

INCH-POUND

MS27624B
14 October 2009
SUPERSEDING
MS27624A
29 September 2000

DETAIL SPECIFICATION SHEET

UNION, NIPPLE

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.

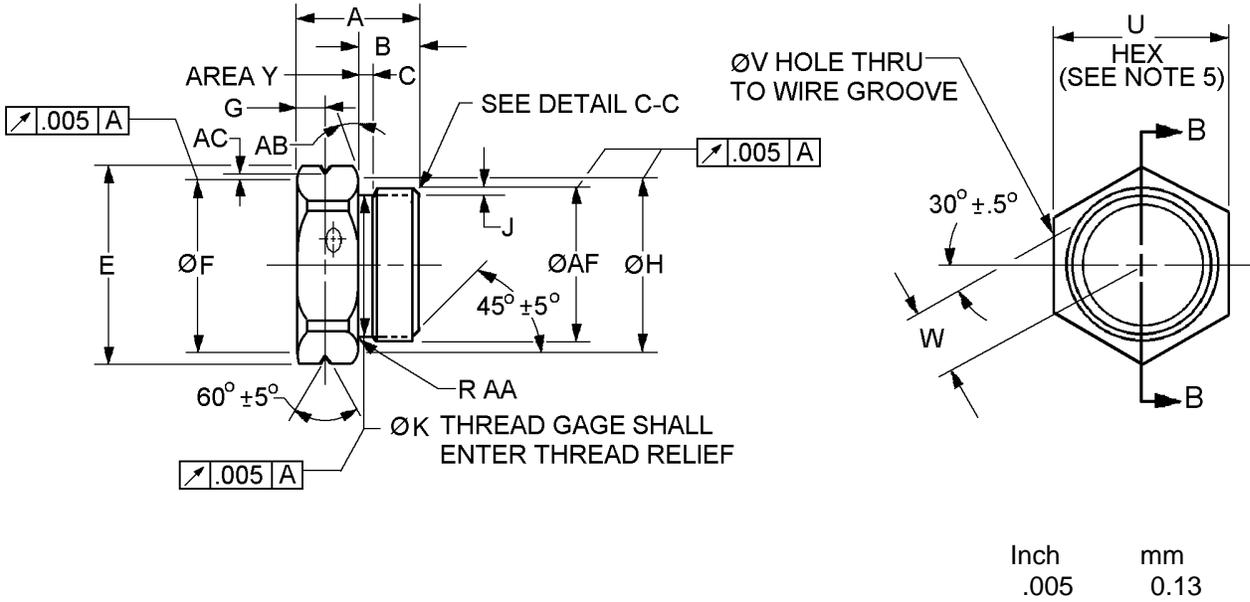
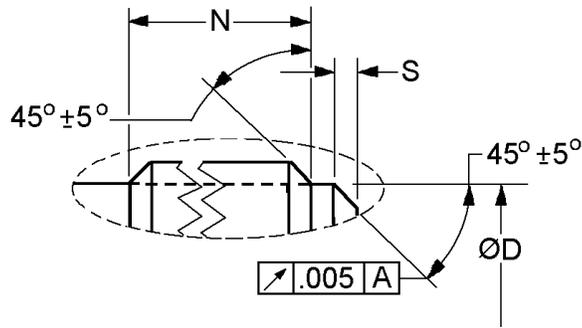
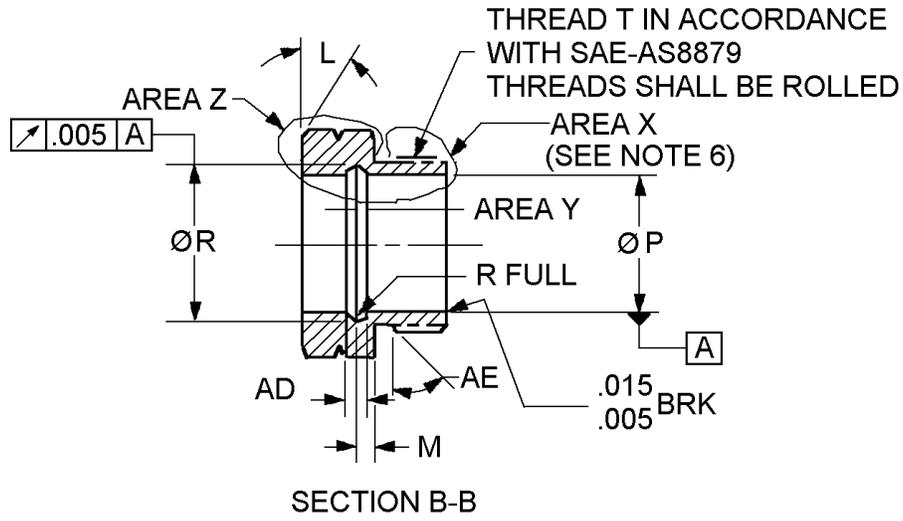


FIGURE 1. Nipple union dimensions and configuration.

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-8 SIZE ONLY

Inches	mm
.005	0.13
.010	0.25
.020	0.51
.025	0.66

FIGURE 1. Nipple union dimensions and configuration - Continued.

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Part or Identifying Number (PIN)	A inch (mm) ±.010 (0.25)	B inch (mm) ±.005 (0.13)	C inch (mm) ±.005 (0.13)	D inch (mm) ±.010 (0.25)	E inch (mm) ±.005 (0.13)	F inch (mm) .02 (0.5)	G inch (mm) ±.005 (0.13)	H inch (mm) ±.02 (0.5)
MS27624-4C	.575 (14.61)	.356 (9.04)	.110 (2.79)	-	.825 (20.96)	.69 (17.53)	.110 (2.79)	.72 (18.29)
MS27624-6C	.653 (16.59)	.340 (8.64)	.085 (2.16)	-	.962 (24.43)		.156 (3.96)	.84 (21.34)
MS27624-8C	.707 (17.96)	.395 (10.03)	.100 (2.54)	.783 (19.89)	1.100 (27.94)	.97 (24.64)		.138 (3.51)
MS27624-10C	.613 (15.57)	.338 (8.59)		-	1.375 (34.93)	1.22 (30.99)	1.22 (30.99)	

PIN	J inch (mm) ±.005 (0.13)	K inch (mm) ±.005 (0.13)	L ±5°	M inch (mm) ±.003 (0.08)	N inch (mm) ±.005 (0.13)	P inch (mm) ±.003 (0.08)	R inch (mm) ±.005 (0.13)	S inch (mm) ±.005 (0.13)
MS27624-4C	.041 (1.04)	.544 (13.82)	30°	.072 (1.83)	-	.454 (11.53)	.531 (13.49)	-
MS27624-6C	.043 (1.09)	.660 (16.76)		.126 (3.20)	-	.507 (12.88)	.620 (15.75)	-
MS27624-8C	-	.813 (20.65)	15°	.118 (3.00)	.245 (6.22)	.691 (17.55)	.781 (19.84)	.030 (.76)
MS27624-10C	.037 (.94)	.989 (25.12)		.114 (2.90)	-	.834 (21.18)	.943 (23.95)	-

PIN	Thread T	Pitch diameter inch (mm)	U	V inch (mm) ±.005 (0.13)	W inch (mm) ±.005 (0.13)	AA inch (mm) ±.010 (0.25)
MS27624-4C	.625-18UNJF-3A	.5889/.5854 (14.958/14.869)	.750 (19.05)	.086 (2.18)	.224 (5.69)	.045 (1.14)
MS27624-6C	.750-16UNJF-3A	.7094/.7056 (18.019/17.922)	.875 (22.23)	.101 (2.57)	.260 (6.60)	.020 (0.51)
MS27624-8C	.875-24UNJS-3A	.8479/.8448 (21.537/21.458)	1.000 (25.40)		.341 (8.66)	
MS27624-10C	1.063-20UNJ-3A	1.0300/1.0266 (26.162/26.076)	1.250 (31.75)	.131 (3.33)	.406 (10.31)	

FIGURE 1. Nipple union dimensions and configuration - Continued.

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PIN	AB ±5°	AC inch (mm) ±.010 (0.25)	AD		AE ±5°	AF inch (mm)	
MS27624-4C	20°	.020 (0.51)	.086 (2.18)	±.002 (0.51)	45°	.625 (15.88)	+.000 -.009 (+.000 -0.23)
MS27624-6C			.100 (2.54)			.750 (19.05)	
MS27624-8C	15°		.128 (3.25)	+.005 -.000	30°	.875 (22.23)	+.000 -.007 (+.000 -0.18)
MS27624-10C			45°		1.062 (26.97)	+.000 -.008 (+.000 -0.20)	

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for information only.
3. Unless otherwise specified, tolerances for three place decimals are ±.005 inch (0.13 mm).
4. Radius or break all corners to .005 +.005/-0.000 (0.13 +0.13/-0.00 mm), unless otherwise specified.
5. For dimension U, use commercial stock size tolerance as specified in SAE-AMS2241.
6. In area X, a dry-film lubricant shall be used as specified in MIL-PRF-46010 or SAE-AS5272. Dry film lubricant is allowed in area Y. In area Z, dry-film lubricant shall not be allowed.
7. Break all sharp edges and remove all hanging burrs and slivers.
8. Surface roughness, as specified in ASME B46.1, shall not exceed 125 µin R_a.
9. Dimensioning and tolerancing are in accordance with ASME Y14.5M.

FIGURE 1. Nipple union dimensions and configuration - Continued.

REQUIREMENTS:

Dimensions and configurations: The design, construction, and physical dimensions shall be in accordance with MIL-DTL-83296 and on 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 an adapter assembly.

This component is used on adapter assemblies MS27620, MS27621, MS27633, and MS27634.

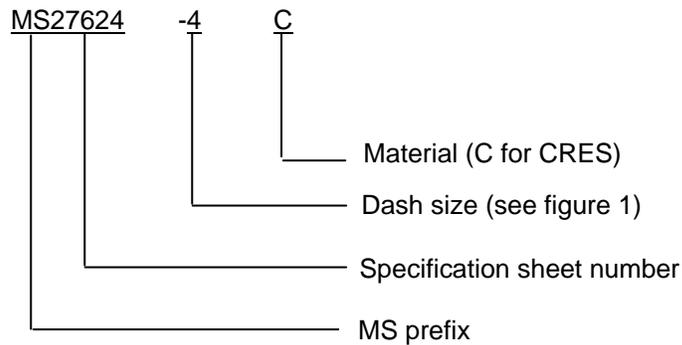
This part for use with MIL-DTL-83298 hose and hose assemblies in accordance with MIL-DTL-32330.

Material: Material shall be corrosion resistant steel (CRES), class 304, condition B, as specified in ASTM A276 or ASTM A473, with minimum yield of 70,000 psi (483 MPa) for sizes -4C, -6C, and -8C and a minimum yield of 80,000 psi (552 MPa) for size -10C.

Finish: Finish shall be passivated as specified in MIL-DTL-83296.

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PIN example:



PIN example: MS27624-4C indicates a union 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	ASME B46.1
MIL-DTL-83298	ASME Y14.5M
MIL-PRF-46010	ASTM A276
MS27620	ASTM A473
MS27621	SAE-AMS2241
MS27633	SAE-AS5272
MS27634	SAE-AS8879

CONCLUDING MATERIAL

Custodians:

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

Preparing activity:
DLA - CC

(Project 4730-2008-042)

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>.