

Square Flange Receptacles

970-032 Square Flange Receptacle with Banding Platform

SQUARE FLANGE RECEPTACLES



970-032 square flange receptacle has integral banding platform. Terminate cable shield directly to connector with Band-Master ATS® banding strap, sold separately. Coupling threads are triple-start ACME quick-disconnect. EMI protected with ground spring on plug. Aluminum or stainless steel shell has five polarizing keyways. Optional self-locking clinch nuts for easier installation. Crimp rear-release contacts are packaged with connector. 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

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 →	970-032	NF	24-2	S1	T	-1
Basic Part Number	970-032 Square-Flange Receptacle with Banding Platform					
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 Arr.	See "Insert Arrangements" Table					
Contact Gender and Plating	A = Pin Connector, without Contacts B = Socket Connector, without Contacts 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.					
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					

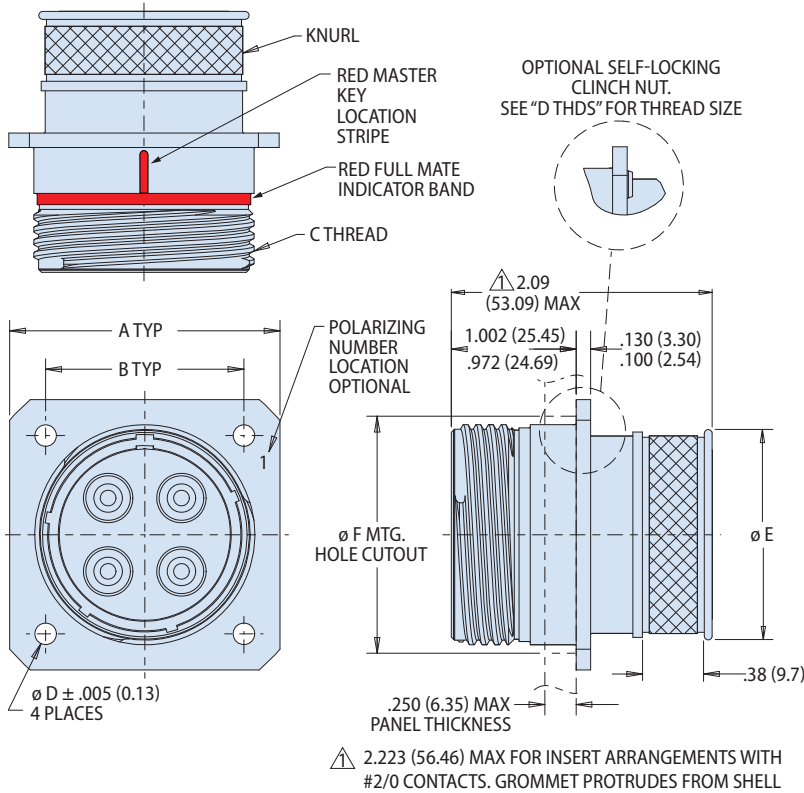
RATINGS
Voltage (DWV): 2000 Volts AC
Current: Size 16 contact 13 amps Size 12 contact 23 amps Size 8 contact 60 amps Size 4 contact 100 amps Size 1/0 contact 175 amps Size 2/0 contact 205 amps
Operating temperature: Matl/Finish Codes ME, Z1: -65° to +200°C Codes MT,NF, TZ, ZR: -65 to +175 °C
Durability: 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
Ingress protection: IP67
Water pressure: 6 feet, 48 hours

CONSTRUCTION
Contacts: size #8 and larger: 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
Wire grommet, face seal: Fluorosilicone/silicone blend
Contact Retention clip: Beryllium copper
Insert retainer ring: High-temperature thermoplastic
Clinch nuts: Stainless steel, passivated



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DIMENSIONS

Shell Size	A		B		C Mating Thd 0.1P-0.3L-TS-2A	Ø D Thru		D Thds	Ø E		Ø F Mtng Hole	
	In.	mm.	In.	mm.		In.	mm.		In.	mm.	In.	mm.
18	1.383	35.13	1.015	25.78	1.125	0.146	3.7	#6-32	1.037	26.34	1.187	30.15
20	1.508	38.30	1.140	28.96	1.250	0.146	3.7	#6-32	1.163	29.54	1.374	34.90
24	1.718	43.64	1.281	32.54	1.500	0.146	3.7	#6-32	1.350	34.29	1.562	39.67
28	2.138	54.31	1.568	39.83	1.750	0.170	4.3	#8-32	1.670	42.42	1.835	46.61
32	2.328	59.13	1.734	44.04	2.000	0.170	4.3	#8-32	1.945	49.40	2.093	53.16
36	2.578	65.48	1.984	50.39	2.250	0.170	4.3	#8-32	2.176	55.27	2.302	58.47
40	2.828	71.83	2.234	56.74	2.500	0.170	4.3	#8-32	2.350	59.69	2.562	65.07

SHRINK BOOT



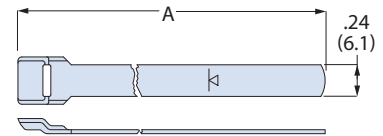
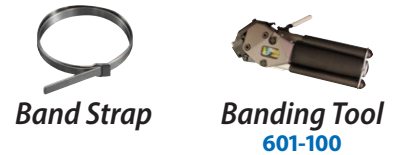
Connector accommodates lipped shrink boot. Boot is ordered separately. Boot provides cable strain relief and environmental protection. Type 1 high-performance semi-rigid elastomer resists fuels and oils and withstands temperature extremes. Available with W1 hot melt adhesive pre-coat. Operating temperature range -75 to +150 °C (no adhesive), -55 to +125 °C (with W1 adhesive).

Shell Size	Shrink Boot P/N	Adhesive Lined Shrink Boot P/N
18	770-001S106	770-001S106W1
20	770-001S106	770-001S106W1
24	770-001S107	770-001S107W1
28	770-001S108	770-001S108W1
32	770-001S108	770-001S108W1
36	770-001S109	770-001S109W1
40	770-001S109	770-001S109W1

SHIELD BAND

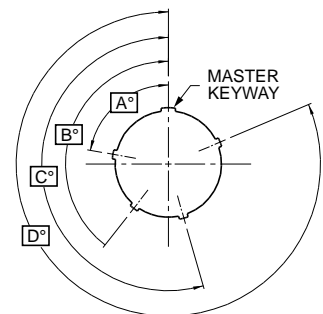
Shield band is not included with connector. Order separately.

Use banding strap to terminate cable braid directly to connector. Stainless steel band strap provides fast, cost-effective and highly reliable termination of braided metallic shielding. The Band-Master ATS® Advanced Cable Shield Termination System is the overwhelming favorite throughout the military aerospace and defense industries, providing excellent static loading and corrosion resistance in electrical wire interconnect systems.



A Length		Fits up to Dia.		Band Strap (pre-coiled) Part Number
in	mm	in	mm	
14	355	1.80	45.7	601-041
18	457	2.50	63.5	601-050

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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