

INCH-POUND

MS27635C
22 October 2009
SUPERSEDING
MS27635B
29 September 2000

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.

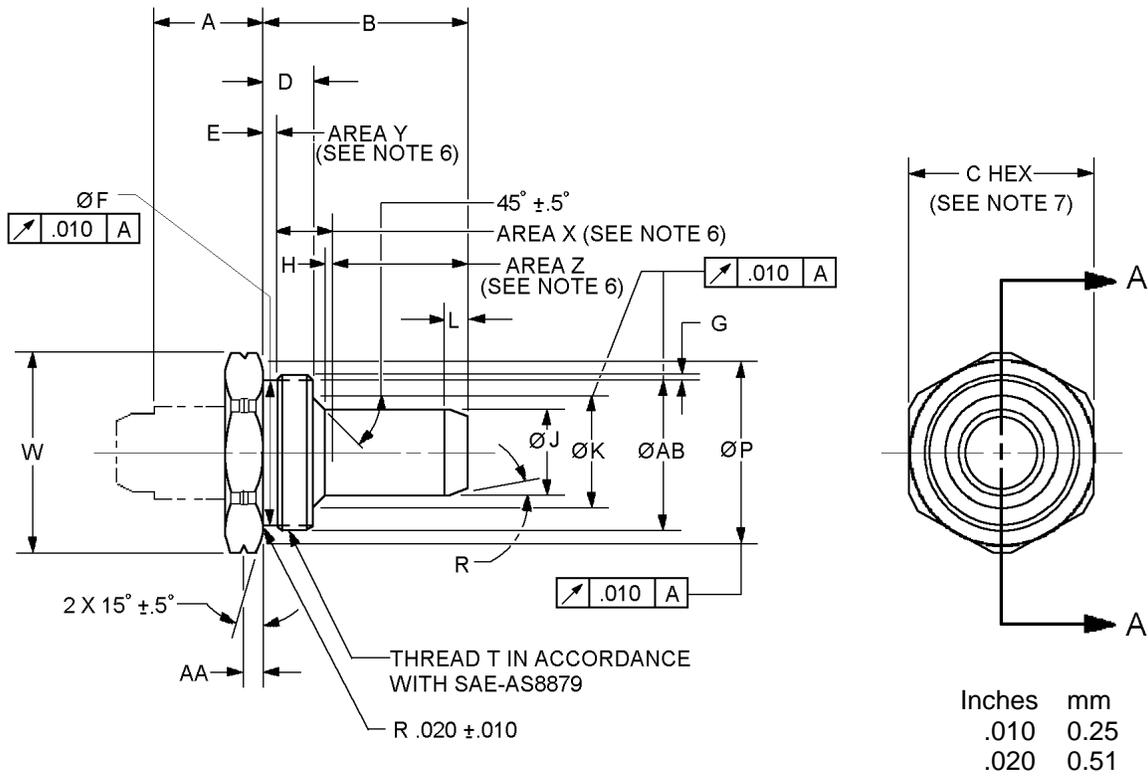
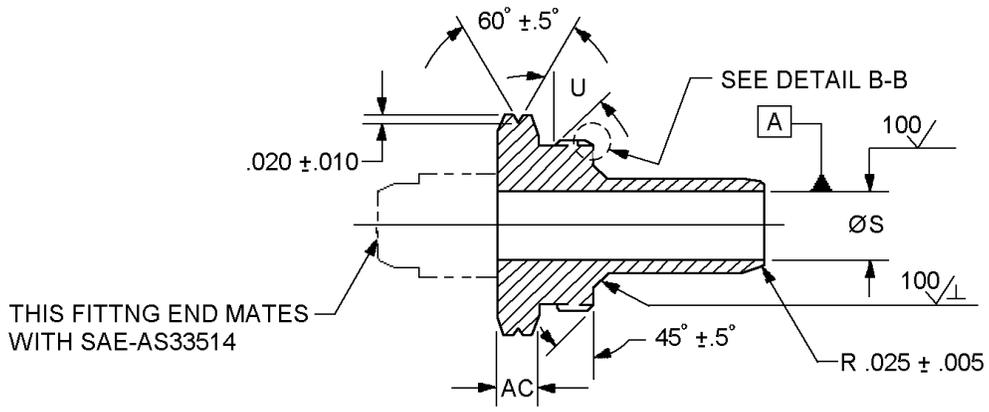
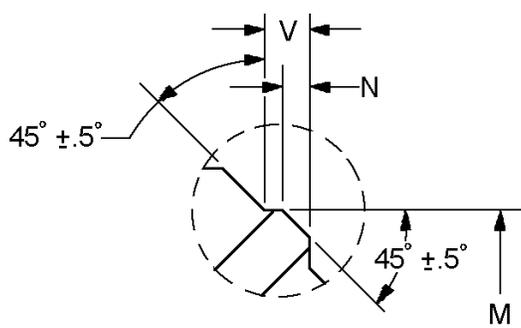


FIGURE 1. Flareless nipple dimensions and configuration.

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SECTION A-A



Inches	mm
.005	0.13
.010	0.25
.020	0.51
.025	0.62

DETAIL B-B

-8 SIZE ONLY

FIGURE 1. Flareless nipple dimensions and configuration – Continued.

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Part or Identifying Number (PIN)	A ±.010 (0.25) inch (mm)	B ±.005 (0.13) inch (mm)	C (see note 5) inch (mm)	D ±.005 (0.13) inch (mm)	E ±.005 (0.13) inch (mm)	F ±.005 (0.13) inch (mm)	G ±.005 (0.13) inch (mm)
MS27635-4C	.583 (14.81)	.929 (23.60)	.750 (19.05)	.379 (9.63)	.110 (2.79)	.544 (13.82)	.041 (1.04)
MS27635-6C	.748 (19.00)	.981 (24.92)	.875 (22.23)	.361 (9.17)	.085 (2.16)	.660 (16.76)	.043 (1.09)
MS27635-8C	.857 (21.77)	1.137 (28.88)	1.000 (25.40)	.400 (10.16)	.100 (2.54)	.813 (20.65)	—
MS27635-10C	1.010 (25.65)	1.388 (35.26)	1.250 (31.75)	.338 (8.59)	.100 (2.54)	.989 (25.12)	.037 (.94)

PIN	H ±.050 inch (mm)	J +.000 - .005 (-0.13) inch (mm)	K ±.005 (0.13) inch (mm)	L ±.005 (0.13) inch (mm)	M ±.010 (0.25) inch (mm)	N ±.005 (0.13) inch (mm)	P ±.02 (0.51) inch (mm)
MS27635-4C	.100 (2.54)	.250 (6.35)	.420 (10.67)	—	—	—	.72 (18.29)
MS27635-6C	—	.343 (8.71)	.495 (12.57)	—	—	—	.84 (21.34)
MS27635-8C	—	.445 (11.30)	.610 (15.49)	—	.783 (19.89)	.030 (0.76)	.97 (24.64)
MS27635-10C	—	.588 (14.94)	.762 (19.35)	.150 (3.81)	—	—	1.22 (30.99)

PIN	R ±.50°	S ±.005 (0.13) inch (mm)	Thread T	Pitch diameter	U ±5°	V ±.005 (0.13) inch (mm)
MS27635-4C	—	.161 (4.09)	.625-18UNJF-3A	.5889/.5854 (14.958/14.869)	45°	—
MS27635-6C	—	.271 (6.88)	.750-16UNJF-3A	.7094/.7056 (18.019/17.922)		—
MS27635-8C	—	.375 (9.53)	.875-24UNJS-3A	.8479/.8448 (21.537/21.558)	30°	.050 (1.27)
MS27635-10C	10°	.465 (11.81)	1.0625-20UNJ-3A	1.0300/1.0266 (26.162/26.076)	45°	—

FIGURE 1. Flareless nipple dimensions and configuration - Continued.

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PIN	W	AA	AB		AC
	$\pm .005$ (0.13) inch (mm)	$\pm .005$ (0.13) inch (mm)	inch (mm)		$\pm .005$ (0.13) inch (mm)
MS27635-4C	.825 (20.96)	.069 (1.75)	.625 (15.88)	+0.000	.138 (3.51)
MS27635-6C	.962 (24.43)	.092 (2.34)	.750 (19.05)	-.009 (-0.23)	.185 (4.70)
MS27635-8C	1.100 (27.94)	.095 (2.41)	.875 (22.23)	+0.000 -.007 (-0.18)	.190 (4.83)
MS27635-10C	1.375 (34.93)	.125 (3.18)	1.062 (26.97)	+0.000 -.008 (-0.20)	.250 (6.35)

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Unless otherwise specified, tolerances shall be $\pm .005$ inch (0.13 mm).
4. Unless otherwise specified, radius or break all corners to $.005 + .005/-0.000$ inch (0.13 +0.13/-0.00 mm).
5. Unless otherwise specified, surface roughness, in accordance with ASME B46.1, shall not exceed 125 μ in R_a.
6. In area X, a dry-film lubricant shall be used as specified in MIL-PRF-46010 or SAE-AS5272. Dry-film lubricant shall be allowed in area Y. Dry-film lubricant shall not extend beyond area Z.
7. For dimension C, use commercial stock size tolerance as specified in SAE-AMS2241.
8. All burrs and slivers shall be removed.
9. Dimensioning and tolerancing are in accordance with ASME Y14.5M.

FIGURE 1. Flareless nipple dimensions and configuration - Continued.

REQUIREMENTS:

Dimensions and configurations: The design, construction, and physical dimensions shall be in accordance with MIL-DTL-83296 and figure 1, in case of conflict between this specification sheet and MIL-DTL-83296, this specification sheet shall govern.

This is a design specification sheet for manufacturing purposes. The item is only procured as an integral part of adapter assembly MS27632.

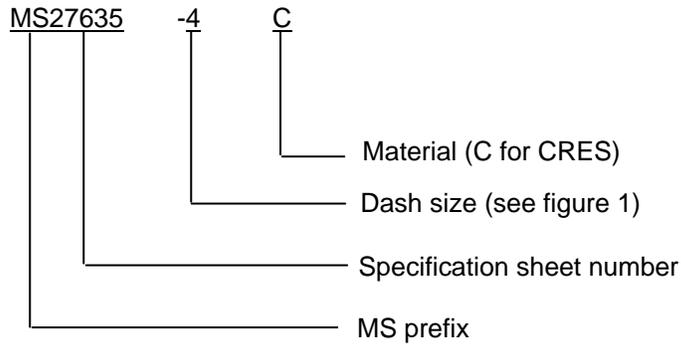
This part for use with MIL-DTL-83298 hose and hose assemblies in accordance with MIL-DTL-32330.

Material: Material shall be a corrosion resistant steel (CRES), class 304, condition B, in accordance with ASTM A276. 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.

Finish: Finish shall be passivated in accordance with MIL-DTL-83296.

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PIN example:



PIN example: MS27635-4C indicates a nipple 1/4 inch, CRES.

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

Referenced documents. In addition to MIL-DTL-83296, this document references the following:

MIL-DTL-32330	ASTM A276
MIL-DTL-83298	SAE-AMS2241
MIL-PRF-46010	SAE-AS5272
MS27632	SAE-AS8879
ASME B46.1	SAE-AS33514
ASME Y14.5M	

CONCLUDING MATERIAL

Custodians:

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

Preparing activity:
DLA - CC

(Project 4730-2008-065)

Review activities:

Navy - MC, SA
Air Force - 71

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