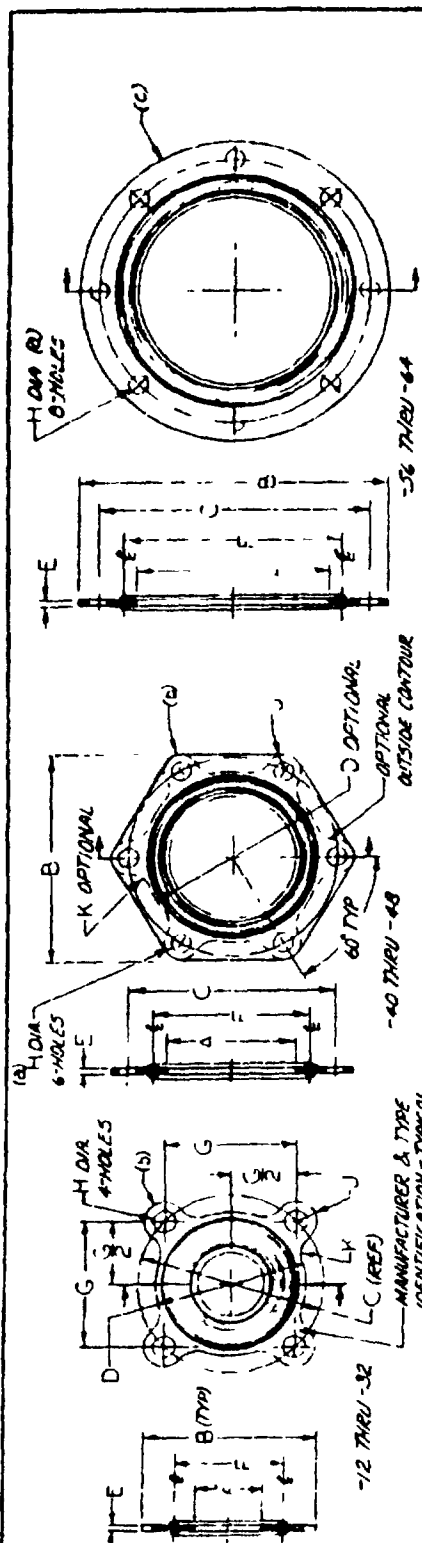
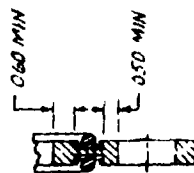


This standard has been approved by the Department of the USAF, and is mandatory for use by that activity. All other military activities are requested to employ this standard where feasible.

NOTE: When Government drawings, specifications, or other data are used for any purpose other than in connection with a definitely related Government procurement operation, the United States Government hereby states its responsibility, and the fact that the Government may have furnished, furnished, or may supply the said drawings, specifications, or other data, and it is not to be regarded by implication or otherwise as in any manner endorsing the article or any other part in connection with carrying out any job in connection with manufacture, use, or sale of any product or service that may in any way be related thereto.



| MS PART NO. | NOMINAL TUBE ID REF | A DIA | B DIA | C DIA | D DIA | E DIA | F DIA | G DIA | H DIA | J DIA | K RAD |
|-------------|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| MS 12 | 3/4 | 6.69 | 1 1/4 | 1.635 | 1 1/2 | 2.00 | 4/16 | 1.136 | 1.203 | 2.32 | 2.32 |
| MS 14 | 1 1/4 | 6.69 | 1 3/4 | 1.635 | 1 1/2 | 2.00 | 1/2 | 1.312 | 2.03 | 2.32 | 2.32 |
| MS 16 | 1 1/2 | 9.04 | 1 1/4 | 1.635 | 1 1/2 | 2.00 | 1/2 | 1.312 | 2.03 | 2.32 | 2.32 |
| MS 18 | 1 3/4 | 9.04 | 2 1/4 | 2.563 | 2 1/2 | 2.00 | 1/2 | 1.612 | 2.66 | 2.32 | 2.32 |
| MS 20 | 2 | 1.138 | 2 3/4 | 2.563 | 2 1/2 | 2.00 | 1/2 | 1.612 | 2.66 | 2.32 | 2.32 |
| MS 22 | 2 1/4 | 1.138 | 2 3/4 | 2.563 | 2 1/2 | 2.00 | 1/2 | 1.612 | 2.66 | 2.32 | 2.32 |
| MS 24 | 2 1/2 | 1.372 | 2 3/4 | 2.563 | 2 1/2 | 2.00 | 1/2 | 1.612 | 2.66 | 2.32 | 2.32 |
| MS 26 | 2 3/4 | 1.841 | 3 | 3.559 | 2 3/4 | 2.00 | 1/2 | 2.32 | 3.28 | 2.32 | 2.32 |
| MS 28 | 3 | 2.341 | 4 | 3.559 | 3 1/4 | 2.00 | 1/2 | 2.32 | 3.28 | 2.32 | 2.32 |
| MS 30 | 3 1/4 | 3.341 | 5 1/4 | 4.825 | 3 3/4 | 2.00 | 1/2 | 3.28 | 3.28 | 2.32 | 2.32 |
| MS 32 | 3 1/2 | 3.341 | 5 1/4 | 4.825 | 3 3/4 | 2.00 | 1/2 | 3.28 | 3.28 | 2.32 | 2.32 |
| MS 34 | 4 | 3.841 | 6 1/4 | 5.438 | 4 1/4 | 2.00 | 1/2 | 4.376 | 3.28 | 2.32 | 2.32 |



ENLARGED SECTION
TYPICAL FOR 1/4" TO 1 1/2"

- (a) 1/4" C. DIAMETER HOLES MUST BE EQUALLY SPACED ON C. DIAMETER WITHIN .005
- (b) COLOR MARKINGS: IN SIZES 12 THRU 48, OUTSIDE EDGE SHALL HAVE AT LEAST 3 NON-PERMANENT RED COLORED MARKINGS MORE THAN 1/4 INCH LONG TO INDICATE TYPE OF SEAL
- (c) COLOR MARKINGS: ON SIZES 50 THRU 64, OUTSIDE EDGES SHALL HAVE NON-PERMANENT RED COLORED MARKINGS EXTENDING AT LEAST THREE-QUARTERS OF THE WAY AROUND THE PART
- WATER-AL: METAL RETAINER, ALUMINUM ALLOY, SPEC QQ-A-327, TEMPER T6, FINISHED TO MIL-A-8825, TYPE-II
- REMOVE ALL BURRS AND SHARP EDGES
- DIMENSIONS IN INCHES UNLESS OTHERWISE SPECIFIED, TOLERANCES, DECIMALS $\pm .005$, FRACTIONS $\pm 1/16$, ANGLES $\pm 1/2^\circ$
- INDIVIDUALLY PACKAGE PER SPEC MIL-P-116, METHOD 1C-1.
- PRODUCT SHALL BE PERMANENTLY IDENTIFIED AS TO MANUFACTURER AND TYPE
- SEAL DESIGN MUST PROVIDE SUBSTANTIAL FILLING OF THE GROOVE WHEN ASSEMBLED
- FOR DESIGN FEATURE PURPOSES, THIS STANDARD TAKES PRECEDENCE OVER PROCUREMENT DOCUMENTS REFERENCED HEREIN
- REFERENCED DOCUMENTS SHALL BE OF THE ISSUE IN EFFECT ON DATE OF INVITATION FOR BIC
- * SUGGESTED DIMENSIONS FOR "D" AND "K" SIZES (1-40 THRU 48)

APPROVED 20 JULY 1962 REVISED

| | | |
|---------------------------|--|--------------------------------------|
| PA USAF Other Cust | TITLE SEAL, PLAIN, RUBBER, (MS 27104) FUEL RESISTANT, MOULD IN GROOVE | MILITARY STANDARD MS 27104 (USAF) |
| PROCUREMENT SPECIFICATION | SUPSEDES | SHEET 1 OF 1 |