

Introduction

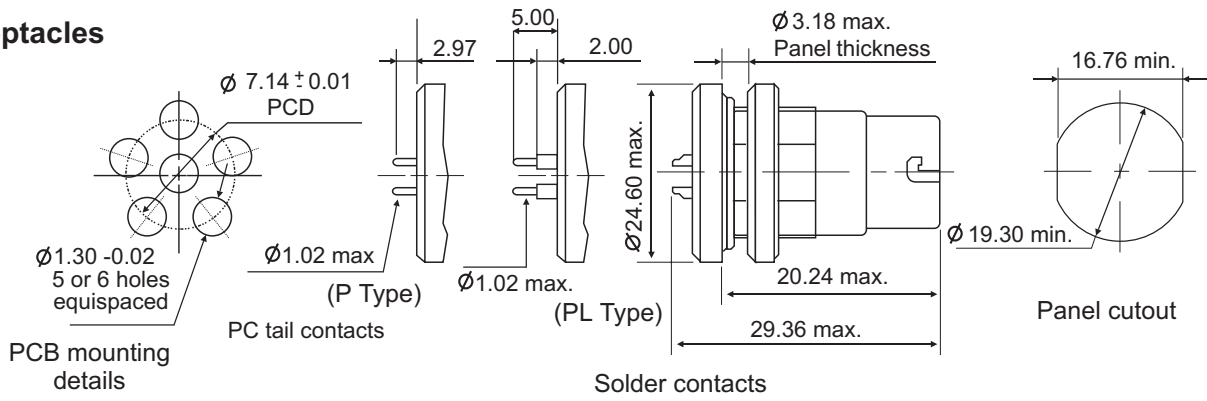
Amphenol 164 series connectors are water resistant, polarised, five and six contact electrical connectors for use in low voltage audio frequency circuits and applications. They employ three-point bayonet coupling for quick disconnect and self - wipe contact. Although designed for use in communications equipment, these versatile connectors, have been successfully adapted for use in numerous industrial, scientific and educational applications.

Amphenol 164 series connectors are designed to meet the requirements of **MIL-C-55116**. They are intermateable with all MIL-C-55116 connectors. These connectors are also approved to Indian Defence Standard Joint Services Specification **JSS 50831**, certified by the Electronic Components Standardisation Organisation (LCSO), Bangalore, India.

Specifications

Number of contacts	5 or 6	
Operating Temperature	-55°C to + 85°C	
Operating current	500 mA per contact	
Operating Voltage	60 V max.	
Contact resistance	$\leq 40 \Omega$	
Insulation resistance	$\geq 1000 M \Omega @ 100 V DC$	
Voltage proof	500 Vrms	
Sealing	0.17 kg / cm ² (2.5 PSI)	
Materials		
	Insulator	DAP
	Contact	Brass / Copper Alloy
	Shell and Nut	Stainless steel
	Contact Springs	Be-Cu
Finish		
	Contact	1.27 m gold over nickel on mating end
	Shell	Sand blasted and passivated
Durability		3000 cycles, mate and unmate

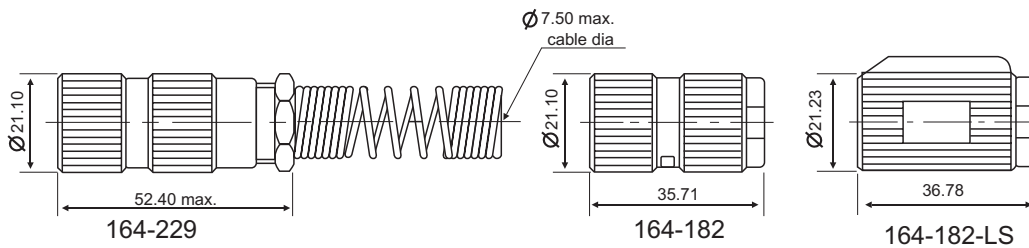
Receptacles



All dimensions in mm

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

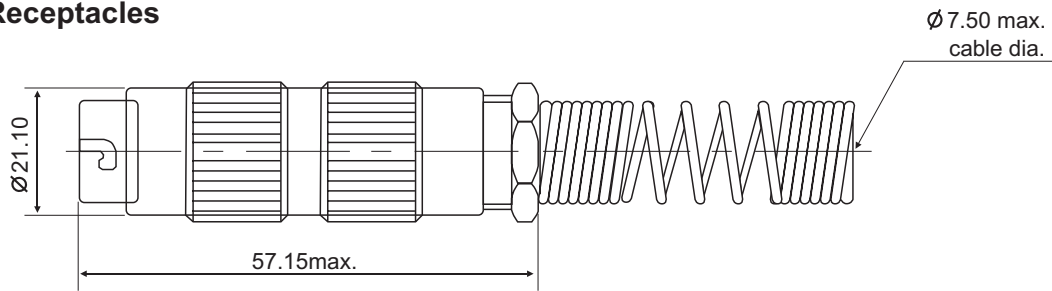
Plugs



All dimensions in mm

Part Number	No.of Contacts	Contact Type	Mates With
164-229	5	barrel rigid	164-183 164-183-P
164-229-S	5	solder rigid	
164-182	5	barrel rigid	
164-182-S	5	solder rigid	
164-182-L	5	barrel rigid	
164-229-6	6	barrel rigid	164-183-6 164-183-6P
164-229-6S	6	solder rigid	
164-182-6	6	barrel rigid	
164-182-6S	6	solder rigid	
164-182-6L	6	barrel rigid	
164-182-6LS	6	solder rigid	

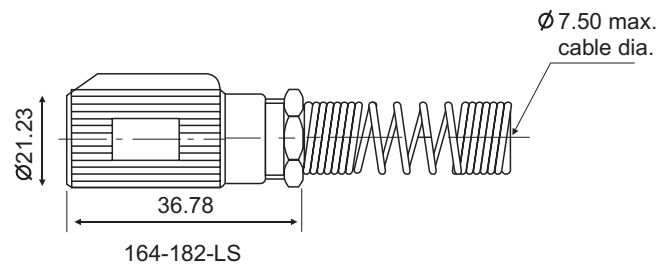
Cable Receptacles



All dimensions in mm

Part Number	No.of Contacts	Contact Type	Mates With
164-228	5	barrel spring loaded	164-229 164-229-S 164-182
164-228-S	5	solder spring loaded	164-182-S 164-182-L 164-182-LS
164-228-6	6	barrel spring loaded	164-229-6 164-229-6S
164-228-6S	6	solder spring loaded	164-182-6 164-182-6S 164-182-6L

Plug Connector With Nylon Over Moulded



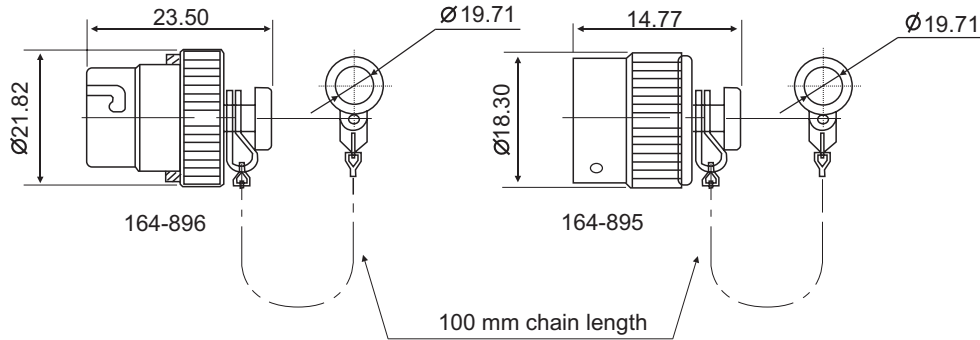
All dimensions in mm

Part Number	No.of Contacts	Contact Type	Mates With
164-229-LS	5	solder rigid	164-183
164-229-6-L	6	barrel rigid	164-183-6
164-229-6LS	6	solder rigid	164-183-6

Accessories

Cap And Chain

These cap and chain assemblies are used with 5 and 6 pin connectors as protective covers giving additional protection against moisture, dust and sand. The caps are manufactured from aluminium and black anodised. The chain is manufactured from stainless steel and is passivated

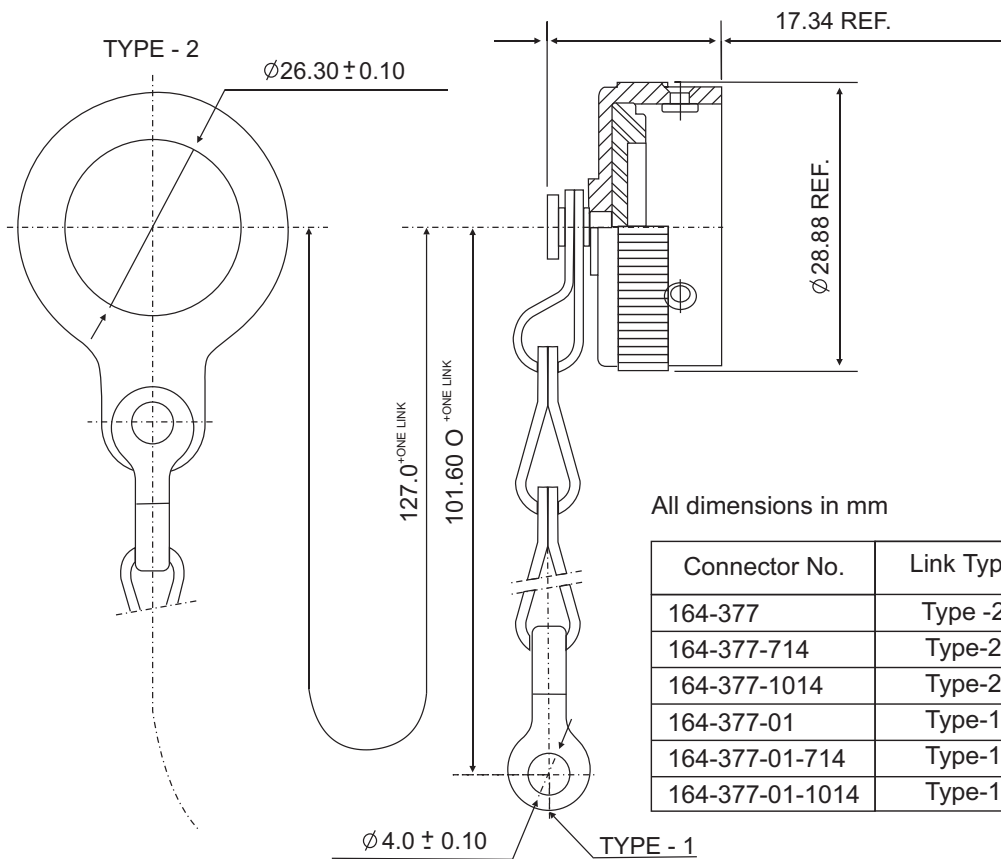


All dimensions in mm

Item	Part Number	For Connector
Recp. Dust Cap	164-895	164-183, 164-228
Plug Dust Cap	164-896	164-229, 164-182

Cap and chain for ten pin waterproof audio receptacles (U-79/U)

Part no. 164-377 xxxx (For Plating and End - link styles refer table 1 below)

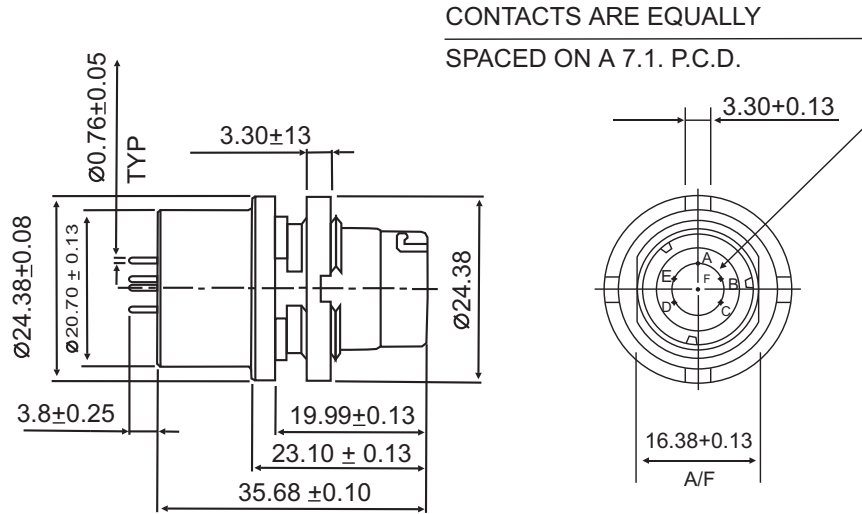


All dimensions in mm

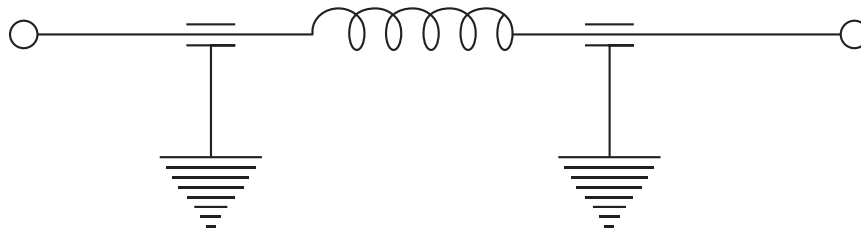
Table 1

Connector No.	Link Type	Cap Finish
164-377	Type -2	Black Anodised
164-377-714	Type-2	Cadmium Plate with Electroless Under Coat
164-377-1014	Type-2	Cadmium Plate with Olive Drab Finish
164-377-01	Type-1	Black Anodised
164-377-01-714	Type-1	Cadmium Plate with Electroless Under Coat
164-377-01-1014	Type-1	Cadmium Plate with Olive Drab Finish

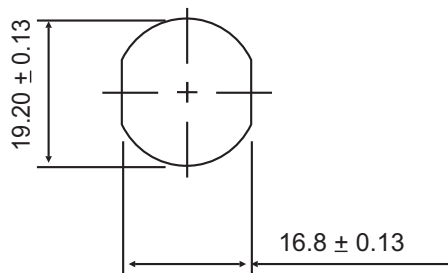
164 - 1836B - 527 Filtered Audio Receptacle Connector



SCHEMATIC DIAGRAM OF 'Pi' FILTER



PANEL CUTOUT



164 - 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 & Passivated
Contacts	:0.80 μ Thick Gold Plate Over Nickel Undercoat 2.54 μ
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)	:0.04 Ohms Max.

MECHANICAL PROPERTIES

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

OPERATING TEMPERATURE RANGE : - 55°C TO 85°C**AMPHENOL 164 F-1836B-527 RECEPTACLE MATES WITH:**

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

164 - 1836B - 527 Filtered Audio Receptacle Connector**CONNECTOR MEETS ALL REQUIREMENT OF MIL-C-55116/JSS 50831****FILTER SPECIFICATIONS:**

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

ALL PINS ARE FILTERED**METHOD OF DESIGNATION**

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

DIMENSIONS ARE FOR REFERENCE ONLY. OTHERWISE SPECIFIED.

Notes :

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 164 Series Waterproof Audio Connectors supercedes all existing Amphenol literature on 164 series connectors.