

INCH - POUND

MS20027F  
 31 August 2010  
 SUPERSEDING  
 MS20027E  
 20 May 2005

## DETAIL SPECIFICATION SHEET

CONNECTORS, LINE PLUG, ELECTRICAL,  
 SOLDER TYPE, BAYONET COUPLING, CLASS T, SERIES I

Inactive for new design after 7 December 1998.

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-27599.

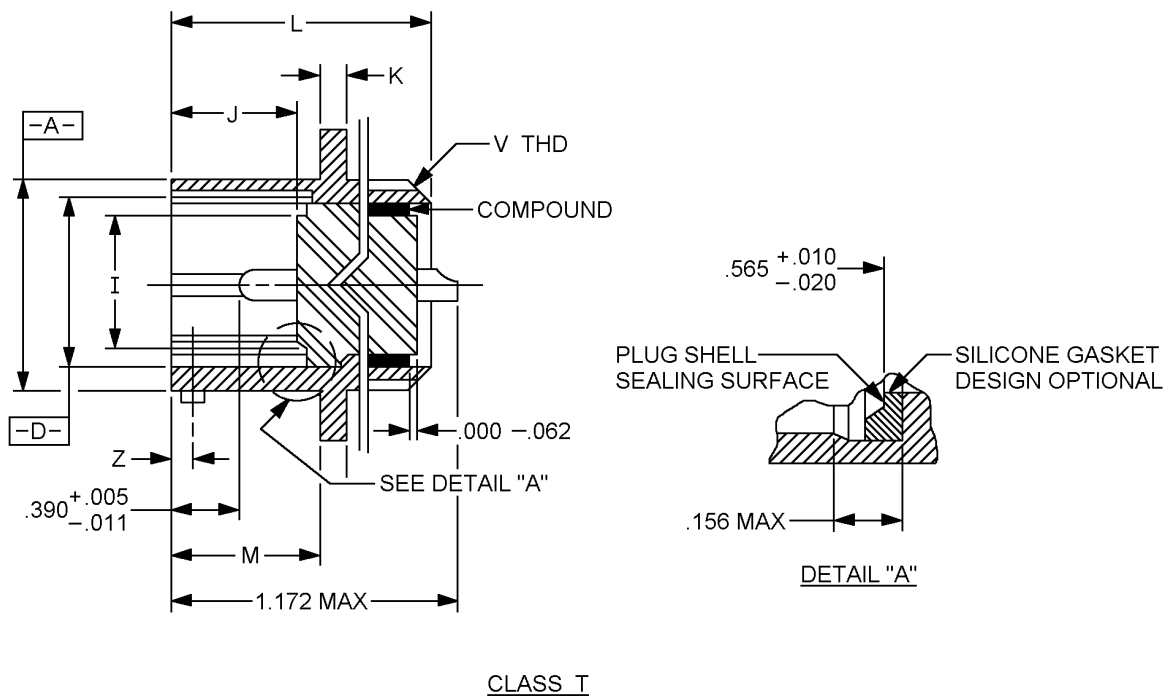
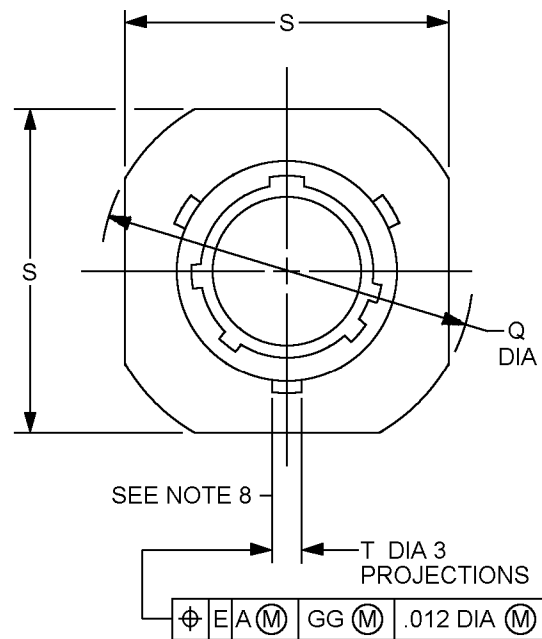


FIGURE 1. Line plug.

MS20027F



CLASS T

FIGURE 1. Line plug - Continued.

MS20027F

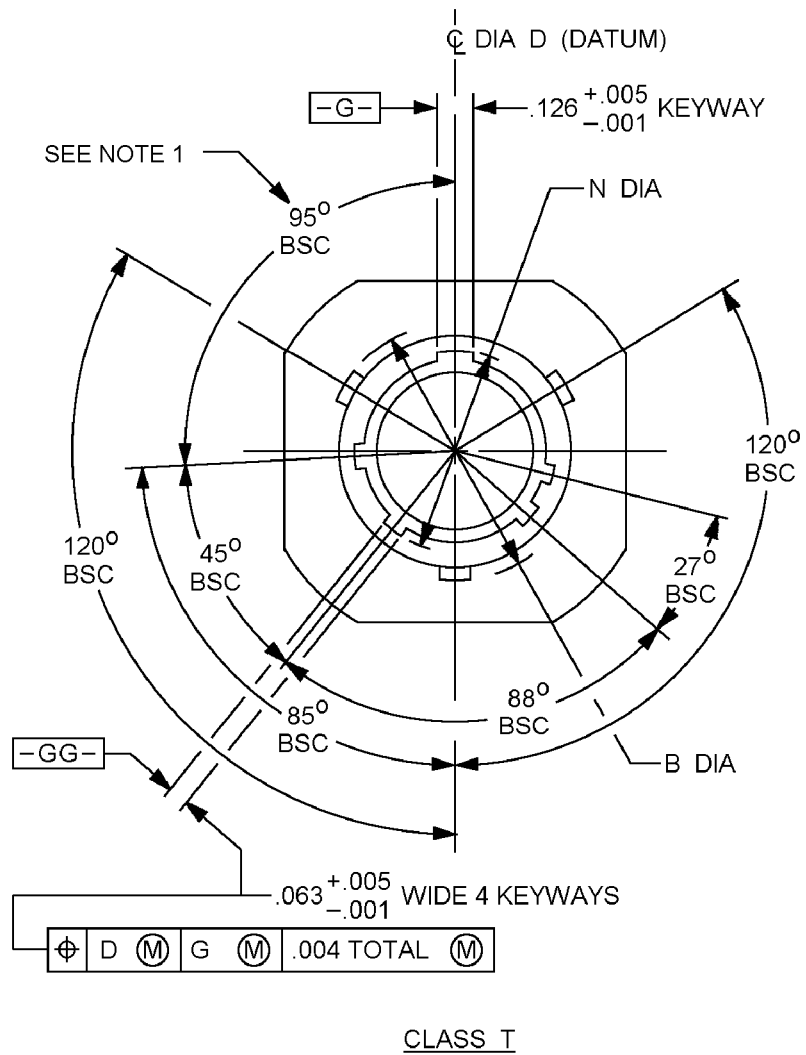
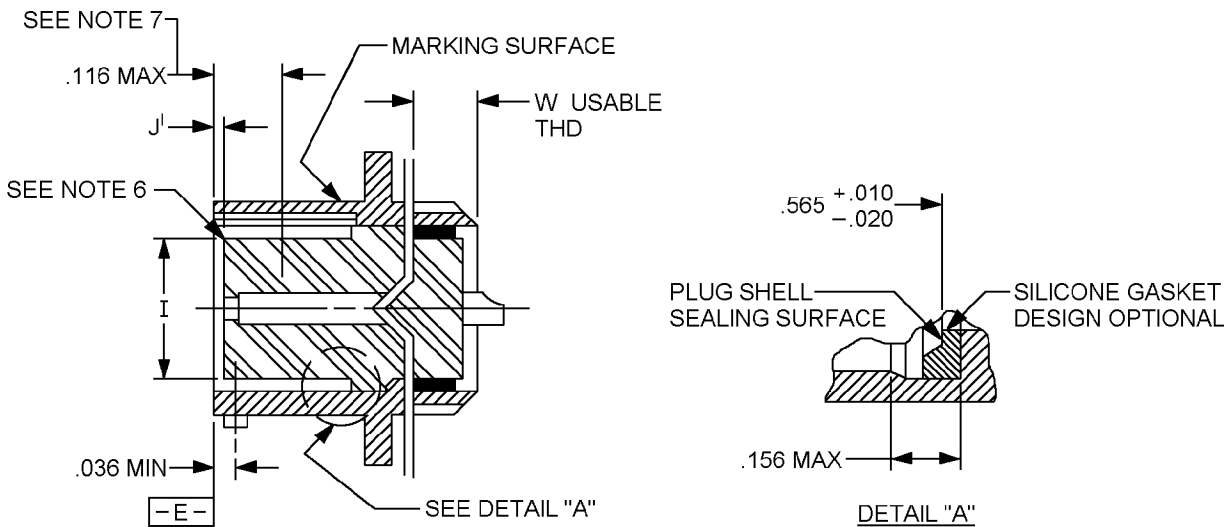


FIGURE 1. Line plug - Continued.

## MS20027F

CLASS T

## NOTES:

1. Normal keyway position. For other keyway positions, see MIL-DTL-27599.
2. Diameters A, D and Q shall be concentric within  $.015 \text{ T.I.R.}$
3. Diameters D and I shall be concentric within  $.005 \text{ T.I.R.}$  at MMC.
4. Diameter A with respect to diameter B, and diameter D with respect to diameter N, shall be concentric at MMC.
5. Dimensions are in inches. Metric equivalents are given for information only.
6. Insert front surface shall be flat within  $.005 \text{ T.I.R.}$
7. The point at which a gauge pin having the same basic diameter as the mating contact and a square face, touches socket contact spring.
8. The gauge features for GG shall be CC smaller than their MMC size.

FIGURE 1. Line plug - Continued.

## MS20027F

Inches	mm	Inches	mm	Inches	mm	Inches	mm
0.001	0.0254	0.012	0.305	0.063	1.60	0.39	9.91
0.004	0.102	0.02	0.508	0.116	2.95	0.565	14.35
0.005	0.127	0.036	0.91	0.126	3.20	1.172	29.78
0.01	0.254	0.062	1.575				
0.011	0.28						

FIGURE 1. Line plug - Continued.TABLE I. Dimensions. 1/ 2/

Shell size	A dia + .001 - .005	B dia + .000 - .016	D dia + .005 - .001	I dia ± .005	J ± .005 pin insert	J <sup>1</sup> ± .005 socket insert
9	.572 (14.53)	.662 (16.81)	.442 (11.23)	.296 (7.52)	.576  (14.63)	.020  (.51)
11	.700 (17.78)	.810 (20.57)	.570 (14.48)	.413 (10.49)		
13	.850 (21.60)	.960 (24.38)	.687 (17.45)	.527 (13.38)		
15	.975 (24.76)	1.085 (27.56)	.812 (20.62)	.652 (16.56)		
17	1.100 (27.94)	1.210 (30.73)	.937 (23.80)	.777 (19.73)		
19	1.207 (30.66)	1.317 (33.45)	1.042 (26.46)	.866 (22.00)		
21	1.332 (33.83)	1.442 (36.63)	1.167 (29.64)	.991 (25.17)		
23	1.457 (37.00)	1.567 (39.80)	1.292 (32.82)	1.116 (28.34)		
25	1.582 (40.20)	1.692 (42.97)	1.417 (36.00)	1.241 (31.52)		

See notes at end of table.

## MS20027F

TABLE I. Dimensions - Continued. 1/ 2/

Shell size	K + .015 - .000	L max	M + .000 - .005	N dia + .005 - .006	Q dia max	S dia ± .020
9	.085 (2.16)	1.094 (27.78)	.632 (16.05)	.492 (12.49)	1.094 (27.79)	.938 (23.82)
11				.620 (15.75)	1.188 (30.17)	1.031 (26.18)
13				.769 (19.53)	1.281 (32.54)	1.125 (28.57)
15				.894 (22.70)	1.375 (34.92)	1.219 (30.96)
17				1.019 (25.88)	1.469 (37.31)	1.312 (33.32)
19				1.124 (28.55)	1.594 (40.48)	1.438 (36.52)
21	.115 (2.92)		.602 (15.30)	1.249 (31.72)	1.719 (43.66)	1.562 (39.67)
23				1.374 (34.90)	1.844 (46.84)	1.688 (42.87)
25				1.499 (38.07)	1.969 (50.01)	1.812 (46.02)

See notes at end of table.

## MS20027F

TABLE I. Dimensions - Continued. 1/ 2/

Shell size	T dia + .006 - .002	W min full thread	Z BSC	V thread class 2A plated UNEF	CC
9	.078 (1.98)	.250 (6.35)	.100 (2.54)	7/16 - 28	.010  (.254)
11				9/16 - 24	
13				11/16 - 24	
15				13/16 - 20	
17				15/16 - 20	
19				1 1/16 - 18	
21				1 3/16 - 18	
23				1 5/16 - 18	
25	.125 (3.17)		.109 (2.77)	1 7/16 - 18	

1/ Dimensions are in inches.2/ Metric equivalents are given for information only.

## REQUIREMENTS

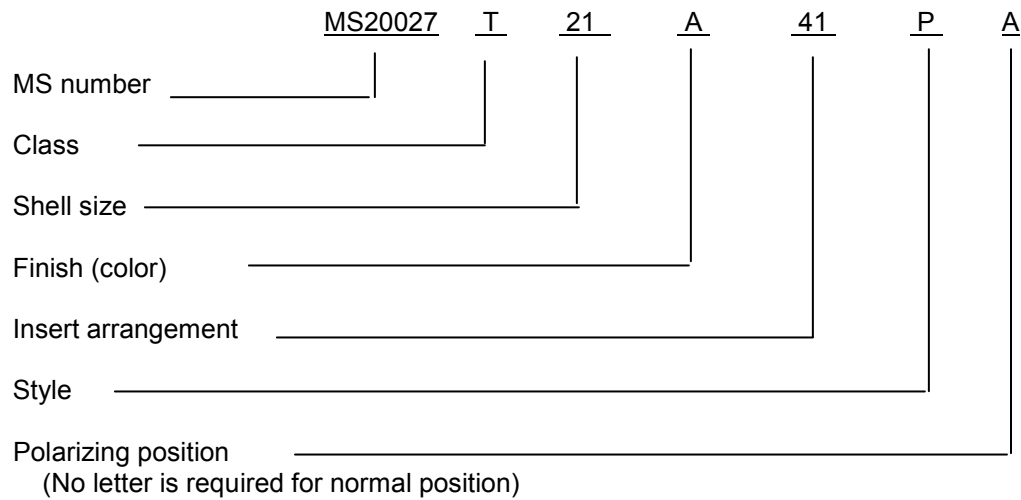
Dimensions and configurations: See figure 1 and table I.

This connector mates with MS20026 and MS20029.

Insert arrangement shall be in accordance with MIL-STD-1560.

## MS20027F

Part or Identifying Number (PIN) example:



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-27599, this document references the following:

MIL-STD-1560  
MS20026  
MS20029

## CONCLUDING MATERIAL

Custodians:  
Air Force - 85  
DLA - CC

Preparing activity:  
DLA - CC

Review activity:  
Air Force - 99

(Project 5935-2010-144)

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 <https://assist.daps.dla.mil>.