

INCH-POUND

MS27239D
22 September 2000
SUPERSEDING
MS27239B
6 January 1976
(See page 4)

DETAIL SPECIFICATION SHEET
NIPPLE, ADAPTER, HOSE TO TUBE, REUSABLE,
HYDRAULIC, FUEL AND OIL LINES. 1/4 THROUGH 3 IN. 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-5070E.

REQUIREMENTS.

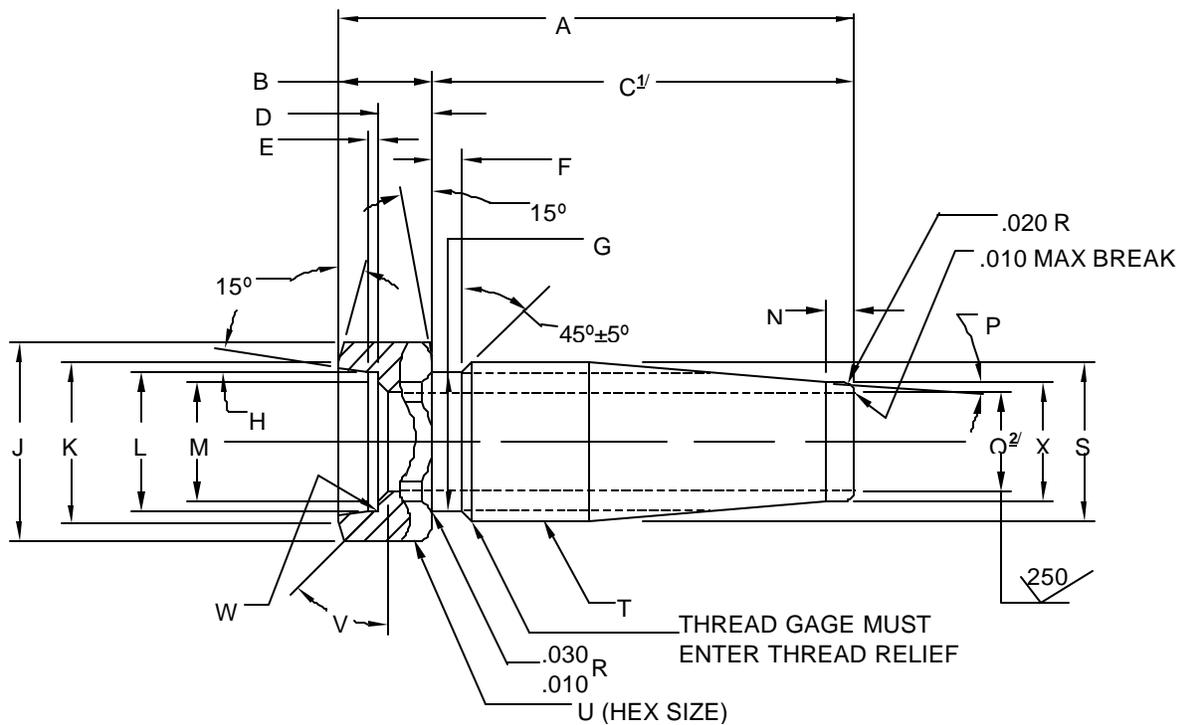


FIGURE 1. Nipple illustration.

TABLE I. Nipple composition.

PIN	A	B	C ^{1/}	D	E	F	G	H	J	K	L	M	N	
MS27239	(ref)	±.010	±.010				Dia			±.02 Dia	Dia	Dia		
-4	1.310	.250	1.060	.097 .092	.135 .070	.093	.250 .245	30°	.450 .430	.34	.254 .251	.175	.125	
-5	1.491	.312	1.179	.159 .154		.107	.329 .324		.510 .490	.41	.316 .313	.235		
-6	1.666	1.354				.388 .383	.580 .560		.47	.379 .376	.272			
-8	2.000	.375	1.625	.222	.046 .031	.126	.520 .510	10°	.719 .688	.59	.504 .501	.420	.150	
-10	2.175		1.800	.217		.645 .635	.859 .828		.72	.629 .626	.545	.097		
-12	2.469		2.094	.128		.765 .755	.984 .953		.84	.754 .751	.670	.150		
-16	1.973		1.598	.123		.990 .980	1.266 1.234		1.09	1.004 1.001	.920	.200		
-20	2.271	.500	1.771	.253 .248	.046 .031	.137	1.239 1.219	10°	1.515 1.485	1.34	1.254 1.251	1.170	.150	
-24	2.373	.562	1.811	.315 .310		1.485 1.465	1.765 1.735		1.59	1.504 1.501	1.295			
-32	2.891	.625	2.266	.378 .373		.132	1.926 1.906		2.317 2.297	2.09	2.004 2.001	1.795		.200
-40	3.219	.750	2.469	.503 .498		.250	2.389 2.369		2.827 2.797	2.59	2.379 2.376	2.295		0
-48	3.344	.875		.628 .623		3.014 2.994	3.515 3.485	3.22	3.004 3.001	2.920				

TABLE I. Nipple composition - Continued.

PIN	P	Q ^{2/}	S	T	U	V	W	X
MS27239	±.25°	Dia	Dia			±2°		Dia
-4	8°	.128	.281	.281-32 UNS-3 PD	.2597	45°	.015 ^{MAX} x 45° break	.172
		.123	.275		.2565			.378
-5		.175	.365	.365-28 UNS-3 PD	.3398			.225
		.170	.357		.3365	.440	.433	.220
-6	7°	.237	.421	.421-28 UNS-3	.3968			.292
		.232	.414		.3932	.503	.496	.287
-8	6°	.360	.562	.563-24 UNEF - 3A	.628	34°		.415
		.355	.555		.621			.628
-10	5°	.460	.688	.688-24 UNEF - 3A	.753			.520
		.450	.680		.746	.753	.746	.510
-12	4.5°	.582	.812	.813-20 UNEF - 3A	.878			.650
		.576	.804		.871	.878	.871	.640
-16	5°	.820	1.062	.063-18 UNEF - 3A	1.128	45°	.015 .010 radius	.900
			.810		1.054			1.121
-20		1.052	1.312	1.313-18 UNEF - 3A	1.378			1.125
		1.042	1.304		1.371	1.378	1.371	1.115
-24		1.286	1.562	1.688-18 UNEF - 3A	1.766			1.360
		1.276	1.554		1.734	1.766	1.734	1.350
-32	4°	1.755	2.000	2.000 - 18 UNS - 3A PD	1.9639	34°		1.830
			1.745		1.991			1.9600
-40		2.219	2.500	2.500 - 12 UN - 3A	2.645			--
		2.199	2.489		2.605	2.645	2.605	--
-48		2.823	3.125	3.125 - 12 UN - 3A	3.270			--
		2.803	3.114		3.230	3.270	3.230	--

Notes.

- 1/ All outside diameters within this length shall be concentric within .005 total indicator reading.
 2/ Hole shall be concentric with external taper within .005 total indicator reading for a depth of .12.

Intended use. This part is a component of MS27223, MS27225, MS27227, and MS27229.

Dimensions and tolerances. Dimensions are in inches. Unless otherwise specified, tolerances are as follows: angles ±.5°; decimals ±.005.

Materials: Sizes -4 through -6: 1137 steel, cold drawn, in accordance with ASTM A108.

Sizes -8 through -48: aluminum alloy 6061, T651, in accordance with SAE AMS-QQ-A-225/8.

Surface roughness. Unless otherwise specified, maximum surface roughness shall be 125 µin R_a in accordance with ASME B46.1.

Design. Threads shall be in accordance with SAE AS8879.

Workmanship. Break all sharp edges and remove all burrs and slivers.

Identification of product. The part or identifying number (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. The PIN for this part shall be as shown in table I (e.g., MS27239-4).

Order of precedence. This specification sheet takes precedence over the documents referenced herein. Unless otherwise specified in the solicitation, referenced documents shall be of the issue in effect on the date of solicitation.

Supersession information. MS27239B (formerly identified as MS27239, Revision 2) was canceled by MS27239C (formerly identified as MS27239, Revision 3). MS27239B was reinstated by MS27239, Notice 1, dated 22 September 2000. Therefore, this document supersedes MS27239B.

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.

CONCLUDING MATERIAL

Custodians:

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

Preparing activity:

DLA - CC

(Project 4730-0900)

Review activities:

Army - AV
Navy - MC, SA
Air Force - 11, 82