



Industrial 5015

Connectors and Cable Assemblies

 **COOPER** Interconnect



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Cooper Interconnect exceeds customer expectations through continuous focus on providing a vast selection of high-quality products and solutions. The Industrial 5015 series of connectors and assemblies represent our continued commitment to adding value with cost-effective solutions.

With the development of new products and technology, Cooper Interconnect continuously expands the technical solutions and value that we can deliver to our customers.



Introduction



Cooper Interconnect's Industrial 5015 military style connectors and cable assemblies represent a proven track record of performance for general duty and harsh environment applications. Common applications include automation equipment, robotics, solar and alternative energy systems, medical (MRI), rail, heavy equipment, farming and transportation vehicles.

Market Segments



Mass Transit/Rail

Engine monitoring systems, way side signaling, radio communications, rail navigation, door control systems, intracar cabling.

- Rugged design and construction.
- Excellent EMI protection.
- Performs well in harsh environments (Temperature, moisture, dust).

Industrial/Automation

Assembly robotics, automation plants, food processing equipment, livestock processing, sensors, motors, encoders, actuators, machining centers.

- Reliable design reduces downtime.
- Excellent EMI protection reduces signal loss and crosstalk.
- Performs well in harsh environments.

Heavy Equipment

Agricultural, portable generators, commercial vehicles, earth movers.

- Rugged construction provides reliable mating in harsh environments.
- High amperage contacts handle high power demands.
- Superior corrosion resistance.

Energy/Solar/Wind/Alternative

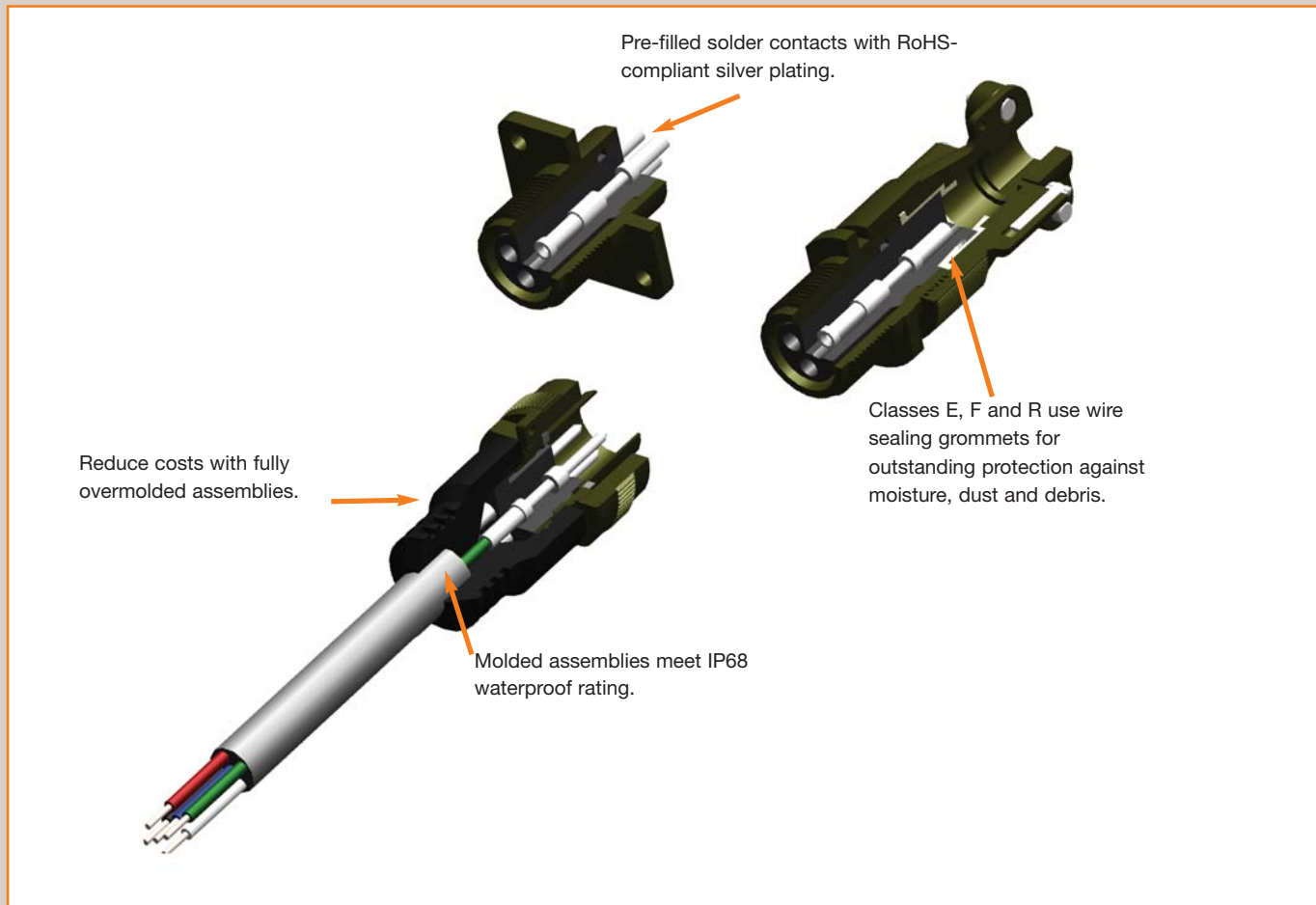
Controls systems, Gear motor controllers, Leveling systems, Gas turbines, Nuclear/Large scale power plants.

- High-amperage contacts handle high-power demands.
- Easy mating and unmating for servicing.
- Survives in high heat and rugged applications.
- Excellent EMI protection.

Features Overview

Features Overview

- Over 140 different insert arrangements available.
- Resilient insulators provide excellent performance and protection.
- Four plating options to meet specific applications. Two types are RoHS compliant.
- Interfaces directly with other MIL-DTL-5015 connectors.
- Connector shells, bodies, coupling nuts and accessories made from high strength aluminum alloy.
- Connector bodies are corrosion and impact resistant.

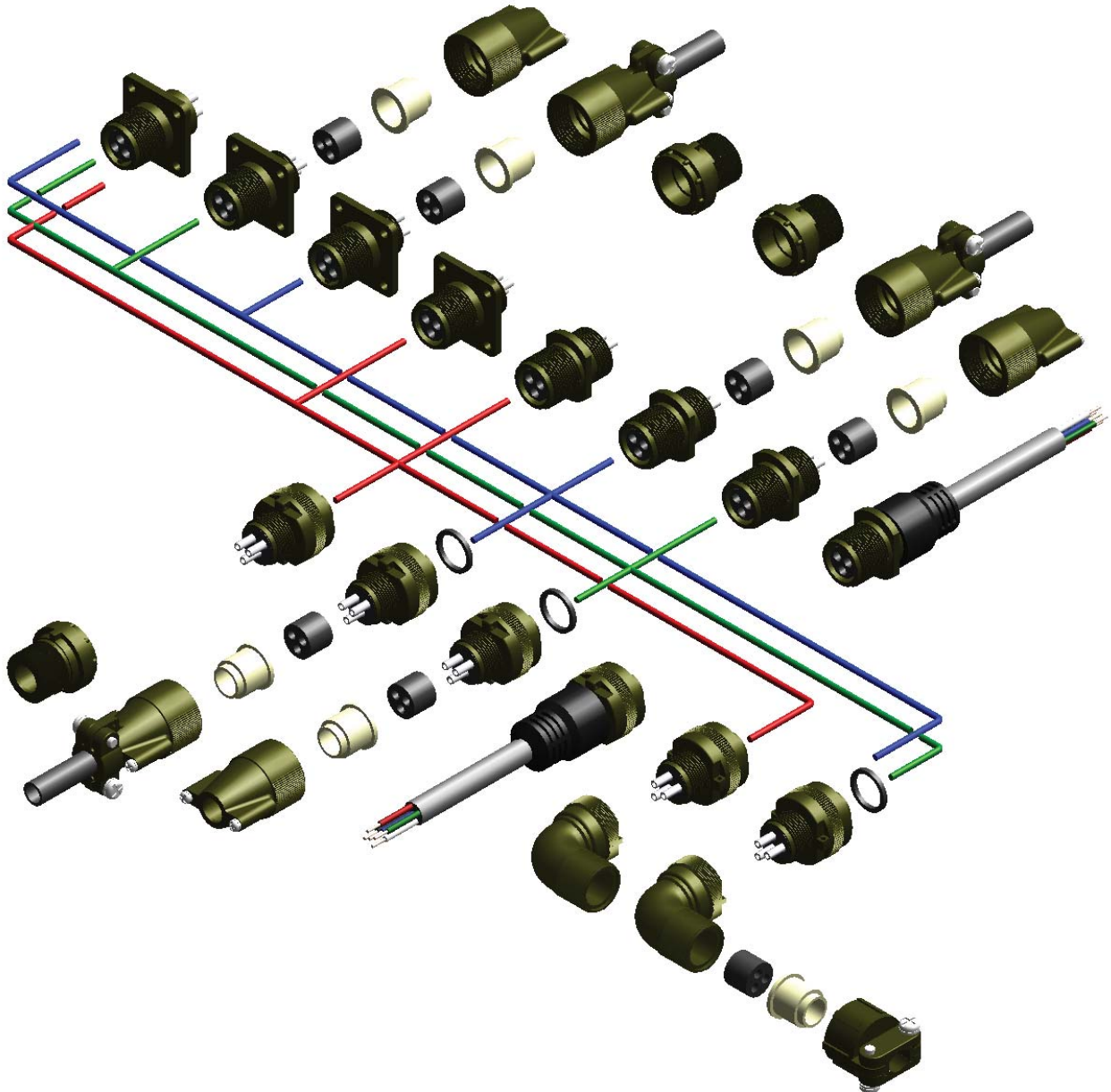


A full line of accessories that includes protective caps, bushings, backshells, and gaskets.



Product At A Glance

Class A	
Class E & F	
Class R	



Type C3106 (Classes F and R) and type C3108 (Classes F and R) cable mount plug connectors have an additional O-ring that enables the entire connector to be environmentally protected per MIL-C-5015.

Ordering Guide

Step 1 - Select a plug



3106E Straight Plug

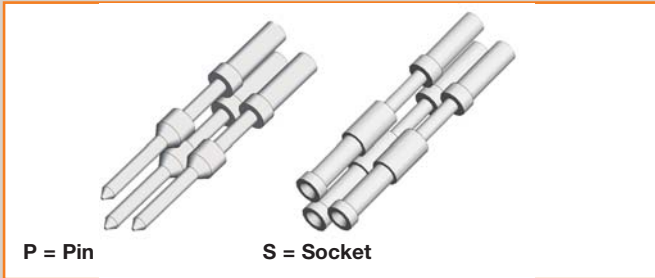


3108E Angled Plug

Step 3 - Select a class rating.

- Class A General, non-environmental applications.
- Class E Same as A, except with integral clamp for cable strain relief.
- Class F Same as E: style 3106 with O-ring seal under the coupling nut.
- Class R Same as F: shortened lightweight endbell (additional sealing with O-ring under the coupling nut for shell styles 3106 and 3108).

Step 5 - Select a contact, pin or socket.



P = Pin

S = Socket

Step 6 - Choose the insert orientation

N - Normal (See pages 19-21 for alternate insert arrangements.)

Step 2 - Select a mating receptacle

Mates
↔
With



3100E Wall Mount Inline Receptacle

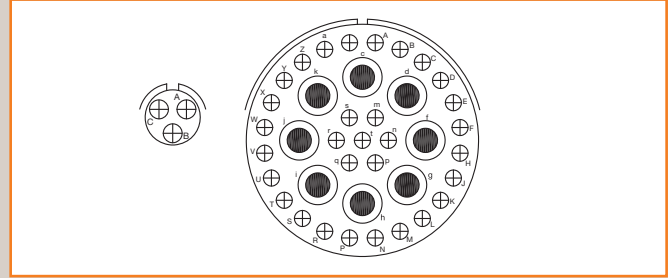


3101E Cable Connecting Receptacle



3102E Box Mount Receptacle

Step 4 - Choose a shell size and insert arrangement.



Sizes range from 10SL-3 to 36-54. See pages 10-18.

Step 7 - Select plating type. (RoHS options available)

BLANK - Conductive olive drab chromate over zinc plate.

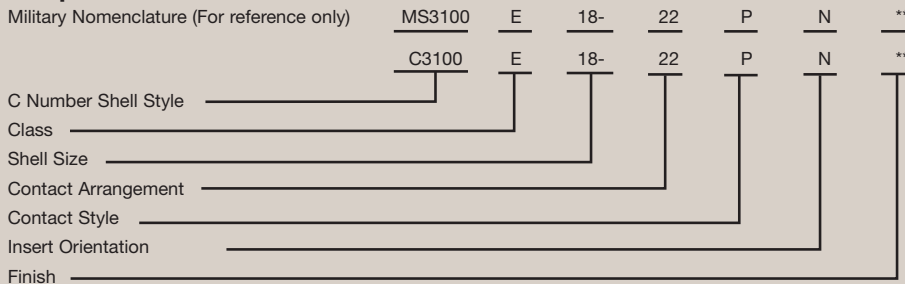
1 - Black zinc cobalt plate (RoHS).

2 - Electroless nickel plate (RoHS).

Standard	
Black zinc	
Electroless nickel	

Cooper Interconnect Nomenclature

Military Nomenclature (For reference only)



Specifications



Specifications

STANDARD MATERIALS AND FINISHES		
	MATERIALS	FINISHES
Shell	Aluminum alloy	Conductive olive drab chromate over zinc (standard) - see page 8 for options.
Insulator	CR - Polychloroprene Rubber	
Contacts	Copper alloy	Silver

ELECTRICAL DATA	
Insulation resistance	5,000MΩ Min. (at 25°C)
Operating temperature range	-55°C to +125°C
Durability	500 cycles

CONTACT ARRANGEMENTS SERVICE RATING							
DIELECTRIC WITHSTANDING VOLTAGE				CONTACT ENGAGING AND SEPARATING FORCE			
SERVICE RATING	TEST VOLTAGE AC (RMS)	OPERATING VOLTAGE		CONTACT SIZE	FORCE IN POUNDS		
		AC (RMS)	DC		MAXIMUM	AVERAGE	MINIMUM
Inst.	1,000	200	250	16	3	2.06	0.13
A	2,000	500	700	12	5	3.5	0.19
D	2,800	900	1,250	8	10	-	0.31
E	3,500	1,250	1,750	4	15	-	0.63
B	4,500	1,750	2,450	0	20	-	0.94
C	7,000	3,000	4,200				



C3057 backshell with C3420 bushing



C3108 angled plug

ALTITUDE VOLTAGE DERATING CHART						
SERVICE RATING	NOMINAL DISTANCE		STANDARD SEA LEVEL CONDITIONS		PRESSURE ALTITUDE 70,000 FEET	
	AIRSPACE	CREEPAGE	MINIMUM FLASHOVER VOLTAGE AC (RMS)	TEST VOLTAGE AC (RMS)	MINIMUM FLASHOVER VOLTAGE AC (RMS)	TEST VOLTAGE AC (RMS)
Inst.	1/32	1/16	1,400	1,000	325	260
A	1/16	1/8	2,800	2,000	450	360
D	1/8	3/16	3,600	2,800	500	400
E	3/16	1/4	4,500	3,500	550	440
B	1/4	5/16	5,700	4,500	600	480
C	5/16	1	8,500	7,000	700	560

Current and Wire Gauge								
CONTACT SIZE	PIN CONTACT DIAMETER (MM)	SOLDER POT DIAMETER (MM)	CURRENT (A) RATING (MATED WITH INSULATORS)	CONTACT RESISTANCE		WIRE RANGE ACCOMMODATIONS		
				TEST CURRENT (A)	POTENTIAL DROP MAXIMUM (MV)	WIRE SIZE (AWG)	WIRE NORMAL SQUARE SIZE (MM²)	DIELECTRIC MATERIAL OUTER DIAMETER
16	1.6	2	13A	20A	21	16	≤ 1.3	3.3
12	2.4	3	23A	35A	20	12	≤ 3.5	4.3
8	3.6	5.2	46A	60A	12	8	≤ 8.0	6.4
4	5.7	8.5	80A	110A	10	4	≤ 22.0	9.4
0	9.1	12	150A	200A	10	0	≤ 50.0	14.0

Contact Arrangements and Formation

	Shell Size 10			Shell Size 12			
Insert Arrangement							
Service Rating	A	INST, A	A	A	A	D	D
Number of Contacts	1	3	2	2	2	1	1
Contact Size	16	16	16	16	16	16	12

	Shell Size 14							
Insert Arrangement								
Service Rating	A	INST	D	D	INST	INST	A	A
Number of Contacts	3	4	1	1	5	6	3	2
Contact Size	16	16	8	16	16	16	16	16

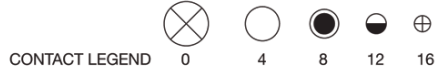
	Shell Size 14	Shell Size 16				
Insert Arrangement						
Service Rating	A	A	A	D	A	A
Number of Contacts	3	8	7	2	3	3
Contact Size	16	16	16	16	16	16

	Shell Size 16					
Insert Arrangement						
Service Rating	A	A	A	A	A	A
Number of Contacts	5	2 2	3	2	1	2
Contact Size	16	16 12	12	12	4	12

	Shell Size 18					
Insert Arrangement						
Service Rating	A (B,C,F,G) INST(OTHERS)	24V	D	D	D	A
Number of Contacts	10	3	2	4	1 2	7 1
Contact Size	16	16	12	16	16 12	16 12

	Shell Size 18					
Insert Arrangement						
Service Rating	INST	A	A	A	A	A
Number of Contacts	5 2	4	5	6	1	1 1
Contact Size	16 12	12	12	16	8	16 4

1. View from pin side insert.
 2. Please contact factory for any special insert arrangements.
 3. Insert arrangements per MIL-STD-1651

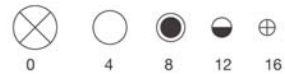


Contact Arrangements and Formation

Shell Size 18						
Insert Arrangement	18 - 16	18 - 18	18 - 19	18 - 20	18 - 21	18 - 22
Service Rating	C	INST	A	A	A	D
Number of Contacts	1	5 2	10	5	3	3
Contact Size	12	16 12	16	16	12	16
Shell Size 20						
Insert Arrangement	20 - 01	20 - 2	20 - 3	20 - 4	20 - 7	
Service Rating	A	D	D	D	A (ALL OTHERS) D (A,B,G,H)	
Number of Contacts	10	1	3	4	8	
Contact Size	16	0	12	12	16	
Shell Size 20						
Insert Arrangement	20 - 8	20 - 10	20 - 11	20 - 15	20 - 16	
Service Rating	INST	A	INST	A	A	
Number of Contacts	4 2	4	13	7	7 2	
Contact Size	16 8	16	16	12	16 12	
Shell Size 20						
Insert Arrangement	20 - 17	20 - 18	20 - 22	20 - 23	20 - 24	
Service Rating	A	A	A	A	A	
Number of Contacts	1 5	6 3	3 3	2	2 2	
Contact Size	16 12	16 12	16 8	8	16 8	
Shell Size 20			Shell Size 22			
Insert Arrangement	20 - 27	20 - 29	20 - 33	22 - 2	22 - 4	
Service Rating	A	A	A	D	A	
Number of Contacts	14	17	11	3	2 2	
Contact Size	16	16	16	8	12 8	

1. View from pin side insert.
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3. Insert arrangements per MIL-STD-1651

CONTACT LEGEND



Contact Arrangements and Formation

Shell Size 22						
Insert Arrangement	22 - 5	22 - 7	22 - 8	22 - 9	22 - 10	
Service Rating	D	E	E	E	E	
Number of Contacts	4 2	1	2	3	4	
Contact Size	16 12	0	12	12	16	
Shell Size 22						
Insert Arrangement	22 - 13	22 - 14	22 - 15	22 - 18	22 - 19	
Service Rating	DA	A	A (ALL OTHERS) D(E)	A (C,D,E) D(ALL OTHERS)	A	
Number of Contacts	1 4	19	1 5	8	14	
Contact Size	16 12	16	16 12	16	16	
Shell Size 22			Shell Size 24			
Insert Arrangement	22 - 21	22 - 22	22 - 23	24 - 2		
Service Rating	A	A	A (ALL OTHERS), D(H)	D		
Number of Contacts	2 1	4	8	7		
Contact Size	16 0	8	12	12		
Shell Size 24						
Insert Arrangement	24 - 02	24 - 3	24 - 4	24 - 5		
Service Rating	A	D	D	A		
Number of Contacts	9	5 2	3 1	16		
Contact Size	12	16 12	16 0	16		
Shell Size 24						
Insert Arrangement	24 - 7	24 - 9	24 - 10	24 - 11		
Service Rating	A	A	A	A		
Number of Contacts	14 2	2	7	6 3		
Contact Size	16 12	4	8	12 8		

1. View from pin side insert.
2. Please contact factory for any special insert arrangements.
3. Insert arrangements per MIL-STD-1651



Contact Arrangements and Formation

Contact Arrangements

Shell Size 24				
Insert Arrangement	24 - 12	24 - 20	24 - 22	24 - 28
Service Rating	A	D	D	INST
Number of Contacts	3 2	9 2	4	24
Contact Size	12 4	16 12	8	16

Shell Size 28				
Insert Arrangement	28 - 2	28 - 3	28 - 6	28 - 10
Service Rating	D	E	D	A (ALL OTHERS), D(G)
Number of Contacts	12 2	3	3	3 2 2
Contact Size	16 12	8	4	12 8 4

Shell Size 28				
Insert Arrangement	28 - 11	28 - 12	28 - 15	28 - 16
Service Rating	A	A	A	A
Number of Contacts	18 4	26	35	20
Contact Size	16 12	16	16	16

Shell Size 28				
Insert Arrangement	28 - 17	28 - 18	28 - 19	28 - 20
Service Rating	A(ALL OTHERS) B(R), D(M,N,P)	A(A,B), C(M), INST(C,D,E,F) D(ALL OTHERS)	A(ALL OTHERS) B(H, M) D(A,B)	A
Number of Contacts	15	12	6 4	4 10
Contact Size	16	16	16 12	16 12

1. View from pin side insert.
 2. Please contact factory for any special insert arrangements.
 3. Insert arrangements per MIL-STD-1651

CONTACT LEGEND

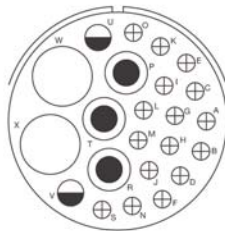
0	4	8	12	16

Contact Arrangements and Formation

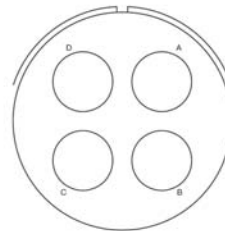
Shell Size 28			
Insert Arrangement	28 - 21	28 - 22	28 - 51
Service Rating	A	D	A
Number of Contacts	37	3 3	12
Contact Size	16	16 4	12
Shell Size 32			
Insert Arrangement	32 - 01	32 - 1	32 - 5
Service Rating	A	E (A), D (ALL OTHERS)	D
Number of Contacts	24	3 2	2
Contact Size	12	12 0	0
Shell Size 32			
Insert Arrangement	32 - 6	32 - 7	32 - 8
Service Rating	A	A (ALL OTHERS), INST (A, B, h, j)	A
Number of Contacts	16 2 3 2	28 7	24 6
Contact Size	16 12 8 4	16 12	16 12
Shell Size 32			
Insert Arrangement	32 - 9	32 - 13	32 - 15
Service Rating	D	D	D
Number of Contacts	12 2	18 5	6 2
Contact Size	16 4	16 12	12 0
<p>1. View from pin side insert. 2. Please contact factory for any special insert arrangements. 3. Insert arrangements per MIL-STD-1651</p>			
<p>CONTACT LEGEND</p>			

Contact Arrangements and Formation

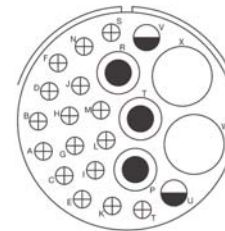
Shell Size 32



Insert Arrangement	32 - 16
Service Rating	A
Number of Contacts	16 2 3 2
Contact Size	16 12 8 4

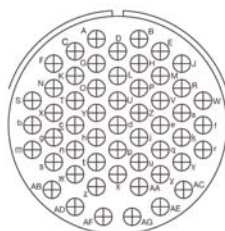


Insert Arrangement	32 - 17
Service Rating	D
Number of Contacts	4
Contact Size	4

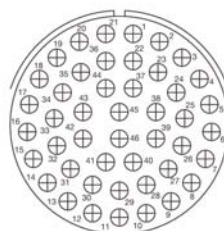


Insert Arrangement	32 - 20
Service Rating	A
Number of Contacts	16 2 3 2
Contact Size	16 12 8 4

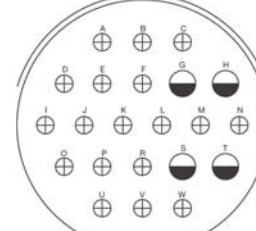
Shell Size 32



Insert Arrangement	32 - 22
Service Rating	A
Number of Contacts	54
Contact Size	16

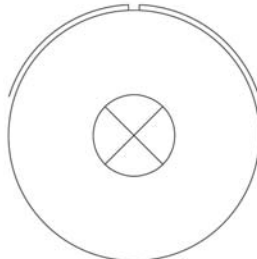


Insert Arrangement	32 - 73
Service Rating	A
Number of Contacts	46
Contact Size	16

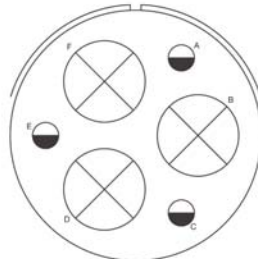


Insert Arrangement	36 - 1
Service Rating	D
Number of Contacts	18 4
Contact Size	16 12

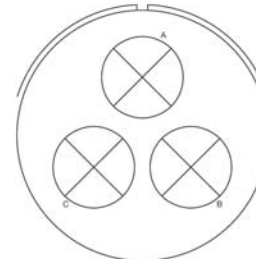
Shell Size 36



Insert Arrangement	36 - 03
Service Rating	A
Number of Contacts	1
Contact Size	0



Insert Arrangement	36 - 3
Service Rating	D
Number of Contacts	3 3
Contact Size	12 0



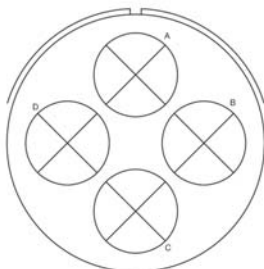
Insert Arrangement	36 - 4
Service Rating	A(B, C), D(A)
Number of Contacts	3
Contact Size	0

1. View from pin side insert.
2. Please contact factory for any special insert arrangements.
3. Insert arrangements per MIL-STD-1651



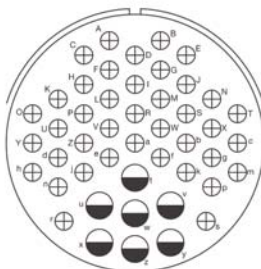
Contact Arrangements and Formation

Shell Size 36

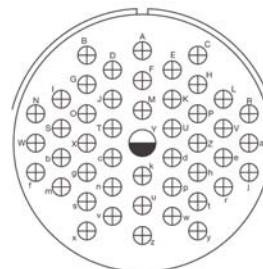


Insert Arrangement
Service Rating
Number of Contacts
Contact Size

36 - 5
A
4
0

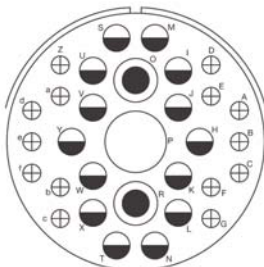


36 - 7
A
40 7
16 12



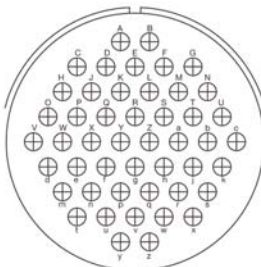
36 - 8
A
46 1
16 12

Shell Size 36

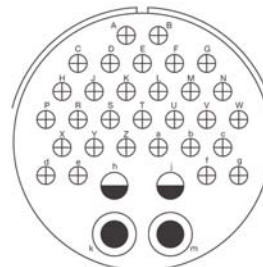


Insert Arrangement
Service Rating
Number of Contacts
Contact Size

36 - 9
A
14 14 2 1
16 12 8 4

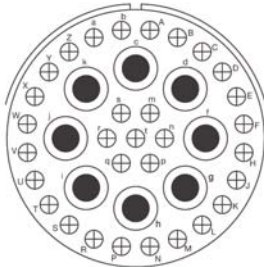


36 - 10
A
48
16



36 - 20
A
30 2 2
16 12 8

Shell Size 36



Insert Arrangement
Service Rating
Number of Contacts
Contact Size

36 - 54
A
31 8
16 8

1. View from pin side insert.
2. Please contact factory for any special insert arrangements.
3. Insert arrangements per MIL-STD-1651



Contact Arrangements and Formation

SHELL SIZE	NUMBER OF CONTACTS	CONTACT SIZE				
		16	12	8	4	0
SHELL SIZE 10						
10S-2	1	1				
10SL-3	3	3				
10SL-4	2	2				
SHELL SIZE 12						
12S-1	2	2				
12S-3	2	2				
12S-4	1	1				
12S-5	1		1			
12S-01	3	3				
12-5	1		1			
SHELL SIZE 14						
14S-1	3	3				
14S-2	4	4				
14S-3	1		1			
14S-4	1	1				
14S-5	5	5				
14S-6	6	6				
14S-7	3	3				
14S-9	2	2		1		
14S-12	3	3				
14-3	1			1		
SHELL SIZE 16						
16S-01	8	8				
16-9	4	2	2			
16-10	3		3			
16-11	2		2			
16-12	1				1	
16-13	2		2			
16S-1	7	7				
16S-4	2	2				
16S-5	3	3				
16S-6	3	3				
16S-8	5	5				

SHELL SIZE	NUMBER OF CONTACTS	CONTACT SIZE				
		16	12	8	4	0
SHELL SIZE 18						
18-1	10	10				
18-2	3	3				
18-3	2		2			
18-4	4	4				
18-5	3	1	2			
18-8	8	7	1			
18-9	7	5	2			
18-10	4		4			
18-11	5		5			
18-12	6	6				
18-13	4		3	1		
18-14	4	1			1	
18-16	1		1			
18-18	7	5	2			
18-19	10	10				
18-20	5	5				
18-21	3		3			
18-22	3	3				
18-01	8	8				
SHELL SIZE 20						
20-2	1					1
20-3	3		3			
20-4	4	4	4			
20-7	8	8				
20-8	6	4		2		
20-10	4	4				
20-13	13	13				
20-15	7		7			
20-16	9	7	2			
20-17	6	1	5			
20-18	9	6	3			
20-19	3			3		
20-22	6	3		3		
20-23	2			2		
20-24	4	2		2		
20-27	14	14				
20-29	17	17				
20-33	11	11				
20-01	10	10				
20-02	10	8	2			
20-03	3	1		2		

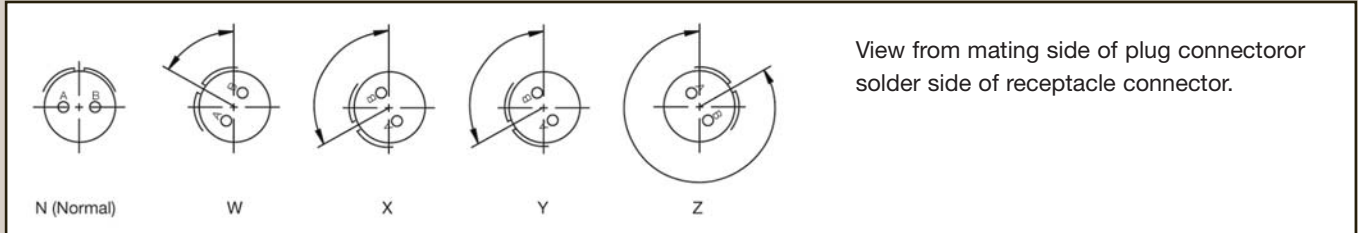
Contact Arrangements

Contact Arrangements and Formation

SHELL SIZE	NUMBER OF CONTACTS	CONTACT SIZE				
		16	12	8	4	0
SHELL SIZE 22						
22-2	3			3		
22-4	4		2	2		
22-5	6	4	2			
22-7	1					1
22-8	2		2			
22-9	3		3			
22-10	4	4				
22-13	5	1	4			
22-14	19	19				
22-15	6	1	5			
22-18	8	8				
22-19	14	14				
22-21	3	2				1
22-22	4			4		
22-23	8		8			
22-27	9	8		1		
22-01	12	8	4			
22-02	9	9				
SHELL SIZE 24						
24-2	7		7			
24-3	7	5	2			
24-4	4	3				1
24-5	16	16				
24-7	16	14	2			
24-9	2				2	
24-10	7			7		
24-11	9		6	3		
24-12	5		3		2	
24-20	11	9	2			
24-22	4			4		
24-28	24	24				
24-01	2				2	
24-02	9		9			
24-03	12	12				
SHELL SIZE 28						
28-2	14	12	2			
28-3	3			3		
28-6	3				3	
28-7	2				2	
28-9	12	6	6			
28-10	7		3	2	2	
28-11	22	18	4			
28-12	26	26				

SHELL SIZE	NUMBER OF CONTACTS	CONTACT SIZE				
		16	12	8	4	0
SHELL SIZE 28						
28-15	35	35				
28-16	20	20				
28-17	15	15				
28-18	12	12				
28-19	10	6	4			
28-20	14	4	10			
28-21	37	37				
28-22	6	3			3	
28-51	12		12			
28-56	16	14	2			
SHELL SIZE 32						
32-1	5		3			2
32-5	2					2
32-6	23	16	2	3	2	
32-7	35	28	7			
32-8	30	24	6			
32-9	14	12			2	
32-13	23	18	5			
32-15	8		6			2
32-16	23	16	2	3	2	
32-17	4				4	
32-20	23	16	2	3	2	
32-22	54	54				
32-73	46	46				
32-01	24		24			
32-02	16		16			
32-03	3				3	
32-04	7		7			
32-05	28	18	8	2		
32-59	40	38	2			
SHELL SIZE 36						
36-1	22	8	4			
36-3	6		3			3
36-4	3					3
36-5	4					4
36-7	47	40	7			
36-8	47	46	1			
36-9	31	14	14	2	1	
36-03	1					1
36-10	48	48				
36-20	34	30	2	2		
36-02	27	27				
36-52	52	52				
36-54	39	31		8		

Alternate Insert Positions PER MIL-STD-1651



Alternate Insert Positions

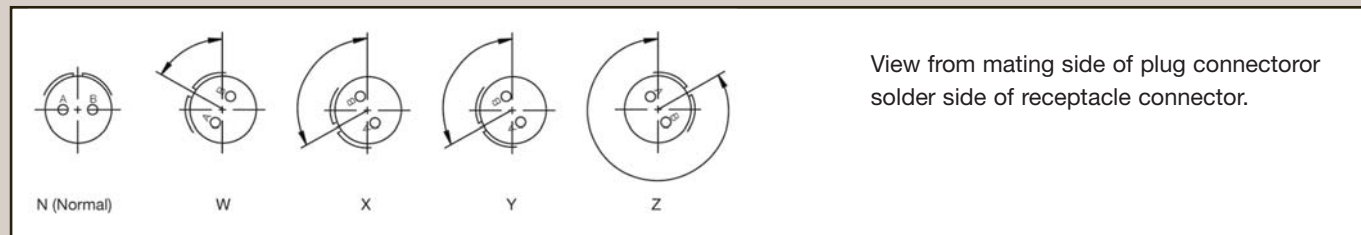
SHELL SIZE	INSERT ARRANGEMENT	CONTACT SIZE	SERVICE RATING	ALTERNATE POSITIONS			
				W	X	Y	Z
12S	12S-3	2 #16	A	70	145	215	290
14S	14S-2	4 #16	Inst.	-	120	240	-
	14S-5	5 #16	Inst.	-	110	-	-
	14S-7	2 #16	A	90	180	270	-
	14S-9	2 #16	A	70	145	215	290
16	16-9	2 #12 2 #16	A	35	110	250	325
	16-10	3 #12	A	90	180	240	-
	16-11	2 #12	A	35	110	250	325
	16-13	2 #12	A	35	110	250	325
16S	16S-1	7 #16	A	80	-	-	280
	16S-4	2 #16	D	35	110	250	325
	16S-5	3 #16	A	70	145	215	290
	16S-6	3 #16	A	90	180	270	-
	16S-8	5 #16	A	-	170	265	-
	16S-5	3 #16	A	70	145	215	290
	16S-6	3 #16	A	90	180	270	-
	16S-8	5 #16	A	-	170	265	-
18	18-1	10 #16	A (B,C, F, G)	70	145	215	290
	Inst. (all others)						
	18-3	2 #12	D	35	110	250	325
	18-4	4 #16	D	35	110	250	325
	18-5	1 #16 2 #12	D	80	110	250	280
	18-8	7 #16 1 #12	A	70	-	-	290
	18-9	5 #16 2 #12	Inst.	80	110	250	280
	18-10	4 #12	A	-	120	240	-
	18-11	5 #12	A	-	170	265	-
	18-12	6 #16	A	80	-	-	280
	18-13	3 #12 1 #8	A	80	110	250	280
	18-15	4 #12	A	-	120	240	-
	18-22	3 #16	D	70	145	215	290

SHELL SIZE	INSERT ARRANGEMENT	CONTACT SIZE	SERVICE RATING	ALTERNATE POSITIONS			
				W	X	Y	Z
20	20-3	3 #12	D	70	145	215	290
	20-4	4 #12	D	45	110	250	-
	20-7	8 #16	A(C-F)	80	110	250	280
	D (A, B, G, H)						
	20-8	4 #16 2 #8	Inst.	80	110	250	280
	20-14	3 #12 2 #8	A	80	110	250	280
	20-15	7 #12	A	80	-	-	280
	20-16	7 #16 2 #12	A	80	110	250	280
	20-17	1 #16 5 #12	A	90	180	270	-
	20-18	6 #16 3 #12	A	35	110	250	325
20-19	3 #8	A	90	180	270	-	
20-22	3 #16 3 #18	A	80	110	250	280	
20-23	2 #8	A	35	110	250	325	
20-24	2 #16 2 #8	A	35	110	250	325	
20-27	14 #16	A	35	110	250	325	
20-29	17 #16	A	80	-	-	280	

Industrial 5015

Alternate Insert Positions

Alternate Insert Positions Per MIL-STD-1651

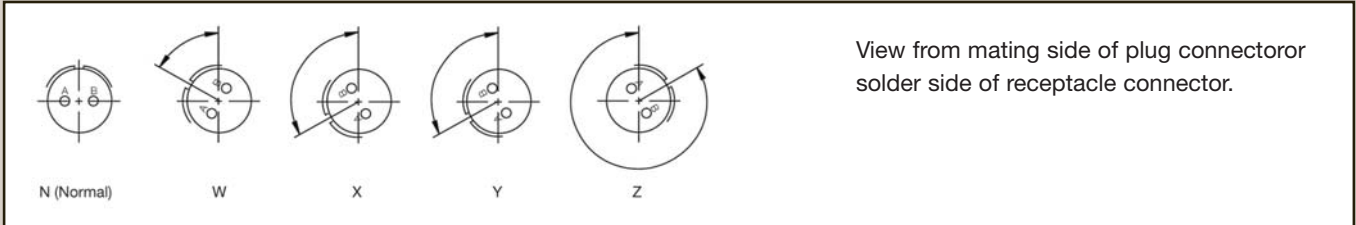


View from mating side of plug connector or solder side of receptacle connector.

SHELL SIZE	INSERT ARRANGEMENT	CONTACT SIZE	SERVICE RATING	ALTERNATE POSITIONS			
				W	X	Y	Z
22	22-2	3 #8	D	70	145	215	290
	22-4	2 #12 2 #8	A	35	110	250	325
	22-5	4 #16 2 #12	D	35	110	250	325
	22-6	1 #16 2 #8	D	80	110	250	280
	22-9	3 #12	E	70	145	215	290
	22-10	4 #16	E	35	110	250	325
	22-11	2 #16	B	35	110	250	325
	22-12	3 #16 2 #8	D	80	110	250	280
	22-13	1 #16 4 #12	A (A-D) D (E)	35	110	250	325
	22-14	19 #16	A	80	-	-	280
	22-15	1 #16 5 #12	A (A-C, E, F) E (D)	80	110	250	280
	22-17	8 #16 1 #12	D (A) A (all others)	80	110	250	280
	22-18	8 #16	A (C-E)	80	110	250	280
	A (all others)						
	22-19	18 #16	A	80	110	250	280
	22-20	9 #16	A	35	110	250	325
	22-22	4 #8	A	-	110	250	-
	22-23	8 #12	D (H)	35	-	250	-
	A (all others)						
	22-27	8 #16 1 #8	D (J) A (all others)	80	-	250	280
	22-28	7 #12	A	80	-	-	280

SHELL SIZE	INSERT ARRANGEMENT	CONTACT SIZE	SERVICE RATING	ALTERNATE POSITIONS			
				W	X	Y	Z
24	24-2	7 #12	D	80	-	-	280
	24-5	16 #16	A	80	110	250	280
	24-6	8 #12	D (A, G, H)	80	110	250	280
	A (all others)						
	24-7	14 #16 2 #12	A	80	110	250	280
	24-9	2 #4	A	35	110	250	325
	24-10	7 #8	A	80	-	-	280
	24-11	6 #16 3 #8	A	35	110	250	325
	24-12	3 #12 2 #4	A	80	110	2580	280
	24-20	9 #16 2 #12	D	80	110	250	280
	24-22	4 #8	D	45	110	250	-
	24-27	7 #16	E	80	-	-	280
	24-28	24 #16	Inst.	80	110	250	280
28	28-1	6 #12 3 #8	D (A, E, J) A (all others)	80			
	28-2	12 #16 2 #12	D	35	110	250	325
	28-7	2 #4	D	35	110	250	325
	28-9	6 #16		80	110	250	280
		6 #12	D				
	28-10	3 #12 2 #8 2 #4	D (G) A (all others)	80	110	250	280
	28-11	18 #16 4 #12	A	80	110	250	280
	28-12	26 #16	A	90	180	270	-
	28-15	35 #16	A	80	110	250	280
	28-16	20 #16	A	80	110	250	280

Alternate Insert Positions PER MIL-STD-1651



Alternate Insert Positions

SHELL SIZE	INSERT ARRANGEMENT	CONTACT SIZE	SERVICE RATING	ALTERNATE POSITIONS			
				W	X	Y	Z
28	28-17	15 #16	A (A-L) B (R) D (M-P)	80	110	250	280
	28-19	6 #16 4 #12	A (C,E,G, J, K,L) B (H,M) D (A,B)	80	110	250	280
	28-20	4 #16 10 #12	A	80	110	250	280
	28-21	37 #16	A	80	110	250	280
	28-22	3 #16 3 #4	D	70	145	215	290
32	32-1	3 #12 2 #0	E (A) D (all others)	80	110	250	280
	32-6	16 #16 2 #12 3 #8 2 #4	A	80	110	235	280
	32-7	28 #16 7 #12	Inst. (A, B, H, J) A (all others)	80	125	235	280
	32-8	24 #16 6 #12	A	80	125	235	280
	32-9	12 #16 2 #4	D	80	110	250	280
	32-17	4 #4	D	45	110	250	-

SHELL SIZE	INSERT ARRANGEMENT	CONTACT SIZE	SERVICE RATING	ALTERNATE POSITIONS			
				W	X	Y	Z
36	36-4	3 #0	A (B,C) D (A)	70	145	215	290
	36-5	4 #0	A	-	120	240	-
	36-7	40 #16 7 #12	A	80	110	250	280
	36-8	46 #16 1 #12	A	80	110	250	280
	36-9	14 #16 14 #12 2 #8 1 #4	A	80	125	235	280
	36-10	48 #16	A	80	1258	235	280
	36-15	35 #16	D (M)	60	125	245	305
	A (all others)						

Wall Mount Inline Receptacle (MS3100 Type) - C3100 Class A

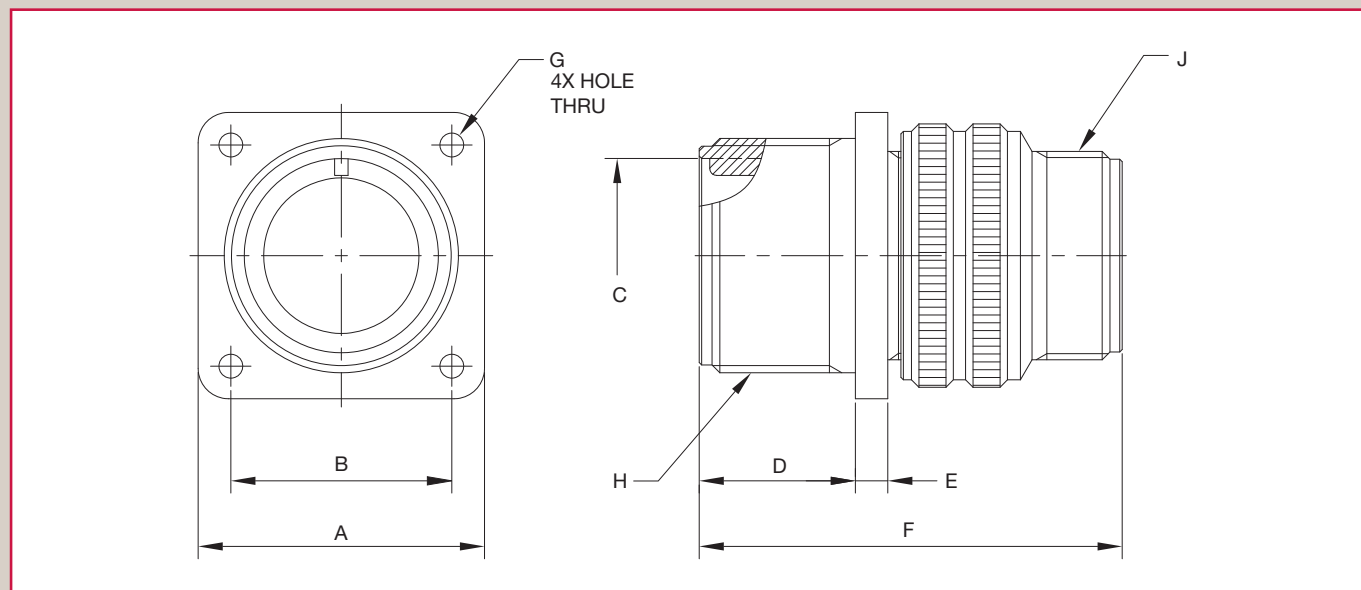


- Includes adapter designed to accept C3057 and MS3057 standard backshells.
- Available with optional RoHS compliant plating.

DIMENSIONS

PART NUMBER	A REF.	B REF.	C DIA. REF.	D REF.	E MAX./MIN.	F MAX.	G DIA. REF.	H THREAD	J THREAD
C3100A10SL-	1.00 (25.4)	0.72 (18.3)	0.45 (11.4)	0.56 (14.3)	0.16 (4.0) / 0.06 (1.6)	1.53 (38.9)	0.12 (3.1)	5/8-24UNEF	5/8-24UNEF
C3100A12S-	1.09 (27.8)	0.81 (20.6)	0.56 (14.2)	0.56 (14.3)	0.16 (4.0) / 0.06 (1.6)	1.69 (42.9)	0.12 (3.1)	3/4-20UNEF	5/8-24UNEF
C3100A12-	1.09 (27.8)	0.81 (20.6)	0.56 (14.2)	0.75 (19.1)	0.16 (4.0) / 0.06 (1.6)	2.06 (52.4)	0.12 (3.1)	3/4-20UNEF	5/8-24UNEF
C3100A14S-	1.19 (30.2)	0.91 (23)	0.68 (17.3)	0.56 (14.3)	0.16 (4.0) / 0.06 (1.6)	1.69 (42.9)	0.12 (3.1)	7/8-20UNEF	3/4-20UNEF
C3100A14-	1.19 (30.2)	0.91 (23)	0.68 (17.3)	0.75 (19.1)	0.16 (4.0) / 0.06 (1.6)	2.06 m(52.4)	0.12 (3.1)	7/8-20UNEF	3/4-20UNEF
C3100A16S-	1.28 (32.5)	0.97 (24.6)	0.81 (20.5)	0.56 (14.3)	0.16 (4.0) / 0.06 (1.6)	1.69 (42.9)	0.12 (3.1)	1-20UNEF	7/8-20UNEF
C3100A16-	1.28 (32.5)	0.97 (24.6)	0.81 (20.5)	0.75 (19.1)	0.16 (4.0) / 0.06 (1.6)	2.06 (52.4)	0.12 (3.1)	1-20UNEF	7/8-20UNEF
C3100A18-	1.38 (34.9)	1.06 (27)	0.93 (23.7)	0.75 (19.1)	0.20 (5.1) / 0.09 (2.4)	2.06 (52.4)	0.12 (3.1)	1 1/8-18UNEF	1-20UNEF
C3100A20-	1.50 (38.1)	1.16 (29.4)	1.06 (26.9)	0.75 (19.1)	0.20 (5.1) / 0.09 (2.4)	2.19 (55.6)	0.12 (3.1)	1 1/4-18UNEF	1 3/16-18UNEF
C3100A22-	1.63 (41.3)	1.25 (31.8)	1.18 (30.0)	0.75 (19.1)	0.20 (5.1) / 0.09 (2.4)	2.19 (55.6)	0.12 (3.1)	1 3/8-18UNEF	1 3/16-18UNEF
C3100A24-	1.75 (44.5)	1.38 (34.9)	1.31 (33.2)	0.81 (20.6)	0.20 (5.1) / 0.09 (2.4)	2.31 (58.7)	0.15 (3.7)	1 1/2-18UNEF	1 7/16-18UNEF
C3100A28-	2.00 (50.8)	1.56 (39.7)	1.53 (38.8)	0.81 (20.6)	0.20 (5.1) / 0.09 (2.4)	2.31 (58.7)	0.15 (3.7)	1 3/4-18UNEF	1 7/16-18UNEF
C3100A32-	2.25 (57.2)	1.75 (44.5)	1.78 (45.1)	0.88 (22.2)	0.36 (9.1) / 0.13 (3.2)	2.44 (61.9)	0.17 (4.4)	2-18UNS	1 3/4-18UNS
C3100A36-	2.50 (63.5)	1.94 (49.2)	2.00 (50.7)	0.88 (22.2)	0.36 (9.1) / 0.13 (3.2)	2.44 (61.9)	0.17 (4.4)	2 1/4-16UN	2-18UNS

Note: Dimensions in inches (mm).



Wall Mount Inline Receptacle (MS3100 Type) - C3100 Class E & F



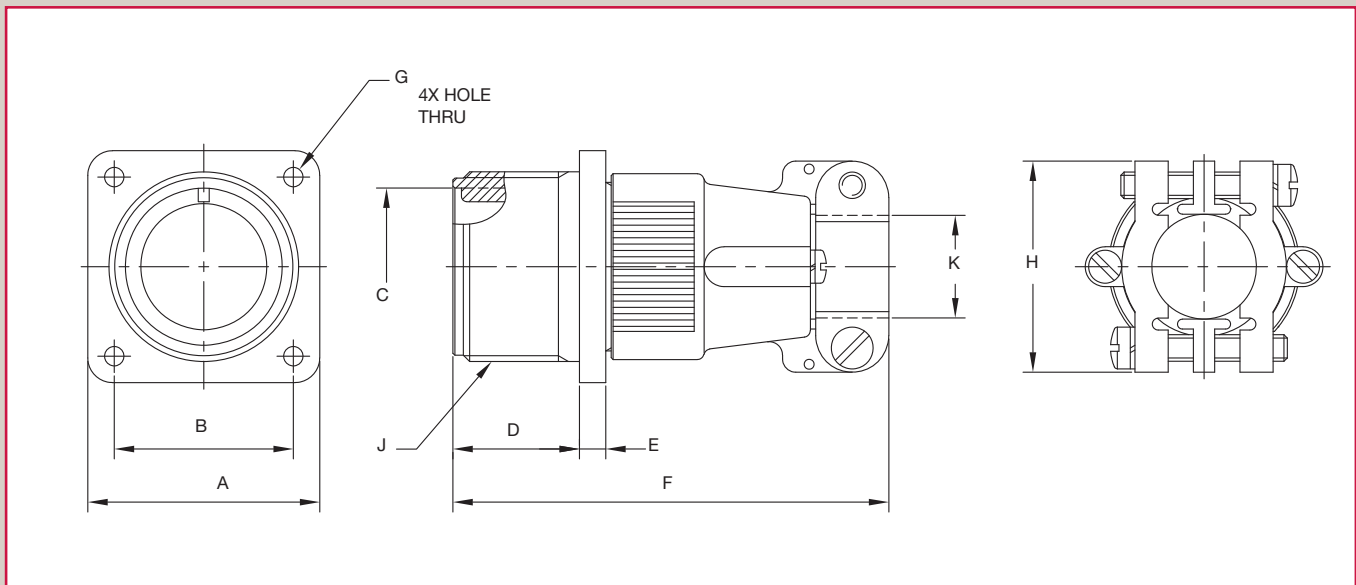
- Includes wire sealing grommet and grounding style backshell.
- Available with RoHS compliant plating.

Connectors

DIMENSIONS										
PART NUMBER	A REF.	B REF.	C DIA. REF.	D REF.	E MAX./MIN.	F MAX.	G DIA. REF.	H THREAD	*K DIA.	J THREAD
C3100_10SL-	1.00 (25.4)	0.72 (18.3)	0.45 (11.4)	0.56 (14.3)	0.16 (4.0) / 0.06 (1.6)	2.25 (57.2)	0.12 (3.1)	0.89 (22.7)	0.26 (6.5)	5/8-24UNEF
C3100_12S-	1.09 (27.8)	0.81 (20.6)	0.56 (14.2)	0.56 (14.3)	0.16 (4.0) / 0.06 (1.6)	2.25 (57.2)	0.12 (3.1)	0.89 (22.7)	0.26 (6.5)	3/4-20UNEF
C3100_12-	1.09 (27.8)	0.81 (20.6)	0.56 (14.2)	0.75 (19.1)	0.16 (4.0) / 0.06 (1.6)	2.63 (66.7)	0.12 (3.1)	0.89 (22.7)	0.26 (6.5)	3/4-20UNEF
C3100_14S-	1.19 (30.2)	0.91 (23)	0.68 (17.3)	0.56 (14.3)	0.16 (4.0) / 0.06 (1.6)	2.25 (57.2)	0.12 (3.1)	1.08 (27.5)	0.35 (9.0)	7/8-20UNEF
C3100_14-	1.19 (30.2)	0.91 (23)	0.68 (17.3)	0.75 (19.1)	0.16 (4.0) / 0.06 (1.6)	2.63 (66.7)	0.12 (3.1)	1.08 (27.5)	0.35 (9.0)	7/8-20UNEF
C3100_16S-	1.28 (32.5)	0.97 (24.6)	0.81 (20.5)	0.56 (14.3)	0.16 (4.0) / 0.06 (1.6)	2.25 (57.2)	0.12 (3.1)	1.18 (30.0)	0.43 (11.0)	1-20UNEF
C3100_16-	1.28 (32.5)	0.97 (24.6)	0.81 (20.5)	0.75 (19.1)	0.16 (4.0) / 0.06 (1.6)	2.63 (66.7)	0.12 (3.1)	1.18 (30.0)	0.43 (11.0)	1-20UNEF
C3100_18-	1.38 (34.9)	1.06 (27)	0.93 (23.7)	0.75 (19.1)	0.20 (5.1) / 0.09 (2.4)	2.69 (68.3)	0.12 (3.1)	1.27 (32.2)	0.56 (14.2)	1 1/8-18UNEF
C3100_20-	1.50 (38.1)	1.16 (29.4)	1.06 (26.9)	0.75 (19.1)	0.20 (5.1) / 0.09 (2.4)	2.75 (69.9)	0.12 (3.1)	1.48 (37.5)	0.62 (15.8)	1 1/4-18UNEF
C3100_22-	1.63 (41.3)	1.25 (31.8)	1.18 (30)	0.75 (19.1)	0.20 (5.1) / 0.09 (2.4)	2.75 (69.9)	0.12 (3.1)	1.48 (37.5)	0.62 (15.8)	1 3/8-18UNEF
C3100_24-	1.75 (44.5)	1.38 (34.9)	1.31 (33.2)	0.81 (20.6)	0.20 (5.1) / 0.09 (2.4)	2.97 (75.4)	0.15 (3.7)	1.70 (43.3)	0.84 (21.4)	1 1/2-18UNEF
C3100_28-	2.00 (50.8)	1.56 (39.7)	1.53 (38.8)	0.81 (20.6)	0.20 (5.1) / 0.09 (2.4)	3.03 (77)	0.15 (3.7)	1.70 (43.3)	0.84 (21.4)	1 3/4-18UNEF
C3100_32-	2.25 (57.2)	1.75 (44.5)	1.78 (45.1)	0.88 (22.2)	0.36 (9.1) / 0.13 (3.2)	3.03 (77)	0.17 (4.4)	2.04 (51.7)	1.05 (26.7)	2-18UNS
C3100_36-	2.50 (63.5)	1.94 (49.2)	2.00 (50.7)	0.88 (22.2)	0.36 (9.1) / 0.13 (3.2)	3.28 (83.3)	0.17 (4.4)	2.28 (58.0)	1.25 (31.7)	2 1/4-16UN

Note: Dimensions in inches (mm).

*Maximum cable outlet.



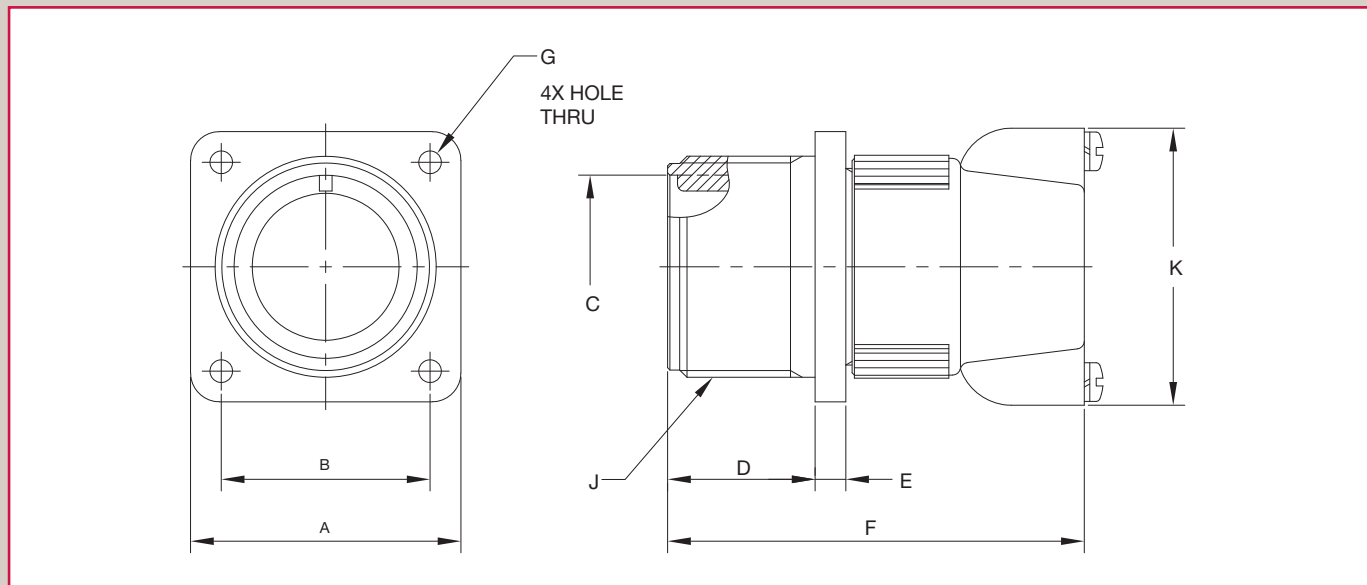
Wall Mount Inline Receptacle (MS3100 Type) - C3100 Class R



- Includes wire sealing grommet and short grounding style backshell.
- Available with optional RoHS compliant plating.

DIMENSIONS									
PART NUMBER	A REF.	B REF.	C DIA. REF.	D REF.	E MAX./MIN.	F MAX.	G DIA. REF.	K MAX.	J THREAD
C3100R10SL-	1.00 (25.4)	0.72 (18.3)	0.45 (11.4)	0.56 (14.3)	0.16 (4.0) / 0.06 (1.6)	1.84 (46.7)	0.12 (3.1)	0.96 (24.4)	5/8-24UNEF
C3100R12S-	1.09 (27.8)	0.81 (20.6)	0.56 (14.2)	0.56 (14.3)	0.16 (4.0) / 0.06 (1.6)	1.84 (46.7)	0.12 (3.1)	0.96 (24.4)	3/4-20UNEF
C3100R12-	1.09 (27.8)	0.81 (20.6)	0.56 (14.2)	0.75 (19.1)	0.16 (4.0) / 0.06 (1.6)	2.18 (55.4)	0.12 (3.1)	0.96 (24.4)	3/4-20UNEF
C3100R14S-	1.19 (30.2)	0.91 (23.0)	0.68 (17.3)	0.56 (14.3)	0.16 (4.0) / 0.06 (1.6)	1.84 (46.7)	0.12 (3.1)	1.14 (29.0)	7/8-20UNEF
C3100R14-	1.19 (30.2)	0.91 (23.0)	0.68 (17.3)	0.75 (19.1)	0.16 (4.0) / 0.06 (1.6)	2.18 (55.4)	0.12 (3.1)	1.14 (29.0)	7/8-20UNEF
C3100R16S-	1.28 (32.5)	0.97 (24.6)	0.81 (20.5)	0.56 (14.3)	0.16 (4.0) / 0.06 (1.6)	1.84 (46.7)	0.12 (3.1)	1.24 (31.5)	1-20UNEF
C3100R16-	1.28 (32.5)	0.97 (24.6)	0.81 (20.5)	0.75 (19.1)	0.16 (4.0) / 0.06 (1.6)	2.18 (55.4)	0.12 (3.1)	1.24 (31.5)	1-20UNEF
C3100R18-	1.38 (34.9)	1.06 (27.0)	0.93 (23.7)	0.75 (19.1)	0.20 (5.1) / 0.09 (2.4)	2.18 (55.4)	0.12 (3.1)	1.44 (36.6)	1 1/8-18UNEF
C3100R20-	1.50 (38.1)	1.16 (29.4)	1.06 (26.9)	0.75 (19.1)	0.20 (5.1) / 0.09 (2.4)	2.18 (55.4)	0.12 (3.1)	1.56 (39.7)	1 1/4-18UNEF
C3100R22-	1.63 (41.3)	1.25 (31.8)	1.18 (30.0)	0.75 (19.1)	0.20 (5.1) / 0.09 (2.4)	2.18 (55.4)	0.12 (3.1)	1.56 (39.7)	1 3/8-18UNEF
C3100R24-	1.75 (44.5)	1.38 (34.9)	1.31 (33.2)	0.81 (20.6)	0.20 (5.1) / 0.09 (2.4)	2.18 (55.4)	0.15 (3.7)	1.87 (47.4)	1 1/2-18UNEF
C3100R28-	2.00 (50.8)	1.56 (39.7)	1.53 (38.8)	0.81 (20.6)	0.20 (5.1) / 0.09 (2.4)	2.18 (55.4)	0.15 (3.7)	1.87 (47.4)	1 3/4-18UNEF
C3100R32-	2.25 (57.2)	1.75 (44.5)	1.78 (45.1)	0.88 (22.2)	0.36 (9.1) / 0.13 (3.2)	2.32 (59.0)	0.17 (4.4)	2.20 (55.9)	2-18UNS
C3100R36-	2.50 (63.5)	1.94 (49.2)	2.00 (50.7)	0.88 (22.2)	0.36 (9.1) / 0.13 (3.2)	2.32 (59.0)	0.17 (4.4)	2.39 (60.8)	2 1/4-16UN

Note: Dimensions in inches (mm).



Cable Connecting Receptacle (MS3101 Type) - C3101 Class A

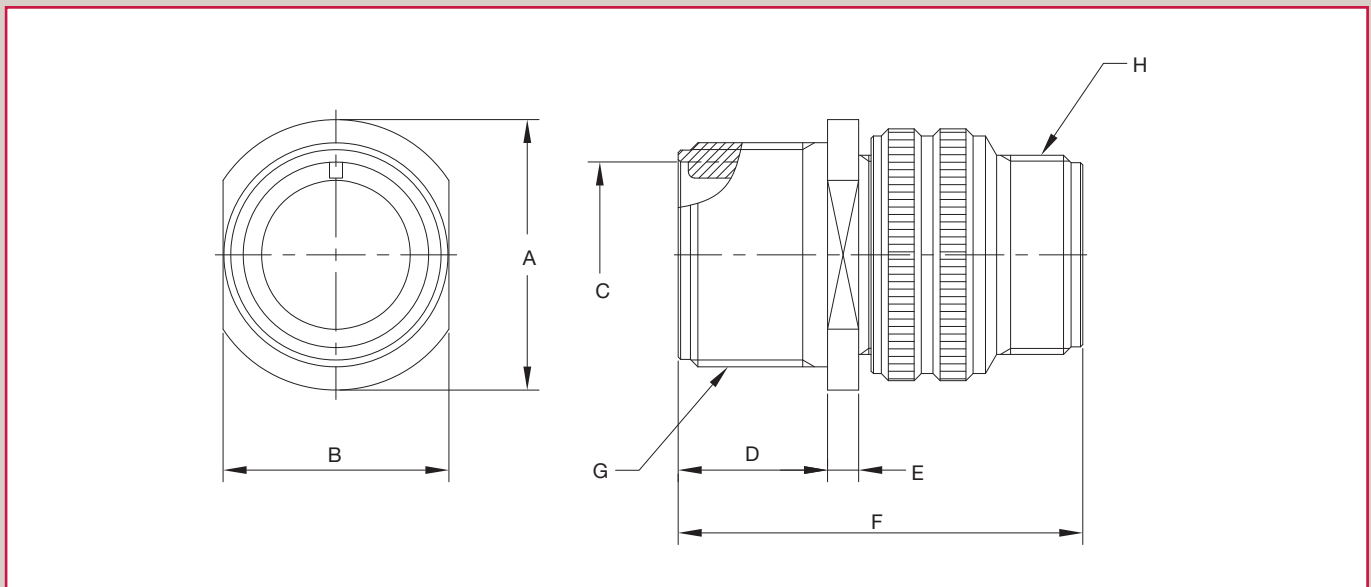


- Includes adapter designed to accept C3057 and MS3057 standard backshells.
- Available with optional RoHS compliant plating.

Connectors

DIMENSIONS								
PART NUMBER	A DIA. MAX.	B MAX.	C DIA. REF.	D REF.	E MAX./MIN.	F MAX.	G THREAD	H THREAD
C3101A10SL-	0.86 (21.8)	0.64 (16.2)	0.45 (11.4)	0.56 (14.3)	0.16 (4.0) / 0.06 (1.6)	1.53 (38.9)	5/8-24UNEF	5/8-24UNEF
C3101A12S-	0.98 (25.0)	0.76 (19.3)	0.56 (14.2)	0.56 (14.3)	0.16 (4.0) / 0.06 (1.6)	1.69 (42.9)	3/4-20UNEF	5/8-24UNEF
C3101A12-	0.98 (25.0)	0.76 (19.3)	0.56 (14.2)	0.75 (19.1)	0.16 (4.0) / 0.06 (1.6)	2.06 (52.4)	3/4-20UNEF	5/8-24UNEF
C3101A14S-	1.11 (28.2)	0.89 (22.5)	0.68 (17.3)	0.56 (14.3)	0.16 (4.0) / 0.06 (1.6)	1.69 (42.9)	7/8-20UNEF	3/4-20UNEF
C3101A14-	1.11 (28.2)	0.89 (22.5)	0.68 (17.3)	0.75 (19.1)	0.16 (4.0) / 0.06 (1.6)	2.06 (52.4)	7/8-20UNEF	3/4-20UNEF
C3101A16S-	1.24 (31.4)	1.01 (25.6)	0.81 (20.5)	0.56 (14.3)	0.16 (4.0) / 0.06 (1.6)	1.69 (42.9)	1-20UNEF	7/8-20UNEF
C3101A16-	1.24 (31.4)	1.01 (25.6)	0.81 (20.5)	0.75 (19.1)	0.16 (4.0) / 0.06 (1.6)	2.06 (52.4)	1-20UNEF	7/8-20UNEF
C3101A18-	1.36 (34.5)	1.13 (28.8)	0.93 (23.7)	0.75 (19.1)	0.20 (5.1) / 0.09 (2.4)	2.06 (52.4)	1 1/8-18UNEF	1-20UNEF
C3101A20-	1.48 (37.6)	1.26 (32.0)	1.06 (26.9)	0.75 (19.1)	0.20 (5.1) / 0.09 (2.4)	2.19 (55.6)	1 1/4-18UNEF	1 3/16-18UNEF
C3101A22-	1.61 (41.0)	1.39 (35.2)	1.18 (30.0)	0.75 (19.1)	0.20 (5.1) / 0.09 (2.4)	2.19 (55.6)	1 3/8-18UNEF	1 3/16-18UNEF
C3101A24-	1.72 (43.8)	1.51 (38.4)	1.31 (33.2)	0.81 (20.6)	0.20 (5.1) / 0.09 (2.4)	2.31 (58.7)	1 1/2-18UNEF	1 7/16-18UNEF
C3101A28-	1.99 (50.5)	1.76 (44.8)	1.53 (38.8)	0.81 (20.6)	0.20 (5.1) / 0.09 (2.4)	2.31 (58.7)	1 3/4-18UNEF	1 7/16-18UNEF
C3101A32-	2.24 (57.0)	2.02 (51.2)	1.78 (45.1)	0.88 (22.2)	0.36 (9.1) / 0.13 (3.2)	2.44 (61.9)	2-18UNS	1 3/4-18UNS
C3101A36-	2.49 (63.2)	2.26 (57.5)	2.00 (50.7)	0.88 (22.2)	0.36 (9.1) / 0.13 (3.2)	2.44 (61.9)	2 1/4-16UN	2-18UNS

Note: Dimensions in inches (mm).



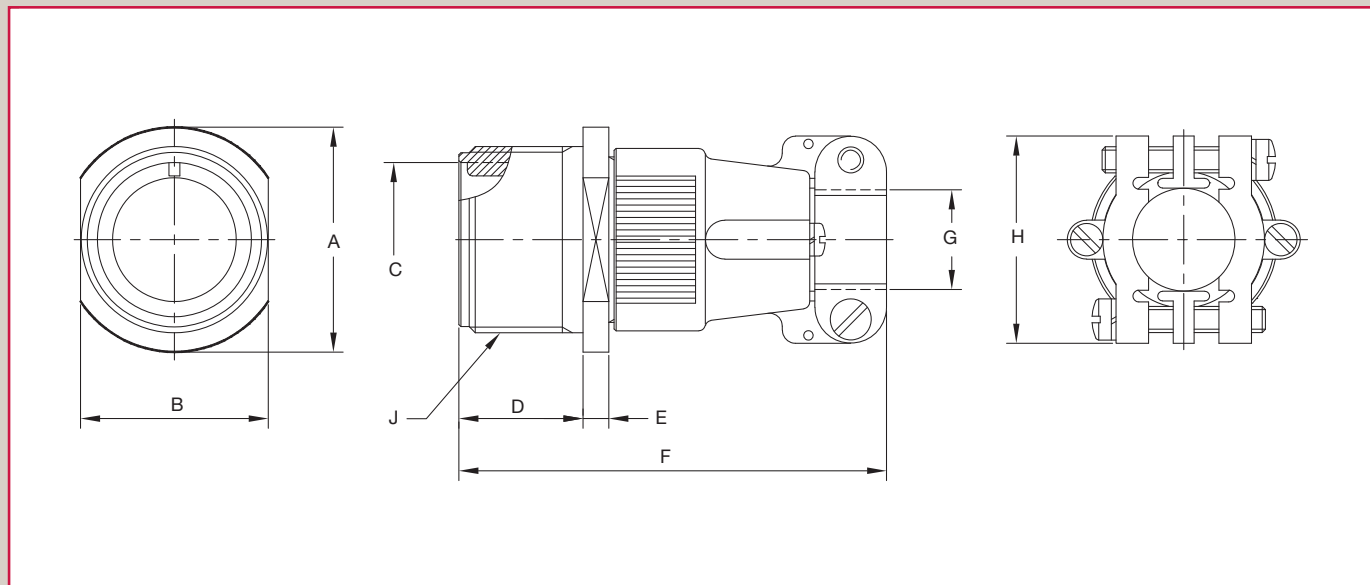
Cable Connecting Receptacle (MS3101 Type) - C3101 Class E & F



- Includes wire sealing grommet and grounding style backshell.
- Available with RoHS compliant plating.

DIMENSIONS									
PART NUMBER	A REF.	B REF.	C DIA. REF.	D REF.	E MAX./MIN.	F MAX.	G DIA. REF.	H THREAD	J THREAD
C3101__10SL-	0.86 (21.8)	0.64 (16.2)	0.45 (11.4)	0.56 (14.3)	0.16 (4.0) / 0.06 (1.6)	2.25 (57.2)	0.26 (6.5)	0.89 (22.7)	5/8-24UNEF
C3101__12S-	0.98 (25.0)	0.76 (19.3)	0.56 (14.2)	0.56 (14.3)	0.16 (4.0) / 0.06 (1.6)	2.25 (57.2)	0.26 (6.5)	0.89 (22.7)	3/4-20UNEF
C3101__12-	0.98 (25.0)	0.76 (19.3)	0.56 (14.2)	0.75 (19.1)	0.16 (4.0) / 0.06 (1.6)	2.63 (66.7)	0.26 (6.5)	0.89 (22.7)	3/4-20UNEF
C3101__14S-	1.11 (28.2)	0.89 (22.5)	0.68 (17.3)	0.56 (14.3)	0.16 (4.0) / 0.06 (1.6)	2.25 (57.2)	0.35 (9.0)	1.08 (27.5)	7/8-20UNEF
C3101__14-	1.11 (28.2)	0.89 (22.5)	0.68 (17.3)	0.75 (19.1)	0.16 (4.0) / 0.06 (1.6)	2.63 (66.7)	0.35 (9.0)	1.08 (27.5)	7/8-20UNEF
C3101__16S-	1.24 (31.4)	1.01 (25.6)	0.81 (20.5)	0.56 (14.3)	0.16 (4.0) / 0.06 (1.6)	2.25 (57.2)	0.43 (11.0)	1.18 (30.0)	1-20UNEF
C3101__16-	1.24 (31.4)	1.01 (25.6)	0.81 (20.5)	0.75 (19.1)	0.16 (4.0) / 0.06 (1.6)	2.63 (66.7)	0.43 (11.0)	1.18 (30.0)	1-20UNEF
C3101__18-	1.36 (34.5)	1.13 (28.8)	0.93 (23.7)	0.75 (19.1)	0.20 (5.1) / 0.09 (2.4)	2.69 (68.3)	0.56 (14.2)	1.27 (32.2)	1 1/8-18UNEF
C3101__20-	1.48 (37.6)	1.26 (32.0)	1.06 (26.9)	0.75 (19.1)	0.20 (5.1) / 0.09 (2.4)	2.75 (69.9)	0.62 (15.8)	1.48 (37.5)	1 1/4-18UNEF
C3101__22-	1.61 (41.0)	1.39 (35.2)	1.18 (30.0)	0.75 (19.1)	0.20 (5.1) / 0.09 (2.4)	2.75 (69.9)	0.62 (15.8)	1.48 (37.5)	1 3/8-18UNEF
C3101__24-	1.72 (43.8)	1.51 (38.4)	1.31 (33.2)	0.81 (20.6)	0.20 (5.1) / 0.09 (2.4)	2.97 (75.4)	0.84 (21.4)	1.70 (43.3)	1 1/2-18UNEF
C3101__28-	1.99 (50.5)	1.76 (44.8)	1.53 (38.8)	0.81 (20.6)	0.20 (5.1) / 0.09 (2.4)	3.03 (77.0)	0.84 (21.4)	1.70 (43.3)	1 3/4-18UNEF
C3101__32-	2.24 (57.0)	2.02 (51.2)	1.78 (45.1)	0.88 (22.2)	0.36 (9.1) / 0.13 (3.2)	3.03 (77.0)	1.05 (26.7)	2.04 (51.7)	2-18UNS
C3101__36-	2.49 (63.2)	2.26 (57.5)	2.00 (50.7)	0.88 (22.2)	0.36 (9.1) / 0.13 (3.2)	3.28 (83.3)	1.25 (31.7)	2.28 (58.0)	2 1/4-16UN

Note: Dimensions in inches (mm).



Cable Connecting Receptacle (MS3101 Type) - C3101 Class R

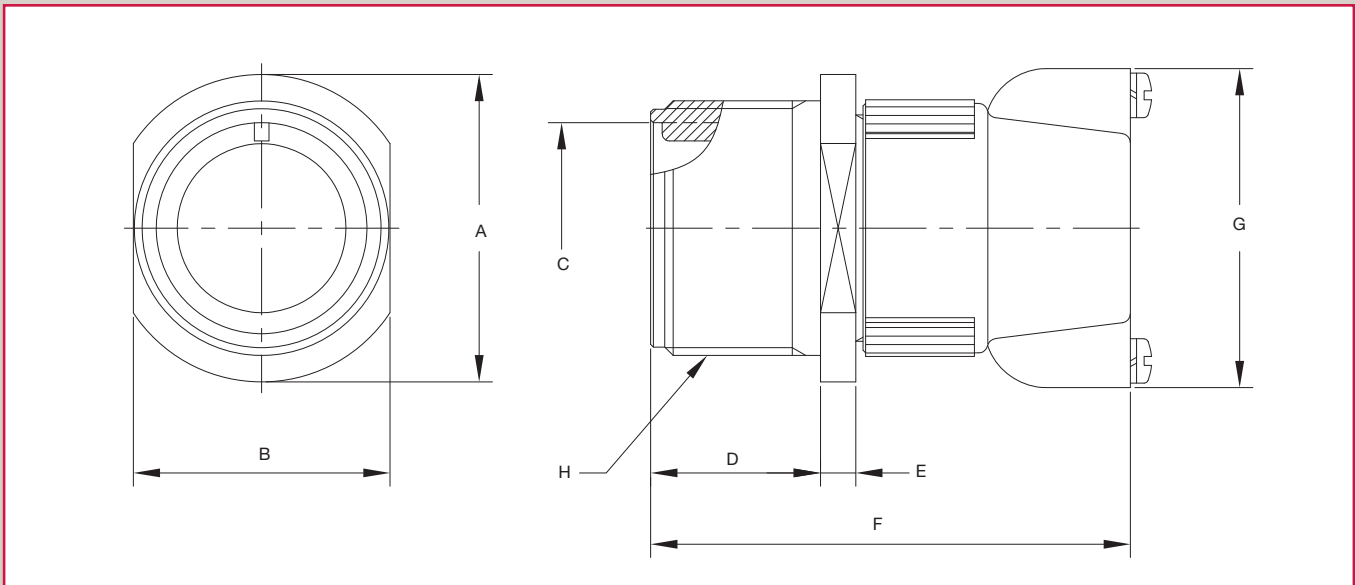


- Includes wire sealing grommet and short grounding style backshell.
- Available with optional RoHS compliant plating.

Connectors

DIMENSIONS								
PART NUMBER	A REF.	B REF.	C DIA. REF.	D REF.	E MAX./MIN.	F MAX.	G DIA. REF.	H THREAD
C3101R10SL-	0.86 (21.8)	0.64 (16.2)	0.45 (11.4)	0.56 (14.3)	0.16 (4.0) / 0.06 (1.6)	1.84 (46.7)	0.96 (24.4)	5/8-24UNEF
C3101R12S-	0.98 (25.0)	0.76 (19.3)	0.56 (14.2)	0.56 (14.3)	0.16 (4.0) / 0.06 (1.6)	1.84 (46.7)	0.96 (24.4)	3/4-20UNEF
C3101R12-	0.98 (25.0)	0.76 (19.3)	0.56 (14.2)	0.75 (19.1)	0.16 (4.0) / 0.06 (1.6)	2.18 (55.4)	0.96 (24.4)	3/4-20UNEF
C3101R14S-	1.11 (28.2)	0.89 (22.5)	0.68 (17.3)	0.56 (14.3)	0.16 (4.0) / 0.06 (1.6)	1.84 (46.7)	1.14 (29.0)	7/8-20UNEF
C3101R14-	1.11 (28.2)	0.89 (22.5)	0.68 (17.3)	0.75 (19.1)	0.16 (4.0) / 0.06 (1.6)	2.18 (55.4)	1.14 (29.0)	7/8-20UNEF
C3101R16S-	1.24 (31.4)	1.01 (25.6)	0.81 (20.5)	0.56 (14.3)	0.16 (4.0) / 0.06 (1.6)	1.84 (46.7)	1.24 (31.5)	1-20UNEF
C3101R16-	1.24 (31.4)	1.01 (25.6)	0.81 (20.5)	0.75 (19.1)	0.16 (4.0) / 0.06 (1.6)	2.18 (55.4)	1.24 (31.5)	1-20UNEF
C3101R18-	1.36 (34.5)	1.13 (28.8)	0.93 (23.7)	0.75 (19.1)	0.20 (5.1) / 0.09 (2.4)	2.18 (55.4)	1.44 (36.6)	1 1/8-18UNEF
C3101R20-	1.48 (37.6)	1.26 (32.0)	1.06 (26.9)	0.75 (19.1)	0.20 (5.1) / 0.09 (2.4)	2.18 (55.4)	1.56 (39.7)	1 1/4-18UNEF
C3101R22-	1.61 (41.0)	1.39 (35.2)	1.18 (30.0)	0.75 (19.1)	0.20 (5.1) / 0.09 (2.4)	2.18 (55.4)	1.56 (39.7)	1 3/8-18UNEF
C3101R24-	1.72 (43.8)	1.51 (38.4)	1.31 (33.2)	0.81 (20.6)	0.20 (5.1) / 0.09 (2.4)	2.18 (55.4)	1.87 (47.4)	1 1/2-18UNEF
C3101R28-	1.99 (50.5)	1.76 (44.8)	1.53 (38.8)	0.81 (20.6)	0.20 (5.1) / 0.09 (2.4)	2.18 (55.4)	1.87 (47.4)	1 3/4-18UNEF
C3101R32-	2.24 (57.0)	2.02 (51.2)	1.78 (45.1)	0.88 (22.2)	0.36 (9.1) / 0.13 (3.2)	2.32 (59.0)	2.20 (55.9)	2-18UNS
C3101R36-	2.49 (63.2)	2.26 (57.5)	2.00 (50.7)	0.88 (22.2)	0.36 (9.1) / 0.13 (3.2)	2.32 (59.0)	2.39 (60.8)	2 1/4-16UN

Note: Dimensions in inches (mm).



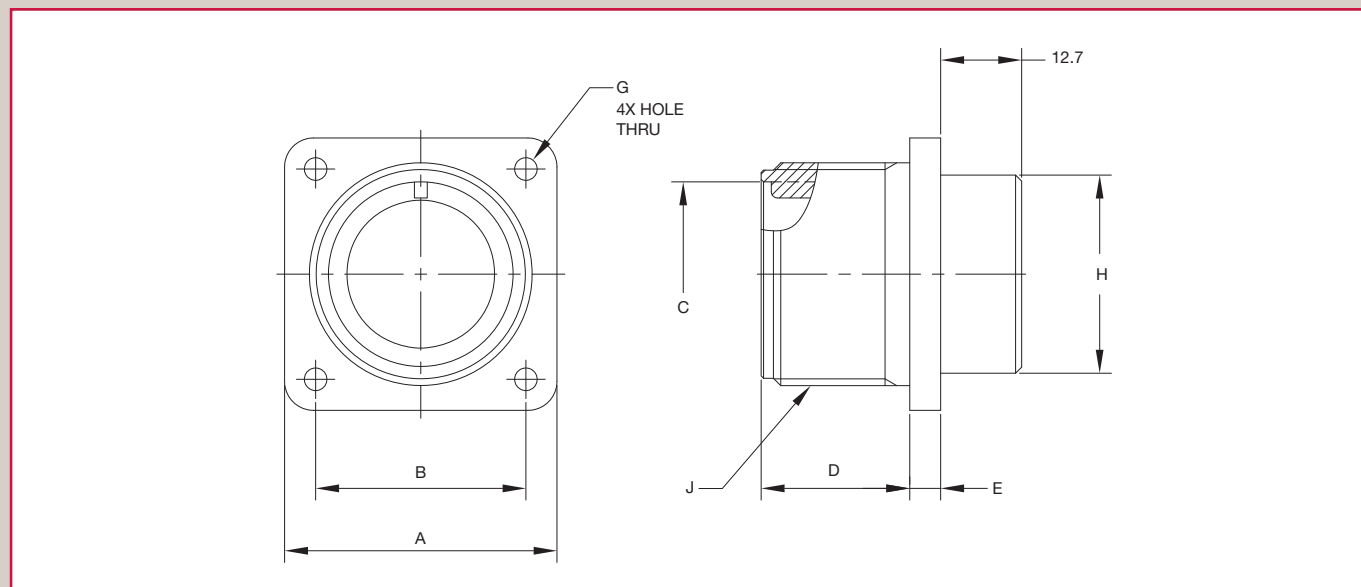
Box Mounting Receptacle (MS3102 Type) - C3102 Class A, E, F & R



- Designed for panel mounting applications.
- Optional protective cap available. (see page 38).
- Includes sealing gasket.
- Available with optional RoHS compliant plating.

DIMENSIONS								
PART NUMBER	A REF.	B REF.	C DIA. REF.	D REF.	E MAX./MIN.	G DIA. REF.	H THREAD	J THREAD
C3102__10SL-	1.00 (25.4)	0.72 (18.3)	0.45 (11.4)	0.56 (14.3)	0.16 (4.0) / 0.06 (1.6)	0.12 (3.1)	0.63 (15.9)	5/8-24UNEF
C3102__12S-	1.09 (27.8)	0.81 (20.6)	0.56 (14.2)	0.56 (14.3)	0.16 (4.0) / 0.06 (1.6)	0.12 (3.1)	0.63 (15.9)	3/4-20UNEF
C3102__12-	1.09 (27.8)	0.81 (20.6)	0.56 (14.2)	0.75 (19.1)	0.16 (4.0) / 0.06 (1.6)	0.12 (3.1)	0.63 (15.9)	3/4-20UNEF
C3102__14S-	1.19 (30.2)	0.91 (23.0)	0.68 (17.3)	0.56 (14.3)	0.16 (4.0) / 0.06 (1.6)	0.12 (3.1)	0.75 (19.0)	7/8-20UNEF
C3102__14-	1.19 (30.2)	0.91 (23.0)	0.68 (17.3)	0.75 (19.1)	0.16 (4.0) / 0.06 (1.6)	0.12 (3.1)	0.75 (19.0)	7/8-20UNEF
C3102__16S-	1.28 (32.5)	0.97 (24.6)	0.81 (20.5)	0.56 (14.3)	0.16 (4.0) / 0.06 (1.6)	0.12 (3.1)	0.87 (22.2)	1-20UNEF
C3102__16-	1.28 (32.5)	0.97 (24.6)	0.81 (20.5)	0.75 (19.1)	0.16 (4.0) / 0.06 (1.6)	0.12 (3.1)	0.87 (22.2)	1-20UNEF
C3102__18-	1.38 (34.9)	1.06 (27.0)	0.93 (23.7)	0.75 (19.1)	0.20 (5.1) / 0.09 (2.4)	0.12 (3.1)	1.00 (25.4)	1 1/8-18UNEF
C3102__20-	1.50 (38.1)	1.16 (29.4)	1.06 (26.9)	0.75 (19.1)	0.20 (5.1) / 0.09 (2.4)	0.12 (3.1)	1.14 (29.0)	1 1/4-18UNEF
C3102__22-	1.63 (41.3)	1.25 (31.8)	1.18 (30.0)	0.75 (19.1)	0.20 (5.1) / 0.09 (2.4)	0.12 (3.1)	1.27 (32.2)	1 3/8-18UNEF
C3102__24-	1.75 (44.5)	1.38 (34.9)	1.31 (33.2)	0.81 (20.6)	0.20 (5.1) / 0.09 (2.4)	0.15 (3.7)	1.39 (35.3)	1 1/2-18UNEF
C3102__28-	2.00 (50.8)	1.56 (39.7)	1.53 (38.8)	0.81 (20.6)	0.20 (5.1) / 0.09 (2.4)	0.15 (3.7)	1.62 (41.2)	1 3/4-18UNEF
C3102__32-	2.25 (57.2)	1.75 (44.5)	1.78 (45.1)	0.88 (22.2)	0.36 (9.1) / 0.13 (3.2)	0.17 (4.4)	1.87 (47.6)	2-18UNS
C3102__36-	2.50 (63.5)	1.94 (49.2)	2.00 (50.7)	0.88 (22.2)	0.36 (9.1) / 0.13 (3.2)	0.17 (4.4)	2.06 (52.4)	2 1/4-16UN

Note: Dimensions in inches (mm).



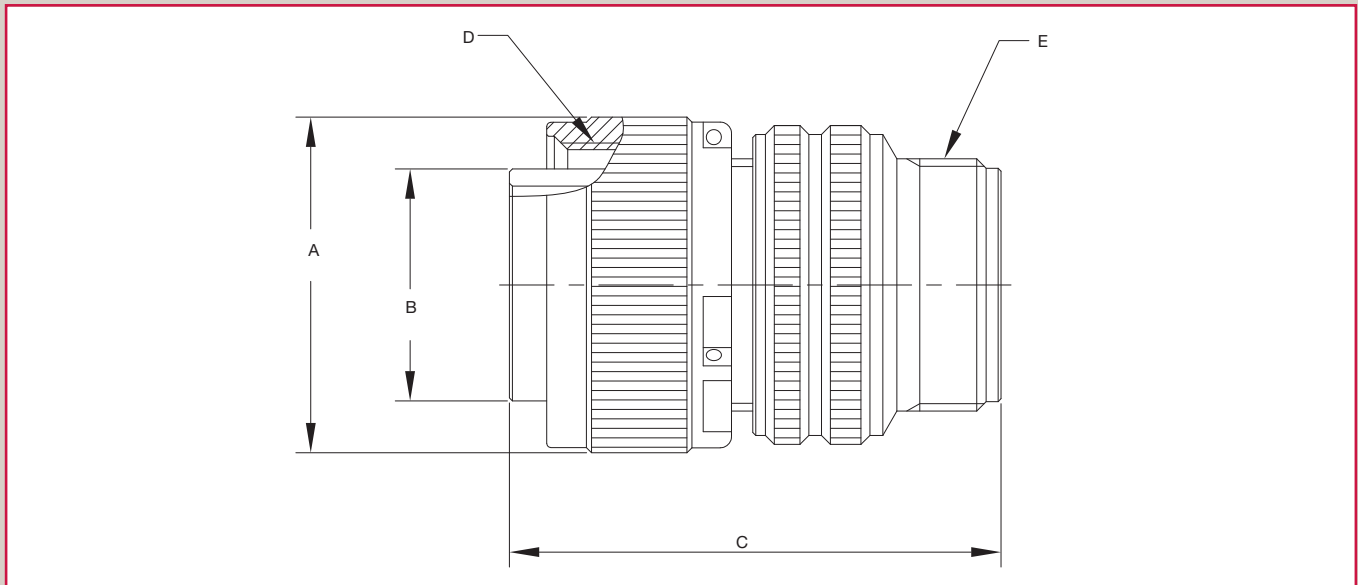
Straight Plug (MS3106 Type) - C3106 Class A



- Includes adapter designed to accept C3057 and MS3057 standard backshells.
- Available with optional RoHS compliant plating.

DIMENSIONS					
PART NUMBER	A DIA. MAX.	B REF.	C MAX.	D THREAD	E THREAD
C3106A10SL-	0.97 (24.6)	0.45 (11.3)	1.53 (38.9)	5/8-24UNEF	5/8-24UNEF
C3106A12S-	1.06 (27.0)	0.56 (14.1)	1.69 (42.9)	3/4-20UNEF	5/8-24UNEF
C3106A12-	1.06 (27.0)	0.56 (14.1)	2.06 (52.4)	3/4-20UNEF	5/8-24UNEF
C3106A14S-	1.16 (29.4)	0.68 (17.2)	1.69 (42.9)	7/8-20UNEF	3/4-20UNEF
C3106A14-	1.16 (29.4)	0.68 (17.2)	2.06 (52.4)	7/8-20UNEF	3/4-20UNEF
C3106A16S-	1.25 (31.8)	0.81 (20.5)	1.69 (42.9)	1-20UNEF	7/8-20UNEF
C3106A16-	1.25 (31.8)	0.81 (20.5)	2.06 (52.4)	1-20UNEF	7/8-20UNEF
C3106A18-	1.34 (34.1)	0.93 (23.6)	2.06 (52.4)	1 1/8-18UNEF	1-20UNEF
C3106A20-	1.47 (37.3)	1.05 (26.7)	2.19 (55.6)	1 1/4-18UNEF	1 3/16-18UNEF
C3106A22-	1.59 (40.5)	1.18 (29.9)	2.19 (55.6)	1 3/8-18UNEF	1 3/16-18UNEF
C3106A24-	1.72 (43.7)	1.30 (33.0)	2.31 (58.7)	1 1/2-18UNEF	1 7/16-18UNEF
C3106A28-	1.97 (50.0)	1.52 (38.6)	2.31 (58.7)	1 3/4-18UNEF	1 7/16-18UNEF
C3106A32-	2.22 (56.4)	1.77 (45.0)	2.44 (61.9)	2-18UNS	1 3/4-18UNS
C3106A36-	2.47 (62.7)	1.98 (50.3)	2.44 (61.9)	2 1/4-16UN	2-18UNS

Note: Dimensions in inches (mm).



Connectors

Straight Plug (MS3106 Type) - C3106 Class E & F



Class E

- Includes wire sealing grommet and grounding style backshell.
- Available with RoHS compliant plating.

Class F

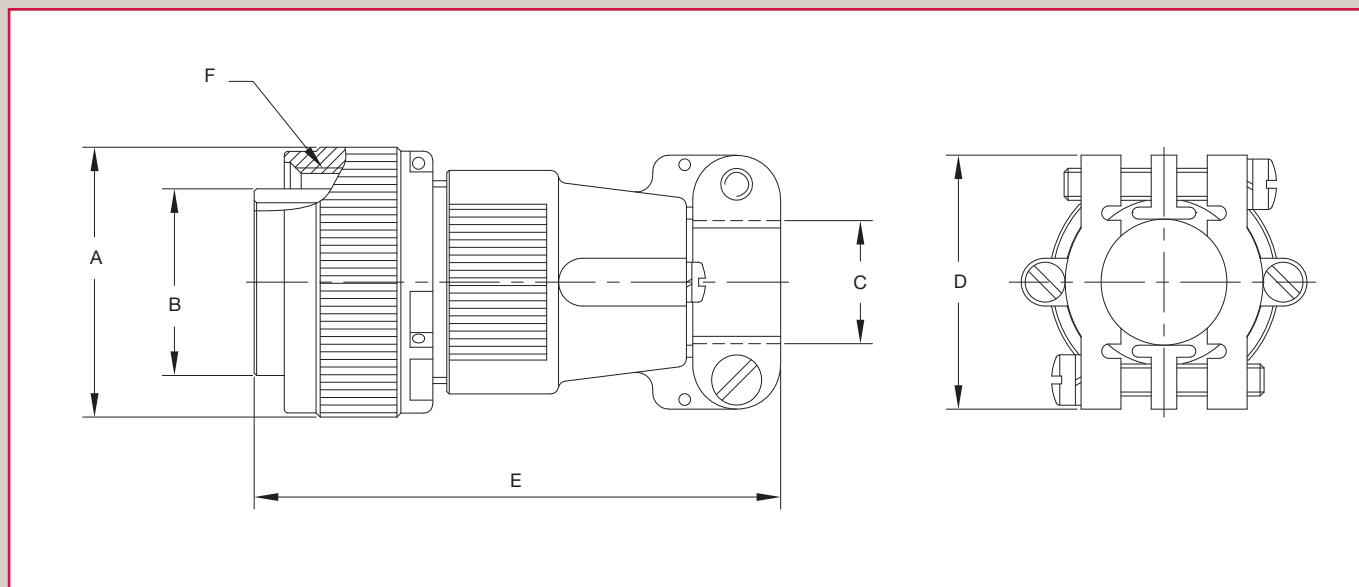
- Includes wire sealing grommet, face mounted O-ring and grounding style backshell.
- Available with RoHS compliant plating.

DIMENSIONS

PART NUMBER	A DIA. MAX.	B DIA. REF.	*C DIA. MAX.	D MAX.	E MAX.	F THREAD
C3106__10SL-	0.97 (24.6)	0.45 (11.3)	0.26 (6.5)	0.89 (22.7)	2.25 (57.2)	5/8-24UNEF
C3106__12S-	1.06 (27.0)	0.56 (14.1)	0.26 (6.5)	0.89 (22.7)	2.25 (57.2)	3/4-20UNEF
C3106__12-	1.06 (27.0)	0.56 (14.1)	0.26 (6.5)	0.89 (22.7)	2.63 (66.7)	3/4-20UNEF
C3106__14S-	1.16 (29.4)	0.68 (17.2)	0.35 (9.0)	1.08 (27.5)	2.25 (57.2)	7/8-20UNEF
C3106__14-	1.16 (29.4)	0.68 (17.2)	0.35 (9.0)	1.08 (27.5)	2.63 (66.7)	7/8-20UNEF
C3106__16S-	1.25 (31.8)	0.81 (20.5)	0.43 (11.0)	1.18 (30.0)	2.25 (57.2)	1-20UNEF
C3106__16-	1.25 (31.8)	0.81 (20.5)	0.43 (11.0)	1.18 (30.0)	2.63 (66.7)	1-20UNEF
C3106__18-	1.34 (34.1)	0.93 (23.6)	0.56 (14.2)	1.27 (32.2)	2.69 (68.3)	1 1/8-18UNEF
C3106__20-	1.47 (37.3)	1.05 (26.7)	0.62 (15.8)	1.48 (37.5)	2.75 (69.9)	1 1/4-18UNEF
C3106__22-	1.59 (40.5)	1.18 (29.9)	0.62 (15.8)	1.48 (37.5)	2.75 (69.9)	1 3/8-18UNEF
C3106__24-	1.72 (43.7)	1.30 (33.0)	0.84 (21.4)	1.70 (43.3)	2.97 (75.4)	1 1/2-18UNEF
C3106__28-	1.97 (50.0)	1.52 (38.6)	0.84 (21.4)	1.70 (43.3)	3.03 (77.0)	1 3/4-18UNEF
C3106__32-	2.22 (56.4)	1.77 (45.0)	1.05 (26.7)	2.04 (51.7)	3.03 (77.0)	2-18UNS
C3106__36-	2.47 (62.7)	1.98 (50.3)	1.25 (31.7)	2.28 (58.0)	3.28 (83.3)	2 1/4-16UN

Note: Dimensions in inches (mm).

*Maximum cable outlet.



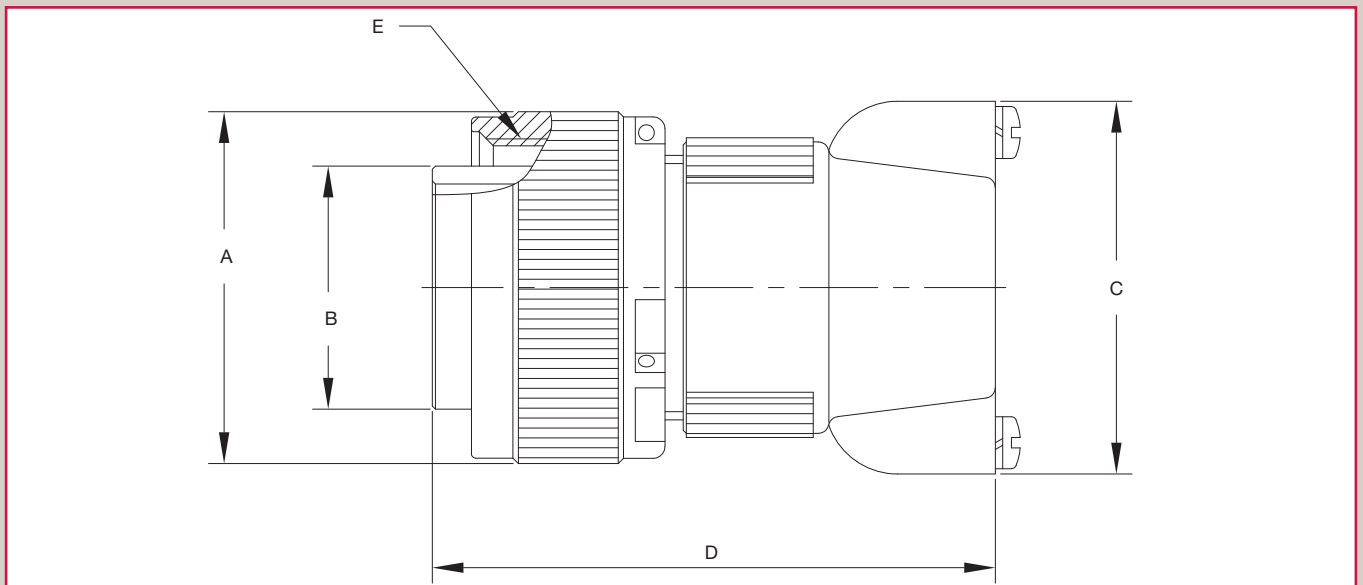
Straight Plug (MS3106 Type) - C3106 Class R



- Includes wire sealing grommet, face mounted O-ring and shorter, grounding style backshell.
- Ideal for limited space applications.
- Available with RoHS compliant plating.

DIMENSIONS					
PART NUMBER	A DIA. MAX.	B DIA. REF.	C. MAX.	D MAX.	E THREAD
C3106R10SL-	0.97 (24.6)	0.45 (11.3)	0.96 (24.4)	1.84 (46.7)	5/8-24UNEF
C3106R12S-	1.06 (27.0)	0.56 (14.1)	0.96 (24.4)	1.84 (46.7)	3/4-20UNEF
C3106R12-	1.06 (27.0)	0.56 (14.1)	0.96 (24.4)	2.18 (55.4)	3/4-20UNEF
C3106R14S-	1.16 (29.4)	0.68 (17.2)	1.14 (29.0)	1.84 (46.7)	7/8-20UNEF
C3106R14-	1.16 (29.4)	0.68 (17.2)	1.14 (29.0)	2.18 (55.4)	7/8-20UNEF
C3106R16S-	1.25 (31.8)	0.81 (20.5)	1.24 (31.5)	1.84 (46.7)	1-20UNEF
C3106R16-	1.25 (31.8)	0.81 (20.5)	1.24 (31.5)	2.18 (55.4)	1-20UNEF
C3106R18-	1.34 (34.1)	0.93 (23.6)	1.44 (36.6)	2.18 (55.4)	1 1/8-18UNEF
C3106R20-	1.47 (37.3)	1.05 (26.7)	1.56 (39.7)	2.18 (55.4)	1 1/4-18UNEF
C3106R22-	1.59 (40.5)	1.18 (29.9)	1.56 (39.7)	2.18 (55.4)	1 3/8-18UNEF
C3106R24-	1.72 (43.7)	1.3 (33.0)	1.87 (47.4)	2.18 (55.4)	1 1/2-18UNEF
C3106R28-	1.97 (50.0)	1.52 (38.6)	1.87 (47.4)	2.18 (55.4)	1 3/4-18UNEF
C3106R32-	2.22 (56.4)	1.77 (45.0)	2.20 (55.9)	2.32 (59.0)	2-18UNS
C3106R36-	2.47 (62.7)	1.98 (50.3)	2.39 (60.8)	2.32 (59.0)	2 1/4-16UN

Note: Dimensions in inches (mm).



Connectors

90° Angle Plug (MS3108 Type) - C3108 Class A

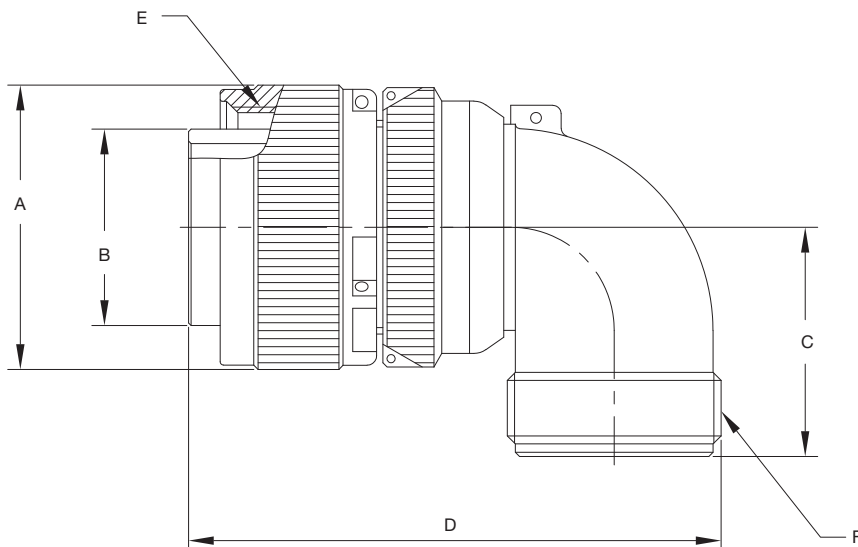


- Includes angled adapter designed to accept C3057 and MS3057 standard backshells.
- Ideal for limited space applications.
- Available with optional RoHS compliant plating.

DIMENSIONS

PART NUMBER	A DIA. MAX.	B DIA. REF.	C MAX.	D MAX.	E THREAD	F THREAD
C3108A10SL-	0.97 (24.6)	0.45 (11.3)	1.00 (25.4)	2.19 (55.6)	5/8-24UNEF	5/8-24UNEF
C3108A12S-	1.06 (27.0)	0.56 (14.1)	1.06 (27.0)	2.19 (55.6)	3/4-20UNEF	5/8-24UNEF
C3108A12-	1.06 (27.0)	0.56 (14.1)	1.06 (27.0)	2.53 (64.3)	3/4-20UNEF	5/8-24UNEF
C3108A14S-	1.16 (29.4)	0.68 (17.2)	1.12 (28.6)	2.31 (58.7)	7/8-20UNEF	3/4-20UNEF
C3108A14-	1.16 (29.4)	0.68 (17.2)	1.12 (28.6)	2.69 (68.3)	7/8-20UNEF	3/4-20UNEF
C3108A16S-	1.25 (31.8)	0.81 (20.5)	1.19 (30.2)	2.41 (61.1)	1-20UNEF	7/8-20UNEF
C3108A16-	1.25 (31.8)	0.81 (20.5)	1.19 (30.2)	2.78 (70.6)	1-20UNEF	7/8-20UNEF
C3108A18-	1.34 (34.1)	0.93 (23.6)	1.31 (33.3)	2.84 (72.2)	1 1/8-18UNEF	1-20UNEF
C3108A20-	1.47 (37.3)	1.05 (26.7)	1.37 (34.9)	3.25 (82.6)	1 1/4-18UNEF	1 3/16-18UNEF
C3108A22-	1.59 (40.5)	1.18 (29.9)	1.37 (34.9)	3.25 (82.6)	1 3/8-18UNEF	1 3/16-18UNEF
C3108A24-	1.72 (43.7)	1.30 (33.0)	1.56 (39.7)	3.72 (94.5)	1 1/2-18UNEF	1 7/16-18UNEF
C3108A28-	1.97 (50.0)	1.52 (38.6)	1.56 (39.7)	3.72 (94.5)	1 3/4-18UNEF	1 7/16-18UNEF
C3108A32-	2.22 (56.4)	1.77 (45.0)	1.87 (47.6)	4.19 (106.4)	2-18UNS	1 3/4-18UNS
C3108A36-	2.47 (62.7)	1.98 (50.3)	2.06 (52.4)	4.30 (109.1)	2 1/4-16UN	2-18UNS

Note: Dimensions in inch (mm).



90° Angle Plug (MS3108 Type) - C3108 Class E, F & R



Class E

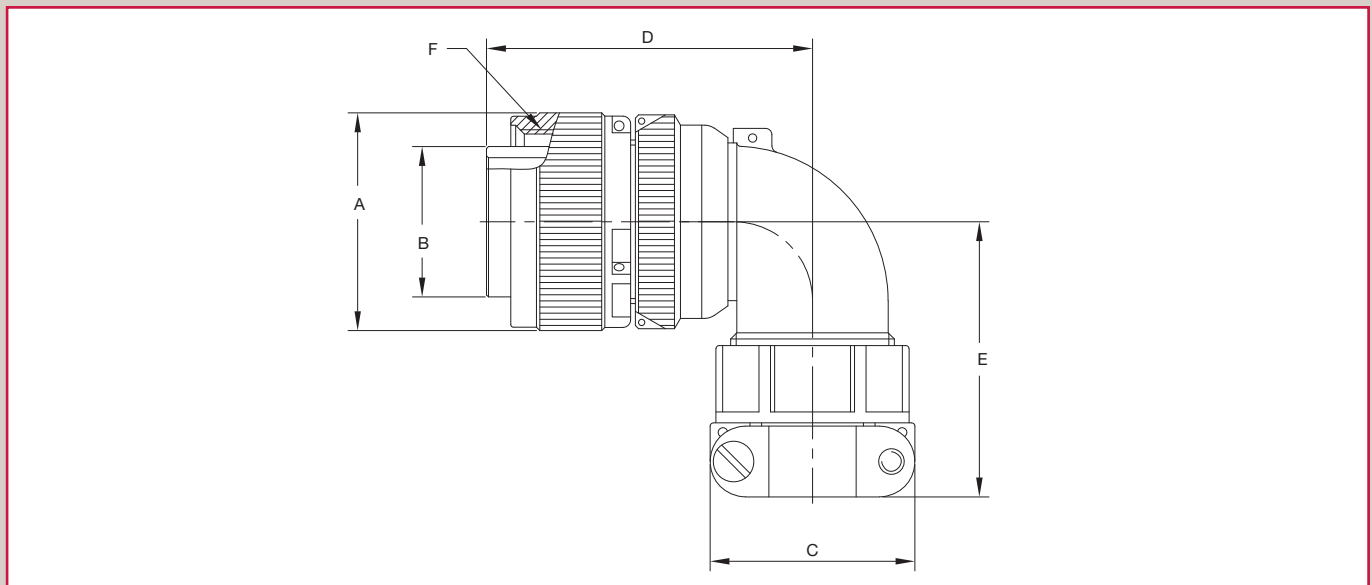
- Includes wire sealing grommet and clamping style backshell.
- Available with RoHS compliant plating.

Class F & R

- Includes wire sealing grommet, face mounted O-rings and clamping style backshell.
- Available with RoHS compliant plating.

DIMENSIONS						
PART NUMBER	A DIA. MAX.	B DIA. REF.	C MAX.	D MAX.	E MAX.	F THREAD
C3108__10SL-	0.97 (24.6)	0.45 (11.3)	0.89 (22.7)	1.77 (45.0)	1.50 (38.1)	5/8-24UNEF
C3108__12S-	1.06 (27.0)	0.56 (14.1)	0.89 (22.7)	1.77 (45.0)	1.50 (38.1)	3/4-20UNEF
C3108__12-	1.06 (27.0)	0.56 (14.1)	0.89 (22.7)	2.13 (54.0)	1.50 (38.1)	3/4-20UNEF
C3108__14S-	1.16 (29.4)	0.68 (17.2)	1.08 (27.5)	1.85 (47.0)	1.59 (40.5)	7/8-20UNEF
C3108__14-	1.16 (29.4)	0.68 (17.2)	1.08 (27.5)	2.17 (55.0)	1.59 (40.5)	7/8-20UNEF
C3108__16S-	1.25 (31.8)	0.81 (20.5)	1.18 (30.0)	1.89 (48.0)	1.69 (42.9)	1-20UNEF
C3108__16-	1.25 (31.8)	0.81 (20.5)	1.18 (30.0)	2.24 (57.0)	1.69 (42.9)	1-20UNEF
C3108__18-	1.34 (34.1)	0.93 (23.6)	1.27 (32.2)	2.28 (58.0)	1.78 (45.2)	1 1/8-18UNEF
C3108__20-	1.47 (37.3)	1.05 (26.7)	1.48 (37.5)	2.40 (61.0)	1.97 (50.0)	1 1/4-18UNEF
C3108__22-	1.59 (40.5)	1.18 (29.9)	1.48 (37.5)	2.40 (61.0)	2.00 (50.8)	1 3/8-18UNEF
C3108__24-	1.72 (43.7)	1.30 (33.0)	1.70 (43.3)	2.60 (66.0)	2.12 (54.0)	1 1/2-18UNEF
C3108__28-	1.97 (50.0)	1.52 (38.6)	1.70 (43.3)	2.60 (66.0)	2.19 (55.6)	1 3/4-18UNEF
C3108__32-	2.22 (56.4)	1.77 (45.0)	2.04 (51.7)	2.83 (72.0)	2.59 (65.9)	2-18UNS
C3108__36-	2.47 (62.7)	1.98 (50.3)	2.28 (58.0)	2.95 (75.0)	2.72 (69.1)	2 1/4-16UN

Note: Dimensions in inches (mm).



Potting Plug (MS25183 Type) - C25183

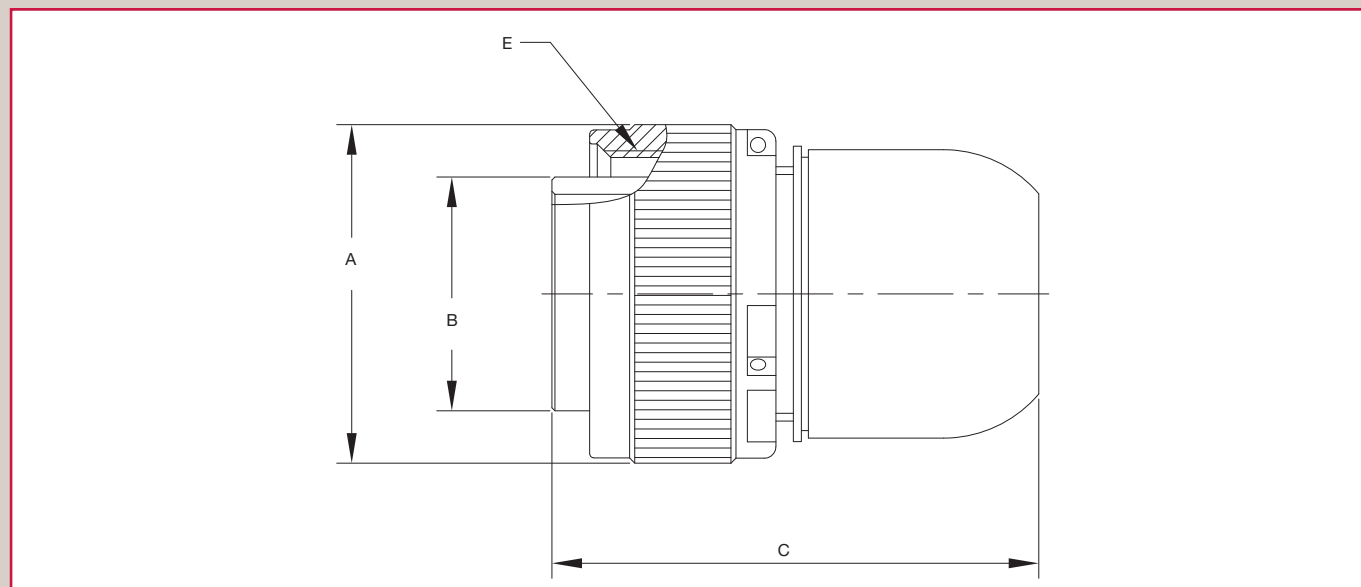


- Includes potting endbell to help encapsulate potting material and strain relief wires.
- Includes a face mounted O-ring.
- Available with optional RoHS compliant plating.

DIMENSIONS

PART NUMBER	A DIA. MAX.	B REF.	C MAX.	E THREAD
C25183-10SL-	0.97 (24.6)	0.45 (11.3)	1.50 (38.1)	5/8-24UNEF
C25183-12S-	1.06 (27.0)	0.56 (14.1)	1.50 (38.1)	3/4-20UNEF
C25183-12-	1.06 (27.0)	0.56 (14.1)	1.91 (48.4)	3/4-20UNEF
C25183-14S-	1.16 (29.4)	0.68 (17.2)	1.50 (38.1)	7/8-20UNEF
C25183-14-	1.16 (29.4)	0.68 (17.2)	1.91 (48.4)	7/8-20UNEF
C25183-16S-	1.25 (31.8)	0.81 (20.5)	1.50 (38.1)	1-20UNEF
C25183-16-	1.25 (31.8)	0.81 (20.5)	1.91 (48.4)	1-20UNEF
C25183-18-	1.34 (34.1)	0.93 (23.6)	1.91 (48.4)	1 1/8-18UNEF
C25183-20-	1.47 (37.3)	1.05 (26.7)	2.19 (55.5)	1 1/4-18UNEF
C25183-22-	1.59 (40.5)	1.18 (29.9)	2.19 (55.5)	1 3/8-18UNEF
C25183-24-	1.72 (43.7)	1.30 (33.0)	2.19 (55.5)	1 1/2-18UNEF
C25183-28-	1.97 (50.0)	1.52 (38.6)	2.19 (55.5)	1 3/4-18UNEF
C25183-32-	2.22 (56.4)	1.77 (45.0)	2.19 (55.5)	2-18UNS
C25183-36-	2.47 (62.7)	1.98 (50.3)	2.19 (55.5)	2 1/4-16UN

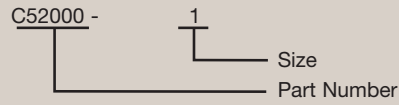
Note: Dimensions in inches (mm).



Accessories - Sealing Gasket (MS52000 Type) - C52000



- Material: Polychloroprene

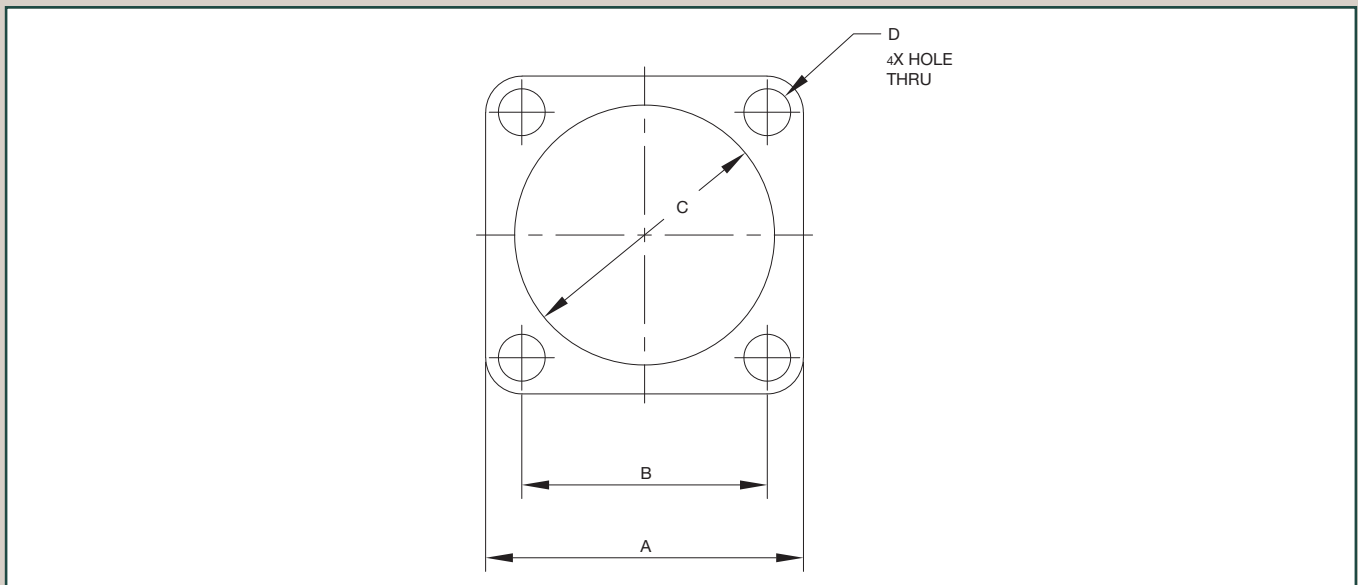


Accessories

DIMENSIONS					
PART NUMBER	SHELL SIZE	A REF.	B REF.	C DIA. REF.	D DIA. REF.
C52000-1	10SL	1.00 (25.4)	0.72 (18.3)	0.63 (15.9)	0.17 (4.4)
C52000-2	12, 12S	1.09 (27.8)	0.81 (20.6)	0.75 (19.1)	0.17 (4.4)
C52000-3	14, 14S	1.19 (30.2)	0.91 (23.0)	0.88 (22.2)	0.17 (4.4)
C52000-4	16, 16S	1.28 (32.5)	0.97 (24.6)	1.00 (25.4)	0.17 (4.4)
C52000-5	18	1.38 (34.9)	1.06 (27.0)	1.13 (28.6)	0.20 (5.2)
C52000-6	20	1.50 (38.1)	1.16 (29.4)	1.25 (31.8)	0.20 (5.2)
C52000-7	22	1.63 (41.3)	1.25 (31.8)	1.38 (34.9)	0.20 (5.2)
C52000-8	24	1.75 (44.5)	1.38 (34.9)	1.50 (38.1)	0.20 (5.2)
C52000-9	28	2.00 (50.8)	1.56 (39.7)	1.75 (44.5)	0.20 (5.2)
C52000-10	32	2.25 (57.2)	1.75 (44.5)	2.00 (50.8)	0.22 (5.6)
C52000-11	36	2.50 (63.5)	1.94 (49.2)	2.25 (57.1)	0.22 (5.6)

Note: Dimensions in inches (mm).

Gasket Thickness Ref. 0.56 (1.4)

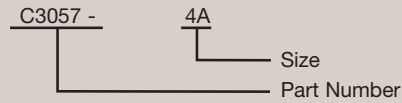


Industrial 5015

Backshell (MS3057 Type) - C3057



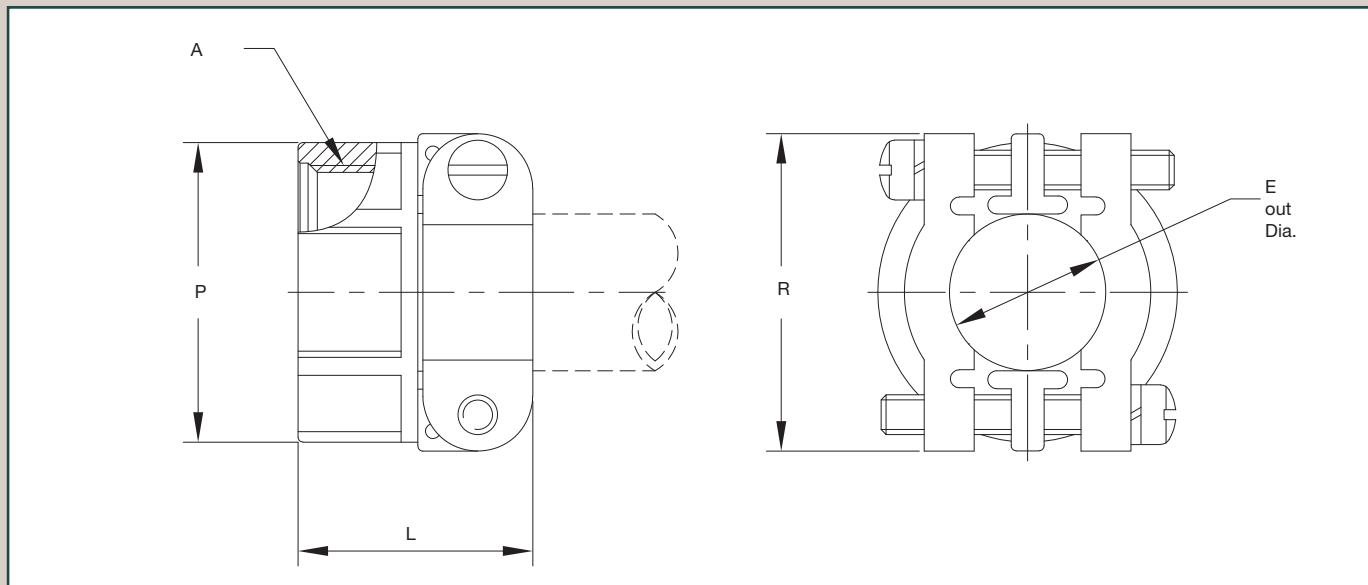
- Use with C3420 rubber bushing for full protection of cable jacket or wire bundles.



Accessories

DIMENSIONS						
PART NUMBER	SHELL SIZE	E CABLE OUTLET MAX.	L REF.	P REF.	R REF.	A THREAD
C3057-4A	10SL,12,12S	0.31 (7.9)	0.81 (20.6)	0.81 (20.6)	0.87 (22.2)	5/8-24UNEF
C3057-6A	14,14S	0.44 (11.1)	0.87 (22.2)	0.97 (24.6)	1.06 (27.0)	3/4-20UNEF
C3057-8A	16,16S	0.56 (14.3)	0.94 (23.8)	1.09 (27.8)	1.16 (29.4)	7/8-20UNEF
C3057-10A	18	0.63 (15.9)	0.94 (23.8)	1.19 (30.2)	1.25 (31.8)	1-20UNEF
C3057-12A	20, 22	0.75 (19.1)	0.94 (23.8)	1.37 (34.9)	1.47 (37.3)	1 3/16-18UNEF
C3057-16A	24, 28	0.94 (23.8)	1.03 (26.2)	1.66 (42.1)	1.69 (42.9)	1 7/16-18UNEF
C3057-20A	32	1.25 (31.8)	1.09 (27.8)	2.03 (51.6)	2.03 (51.6)	1 3/4-18UNS
C3057-24A	36	1.37 (34.9)	1.16 (29.4)	2.22 (56.4)	2.28 (57.9)	2-18UNEF

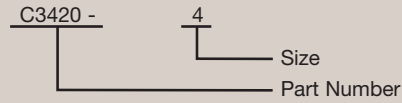
Note: Dimensions in inches (mm).



Rubber Bushing (MS3420 Type) - C3420

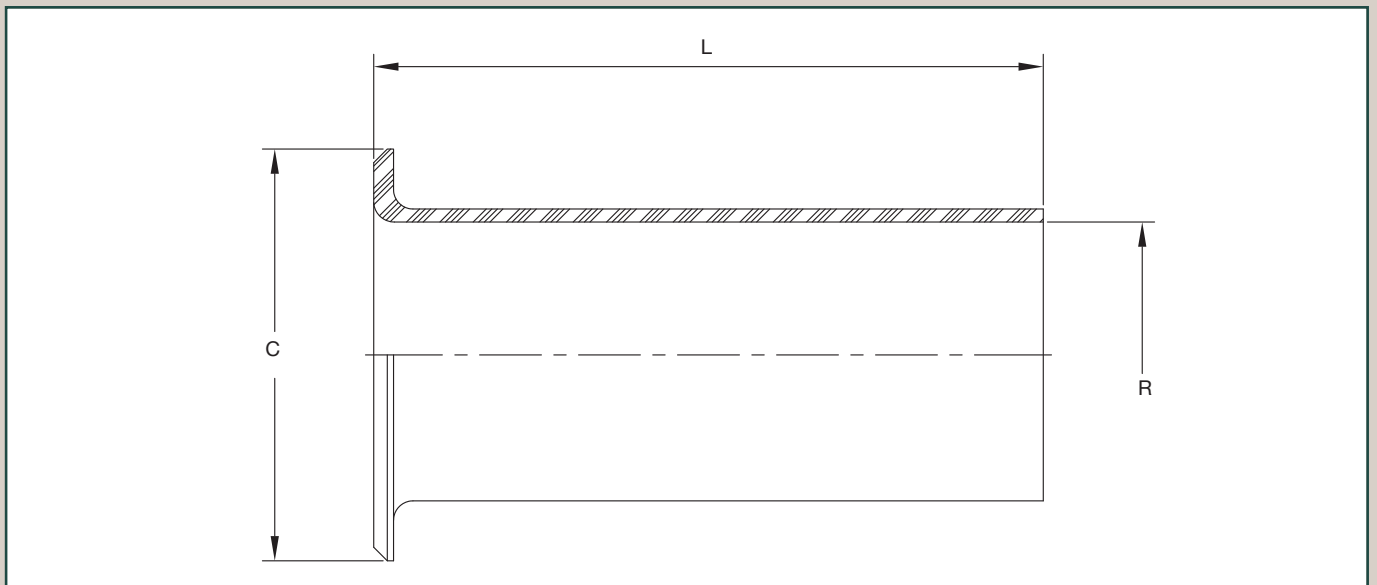


- Use with C3057 backshell for the full protection of cable jacket or wire bundles.



DIMENSIONS				
PART NUMBER	SHELL SIZE	C REF.	L REF.	R REF.
C3420-4	10SL,12,12S	0.51 (12.8)	2.75 (69.9)	0.22 (5.6)
C3420-6	14, 14S	0.62 (15.7)	2.63 (66.7)	0.31 (7.9)
C3420-8	16, 16S	0.74 (18.9)	2.50 (63.5)	0.44 (11.1)
C3420-10	18	0.87 (22.1)	2.37 (60.3)	0.56 (14.3)
C3420-12	20, 22	1.06 (27.0)	2.25 (57.2)	0.63 (15.9)
C3420-16	24, 28	1.31 (33.4)	2.13 (54.0)	0.75 (19.1)
C3420-20	32	1.60 (40.5)	2.00 (50.8)	0.94 (23.8)
C3420-24	36	1.85 (46.9)	1.87 (47.6)	1.25 (31.8)

Note: Dimensions in inches (mm).



Accessories

Protective Cap- Receptacle (MS25043 Type) - C25043

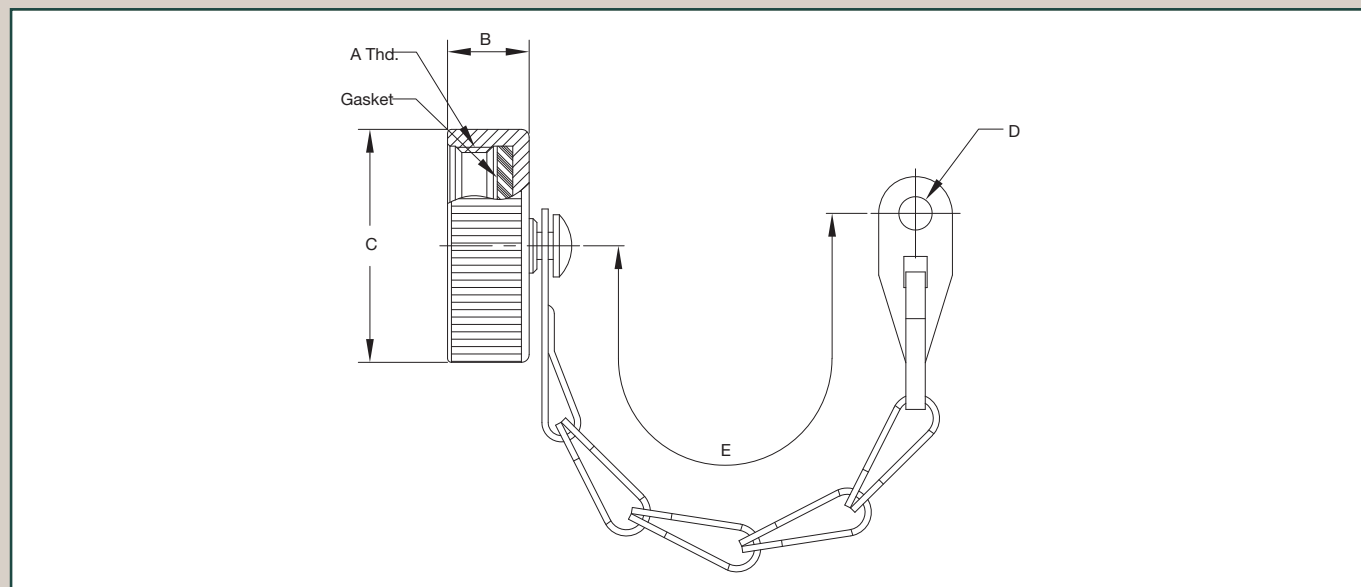


- Designed to protect all classes of C3100, C3101, and C3102 receptacle connectors.

C25043 - 18D
 Size
 Part Number

DIMENSIONS						
PART NUMBER	SHELL SIZE	B MAX.	C DIA. MAX.	E REF.	D DIA. REF.	A THREAD
C25043-10D	10S,10SL	0.47 (11.9)	0.81 (20.7)	4.00 (101.6)	0.14 (3.6)	5/8-24UNEF
C25043-12D	12S,12SL	0.47 (11.9)	1.00 (25.4)	4.50 (114.3)	0.14 (3.6)	3/4-20UNEF
C25043-14D	14,14S	0.47 (11.9)	1.01 (25.6)	4.50 (114.3)	0.14 (3.6)	7/8-20UNEF
C25043-16D	16,16S	0.47 (11.9)	1.19 (30.2)	4.50 (114.3)	0.14 (3.6)	1-20UNEF
C25043-18D	18	0.47 (11.9)	1.34 (34.1)	4.50 (114.3)	0.14 (3.6)	1 1/8-18UNEF
C25043-20D	20	0.47 (11.9)	1.47 (37.3)	5.00 (127.0)	0.14 (3.6)	1 1/4-18UNEF
C25043-22D	22	0.47 (11.9)	1.59 (40.5)	5.00 (127.0)	0.14 (3.6)	1 3/8-18UNEF
C25043-24D	24	0.47 (11.9)	1.72 (43.7)	5.50 (139.7)	0.17 (4.3)	1 1/2-18UNEF
C25043-28D	28	0.53 (13.5)	1.97 (50.0)	7.75 (196.9)	0.17 (4.3)	1 3/4-18UNEF
C25043-32D	32	0.53 (13.5)	2.22 (56.4)	7.75 (196.9)	0.19 (4.8)	2-18UNS
C25043-36D	36	0.53 (13.5)	2.47 (62.7)	7.75 (196.9)	0.19 (4.8)	2 1/4-16UN

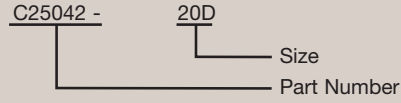
Note: Dimensions in inches (mm).



Protective Cap - Plug (MS25042 Type) - C25042

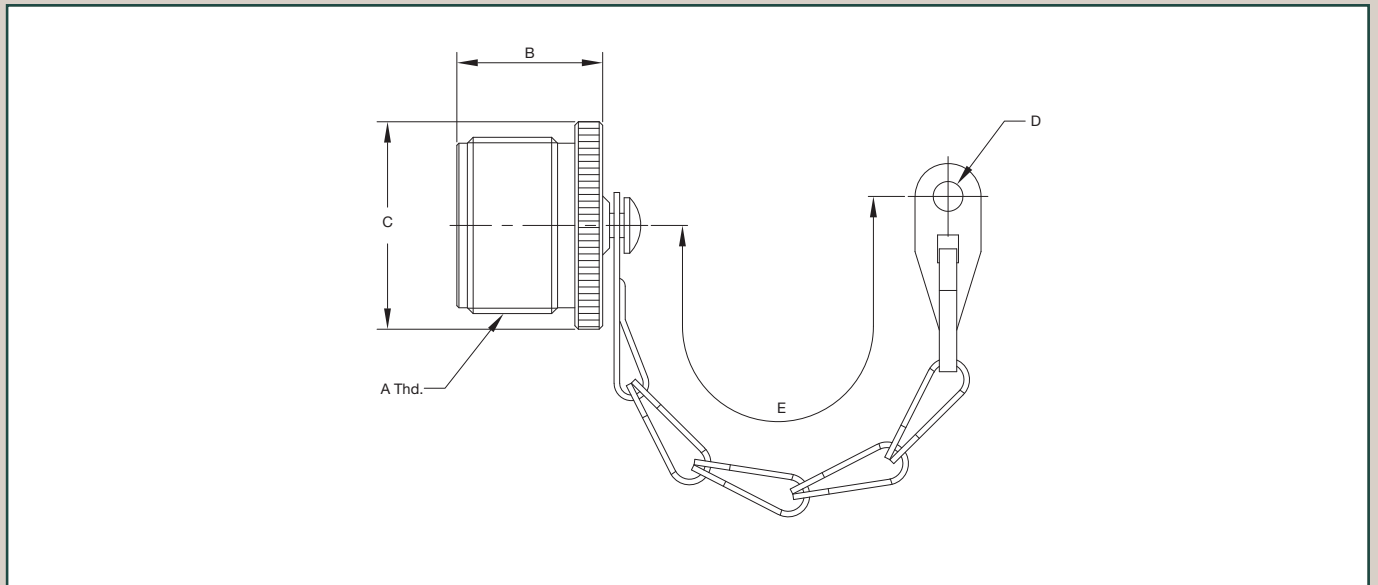


- Designed to protect all classes of C3106, C3108, and C25183 plugs.



DIMENSIONS						
PART NUMBER	SHELL SIZE	B MAX.	C DIA. MAX.	E REF.	D DIA. REF.	A THREAD
C25042-10D	10S,10SL	0.66 (16.7)	0.69 (17.5)	4.50 (114.3)	0.16 (4.0)	5/8-24UNEF
C25042-12D	12S,12SL	0.84 (21.4)	0.81 (20.6)	5.00 (127.0)	0.16 (4.0)	3/4-20UNEF
C25042-14D	14,14S	0.84 (21.4)	0.94 (23.8)	5.00 (127.0)	0.16 (4.0)	7/8-20UNEF
C25042-16D	16S,16SL	0.84 (21.4)	1.06 (27.0)	5.00 (127.0)	0.16 (4.0)	1-20UNEF
C25042-18D	18	0.84 (21.4)	1.19 (30.2)	5.00 (127.0)	0.16 (4.0)	1 1/8-18UNEF
C25042-20D	20	0.84 (21.4)	1.31 (33.3)	5.50 (139.7)	0.19 (4.8)	1 1/4-18UNEF
C25042-22D	22	0.84 (21.4)	1.44 (36.5)	5.50 (139.7)	0.19 (4.8)	1 3/8-18UNEF
C25042-24D	24	0.84 (21.4)	1.56 (39.7)	6.00 (152.4)	0.19 (4.8)	1 1/2-18UNEF
C25042-28D	28	0.84 (21.4)	1.81 (46.0)	8.25 (209.6)	0.19 (4.8)	1 3/4-18UNEF
C25042-32D	32	0.84 (21.4)	2.06 (52.4)	8.25 (209.6)	0.22 (5.5)	2-18UNS
C25042-36D	36	0.84 (21.4)	2.31 (58.7)	8.25 (209.6)	0.22 (5.5)	2 1/4-16UN

Note: Dimensions in inches (mm).



Accessories

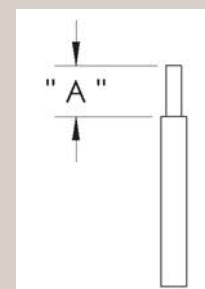
Industrial 5015

Assembly Instructions for Industrial 5015 Connectors

Wire Preparation for all solder cup contacts.

Strip wire to length shown (" A ") per Table I. Use care not to cut or nick wire strands. Twist wire strands back to their original lay. Pre-tin wire ends prior to final assembly.

TABLE I										
Contact Size	Wire Size	Normal Amps	Working Voltage by Service Rating (Volts - rms)					Insulation O.D.	Stripping Length "A"	
			Instrument	D	A	E	B			C
16	16 AWG	13A	200	900	500	1250	1750	3000	.064 - .130	.200 - .240
12	12 AWG	23A							.114 - .170	.170 - .210
8	8 AWG	46A							.154 - .225	.220 - .260
4	4 AWG	80A							.272 - .370	.310 - .350
0	0 AWG	150A							.415-.550	.420 - .470



Assembly Instructions

C3100, C3101 AND 3106 CLASS: A

(1) Slide **ADAPTOR** onto prepared wires. (2) Attach one wire per contact. (3) Screw **ADAPTOR** to connector body and torque per Table II.

C3100, C3101 AND C3106 CLASS: E AND F

(1) Slide in order **BACK SHELL / CABLE CLAMP ASSY, COMPRESSION SLEEVE AND GROMMET** onto prepared wires. (2) Attach one wire per contact. (3) Slide **GROMMET** and **COMPRESSION SLEEVE** to connector making sure **GROMMET** covers solder cup and rests on insulator. (4) Screw **BACK SHELL / CABLE CLAMP** to connector body and torque per Table II.

C3100, C3101 AND C3106 CLASS: R

(1) Slide in order **BACK SHELL, COMPRESSION SLEEVE** and **GROMMET** onto prepared wires. (2) Attach one wire per contact. (3) Slide **GROMMET** and **COMPRESSION SLEEVE** to connector making sure **GROMMET** covers solder cup and rests on insulator. (4) Screw **BACK SHELL** to connector body and torque per Table II.

C3102, CLASS: A, E, F AND R

(1) Slide **GASKET** onto prepared wires. (2) Attach one wire per contact.

C3108, CLASS: A

(1) Slide in order 90° **ADAPTOR** onto prepared wires. (2) Attach one wire per contact. (3) Slide 90° **ADAPTOR** to connector body and thread onto connector body then torque per Table II.

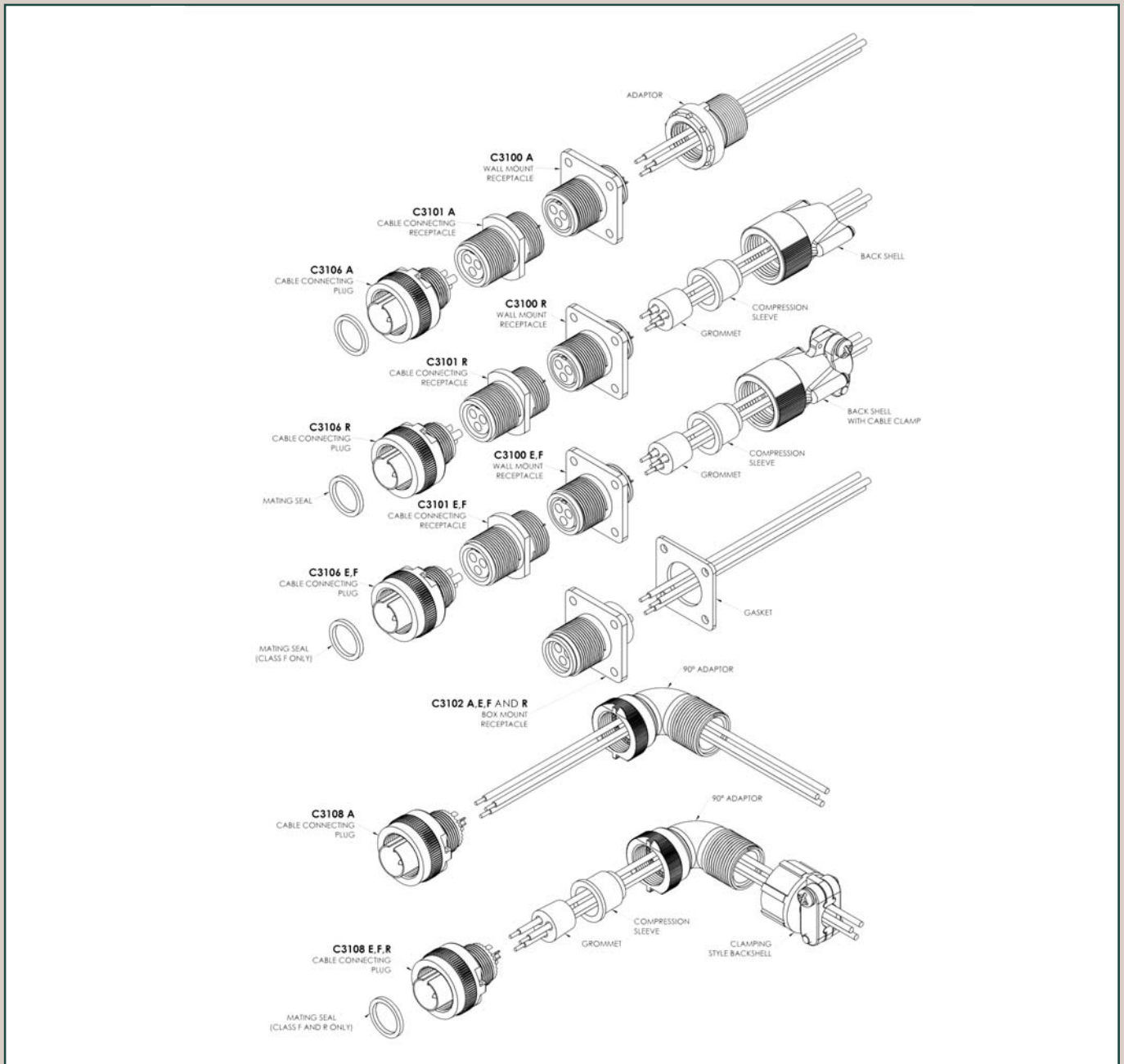
C3108 CLASS E, F AND R

(1) Slide in order **CLAMPING STYLE BACKSHELL , 90° ADAPTOR , COMPRESSION SLEEVE** and **GROMMET** onto prepared wires. (2) Attach one wire per contact. (3) Slide **GROMMET** and **COMPRESSION SLEEVE** to connector making sure **GROMMET** covers solder cup and rests on insulator. (4) Slide 90° **ADAPTOR**, to connector body and thread onto connector body then torque per Table II. (5) Slide **CLAMPING STYLE BACKSHELL**, to connector body and thread onto connector body then torque per Table II.

NOTE: On C3106 and C3108 Class: F and R Plugs , check that the MATING SEAL is installed.

Assembly Instructions for Industrial 5015 Connectors

TABLE II														
Connector Size	10SL	12	12S	14	14S	16	16S	18	20	22	24	28	32	36
Back Shell Torque (In. - lbs.)	26-32	32-40		46-50		55-60		70-75	80-85	90-95	100-110	120-130	150-160	170-180



Assembly Instructions

Industrial 5015 Cable Assemblies



Industrial 5015 Cable Assemblies Provide the Ultimate in Performance and Reliability.

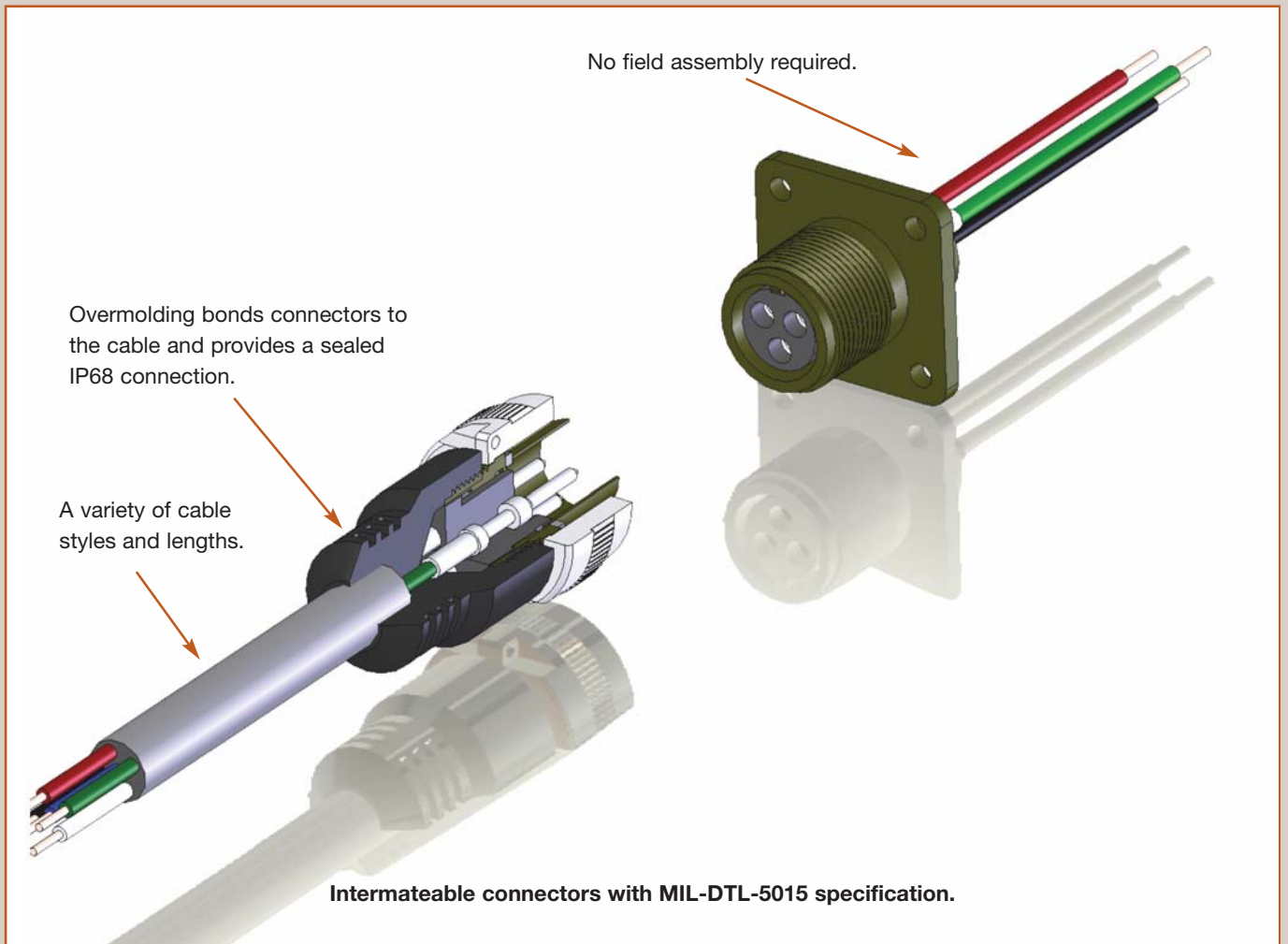
Cooper Interconnect offers a full line of cable assemblies to meet a wide range of requirements, built on the standard MIL-DTL-5015 series of field attachable products. Available in all 5015 configurations, our proven design is the choice in factory environments.

Our assemblies are 100 percent factory tested to the stringent specifications and performance requirements outlined by our discriminating customers.

Features Overview

Design Features

- Reduces costs—no additional labor required.
- Factory prewired—ready to install.
- No special tools required.
- 100 percent electrically tested for superior circuit integrity.
- Elastomeric body is corrosion and impact resistant.
- Easy installation saves time and money.



Ordering Guide

Ordering Information - Part Numbering System

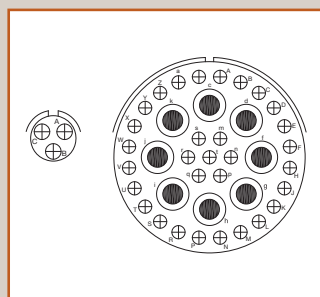


Cable Assemblies

M **E** **18-1** / **16S-01**

Select second connector shell size and insert arrangement. Leave blank if single sided.

Select first connector shell size and insert arrangement (See pages 10-21).



Assembly Types*

- E = MS3106/3106 Extension (Internal threaded Couplers)
- F = MS3106/3101 Extension (Int. Thd. Coupler/Ext. Thd. Shell)
- M = MS3101 Plug w/ Ext. Threads
- N = FRA-FRA 3108 Sockets to 3108 Sockets
- P = MS3106 Plug w/ Int. Thd. Coupler
- Q = MS3108 R/A Plug w/ Int. Thd. Coupler
- R = MS3102 Flange Mount Receptacle, Solder
- S = MS Modified Flange Mount Receptacle, Potted, Solder
- V = Potted Recpt., Ext. 1-14 Thread

Prefix - 5015 cable assemblies.

- For "E" shell type extensions, choose "P", "S" or "A" for gender.
- For "F" shell type extension choose "P" or "S", or "A" or "B" pin/socket option based on which gender goes into which shell. Specify gender for MS3106 shell first and MS3101 shell second.

*Extensions can have all male pins, all female sockets or a combination.

Ordering Guide

Ordering Information - Part Numbering System



P **120** **A** **T**

Cable Assemblies



Contact Types*
 A = Pin to socket extension
 B = Socket to pin extension
 P = Pin contacts
 S = Socket contacts

Cable (or longest pigtail) length
 Format - XX.X

A = Inches
 F = Feet
 M = Meters

Cable type / Special construction options

- B** = Shielded cable
- F** = Flexible conduit
- H** = Tray cable
- N** = Nylon hardware
- Q** = Shielded SEOW cable
- S** = SO(W-A) cable
- T** = Crimped terminals
- X** = Stainless hardware

Consult factory for options.

Custom Connectors

Custom Connectors

Cooper can provide special variations and derivatives to most of the standard 5015 products. Typical variations include special contact plating options, special coupling options, customized backshells and reverse bayonet locking systems.



Custom reverse bayonet connector for rail applications



Reverse Bayonet plug with RoHS compliant plating



RoHS compliant Electroless Nickel plating



Right angle multi pin connector for Medical applications.

Custom Connectors

INNOVATION YOU CAN TRUST IN THE MOST CHALLENGING CONDITIONS

Miniature Connectors

When it comes to dependable, quick-disconnect products for sensor and control devices, Cooper Interconnect's miniature connectors are among the most reliable and versatile in the industry.

And if our standard products don't meet your need, we can customize connectors to meet your specific requirement.



Mini-Line™ - With three connector sizes up to twelve contacts, the Mini-Line is manufactured in thermoplastic with STOOV cable or thermoset with SOOV cable versions.



Suremate™ - features 2- through 4-pin configurations with #14 AWG and #12 AWG conductors.



Micro-Line™ - features the three standard pin configurations used by major sensor and control manufacturers.



Micro-Plex™ - features 4-, 6- and 8-port configurations with top- and side-mounted designs and multiple wiring variations: parallel and LED (PNP and NPN versions).

Filter Connectors



The best performing EMI/ESD connectors for mission-critical applications.

Imagine EMI and RFI not affecting critical communication, fire control, and power systems. With Cooper Interconnect filtered connector solutions, imagination becomes reality. Cooper Interconnect filtered connectors are used in electrical and environmental applications to reduce electromagnetic interference (EMI) and radio frequency interference (RFI), while allowing the desired signals to pass. Our unique approach to planar filtered connector design offers the best electrical performance in the smallest possible package. Our high reliability solution to filtering a connector can be applied to any type of high performance connector where EMI/RFI protection is needed.

Flexibility

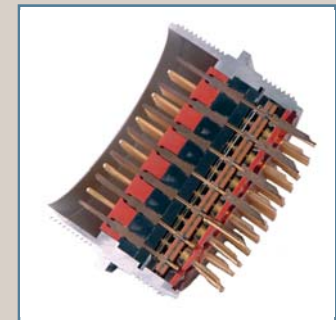
- Filtered connectors are available in MIL-DTL-38999, MIL-C-26482, and other specifications in environmental and hermetic versions. Choose from a large selection of military specification shell types and insert arrangements.
- Cooper Interconnect filtered products are available using Planar or Surface Mount technologies in C, LC, PI, T or extended PI configurations to achieve EMI/RFI suppression and using diodes to achieve EMP/Transient protection.
- Flexible design allows custom features to be added from a standard design.

Performance and Reliability

- All connectors are 100 percent tested before leaving the factory.
- Full manufacturing test data can be provided with each filtered connector.



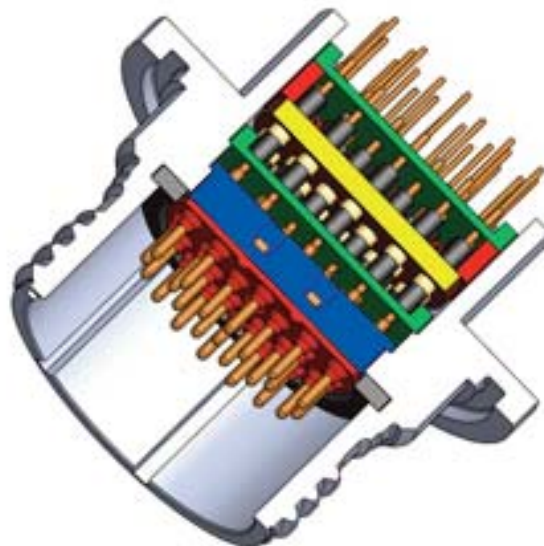
28840 Filtered Connector



Filtered Connector Cut-away

Filter Connectors

T Filter Cut-Away



Filter Connector

Availability

MIL-DTL-38999
Series I, II, III and IV.

Available in

- Wall Mount, Box Mount, Jam Nut, Plugs
- PCB tail or Solder buckets
- Available in all finishes and polarizations
- Most insert arrangements available

- Filter configurations:
C, LC, CL, Pi, TVS, Combo

MIL-DTL-26482 Series I, II

MIL-DTL-22992 Class L

MIL-C-55116

MIL-DTL-24308

Industrial 5015

Consult factory

Cooper Interconnect's Industrial 5015 Series are available from

Connectors

Cooper Interconnect
5455 Endeavour Court
Moorpark, CA 93021-8009
P: 805-553-9633
F: 805-553-9655

Cable Assemblies

Cooper Interconnect
4758 Washington Street
LaGrange, NC 28551
P: 252-566-3014
F: 252-566-9337

Filter Connectors

Cooper Interconnect
750 West Ventura Boulevard
Camarillo, CA 93010
P: 805-484-0543
F: 805-987-5062

Cooper Interconnect Headquarters

Wolf & 7th North Streets
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Syracuse, NY 13221-4999
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