

MIL-DTL-38999 Series III Type Environmental Connectors 233-226 QDC Plug with shielded crimp removable contacts

HIGH-SPEED CONNECTORS

Part Number Development																							
Sample Part Number	233-226											B	-G6	ME	25	-	8	B	A	E	-4	-909CP	
Series / Basic Part No.	233-226 High-Speed, Quick Disconnect Plug																						
Rear Accessory Options	- = Accessory Thread and Teeth B = Integrated Backshell, Boot Adapter S = Integrated Backshell Single Band																						
Connector Style	-G6 = Plug, EMI																						
Material/Finish	NF = Aluminum/Cad. Olive Drab MT = Aluminum/Nickel PTFE ME = Aluminum/ Electroless Nickel Z1 = SST, Passivated																						
Shell Size	9, 11, 13, 17, 19, 21, 23, 25																						
Ground Option	G = Common Ground - = None; See Note 8																						
Insert Arrangement	Per MIL-STD-1560, See page C-5 and C-6																						
Contact Style	A = Pin Insert, Less Contacts B = Socket Insert, Less Contacts																						
Alternate Polarization*	A, B, C, D, E, N = Normal (IAW MIL-DTL-38999 Series III)																						
Lanyard Length	See Table I, Lanyard Length																						
Connector Type	1 = Type 1 4 = Type 4 6 = Type 6																						
Optional Mod Code	909** = Supplies connector with contacts; See modification code example for details.																						

*Refer to Section A for complete details

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.

233-226B-G6ME25-8BAE-4 -909 C P

- Basic Connector Part Number: 233-226B-G6ME25-8BAE-4
- Basic Modification Code: 909
- Contact Type Symbol (See Contact Type Table): C, D, E*, Q, P, T
- Contact Gender (Optional): P = Pin, S = Skt

*For El Ochito see Table II, Contact Configuration Table on following page for appropriate code and dash number symbol.

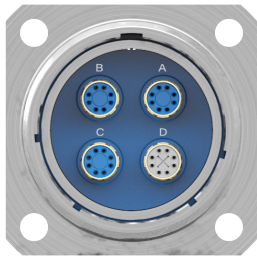
Contact Type					
Sym	Description	Glenair P/N	Wire Type	Grommet Follower	Application Notes
C	Size 16, contact for coax cable, per M39029/76 & /77;	Pin: 852-008-16-424 Skt: 852-009-16-428	RG174, RG316, RG179	N/A	Analog radio frequency or microwave applications
	Size 12, contact for coax cable, per M39029/102 & /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, differential 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/40G 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 Quadrax	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.

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EI Ochito Protocols		
WHITE	BLUE	RED
40GBASE-T	USB 3.0	Multi Gigabit 100 ohm protocols HDMI, SATA, DisplayPort 1.4

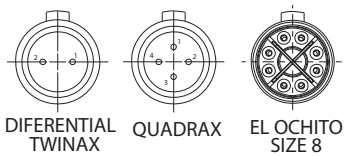


Example Code E7



Example Code E5

FIGURE 2: REFERENCE ORIENTATION OF INNER PINS RELATIVE TO CONNECTOR MAIN KEY/KEYWAY

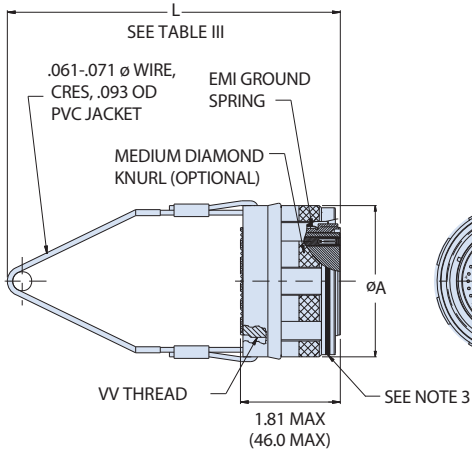


Sym	L ±.236 (±6)	Sym	L ±.236 (±6)
A	4.016 (102.01)	M	10.000 (254.00)
B	4.527 (114.99)	N	10.511 (266.98)
C	5.000 (127.00)	P	11.023 (279.98)
D	5.511 (139.98)	R	11.535 (292.99)
E	6.024 (153.01)	S	12.007 (304.98)
F	6.535 (165.99)	T	12.519 (317.98)
G	7.007 (177.98)	U	13.031 (330.99)
H	7.519 (190.98)	V	14.015 (355.98)
I	7.992 (203.00)	W	15.000 (381.00)
J	8.503 (215.98)	X	16.023 (406.98)
K	9.015 (228.98)	Y	17.007 (431.98)
L	9.527 (241.99)	Z	18.031 (457.99)

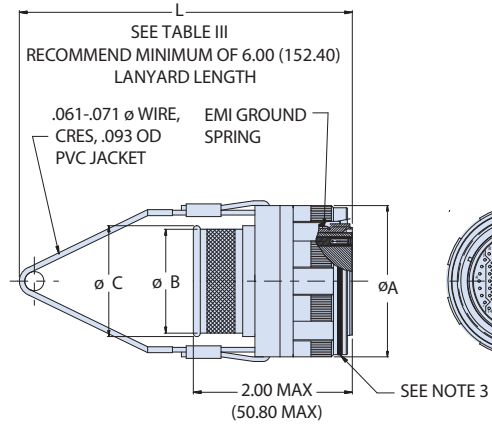
EI Ochito Contact Configuration								
SYM	CAVITY A	CAVITY B	CAVITY C	CAVITY D	CAVITY E	CAVITY F	CAVITY G	CAVITY H
E	W	W	W	W	W	W	W	W
E2	B	W	W	W	W	W	W	W
E3	R	W	W	W	W	W	W	W
E4	B	B	W	W	W	W	W	W
E5	R	B	W	W	W	W	W	W
E6	R	R	W	W	W	W	W	W
E7	B	B	B	W	W	W	W	W
E8	R	B	B	W	W	W	W	W
E9	R	R	B	W	W	W	W	W
E10	R	R	R	W	W	W	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

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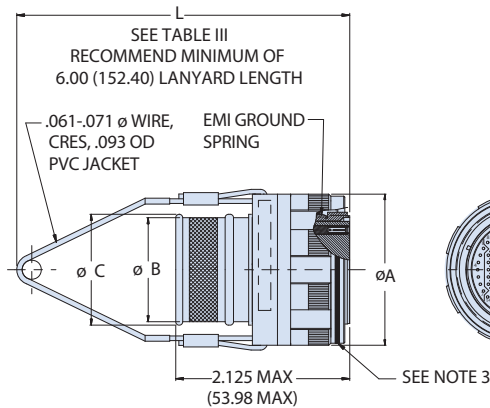
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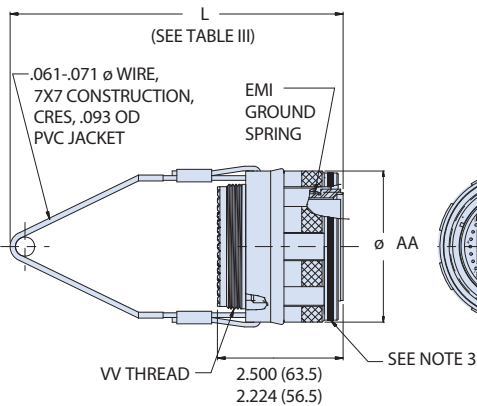
TYPE -4



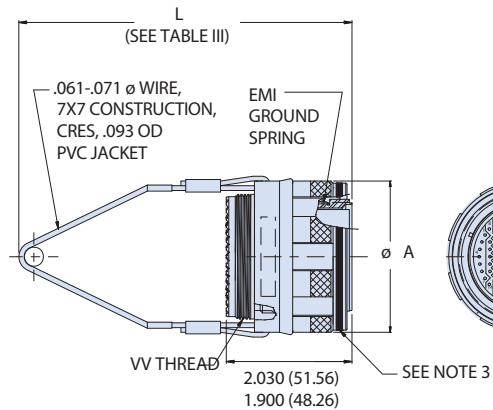
**TYPE -4
S - SINGLE BAND**



**TYPE -4
B - BOOT GROOVE**



TYPE -1



TYPE -6

*Refer to el Ochito contact positions table for orientation.

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HIGH-SPEED CONNECTORS

General Dimensions				
Shell Size	Shell Size Code	ø A ±.06 (1.52)	ø AA ±.06 (1.52)	VV Thread
09	A	1.060 (26.92)	N/A	M12x1-6g-0.100R
11	B	1.180 (29.97)	1.242 (31.55)	M15x1-6g-0.100R
13	C	1.310 (33.27)	1.325 (33.65)	M18x1-6g-0.100R
15	D	1.437 (36.50)	1.499 (38.07)	M22x1-6g-0.100R
17	E	1.560 (39.62)	1.622 (41.20)	M25x1-6g-0.100R
19	F	1.690 (42.93)	1.752 (44.50)	M28x1-6g-0.100R
21	G	1.760 (44.70)	1.822 (46.28)	M31x1-6g-0.100R
23	H	1.900 (48.26)	1.962 (49.83)	M34x1-6g-0.100R
25	J	2.000 (50.80)	2.125 (53.97)	M37x1-6g-0.100R

Integral Backshell Dimensions		
Shell Size	ø B	ø C
11	0.550 (13.97)	0.595 (15.11)
13	0.670 (17.02)	0.715 (18.16)
15	0.815 (20.70)	0.860 (21.84)
17	0.945 (24.00)	0.990 (25.15)
19	1.050 (26.67)	1.100 (27.94)
21	1.170 (29.72)	1.220 (30.99)
23	1.290 (32.77)	1.340 (34.04)
25	1.400 (35.56)	1.450 (36.83)

Size #9 only available on Type -4

Separation Pull Forces Maximum			
Shell Size	Shell Size Code	Straight Pull Lbs (Newton)	15 Degree Pull Lbs (Newton)
09	A	44.96 (200)	55.08 (245)
11	B	44.96 (200)	55.08 (245)
13	C	44.96 (200)	55.08 (245)
15	D	44.96 (200)	55.08 (245)
17	E	44.96 (200)	100.04 (445)
19	F	89.92 (400)	100.04 (445)
21	G	89.92 (400)	100.04 (445)
23	H	89.92 (400)	100.04 (445)
25	J	89.92 (400)	100.04 (445)

NOTES

- Material/Finish
 - Barrel, coupling nut, lanyard ring: see part number development
 - Ratchet ring, detent spring: stainless steel/passivated
 - Grounding spring: BeCu alloy / eletroless nickel
 - Wave spring: CRES / passivated
 - Insulators: high grade rigid dielectric/ N.A.
 - Seals: fluorosilicone blend / N.A.
- 233-226 Connector is designed to mate with any QPL manufacturer's MIL-DTL-38999, Series III receptacle connector with the same shell size, insert arrangement, polarization and mating contact
- Blue color band indicates rear release retention system
- For backshell extender consult factory.
- Dimension B is clearance to accommodate MIL-C-85049 accessories.
- All contacts, insertion/ removal tool, and sealing plug to be ordered separately
- Connector 233-260 is commercial equivalent of D38999/29, /30 and /31 type 2
- Ground plane option only available for insert arrangements where all contacts are shielded type
- Modification code 909 can be added to the end of part number to include contacts. See contact reference guide table. All remaining combo contact arrangements for size #22, 20, 16 and 12 are to be power.