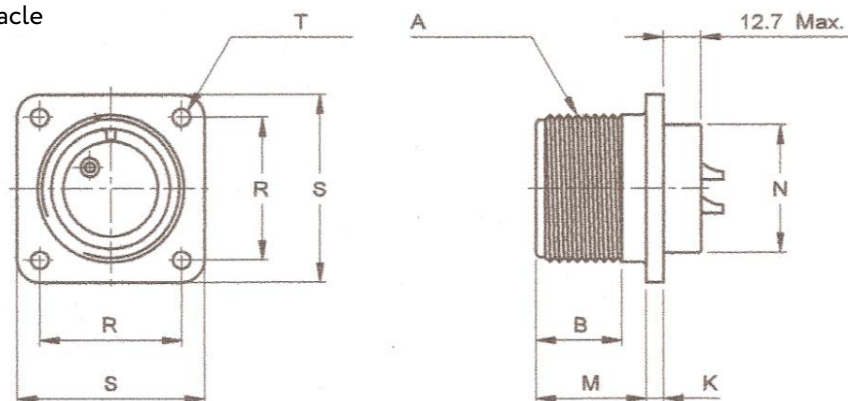
Part No.	A Thread Class 2A	B (Min)	F (Ref)	K Min /Max	L Max	M+0.79 /-0.00	N Max	X Min	Z Max
MS3100A 10SL	5/8-24 UNF	9.53	16.2	1.58/3.96	57.15	14.28	24.61	7.14	28.57
MS3100A 12S	3/4-20 UNEF	9.53	19.9	1.58/3.96	57.15	14.28	26.97	7.14	28.57
MS3100A 12	3/4-20 UNEF	15.88	19.9	1.58/3.96	66.67	19.05	26.97	7.14	28.57
MS3100A 14S	7/8-20 UNEF	9.53	22.6	1.58/3.96	57.15	14.28	29.36	10.32	34.11
MS3100A 14	7/8-20 UNEF	15.88	22.6	1.58/3.96	66.67	19.05	29.36	10.32	34.11
MS3100A 16S	1-20 UNEF	9.53	25.7	1.58/3.96	57.15	14.28	31.75	12.70	37.69
MS3100A 16	1-20 UNEF	15.88	25.7	1.58/3.96	66.67	19.05	31.75	12.70	37.69
MS3100A 18	1 1/8-18 NEF	15.88	28.8	2.39/5.15	68.67	19.05	34.13	13.49	40.86
MS3100A 20	1 1/4-18 NEF	15.88	32.0	2.39/5.15	69.85	19.05	37.31	16.67	48.00
MS3100A 22	1 3/8-18 NEF	15.88	35.2	2.39/5.15	69.85	19.05	40.48	16.86	48.00
MS3100A 24	1 1/2-18 NEF	15.88	38.4	2.39/5.15	75.41	19.05	43.66	19.84	55.11
MS3100A 28	1 3/4-18 NEF	15.88	44.8	2.39/5.15	76.98	19.05	50.01	23.42	55.11
MS3100A 32	2-18 UNS	15.88	51.2	3.18/9.11	76.98	19.05	56.36	29.36	67.46
MS3100A 36	2 1/4-16UN	15.88	57.5	3.18/9.11	83.33	19.05	62.71	31.75	74.21

MS3101 Class R



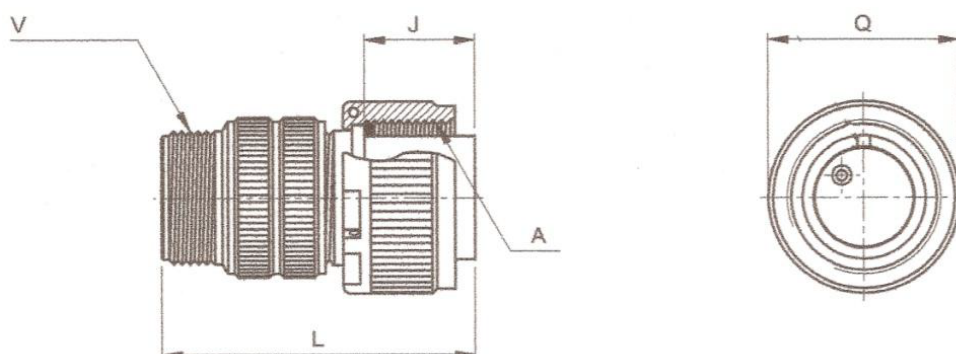
Part No.	A Thread Class 2A	B (Min)	F (Ref)	K Min /Max	L Max	M+0.79 /-0.00	N Max	Z Max
MS3100A 10SL	5/8-24 UNF	9.53	16.2	1.58/3.96	46.68	14.28	24.61	28.57
MS3100A 12S	3/4-20 UNEF	9.53	19.9	1.58/3.96	46.68	14.28	26.97	28.57
MS3100A 12	3/4-20 UNEF	15.88	19.9	1.58/3.96	55.39	19.05	26.97	28.57
MS3100A 14S	7/8-20 UNEF	9.53	22.6	1.58/3.96	46.68	14.28	29.36	34.11
MS3100A 14	7/8-20 UNEF	15.88	22.6	1.58/3.96	55.39	19.05	29.36	34.11
MS3100A 16S	1-20 UNEF	9.53	25.7	1.58/3.96	46.68	14.28	31.75	37.69
MS3100A 16	1-20 UNEF	15.88	25.7	1.58/3.96	55.39	19.05	31.75	37.69
MS3100A 18	1 1/8-18 NEF	15.88	28.8	2.39/5.15	57.93	19.05	34.13	40.86
MS3100A 20	1 1/4-18 NEF	15.88	32.0	2.39/5.15	57.93	19.05	37.31	48.00
MS3100A 22	1 3/8-18 NEF	15.88	35.2	2.39/5.15	57.93	19.05	40.48	48.00
MS3100A 24	1 1/2-18 NEF	15.88	38.4	2.39/5.15	57.93	19.05	43.66	55.11
MS3100A 28	1 3/4-18 NEF	15.88	44.8	2.39/5.15	57.93	19.05	50.01	55.11
MS3100A 32	2-18 UNS	15.88	51.2	3.18/9.11	58.97	19.05	56.36	67.46
MS3100A 36	2 1/4-16UN	15.88	57.5	3.18/9.11	58.97	19.05	62.71	74.21

c. Box mounting receptacle
MS3102 Class A, E & R



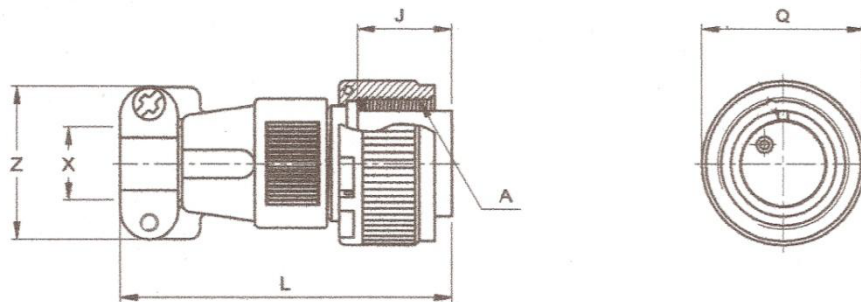
Part No.	A Thread Class 2A	B (Min)	K Min/Max	M+0.79 /-0.00	N+0.00 /-4.77	R ±0.12	S ±0.79	T+0.25 /-0.12
MS3100A 10SL	5/8-24 UNF	9.53	1.58/3.96	14.28	19.86	18.26	25.40	3.05
MS3100A 12S	3/4-20 UNEF	9.53	1.58/3.96	14.28	19.86	20.62	27.79	3.05
MS3100A 12	3/4-20 UNEF	15.88	1.58/3.96	19.05	19.86	20.62	27.79	3.05
MS3100A 14S	7/8-20 UNEF	9.53	1.58/3.96	14.28	23.01	23.01	30.18	3.05
MS3100A 14	7/8-20 UNEF	15.88	1.58/3.96	19.05	23.01	23.01	30.18	3.05
MS3100A 16S	1-20 UNEF	9.53	1.58/3.96	14.28	26.21	24.61	32.54	3.05
MS3100A 16	1-20 UNEF	15.88	1.58/3.96	19.05	26.21	24.61	32.54	3.05
MS3100A 18	1 1/8-18 NEF	15.88	2.39/5.15	19.05	29.36	26.97	34.93	3.05
MS3100A 20	1 1/4-18 NEF	15.88	2.39/5.15	19.05	32.56	29.36	38.10	3.05
MS3100A 22	1 3/8-18 NEF	15.88	2.39/5.15	19.05	35.71	31.75	41.28	3.05
MS3100A 24	1 1/2-18 NEF	15.88	2.39/5.15	20.63	38.91	34.93	44.45	3.73
MS3100A 28	1 3/4-18 NEF	15.88	2.39/5.15	20.63	45.26	39.67	50.80	3.73
MS3100A 32	2-18 UNS	15.88	3.18/9.11	22.23	51.61	44.45	57.15	4.39
MS3100A 36	2 1/4-16UN	15.88	3.18/9.11	22.23	57.96	49.23	63.50	4.39

d. Straight plug
MS3106 Class A



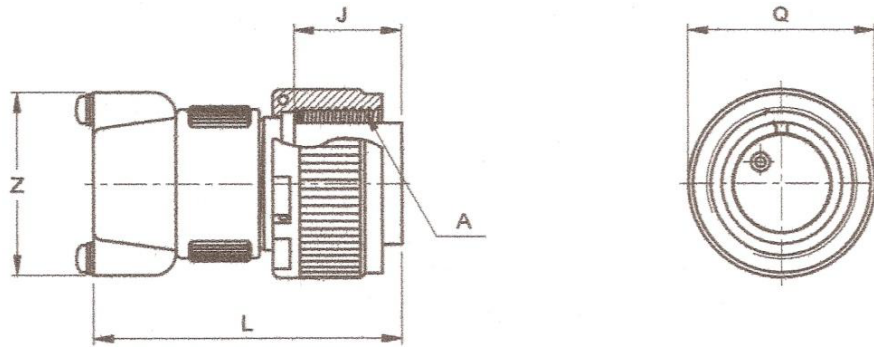
Part No.	A Thread Class 2A	J ±0.12	L (Max)	Q (Max)	V Thread Class 2A
MS3100A 10SL	5/8-24 UNF	18.26	13.49	38.88	5/8-24 UNF
MS3100A 12S	3/4-20 UNEF	20.62	13.49	42.87	5/8-24 NEF
MS3100A 12	3/4-20 UNEF	20.62	18.26	52.37	5/8-24 NEF
MS3100A 14S	7/8-20 UNEF	23.01	13.49	42.87	3/4-20 UNEF
MS3100A 14	7/8-20 UNEF	23.01	18.26	52.37	3/4-20 UNEF
MS3100A 16S	1-20 UNEF	24.61	13.49	42.87	7/8-20 UNEF
MS3100A 16	1-20 UNEF	24.61	18.26	52.37	7/8-20 UNEF
MS3100A 18	1 1/8-18 NEF	26.97	18.26	52.37	1-20 UNEF
MS3100A 20	1 1/4-18 NEF	29.36	18.26	55.57	1 3/16-18 NEF
MS3100A 22	1 3/8-18 NEF	31.75	18.26	55.57	1 3/16-18 NEF
MS3100A 24	1 1/2-18 NEF	34.93	18.26	58.72	1 7/16-18 NEF
MS3100A 28	1 3/4-18 NEF	39.67	18.26	58.72	1 7/16-18 NEF
MS3100A 32	2-18 UNS	44.45	18.26	61.92	1 3/4-18 UNS
MS3100A 36	2 1/4-16UN	49.23	18.26	61.92	2-18 UNS

MS3106 Class E & F



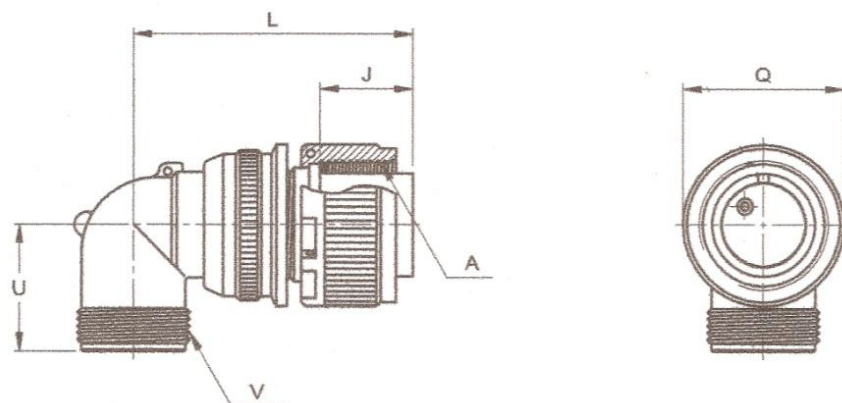
Part No.	A Thread Class 2A	J ±0.12	L (Max)	Q (Max)	X Min	Z Max
MS3100A 10SL	5/8-24 UNF	13.49	57.15	24.61	7.14	28.57
MS3100A 12S	3/4-20 UNEF	13.49	57.15	26.97	7.14	28.57
MS3100A 12	3/4-20 UNEF	18.26	66.67	26.97	7.14	28.57
MS3100A 14S	7/8-20 UNEF	13.49	57.15	29.36	10.32	34.11
MS3100A 14	7/8-20 UNEF	18.26	66.67	29.36	10.32	34.11
MS3100A 16S	1-20 UNEF	13.49	57.15	31.75	12.70	37.69
MS3100A 16	1-20 UNEF	18.26	66.67	31.75	12.70	37.69
MS3100A 18	1 1/8-18 NEF	18.26	68.27	34.13	13.49	40.86
MS3100A 20	1 1/4-18 NEF	18.26	69.85	37.31	16.67	48.00
MS3100A 22	1 3/8-18 NEF	18.26	69.85	40.48	16.86	48.00
MS3100A 24	1 1/2-18 NEF	18.26	75.41	43.66	19.84	55.11
MS3100A 28	1 3/4-18 NEF	18.26	76.98	50.01	23.42	55.11
MS3100A 32	2-18 UNS	18.26	76.98	56.36	29.36	67.46
MS3100A 36	2 1/4-16UN	18.26	83.33	62.71	31.75	74.21

MS3106 Class R



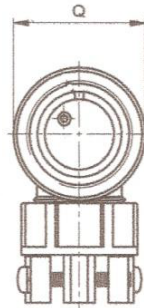
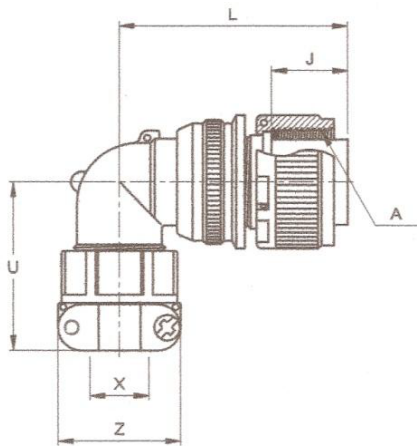
Part No.	A Thread Class 2A	J ±0.12	L Max	Q (Max)	Z Max
MS3100A 10SL	5/8-24 UNF	13.49	46.68	24.61	28.57
MS3100A 12S	3/4-20 UNEF	13.49	46.68	26.97	28.57
MS3100A 12	3/4-20 UNEF	18.26	55.39	26.97	28.57
MS3100A 14S	7/8-20 UNEF	13.49	46.68	29.36	34.11
MS3100A 14	7/8-20 UNEF	18.26	55.39	29.36	34.11
MS3100A 16S	1-20 UNEF	13.49	46.68	31.75	37.69
MS3100A 16	1-20 UNEF	18.26	55.39	31.75	37.69
MS3100A 18	1 1/8-18 NEF	18.26	57.93	34.13	40.86
MS3100A 20	1 1/4-18 NEF	18.26	57.93	37.31	48.00
MS3100A 22	1 3/8-18 NEF	18.26	57.93	40.48	48.00
MS3100A 24	1 1/2-18 NEF	18.26	57.93	43.66	55.11
MS3100A 28	1 3/4-18 NEF	18.26	57.93	50.01	55.11
MS3100A 32	2-18 UNS	18.26	58.97	56.36	67.46
MS3100A 36	2 1/4-16UN	18.26	58.97	62.71	74.21

e. Elbow plug
MS3108 Class A



Part No.	A Thread Class 2A	J ±0.12	L Max	Q (Max)	U Max	V Thread Class 2A
MS3100A 10SL	5/8-24 UNF	13.49	45.0	24.61	25.40	5/8-24 UNF
MS3100A 12S	3/4-20 UNEF	13.49	45.0	26.97	26.97	5/8-24 NEF
MS3100A 12	3/4-20 UNEF	18.26	54.0	26.97	26.97	5/8-24 NEF
MS3100A 14S	7/8-20 UNEF	13.49	47.0	29.36	28.57	3/4-20 UNEF
MS3100A 14	7/8-20 UNEF	18.26	55.0	29.36	28.57	3/4-20 UNEF
MS3100A 16S	1-20 UNEF	13.49	58.0	31.75	30.17	7/8-20 UNEF
MS3100A 16	1-20 UNEF	18.26	57.0	31.75	30.17	7/8-20 UNEF
MS3100A 18	1 1/8-18 NEF	18.26	58.0	34.13	33.32	1-20 UNEF
MS3100A 20	1 1/4-18 NEF	18.26	61.0	37.31	34.92	1 3/16-18 NEF
MS3100A 22	1 3/8-18 NEF	18.26	61.0	40.48	34.92	1 3/16-18 NEF
MS3100A 24	1 1/2-18 NEF	18.26	66.0	43.66	39.67	1 7/16-18 NEF
MS3100A 28	1 3/4-18 NEF	18.26	66.0	50.01	39.67	1 7/16-18 NEF
MS3100A 32	2-18 UNS	18.26	72.0	56.36	47.62	1 3/4-18 UNS
MS3100A 36	2 1/4-16UN	18.26	77.0	62.71	52.37	2-18 UNS

MS3108 Class E & R



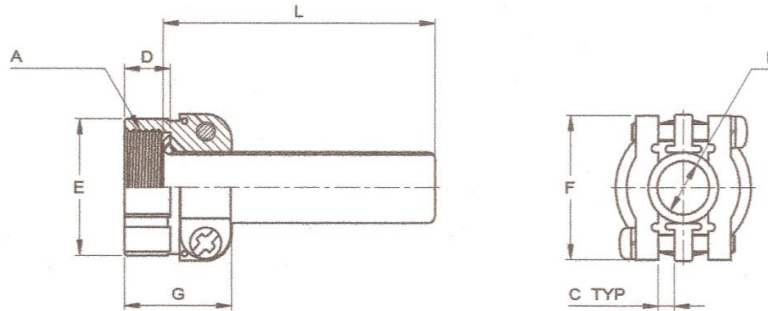
NOTE:

1. MS3108E/R: with grommet
2. MS3108E: without O ring
3. MS3108R: with O ring
4. MS3108R: without cable clamp

Part No.	A Thread Class 2A	J ±0.12	L Max	Q (Max)	U Max	X Min	Z Max
MS3100A 10SL	5/8-24 UNF	13.49	45.0	24.61	42.0	7.14	28.57
MS3100A 12S	3/4-20 UNEF	13.49	45.0	26.97	42.0	7.14	28.57
MS3100A 12	3/4-20 UNEF	18.26	54.0	26.97	42.0	7.14	28.57
MS3100A 14S	7/8-20 UNEF	13.49	47.0	29.36	42.0	10.32	34.11
MS3100A 14	7/8-20 UNEF	18.26	55.0	29.36	42.0	10.32	34.11
MS3100A 16S	1-20 UNEF	13.49	58.0	31.75	45.0	12.70	37.69
MS3100A 16	1-20 UNEF	18.26	57.0	31.75	45.0	12.70	37.69
MS3100A 18	1 1/8-18 NEF	18.26	58.0	34.13	53.0	13.49	40.86
MS3100A 20	1 1/4-18 NEF	18.26	61.0	37.31	53.0	16.67	48.00
MS3100A 22	1 3/8-18 NEF	18.26	61.0	40.48	53.0	16.86	48.00
MS3100A 24	1 1/2-18 NEF	18.26	66.0	43.66	58.0	19.84	55.11
MS3100A 28	1 3/4-18 NEF	18.26	66.0	50.01	58.0	23.42	55.11
MS3100A 32	2-18 UNS	18.26	72.0	56.36	66.0	29.36	67.46
MS3100A 36	2 1/4-16UN	18.26	77.0	62.71	69.0	31.75	74.21

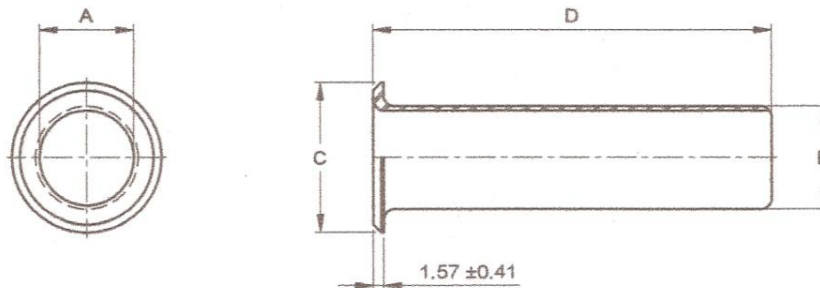
ACCESSORIES

a. Cable clamp MS3057 - A



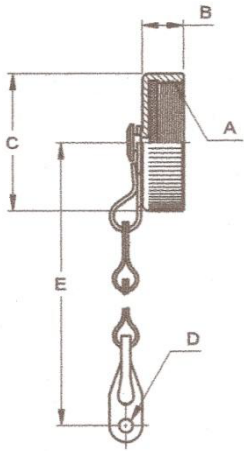
Part No.	Shell size	A Thread Class 2A	B ±0.41	C TYP ±0.41	D ±0.41	E ±0.79	F ±0.79	G ±0.79	L ±0.8	Bushing Ref.
MS3057-4A	10SL, 12S, 12	5/8-24 UNF	7.92	1.57	10.31	20.62	22.23	20.62	69.8	MS3420-4
MS3057-6A	14S, 14	3/4-20 UNEF	11.10	1.98	10.31	24.61	26.97	22.22	66.7	MS3420-6
MS3057-8A	16S, 16	7/8-20 UNEF	14.27	2.77	10.31	27.79	29.36	23.82	63.5	MS3420-8
MS3057-10A	18	1-20 UNEF	15.88	3.16	10.31	30.18	31.75	23.82	60.3	MS3420-10
MS3057-12A	20, 22	1 3/16-18 NEF	19.05	3.96	10.31	34.47	37.31	23.82	57.2	MS3420-12
MS3057-16A	24, 28	1 7/16-18 NEF	23.80	4.78	10.31	42.06	42.88	26.18	54.0	MS3420-16
MS3057-20A	32	1 3/4-18 UNS	31.75	6.35	11.91	51.59	51.59	27.78	50.8	MS3420-20
MS3057-24A	36	2-18 UNS	34.92	7.54	13.49	56.36	57.94	29.36	47.6	MS3420-24

b. Telescoping bushing MS3420



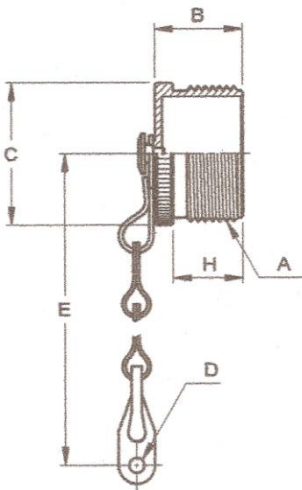
Part No.	Shell size	A ±0.41	B ±0.41	C ±0.41	D ±0.41	Cable clamp ref.
MS3057-4A	10SL, 12S, 12	5.59	7.67	12.83	69.85	MS3420-4
MS3057-6A	14S, 14	7.92	10.85	15.72	66.68	MS3420-6
MS3057-8A	16S, 16	11.10	14.02	18.90	63.50	MS3420-8
MS3057-10A	18	14.27	15.62	22.58	60.33	MS3420-10
MS3057-12A	20, 22	15.88	18.80	27.53	57.15	MS3420-12
MS3057-16A	24, 28	19.05	23.55	33.38	53.98	MS3420-16
MS3057-20A	32	23.80	31.50	40.59	50.80	MS3420-20
MS3057-24A	36	31.75	34.67	46.91	47.63	MS3420-24

c. Dust-cap
MS25043 (For receptacle)



Part No.	Shell size	A Thread Class 2A	B (Max)	C (Max)	D+0.25/-0.13	E ±21.0
MS25043-10D	10S, 10SL	5/8-24 UNF	11.91	20.70	3.56	101.6
MS25043-12D	12S, 12	3/4-20 UNEF	11.91	25.40	3.56	114.3
MS25043-14D	14S, 14	7/8-20 UNEF	11.91	28.58	3.56	114.3
MS25043-16D	16S, 16	1-20 UNEF	11.91	30.18	3.56	114.3
MS25043-18D	18	1 1/8-18 NEF	11.91	34.14	3.56	114.3
MS25043-20D	20	1 1/4-18 NEF	11.91	37.31	3.56	127.0
MS25043-22D	22	1 3/8-18 NEF	11.91	40.49	3.56	127.0
MS25043-24D	24	1 1/2-18 NEF	11.91	43.66	4.34	139.7
MS25043-28D	28	1 3/4-18 NEF	13.49	50.01	4.34	196.8
MS25043-32D	32	2-18 UNS	13.49	56.36	4.75	196.8
MS25043-36D	36	2 1/4-16 UN	13.49	62.71	4.75	196.8

MS25042 (For plug)



Part No.	Shell size	A Thread Class 2A	B (Max)	C (Max)	D+0.25/-0.13	E ±21.0	H (Min)
MS25043-10D	10S, 10SL	5/8-24 UNF	16.66	17.45	3.96	101.6	9.65
MS25043-12D	12S, 12	3/4-20 UNEF	21.44	20.62	3.96	114.3	16.00
MS25043-14D	14S, 14	7/8-20 UNEF	21.44	23.80	3.96	114.3	16.00
MS25043-16D	16S, 16	1-20 UNEF	21.44	26.97	3.96	114.3	16.00
MS25043-18D	18	1 1/8-18 NEF	21.44	30.15	3.96	114.3	16.00
MS25043-20D	20	1 1/4-18 NEF	21.44	33.32	4.75	127.0	16.00
MS25043-22D	22	1 3/8-18 NEF	21.44	36.50	4.75	127.0	16.00
MS25043-24D	24	1 1/2-18 NEF	21.44	39.67	4.75	139.7	16.00
MS25043-28D	28	1 3/4-18 NEF	21.44	46.02	4.75	196.8	16.00
MS25043-32D	32	2-18 UNS	21.44	52.37	5.54	196.8	16.00
MS25043-36D	36	2 1/4-16 UN	21.44	58.72	5.54	196.8	16.00



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