

INCH-POUND

MS27624A
29 September 2000
SUPERSEDING
MS27624
17 March 1971

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.

REQUIREMENTS:

1. Nipple unions 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, with minimum yield of 70,000 psi for sizes -4C, -6C, and -8C and a minimum yield of 80,000 psi for size -10C.
3. Finish shall be passivated as specified in MIL-DTL-83296.
4. In area X, a dry-film lubricant shall be used as specified in MIL-L-46010. Dry film lubricant is allowed in area Y. In area Z, dry-film lubricant shall not be allowed.
5. Radius or break all corners to .005 +.005/-.000, unless otherwise specified.
6. All burrs and slivers shall be removed.
7. Surface roughness, as specified in ASME B46.1, shall not exceed 125 μ in R_a .
8. All tolerances shall be \pm .005, unless otherwise specified.

MS27624A

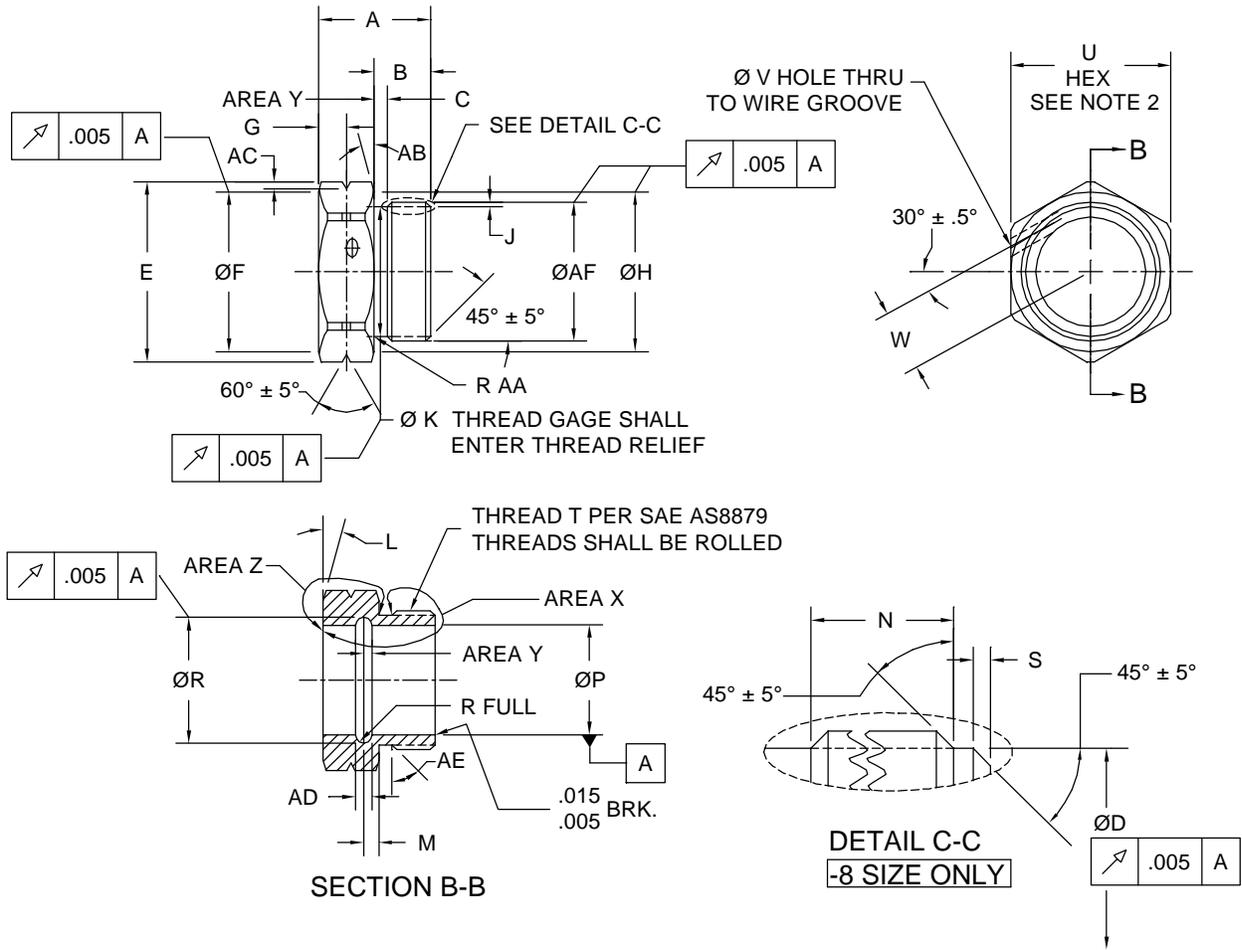


FIGURE 1. Nipple Union.

TABLE I. Nipple union dimensions.

Part number	A ±.010	B ±.005	C ±.005	D ±.010	E ±.005	F ±.02	G ±.005	H ±.02
MS27624-4C	.575	.356	.110	-	.825	.69	.110	.72
MS27624-6C	.653	.340	.085	-	.962		.156	.84
MS27624-8C	.707	.395	.100	.783	1.100	.97		.97
MS27624-10C	.613	.338		-	1.375	1.22	.138	1.22

MS27624A

TABLE I. Nipple union dimensions - Continued.

Part number	J ±.005	K ±.005	L ±5°	M ±.003	N ±.005	P ±.003	R ±.005	S ±.005
MS27624-4C	.041	.544	30°	.072	-	.454	.531	-
MS27624-6C	.043	.660		.126	-	.507	.620	-
MS27624-8C	-	.813	15°	.118	.245	.691	.781	.030
MS27624-10C	.037	.989		.114	-	.834	.943	-

TABLE I. Nipple union dimensions - Continued.

Part number	Thread T	Pitch diameter	U	V ±.005	W ±.005	AA ±.010
MS27624-4C	5/8-18UNJF-3A	.5889/.5854	.750	.086	.224	.045
MS27624-6C	3/4-16UNJF-3A	.7094/.7056	.875	.101	.260	.020
MS27624-8C	7/8-24UNJS-3A	.8479/.8448	1.000		.341	
MS27624-10C	1 1/16-20UNJ-3A	1.0300/1.0266	1.250	.131	.406	

TABLE I. Nipple union dimensions - Continued.

Part number	AB ±5°	AC ±.010	AD		AE ±5°	AF	
MS27624-4C	20°	.020	.086	±.002	45°	.625	+.000 -.009
MS27624-6C			.100			.750	
MS27624-8C	15°				30°	.875	+.000 -.007
MS27624-10C			.128	+.005 -.000	45°	1.062	

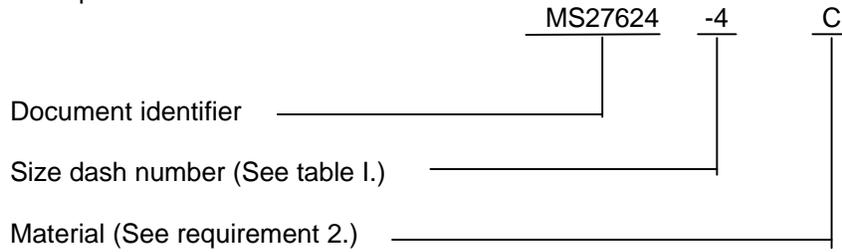
NOTES:

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

MS27624A

8. Part or Identifying Number (PIN):

Example of a PIN: MS27624-4C.



9. Next assemblies are MS27620, MS27621, MS27633, and MS27634.

Custodians:

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

Preparing activity:

DLA - CC

(Project 4730-1040-018)

Review activities:

- Air Force - 82
- Navy - MC, SA