

INCH-POUND

MS27636A
29 September 2000
SUPERSEDING
MS27636
17 March 1971

DETAIL SPECIFICATION SHEET

ELBOW, FLARELESS, TUBE TO HOSE-90°, 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. Elbows shall be in accordance with figure 1 and table I.
2. Material shall be a corrosion resistant steel, class 304 per SAE AMS5639, 304L per SAE AMS5647, 316 per SAE AMS5648, or 321 per SAE AMS5646, or condition A (accepted classes only), as specified in SAE AMS-QQ-S-763.
3. Finish shall be passivated as specified in MIL-DTL-83296.
4. Radius or break all corners to .005 +.005/-.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 μin R_a , unless otherwise specified.
7. All tolerances shall be $\pm.005$, unless otherwise specified.
8. On -10 size, the bent tube forming shall not be less than the nipple I.D. Ovality of all bent tube fittings shall not exceed 7.5% of nominal tubing O.D.
9. The part number and manufacturer's part number shall be marked in accordance with MIL-DTL-83296.

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TABLE I. Elbow dimensions.

Part number	A min	B ±.010	C		D +.005 -.000	E ±.005
MS27636-4C	.633	.550	.116	±.010	.413	-
MS27636-6C	.709	.620	.140	±.020	.442	-
MS27636-8C	.779	.737			.472	-
MS27636-10C	.660	1.050	.170		.405	.150

TABLE I. Elbow dimensions – Continued.

Part number	F +.000 -.005	G +.000 -.005	H ±.005	J ±.003	K ±.5°	L ±.004
MS27636-4C	.346	.250	.420	.443	-	.040
MS27636-6C	.395	.343	-	.497	-	.047
MS27636-8C	.564	.445	.610	.680	-	
MS27636-10C	.679	.588	.762	.823	10°	.062

TABLE I. Elbow dimensions – Continued.

Part number	M min	N ±.005	P		R	
MS27636-4C	.578	.161	.970	±.020	.850	±.020
MS27636-6C	.654	.271	1.088		1.031	
MS27636-8C	.692	.375	1.304		1.197	
MS27636-10C	.606	.465	1.434	±.035	1.436	±.035

NOTES:

1. Dimensions are in inches, unless otherwise specified.
2. On -4, -6, and -8 size, dimension A shall be used when the adjacent diameter to the left of plane B-B is greater than dimension J. When the adjacent diameter is equal to or less than dimension J, dimension M may be used in place of dimension A.
3. Any forged design fitting is acceptable for -4, -6, and -8 sizes. Any bent tube design fitting is acceptable for -10 size.
4. This part is for use with MIL-DTL-83298 hose.
5. This specification sheet takes precedence over documents referenced herein.
6. This is a design specification sheet for manufacturing purposes, the item is only procured as an integral part of adapter assembly.

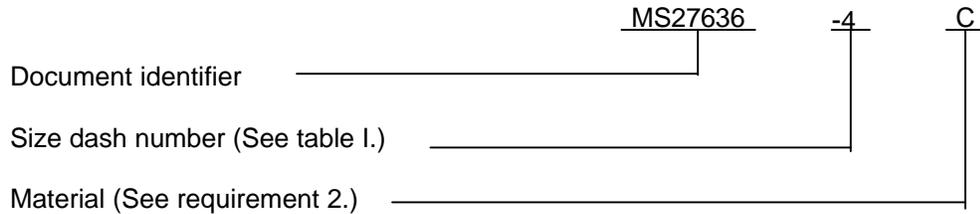
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7. Referenced documents shall be of issue listed in the issue of the Department of Defense Index of Specifications and Standards (DoDISS) and supplement thereto, cited in the solicitation.

8. Dimensioning and tolerancing are in accordance with ASME Y14.5M-1994.

9. Part or Identifying Number (PIN):

Example of a PIN: MS27636-4C.



10. Next assembly is MS27634.

Custodians:

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

Preparing activity:

- DLA - CC
- (Project 4730-1040-040)

Review activities:

- Air Force - 82
- Navy - MC, SA