

INCH-POUND

MS27635B  
29 September 2000  
SUPERSEDING  
MS27635A  
18 December 1987

## DETAIL SPECIFICATION SHEET

### NIPPLE, FLARELESS, 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 sheet and MIL-DTL-83296.

#### REQUIREMENTS:

1. Nipples shall be in accordance with figure 1 and table I.
2. Material shall be a corrosion resistant steel, class 304, condition B, as specified in SAE AMS-QQ-S-763. Sizes -4, -6, and -8 shall have a minimum yield of 70,000 psi and size -10 shall have a minimum yield of 60,000 psi.
3. Finish shall be passivated as specified in MIL-DTL-83296.
4. Radius or break all corners to  $.005 + .005/-0.000$ , unless otherwise specified.
5. All burrs and slivers shall be removed.
6. Surface roughness, in accordance with ASME B46.1, shall not exceed  $125 \mu\text{in } R_a$ , unless otherwise specified.
7. All tolerances shall be  $\pm 0.005$ , unless otherwise specified.
8. In area X, a dry-film lubricant shall be used as specified in MIL-L-46010. Dry-film lubricant shall be allowed in area Y. Dry-film lubricant shall not extend beyond area Z.
9. The part number and manufacturer's part number shall be marked in accordance with MIL-DTL-83296.

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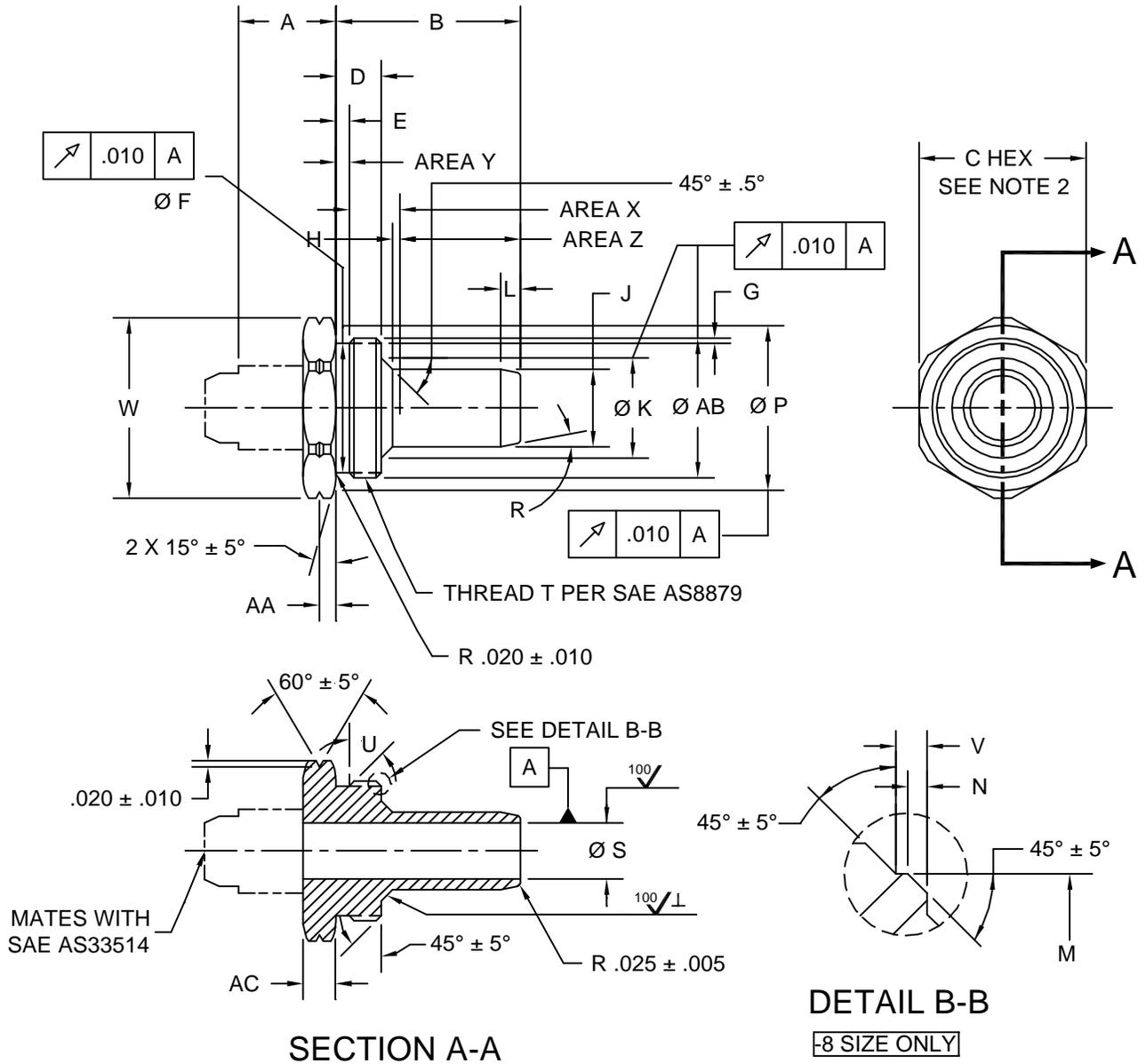


FIGURE 1. Flareless Nipple.

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TABLE I. Nipple dimensions.

Part number	A ±.010	B ±.005	C	D ±.005	E ±.005	F ±.005	G ±.005
MS27635-4C	.583	.929	.750	.379	.110	.544	.041
MS27635-6C	.748	.981	.875	.361	.085	.660	.043
MS27635-8C	.857	1.137	1.000	.400	.100	.813	—
MS27635-10C	1.010	1.388	1.250	.338	.100	.989	.037

TABLE I. Nipple dimensions - Continued.

Part number	H ±.050	J +.000 -.005	K ±.005	L ±.005	M ±.010	N ±.005	P ±.02
MS27635-4C	.100	.250	.420	—	—	—	.72
MS27635-6C	—	.343	.495	—	—	—	.84
MS27635-8C	—	.445	.610	—	.783	.030	.97
MS27635-10C	—	.588	.762	.150	—	—	1.22

TABLE I. Nipple dimensions - Continued.

Part number	R ±.50°	S ±.005	Thread T	Pitch diameter	U ±5°	V ±.005
MS27635-4C	—	.161	5/8-18UNJF-3A	.5889/.5854	45°	—
MS27635-6C	—	.271	3/4-16UNJF-3A	.7094/.7056		—
MS27635-8C	—	.375	7/8-24UNJS-3A	.8479/.8448	30°	.050
MS27635-10C	10°	.465	1 1/16-20UNJ-3A	1.0300/1.026 6	45°	—

TABLE I. Nipple dimensions - Continued.

Part number	W ±.005	AA ±.005	AB		AC ±.005
MS27635-4C	.825	.069	.625	+0.000 -.009	.138
MS27635-6C	.962	.092	.750		.185
MS27635-8C	1.100	.095	.875	+0.000 -.007	.190
MS27635-10C	1.375	.125	1.062	+0.000 -.008	.250

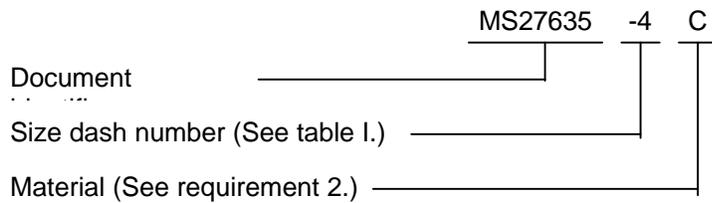
NOTES:

1. All dimensions are in inches, unless otherwise specified.
2. For dimension C, use commercial stock size tolerance as specified in SAE AMS2241M.
3. This part is for use with MIL-DTL-83298 hose.

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- 4. This specification sheet takes precedence over documents referenced herein.
- 5. This is a design specification sheet for manufacturing purposes. The item is only procured as an integral part of an adapter assembly.
- 6. Referenced documents shall be of the issue listed in the issue of the Department of Defense Index of Specifications and Standards (DoDISS) and supplement thereto, cited in the solicitation.
- 7. Dimensioning and tolerancing are in accordance with ASME Y14.5M-1994.
- 8. Part or Identifying Number (PIN):

Example of a PIN: MS27635-4C.



- 9. Next assembly is MS27632.

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

Preparing activity:  
DLA - CC  
  
(Project 4730-1078)

Review activities:  
Air Force - 82  
Navy - MC, SA