

MIL-C-55116 SERIES

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

CONNECTOR MEETS ALL REQUIREMENTS OF MIL-C-55116, LATEST REVISION.

MATERIALS

Shell and Panel Nut: Stainless Steel (Class 303 per ASTM A 582) or Nylon Overmolded Stainless Steel (M55116 Plugs) per ASTM A 582, Class 303.

Insulator: Diallyl Phthalate per MIL-M-14, type MDG.

Contacts and Terminals: Copper Alloy per ASTM B 16.

Strain Relief: Stainless Steel per ASTM A 313.

Adapter Nut and Stud: Aluminum Alloy per QQ-A-225.

FINISHES/COLORS

Shell and Panel Nut: Passivated, Sand Blasted or Black (M55116 Plugs).

Adapter Nut and Stud: Black Anodizing per MIL-A-8625.

Strain Relief: Black Oxide per MIL-C-13924.

Contacts And Terminals:

.000030 Gold per MIL-G-45204, Type 1, Class 0; over Nickel per QQ-N-290.

Insulator: Blue.

ELECTRICAL

Operating Voltage: 60 Volts Maximum Potential.

Dielectric Withstanding Voltage: 500 V RMS.

Insulation Resistance: 1000 Megohms Minimum.

Current Rating: 0.5 Amp Maximum.

Contact Resistance (Mated): 0.05 Ohm Maximum.

MECHANICAL

Air Pressure: 2.5 P.S.I.

Water Immersion: 48 Hours at 6 Feet.

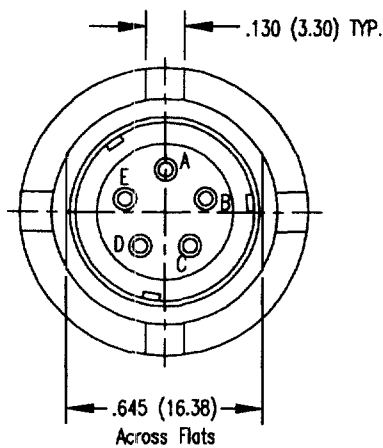
Durability: 3000 Cycles, Mate and Unmate.

Operating Temperature Range: -67° F to +185° F
(-55° C to +85° C).

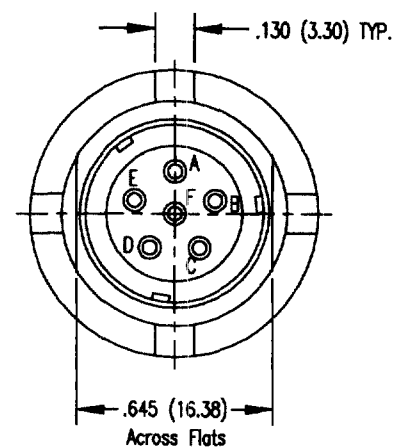
MILITARY CONNECTORS

Part Number		Front View	Termination
Commercial	Military		
MC183	M55116/9-0	Fig. 1	Solder Cup
MC283	M55116/10-0	Fig. 2	Solder Cup
MC183G2	N/A	Fig. 1	Barrel Cup
MC283G2	N/A	Fig. 2	Barrel Cup

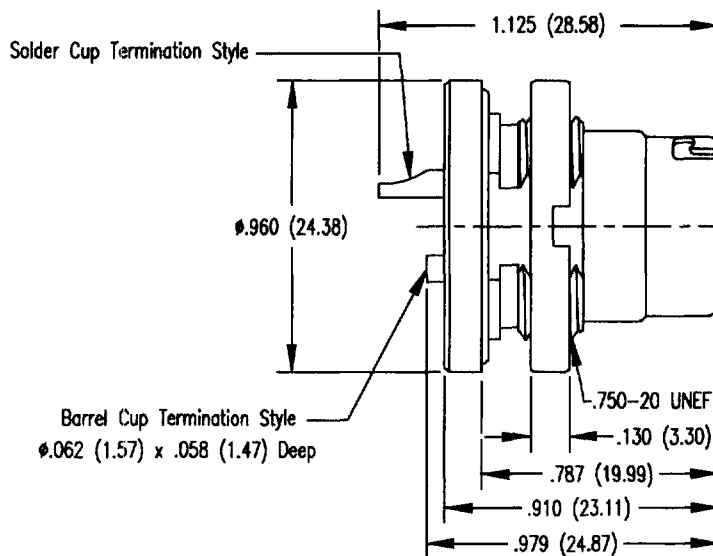
MC183
MC283
MC183G2
MC283G2



5-Position Connector
FIGURE 1



6-Position Connector
FIGURE 2

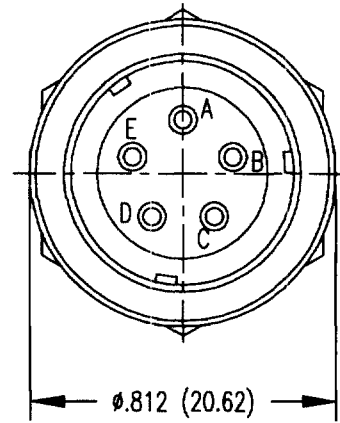
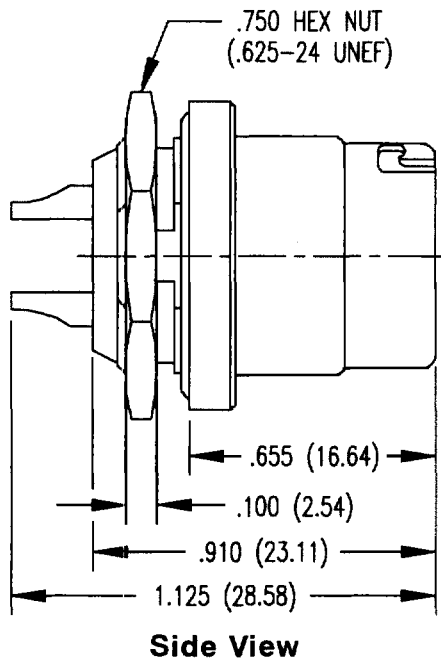


Side View

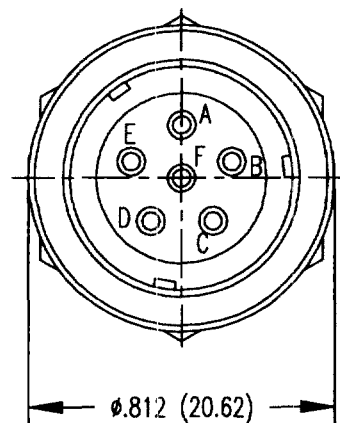
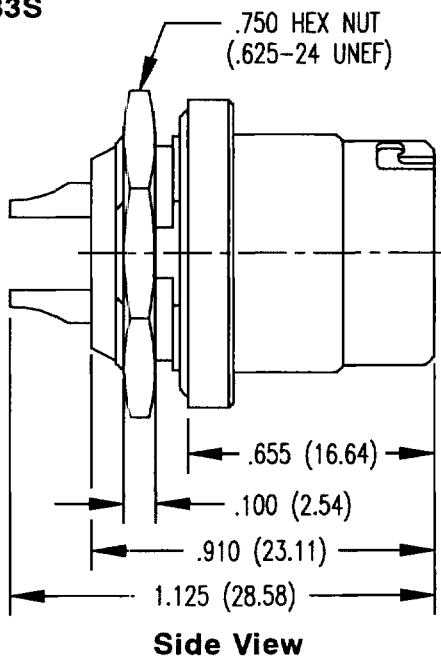
MILITARY CONNECTORS

Receptacles

MC183S



MC683S



MILITARY CONNECTORS Printed Circuit Board

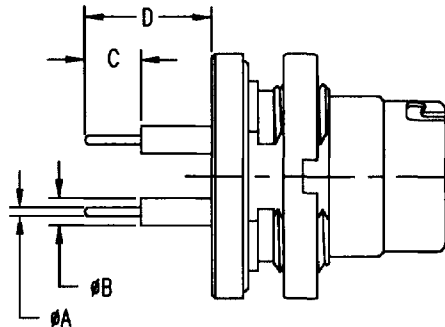
Designation System

M C 8 3 - X

→ PCB Termination Modifier Per
Figure 1.*
(See Tables Below)

→ Connector Configuration:
1=5-Position
2=6-Position

FIGURE 1



Printed Circuit Board Termination Modifiers

183 TYPE

283 TYPE

Modifier	ØA	ØB	C	D
-1	.040 (1.02)	.089 (2.26)	.115 (2.92)	.169 (4.29)
-5	.028 (0.71)	.089 (2.26)	.125 (3.18)	.194 (4.93)
-8	.028 (0.71)	.089 (2.26)	.188 (4.78)	.590 (14.99)
-9	.040 (1.02)	.040 (1.02)	.437 (11.10)	.437 (11.10)
-10	.028 (0.71)	.089 (2.26)	.218 (5.54)	.257 (6.53)
-12	.040 (1.02)	.040 (1.02)	.110 (2.79)	.110 (2.79)
-13	.028 (0.71)	.089 (2.26)	.150 (3.81)	.437 (11.10)
-14	.030 (0.76)	.030 (0.76)	.120 (3.05)	.120 (3.05)
-15	.028 (0.71)	.089 (2.26)	.140 (3.56)	.390 (9.91)
-16	.040 (1.02)	.040 (1.02)	.744 (18.90)	.744 (18.90)
-20	.030 (0.76)	.030 (0.76)	.564 (14.33)	.564 (14.33)
-21	.040 (1.02)	.040 (1.02)	.110 (2.79)	.110 (2.79)

Modifier	ØA	ØB	C	D
-1	.040 (1.02)	.089 (2.26)	.115 (2.92)	.169 (4.29)
-2	.040 (1.02)	.040 (1.02)	.437 (11.10)	.437 (11.10)
-8	.028 (0.71)	.089 (2.26)	.188 (4.78)	.590 (14.99)
-9	.028 (0.71)	.089 (2.26)	.125 (3.18)	.194 (4.93)
-10	.028 (0.71)	.089 (2.26)	.218 (5.54)	.257 (6.53)
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-16	.040 (1.02)	.040 (1.02)	.744 (18.90)	.744 (18.90)
-20	.030 (0.76)	.030 (0.76)	.564 (14.33)	.564 (14.33)
-21	.040 (1.02)	.040 (1.02)	.110 (2.79)	.110 (2.79)

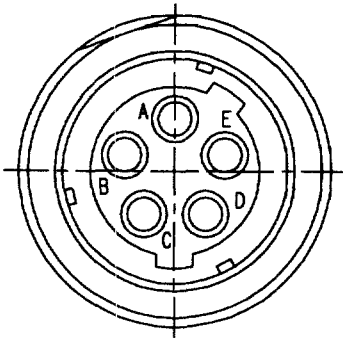
* Consult factory for other PCB termination styles and availability.

MILITARY CONNECTORS

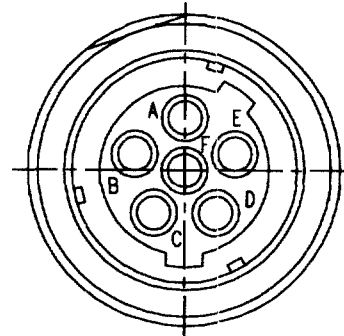
Receptacles

MC429
MC529
MC429G2
MC529G2

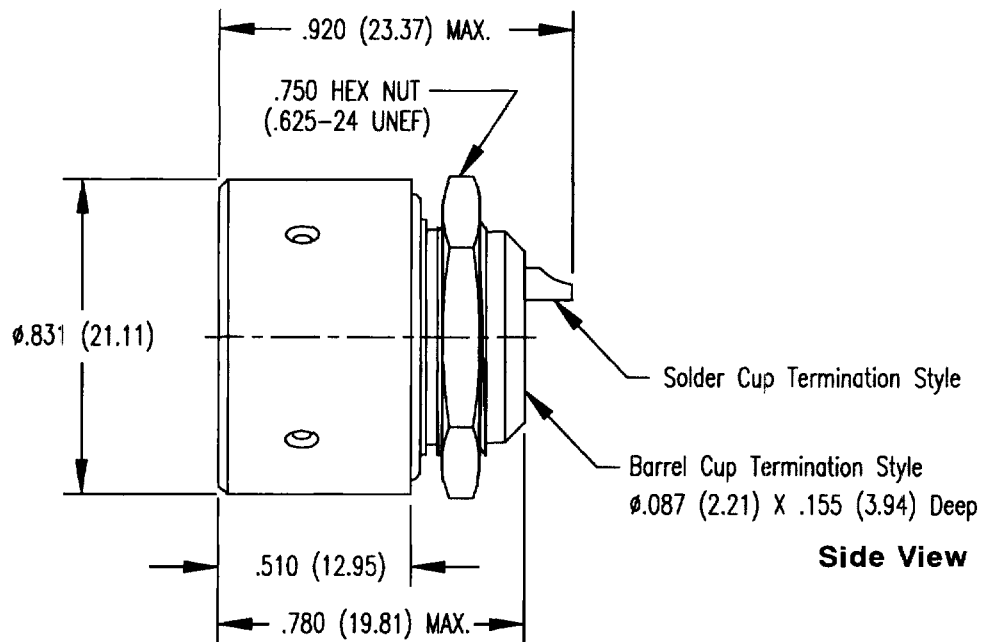
Part Number		Front View	Termination
Commercial	Military		
MC429	N/A	Fig. 1	Solder Cup
MC529	N/A	Fig. 2	Solder Cup
MC429G2	N/A	Fig. 1	Barrel Cup
MC529G2	N/A	Fig. 2	Barrel Cup



5-Position Connector
FIGURE 1



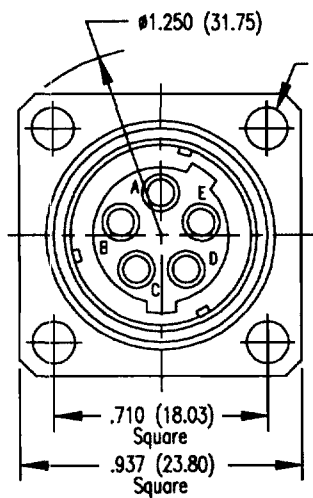
6-Position Connector
FIGURE 2



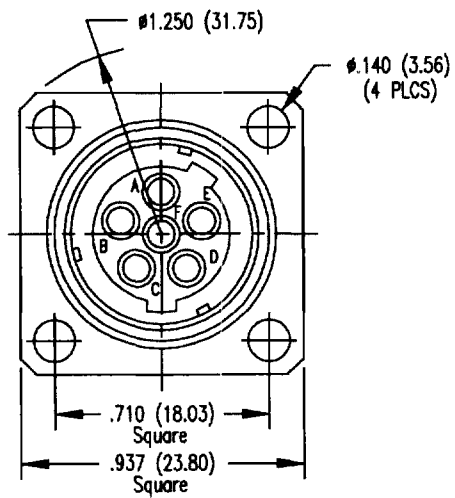
MILITARY CONNECTORS Receptacles

Part Number		Front View	Termination
Commercial	Military		
MC629	N/A	Fig. 1	Solder Cup
MC729	N/A	Fig. 2	Solder Cup
MC629G2	N/A	Fig. 1	Barrel Cup
MC729G2	N/A	Fig. 2	Barrel Cup

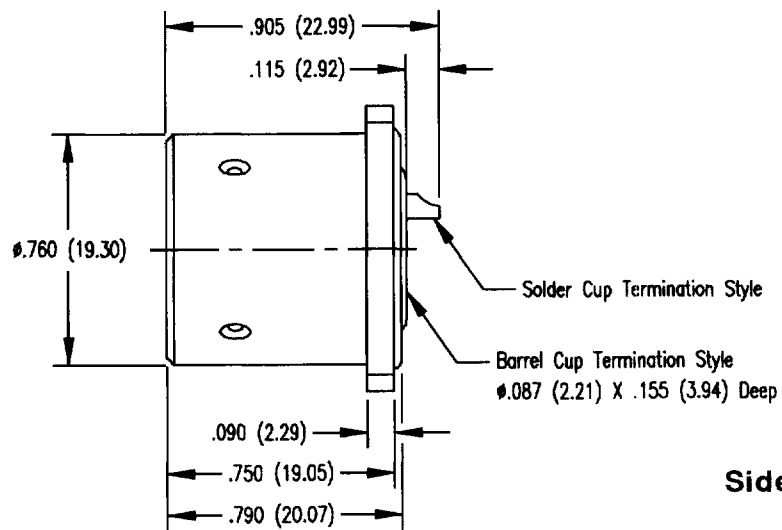
MC629
MC729
MC629G2
MC729G2



**5-Position Connector
FIGURE 1**



**6-Position Connector
FIGURE 2**

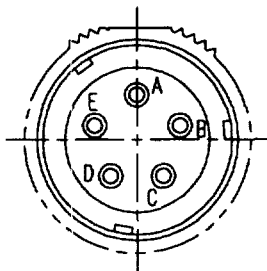


Side View

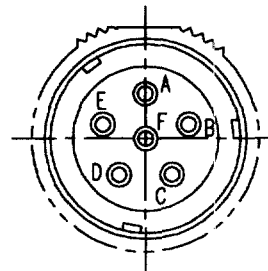
MILITARY CONNECTORS

Plugs

Part Number		Cable Size	Front View	Termination
Commercial	Military			
MC228B5	M55116/11-1	.165+/- .010 (4.19 +/- .25)	Fig. 1	Barrel Cup
MC228B6	M55116/11-2	.228+/- .010 (5.79 +/- .25)	Fig. 1	Barrel Cup
MC228	M55116/11-3	.250+/- .010 (6.35 +/- .25)	Fig. 1	Barrel Cup
MC228B4	M55116/11-4	.290+/- .010 (7.37 +/- .25)	Fig. 1	Barrel Cup
MC228B3	M55116/11-5	.320+/- .010 (8.13 +/- .25)	Fig. 1	Barrel Cup
MC228B7	M55116/13-1	.165+/- .010 (4.19 +/- .25)	Fig. 1	Solder Cup
MC228B8	M55116/13-2	.228+/- .010 (5.79 +/- .25)	Fig. 1	Solder Cup
MC228G2	M55116/13-3	.250+/- .010 (6.35 +/- .25)	Fig. 1	Solder Cup
MC228B2	M55116/13-4	.290+/- .010 (7.37 +/- .25)	Fig. 1	Solder Cup
MC228B1	M55116/13-5	.320+/- .010 (8.13 +/- .25)	Fig. 1	Solder Cup
MC328B5	M55116/12-1	.165+/- .010 (4.19 +/- .25)	Fig. 2	Solder Cup
MC328B6	M55116/12-2	.228+/- .010 (5.79 +/- .25)	Fig. 2	Barrel Cup
MC328	M55116/12-3	.250+/- .010 (6.35 +/- .25)	Fig. 2	Barrel Cup
MC328B4	M55116/12-4	.290+/- .010 (7.37 +/- .25)	Fig. 2	Barrel Cup
MC328B3	M55116/12-5	.320+/- .010 (8.13 +/- .25)	Fig. 2	Barrel Cup
MC328B7	M55116/14-1	.165+/- .010 (4.19 +/- .25)	Fig. 2	Barrel Cup
MC328B8	M55116/14-2	.228+/- .010 (5.79 +/- .25)	Fig. 2	Solder Cup
MC328G2	M55116/14-3	.250+/- .010 (6.35 +/- .25)	Fig. 2	Solder Cup
MC328B2	M55116/14-4	.290+/- .010 (7.37 +/- .25)	Fig. 2	Solder Cup
MC328B1	M55116/14-5	.320+/- .010 (8.13 +/- .25)	Fig. 2	Solder Cup

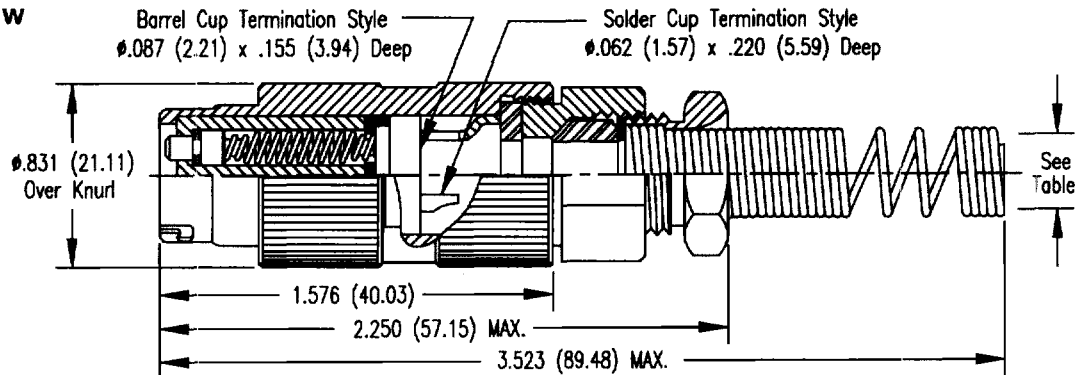


5-Position Connector
FIGURE 1



6-Position Connector
FIGURE 2

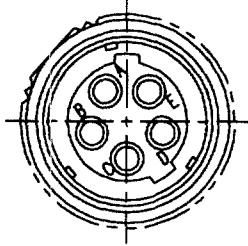
Side View



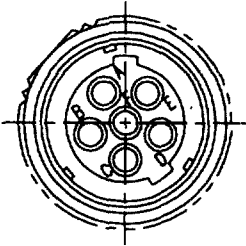
MILITARY CONNECTORS Plugs

Part Number		Front View	Termination
Commercial	Military		
MC182	M55116/8-0 (See Fig. 3)	Fig. 1	Barrel Cup
MC682	M55116/7-0 (See Fig. 3)	Fig. 2	Solder Cup
MC182G2	M55116/6-0 (See Fig. 3)	Fig. 1	Barrel Cup
MC682G2	M55116/5-0 (See Fig. 3)	Fig. 2	Solder Cup

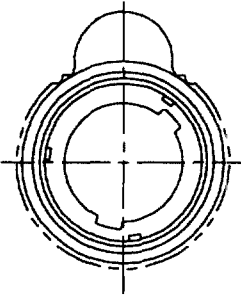
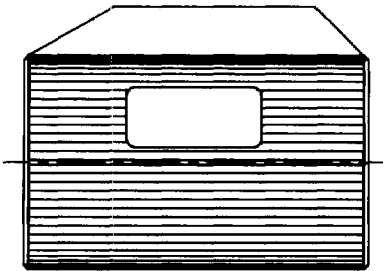
MC182
MC682
MC182G2
MC682G2



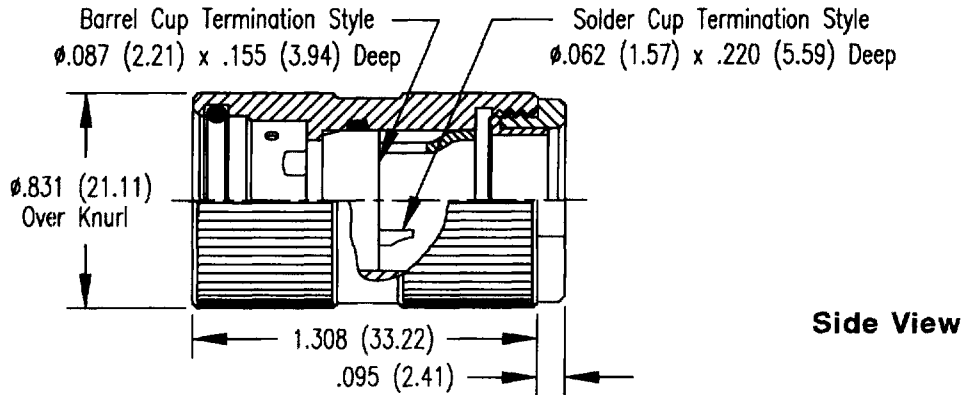
**5-Position Connector
FIGURE 1**



**6-Position Connector
FIGURE 2**

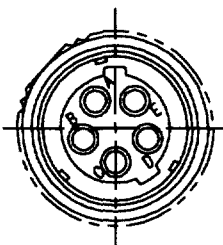


**Military Shell Detail
FIGURE 3**

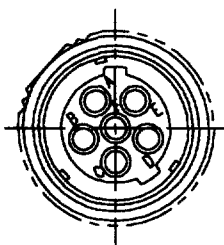


MILITARY CONNECTORS Plugs

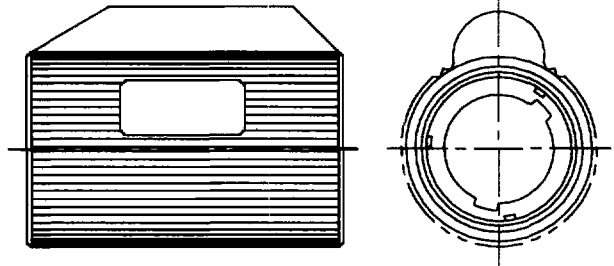
Part Number		Cable Size	Front View	Termination
Commercial	Military			
MC229B5	M55116/1-1 (See Fig. 3)	.165 +/- .010 (4.19 +/- .25)	Fig. 1	Barrel Cup
MC229B6	M55116/1-2 (See Fig. 3)	.228 +/- .010 (5.79 +/- .25)	Fig. 1	Barrel Cup
MC229	M55116/1-3 (See Fig. 3)	.250 +/- .010 (6.35 +/- .25)	Fig. 1	Barrel Cup
MC229B4	M55116/1-4 (See Fig. 3)	.290 +/- .010 (7.37 +/- .25)	Fig. 1	Barrel Cup
MC229B3	M55116/1-5 (See Fig. 3)	.320 +/- .010 (8.13 +/- .25)	Fig. 1	Barrel Cup
MC229B7	M55116/3-1 (See Fig. 3)	.165 +/- .010 (4.19 +/- .25)	Fig. 1	Solder Cup
MC229B8	M55116/3-2 (See Fig. 3)	.228 +/- .010 (5.79 +/- .25)	Fig. 1	Solder Cup
MC229G2	M55116/3-3 (See Fig. 3)	.250 +/- .010 (6.35 +/- .25)	Fig. 1	Solder Cup
MC229B2	M55116/3-4 (See Fig. 3)	.290 +/- .010 (7.37 +/- .25)	Fig. 1	Solder Cup
MC229B1	M55116/3-5 (See Fig. 3)	.320 +/- .010 (8.13 +/- .25)	Fig. 1	Solder Cup
MC329B5	M55116/2-1 (See Fig. 3)	.165 +/- .010 (4.19 +/- .25)	Fig. 2	Solder Cup
MC329B6	M55116/2-2 (See Fig. 3)	.228 +/- .010 (5.79 +/- .25)	Fig. 2	Barrel Cup
MC329	M55116/2-3 (See Fig. 3)	.250 +/- .010 (6.35 +/- .25)	Fig. 2	Barrel Cup
MC329B4	M55116/2-4 (See Fig. 3)	.290 +/- .010 (7.37 +/- .25)	Fig. 2	Barrel Cup
MC329B3	M55116/2-5 (See Fig. 3)	.320 +/- .010 (8.13 +/- .25)	Fig. 2	Barrel Cup
MC329B7	M55116/4-1 (See Fig. 3)	.165 +/- .010 (4.19 +/- .25)	Fig. 2	Barrel Cup
MC329B8	M55116/4-2 (See Fig. 3)	.228 +/- .010 (5.79 +/- .25)	Fig. 2	Solder Cup
MC329G2	M55116/4-3 (See Fig. 3)	.250 +/- .010 (6.35 +/- .25)	Fig. 2	Solder Cup
MC329B2	M55116/4-4 (See Fig. 3)	.290 +/- .010 (7.37 +/- .25)	Fig. 2	Solder Cup
MC329B1	M55116/4-5 (See Fig. 3)	.320 +/- .010 (8.13 +/- .25)	Fig. 2	Solder Cup



**5-Position
FIGURE 1**

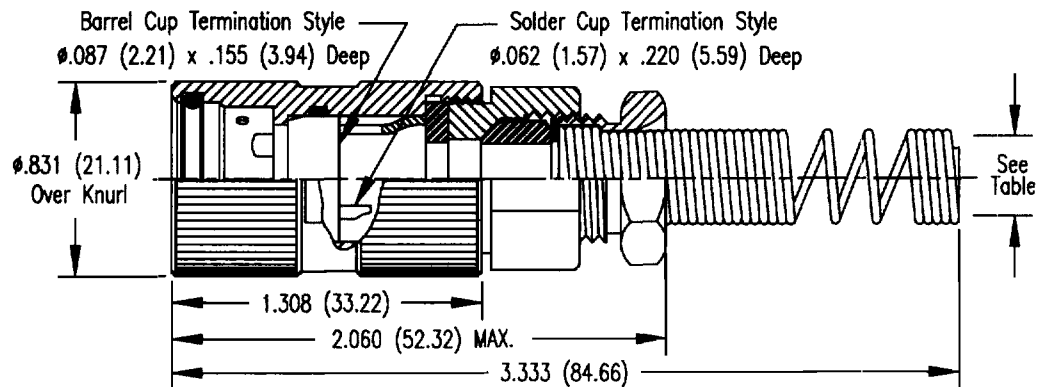


**6-Position
FIGURE 2**



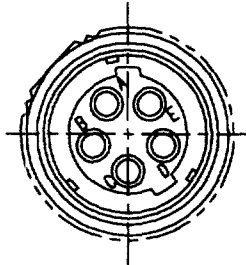
**Military Shell Detail
FIGURE 3**

Side View

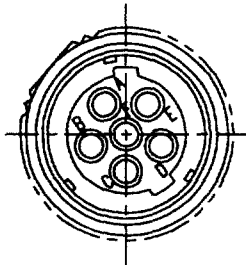


MILITARY CONNECTORS Plugs

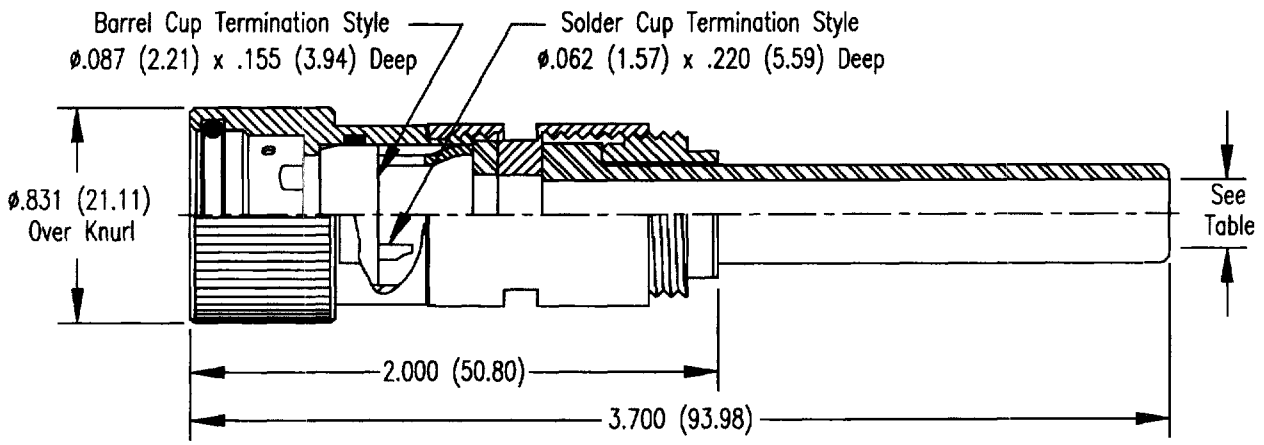
Part Number	Cable Size	Front View	Termination
MC217-3/16	3/16 (4.76)	Fig. 1	Solder Cup
MC217G2-3/16	3/16 (4.76)	Fig. 1	Barrel Cup
MC217-1/4	1/4 (6.35)	Fig. 1	Solder Cup
MC217G2-1/4	1/4 (6.35)	Fig. 1	Barrel Cup
MC617-3/16	3/16 (4.76)	Fig. 2	Solder Cup
MC617G2-3/16	3/16 (4.76)	Fig. 2	Barrel Cup
MC617-1/4	1/4 (6.35)	Fig. 2	Solder Cup
MC617G2-1/4	1/4 (6.35)	Fig. 2	Barrel Cup



**5-Position Connector
FIGURE 1**



**6-Position Connector
FIGURE 2**



Side View