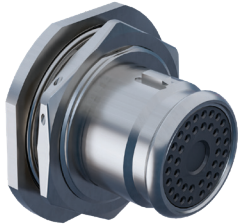


SPACE-GRADE MIL-DTL-38999 TYPE SuperNine® Blind-Mate / ASF Connectors



253-044 High-Speed Plug, Fixed Rear Panel-Mount Series, Roll-On / Roll-Off Nose High-Speed data and RF insert arrangements



253-044 high-speed fixed-mount plug series with 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

Modification code 909xx is used to supply D38999 Series III Type connectors featuring crimp removable type contacts with high-speed contact kits. Kits include spares, tools, and sealing plugs. See example below.

253-044-07ME25-8AN -909 C P

Basic Connector Part Number

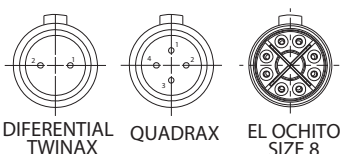
Basic Modification Code
909

Contact Type Symbol
(See Contact Type Table)
C, C1, D, E*, Q, P, T

Contact Gender (Optional)
P = Pin, S = Skt

*For El Ochito see Contact Configuration Table for appropriate code and dash number symbol.

FIGURE 2: CONTACT INNER PIN ORIENTATION



HOW TO ORDER

Sample Part No.	253-044	-	07	ME	25	-	8	A	N	-909CP
Series / Basic Part No.	253-044 = Blind-mate Plug (fixed mount)									
Accessory Style	B = Integral Backshell - (Dash) = Accessory Thread									
Connector Style	L7 = Jam nut (locating pin) 07 = Jam nut mount D0 = Panel-mount rcpt; through holes 00 = Panel-mount rcpt; slotted holes									
Material/Finish	MN = Al Alloy, MegaNickel, per D38999 class AA ME = Al, electroless nickel MT = Al, nickel PTFE Z1 = CRES, passivated ZL = CRES, electrodeposited nickel									
Shell Size	11 13 17 19 21 23 25									
Ground Option	G = Common ground - (dash) = None									
Insert Arrangement	Insert Arrangement number per MIL-STD-1560 High-Speed or Combo Contact Arrangement (see table).									
Insert Designator	A = Pin insert, less contacts B = Socket insert, less contacts									
Alternate Polarization	A, B, C, D, E, N = Normal (Polarization for intermateability with 253-014 is per MIL-DTL-38999 Series I)									
Optional Mod Code	-909** = See Mod Code specifications below									

253-044 High-Speed Plug mates with 253-045 Receptacle

Space-grade modification codes may be added directly to the end of any valid part number

CONTACT TYPE

Sym	Description	Glenair P/N	Wire Type	Grommet Follower	Application Notes
C	Size 16, contact for coax cable, per M39029/76 & /77;	Pin: 852-008-16-424 Skt: 852-009-16-428	RG174, RG316, RG179	N/A	Analog radio frequency or microwave applications
	Size 12, contact for coax cable, per M39029/102 & /103	Pin: 852-004-12-558 Skt: 852-005-12-559	RG174, RG316, RG179	N/A	
	Size 8, contact for coax cable, per M39029/59 & /60	Pin: 852-007-08-367 Skt: 852-006-08-366	M17 /95-RG180	859-042-02	
C1	Size 8, contact for 75 ohm coax cable	Pin: 852-056-01 Skt: 852-057-01	V73263, V75268, V76261	859-042-01	aerospace-grade digital video
D	Size 8, diff. twinax contact for 24 AWG twinax cable	Pin: 853-014-05 Skt: 853-013-05	M17 /176-00002	859-042-01	1553 databus / differential signal
E*	Size 8, El Ochito® contact for 26 AWG	White Pin: 858-003-02 Skt: 858-004-02	963-003-26 963-033-26	687-643-8-2	1G/10G Base-T Ethernet (white)
	Size 8, El Ochito® contact for 24/26-30 AWG Cable	Blue Pin: 858-028-02 Skt: 858-029-02	963-110 & 963-118	687-643-8-2	USB 3.0 (Blue)
	Size 8, El Ochito® contact for 26-30 AWG Cable	Red Pin: 858-030-02 Skt: 858-031-02	963-033-26	687-643-8-2	SATA 3.0 General High Speed (red)
Q	Size 8, contact for 24 AWG Quadrx	Pin: 854-001-02 Skt: 854-002-02	963-020	859-042-02	10/100Base-T ethernet
P	Size 8, power contact for 8 AWG	Pin: 850-014 Skt: 850-013	M22759/11 or equivalent	859-042-03	Power
T	Size 8, triax/ concentric twinax for twinax cable	Pin: 853-003-08-625 Skt: 853-004-08-628	M17 /176-00002	859-042-01	1553 Databus

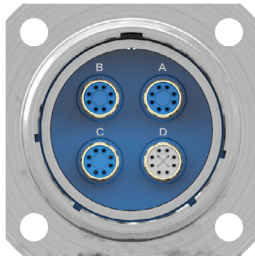
* See Table II for Contact Positions. See Figure 2 for orientation of inner pins relative to connector main key/keyway.

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



253-044 High-Speed Plug, Fixed Rear Panel-Mount Series, Roll-On / Roll-Off Nose
High-Speed data and RF insert arrangements

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

MIL-STD-1560 HIGH-SPEED AND COMBO CONTACT ARRANGEMENTS								
Contact Type	Number of Contacts							Shell Size - Ins. Arr.
	#23	#22D	#20	#16	#12	#10	#8	
High-Speed Contact Arrangements							1	11-1
							2	17-75
							4	19-4
							4	21-75
							5	23-5
							6	23-6
							8	25-8
Combo High-Speed Contact Arrangements	14							13-14
		38		2				17-2
					2		2	17-22
		8						17-60
		10	1	4				19-17
			16				1	19A-17
		14						19-18
		97						25-7
		36						25-17
			10	13	4		3	25-20
				16		5	4	25-26
			22	3	11	2	3	25-41
				40	4		2	25-46

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

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

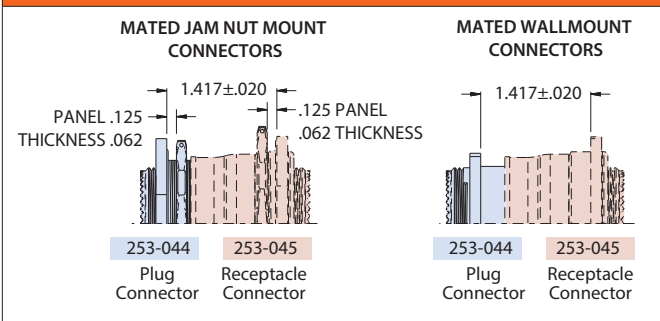


253-044 High-Speed Plug, Fixed Rear Panel-Mount Series, Roll-On / Roll-Off Nose High-Speed data and RF insert arrangements

NOTES:

1. Glenair 253-044 is designed to mate with 253-045 with same insert arrangement and polarization
2. Stainless steel locating pin to be shipped with L7 jam-nut connector
3. Misalignment capabilities are possible with 253-044, when mated to 253-045.
4. See page 80 for outgassing options
5. 253-044 connectors are rear panel-mount only. Panel to panel dimensions the same for all configurations. Tolerance as shown
6. See page 80 for outgassing options
7. Material/finish
 - Shell, jam-nut: see P/N development, finish
 - Insulator: high-grade rigid dielectric/N.A.
 - Seals: fluorosilicone blend/N.A.
 - Contacts: copper alloy/gold plated

253-044 - 253-045 DISTANCE BETWEEN MATED FLANGES

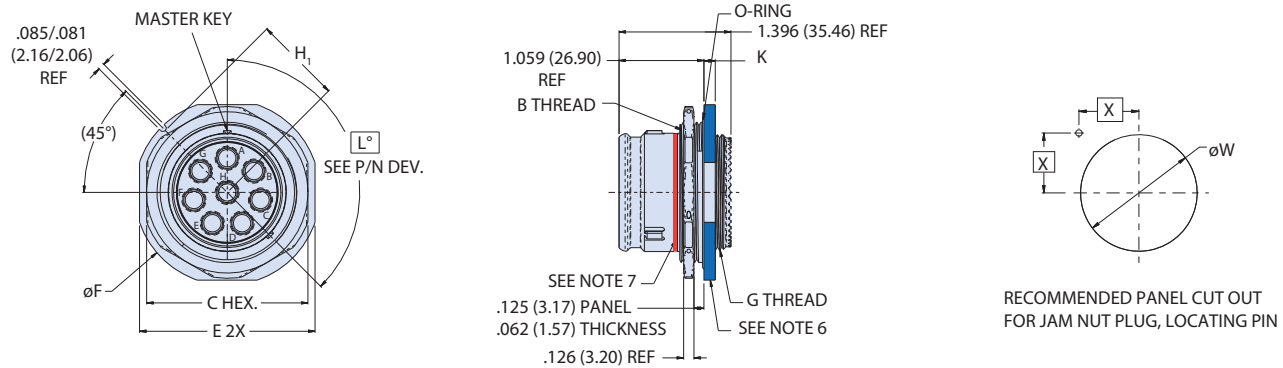


SPACE-GRADE MIL-DTL-38999 TYPE SuperNine® Blind-Mate / ASF Connectors

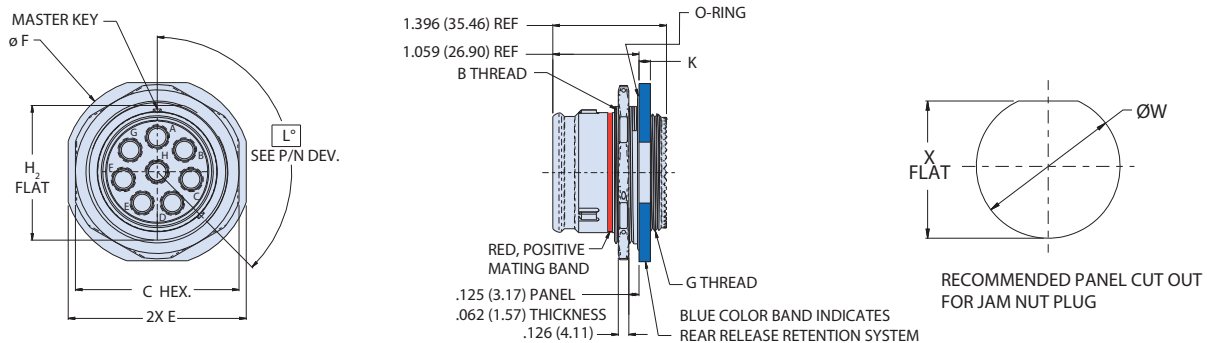


253-044 High-Speed Plug, Fixed Rear Panel-Mount Series, Roll-On / Roll-Off Nose High-Speed data and RF insert arrangements

253-044-L7 JAM-NUT MOUNT PLUG WITH LOCATING PIN, ACCESSORY THREADS AND SIZE 8 HIGH-SPEED CONTACTS



253-044-07 JAM-NUT MOUNT PLUG WITH ACCESSORY THREADS AND SIZE 8 HIGH-SPEED CONTACTS



PLUG, JAM NUT MOUNT L7 (LOCATING PIN) AND 07 (STANDARD)

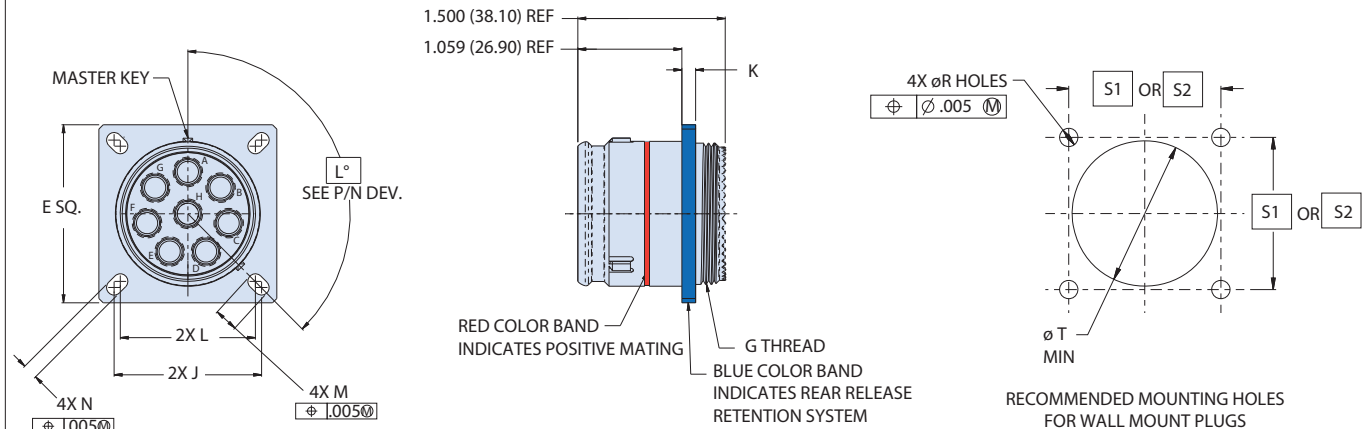
Shell Size	B Thread Class 2A	C ±.015	E ±.015	Ø F	H ₁ +.000/-0.008	H ₂ Flat +.000/-0.006	G Thread UNEF Class 2A	K Flange Thickness	L7 Panel Cut-out		07 Panel Cut-out	
									Ø W +.010/0.000	X	Ø W +.010/0.000	X flat +.010/0.000
11	.8125-20 UNEF	1.010 (25.65)	1.250 (31.75)	1.386 (35.20)	0.604 (15.34)	0.754 (19.15)	.5625-24	0.109 (2.77)	0.823 (20.90)	0.460 (11.68)	0.823 (20.90)	0.773 (19.63)
13	1.0000-20 UNEF	1.175 (29.85)	1.375 (34.92)	1.511 (38.38)	0.666 (16.92)	0.936 (23.77)	.6875-24	0.109 (2.77)	1.010 (25.65)	0.504 (12.80)	1.010 (25.65)	0.955 (24.26)
15	1.1250-18 UNEF	1.294 (32.87)	1.500 (38.10)	1.636 (41.55)	0.729 (18.52)	1.066 (27.08)	.8125-20	0.109 (2.77)	1.135 (28.83)	0.549 (13.94)	1.135 (28.83)	1.085 (27.56)
17	1.2500-18 UNEF	1.451 (36.86)	1.625 (41.28)	1.761 (44.73)	0.791 (20.09)	1.191 (30.25)	.9375-20	0.109 (2.77)	1.260 (32.00)	0.593 (15.06)	1.260 (32.00)	1.210 (30.73)
19	1.3750-18 UNEF	1.569 (39.85)	1.812 (46.02)	1.949 (49.50)	0.893 (22.68)	1.316 (33.43)	1.0625-18	0.140 (3.56)	1.385 (35.18)	0.665 (16.89)	1.385 (35.18)	1.335 (33.91)
21	1.5000-18 UNEF	1.687 (42.85)	1.938 (49.23)	2.073 (52.65)	0.955 (24.26)	1.441 (36.60)	1.1875-18	0.140 (3.56)	1.510 (38.35)	0.709 (18.01)	1.510 (38.35)	1.460 (37.08)
23	1.6250-18 UNEF	1.875 (47.63)	2.062 (52.37)	2.200 (55.88)	1.017 (25.83)	1.566 (39.78)	1.3125-18	0.140 (3.56)	1.635 (41.53)	0.753 (19.13)	1.635 (41.53)	1.585 (40.26)
25	1.7500-18 UNS	2.010 (51.05)	2.187 (55.55)	2.323 (59.00)	1.096 (27.84)	1.691 (42.95)	1.4375-18	0.140 (3.56)	1.760 (44.70)	0.806 (20.47)	1.760 (44.70)	1.710 (43.43)

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

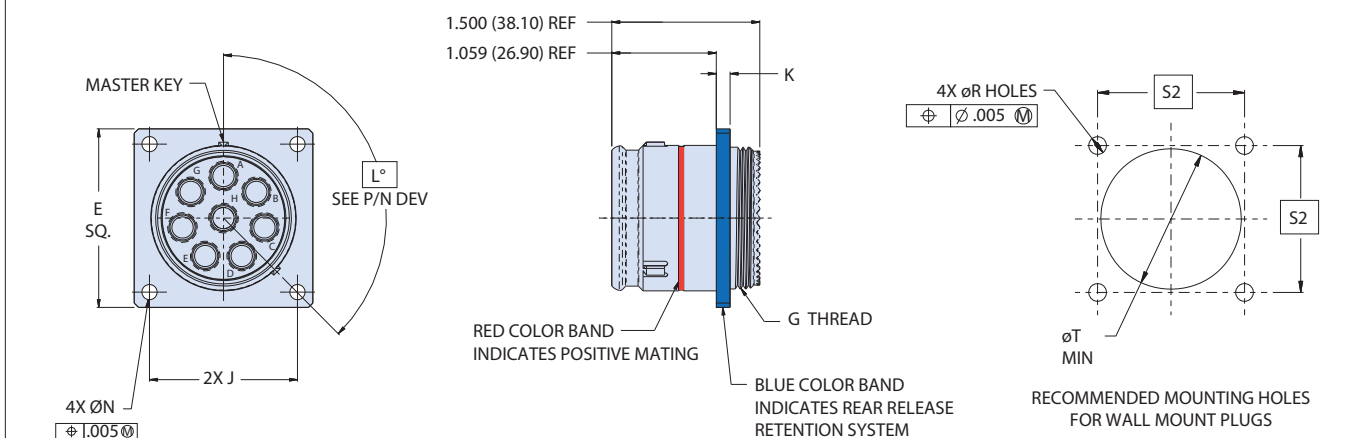


253-044 High-Speed Plug, Fixed Rear Panel-Mount Series, Roll-On / Roll-Off Nose High-Speed data and RF insert arrangements

253-044-00 PANEL-MOUNT MOUNT PLUG WITH SLOTTED HOLES, ACCESSORY THREADS AND SIZE 8 HIGH-SPEED CONTACTS



253-044-D0 PANEL-MOUNT MOUNT PLUG WITH SLOTTED HOLES, ACCESSORY THREADS AND SIZE 8 HIGH-SPEED CONTACTS



PANEL-MOUNT PLUG WITH SLOTTED HOLES AND ROUND HOLES

Shell Size	E	L	J	M	N	G Thd UNEF Class 2A	Flange Thickness	Panel-mount			
								S1	S2	T Dia.	R Dia.
11	1.031 (26.19)	0.719 (18.26)	0.812 (20.62)	0.194 (4.93)	0.128 (3.25)	.5625-24	0.109 (2.77)	0.719 (18.26)	0.812 (20.62)	0.718 (18.24)	0.133 (3.38) 0.123 (3.12)
13	1.126 (28.60)	0.812 (20.62)	0.906 (23.01)	0.194 (4.93)	0.128 (3.25)	.6875-24	0.109 (2.77)	0.812 (20.62)	0.906 (23.01)	0.844 (21.44)	
15	1.220 (30.99)	0.906 (23.01)	0.969 (24.61)	0.173 (4.39)	0.128 (3.25)	.8125-20	0.109 (2.77)	0.906 (23.01)	0.969 (24.61)	0.968 (24.59)	
17	1.311 (33.30)	0.969 (24.61)	1.062 (26.97)	0.194 (4.93)	0.128 (3.25)	.9375-20	0.109 (2.77)	0.969 (24.61)	1.062 (26.97)	1.096 (27.84)	
19	1.437 (36.50)	1.062 (26.97)	1.156 (29.36)	0.194 (4.93)	0.128 (3.25)	1.0625-18	0.140 (3.56)	1.062 (26.97)	1.156 (29.36)	1.222 (31.04)	
21	1.563 (39.70)	1.156 (29.36)	1.250 (31.75)	0.194 (4.93)	0.128 (3.25)	1.1875-18	0.140 (3.56)	1.156 (29.36)	1.250 (31.75)	1.344 (34.14)	
23	1.689 (42.90)	1.250 (31.75)	1.375 (34.92)	0.242 (6.15)	0.154 (3.91)	1.3125-18	0.140 (3.56)	1.250 (31.75)	1.375 (34.92)	1.468 (37.29)	0.159 (4.04) 0.149 (3.78)
25	1.811 (46.00)	1.375 (34.92)	1.500 (38.10)	0.242 (6.15)	0.154 (3.91)	1.4375-18	0.140 (3.56)	1.375 (34.92)	1.500 (38.10)	1.594 (40.49)	0.155 (3.94) 0.145 (3.68)