

cannon

MIL-DTL-5015/SAE-AS50151 Catalog

Class E/F/R/ER

Shell Styles 3100, 3101, 3102, 3103, 3106, 3108



ITT

We Connect

When it matters most

For more than a century, ITT Cannon has developed innovative interconnect solutions for the world's harshest environments. With facilities in the United States, Germany, Italy, Mexico, China and Japan, each with its unique strengths, we offer our customers interconnect solutions that are truly Engineered for Life.

In addition to this truly global footprint, we offer highly specialized, segmented industry expertise. We have a proven track record as an industry leader in harsh-environment applications. This has equipped us with the knowledge needed to continue to produce the most resilient, reliable connectors for our customers' most challenging conditions.



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Overview

ITT Cannon's MIL-C-5015 and circular metal CA connector series is one of the market standards for harsh environment applications in commercial as well as military applications. Derived from the military standard MIL-C-5015 the CA product portfolio expanded to meet the needs of industrial and heavy vehicle applications around the globe. This connector series is designed to operate in the extreme environmental conditions of high altitude flight and must be completely sealed to withstand moisture, condensation, vibration, corona and flashover caused by high altitude environments.

They have resilient grommet with internal restrictions in the wire cavities which act as O rings around the wires. This allows the wires to slide thru the grommet with a minimum of friction, yet when the ferrule is seated and the endbell tightened it provides a perfect wire seal thru a wide variety of wire diameters. This seal at the rear, plus the interfacial seal at the front, provides a completely environment-resistant assembly when the plug is mated to the receptacle. Sockets are of the closed-entry type.

The temperature range for this connector is - 55°C (67°F) to +125° (+257°F) and meets the requirements of MIL-C-5015.

The F80 modification (crimp contact termination) is available in resilient insulators in the E, R, F, and BFR styles, creating a large selection of insert assemblies and hardware. Components are identical to the MS-5015 except that the contacts are modified for crimp termination providing and inexpensive crimp contact connector with the proven reliability of and complete intermateability with the MS-5015 series. Cable clamps have been integrally designed with the endbell to provide strain relief when needed for the intended application.

Features & Benefit

- 5 polarizations available
- Rated 500 mating cycles
- Individual wire sealing grommet
- RoHS compliant options available
- Housings available in 4 plating options
- Bonded-In contacts providing 30 PSI sealing
- Available with high power contact sizes from 8 to 0
- Several endbell options available for cable termination



Specifications

Performance and Material Specifications

Material and Finishes		
Shell	Material	Aluminum Alloy
	Finish	O.D. Chromate Coating over Cadmium Plating*
Insulator	Material	Polychloroprene (resilient)
Contacts	Material	Brass or Copper Alloy
	Finish	Silver Plate
	Termination	Tinned Solder Pot (contacts are not tinned for RoHS options)

* Additional platings available

Wiring		
For class E, F, and R connectors, satisfactory moisture sealing will be obtained if AWG and MS wire sizes and insulation outside diameters are governed by this table.		
Contact Size	Wire Size (MIL-W-5086)	Insulation OD Limit (inches)
16	16 thru 20	.064 (1.63) min. to .130 (3.30) max.
12	12 thru 14	.114 (2.90) min. to .170 (4.32) max.
8	8 thru 10	.164 (4.17) min. to .255 (6.48) max.
4	4 thru 6	.275 (6.98) min. to .370 (9.40) max.
0 max.	0 thru 2	.415 (10.54) min to .550 (13.97)

Electrical Service Data		
Test current ratings of contacts and allowable voltage drop under test conditions when assembled as in service are shown below. Maximum total current to be carried per connector is the same as the allowable in wire bundles as specified in MIL-W-5088.		
Contact Size	Test Current (amps)	Potential Drop (millivolts)
16	13	49
12	23	42
8	46	26
4	80	23
0	150	21

Thermocouple Contacts	
Sizes 12 and 16 contacts, machined from matching thermocouple lead wire alloys, can be supplied in ITT Cannon connectors. These thermocouple contacts maintain continuity from thermal-sensor leads through a bulkhead of other closures in temperature measuring applications. These contacts for matching lead wires are detailed by the standards of the Instrument Society of America (ISA).	
ISA Standards	Material
J and Y	Iron and Constantan
K	Chromel and Alumel
T	Copper and Constantan
Since the thermocouple connector applications determines the soldering methods and materials to be used, thermocouple contacts, identified by permanent markings, are normally supplied with untinned solder pots. Thermocouple contacts are supplied only in connectors having resilient insulators.	

High Potential Test Voltage					
MS connectors show no evidence of breakdown when the test voltage given below is applied between the two closest contacts and between the shell and the contacts closest to the shell for a period of one minute.					
MS Service Rating	Test Voltage (RMS) 60 cps	Suggested* Operating Voltages		Air Spacing Nom. (inches)	Creepage Distance Nom. (inches)
		DC	AC (rms)		
Inst.	1000	250	200		1/16
A	2000	700	500	1/16	1/8
D	2800	1250	900	1/8	3/16
E	3500	1750	1250	3/16	1/4
B	4500	2450	1750	1/4	5/16
C	7000	4200	3000	5/16	1
*As indicated in previous MS specification and to be used by designer only as a guide.					

MIL-DTL-5015 Ordering Guide

1- Series	2- Shell Style	3- Class	4- Shell Size	5- Contact Arrangements	6- Contact Type	7- Polarization	8- Mod Codes
MS	3106	F	18	-1	P	W	
CA	06R		18	-1	P	W	A206-F80

1- Series		3- Class		4- Shell Size		5- Contact Arrangement		6- Contact Type		7- Polarization		8- Modification Codes***	
MS	MIL-DTL-5015	E	Resilient insulator and integral clamp for cable strain relief	8S, 10S, 12S, 14S, 16S, 18, 20, 22, 24, 28, 32, 36 & 40		Reference Contact Arrangements on pages 12-19		P	Pin	Blank	Normal	A71	Electroless Nickel hardware, RoHS
CA	Commercial 5015	F	Resilient insulator and integral clamp for cable strain relief (use in place for 'E' class for new designs. O-ring provided for MS3106F and for CA Series use CA06R)					S	Socket	W	See available polarizations on page 11	A206	Black zinc cobalt hardware, RoHS
CAR*	RoHS Compliant Commercial 5015	R	Short backshell, no strain relief							X		A232	Black zinc cobalt hardware, RoHS European version
2- Shell Style		PG	Adapter for PG-termination							Y		A176	Contacts hard gold over nickel, RoHS
3100	Wall Mount Receptacle	DT	Banded Endbell for CA3100, CA3101 & CA3106							Z		F42	Without endbell, grommet and ferrule
3101	In-Line Receptacle	A	Threaded Endbell for CA3100, CA3101 & CA3106 (use w/mod RES only)									F80	Snap-in crimp contacts
3102	Box Mount Receptacle											F0	Less Contacts
3106	Straight Plug											DN	CA3100, CA3101 & CA3106 endbell for shrink boot adapter
06R**	Straight Plug											-15	CA3100, CA3101 & CA3106 shielded back-shell for crimp contacts
3108	90° Angle Plug											RES	Resilient insulator (used only with 'A' Endbell)

*CAR RoHS, default to black zinc cobalt plating, contacts less tinning.

**06R commercial equivalent to MS3106F, see connector configuration on page 9. Class not available, leave blank.

***Mil-Spec not available with Mod code, leave blank. When ordering CA Mod code to be listed in alphabetical order.

MIL-DTL-5015 Potting Cup Ordering Guide

1- Series	2- Shell Style	3- Class	4- Shell Size	5- Contact Arrangements	6- Contact Type	7- Polarization	8- Mod Codes
MS	3103	-	18	-1	P	W	A206
CA	3100	ER	18	-1	p	W	A206

1- Series		3- Class		6- Contact Type		7- Polarization		8- Modification Codes	
MS	MIL-DTL-5015	ER (CA series only)	Resilient insulator, nylon potting cup and thread attachment ring	P	Pin	Blank	Normal	A71	Electroless Nickel hardware, RoHS
CA	Commercial 5015	-	No class designator for MS types.	S	Socket	W	See available polarizations on page 11	A206	Black zinc cobalt hardware, RoHS
2- Shell Style		4- Shell Size		7- Polarization		X		A232	Black zinc cobalt hardware, RoHS European version
3103*	Wall Mount receptacle (3100)					Y		A176	Contacts hard gold over nickel, RoHS
3100						Z		F80	Snap-in crimp contacts
25183*	Straight Plug (3106)							F0	Less Contacts
3106									
3108	90° Angle Plug (3108)								

*MS series only

Connector Configuration

Wall Mount Receptacle - Shell Style 3100				
MS3100E / CA3100E MS3100F*	CA3100F	MS3100R CA3100R	MS3103 CA3100ER	CA3100A (RES)
				
CA3100DT	CA3100PG	CA3100E...DN	CA3100E...-15	
				

*Note: use "F" Class for new designs

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Dimensions shown in inches (mm). Specifications and dimensions subject to change.

Connector Configuration

In-Line Receptacle - Shell Style 3101				
MS3101E / CA3101E MS3101F*	CA3101F	MS3101R CA3101R	CA3101ER	CA3101A (RES)
				
CA3101DT	CA3101PG	CA3101E...DN	CA3101E...15	Box Mounting Receptacle Shell Style 3102 MS3102E / CA3102E MS3102R / CA3102R
				
				

*Note: use "F" Class for new designs

Connector Configuration

Straight Plug - Shell Style 3106				
MS3106E / CA3106E	MS3106F / CA06R	CA3106F	MS3106R / CA3106R	MS25183 / CA3106ER
				
CA3106DT	CA3106PG	CA3106E...DN	CA3106E...-15	CA3106A (RES)
				

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Connector Configuration

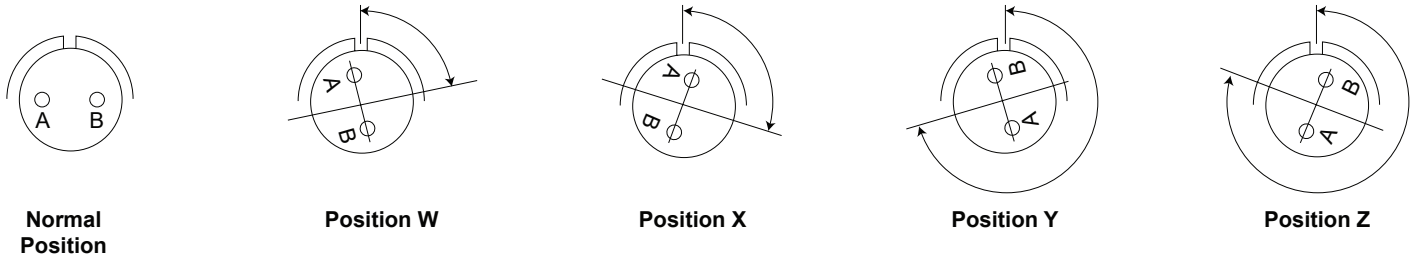


Straight Plug - Shell Style 3108		
MS3108E / CA3108E	MS3108R / CA3108R	CA3108ER

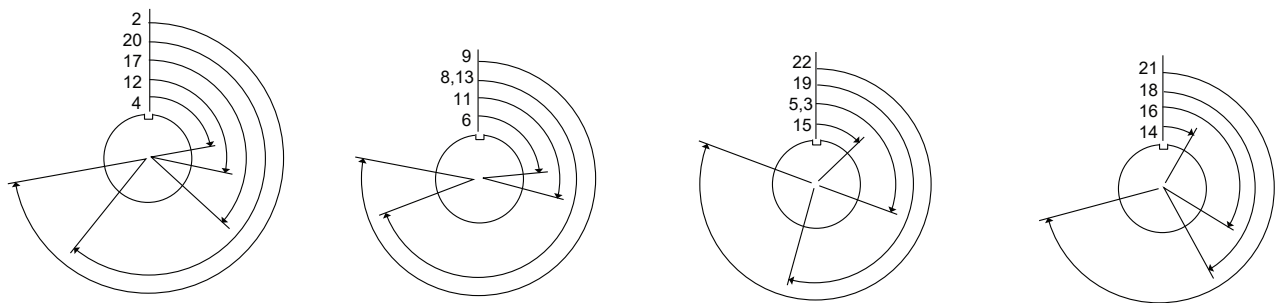
Polarization

Standard Polarization

Per Mil-Spec. All views are looking into front of pin insert of rear of socket insert.



Alternate Polarizations



Note: Front view of pin insulator rotates as shown.

Layout	Alternate Polarization positions							
10SLA4*	Normal							
12SA10*	3	8						
20-33	2	3	17	19				
24A24*	2	4	9	12				
28A16*	2	3	8	9				
32A47*	2	3	4	8	9	12		
32A10*	2	3	4	5	8	9	12	13
36A46*	2	3	4	8	9	12		
36A34*	2	3	4	8	9	12	20	
36A66*	2	3	8	9	17	18		
40A33*	2	3	8					
40A27*	4	14	17	20	22			

*Not MS approved.

Note: Layout 20-33 is MS approved

Position	Angle (degrees)	Position	Angle (degrees)
Normal	0	15	45
2	260	16	120
3	110	17	130
4	80	18	150
5	110	19	195
6	85	20	220
8	250	21	255
9	280	22	290
11	105	23	165
12	100	24	330
13	250	25	235
14	30	26	125

Layout	Additional Layouts available (Link)
20A9*	European manufactured CA threaded version only
20A48*	European manufactured CA threaded version only
28A51*	European manufactured CA threaded version only
28A63*	European manufactured CA threaded version only
32A69*	European manufactured CA threaded version only

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Standard Contact Arrangements Chart

MIL-DTL-5015 and Commercial CA Threaded

Shell Size	Layout	MIL-Spec	Service Rating	Total Contact QTY	QTY by Contact Size							Standard Polarization			
					#20	#16S	#16	#12	#8	#4	#0	W	X	Y	Z
8	8S-1	Yes	A	1		1						-	-	-	-
10	10S-2	Yes	A	1		1						-	-	-	-
10	10SL-4	Yes	A	2		2						-	-	-	-
10	10SL-3	Yes	Inst.	3		3						-	-	-	-
10	10SLA4	No	A	5	5							Alternate polarization, see page 11			
12	12S-4	Yes	D	1		1						-	-	-	-
12	12-5	Yes	D	1				1				-	-	-	-
12	12S-3	Yes	A	2		2						70	145	215	290
12	12SA10	No	Inst.	4		4						Alternate polarization, see page 11			
14	14-3	Yes	A	1					1			-	-	-	-
14	14S-9	Yes	A	2		2						70	145	215	290
14	14S-1	Yes	A	3		3						-	-	-	-
14	14S-7	Yes	A	3		3						90	180	270	-
14	14S-2	Yes	Inst.	4		4						-	120	240	-
14	14S-5	Yes	Inst.	5		5						-	110	-	-
14	14S-6	Yes	Inst.	6		6						-	-	-	-
16	16-12	Yes	A	1						1		-	-	-	-
16	16-11	Yes	A	2				2				35	110	250	325
16	16S-4	Yes	D	2		2						35	110	250	325
16	16-13	Yes	A	2				2				35	110	250	325
16	16S-5	Yes	A	3		3						70	145	215	290
16	16S-6	Yes	A	3		3						90	180	270	-
16	16-10	Yes	A	3				3				90	180	270	-
16	16S-8	Yes	A	5		5						-	170	265	-
16	16S-1	Yes	A	7		7						80	-	-	280
18	18-7	Yes	B	1					1			-	-	-	-
18	18-3	Yes	D	2				2				35	110	250	325
18	18-22	Yes	D	3			3					70	145	215	290
18	18-4	Yes	D	4			4					35	110	250	325
18	18-10	Yes	A	4				4				-	120	240	-
18	18-15	Yes	A	4				4				-	120	240	-
18	18-11	Yes	A	5				5				-	170	265	-
18	18-12	Yes	A	6			6					80	-	-	280
18	18-1	Yes	A(B,C,F,G) Inst.(A,D,E,H,I,J)	10			10					70	145	215	290
18	18-19	Yes	A	10			10					-	-	-	-
20	20-2	Yes	D	1							1	-	-	-	-
20	20-23	Yes	A	2					2			35	110	250	325
20	20-3	Yes	D	3				3				70	145	215	290
20	20-19	Yes	A	3					3			90	180	270	-
20	20-4	Yes	D	4				4				45	110	250	-
20	20-15	Yes	A	7				7				80	-	-	280
20	20-7	Yes	A(C,D,E,F) D(A,B,G,H)	8			8					80	110	250	280
20	20-33	Yes	A	11			11					Alternate polarization, see page 11			
20	20-11	Yes	Inst.	13			13					-	-	-	-
20	20-27	Yes	A	14			14					35	110	250	325

Standard Contact Arrangements Chart

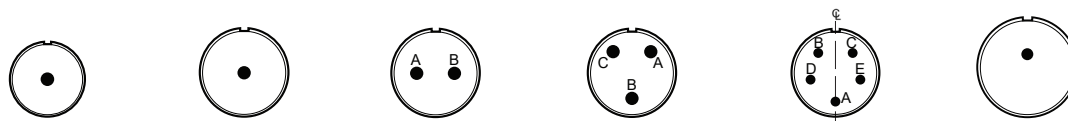
MIL-DTL-5015 and Commercial CA Threaded

Shell Size	Layout	MIL-Spec	Service Rating	Total Contact QTY	QTY by Contact Size							Standard Polarization			
					#20	#16S	#16	#12	#8	#4	#0	W	X	Y	Z
20	20-29	Yes	A	17			17					80	-	-	280
22	22-7	Yes	E	1							1	-	-	-	-
22	22-11	Yes	B	2			2					35	110	250	325
22	22-2	Yes	D	3					3			70	145	215	290
22	22-9	Yes	E	3				3				70	145	215	290
22	22-10	Yes	E	4			4					35	110	250	325
22	22-22	Yes	A	4					4			-	110	250	-
22	22-28	Yes	A	7				7				80	-	-	280
22	22-18	Yes	A(C,D,E) D(A,B,F,G,H)	8			8					80	110	250	280
22	22-23	Yes	D(H) / A(all others)	8				8				35	-	250	-
22	22-20	Yes	A	9			9					35	110	250	325
22	22-19	Yes	A	14			14					80	110	250	280
22	22-14	Yes	A	19			19					80	-	-	280
24	24-9	Yes	A	2						2		35	110	250	325
24	24-22	Yes	D	4					4			45	110	250	-
24	24-2	Yes	D	7				7				80	-	-	280
24	24-10	Yes	A	7					7			80	-	-	280
24	24-27	Yes	E	7			7					80	-	-	280
24	24-6	Yes	A(B,C,D,E,F) D(A,G,H)	8				8				80	110	250	280
24	24-19	Yes	A	12			12					-	-	-	-
24	24A24	No	A	12				12				Alternate polarization, see page 11			
24	24-5	Yes	A	16			16					80	110	250	280
24	24-28	Yes	Inst.	24			24					80	110	250	280
28	28-7	Yes	D	2						2		35	110	250	325
28	28-17	Yes	B(R) / D(M,N,P) A(all others)	15			15					80	110	250	280
28	28-16	Yes	A	20			20					80	110	250	280
28	28-12	Yes	A	26			26					90	180	270	-
28	28-15	Yes	A	35			35					80	110	250	280
28	28-21	Yes	A	37			37					80	110	250	280
32	32-17	Yes	D	4						4		45	110	250	-
32	32-5	Yes	D	2							2	35	110	250	325
32	32A47	No	A	47			47					Alternate polarization, see page 11			
32	32A10	No	A	54			54					80	110	250	280
												Alternate polarization, see page 11			
36	36-4	Yes	A(B,C) / D(A)	3							3	70	145	215	290
36	36-5	Yes	A	4							4	-	120	240	-
36	36A46	No	A	27				27				Alternate polarization, see page 11			
36	36-15	Yes	D(M) / A(all others)	35			35					60	125	245	305
36	36-10	Yes	A	48			48					80	125	235	280
36	36A34	No	A	52			52					Alternate polarization, see page 11			
40	40A27	No	A	60			60					30	80	130	220
												Alternate polarization, see page 11			
40	40-56	Yes	A	85			85					72	144	216	288

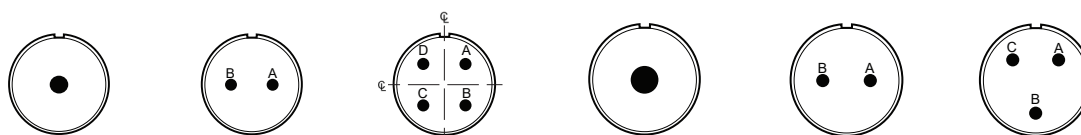
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Standard Contact Arrangements

MIL-DTL-5015 and Commercial CA Threaded



Shell Size - Arrangement	85-1	10S-2	10SL-4	10SL-3	10SLA-4*	12S-4
Contact QTY & Size	1 #16S	1 #16S	2 #16S	3 #16S	5 #20	1 #16S
Service Rating	A	A	A	Inst.	A	D



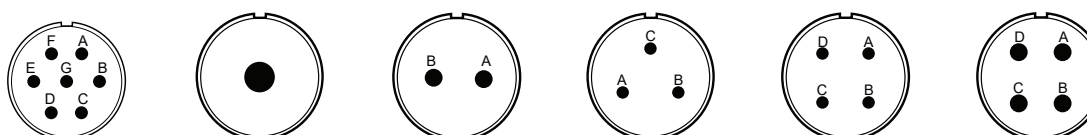
Shell Size - Arrangement	12-5	12S-3	12SA10*	14-3	14S-9	14S-1
Contact QTY & Size	1 #12	2 #16S	4 #16S	1 #8	2 #16S	3 #16S
Service Rating	D	A	Inst.	A	A	A



Shell Size - Arrangement	14S-7	14S-2	14S-5	14S-6	16-12	16-11
Contact QTY & Size	3 #16S	4 #16S	5 #16S	6 #16S	1 #4	2 #12
Service Rating	A	Inst.	Inst.	Inst.	A	A



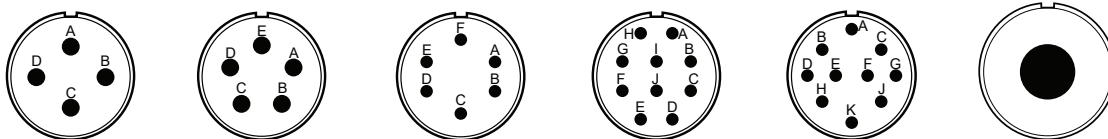
Shell Size - Arrangement	16S-4	16-13	16S-5	16S-6	16-10	16S-8
Contact QTY & Size	2 #16S	2 #12	3 #16S	3 #16S	3 #12	5 #16S
Service Rating	D	A	A	A	A	A



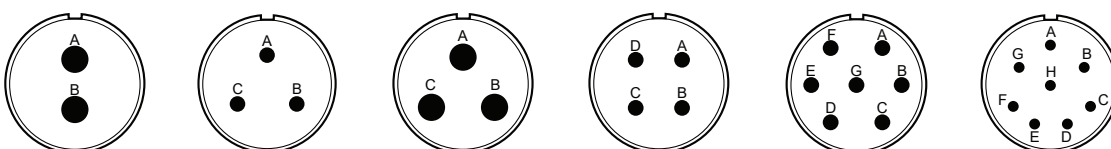
Shell Size - Arrangement	16S-1	18-7	18-3	18-22	18-4	18-10
Contact QTY & Size	7 #16S	1 #8	2 #12	3 #16	4 #16	4 #12
Service Rating	A	B	D	D	D	A

Standard Contact Arrangements

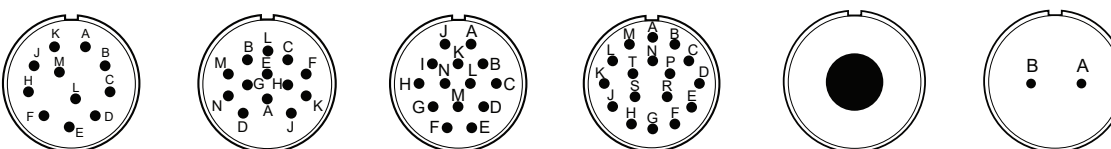
MIL-DTL-5015 and Commercial CA Threaded



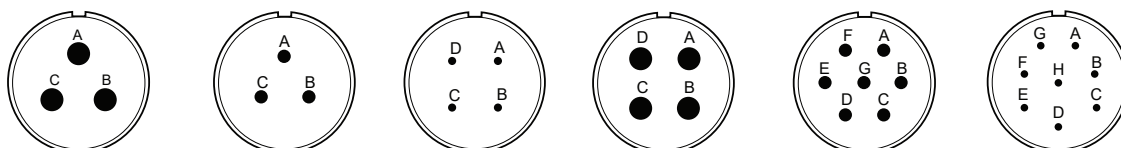
Shell Size - Arrangement	18-15	18-11	18-12	18-1	18-19	20-2
Contact QTY & Size	4 #12	5 #12	6 #16	10 #16	10 #16	1 #0
Service Rating	A	A	A	A(B,C,F,G) Inst.(A,D,E,H,I,J)	A	D



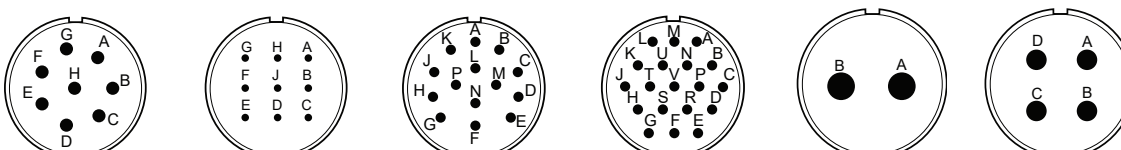
Shell Size - Arrangement	20-23	20-3	20-19	20-4	20-15	20-7
Contact QTY & Size	2 #8	3 #12	3 #8	4 #12	7 #12	8 #16
Service Rating	A	D	A	D	A	A(C,D,E,F) D(A,B,G,H)



Shell Size - Arrangement	20-33	20-11	20-27	20-29	22-7	22-11
Contact QTY & Size	11 #16	13 #16	14 #16	17 #16	1 #0	2 #16
Service Rating	A	Inst.	A	A	E	B



Shell Size - Arrangement	22-2	22-9	22-10	22-22	22-28	22-18
Contact QTY & Size	3 #8	3 #12	4 #16	4 #8	7 #12	8 #16
Service Rating	D	E	E	A	A	A(C,D,E) D(A,B,F,G,H)

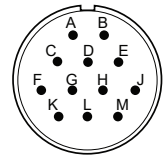
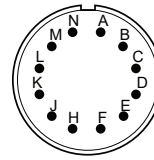
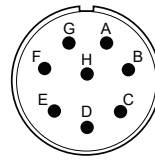
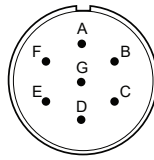
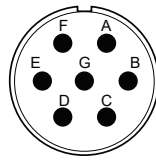
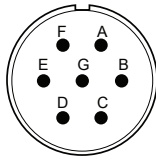


Shell Size - Arrangement	22-23	22-20	22-19	22-14	24-9	24-22
Contact QTY & Size	8 #12	9 #16	14 #16	19 #16	2 #4	4 #8
Service Rating	D(H) / A(all others)	A	A	A	A	D

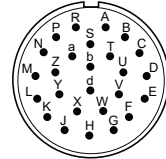
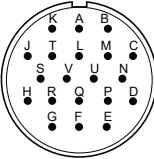
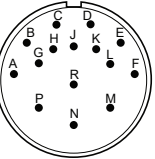
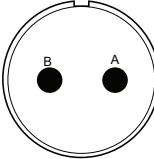
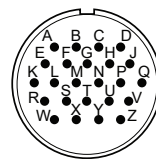
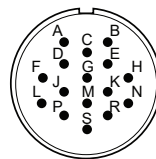
This document applies to North America manufactured 5015/CA Threaded products.
Dimensions shown in inches (mm). Specifications and dimensions subject to change.

Standard Contact Arrangements

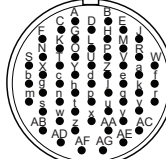
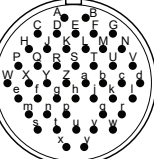
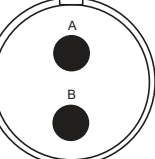
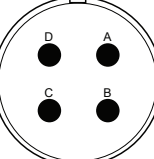
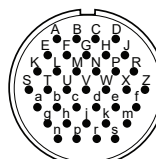
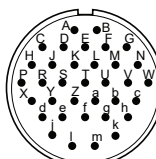
MIL-DTL-5015 and Commercial CA Threaded



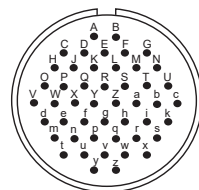
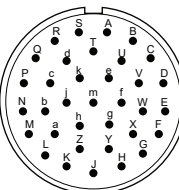
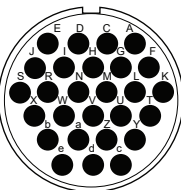
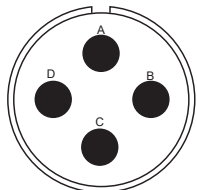
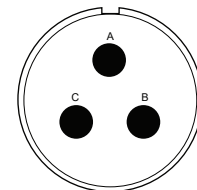
Shell Size - Arrangement	24-2	24-10	24-27	24-6	24-19	24A24*
Contact QTY & Size	7 #12	7 #8	7 #16	8 #12	12 #16	12 #12
Service Rating	D	A	E	A(B,C,D,E,F) D(A,G,H)	A	A



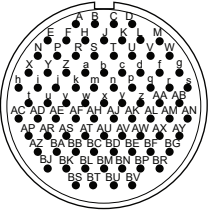
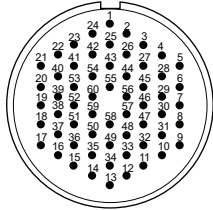
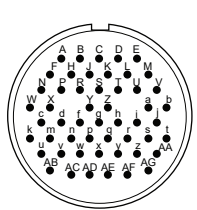
Shell Size - Arrangement	24-5	24-28	28-7	28-17	28-16	28-12
Contact QTY & Size	16 #16	24 #16	2 #4	15 #16	20 #16	26 #16
Service Rating	A	Inst.	D	B(R) / D(M,N,P) A(all others)	A	A



Shell Size - Arrangement	28-15	28-21	32-17	32-5	32A47*	32A10*
Contact QTY & Size	35 #16	37 #16	4 #4	2#0	47 #16	54 #16
Service Rating	A	A	D	D	A	A



Shell Size - Arrangement	36-4	36-5	36A46*	36-15	36-10
Contact QTY & Size	3 #0	4 #0	27 #12	35 #16	48 #16
Service Rating	A(B,C) / D(A)	A	A	D(M) / A(all others)	A



Shell Size - Arrangement	36A34*	40A27*	40-56
Contact QTY & Size	52 #16	60 #16	85 #16
Service Rating	A	A	A

*Not MS approved.

Combo Contact Arrangements Chart

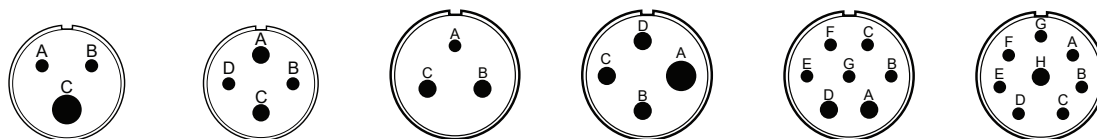
MIL-DTL-5015 and Commercial CA Threaded

Shell Size	Layout	MIL-Spec	Service Rating	Total Contact QTY	QTY by Contact Size					Standard Polarization			
					16	12	8	4	0	W	X	Y	Z
16	16-7	Yes	A	3	2		1			80	110	250	280
16	16-9	Yes	A	4	2	2				35	110	250	325
18	18-5	Yes	D	3	1	2				80	110	250	280
18	18-13	Yes	A	4		3	1			80	110	250	280
18	18-9	Yes	Inst.	7	5	2				80	110	250	280
18	18-8	Yes	A	8	7	1				70	-	-	290
20	20-24	Yes	A	4	2		2			35	110	250	325
20	20-14	Yes	A	5		3	2			80	110	250	280
20	20-8	Yes	Inst.	6	4		2			80	110	250	280
20	20-17	Yes	A	6	1	5				90	180	270	-
20	20-22	Yes	A	6	3		3			80	110	250	280
20	20-16	Yes	A	9	7	2				80	110	250	280
20	20-18	Yes	A	9	6	3				35	110	250	325
22	22-6	Yes	D	3	1		2			80	110	250	280
22	22-4	Yes	A	4		2	2			35	110	250	325
22	22-12	Yes	D	5	3		2			80	110	250	280
22	22-13	Yes	A(A,B,C,D) / D(E)	5	1	4				35	110	250	325
22	22-5	Yes	D	6	4	2				35	110	250	325
22	22-15	Yes	A(A,B,C,E,F) / E(D)	6	1	5				80	110	250	280
22	22-17	Yes	D(A) / A(others)	9	8	1				80	110	250	280
22	22-27	Yes	D(I) / A(others)	9	8		1			80	-	250	280
24	24-12	Yes	A	5		3		2		80	110	250	280
24	24-11	Yes	A	9		6	3			35	110	250	325
24	24-20	Yes	D	11	9	2				80	110	250	280
24	24-7	Yes	A	16	14	2				80	110	250	280
28	28-22	Yes	D	6	3			3		70	145	215	290
28	28-10	Yes	D(G) / A(others)	7		3	2	2		80	110	250	280
28	28-1	Yes	D(A,E,I) / A(others)	9		6	3			80	110	250	280
28	28A16	No	A	9	5			4		Alternate polarization, see page 11			
28	28-19	Yes	A(C,E,G,I,K,L) / B(H,M) / D(A,B)	10	6	4				80	110	250	280
28	28-9	Yes	D	12	6	6				80	110	250	280
28	28-2	Yes	D	14	12	2				35	110	250	325
28	28-20	Yes	A	14	4	10				80	110	250	280
28	28-11	Yes	A	22	18	4				80	110	250	280
32	32-1	Yes	E(A) / D(B,C,D,E)	5		3			2	80	110	250	280
32	32-15	Yes	D	8		6			2	35	110	250	280
32	32-9	Yes	D	14	12			2		80	110	250	280
32	32-6	Yes	A	23	16	2	3	2		80	110	250	280
32	32-8	Yes	A	30	24	6				80	125	235	280
32	32-7	Yes	Inst.(A,B,h,i) / A(others)	35	28	7				80	125	235	280
36	36-6	Yes	A	6				4	2	35	110	250	325
36	36-14	Yes	D	16	6	5	5			90	180	270	-
36	36-9	Yes	A	31	14	14	2	1		80	125	235	280
36	36-7	Yes	A	47	40	7				80	110	250	280
36	36-8	Yes	A	47	46	1				80	110	250	280
36	36A66	No	A	56	52	4				Alternate polarization, see page 11			
40	40A33	No	A	13			7	6		Alternate polarization, see page 11			
40	40-10	Yes	A	29	16		9	4		65	125	225	310
44	44-1	No	D	42	36	6				65	125	225	310
48	48-5	No	A	100	90	9	1			-	-	-	-

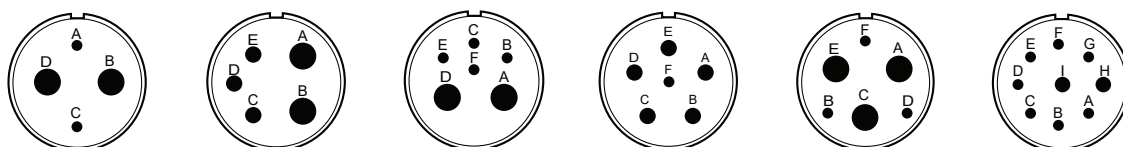
This document applies to North America manufactured 5015/CA Threaded products.
Dimensions shown in inches (mm). Specifications and dimensions subject to change.

Combo Contact Arrangements

MIL-DTL-5015 and Commercial CA Threaded



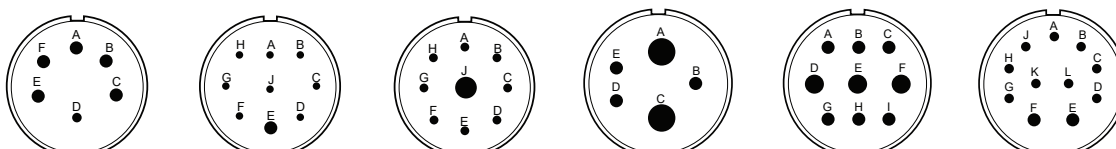
Shell Size - Arrangement	16-7	16-9	18-5	18-13	18-9	18-8
Contact QTY & Size	2 #16 (A,B) 1 #8 (C)	2 #16(B,D) 2 #12(A,C)	1 #16(A) 2 #12(B,C)	3 #12 (B,C,D) 1 #8(A)	5 #16(B,C,E,FG) 2 #12(A,D)	7 #16(A-G) 1 #12(H)
Service Rating	A	A	D	A	Inst.	A



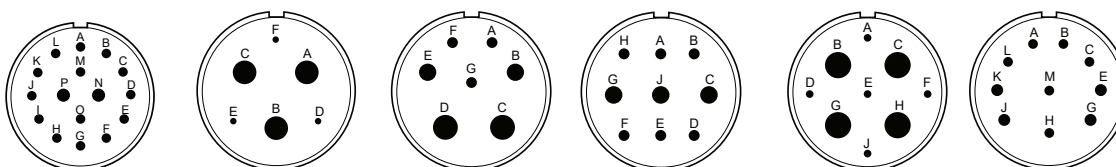
Shell Size - Arrangement	20-24	20-14	20-8	20-17	20-22	20-16
Contact QTY & Size	2 #16(A,C) 2 #8(B,D)	3 #12(C,D,E) 2 #8(A,B)	4 #16(B,C,E,F) 2 #8(A,D)	1 #16(F) 5 #12(A-E)	3 #16(B,D,F) 3 #8(A,C,E)	7 #16(A-G) 2 #12(H,I)
Service Rating	A	A	Inst.	A	A	A



Shell Size - Arrangement	20-18	22-6	22-4	22-12	22-13	22-5
Contact QTY & Size	6 #16(A,C,D,E,G,H) 3 #12(B,F,I)	1 #16(B) 2 #8(A,C)	2 #12(A,C) 2 #8(B,D)	3 #16(A,C,D) 2 #8(B,E)	1 #16(E) 4 #12(A,B,C,D)	4 #16(A,C,D,F) 2 #12(B,E)
Service Rating	A	D	A	D	A(A,B,C,D) / D(E)	D



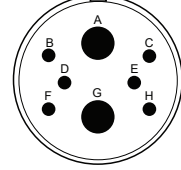
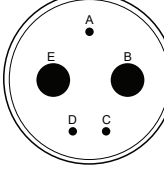
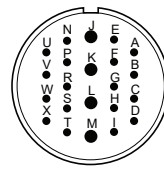
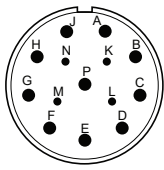
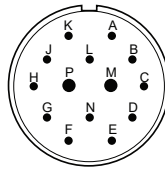
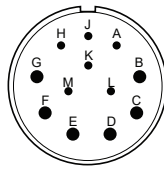
Shell Size - Arrangement	22-15	22-17	22-27	24-12	24-11	24-20
Contact QTY & Size	1 #16(D) 5 #12(A,B,C,E,F)	8 #16(A-D,F-J) 1 #12(E)	8 #16(A-H) 1 #8(I)	3 #12(B,D,E) 2 #4(A,C)	6 #12(A,B,C,G,H,I) 3 #8(D,E,F)	9 #16(A-D, G-L) 2 #12(E,F)
Service Rating	A(A,B,C,E,F) / E(D)	D(A) / A(others)	D(J) / A(others)	A	A	D



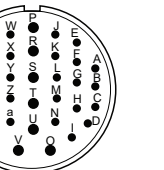
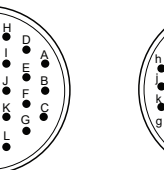
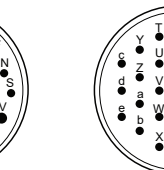
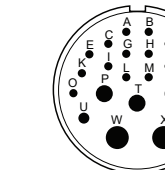
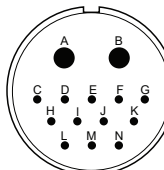
Shell Size - Arrangement	24-7	28-22	28-10	28-1	28A-16*	28-19
Contact QTY & Size	14 #16(A-M,O) 2 #12(P,N)	3 #16(D,E,F) 3 #4(A,B,C)	3 #12(A,F,G) 2 #8(B,E) 2 #4(C,D)	6 #12(A,B,D,E,F,H) 3 #8(C,J,G)	5 #16 (A,D,E,F,J) 4 #4 (B,C,G,H)	6 #16(A,B,C,H,L,M) 4 #12(E,G,J,K)
Service Rating	A	D	D(G) / A(others)	D(A,E,J) / A(others)	A	A(C,E,G,J,K,L) / B(H,M) / D(A,B)

Combo Contact Arrangements

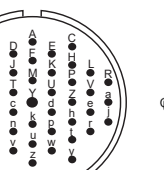
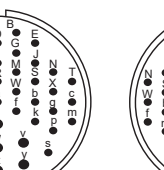
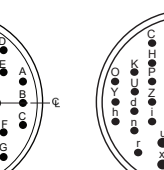
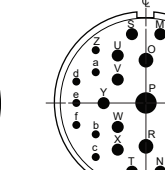
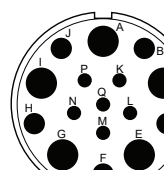
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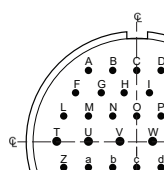
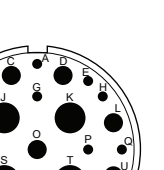
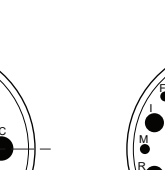
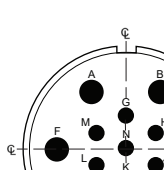
Shell Size - Arrangement	28-9	28-2	28-20	28-11	32-1	32-15
Contact QTY & Size	6 #16(A,H,J,K,M,L) 6 #12(B,C,D,E,F,G)	12 #16(A-L,N) 2 #12(M,P)	4 #16(K,L,M,N) 10 #12(A-J,P)	18 #16(A-I, N-X) 4 #12(J,K,L,M)	3 #12(A,C,D) 2 #0(B,E)	2 #0(A,G) 6 #12(B,C,D,E,F,H)
Service Rating	D	D	A	A	E(A) / D(B,C,D,E)	D



Shell Size - Arrangement	32-9	32-6	32-8	32-7	36-6
Contact QTY & Size	32-9 12 #16(C-N) 2 #4(A,B)	16 #16(A-O,S) 2 #12(U,V) 3 #8(P,R,T) 2 #4(W,X)	24 #16(A-L,T-Z,a-e) 6 #12(M,N,O,P,R,S)	28 #16(A-N,W-Z,a-k) 7 #12(O-V)	4 #4(B,C,E,F) 2 #0(A,D)
Service Rating	D	A	A	Inst.(A,B,h,j) / A(others)	A



Shell Size - Arrangement	36-14	36-9	36-7	36-8	36A66*
Contact QTY & Size	6 #16(K,L,M,N,P,Q) 5 #12(B,D,F,H,J) 5 #8(A,C,E,G,I)	14 #16(A-G,Z-f) 14 #12(H-N,S-Y) 2 #8(O,R) 1 #4(P)	40 #16(A-Z,a-s) 7 #12(t,u,v,w,x,y,z)	46 #16(A-X,Z,a-z) 1 #12(Y)	52 #16(A-c,h-AK) 4 #12(d,e,f,g)
Service Rating	D	A	A	A	A



Shell Size - Arrangement	40A33*	40-10	44-1*	48-5*
Contact QTY & Size	7 #8(G-N) 6 #4(A,B,C,D,E,F)	16 #16(A,B,E,F,G,H,M,N,P,Q) V,W,X,Y,b,c) 9 #8(C,D,I,L,O,R,U,Z,a) 4 #4(K,J,S,T)	36 #16(A-S,Z-t) 6 #12(T-Y)	90 #16(A-BL,BN-BT,BW,BX) 9 #12(BM,BU,BV,BY-CC,CE) 1 #8(CD)
Service Rating	A	A	D	A

*Not MS approved.

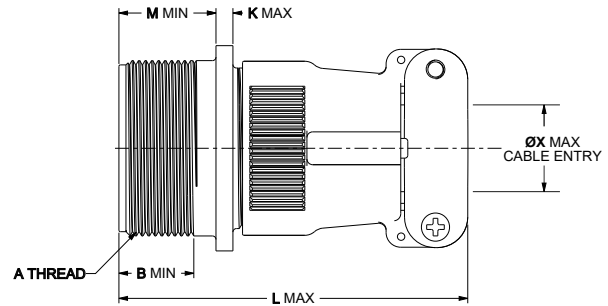
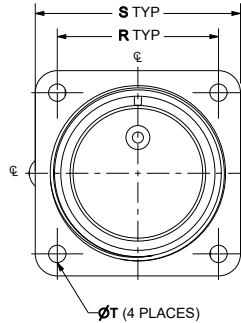
This document applies to North America manufactured 5015/CA Threaded products.
Dimensions shown in inches (mm). Specifications and dimensions subject to change.

Wall Mount Receptacle

Shell Style 3100	
Military Standard Part Number	ITT Part Number
MS3100E MS3100F*	CA3100E

MS3100F wall mounting receptacles are used to carry wires thru walls or bulkheads, or to provide a means of disconnection at a bulkhead.
MS3100F receptacles mate with 3106 and 3108 plugs.

*Use "F" Class for new designs

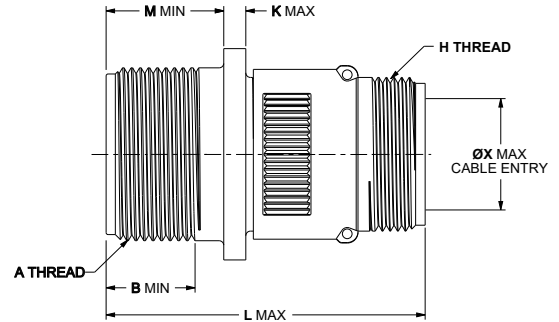
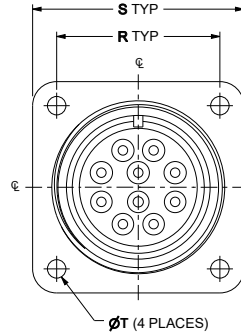
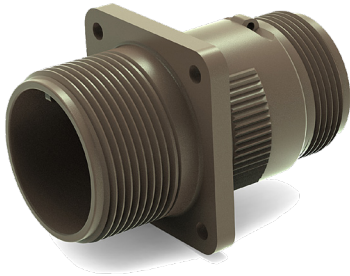


SHELL SIZE	B MIN	K MAX	M MIN	R TYP ± .005	S TYP ± .031	Ø T + .010 / - .005	A THREAD CLASS 2A	L MAX	Ø X MAX
8S	.375 (9.53)	.125 (3.18)	.562 (14.27)	.594 (15.09)	.875 (22.23)	.120 (3.05)	1/2-28 UNEF	2.250 (57.15)	.250 (6.35)
10S	.375 (9.53)	.125 (3.18)	.562 (14.27)	.719 (18.26)	1.000 (25.40)	.120 (3.05)	5/8-24 UNEF	2.250 (57.15)	.250 (6.35)
10SL	.375 (9.53)	.125 (3.18)	.562 (14.27)	.719 (18.26)	1.000 (25.40)	.120 (3.05)	5/8-24 UNEF	2.250 (57.15)	.312 (7.92)
12S	.375 (9.53)	.140 (3.56)	.562 (14.27)	.812 (20.62)	1.094 (27.79)	.120 (3.05)	3/4-20 UNEF	2.250 (57.15)	.312 (7.92)
12	.625 (15.88)	.146 (3.71)	.750 (19.05)	.812 (20.62)	1.094 (27.79)	.120 (3.05)	3/4-20 UNEF	2.625 (66.68)	.312 (7.92)
14S	.375 (9.53)	.140 (3.56)	.562 (14.27)	.906 (23.01)	1.188 (30.18)	.120 (3.05)	7/8-20 UNEF	2.250 (57.15)	.438 (11.13)
14	.625 (15.88)	.146 (3.71)	.750 (19.05)	.906 (23.01)	1.188 (30.18)	.120 (3.05)	7/8-20 UNEF	2.625 (66.68)	.438 (11.13)
16S	.375 (9.53)	.140 (3.56)	.562 (14.27)	.969 (24.61)	1.281 (32.54)	.120 (3.05)	1-20 UNEF	2.250 (57.15)	.562 (14.27)
16	.625 (15.88)	.146 (3.71)	.750 (19.05)	.969 (24.61)	1.281 (32.54)	.120 (3.05)	1-20 UNEF	2.625 (66.68)	.562 (14.27)
18	.625 (15.88)	.180 (4.57)	.750 (19.05)	1.062 (26.97)	1.375 (34.93)	.120 (3.05)	1-1/8-18 UNEF	2.688 (68.28)	.625 (15.88)
20	.625 (15.88)	.180 (4.57)	.750 (19.05)	1.156 (29.36)	1.500 (38.10)	.120 (3.05)	1-1/4-18 UNEF	2.750 (69.85)	.750 (19.05)
22	.625 (15.88)	.180 (4.57)	.750 (19.05)	1.250 (31.75)	1.625 (41.28)	.120 (3.05)	1-3/8-18 UNEF	2.750 (69.85)	.750 (19.05)
24	.625 (15.88)	.203 (5.16)	.812 (20.62)	1.375 (34.93)	1.750 (44.45)	.147 (3.73)	1-1/2-18 UNEF	2.969 (75.41)	.938 (23.83)
28	.625 (15.88)	.203 (5.16)	.812 (20.62)	1.562 (39.67)	2.000 (50.80)	.147 (3.73)	1-3/4-18 UNS	3.031 (76.99)	.938 (23.83)
32	.625 (15.88)	.203 (5.16)	.875 (22.23)	1.750 (44.45)	2.250 (57.15)	.173 (4.39)	2-18 UNS	3.031 (76.99)	1.250 (31.75)
36	.625 (15.88)	.203 (5.16)	.875 (22.23)	1.938 (49.23)	2.500 (63.50)	.173 (4.39)	2-1/4-16 UN	3.281 (84.34)	1.375 (34.93)
40	.625 (15.88)	.203 (5.16)	.875 (22.23)	2.188 (55.58)	2.750 (69.85)	.173 (4.39)	2-1/2-16 UN	3.500 (88.90)	1.625 (41.28)

Wall Mount Receptacle

Shell Style 3100
ITT Part Number
CA3100F

CA3100F designates a wall mounting receptacle with backshell for flex tubes or to be combined with a cable clamp. It mates with plugs CA3106 and CA3108.

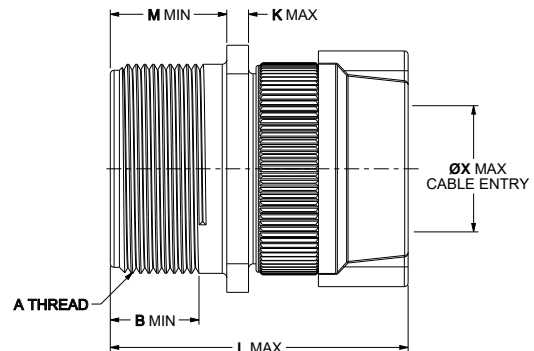
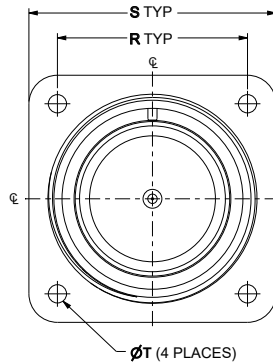
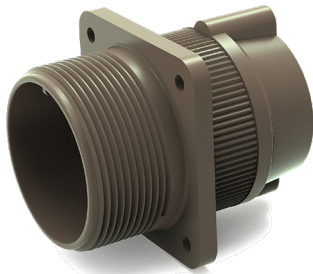


SHELL SIZE	B MIN	K MAX	M MIN	R TYP ± .005	S TYP ± .031	Ø T + .010 / - .005	A THREAD CLASS 2A	H THREAD CLASS 2A	L MAX	Ø X MAX
8S	.375 (9.53)	.125 (3.18)	.562 (14.27)	.594 (15.09)	.875 (22.23)	.120 (3.05)	1/2-28 UNEF	1/2-28 UNEF	1.750 (44.45)	.250 (6.35)
10S	.375 (9.53)	.125 (3.18)	.562 (14.27)	.719 (18.26)	1.000 (25.40)	.120 (3.05)	5/8-24 UNEF	1/2-28 UNEF	1.750 (44.45)	.250 (6.35)
10SL	.375 (9.53)	.125 (3.18)	.562 (14.27)	.719 (18.26)	1.000 (25.40)	.120 (3.05)	5/8-24 UNEF	5/8-24 NEF	1.750 (44.45)	.324 (8.23)
12S	.375 (9.53)	.140 (3.56)	.562 (14.27)	.812 (20.62)	1.094 (27.79)	.120 (3.05)	3/4-20 UNEF	5/8-24 NEF	1.750 (44.45)	.324 (8.23)
12	.625 (15.88)	.146 (3.71)	.750 (19.05)	.812 (20.62)	1.094 (27.79)	.120 (3.05)	3/4-20 UNEF	5/8-24 NEF	2.093 (53.16)	.324 (8.23)
14S	.375 (9.53)	.140 (3.56)	.562 (14.27)	.906 (23.01)	1.188 (30.18)	.120 (3.05)	7/8-20 UNEF	3/4-20 UNEF	1.750 (44.45)	.438 (11.13)
14	.625 (15.88)	.146 (3.71)	.750 (19.05)	.906 (23.01)	1.188 (30.18)	.120 (3.05)	7/8-20 UNEF	3/4-20 UNEF	2.093 (53.16)	.438 (11.13)
16S	.375 (9.53)	.140 (3.56)	.562 (14.27)	.969 (24.61)	1.281 (32.54)	.120 (3.05)	1-20 UNEF	7/8-20 UNEF	1.750 (44.45)	.562 (14.27)
16	.625 (15.88)	.146 (3.71)	.750 (19.05)	.969 (24.61)	1.281 (32.54)	.120 (3.05)	1-20 UNEF	7/8-20 UNEF	2.093 (53.16)	.562 (14.27)
18	.625 (15.88)	.180 (4.57)	.750 (19.05)	1.062 (26.97)	1.375 (34.93)	.120 (3.05)	1-1/8-18 UNEF	1-20 NEF	2.093 (53.16)	.656 (16.66)
20	.625 (15.88)	.180 (4.57)	.750 (19.05)	1.156 (29.36)	1.500 (38.10)	.120 (3.05)	1-1/4-18 UNEF	1 3/16-18 NEF	2.124 (53.95)	.781 (19.84)
22	.625 (15.88)	.180 (4.57)	.750 (19.05)	1.250 (31.75)	1.625 (41.28)	.120 (3.05)	1-3/8-18 UNEF	1 3/16-18 NEF	2.218 (56.34)	.781 (19.84)
24	.625 (15.88)	.203 (5.16)	.812 (20.62)	1.375 (34.93)	1.750 (44.45)	.147 (3.73)	1-1/2-18 UNEF	1 7/16-18 NEF	2.218 (56.34)	1.000 (25.4)
28	.625 (15.88)	.203 (5.16)	.812 (20.62)	1.562 (39.67)	2.000 (50.80)	.147 (3.73)	1-3/4-18 UNS	1 7/16-18 NEF	2.343 (59.51)	1.062 (26.97)
32	.625 (15.88)	.203 (5.16)	.875 (22.23)	1.750 (44.45)	2.250 (57.15)	.173 (4.39)	2-18 UNS	1 3/4-18 NS	2.406 (61.11)	1.281 (32.54)
36	.625 (15.88)	.203 (5.16)	.875 (22.23)	1.938 (49.23)	2.500 (63.50)	.173 (4.39)	2-1/4-16 UN	2-18 NS	2.469 (62.71)	1.406 (35.71)

Wall Mount Receptacle

Shell Style 3100	
Military Standard Part Number	ITT Part Number
MS3100R	CA3100R

The MS3100R features a shorter light weight endbell and mates with 3106 and 3108 plugs

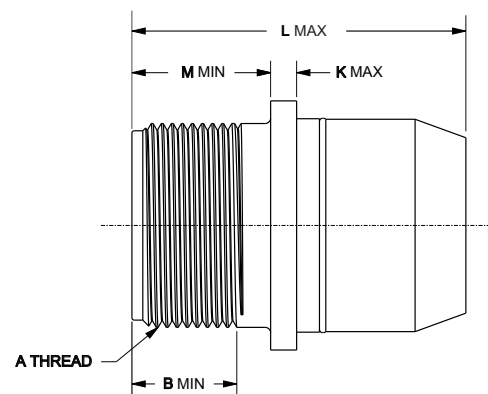
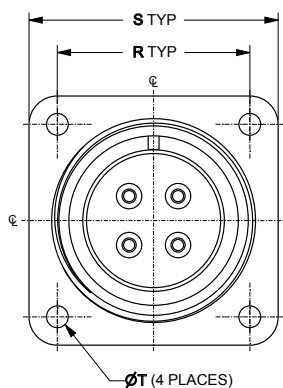
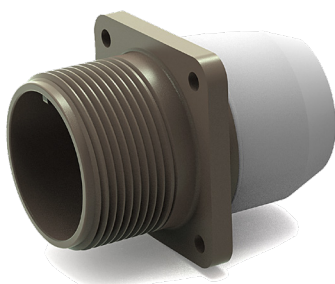


SHELL SIZE	B MIN	K MAX	M MIN	R TYP ± .005	S TYP ± .031	Ø T + .010 / - .005	A THREAD CLASS 2A	L MAX	Ø X MAX
8S	.375 (9.53)	.125 (3.18)	.562 (14.27)	.594 (15.09)	.875 (22.23)	.120 (3.05)	1/2-28 UNEF	1.838 (46.69)	.260 (6.60)
10S	.375 (9.53)	.125 (3.18)	.562 (14.27)	.719 (18.26)	1.000 (25.40)	.120 (3.05)	5/8-24 UNEF	1.838 (46.69)	.260 (6.60)
10SL	.375 (9.53)	.125 (3.18)	.562 (14.27)	.719 (18.26)	1.000 (25.40)	.120 (3.05)	5/8-24 UNEF	1.838 (46.69)	.388 (9.86)
12S	.375 (9.53)	.140 (3.56)	.562 (14.27)	.812 (20.62)	1.094 (27.79)	.120 (3.05)	3/4-20 UNEF	1.838 (46.69)	.413 (10.49)
12	.625 (15.88)	.146 (3.71)	.750 (19.05)	.812 (20.62)	1.094 (27.79)	.120 (3.05)	3/4-20 UNEF	2.181 (55.40)	.413 (10.49)
14S	.375 (9.53)	.140 (3.56)	.562 (14.27)	.906 (23.01)	1.188 (30.18)	.120 (3.05)	7/8-20 UNEF	1.838 (46.69)	.495 (12.57)
14	.625 (15.88)	.146 (3.71)	.750 (19.05)	.906 (23.01)	1.188 (30.18)	.120 (3.05)	7/8-20 UNEF	2.181 (55.40)	.495 (12.57)
16S	.375 (9.53)	.140 (3.56)	.562 (14.27)	.969 (24.61)	1.281 (32.54)	.120 (3.05)	1-20 UNEF	1.838 (46.69)	.614 (15.60)
16	.625 (15.88)	.146 (3.71)	.750 (19.05)	.969 (24.61)	1.281 (32.54)	.120 (3.05)	1-20 UNEF	2.181 (55.40)	.572 (14.53)
18	.625 (15.88)	.180 (4.57)	.750 (19.05)	1.062 (26.97)	1.375 (34.93)	.120 (3.05)	1-1/8-18 UNEF	2.281 (57.94)	.733 (18.62)
20	.625 (15.88)	.180 (4.57)	.750 (19.05)	1.156 (29.36)	1.500 (38.10)	.120 (3.05)	1-1/4-18 UNEF	2.281 (57.94)	.873 (22.17)
22	.625 (15.88)	.180 (4.57)	.750 (19.05)	1.250 (31.75)	1.625 (41.28)	.120 (3.05)	1-3/8-18 UNEF	2.281 (57.94)	.981 (24.92)
24	.625 (15.88)	.203 (5.16)	.812 (20.62)	1.375 (34.93)	1.750 (44.45)	.147 (3.73)	1-1/2-18 UNEF	2.281 (57.94)	1.093 (27.76)
28	.625 (15.88)	.203 (5.16)	.812 (20.62)	1.562 (39.67)	2.000 (50.80)	.147 (3.73)	1-3/4-18 UNS	2.281 (57.94)	1.253 (31.83)
32	.625 (15.88)	.203 (5.16)	.875 (22.23)	1.750 (44.45)	2.250 (57.15)	.173 (4.39)	2-18 UNS	2.322 (58.98)	1.260 (32.00)
36	.625 (15.88)	.203 (5.16)	.875 (22.23)	1.938 (49.23)	2.500 (63.50)	.173 (4.39)	2-1/4-16 UN	2.322 (58.98)	1.385 (35.18)
40	.625 (15.88)	.203 (5.16)	.875 (22.23)	2.188 (55.58)	2.750 (69.85)	.173 (4.39)	2-1/2-16 UN	2.427 (61.65)	1.890 (48.00)

Wall Mount Receptacle - Potting cup

Shell Style 3100	
Military Standard Part Number	ITT Part Number
MS3103	CA3100ER

The CA3100ER (MS3103) is supplied with a resilient insulator and nylon potting cup with a threaded attachment ring. This receptacle mates with 3106 and 3108 plugs.

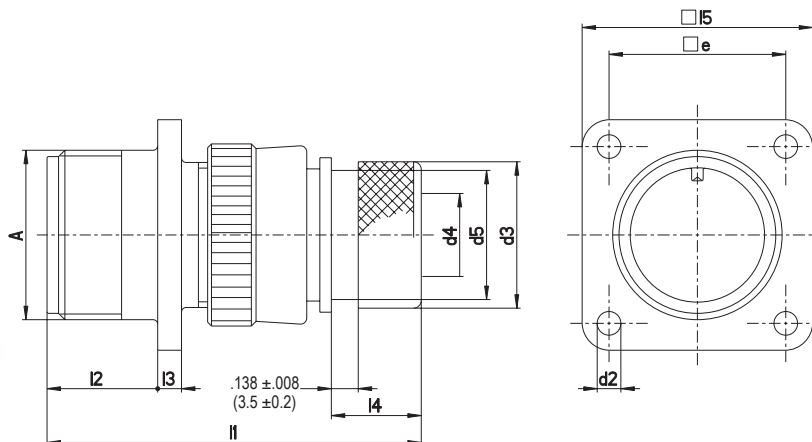
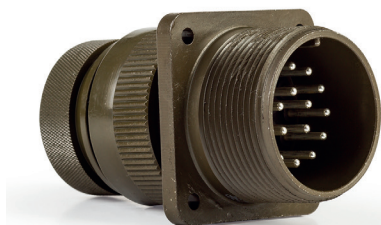


SHELL SIZE	B MIN	K MAX	M MIN	R TYP ± .005	S TYP ± .031	Ø T + .010 / - .005	A THREAD CLASS 2A	L MAX
8S	.375 (9.53)	.125 (3.18)	.562 (14.27)	.594 (15.09)	.875 (22.23)	.120 (3.05)	1/2-28 UNEF	1.452 (36.88)
10S	.375 (9.53)	.125 (3.18)	.562 (14.27)	.719 (18.26)	1.000 (25.40)	.120 (3.05)	5/8-24 UNEF	1.452 (36.88)
10SL	.375 (9.53)	.125 (3.18)	.562 (14.27)	.719 (18.26)	1.000 (25.40)	.120 (3.05)	5/8-24 UNEF	1.452 (36.88)
12S	.375 (9.53)	.140 (3.56)	.562 (14.27)	.812 (20.62)	1.094 (27.79)	.120 (3.05)	3/4-20 UNEF	1.452 (36.88)
12	.625 (15.88)	.146 (3.71)	.750 (19.05)	.812 (20.62)	1.094 (27.79)	.120 (3.05)	3/4-20 UNEF	1.890 (48.01)
14S	.375 (9.53)	.140 (3.56)	.562 (14.27)	.906 (23.01)	1.188 (30.18)	.120 (3.05)	7/8-20 UNEF	1.452 (36.88)
14	.625 (15.88)	.146 (3.71)	.750 (19.05)	.906 (23.01)	1.188 (30.18)	.120 (3.05)	7/8-20 UNEF	1.890 (48.01)
16S	.375 (9.53)	.140 (3.56)	.562 (14.27)	.969 (24.61)	1.281 (32.54)	.120 (3.05)	1-20 UNEF	1.452 (36.88)
16	.625 (15.88)	.146 (3.71)	.750 (19.05)	.969 (24.61)	1.281 (32.54)	.120 (3.05)	1-20 UNEF	1.890 (48.01)
18	.625 (15.88)	.180 (4.57)	.750 (19.05)	1.062 (26.97)	1.375 (34.93)	.120 (3.05)	1-1/8-18 UNEF	1.890 (48.01)
20	.625 (15.88)	.180 (4.57)	.750 (19.05)	1.156 (29.36)	1.500 (38.10)	.120 (3.05)	1-1/4-18 UNEF	2.015 (51.18)
22	.625 (15.88)	.180 (4.57)	.750 (19.05)	1.250 (31.75)	1.625 (41.28)	.120 (3.05)	1-3/8-18 UNEF	2.015 (51.18)
24	.625 (15.88)	.203 (5.16)	.812 (20.62)	1.375 (34.93)	1.750 (44.45)	.147 (3.73)	1-1/2-18 UNEF	2.015 (51.18)
28	.625 (15.88)	.203 (5.16)	.812 (20.62)	1.562 (39.67)	2.000 (50.80)	.147 (3.73)	1-3/4-18 UNS	2.015 (51.18)
32	.625 (15.88)	.203 (5.16)	.875 (22.23)	1.750 (44.45)	2.250 (57.15)	.173 (4.39)	2-18 UNS	2.015 (51.18)
36	.625 (15.88)	.203 (5.16)	.875 (22.23)	1.938 (49.23)	2.500 (63.50)	.173 (4.39)	2-1/4-16 UN	2.015 (51.18)

Wall Mount Receptacle

Shell Style 3100
ITT Part Number
CA3100E...DN

CA3100E...DN designates a wall mount receptacle with backshell for heat-shrinkable boots. It mates with plugs CA3106 and CA3108.

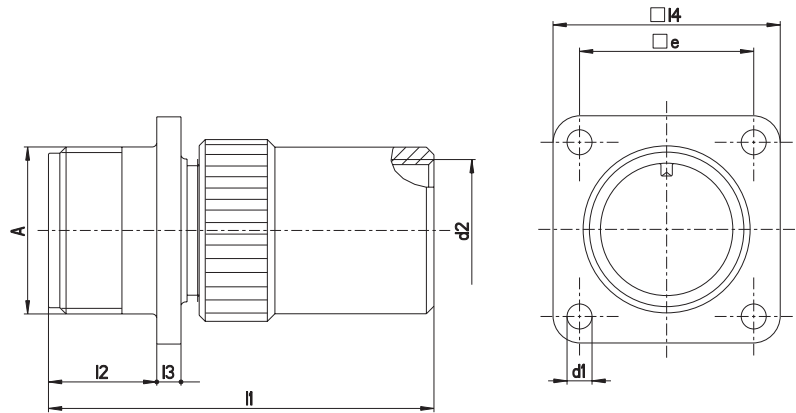
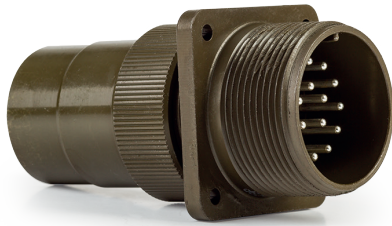


SHELL SIZE	A THREAD CLASS 2A	d2 +.008/-0.004 (+0.2/-0.1)	d3 ±.008 (±0.2)	d4 MAX CABLE DIA	d5 MAX	I1 MAX	I2 +.016 (+0.4)	I3 ±.012 (±0.3)	I4 ±.020 (±0.5)	I5 ±.012 (±0.3)	e ±.004 (±0.1)
10SL	5/8-24 UNEF	.122 (3.1)	.610 (15.5)	.303 (7.7)	.524 (13.3)	1.929 (49.0)	.559 (14.2)	.110 (2.8)	.460 (11.7)	1.000 (25.4)	.717 (18.2)
12S	3/4-20 UNEF	.122 (3.1)	.610 (15.5)	.311 (7.9)	.524 (13.3)	1.929 (49.0)	.559 (14.2)	.126 (3.2)	.460 (11.7)	1.102 (28.0)	.811 (20.6)
14S	7/8-20 UNEF	.122 (3.1)	.752 (19.1)	.417 (10.6)	.669 (17.0)	1.929 (49.0)	.559 (14.2)	.126 (3.2)	.460 (11.7)	1.181 (30.0)	.906 (23.0)
16S	1-20 UNEF	.122 (3.1)	.941 (23.9)	.531 (13.5)	.862 (21.9)	1.929 (49.0)	.559 (14.2)	.126 (3.2)	.460 (11.7)	1.280 (32.5)	.969 (24.6)
16	1-20 UNEF	.122 (3.1)	.941 (23.9)	.531 (13.5)	.862 (21.9)	2.283 (58.0)	.748 (19.0)	.126 (3.2)	.453 (11.5)	1.280 (32.5)	.969 (24.6)
18	1-1/8-18 UNEF	.122 (3.1)	.941 (23.9)	.575 (14.6)	.862 (21.9)	2.283 (58.0)	.748 (19.0)	.157 (4.0)	.453 (11.5)	1.378 (35.0)	1.063 (27.0)
20	1-1/4-18 UNEF	.122 (3.1)	1.165 (29.6)	.736 (18.7)	1.031 (26.2)	2.362 (60.0)	.748 (19.0)	.157 (4.0)	.500 (12.7)	1.378 (35.0)	1.063 (27.0)
22	1-3/8-18 UNEF	.122 (3.1)	1.165 (29.6)	.819 (20.8)	1.031 (26.2)	2.362 (60.0)	.748 (19.0)	.157 (4.0)	.500 (12.7)	1.614 (41.0)	1.252 (31.8)
24	1-1/2-18 UNEF	.146 (3.7)	1.488 (37.8)	.968 (24.6)	1.358 (34.5)	2.480 (63.0)	.811 (20.6)	.157 (4.0)	.500 (12.7)	1.752 (44.5)	1.374 (34.9)
28	1-3/4-18 UNS	.146 (3.7)	1.488 (37.8)	1.063 (27.0)	1.358 (34.5)	2.480 (63.0)	.811 (20.6)	.157 (4.0)	.500 (12.7)	2.000 (50.8)	1.563 (39.7)
32	2-18 UNS	.173 (4.4)	1.882 (47.8)	1.311 (33.3)	1.717 (43.6)	2.638 (67.0)	.874 (22.2)	.157 (4.0)	.598 (15.2)	2.244 (57.0)	1.752 (44.5)
36	2-1/4-16 UN	.173 (4.4)	1.882 (47.8)	1.516 (38.5)	1.717 (43.6)	2.677 (68.0)	.874 (22.2)	.157 (4.0)	.598 (15.2)	2.500 (63.5)	1.937 (49.2)

Wall Mount Receptacle

Shell Style 3100
ITT Part Number
CA3100PG

CA3100PG designates a wall mount receptacle for usage with PG. It mates with plugs CA3106 and CA3108. The cable gland is not content of the delivery.

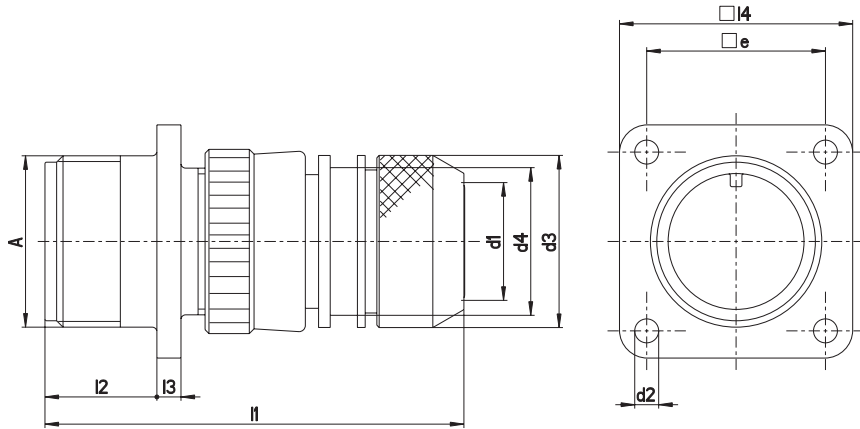
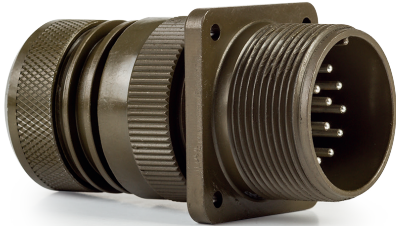


SHELL SIZE	A THREAD CLASS 2A	d1 +.008/-0.004 (+0.2/-0.1)	d2		I1 MAX	I2 +.016 (+0.4)	I3 ±.012 (±0.3)	I4 ±.012 (±0.3)	e ±.004 (±0.1)
			PG-Thread	Metric					
10SL	5/8-24 UNEF	.122 (3.1)	PG9	M16 × 1,5	2.047 (52.0)	.559 (14.2)	.110 (2.8)	1.000 (25.4)	.717 (18.2)
12S	3/4-20 UNEF	.122 (3.1)	PG9	M16 × 1,5	2.047 (52.0)	.559 (14.2)	.126 (3.2)	1.102 (28.0)	.811 (20.6)
14S	7/8-20 UNEF	.122 (3.1)	PG11	M20 × 1,5	2.047 (52.0)	.559 (14.2)	.126 (3.2)	1.181 (30.0)	.906 (23.0)
16S	1-20 UNEF	.122 (3.1)	PG13,5	M20 × 1,5	2.126 (54.0)	.559 (14.2)	.126 (3.2)	1.280 (32.5)	.969 (24.6)
16	1-20 UNEF	.122 (3.1)	PG13,5	M20 × 1,5	2.520 (64.0)	.748 (19.0)	.126 (3.2)	1.280 (32.5)	.969 (24.6)
18	1-1/8-18 UNEF	.122 (3.1)	PG13,5	M25 × 1,5	2.717 (69.0)	.748 (19.0)	.157 (4.0)	1.378 (35.0)	1.063 (27.0)
20	1-1/4-18 UNEF	.122 (3.1)	PG16	M25 × 1,5	2.756 (70.0)	.748 (19.0)	.157 (4.0)	1.496 (38.0)	1.157 (29.4)
22	1-3/8-18 UNEF	.122 (3.1)	PG16	M32 × 1,5	2.874 (73.0)	.748 (19.0)	.157 (4.0)	1.614 (41.0)	1.252 (31.8)
24	1-1/2-18 UNEF	.146 (3.7)	PG16	M32 × 1,5	2.913 (74.0)	.811 (20.6)	.157 (4.0)	1.752 (44.5)	1.374 (34.9)
28	1-3/4-18 UNS	.146 (3.7)	PG21	M32 × 1,5	2.913 (74.0)	.811 (20.6)	.157 (4.0)	2.000 (50.8)	1.563 (39.7)
32	2-18 UNS	.173 (4.4)	PG29	M40 × 1,5	2.992 (76.0)	.874 (22.2)	.157 (4.0)	2.244 (57.0)	1.752 (44.5)
36	2-1/4-16 UN	.173 (4.4)	PG29	M40 × 1,5	3.425 (87.0)	.874 (22.2)	.157 (4.0)	2.500 (63.5)	1.937 (49.2)

Wall Mount Receptacle

Shell Style 3100
ITT Part Number
CA3100E...-15

CA3100E...-13/-15 designates a shielded wall mount receptacle with backshell to accommodate cable braids and heat-shrinkable boots. For Mod. codes please see page 6. It mates with plugs CA3106 and CA3108

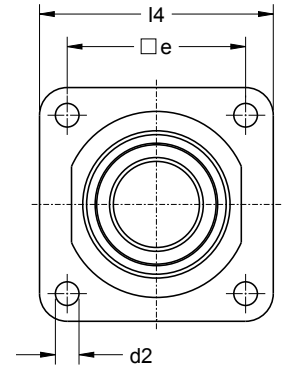
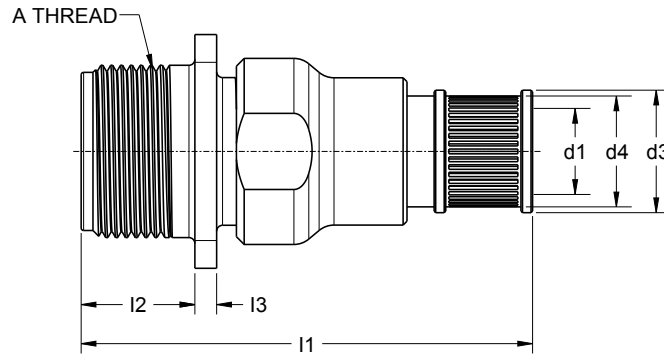
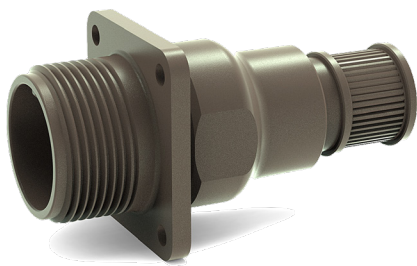


SHELL SIZE	A THREAD CLASS 2A	d1 MAX CABLE DIA	d2 +.008/-0.004 (+0.2/-0.1)	d3 ±.020 (±0.5)	d4 MAX	I1 MAX	I2 +.016 (+0.4)	I3 ±.012 (±0.3)	I4 ±.020 (±0.5)	e ±.004 (±0.1)
10SL	5/8-24 UNEF	.303 (7.7)	.122 (3.1)	.728 (18.5)	.642 (16.3)	2.165 (55.0)	.559 (14.2)	.110 (2.8)	1.000 (25.4)	.717 (18.2)
12S	3/4-20 UNEF	.311 (7.9)	.122 (3.1)	.787 (20.0)	.669 (17.0)	2.165 (55.0)	.559 (14.2)	.126 (3.2)	1.102 (28.0)	.811 (20.6)
14S	7/8-20 UNEF	.417 (10.6)	.122 (3.1)	.866 (22.0)	.787 (20.0)	2.283 (58.0)	.559 (14.2)	.126 (3.2)	1.181 (30.0)	.906 (23.0)
16S	1-20 UNEF	.531 (13.5)	.122 (3.1)	.984 (25.0)	.906 (23.0)	2.756 (70.0)	.559 (14.2)	.126 (3.2)	1.280 (32.5)	.969 (24.6)
16	1-20 UNEF	.531 (13.5)	.122 (3.1)	.984 (25.0)	.906 (23.0)	2.756 (70.0)	.748 (19.0)	.126 (3.2)	1.280 (32.5)	.969 (24.6)
18	1-1/8-18 UNEF	.575 (14.6)	.122 (3.1)	1.102 (28.0)	.965 (24.5)	2.756 (70.0)	.748 (19.0)	.157 (4.0)	1.378 (35.0)	1.063 (27.0)
20	1-1/4-18 UNEF	.728 (18.5)	.122 (3.1)	1.260 (32.0)	1.122 (28.5)	2.756 (70.0)	.748 (19.0)	.157 (4.0)	1.496 (38.0)	1.063 (27.0)
22	1-3/8-18 UNEF	.819 (20.8)	.122 (3.1)	1.339 (34.0)	1.201 (30.5)	2.756 (70.0)	.748 (19.0)	.157 (4.0)	1.614 (41.0)	1.252 (31.8)
24	1-1/2-18 UNEF	.968 (24.6)	.146 (3.7)	1.496 (38.0)	1.358 (34.5)	2.756 (70.0)	.811 (20.6)	.157 (4.0)	1.752 (44.5)	1.374 (34.9)
28	1-3/4-18 UNS	1.063 (27.0)	.146 (3.7)	1.614 (41.0)	1.476 (37.5)	2.756 (70.0)	.811 (20.6)	.157 (4.0)	2.000 (50.8)	1.563 (39.7)
32	2-18 UNS	1.311 (33.3)	.173 (4.4)	1.890 (48.0)	1.732 (44.0)	2.953 (75.0)	.874 (22.2)	.157 (4.0)	2.244 (57.0)	1.752 (44.5)
36	2-1/4-16 UN	1.516 (38.5)	.173 (4.4)	2.165 (55.0)	2.010 (51.0)	3.346 (85.0)	.874 (22.2)	.157 (4.0)	2.500 (63.5)	1.937 (49.2)

Wall Mount Receptacle

Shell Style 3100
ITT Part Number
CA3100DT

Shielded receptacle with banding adapter for shielding braid and heat shrink boots. Supplied with grommet seal and ferrule for environmental sealing IP67.



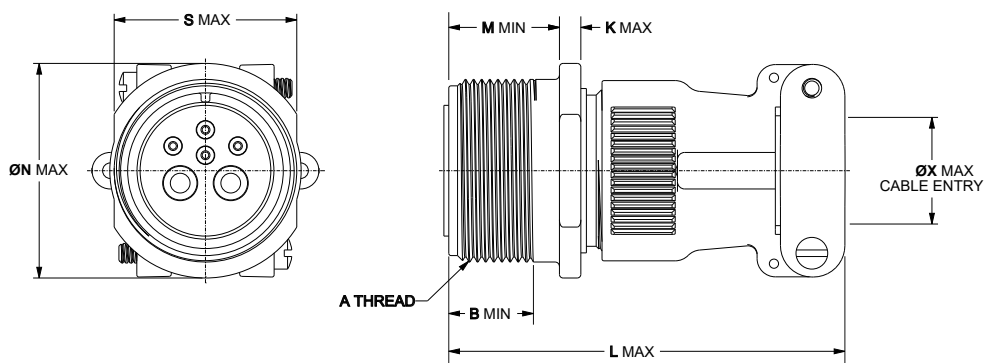
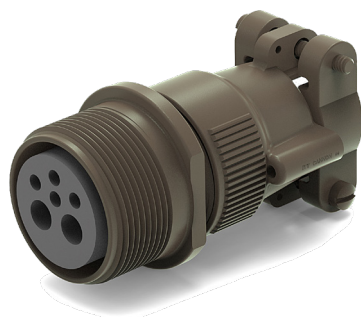
SHELL SIZE	A THREAD CLASS 2A	d2 +.008/-0.004 (+0.2/-0.1)	d1 MAX CABLE DIA	d4 MAX	d3 ±.010 (±0.25)	I1 MAX	I2 +.016 (+0.4)	I3 ±.012 (±0.3)	I4 ±.020 (±0.5)	e ±.004 (±0.1)
10SL	5/8-24 UNEF	.122 (3.1)	.379 (9.6)	.505 (12.8)	.563 (14.3)	2.300 (58.4)	.559 (14.2)	.110 (2.8)	1.000 (25.4)	.717 (18.2)
14S	7/8-20 UNEF	.122 (3.1)	.442 (11.2)	.567 (14.4)	.622 (15.8)	2.302 (58.5)	.559 (14.2)	.126 (3.2)	1.181 (30.0)	.906 (23.0)
16	1-20 UNEF	.122 (3.1)	.442 (11.2)	.567 (14.4)	.622 (15.8)	2.637 (67.0)	.748 (19.0)	.126 (3.2)	1.280 (32.5)	.969 (24.6)
18	1-1/8-18 UNEF	.122 (3.1)	.631 (16.0)	.757 (19.2)	.811 (20.6)	2.751 (69.9)	.748 (19.0)	.157 (4.0)	1.378 (35.0)	1.063 (27.0)
20	1-1/4-18 UNEF	.122 (3.1)	.631 (16.0)	.757 (19.2)	.811 (20.6)	2.799 (71.1)	.748 (19.0)	.157 (4.0)	1.496 (38.0)	1.063 (27.0)
22	1-3/8-18 UNEF	.122 (3.1)	.816 (20.7)	.942 (23.9)	1.000 (25.4)	2.691 (68.4)	.748 (19.0)	.157 (4.0)	1.614 (41.0)	1.252 (31.8)
24	1-1/2-18 UNEF	.146 (3.7)	.816 (20.7)	.942 (23.9)	1.000 (25.4)	2.795 (71.0)	.811 (20.6)	.157 (4.0)	1.752 (44.5)	1.374 (34.9)
28	1-3/4-18 UNS	.146 (3.7)	.879 (22.3)	1.005 (25.5)	1.063 (27.0)	2.849 (72.4)	.811 (20.6)	.157 (4.0)	2.000 (50.8)	1.563 (39.7)

In-Line Receptacle

Shell Style 3101	
Military Standard Part Number	ITT Part Number
MS3101E MS3101F*	CA3101E

MS3101F in-Line receptacles are used for cable extension requirements, where mounting provisions are unnecessary. MS3101F receptacle mate with 3106, and 3108 plugs.

*Use "F" Class for new designs

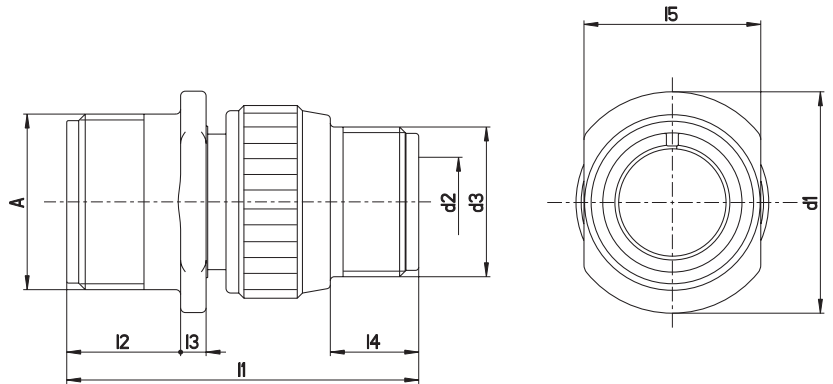


SHELL SIZE	B MIN	K MAX	M MIN	Ø N MAX	S MAX	A THREAD CLASS 2A	L MAX	Ø X MAX
8S	.375 (9.53)	.125 (3.18)	.562 (14.27)	.844 (21.44)	.515 (13.08)	1/2-28 UNEF	2.250 (57.15)	.250 (6.35)
10S	.375 (9.53)	.125 (3.18)	.562 (14.27)	.969 (24.61)	.640 (16.26)	5/8-24 UNEF	2.250 (57.15)	.250 (6.35)
10SL	.375 (9.53)	.125 (3.18)	.562 (14.27)	1.062 (26.97)	.640 (16.26)	5/8-24 UNEF	2.250 (57.15)	.312 (7.92)
12S	.375 (9.53)	.140 (3.56)	.562 (14.27)	1.062 (26.97)	.765 (19.43)	3/4-20 UNEF	2.250 (57.15)	.312 (7.92)
12	.625 (15.88)	.146 (3.71)	.750 (19.05)	1.062 (26.97)	.765 (19.43)	3/4-20 UNEF	2.625 (66.68)	.312 (7.92)
14S	.375 (9.53)	.140 (3.56)	.562 (14.27)	1.156 (29.36)	.890 (22.61)	7/8-20 UNEF	2.250 (57.15)	.438 (11.13)
14	.625 (15.88)	.146 (3.71)	.750 (19.05)	1.156 (29.36)	.890 (22.61)	7/8-20 UNEF	2.625 (66.68)	.438 (11.13)
16S	.375 (9.53)	.140 (3.56)	.562 (14.27)	1.281 (32.54)	1.015 (25.78)	1-20 UNEF	2.250 (57.15)	.562 (14.27)
16	.625 (15.88)	.146 (3.71)	.750 (19.05)	1.281 (32.54)	1.015 (25.78)	1-20 UNEF	2.625 (66.68)	.562 (14.27)
18	.625 (15.88)	.180 (4.57)	.750 (19.05)	1.344 (34.14)	1.140 (28.96)	1-1/8-18 UNEF	2.688 (68.28)	.625 (15.88)
20	.625 (15.88)	.180 (4.57)	.750 (19.05)	1.500 (38.10)	1.265 (32.13)	1-1/4-18 UNEF	2.750 (69.85)	.750 (19.05)
22	.625 (15.88)	.180 (4.57)	.750 (19.05)	1.625 (41.28)	1.390 (35.31)	1-3/8-18 UNEF	2.750 (69.85)	.750 (19.05)
24	.625 (15.88)	.203 (5.16)	.812 (20.62)	1.750 (44.45)	1.515 (38.48)	1-1/2-18 UNEF	2.969 (75.41)	.938 (23.83)
28	.625 (15.88)	.203 (5.16)	.812 (20.62)	2.000 (50.80)	1.765 (44.83)	1-3/4-18 UNS	3.031 (76.99)	.938 (23.83)
32	.625 (15.88)	.203 (5.16)	.875 (22.23)	2.250 (57.15)	2.015 (51.18)	2-18 UNS	3.031 (76.99)	1.250 (31.75)
36	.625 (15.88)	.203 (5.16)	.875 (22.23)	2.500 (63.50)	2.270 (57.66)	2-1/4-16 UN	3.281 (84.34)	1.375 (34.93)
40	.625 (15.88)	.203 (5.16)	.875 (22.23)	2.728 (69.29)	2.510 (63.75)	2-1/2-16 UN	3.685 (93.60)	1.625 (41.28)

In-Line Receptacle

Shell Style 3101
ITT Part Number
CA3101F

CA3101F In-Line receptacles are used for flex tub or to be combined with a cable clamp. It mates with plugs CA3106 and CA3108. Utilized to realize a cable to cable connection. If crimp version is required please order CA3101F...F80

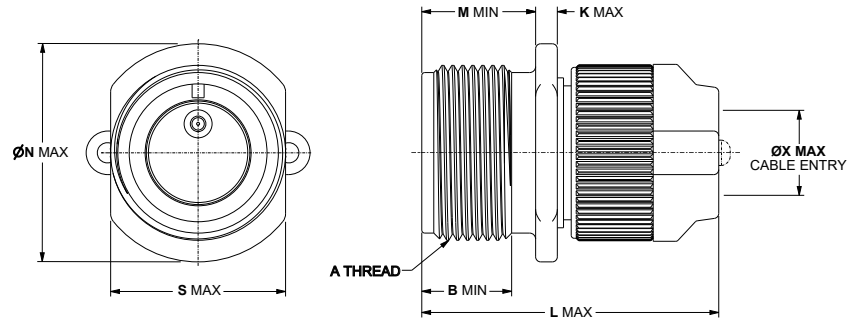


SHELL SIZE	A THREAD CLASS 2A	d1 MAX	d2 MAX CABLE DIA	d3 THREAD CLASS 2A	I1 MAX	I2 +.016 (+0.4)	I3 ±.012 (±0.3)	I4 MIN	I5 ±.008 (±0.2)
10SL	5/8-24 UNEF	.858 (21.8)	.323 (8.2)	5/8-24 UNEF	1.772 (45.0)	.559 (14.2)	.110 (2.8)	.374 (9.5)	.638 (16.2)
12S	3/4-20 UNEF	.984 (25.0)	.323 (8.2)	5/8-24 UNEF	1.772 (45.0)	.559 (14.2)	.126 (3.2)	.374 (9.5)	.764 (19.4)
14S	7/8-20 UNEF	1.110 (28.2)	.437 (11.1)	3/4-20 UNEF	1.772 (45.0)	.559 (14.2)	.126 (3.2)	.374 (9.5)	.886 (22.5)
16S	1-20 UNEF	1.236 (31.4)	.563 (14.3)	7/8-20 UNEF	1.772 (45.0)	.559 (14.2)	.126 (3.2)	.374 (9.5)	1.012 (25.7)
16	1-20 UNEF	1.236 (31.4)	.563 (14.3)	7/8-20 UNEF	2.126 (54.0)	.559 (14.2)	.126 (3.2)	.374 (9.5)	1.012 (25.7)
18	1-1/8-18 UNEF	1.358 (34.5)	.657 (16.7)	1-20 UNEF	2.126 (54.0)	.748 (19.0)	.157 (4.0)	.374 (9.5)	1.138 (28.9)
20	1-1/4-18 UNEF	1.469 (37.3)	.779 (19.8)	1-3/16-18 UNEF	2.165 (55.0)	.748 (19.0)	.157 (4.0)	.374 (9.5)	1.263 (32.1)
22	1-3/8-18 UNEF	1.610 (40.9)	.779 (19.8)	1-3/16-18 UNEF	2.283 (58.0)	.811 (20.6)	.157 (4.0)	.374 (9.5)	1.386 (35.2)
24	1-1/2-18 UNEF	1.724 (43.8)	1.000 (25.4)	1-7/16-18 UNEF	2.323 (59.0)	.811 (20.6)	.157 (4.0)	.374 (9.5)	1.512 (38.4)
28	1-3/4-18 UNS	1.984 (50.4)	1.063 (27.0)	1-7/16-18 UNEF	2.362 (60.0)	.811 (20.6)	.157 (4.0)	.374 (9.5)	1.764 (44.8)
32	2-18 UNS	2.236 (56.8)	1.280 (32.5)	1-3/4-18 UNS	2.441 (62.0)	.874 (22.2)	.157 (4.0)	.433 (11.0)	2.012 (51.1)
36	2-1/4-16 UN	2.484 (63.1)	1.405 (35.7)	2-18 UNS	2.520 (64.0)	.874 (22.2)	.157 (4.0)	.465 (11.8)	2.264 (57.5)

In-Line Receptacle

Shell Style 3101	
Military Standard Part Number	ITT Part Number
MS3101R	CA3101R

The MS3101R In-Line receptacle features a shorter light weight endbell and mates with 3106, and 3108 plugs.

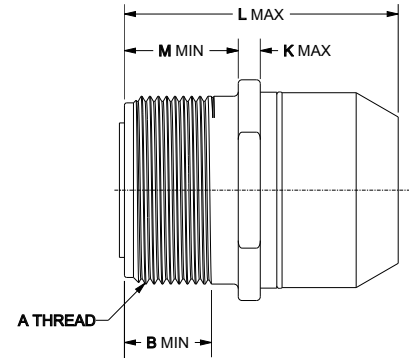
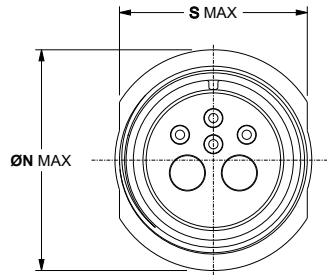
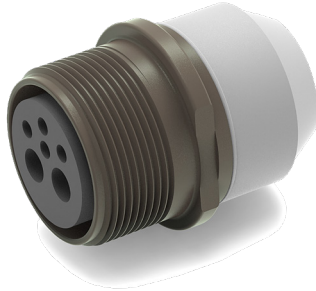


SHELL SIZE	B MIN	K MAX	M MIN	Ø N MAX	S MAX	A THREAD CLASS 2A	L MAX	Ø X MAX
8S	.375 (9.53)	.125 (3.18)	.562 (14.27)	.844 (21.44)	.515 (13.08)	1/2-28 UNEF	1.515 (38.48)	.260 (6.60)
10S	.375 (9.53)	.125 (3.18)	.562 (14.27)	.969 (24.61)	.640 (16.26)	5/8-24 UNEF	1.530 (38.86)	.260 (6.60)
10SL	.375 (9.53)	.125 (3.18)	.562 (14.27)	1.062 (26.97)	.640 (16.26)	5/8-24 UNEF	1.520 (38.61)	.388 (9.86)
12S	.375 (9.53)	.140 (3.56)	.562 (14.27)	1.062 (26.97)	.765 (19.43)	3/4-20 UNEF	1.542 (39.17)	.413 (10.49)
12	.625 (15.88)	.146 (3.71)	.750 (19.05)	1.062 (26.97)	.765 (19.43)	3/4-20 UNEF	1.896 (48.16)	.413 (10.49)
14S	.375 (9.53)	.140 (3.56)	.562 (14.27)	1.156 (29.36)	.890 (22.61)	7/8-20 UNEF	1.518 (38.56)	.495 (12.57)
14	.625 (15.88)	.146 (3.71)	.750 (19.05)	1.156 (29.36)	.890 (22.61)	7/8-20 UNEF	1.872 (47.55)	.495 (12.57)
16S	.375 (9.53)	.140 (3.56)	.562 (14.27)	1.281 (32.54)	1.015 (25.78)	1-20 UNEF	1.510 (38.35)	.614 (15.60)
16	.625 (15.88)	.146 (3.71)	.750 (19.05)	1.281 (32.54)	1.015 (25.78)	1-20 UNEF	1.882 (47.80)	.572 (14.53)
18	.625 (15.88)	.180 (4.57)	.750 (19.05)	1.344 (34.14)	1.140 (28.96)	1-1/8-18 UNEF	1.992 (50.60)	.733 (18.62)
20	.625 (15.88)	.180 (4.57)	.750 (19.05)	1.500 (38.10)	1.265 (32.13)	1-1/4-18 UNEF	2.011 (51.08)	.873 (22.17)
22	.625 (15.88)	.180 (4.57)	.750 (19.05)	1.625 (41.28)	1.390 (35.31)	1-3/8-18 UNEF	1.978 (50.24)	.981 (24.92)
24	.625 (15.88)	.203 (5.16)	.812 (20.62)	1.750 (44.45)	1.515 (38.48)	1-1/2-18 UNEF	1.991 (50.57)	1.093 (27.76)
28	.625 (15.88)	.203 (5.16)	.812 (20.62)	2.000 (50.80)	1.765 (44.83)	1-3/4-18 UNS	1.991 (50.57)	1.253 (31.83)
32	.625 (15.88)	.203 (5.16)	.875 (22.23)	2.250 (57.15)	2.015 (51.18)	2-18 UNS	1.999 (50.77)	1.260 (32.00)
36	.625 (15.88)	.203 (5.16)	.875 (22.23)	2.500 (63.50)	2.270 (57.66)	2-1/4-16 UN	1.998 (50.75)	1.385 (35.18)
40	.625 (15.88)	.203 (5.16)	.875 (22.23)	2.728 (69.29)	2.510 (63.75)	2-1/2-16 UN	2.427 (61.65)	1.890 (48.00)

In-Line Receptacle - Potting cup

Shell Style 3101
ITT Part Number
CA3101ER

The CA3101ER In-Line receptacle is supplied with a resilient insulator and nylon potting cup with a threaded attachment ring. This receptacle mates with 3106 and 3108 plugs.

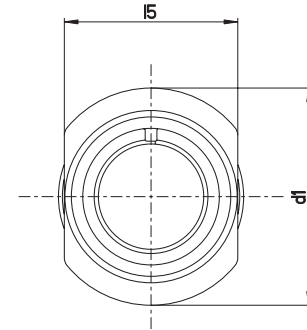
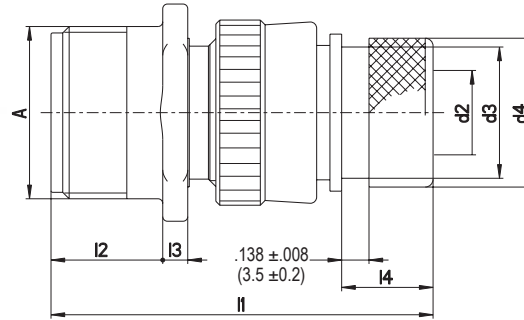
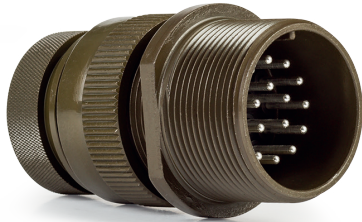


SHELL SIZE	B MIN	K MAX	M MIN	Ø N MAX	S MAX	A THREAD CLASS 2A	L MAX Alvin/review
8S	.375 (9.53)	.125 (3.18)	.562 (14.27)	.844 (21.44)	.515 (13.08)	1/2-28 UNEF	1.469 (37.31)
10S	.375 (9.53)	.125 (3.18)	.562 (14.27)	.969 (24.61)	.640 (16.26)	5/8-24 UNEF	1.469 (37.31)
10SL	.375 (9.53)	.125 (3.18)	.562 (14.27)	1.062 (26.97)	.640 (16.26)	5/8-24 UNEF	1.469 (37.31)
12S	.375 (9.53)	.140 (3.56)	.562 (14.27)	1.062 (26.97)	.765 (19.43)	3/4-20 UNEF	1.470 (37.34)
12	.625 (15.88)	.146 (3.71)	.750 (19.05)	1.062 (26.97)	.765 (19.43)	3/4-20 UNEF	1.911 (48.54)
14S	.375 (9.53)	.140 (3.56)	.562 (14.27)	1.156 (29.36)	.890 (22.61)	7/8-20 UNEF	1.470 (37.34)
14	.625 (15.88)	.146 (3.71)	.750 (19.05)	1.156 (29.36)	.890 (22.61)	7/8-20 UNEF	1.911 (48.54)
16S	.375 (9.53)	.140 (3.56)	.562 (14.27)	1.281 (32.54)	1.015 (25.78)	1-20 UNEF	1.470 (37.34)
16	.625 (15.88)	.146 (3.71)	.750 (19.05)	1.281 (32.54)	1.015 (25.78)	1-20 UNEF	1.911 (48.54)
18	.625 (15.88)	.180 (4.57)	.750 (19.05)	1.344 (34.14)	1.140 (28.96)	1-1/8-18 UNEF	1.921 (48.79)
20	.625 (15.88)	.180 (4.57)	.750 (19.05)	1.500 (38.10)	1.265 (32.13)	1-1/4-18 UNEF	2.035 (51.69)
22	.625 (15.88)	.180 (4.57)	.750 (19.05)	1.625 (41.28)	1.390 (35.31)	1-3/8-18 UNEF	2.035 (51.69)
24	.625 (15.88)	.203 (5.16)	.812 (20.62)	1.750 (44.45)	1.515 (38.48)	1-1/2-18 UNEF	2.051 (52.10)
28	.625 (15.88)	.203 (5.16)	.812 (20.62)	2.000 (50.80)	1.765 (44.83)	1-3/4-18 UNS	2.051 (52.10)
32	.625 (15.88)	.203 (5.16)	.875 (22.23)	2.250 (57.15)	2.015 (51.18)	2-18 UNS	2.028 (51.51)
36	.625 (15.88)	.203 (5.16)	.875 (22.23)	2.500 (63.50)	2.270 (57.66)	2-1/4-16 UN	2.028 (51.51)

In-Line Receptacle

Shell Style 3101
ITT Part Number
CA3101E...DN

CA3101E...DN designates a In-Line receptacle with backshell for heat-shrinkable boots. It mates with plugs CA3106 and CA3108.

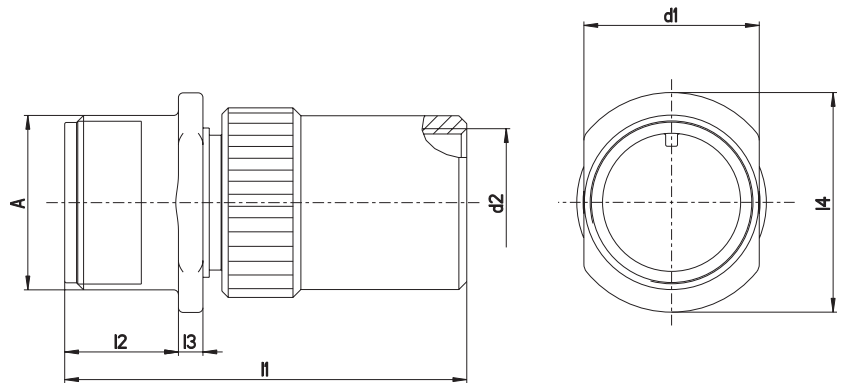


SHELL SIZE	A THREAD CLASS 2A	d1 MAX	d2 MAX CABLE DIA	d3 Max	d4 ±.008 (±0.2)	I1 MAX	I2 ±.012 (±0.3)	I3 ±.012 (±0.3)	I4 MAX	I5 ±.008 (±0.2)
10SL	5/8-24 UNEF	.858 (21.8)	.303 (7.7)	.524 (13.3)	.610 (15.5)	1.929 (49.0)	.559 (14.2)	.110 (2.8)	.460 (11.7)	.638 (16.2)
12S	3/4-20 UNEF	.984 (25.0)	.311 (7.9)	.524 (13.3)	.610 (15.5)	1.929 (49.0)	.559 (14.2)	.126 (3.2)	.460 (11.7)	.764 (19.4)
14S	7/8-20 UNEF	1.110 (28.2)	.417 (10.6)	.669 (17.0)	.752 (19.1)	1.929 (49.0)	.559 (14.2)	.126 (3.2)	.460 (11.7)	.886 (22.5)
16S	1-20 UNEF	1.236 (31.4)	.531 (13.5)	.862 (21.9)	.941 (23.9)	1.929 (49.0)	.555 (14.1)	.126 (3.2)	.460 (11.7)	1.012 (25.7)
16	1-20 UNEF	1.236 (31.4)	.531 (13.5)	.862 (21.9)	.941 (23.9)	2.283 (58.0)	.748 (19.0)	.126 (3.2)	.453 (11.5)	1.012 (25.7)
18	1-1/8-18 UNEF	1.358 (34.5)	.575 (14.6)	.862 (21.9)	.941 (23.9)	2.283 (58.0)	.748 (19.0)	.157 (4.0)	.453 (11.5)	1.138 (28.9)
20	1-1/4-18 UNEF	1.469 (37.3)	.736 (18.7)	1.031 (26.2)	1.165 (29.6)	2.362 (60.0)	.748 (19.0)	.157 (4.0)	.500 (12.7)	1.263 (32.1)
22	1-3/8-18 UNEF	1.610 (40.9)	.819 (20.8)	1.031 (26.2)	1.165 (29.6)	2.362 (60.0)	.748 (19.0)	.157 (4.0)	.500 (12.7)	1.386 (35.2)
24	1-1/2-18 UNEF	1.724 (43.8)	.968 (24.6)	1.358 (34.5)	1.488 (37.8)	2.480 (63.0)	.811 (20.6)	.157 (4.0)	.500 (12.7)	1.512 (38.4)
28	1-3/4-18 UNS	1.984 (50.4)	1.063 (27.0)	1.358 (34.5)	1.488 (37.8)	2.480 (63.0)	.811 (20.6)	.157 (4.0)	.500 (12.7)	1.764 (44.8)
32	2-18 UNS	2.236 (56.8)	1.311 (33.3)	1.717 (43.6)	1.882 (47.8)	2.638 (67.0)	.874 (22.2)	.157 (4.0)	.598 (15.2)	2.012 (51.1)
36	2-1/4-16 UN	2.484 (63.1)	1.516 (38.5)	1.717 (43.6)	1.882 (47.8)	2.677 (68.0)	.874 (22.2)	.157 (4.0)	.598 (15.2)	2.264 (57.5)

In-Line Receptacle

Shell Style 3101
ITT Part Number
CA3101PG

CA3101PG designates a In-Line receptacle for usage with PG. It mates with plugs CA3106 and CA3108. The cable gland is not content of the delivery.

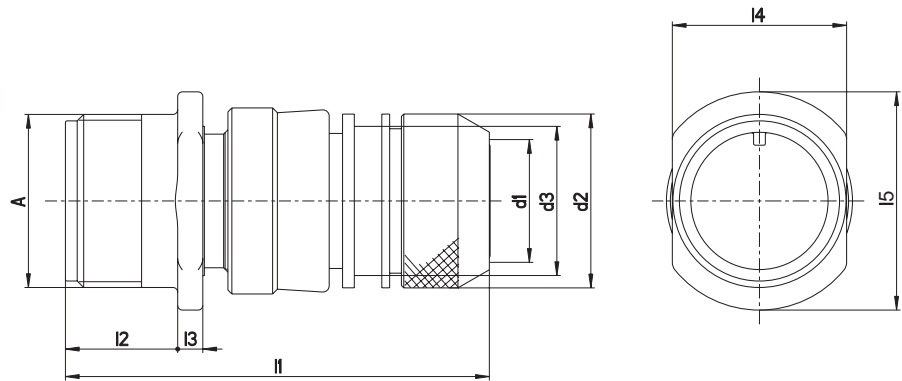
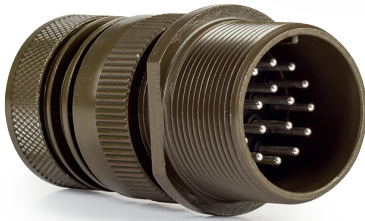


SHELL SIZE	A THREAD CLASS 2A	d1 MAX	d2		I1 MAX	I2 +.016 (+0.4)	I3 ±.012 (±0.3)	I4 MAX
			PG-Thread	Metric				
10SL	5/8-24 UNEF	0.638 (16.2)	PG9	M16 × 1,5	2.047 (52.0)	.559 (14.2)	.110 (2.8)	.858 (21.8)
12S	3/4-20 UNEF	0.764 (19.4)	PG9	M16 × 1,5	2.047 (52.0)	.559 (14.2)	.126 (3.2)	.984 (25.0)
14S	7/8-20 UNEF	0.886 (22.5)	PG11	M20 × 1,5	2.047 (52.0)	.559 (14.2)	.126 (3.2)	1.110 (28.2)
16S	1-20 UNEF	1.012 (25.7)	PG13,5	M20 × 1,5	2.126 (54.0)	.559 (14.2)	.126 (3.2)	1.236 (31.4)
16	1-20 UNEF	1.012 (25.7)	PG13,5	M20 × 1,5	2.520 (64.0)	.748 (19.0)	.126 (3.2)	1.236 (31.4)
18	1-1/8-18 UNEF	1.138 (28.9)	PG13,5	M25 × 1,5	2.717 (69.0)	.748 (19.0)	.157 (4.0)	1.358 (34.5)
20	1-1/4-18 UNEF	1.264 (32.1)	PG16	M25 × 1,5	2.756 (70.0)	.748 (19.0)	.157 (4.0)	1.469 (37.3)
22	1-3/8-18 UNEF	1.386 (35.2)	PG16	M32 × 1,5	2.874 (73.0)	.748 (19.0)	.157 (4.0)	1.610 (40.9)
24	1-1/2-18 UNEF	1.512 (38.4)	PG16	M32 × 1,5	2.913 (74.0)	.811 (20.6)	.157 (4.0)	1.724 (43.8)
28	1-3/4-18 UNS	1.764 (44.8)	PG21	M32 × 1,5	2.913 (74.0)	.811 (20.6)	.157 (4.0)	1.984 (50.4)
32	2-18 UNS	2.012 (51.1)	PG29	M40 × 1,5	2.992 (76.0)	.874 (22.2)	.157 (4.0)	2.236 (56.8)
36	2-1/4-16 UN	2.264 (57.5)	PG29	M40 × 1,5	3.425 (87.0)	.874 (22.2)	.157 (4.0)	2.484 (63.1)

In-Line Receptacle

Shell Style 3101
ITT Part Number
CA3101E...-15

CA3101E...-13/-15 designates a shielded In-Line Receptacle (without flange and coupling nut) to accommodate cable braids and heat-shrinkable boots. For Mod. codes please see page 6. It mates with plugs CA3106 and CA3108.

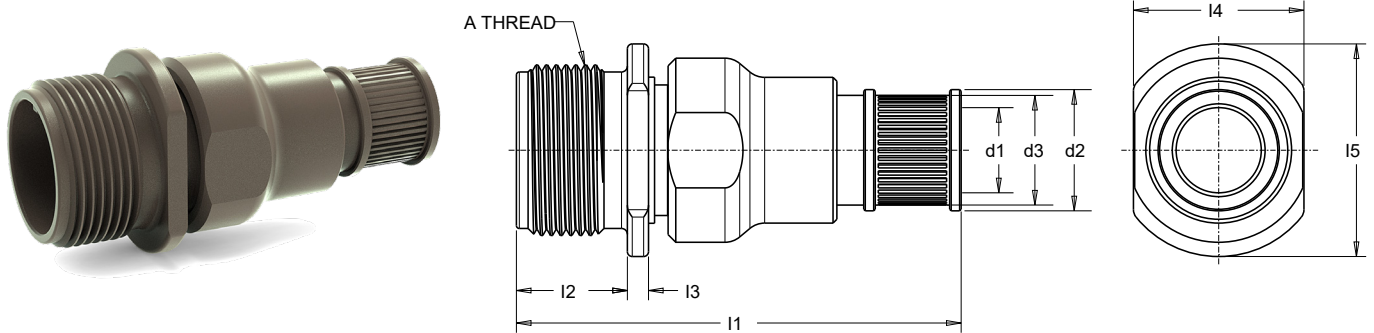


SHELL SIZE	A THREAD CLASS 2A	d1 MAX CABLE DIA	d2 ±.020 (±0.5)	d3 MAX	I1 MAX	I2 ±.012 (±0.3)	I3 ±.012 (±0.3)	I4 MAX	I5 MAX
10SL	5/8-24 UNEF	.303 (7.7)	.728 (18.5)	.642 (16.3)	2.165 (55.0)	.559 (14.2)	.110 (2.8)	0.638 (16.2)	.858 (21.8)
12S	3/4-20 UNEF	.311 (7.9)	.787 (20.0)	.669 (17.0)	2.165 (55.0)	.559 (14.2)	.126 (3.2)	0.764 (19.4)	.984 (25.0)
14S	7/8-20 UNEF	.417 (10.6)	.866 (22.0)	.787 (20.0)	2.283 (58.0)	.559 (14.2)	.126 (3.2)	0.886 (22.5)	1.110 (28.2)
16S	1-20 UNEF	.531 (13.5)	.984 (25.0)	.906 (23.0)	2.756 (70.0)	.555 (14.1)	.126 (3.2)	1.012 (25.7)	1.236 (31.4)
16	1-20 UNEF	.531 (13.5)	.984 (25.0)	.906 (23.0)	2.756 (70.0)	.748 (19.0)	.126 (3.2)	1.012 (25.7)	1.236 (31.4)
18	1-1/8-18 UNEF	.575 (14.6)	1.102 (28.0)	.965 (24.5)	2.756 (70.0)	.748 (19.0)	.157 (4.0)	1.138 (28.9)	1.358 (34.5)
20	1-1/4-18 UNEF	.575 (14.6)	1.260 (32.0)	1.122 (28.5)	2.756 (70.0)	.748 (19.0)	.157 (4.0)	1.264 (32.1)	1.469 (37.3)
22	1-3/8-18 UNEF	.819 (20.8)	1.339 (34.0)	1.201 (30.5)	2.756 (70.0)	.748 (19.0)	.157 (4.0)	1.386 (35.2)	1.610 (40.9)
24	1-1/2-18 UNEF	.968 (24.6)	1.496 (38.0)	1.358 (34.5)	2.756 (70.0)	.811 (20.6)	.157 (4.0)	1.512 (38.4)	1.724 (43.8)
28	1-3/4-18 UNS	1.063 (27.0)	1.614 (41.0)	1.476 (37.5)	2.756 (70.0)	.811 (20.6)	.157 (4.0)	1.764 (44.8)	1.984 (50.4)
32	2-18 UNS	1.311 (33.3)	1.890 (48.0)	1.732 (44.0)	2.953 (75.0)	.874 (22.2)	.157 (4.0)	2.012 (51.1)	2.236 (56.8)
36	2-1/4-16 UN	1.516 (38.5)	2.165 (55.0)	2.010 (51.0)	3.346 (85.0)	.874 (22.2)	.157 (4.0)	2.264 (57.5)	2.484 (63.1)

In-Line Receptacle

Shell Style 3101
ITT Part Number
CA3101DT

Cable connection receptacle with banding adapter for shielding braid and heat shrink boots. Supplied with grommet seal and ferrule for environmental sealing IP67.

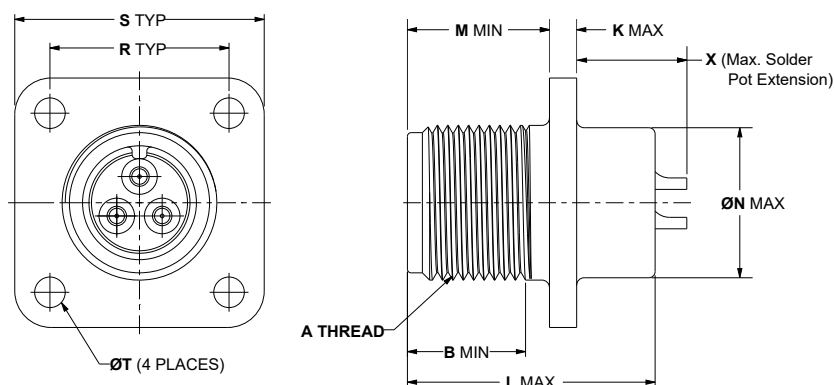
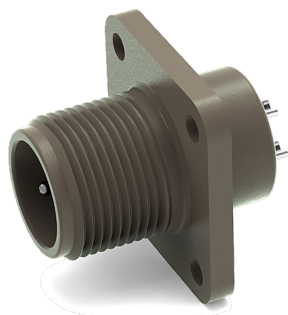


SHELL SIZE	A THREAD CLASS 2A	d1 MAX CABLE DIA	d3 MAX	d2 ±.010 (±0.25)	I1 MAX	I2 ±.012 (±0.3)	I3 ±.012 (±0.3)	I4 MAX	I5 MAX
10SL	5/8-24 UNEF	.379 (9.6)	.505 (12.8)	.563 (14.3)	2.284 (58.0)	.559 (14.2)	.110 (2.8)	0.638 (16.2)	.858 (21.8)
14S	7/8-20 UNEF	.442 (11.2)	.567 (14.4)	.622 (15.8)	2.292 (58.2)	.559 (14.2)	.126 (3.2)	0.886 (22.5)	1.110 (28.2)
16	1-20 UNEF	.442 (11.2)	.567 (14.4)	.622 (15.8)	2.644 (67.2)	.748 (19.0)	.126 (3.2)	1.012 (25.7)	1.236 (31.4)
18	1-1/8-18 UNEF	.631 (16.0)	.757 (19.2)	.811 (20.6)	2.740 (69.6)	.748 (19.0)	.157 (4.0)	1.138 (28.9)	1.358 (34.5)
20	1-1/4-18 UNEF	.631 (16.0)	.757 (19.2)	.811 (20.6)	2.801 (71.1)	.748 (19.0)	.157 (4.0)	1.264 (32.1)	1.469 (37.3)
22	1-3/8-18 UNEF	.816 (20.7)	.942 (23.9)	1.000 (25.4)	2.682 (68.1)	.748 (19.0)	.157 (4.0)	1.386 (35.2)	1.610 (40.9)
24	1-1/2-18 UNEF	.816 (20.7)	.942 (23.9)	1.000 (25.4)	2.784 (70.7)	.811 (20.6)	.157 (4.0)	1.512 (38.4)	1.724 (43.8)
28	1-3/4-18 UNS	.879 (22.3)	1.005 (25.5)	1.063 (27.0)	2.840 (72.1)	.811 (20.6)	.157 (4.0)	1.764 (44.8)	1.984 (50.4)

Box Mount Receptacle

Shell Style 3102	
Military Standard Part Number	ITT Part Number
MS3102E	CA3102E
MS3102R	CA3102R

MS3102E and MS3102R box mount receptacles are used in junction boxes or as an integral part of equipment. These connectors are identical in construction and will mate with 3106 and 3108 plugs. For new equipment, customers should specify MS3102R.



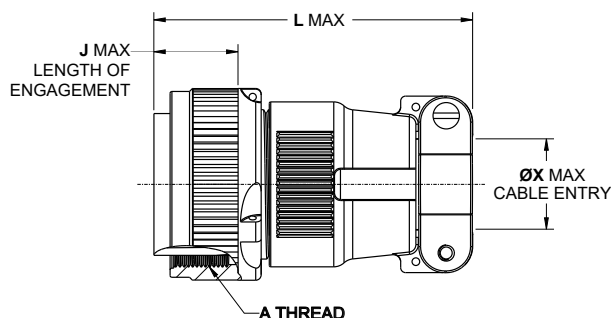
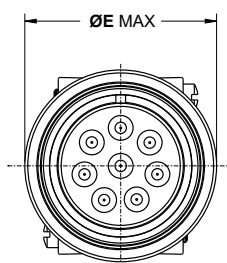
X DIMENSIONS Max. Solder Pot Extension - Pin or socket					
SHELL SIZE	Contact Size				
	#16	#12	#8	#4	#0
8S, 10S, 10SL	.534	-	-	-	-
12S, 14S, 16S	.518	-	-	-	-
12	.705	.705	-	-	-
14	.705	.705	.767	-	-
16	.705	.705	.767	.767	-
18	.674	.674	.736	.736	-
20, 22	.674	.674	.736	.736	.971
24, 28	.612	.612	.674	.674	.909
32, 36	.549	.549	.611	.611	.846

SHELL SIZE	B MIN	K MAX	M MIN	R TYP ± .005	S TYP ± .031	Ø T + .010 / - .005	A THREAD CLASS 2A	L MAX Alvin/review	Ø N MAX
8S	.375 (9.53)	.129 (3.28)	.562 (14.27)	.594 (15.09)	.875 (22.23)	.120 (3.05)	1/2-28 UNEF	1.040 (26.42)	.426 (10.82)
10S	.375 (9.53)	.129 (3.28)	.562 (14.27)	.719 (18.26)	1.000 (25.40)	.120 (3.05)	5/8-24 UNEF	1.040 (26.42)	.520 (13.21)
10SL	.375 (9.53)	.129 (3.28)	.562 (14.27)	.719 (18.26)	1.000 (25.40)	.120 (3.05)	5/8-24 UNEF	1.040 (26.42)	.614 (15.60)
12S	.375 (9.53)	.145 (3.68)	.562 (14.27)	.812 (20.62)	1.094 (27.79)	.120 (3.05)	3/4-20 UNEF	1.040 (26.42)	.614 (15.60)
12	.625 (15.88)	.145 (3.68)	.750 (19.05)	.812 (20.62)	1.094 (27.79)	.120 (3.05)	3/4-20 UNEF	1.040 (26.42)	.614 (15.60)
14S	.375 (9.53)	.145 (3.68)	.562 (14.27)	.906 (23.01)	1.188 (30.18)	.120 (3.05)	7/8-20 UNEF	1.040 (26.42)	.739 (18.77)
14	.625 (15.88)	.145 (3.68)	.750 (19.05)	.906 (23.01)	1.188 (30.18)	.120 (3.05)	7/8-20 UNEF	1.040 (26.42)	.739 (18.77)
16S	.375 (9.53)	.145 (3.68)	.562 (14.27)	.969 (24.61)	1.281 (32.54)	.120 (3.05)	1-20 UNEF	1.040 (26.42)	.864 (21.95)
16	.625 (15.88)	.145 (3.68)	.750 (19.05)	.969 (24.61)	1.281 (32.54)	.120 (3.05)	1-20 UNEF	1.400 (35.56)	.864 (21.95)
18	.625 (15.88)	.176 (4.47)	.750 (19.05)	1.062 (26.97)	1.375 (34.93)	.120 (3.05)	1-1/8-18 UNEF	1.400 (35.56)	.989 (25.12)
20	.625 (15.88)	.176 (4.47)	.750 (19.05)	1.156 (29.36)	1.500 (38.10)	.120 (3.05)	1-1/4-18 UNEF	1.400 (35.56)	1.145 (29.08)
22	.625 (15.88)	.176 (4.47)	.750 (19.05)	1.250 (31.75)	1.625 (41.28)	.120 (3.05)	1-3/8-18 UNEF	1.400 (35.56)	1.270 (32.26)
24	.625 (15.88)	.176 (4.47)	.812 (20.62)	1.375 (34.93)	1.750 (44.45)	.147 (3.73)	1-1/2-18 UNEF	1.400 (35.56)	1.395 (35.43)
28	.625 (15.88)	.176 (4.47)	.812 (20.62)	1.562 (39.67)	2.000 (50.80)	.147 (3.73)	1-3/4-18 UNS	1.400 (35.56)	1.614 (41.00)
32	.625 (15.88)	.176 (4.47)	.875 (22.23)	1.750 (44.45)	2.250 (57.15)	.173 (4.39)	2-18 UNS	1.400 (35.56)	1.864 (47.35)
36	.625 (15.88)	.176 (4.47)	.875 (22.23)	1.938 (49.23)	2.500 (63.50)	.173 (4.39)	2-1/4-16 UN	1.400 (35.56)	2.051 (52.10)
40	.625 (15.88)	.176 (4.47)	.875 (22.23)	2.188 (55.58)	2.750 (69.85)	.173 (4.39)	2-1/2-16 UN	1.400 (35.56)	2.400 (60.96)

Straight Plug

Shell Style 3106	
Military Standard Part Number	ITT Part Number
MS3106E	CA3106E
MS3106F	CA06R

MS3106F straight plugs mate with 3100, 3101 and 3102 receptacles. MS3106E is available upon request. For new equipment, customer should specify MS3106F. MS3106F is identical to MS3106E except that it contains an o-ring under the coupling nut. Please note commercial MS3106F is CA06R not CA3106F.

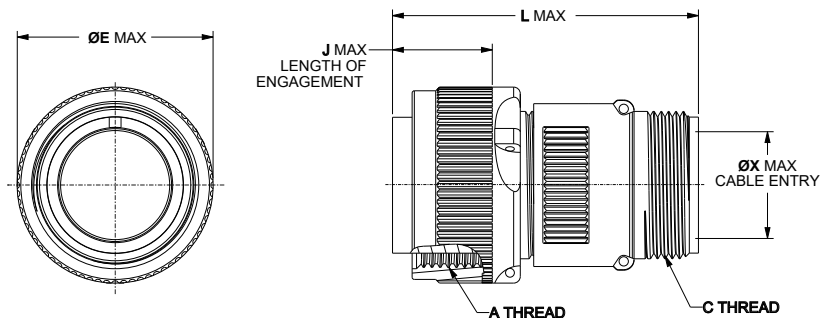


SHELL SIZE	Ø E MAX	J MAX	A THREAD CLASS 2A	L MAX	Ø X MAX
8S	.844 (21.44)	.536 (13.61)	1/2-28 UNEF	2.250 (57.15)	.250 (6.35)
10S	.969 (24.61)	.536 (13.61)	5/8-24 UNEF	2.250 (57.15)	.250 (6.35)
10SL	.969 (24.61)	.536 (13.61)	5/8-24 UNEF	2.250 (57.15)	.312 (7.92)
12S	1.062 (26.97)	.536 (13.61)	3/4-20 UNEF	2.250 (57.15)	.312 (7.92)
12	1.062 (26.97)	.724 (18.39)	3/4-20 UNEF	2.625 (66.68)	.312 (7.92)
14S	1.156 (29.36)	.536 (13.61)	7/8-20 UNEF	2.250 (57.15)	.438 (11.13)
14	1.156 (29.36)	.724 (18.39)	7/8-20 UNEF	2.625 (66.68)	.438 (11.13)
16S	1.250 (31.75)	.536 (13.61)	1-20 UNEF	2.250 (57.15)	.562 (14.27)
16	1.250 (31.75)	.724 (18.39)	1-20 UNEF	2.625 (66.68)	.562 (14.27)
18	1.344 (34.14)	.724 (18.39)	1-1/8-18 UNEF	2.688 (68.28)	.625 (15.88)
20	1.469 (37.31)	.724 (18.39)	1-1/4-18 UNEF	2.750 (69.85)	.750 (19.05)
22	1.594 (40.49)	.724 (18.39)	1-3/8-18 UNEF	2.750 (69.85)	.750 (19.05)
24	1.719 (43.66)	.724 (18.39)	1-1/2-18 UNEF	2.969 (75.41)	.938 (23.83)
28	1.969 (50.01)	.724 (18.39)	1-3/4-18 NS	3.031 (76.99)	.938 (23.83)
32	2.219 (56.36)	.724 (18.39)	2-18 NS	3.031 (76.99)	1.250 (31.75)
36	2.469 (62.71)	.724 (18.39)	2-1/4-16 UN	3.281 (84.34)	1.375 (34.93)
40	2.723 (69.16)	.724 (18.39)	2-1/2-16 UN	3.685 (93.60)	1.625 (41.28)

Straight Plug

Shell Style 3106
ITT Part Number
CA3106F

CA3106F designates a straight plug with backshell for flex tubes or to be combined with a cable clamp. It mates with receptacles 3100, 3101 and 3102 receptacles.

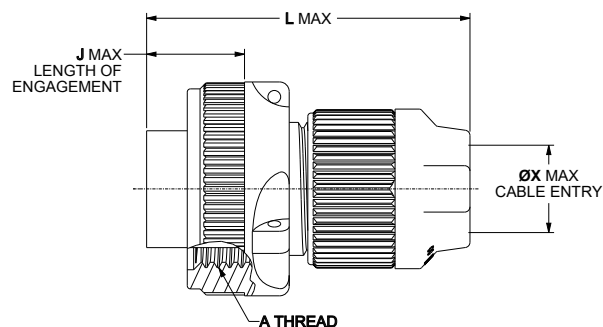
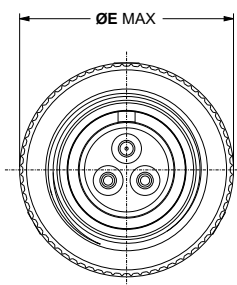


SHELL SIZE	Ø E MAX	J MAX	A THREAD CLASS 2A	L MAX	Ø X MAX
8S	.844 (21.44)	.536 (13.61)	1/2-28 UNEF	1.749 (44.42)	.250 (6.35)
10S	.969 (24.61)	.536 (13.61)	5/8-24 UNEF	1.749 (44.42)	.250 (6.35)
10SL	.969 (24.61)	.536 (13.61)	5/8-24 UNEF	1.749 (44.42)	.324 (8.23)
12S	1.062 (26.97)	.536 (13.61)	3/4-20 UNEF	1.749 (44.42)	.324 (8.23)
12	1.062 (26.97)	.724 (18.39)	3/4-20 UNEF	2.093 (53.16)	.324 (8.23)
14S	1.156 (29.36)	.536 (13.61)	7/8-20 UNEF	1.749 (44.42)	.438 (11.13)
14	1.156 (29.36)	.724 (18.39)	7/8-20 UNEF	2.093 (53.16)	.438 (11.13)
16S	1.250 (31.75)	.536 (13.61)	1-20 UNEF	1.749 (44.42)	.562 (14.27)
16	1.250 (31.75)	.724 (18.39)	1-20 UNEF	2.093 (53.16)	.562 (14.27)
18	1.344 (34.14)	.724 (18.39)	1-1/8-18 UNEF	2.093 (53.16)	.656 (16.66)
20	1.469 (37.31)	.724 (18.39)	1-1/4-18 UNEF	2.124 (53.95)	.781 (19.84)
22	1.594 (40.49)	.724 (18.39)	1-3/8-18 UNEF	2.218 (56.34)	.781 (19.84)
24	1.719 (43.66)	.724 (18.39)	1-1/2-18 UNEF	2.281 (57.94)	1.000 (25.4)
28	1.969 (50.01)	.724 (18.39)	1-3/4-18 NS	2.343 (59.51)	1.062 (26.97)
32	2.219 (56.36)	.724 (18.39)	2-18 NS	2.406 (61.11)	1.281 (32.54)
36	2.469 (62.71)	.724 (18.39)	2-1/4-16 UN	2.468 (62.69)	1.406 (35.71)

Straight Plug

Shell Style 3106	
Military Standard Part Number	ITT Part Number
MS3106R	CA3106R

MS3106R straight plug is identical in purpose to the MS3106F. The MS3106R has the shorter endbell. This plug will mate with 3100, 3101, and 3102 receptacles.

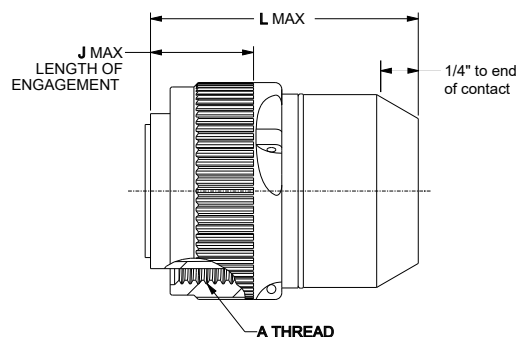
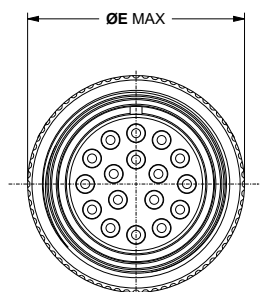
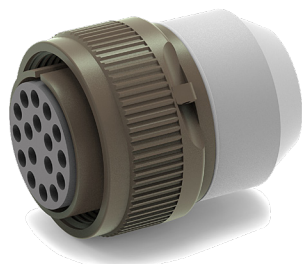


SHELL SIZE	Ø E MAX	J MAX	A THREAD CLASS 2A	L MAX	Ø X MAX
8S	.844 (21.44)	.536 (13.61)	1/2-28 UNEF	1.838 (46.69)	.260 (6.60)
10S	.969 (24.61)	.536 (13.61)	5/8-24 UNEF	1.838 (46.69)	.260 (6.60)
10SL	.969 (24.61)	.536 (13.61)	5/8-24 UNEF	1.838 (46.69)	.388 (9.86)
12S	1.062 (26.97)	.536 (13.61)	3/4-20 UNEF	1.838 (46.69)	.413 (10.49)
12	1.062 (26.97)	.724 (18.39)	3/4-20 UNEF	2.181 (55.40)	.413 (10.49)
14S	1.156 (29.36)	.536 (13.61)	7/8-20 UNEF	1.838 (46.69)	.495 (12.57)
14	1.156 (29.36)	.724 (18.39)	7/8-20 UNEF	2.181 (55.40)	.495 (12.57)
16S	1.250 (31.75)	.536 (13.61)	1-20 UNEF	1.838 (46.69)	.614 (15.60)
16	1.250 (31.75)	.724 (18.39)	1-20 UNEF	2.181 (55.40)	.572 (14.53)
18	1.344 (34.14)	.724 (18.39)	1-1/8-18 UNEF	2.281 (57.94)	.733 (18.62)
20	1.469 (37.31)	.724 (18.39)	1-1/4-18 UNEF	2.281 (57.94)	.873 (22.17)
22	1.594 (40.49)	.724 (18.39)	1-3/8-18 UNEF	2.281 (57.94)	.981 (24.92)
24	1.719 (43.66)	.724 (18.39)	1-1/2-18 UNEF	2.281 (57.94)	1.093 (27.76)
28	1.969 (50.01)	.724 (18.39)	1-3/4-18 NS	2.281 (57.94)	1.253 (31.83)
32	2.219 (56.36)	.724 (18.39)	2-18 NS	2.322 (58.98)	1.260 (32.00)
36	2.469 (62.71)	.724 (18.39)	2-1/4-16 UN	2.322 (58.98)	1.385 (35.18)
40	2.723 (69.16)	.724 (18.39)	2-1/2-16 UN	2.427 (61.65)	1.890 (48.00)

Straight Plug - Potting cup

Shell Style 3106	
Military Standard Part Number	ITT Part Number
MS25183	CA3106ER

The CA3106ER (MS25183) is supplied with a resilient insulator and nylon potting cup with a threaded attachment ring. This receptacle mates with 3100, 3101 and 3102 receptacles.

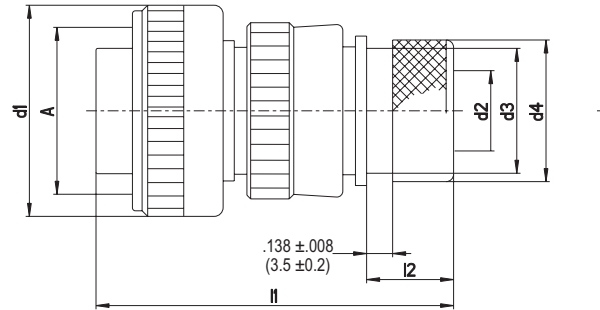


SHELL SIZE	Ø E MAX	J MAX	A THREAD CLASS 2A	L MAX
8S	.844 (21.44)	.536 (13.61)	1/2-28 UNEF	1.500 (38.1)
10S	.969 (24.61)	.536 (13.61)	5/8-24 UNEF	1.500 (38.1)
10SL	.969 (24.61)	.536 (13.61)	5/8-24 UNEF	1.500 (38.1)
12S	1.062 (26.97)	.536 (13.61)	3/4-20 UNEF	1.500 (38.1)
12	1.062 (26.97)	.724 (18.39)	3/4-20 UNEF	1.906 (48.41)
14S	1.156 (29.36)	.536 (13.61)	7/8-20 UNEF	1.500 (38.1)
14	1.156 (29.36)	.724 (18.39)	7/8-20 UNEF	1.906 (48.41)
16S	1.250 (31.75)	.536 (13.61)	1-20 UNEF	1.500 (38.1)
16	1.250 (31.75)	.724 (18.39)	1-20 UNEF	1.906 (48.41)
18	1.344 (34.14)	.724 (18.39)	1-1/8-18 UNEF	1.906 (48.41)
20	1.469 (37.31)	.724 (18.39)	1-1/4-18 UNEF	2.188 (55.58)
22	1.594 (40.49)	.724 (18.39)	1-3/8-18 UNEF	2.188 (55.58)
24	1.719 (43.66)	.724 (18.39)	1-1/2-18 UNEF	2.188 (55.58)
28	1.969 (50.01)	.724 (18.39)	1-3/4-18 NS	2.188 (55.58)
32	2.219 (56.36)	.724 (18.39)	2-18 NS	2.188 (55.58)
36	2.469 (62.71)	.724 (18.39)	2-1/4-16 UN	2.188 (55.58)
40	2.723 (69.16)	.724 (18.39)	2-1/2-16 UN	2.188 (55.58)

Straight Plug

Shell Style 3106
ITT Part Number
CA3106E...DN

CA3106E...DN designates a straight plug with backshell for heat-shrinkable boots. CA3106E-DN has an O-ring seal under the coupling nut. It mates with receptacles 3100, 3101 and 3102 receptacles.

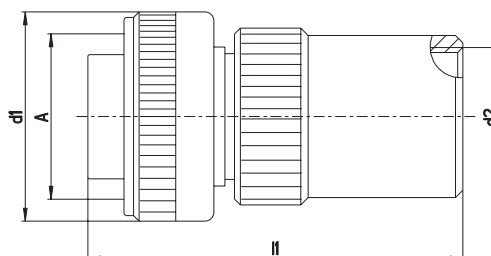


SHELL SIZE	A THREAD CLASS 2B	d1 MAX	d2 MAX CABLE DIA	d3 MAX	d4 ±.008 (±0.2)	I1 MAX	I2 ±.020 (±0.5)
10SL	5/8-24 UNEF	.949 (24.1)	.303 (7.7)	.524 (13.3)	.610 (15.5)	1.929 (49.0)	.460 (11.7)
12S	3/4-20 UNEF	1.016 (25.8)	.311 (7.9)	.524 (13.3)	.610 (15.5)	1.929 (49.0)	.460 (11.7)
14S	7/8-20 UNEF	1.134 (28.8)	.417 (10.6)	.669 (17.0)	.752 (19.1)	1.929 (49.0)	.460 (11.7)
16S	1-20 UNEF	1.252 (31.8)	.531 (13.5)	.862 (21.9)	.941 (23.9)	1.929 (49.0)	.460 (11.7)
16	1-20 UNEF	1.252 (31.8)	.531 (13.5)	.862 (21.9)	.941 (23.9)	2.283 (58.0)	.453 (11.5)
18	1-1/8-18 UNEF	1.343 (34.1)	.575 (14.6)	.862 (21.9)	.941 (23.9)	2.283 (58.0)	.453 (11.5)
20	1-1/4-18 UNEF	1.472 (37.4)	.736 (18.7)	1.031 (26.2)	1.165 (29.6)	2.362 (60.0)	.500 (12.7)
22	1-3/8-18 UNEF	1.594 (40.5)	.819 (20.8)	1.031 (26.2)	1.165 (29.6)	2.362 (60.0)	.500 (12.7)
24	1-1/2-18 UNEF	1.724 (43.8)	.968 (24.6)	1.358 (34.5)	1.488 (37.8)	2.480 (63.0)	.500 (12.7)
28	1-3/4-18 UNS	1.976 (50.2)	1.063 (27.0)	1.358 (34.5)	1.488 (37.8)	2.480 (63.0)	.500 (12.7)
32	2-18 UNS	2.220 (56.4)	1.311 (33.3)	1.717 (43.6)	1.882 (47.8)	2.638 (67.0)	.598 (15.2)
36	2-1/4-16 UN	2.472 (62.8)	1.516 (38.5)	1.717 (43.6)	1.882 (47.8)	2.677 (68.0)	.598 (15.2)

Straight Plug

Shell Style 3106
ITT Part Number
CA3106PG

CA3106PG is a straight plug for usage of PG. CA3106PG has an O-ring seal under the coupling nut. The cable gland is not content of the delivery. It mates with receptacles 3100, 3101 and 3102 receptacles.

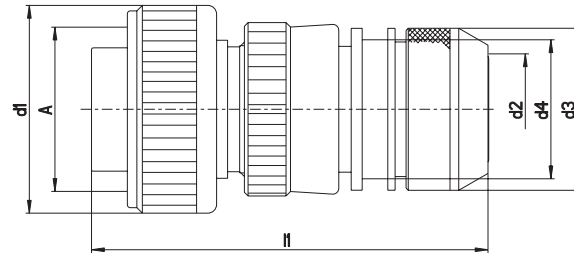


SHELL SIZE	A THREAD CLASS 2B	d1 MAX	d2		l1 MAX
			PG-Thread	Metric	
10SL	5/8-24 UNEF	.949 (24.1)	PG9	M16 × 1,5	2.047 (52.0)
12S	3/4-20 UNEF	1.016 (25.8)	PG9	M16 × 1,5	2.047 (52.0)
14S	7/8-20 UNEF	1.134 (28.8)	PG11	M20 × 1,5	2.047 (52.0)
16S	1-20 UNEF	1.252 (31.8)	PG13,5	M20 × 1,5	2.126 (54.0)
16	1-20 UNEF	1.252 (31.8)	PG13,5	M20 × 1,5	2.520 (64.0)
18	1-1/8-18 UNEF	1.343 (34.1)	PG13,5	M25 × 1,5	2.717 (69.0)
20	1-1/4-18 UNEF	1.472 (37.4)	PG16	M25 × 1,5	2.756 (70.0)
22	1-3/8-18 UNEF	1.594 (40.5)	PG16	M32 × 1,5	2.874 (73.0)
24	1-1/2-18 UNEF	1.724 (43.8)	PG16	M32 × 1,5	2.913 (74.0)
28	1-3/4-18 UNS	1.976 (50.2)	PG21	M32 × 1,5	2.913 (74.0)
32	2-18 UNS	2.220 (56.4)	PG29	M40 × 1,5	2.992 (76.0)
36	2-1/4-16 UN	2.472 (62.8)	PG29	M40 × 1,5	3.425 (87.0)

Straight Plug

Shell Style 3106
ITT Part Number
CA3106E...-15

CA3106E...-13/-15 is a shielded straight plug with backshell to accommodate cable braids and heat-shrinkable boots. It has an O-ring under the coupling nut. It mates with receptacles 3100, 3101 and 3102 receptacles.

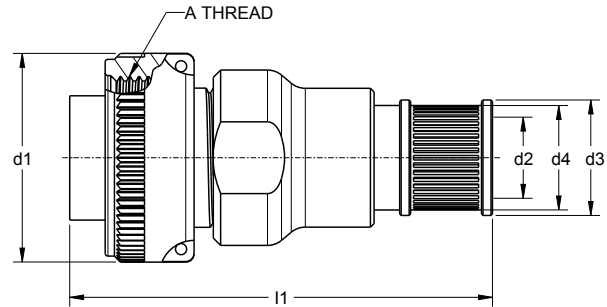
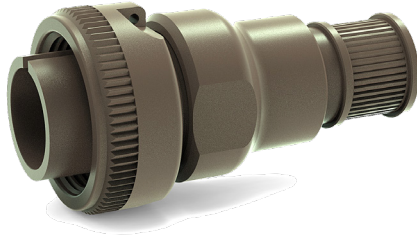


SHELL SIZE	A THREAD CLASS 2B	d1 MAX	d2 MAX CABLE DIA	d3 ±.020 (±0.5)	d4 MAX	l1 MAX
10SL	5/8-24 UNEF	.949 (24.1)	.303 (7.7)	.728 (18.5)	.642 (16.3)	2.165 (55.0)
12S	3/4-20 UNEF	1.016 (25.8)	.311 (7.9)	.787 (20.0)	.669 (17.0)	2.165 (55.0)
14S	7/8-20 UNEF	1.134 (28.8)	.417 (10.6)	.866 (22.0)	.787 (20.0)	2.165 (55.0)
16S	1-20 UNEF	1.252 (31.8)	.531 (13.5)	.984 (25.0)	.906 (23.0)	2.362 (60.0)
16	1-20 UNEF	1.252 (31.8)	.531 (13.5)	.984 (25.0)	.906 (23.0)	2.756 (70.0)
18	1-1/8-18 UNEF	1.343 (34.1)	.575 (14.6)	1.102 (28.0)	.965 (24.5)	2.756 (70.0)
20	1-1/4-18 UNEF	1.472 (37.4)	.575 (14.6)	1.260 (32.0)	1.122 (28.5)	2.756 (70.0)
22	1-3/8-18 UNEF	1.594 (40.5)	.819 (20.8)	1.339 (34.0)	1.201 (30.5)	2.756 (70.0)
24	1-1/2-18 UNEF	1.724 (43.8)	.968 (24.6)	1.496 (38.0)	1.358 (34.5)	2.756 (70.0)
28	1-3/4-18 UNS	1.976 (50.2)	1.063 (27.0)	1.614 (41.0)	1.476 (37.5)	2.756 (70.0)
32	2-18 UNS	2.220 (56.4)	1.311 (33.3)	1.890 (48.0)	1.732 (44.0)	2.756 (70.0)
36	2-1/4-16 UN	2.472 (62.8)	1.516 (38.5)	2.165 (55.0)	2.010 (51.0)	3.150 (80.0)

Straight Plug

Shell Style 3106
ITT Part Number
CA3106DT

Straight, shielded plug, with banding adapter for shielding braid and heat shrink boots. Supplied with grommet and ferrule for environmental sealing IP67.

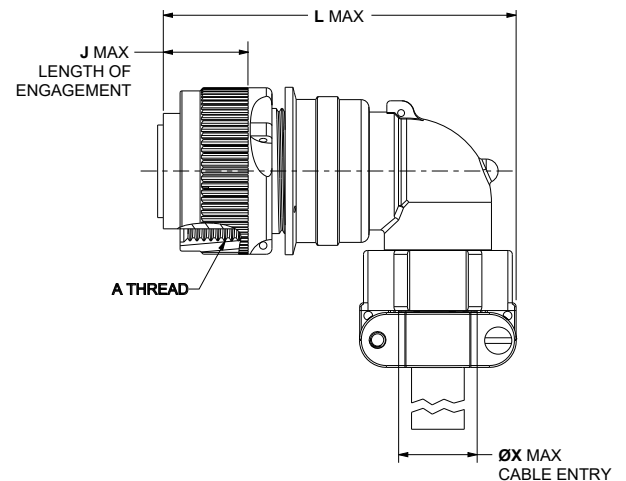
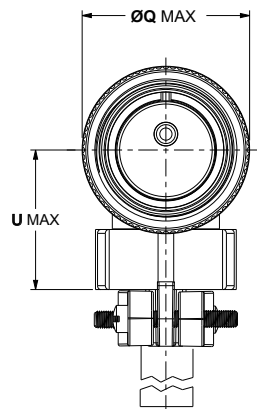


SHELL SIZE	A THREAD CLASS 2B	d1 MAX	d2 MAX CABLE DIA	d4 MAX	d3 ±.010 (±0.25)	l1 MAX
10SL	5/8-24 UNEF	.949 (24.1)	.379 (9.6)	.505 (12.8)	.563 (14.3)	2.289 (58.1)
14S	7/8-20 UNEF	1.134 (28.8)	.442 (11.2)	.567 (14.4)	.622 (15.8)	2.289 (58.1)
16	1-20 UNEF	1.252 (31.8)	.442 (11.2)	.567 (14.4)	.622 (15.8)	2.634 (66.9)
18	1-1/8-18 UNEF	1.343 (34.1)	.631 (16.0)	.757 (19.2)	.811 (20.6)	2.726 (69.2)
20	1-1/4-18 UNEF	1.472 (37.4)	.631 (16.0)	.757 (19.2)	.811 (20.6)	2.811 (71.4)
22	1-3/8-18 UNEF	1.594 (40.5)	.816 (20.7)	.942 (23.9)	1.000 (25.4)	2.692 (68.4)
24	1-1/2-18 UNEF	1.724 (43.8)	.816 (20.7)	.942 (23.9)	1.000 (25.4)	2.846 (72.3)
28	1-3/4-18 UNS	1.976 (50.2)	.879 (22.3)	1.005 (25.5)	1.063 (27.0)	2.850 (72.4)

90° Angle Plug

Shell Style 3108	
Military Standard Part Number	ITT Part Number
MS3108E	CA3108E

MS3108E 90° angle plugs (less O-ring seal with cable clamp) are used where there is limited space and where wires must be brought at abrupt angles. These plugs will mate with 3100, 3101 and 3102 receptacles.

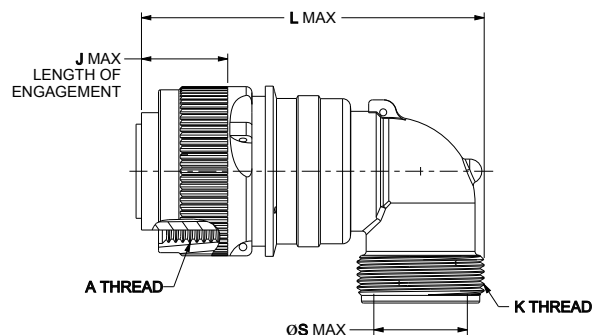
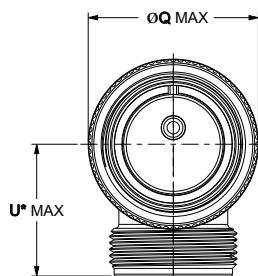


SHELL SIZE	Ø Q MAX	J MAX	A THREAD CLASS 2B	U MAX	L MAX	Ø X MAX
8S	.844 (21.44)	.536 (13.61)	1/2-28 UNEF	1.218 (30.94)	2.156 (54.76)	.248 (6.30)
10S	.969 (24.61)	.536 (13.61)	5/8-24 UNEF	1.250 (31.75)	2.156 (54.76)	.248 (6.30)
10SL	.969 (24.61)	.536 (13.61)	5/8-24 UNEF	1.281 (32.54)	2.188 (55.58)	.310 (7.87)
12S	1.062 (26.97)	.536 (13.61)	3/4-20 UNEF	1.281 (32.54)	2.188 (55.58)	.310 (7.87)
12	1.062 (26.97)	.724 (18.39)	3/4-20 UNEF	1.281 (32.54)	2.531 (64.29)	.310 (7.87)
14S	1.156 (29.36)	.536 (13.61)	7/8-20 UNEF	1.406 (35.71)	2.312 (58.72)	.436 (11.07)
14	1.156 (29.36)	.724 (18.39)	7/8-20 UNEF	1.406 (35.71)	2.688 (68.28)	.436 (11.07)
16S	1.250 (31.75)	.536 (13.61)	1-20 UNEF	1.531 (38.89)	2.406 (61.11)	.560 (14.22)
16	1.250 (31.75)	.724 (18.39)	1-20 UNEF	1.531 (38.89)	2.781 (70.64)	.560 (14.22)
18	1.344 (34.14)	.724 (18.39)	1-1/8-18 UNEF	1.593 (40.46)	2.844 (72.24)	.623 (15.82)
20	1.469 (37.31)	.724 (18.39)	1-1/4-18 UNEF	1.656 (42.06)	3.250 (82.55)	.748 (19.0)
22	1.594 (40.49)	.724 (18.39)	1-3/8-18 UNEF	1.718 (43.64)	3.250 (82.55)	.748 (19.0)
24	1.719 (43.66)	.724 (18.39)	1-1/2-18 UNEF	1.890 (48.01)	3.719 (94.46)	.935 (23.75)
28	1.969 (50.01)	.724 (18.39)	1-3/4-18 NS	1.968 (49.99)	3.719 (94.46)	.935 (23.75)
32	2.219 (56.36)	.724 (18.39)	2-18 NS	2.187 (55.55)	4.188 (106.38)	1.248 (31.70)
36	2.469 (62.71)	.724 (18.39)	2-1/4-16 UN	2.406 (61.11)	4.297 (109.14)	1.373 (34.87)
40	2.723 (69.16)	.724 (18.39)	2-1/2-16 UN	5.875 (149.22)	7.211 (183.16)	1.635 (41.53)

90° Angle Plug

Shell Style 3108	
Military Standard Part Number	ITT Part Number
MS3108R	CA3108R

MS3108R 90° angle plugs with O-ring seal (less cable clamp) are used where there is limited space and where wires must be brought at abrupt angles. These plugs will mate with 3100, 3101 and 3102 receptacles.

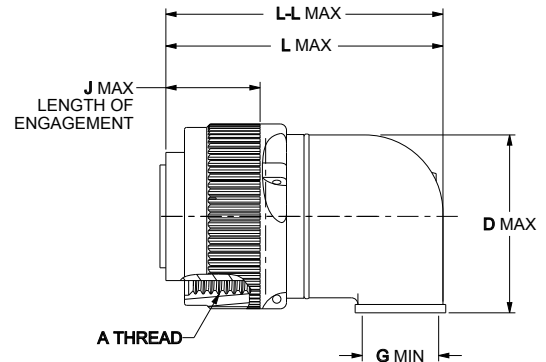
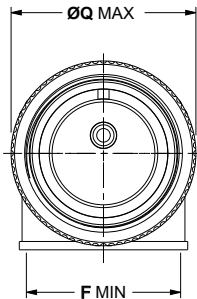


SHELL SIZE	Ø Q MAX	J MAX	A THREAD CLASS 2B	K THREAD CLASS 2A	U* MAX	L MAX	Ø S MAX
8S	.844 (21.44)	.536 (13.61)	1/2-28 UNEF	1/2-28 UNEF	.801 (20.35)	1.930 (49.02)	.253 (6.43)
10S	.969 (24.61)	.536 (13.61)	5/8-24 UNEF	1/2-28 UNEF	.832 (21.13)	1.930 (49.02)	.307 (7.80)
10SL	.969 (24.61)	.536 (13.61)	5/8-24 UNEF	5/8-24 UNEF	.863 (21.92)	2.050 (52.07)	.393 (9.98)
12S	1.062 (26.97)	.536 (13.61)	3/4-20 UNEF	5/8-24 UNEF	.863 (21.92)	2.050 (52.07)	.411 (10.44)
12	1.062 (26.97)	.724 (18.39)	3/4-20 UNEF	5/8-24 UNEF	.863 (21.92)	2.550 (64.77)	.411 (10.44)
14S	1.156 (29.36)	.536 (13.61)	7/8-20 UNEF	3/4-20 UNEF	.926 (23.52)	2.410 (61.21)	.493 (12.52)
14	1.156 (29.36)	.724 (18.39)	7/8-20 UNEF	3/4-20 UNEF	.926 (23.52)	2.630 (66.80)	.493 (12.52)
16S	1.250 (31.75)	.536 (13.61)	1-20 UNEF	7/8-20 UNEF	.988 (25.10)	2.370 (60.20)	.615 (15.62)
16	1.250 (31.75)	.724 (18.39)	1-20 UNEF	7/8-20 UNEF	.988 (25.10)	2.730 (69.34)	.615 (15.62)
18	1.344 (34.14)	.724 (18.39)	1-1/8-18 UNEF	1-20 UNEF	1.051 (26.70)	2.790 (70.87)	.735 (18.67)
20	1.469 (37.31)	.724 (18.39)	1-1/4-18 UNEF	1-3/16-18 UNEF	1.113 (28.27)	2.940 (74.68)	.875 (22.23)
22	1.594 (40.49)	.724 (18.39)	1-3/8-18 UNEF	1-3/16-18 UNEF	1.176 (29.87)	2.940 (74.68)	.983 (24.97)
24	1.719 (43.66)	.724 (18.39)	1-1/2-18 UNEF	1-7/16-18 UNEF	1.253 (31.83)	3.290 (83.57)	1.095 (27.81)
28	1.969 (50.01)	.724 (18.39)	1-3/4-18 NS	1-7/16-18 UNEF	1.332 (33.83)	3.290 (83.57)	1.205 (30.60)
32	2.219 (56.36)	.724 (18.39)	2-18 NS	1-3/4-18 UNS	1.551 (39.40)	3.750 (95.25)	1.473 (37.41)
36	2.469 (62.71)	.724 (18.39)	2-1/4-16 UN	2-18 UNS	1.770 (44.96)	3.910 (99.31)	1.715 (43.56)
40	2.723 (69.16)	.724 (18.39)	2-1/2-16 UN	2-1/4-16 UN	3.950 (100.33)	6.840 (173.74)	1.942 (49.33)

90° Angle Plug - Potting cup

Shell Style 3108
ITT Part Number
CA3108ER

The CA3108ER 90° angle plug is supplied with a resilient insulator and nylon potting cup with a threaded attachment ring. This receptacle mates with 3100, 3101 and 3102 receptacles.



SHELL SIZE	Ø Q MAX	J MAX	A THREAD CLASS 2B	F MIN	G MIN	D MAX	L MAX (Short Potting Cup)	L-L MAX (Long Potting Cup)
10SL	.969 (24.61)	.536 (13.61)	5/8-24 UNEF	.605 (15.37)	.250 (6.35)	1.030 (26.16)	1.410 (35.81)	NA
12S	1.062 (26.97)	.536 (13.61)	3/4-20 UNEF	.760 (19.30)	.250 (6.35)	1.030 (26.16)	1.600 (40.64)	NA
12	1.062 (26.97)	.724 (18.39)	3/4-20 UNEF	.760 (19.30)	.250 (6.35)	1.030 (26.16)	1.910 (48.51)	NA
14S	1.156 (29.36)	.536 (13.61)	7/8-20 UNEF	.840 (21.34)	.280 (7.11)	1.030 (26.16)	1.600 (40.64)	2.300 (58.42)
14	1.156 (29.36)	.724 (18.39)	7/8-20 UNEF	.840 (21.34)	.280 (7.11)	1.030 (26.16)	1.910 (48.51)	2.610 (66.29)
16S	1.250 (31.75)	.536 (13.61)	1-20 UNEF	.965 (24.51)	.355 (9.02)	1.280 (32.51)	1.600 (40.64)	2.550 (64.77)
16	1.250 (31.75)	.724 (18.39)	1-20 UNEF	.965 (24.51)	.355 (9.02)	1.280 (32.51)	1.910 (48.51)	2.850 (72.39)
18	1.344 (34.14)	.724 (18.39)	1-1/8-18 UNEF	1.100 (27.94)	.530 (13.46)	1.280 (32.51)	2.100 (53.34)	2.850 (72.39)
20	1.469 (37.31)	.724 (18.39)	1-1/4-18 UNEF	1.225 (31.12)	.560 (14.22)	1.530 (38.86)	2.100 (53.34)	2.850 (72.39)
22	1.594 (40.49)	.724 (18.39)	1-3/8-18 UNEF	1.350 (34.29)	.560 (14.22)	1.530 (38.86)	2.100 (53.34)	2.850 (72.39)
24	1.719 (43.66)	.724 (18.39)	1-1/2-18 UNEF	1.475 (37.47)	.610 (15.49)	1.780 (45.21)	2.280 (57.91)	2.985 (75.82)
28	1.969 (50.01)	.724 (18.39)	1-3/4-18 NS	1.725 (43.82)	.805 (20.45)	2.030 (51.56)	2.485 (63.12)	2.985 (75.82)
32	2.219 (56.36)	.724 (18.39)	2-18 NS	2.010 (51.05)	.805 (20.45)	2.280 (57.91)	2.485 (63.12)	2.985 (75.82)
36	2.469 (62.71)	.724 (18.39)	2-1/4-16 UN	2.230 (56.64)	.805 (20.45)	2.530 (64.26)	2.485 (63.12)	2.985 (75.82)

Bulkhead Receptacles

BFR/TBF



TBF and BFR pressurized bulkhead receptacles mate with standard MS type plugs (3106 and 3108). Both the BFR and TBF have resilient insulators. The TBF (thru bulkhead fitting) version has a double faced construction allowing mating from both ends. An O-ring is supplied as standard on both the BFR and TBF. Contacts are silver plated copper or brass alloy. Shells are aluminum alloy.

Bulkhead Receptacles Ordering Guide

1- Series	2- Shell Size	3- Contact Arrangements	4- Contact Type	5- Polarization	6- Mod Codes
BFR	18	-1	P	W	A206
TBF	18	-1	PS	W	A206

1- Series	3- Contact Arrangements	5- Polarization	8- Modification Codes
BFR Bulkhead Fittings	Reference Contact Arrangements on pages 12-19	Blank Normal	A71 Electroless Nickel hardware, RoHS
TBF Thru Bulkhead Fittings		W	A206 Black zinc cobalt hardware, RoHS
2- Shell Size	4- Contact Type	X	A232 Black zinc cobalt hardware, RoHS European version
8S, 10S, 12S, 14S, 16S, 16, 18, 20, 22, 24, 28, 32 and 36 & 40	P Pin	Y See available polarizations on page 11	A176 Contacts hard gold over nickel, RoHS
	S Socket	Z	F80 Snap-in crimp contacts
	PS Pin and Socket		F0 Less Contacts
			-1 Obligatory code, BFR only

Bulkhead Receptacles

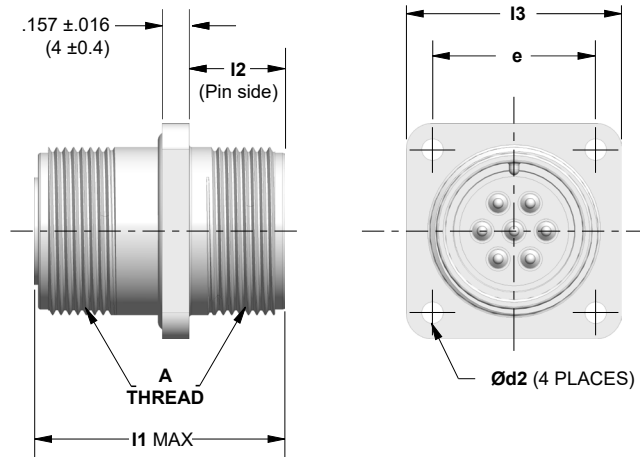
Thru-Bulkhead Receptacle

TBF - Resilient Insulator



Socket and Pin Insert End.

TBF thru-bulkhead fittings have pressurized resilient insulators. Special double-faced pin and socket contact construction permits cable components to be wired and tested in the shop and then to be plugged into the mounted TBF plug to complete the installation. The TBF mates with 3106 and 3108 plugs.



SHELL SIZE	I1 MAX	I2 +.016 (+0.4)	I3 ±.012, SQ (±0.3)	e ±.004, SQ (±0.1)	Ød2 +.008/-0.004 (+0.2/-0.1)	A THREAD CLASS 2A
8S	1.579 (40.1)	.559 (14.2)	.875 (22.22)	.594 (15.09)	.122 (3.1)	1/2-28 UNEF
10SL	1.579 (40.1)	.559 (14.2)	1.000 (25.4)	.717 (18.2)	.122 (3.1)	5/8-24 UNEF
14S	1.579 (40.1)	.559 (14.2)	1.181 (30.0)	.905 (23.0)	.122 (3.1)	7/8-20 UNEF
16S	1.579 (40.1)	.559 (14.2)	1.280 (32.5)	.968 (24.6)	.122 (3.1)	1-20 UNEF
16	2.142 (54.4)	.748 (19.0)	1.280 (32.5)	1.157 (29.4)	.122 (3.1)	1-20 UNEF
18	2.142 (54.4)	.748 (19.0)	1.378 (35.0)	1.252 (31.8)	.122 (3.1)	1-1/8-18 UNEF
20	2.142 (54.4)	.748 (19.0)	1.496 (38.0)	1.157 (29.4)	.122 (3.1)	1-1/4-18 UNEF
22	2.142 (54.4)	.748 (19.0)	1.614 (41.0)	1.252 (31.8)	.122 (3.1)	1-3/8-18 UNEF
24	2.142 (54.4)	.811 (20.6)	1.752 (44.5)	1.374 (34.9)	.146 (3.7)	1-1/2-18 UNEF
28	2.142 (54.4)	.811 (20.6)	2.000 (50.8)	1.563 (39.7)	.146 (3.7)	1-3/4-18 UNS
32	2.142 (54.4)	.874 (22.2)	2.244 (57.0)	1.752 (44.5)	.173 (4.4)	2-18 UNS
36	2.142 (54.4)	.874 (22.2)	2.500 (63.5)	1.937 (49.2)	.173 (4.4)	2-1/4-16 UN

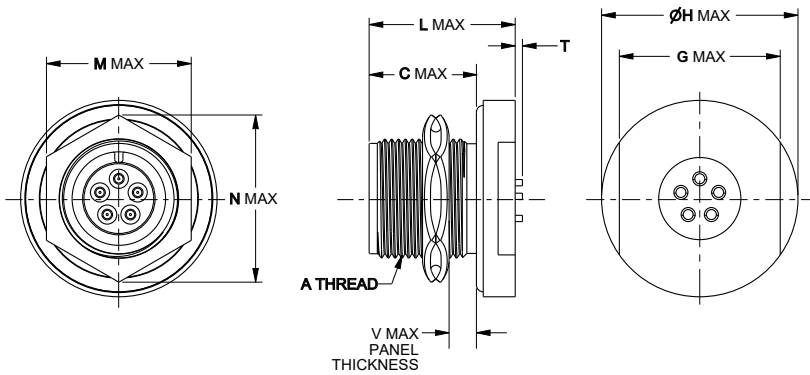
Bulkhead Receptacles

Pressurized Bulkhead Receptacle

BFR



BFR pressurized bulkhead receptacles withstand the air leakage requirements of MIL-C-5015 not to exceed 1 cu. in. of air per hour when subjected to a pressure differential of 30 psi at -55°C. Insulators are resilient material bonded to aluminum shell. Both pin and socket assemblies are available. The BFR will mate with standard MS type 3106 and 3108 plugs.



T DIMENSIONS Max. Solder Pot Extension - Pin or socket					
SHELL SIZE	Contact Size				
	#16	#12	#8	#4	#0
85 10S 10SL 12S 14S 16S	.140 (3.56)	-	-	-	-
12	.062 (1.57)	.062 (1.57)	-	-	-
14	.062 (1.57)	.062 (1.57)	.125 (3.18)	-	-
16	.062 (1.57)	.062 (1.57)	.125 (3.18)	.125 (3.18)	-
18	.062 (1.57)	.062 (1.57)	.125 (3.18)	.125 (3.18)	-
20 22	.062 (1.57)	.062 (1.57)	.125 (3.18)	.125 (3.18)	.359 (9.12)
24 28	.062 (1.57)	.062 (1.57)	.125 (3.18)	.125 (3.18)	.359 (9.12)
32 36	.062 (1.57)	.062 (1.57)	.125 (3.18)	.125 (3.18)	.359 (9.12)

SHELL SIZE	C MAX	G MAX	H MAX	L MAX	M MAX	N MAX	V MAX	A THREAD CLASS 2A
85	.853 (21.67)	.895 (22.73)	1.077 (27.36)	1.087 (27.61)	.702 (17.83)	.820 (20.83)	.250 (6.35)	1/2-28 UNEF
10S	.853 (21.67)	1.015 (25.78)	1.203 (30.56)	1.087 (27.61)	.822 (20.88)	.960 (24.38)	.250 (6.35)	5/8-24 UNEF
10SL	.853 (21.67)	1.015 (25.78)	1.203 (30.56)	1.087 (27.61)	.822 (20.88)	.960 (24.38)	.250 (6.35)	5/8-24 UNEF
12S	.853 (21.67)	1.077 (27.36)	1.327 (33.71)	1.087 (27.61)	.955 (24.26)	1.110 (28.19)	.250 (6.35)	3/4-20 UNEF
12	1.244 (31.60)	1.077 (27.36)	1.327 (33.71)	1.525 (38.74)	.955 (24.26)	1.110 (28.19)	.375 (9.52)	3/4-20 UNEF
14S	.853 (21.67)	1.203 (30.56)	1.453 (36.91)	1.087 (27.61)	1.072 (27.23)	1.250 (31.75)	.375 (9.52)	7/8-20 UNEF
14	1.244 (31.60)	1.203 (30.56)	1.453 (36.91)	1.525 (38.74)	1.072 (27.23)	1.250 (31.75)	.375 (9.52)	7/8-20 UNEF
16S	.853 (21.67)	1.327 (33.71)	1.577 (40.06)	1.087 (27.61)	1.265 (32.13)	1.460 (37.08)	.375 (9.52)	1-20 UNEF
16	1.244 (31.60)	1.327 (33.71)	1.577 (40.06)	1.525 (38.74)	1.265 (32.13)	1.460 (37.08)	.375 (9.52)	1-20 UNEF
18	1.244 (31.60)	1.453 (36.91)	1.703 (43.26)	1.525 (38.74)	1.395 (35.43)	1.610 (40.89)	.375 (9.52)	1-1/8-18 UNEF
20	1.244 (31.60)	1.577 (40.06)	1.827 (46.41)	1.525 (38.74)	1.515 (38.48)	1.750 (44.45)	.375 (9.52)	1-1/4-18 UNEF
22	1.244 (31.60)	1.577 (40.06)	1.953 (49.61)	1.525 (38.74)	1.635 (41.53)	1.900 (48.26)	.375 (9.52)	1-3/8-18 UNEF
24	1.244 (31.60)	1.827 (46.41)	2.077 (52.76)	1.525 (38.74)	1.765 (44.83)	2.030 (51.56)	.375 (9.52)	1-1/2-18 UNEF
28	1.244 (31.60)	1.953 (49.61)	2.327 (59.11)	1.525 (38.74)	2.015 (51.18)	2.330 (59.18)	.375 (9.52)	1-3/4-18 UNS
32	1.244 (31.60)	2.203 (55.96)	2.577 (65.45)	1.525 (38.74)	2.205 (56.01)	2.550 (64.77)	.375 (9.52)	2-18 UNS
36	1.244 (31.60)	2.577 (65.46)	2.827 (71.81)	1.525 (38.74)	2.455 (62.36)	2.840 (72.14)	.312 (7.92)	2-1/4-16 UN

Bulkhead Receptacles

Pressurized Bulkhead Receptacle

BFR

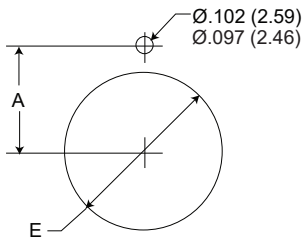


Fig. 1

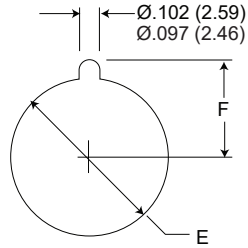
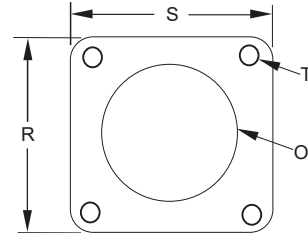


Fig. 2



MOUNTING DIMENSIONS (Figure 1 & 2)			
SHELL SIZE	A ±.005 (±0.13)	E +.015/-0.000 (+0.38/-0.00)	F ±.005 (±0.13)
8S	.323 (8.20)	.500 (12.70)	.373 (9.47)
10S, 10SL	.385 (9.78)	.625 (15.88)	.435 (11.05)
12S, 12	.448 (11.38)	.750 (19.05)	.498 (12.65)
14S, 14	.510 (12.95)	.875 (22.22)	.560 (14.22)
16S, 16	.573 (14.55)	1.000 (25.40)	.623 (15.82)
18	.635 (16.13)	1.125 (28.58)	.685 (17.40)
20	.698 (17.73)	1.250 (31.75)	.748 (19.00)
22	.760 (19.30)	1.375 (34.92)	.810 (20.57)
24	.823 (20.90)	1.500 (38.10)	.873 (22.17)
28	.948 (24.08)	1.750 (44.45)	.998 (25.35)
32	1.073 (27.25)	2.000 (50.80)	1.123 (28.52)
36	1.198 (30.43)	2.250 (57.15)	1.248 (31.70)

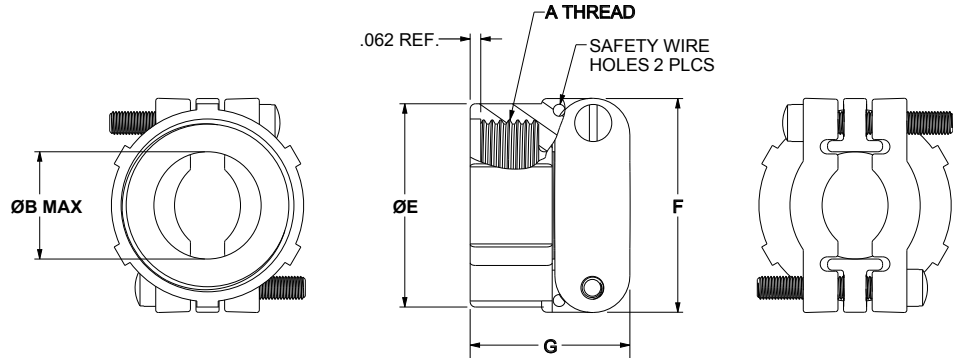
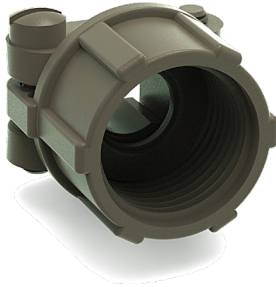
PANEL CUTOUTS				
SHELL SIZE	R ±.005 (±0.13)	S ±.031 (±0.79)	O	T ±.005 (±0.13)
8S	.594	.875	.562	.120
10S, 10SL	.719	1.000	.688	.120
12S, 12	.812	1.094	.812	.120
14S, 14	.906	1.188	.938	.120
16S, 16	.969	1.281	1.062	.120
18	1.062	1.375	1.188	.120
20	1.156	1.500	1.312	.120
22	1.250	1.625	1.438	.120
24	1.375	1.750	1.562	.147
28	1.562	2.000	1.812	.147
32	1.750	2.250	2.062	.173
36	1.938	2.500	2.312	.173
40	2.188	2.750	2.562	.173

Accessories

Cable Clamp

M85049-41 Style

M85049-41 Style cable clamp is made for plugs and receptacles that have an endbell with external conduit threads. The double clamping action provides a balanced, positive hold on the wires and greatly reduces moisture transmission. Provision is made for safety wiring. This clamp is supplied without bushing.

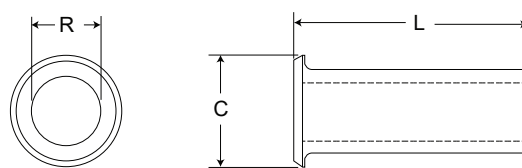


Fits Shell Size	ITT Cannon Part Number	MS Part Number (Reference only)	Superceded MS Part Number (Reference only)	Accommodates MS Bushings	Ø B MAX	Ø E ±.031 (±0.79)	F ±.031 (±0.79)	G ±.031 (±0.79)	A THREAD CLASS 2B
8S, 10S	017711-0003	M85049/41-3A	MS3057-3A	MS3420-3	.250 (6.35)	.688 (17.48)	.812 (20.62)	.812 (20.62)	1/2-28 UNEF
10SL, 12S, 12	017711-0004	M85049/41-4A	MS3057-4A	MS3420-4	.312 (7.92)	.812 (20.62)	.875 (22.22)	.812 (20.62)	5/8-24 UNEF
14S, 14	017711-0006	M85049/41-6A	MS3057-6A	MS3420-6	.438 (11.13)	.969 (24.61)	1.062 (26.97)	.875 (22.22)	3/4-20 UNEF
16S, 16	017711-0008	M85049/41-8A	MS3057-8A	MS3420-8	.562 (14.27)	1.094 (27.79)	1.156 (29.36)	.938 (23.83)	7/8-20 UNEF
18	017711-0010	M85049/41-10A	MS3057-10A	MS3420-10	.625 (15.88)	1.188 (30.18)	1.250 (31.75)	.938 (23.83)	1-20 UNEF
20, 22	017711-0012	M85049/41-12A	MS3057-12A	MS3420-12	.750 (19.05)	1.375 (34.92)	1.469 (37.31)	.938 (23.83)	1-3/16-18 UNEF
24, 28	017711-0016	M85049/41-16A	MS3057-16A	MS3420-16,12	.938 (23.83)	1.656 (42.06)	1.688 (42.88)	1.031 (26.19)	1-7/16-18 UNEF
32	017711-0020	M85049/41-20A	MS3057-20A	MS3420-20,16	1.250 (31.75)	2.031 (51.59)	2.031 (51.59)	1.094 (27.79)	1-3/4-18 UNS
36	017711-0024	M85049/41-24A	MS3057-24A	MS3420-24,20	1.375 (34.92)	2.219 (56.36)	2.281 (57.94)	1.156 (29.36)	2-18 UNS
40	017711-0028	M85049/41-28A	MS3057-28A	MS3420-24,20	1.625 (41.28)	2.500 (63.50)	2.688 (68.28)	1.688 (42.88)	2-1/4-16 UN

Telescoping Bushing

MS3420 / MS39056 (REF.)

Telescoping gland bushing (used with M85049/41 cable clamp) keep dirt, oil and moisture out of endbell. Taping or wrapping wires is eliminated since bushing protects wires going through clamp. Combinations of bushings may be used to decrease cable entry diameter to improve sealing.

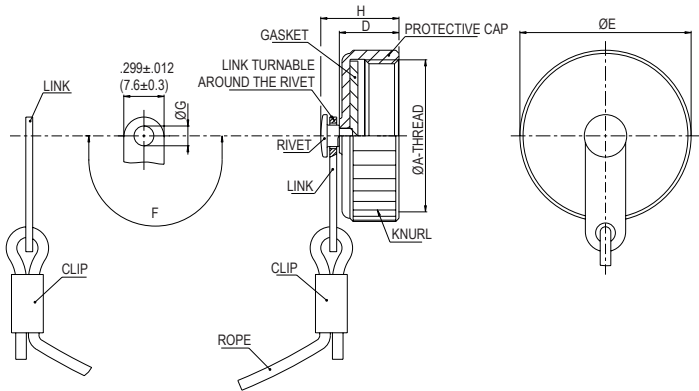


Fits Shell Size	ITT Cannon Part Number	MS Part Number	Superceded MS Part Number	Ø C ±.016 (±0.41)	L ±.031 (±0.79)	Ø R ±.016 (±0.41)
8S, 10S	CA18220-3	MS3420-3	MS39056-1	.379 (9.63)	2.875 (73.02)	.130 (3.30)
10SL, 12S, 12	CA18220-4	MS3420-4	MS39056-2	.505 (12.83)	2.750 (69.85)	.200 (5.59)
14S, 14	CA18220-6	MS3420-6	MS39056-3	.619 (15.72)	2.625 (66.68)	.312 (7.92)
16S, 16	CA18220-8	MS3420-8	MS39056-4	.744 (18.90)	2.500 (63.50)	.437 (11.10)
18	CA18220-10	MS3420-10	MS39056-5	.869 (22.07)	2.375 (60.32)	.562 (14.27)
20, 22	CA18220-12	MS3420-12	MS39056-6	1.064 (27.03)	2.250 (57.15)	.625 (15.88)
24, 28	CA18220-16	MS3420-16	MS39056-7	1.314 (33.38)	2.125 (53.98)	.750 (19.05)
32	CA18220-20	MS3420-20	MS39056-8	1.596 (40.54)	2.000 (50.80)	.937 (23.80)
36	CA18220-24	MS3420-24	MS39056-9	1.847 (46.91)	1.875 (47.62)	1.250 (31.75)
40	CA18220-28	MS3420-28	MS39056-10	2.085 (52.96)	1.750 (44.45)	1.375 (34.92)

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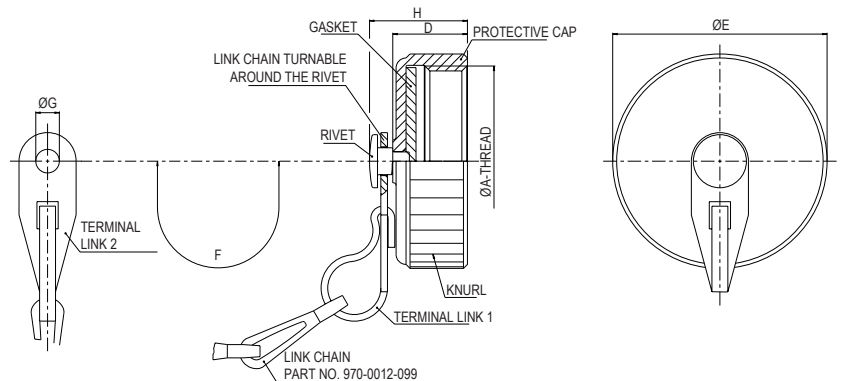
Accessories

Metal Protective Caps for Receptacles with Cord



Fits Shell Size	Order Designation				Ø A THREAD CLASS 2B	D MAX	ØE MAX	G approx.	ØG +.016 (+0.4)	H MAX
	A66	A232	A240	A241						
10SL	CA121003-801	CA121003-1621	CA121003-1681	CA121003-1721	5/8-24 UNEF	.461 (11.7)	.795 (20.2)	3.937 (100)	.134 (3.4)	.630 (16.0)
12S	CA121003-802	CA121003-1622	CA121003-1682	CA121003-1722	3/4-20 UNEF	.461 (11.7)	.921 (23.4)	4.528 (115)	.134 (3.4)	.630 (16.0)
14S	CA121003-803	CA121003-1623	CA121003-1683	CA121003-1723	7/8-20 UNEF	.461 (11.7)	1.047 (26.6)	4.528 (115)	.134 (3.4)	.630 (16.0)
16S, 16	CA121003-804	CA121003-1624	CA121003-1684	CA121003-1724	1-20 UNEF	.461 (11.7)	1.173 (29.8)	4.528 (115)	.134 (3.4)	.630 (16.0)
18	CA121003-806	CA121003-1626	CA121003-1686	CA121003-1726	1 1/8-18 UNEF	.461 (11.7)	1.295 (32.9)	4.528 (115)	.134 (3.4)	.630 (16.0)
20	CA121003-807	CA121003-1627	CA121003-1687	CA121003-1727	1 1/4-18 UNEF	.461 (11.7)	1.421 (36.1)	4.921 (125)	.134 (3.4)	.630 (16.0)
22	CA121003-808	CA121003-1628	CA121003-1688	CA121003-1728	1 3/8-18 UNEF	.461 (11.7)	1.551 (39.4)	4.921 (125)	.134 (3.4)	.630 (16.0)
24	CA121003-809	CA121003-1629	CA121003-1689	CA121003-1729	1 1/2-18 UNEF	.461 (11.7)	1.677 (42.6)	5.512 (140)	.165 (4.2)	.630 (16.0)
28	CA121003-810	CA121003-1630	CA121003-1690	CA121003-1730	1 3/4-18 UNS	.524 (13.3)	1.925 (48.9)	7.874 (200)	.165 (4.2)	.709 (18.0)
32	CA121003-811	CA121003-1631	CA121003-1691	CA121003-1731	2-18 UNS	.524 (13.3)	2.177 (55.3)	7.874 (200)	.181 (4.6)	.709 (18.0)
36	CA121003-812	CA121003-1632	CA121003-1692	CA121003-1732	2 1/4-16 UN	.524 (13.3)	2.425 (61.6)	7.874 (200)	.181 (4.6)	.709 (18.0)

Metal Protective Caps for Receptacles with Chain

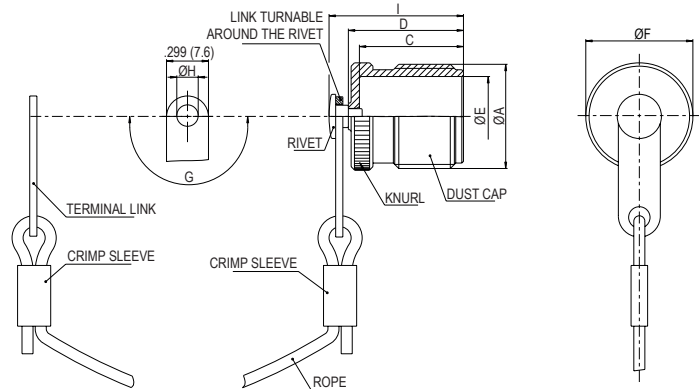


Fits Shell Size	Order Designation				Ø A THREAD CLASS 2B	D MAX	ØE MAX	G approx.	ØG +.016 (+0.4)	H MAX
	A66	A232	A240	A241						
10SL	CA2209-5101	CA121003-641	CA121003-681	CA121003-721	5/8-24 UNEF	.461 (11.7)	.795 (20.2)	3.937 (100)	.134 (3.4)	.630 (16.0)
12S	CA2209-5102	CA121003-642	CA121003-682	CA121003-722	3/4-20 UNEF	.461 (11.7)	.921 (23.4)	4.528 (115)	.134 (3.4)	.630 (16.0)
14S	CA2209-5103	CA121003-643	CA121003-683	CA121003-723	7/8-20 UNEF	.461 (11.7)	1.047 (26.6)	4.528 (115)	.134 (3.4)	.630 (16.0)
16S, 16	CA2209-5104	CA121003-644	CA121003-684	CA121003-724	1-20 UNEF	.461 (11.7)	1.173 (29.8)	4.528 (115)	.134 (3.4)	.630 (16.0)
18	CA2209-5105	CA121003-646	CA121003-686	CA121003-725	1 1/8-18 UNEF	.461 (11.7)	1.295 (32.9)	4.528 (115)	.134 (3.4)	.630 (16.0)
20	CA2209-5106	CA121003-647	CA121003-687	CA121003-726	1 1/4-18 UNEF	.461 (11.7)	1.421 (36.1)	4.921 (125)	.134 (3.4)	.630 (16.0)
22	CA2209-5107	CA121003-648	CA121003-688	CA121003-727	1 3/8-18 UNEF	.461 (11.7)	1.551 (39.4)	4.921 (125)	.134 (3.4)	.630 (16.0)
24	CA2209-5108	CA121003-649	CA121003-689	CA121003-728	1 1/2-18 UNEF	.461 (11.7)	1.677 (42.6)	5.512 (140)	.165 (4.2)	.630 (16.0)
28	CA2209-5109	CA121003-650	CA121003-690	CA121003-729	1 3/4-18 UNS	.524 (13.3)	1.925 (48.9)	7.874 (200)	.165 (4.2)	.709 (18.0)
32	CA2209-5110	CA121003-651	CA121003-691	CA121003-730	2-18 UNS	.524 (13.3)	2.177 (55.3)	7.874 (200)	.181 (4.6)	.709 (18.0)
36	CA2209-5111	CA121003-652	CA121003-692	CA121003-731	2 1/4-16 UN	.524 (13.3)	2.425 (61.6)	7.874 (200)	.181 (4.6)	.709 (18.0)

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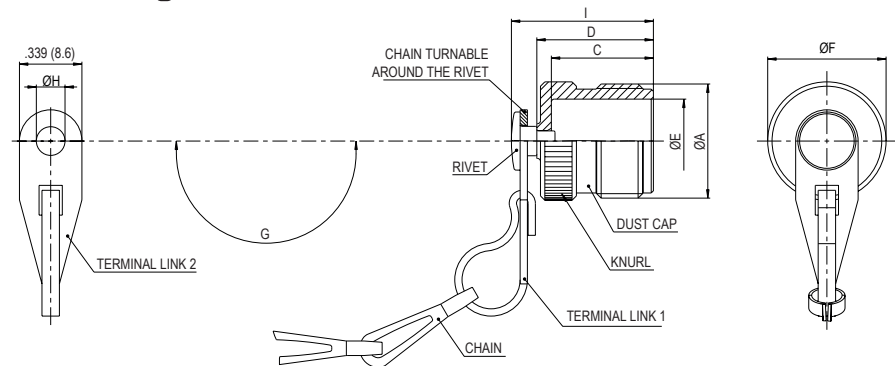
Accessories

Metal Protective Caps for Plugs with Cord



Fits Shell Size	Order Designation				Ø A THREAD CLASS 2A	C ±.020 (±0.5)	D MAX	ØE +.008 (+0.2)	ØF MAX	G approx.	ØH +.016 (+0.4)	I MAX
	A66	A232	A240	A241								
10SL	CA121004-801	CA121004-1621	CA121004-1681	CA121004-1721	5/8-24 UNEF	.555 (14.1)	.642 (16.3)	.453 (11.5)	.657 (16.7)	3.937 (100)	.150 (3.8)	.807 (20.5)
125	CA121004-802	CA121004-1622	CA121004-1682	CA121004-1722	3/4-20 UNEF	.744 (18.9)	.827 (21.0)	.567 (14.4)	.779 (19.8)	4.528 (115)	.150 (3.8)	.984 (25.0)
145	CA121004-803	CA121004-1623	CA121004-1683	CA121004-1723	7/8-20 UNEF	.744 (18.9)	.827 (21.0)	.693 (17.6)	0.906 (23.0)	4.528 (115)	.150 (3.8)	.984 (25.0)
165, 16	CA121004-804	CA121004-1624	CA121004-1684	CA121004-1724	1-20 UNEF	.744 (18.9)	.827 (21.0)	.819 (20.8)	1.031 (26.2)	4.528 (115)	.150 (3.8)	.984 (25.0)
18	CA121004-806	CA121004-1626	CA121004-1686	CA121004-1726	1 1/8-18 UNEF	.744 (18.9)	.827 (21.0)	.941 (23.9)	1.157 (29.4)	4.528 (115)	.150 (3.8)	.984 (25.0)
20	CA121004-807	CA121004-1627	CA121004-1687	CA121004-1727	1 1/4-18 UNEF	.744 (18.9)	.827 (21.0)	1.067 (27.1)	1.279 (32.5)	4.921 (125)	.181 (4.6)	.984 (25.0)
22	CA121004-808	CA121004-1628	CA121004-1688	CA121004-1728	1 3/8-18 UNEF	.744 (18.9)	.827 (21.0)	1.193 (30.3)	1.406 (35.7)	4.921 (125)	.181 (4.6)	.984 (25.0)
24	CA121004-809	CA121004-1629	CA121004-1689	CA121004-1729	1 1/2-18 UNEF	.744 (18.9)	.827 (21.0)	1.319 (33.5)	1.531 (38.9)	5.512 (140)	.181 (4.6)	.984 (25.0)
28	CA121004-810	CA121004-1630	CA121004-1690	CA121004-1730	1 3/4-18 UNS	.744 (18.9)	.827 (21.0)	1.535 (39.0)	1.780 (45.2)	7.874 (200)	.181 (4.6)	.984 (25.0)
32	CA121004-811	CA121004-1631	CA121004-1691	CA121004-1731	2-18 UNS	.744 (18.9)	.827 (21.0)	1.787 (45.4)	2.031 (51.6)	7.874 (200)	.213 (5.4)	.984 (25.0)
36	CA121004-812	CA121004-1632	CA121004-1692	CA121004-1732	2 1/4-16 UN	.744 (18.9)	.827 (21.0)	2.004 (50.9)	2.280 (57.9)	7.874 (200)	.213 (5.4)	.984 (25.0)

Metal Protective Caps for Plugs with Chain

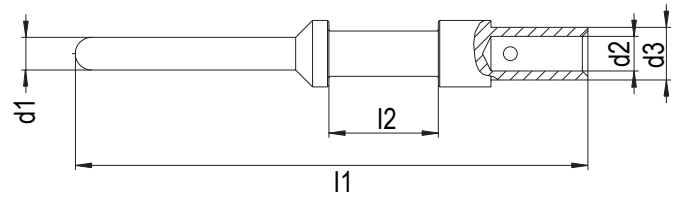


Fits Shell Size	Order Designation				Ø A THREAD CLASS 2A	C ±.020 (±0.5)	D MAX	ØE +.008 (+0.2)	ØF MAX	G approx.	ØH +.016 (+0.4)	I MAX
	A66	A232	A240	A241								
10SL	CA17530-5101	CA121004-641	CA121004-681	CA121004-721	5/8-24 UNEF	.555 (14.1)	.642 (16.3)	.453 (11.5)	.657 (16.7)	3.937 (100)	.150 (3.8)	.807 (20.5)
125	CA17530-5102	CA121004-642	CA121004-682	CA121004-722	3/4-20 UNEF	.744 (18.9)	.827 (21.0)	.567 (14.4)	.779 (19.8)	4.528 (115)	.150 (3.8)	.984 (25.0)
145	CA17530-5103	CA121004-643	CA121004-683	CA121004-723	7/8-20 UNEF	.744 (18.9)	.827 (21.0)	.693 (17.6)	0.906 (23.0)	4.528 (115)	.150 (3.8)	.984 (25.0)
165, 16	CA17530-5104	CA121004-644	CA121004-684	CA121004-724	1-20 UNEF	.744 (18.9)	.827 (21.0)	.819 (20.8)	1.031 (26.2)	4.528 (115)	.150 (3.8)	.984 (25.0)
18	CA17530-5105	CA121004-646	CA121004-686	CA121004-726	1 1/8-18 UNEF	.744 (18.9)	.827 (21.0)	.941 (23.9)	1.157 (29.4)	4.528 (115)	.150 (3.8)	.984 (25.0)
20	CA17530-5106	CA121004-647	CA121004-687	CA121004-727	1 1/4-18 UNEF	.744 (18.9)	.827 (21.0)	1.067 (27.1)	1.279 (32.5)	4.921 (125)	.181 (4.6)	.984 (25.0)
22	CA17530-5107	CA121004-648	CA121004-688	CA121004-728	1 3/8-18 UNEF	.744 (18.9)	.827 (21.0)	1.193 (30.3)	1.406 (35.7)	4.921 (125)	.181 (4.6)	.984 (25.0)
24	CA17530-5108	CA121004-649	CA121004-689	CA121004-729	1 1/2-18 UNEF	.744 (18.9)	.827 (21.0)	1.319 (33.5)	1.531 (38.9)	5.512 (140)	.181 (4.6)	.984 (25.0)
28	CA17530-5109	CA121004-650	CA121004-690	CA121004-730	1 3/4-18 UNS	.744 (18.9)	.827 (21.0)	1.535 (39.0)	1.780 (45.2)	7.874 (200)	.181 (4.6)	.984 (25.0)
32	CA17530-5110	CA121004-651	CA121004-691	CA121004-731	2-18 UNS	.744 (18.9)	.827 (21.0)	1.787 (45.4)	2.031 (51.6)	7.874 (200)	.213 (5.4)	.984 (25.0)
36	CA17530-5111	CA121004-652	CA121004-692	CA121004-732	2 1/4-16 UN	.744 (18.9)	.827 (21.0)	2.004 (50.9)	2.280 (57.9)	7.874 (200)	.213 (5.4)	.984 (25.0)

This document applies to North America manufactured 5015/CA Threaded products.
Dimensions shown in inches (mm). Specifications and dimensions subject to change.

Contacts

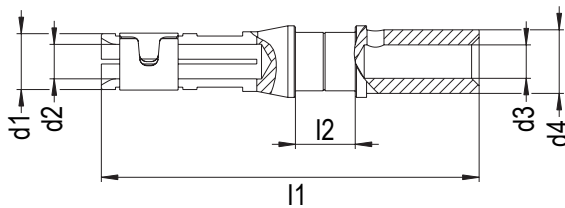
F-80 pin - Crimp Type



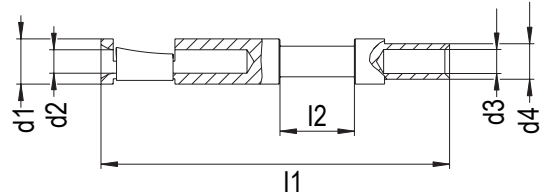
Contact Size	Wire Size (AWG)	Part Number with Finish A36-Silver Plated	Ø d1 -.002 (-0.05)	Ød2	Ød3	l1 ±.006 (±0.15)	l2 ±.020 (±0.5)
16S	18/16	330-0345-016	.063 (1.60)	.069 (1.75)	.108 (2.75)	1.079 (27.4)	.152 (3.85)
16	18/16	330-0351-016	.063 (1.60)	.069 (1.75)	.108 (2.75)	1.236 (31.4)	.311 (7.90)
12	14/12	330-0351-012	.094 (2.40)	.098 (2.50)	.150 (3.80)	1.457 (37.0)	.311 (7.90)
8	8	330-0351-008	.142 (3.60)	.179 (4.55)	.268 (6.80)	1.559 (39.6)	.250 (6.35)
4	4	330-0351-004	.226 (5.75)	.280 (7.10)	.376 (9.55)	1.559 (39.6)	.250 (6.35)
0	0	330-0351-000	.358 (9.10)	.453 (11.5)	.565 (14.35)	1.614 (41.0)	.250 (6.35)

F-80 socket - Crimp Type

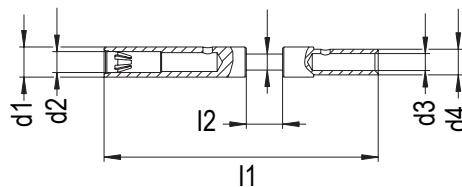
Contact size 8, 4 & 0



Contact size 12



Contact size 16S & 16



Contact Size	Wire Size (AWG)	Part Number with Finish A36-Silver Plated	Ø d1	Ød2 +.002 (+0.05)	Ød3	Ød4	l1 ±.008 (±0.2)	l2 ±.004 (±0.1)
16S	18 /16	031-0554-161	.126 (3.2)	.065 (1.65)	.069 (1.75)	.108 (2.75)	1.146 (29.1)	.154 (3.90)
16	18 /16	031-0560-161	.126 (3.2)	.065 (1.65)	.069 (1.75)	.108 (2.75)	1.488 (37.8)	.311 (7.90)
12	14 /12	031-0560-121	.189 (4.8)	.096 (2.45)	.098 (2.50)	.150 (3.80)	1.457 (37.0)	.311 (7.90)
8	8	031-0560-081	.256 (6.5)	.144 (3.65)	.179 (4.55)	.268 (6.80)	1.579 (40.1)	.250 (6.35)
4	4	031-0560-041	.339 (8.6)	.228 (5.80)	.280 (7.10)	.376 (9.55)	1.579 (40.1)	.250 (6.35)
0	0	031-0560-001	.520 (13.2)	.360 (9.15)	.453 (11.5)	.565 (14.35)	1.638 (41.6)	.250 (6.35)

Contacts

CA standard Layout Overview with contact wire size

The table below shows all available contact arrangements (layouts) available for ITT's CA product line. For each layout the crimp contact styles and wire cross sections used as default are shown.

If other crimp sizes are required the connector can be ordered with suffix "-FO" (without contacts), see ordering guide on page 6 for details. In this case, separate contacts can be selected according to contact selection tables on page 55.

Layout	No. of Contacts	Contact Size	Contact Termination -F80 Wire Size AWG
8S-1	1	16S	18/16
10S-2	1	16S	18/16
10SL-4	2	16S	18/16
10SL-3	3	16S	18/16
10SLA4	5	20	N/A
12S-4	1	16S	18/16
12-5	1	12	14/12
12S-3	2	16S	18/16
12SA10	4	16S	18/16
14-3	1	8	8
14S-9	2	16S	18/16
14S-1	3	16S	18/16
14S-7	3	16S	18/16
14S-2	4	16S	18/16
14S-5	5	16S	18/16
14S-6	6	16S	18/16
16-12	1	4	4
16-11	2	12	14/12
16S-4	2	16S	18/16
16-13	2	12	14/12
16S-5	3	16S	18/16
16S-6	3	16S	18/16
16-10	3	12	14/12
16S-8	5	16S	18/16
16S-1	7	16S	18/16
18-7	1	8	8
18-3	2	12	14/12
18-22	3	16	18/16
18-4	4	16	18/16
18-10	4	12	14/12
18-15	4	12	14/12
18-11	5	12	14/12
18-12	6	16	18/16
18-1	10	16	18/16
18-19	10	16	18/16
20-2	1	0	0
20-23	2	8	8

Layout	No. of Contacts	Contact Size	Contact Termination -F80 Wire Size AWG
20-3	3	12	14/12
20-19	3	8	8
20-4	4	12	14/12
20-15	7	12	14/12
20-7	8	16	18/16
20-33	11	16	18/16
20-11	13	16	18/16
20-27	14	16	18/16
20-29	17	16	18/16
22-7	1	0	0
22-11	2	16	18/16
22-2	3	8	8
22-9	3	12	14/12
22-10	4	16	18/16
22-22	4	8	8
22-28	7	12	14/12
22-18	8	16	18/16
23-23	8	12	14/12
22-20	9	16	18/16
22-19	14	16	18/16
22-14	19	16	18/16
24-9	2	4	4
24-22	4	8	8
24-2	7	12	14/12
24-10	7	8	8
24-27	7	16	18/16
24-6	8	12	14/12
24-19	12	16	18/16
24A24	12	12	14/12
24-5	16	16	18/16
24-28	24	16	18/16
28-7	2	4	4
28-17	15	16	18/16
28-16	20	16	18/16
28-12	26	16	18/16
28-15	35	16	18/16
28-21	37	16	18/16
32-17	4	4	4
32-5	2	0	0
32A47	47	16	18/16
32A10	54	16	18/16
36-4	3	0	0
36-5	4	0	0
36A46	27	12	14/12
36-15	35	16	18/16
36-10	48	16	18/16
36A34	52	16	18/16
40A27	60	16	18/16
40-56	85	16	18/16

This document applies to North America manufactured 5015/CA Threaded products. Dimensions shown in inches (mm). Specifications and dimensions subject to change.

Contacts

CA Combo Layout Overview with contact wire size

Layout	No. of Contacts	Contact Size	Contact Termination* -F80 Wire Size AWG
16-7	2	16	18/16
	1	8	8
16-9	2	16	18/16
	2	12	14/12
18-5	1	16	18/16
	2	12	14/12
18-13	3	12	14/12
	1	8	8
18-9	5	16	18/16
	2	12	14/12
18-8	7	16	18/16
	1	12	14/12
20-24	2	16	18/16
	2	8	8
20-14	3	12	14/12
	2	8	8
20-8	4	16	18/16
	2	8	8
20-17	1	16	18/16
	5	12	14/12
20-22	3	16	18/16
	3	8	8
20-16	7	16	18/16
	2	12	14/12
20-18	6	16	18/16
	3	12	14/12
22-6	1	16	18/16
	2	8	8
22-4	2	12	14/12
	2	8	8
22-12	3	16	18/16
	2	8	8
22-13	1	16	18/16
	4	12	14/12
22-5	4	16	18/16
	2	12	14/12
22-15	1	16	18/16
	5	12	14/12
22-17	8	16	18/16
	1	12	14/12
22-27	8	16	18/16
	1	8	8
24-12	3	12	14/12
	2	4	4
24-11	6	12	14/12
	3	8	8
24-20	9	16	18/16
	2	12	14/12
24-7	14	16	18/16
	2	12	14/12
28-22	3	16	18/16
	3	4	4

Layout	No. of Contacts	Contact Size	Contact Termination* -F80 Wire Size AWG
28-10	3	12	14/12
	2	8	8
	2	4	4
28-1	6	12	14/12
	3	8	8
28A16	5	16	18/16
	4	4	4
28-19	6	16	18/16
	4	12	14/12
28-9	6	16	18/16
	6	12	14/12
28-2	12	16	18/16
	2	12	14/12
28-20	4	16	18/16
	10	12	14/12
28-11	18	16	18/16
	4	12	14/12
32-1	3	12	14/12
	2	0	0
32-15	6	12	14/12
	2	0	0
32-9	12	16	18/16
	2	4	4
32-6	16	16	18/16
	2	12	14/12
	3	8	8
	2	4	4
32-8	24	16	18/16
	6	12	14/12
32-7	28	16	18/16
	7	12	14/12
36-6	4	4	4
	2	0	0
36-14	6	16	18/16
	5	12	14/12
	5	8	8
36-9	14	16	18/16
	14	12	14/12
	2	8	8
	1	4	4
36-7	40	16	18/16
	7	12	14/12
36-8	46	16	18/16
	1	12	14/12
36A66	52	16	18/16
	4	12	14/12
40A33	7	8	8
	6	4	4
40-10	16	16	18/16
	9	8	8
	4	4	4
44-1	36	16	18/16
	6	12	14/12
48-5	90	16	18/16
	9	12	14/12
	1	8	8

This document applies to North America manufactured 5015/CA Threaded products.
Dimensions shown in inches (mm). Specifications and dimensions subject to change.

Tools

F80 Assembly Instructions

ITT Cannon provides a complete line of crimp insertion and extraction tooling to be used with CA-F80 contacts as follows.

Contact Size	Hand Crimp Tool*	Locator	Power Crimp Tool*	Crimp Head	Locator	Gauge
16	M-2252/1-01	TH-70-1	CBT-530			
12	M-2252/1-01	TP567	CBT-600/600B	CCH-12-7	CCHP-12-2	
8	-		CBT-600/600B	CCH-8-1	CCHP-8-1	CCH-8-1
4	-		CBT-600/600B	CCH-4-1	CCHP-4-1	CCH-4-1
0	-		CBT-600B	CCH-0-1	CCHP-0-9	CCH-0

*The M-2252/1-01 is the MIL standard crimp tool for #12 thru #20 contacts and when used with crimp #12, 16 & 20 contacts for the CA-F80.

** The CBT-600 is recommended for crimping of #4 thru #12 contacts. The CBT-600B for #0 thru #8. The appropriate locators and crimp heads are available as shown above.



CBT-600



CBT-520/530

Crimp Tool



Crimping Contacts

1. Check the crimp tool to be sure that the proper crimp head locator is used.
2. Cycle to tool to be sure the indentors are open.
3. Place the contact, mating end first, into the tool.
4. Insert the stripped wire into the hollow end of the contact. Be sure the wire is inserted as far as it will go.
5. Close the tool completely to crimp. Unless the tool is closed completely, the tool will not release the contact.
6. Remove the crimped contact from the tool. Check the inspection hole to verify that the wire is fully inserted.

Insertion of Contacts

1. Before inserting the contacts, remove the endbell, grommets, and ferrule from the receptacle. Remove the endbell, grommet, ferrule, and coupling nut from the plug. Slide the hardware over the wire bundle in the proper order for reassembly after all the contacts are inserted.
2. To assist insertion of contacts, lubricate insert cavities with isopropyl alcohol. Alcohol will evaporate and will not leave a conductive film. Caution: Never use any lubricant other than isopropyl alcohol. Hold the plug or receptacle body firmly and insert the wired contacts as far as possible by hand. Starting at one side of the insulator, work progressively from contact to contact across the layout. When inserting socket contacts, be sure to provide fixture space below the front face to permit length of guide pins for #16 and #12 contacts to clear insulator face.
3. Place the correct insertion tool on the contact so that the wire runs along the groove in the tool. (Tool tip will butt against the shoulder.)
4. Beginning with a cavity on the outer edge of the plug, apply a slow, even pressure perpendicular to the insulator face until the contact snaps into position. If contacts are not inserted all the way prior to removing insertion tool, do not try to reinsert the insertion tool. Instead, using the extraction tool, push the contact back to the position it was in when the insertion tool was originally placed over the contact for push-in; otherwise the inside of contact cavity may be damaged by reinserting the insertion tool.
5. Inspect the front end of the insulator to assure that the contacts are inserted to the proper depth.

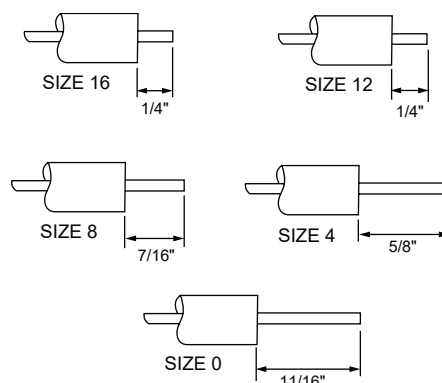
Completion

After all the cavities have been filled, slide the hardware back into position on the barrel. Tighten the endbell until the ferrule and endbell are flush. Compression of the grommet in this manner results in maximum sealing characteristics of the plug.

Extraction of Contacts

1. Select the appropriate tool. (Tool tips are reversible for either pin or socket.) Place the extraction tool over the pin or into the socket.
2. Apply a slow, even pressure to push the contact out of the rear of the insulator.

Recommended Wire Stripping



Contacts

Contact Size	Contact Part Numbers F80	
	Pin	Socket
16S	330-0345-016	031-0554-161
16	330-0351-016	031-0560-161
12	330-0351-012	031-0560-121
8	330-0351-008	031-0560-081
4	330-0351-004	031-0560-041
0	330-0351-000	031-0560-001

Guide Pins

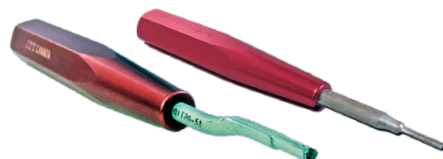
Guide pins are used to assist insertion of socket contact sizes #16 and #12. Larger sizes do not require guide pins.

Contact	Guide Pin
#16	226-1017-000
#12	226-1018-000

Wire Hole Fillers

Wire Size AWG	ITT Cannon Part Number	Color
20	225-1000-000	Red
16/16S	225-0017-000	Blue
12	225-0018-000	Yellow
8	225-0019-000	White
4	225-8502-000	Green
0	225-8503-000	Black

Insertion/Extraction Tools



Insertion and extraction tools used for these connectors are available for contact sizes 16 thru 0 as shown.

Contact Size	Insertion Tools	Extraction Tools	Handle Color
16	CIT-16 (038895-0000)	CET-16-4 (038888-0004)	Blue
12	CIT-12 (038896-0000)	CET-12-2 (038890-0002)	Yellow
8	CIT-8	CET-8	Red
4	CIT-4	CET-4	Blue
0	CIT-0	CET-0	Yellow

Notes

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

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