

# Amphenol

164-SERIES

WATERPROOF AUDIO CONNECTORS

AC16403 0118





# Introduction

Amphenol 164 series connectors are water resistant, five & six pin contact electrical connectors for use in low voltage audio frequency circuits & applications. They employ three-point bayonet coupling for quick disconnect & self wipe contact.

These connectors are extensively used in military communication equipments, where high reliability is paramount & severe environmental conditions are encountered.

Amphenol 164 series connectors are qualified to MIL specification MIL-DTL-55116. They are intermatable with any other manufacturers product which is designed as per MIL-DTL-55116.

	Page
Introduction -----	1
Specifications, Material & Finishes -----	2
QPL Approval Letter -----	3-4
Five & Six Pin Audio Plug Connector Crimp Sleeve Terminal (U-229-Type) Products -----	5
Five & Six Pin Audio Plug Connector Solder Cup Terminal (U-229S-Type) Products -----	6
Five & Six Pin Audio Plug Connector Crimp Sleeve Terminal (U-182-Type) Products -----	7
Five & Six Pin Audio Plug Connector Solder Cup Terminal (U-182S-Type) Products -----	8
Five & Six Pin Audio Receptacle Panel Mount Connector-Solder (U-183/U Type & U-283/U Type) Products -----	9
Five & Six Pin Audio Receptacle Connector Crimp Sleeve Terminal (U-228/U Type & U-328/U Type) Products -----	10
Five & Six Pin Audio Receptacle Connector Solder Cup Terminal (U-228/U Type & U-328/U Solder Type) Products -----	11
List Of Part Numbers -----	12
Ordering Information -----	13
Special Products -----	15-27

## Electrical

Operating Current	500 m A per contact
Operating Voltage	60V max.
Contact Resistance	0.050 ohms max.
Insulation Resistance	1000 M ohm @ 100 V DC
Dielectric Strength	500V rms

## Mechanical

Number of Contacts	5 or 6
Air Pressure	2.5 PSI
Durability	3000 cycles, mate & unmate.
Immersion	48 hrs. At 6ft.

## Environmental

Operating Temperature	-55° C to +85° C.
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## Material & Finishes

Part	Material	Finish
Shell & Nut	Stainless Steel	Sand Blasted
Insulator	Diallyphthalate as per ASTM D5948 Type SDG-F	-
Contact	Copper Alloy -Brass	0.75µm Gold over Nickel





Defence Logistics Agency  
 Defence Supply Centre, Columbus  
 Post Office Box 3990  
 Columbus, OH 43218-3990

MAR 18 2009

DSCC-VQP-09-017606 (Mr. Funk/614-692-6608/jf)  
 Subject: Qualification for MIL-DTL-55116  
 DSCC Test Report Number 55116-2285-08  
 FSC 5935, Preparing Activity:DLA-CC

Amphenol Interconnect India Pvt. Ltd.  
 105, Bhosari Industrial Estate  
 Pune-411026 (India)

We have received Amphenol Interconnect India's test report and supporting data dated February 18, 2009. Qualification of your products is granted under the Military Specification Sheets listed below as a result of providing exhibit samples that demonstrate your capability to manufacture these products to Military Specification MIL-DTL-55116.

Supplier: Amphenol Interconnect India Pvt. Ltd.	Supplier: Amphenol Interconnect India Pvt. Ltd.
Government Designation: M55116/1-( )	Government Designation: M55116/2-( )
Manufacturer's Designation: 164-229-( )	Manufacturer's Designation: 164-229-6-( )
Cable Accommodation: 1, 2, 3, 4, 5	Cable Accommodation: 1, 2, 3, 4, 5
Test or Qualification Reference: 55116-2285-08	Test or Qualification Reference: 55116-2285-08
Supplier: Amphenol Interconnect India Pvt. Ltd.	Supplier: Amphenol Interconnect India Pvt. Ltd.
Government Designation: M55116/3-( )	Government Designation: M55116/4-( )
Manufacturer's Designation: 164-229-S-( )	Manufacturer's Designation: 164-229-6S-( )
Cable Accommodation: 1, 2, 3, 4, 5	Cable Accommodation: 1, 2, 3, 4, 5
Test or Qualification Reference: 55116-2285-08	Test or Qualification Reference: 55116-2285-08
Supplier: Amphenol Interconnect India Pvt. Ltd.	Supplier: Amphenol Interconnect India Pvt. Ltd.
Government Designation: M55116/5-( )	Government Designation: M55116/6-( )
Manufacturer's Designation: 164-182-( )	Manufacturer's Designation: 164-182-6-( )
Cable Accommodation: 1, 2, 3, 4, 5	Cable Accommodation: 1, 2, 3, 4, 5
Test or Qualification Reference: 55116-2285-08	Test or Qualification Reference: 55116-2285-08
Supplier: Amphenol Interconnect India Pvt. Ltd.	Supplier: Amphenol Interconnect India Pvt. Ltd.
Government Designation: M55116/7-( )	Government Designation: M55116/8-( )
Manufacturer's Designation: 164-182-S( )	Manufacturer's Designation: 164-182-6S-( )
Cable Accommodation: 1, 2, 3, 4, 5	Cable Accommodation: 1, 2, 3, 4, 5
Test or Qualification Reference: 55116-2285-08	Test or Qualification Reference: 55116-2285-08



Supplier: Amphenol Interconnect India Pvt. Ltd.	Supplier: Amphenol Interconnect India Pvt. Ltd.
Government Designation: M55116/9-( )	Government Designation: M55116/10-( )
Manufacturer's Designation: 164-183-( )	Manufacturer's Designation: 164-183-6-( )
Cable Accommodation: 0	Cable Accommodation: 0
Test or Qualification Reference: 55116-2285-08	Test or Qualification Reference: 55116-2285-08
Supplier: Amphenol Interconnect India Pvt. Ltd.	Supplier: Amphenol Interconnect India Pvt. Ltd.
Government Designation: M55116/11-( )	Government Designation: M55116/12-( )
Manufacturer's Designation: 164-228-( )	Manufacturer's Designation: 164-228-6-( )
Cable Accommodation: 1, 2, 3, 4, 5	Cable Accommodation: 1, 2, 3, 4, 5
Test or Qualification Reference: 55116-2285-08	Test or Qualification Reference: 55116-2285-08
Supplier: Amphenol Interconnect India Pvt. Ltd.	Supplier: Amphenol Interconnect India Pvt. Ltd.
Government Designation: M55116/13-( )	Government Designation: M55116/14-( )
Manufacturer's Designation: 164-228-S-( )	Manufacturer's Designation: 164-228-6S-( )
Cable Accommodation: 1, 2, 3, 4, 5	Cable Accommodation: 1, 2, 3, 4, 5
Test or Qualification Reference: 55116-2285-08	Test or Qualification Reference: 55116-2285-08

A detailed listing of the connector type under the Military Specification Sheet will be listed on the Qualified Products List (QPL) 55116. This qualification is subject to the conditions stated in DoD 4120.24-M and SD-6.

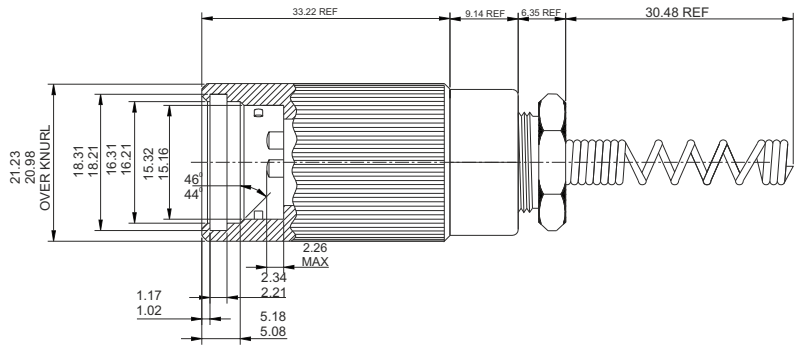
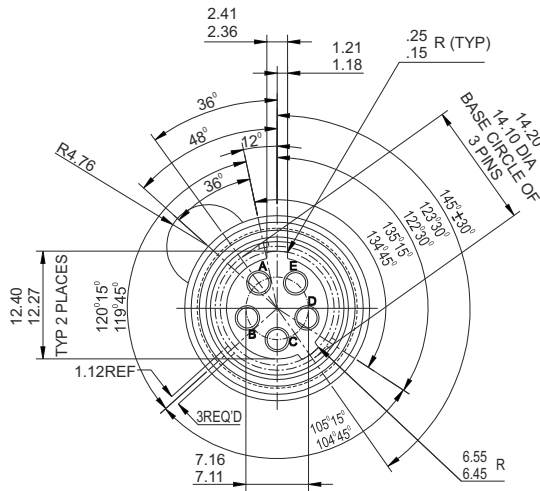
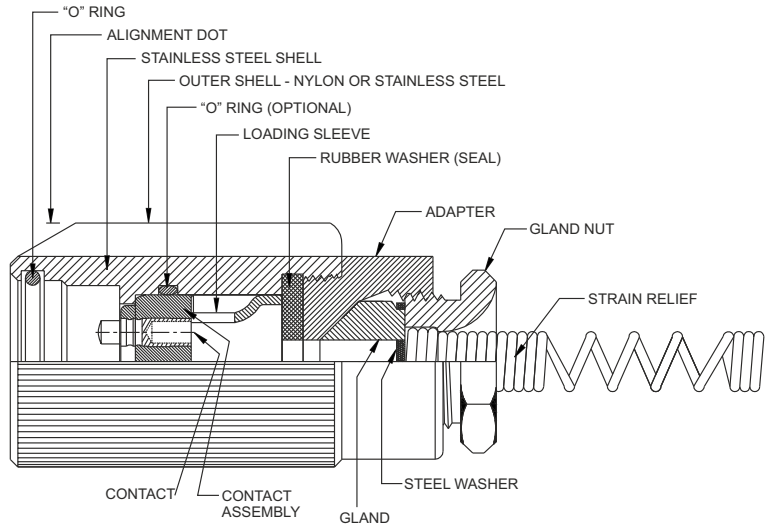
Because we are held responsible for the accuracy and currency of this QPL, please let us know if your company discontinues production of these products.

If you have any questions concerning this letter, please contact Mr. Funk at 614-692-6608 or email [Jeremy.Funk@dla.mil](mailto:Jeremy.Funk@dla.mil).

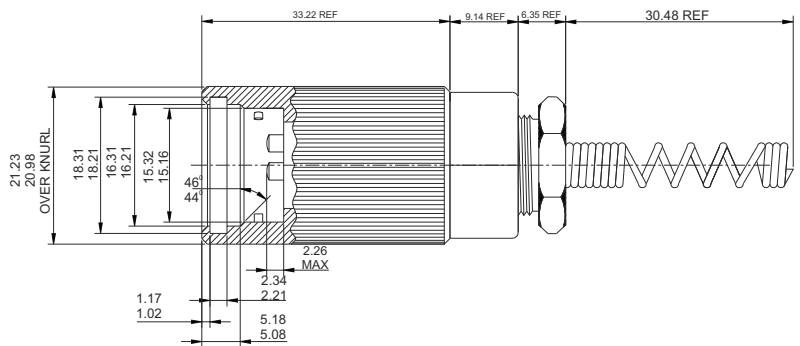
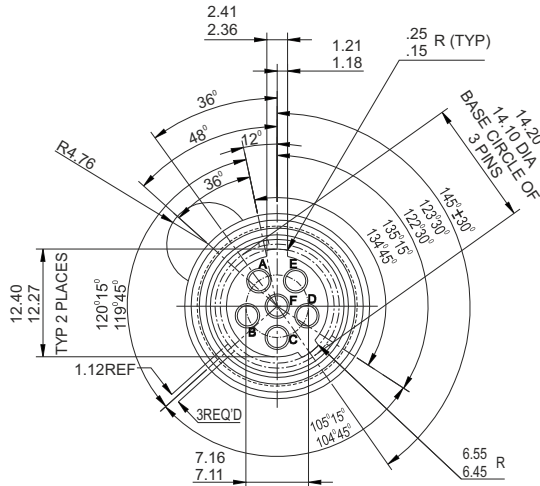
Sincerely,



JOSEPH GEMPERLINE  
 Chief  
 Sourcing and Qualifications Division



**M55116/1-X**

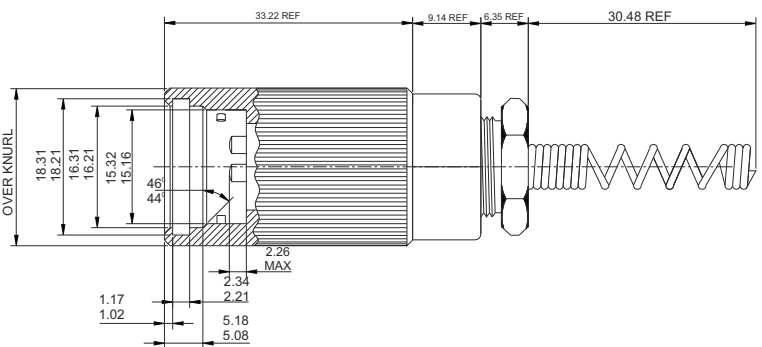
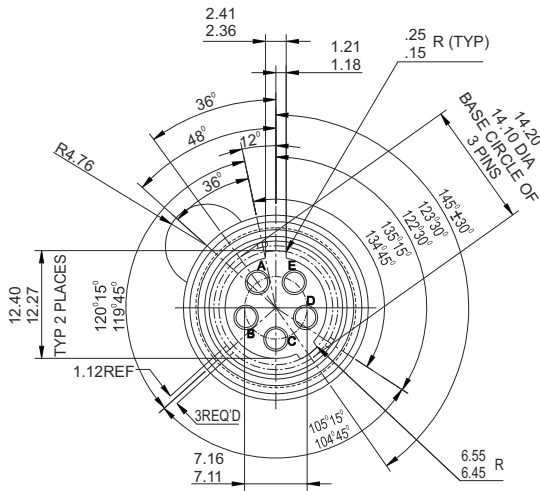
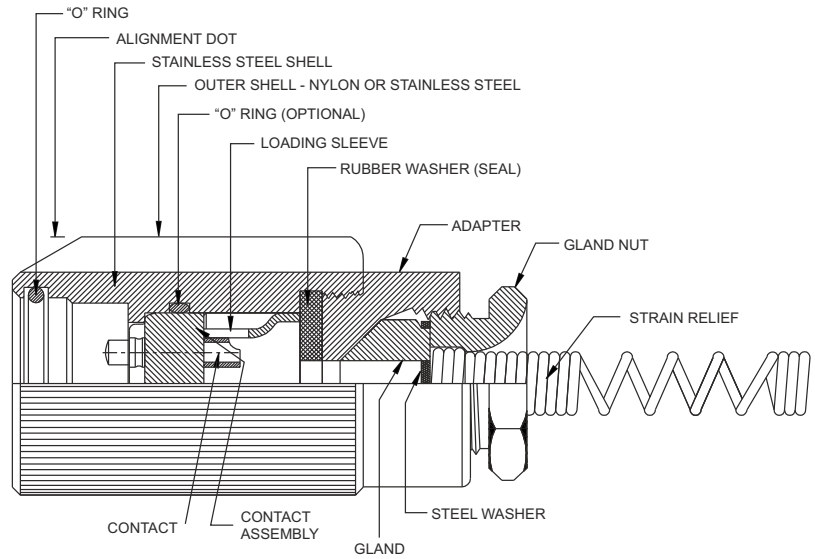


**M55116/2-X**

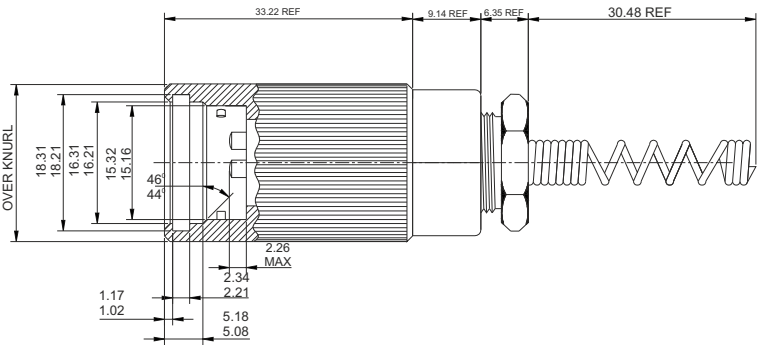
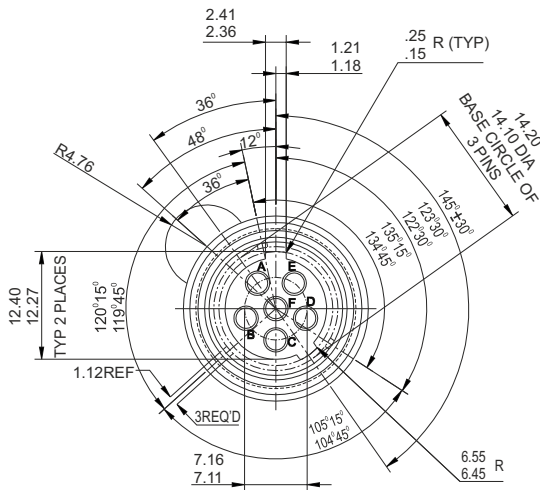
Sr No.	Description	MIL Designation	Amphenol Designation
1	5 Pin Audio plug connector with crimp sleeve terminal & wire strain relief	M55116/1-X	164-229-X
2	6 Pin Audio plug connector with crimp sleeve terminal & wire strain relief	M55116/2-X	164-229-6-X

Dash no-X	Cable diameter
-0	N/A
-1	4.19 ± 0.25
-2	5.79 ± 0.25
-3	6.35 ± 0.25
-4	7.36 ± 0.25
-5	8.12 ± 0.25

X Stands for the Cable size accommodation, is identified by a dash number as shown in above table. This number indicates the outside diameter of the cable that the connector will accommodate.



**M55116/3-X**



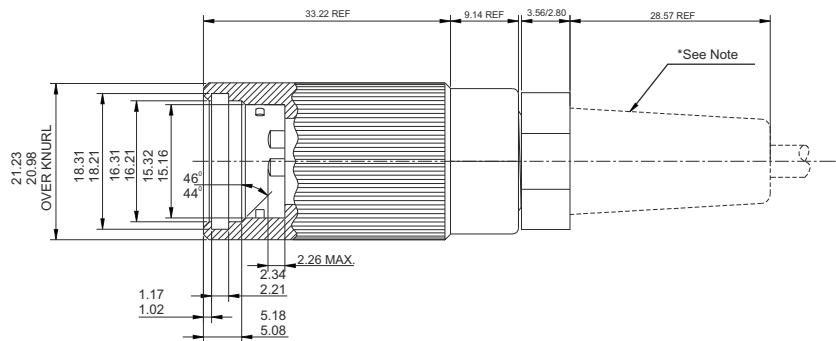
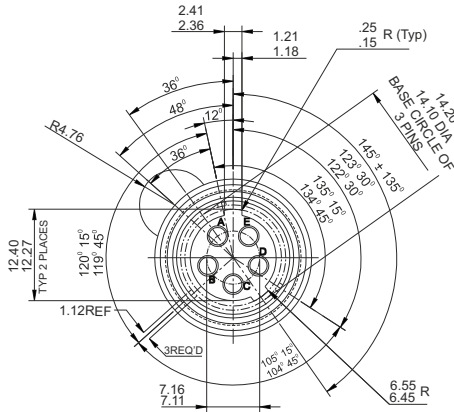
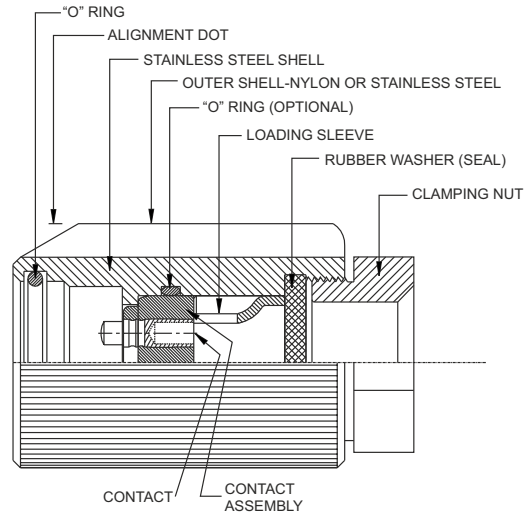
**M55116/4-X**

Sr No.	Description	MIL Designation	Amphenol Designation
1	5 Pin Audio plug connector with Solder Cup Terminal & wire strain relief	M55116/3-X	164-229-S-X
2	6 Pin Audio plug connector with Solder Cup Terminal & wire strain relief	M55116/4-X	164-229-6S-X

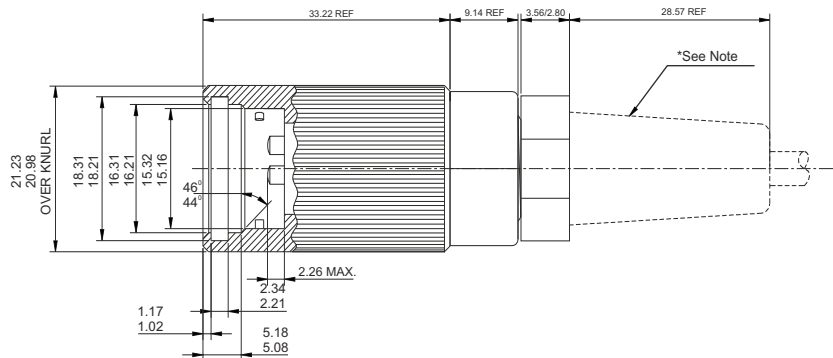
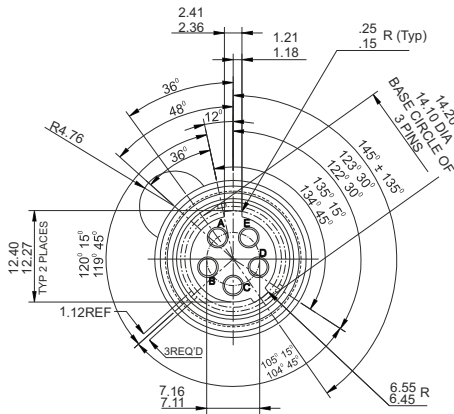
Dash no-X	Cable diameter
-0	N/A
-1	4.19 ± 0.25
-2	5.79 ± 0.25
-3	6.35 ± 0.25
-4	7.36 ± 0.25
-5	8.12 ± 0.25

X Stands for the Cable size accommodation, is identified by a dash number as shown in above table. This number indicates the outside diameter of the cable that the connector will accommodate.





**M55116/5-X**



**M55116/6-X**

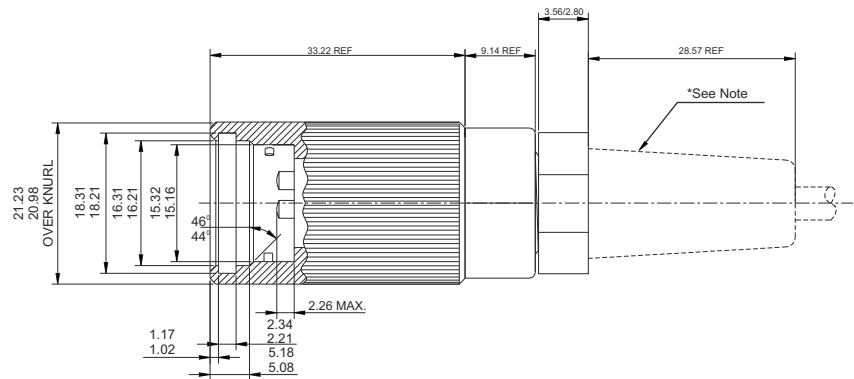
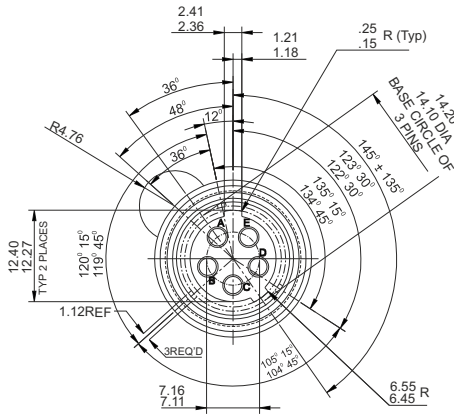
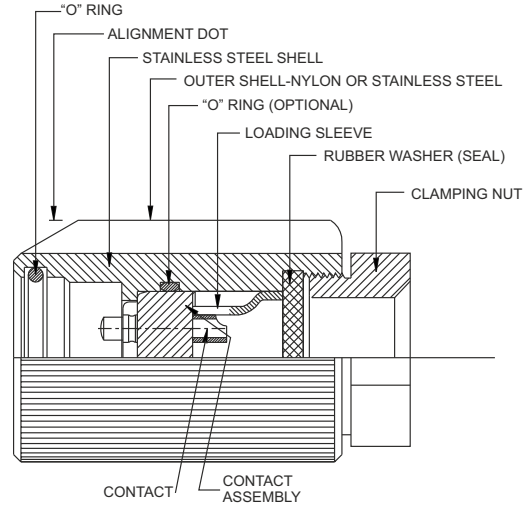
Sr No.	Description	MIL Designation	Amphenol Designation
1	5 Pin Audio plug connector with crimp sleeve terminal & molded strain relief (Not supplied)	M55116/5-X	164-182-X
2	6 Pin Audio plug connector with crimp sleeve terminal & molded strain relief (Not supplied)	M55116/6-X	164-182-6-X

Dash no-X	Cable diameter
-0	N/A
-1	4.19 ± 0.25
-2	5.79 ± 0.25
-3	6.35 ± 0.25
-4	7.36 ± 0.25
-5	8.12 ± 0.25

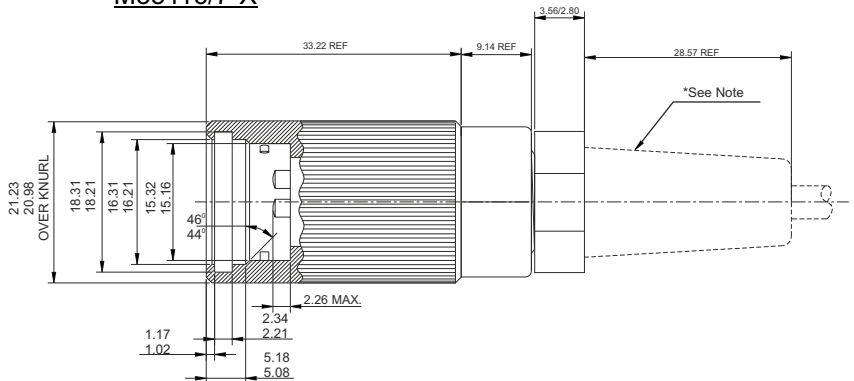
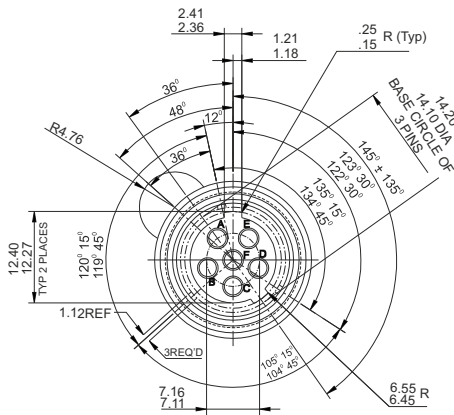
X Stands for the Cable size accommodation, is identified by a dash number as shown in above table. This number indicates the outside diameter of the cable that the connector will accommodate.

\*Nylon molded strain relief on request

# Five & Six Pin Audio Plug Connector Solder Cup Terminal



**M55116/7-X**



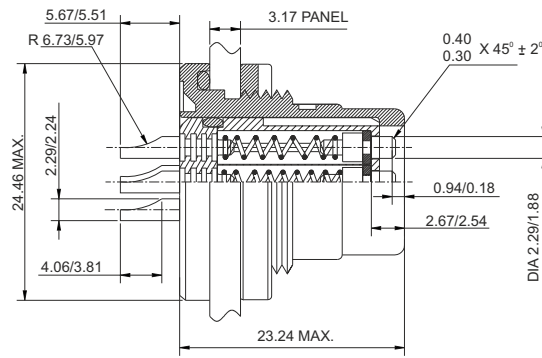
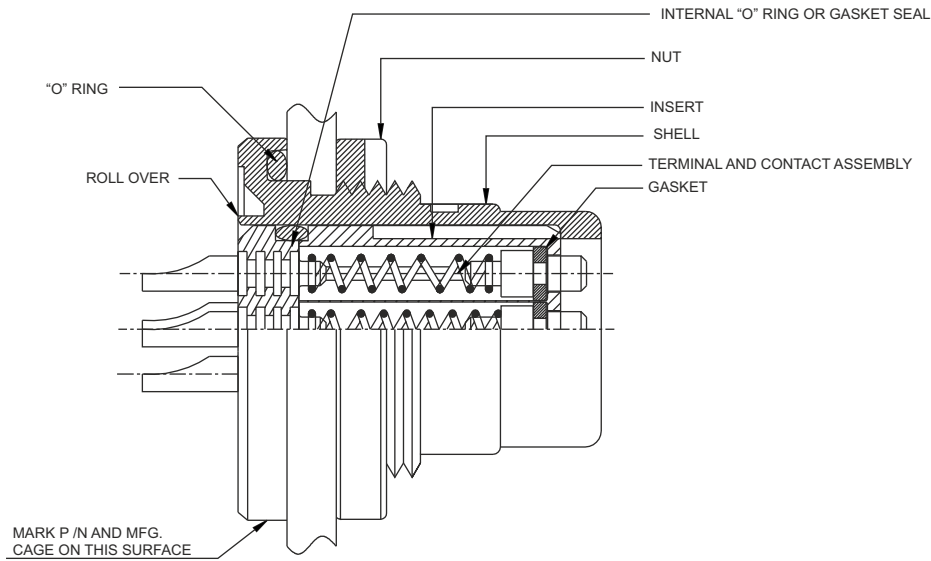
**M55116/8-X**

Sr No.	Description	MIL Designation	Amphenol Designation
1	5 Pin Audio plug connector with Solder Cup Terminal & molded strain relief (Not Supplied)	M55116/7-X	164-182-S-X
2	6 Pin Audio plug connector with Solder Cup Terminal & molded strain relief (Not Supplied)	M55116/8-X	164-182-6S-X

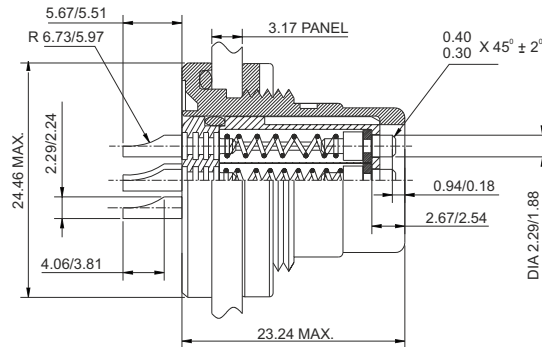
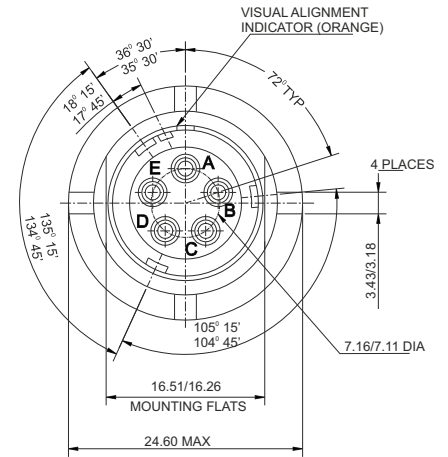
Dash no-X	Cable diameter
-0	N/A
-1	4.19 ± 0.25
-2	5.79 ± 0.25
-3	6.35 ± 0.25
-4	7.36 ± 0.25
-5	8.12 ± 0.25

X Stands for the Cable size accommodation, is identified by a dash number as shown in above table. This number indicates the outside diameter of the cable that the connector will accommodate.

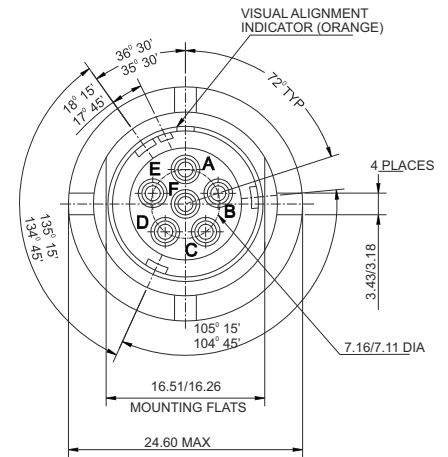
\*Nylon molded strain relief on request



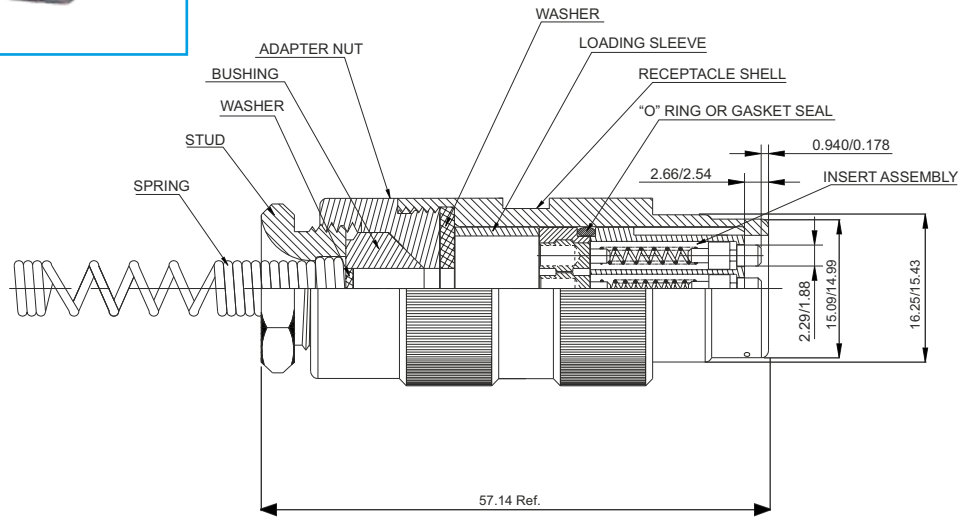
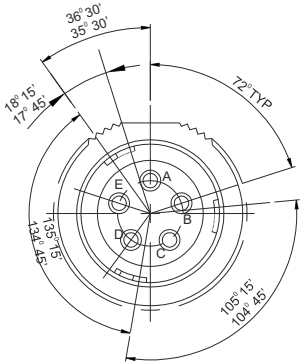
M55116/9



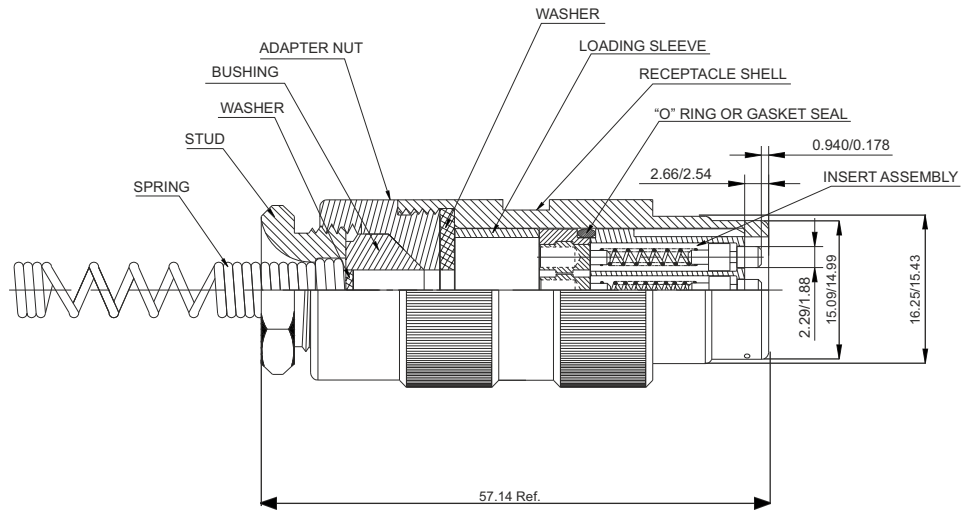
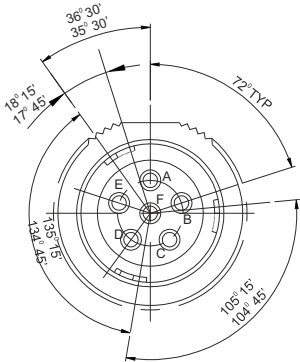
M55116/10



Sr No.	Description	MIL Designation	Amphenol Designation
1	5 Pin Audio Receptacle with solder cup terminal, Panel Mount	M55116/9	164-183
2	6 Pin Audio Receptacle with solder cup terminal, Panel Mount	M55116/10	164-183-6



M55116/11-X



M55116/12-X

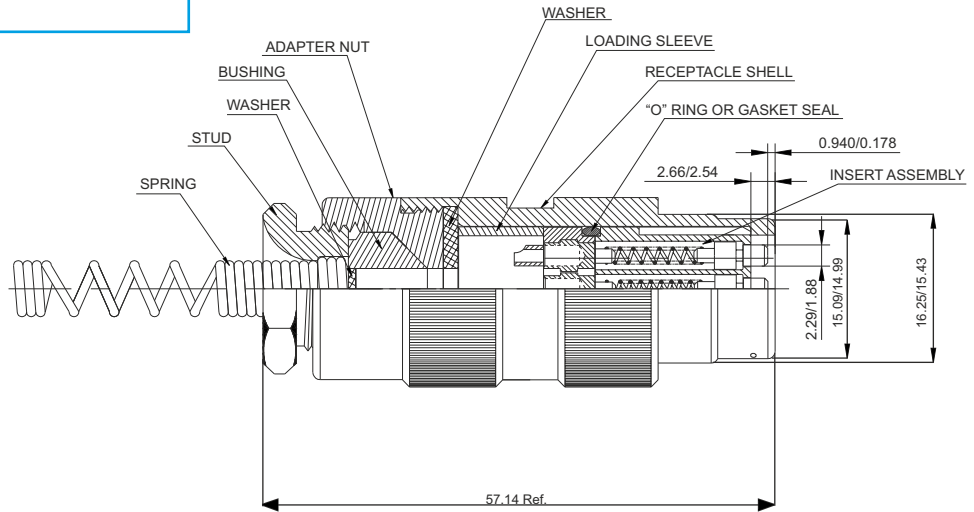
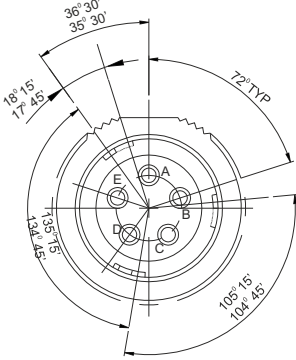
Sr No.	Description	MIL Designation	Amphenol Designation
1	5 Pin Audio Receptacle with Crimp sleeve terminal & wire strain relief	M55116/11-X	164-228-X
2	6 Pin Audio Receptacle with Crimp sleeve terminal & wire strain relief	M55116/12-X	164-228-6-X

Dash no-X	Cable diameter
-0	N/A
-1	4.19 ± 0.25
-2	5.79 ± 0.25
-3	6.35 ± 0.25
-4	7.36 ± 0.25
-5	8.12 ± 0.25

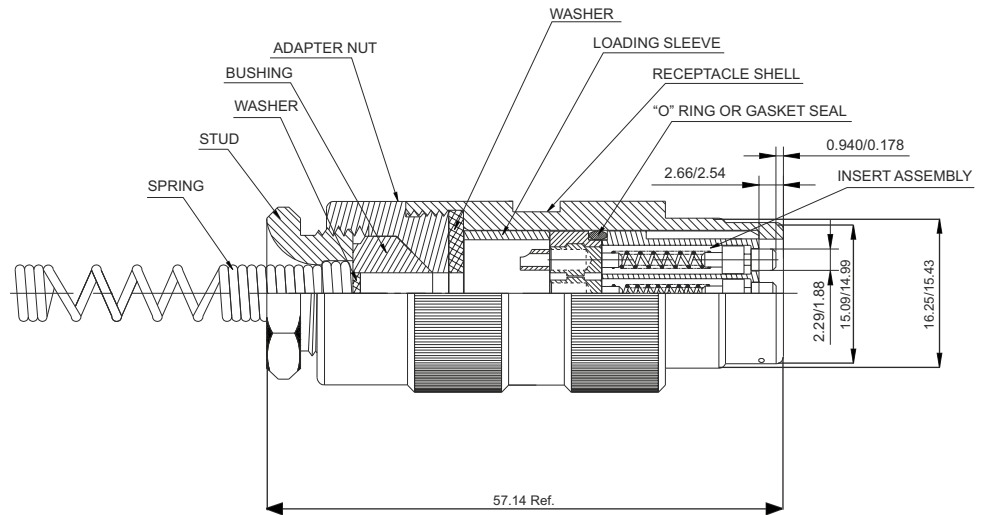
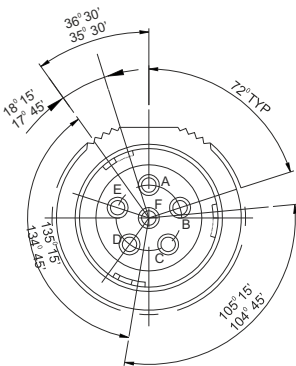
X Stands for the Cable size accommodation, is identified by a dash number as shown in above table. This number indicates the outside diameter of the cable that the connector will accommodate.

# F

## ive & Six Pin Audio Receptacle Connector Solder Cup Terminal



M55116/13-X



M55116/14-X

Sr No.	Description	MIL Designation	Amphenol Designation
1	5 Pin Audio Receptacle with solder cup terminal & wire strain relief	M55116/13-X	164-228-S-X
2	6 Pin Audio Receptacle with solder cup terminal & wire strain relief	M55116/14-X	164-228-6S-X

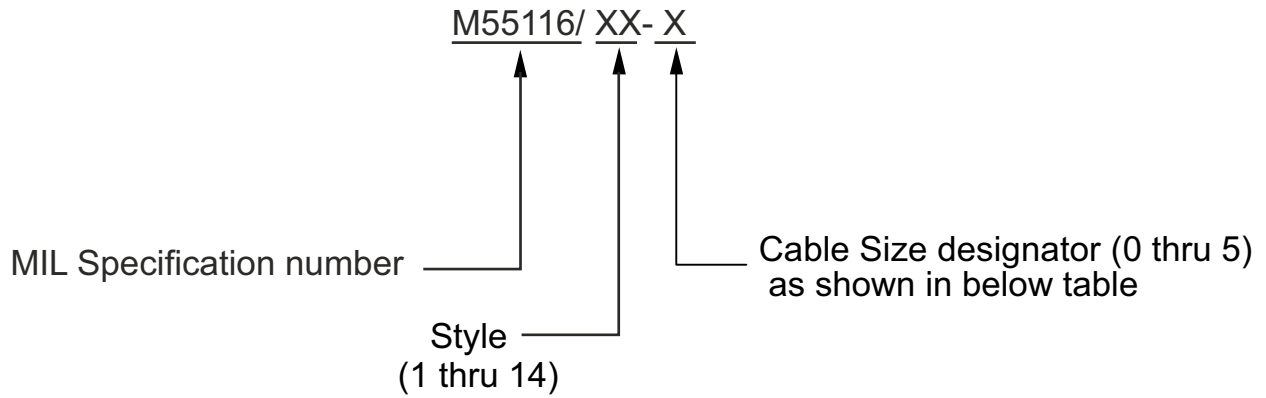
Dash no-X	Cable diameter
-0	N/A
-1	4.19 ± 0.25
-2	5.79 ± 0.25
-3	6.35 ± 0.25
-4	7.36 ± 0.25
-5	8.12 ± 0.25

X Stands for the Cable size accommodation, is identified by a dash number as shown in above table. This number indicates the outside diameter of the cable that the connector will accommodate.



# List of Qualified Part Numbers

Sr. No.	MIL Specification Designation	Amphenol Designation
1	M55116/1-1	164-229-1
2	M55116/1-2	164-229-2
3	M55116/1-3	164-229-3
4	M55116/1-4	164-229-4
5	M55116/1-5	164-229-5
6	M55116/2-1	164-229-6-1
7	M55116/2-2	164-229-6-2
8	M55116/2-3	164-229-6-3
9	M55116/2-4	164-229-6-4
10	M55116/2-5	164-229-6-5
11	M55116/3-1	164-229-S-1
12	M55116/3-2	164-229-S-2
13	M55116/3-3	164-229-S-3
14	M55116/3-4	164-229-S-4
15	M55116/3-5	164-229-S-5
16	M55116/4-1	164-229-6S-1
17	M55116/4-2	164-229-6S-2
18	M55116/4-3	164-229-6S-3
19	M55116/4-4	164-229-6S-4
20	M55116/4-5	164-229-6S-5
21	M55116/5-1	164-182-1
22	M55116/5-2	164-182-2
23	M55116/5-3	164-182-3
24	M55116/5-4	164-182-4
25	M55116/5-5	164-182-5
26	M55116/6-1	164-182-6-1
27	M55116/6-2	164-182-6-2
28	M55116/6-3	164-182-6-3
29	M55116/6-4	164-182-6-4
30	M55116/6-5	164-182-6-5
31	M55116/7-1	164-182-S-1
32	M55116/7-2	164-182-S-2
33	M55116/7-3	164-182-S-3
34	M55116/7-4	164-182-S-4
35	M55116/7-5	164-182-S-5
36	M55116/8-1	164-182-6S-1
37	M55116/8-2	164-182-6S-2
38	M55116/8-3	164-182-6S-3
39	M55116/8-4	164-182-6S-4
40	M55116/8-5	164-182-6S-5
41	M55116/9	164-183
42	M55116/10	164-183-6
43	M55116/11-1	164-228-1
44	M55116/11-2	164-228-2
45	M55116/11-3	164-228-3
46	M55116/11-4	164-228-4
47	M55116/11-5	164-228-5
48	M55116/12-1	164-228-6-1
49	M55116/12-2	164-228-6-2
50	M55116/12-3	164-228-6-3
51	M55116/12-4	164-228-6-4
52	M55116/12-5	164-228-6-5
53	M55116/13-1	164-228-S-1
54	M55116/13-2	164-228-S-2
55	M55116/13-3	164-228-S-3
56	M55116/13-4	164-228-S-4
57	M55116/13-5	164-228-S-5
58	M55116/14-1	164-228-6S-1
59	M55116/14-2	164-228-6S-2
60	M55116/14-3	164-228-6S-3
61	M55116/14-4	164-228-6S-4
62	M55116/14-5	164-228-6S-5



Dash no-X	Cable diameter
-0	N/A
-1	4.19 ± 0.25
-2	5.79 ± 0.25
-3	6.35 ± 0.25
-4	7.36 ± 0.25
-5	8.12 ± 0.25

Note : Standard plug connector supplied with nylon over molding. For Stainless Steel version please add prefix S01 at the end of part number ordering information.

# Special Products

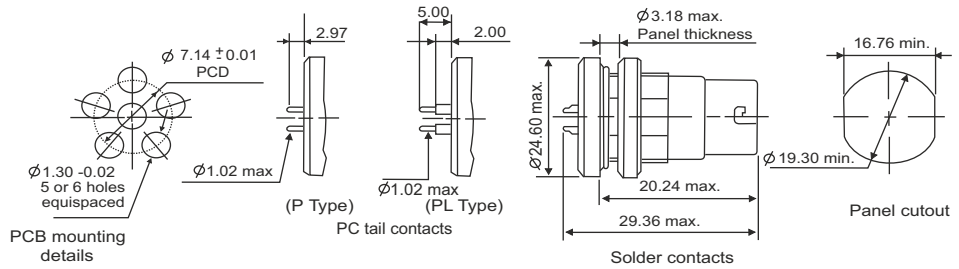
## Receptacles With PC Tail Contacts



Barrel Rigid Contact  
(Crimp Sleeve Terminal)



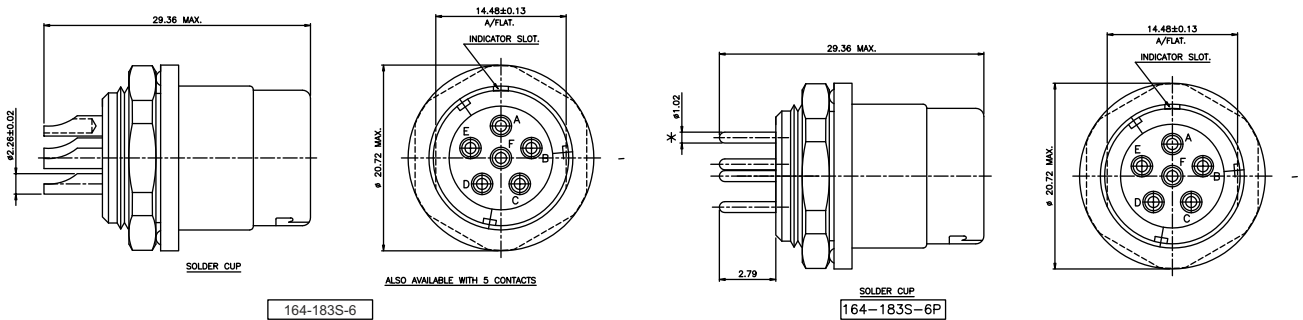
Solder Rigid Contact  
(Solder Cup Terminal)



All dimensions in mm

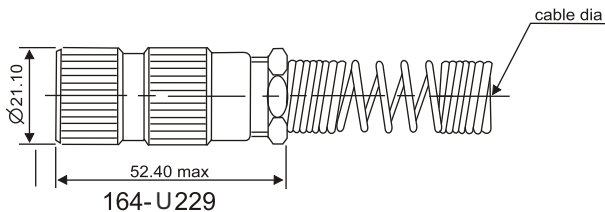
Part Number	No. of Contacts	Contact Type	Mates With
164-183-P	5	PC tail spring loaded	164-229, 164-229-S, 164-182
164-183-PL	5	PC tail spring loaded	164-182-S, 164-182-L, 164-182-LS
164-183-6P	6	PC tail spring loaded	164-229-6, 164-229-6S, 164-182-6
164-183-6PL	6	PC tail spring loaded	164-182-6S, 164-182-6L

## Rear Mount Receptacles 6 Pins



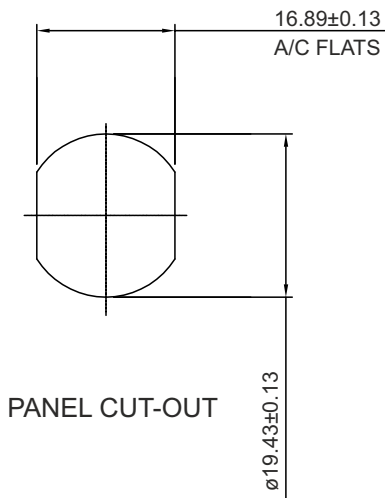
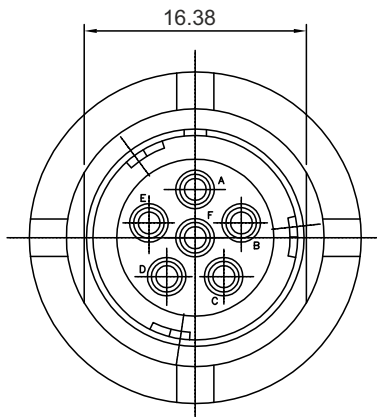
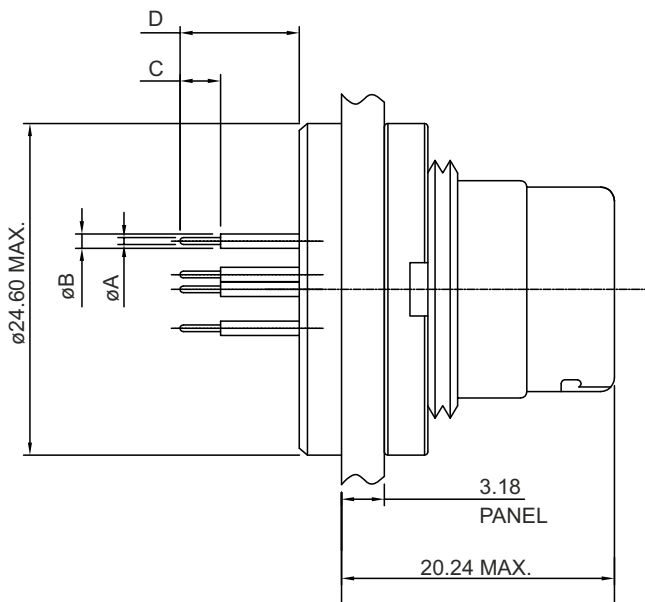
Note: For 5 Pin Connector Contact Factory

## Plug Connector Without Nylon Overmoulded



Part Number	No of contact	Contact Type	Dash no-X	Cable diameter
164-U229-X	5	Barrel Rigid	-0	N/A
164-U229-S-X	5	Solder Rigid	-1	4.19 $\pm$ 0.25
164-U229-6-X	6	Barrel Rigid	-2	5.79 $\pm$ 0.25
164-U229-6S-X	6	Solder Rigid	-3	6.35 $\pm$ 0.25
			-4	7.36 $\pm$ 0.25
			-5	8.12 $\pm$ 0.25

### 164 Receptacle Connector With PC Tail Contact



164-183-5PL-XX

(FOR 5 PIN)

MODIFIER	øA	øB	C±0.50	D±0.50
NO MODIFIER	1.02	1.78	3.00	5.00
-1	1.02	2.26	2.92	4.29
-5	0.71	2.26	3.18	4.93
-8	0.71	2.26	4.78	14.99
-9	1.02	1.02	11.10	11.10
-10	0.71	2.26	5.54	6.53
-12	1.02	1.02	2.79	2.79
-13	0.71	2.26	3.81	11.10
-14	0.76	0.76	3.05	3.05
-15	0.71	2.26	3.56	9.91
-16	1.02	1.02	18.90	18.90
-20	0.76	0.76	14.33	14.33
-21	1.02	1.02	2.79	2.79
-22	0.65	2.25	3.10	5.00
-23	1.02	1.78	2.00	5.00

164-183-6PL-XX

(FOR 6 PIN)

MODIFIER	øA	øB	C±0.50	D±0.50
NO MODIFIER	1.02	1.78	3.00	5.00
-1	1.02	2.26	2.92	4.29
-2	1.02	1.02	11.10	10.10
-8	0.71	2.26	4.78	14.99
-9	0.71	2.26	3.18	4.93
-10	0.71	2.26	5.54	6.53
-12	1.02	1.02	2.79	2.79
-13	0.71	2.26	3.81	11.10
-14	0.76	0.76	3.05	3.05
-15	0.71	2.26	3.56	9.91
-16	1.02	1.02	18.90	18.90
-20	0.76	0.76	14.33	14.33
-21	1.02	1.02	2.79	2.79
-22	0.65	2.25	3.10	5.00
-23	1.02	1.78	2.00	5.00

Note: Consult Factory For Other Pcb Termination Styles And Availability



## Filtered Audio Receptacle Connector

Connector Meets All Requirement Of MIL-C-55116/5081

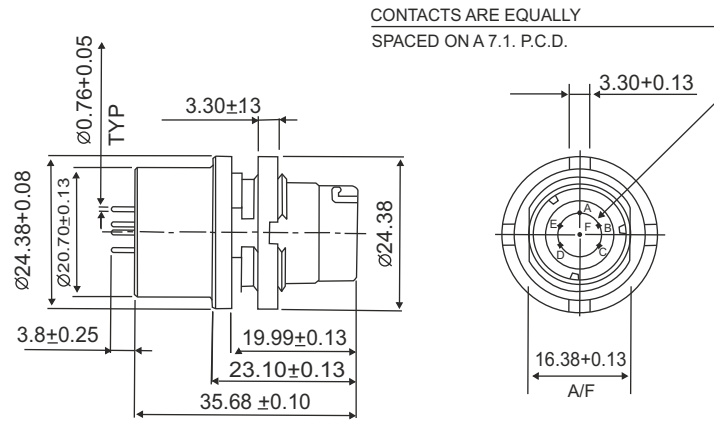
### Filter Specifications:

Capacitance ( 1KHz, 25° )	:8000PF TYP
Insertion Loss (TYP.) (MIL-STD-220, No Load 25°)	:1Mhz - 4dB :10Mhz - 25dB :50Mhz - 60dB
Working Voltage	:100DVC
Dielectric Voltage Breakdown	:300VDC
Insulation Resistance (100VDC, 25° C)	:10000 Mohms Min.
RF Current	:0.25 A Max.

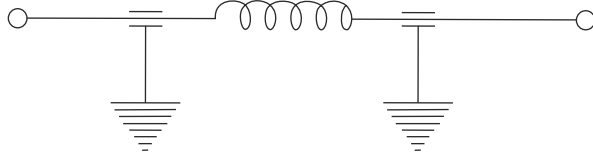
### Method Of Designation

Connector Number	Description	No. Of Contacts	Contact Termination
164F-1836B-527	164 Filtered Audio Receptacle Connector	6	PC Tail
164F-1835B-527	164 Filtered Audio Receptacle Connector	5	PC Tail

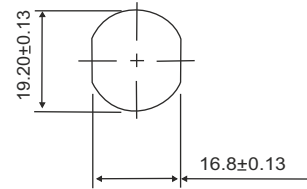
164F-1836B -527 Filtered Audio Receptacle Connector



SCHEMATIC DIAGRAM OF 'PI' FILTER



PANEL CUTOUT



## 164F - 1836B -527 Filtered Audio Receptacle Connector

### Specifications (Technical Data):

### Materials

Shell and Panel Nut	: Stainless Steel
Contacts	: Copper Alloy
Insulator	: Diallyl Pthalate Per MIL-M-14 Type MDG/Polyethersulfone

### Finish Colour

Shell and Panel Nut	: Sand blasted and Passivated
Contacts	: 0.75 $\mu$ Thick Gold Plate Over Nickel Undercoat 2.54 $\mu$
Insulator	: Blue/Black

### Electrical Properties

Operating Voltage	: 60V Max. Potential
Current Rating	: 0.5A Max.
Dielectric Breakdown	: 300V DC
Insulation Resistance	: 1000M Ohms
Contact Resistance(Mated)	: 0.050 Ohms Max.

### Mechanical Properties

Air Pressure	: 2.5 P.S.I.
Water Immersion	: 48 Hrs. At 6 Feet
Durability	: 3000 Cycles Mate & Unmate

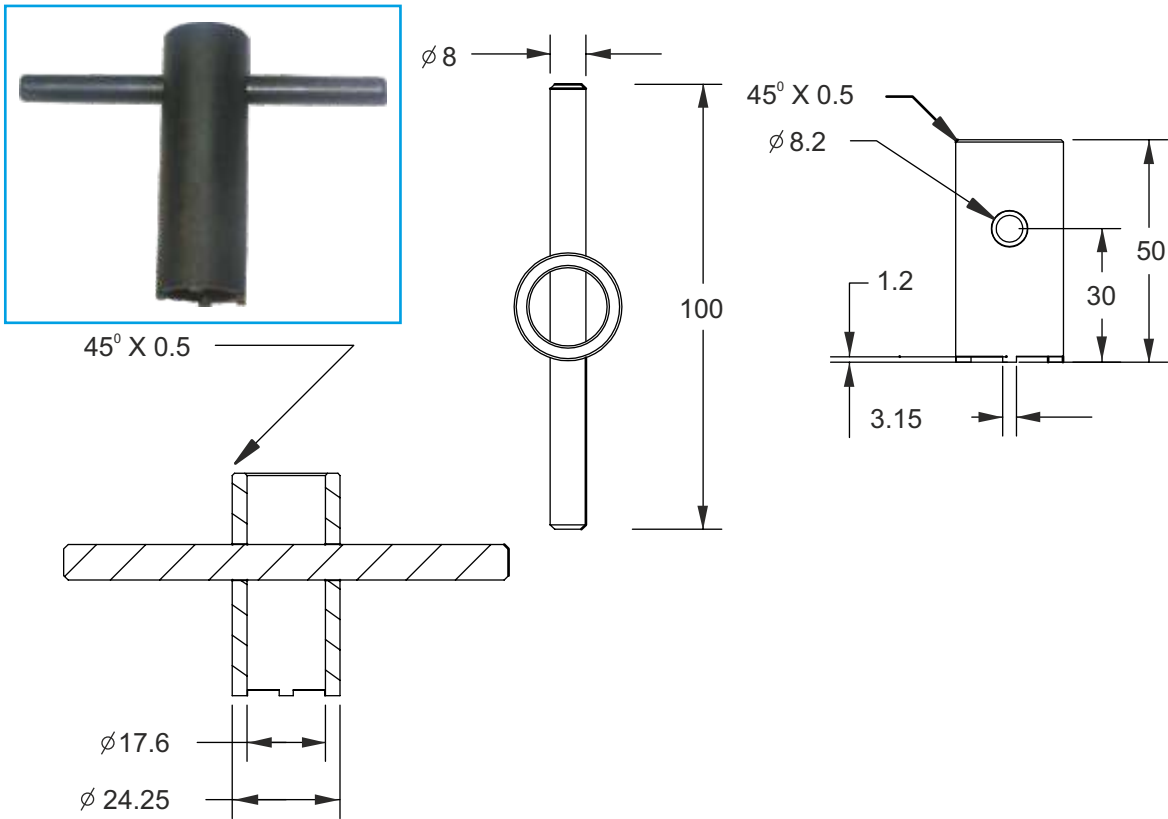
Operating Temperature Range: -55<sup>o</sup> C TO 85<sup>o</sup> C

Amphenol 164 F-1836B-527 Receptacle Mates With:

Amphenol 164-229-6 & 164-229

Amphenol 164-229-6S & 164-229-S

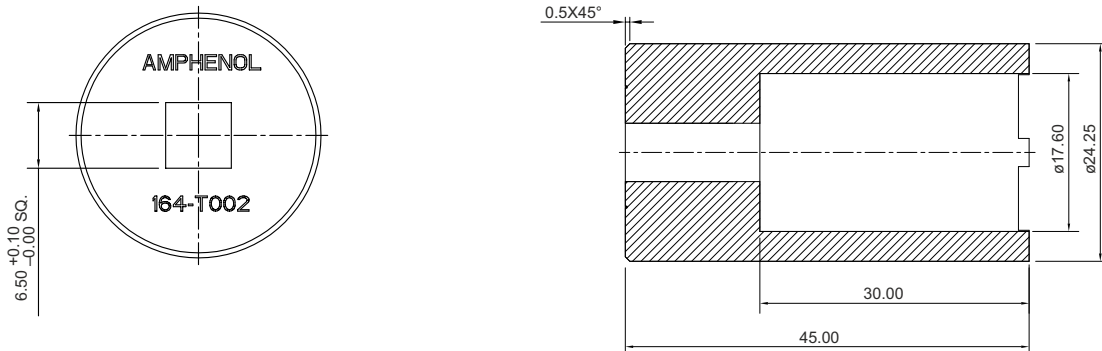
**Tightening Spanner (164-T001)**  
(Panel Nut Tightening For 164-183 Connector)



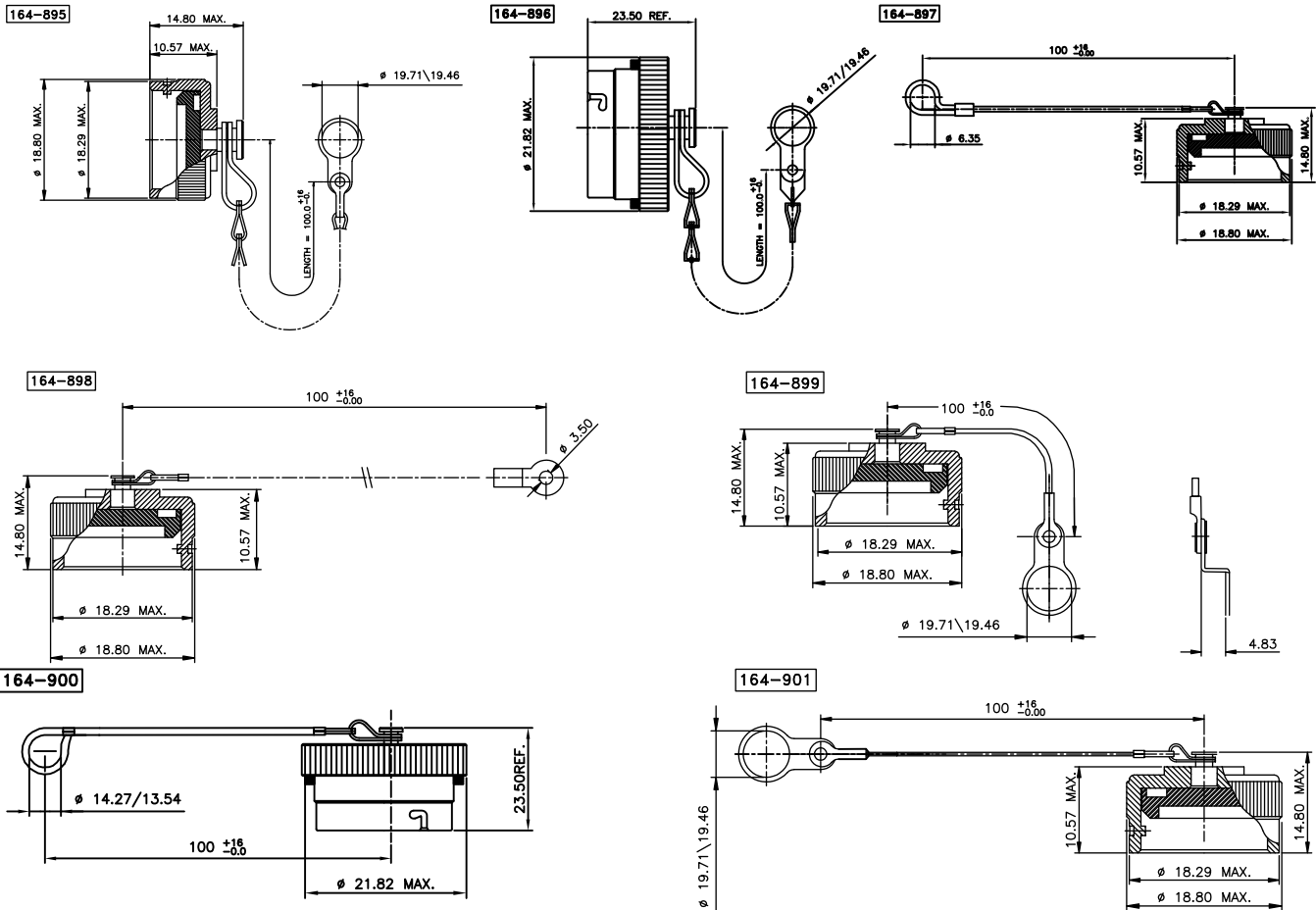
**Tightening Spanner (164-T002)**  
(Panel Nut Tightening For 164-183 Connector - Torque Wrench Provision)



Ordering Part No. - 164- T002



Accessories - Caps For 5 & 6 Pin Connectors



ORDERING INFORMATION FOR 164 DUST CAP

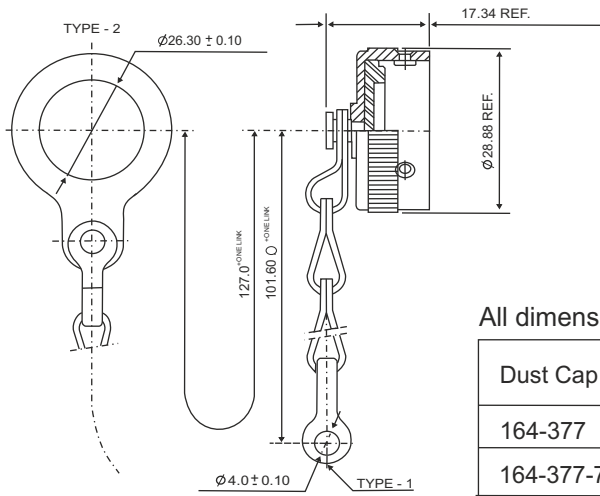
- Series Designation 164 MIL 55116 Audio Connector Caps  
 Shell Style 895
- 895:-Receptacle dust caps for 5 & 6 pin audio connector with chain & solid ring
  - 896:-Plug dust caps for 5 & 6 pin audio connector with chain & solid ring
  - 897:-Receptacle dust caps for 5 & 6 pin audio connector with nylon rope & loop
  - 898:-Receptacle dust caps for 5 & 6 pin audio connector with nylon rope & SS lug
  - 899:-Receptacle dust caps for 5 & 6 pin audio connector with SS rope & lug
  - 900:-Plug caps for 5 & 6 pin audio connector with SS rope & loop
  - 901:-Receptacle dust caps for 5 & 6 pin audio connector with nylon rope & solid ring

- Finish CD  
 Special Deviation for length for standard none for Non std. mention length in mm LXX
- Standard Black anodic caps
  - CD - Cadmium olive green finish
  - 622 - Zn Co olive green finish
  - 624 - Zn Co black finish

MATERIAL	
Cover	: Machined Alluminium Alloy
Gasket	: Silicon elastomer
Chain	: Stainless steel passivated
Ring	: Stainless steel passivated
SS Rope	: Stainless steel teflon coated
Rope	: Nylon (olive green)
Fastners	: Stainless steel passivated



Dust Cap for 10 Pin Receptacle



All dimensions in mm

Table 1

Dust Cap No.	Link Type	Cap Finish
164-377	Type -2	Black Anodised
164-377-714	Type-2	Cadmium Plate with Electroless Under Coat
164-377-01	Type-1	Black Anodised
164-377-01-714	Type-1	Cadmium Plate with Electroless Under Coat

## Specifications:

### 1. Materials & Finish

Receptacle Shell	: Stainless Steel, passivated, sand blasted
Plug Shell	: Stainless Steel, black passivated
Rear Shell	: Aluminium alloy, black oxide : Zinc Black for shielded
Inserts	: Diallylphthalate as per MIL-M-14F, type MDG
Contacts	: Copper Alloy, Gold plated .000030 In
Panel Nuts	: Stainless Steel, passivated sand blasted

### 2. Mechanical Properties

Durability	: 3000 Cycles Min.
Air Pressure	: 2.5psi.
Immersion	: 48 Hrs at 6 ft.

### 3. Electrical Performance

Dielectric Strength	: 500 vRms
Insulation Resistance	: 1000 Megha Ohms Min.
Contact Resistance (mated)	: .015 Ohms (Max.)

### 4. Reference Standard

MIL-C-10544

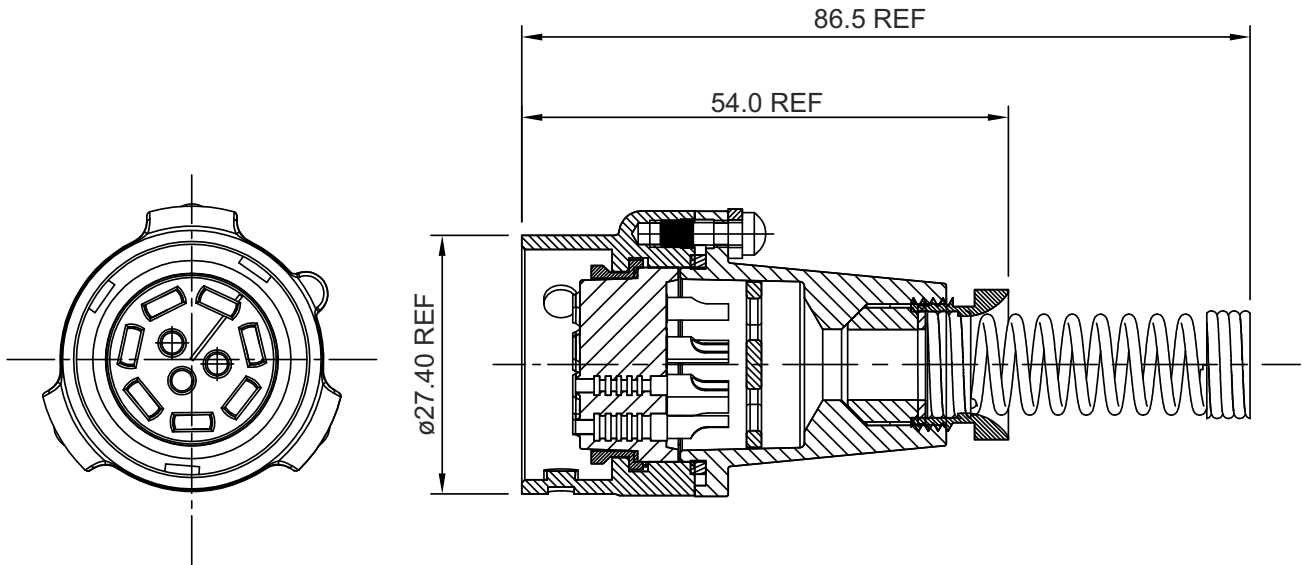
### 5. Environmental

Operating Temperature :- -55°C to +85°C

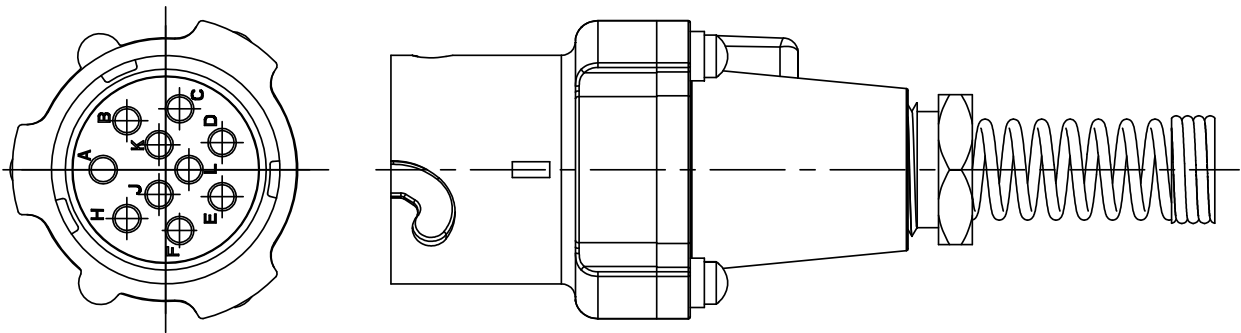
### 6. Ordering Information

SL. NO.	MIL PART NUMBER	AMPHENOL PART NUMBER	CONNECTOR	NO. OF CONTACTS	TYPE OF TERMINATION	REAR SHELL DESIGN
1	U-77()/U	164-77/U	PLUG	10	SOLDER POCKET	STRAIGHT
2	U-78()/U	164-78/U	PLUG	10	SOLDER POCKET	STRAIGHT
3	U-79()/U	164-79/U	RECEPTACLE	10	SOLDER POCKET	STRAIGHT
4	U-126()/U	164-126/U*	RECEPTACLE	10	SOLDER POCKET	STRAIGHT
5	U-127()/U	164-127/U*	PLUG	10	SOLDER POCKET	RIGHT ANGLE
6	U-161()/U	164-161/U	PLUG	10	TAPER PIN	STRAIGHT

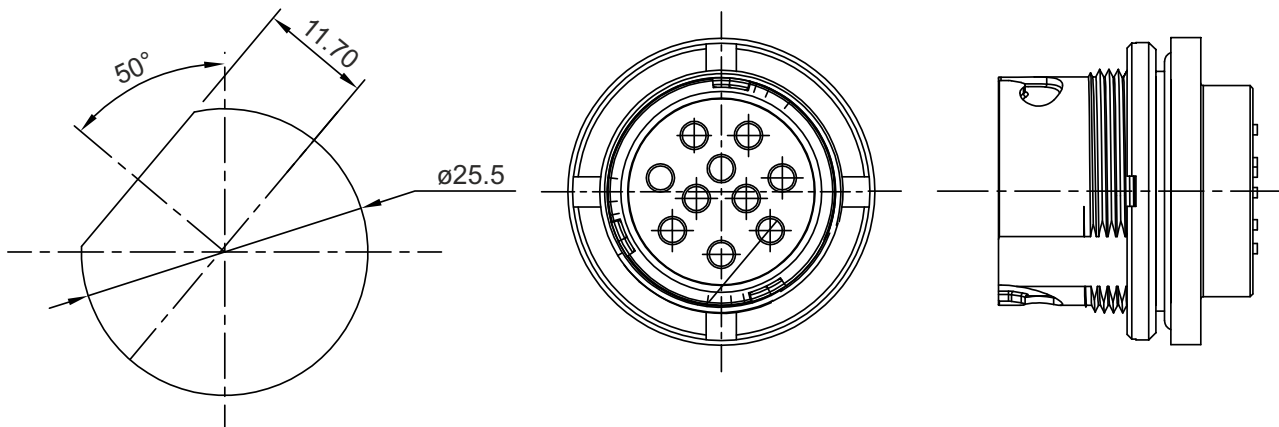
**164-77/U Plug With Rigid Contacts, Solder Pocket Terminal, Straight Rear Shell**



**164-78/U Receptacle With Non Rigid Contacts, Solder Pocket Terminal, Straight Rear Shell**

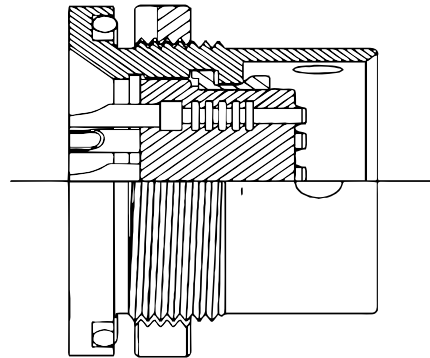


**164-79/U Panel Mount Receptacle With Non Rigid Contacts, Solder Pocket Terminal**

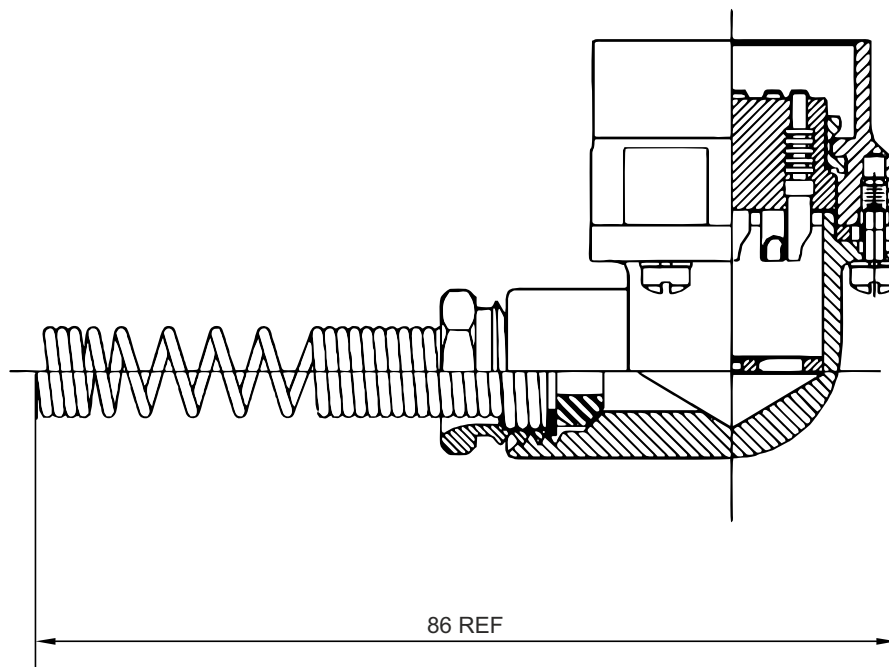


Recommended Panel Cut Out

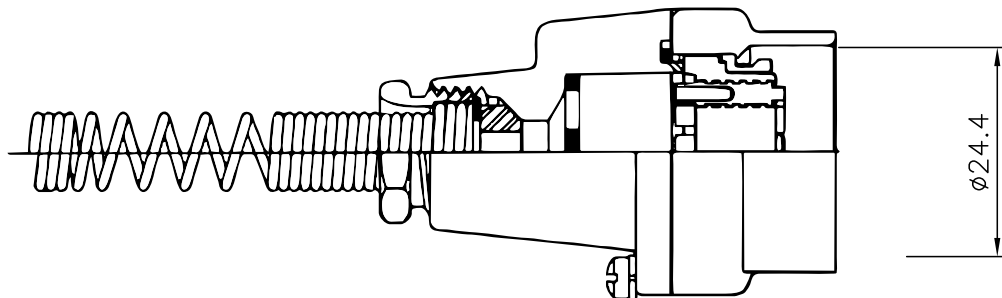
164-126/U Panel Mount Plug With Rigid Contacts, Solder Pocket Terminal

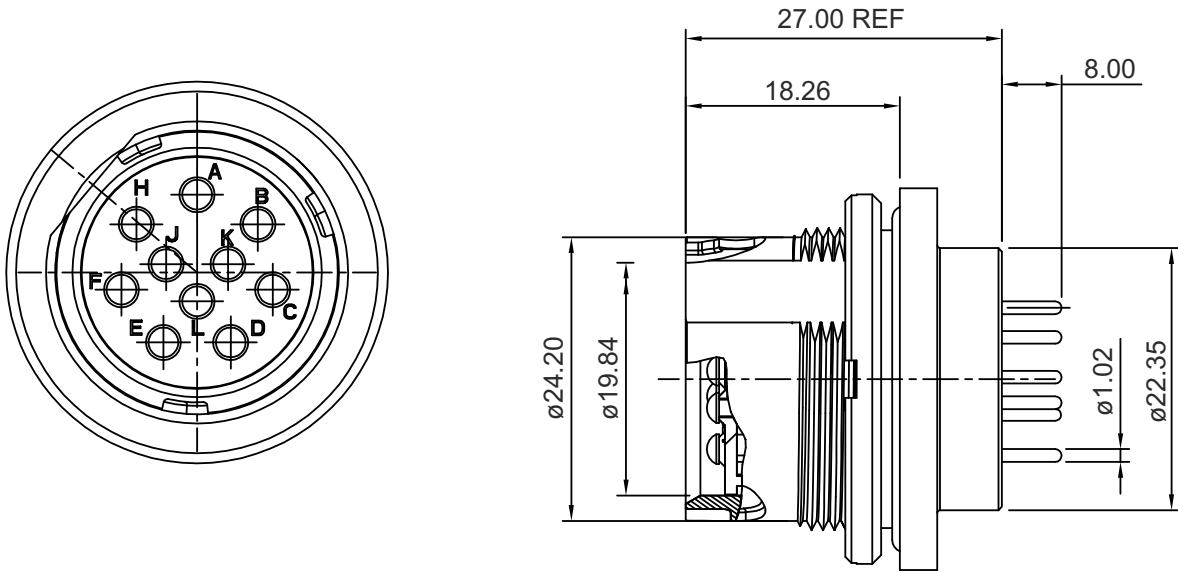


164-127/U Plug With Rigid Contacts, Solder Pocket Terminal, Right Angled Rear Shell

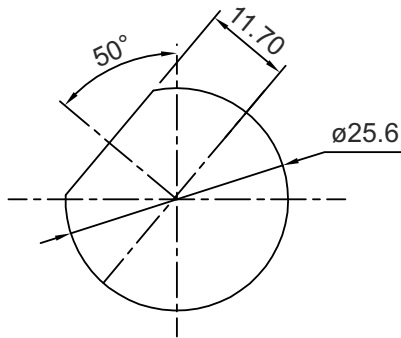


164-161/U Plug With Rigid Contacts, Solder Pocket Terminal, Right Angled Rear Shell

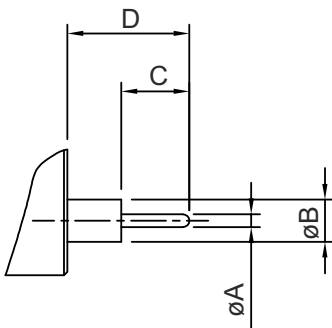




164-79/U—P PLAIN PIN DESIGN



RECOMANDED PANEL CUT OUT

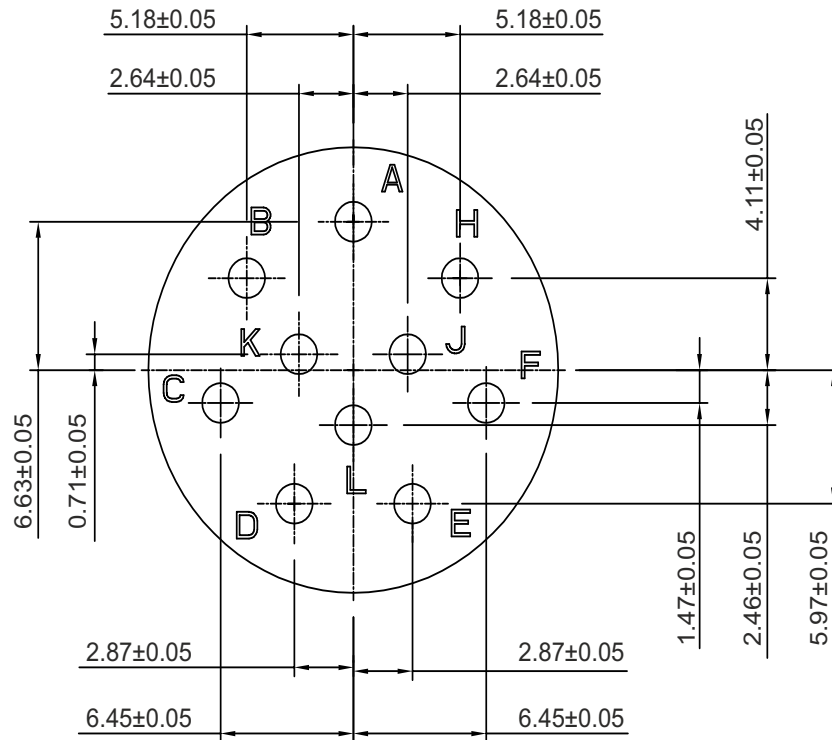


164-79/U—PL—XX STEPPED PIN DESIGN

MODIFIER(XX)	øA	øB	C	D
NO MODIFIER	1.02	1.78	3.00	5.00
-1	1.02	2.26	2.92	4.29
-2	1.02	1.02	11.10	11.10
-8	0.71	2.26	4.78	14.99
-9	0.71	2.26	3.18	4.93
-10	0.71	2.26	5.54	6.53
-12	1.02	1.02	2.79	2.79
-13	0.71	2.26	3.81	11.10
-14	0.76	0.76	3.05	3.05
-15	0.71	2.26	3.56	9.91
-16	1.02	1.02	18.90	18.90
-20	0.76	0.76	14.33	14.33
-21	1.02	1.02	2.79	2.79
-22	0.65	2.25	3.10	5.00
-23	1.02	1.78	2.00	5.00



## PCB Pin Co-ordinates



## Specifications:

### 1. Ordering Information

164—79/U—P	: Plain Pin Design
164—79/U—P	: Stepped Pin Design

### 2. Materials & Finish

Front Shell	: Stainless Steel, Sand Blasted Finish.
Spanner Nut	: Stainless Steel, Sand Blasted Finish.
Inserts	: Diallylphthalate as per MIL—M—14F, type MDG
Contacts	: Copper Alloy, Gold plated .000030 In

### 3. Mechanical Properties

Durability	: 3000 Cycles Minimum.
Air Pressure	: 2.5psi.
Immersion	: 48 Hrs at 6 ft.

### 4. Electrical Performance

Dielectric Strength	: 500 vRms
Insulation Resistance	: 1000 Megha Ohms Min
Contact Resistance (mated)	: .015 Ohms (Max)

### 5. Reference Standard

STD	: — MIL—C—10544
PART NO	: — U—79/U

Notice: All information, including illustrations given herein is believed to be accurate at the time of printing. In lieu of design advances, Amphenol reserves the right to change specifications without notice. This publication Series 164 Connectors AC16403 0118 supercedes all existing Amphenol literature on Series 164 Connectors.

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