SuperNine® Series IV Environmental

MIL-DTL-38999 Series IV Type
234-213 Sav-Con® plug/receptacle connector saver

HOW TO ORDER								
Sample Part Number	**234-213**	**NF**	**11**	**-35**	**P**	**N**	**S**	**N**

Basic Part Number	**234-213**
Material/Finish	(See Table I)
Shell Size	**11**, **13**, **15**, **17**, **19**, **21**, **23**, **25**
Insert Arrangement	PER MIL-STD-1560
Contact Style (Plug side)	**P** = Pin, Gold, 1500 Cycles **S** = Socket, Gold, 1500 Cycles **H** = Pin, Pd/Ni, 1500 Cycles **J** = Socket, Pd/Ni, 1500 Cycles
Shell Polarization (Plug side)	**A, B, C, D, K, L, M, R, N** = Normal, **U** = Universal
Contact Style (Receptacle side)	**P** = Pin **S** = Socket
Shell Polarization (Receptacle side)	**A, B, C, D, K, L, M, R, N** = Normal, **U** = Universal

"BETTER-THAN-QPL" FEATURES AND BENEFITS

- Secure breech-lock mating connector meets D38999 shock and vibe
- Improved plug ground fingers deliver outstanding EMI performance—equal to D38999 Series III
- Glenair Signature Tin Zinc finish class is RoHS compliant and cadmium compatible
- Precision-machined key/keyway polarization for reliable mismating protection
- 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

Equiv Class	Sym	Material	Finish
W	**NF**	Aluminum Alloy	Cad/O.D. over Electroless Nickel
G*	**MA****		Electroless Nickel, Matte
T*	**MT**		Nickel-PTFE
F	**ME**		Electroless Nickel
AA	**MN**		MegaNickel
V	**TZ**		Tin-Zinc
Z*	**ZR**		Zinc Ni, Black (Tri-Valent CR)
K*	**Z1**	Stainless Steel	Passivate
L*	**ZL**		Electrodeposited Nickel

* = Glenair Equivalent Only

** = Connectors for space applications must be ordered with "MA" finish and mod code "-186T" to conform to the thermal vacuum outgassing requirements of class G.

TABLE VII - POLARIZING POSITIONS

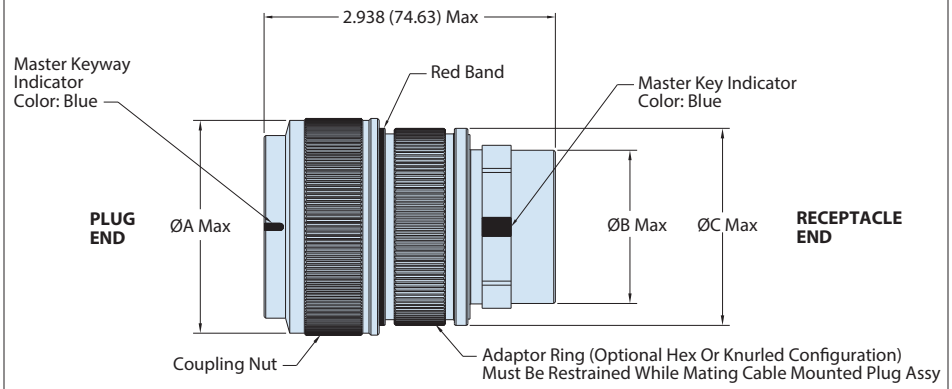
	N	A	B	C	D	K	L	M	R
X	110°	100°	90°	80°	70°	120°	120°	120°	120°
Y	250°	260°	270°	280°	290°	255°	265°	275°	285°

MIL-DTL-38999 Series IV Type
234-213 Sav-Con® plug/receptacle connector saver

NOTES

1. Materials And Finishes (As Applicable):
   - Shell - See Table I
   - Insulator - High Grade Rigid Dielectric.
   - O-Ring - Silicone.
   - Contacts - Copper Alloy/ Gold Plated (w/ SST Skt Hood)
   - Seals - Fluorosilicone Blend.
2. Glenair 234-213 Series connectors savers are designed to mate with any QPL manufacturer's MIL-DTL-38999 Series IV connectors with same size insert arrangement and polarization.
3. Insert arrangement in accordance with MIL-STD-1560. Contact factory for additional insert arrangements.
4. Alternate polarization "U" (Universal) is a non-standard/ non-mil-spec option which allows for mating to any QPL manufacturer's MIL-DTL-38999, Series IV connector having the same shell size, insert arrangement and mating contact size. Universal connectors are intended for use in testing facilities only and should be highly evaluated before consideration in another environment.
5. Power to a given contact on one end will result in power to a contact directly opposite, regardless of identification letter.
6. Electrical safety limits must be established by user. Peak voltage, switching surge, and transient etc, should be used to detrmine the safety application.

234-213 DIMENSIONS

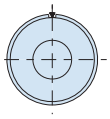


Shell Size	ØA Max	ØB Max	ØC Max.
11	1.054 (26.77)	0.509 (12.93)	0.926 (23.52)
13	1.226 (31.14)	0.634 (16.10)	1.040 (26.42)
15	1.351 (34.32)	0.759 (19.28)	1.165 (29.59)
17	1.478 (37.54)	0.885 (22.48)	1.290 (32.77)
19	1.586 (40.28)	1.009 (25.63)	1.425 (36.20)
21	1.711 (43.46)	1.134 (28.80)	1.550 (39.37)
23	1.836 (46.63)	1.259 (31.98)	1.686 (42.82)
25	1.964 (49.89)	1.384 (35.15)	1.800 (45.72)

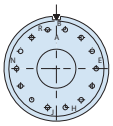
SuperNine® Series IV Environmental

MIL-DTL-38999 Series IV Type
234-217 High-speed plug, and panel mount and jam nut receptacles ins. arrangements

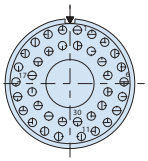
HIGH-SPEED AND HYBRID INSERT ARRANGEMENTS



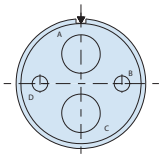
Arrangement 11-1
1x Size 8



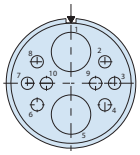
Arrangement 13-14
1x Size 8
14x Size 23



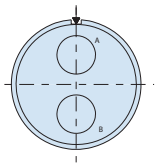
Arrangement 17-2
1x Size 8
38x Size 22



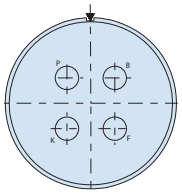
Arrangement 17-22
2x Size 8
2x Size 12



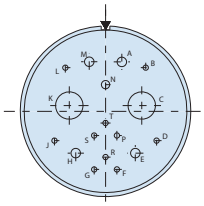
Arrangement 17-60
2x Size 8
8x Size 22



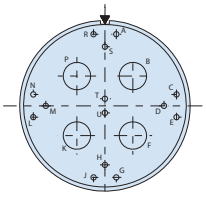
Arrangement 17-75
2x Size 8



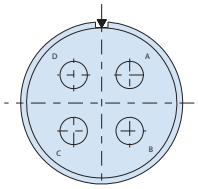
Arrangement 19-4
4x Size 8



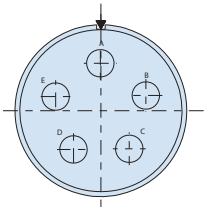
Arrangement 19-17
10x Size 22D
1x Size 20
4x Size 16
2x Size 8



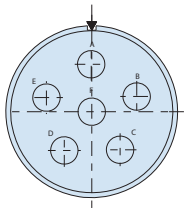
Arrangement 19-18
14x Size 22D
4x Size 8



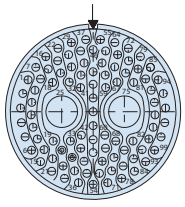
Arrangement 21-75
4x Size 8



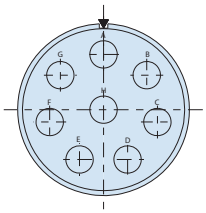
Arrangement 23-5
5x Size 8



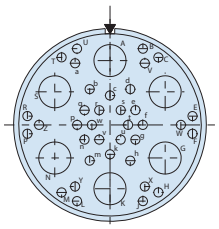
Arrangement 23-6
6x Size 8



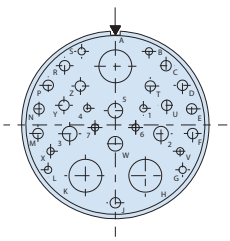
Arrangement 25-7
97x Size 22
2x Size 8



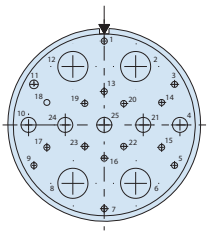
Arrangement 25-8
8x Size 8



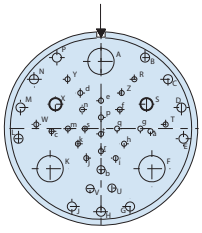
Arrangement 25-17
36x Size 22
6x Size 8



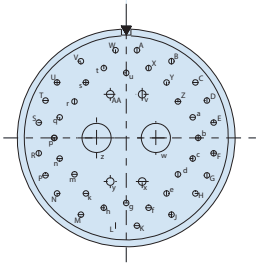
Arrangement 25-20
10x Size 20
13x Size 16
4x Size 12
3x Size 8



Arrangement 25-26
16x Size 20
5x Size 12
4x Size 8



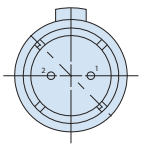
Arrangement 25-41
22x Size 22D
3x Size 20
11x Size 16
2x Size 12
3x Size 8



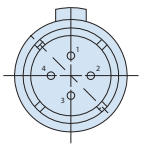
Arrangement 25-46
40x Size 20
4x Size 16
2x Size 8

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

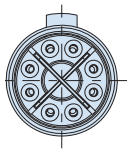
CONTACT INNER PIN ORIENTATION



Differential
Twinax



Quadrax

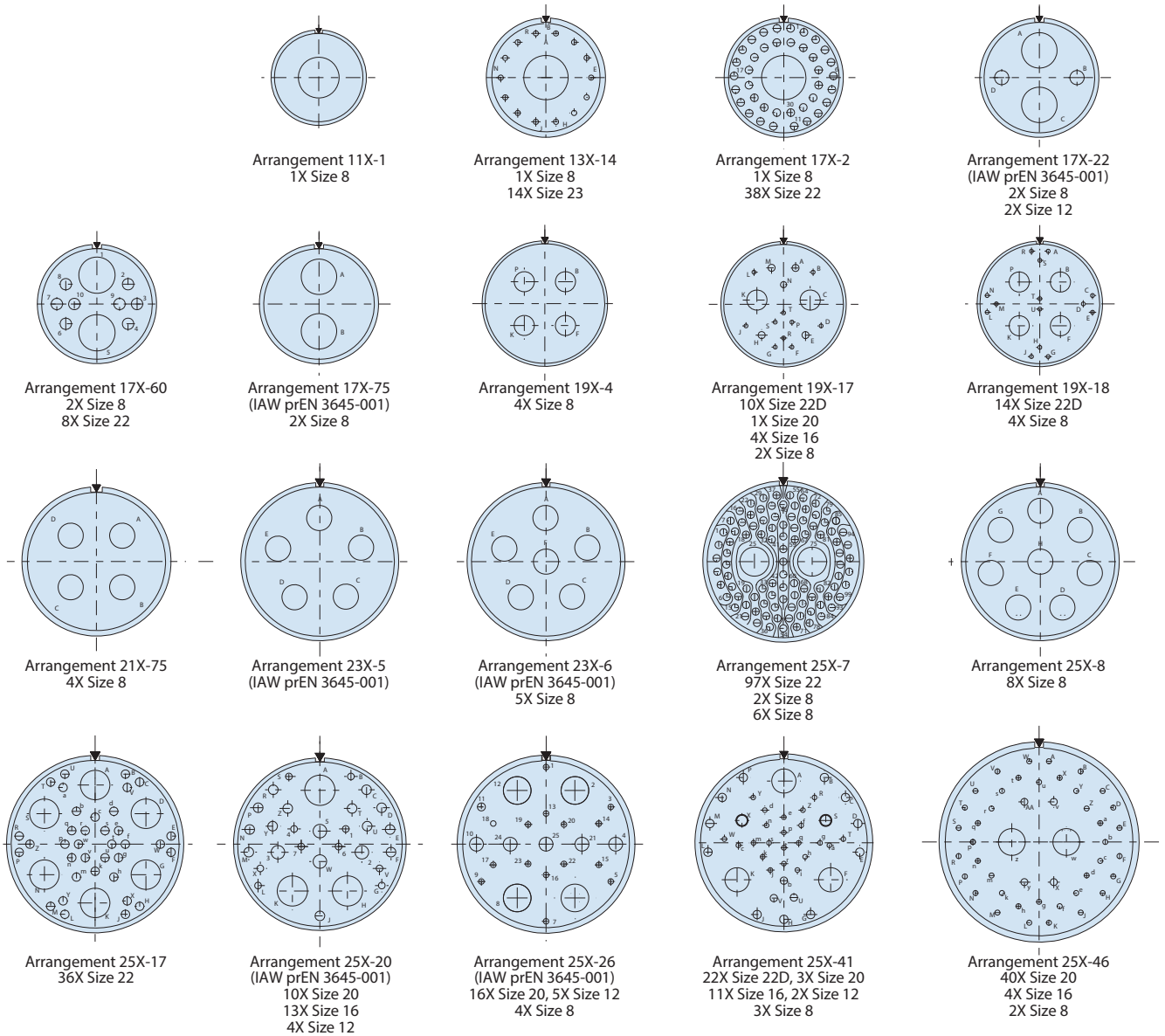


El Ochito

SuperNine® Series IV Environmental

MIL-DTL-38999 Series IV Type
234-218 High-speed panel mount receptacles, PC tail insert arrangements

FIGURE 1 - INSERT ARRANGEMENTS



Arrangement 11X-1
1X Size 8

Arrangement 13X-14
1X Size 8
14X Size 23

Arrangement 17X-2
1X Size 8
38X Size 22

Arrangement 17X-22
(IAW prEN 3645-001)
2X Size 8
2X Size 12

Arrangement 17X-60
2X Size 8
8X Size 22

Arrangement 17X-75
(IAW prEN 3645-001)
2X Size 8

Arrangement 19X-4
4X Size 8

Arrangement 19X-17
10X Size 22D
1X Size 20
4X Size 16
2X Size 8

Arrangement 19X-18
14X Size 22D
4X Size 8

Arrangement 21X-75
4X Size 8

Arrangement 23X-5
(IAW prEN 3645-001)

Arrangement 23X-6
(IAW prEN 3645-001)
5X Size 8

Arrangement 25X-7
97X Size 22
2X Size 8
6X Size 8

Arrangement 25X-8
8X Size 8

Arrangement 25X-17
36X Size 22

Arrangement 25X-20
(IAW prEN 3645-001)
10X Size 20
13X Size 16
4X Size 12
3X Size 8

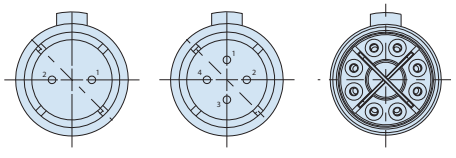
Arrangement 25X-26
(IAW prEN 3645-001)
16X Size 20, 5X Size 12
4X Size 8

Arrangement 25X-41
22X Size 22D, 3X Size 20
11X Size 16, 2X Size 12
3X Size 8

Arrangement 25X-46
40X Size 20
4X Size 16
2X Size 8

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



Differential Twinax

Quadrax

El Ochito