INCH-POUND

MS3477B <u>1 March 2007</u> SUPERSEDING MS3477A 05 September 1975

DETAIL SPECIFICATION SHEET

CONNECTORS, RECEPTACLE, ELECTRICAL, SERIES II, HERMETIC, SOLDERLESS, BOX MOUNTING, BAYONET COUPLING, CLASS N

Reactivated after 1 March 2007 and may be used for new and existing designs and acquisitions.

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The requirements for acquiring the product described herein shall consist of this specification sheet and MIL-DTL-26482.

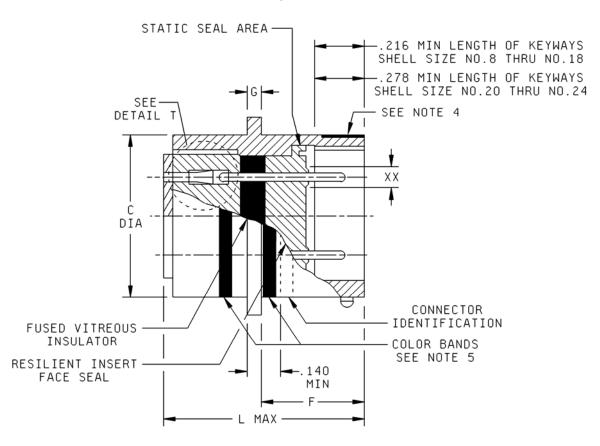




FIGURE 1. Receptacle, class N, dimensions and configurations.

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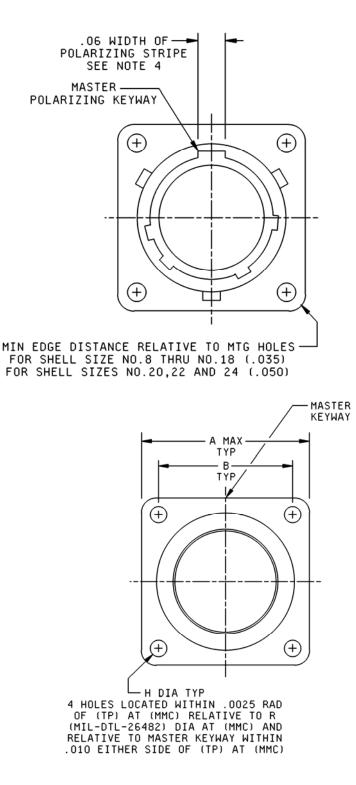
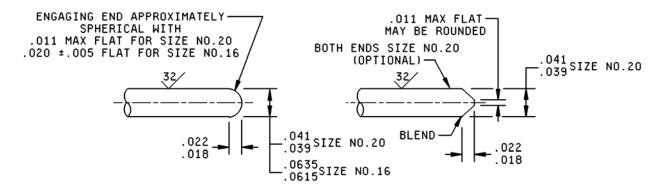
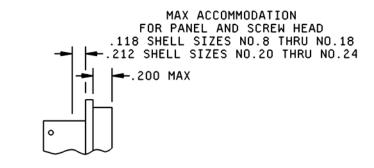


FIGURE 1. Receptacle, class N, dimensions and configurations - Continued.









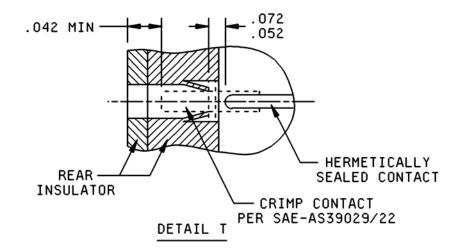


FIGURE 1. Receptacle, class N, dimensions and configurations - Continued.

Shell size	А	В	С	F
8	.828 (21.03)	.594 (15.09)	.563 (14.30) .557 (14.15)	
10	.954 (24.23)	.719 (18.26)	.673 (17.09) .667 (16.94)	
12	1.047 (26.59)	.812 (20.62)	.782 (19.86) .776 (19.71)	.704 (17.88)
14	1.141 (28.98)	.906 (23.01) $.907 (23.04)$ $.901 (22.89)$ $.969 (24.61)$ $1.032 (26.21)$ $1.026 (26.06)$ $1.032 (26.21)$ $1.026 (26.06)$.680 (17.27)
16	1.234 (31.34)			
18	1.328 (33.73)	1.062 (26.97)	1.062 (26.97) 1.157 (29.39) 1.151 (29.24)	
20	1.453 (36.91)	1.156 (29.36)	1.251 (31.78) 1.245 (31.62)	
22	1.578 (40.08)	1.250 (31.75)	1.376 (34.95) 1.370 (34.80)	.756 (19.20) .739 (18.77)
24	1.703 (43.26)	1.375 (34.93)	1.501 (38.13) 1.495 (37.97)	

Shell size	G	Н	L	Panel cutout dia
8				.570 (14.48)
10	.078 (1.98) .046 (1.17)		1.078 (27.38)	.680 (17.27)
12				.789 (20.04)
14				.914 (23.22)
16				1.039 (26.39)
18				1.164 (29.57)
20	.110 (2.79) .078 (1.98)	.120 (3.05)		1.258 (31.95)
22			1.140	1.383 (35.13)
24		.147 (3.73)	(28.96)	1.508 (38.30)

FIGURE 1. <u>Receptacle, class N, dimensions and configurations</u> - Continued.

NOTES:

- 1. Dimensions are in inches. Metric equivalents are given for information only.
- 2. Unless otherwise specified, tolerances are .XX \pm .01, .XXX \pm .005. Angular tolerances are X° \pm 1°.
- 3. True position (TP) tolerances specified are in accordance with ASME Y14.5M.
- 4. Polarizing stripe, color optional.
- 5. Color band: .070 \pm .031 inch (1.78 \pm 0.79 mm) wide, color blue. Band location must be such that it is visible when mounting.
- 6. Insert arrangements requiring reduced diameters for raised seal barriers on outer row of contact cavities as specified (see figure 1).

FIGURE 1. Receptacle, class N, dimensions and configurations - Continued.

Shell size	Insert arrangement	Contact cavities
8	-33 & -98	A, B, C.
12	-10	C, G.
14	-12	A, B, C, D, E, F, G, H.
14	-18	A, C, E, G, J, L.
14	-19	B, D, F, H, K, M.
16	-26	A, B, C, D, E, F, G, H, J, K, L, M, N, P, R.
18	-32	A, B, C, D, E, F, G, H, J, K, L, M, N, P, R, S, T.
22	-41	A, B, C, D, E, F, G, H, J, K, L, M, N, P, R, S, T, U, V, W, X, Y.

TABLE I.	Contact cavities requiring	reduced diameters	(XX)) for	pins and so	ckets
	in outer row	of contact cavities.	<u>1</u> /			

1/ The reduced diameter "XX" refers to the diameters of the raised seal barriers (pin barrier rings) or lead-in chamfers (socket entry holes) to ensure proper sealing of pin and socket after mating. See MIL-DTL-26482, connector intermateability control dimensions (series 1 and series 2) figure for reduced diameter "XX" for contact size 20 only.

REQUIREMENTS:

Dimensions and configuration: See figure 1 and table I.

Connector mating: This connector mates with MS3475 and MS3476.

For insert arrangement: See MIL-STD-1669.

Contact SAE-AS39029/32-XX-XX must be used for wire terminations.

Shell material: Cold rolled steel, in accordance with ASTM-A108.

Shell finish: .00001 inch (0.254 µm) minimum tin in accordance with ASTM-B545 and ASTM-B339, over nickel pin accordance with SAE-AMS-QQ-N-290.

Insertion/removal tool MIL-I-81969/16-XX to be used with this connector.

Maximum wire diameter permissible: .074 inch (1.88 mm) for size 20 contact, .103 inch (2.62) for size 16 contact.

Intermateability dimensions shall be in accordance with MIL-DTL-26482.

Part or Identifying Number (PIN) example:

	<u>MS3477</u>	<u>N</u>	<u>16</u> D	<u>26</u>	<u>P</u>	<u>W</u>
MS number						
Class						
Shell size						
Termination type & shell ma	aterial ——					
Insert arrangement						
Contact style						
Insert position						

Changes from previous issue. Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extent of the changes.

Referenced documents. In addition to MIL-DTL-26482, this document references the following:

MS3475 MS3476 MIL-STD-1669 ASME Y14.5M ASTM-A108 ASTM-B339 ASTM-B545 SAE-AMS-QQ-N-290 SAE-AS39029/22

CONCLUDING MATERIAL

Custodians: Army - CR Navy - AS Air Force - 11 DLA - CC Preparing activity: DLA - CC

(Project 5935-4656-017)

Review activities: Army - AV Navy - EC, SH

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at <u>http://assist.daps.dla.mil</u>.