



#### PRODUCT FEATURES

- Stainless Steel, Aluminum and Composite Versions
- Hermetic and Environmental
- 2 to 18 Pin Layouts
- Plugs, Receptacles and Bulkhead Feed-Thrus
- Solder Mounts, Flange Mount and Jam-Nut Versions
- Keyed Polarization
- Special Swivel-Lanyard Quick Disconnect Designs

## Corrosion Resistant Stainless Steel and Composite Mil-DTL-5015 Type Harsh Environment Connectors

***Originally Designed for Use in Oil Patch Applications, this Connector is Ideal for all Harsh Environmental Settings***

Glenair's line of 5015 Type Harsh Environment Connectors are designed to provide outstanding corrosion resistance and rugged performance. These stainless steel, aluminum and composite thermoplastic plugs and receptacles are ideally suited for severe environments such as geophysical exploration, mining and other settings where resistance to extreme temperatures, salt spray and caustic chemicals is a critical requirement.

Fully compliant with the Mil-DTL-5015 specification, the connectors offer additional design features and materials advantages which make them exceptional values for many interconnect applications. Composite versions are manufactured from a 40% glass filled Ryton engineering plastic. Ryton is a high temperature, injection molded material with good mechanical properties and excellent chemical resistance at elevated temperatures, up to 500° F. The material provides outstanding resistance to a broad spectrum of aggressive chemicals and has very stable dielectric and insulating properties.

The connectors are designed for rugged field use, and feature large profile knurlings for ease of handling, and anti-decoupling springs for maintenance-free performance. A complete range of pin sizes and insert arrangements are available.

### HOW TO ORDER:

EXAMPLE: 190 - 007 - 6 - 14S - 5 P W M

PRODUCT SERIES \_\_\_\_\_

BASIC NO \_\_\_\_\_

6 = PLUG ASSEMBLY \_\_\_\_\_

SHELL SIZE, TABLE I \_\_\_\_\_

INSERT ARRANGEMENT DASH NO. \_\_\_\_\_

CONTACT STYLE : \_\_\_\_\_

P = PIN

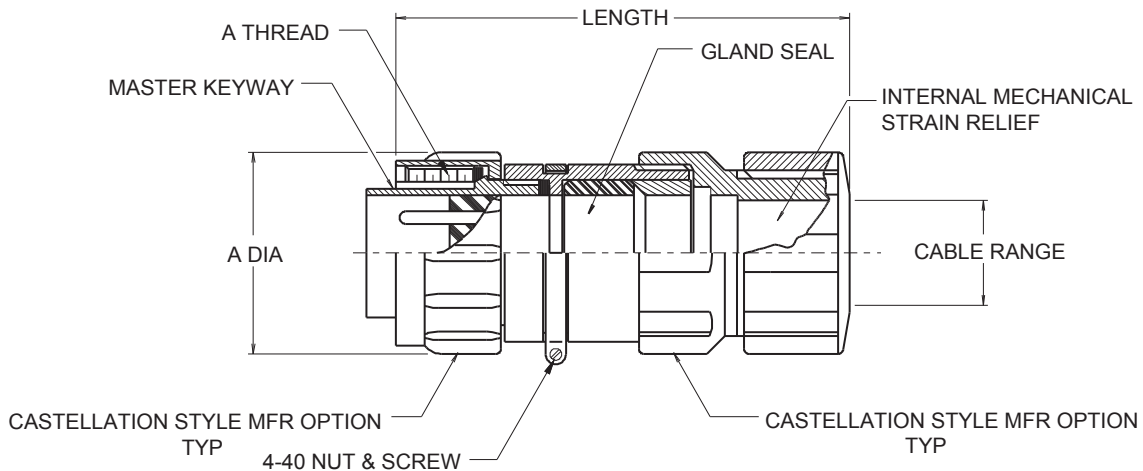
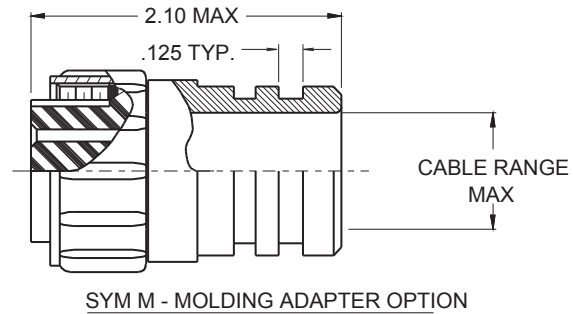
S = SOCKET

ALTERNATE INSERT POSITION, OMIT FOR NORMAL \_\_\_\_\_

M = MOLDING ADAPTER \_\_\_\_\_

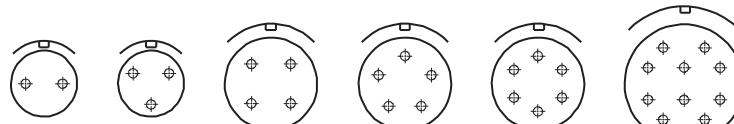
C = CONNECTOR ONLY (NO ADAPTER)

OMIT FOR STANDARD \_\_\_\_\_



### INSERT ARRANGEMENTS

FACE VIEW OF PIN INSERT SHOWN



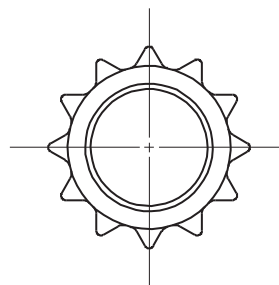
INSERT ARRANGEMENT:	10SL-4	10SL-3	14S-2	14S-5	14S-6	18-1
CONTACT SIZE & QUANTITY:	2 - #16	3 - #16	4 - #16	5 - #16	6 - #16	10 - #16
MS SERVICE RATING:	A	A	INST	INST	INST	4A 6 INST

**190-007-6**  
**Composite Connector, Plug**  
**Environment Resistant**  
**MIL-DTL-5015 Type**



MIL-DTL-5015

TABLE I: CONNECTOR DIMENSIONS						
SHELL SIZE	A MAX	B FLATS	STD CABLE RANGE		CONFIGURATION STYLE	LENGTH MAX
			MIN	MAX		
10SL	1.15 (29.2)	.87 (22.1)	.203 (5.2)	.375 (9.5)	I	3.00
14S	1.33 (33.8)	.87 (22.1)	.203 (5.2)	.375 (9.5)	I	3.00
18	1.60 (40.6)	1.00 (25.4)	.328 (8.3)	.500 (12.7)	I	3.00



**NOTES:**

1. ASSEMBLY IDENTIFIED WITH MANUFACTURER'S NAME AND P/N, SPACE PERMITTING.
2. GLENAIR 190-007 CONNECTOR FEATURES:
  - A. BARREL, COUPLING NUT & REAR ACCESSORY HARDWARE: HIGH GRADE ENGINEERING THERMOPLASTIC (RYTON).
  - B. INSULATOR, O-RING, GROMMET: NITRILE/NEOPRENE
  - C. GROMMET FOLLOWER: NYLON
  - D. CONTACTS: GOLD PLATED COPPER ALLOY WITH SOLDER POTS .
  - E. CONTACT CURRENT RATING: #20-5 AMPS, #16-10 AMPS, #12-17 AMPS, #8-35 AMPS.
  - F. RATED OPERATING VOLTAGE: SERVICE RATING INST - 250 VDC  
SERVICE RATING A - 700 VDC
  - G. DIELECTRIC W/STANDING VOLTAGE (HI-POT): SERVICE RATING INST - 1000 VRMS  
A - 2000 VRMS
  - H. INSULATION RESISTANCE: 5000 MEGOHMS MINIMUM AT 500 VDC AND +25AC
  - J. TEMPERATURE RANGE: -55AC TO +125AC
3. ELECTRICAL SAFETY LIMITS MUST BE ESTABLISHED BY THE USER .  
PEAK VOLTAGES, SWITCHING SURGES, TRANSIENTS, ETC., SHOULD BE USED TO DETERMINE THE SAFETY OF APPLICATION .

### HOW TO ORDER:

EXAMPLE: 190 - 007 - 7 - 14S - 5 P W M

PRODUCT SERIES

BASIC NO

7 = RECEPTACLE ASSEMBLY

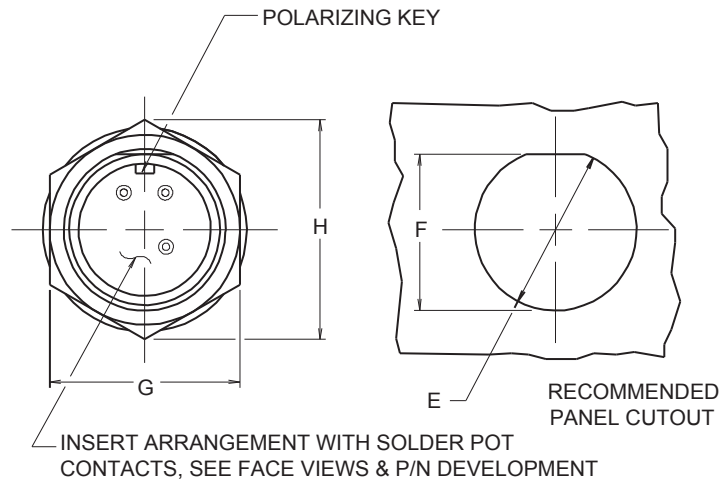
SHELL SIZE, TABLE I

INSERT ARRANGEMENT DASH NO.

CONTACT STYLE :  
P = PIN  
S = SOCKET

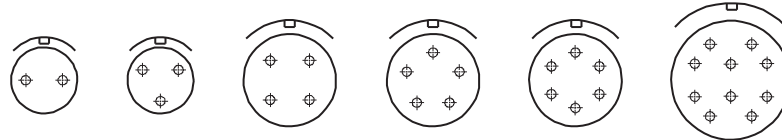
ALTERNATE INSERT POSITION, N, W, X, Y OR Z

M = MOLDING ADAPTER, OMIT FOR NONE



### INSERT ARRANGEMENTS

#### FACE VIEW OF PIN INSERT SHOWN



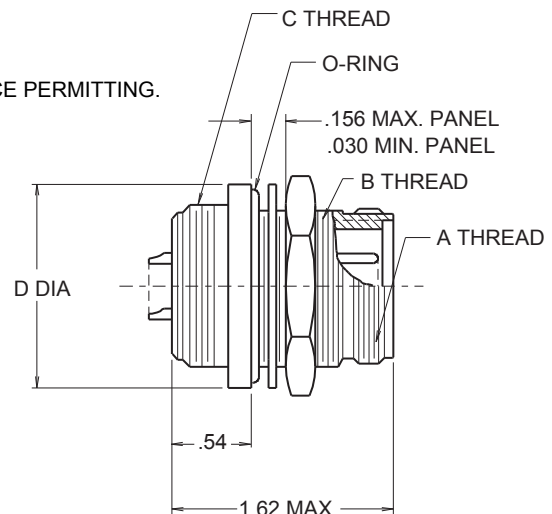
INSERT ARRANGEMENT: 10SL-4	10SL-3	14S-2	14S-5	14S-6	18-1
CONTACT SIZE & QUANTITY: 2 - #16	3 - #16	4 - #16	5 - #16	6 - #16	10 - #16
MS SERVICE RATING: A	A	INST	INST	INST	4A 6 INST

### TABLE I: CONNECTOR DIMENSIONS

SHELL SIZE	A THREAD CLASS 2A	B THREAD CLASS 2A	C THREAD CLASS 2A	D DIA MAX	E DIA +.010 - .000 (+0.3 - 0)	F +.010 - .000 (+0.3 - 0)	G FLATS	H MAX
10SL	.625-.1P-1L	3/4 -20 UNEF	5/8 -24 UNEF	1.10 (27.9)	.760 (19.3)	.710 (18.0)	.938 (23.8)	1.09 (27.7)
14S	.875-.1P-1L	1 -20 UNEF	7/8 -20 UNEF	1.45 (36.8)	1.010 (25.7)	.960 (24.4)	1.250 (31.8)	1.44 (36.6)
18	1.125-.1P-1L	1 1/4 -18 UNEF	1 1/8 -16 UN	1.75 (44.5)	1.260 (32.0)	1.210 (30.7)	1.500 (38.1)	1.73 (43.9)

### NOTES:

- ASSEMBLY IDENTIFIED WITH MANUFACTURER'S NAME AND P/N, SPACE PERMITTING.
- GLENAIR 190-007 CONNECTOR FEATURES :
  - SHELL: HIGH GRADE ENGINEERING THERMOPLASTIC (RYTON).
  - INSULATOR, O-RING, GROMMET: NITRILE/NEOPRENE
  - CONTACTS: GOLD PLATED COPPER ALLOY WITH SOLDER POTS
  - CONTACT CURRENT RATING: #16-10 AMPS.
  - RATED OPERATING VOLTAGE: SERVICE RATING INST - 250 VDC  
SERVICE RATING A - 700 VDC
  - DIELECTRIC W/STANDING VOLTAGE (HI-POT): SERVICE RATING INST - 1000 VRMS, A - 2000 VRMS
  - INSULATION RESISTANCE: 5000 MEGOHMS MINIMUM AT 500 VDC AND +25AC
  - TEMPERATURE RANGE: -55AC TO +125AC
- ELECTRICAL SAFETY LIMITS MUST BE ESTABLISHED BY THE USER . PEAK VOLTAGES, SWITCHING SURGES, TRANSIENTS, ETC., SHOULD BE USED TO DETERMINE THE SAFETY OF APPLICATION .



# To Most People It's Just a Rubber Connector Cover



## At Glenair It's a Good Ol' "Marshal Bean"

**W**e're always hard at work at Glenair developing new and improved interconnect products and accessories. Our "Marshal Bean" Protective Rubber Covers are a fine example—even if they *have* been around for a month of Sunday's.

"Marshal Beans" provide robust physical and environmental protection while eliminating the damage caused when metal connector covers bang against equipment housings, or when test cables get dragged across the shop floor! The covers come in two material types: a flex-

ible neoprene rubber or a proprietary conductive material which dissipates static electricity.

Glenair Bean Rubber Covers have been available for years, but this catalog introduces four new universal models that make order-entry a snap for standard MIL-C-24308 D-Subminiature's, MIL-DTL-83513 Micro-D's, ARINC 400's and all uniformly rectangular connectors. At Glenair, we reckon a flexible rubber cover is the perfect way to protect an interconnect cable. So isn't it time you hired "Marshal Bean" to ride herd on your connector investment?



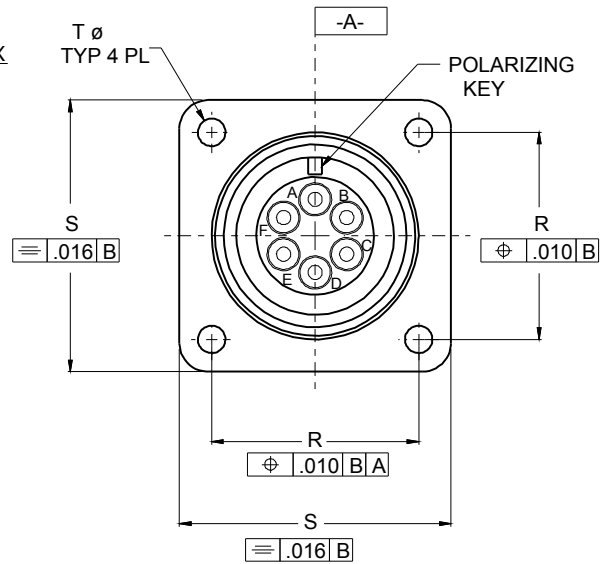
1211 Air Way  
Glendale, California 91201-2497  
Telephone: 818-247-6000 · Facsimilie: 818-500-9912 · EMail: sales@glenair.com

United States · United Kingdom · Germany · Nordic · France · Italy · Spain

[www.glenair.com](http://www.glenair.com)

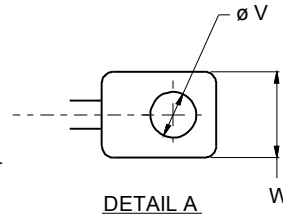
**HOW TO ORDER:**

EXAMPLE: 250-013 Z1 14 - 6 P X  
 BASIC PART NUMBER     250-013  
 MATERIAL DESIGNATION    Z1  
 FT - FUSED TIN OVER FERROUS STEEL  
 Z1 - PASSIVATED STAINLESS STEEL  
 SHELL SIZE                 14  
 INSERT ARRANGEMENT PER MIL-STD-1651  
 TERMINATION TYPE        P  
 P - SOLDER CUP  
 X - EYELET  
 ALTERNATE INSERT POSITION  
 W, X, Y, OR Z  
 OMIT FOR NORMAL



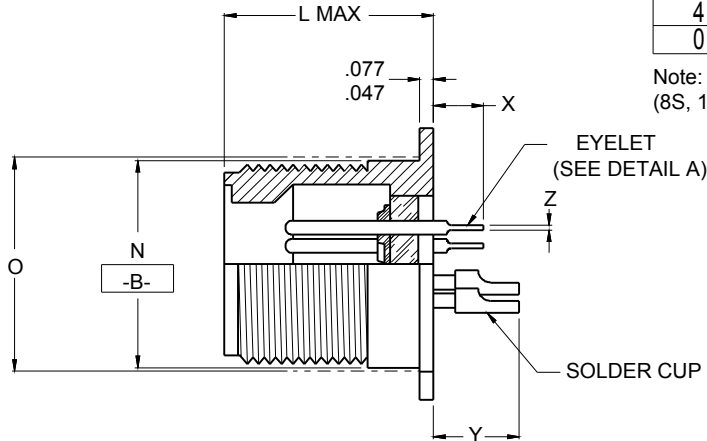
**NOTES:**

1. MATERIAL/FINISH:  
 SHELL: FT - FUSED TIN OVER CARBON STEEL  
 Z1 - PASSIVATED STAINLESS STEEL  
 CONTACTS: 52 NICKEL ALLOY/ GOLD PLATE  
 SEALS: SILICONE ELASTOMER  
 INSULATION: GLASS BEADS, NOIBN
2. ASSEMBLY TO BE IDENTIFIED WITH GLENAIR'S NAME, PART NUMBER AND DATE CODE SPACE PERMITTING.
3. PERFORMANCE:  
 HERMETICITY: <math> <1 \times 10^{-6}</math> SCCHE/SEC @ 1 ATMOSPHERE DIFFERENTIAL  
 DIELECTRIC WITHSTANDING VOLTAGE: SEE TABLE ON SHEET #2  
 INSULATION RESISTANCE: 5000 MEGOHMS MIN @ 500VDC
4. GLENAIR 250-013 WILL MATE WITH ANY MIL-C-5015 SERIES THREADED COUPLING PLUG OF SAME SIZE AND INSERT POLARIZATION



CONTACT SIZE	X MAX.	Y MAX.	Z MIN.	V MIN.	W MAX.
16	.219 (5.6)	.375 (9.5)	.020 (0.5)	.065 (1.7)	.115 (2.9)
12	.281 (7.1)	.516 (13.1)	.020 (0.5)	.096 (2.4)	.190 (4.8)
8	.700 (17.8)	.719 (18.3)	.040 (1.0)	.135 (3.4)	.330 (8.4)
4	.900 (22.9)	.980 (24.9)	.050 (1.3)	.220 (5.6)	.440 (11.2)
0	.900 (22.9)	.980 (24.9)	.090 (2.3)	.335 (8.5)	.605 (15.4)

Note: Contact sizes 4 and 0 are not available for "S" size shells (8S, 10S, 10SL, 12S, 14S, and 16S) and size 12 and 14



250-013  
Hermetic Receptacle, Panel Mount  
MIL-DTL-5015 Type (MS3142)



MIL-DTL-5015

PATTERN NUMBER	CONTACT SIZE AND QUANTITY					SERVICE RATING
	16 GA	12 GA	8 GA	4 GA	0 GA	
8S-1	1					A
10S-2	1					A
10SL-3	3					INST
10SL-4	4					A
12S-3	2					A
12S-4	1					D
14S-1	3					A
14S-2	4					INST
14S-4	1					O
14S-5	5					INST
14S-6	6					INST
14S-7	3					A
14S-9	2					A
16S-1	7					A
16S-3	1					B
16S-4	2					D
16S-5	3					A
16S-6	3					A
16S-8	5					A
16-9	2	2				A
16-10		3				A
16-11		2				A
18-1	10					A/INST
18-4		4				D
18-8	7	1				A
18-9	5	2				INST
18-10		4				A
18-11		5				A
18-12	6					A
20-4		4				D
20-7	8					D/A
20-8	4					INST
20-14		3				A
20-15		7				A
20-16	7	2				A
20-17	1	5				A
20-18	6	3				A
20-19			3			A

PATTERN NUMBER	CONTACT SIZE AND QUANTITY					SERVICE RATING
	16 GA	12 GA	8 GA	4 GA	0 GA	
20-22	3		3			A
20-24	2		2			A
20-27	14					A
20-29	17					A
20-33	11					A
22-2			3			D
22-5	4	2				D
22-9		3				E
22-14	19					A
22-18	8					A/D
22-19	14					A
22-20	9					A
22-22			4			A
22-23		8				D/A
24-2		7				D
24-4	3					D
24-7	14	2				A
24-10			7			A
24-11		6	3			A
24-19	12					A
24-20	9	2				D
24-27	7					E
24-28	24					INST
28-9	6	6				D
28-11	18	4				A
28-12	26					A
28-15	35					A
28-17	15					B/D/A
28-20	4	10				A
28-21	37					A
32-6	3	2	3	2		A
32-7	28	7				INST/A
32-8	24	6				A
32-15		6			2	D
32-17				4		D
36-5					4	A
36-7	40	7				A
36-9	14	14	2	1		A
36-10	48					A

SIZE	L MAX CONTACT SIZE		Ø N +.000 -.062 (+0 - 1.6)	Ø O (REF) MTG HOLE	R T.P C—C	S ±.031 (0.8)	T ±.005 (0.1)
	16, 12 & 8	4 & 0					
8S	.730 (18.5)		.532 (13.5)	.562 (14.3)	.594 (15.1)	.875 (22.2)	.120 (3.0)
10S	.730 (18.5)		.656 (16.7)	.688 (17.5)	.719 (18.3)	1.000 (25.4)	
10SL	.730 (18.5)		.656 (16.7)	.688 (17.5)	.719 (18.3)	1.000 (25.4)	
12S	.730 (18.5)		.782 (19.9)	.812 (20.6)	.812 (20.6)	1.094 (27.8)	
12	.915 (23.2)		.782 (19.9)	.812 (20.6)	.812 (20.6)	1.094 (27.8)	
14S	.730 (18.5)		.906 (23.0)	.938 (23.8)	.906 (23.0)	1.188 (30.2)	
14	.915 (23.2)		.906 (23.0)	.938 (23.8)	.906 (23.0)	1.188 (30.2)	
16S	.730 (18.5)	1.040 (26.4)	1.032 (26.2)	1.062 (27.0)	.969 (24.6)	1.281 (32.5)	
16	.915 (23.2)		1.032 (26.2)	1.062 (27.0)	.969 (24.6)	1.281 (32.5)	
18			1.156 (29.4)	1.188 (30.2)	1.062 (27.0)	1.375 (34.9)	
20			1.282 (32.6)	1.312 (33.3)	1.156 (29.4)	1.500 (38.1)	.120 (3.0)
22			1.406 (35.7)	1.438 (36.5)	1.250 (31.8)	1.625 (41.3)	.147 (3.7)
24			1.532 (38.9)	1.562 (39.7)	1.375 (34.9)	1.750 (44.5)	.147 (3.7)
28			1.782 (45.3)	1.812 (46.0)	1.562 (39.7)	2.000 (50.8)	.173 (4.4)
32			2.032 (51.6)	2.062 (52.4)	1.750 (44.5)	2.250 (57.2)	
36			2.282 (58.0)	2.312 (58.7)	1.938 (49.2)	2.500 (63.5)	
40			2.532 (64.3)	2.562 (65.1)	2.188 (55.6)	2.750 (69.9)	
44			2.782 (70.7)	2.812 (71.4)	2.375 (60.3)	3.000 (76.2)	
48	.915 (23.2)	1.040 (26.4)	3.032 (77.0)	3.062 (77.8)	2.625 (66.7)	3.250 (82.6)	.173 (4.4)

SERVICE RATING	WORKING VOLTAGES (VOLTS-RMS)
INST	200
A	500
D	900
E	1250
B	1750
C	3000



**HOW TO ORDER:**

EXAMPLE:                            250-014    Z1    14    -    6    P    X

BASIC PART NUMBER            250-014

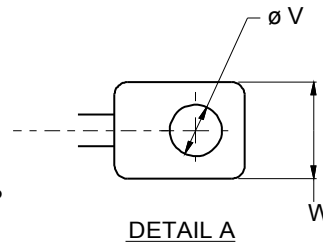
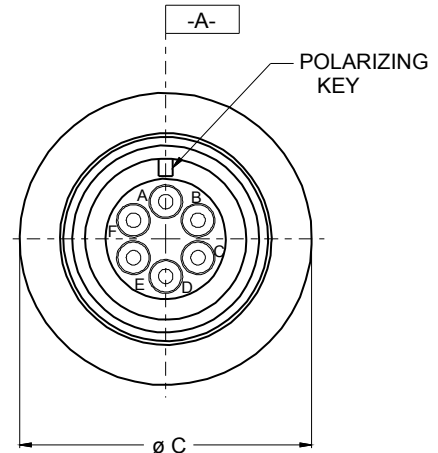
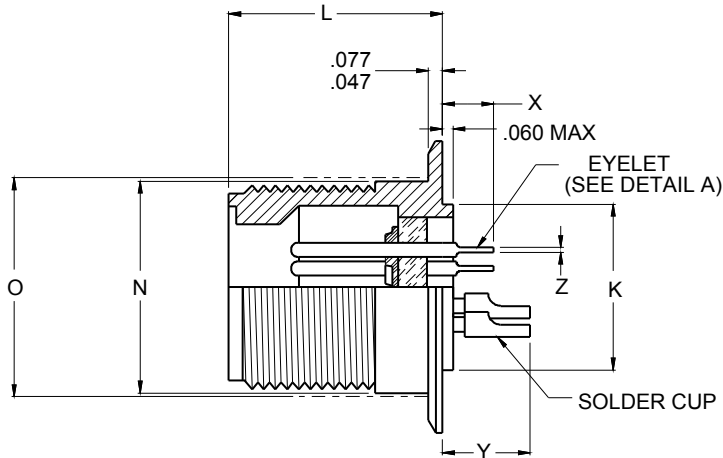
MATERIAL DESIGNATION  
 FT - FUSED TIN OVER FERROUS STEEL  
 Z1 - PASSIVATED STAINLESS STEEL

SHELL SIZE                            14

INSERT ARRANGEMENT PER MIL-STD-1651            -

TERMINATION TYPE  
 P - SOLDER CUP  
 X - EYELET

ALTERNATE INSERT POSITION  
 W, X, Y, OR Z  
 OMIT FOR NORMAL



CONTACT SIZE	X MAX.	Y MAX.	Z MIN.	V MIN.	W MAX.
16	.219 (5.6)	.375 (9.5)	.020 (0.5)	.065 (1.7)	.115 (2.9)
12	.281 (7.1)	.516 (13.1)	.020 (0.5)	.096 (2.4)	.190 (4.8)
8	.700 (17.8)	.719 (18.3)	.040 (1.0)	.135 (3.4)	.330 (8.4)
4	.900 (22.9)	.980 (24.9)	.050 (1.3)	.220 (5.6)	.440 (11.2)
0	.900 (22.9)	.980 (24.9)	.090 (2.3)	.335 (8.5)	.605 (15.4)

Note: Contact sizes 4 and 0 are not available for "S" size shells (8S, 10S, 10SL, 12S, 14S, and 16S) and size 12 and 14

**NOTES:**

- MATERIAL/FINISH:  
 SHELL: FT - FUSED TIN OVER CARBON STEEL  
 Z1 - PASSIVATED STAINLESS STEEL  
 CONTACTS: 52 NICKEL ALLOY/ GOLD PLATE  
 SEALS: SILICONE ELASTOMER  
 INSULATION: GLASS BEADS, NOIBN
- ASSEMBLY TO BE IDENTIFIED WITH GLENAIR'S NAME, PART NUMBER AND DATE CODE SPACE PERMITTING.
- PERFORMANCE:  
 HERMETICITY: <math>1 \times 10^{-6}</math> SCCHE/SEC @ 1 ATMOSPHERE DIFFERENTIAL  
 DIELECTRIC WITHSTANDING VOLTAGE: SEE TABLE ON SHEET #2  
 INSULATION RESISTANCE: 5000 MEGOHMS MIN @ 500VDC
- GLENAIR 250-014 WILL MATE WITH ANY MIL-C-5015 SERIES THREADED COUPLING PLUG OF SAME SIZE AND INSERT POLARIZATION



**250-014**  
**Hermetic Receptacle, Solder Mount**  
**MIL-DTL-5015 Type (MS3143)**



MIL-DTL-5015

PATTERN NUMBER	CONTACT SIZE AND QUANTITY					SERVICE RATING
	16 GA	12 GA	8 GA	4 GA	0 GA	
8S-1	1					A
10S-2	1					A
10SL-3	3					INST
10SL-4	4					A
12S-3	2					A
12S-4	1					D
14S-1	3					A
14S-2	4					INST
14S-4	1					O
14S-5	5					INST
14S-6	6					INST
14S-7	3					A
14S-9	2					A
16S-1	7					A
16S-3	1					B
16S-4	2					D
16S-5	3					A
16S-6	3					A
16S-8	5					A
16-9	2	2				A
16-10		3				A
16-11		2				A
18-1	10					A/INST
18-4		4				D
18-8	7	1				A
18-9	5	2				INST
18-10		4				A
18-11		5				A
18-12	6					A
20-4		4				D
20-7	8					D/A
20-8	4					INST
20-14		3				A
20-15		7				A
20-16	7	2				A
20-17	1	5				A
20-18	6	3				A
20-19			3			A

PATTERN NUMBER	CONTACT SIZE AND QUANTITY					SERVICE RATING
	16 GA	12 GA	8 GA	4 GA	0 GA	
20-22	3		3			A
20-24	2		2			A
20-27	14					A
20-29	17					A
20-33	11					A
22-2			3			D
22-5	4	2				D
22-9		3				E
22-14	19					A
22-18	8					A/D
22-19	14					A
22-20	9					A
22-22			4			A
22-23		8				D/A
24-2		7				D
24-4	3					D
24-7	14	2				A
24-10			7			A
24-11		6	3			A
24-19	12					A
24-20	9	2				D
24-27	7					E
24-28	24					INST
28-9	6	6				D
28-11	18	4				A
28-12	26					A
28-15	35					A
28-17	15					B/D/A
28-20	4	10				A
28-21	37					A
32-6	3	2	3	2		A
32-7	28	7				INST/A
32-8	24	6				A
32-15		6			2	D
32-17				4		D
36-5					4	A
36-7	40	7				A
36-9	14	14	2	1		A
36-10	48					A

SIZE	C ∅ ±.010 (±0.3)	K ∅ ±.010 (±0.3)	L MAX		∅ N +.000 -.062 (+0 - 1.6)	∅ O (REF) MTG HOLE
			CONTACT SIZE			
			16, 12 & 8	4 & 0		
8S	.750 (19.1)	.428 (10.9)	.730 (18.5)		.532 (13.5)	.562 (14.3)
10S	.875 (22.2)	.490 (12.4)	.730 (18.5)		.656 (16.7)	.688 (17.5)
10SL	.875 (22.2)	.490 (12.4)	.730 (18.5)		.656 (16.7)	.688 (17.5)
12S	1.000 (25.4)	.646 (16.4)	.730 (18.5)		.782 (19.9)	.812 (20.6)
12	1.000 (25.4)	.646 (16.4)	.915 (23.2)		.782 (19.9)	.812 (20.6)
14S	1.125 (28.6)	.709 (18.0)	.730 (18.5)		.906 (23.0)	.938 (23.8)
14	1.125 (28.6)	.709 (18.0)	.915 (23.2)		.906 (23.0)	.938 (23.8)
16S	1.250 (31.8)	.834 (21.2)	.730 (18.5)	1.040 (26.4)	1.032 (26.2)	1.062 (27.0)
16	1.250 (31.8)	.834 (21.2)	.915 (23.2)		1.032 (26.2)	1.062 (27.0)
18	1.375 (34.9)	.959 (24.4)			1.156 (29.4)	1.188 (30.2)
20	1.500 (38.1)	1.146 (29.1)			1.282 (32.6)	1.312 (33.3)
22	1.625 (41.3)	1.240 (31.5)			1.406 (35.7)	1.438 (36.5)
24	1.750 (44.5)	1.365 (34.7)			1.532 (38.9)	1.562 (39.7)
28	2.000 (50.8)	1.615 (41.0)			1.782 (45.3)	1.812 (46.0)
32	2.250 (57.2)	1.865 (47.4)			2.032 (51.6)	2.062 (52.4)
36	2.500 (63.5)	2.115 (53.7)			2.282 (58.0)	2.312 (58.7)
40	2.750 (69.9)	2.365 (60.1)			2.532 (64.3)	2.562 (65.1)
44	3.000 (76.2)	2.615 (66.4)			2.782 (70.7)	2.812 (71.4)
48	3.250 (82.6)	2.865 (72.8)	.915 (23.2)	1.040 (26.4)	3.032 (77.0)	3.062 (77.8)

SERVICE RATING	WORKING VOLTAGES (VOLTS-RMS)
INST	200
A	500
D	900
E	1250
B	1750
C	3000

#### HOW TO ORDER:

EXAMPLE:                    257 - 003 H 2 - 14S - 5 P W M

PRODUCT SERIES            257 - 003

BASIC NO                    H

H = HERMETIC  
OMIT FOR STD, SUBSTITUTE DASH

2 = RECEPTACLE ASSEMBLY

SHELL SIZE, TABLE I        14S

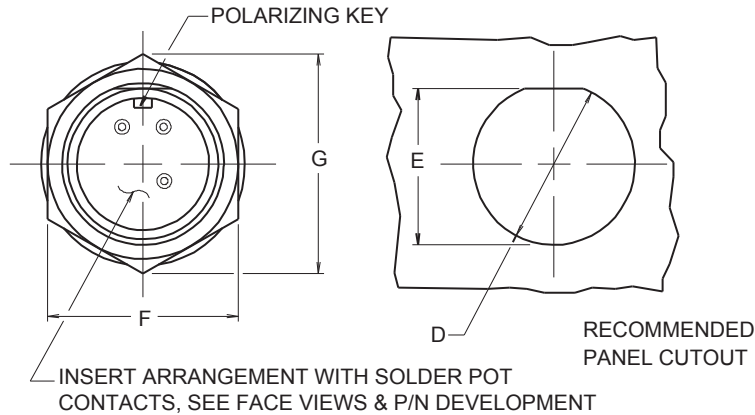
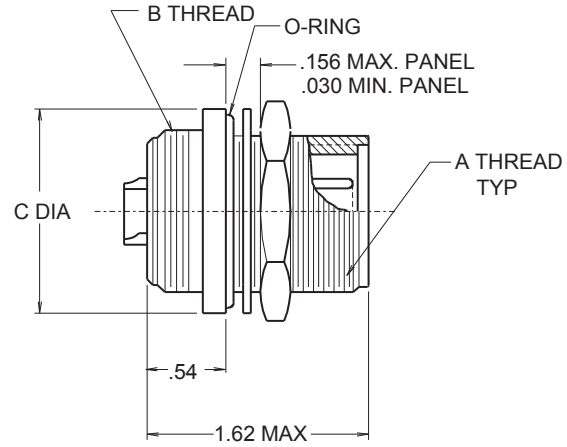
INSERT ARRANGEMENT DASH NO.    5

CONTACT STYLE :            P

P = PIN  
S = SOCKET (NON HERMETIC ONLY)

ALTERNATE INSERT POSITION, OMIT FOR NORMAL

M = MOLDING ADAPTER, OMIT FOR NONE



**TABLE I: CONNECTOR DIMENSIONS**

SHELL SIZE	A THREAD CLASS 2A	B THREAD CLASS 2A	C DIA MAX	D DIA +.010 - .000 (+0.3 - 0)	E +.010 - .000 (+0.3 - 0)	F MAX	G MAX
10SL	5/8 -24 UNEF	5/8 -24 UNEF	1.03 (26.2)	.635 (16.1)	.585 (14.9)	.812 (20.6)	.94 (23.9)
12	3/4 -20 UNEF	3/4 -20 UNEF	1.16 (29.5)	.760 (19.3)	.710 (18.0)	.938 (23.8)	1.09 (27.7)
14S	7/8 -20 UNEF	7/8 -20 UNEF	1.28 (32.5)	.885 (22.5)	.835 (21.2)	1.125 (28.6)	1.25 (31.8)
18	1 1/8 -18 UNEF	1 1/8 -16 UN	1.66 (42.2)	1.135 (28.8)	1.085 (27.6)	1.500 (38.1)	1.69 (42.9)
20	1 1/4 -18 UNEF	1 1/4 -16 UN	1.78 (45.2)	1.260 (32.0)	1.210 (30.7)	1.625 (41.3)	1.82 (46.2)
24	1 1/2 -18 UNEF	1 1/2 -16 UN	2.03 (51.6)	1.510 (38.4)	1.460 (37.1)	1.875 (47.6)	2.12 (53.8)
28	1 3/4 -18 UNS	1 3/4 -18 UN	2.28 (57.9)	1.760 (44.7)	1.710 (43.4)	2.125 (54.0)	2.42 (61.5)

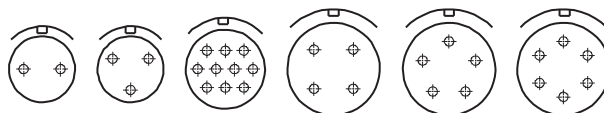
**257-003-2**  
**Stainless Steel, Jam Nut Mount Receptacle**  
**MIL-DTL-5015 Type**



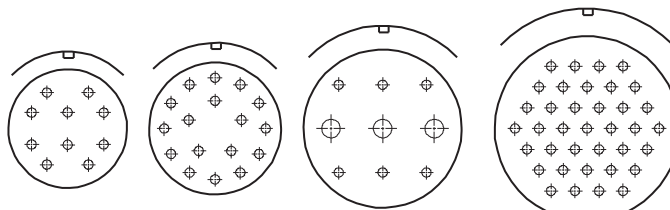
MIL-DTL-5015

INSERT ARRANGEMENTS

FACE VIEW OF PIN INSERT SHOWN



INSERT ARRANGEMENT:	10SL-4	10SL-3	12-10	14S-2	14S-5	14S-6
CONTACT SIZE & QUANTITY:	2 - #16	3 - #16	10 - #20	4 - #16	5 - #16	6 - #16
MS SERVICE RATING:	A	A	INST	INST	INST	INST



INSERT ARRANGEMENT:	18-1	20-29	24-11	28-21
CONTACT SIZE & QUANTITY:	10 - #16	17 - #16	6 - #12, 3 - #8	37 - #16
MS SERVICE RATING:	4A 6 INST	A	A	A

**NOTES:**

1. ASSEMBLY IDENTIFIED WITH MANUFACTURER'S NAME AND P/N, SPACE PERMITTING.
2. GLENAIR 257-003- CONNECTOR FEATURES :
  - A. SHELL: PASSIVATED STAINLESS STEEL
  - B. INSULATOR, O-RING, GROMMET: NITRILE/NEOPRENE  
HERMETIC INSULATOR: FULL GLASS/N.A.
  - C. CONTACTS: GOLD PLATED COPPER ALLOY WITH SOLDER POTS  
HERMETIC CONTACTS: ALLOY 52/GOLD PLATE
  - D. CONTACT CURRENT RATING: #20-5 AMPS, #16-10 AMPS, #12-17 AMPS, #8-35 AMPS .
  - E. RATED OPERATING VOLTAGE: SERVICE RATING INST - 250 VDC  
SERVICE RATING A - 700 VDC
  - F. DIELECTRIC W/STANDING VOLTAGE (HI-POT): SERVICE RATING INST - 1000 VRMS  
A - 2000 VRMS
  - G. INSULATION RESISTANCE: 5000 MEGOHMS MINIMUM AT 500 VDC AND +25°C
  - H. TEMPERATURE RANGE: -55°C TO +125°C
3. PERFORMANCE DATA (HERMETIC ONLY):
  - A. CONTACT CURRENT RATING: 20 AMPS MAX
  - B. RATED OPERATING VOLTAGE: 250 VDC
  - C. DIELECTRIC W/STANDING VOLTAGE (HI-POT): 1000 VRMS
  - D. INSULATION RESISTANCE: 5000 MEGOHMS MIN AT 500 VDC & +25°C
4. ELECTRICAL SAFETY LIMITS MUST BE ESTABLISHED BY THE USER .  
PEAK VOLTAGES, SWITCHING SURGES, TRANSIENTS, ETC., SHOULD BE USED TO DETERMINE THE SAFETY OF APPLICATION .

**HOW TO ORDER:**

EXAMPLE: 257 - 003 - 6 - 14S - 5 P W M 08

PRODUCT SERIES \_\_\_\_\_

BASIC NO \_\_\_\_\_

6 = PLUG ASSEMBLY \_\_\_\_\_

SHELL SIZE, TABLE I \_\_\_\_\_

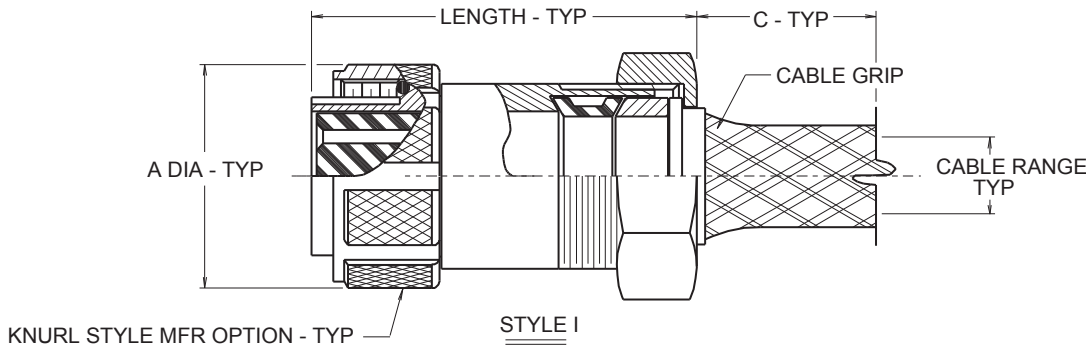
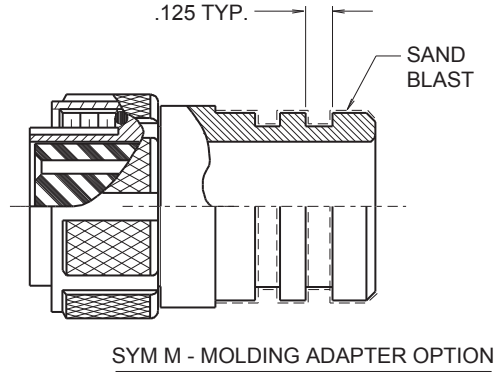
INSERT ARRANGEMENT DASH NO \_\_\_\_\_

CONTACT STYLE: \_\_\_\_\_  
P = PIN  
S = SOCKET

ALTERNATE INSERT POSITION, OMIT FOR NORMAL \_\_\_\_\_

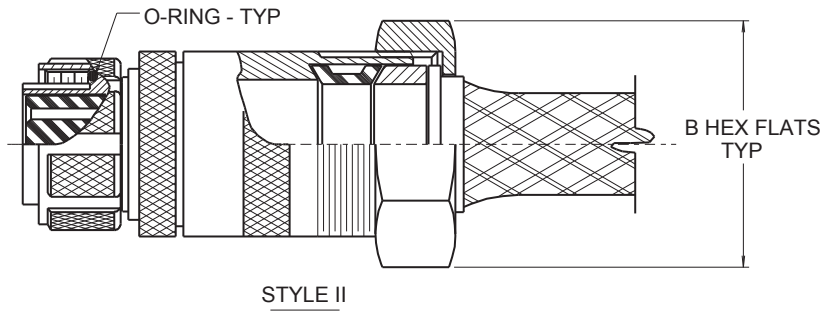
M = MOLDING ADAPTER  
N = NO ADAPTER (CONNECTOR ONLY)  
OMIT FOR STANDARD

OPTIONAL ENTRY, TABLE II, OMIT FOR STANDARD \_\_\_\_\_



**TABLE II: CABLE RANGE**

DASH NO	C REF	CABLE RANGE	
		MIN	MAX
03	5.12 (130.0)	.180 (4.6)	.210 (5.3)
04	5.75 (146.1)	.210 (5.3)	.312 (7.9)
06	7.00 (177.8)	.310 (7.9)	.438 (11.1)
08	7.12 (180.8)	.438 (11.1)	.500 (12.7)
10	7.37 (187.2)	.500 (12.7)	.625 (15.9)
12	9.00 (228.6)	.530 (13.5)	.750 (19.1)
14	8.00 (203.2)	.750 (19.1)	.875 (22.2)
16	9.00 (228.6)	.875 (22.2)	1.000 (25.4)



**TABLE I: CONNECTOR DIMENSIONS**

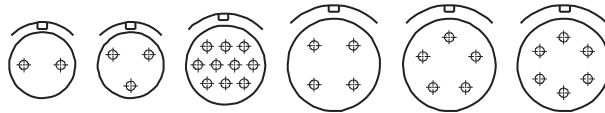
SHELL SIZE	A MAX	B FLATS	STD CABLE RANGE		CONFIGURATION STYLE	MAX DASH NO <sup>2</sup>	LENGTH MAX
			MIN	MAX			
10SL	1.031 (26.2)	1.00 (25.4)	.210 (5.3)	.312 (7.9)	I	04	3.00
12	1.125 (28.6)	1.38 (35.0)	.500 (12.7)	.625 (15.9)	II	08	3.00
14S	1.219 (31.0)	1.00 (25.4)	.210 (5.3)	.312 (7.9)	I	10	3.00
18	1.406 (35.7)	1.22 (31.0)	.310 (7.9)	.438 (11.1)	I	12	3.00
20	1.531 (38.9)	1.50 (38.1)	.530 (13.5)	.750 (19.1)	I	14	3.5
24	1.781 (45.2)	1.50 (38.1)	.530 (13.5)	.750 (19.1)	I	16	3.5
28	2.031 (51.6)	1.50 (38.1)	.530 (13.5)	.750 (19.1)	I	16	3.5

**257-003-6**  
**Stainless Steel Plug Assembly**  
**MIL-DTL-5015 Type**

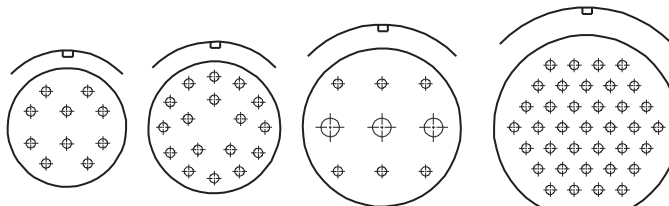


MIL-DTL-5015

INSERT ARRANGEMENTS  
FACE VIEW OF PIN INSERT SHOWN



INSERT ARRANGEMENT:	10SL-4	10SL-3	12-10	14S-2	14S-5	14S-6
CONTACT SIZE & QUANTITY:	2 - #16	3 - #16	10 - #20	4 - #16	5 - #16	6 - #16
MS SERVICE RATING:	A	A	INST	INST	INST	INST



INSERT ARRANGEMENT:	18-1	20-29	24-11	28-21
CONTACT SIZE & QUANTITY:	10 - #16	17 - #16	6 - #12, 3 - #8	37 - #16
MS SERVICE RATING:	4A 6 INST	A	A	A

**NOTES:**

1. ASSEMBLY IDENTIFIED WITH MANUFACTURER'S NAME AND P/N, SPACE PERMITTING.
2. WHEN CABLE DIAMETER EXCEEDS 'MAX DASH NO' IN TABLE I, STYLE II WILL BE SUPPLIED.
3. GLENAIR 257-003 CONNECTOR FEATURES:
  - A. BARREL & REAR ACCESSORY HARDWARE: PASSIVATED STAINLESS STEEL
  - B. COUPLING NUT: NICKEL/ALUMINUM/BRONZE
  - C. INSULATOR, O-RING, GROMMET: NITRILE/NEOPRENE
  - D. GROMMET FOLLOWER: NYLON
  - E. CONTACTS: GOLD PLATED COPPER ALLOY WITH SOLDER POTS
  - F. CONTACT CURRENT RATING: #20-5 AMPS, #16-10 AMPS, #12-17 AMPS, #8-35 AMPS
  - G. RATED OPERATING VOLTAGE: SERVICE RATING INST - 250 VDC  
 SERVICE RATING A - 700 VDC
  - H. DIELECTRIC W/STANDING VOLTAGE (HI-POT): SERVICE RATING INST - 1000 VRMS  
 A - 2000 VRMS
  - J. INSULATION RESISTANCE: 5000 MEGOHMS MINIMUM AT 500 VDC AND +25°C
  - K. TEMPERATURE RANGE: -55°C TO +125°C

### HOW TO ORDER:

EXAMPLE:                    257 - 005 H 14S - 5 P W

PRODUCT SERIES        257 - 005

BASIC NO                    H

H = HERMETIC  
OMIT FOR STD, SUBSTITUTE DASH

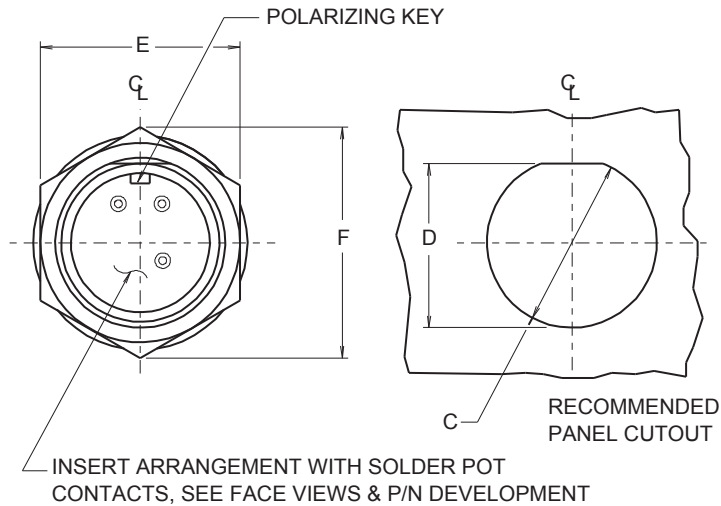
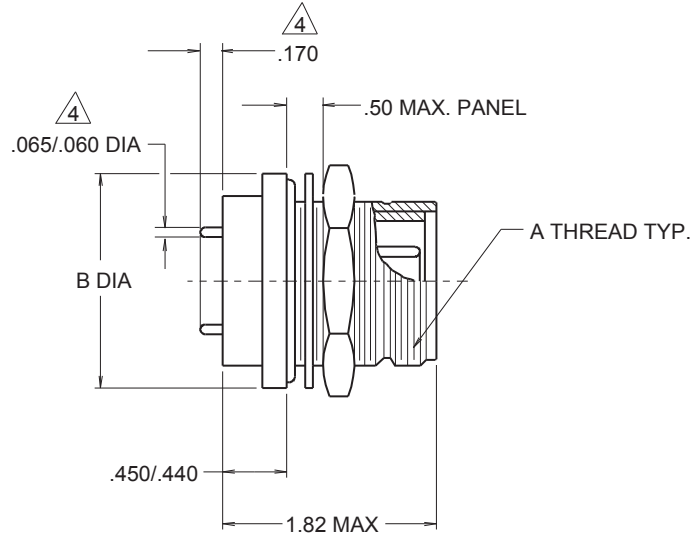
SHELL SIZE, TABLE I    14S - 5

INSERT ARRANGEMENT DASH NO.    P

CONTACT STYLE :        W

P = PIN  
S = SOCKET (NON HERMETIC ONLY)

ALTERNATE INSERT POSITION, OMIT FOR NORMAL



#### TABLE I: CONNECTOR DIMENSIONS

SHELL SIZE	A THREAD CLASS 2A	B DIA MAX	C DIA +.010 - .000 (+0.3 - 0)	D +.010 - .000 (+0.3 - 0)	E FLATS	F REF
10SL	5/8 -24 UNEF	1.03 (26.2)	.635 (16.1)	.585 (14.9)	.870 (22.1)	1.000 (25.4)
12	3/4 -20 UNEF	1.16 (29.5)	.760 (19.3)	.710 (18.0)	.995 (25.3)	1.125 (28.6)
14S	7/8 -20 UNEF	1.28 (32.5)	.885 (22.5)	.835 (21.2)	1.120 (28.4)	1.250 (31.8)
18	1 1/8 -18 UNEF	1.66 (42.2)	1.135 (28.8)	1.085 (27.6)	1.495 (38.0)	1.730 (43.9)
20	1 1/4 -18 UNEF	1.78 (45.2)	1.260 (32.0)	1.210 (30.7)	1.620 (41.1)	1.870 (47.5)
24	1 1/2 -18 UNEF	2.03 (51.6)	1.510 (38.4)	1.460 (37.1)	1.870 (47.5)	2.165 (55.0)
28	1 3/4 -18 UNEF	2.28 (57.9)	1.760 (44.7)	1.710 (43.4)	2.120 (53.8)	2.448 (62.2)

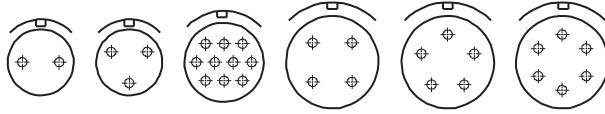
**257-005**  
**Stainless Steel Environmental Receptacle**  
**with Printed Circuit Contacts**  
**MIL-DTL-5015 Type**



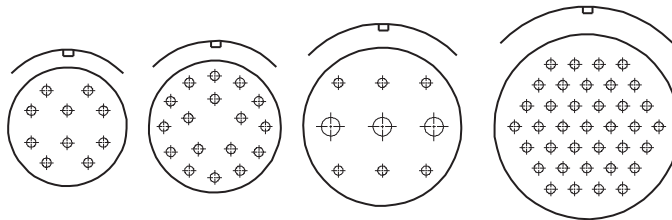
MIL-DTL-5015

INSERT ARRANGEMENTS

FACE VIEW OF PIN INSERT SHOWN



INSERT ARRANGEMENT:	10SL-4	10SL-3	12-10	14S-2	14S-5	14S-6
CONTACT SIZE & QUANTITY:	2 - #16	3 - #16	10 - #20	4 - #16	5 - #16	6 - #16
MS SERVICE RATING:	A	A	INST	INST	INST	INST



INSERT ARRANGEMENT:	18-1	20-29	24-11	28-21
CONTACT SIZE & QUANTITY:	10 - #16	17 - #16	6 - #12, 3 - #8	37 - #16
MS SERVICE RATING:	4A 6 INST	A	A	A

**NOTES:**

1. ASSEMBLY IDENTIFIED WITH MANUFACTURER'S NAME AND P/N, SPACE PERMITTING.
2. GLENAIR 257-005- CONNECTOR FEATURES :
  - A. SHELL: PASSIVATED STAINLESS STEEL
  - B. INSULATOR, O-RING, GROMMET: NITRILE/NEOPRENE HERMETIC INSULATOR: FULL GLASS
  - C. CONTACTS: GOLD PLATED COPPER ALLOY HERMETIC CONTACTS: ALLOY 52/GOLD PLATE
  - D. CONTACT CURRENT RATING: #20-5 AMPS, #16-10 AMPS, #12-17 AMPS, #8-35 AMPS.
  - E. RATED OPERATING VOLTAGE: SERVICE RATING INST - 250 VDC SERVICE RATING A - 700 V
  - F. DIELECTRIC W/STANDING VOLTAGE (HI-POT): SERVICE RATING INST - 1000 VRMS A - 2000 V
  - G. INSULATION RESISTANCE: 5000 MEGOHMS MINIMUM AT 500 VDC AND +25AC
  - H. TEMPERATURE RANGE: -55AC TO +125AC
3. PERFORMANCE DATA (HERMETIC ONLY):
  - A. CONTACT CURRENT RATING: 20 AMPS MAX
  - B. RATED OPERATING VOLTAGE: 250 VDC
  - C. DIELECTRIC W/STANDING VOLTAGE (HI-POT): 1000 VRMS
  - D. INSULATION RESISTANCE: 5000 MEGOHMS MIN AT 500 VDC & +25AC
- ⚠ EXTENSION AND DIAMETER OF CONTACTS APPLY TO #16 CONTACTS ONLY, FOR OTHER SIZES, CONSULT FACTORY.
5. ELECTRICAL SAFETY LIMITS MUST BE ESTABLISHED BY THE USER  
 PEAK VOLTAGES, SWITCHING SURGES, TRANSIENTS, ETC., SHOULD BE USED TO DETERMINE



#### HOW TO ORDER:

EXAMPLE: 257 - 012 - 2 - 14S - 5 P W M

PRODUCT SERIES \_\_\_\_\_

BASIC NO \_\_\_\_\_

2 = RECEPTACLE ASSEMBLY \_\_\_\_\_

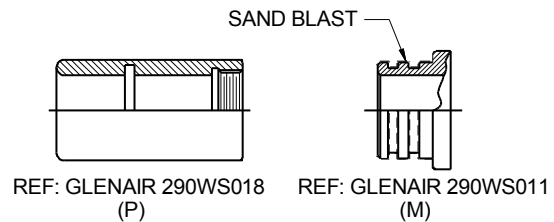
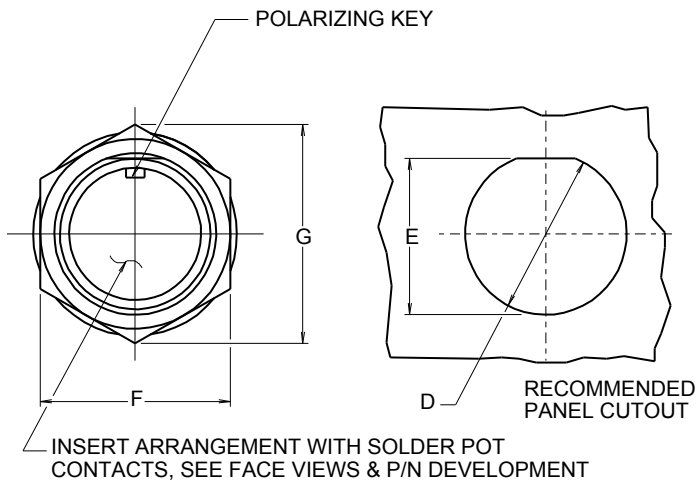
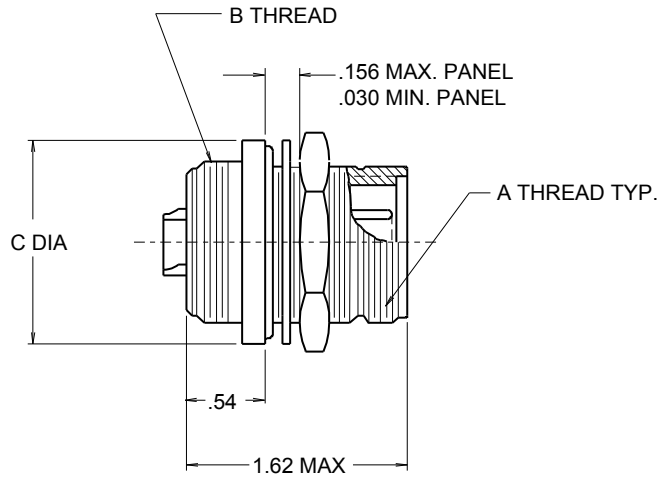
SHELL SIZE, TABLE I \_\_\_\_\_

INSERT ARRANGEMENT DASH NO \_\_\_\_\_

CONTACT STYLE: \_\_\_\_\_  
 P = PIN  
 S = SOCKET

ALTERNATE INSERT POSITION, OMIT FOR NORMAL \_\_\_\_\_

M = MOLDING ADAPTER \_\_\_\_\_  
 P = POTTING ADAPTER  
 (OMIT FOR NONE)



#### TABLE I: CONNECTOR DIMENSIONS

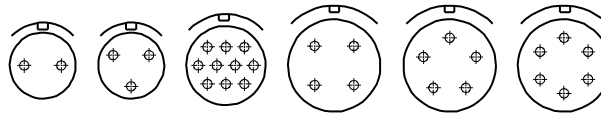
SHELL SIZE	A THREAD CLASS 2A	B THREAD CLASS 2A	C MAX	D +.010 - .000 (+0.3 - 0)	E +.010 - .000 (+0.3 - 0)	F MAX	G MAX
10SL	5/8 -24 UNEF	5/8 -24 UNEF	1.03 (26.2)	.635 (16.1)	.585 (14.9)	.875 (22.2)	.94 (23.9)
12	3/4 -20 UNEF	3/4 -20 UNEF	1.16 (29.5)	.760 (19.3)	.710 (18.0)	1.000 (25.4)	1.09 (27.7)
14S	7/8 -20 UNEF	7/8 -20 UNEF	1.28 (32.5)	.885 (22.5)	.835 (21.2)	1.125 (28.6)	1.25 (31.8)
16S	1 -20 UNEF	1 -20 UNEF	1.42 (36.1)	1.010 (25.7)	.960 (24.4)	1.250 (31.8)	1.39 (35.3)
18	1 1/8 -18 UNEF	1 1/8 -16 UN	1.66 (42.2)	1.135 (28.8)	1.085 (27.6)	1.500 (38.1)	1.69 (42.9)
20	1 1/4 -18 UNEF	1 1/4 -16 UN	1.78 (45.2)	1.260 (32.0)	1.210 (30.7)	1.625 (41.3)	1.82 (46.2)
24	1 1/2 -18 UNEF	1 1/2 -16 UN	2.03 (51.6)	1.510 (38.4)	1.460 (37.1)	1.875 (47.6)	2.12 (53.8)
28	1 3/4 -18 UNEF	1 3/4 -18 UN	2.28 (57.9)	1.760 (44.7)	1.710 (43.4)	2.125 (54.0)	2.42 (61.5)

**257-012**  
**Environment Resistant Receptacle**  
**MIL-DTL-5015 Type**  
**Mates to Mil-C-5015 (MS3106) Type Receptacle Connector**

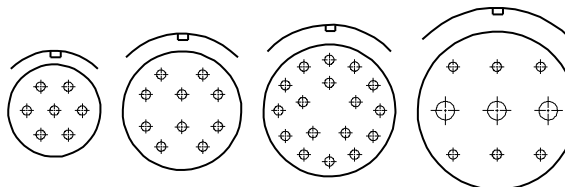


MIL-DTL-5015

INSERT ARRANGEMENTS  
FACE VIEW OF PIN INSERT SHOWN



INSERT ARRANGEMENT:	10SL-4	10SL-3	12-10	14S-2	14S-5	14S-6
CONTACT SIZE & QUANTITY:	2 - #16	3 - #16	10 - #20	4 - #16	5 - #16	6 - #16
MS SERVICE RATING:	A	A	INST	INST	INST	INST
ALTERNATE POSITION:	N/A	N/A	N/A	X & Y	X	N/A



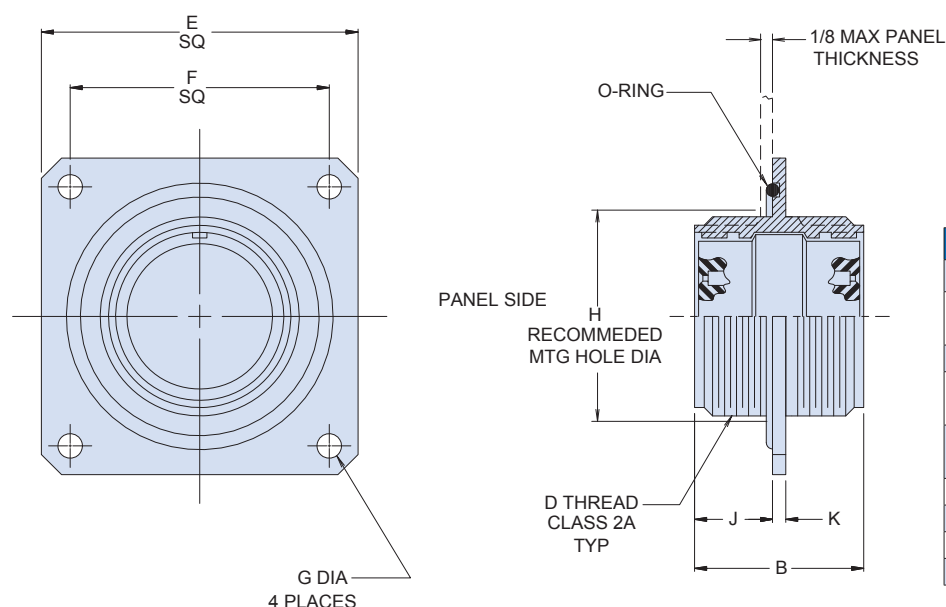
INSERT ARRANGEMENT:	16S-1	18-1	20-29	24-11
CONTACT SIZE & QUANTITY:	7 - #16	10 - #16	17 - #16	6 - #12, 3 - #8
MS SERVICE RATING:	A	4A 6 INST	A	A
ALTERNATE POSITION:	W & Z	W,X,Y & Z	W & Z	W,X,Y & Z

**NOTES:**

1. ASSEMBLY IDENTIFIED WITH MANUFACTURER'S NAME AND P/N, SPACE PERMITTING.
  2. GLENAIR 257-012 CONNECTOR FEATURES:
    - A. SHELL, ADAPTER: AL ALLOY/HARD COAT
    - B. INSULATOR, O-RING, GROMMET: NITRILE/NEOPRENE
    - C. CONTACTS: GOLD PLATED COPPER ALLOY WITH SOLDER POTS
    - D. CONTACT CURRENT RATING: #20-5 AMPS, #16-10 AMPS, #12-17 AMPS, #8-35 AMPS
    - E. RATED OPERATING VOLTAGE: SERVICE RATING INST - 250 VDC  
SERVICE RATING A - 700 VDC
    - F. DIELECTRIC W/STANDING VOLTAGE (HI-POT): SERVICE RATING INST - 1000 VRMS  
- A VRMS
    - G. INSULATION RESISTANCE: 5000 MEGOHMS MINIMUM AT 500 VDC AND +25°C
    - H. TEMPERATURE RANGE: -55°C TO +125°C
  3. ELECTRICAL SAFETY LIMITS MUST BE ESTABLISHED BY THE USER.  
PEAK VOLTAGES, SWITCHING SURGES, TRANSIENTS, ETC., SHOULD BE
- ⚠ MATES TO MIL-C-5015 (MS3106) TYPE PLUG CONNECTORS.  
USED TO DETERMINE THE SAFETY OF THE APPLICATION.

#### How To Order 947-041

<b>Sample Part Number</b>	<b>947-041</b>	<b>M</b>	<b>18-11</b>	<b>P</b>	<b>X</b>
<b>Series / Basic Part No.</b>	MIL-DTL-5015 type bulkhead feed-thru, panel mount				
<b>Finish</b>	See Table II				
<b>Shell Size - Insert Arrangement*</b>	Per Table I and MIL-C-5015				
<b>Contact Style</b>	<b>P</b> = Pins <b>S</b> = Sockets <b>PS</b> = Pin on panel side / socket opposite <b>SP</b> = Socket on panel side / pin opposite				
<b>Alternate Polarization</b>	<b>W, X, Y, Z</b> (omit for normal). Insert rotates in relation to master key				



Sym	Material	Finish
B	Al Alloy	Cadmium Plate / Olive Drab
M		Electroless Nickel
N		Cad Plate / Olive Drab over Nickel Plate
NF		Cad / O.D. over Electroless Nickel (500 hr. Salt Spray)
ZU	SST	Black Cad / Nickel Strike
ZW		Olive Drab Cad / Nickel
Z1		Passivated
ZL		Electrodeposited Nickel

#### Table I

Shell Size	B Max	D Thread Class 2A	E Dim ± .031	F Dim ± .005	G Dia. +.010/- .000	H Dia. +.010/- .000	J ± .015	K ± .015
8S	1.750 (44.5)	1/2-28 UNEF	0.875 (22.2)	0.594 (15.1)	0.120 (3.0)	0.510 (13.0)	0.578 (14.7)	0.083 (2.1)
10SL	1.750 (44.5)	3/8-24 UNEF	1.000 (25.4)	0.719 (18.3)	0.120 (3.0)	0.635 (16.1)	0.578 (14.7)	0.083 (2.1)
12S	1.750 (44.5)	3/4-20 UNEF	1.094 (27.8)	0.812 (20.6)	0.120 (3.0)	0.760 (19.3)	0.578 (14.7)	0.083 (2.1)
12	2.125 (54.0)	3/4-20 UNEF	1.094 (27.8)	0.812 (20.6)	0.120 (3.0)	0.760 (19.3)	0.800 (20.3)	0.083 (2.1)
14S	1.750 (44.5)	7/8-20 UNEF	1.188 (30.2)	0.906 (23.0)	0.120 (3.0)	0.885 (22.5)	0.578 (14.7)	0.083 (2.1)
14	2.125 (54.0)	7/8-20 UNEF	1.188 (30.2)	0.906 (23.0)	0.120 (3.0)	0.885 (22.5)	0.800 (20.3)	0.083 (2.1)
16S	1.750 (44.5)	1-20 UNEF	1.281 (32.5)	0.969 (24.6)	0.120 (3.0)	1.010 (25.7)	0.578 (14.7)	0.083 (2.1)
16	2.125 (54.0)	1-20 UNEF	1.281 (32.5)	0.969 (24.6)	0.120 (3.0)	1.010 (25.7)	0.800 (20.3)	0.083 (2.1)
18	2.125 (54.0)	1 1/8-18 UNEF	1.375 (34.9)	1.062 (27.0)	0.120 (3.0)	1.135 (28.8)	0.800 (20.3)	0.100 (2.5)
20	2.125 (54.0)	1 1/4-18 UNEF	1.500 (38.1)	1.156 (29.4)	0.120 (3.0)	1.260 (32.0)	0.800 (20.3)	0.100 (2.5)
22	2.125 (54.0)	1 3/8-18 UNEF	1.625 (41.3)	1.250 (31.8)	0.120 (3.0)	1.385 (35.2)	0.800 (20.3)	0.100 (2.5)
24	2.125 (54.0)	1 1/2-18 UNEF	1.750 (44.5)	1.375 (34.9)	0.147 (3.7)	1.510 (38.4)	0.800 (20.3)	0.100 (2.5)
28	2.125 (54.0)	1 3/4-18 UNS	2.000 (50.8)	1.562 (39.7)	0.147 (3.7)	1.760 (44.7)	0.820 (20.8)	0.100 (2.5)
32	2.125 (54.0)	2-18 UNS	2.250 (57.2)	1.750 (44.5)	0.173 (4.4)	2.010 (51.1)	0.800 (20.3)	0.100 (2.5)
36	2.125 (54.0)	2 1/4-16 UNS	2.500 (63.5)	1.938 (49.2)	0.173 (4.4)	2.260 (57.4)	0.880 (22.4)	0.125 (3.2)
40	2.125 (54.0)	2 1/2-16 UN	2.750 (69.9)	2.188 (55.6)	0.173 (4.4)	2.510 (63.8)	0.880 (22.4)	0.125 (3.2)
44	2.125 (54.0)	2 3/4-16 UN	3.000 (76.2)	2.438 (61.9)	0.173 (4.4)	2.760 (70.1)	0.880 (22.4)	0.125 (3.2)
48	2.125 (54.0)	3-16 UN	3.250 (82.6)	2.688 (68.3)	0.173 (4.4)	3.010 (76.5)	0.880 (22.4)	0.125 (3.2)

#### NOTES

Assembly identified with manufacturer's name and P/N, space permitting

#### MATERIAL/FINISH

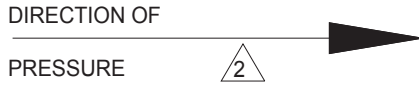
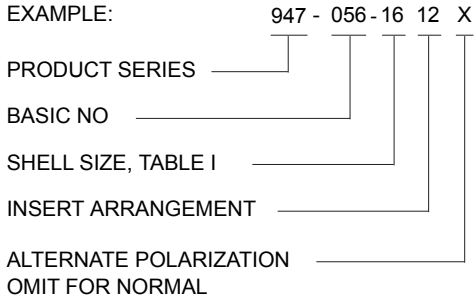
Shell - See Table II  
 Contacts - Copper alloy / gold plate  
 Insulators, Spacer - High-grade rigid dielectric  
 O-rings & seals - Silicone

# 947-056 Bulkhead Feed-Thru, Hermetic Pin/Pin MIL-DTL-5015 "D" Series Type Connectors

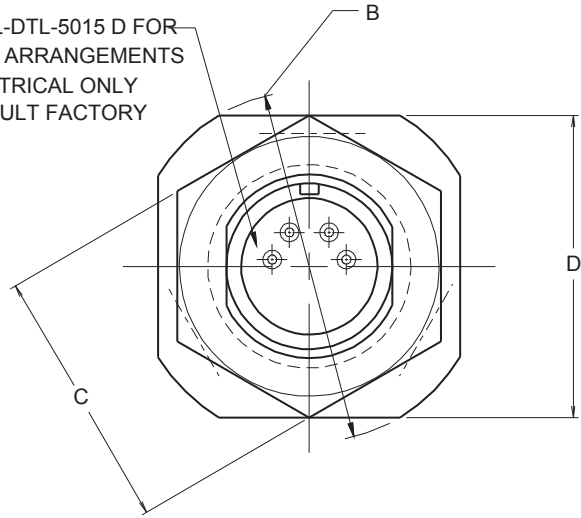


MIL-DTL-5015

## PART NUMBER DEVELOPMENT



SEE MIL-DTL-5015 D FOR  
INSERT ARRANGEMENTS  
SYMETRICAL ONLY  
CONSULT FACTORY



## NOTES:

- ASSEMBLY IDENTIFIED WITH MANUFACTURER'S NAME AND P/N, SPACE PERMITTING.
- HERMETICITY - LESS THAN  $1 \times 10^{-6}$  CC/SEC AT ONE ATMOSPHERE. NOT FOR USE IN LIQUID ATMOSPHERE.
- OUTGAS FOR SPACE APPLICATION.
- MATERIAL/FINISH:  
JAM NUT, LOCKRING, SHELL ASSEMBLY - SST./PASSIVATE  
CONTACTS - ALLOY 52/GOLD PLATE  
INSULATORS - HIGH-GRADE RIGID DIELECTRIC, FULL GLASS OR GLASS BEAD  
O-RINGS - SILICONE/N.A.

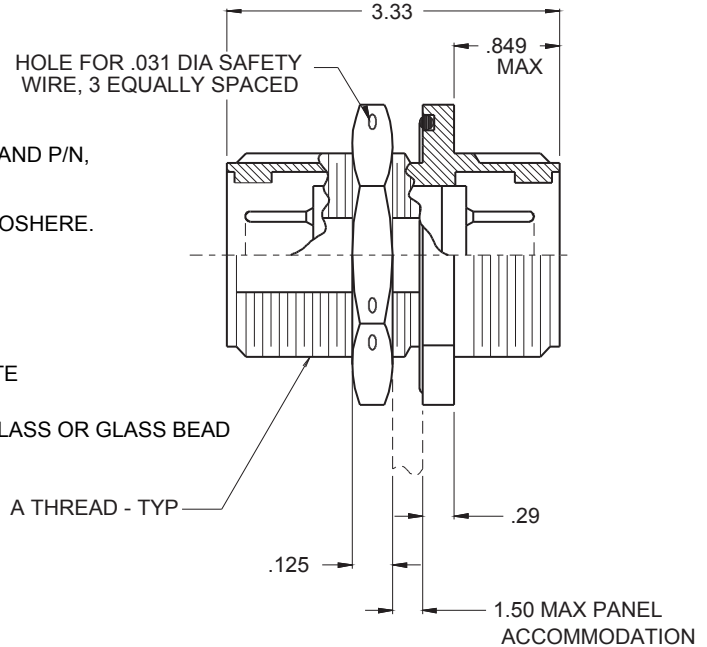
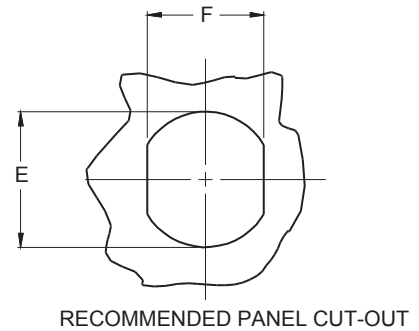


TABLE I: CONNECTOR DIMENSIONS

SHELL SIZE	A THREAD CLASS 2A	B DIA MAX	C HEX	D FLATS	E DIA ±.005 (±0.1)	F +.015 - .000 (+0.4 - 0)
08	1/2-28 UNEF	1.000 (25.4)	.688 (17.5)	.875 (22.2)	.510 (13.0)	.460 (11.7)
10	5/8-24 UNEF	1.125 (28.6)	.812 (20.6)	1.000 (25.4)	.635 (16.1)	.578 (14.7)
12	3/4-20 UNEF	1.250 (31.8)	.938 (23.8)	1.125 (28.6)	.760 (19.3)	.692 (17.6)
14	7/8-20 UNEF	1.375 (34.9)	1.062 (27.0)	1.250 (31.8)	.885 (22.5)	.817 (20.8)
16	1 -20 UNEF	1.500 (38.1)	1.250 (31.8)	1.375 (34.9)	1.010 (25.7)	.942 (23.9)
18	1 1/8-18 UNEF	1.750 (44.5)	1.375 (34.9)	1.625 (41.3)	1.135 (28.8)	1.060 (26.9)
20	1 1/4-18 UNEF	1.875 (47.6)	1.500 (38.1)	1.750 (44.5)	1.260 (32.0)	1.185 (30.1)
22	1 3/8-18 UNEF	2.000 (50.8)	1.625 (41.3)	1.875 (47.6)	1.385 (35.2)	1.310 (33.3)
24	1 1/2-18 UNEF	2.188 (55.6)	1.750 (44.5)	2.000 (50.8)	1.510 (38.4)	1.435 (36.4)
28	1 3/4-18 UNEF	2.438 (61.9)	2.000 (50.8)	2.250 (57.2)	1.760 (44.7)	1.687 (42.8)
32	2 -18 UNEF	2.688 (68.3)	2.250 (57.2)	2.500 (63.5)	2.010 (51.1)	1.937 (49.2)
36	2 1/4-16 UN	2.938 (74.6)	2.500 (63.5)	2.750 (69.9)	2.260 (57.4)	2.177 (55.3)



**PART NUMBER DEVELOPMENT**

EXAMPLE: 947 - 042- 36 - 12 P X

PRODUCT SERIES

BASIC NO

SHELL SIZE, TABLE I

INSERT ARRANGEMENT

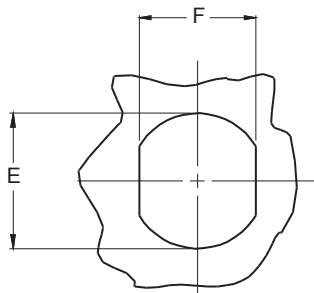
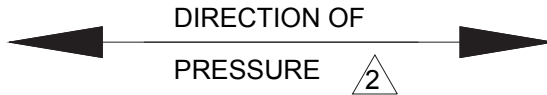
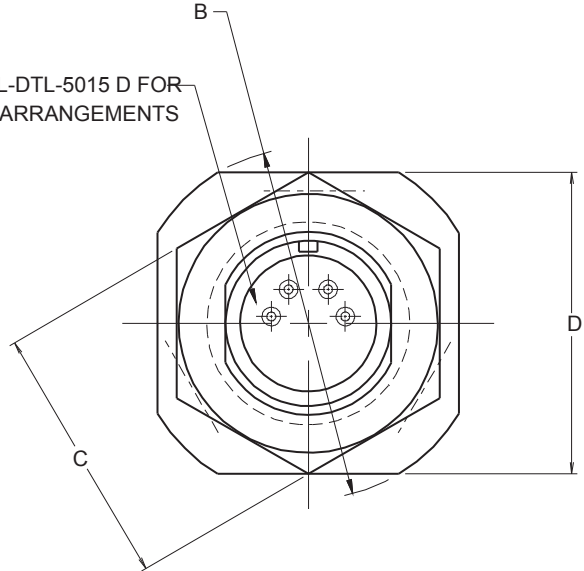
P = PIN ON JAM NUT SIDE,  
 SOCKET OPPOSITE

S = SOCKET ON JAM NUT SIDE,  
 PIN OPPOSITE

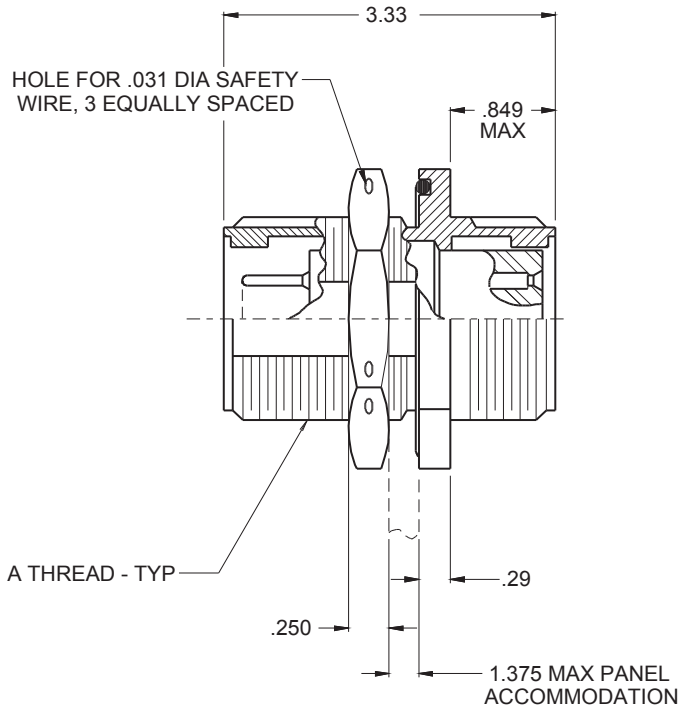
5 PP= PIN ON BOTH SIDES

ALTERNATE POLARIZATION  
 OMIT FOR NORMAL

SEE MIL-DTL-5015 D FOR  
 INSERT ARRANGEMENTS



RECOMMENDED PANEL CUT-OUT



**947-042**  
**Bulkhead Feed-Thru, Hermetic, Jam Nut Mount**  
**Pin-Socket Contacts**  
**MIL-DTL-5015 "D" Series Type Connectors**



MIL-DTL-5015

**TABLE I: CONNECTOR DIMENSIONS**

SHELL SIZE	A THREAD CLASS 2A	B DIA MAX	C HEX	D FLATS	E DIA ±.005 (0.1)	F +.015 - .000 (+0.4 - 0)
08	1/2-28 UNEF	1.000 (25.4)	.688 (17.5)	.875 (22.2)	.510 (13.0)	.460 (11.7)
10	5/8-24 UNEF	1.125 (28.6)	.812 (20.6)	1.000 (25.4)	.635 (16.1)	.578 (14.7)
12	3/4-20 UNEF	1.250 (31.8)	.938 (23.8)	1.125 (28.6)	.760 (19.3)	.692 (17.6)
14	7/8-20 UNEF	1.375 (34.9)	1.062 (27.0)	1.250 (31.8)	.885 (22.5)	.817 (20.8)
16	1 -20 UNEF	1.500 (38.1)	1.250 (31.8)	1.375 (34.9)	1.010 (25.7)	.942 (23.9)
18	1 1/8-18 UNEF	1.750 (44.5)	1.375 (34.9)	1.625 (41.3)	1.135 (28.8)	1.060 (26.9)
20	1 1/4-18 UNEF	1.875 (47.6)	1.500 (38.1)	1.750 (44.5)	1.260 (32.0)	1.185 (30.1)
22	1 3/8-18 UNEF	2.000 (50.8)	1.625 (41.3)	1.875 (47.6)	1.385 (35.2)	1.310 (33.3)
24	1 1/2-18 UNEF	2.188 (55.6)	1.750 (44.5)	2.000 (50.8)	1.510 (38.4)	1.435 (36.4)
28	1 3/4-18 UNEF	2.438 (61.9)	2.000 (50.8)	2.250 (57.2)	1.760 (44.7)	1.687 (42.8)
32	2 -18 UNEF	2.688 (68.3)	2.250 (57.2)	2.500 (63.5)	2.010 (51.1)	1.937 (49.2)
36	2 1/4-16 UN	2.938 (74.6)	2.500 (63.5)	2.750 (69.9)	2.260 (57.4)	2.177 (55.3)

**NOTES:**

1. ASSEMBLY IDENTIFIED WITH MANUFACTURER'S NAME AND P/N, SPACE PERMITTING.
2. HERMETICITY - LESS THAN 1 X 10<sup>-6</sup> CC/SEC AT ONE ATMOSPHERE. NOT FOR USE IN LIQUID ATMOSPHERE. CONNECTOR RATED TO 200° C AND 1000 PSI. MAX
3. OUTGAS FOR SPACE APPLICATION.
4. MATERIAL/FINISH:  
 JAM NUT, HOODS, LOCKRING, SHELL ASSEMBLY - SST./PASSIVATE  
 CONTACTS - ALLOY 52/GOLD PLATE  
 INSULATORS - HIGH-GRADE RIGID DIELECTRIC, FULL GLASS OR GLASS BEAD  
 O-RINGS - SILICONE/N.A.
5. FOR PIN TO PIN, SYMMETRICAL LAYOUTS ONLY. POWER TO A GIVEN CONTACT ON ONE END WILL RESULT IN POWER TO CONTACT DIRECTLY OPPOSITE, REGARDLESS OF IDENTIFICATION LETTER.

# 947-045 Bulkhead Feed-Thru, Jam Nut Mount MIL-DTL-5015 Type

## HOW TO ORDER:

EXAMPLE: 947-045 M 18 - 11 P X

BASIC NO \_\_\_\_\_

FINISH SYM, TABLE II \_\_\_\_\_

SHELL SIZE, TABLE I \_\_\_\_\_

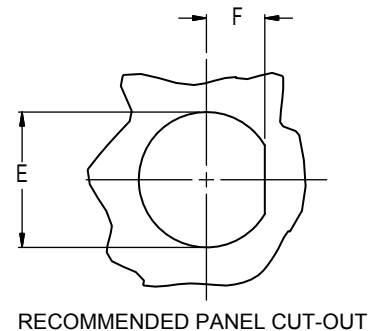
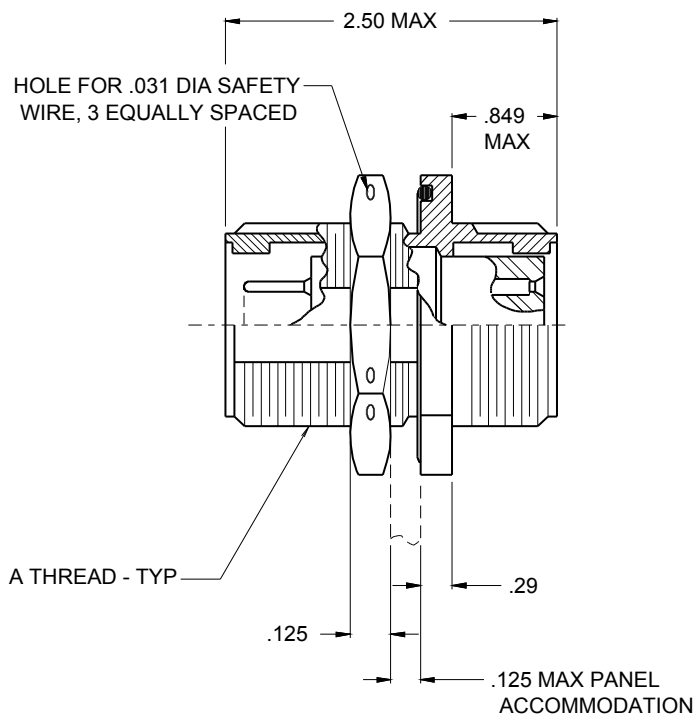
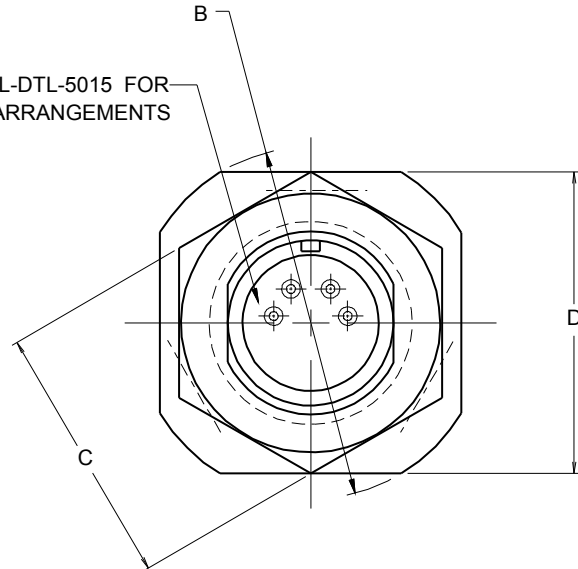
INSERT ARRANGEMENT  
PER MIL-C-5015 \_\_\_\_\_

P = PIN/PIN  
S = SOCKET/SOCKET  
OMIT INSERT DASH NO FOR PIN/SOCKET

ALTERNATE POSITION \_\_\_\_\_

W,X,Y,Z (OMIT FOR NORMAL)

SEE MIL-DTL-5015 FOR  
INSERT ARRANGEMENTS



## NOTES:

1. ASSEMBLY IDENTIFIED WITH MANUFACTURER'S NAME AND P/N, SPACE PERMITTING.
2. MATERIAL/FINISH:  
JAM NUT, HOODS, LOCKRING, SHELL ASSEMBLY - AL ALLOY/SEE TABLE II  
CONTACTS - ALLOY 52/GOLD PLATE  
INSULATORS - HIGH-GRADE RIGID DIELECTRIC  
O-RINGS & SEALS - SILICONE/N.A.



947-045  
Bulkhead Feed-Thru, Jam Nut Mount  
MIL-DTL-5015 Type



MIL-DTL-5015

SYM	FINISH DESCRIPTION
B	CADMIUM PLATE/OLIVE DRAB
M	ELECTROLESS NICKEL
N	CADMIUM PLATE/OLIVE DRAB OVER NICKEL PLATE
NF	CAD/O. D. OVER ELECTROLESS NICKEL (500 HOUR SALT SPRAY)

SHELL SIZE	A THREAD CLASS 2A	B DIA MAX	C HEX	D FLATS	E DIA ±.005 (±0.1)	F DIM MIN
8S	1/2-28 UNEF	1.000 (25.4)	.688 (17.5)	.875 (22.2)	.510 (13.0)	.219 (5.6)
10SL	5/8-24 UNEF	1.125 (28.6)	.812 (20.6)	1.000 (25.4)	.635 (16.1)	.281 (7.1)
12	3/4-20 UNEF	1.250 (31.8)	.938 (23.8)	1.125 (28.6)	.760 (19.3)	.344 (8.7)
12S	3/4-20 UNEF	1.250 (31.8)	.938 (23.8)	1.125 (28.6)	.760 (19.3)	.344 (8.7)
14	7/8-20 UNEF	1.375 (34.9)	1.062 (27.0)	1.250 (31.8)	.885 (22.5)	.406 (10.3)
14S	7/8-20 UNEF	1.375 (34.9)	1.062 (27.0)	1.250 (31.8)	.885 (22.5)	.406 (10.3)
16	1 -20 UNEF	1.500 (38.1)	1.250 (31.8)	1.375 (34.9)	1.010 (25.7)	.469 (11.9)
16S	1 -20 UNEF	1.500 (38.1)	1.250 (31.8)	1.375 (34.9)	1.010 (25.7)	.469 (11.9)
18	1 1/8-18 UNEF	1.750 (44.5)	1.375 (34.9)	1.625 (41.3)	1.135 (28.8)	.531 (13.5)
20	1 1/4-18 UNEF	1.875 (47.6)	1.500 (38.1)	1.750 (44.5)	1.260 (32.0)	.594 (15.1)
22	1 3/8-18 UNEF	2.000 (50.8)	1.625 (41.3)	1.875 (47.6)	1.385 (35.2)	.656 (16.7)
24	1 1/2-18 UNEF	2.188 (55.6)	1.750 (44.5)	2.000 (50.8)	1.510 (38.4)	.719 (18.3)
28	1 3/4-18 UNEF	2.438 (61.9)	2.000 (50.8)	2.250 (57.2)	1.760 (44.7)	.844 (21.4)
32	2 -18 UNEF	2.688 (68.3)	2.250 (57.2)	2.500 (63.5)	2.010 (51.1)	.969 (24.6)
36	2 1/4-16 UN	2.938 (74.6)	2.500 (63.5)	2.750 (69.9)	2.260 (57.4)	1.089 (27.7)
40	2 1/2-16 UN	3.188 (81.0)	2.750 (69.9)	3.000 (76.2)	2.510 (63.8)	1.219 (31.0)
44	2 3/4-16 UN	3.438 (87.3)	3.000 (76.2)	3.250 (82.6)	2.760 (70.1)	1.344 (34.1)
48	3 -16 UN	3.688 (93.7)	3.250 (82.6)	3.500 (88.9)	3.010 (76.5)	1.469 (37.3)

# 947-106 Quick Disconnect, Swivel Lanyard MIL-DTL-5015 Type

## HOW TO ORDER:

EXAMPLE:                    947 - 106 - XX XX

PRODUCT SERIES        |

BASIC NO                |

SHELL SIZE TABLE I    |

CONTACT ARRANGEMENT (MIL-STD-1651) |

## NOTES:

- ASSEMBLY TO BE IDENTIFIED WITH "GLENAIR", GLENAIR PART NUMBER, AND DATE CODE.
- PLUG IS COUPLED TO THE RECEPTACLE BY PULLING COUPLING RING REARWARD AND THEN PUSH THE RECEPTACLE FORWARD. PLUG IS UNCOUPLED BY A STRAIGHT AXIAL PULL OF LANYARD
- CONNECTOR 947-106-XXXX MATES TO AN MS3102A-XX-XX CONNECTOR WITH QUICK DISCONNECT ADAPTER ATTACHED - P/N 687-329-XX (TO BE ORDERED SEPARATELY).
- FOR SHELL SIZE 32, 36, 40, 44, AND 48 CONSULT FACTORY
- MATERIAL/FINISH:  
CONNECTOR BODY-PER MS3106A PLUG  
ADAPTER, LANYARD SLEEVE-AL ALLOY/CADIUM OLIVE DRAB  
LANYARD-CRES/PASSIVATED NYLON JACKET

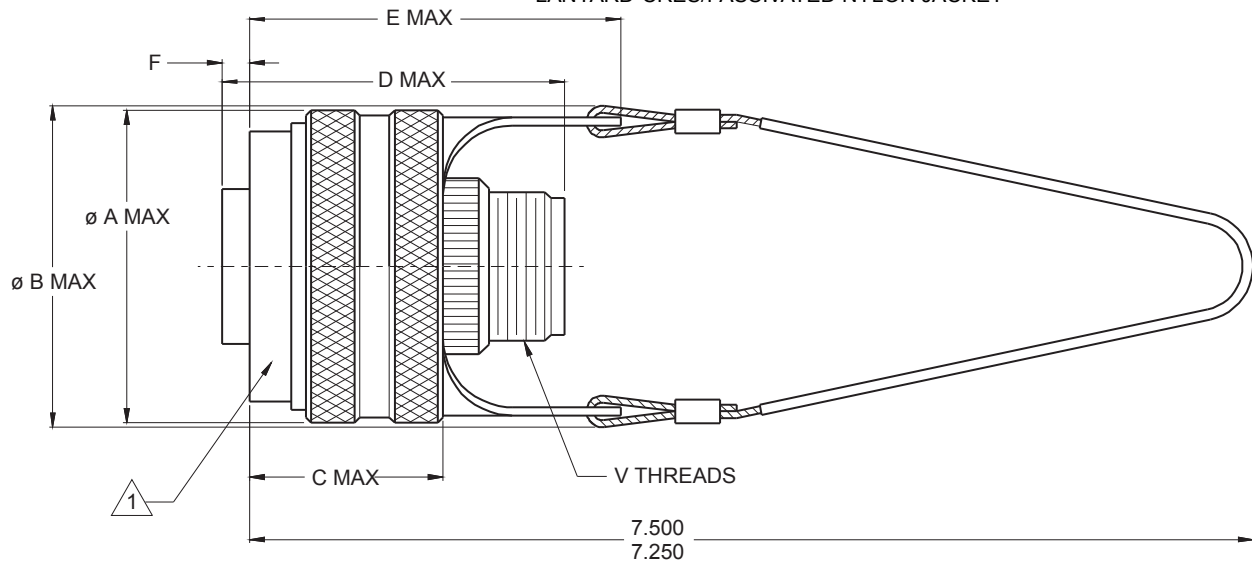


TABLE I: CONNECTOR DIMENSIONS

SHELL SIZE	V THREAD CLASS 2A	ø A MAX	ø B MAX	C MAX	D MAX	E MAX	F DIM
8S	.500-28 UNEF-2A	1.040 (26.4)	1.320 (33.5)	.740 (18.8)	1.469 (37.3)	1.700 (43.2)	.089-.161 (2.3-4.1)
10S	.500-28 UNEF-2A	1.165 (29.6)	1.445 (36.7)		1.531 (38.9)		
10SL	.625-24 NEF-2A				2.062 (52.4)		
12	.625-20 NEF-2A	1.290 (32.8)	1.570 (39.9)		1.688 (42.9)		.027-.099 (0.7-2.5)
12S	.625-24 NEF-2A				2.062 (52.4)		.089-.161 (2.3-4.1)
14	.750-20 UNEF-2A	1.415 (35.9)	1.695 (43.1)		1.688 (42.9)		.027-.099 (0.7-2.5)
14S	.750-20 UNEF-2A				2.062 (52.4)		.089-.161 (2.3-4.1)
16	.6875-20 UNEF-2A	1.540 (39.1)	1.820 (46.2)		2.062 (52.4)		.027-.099 (0.7-2.5)
16S	.6875-20 UNEF-2A				1.688 (42.9)		.089-.161 (2.3-4.1)
18	1.000-20 UNEF-2A	1.665 (42.3)	1.945 (49.4)		.880 (22.4)		2.062 (52.4)
20	1.1875-18 UNEF-2A	1.780 (45.2)	2.060 (52.3)	2.188 (55.6)			
22	1.1875-18 UNEF-2A	1.910 (48.5)	2.190 (55.6)	.950 (24.1)		2.312 (58.7)	1.920 (48.8)
24	1.4375-18 UNEF-2A	2.040 (51.8)	2.274 (57.8)				
28	1.4375-18 UNEF-2A	2.240 (56.9)	2.520 (64.0)				