



SPEEDMASTER™



HERMETIC

# SpeedMaster 10G

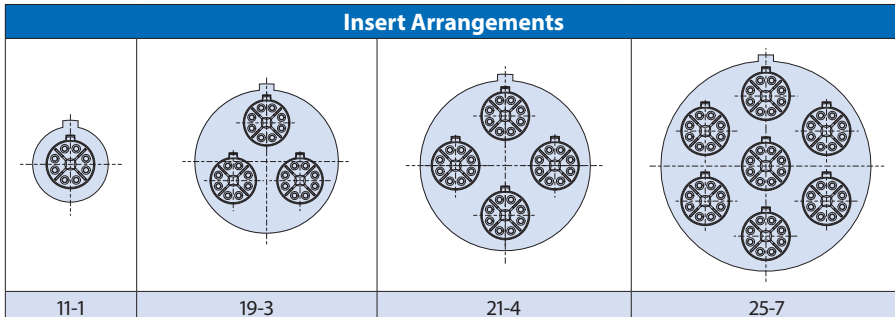
## High-speed, hermetic connection system

Newly developed hermetic SpeedMaster 10G is optimized for high-speed Cat 6A Ethernet performance in a glass sealed configuration. The SpeedMaster 10G system offers industry-leading NEXT, return loss and insertion loss performance due to its highly-engineered isolation and separation architecture. SpeedMaster contacts meet the broad range of aerospace industry requirements for random vibration, shock, temperature cycling, durability, and safe, reliable performance. Hermeticity is rated at  $1 \times 10^{-7}$  ccHe/sec at 1 ATM delta pressure. Available in wall mount, jam-nut, double o-ring jam-nut, and weld mount configurations.

### FEATURES

- $1 \times 10^{-7}$  ccHe/sec at 1 ATM
- Optimized line density over RJ45 connectivity.
- Superior temperature and shock and vibrate
- Significant weight reduction compared to Quadrax solutions (reduces cable requirement by 1/2)
- High-density solution—ideally suited for today's networked IFE environments
- Maintains signal integrity through a hermetic barrier.

Insert Arrangements



Contact Glenair at  
818-247-6000 or  
visit us at [www.glenair.com](http://www.glenair.com)  
U.S. CAGE code 06324

NEXT-GENERATION

# Supernine Hermetic connectors with SpeedMaster™ 10G high-speed contacts

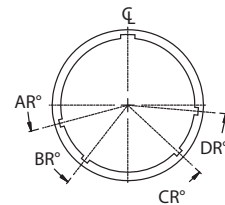
## 10GBase-T Cat 6A Compliance Testing Contacts



Part Number Development								
Sample Part Number	233-263	-H7	ZL	25	-7	S	N	-2
Series - Basic Part No.	233-263 = SuperNine Hermetic High-Speed Bulkhead Feedthru							
Connector Style*	H2 = Square Flange Mount H7 = Jam-Nut Mount DH7 = Dual O-ring Jam-Nut Mount H8 = Weld Mount							
Material/Finish	Z1 = 300 Series CRES; Passivated ZL = 300 Series CRES; Electroless Nickel							
Shell Size	11, 19, 21, 25							
Insert Arrangement	See Insert Arrangement Table							
Module Type	P = Pin S = Socket A = Connector Less Contacts							
Alternate Polarization	A, B, C, D, E, N = Normal (IAW MIL-DTL-38999 Series III); see alternate keyway positions table.							
Panel Thickness	2 = .250							



### Receptacle, Alternate Keyway Positions

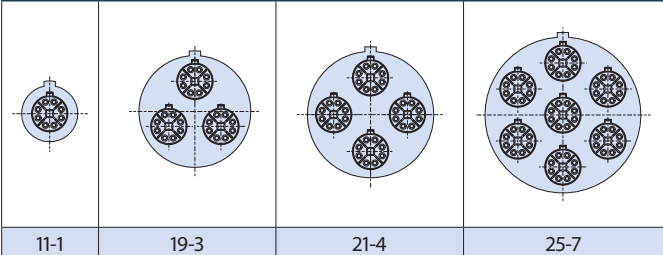


Shell Size Code	Shell Size	Alternate Position Code	AR°	BR°	CR°	DR°
B	11	N	95	141	208	236
		A	113	156	182	292
		B	90	145	195	252
		C	53	156	220	255
		D	119	146	176	298
F G J	19 21 25	N	80	142	196	293
		A	135	170	200	310
		B	49	169	200	244
		C	66	140	200	257
		D	62	145	180	280
		E	79	153	197	272

### NOTES

- Contact factory for other plating options
- SpeedMaster insert arrangements are exclusive to SpeedMaster™ and are unrelated to other insert patterns of the same name
- Glenair 233-263 is only designed to mate with Glenair 233-219-G6 connector of the same shell size, polarization, and opposite gender
- Hermeticity: less than  $1 \times 10^{-7}$  ccHe/sec at 1 atmosphere differential.
- 233-263 connector is only available as pin to socket or socket to pin
- Contacts are non removable
- Material / Finish
  - Shell and jam-nut: CRES/passivate or CRES/nickel plate
  - Contacts pin: nickel/iron alloy/gold
  - Contacts sockets: copper alloy/gold
  - Insulator hermetic: full glass/N.A
  - Insulator socket: high grade dielectric/N.A
  - Grounding members: copper alloy/electroless nickel
  - Seals: fluorosilicone blend/N.A.

### Insert Arrangements

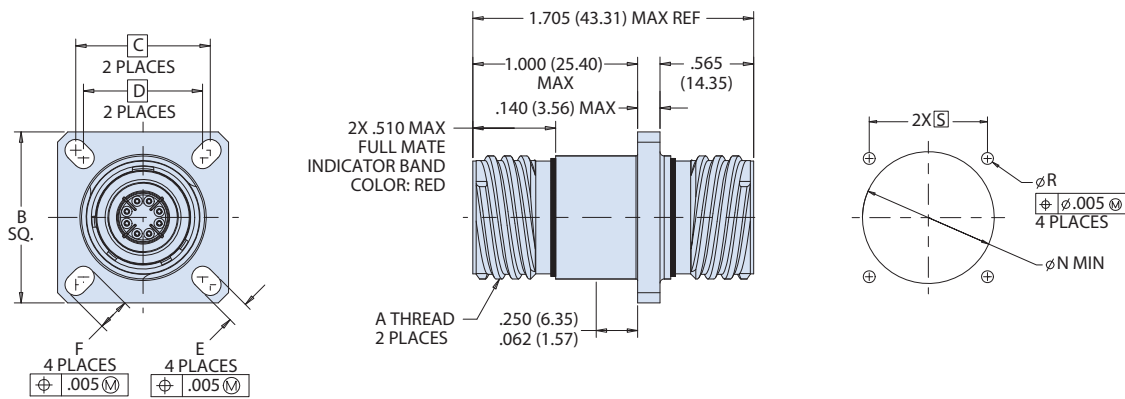


NEXT-GENERATION

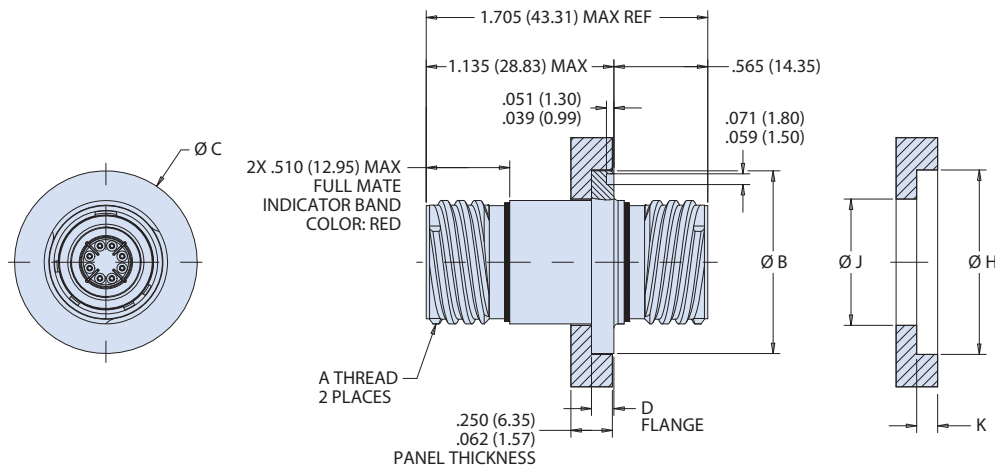
# Supernine Hermetic connectors with SpeedMaster™ 10G high-speed contacts

## Shell Style Dimensions

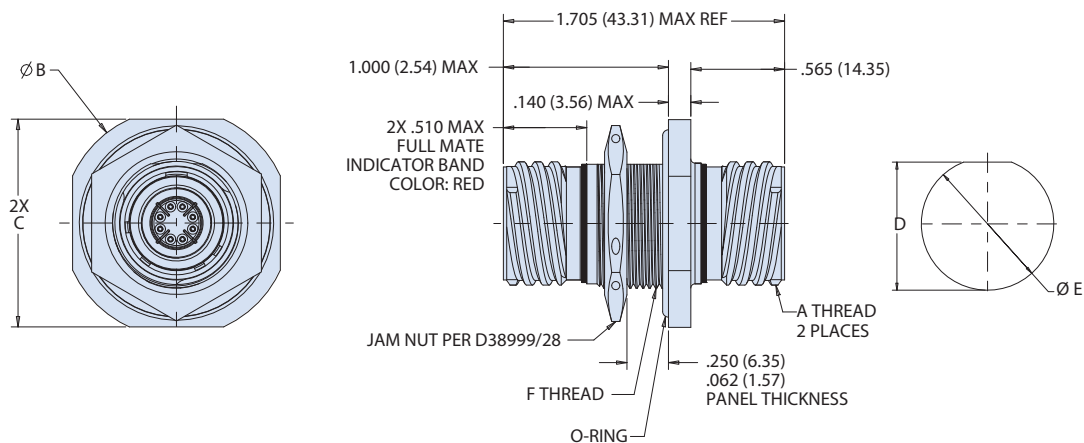
### H2 - SQUARE FLANGE MOUNT BULKHEAD FEED-THRU



### H8 - WELD MOUNT BULKHEAD FEED-THRU



### H7 - JAM-NUT MOUNT BULKHEAD FEED-THRU



# Supernine Hermetic connectors with SpeedMaster™ 10G high-speed contacts



## Shell Style Dimensions

233-263-H2 Square Flange Mount Dimensions								
Shell Size	A THREAD	B	C Basic	D Basic	E	F	ØR Holes	S Basic
11	.7500-.1P-.3L-TS-2A	1.040 (26.42) 1.016 (25.81)	0.812 (20.62)	0.719 (18.26)	0.136 (3.45) 0.120 (3.05)	0.198 (5.03) 0.190 (4.83)	0.133 (3.38) 0.123 (3.12)	0.812 (20.62)
19	1.2500-.1P-.3L-TS-2A	1.449 (36.80) 1.425 (36.20)	1.156 (29.36)	1.062 (26.97)		0.202 (5.13) 0.186 (4.72)		1.156 (29.36)
21	1.3750-.1P-.3L-TS-2A	1.575 (40.00) 1.551 (39.40)	1.250 (31.75)	1.156 (29.36)				1.250 (31.75)
25	1.6250-.1P-.3L-TS-2A	1.823 (46.30) 1.799 (45.69)	1.500 (38.10)	1.375 (34.92)	0.162 (4.11) 0.146 (3.71)	0.250 (6.35) 0.234 (5.94)	0.155 (3.94) 0.145 (3.68)	1.500 (38.10)

233-263-H8 Weld Mount Dimensions							
Shell Size	A Thread	B	C	D	ØH	ØJ	ØK ±.005 (0.13)
11	.7500-.1P-.3L-TS-2A	1.063 (27.00) 1.051 (26.70)	1.106 (28.09) 1.094 (27.79)	0.134 (3.40) 0.118 (3.00)	1.112 (28.24) 1.107 (28.12)	.760 (19.30)	.126 (3.20)
19	1.2500-.1P-.3L-TS-2A	1.547 (39.29) 1.535 (38.99)	1.591 (40.41) 1.579 (40.11)		1.597 (40.56) 1.592 (40.44)	1.260 (32.00)	
21	1.3750-.1P-.3L-TS-2A	1.689 (42.90) 1.677 (42.60)	1.732 (43.99) 1.720 (43.69)		1.738 (44.15) 1.733 (44.02)	1.385 (35.18)	
25	1.6250-.1P-.3L-TS-2A	1.941 (49.30) 1.929 (49.00)	1.984 (50.39) 1.972 (50.09)	0.165 (4.19) 0.149 (3.78)	1.990 (50.55) 1.985 (50.42)	1.635 (41.53)	.15 (3.81)

233-263-H7 Jam-Nut Mount Dimensions				
Shell Size	A Thread	Ø B	C Max	F Thread
11	.7500-.1P-.3L-TS-2A	1.375 (34.92)	1.252 (31.80)	M20x1.0-6g 0.100R
19	1.2500-.1P-.3L-TS-2A	1.937 (49.20)	1.811 (46.00)	M35x1.0-6g 0.100R
21	1.3750-.1P-.3L-TS-2A	2.063 (52.40)	1.937 (49.20)	M38x1.0-6g 0.100R
25	1.6250-.1P-.3L-TS-2A	2.311 (58.70)	2.189 (55.60)	M44x1.0-6g 0.100R

Dual O-Ring Jam-Nut Mount Dimensions				
Shell Size	A Thread	Ø B	C Max	F Thread
11	.7500-.1P-.3L-TS-2A	1.625 (41.28)	1.500 (38.10)	M20x1.0-6g 0.100R
19	1.2500-.1P-.3L-TS-2A	2.189 (55.60)	2.063 (52.40)	M35x1.0-6g 0.100R
21	1.3750-.1P-.3L-TS-2A	2.311 (58.70)	2.189 (55.60)	M38x1.0-6g 0.100R
25	1.6250-.1P-.3L-TS-2A	2.625 (66.68)	2.400 (60.96)	M44x1.0-6g 0.100R

Jam-Nut Panel Cut-Out Dimensions		
SHELL SIZE	ØD	E FLAT
11	0.835 (21.21)	0.771 (19.58)
	0.825 (20.96)	0.761 (19.33)
19	1.395 (35.43)	1.335 (33.91)
	1.385 (35.18)	1.325 (33.65)
21	1.520 (38.61)	1.460 (37.08)
	1.510 (38.35)	1.450 (36.83)
25	1.770 (44.96)	1.710 (43.43)
	1.760 (44.70)	1.700 (43.18)