

DETAIL SPECIFICATION SHEET

NIPPLE ASSEMBLY 45°, ADAPTER, HOSE TO TUBE,
REUSABLE, BRAZELESS, ONE-PIECE DESIGN, HYDRAULIC,
FUEL AND OIL LINES, 1/4 THROUGH 2 INCH TUBE SIZES

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-5070.

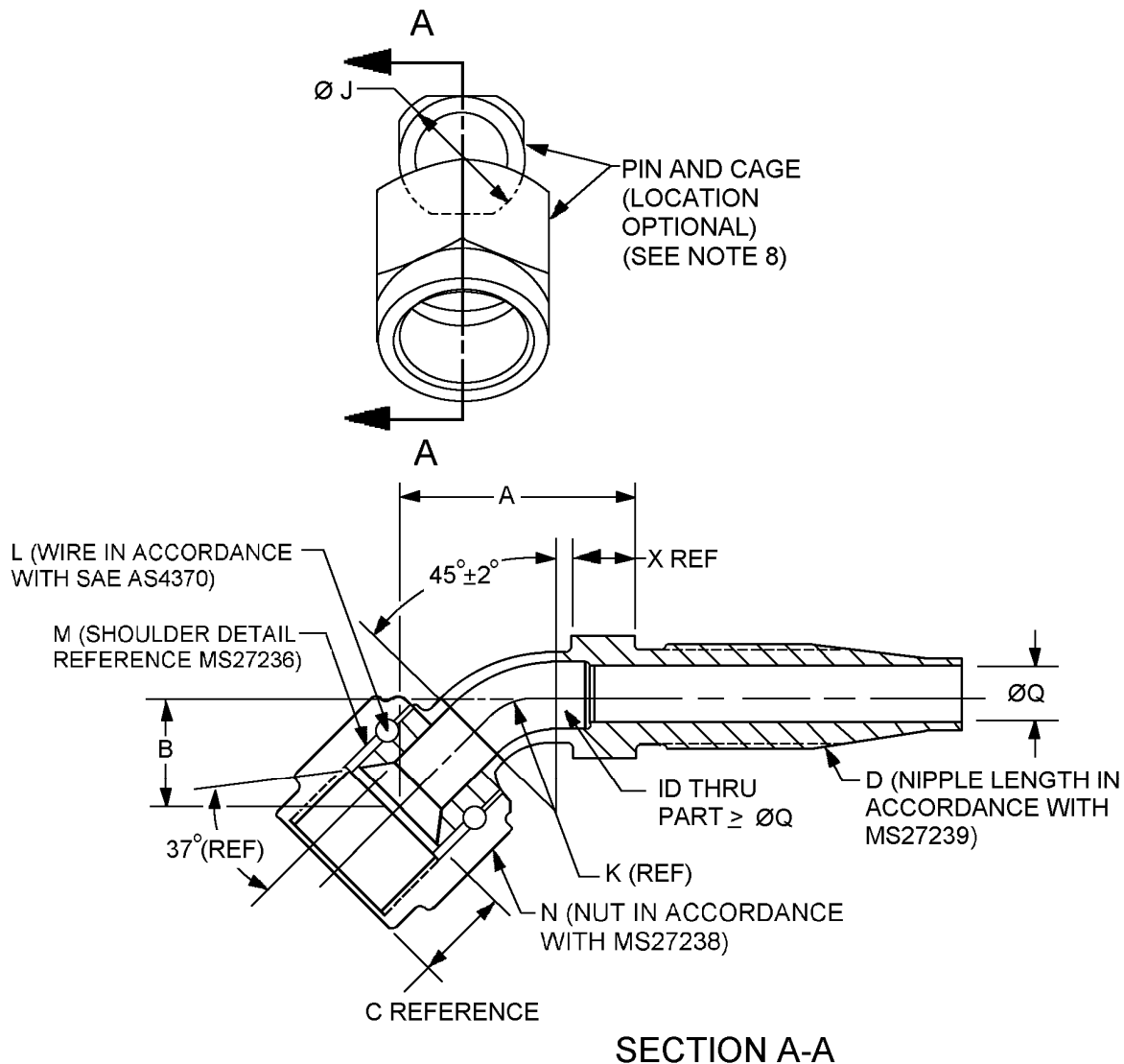


FIGURE 1. Nipple dimensions and configuration.

MIL-DTL-5070/2

Dash number	A ±.04 (1.02) Inches (mm)	B ±.04 (1.02) Inches (mm)	C Inches (mm)	J Dia Inches (mm)	K rad (ref) Inches (mm)	L Wire MS27238 dash number	M Shoulder MS27236 dash number
-4	.758 (19.25)	.352 (8.94)	.37 (9.40)	.450 (11.43) .430 (10.92)	.38 (9.65)	-4	-4
-5	.909 (23.09)	.415 (10.54)	.38 (9.65)	.510 (12.95) .490 (12.45)	.44 (11.18)	-5	-5
-6	.965 (24.51)	.444 (11.28)	.38 (9.65)	.580 (14.73) .560 (14.22)	.50 (12.70)	-6	-6
-8	1.039 (26.39)	.456 (11.58)	.44 (11.18)	.719 (18.26) .688 (17.48)	.50 (12.70)	-8	-8
-10	1.171 (29.74)	.536 (13.61)	.50 (12.70)	.859 (21.82) .828 (21.03)	.62 (15.75)	-10	-10
-12	1.348 (34.24)	.625 (15.88)	.57 (14.48)	.984 (24.99) .953 (24.21)	.84 (21.34)	-12	-12
-16	1.436 (36.47)	.660 (16.76)	.63 (16.00)	1.266 (32.16) 1.234 (31.34)	.97 (24.64)	-16	-16
-20	1.760 (44.70)	.768 (19.51)	.64 (16.26)	---	1.19 (30.23)	-20	-20
-24	1.999 (50.77)	.867 (22.02)	.77 (19.56)	---	1.38 (35.05)	-24	-24
-32	2.415 (61.34)	1.066 (27.08)	.92 (23.37)	---	1.75 (44.45)	-32	-32

Dash number	N Nut SAE-AS4370 dash number	P Nipple MS27239 dash number	Q Inches (mm)
-4	-4	-4	.128 (3.25) .123 (3.12)
-5	-5	-5	.175 (4.45) .170 (4.32)
-6	-6	-6	.237 (6.02) .232 (5.89)
-8	-8	-8	.360 (9.14) .355 (9.02)
-10	-10	-10	.460 (11.68) .450 (11.43)
-12	-12	-12	.582 (14.78) .576 (14.63)
-16	-16	-16	.820 (20.83) .810 (20.57)
-20	-20	-20	1.052 (26.72) 1.042 (26.47)
-24	-24	-24	1.286 (32.66) 1.276 (32.41)
-32	-32	-32	1.755 (44.58) 1.745 (44.32)

FIGURE 1. Nipple dimensions and configuration - Continued.

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are for information only.
3. Unless otherwise specified, tolerances are as follows: Angles $\pm 5^\circ$; decimals ± 0.005 inch (0.13 mm).
4. Unless otherwise specified, maximum surface roughness shall be 125 μin R_a in accordance with ASME B46.1.
5. Break all sharp edges and remove all burrs and slivers.
6. Nut must swivel freely after assembly.
7. This is an alternate design to and satisfactory replacement for MS27225 (users are cautioned to evaluate replacements for their particular application). No brazing is needed.
8. Part or Identifying Number (PIN).

FIGURE 1. Nipple dimensions and configuration - Continued.

REQUIREMENTS:

Dimensions and configurations: The design, construction, and physical dimensions shall be in accordance with MIL-DTL-5070 and figure 1 in case of conflict between this drawing and MIL-DTL-5070, this drawing shall govern.

Intended use. This assembly is designed to mate with MS24590 and then MS27224, and then hose assembly MIL-DTL-8794. The application is intended for aerospace fuel and fluid, 200 psi to 1000 psi (14 bar to 69 bar).

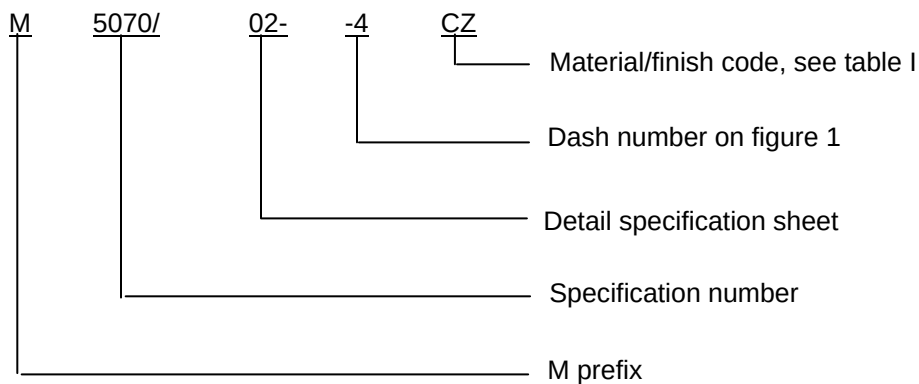
45° nipple assembly parts. Parts satisfying the dimensional and material requirements of MS27225 but eliminate braze joints with welds or whole subcomponents are acceptable.

Materials: Materials shall be in accordance with MIL-DTL-5070.

Finish: Finish shall be in accordance with MIL-DTL-5070.

Color identification: Color identification shall be in accordance with MIL-DTL-5070.

PIN example:



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TABLE I. Code for material and finish.

Code	Dash size	Material/finish
CC	-4 thru -6	Carbon Steel – cadmium plating
CZ	-4 thru -6	Carbon steel – zinc plating
SS	-4 through -6	Corrosion resistant steel - N/A
AA	-4 through -32	Aluminum – anodic coating
TA	-3 through -32	Titanium - Anodized or fluoride phosphated.

To the users of this document, it is recommended that the use of carbon steel material with cadmium plating be used only when the other materials and finishes specified in this document cannot meet performance requirements.

Identification of product. The PIN and the manufacturer's Commercial and Government Entity (CAGE) Code or trademark shall be permanently marked on the nipple or on a removable tag securely attached to the part.

Referenced documents. In addition to MIL-DTL-5070, this document references the following:

MIL-DTL-8794	MS27238
MS24590	MS27239
MS27224	ASME B46.1
MS27225	SAE AS4370
MS27236	

CONCLUDING MATERIAL

Custodians:

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

Preparing activity:

DLA - CC

(Project 4730-2006-109)

Review activities:

Army - AT
Navy - MC, SA
Air Force - 11, 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>.