

Space-grade blind-mate connectors

MIL-DTL-38999 Series III Type Space-Grade Connectors

Receptacle with misalignment accommodation and optional sealing

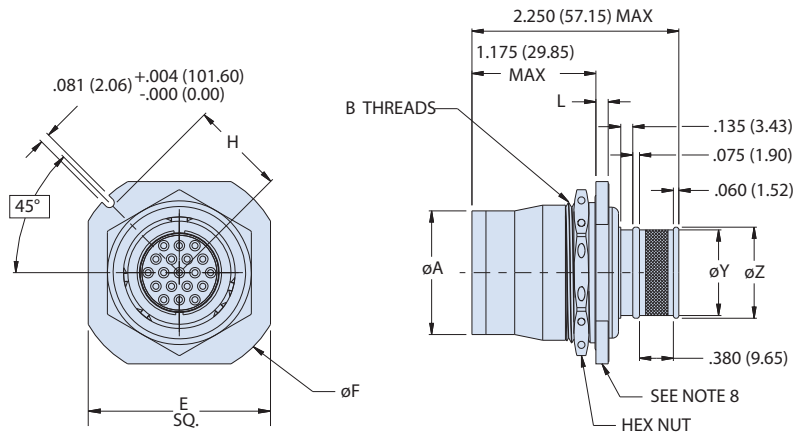
Part Number Development	
Sample Part Number	253-015 B 07 ME 25-35 P N NS H
Series / Basic Part No.	253-015 = Receptacle (float mount)
Accessory Option	B = Integral Backshell — (dash) = Accessory Threads
Connector Style	07 = Jam nut mount 00 = Receptacle Wall Mount with Slotted Holes 00 = Receptacle, Wall Mount with Round Holes
Material/Finish	ME = Aluminum, electroless nickel ZL = CRES, electrodeposited nickel MT = Aluminum, nickel PTFE Z1 = CRES, passivated
Shell Size - Insert Arrangement*	Per MIL-STD-1560; symmetrical layouts only, consult factory for complete details
Contact Type	P = Pin, crimp removable S = Socket, crimp removable 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)
Non Sealing	NS = Non-Sealing (omit for external elastomer seal version)
Jam-Nut Type	H = Hex S = Spanner with wire holes

*Refer to C-5 to C-12 for insert arrangements.
For Space-Grade modification codes see pages C-3 thru C-4. Modification codes may be added directly to the end of any valid part number

NOTES:

- Material/finish
 - Shell, jam-nut: see P/N dev., finish
 - Wave spring: CRES 17-7PH/Passivate
 - Insulator: high grade rigid dielectric/N.A.
 - Seals: fluorosilicone blend/N.A.
 - Contacts: copper alloy/gold plated
- Glenair 253-015 is designed to mate with 253-014 with same insert arrangement and polarization.
- Insert arrangements are in accordance with MIL-STD-1560, except for arrangements with size 8 contacts. Contact factory for available options.
- Polarization for intermateability with 253-014 is per MIL-DTL-38999 Series I
- See Space Grade and Outgassing Options of this section
- Misalignment capabilities are possible with mated pair. Reference Glenair connector 253-014
- Stainless steel locating pin (Ø.079) to be shipped with connector
- Blue color band indicates rear release retention system
- Jam nut style 'H' or 'S' per dimensions listed in 253-015-07
- For part numbers consisting of P (pin) or S (socket), the contacts provided are IAW with AS39029/56 or AS39029/58

253-015-07 BOOT GROOVE EXAMPLE OF JAM-NUT CONNECTOR



253-015-07 Boot Groove Dimensions							
Shell Size	Diameter A, Max.	Thread B, Class 2A	E [+/- .016]	Diameter F, Max.	H [+0/- .008]	Ø Y	Ø Z
11	0.853 (21.67)	1.0000-20 UNEF	1.266 (32.16)	1.500 (38.10)	0.666 (16.92)	0.600 (15.24)	0.662 (16.81)
13	0.978 (24.84)	1.1250-18 UNEF	1.391 (35.33)	1.641 (41.68)	0.729 (18.52)	0.700 (17.78)	0.762 (19.35)
15	1.103 (28.02)	1.2500-18 UNEF	1.516 (38.51)	1.750 (44.45)	0.791 (20.09)	0.835 (21.21)	0.898 (22.81)
17	1.228 (31.19)	1.3750-18 UNEF	1.641 (41.68)	1.938 (49.23)	0.893 (22.68)	0.960 (24.38)	1.022 (25.96)
19	1.353 (34.37)	1.5000-18 UNEF	1.828 (46.43)	2.062 (52.37)	0.955 (24.26)	1.062 (26.97)	1.125 (28.58)
21	1.478 (37.54)	1.6250-18 UNEF	1.954 (49.63)	2.188 (55.58)	1.017 (25.83)	1.188 (30.18)	1.250 (31.75)
23	1.603 (40.72)	1.7500-18 UNS	2.078 (52.78)	2.312 (58.72)	1.080 (27.43)	1.275 (32.39)	1.338 (33.99)
25	1.728 (43.89)	1.8750-16 UNS	2.128 (54.05)	2.327 (59.11)	1.086 (27.58)	1.475 (37.47)	1.538 (39.07)

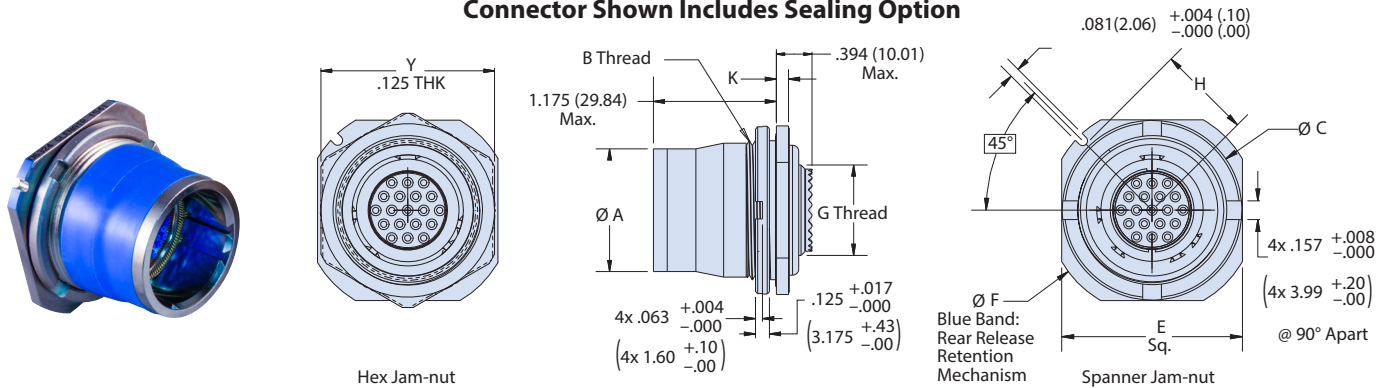
Space-grade blind-mate connectors

MIL-DTL-38999 Series III Type Space-Grade Connectors

Receptacle with misalignment accommodation and optional sealing

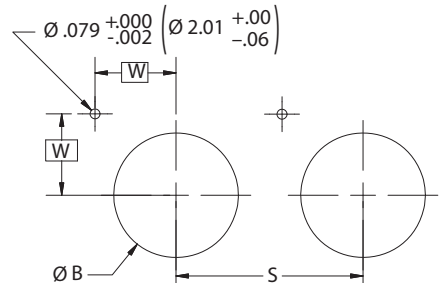
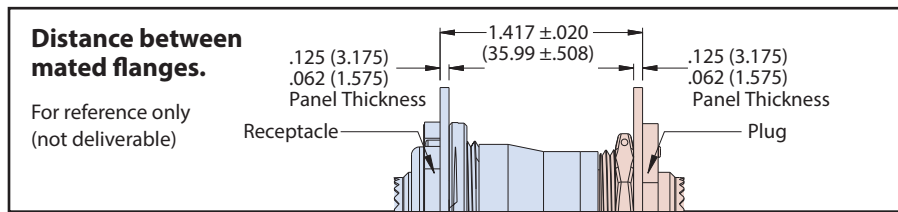
253-015-07 FLOATING, JAM-NUT MOUNT RECEPTACLE WITH MISALIGNMENT ACCOMMODATION AND OPTIONAL SEALING

Connector Shown Includes Sealing Option

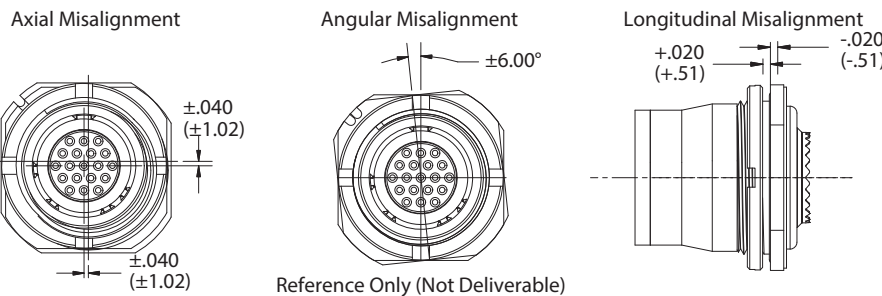


253-015-07 Dimensions

Shell Size	A Max Dia.	Thread B Class 2A	C Max.	Y Hex	E ±.016(.41)	F Max Dia.	G Thd Class 2A	K +.011/.010 (+.28/.25)	H +0/--.008 (+0/- .20)
11	.853 (21.67)	1.0000-20 UNEF	1.264 (32.11)	1.181 (30.00)	1.266 (32.16)	1.500 (38.10)	.5625-24	.109 (2.77)	.666 (16.92)
13	.978 (24.84)	1.1250-18 UNEF	1.388 (35.26)	1.300 (33.02)	1.391 (35.33)	1.641 (41.68)	.6875-24	.109 (2.77)	.729 (18.52)
15	1.103 (28.02)	1.2500-18 UNEF	1.512 (38.40)	1.457 (37.01)	1.516 (38.51)	1.750 (44.45)	.8125-20	.109 (2.77)	.791 (20.09)
17	1.228 (31.19)	1.3750-18 UNEF	1.638 (41.61)	1.575 (40.00)	1.641 (41.68)	1.938 (49.23)	.9375-20	.109 (2.77)	.893 (22.68)
19	1.353 (34.37)	1.5000-18 UNEF	1.823 (46.30)	1.693 (43.00)	1.828 (46.43)	2.062 (52.37)	1.0625-18	.140 (3.56)	.955 (24.26)
21	1.478 (37.54)	1.6250-18 UNEF	1.953 (49.61)	1.880 (47.75)	1.954 (49.63)	2.188 (55.58)	1.1875-18	.140 (3.56)	1.017 (25.83)
23	1.603 (40.72)	1.7500-18 UNS	2.075 (52.71)	2.010 (51.05)	2.078 (52.78)	2.312 (58.72)	1.3125-18	.140 (3.56)	1.080 (27.43)
25	1.728 (43.89)	1.8750-16 UNS	2.122 (53.90)	2.125 (53.97)	2.128 (54.05)	2.327 (59.11)	1.4375-18	.140 (3.56)	1.086 (27.58)



253-015 Misalignment Capabilities



253-015 Recommended Panel Cutout Dimensions

Shell Size	W	B Dia. ±.004 (.10)	S
11	.504 (12.80)	1.007 (25.58)	1.282 (32.56)
13	.549 (13.94)	1.134 (28.80)	1.417 (35.99)
15	.593 (15.06)	1.259 (31.98)	1.559 (39.60)
17	.665 (16.89)	1.384 (35.15)	1.705 (43.31)
19	.709 (18.01)	1.507 (38.28)	1.850 (46.99)
21	.753 (19.13)	1.634 (41.50)	1.992 (50.60)
23	.797 (20.24)	1.759 (44.68)	2.134 (54.20)
25	.799 (20.29)	1.884 (47.85)	2.262 (57.45)

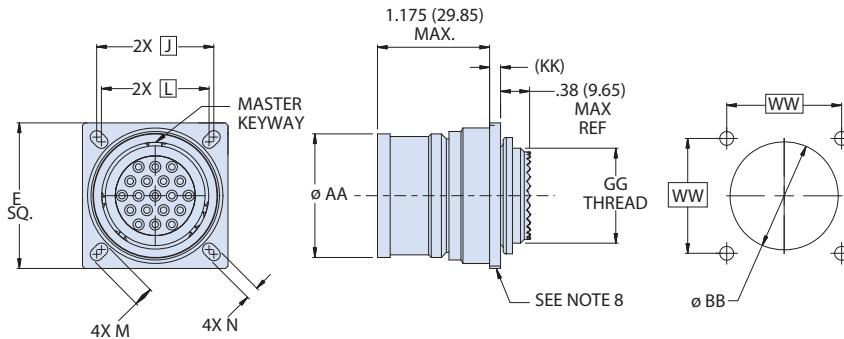
Space-grade blind-mate connectors

MIL-DTL-38999 Series III Type Space-Grade Connectors

Receptacle with misalignment accommodation and optional sealing

253-015-00 FLOATING, SLOTTED HOLE WALL MOUNT RECEPTACLE WITH MISALIGNMENT ACCOMMODATION AND OPTIONAL SEALING

Connector Shown Does Not Include Sealing Option

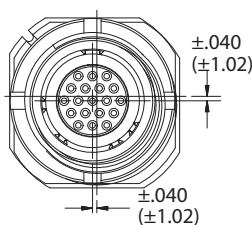


RECOMMENDED PANEL CUTOUT FOR SLOTTED HOLE CONNECTORS				
SHELL SIZE	WW	WW'	Ø BB MIN.	Ø BB' MIN.
11	0.906	1.062	0.984	1.062
13	0.969	1.156	1.109	1.156
15	1.062	1.250	1.234	1.250
17	1.156	1.375	1.359	1.375
19	1.250	1.500	1.484	1.500
21	1.375	1.625	1.609	1.625
23	1.500	1.750	1.734	1.750
25	1.625	1.875	1.859	1.875

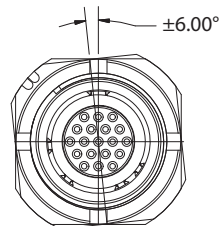
253-015-00 Dimensions													
Shell Size	Diameter AA, Max.	E +/--.012	E' +/--.012	J	J'	L	L'	M +/--.008	M' +/--.008	N +/--.008	N' +/--.008	Thread GG, Class 2A	KK [+0.011/-0.010]
11	0.853 (21.67)	1.126 (28.60)	1.311 (33.30)	0.906 (23.01)	1.062 (26.97)	0.812 (20.62)	0.969 (24.61)	0.194 (4.93)	0.194 (4.93)	0.128 (3.25)	0.128 (3.25)	0.5625-24	0.109 (2.77)
13	0.978 (24.84)	1.220 (30.99)	1.437 (36.50)	0.969 (24.61)	1.156 (29.36)	0.906 (23.01)	1.062 (26.97)	0.173 (4.39)	0.194 (4.93)	0.128 (3.25)	0.128 (3.25)	0.6875-24	0.109 (2.77)
15	1.103 (28.02)	1.311 (33.30)	1.563 (39.70)	1.062 (26.97)	1.250 (31.75)	0.969 (24.61)	1.156 (29.36)	0.194 (4.93)	0.194 (4.93)	0.128 (3.25)	0.128 (3.25)	0.8125-20	0.109 (2.77)
17	1.228 (31.19)	1.437 (36.50)	1.689 (42.90)	1.156 (29.36)	1.375 (34.92)	1.062 (26.97)	1.250 (31.75)	0.194 (4.93)	0.216 (5.49)	0.128 (3.25)	0.128 (3.25)	0.9375-20	0.109 (2.77)
19	1.353 (34.37)	1.563 (39.70)	1.811 (46.00)	1.250 (31.75)	1.500 (38.10)	1.156 (29.36)	1.375 (34.92)	0.194 (4.93)	0.242 (6.15)	0.128 (3.25)	0.154 (3.91)	1.0625-18	0.140 (3.56)
21	1.478 (37.54)	1.689 (42.90)	1.952 (49.58)	1.375 (34.92)	1.625 (41.28)	1.250 (31.75)	1.500 (38.10)	0.242 (6.15)	0.242 (6.15)	0.154 (3.91)	0.154 (3.91)	1.1875-18	0.140 (3.56)
23	1.603 (40.72)	1.811 (46.00)	2.093 (53.16)	1.500 (38.10)	1.750 (44.45)	1.375 (34.92)	1.625 (41.28)	0.242 (6.15)	0.242 (6.15)	0.154 (3.91)	0.154 (3.91)	1.3125-18	0.140 (3.56)
25	1.728 (43.89)	1.952 (49.58)	2.234 (56.74)	1.625 (41.28)	1.875 (47.63)	1.500 (38.10)	1.750 (44.45)	0.242 (6.15)	0.242 (6.15)	0.154 (3.91)	0.154 (3.91)	1.4375-18	0.140 (3.56)

253-015 Misalignment Capabilities

Axial Misalignment

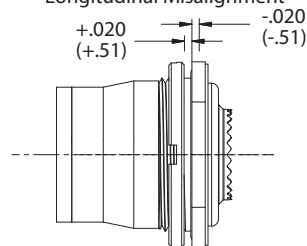


Angular Misalignment



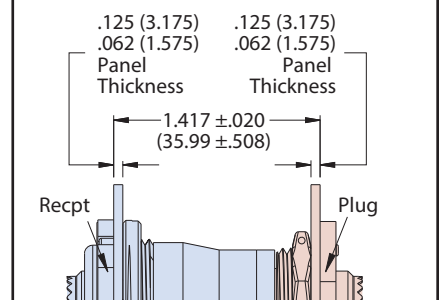
Reference Only (Not Deliverable)

Longitudinal Misalignment



Distance between mated flanges.

For reference only (not deliverable)

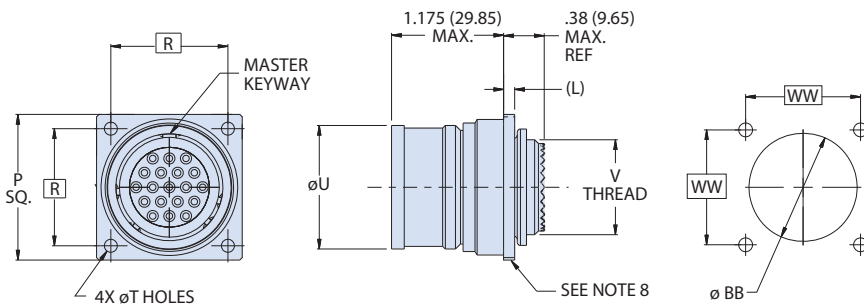


Space-grade blind-mate connectors

MIL-DTL-38999 Series III Type Space-Grade Connectors

Receptacle with misalignment accommodation and optional sealing

253-015-D0 FLOATING, JAM-NUT MOUNT RECEPTACLE WITH MISALIGNMENT ACCOMMODATION AND OPTIONAL SEALING

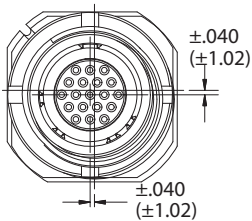


RECOMMENDED PANEL CUTOUT FOR SLOTTED HOLE CONNECTORS				
SHELL SIZE	WW	WW'	Ø BB MIN.	Ø BB' MIN.
11	0.906	1.062	0.984	1.062
13	0.969	1.156	1.109	1.156
15	1.062	1.250	1.234	1.250
17	1.156	1.375	1.359	1.375
19	1.250	1.500	1.484	1.500
21	1.375	1.625	1.609	1.625
23	1.500	1.750	1.734	1.750
25	1.625	1.875	1.859	1.875

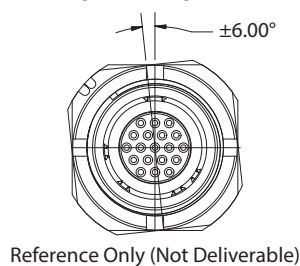
253-015-D0 Dimensions								
SHELL SIZE	DIAMETER U, MAX.	P +/--.012	P' +/--.012	R	R'	T +/--.008	THREAD V, CLASS 2A	L +.011/--.010
11	0.853 (21.67)	1.126 (28.60)	1.311 (33.30)	0.906 (23.01)	1.062 (26.97)	0.128 (3.25)	0.5625-24	0.109 (2.77)
13	0.978 (24.84)	1.220 (30.99)	1.437 (36.50)	0.969 (24.61)	1.156 (29.36)	0.128 (3.25)	0.6875-24	0.109 (2.77)
15	1.103 (28.02)	1.311 (33.30)	1.563 (39.70)	1.062 (26.97)	1.250 (31.75)	0.128 (3.25)	0.8125-20	0.109 (2.77)
17	1.228 (31.19)	1.437 (36.50)	1.689 (42.90)	1.156 (29.36)	1.375 (34.92)	0.128 (3.25)	0.9375-20	0.109 (2.77)
19	1.353 (34.37)	1.563 (39.70)	1.811 (46.00)	1.250 (31.75)	1.500 (38.10)	0.128 (3.25)	1.0625-18	0.140 (3.56)
21	1.478 (37.54)	1.689 (42.90)	1.952 (49.58)	1.375 (34.92)	1.625 (41.28)	0.154 (3.91)	1.1875-18	0.140 (3.56)
23	1.603 (40.72)	1.811 (46.00)	2.093 (53.16)	1.500 (38.10)	1.750 (44.45)	0.154 (3.91)	1.3125-18	0.140 (3.56)
25	1.728 (43.89)	1.952 (49.58)	2.234 (56.74)	1.625 (41.28)	1.875 (47.63)	0.154 (3.91)	1.4375-18	0.140 (3.56)

253-015 Misalignment Capabilities

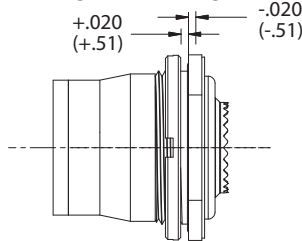
Axial Misalignment



Angular Misalignment



Longitudinal Misalignment



Distance between mated flanges.

For reference only (not deliverable)

