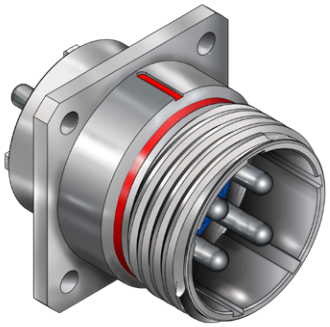
Square Flange Receptacles

970-008 Square Flange PC Tail Receptacle, #8 Contacts



970-008 square flange receptacle has printed circuit terminals. Available for insert arrangements with size #8 contacts. Terminals are non-removable and are sealed with RTV silicone. Coupling threads are triple-start ACME quick-disconnect. Optional self-locking clinch nuts for easier installation. PowerTrip connectors feature low resistance LouverBand contacts and are designed to withstand extreme environments.

- Quick-disconnect, high shock, high vibration, self-locking connector
- 2000 VAC (DWV)
- -65° to +200 °C
- Plug has EMI ground spring
- Crimp, rear-release contacts
- Advanced IP68+ sealing

RATINGS

Voltage (DWV): 2000 Volts AC
Current: Size 16 contact 13 amps
Size 12 contact 23 amps
Size 8 contact 60 amps
Operating temperature:
Matl/Finish Codes ME, Z1: -45 to +200 °C
Codes MT,NF, TZ, ZR: -45 to +175 °C
Durability: 500 mating cycles
EMI shielding effectiveness: 65 dB min. 100 MHz to 10 GHz
Shock: 50 g
Vibration: per MIL-DTL-38999 Series III
MIL-S-901 high impact shock: Grade A
Blowing sand and dust: MIL-STD-810, method 510.5
Altitude immersion: 75,000 feet
Ingress protection: IP67
Water pressure: 6 feet, 48 hours

CONSTRUCTION

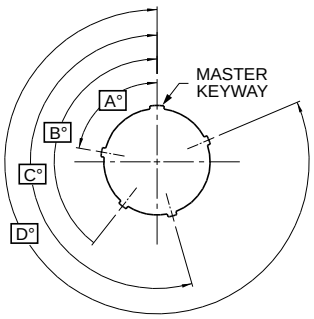
Contacts: size #8: high conductivity copper alloy, gold or silver plated.
Size #12, #16: copper alloy, gold plated
Shell: Aluminum or stainless steel, see How to Order
Insulator: Glass-filled thermoset epoxy
Interfacial seal: Fluorosilicone/silicone blend
Potting compound: RTV-3140
Clinch nuts: Stainless steel, passivated

HOW TO ORDER

Sample Part Number →	970-013	ME	20-4	P1	A	T	-1

Basic Part Number	**970-013** Square Flange Receptacle, Box Mount, with O-ring
Material/Finish	**ME** = Aluminum / Electroless Nickel **MT** = Aluminum / Nickel PTFE **NF** = Aluminum / Olive Drab Cadmium **TZ** = Aluminum / Tin-Zinc **ZR** = Aluminum / Black Zinc-Nickel **Z1** = Stainless Steel / Passivated
Shell Size-Insert Arrangement	**18-2** = (2) #8 contacts **18-4** = (2) #8 contacts, (2) #12 contacts **20-3** = (3) #8 contacts **20-4** = (4) #8 contacts **20-5** = (3) #8 contacts, (2) #12 contacts **20-7** = (3) #8 contacts, (4) #16 contacts **24-5** = (5) #8 contacts
Contact Gender and Plating	**P1** = Pin Contacts, Silver Plating* **P2** = Pin Contacts, Gold Plating **S1** = Socket Contacts, Silver Plating* **S2** = Socket Contacts, Gold Plating * Size 12 and 16 contacts are gold-plated. Size 8, 4, 1/0 and 2/0 are silver plated.
PC Tail Length	**A** = .125 (3.18) **B** = .250 (6.35) **C** = .375 (9.53)
Mounting Hole Option	**N** = Thru-Hole **T** = Clinch Nuts Installed in Mounting Holes for Back Panel Mounting
Keyway Position	**-1**, **-2**, **-3**, **-4**, **-5**, or **-6**

KEY POSITIONS



Position	A°	B°	C°	D°
1	80	142	196	293
2	135	170	200	310
3	49	169	200	244
4	66	140	200	257
5	62	145	180	280
6	79	153	197	272

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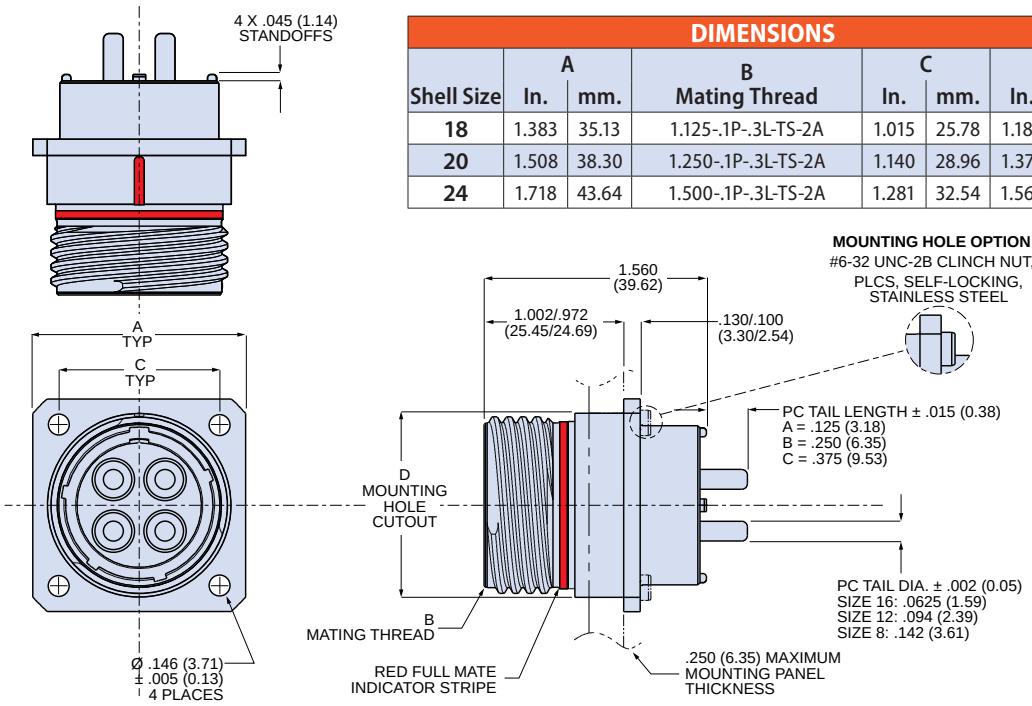
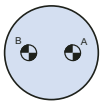
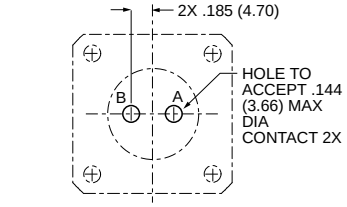
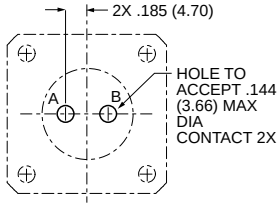
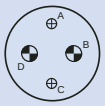
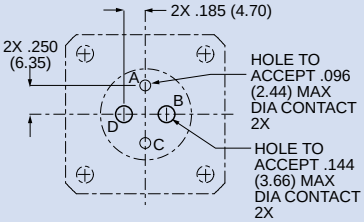
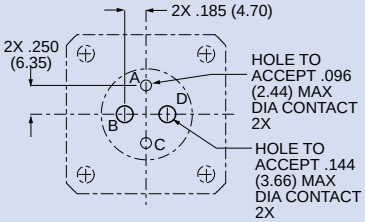
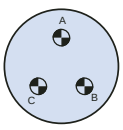
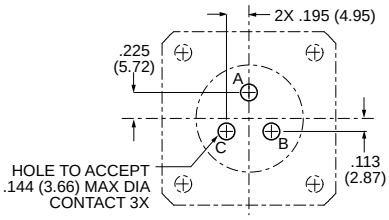
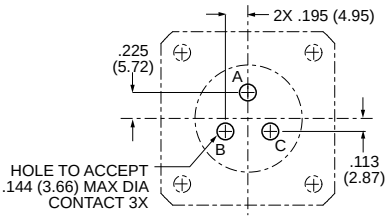


DIMENSIONS							
	A		B	C		ø D	
Shell Size	In.	mm.	Mating Thread	In.	mm.	In.	mm.
18	1.383	35.13	1.125-.1P-.3L-TS-2A	1.015	25.78	1.187	30.15
20	1.508	38.30	1.250-.1P-.3L-TS-2A	1.140	28.96	1.374	34.90
24	1.718	43.64	1.500-.1P-.3L-TS-2A	1.281	32.54	1.562	39.67

970-008 PRINTED CIRCUIT BOARD PATTERNS

Insert Arrangement	Component Mounting Side of PCB	
	Pin Connector	Socket Connector
 18-2 2 #8 Contacts		
 18-4 2 #8 Contacts, 2 #12 Contacts		
 20-3 3 #8 Contacts		

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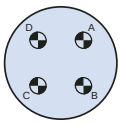
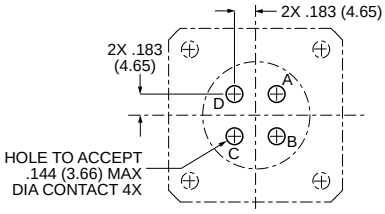
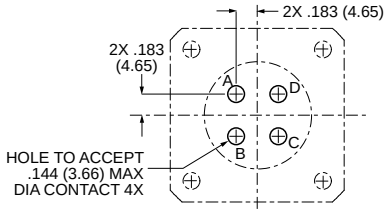
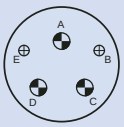
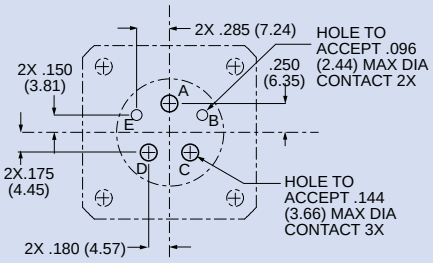
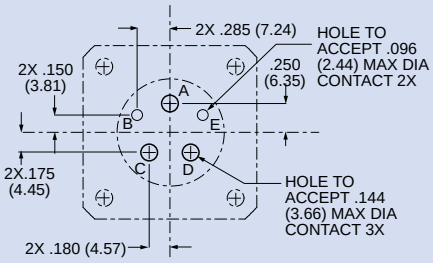
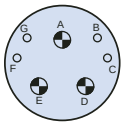
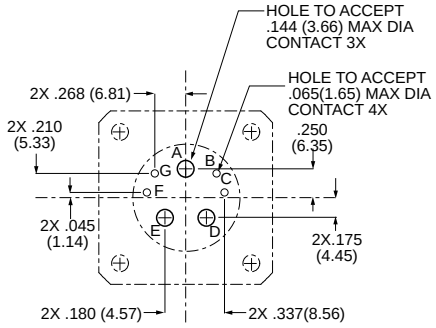
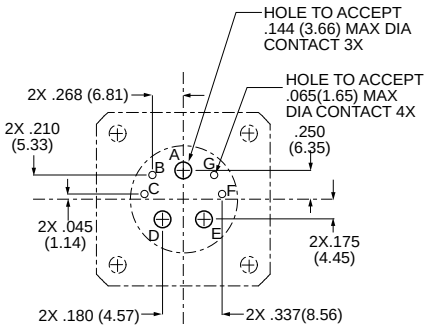
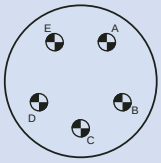
 20-4 4#8 Contacts		
 20-5 3#8 Contacts, 2 #12 Contacts		
 20-7 3#8 Contacts, 4 #16 Contacts		
 24-5 5#8 Contacts