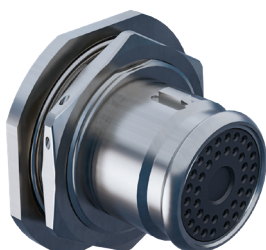


SPACE-GRADE MIL-DTL-38999 TYPE SuperNine® Blind-Mate / ASF Connectors



253-052 High-Speed Plug, Fixed Rear Panel-Mount Series, Roll-On / Roll-Off Nose High-Speed data and RF insert arrangements



253-052 high-speed plug, fixed rear panel-mount, roll-on/roll-off nose

ADAPTER CODE **F**

"F" adapter code accessories (D38999 Series I, imperial thread) fit this connector

Glenair recommends the use of 4470-1130 SplayMaster backshells for alignment of shielded contacts and cables

NOTES:

- Material / finish:
 - Insulator - high-grade rigid dielectric
 - For common ground option - Al alloy / mfg. option
 - Grommet, O-ring, interfacial seal - fluorosilicone blend / N.A
 - Contacts & grommet follower to be ordered separately
- Glenair's 253-052 connectors are designed to mate with Glenair connector 253-045 having the same insert arrangement and Polarization. See Table III for polarization options.
- 253-044 Connectors are rear panel-mount only. The panel to panel dimension is the same for all configurations in the How to Order table. The tolerance is as shown.
- Misalignment capabilities are possible when mating with Glenair connector 253-045. Reference Glenair 253-045 drawing for details.
- Stainless steel locating pin ($\phi .0790 \pm .0006$, Length .241/.231) to be shipped with each L7 jam nut mount connector.
- El Ochito mating contact shall be in accordance with Table VII. El Ochito color type configuration position shall be per Table VIII.

HOW TO ORDER									
Sample Part No.	253-052	-07	ME	25	Q	-	8	P	N
Series / Basic Part No.	253-052 = Environmental Connector Plug								
Connector Style	-L7 = Plug, Jam Nut (Locating Pin) -07 = Plug, Jam Nut (Flat on Thread) -00 = Plug, panel-mount, slotted holes -D0 = Plug, panel-mount, thru holes								
Material/Finish	MN = Al Alloy, MegaNickel, per D38999 class AA ME = Aluminum, electroless nickel MT = Aluminum, nickel PTFE ZL = CRES, electrodeposited nickel Z1 = CRES, passivated								
Shell Size	25								
Contact Type	See Table VI								
Ground Option	G = Common ground - = None								
Insert Arrangement	Insert Arrangement number per MIL-STD-1560 High-Speed or Combo Contact Arrangement (see table).								
Insert Designator	P = Pin S = Socket								
Alternate Polarization	A = 40°, B = 65°, C = 80°, D = 210°, E = 250°, N = 135° (Normal)								

253-052 High-Speed Plug mates with 253-045 Receptacle
Space-grade modification codes may be added directly to the end of any valid part number

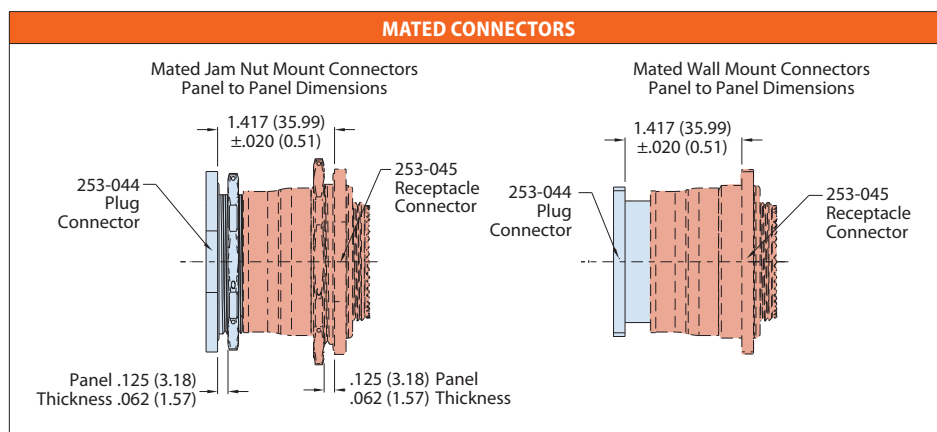


TABLE IV	
Contact Size	PC Tail ØV
No 22	0.020 (0.51) 0.018 (0.46)
No 20	0.030 (0.76) 0.028 (0.71)
No 16	0.040 (1.02) 0.038 (0.97)
No 12	0.072 (1.83) 0.070 (1.78)
No 8	0.182 (4.62) 0.178 (4.52)

TABLE VI - CONTACT REFERENCE GUIDE		
Symbol	Description	Contact Size
	Coax Per M39029/76 M39029/77	16
C	Coax Per M39029/102 M39029/103	12
D	Differential Twinax	8
E	El Ochito	8
Q	Quadrax	8
P	Power	8
T	Triax/ Concentric Twinax	8

SPACE-GRADE MIL-DTL-38999 TYPE SuperNine® Blind-Mate / ASF Connectors



253-052 High-Speed Plug, Fixed Rear Panel-Mount Series, Roll-On / Roll-Off Nose
High-Speed data and RF insert arrangements

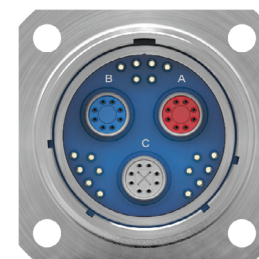
TABLE VII - EL OCHITO CONTACT CONFIGURATION								
SYM	CAVITY A	CAVITY B	CAVITY C	CAVITY D	CAVITY E	CAVITY F	CAVITY G	CAVITY H
E	W	W	W	W	W	W	W	W
E2	B	W	W	W	W	W	W	W
E3	R	W	W	W	W	W	W	W
E4	B	B	W	W	W	W	W	W
E5	R	B	W	W	W	W	W	W
E6	R	R	W	W	W	W	W	W
E7	B	B	B	W	W	W	W	W
E8	R	B	B	W	W	W	W	W
E9	R	R	B	W	W	W	W	W
E10	R	R	R	W	W	W	W	W
E11	B	B	B	B	W	W	W	W
E12	R	B	B	B	W	W	W	W
E13	R	R	B	B	W	W	W	W
E14	R	R	R	B	W	W	W	W
E15	R	R	R	R	W	W	W	W
E16	B	B	B	B	B	W	W	W
E17	R	B	B	B	B	W	W	W
E18	R	R	B	B	B	W	W	W
E19	R	R	R	B	B	W	W	W
E20	R	R	R	R	B	W	W	W
E21	R	R	R	R	R	W	W	W
E22	B	B	B	B	B	B	W	W
E23	R	B	B	B	B	B	W	W
E24	R	R	B	B	B	B	W	W
E25	R	R	R	B	B	B	W	W
E26	R	R	R	R	B	B	W	W
E27	R	R	R	R	R	B	W	W
E28	R	R	R	R	R	R	W	W
E29	B	B	B	B	B	B	B	W
E30	R	B	B	B	B	B	B	W
E31	R	R	B	B	B	B	B	W
E32	R	R	R	B	B	B	B	W
E33	R	R	R	R	B	B	B	W
E34	R	R	R	R	R	B	B	W
E35	R	R	R	R	R	R	B	W
E36	R	R	R	R	R	R	R	W
E37	B	B	B	B	B	B	B	B
E38	R	B	B	B	B	B	B	B
E39	R	R	B	B	B	B	B	B
E40	R	R	R	B	B	B	B	B
E41	R	R	R	R	B	B	B	B
E42	R	R	R	R	R	B	B	B
E43	R	R	R	R	R	R	B	B
E44	R	R	R	R	R	R	R	B
E45	R	R	R	R	R	R	R	R

TABLE VIII - EL OCHITO MATING CONTACT		
Mating Part Number	Protocols	
White-Pin	858-003	Use for gb ethernet and 10gb ethernet protocols
White-Skt	858-004	Use for gb ethernet and 10gb ethernet protocols
Blue-Pin	858-028	Use for USB 3.0 (90 Ohm)
Blue-Skt	858-029	Use for USB 3.0 (90 Ohm)
Red-Pin	858-030	Use for all high-bandwidth 100 ohm differential lines
Red-Skt	858-031	Use for all high-bandwidth 100 ohm differential lines

EL OCHITO PROTOCOLS		
		
WHITE	BLUE	RED
10GBASE-T	USB 3.0	Multi Gigabit 100 ohm protocols HDMI, SATA, DisplayPort



Example Code E7



Example Code E5

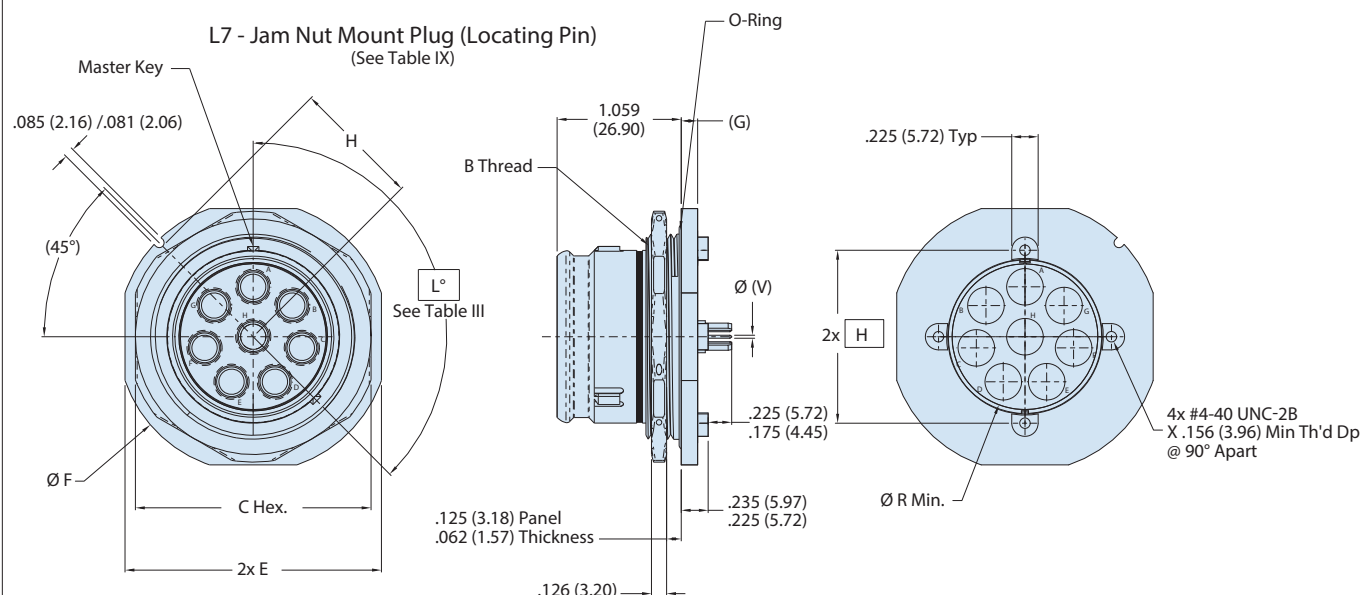
COMPATIBLE SPEEDLINE HIGH-SPEED CABLE		
Part No.	High-Speed Protocol	El Ochito contact type
963-066-24	Ethernet	El Ochito White
963-066-26	Ethernet	El Ochito White
963-089-24	SpaceWire	El Ochito White
963-089-26	SpaceWire	El Ochito White
963-077-26	High-speed USB	El Ochito Blue
963-127-3	HDMI, DisplayPort, DVI	El Ochito Red
963-072-24	SATA / eSATA	El Ochito Red

SPACE-GRADE MIL-DTL-38999 TYPE SuperNine® Blind-Mate / ASF Connectors



253-052 High-Speed Plug, Fixed Rear Panel-Mount Series, Roll-On / Roll-Off Nose High-Speed data and RF insert arrangements

TABLE IX - PLUG, JAM NUT MOUNT (LOCATING PIN)



Shell Size	B Thread Class 2A	C $\pm .015$	E $\pm .015$	Ø F	H $+.000/- .008$	G Thk	H Thread Bsc	R Ø Min.
11	.8125-20 UNEF	1.010 (25.65)	1.250 (31.75)	1.386 (35.20)	0.604 (15.34)	0.122 (3.10) 0.083 (2.11)	0.719 (18.26)	0.468 (11.89)
13	1.0000-20 UNEF	1.175 (29.85)	1.375 (34.93)	1.511 (38.38)	0.666 (16.92)		0.812 (20.62)	0.572 (14.53)
15	1.1250-18 UNEF	1.294 (32.87)	1.500 (38.10)	1.636 (41.55)	0.729 (18.52)		0.906 (23.01)	0.705 (17.91)
17	1.2500-18 UNEF	1.451 (36.86)	1.625 (41.28)	1.761 (44.73)	0.791 (20.09)		1.030 (26.16)	0.830 (21.08)
19	1.3750-18 UNEF	1.569 (39.85)	1.812 (46.02)	1.949 (49.50)	0.893 (22.68)	.153 (3.89) .114 (2.90)	1.150 (29.21)	0.934 (23.72)
21	1.5000-18 UNEF	1.687 (42.85)	1.938 (49.23)	2.073 (52.65)	0.955 (24.26)		1.221 (31.01)	1.055 (26.80)
23	1.6250-18 UNEF	1.875 (47.63)	2.062 (52.37)	2.200 (55.88)	1.017 (25.83)		1.360 (34.54)	1.160 (29.46)
25	1.7500-18 UNS	2.010 (51.05)	2.187 (55.55)	2.323 (59.00)	1.096 (27.84)		1.475 (37.47)	1.307 (33.20)

TABLE X - PANEL-MOUNT

Shell Size	Ø W $+.010/- .000$	X
11	0.823 (20.90)	0.460 (11.68)
13	1.010 (25.65)	0.504 (12.80)
15	1.135 (28.83)	0.549 (13.94)
17	1.260 (32.00)	0.593 (15.06)
19	1.385 (35.18)	0.665 (16.89)
21	1.510 (38.35)	0.709 (18.01)
23	1.635 (41.53)	0.753 (19.13)
25	1.760 (44.70)	0.806 (20.47)

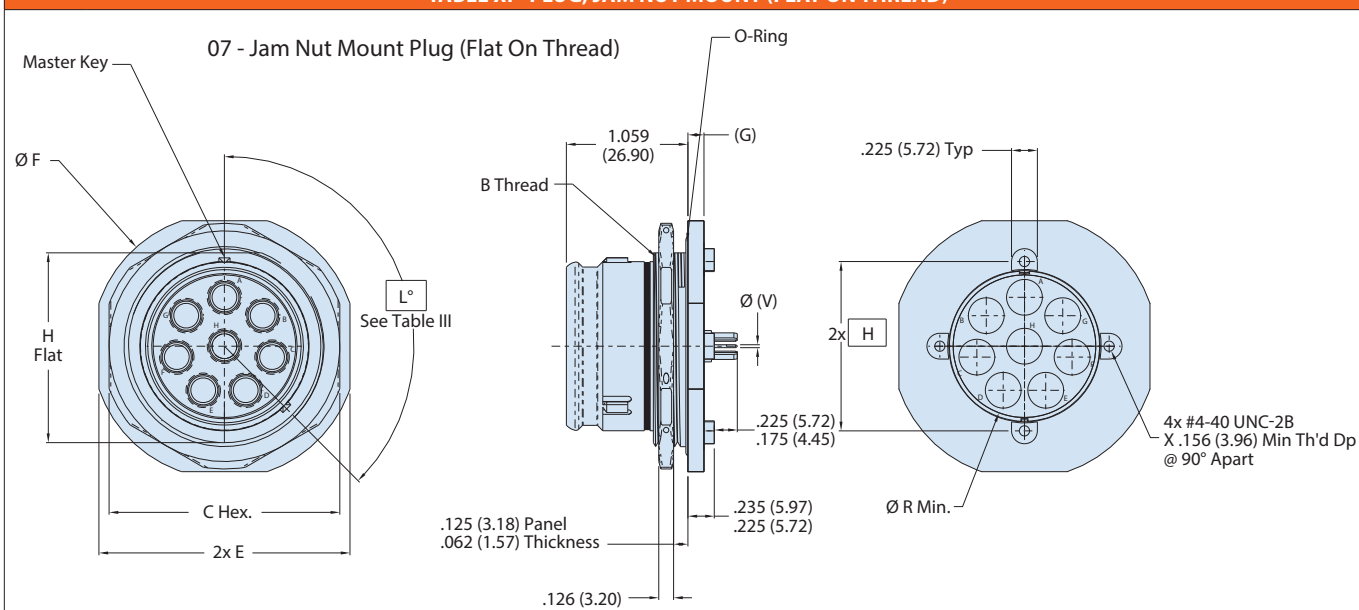
Recommended Panel Cut Out For Jam Nut Plug, Locating Pin (See Table X)

SPACE-GRADE MIL-DTL-38999 TYPE SuperNine® Blind-Mate / ASF Connectors



253-052 High-Speed Plug, Fixed Rear Panel-Mount Series, Roll-On / Roll-Off Nose
High-Speed data and RF insert arrangements

TABLE XI - PLUG, JAM NUT MOUNT (FLAT ON THREAD)



Shell Size	B Thread Class 2A	C ±.015	E ±.015	Ø F	H Flat	G Thk	H Thread Bsc	R Ø Min.
11	.8125-20 UNEF	1.010 (25.65)	1.250 (31.75)	1.386 (35.20)	0.754 (19.15) 0.748 (19.00)	.122 (3.10) .083 (2.11)	0.719 (18.26)	0.468 (11.89)
13	1.0000-20 UNEF	1.175 (29.85)	1.375 (34.93)	1.511 (38.38)	0.936 (23.77) 0.930 (23.62)		0.812 (20.62)	0.572 (14.53)
15	1.1250-18 UNEF	1.294 (32.87)	1.500 (38.10)	1.636 (41.55)	1.066 (27.08) 1.060 (26.92)		0.906 (23.01)	0.705 (17.91)
17	1.2500-18 UNEF	1.451 (36.86)	1.625 (41.28)	1.761 (44.73)	1.191 (30.25) 1.185 (30.10)		1.030 (26.16)	0.830 (21.08)
19	1.3750-18 UNEF	1.569 (39.85)	1.812 (46.02)	1.949 (49.50)	1.316 (33.43) 1.310 (33.27)	.153 (3.89) .114 (2.90)	1.150 (29.21)	0.934 (23.72)
21	1.5000-18 UNEF	1.687 (42.85)	1.938 (49.23)	2.073 (52.65)	1.441 (36.60) 1.435 (36.45)		1.221 (31.01)	1.055 (26.80)
23	1.6250-18 UNEF	1.875 (47.63)	2.062 (52.37)	2.200 (55.88)	1.566 (39.78) 1.560 (39.62)		1.360 (34.54)	1.160 (29.46)
25	1.7500-18 UNS	2.010 (51.05)	2.187 (55.55)	2.323 (59.00)	1.691 (42.95) 1.685 (42.80)		1.475 (37.47)	1.307 (33.20)

TABLE XII PANEL-MOUNT

Shell Size	Ø W +.010/ -.000	X Flat +.000/ -.010
11	0.823 (20.90)	0.773 (19.63)
13	1.010 (25.65)	0.955 (24.26)
15	1.135 (28.83)	1.085 (27.56)
17	1.260 (32.00)	1.210 (30.73)
19	1.385 (35.18)	1.335 (33.91)
21	1.510 (38.35)	1.460 (37.08)
23	1.635 (41.53)	1.585 (40.26)
25	1.760 (44.70)	1.710 (43.43)

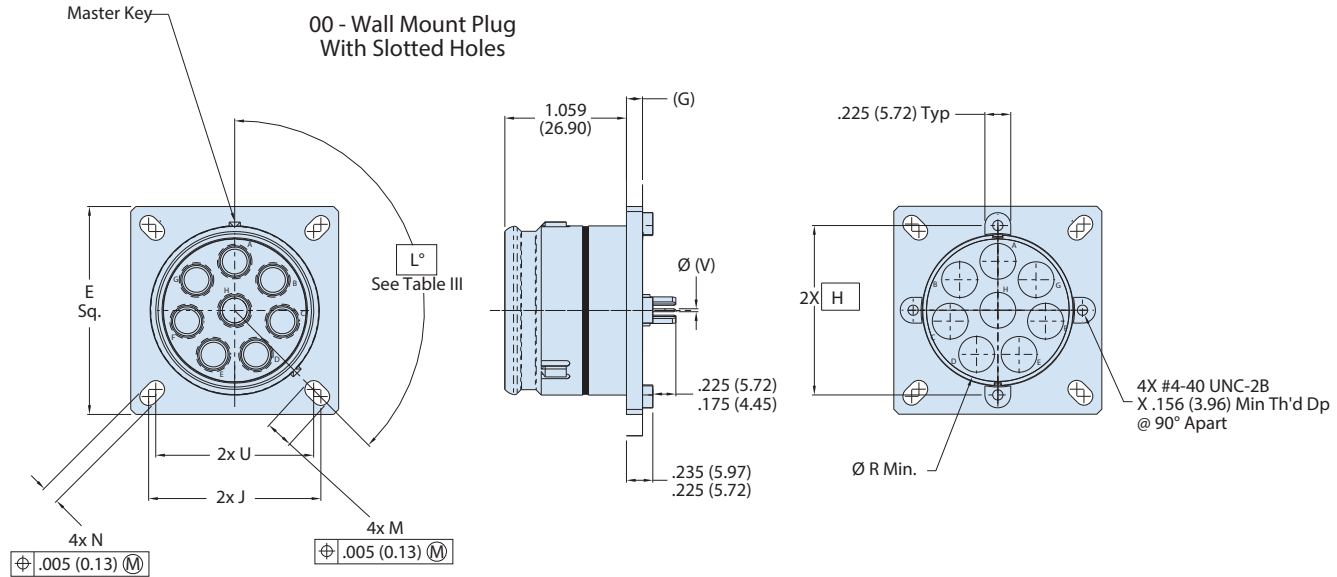
Recommended Panel Cut Out For Jam Nut Plug

SPACE-GRADE MIL-DTL-38999 TYPE SuperNine® Blind-Mate / ASF Connectors



253-052 High-Speed Plug, Fixed Rear Panel-Mount Series, Roll-On / Roll-Off Nose High-Speed data and RF insert arrangements

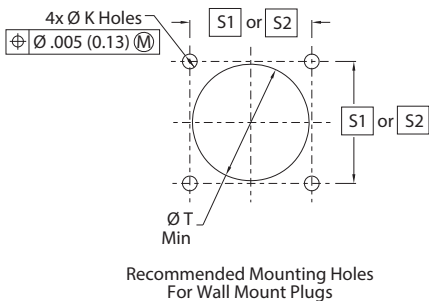
TABLE XIII - PLUG, PANEL-MOUNT (SLOTTED HOLES)



Shell Size	E	U	J	M	N	G Thk	H Thread Bsc	R Ø Min.
11	1.031 (26.19)	0.719 (18.26)	0.812 (20.62)	0.194 (4.93)	0.128 (3.25)	.122 (3.10) .083 (2.11)	0.719 (18.26)	0.468 (11.89)
13	1.126 (28.60)	0.812 (20.62)	0.906 (23.01)	0.194 (4.93)	0.128 (3.25)		0.812 (20.62)	0.572 (14.53)
15	1.220 (30.99)	0.906 (23.01)	0.969 (24.61)	0.173 (4.39)	0.128 (3.25)		0.906 (23.01)	0.705 (17.91)
17	1.311 (33.30)	0.969 (24.61)	1.062 (26.97)	0.194 (4.93)	0.128 (3.25)		1.030 (26.16)	0.830 (21.08)
19	1.437 (36.50)	1.062 (26.97)	1.156 (29.36)	0.194 (4.93)	0.128 (3.25)	.153 (3.89) .114 (2.90)	1.150 (29.21)	0.934 (23.72)
21	1.563 (39.70)	1.156 (29.36)	1.250 (31.75)	0.194 (4.93)	0.128 (3.25)		1.221 (31.01)	1.055 (26.80)
23	1.689 (42.90)	1.250 (31.75)	1.375 (34.93)	0.242 (6.15)	0.154 (3.91)		1.360 (34.54)	1.160 (29.46)
25	1.811 (46.00)	1.375 (34.93)	1.500 (38.10)	0.242 (6.15)	0.154 (3.91)		1.475 (37.47)	1.307 (33.20)

TABLE XIX - PANEL-MOUNT

Shell Size	S1	S2	T Dia.	K Dia.
11	0.719 (18.26)	0.812 (20.62)	0.718 (18.24)	0.133 (3.38) 0.123 (3.12)
13	0.812 (20.62)	0.906 (23.01)	0.844 (21.44)	
15	0.906 (23.01)	0.969 (24.61)	0.968 (24.59)	
17	0.969 (24.61)	1.062 (26.97)	1.096 (27.84)	
19	1.062 (26.97)	1.156 (29.36)	1.222 (31.04)	
21	1.156 (29.36)	1.250 (31.75)	1.344 (34.14)	
23	1.250 (31.75)	1.375 (34.93)	1.468 (37.29)	0.159 (4.04) 0.149 (3.78)
25	1.375 (34.93)	1.500 (38.10)	1.594 (40.49)	0.155 (3.94) 0.145 (3.68)



SPACE-GRADE MIL-DTL-38999 TYPE SuperNine® Blind-Mate / ASF Connectors



253-052 High-Speed Plug, Fixed Rear Panel-Mount Series, Roll-On / Roll-Off Nose High-Speed data and RF insert arrangements

TABLE XX - PLUG, PANEL-MOUNT (ROUND HOLES)

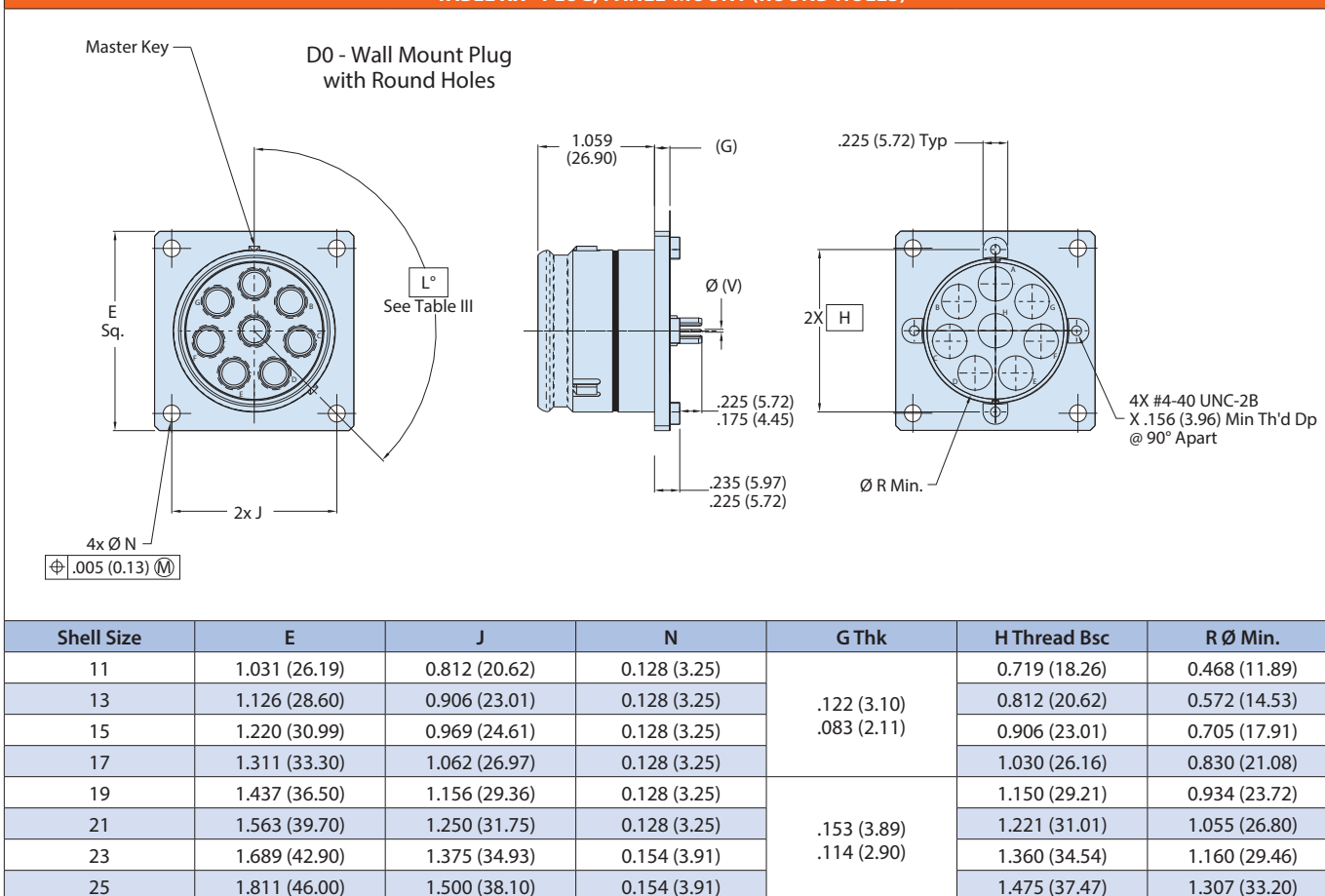


TABLE XXI - PANEL-MOUNT

