

INCH-POUND

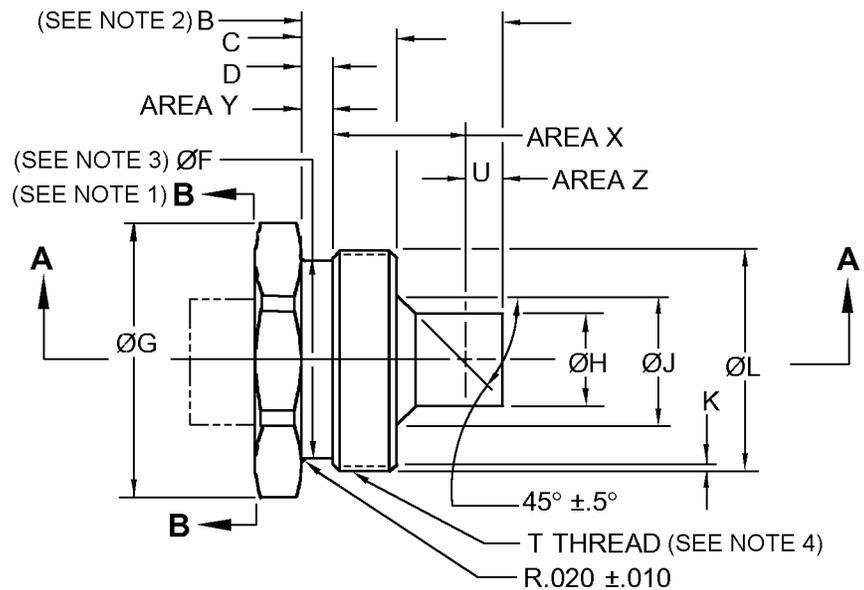
MS27075C
25 September 2003
SUPERSEDING
MS27075B
30 June 1972

DETAIL SPECIFICATION SHEET

NIPPLE, FLARED, TUBE TO HOSE - SWIVEL NUT

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 and MIL-DTL-27272.



NOTES:

1. Any design to the left of plane B-B is acceptable provided A dimension and the requirements of this specification sheet and the procurement specification are met.
2. All diameters within B dimension shall be concentric within .005 full indicator movement.
3. Thread gauge must enter thread relief (-10 through -24 sizes only).
4. Threads shall be in accordance with SAE AS8879 except for -8 and -24 sizes, which shall be in accordance with ANSI ASME B1.1. Threads shall be rolled on corrosion-resisting steel only.

FIGURE 1. Nipple illustration.

MS27075C

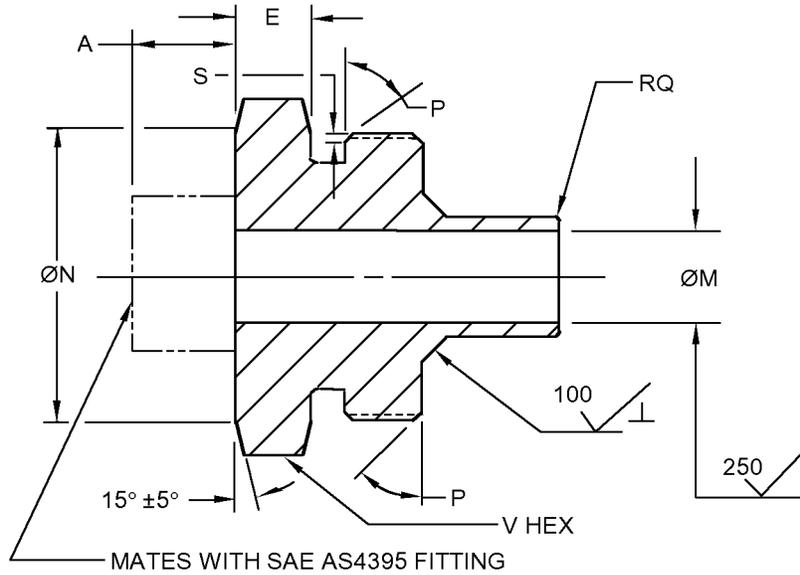


FIGURE 1. Nipple illustration - Continued.

TABLE I. Nipple requirements.

PIN MS27075		A ±.005	B $\frac{1}{2}$ ±.005		C ±.005		D ±.005	
Steel	Alum		Steel	Alum	Steel	Alum	Steel	Alum
-3/-4C	-	.275	.735	-	.255	-	.075	-
-4C	-	.290	-	-	-	-	-	-
-5C	-	.325	.730	-	.250	-	.085	-
-6C	-	.360	-	-	-	-	.050	-
-8C	-8D	.440	.870	.865	.270	.265	.085	.080
-10C	-10D	.485	.950	.957	.300	.307	.100	.107
-12C	-12D	.465	1.035	1.018	.360	.343	-	.083
-16C	-16D	.545	1.120	1.100	.390	.370	.110	.090
-20C	-20D	.600	1.335	1.341	.400	.406	.085	.091
-24C	-24D	.695	1.480	1.480	.500	.500	.100	.100

See notes at end of table.

TABLE I. Nipple requirements - Continued.

PIN MS27075	E ±.005		F 2/		G		H +.000 -.005	J ±.005	K
	Steel	Alum							
-	.125	-	.400	±.005	.620	±.005	.210	.295	±.005
3C/4 C									
-4C	-	-							
-5C	-	-	.430		.675	+0.015	.273	.360	
-6C	-	-	.495		.750	-0.000	.335	.425	max
-8C	-8D	.155	.600		.960		.431	.530	±.005
-10C	-10D	.163	.785	±.010	1.105		.531	.625	.035
-12C	-12D	.207	.910		1.385		.655	.760	
-16C	-16D	.240	1.277		1.680		.905	1.040	.038
-20C	-20D	.274	1.589		1.979		1.156	1.275	
-24C	-24D	.280	1.828		2.340		1.406	1.550	.043

PIN MS27075	L		M		N ±.02	P ±5°		Q		S
	Steel	Alum				Steel	Alum			
-3C/-4C	.500	+0.000	.161	+0.005	.53	45°	-	.015	+0.005	±.005
-4C	-	-0.006		-0.000			-		-0.000	
-5C	.562	+0.000	.224		.59		-			
-6C	.625	-0.007	.261		.66	30°	-			max
-8C	.750		.345	+0.006	.84	45°	30°	.020	±.005	±.005
-10C	.875	+0.000	.440	-0.000	.97					
-12C	1.000	-0.008	.560		1.22			.030		
-16C	1.375	+0.000	.828		1.47					
-20C	1.688	-0.009	1.058		1.78					
-24C	1.938	+0.000	1.282	+0.005	2.09			.035		
		-0.010		-0.000						

See notes at end of table.

MS27075C

TABLE I. Nipple requirements - Continued.

PIN: MS27075		T <u>3/</u>		U		V ±.02
Steel	Alum	Thread	Pitch diameter	Steel only		
-3C/-4C	-	.5000 - 28 UNJEF - 3A	.4768/.4740	.25	±.05	.56
-4C	-					
-5C	-	.5625 - 24 UNJEF -3A	.5354/.5325	.32	±.12	.62
-6C	-	.6250 - 24 UNJEF -3A	.5979/.5949			.69
-8C	-8D	.7500 - 24 UNS -3A	.7229/.7198			.35
-10C	-10D	.8750 - 20 UNJEF -3A	.8425/.8392	.39	±.19	1.25
-12C	-12D	1.0000 - 20 UNJEF -3A	.9675/.9641			1.50
-16C	-16D	1.3750 - 18 UNJEF - 3A	1.3389/1.3353	.48	±.28	1.81
-20C	-20D	1.6875 - 18 UNJEF - 3A	1.6514/1.6476			2.12
-24C	-24D	1.9375 - 16 UN - 3A	1.8969/1.8929	.50	±.30	

1/ All diameters within B dimension shall be concentric within .005 full indicator movement.

2/ Thread gauge must enter thread relief (-10 through -24 sizes only).

3/ Threads shall be in accordance with SAE AS8879 except for -8 and -24 sizes, which shall be in accordance with ANSI ASME B1.1. Threads shall be rolled on corrosion-resisting steel only.

REQUIREMENTS

Intended use. This part is a component of MS27061. This is a design standard for manufacturing purposes. The item is only procured as an integral part of adapter assemblies.

Identification of product. The Part or Identifying Number (PIN) for this part shall be as specified in table I (e.g., MS27075-4C).

Dimensions and tolerances. Dimensions are in inches. Unless otherwise specified, break or radius all corners .005, +.005, -.000. All diameters must be concentric within .010 full indicator reading.

Material. PIN suffix C, corrosion-resistant steel, class 304, condition A, in accordance with SAE AMS-QQ-S-763.

PIN suffix D. Aluminum alloy, 6061-T651 in accordance with SAE AMS-QQ-A-225/8.

Finish. Corrosion-resistant steel, passivate in accordance with SAE AMS-QQ-P-35. Dry-film lubricate area X. Dry-film lubrication allowed in area Y. No dry-film lubrication allowed in area Z. Dry-film lubrication shall conform to SAE AS1701.

Aluminum alloy. Anodize in accordance with MIL-A-8625, type II, dye blue.

Remove all burrs and slivers.

Nipple illustration. See figure 1.

Surface roughness. Unless otherwise specified, maximum surface roughness shall not exceed 125 µin. R_a in accordance with ASME B46.1.

MS27075C

Order of precedence. This specification takes precedence over the documents referenced herein. Unless otherwise specified, referenced documents shall be of the issue in effect on the date of solicitation.

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.

CONCLUDING MATERIAL

Custodians:

Army - AV
Navy - AS
Air Force - 99
DLA - CC

Preparing activity:

DLA - CC

(Project 4730-0868-051)

Review activities:

Army - AR, AT, MI
Navy - MC, SA, SH
Air Force - 71