

INCH-POUND

MS27069F
 24 September 2003
 SUPERSEDING
 MS27069E
 6 March 1969

DETAIL SPECIFICATION SHEET

SOCKET, HOSE COUPLING

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 and MIL-DTL-27272.

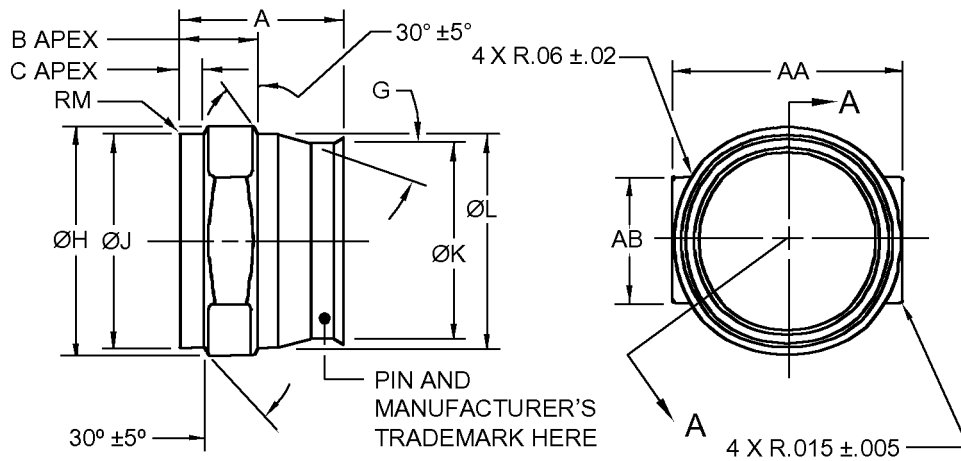
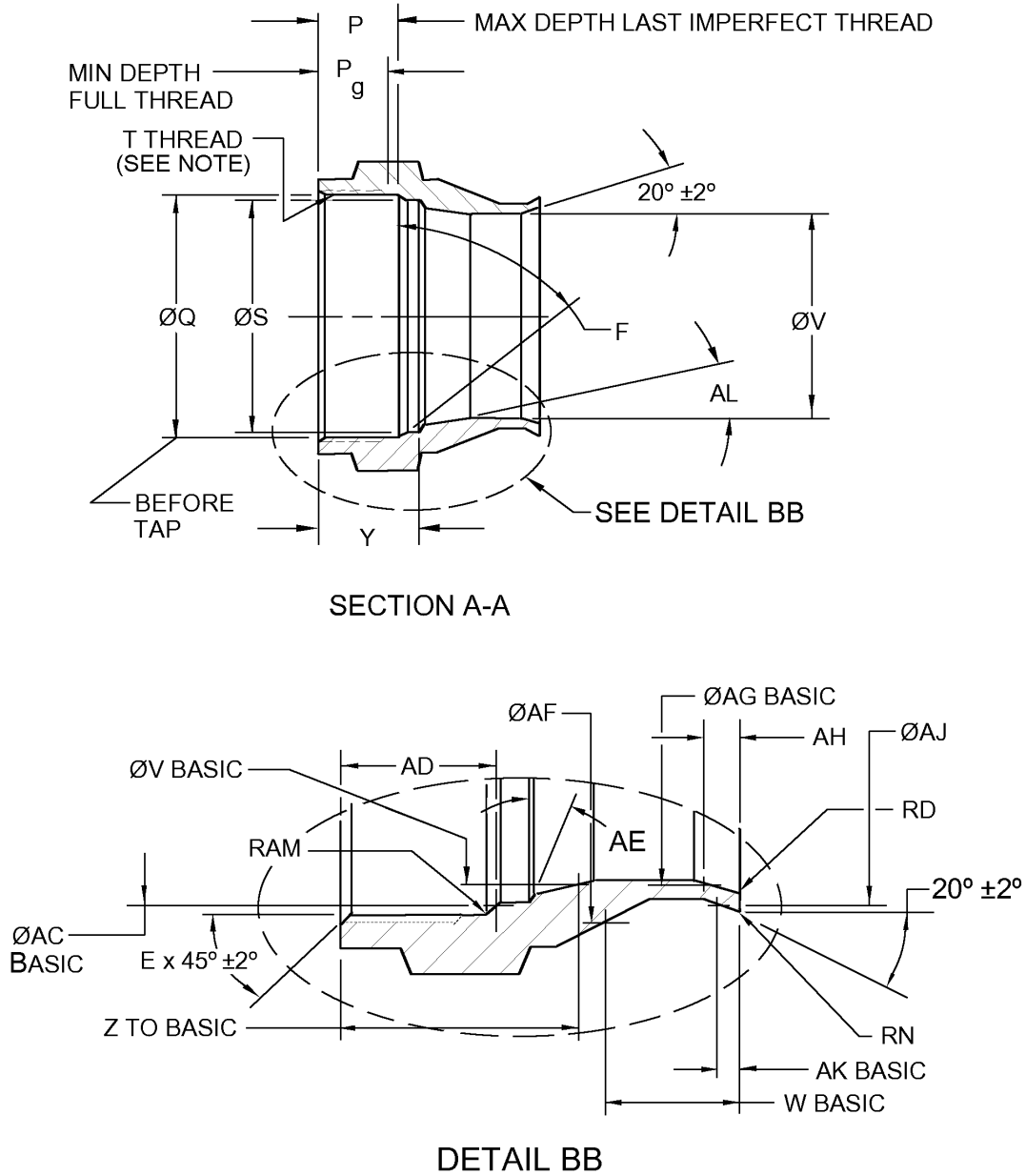


FIGURE 1. Socket illustration.

MS27069F



NOTES: Threads shall be in accordance with SAE AS8879 except for -8 and -24 sizes, which shall be in accordance with ANSI ASME B1.1.

FIGURE 1. Socket illustration - Continued.

TABLE I. Socket requirements.

| PIN MS27069 | A $\pm.010$ | B $\pm.010$ | C $\pm.010$ | D $\pm.005$ | E | | F $\pm 2^\circ$ | G $\pm.5^\circ$ | H $\pm.005$ | J $\pm.005$ | K $\pm.005$ | L $\pm.005$ |
|----------------|----------------|----------------|----------------|----------------|------|-----------|--------------------|--------------------|----------------|----------------|----------------|----------------|
| -4C | .806 | .385 | .120 | .015 | .030 | $\pm.005$ | 30° | 15.5° | .562 | .558 | .440 | .558 |
| -5C | .834 | | | | .031 | $\pm.015$ | | 14.5° | .625 | .620 | .514 | .620 |
| -6C | .853 | | | | .400 | .110 | | 14.0° | .688 | .683 | .582 | .683 |
| -8C | .979 | | | | .440 | .160 | | 17.0° | .875 | .870 | .700 | .870 |
| -10C | 1.080 | .505 | .190 | .020 | | | 18.0° | 1.000 | .995 | .822 | .995 | |
| -12C | 1.152 | .540 | .200 | | .035 | $\pm.005$ | 60° | 16.0° | 1.125 | 1.120 | .942 | 1.120 |
| -16C | 1.255 | .655 | .185 | | .040 | | 45° | 20.0° | 1.500 | 1.495 | 1.270 | 1.495 |
| -20C | 1.510 | .815 | .235 | | | 30° | 23.0° | 1.875 | 1.870 | 1.520 | 1.870 | |
| -24C | 1.582 | .900 | .250 | | | 45° | 22.0° | 2.125 | 2.120 | 1.816 | 2.120 | |

| PIN MS27069 | M | N | P max | P _g min | Q | | S +.000 -.005 | T ^{1/} | |
|----------------|-------------------|-------------------|----------|-----------------------|-------------|-------------|---------------------|------------------------|-----------------------|
| | | | | | | | | Thread | Pitch diameter |
| -4C | .010 $\pm.005$ | .030 max | .310 | .210 | .461 | +.007/-.000 | - | .5000 - 28 UNJEF - 3B | .4804/.4768 |
| -5C | | | .335 | .235 | .517 | | - | .5625 - 24 UNJEF - 3B | .5392/.5354 |
| -6C | | | .320 | .215 | .580 | | - | .6250 - 24 UNJEF - 3B | .6018/.5979 |
| -8C | .030 max | | .365 | .235 | .705 | +.005/-.000 | - | .7500 - 24 UNS - 3B | .7269/.7229 |
| -10C | | .015 $\pm.005$ | .410 | .270 | .821 | | +.008/-.000 | - | .8750 - 20 UNJEF - 3B |
| -12C | | | .435 | .360 | .946 | - | | 1.0000 - 20 UNJEF - 3B | .9719/.9675 |
| -16C | | | .490 | .380 | 1.315 | 1.225 | | 1.3750 - 18 UNJEF - 3B | 1.3436/1.3389 |
| -20C | | | .695 | .495 | 1.627 | +.009/-.000 | 1.500 | 1.6875 - 18 UNJEF - 3B | 1.6563/1.6514 |
| -24C | .782 | | .607 | 1.870 | +.008/-.000 | | 1.815 | 1.9375 - 16 UN - 3B | 1.9021/1.8969 |

See note at end of table.

MS27069F

TABLE I. Socket requirements - Continued.

| PIN MS27069 | U | V | | W | Y ±.005 | Z | | AA ±.005 |
|----------------|--------|-------|--------------|-------|------------|-------|--------------|-------------|
| -4C | .3785 | .348 | +.005/-0.000 | .1826 | - | .436 | +.013/-0.000 | .562 |
| -5C | .4410 | .411 | | .2035 | - | .447 | ±.006 | .625 |
| -6C | .5030 | .478 | +.006/-0.000 | .2403 | - | .430 | +.013/-0.000 | .688 |
| -8C | .6195 | .590 | +.005-0.000 | .2169 | - | .527 | +.011/-0.000 | .875 |
| -10C | .7245 | .692 | +.006/-0.000 | .2423 | - | .592 | +.007/-0.000 | 1.000 |
| -12C | .8665 | .825 | +.007/-0.000 | .2738 | - | .631 | ±.004 | 1.125 |
| -16C | 1.1700 | 1.140 | +.005/-0.000 | .4009 | .648 | .756 | +.009/-0.000 | 1.500 |
| -20C | 1.4425 | 1.390 | | .4480 | .905 | .994 | ±.008 | 1.875 |
| -24C | 1.7185 | 1.713 | ±.005 | .4538 | .942 | 1.101 | ±.005 | 2.125 |

4

| PIN MS27069 | AB ±.015 | AC | AD ±.005 | AE | AF ±.005 | AG | AH ±.010 | AJ ±.005 | AK | AL ±.25° | AM max |
|----------------|-------------|--------|-------------|--------|-------------|--------|-------------|-------------|-------|-------------|-----------|
| -4C | .325 | .4362 | .328 | - | .450 | .3878 | .051 | .450 | .0545 | 9° | - |
| -5C | .361 | .4928 | .353 | - | .525 | .4568 | .059 | .525 | .0552 | 8° | - |
| -6C | .397 | .5560 | .338 | - | .601 | .5290 | .066 | .601 | .0668 | | - |
| -8C | .505 | .6832 | .385 | - | .713 | .6362 | .060 | .713 | .0579 | | - |
| -10C | .578 | .8008 | .427 | - | .844 | .7500 | .075 | .844 | .0567 | 9° | - |
| -12C | .650 | .9295 | .463 | - | .969 | .8818 | .073 | .969 | .0647 | 8° | - |
| -16C | .866 | 1.2708 | .524 | 3° max | 1.397 | 1.2038 | .084 | 1.298 | .0649 | 7° | - |
| -20C | 1.082 | 1.5645 | .786 | 3°±2° | 1.710 | 1.4488 | | 1.545 | .0615 | 8° | - |
| -24C | 1.227 | 1.8432 | .827 | | 1.993 | 1.7424 | | .079 | 1.849 | .0426 | 6° |

1/ Threads shall be in accordance with SAE AS8879 except for -8 and -24 sizes, which shall be in accordance with ANSI ASME B1.1.

MS27069F

MS27069F

REQUIREMENTS

Intended use. This part is a component of MS27053 through MS27060 and MS27381 through MS27385.

Identification of product. The Part or Identifying Number (PIN) and the manufacturer's trademark shall be permanently marked on the assembly. The PIN for this part shall be as specified in table I (e.g., MS27069-4C).

Dimensions and tolerances. Dimensions are in inches. Unless otherwise specified, break or radius all corners .005, +.005, -.000. All diameters must be concentric within .005 full indicator movement.

Materials. Corrosion-resistant steel, class 304, condition B, in accordance with SAE AMS-QQ-S-763.

Minimum yield. 60,000 psi on -4C through -12C, 50,000 psi on -16C, 45,000 psi on -20C and -24C.

Finish. Passivate in accordance with SAE AMS-QQ-P-35. Threads on -8C through -24C shall be lubricated with dry-film lubricant conforming to SAE AS1701; no overspray allowed.

Surface roughness. Unless otherwise specified, maximum surface roughness shall not exceed 125 μin . R_a in accordance with ASME B46.1.

Elbow subassembly illustration. See figure 1.

Remove all burrs and slivers.

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

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

Preparing activity:

DLA - CC

(Project 4730-0868-043)

Review activities:

Army - AR, AT, MI
Navy - MC, SA, SH
Air Force - 71