

INCH-POUND

MS24590C

14 May 2007

SUPERSEDING

MS24590B

22 September 2000

DETAIL SPECIFICATION SHEET

SOCKET, ADAPTER, HOSE TO TUBE, REUSABLE, HYDRAULIC,
FUEL AND OIL LINES, 3/16 THROUGH 3/4 INCH TUBING 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.

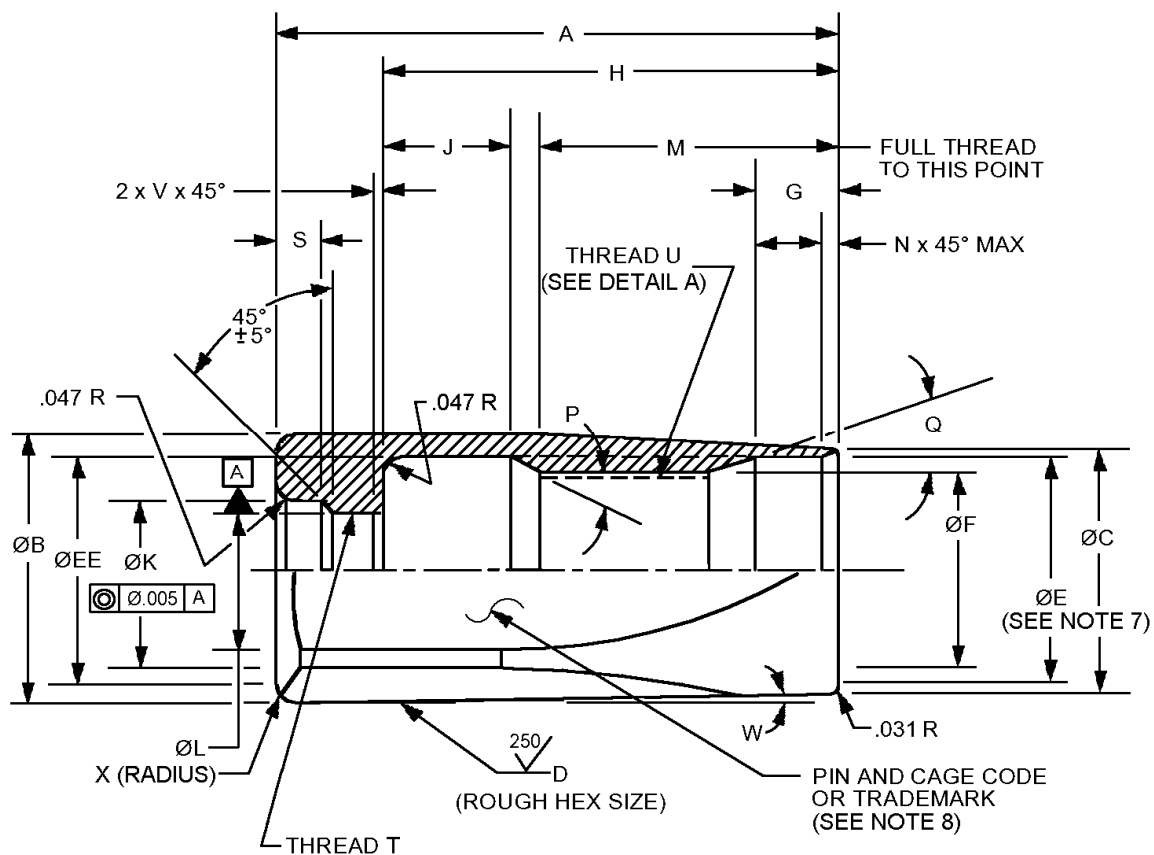
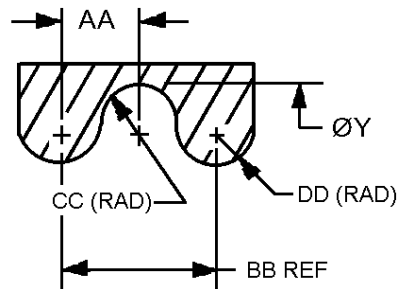


FIGURE 1. Socket dimensions and configuration.

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ENLARGED VIEW OF U THREAD

DETAIL A

Dash number	A max/min Inches (mm)	B dia Inches (mm) ±.015 (0.38)	C dia Inches (mm) ±.015 (0.38)	D Inches (mm) ±.015 (0.38)	E dia Inches (mm)	F dia Inches (mm)	G Inches (mm)	H Inches (mm)	J Inches (mm)	K dia Inches (mm)
-3	1.010 (25.65)	.625 (15.88)	.563 (14.30)	.563 (14.30)	.500 (12.70)	.405 (10.29)	.130 (3.30)	.660 (16.76)	.170 (4.32)	.240 (6.10)
	.990 (25.15)					.400 (10.16)		.640 (16.26)		.235 (5.97)
-4	1.110 (28.19)	.688 (17.48)	.625 (15.88)	.625 (15.88)	.560 (14.22)	.435 (11.05)	.100 (2.54)	.760 (19.30)	.170 (4.32)	.296 (7.52)
	1.090 (27.69)					.430 (10.92)		.740 (18.80)		.291 (7.39)
-5	1.210 (30.73)	.750 (19.05)	.688 (17.48)	.688 (17.48)	.640 (16.26)	.525 (13.34)	.100 (2.54)	.790 (20.07)	.180 (4.57)	.373 (9.47)
	1.190 (30.23)					.520 (13.21)		.770 (19.56)		.368 (9.35)
-6	1.310 (33.27)	.875 (22.23)	.813 (20.65)	.813 (20.65)	.750 (19.05)	.605 (15.37)	.150 (3.81)	.910 (23.11)	.200 (5.08)	.431 (10.95)
	1.290 (32.77)					.600 (15.24)		.890 (22.61)		.429 (10.90)
-8	1.660 (42.16)	1.000 (25.40)	.938 (23.83)	.938 (23.83)	.820 (20.83)	.705 (17.91)	.210 (5.33)	1.160 (29.46)	.320 (8.13)	.568 (14.43)
	1.640 (41.66)					.700 (17.78)		1.140 (28.96)		.563 (14.30)
-10	1.810 (45.97)	1.219 (30.96)	1.125 (28.58)	1.125 (28.58)	1.000 (25.40)	.880 (22.35)	.250 (6.35)	1.300 (33.02)	.312 (7.92)	.697 (17.70)
	1.790 (45.47)					.870 (22.10)		1.280 (32.51)		.692 (17.58)
-12	2.110 (53.59)	1.344 (34.14)	1.250 (31.75)	1.250 (31.75)	1.160 (29.46)	1.025 (26.04)	.250 (6.35)	1.580 (40.13)	.500 (12.70)	.819 (20.80)
	2.090 (53.09)					1.015 (25.78)		1.560 (39.62)		.814 (20.68)

FIGURE 1. Socket dimensions and configuration - Continued.

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Dash number	L dia Inches (mm)	M min Inches (mm)	N Inches (mm)	P	Q	S Inches (mm)
-3	.204 (5.18) .201 (5.11)	.460 (11.68)	.010 (.25)	30°	15°	.160 (4.06)
-4	.251 (6.38) .247 (6.27)	.550 (13.97)				
-5	.330 (8.38) .326 (8.28)	.550 (13.97)				.200 (5.08)
-6	.387 (9.83) .383 (9.73)	.680 (17.27)				
-8	.526 (13.36) .517 (13.13)	.750 (19.05)	.015 (.38)	20°	20°	.160 (4.06)
-10	.649 (16.48) .642 (16.31)	.978 (24.84)			15°	
-12	.765 (19.43) .758 (19.25)	1.025 (26.04)			20°	

Dash number	T Thread (see note 5)	PD	U LH round thread (see note 5)	V Inches (mm)	W
-3	.234-32 UNS-2B	.2172 .2141	.500-10	.031 (.79)	3°
-4	.281-32 UNS-2B	.2639 2607	.530-10		2.5°
-5	.365-28 UNS-2B	.3451 .3418	.640-8		
-6	.421-28 UNS-2B	.4014 .3978	.720-8		2°
-8	.562-24 UNEF-2B	---	.820-8	.047 (1.19)	1.5°
-10	.687-24 UNEF-2B	---	1.000-7		2°
-12	.812-20 UNEF-2B	---	1.145-7		

FIGURE 1. Socket dimensions and configuration - Continued.

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Dash number	X rad Inches (mm) ± 0.015 (0.38)	Y dia inches (mm)	AA inches (mm)	BB inches (mm)	CC rad inches (mm)	DD rad inches (mm)	EE inches (mm)
-3	.109 (2.77)	.500 (12.70)	.0500 (1.270)	.1000 (2.540)	.0200 (.508)	.025 (.64)	.445 (11.30)
-4		.530 (13.46)					.505 (12.83)
-5	.125 (3.18)	.640 (16.26)	.0625 (1.59)	.1250 (3.18)	.0275 (.70)	.032 (.81)	.600 (15.24)
-6		.720 (18.29)					.665 (16.89)
-8		.820 (20.83)					.810 (20.57)
-10	.188 (4.78)	1.000 (25.40)	.0715 (1.82)	.1430 (3.63)	.0310 (.79)	.040 (1.02)	1.000 (25.40)
-12		1.145 (29.08)	.0714 (1.81)	.1428 (3.63)			1.160 (29.46) (29.46 (748.28))

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are for information only.
3. Unless otherwise specified, tolerances are as follows: Angles $\pm 1^\circ$; 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. Threads shall be in accordance with MIL-S-7742, except round threads.
6. Break all sharp edges and remove all hanging burrs and slivers.
7. Thread marks on diameter E shall not be cause for rejection.
8. Part or Identifying Number (PIN).

FIGURE 1. Socket 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 part is a component of MS24587, MS27224, MS27226, MS27228, MS27230, and MS27232.

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 accordance with MIL-DTL-5070.

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Part or Identifying Number (PIN) example:

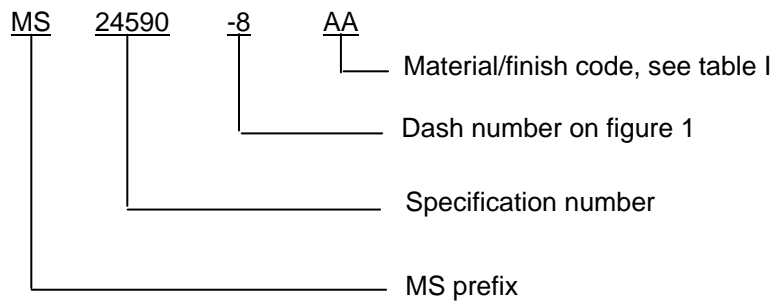


TABLE I. Code for material and finish.

Code	Dash size	Material/finish
CC	-3 thru -6	Carbon Steel – cadmium plating
CZ	-3 thru -6	Carbon steel – zinc plating
SS	-3 through -6	Corrosion resistant steel - N/A
AA	-8 through -12	Aluminum – anodic coating
TA	-3 through -12	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.

Marking: The PIN and the manufacturer's Commercial and Government Entity (CAGE) Code or trademark shall be marked on the socket, see figure 1, or a removable tag securely attached to the socket.

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

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

ASME B46.1	MS27228
MS24587	MS27230
MS27224	MS27232
MS27226	MIL-S-7742

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CONCLUDING MATERIAL

Custodians:

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

Preparing activity:

DLA - CC

(Project 4730-2005-040)

Review activities:

Army - AV
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>.