

MIL-DTL-38999 Series I Type 231-218 High-speed wall-mount receptacle with standoffs

"BETTER THAN QPL" FEATURES AND BENEFITS

- Improved, positive-lock, 3-point stainless-steel pin bayonet coupling with outstanding vibration and shock resistance
- Plug ground fingers for advanced EMC
- Glenair Signature tin zinc finish class is RoHS compliant and cadmium compatible
- Precision-machined key/keyway polarization for reliable mismatching protection
- Expanded receptacle styles include Clinch-nut and Helicoil mounting, and In-Line configurations
- Scoop-proof design prevents pin damage and short circuits
- Fully tooled for all MIL-STD-1560 insert arrangements
- Contact options include size #22D, #20, #16, and #12 (see High-Speed series for Size #8)
- 500+ mating cycles exceeds MIL-DTL-38999 specification

POWER SPECIFICATIONS

- Max operating temperature is 200°C finish dependent
- Meets Mil-Spec service rating, insert dependent

HOW TO ORDER									
Sample Part Number	231-218	-CM	NF	17	E	-	2	P	N
Basic Part Number	231-218								
Connector Style	(See Table IV)								
Material/Finish	(See Table V)								
Shell Size	9, 11, 13, 15, 17, 19, 21, 23, 25								
Contact Type	(See Table VI)								
Ground Option	G = Common Ground - = None								
Insert Arrangement	PER MIL-STD-1560								
Contact Style	P = Pin, PC Tail S = Socket, PC Tail								
Alternate Polarization	A, B, C, D, E, N = Normal, U = Universal								

TABLE II - MOUNTING HOLES

BACK PANEL RECOMMENDED MOUNTING HOLES				
Shell Size Code	Shell Size	ØN Min	ØR Holes	V Bsc
A	9	0.656 (16.66)		0.719 (18.26)
B	11	0.796 (20.22)		0.812 (20.62)
C	13	0.922 (23.42)		0.906 (23.01)
D	15	1.047 (26.59)	.133 (3.38) .123 (3.12)	0.969 (24.61)
E	17	1.219 (30.96)		1.062 (26.97)
F	19	1.297 (32.94)		1.156 (29.36)
G	21	1.422 (36.12)		1.250 (31.75)
H	23	1.547 (39.29)	.159 (4.04) .149 (3.78)	1.375 (34.93)
J	25	1.672 (42.47)	.155 (3.94) .145 (3.68)	1.500 (38.10)

TABLE III

Contact Size	PC Tail Øm
NO 23	.020 (0.51) .018 (0.46)
NO 22	.020 (0.51) .018 (0.46)
NO 20	.030 (0.76) .028 (0.71)
NO 16	.040 (1.02) .038 (0.97)
NO 12	.072 (1.83) .070 (1.78)

TABLE IV - CONNECTOR STYLE

SYM	Description
CM	Receptacle, Wall-mount With Metric Clinch-nuts
CS	Receptacle, Wall-mount With Standard Clinch-nuts
DO	Receptacle, Wall-mount With Thru Holes
HM	Receptacle, Wall-mount With Metric Helicoils
HS	Receptacle, Wall-mount With Standard Helicoils
T0	Receptacle, Wall-mount With Std Tapped Holes (MAT; SST & MB)
T1	Receptacle, Wall-mount With Mtc Tapped Holes (MAT; SST & MB)

MIL-DTL-38999 Series I Type
231-218 High-speed wall-mount receptacle with standoffs

HIGH-SPEED CONNECTORS

TABLE VII - OCHITO POSITIONS
B = BLUE, R = RED, W = WHITE

SYM	Contact 1	Contact 2	Contact 3	Contact 4	Contact 5	Contact 6	Contact 7	Contact 8
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 V - MATERIAL/FINISH

Sym	Material	Finish
NF	Aluminum Alloy	Cad/O.D. Over Electroless Nickel
MA		Electroless Nickel, Matte
ME		Electroless Nickel
MN		Tri-Nickel Alloy
MT		Nickel-PTFE
TZ		Tin Zinc Over Electroless Nickel
ZN		Zinc-Nickel Olive Drab
ZR		Zinc Ni, Black (Tri-Valent Cr)
Z1		Passivate
ZL	Stainless Steel (SST)	Electrodeposited Nickel
AB	Marine Bronze (MB)	None (Clean Only)

TABLE VI - CONTACT STYLE

SYM	Description
C	Coax, 50 Ohm
C1	Coax, 75 Ohm
D	Differential Twinax
E*	El Ochito
P	Power
Q	Quadrx
T	Triax/Concentric Twinax
OMIT	Per Mil-Std-1560

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

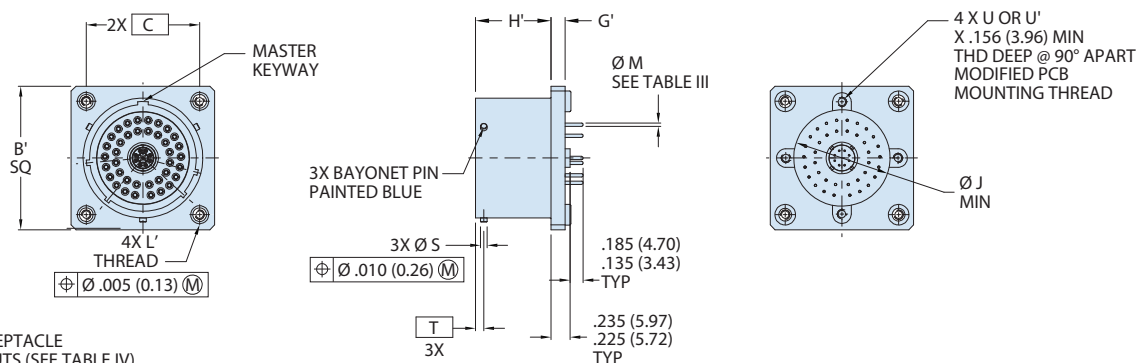
EL OCHITO PROTOCOLS

		
WHITE	BLUE	RED
10GBASE-T	USB 3.0	HDMI, SATA, DisplayPort

The Ochito octaxial contact has a color-coded insulator signifying the data protocol. White is used for 10 Gb Ethernet, blue is used for USB 3.0, and red is used for multi gigabit 100 ohm protocols including HDMI, DisplayPort and SATA. The connector part number includes a protocol code from Table VII. This code determines specific contact position for every combination of protocol.

MIL-DTL-38999 Series I Type
231-218 High-speed wall-mount receptacle with standoffs

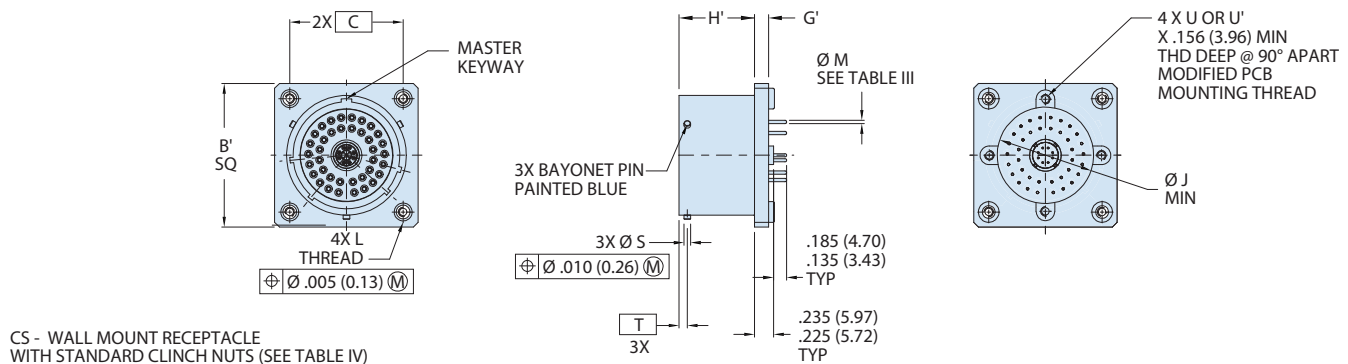
TABLE I - CM - WALL-MOUNT RECEPTACLE



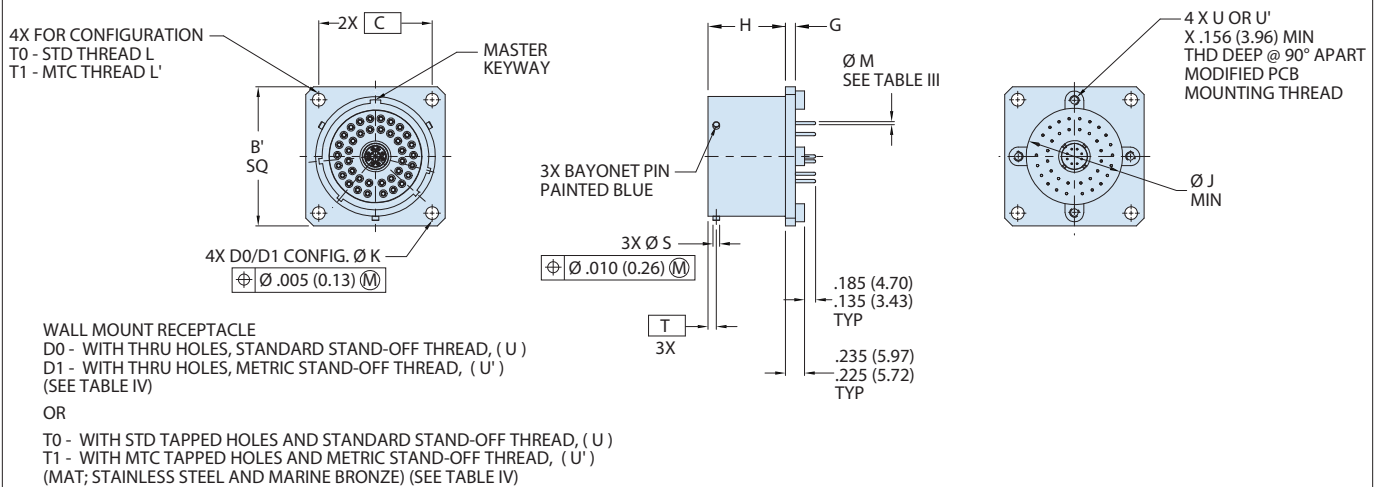
Shell Size Code	Shell Size	B Sq	B' Sq	C Bsc	G	G'	H	H'	ØJ Min	Øk	L Thread	L' Thread	ØS	T Bsc	Stand-Off Threads	
															U	U'
A	9	.948 (24.08) .925 (23.50)	1.043 (26.49) 1.003 (25.48)	0.719 (18.26)	.103 (2.62) .077 (1.96)	.153 (3.89) .127 (3.23)	.952 (24.18) .928 (23.57)	.927 (23.55) .903 (22.94)	0.340 (8.64)	.136 (3.45) .120 (3.05)	.112-40 UNC	M3X0.5	.084 (2.13) .076 (1.93)	0.100 (2.54)	Accepts .112-40 UNC-2A	Accepts M3 X 0.5-6G
B	11	1.043 (26.49) 1.019 (25.88)	1.136 (28.85) 1.096 (27.84)	0.812 (20.62)					0.468 (11.89)							
C	13	1.137 (28.88) 1.114 (28.30)	1.230 (31.24) 1.190 (30.23)	0.906 (23.01)					0.572 (14.53)							
D	15	1.232 (31.29) 1.208 (30.68)	1.293 (32.84) 1.253 (31.83)	0.969 (24.61)					0.705 (17.91)							
E	17	1.323 (33.60) 1.299 (32.99)	1.386 (35.20) 1.346 (34.19)	1.062 (26.97)					0.830 (21.08)							
F	19	1.449 (36.80) 1.425 (36.20)	1.480 (37.59) 1.440 (36.58)	1.156 (29.36)					0.934 (23.72)							
G	21	1.575 (40.01) 1.551 (39.40)	1.574 (39.98) 1.534 (38.96)	1.250 (31.75)	.133 (3.38) .107 (2.72)	.183 (4.65) .157 (3.99)		1.055 (26.80)	.162 (4.11) .146 (3.71)	.138-32 UNC	M4X0.7	.131 (3.33) .123 (3.12)	0.109 (2.77)			
H	23	1.701 (43.21) 1.677 (42.60)	1.759 (44.68) 1.719 (43.66)	1.375 (34.93)				1.160 (29.46)								
J	25	1.823 (46.30) 1.799 (45.69)	1.884 (47.85) 1.844 (46.84)	1.500 (38.10)				1.307 (33.20)								

MIL-DTL-38999 Series I Type
 231-218 High-speed wall-mount receptacle with standoffs

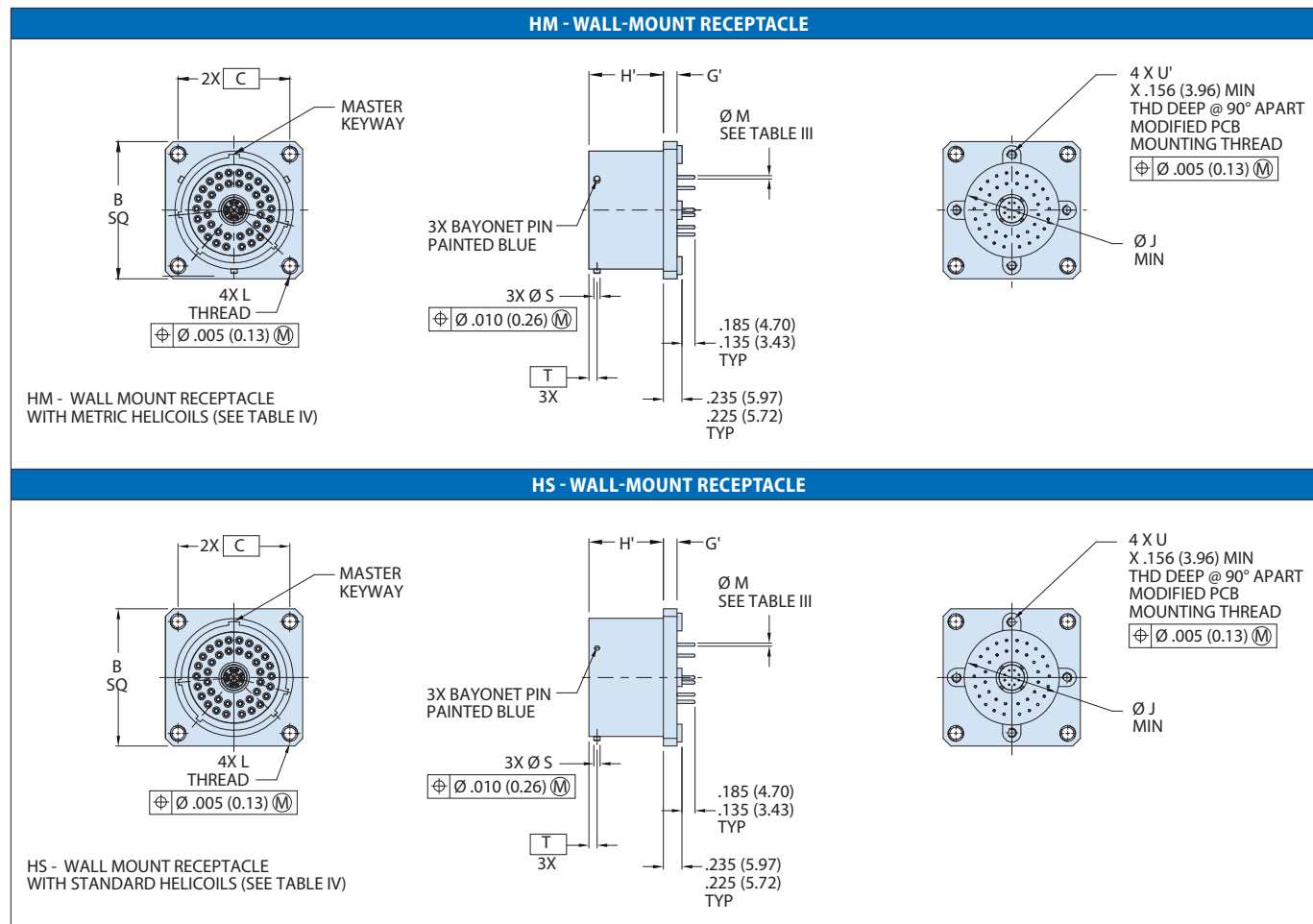
CS - WALL-MOUNT RECEPTACLE



D0 - WALL-MOUNT RECEPTACLE



MIL-DTL-38999 Series I Type
 231-218 High-speed wall-mount receptacle with standoffs



MIL-DTL-38999 Series I Type
231-218 High-speed wall-mount receptacle with standoffs

FIGURE 1 - INSERT ARRANGEMENTS

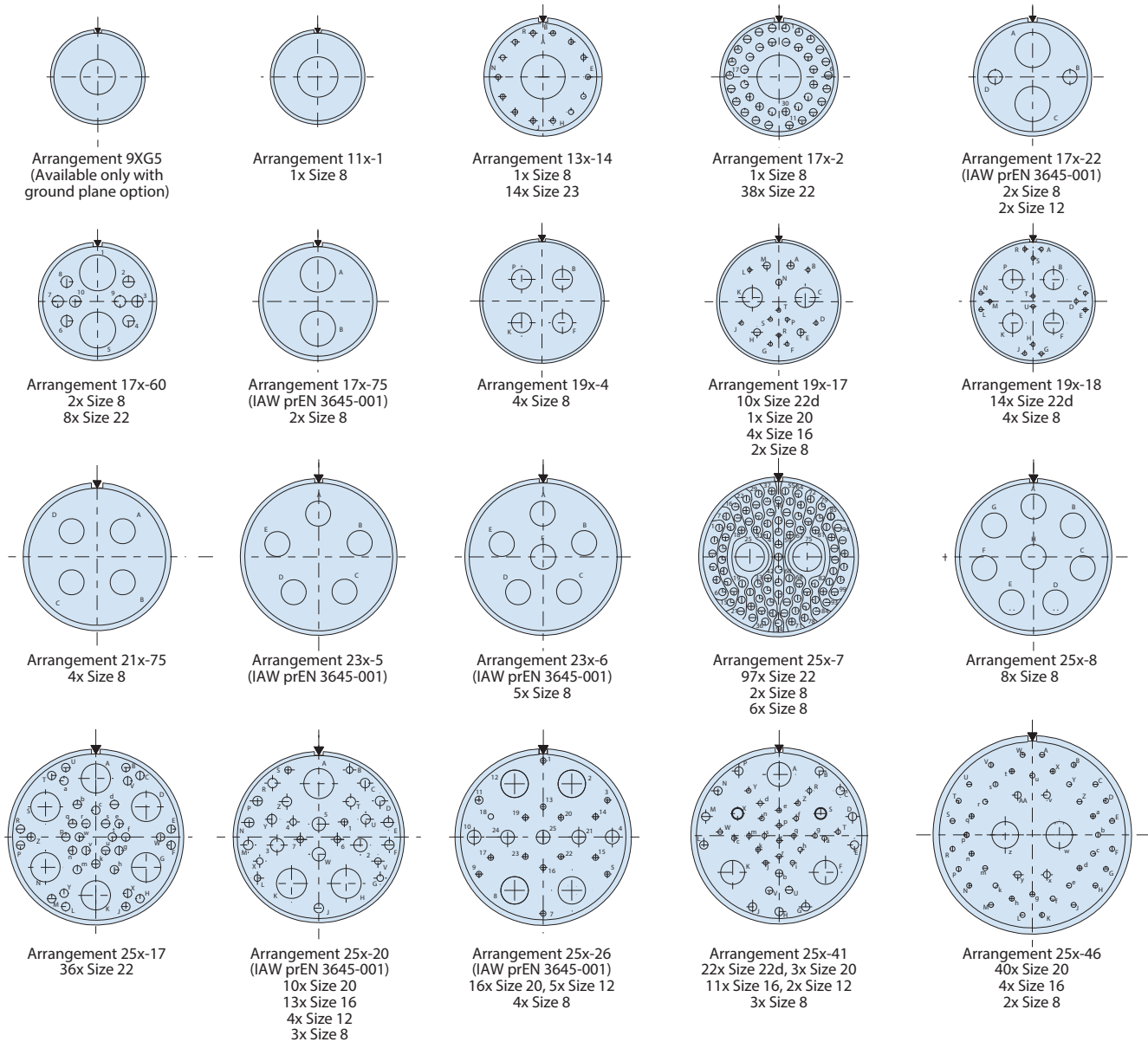
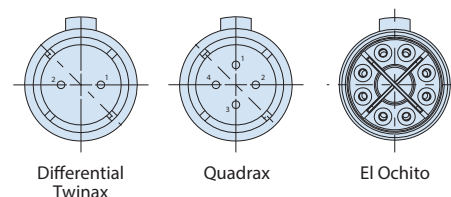


Figure 1
Insert arrangements, mating
face of pin insert shown.
Replace X with C, D, E, Q or T
(See Table VI)

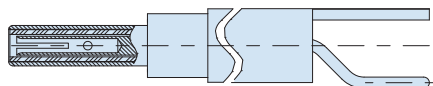
FIGURE 2 - CONTACT INNER PIN ORIENTATION



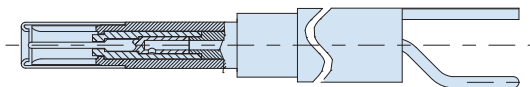
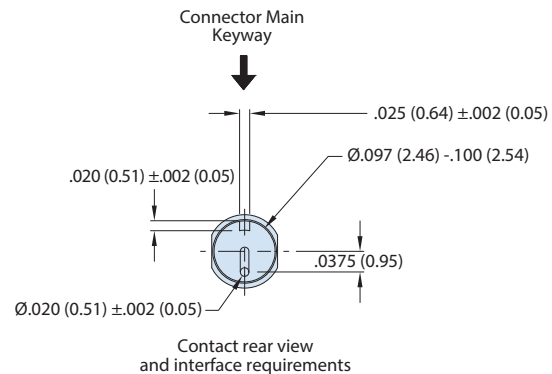
MIL-DTL-38999 Series I Type
 231-218 High-speed wall-mount receptacle with standoffs

COAX CONTACTS

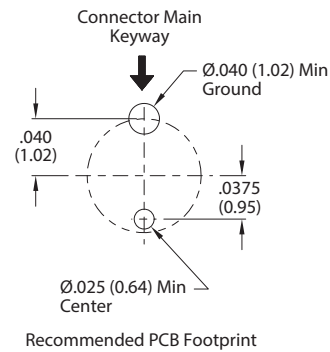
COAX CONTACTS



Size #16 Coax Contact, Pin, PC Tail Detail
 Interface per M39029/76
 Note: Max usable frequency of 700 Mhz

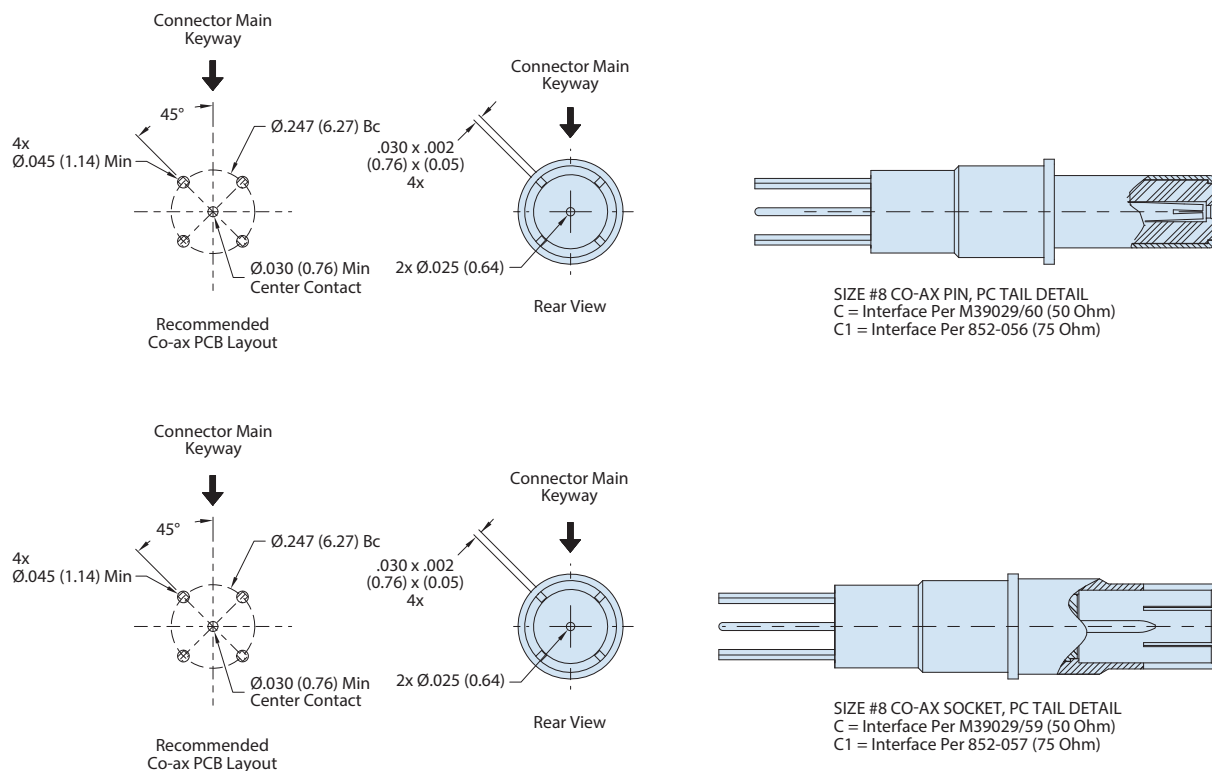
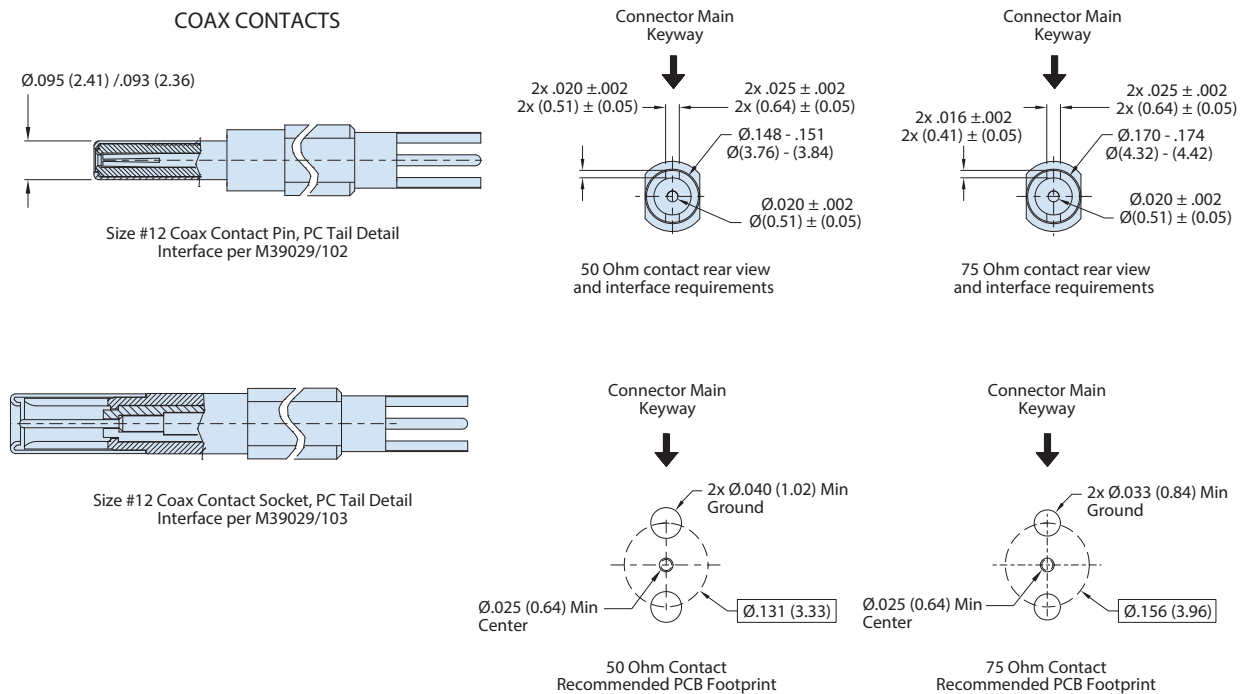


Size #16 Coax Contact, Socket, PC Tail Detail
 Interface per M39029/77
 Note: Max usable frequency of 700 Mhz

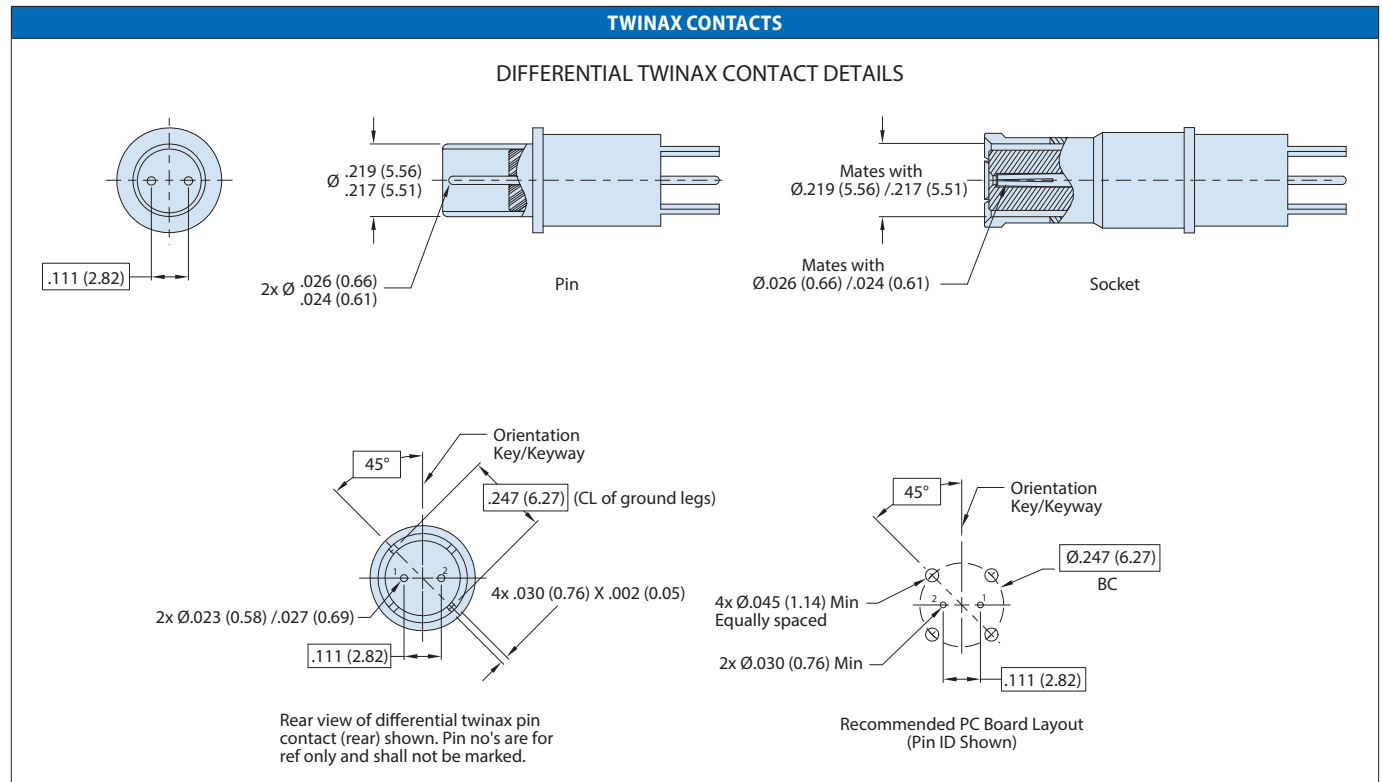


MIL-DTL-38999 Series I Type
231-218 High-speed wall-mount receptacle with standoffs

COAX CONTACTS



MIL-DTL-38999 Series I Type
 231-218 High-speed wall-mount receptacle with standoffs

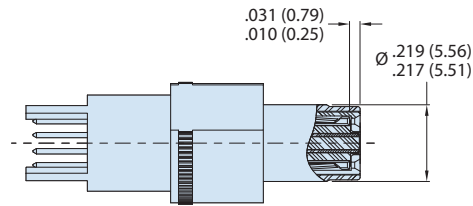
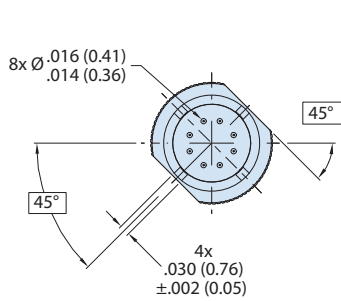


HIGH-SPEED CONNECTORS

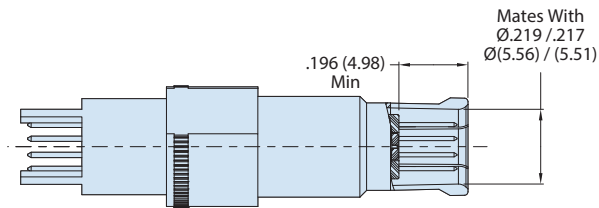
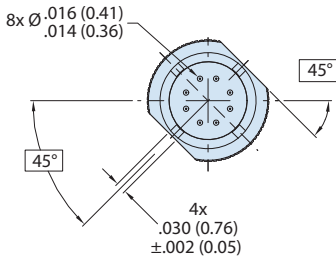
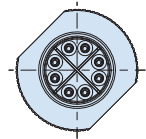
MIL-DTL-38999 Series I Type
231-218 High-speed wall-mount receptacle with standoffs

HIGH-SPEED CONNECTORS

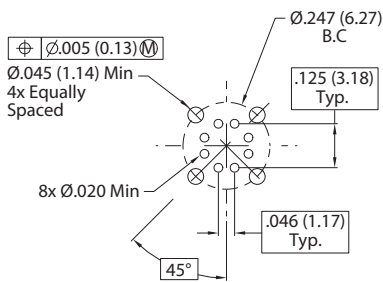
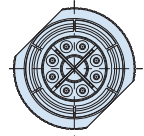
EL OCHITO CONTACTS



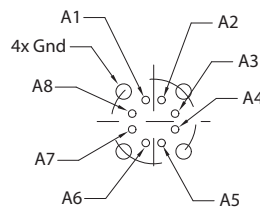
Size #8 El Ochito Pin, PC Tail Detail
White Insert - For Ethernet Applications



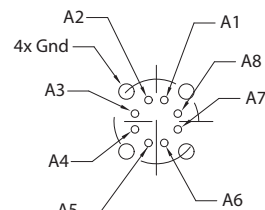
Size #8 El Ochito Socket, PC Tail Detail
White Insert - For Ethernet Applications



Recommended PC Board Layout
(See Detail A for pin assignment)
For optimal performance, see
Glenair application note AN0002



PC Tail Pin Assignment
(For Ochito Pin Contact)



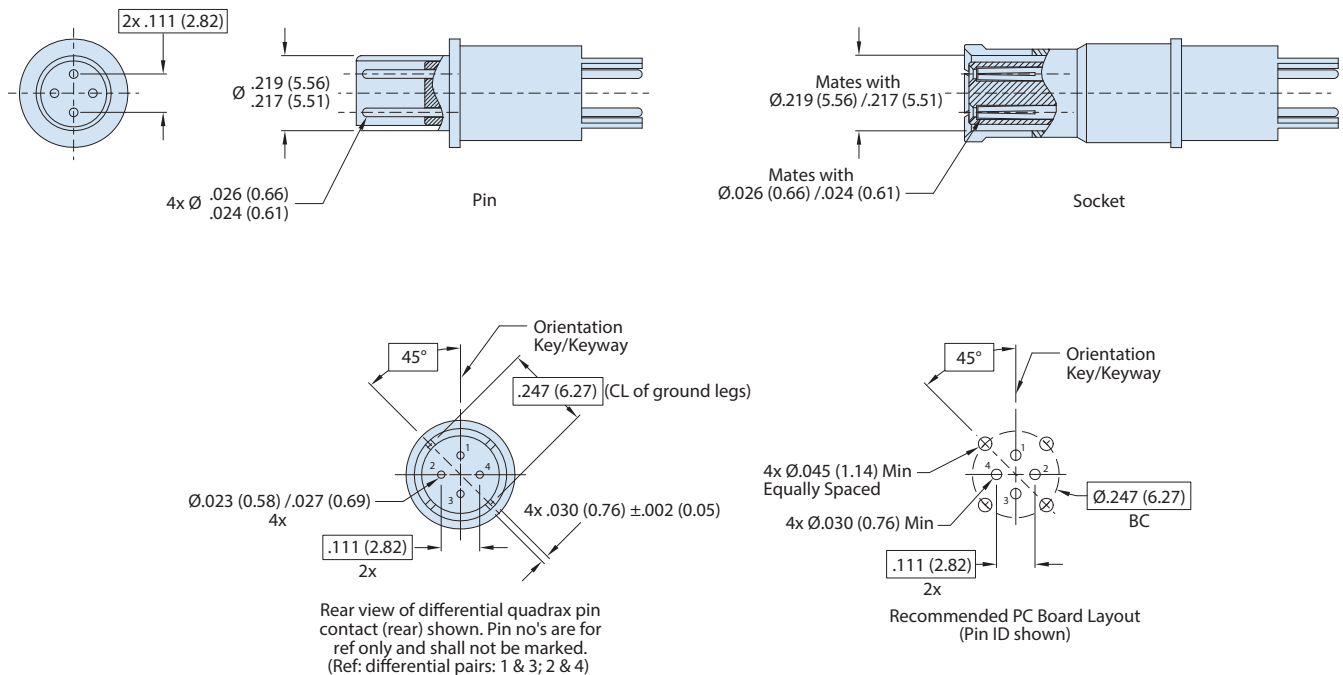
PC Tail Pin Assignment
(For Ochito Skt Contact)

DETAIL A (TYP)

MIL-DTL-38999 Series I Type
 231-218 High-speed wall-mount receptacle with standoffs

QUADRAX CONTACTS

QUADRAX CONTACT DETAILS



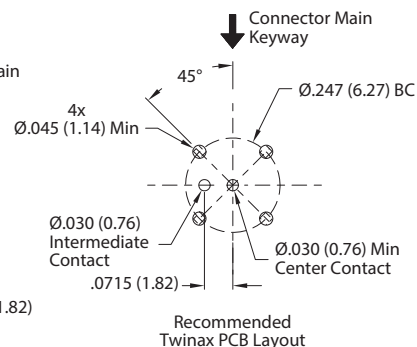
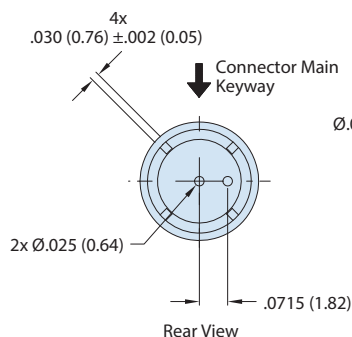
MIL-DTL-38999 Series I Type
 231-218 High-speed wall-mount receptacle with standoffs

TRIAX / CONCENTRIC TWINAX CONTACTS

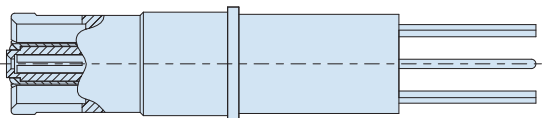
TRIAX / CONCENTRIC TWINAX PIN



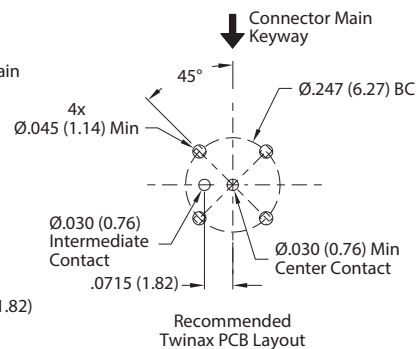
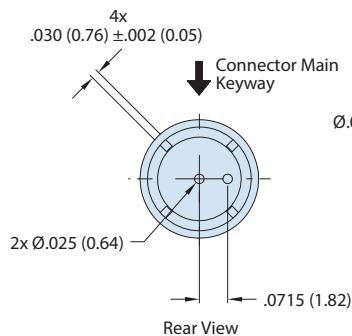
Size #8 Concentric Twinax Pin, Pc Tail Detail
 Interface per M39029/90 and/113



TRIAX / CONCENTRIC TWINAX SOCKET



Size #8 Concentric Twinax Socket, PC Tail Detail
 Interface per M39029/91 and/114



MIL-DTL-38999 Series I Type
231-218-07 High-speed jam-nut mount receptacle with standoffs



HOW TO ORDER									
Sample Part Number	231-218	-07	NF	17	E	-	2	P	N
Basic Part Number	231-218								
Connector Style	07 = Receptacle, Jam-nut, Standard Standoff Thread 17 = Receptacle, Jam-nut, Metric Standoff Thread								
Material/Finish	(See Table I)								
Shell Size	9, 11, 13, 15, 17, 19, 21, 23, 25								
Contact Type	(See Table V)								
Ground Option	G = Common Ground - = None								
Insert Arrangement	PER MIL-STD-1560								
Contact Style	P = Pin, PC Tail S = Socket, PC Tail								
Alternate Polarization	A, B, C, D, N = Normal								

**“BETTER THAN QPL”
FEATURES AND BENEFITS**

- Improved, positive-lock, 3-point stainless-steel pin bayonet coupling with outstanding vibration and shock resistance
- Plug ground fingers for advanced EMC
- Glenair Signature tin zinc finish class is RoHS compliant and cadmium compatible
- Precision-machined key/keyway polarization for reliable mismatching protection
- Expanded receptacle styles include Clinch-nut and Helicoil mounting, and In-Line configurations
- Scoop-proof design prevents pin damage and short circuits
- Fully tooled for all MIL-STD-1560 insert arrangements
- Contact options include size #22D, #20, #16, and #12 (see High-Speed series for Size #8)
- 500+ mating cycles exceeds MIL-DTL-38999 specification

TABLE I - MATERIAL/FINISH		
Sym	Material	Finish
NF	Aluminum Alloy	Cad/O.D. Over Electroless Nickel
MA		Electroless Nickel, Matte
ME		Electroless Nickel
MN		Tri-Nickel Alloy
MT		Nickel-PTFE
TZ		Tin Zinc Over Electroless Nickel
ZR	Stainless Steel (SST)	Zinc Ni, Black (Tri-Valent Cr)
Z1		Passivate
ZL	Marine Bronze (MB)	Electrodeposited Nickel
AB		None (Clean Only)

TABLE V - CONTACT STYLE	
SYM	Description
C	Coax, 50 Ohm
C1	Coax, 75 Ohm
D	Differential Twinax
E*	El Ochito
P	Power
Q	Quadrax
T	Triax/Concentric Twinax
OMIT	Per Mil-Std-1560

TABLE IV	
Contact Size	PC Tail Øm
NO 23	.020 (0.51) .018 (0.46)
NO 22	.020 (0.51) .018 (0.46)
NO 20	.030 (0.76) .028 (0.71)
NO 16	.040 (1.02) .038 (0.97)
NO 12	.072 (1.83) .070 (1.78)
NO 8	.182 (4.62) .178 (4.52)

POWER SPECIFICATIONS

- Max operating temperature is 200°C finish dependent
- Meets Mil-Spec service rating, insert dependent

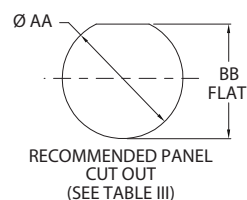
MIL-DTL-38999 Series I Type
231-218-07 High-speed jam-nut mount receptacle with standoffs

HIGH-SPEED CONNECTORS

TABLE VII - OCHITO POSITIONS
B = BLUE, R = RED, W = WHITE

SYM	Contact 1	Contact 2	Contact 3	Contact 4	Contact 5	Contact 6	Contact 7	Contact 8
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 III - PANEL-MOUNT



Size Code	Shell Size	ØAA	BB Flat
A	9	0.703 (17.86) 0.693 (17.60)	0.661 (16.79) 0.654 (16.61)
B	11	0.835 (21.21) 0.825 (20.96)	0.771 (19.58) 0.761 (19.33)
C	13	1.020 (25.91) 1.010 (25.65)	0.955 (24.26) 0.945 (24.00)
D	15	1.145 (29.08) 1.135 (28.83)	1.085 (27.56) 1.075 (27.31)
E	17	1.270 (32.26) 1.260 (32.00)	1.210 (30.73) 1.200 (30.48)
F	19	1.395 (35.43) 1.385 (35.18)	1.335 (33.91) 1.325 (33.66)
G	21	1.520 (38.61) 1.510 (38.35)	1.460 (37.08) 1.450 (36.83)
H	23	1.645 (41.78) 1.635 (41.53)	1.585 (40.26) 1.575 (40.01)
J	25	1.770 (44.96) 1.760 (44.70)	1.710 (43.43) 1.700 (43.18)

TABLE VI - 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

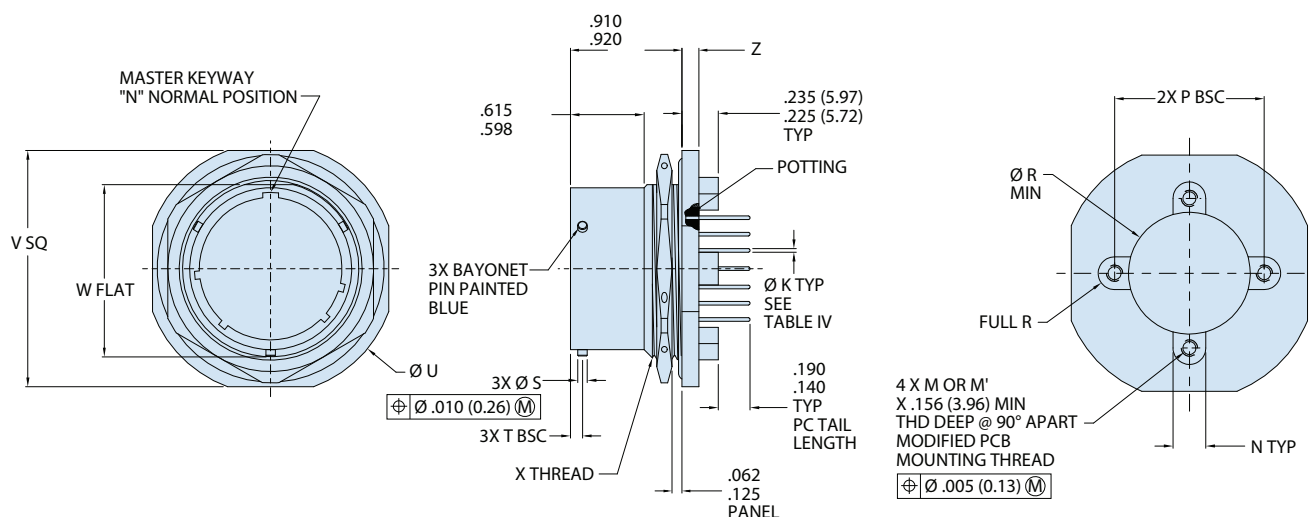
EL OCHITO PROTOCOLS

WHITE	BLUE	RED
10GBASE-T	USB 3.0	HDMI, SATA, DisplayPort

The Ochito octaxial contact has a color-coded insulator signifying the data protocol. White is used for 10 Gb Ethernet, blue is used for USB 3.0, and red is used for multi gigabit 100 ohm protocols including HDMI, DisplayPort and SATA. The connector part number includes a protocol code from Table VII. This code determines specific contact position for every combination of protocol.

MIL-DTL-38999 Series I Type
231-218-07 High-speed jam-nut mount receptacle with standoffs

TABLE II - JAM NUT MOUNT



											Threads		Width		
Size Code	Shell Size	P Bsc	ØR Min	ØS	T Bsc	ØU	V Sq.	W Flat	X Thread	Z	M	M'	N		
A	9	0.594 (15.09)	0.340 (8.64)	.084 (2.13) .076 (1.93)	0.100 (2.54)	1.204 (30.58) 1.172 (29.77)	1.078 (27.38) 1.046 (26.57)	.655 (16.64) .645 (16.38)	.6875-24 UNEF-2A	.120 (3.05) .099 (2.51)	#4-40 UNC-2B	M3 X 0.5	0.150 (3.81)		
B	11	0.719 (18.26)	0.468 (11.89)			1.391 (35.33) 1.359 (34.52)	1.266 (32.16) 1.234 (31.34)	.755 (19.18) .745 (18.92)	.8125-20 UNEF-2A				0.175 (4.45)		
C	13	0.812 (20.62)	0.572 (14.53)			1.516 (38.51) 1.484 (37.69)	1.391 (35.33) 1.359 (34.52)	.942 (23.93) .932 (23.67)	1.0000-20 UNEF-2A				0.200 (5.08)		
D	15	0.906 (23.01)	0.705 (17.91)			1.641 (41.68) 1.609 (40.87)	1.516 (38.51) 1.484 (37.69)	1.066 (27.08) 1.056 (26.82)	1.1250-18 UNEF-2A						
E	17	1.030 (26.16)	0.830 (21.08)			1.766 (44.86) 1.734 (44.04)	1.641 (41.68) 1.609 (40.87)	1.191 (30.25) 1.181 (30.00)	1.2500-18 UNEF-2A	.151 (3.84) .130 (3.30)			0.225 (5.72)		
F	19	1.150 (29.21)	0.934 (23.72)			1.954 (49.63) 1.922 (48.82)	1.828 (46.43) 1.796 (45.62)	1.316 (33.43) 1.306 (33.17)	1.3750-18 UNEF-2A						
G	21	1.221 (31.01)	1.055 (26.80)			2.078 (52.78) 2.046 (51.97)	1.954 (49.63) 1.922 (48.82)	1.441 (36.60) 1.431 (36.35)	1.5000-18 UNEF-2A						
H	23	1.360 (34.54)	1.160 (29.46)			2.204 (55.98) 2.172 (55.17)	2.078 (52.78) 2.046 (51.97)	1.566 (39.78) 1.556 (39.52)	1.6250-18 UNEF-2A						
J	25	1.475 (37.47)	1.307 (33.20)	.131 (3.33) .123 (3.12)	0.109 (2.77)	2.328 (59.13) 2.296 (58.32)	2.204 (55.98) 2.172 (55.17)	1.691 (42.95) 1.681 (42.70)	1.7500-18 UNEF-2A						

HIGH-SPEED CONNECTORS

MIL-DTL-38999 Series I Type
231-218-07 High-speed jam-nut mount receptacle with standoffs

FIGURE 1 - INSERT ARRANGEMENTS

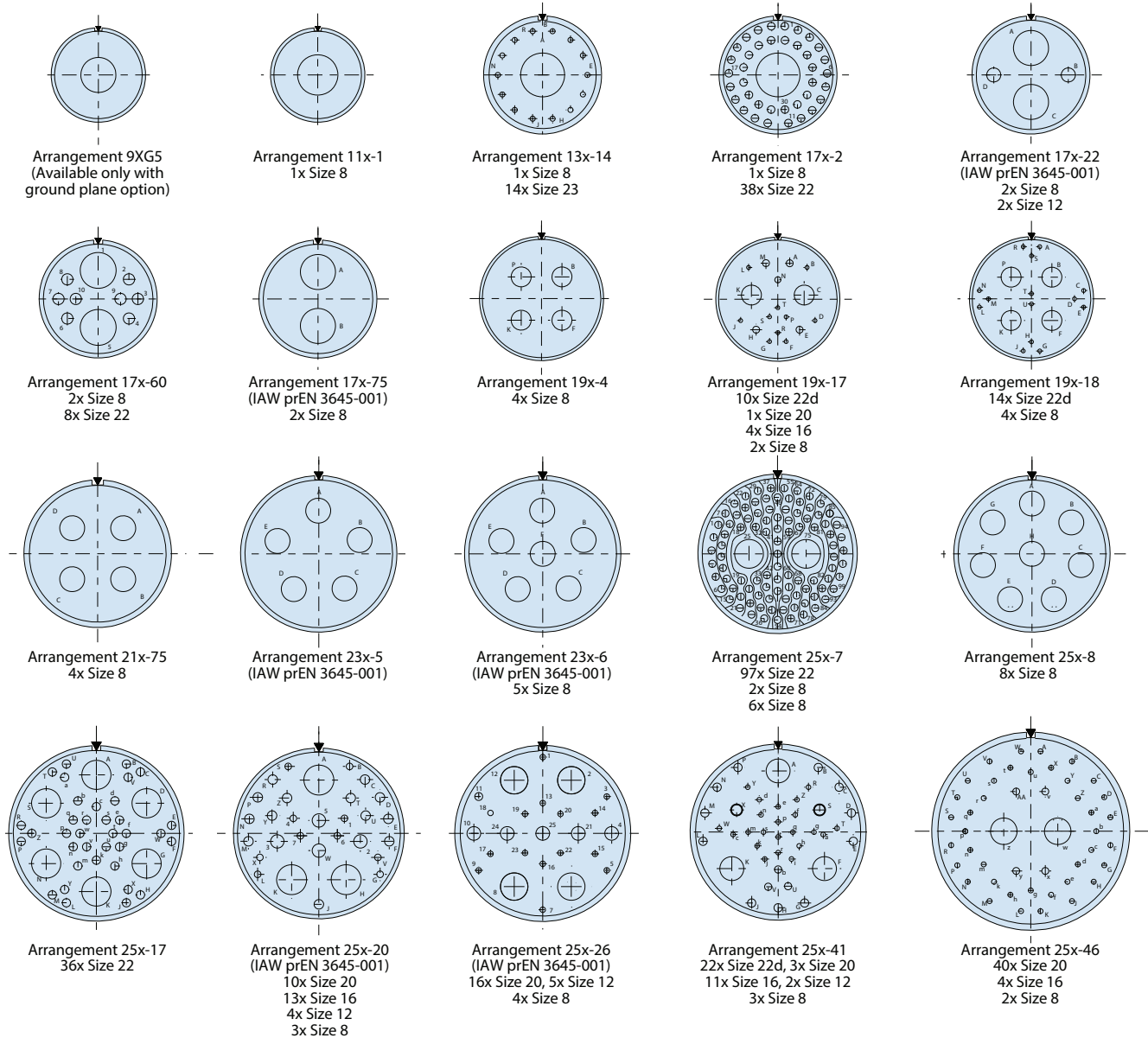
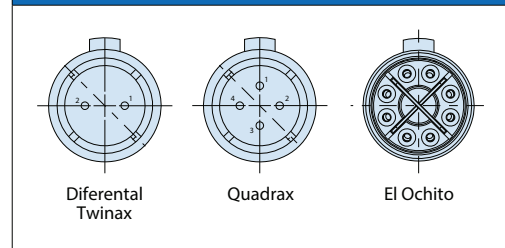


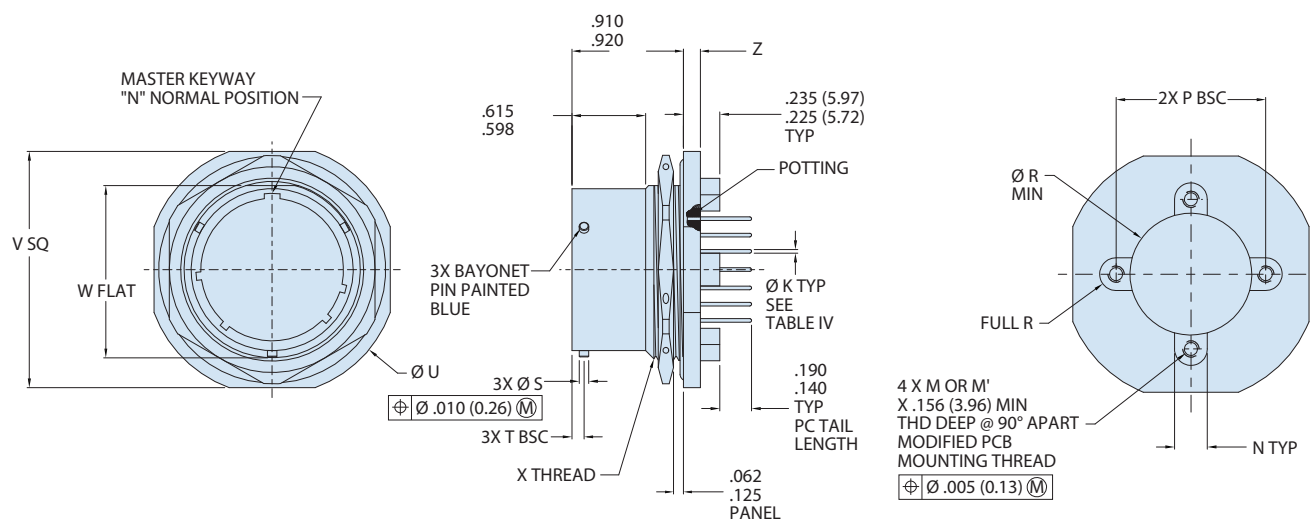
Figure 1
Insert arrangements, mating
face of pin insert shown.
Replace X with C, D, E, Q or T
(See Table VI)

FIGURE 2 - CONTACT INNER PIN ORIENTATION



MIL-DTL-38999 Series I Type
231-218-07 High-speed jam-nut mount receptacle with standoffs

TABLE II - JAM-NUT MOUNT



											Threads		Width
Size Code	Shell Size	P Bsc	ØR Min	ØS	T Bsc	ØU	V Sq.	W Flat	X Thread	Z	M	M'	N
A	9	0.594 (15.09)	0.340 (8.64)	.084 (2.13) .076 (1.93)	0.100 (2.54)	1.204 (30.58) 1.172 (29.77)	1.078 (27.38) 1.046 (26.57)	.655 (16.64) .645 (16.38)	.6875-24 UNEF-2A	.120 (3.05) .099 (2.51)	#4-40 UNC-2B	M3 X 0.5	0.150 (3.81)
B	11	0.719 (18.26)	0.468 (11.89)			1.391 (35.33) 1.359 (34.52)	1.266 (32.16) 1.234 (31.34)	.755 (19.18) .745 (18.92)	.8125-20 UNEF-2A				0.175 (4.45)
C	13	0.812 (20.62)	0.572 (14.53)			1.516 (38.51) 1.484 (37.69)	1.391 (35.33) 1.359 (34.52)	.942 (23.93) .932 (23.67)	1.0000-20 UNEF-2A				0.200 (5.08)
D	15	0.906 (23.01)	0.705 (17.91)			1.641 (41.68) 1.609 (40.87)	1.516 (38.51) 1.484 (37.69)	1.066 (27.08) 1.056 (26.82)	1.1250-18 UNEF-2A				0.225 (5.72)
E	17	1.030 (26.16)	0.830 (21.08)			1.766 (44.86) 1.734 (44.04)	1.641 (41.68) 1.609 (40.87)	1.191 (30.25) 1.181 (30.00)	1.2500-18 UNEF-2A	.151 (3.84) .130 (3.30)			0.200 (5.08)
F	19	1.150 (29.21)	0.934 (23.72)			1.954 (49.63) 1.922 (48.82)	1.828 (46.43) 1.796 (45.62)	1.316 (33.43) 1.306 (33.17)	1.3750-18 UNEF-2A				0.225 (5.72)
G	21	1.221 (31.01)	1.055 (26.80)			2.078 (52.78) 2.046 (51.97)	1.954 (49.63) 1.922 (48.82)	1.441 (36.60) 1.431 (36.35)	1.5000-18 UNEF-2A				0.225 (5.72)
H	23	1.360 (34.54)	1.160 (29.46)			2.204 (55.98) 2.172 (55.17)	2.078 (52.78) 2.046 (51.97)	1.566 (39.78) 1.556 (39.52)	1.6250-18 UNEF-2A				0.225 (5.72)
J	25	1.475 (37.47)	1.307 (33.20)	.131 (3.33) .123 (3.12)	0.109 (2.77)	2.328 (59.13) 2.296 (58.32)	2.204 (55.98) 2.172 (55.17)	1.691 (42.95) 1.681 (42.70)	1.7500-18 UNEF-2A				

MIL-DTL-38999 Series I Type
231-218-07 High-speed jam-nut mount receptacle with standoffs

FIGURE 1 - INSERT ARRANGEMENTS

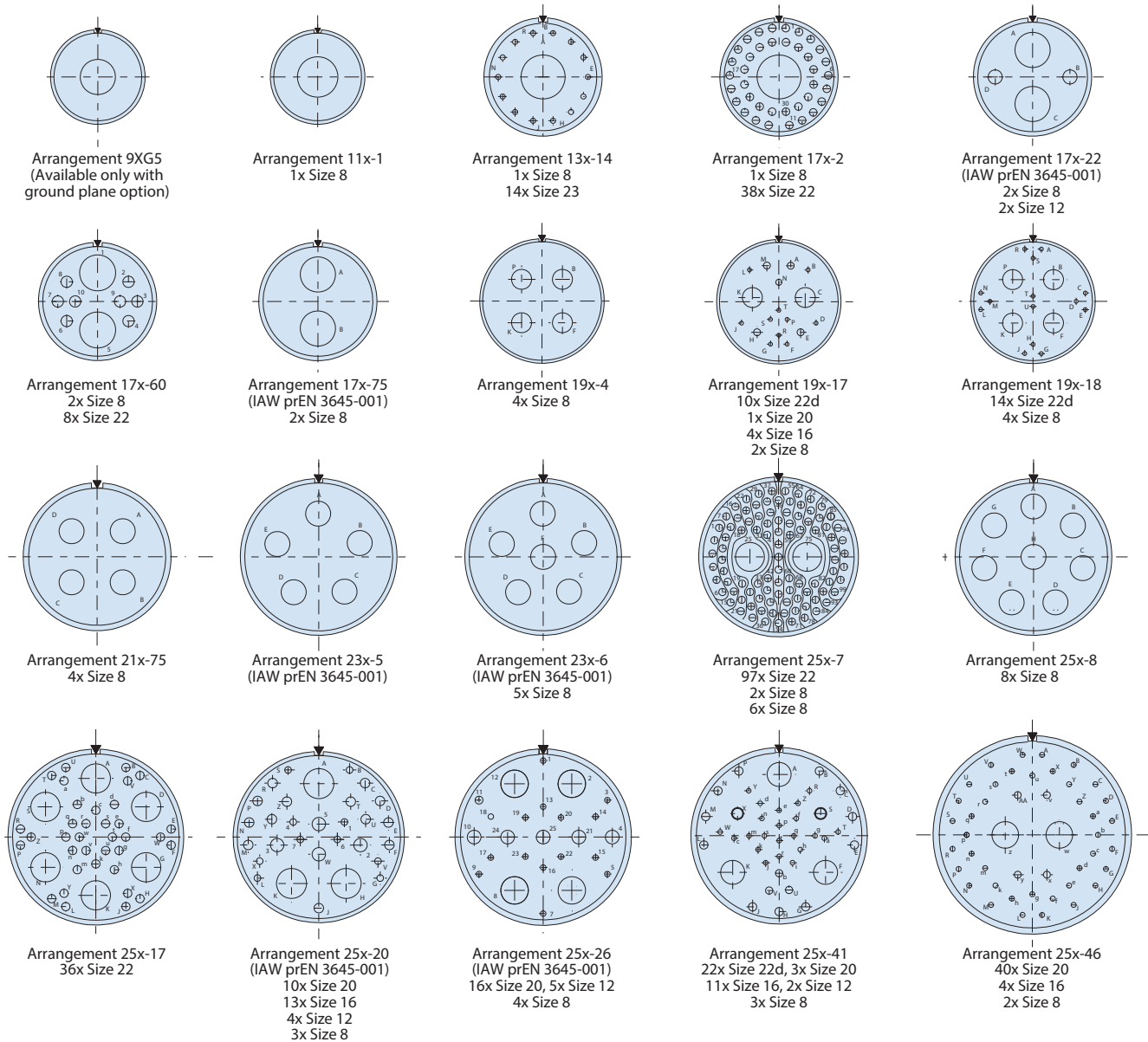
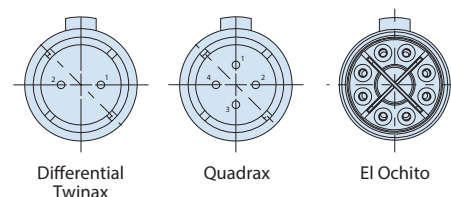


Figure 1
Insert arrangements, mating
face of pin insert shown.
Replace X with C, D, E, Q or T
(See Table VI)

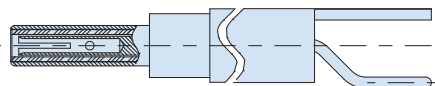
FIGURE 2 - CONTACT INNER PIN ORIENTATION



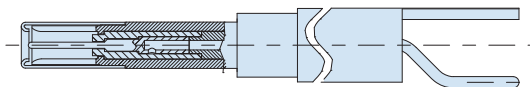
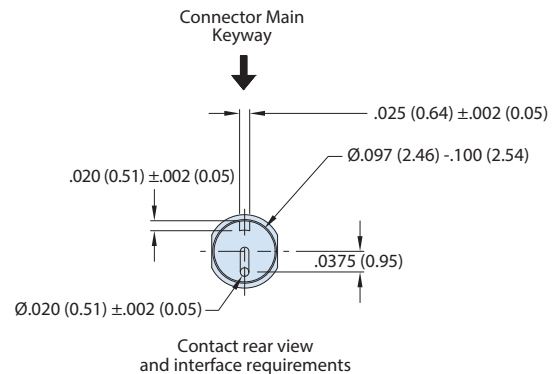
MIL-DTL-38999 Series I Type
 231-218-07 High-speed jam-nut mount receptacle with standoffs

COAX CONTACTS

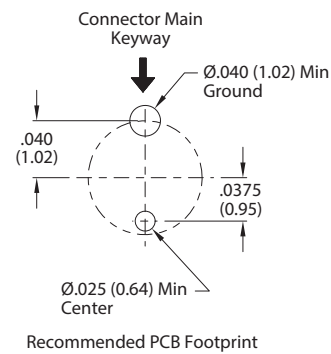
COAX CONTACTS



Size #16 Coax Contact, Pin, PC Tail Detail
 Interface per M39029/76
 Note: Max usable frequency of 700 Mhz

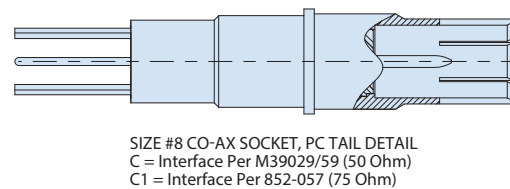
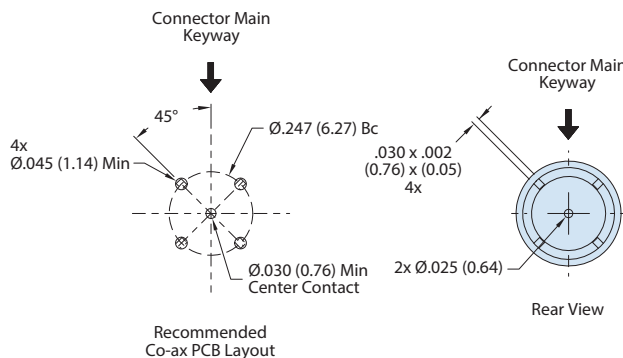
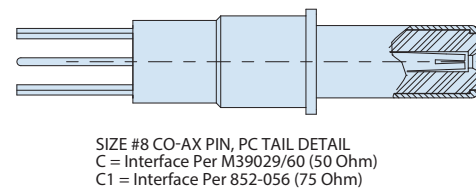
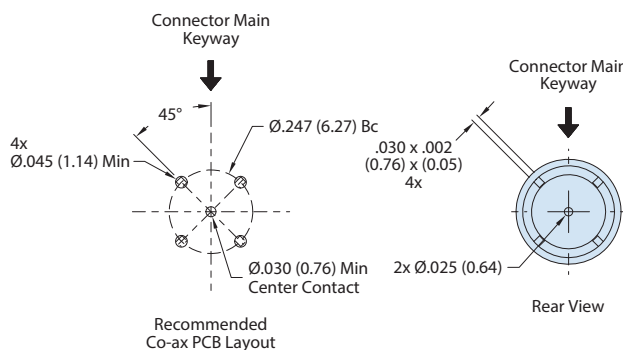
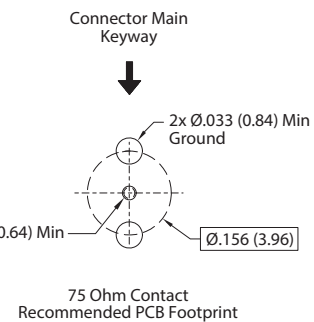
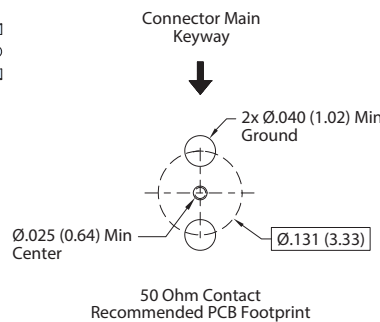
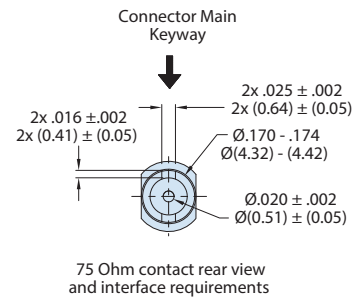
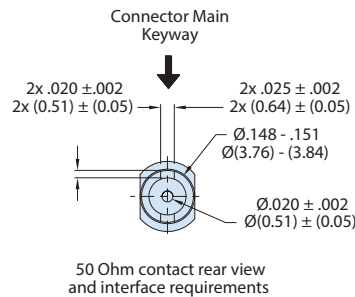
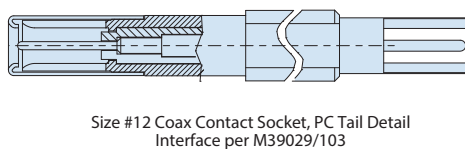
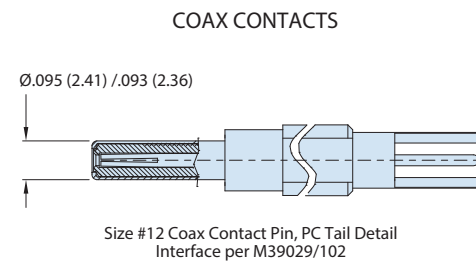


Size #16 Coax Contact, Socket, PC Tail Detail
 Interface per M39029/77
 Note: Max usable frequency of 700 Mhz

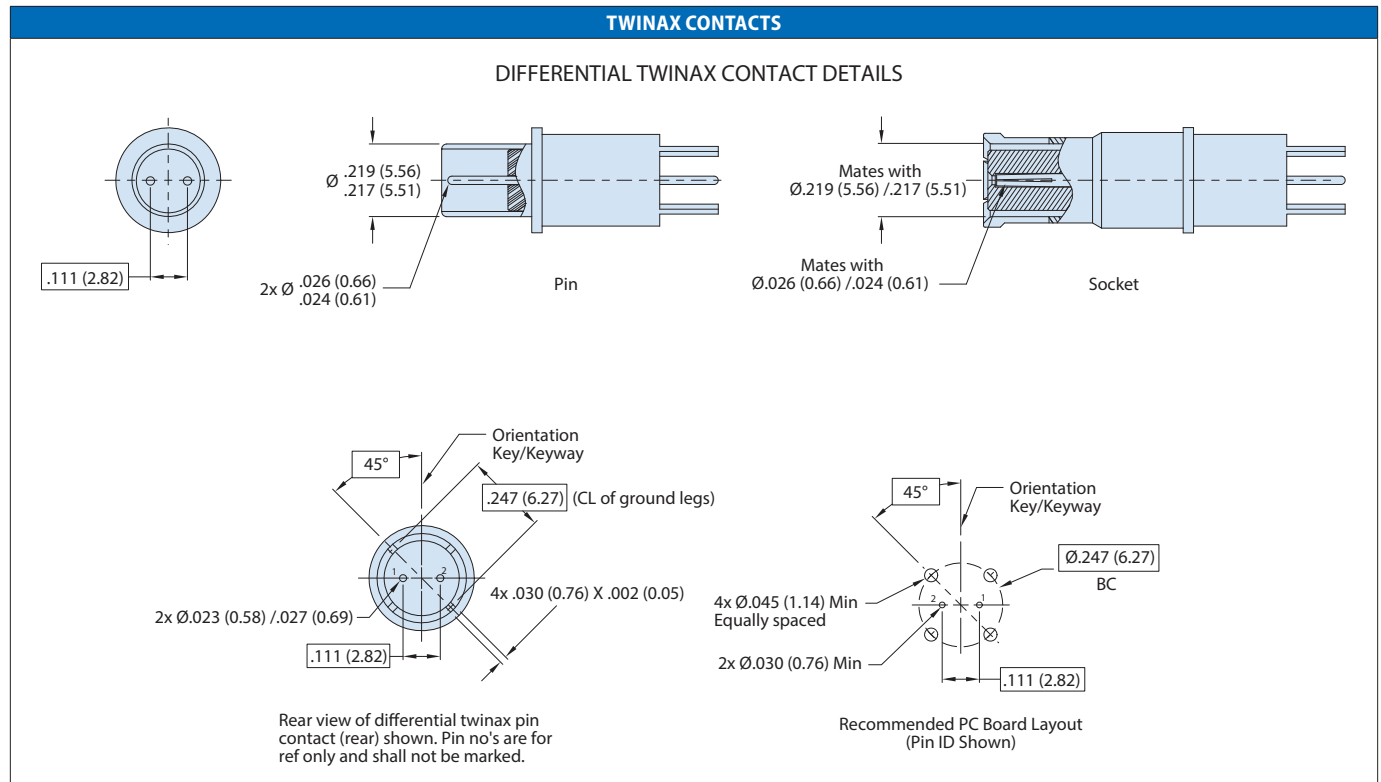


MIL-DTL-38999 Series I Type
231-218-07 High-speed jam-nut mount receptacle with standoffs

COAX CONTACTS



MIL-DTL-38999 Series I Type
 231-218-07 High-speed jam-nut mount receptacle with standoffs

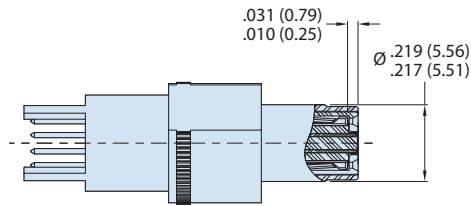
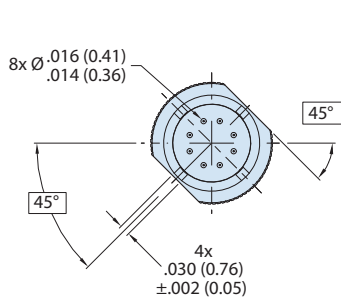


HIGH-SPEED CONNECTORS

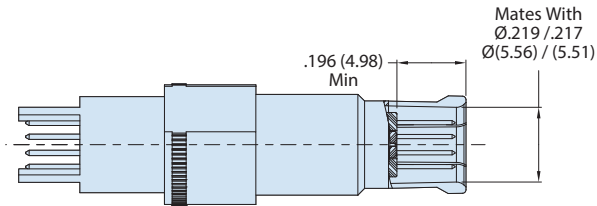
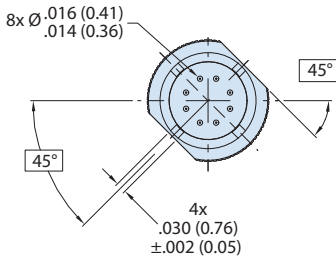
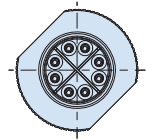
MIL-DTL-38999 Series I Type
 231-218-07 High-speed jam-nut mount receptacle with standoffs

HIGH-SPEED CONNECTORS

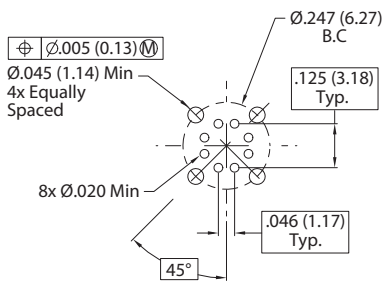
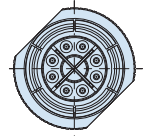
EL OCHITO CONTACTS



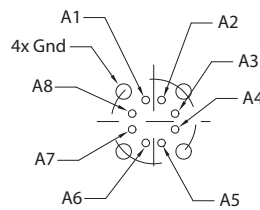
Size #8 El Ochito Pin, PC Tail Detail
 White Insert - For Ethernet Applications



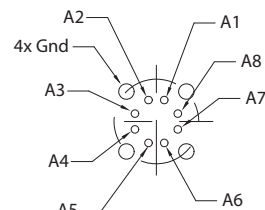
Size #8 El Ochito Socket, PC Tail Detail
 White Insert - For Ethernet Applications



Recommended PC Board Layout
 (See Detail A for pin assignment)
 For optimal performance, see
 Glenair application note AN0002



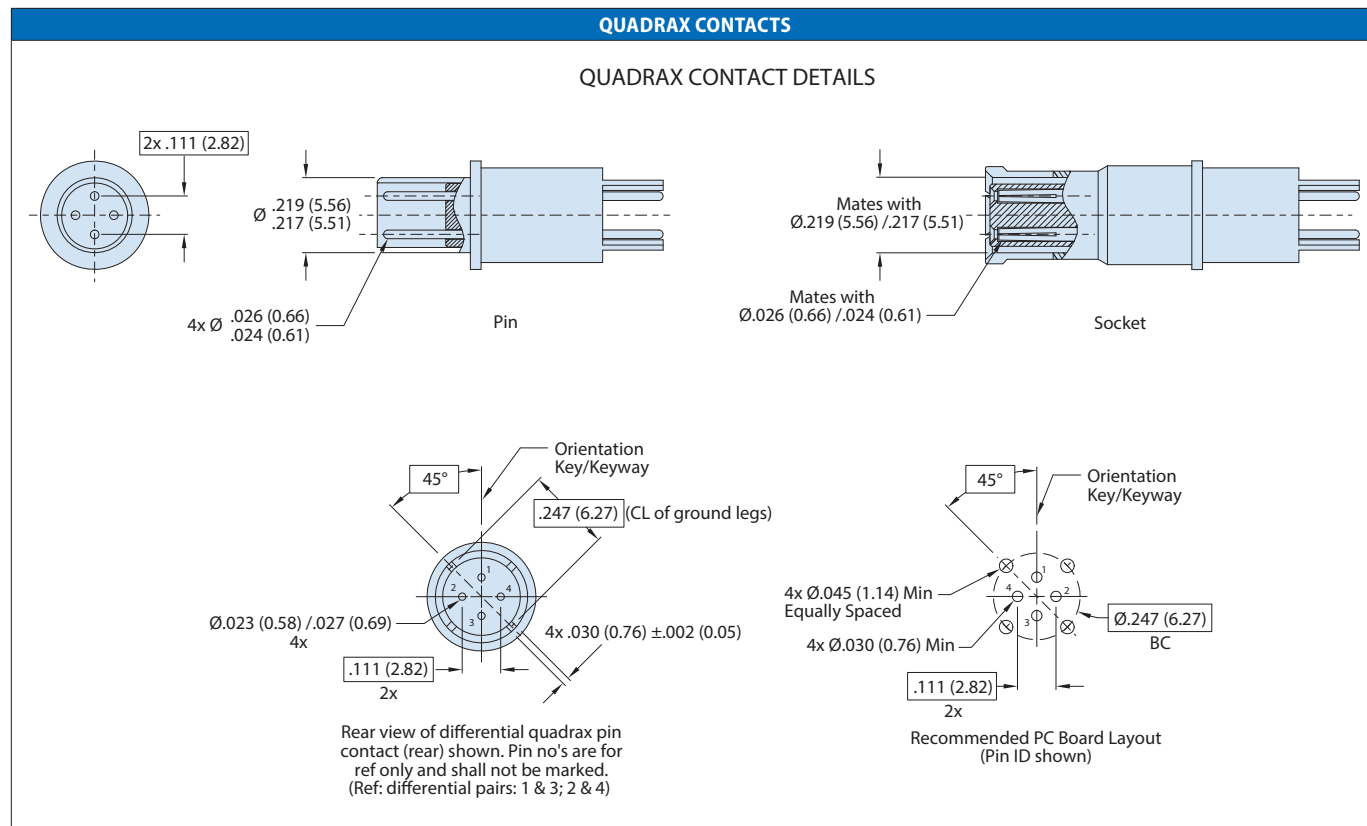
PC Tail Pin Assignment
 (For Ochito Pin Contact)



PC Tail Pin Assignment
 (For Ochito Skt Contact)

DETAIL A (TYP)

MIL-DTL-38999 Series I Type
 231-218-07 High-speed jam-nut mount receptacle with standoffs



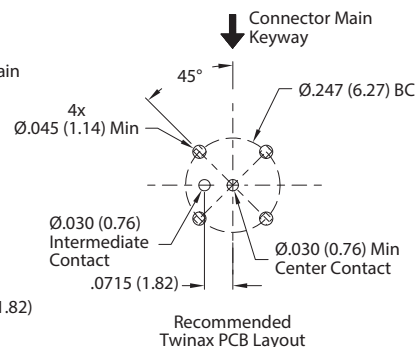
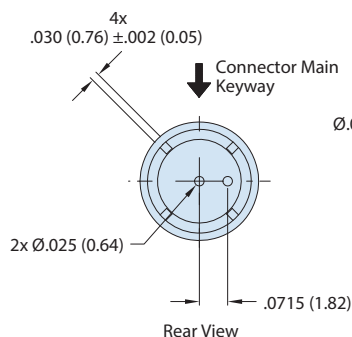
MIL-DTL-38999 Series I Type
 231-218-07 High-speed jam-nut mount receptacle with standoffs

TRIAX / CONCENTRIC TWINAX CONTACTS

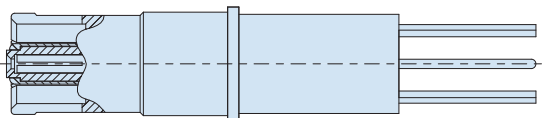
TRIAX / CONCENTRIC TWINAX PIN



Size #8 Concentric Twinax Pin, PC Tail Detail
 Interface per M39029/90 and/113



TRIAX / CONCENTRIC TWINAX SOCKET



Size #8 Concentric Twinax Socket, PC Tail Detail
 Interface per M39029/91 and/114

