

231-105 Environmental Plug and Receptacles

ENVIRONMENTAL CONNECTORS



MATERIAL/FINISH

- Shell, barrel, coupling nut, jam nut - see Material/Finish table
- Insulator - high grade rigid dielectric
- Seals, grommet - fluorosilicone blend
- Contacts - copper alloy / gold

NOTES

- Glenair's 231-105 connectors are designed to mate with any QPL manufacturer's MIL-DTL-38999, Series I connectors having the same shell size, insert arrangement, and polarization.
- Connector is supplied with contacts (including spares), insertion/ removal tool, and sealing plugs where indicated in How to Order table.
- Consult factory for crimp tools and/or accessory selection.

HOW TO ORDER

Sample Part Number	231-105	-G6	NF	17-8	P	N
Basic Part Number	231-105 MIL-DTL-38999 Series I Type Environmental Connector					
Connector Style	See Connector Styles table					
Material/Finish	See Material/Finish table					
Connector Size/ Insert Arrangement	Per MIL-STD-1560					
Contact Style	P = Pin, Gold, 500 Cycles		S = Socket, Gold, 500 Cycles			
	A = Pin Insert, Less Pin Contacts		B = Socket Insert, Less Socket Contacts			
Alternate Polarization	A, B, C, D, E, N = Normal; U = Universal					

CONNECTOR STYLES

Sym	Description
G6	Plug, EMI Spring, (MS27467T)
07	Receptacle, Jam Nut (MS27468T)
D0	Receptacle, Wall Mount Front Panel, Standard Holes (MS27466T)
E0	Receptacle, Extended Wall Mount, Back Panel, Standard Holes (MS27656T)
CS	Receptacle, Wall Mount, Standard Clinch Nuts
CM	Receptacle, Wall Mount, Metric Clinch Nuts
HS	Receptacle, Wall Mount, Standard Helicoils
HM	Receptacle, Wall Mount, Metric Helicoils
T0	Receptacle, Wall Mount, With Std Tapped Holes (Mat; Sst and MB)
T1	Receptacle, Wall Mount, With Mtc Tapped Holes (Mat; Sst and MB)
05	Receptacle, In-Line

MATERIAL/FINISH

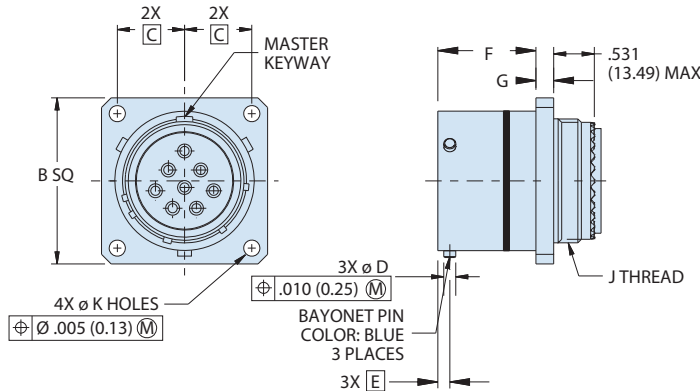
Sym	Material	Finish
NF	Aluminum Alloy	Cad/O.D. Over Electroless Nickel
MA		Electroless Nickel, Matte
MT		Nickel-PTFE
TZ		Tin-Zinc (SnZn) Over Electroless Nickel Over Suitable Underplate
ME		Electroless Nickel
ZR		Zinc Ni, Black (Tri-Valent Cr)
MN		Tri-Nickel Alloy
Z1	Stainless Steel (Sst)	Passivate
ZL		Electro Deposited Nickel
AB	Marine Bronze (Mb)	None (Clean Only)

BAYONET-LOCK MIL-DTL-38999 Series I Type



231-105-D0 Wall-Mount Receptacle, standard holes

D0 - WALL-MOUNT FRONT PANEL RECEPTACLE WITH STANDARD HOLES



Shell Size Code	Shell Size	B Sq.	C Bsc	F	G	J Thread	Ø K Holes	Ø D	E Bsc
A	9	.948 (24.08) .925 (23.50)	.3595 (9.13)	.632 (16.05) .627 (15.93)	.100 (2.54) .085 (2.16)	.4375-28 UNEF-2A	.138 (3.51) .123 (3.12)	.084 (2.13) .076 (1.93)	.100 (2.54)
B	11	1.043 (26.49) 1.019 (25.88)	.406 (10.31)			.5625-24 UNEF-2A			
C	13	1.137 (28.88) 1.114 (28.30)	.453 (11.51)			.6875-24 UNEF-2A			
D	15	1.232 (31.29) 1.208 (30.68)	.4845 (12.31)			.8125-20 UNEF-2A			
E	17	1.323 (33.60) 1.299 (32.99)	.531 (13.49)			.9375-20 UNEF-2A			
F	19	1.449 (36.80) 1.425 (36.20)	.578 (14.68)			1.0625-18 UNEF-2A			
G	21	1.575 (40.00) 1.551 (39.40)	.625 (15.88)	.602 (15.29) .597 (15.16)	.130 (3.30) .115 (2.92)	1.1875-18 UNEF-2A	.157 (3.99) .142 (3.61)	.131 (3.33) .123 (3.12)	.109 (2.77)
H	23	1.701 (43.21) 1.677 (42.60)	.6875 (17.46)			1.3125-18 UNEF-2A			
J	25	1.823 (46.30) 1.799 (45.69)	.750 (19.05)			1.4375-18 UNEF-2A			

RECOMMENDED PANEL MOUNTING HOLES

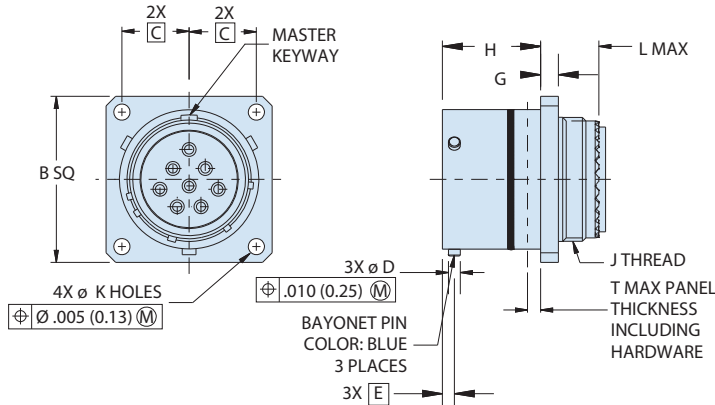
Shell Size Code	Shell Size	ØN Min	ØP Min	ØR Holes	S Bsc
A	9	.656 (16.66)	.516 (13.11)	.133 (3.38) .123 (3.12)	.719 (18.26)
B	11	.796 (20.22)	.625 (15.88)		.812 (20.62)
C	13	.922 (23.42)	.750 (19.05)		.906 (23.01)
D	15	1.047 (26.59)	.906 (23.01)		.969 (24.61)
E	17	1.219 (30.96)	1.016 (25.81)		1.062 (26.97)
F	19	1.297 (32.94)	1.141 (28.98)		1.156 (29.36)
G	21	1.422 (36.12)	1.266 (32.16)	1.250 (31.75)	
H	23	1.547 (39.29)	1.375 (34.92)	.159 (4.04) .149 (3.78)	1.375 (34.92)
J	25	1.672 (42.47)	1.484 (37.69)	.155 (3.94) .145 (3.68)	1.500 (38.10)

ENVIRONMENTAL CONNECTORS

231-105-E0 Extended Wall-Mount Back-Panel Receptacle, standard holes

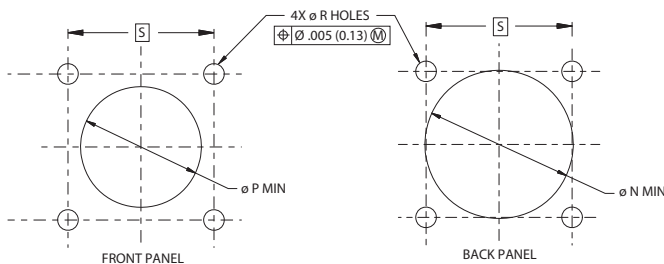
ENVIRONMENTAL CONNECTORS

E0 - EXTENDED WALL MOUNT BACK PANEL RECEPTACLE WITH STANDARD HOLES



Shell Size Code	Shell Size	B Sq.	C Bsc	G	H	J Thread	Ø K Holes	Ø D	E Bsc	L Max	T Max
A	9	.948 (24.08) .925 (23.50)	.3595 (9.13)	.100 (2.54) .085 (2.16)	.820 (20.83) .815 (20.70)	.4375-28 UNEF-2A	.138 (3.51) .123 (3.12)	.084 (2.13) .076 (1.93)	.100 (2.54)	.469 (11.91)	.234 (5.94)
B	11	1.043 (26.49) 1.019 (25.88)	.406 (10.31)			.5625-24 UNEF-2A					
C	13	1.137 (28.88) 1.114 (28.30)	.453 (11.51)			.6875-24 UNEF-2A					
D	15	1.232 (31.29) 1.208 (30.68)	.4845 (12.31)			.8125-20 UNEF-2A					
E	17	1.323 (33.60) 1.299 (32.99)	.531 (13.49)			.9375-20 UNEF-2A					
F	19	1.449 (36.80) 1.425 (36.20)	.578 (14.68)			1.0625-18 UNEF-2A					
G	21	1.575 (40.00) 1.551 (39.40)	.625 (15.88)	.130 (3.30) .115 (2.92)	.790 (20.07) .785 (19.94)	1.1875-18 UNEF-2A	.157 (3.99) .142 (3.61)	.131 (3.33) .123 (3.12)	.109 (2.77)	.500 (12.70)	.204 (5.18)
H	23	1.701 (43.21) 1.677 (42.60)	.6875 (17.46)			1.3125-18 UNEF-2A					
J	25	1.823 (46.30) 1.799 (45.69)	.750 (19.05)			1.4375-18 UNEF-2A					

RECOMMENDED PANEL MOUNTING HOLES



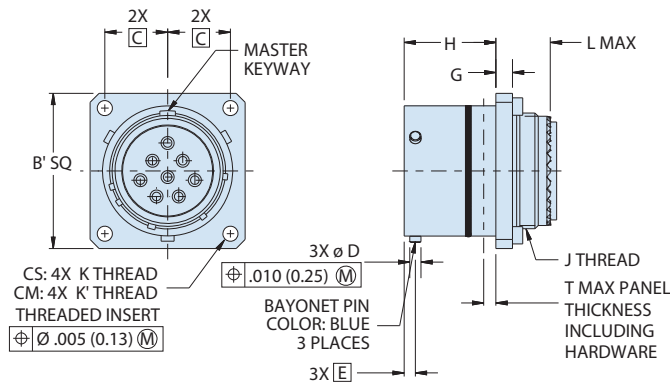
Shell Size Code	Shell Size	ØN Min	ØP Min	ØR Holes	S Bsc
A	9	.656 (16.66)	.516 (13.11)	.133 (3.38) .123 (3.12)	.719 (18.26)
B	11	.796 (20.22)	.625 (15.88)		.812 (20.62)
C	13	.922 (23.42)	.750 (19.05)		.906 (23.01)
D	15	1.047 (26.59)	.906 (23.01)		.969 (24.61)
E	17	1.219 (30.96)	1.016 (25.81)		1.062 (26.97)
F	19	1.297 (32.94)	1.141 (28.98)		1.156 (29.36)
G	21	1.422 (36.12)	1.266 (32.16)	.159 (4.04) .149 (3.78)	1.250 (31.75)
H	23	1.547 (39.29)	1.375 (34.92)		1.375 (34.92)
J	25	1.672 (42.47)	1.484 (37.69)		.155 (3.94) .145 (3.68)

BAYONET-LOCK MIL-DTL-38999 Series I Type



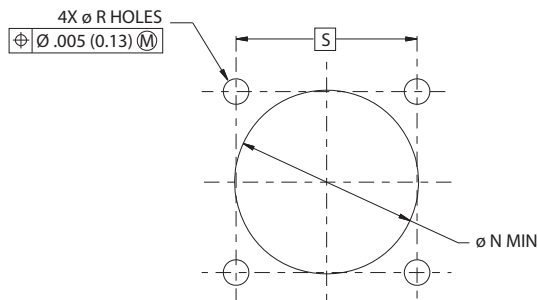
231-105-CS / CM Wall-Mount Receptacle, Clinch Nuts (standard or metric)

CS/CM - WALL MOUNT RECEPTACLE WITH STANDARD AND METRIC CLINCH NUTS



Shell Size Code	Shell Size	B' Sq	C Bsc	G	H	J Thread	K Thread	K' Thread	L Max	ØD	E Bsc	T Max
A	9	1.043 (26.49) 1.003 (25.48)	.3595 (9.13)	.100 (2.54) .085 (2.16)	.820 (20.83) .815 (20.70)	.4375-28 UNEF-2A	.112-40 UNC-3B	M3X0.5	.469 (11.91)	.084 (2.13) .076 (1.93)	.100 (2.54)	.234 (5.94)
B	11	1.136 (28.85) 1.096 (27.84)	.406 (10.31)			.5625-24 UNEF-2A						
C	13	1.230 (31.24) 1.190 (30.23)	.453 (11.51)			.6875-24 UNEF-2A						
D	15	1.293 (32.84) 1.253 (31.83)	.4845 (12.31)			.8125-20 UNEF-2A						
E	17	1.386 (35.20) 1.346 (34.19)	.531 (13.49)			.9375-20 UNEF-2A						
F	19	1.480 (37.59) 1.440 (36.58)	.578 (14.68)			1.0625-18 UNEF-2A						
G	21	1.574 (39.98) 1.534 (38.96)	.625 (15.88)	.130 (3.30) .115 (2.92)	.790 (20.07) .785 (19.94)	1.1875-18 UNEF-2A	.138-32 UNC-3B	M4X0.7	.500 (12.70)	.131 (3.33) .123 (3.12)	.109 (2.77)	.204 (5.18)
H	23	1.759 (44.68) 1.719 (43.66)	.6875 (17.46)	1.3125-18 UNEF-2A	.193 (4.90)							
J	25	1.884 (47.85) 1.844 (46.84)	.750 (19.05)	1.4375-18 UNEF-2A								

RECOMMENDED PANEL MOUNTING HOLES



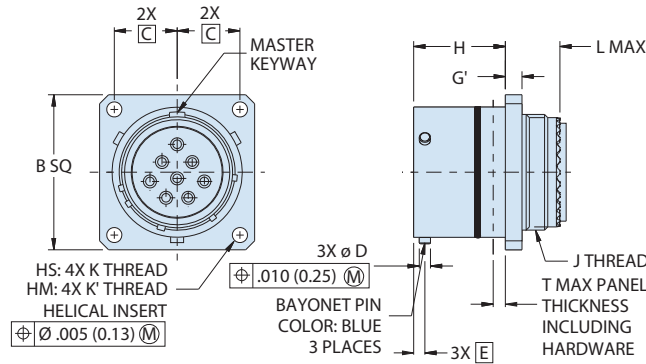
Shell Size Code	Shell Size	ØN Min	ØR Holes	S Bsc
A	9	.656 (16.66)	.133 (3.38) .123 (3.12)	.719 (18.26)
B	11	.796 (20.22)		.812 (20.62)
C	13	.922 (23.42)		.906 (23.01)
D	15	1.047 (26.59)		.969 (24.61)
E	17	1.219 (30.96)		1.062 (26.97)
F	19	1.297 (32.94)		1.156 (29.36)
G	21	1.422 (36.12)		1.250 (31.75)
H	23	1.547 (39.29)	.159 (4.04) .149 (3.78)	1.375 (34.92)
J	25	1.672 (42.47)	.155 (3.94) .145 (3.68)	1.500 (38.10)

ENVIRONMENTAL CONNECTORS

231-105-HS / HM Wall-Mount Receptacle, Helicoil (standard or metric)

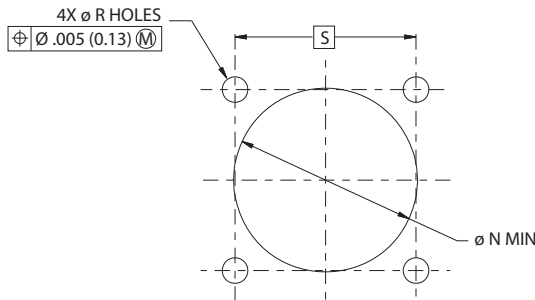
ENVIRONMENTAL CONNECTORS

HS/HM - WALL MOUNT RECEPTACLE WITH STANDARD AND METRIC HELICOIL



Shell Size Code	Shell Size	B Sq	C Bsc	G'	H	J Thread	K Thread	K' Thread	L Max	ØD	E Bsc	T Max
A	9	.948 (24.08) .925 (23.50)	.3595 (9.13)	.179 (4.55) .140 (3.56)	.820 (20.83) .815 (20.70)	.4375-28 UNEF-2A	.112-40 UNC-3B	M3X0.5	.469 (11.91)	.084 (2.13) .076 (1.93)	.100 (2.54)	.234 (5.94)
B	11	1.043 (26.49) 1.019 (25.88)	.406 (10.31)			.5625-24 UNEF-2A						
C	13	1.137 (28.88) 1.114 (28.30)	.453 (11.51)			.6875-24 UNEF-2A						
D	15	1.232 (31.29) 1.208 (30.68)	.4845 (12.31)			.8125-20 UNEF-2A						
E	17	1.323 (33.60) 1.299 (32.99)	.531 (13.49)			.9375-20 UNEF-2A						
F	19	1.449 (36.80) 1.425 (36.20)	.578 (14.68)			1.0625-18 UNEF-2A						
G	21	1.575 (40.00) 1.551 (39.40)	.625 (15.88)			.190 (4.83) .170 (4.32)						
H	23	1.701 (43.21) 1.677 (42.60)	.6875 (17.46)	1.3125-18 UNEF-2A								
J	25	1.823 (46.30) 1.799 (45.69)	.750 (19.05)	1.4375-18 UNEF-2A								

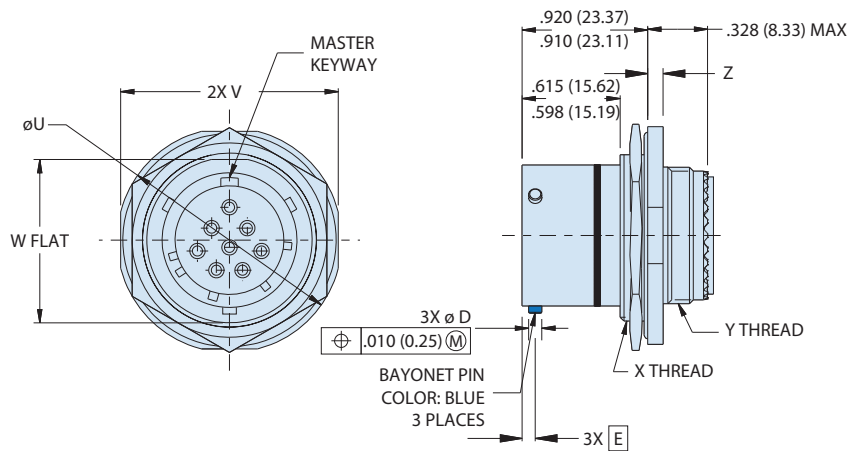
RECOMMENDED PANEL MOUNTING HOLES



Shell Size Code	Shell Size	ØN Min	ØR Holes	S Bsc
A	9	.656 (16.66)	.133 (3.38) .123 (3.12)	.719 (18.26)
B	11	.796 (20.22)		.812 (20.62)
C	13	.922 (23.42)		.906 (23.01)
D	15	1.047 (26.59)		.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 (34.92)
J	25	1.672 (42.47)	.155 (3.94) .145 (3.68)	1.500 (38.10)

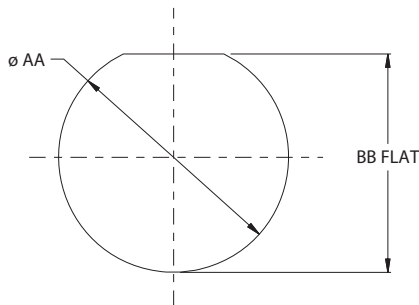
231-105-07 Jam-Nut Receptacle

07 - JAM-NUT MOUNT RECEPTACLE



Shell Size Code	Shell Size	øU	V	W Flat	X Thread	Y Thread	Z	ØD	E Bsc
A	9	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	.4375-28 UNEF-2A	.120 (3.05) .099 (2.51)	.084 (2.13) .076 (1.93)	.100 (2.54)
B	11	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	.5625-24 UNEF-2A			
C	13	1.516 (38.51) 1.484 (37.69)	1.391 (35.33) 1.359 (34.52)	.942 (23.93) .932 (23.67)	1.000-20 UNEF-2A	.6875-24 UNEF-2A			
D	15	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	.8125-20 UNEF-2A			
E	17	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	.9375-20 UNEF-2A			
F	19	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	1.0625-18 UNEF-2A	.151 (3.84) .130 (3.30)		
G	21	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	1.1875-18 UNEF-2A			
H	23	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	1.3125-18 UNEF-2A			
J	25	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	1.4375-18 UNEF-2A			

RECOMMENDED PANEL MOUNTING HOLES



Shell Size Code	Shell Size	ØAA	BB Flat
A	9	.703 (17.86)	.661 (16.79)
		.693 (17.60)	.654 (16.61)
B	11	.835 (21.21)	.771 (19.58)
		.825 (20.96)	.761 (19.33)
C	13	1.020 (25.91)	.955 (24.26)
		1.010 (25.65)	.945 (24.00)
D	15	1.145 (29.08)	1.085 (27.56)
		1.135 (28.83)	1.075 (27.30)
E	17	1.270 (32.26)	1.210 (30.73)
		1.260 (32.00)	1.200 (30.48)
F	19	1.395 (35.43)	1.335 (33.91)
		1.385 (35.18)	1.325 (33.65)
G	21	1.520 (38.61)	1.460 (37.08)
		1.510 (38.35)	1.450 (36.83)
H	23	1.645 (41.78)	1.585 (40.26)
		1.635 (41.53)	1.575 (40.00)
J	25	1.770 (44.96)	1.710 (43.43)
		1.760 (44.70)	1.700 (43.18)

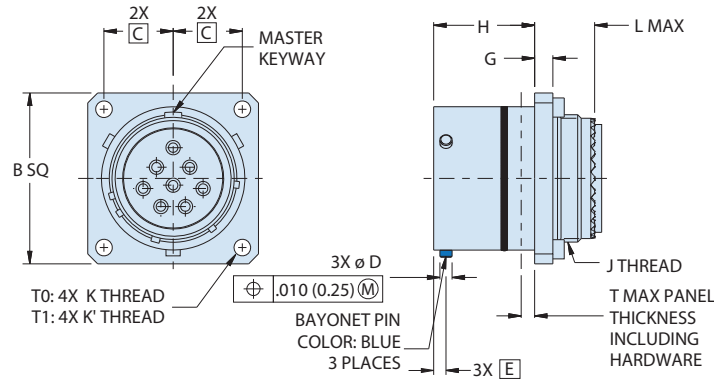
BAYONET-LOCK MIL-DTL-38999 Series I Type



231-105-T0 / T1 Wall-Mount Receptacle, Tapped Holes (standard or metric)

ENVIRONMENTAL CONNECTORS

T0/T1 - WALL MOUNT RECEPTACLE WITH STANDARD AND METRIC TAPPED HOLES

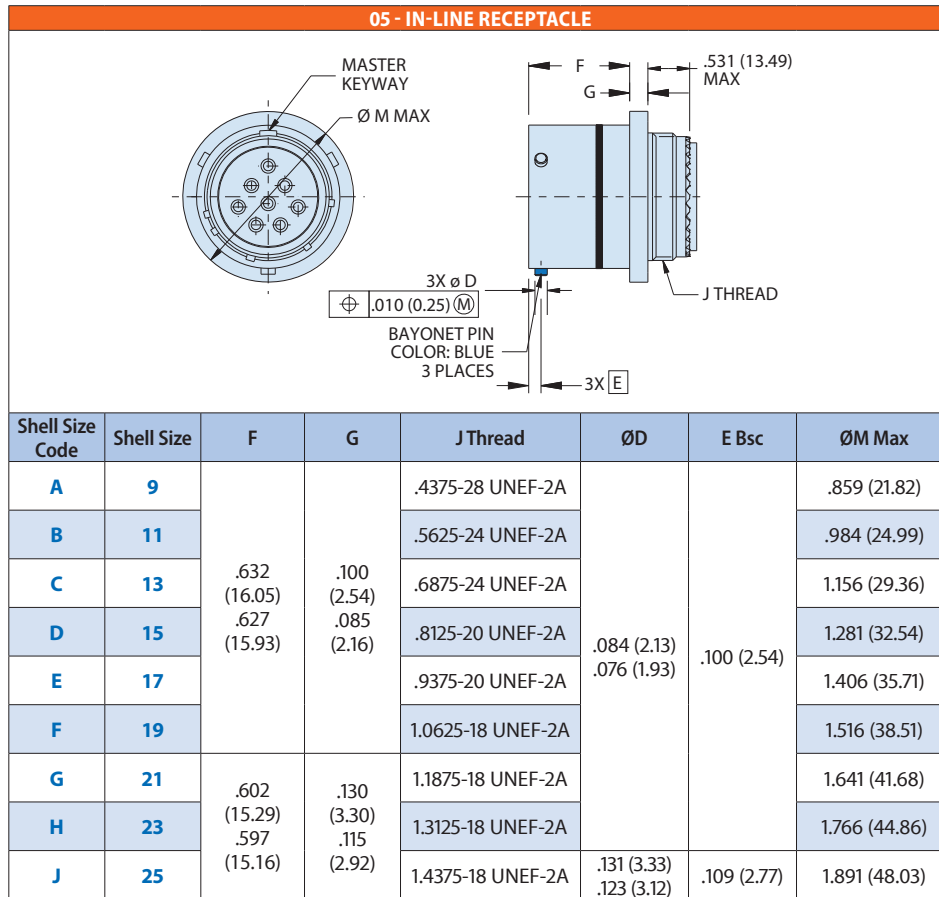


Shell Size Code	Shell Size	B Sq.	C Bsc	F	G	H	J Thread	K Thread	K' Thread	L Max	ØD	E Bsc	T Max
A	9	.948 (24.08) .925 (23.50)	.3595 (9.13)				.4375-28 UNEF-2A						
B	11	1.043 (26.49) 1.019 (25.88)	.406 (10.31)				.5625-24 UNEF-2A						
C	13	1.137 (28.88) 1.114 (28.30)	.453 (11.51)	.632 (16.05)	.100 (2.54)	.820 (20.83)	.6875-24 UNEF-2A	.112-40 UNC-3B	M3X0.5	.469 (11.91)	.084 (2.13) .076 (1.93)	.100 (2.54)	.234 (5.94)
D	15	1.232 (31.29) 1.208 (30.68)	.4845 (12.31)	.627 (15.93)	.085 (2.16)	.815 (20.70)	.8125-20 UNEF-2A						
E	17	1.323 (33.60) 1.299 (32.99)	.531 (13.49)				.9375-20 UNEF-2A						
F	19	1.449 (36.80) 1.425 (36.20)	.578 (14.68)				1.0625-18 UNEF-2A						
G	21	1.575 (40.00) 1.551 (39.40)	.625 (15.88)	.602 (15.29)	.130 (3.30)	.790 (20.07)	1.1875-18 UNEF-2A	.138-32 UNC-3B	M4X0.7	.500 (12.70)			.204 (5.18)
H	23	1.701 (43.21) 1.677 (42.60)	.6875 (17.46)	.597 (15.16)	.115 (2.92)	.785 (19.94)	1.3125-18 UNEF-2A						
J	25	1.823 (46.30) 1.799 (45.69)	.750 (19.05)				1.4375-18 UNEF-2A						
											.131 (3.33) .123 (3.12)	.109 (2.77)	.193 (4.90)

BAYONET-LOCK MIL-DTL-38999 Series I Type



231-105-05 In-Line Receptacle



ENVIRONMENTAL CONNECTORS

