



Hermetic and Filter Receptacles

970-042 Hermetic Receptacle with Banding Porch or Accessory Threads



970-042 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. Options for a Banding Porch or Accessory Threads 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 →		970-042	-H0	Z1	36-4	P	2	N	-1
Basic Part Number	970-042 Hermetic Receptacle with Banding Porch or Accessory Threads								
Shell Style	-H0 = Wall Mount With Accessory Thread -BH0 = Wall Mount With Single Band Porch								
Material/Finish	Z1 = Stainless Steel, Passivate 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								
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 vac pin-to-pin and pin-to-shell w/o breakdown
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
Operating temperature: -65° to +200°C
Hermeticity: <1 X 10 ⁻⁷ scc He/ sec @ 1 atm differential
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 maximum in direction indicated

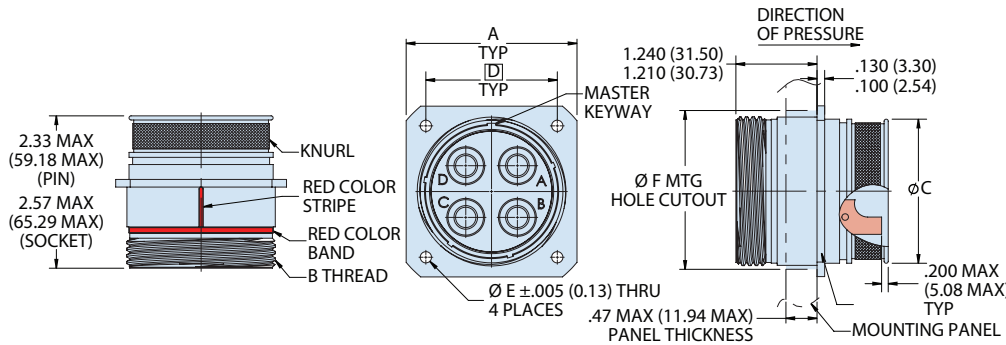
CONSTRUCTION
Contacts, hermetic: iron - nickel alloy / see part number development
Contacts, socket: copper alloy/see part number development
Shell: stainless steel, passivated or electrodeposited nickel
Insulator, hermetic: glass / N.A.
Insulator, socket: rigid dielectric/N.A.
Seals: fluorosilicone

Hermetic and Filter Receptacles

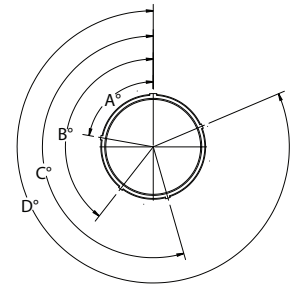
970-042 Hermetic Receptacle with Banding Porch or Accessory Threads

HERMETIC AND FILTER RECEPTACLES

970-042-BH0 WALL MOUNT WITH SINGLE BAND PORCH



KEY POSITIONS

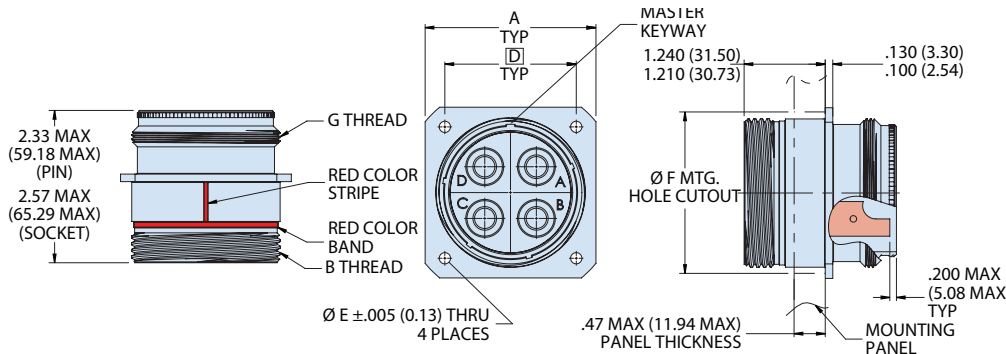


Position	A°	B°	C°	D°
1	80	142	196	293
2	135	170	200	310
3	49	169	200	244
4	66	140	200	257
5	62	145	180	280
6	79	153	197	272

DIMENSIONS

Shell Size	A		B Mating Thread	Ø C		D bsc		Ø E Thru		Ø F Mtg. Hole	
	In.	mm.		In.	mm.	In.	mm.	In.	mm.	In.	mm.
18	1.383	35.13	1.125-0.1P-0.3L-TS-2A	1.037	26.34	1.015	25.78	.146	3.7	1.187	30.15
20	1.508	38.30	1.250-0.1P-0.3L-TS-2A	1.163	29.54	1.140	28.96			1.374	34.90
24	1.718	43.64	1.500-0.1P-0.3L-TS-2A	1.350	34.29	1.281	32.54			1.562	39.67
28	2.138	54.31	1.750-0.1P-0.3L-TS-2A	1.670	42.42	1.568	39.83			1.874	47.60
32	2.328	59.13	2.000-0.1P-0.3L-TS-2A	1.945	49.40	1.734	44.04			2.062	52.37
36	2.578	65.48	2.250-0.1P-0.3L-TS-2A	2.176	55.27	1.984	50.39			2.302	58.47
40	2.828	71.83	2.500-0.1P-0.3L-TS-2A	2.350	59.69	2.234	56.74	.170	4.3	2.562	65.07

970-042-H0 WALL MOUNT WITH ACCESSORY THREAD



DIMENSIONS

Shell Size	A		B Mating Thread	Ø C		D bsc		Ø E Thru		Ø F Mtg. Hole		G Accessory Thread
	In.	mm.		In.	mm.	In.	mm.	In.	mm.	In.	mm.	
18	1.383	35.13	1.125-0.1P-0.3L-TS-2A	1.037	26.34	1.015	25.78	.146	3.7	1.187	30.15	1.125-18 UNEF-2A
20	1.508	38.30	1.250-0.1P-0.3L-TS-2A	1.163	29.54	1.140	28.96			1.374	34.90	1.250-18 UNEF-2A
24	1.718	43.64	1.500-0.1P-0.3L-TS-2A	1.350	34.29	1.281	32.54			1.562	39.67	1.4375-18 UNEF-2A
28	2.138	54.31	1.750-0.1P-0.3L-TS-2A	1.670	42.42	1.568	39.83			1.874	47.60	1.8125-16 UN-2A
32	2.328	59.13	2.000-0.1P-0.3L-TS-2A	1.945	49.40	1.734	44.04			2.062	52.37	2.0625-16 UNS-2A
36	2.578	65.48	2.250-0.1P-0.3L-TS-2A	2.176	55.27	1.984	50.39			2.302	58.47	2.250-16 UN-2A
40	2.828	71.83	2.500-0.1P-0.3L-TS-2A	2.350	59.69	2.234	56.74	.170	4.3	2.562	65.07	2.500-16 UN-2A