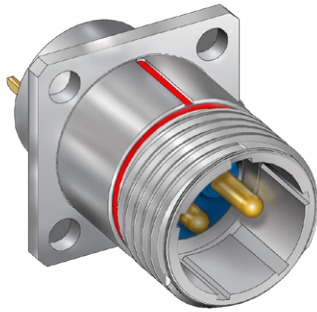




Hermetic and Filter Receptacles

970-012 Hermetic Square Flange Receptacle



970-012 hermetic receptacle has stainless steel shell, fused glass insulator and iron-nickel alloy contacts. Contacts are three types: solder cup, bus bar or lug termination. Coupling threads are triple-start ACME quick-disconnect. PowerTrip connectors feature low resistance LouverBand contacts and are designed to withstand extreme environments.

- Quick-disconnect self-locking aerospace-grade power connector
- 2000 VAC (DWV)
- -65° to +200°C
- Fused glass hermetic seal
- High shock, high vibration

HERMETIC AND FILTER RECEPTACLES

INSERT ARRANGEMENTS						
Insert Arr.	Contact Size and Quantity					
	#16	#12	#8	#4	#1/0	#2/0
18-2			2			
18-4		2	2			
20-3			3			
20-4			4			
20-5		2	3			
20-7	4		3			
24-1					1	
24-2				2		
24-3				3		
24-5			5			
24-6		4		2		
24-A1						1
24-A6		3		3		
28-12	6		6			
28-15	15					
28-4				4		
28-8		1	7			
28-9	5			4		
32-12	2		10			
32-2					2	
32-20	1	19				
32-3					3	
32-4				2	2	
32-5				5		
32-6		3			3	
32-7				7		
32-A22		22				
36-16	3		13			
36-2						2
36-4					4	
36-9	14	14	2	1		
36-A8				8		
36-B8	4				4	
40-10	16		9	4		
40-21			21			
40-5					5	

HOW TO ORDER								
Sample Part Number →		970-012	Z1	24-2	P	2	N	-1
Basic Part Number	970-012 Hermetic Square Flange Receptacle							
Material/Finish	Z1 = Stainless Steel / Passivated ZL = Stainless Steel / Electrodeposited Nickel							
Shell Size-Insert Arr.	See "Insert Arrangements" Table							
Contact Type	P = Pin Contacts, Solder Cup S = Socket Contacts, Solder Cup PA = Pin Contacts, Bus Bar* SA = Socket Contacts, Bus Bar* PC = Pin Contacts, Lug* SC = Socket Contacts, Lug* <i>* Size 12 and 16 contacts are solder cup</i>							
Contact Plating	1 = Silver 2 = Gold							
Mounting Hole Option	N = Thru-Hole							
Keyway Position	-1, -2, -3, -4, -5, or -6							

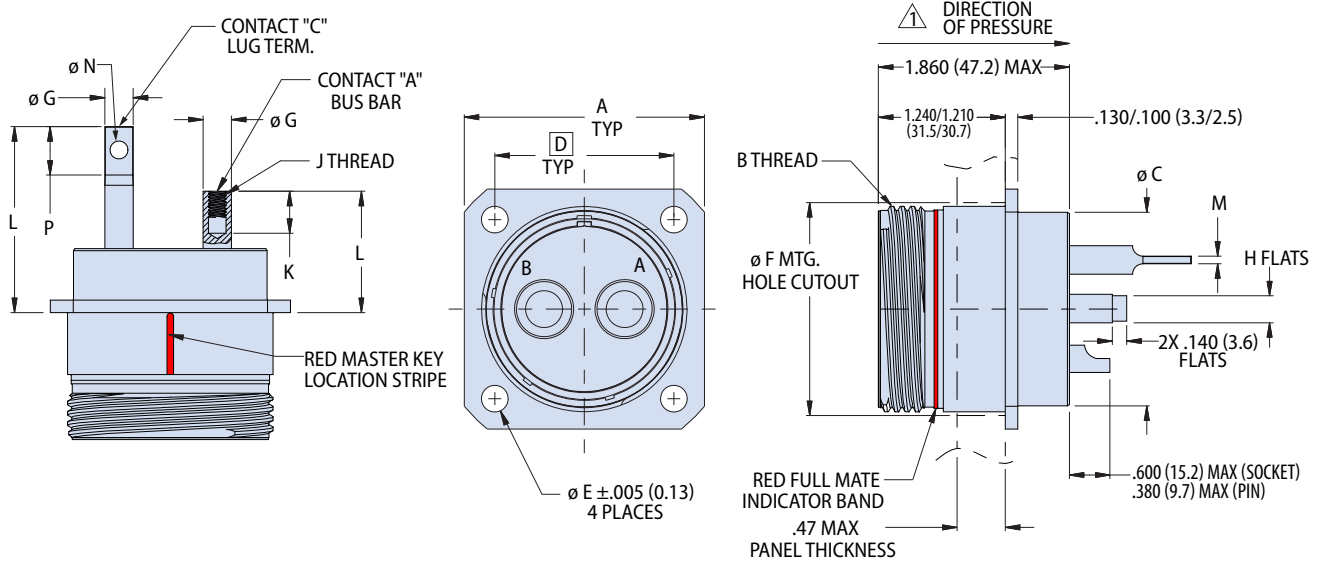
RATINGS	
Voltage (DWV):	2000 Volts AC
Current:	Size 16 contact 10 amps Size 12 contact 17 amps Size 8 contact 30 amps Size 4 contact 60 amps Size 1/0 contact 125 amps Size 2/0 contact 150 amps
Operating temperature:	-65° to +200°C
Hermeticity:	1E-7 cm ³ /s max leak rate @ 1 atmos
Durability:	500 mating 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
Pressure rating:	200 PSI

CONSTRUCTION	
Contacts:	iron-nickel alloy, gold or silver plated. Socket contacts have BeCu springs.
Shell:	stainless steel, passivated or electrodeposited nickel
Insulator:	vitreous glass. Socket connectors have additional thermoplastic insulator.
Seals:	fluorosilicone

Hermetic and Filter Receptacles

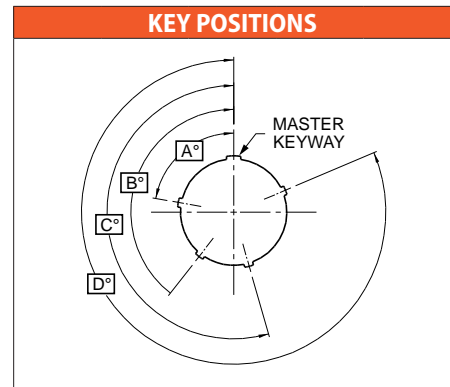
970-012 Hermetic Square Flange Receptacle

HERMETIC AND FILTER RECEPTACLES



▲ PRESSURE RATING 200 PSI MAXIMUM IN DIRECTION INDICATED

DIMENSIONS												
Shell Size	A		B		ø C		D bsc		ø E		ø F	
	In.	mm.	Mating Thread	In.	mm.	In.	mm.	In.	mm.	In.	mm.	
18	1.383	35.13	1.125-1P-3L-TS-2A	.972	24.69	1.015	25.78	.146	3.71	1.187	30.15	
20	1.508	38.30	1.250-1P-3L-TS-2A	1.116	28.35	1.140	28.96	.146	3.71	1.374	34.90	
24	1.718	43.64	1.500-1P-3L-TS-2A	1.300	33.02	1.281	32.54	.146	3.71	1.562	39.67	
28	2.138	54.31	1.750-1P-3L-TS-2A	1.604	40.74	1.568	39.83	.170	4.32	1.874	47.60	
32	2.328	59.13	2.000-1P-3L-TS-2A	1.875	47.63	1.734	44.04	.170	4.32	2.062	52.37	
36	2.578	65.48	2.250-1P-3L-TS-2A	2.093	53.16	1.984	50.39	.170	4.32	2.302	58.47	
40	2.828	71.83	2.500-1P-3L-TS-2A	2.310	58.67	2.234	56.74	.170	4.32	2.562	65.07	



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

CONTACT STYLE "A" BUS BAR									
Contact Size	ø G		H Flat (ref)		J THD UNF 2B	K depth		L Length	
	In.	mm.	In.	mm.		In.	mm.	In.	mm.
00	.609	15.5	1/2	12.7	5/16-24	.539	13.7	1.356/1.231	34.4/31.3
0	.562	14.3	1/2	12.7	5/16-24	.539	13.7	1.232/1.107	31.3/28.1
4	.386	9.8	5/16	7.9	10-32	.460	11.7	1.236/1.107	32.0/28.1
8	.275	7.0	5/16	7.9	8-36	.407	10.3	1.236/1.107	32.0/28.1

CONTACT STYLE "C" LUG TERMINATION										
Contact Size	ø G		M Thk		ø N Thru		P Flat		L Length	
	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.
00	.609	15.5	.120	3.0	.330	8.4	.946	24.0	2.496/2.371	63.4/60.2
0	.562	14.3	.115	2.9	.330	8.4	.836	21.2	2.262/2.137	57.5/54.3
4	.386	9.8	.085	2.2	.198	5.0	.552	14.0	1.978/1.853	50.2/47.1
8	.275	7.0	.075	1.9	.173	4.4	.468	11.9	1.844/1.719	46.8/43.7