

INCH-  
POUND

MS21959C  
15 June 2000  
SUPERSEDING  
MS21959B  
20 June 1975

# DETAIL SPECIFICATION SHEET

## BODY, CLUSTER FITTING, TWO-WAY, 90°, INTERNAL BOSS

This specification is approved for use by all Departments and Agencies  
of the Department of Defense .

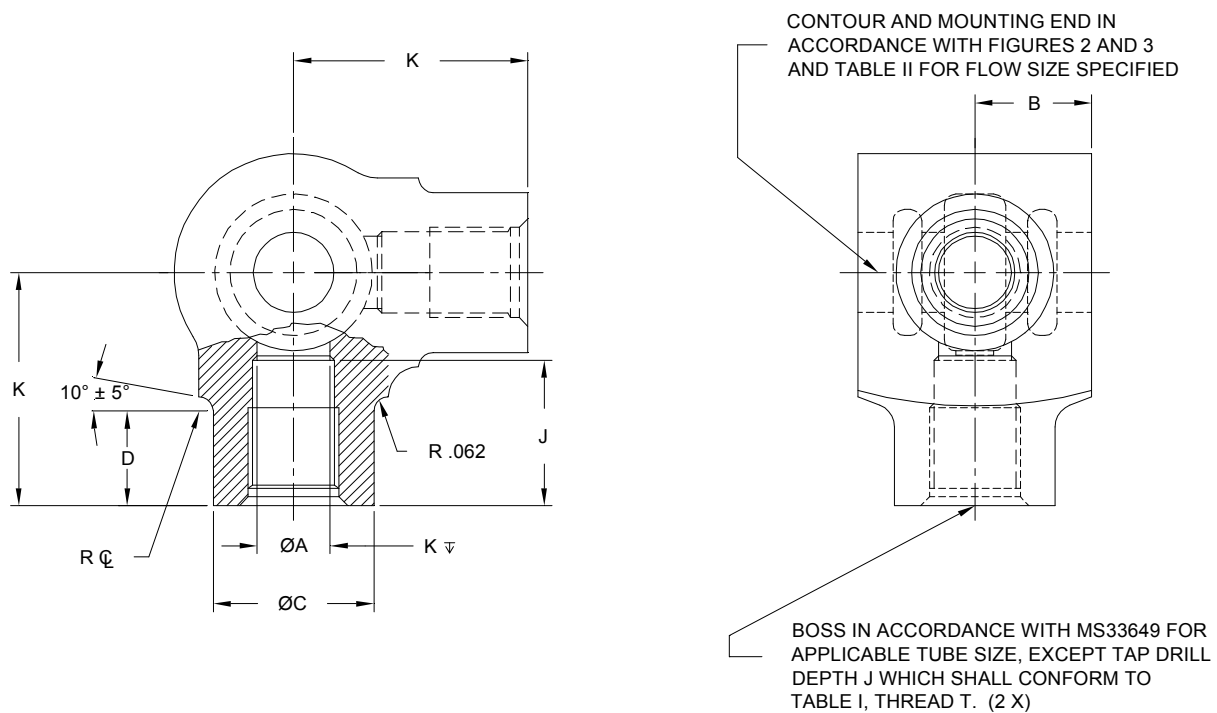


FIGURE 1. Body, cluster fitting.

## MS21959C

TABLE IA. Dimensions for low flow sizes.

Low Flow Size		Tube OD	Thread T SAE AS8879	A	B	C ± .031	D ± .031	J	K
Al Alloy 7075	Al Alloy 1/ 2014/2024								
W4L	-4L	.250	.4375-20UNJF-3B	.312	.500	.688	.406	.625	1.062
W5L	-5L	.312	.500-20UNJF-3B	.344	.500	.750	.438	.625	1.094
W6L	-6L	.375	.5625-18UNJF-3B	.344	.500	.812	.469	.625	1.125

1/ Aluminum alloy 2014 and 2024 parts are cancelled. Use Aluminum alloy 7075 parts for new design.  
Cancelled parts may be used till stock is exhausted.

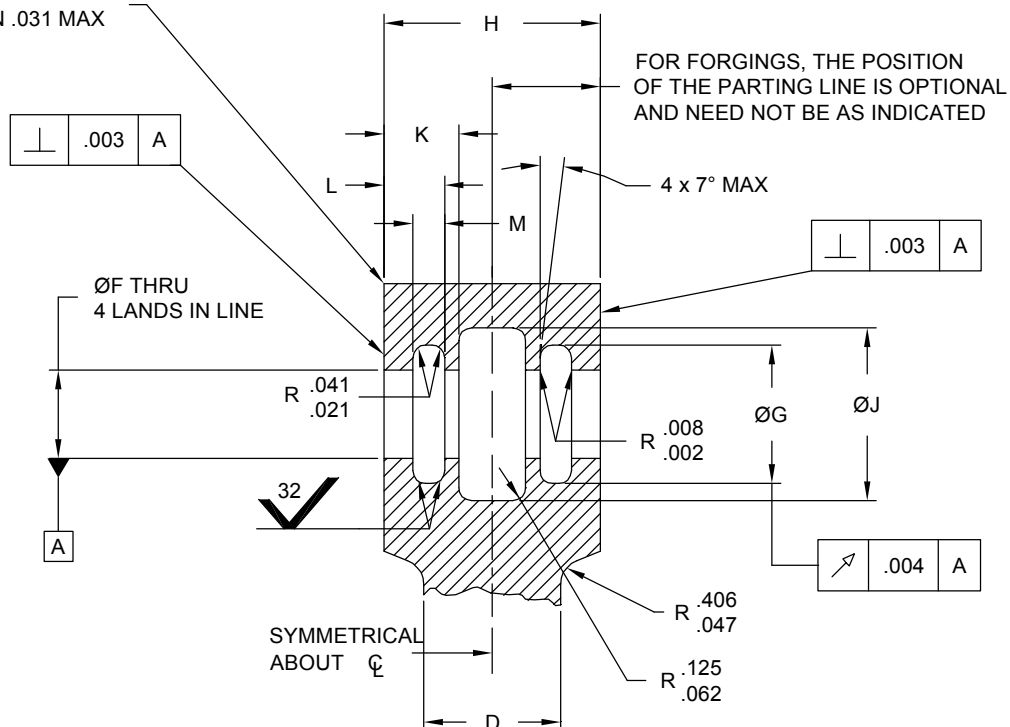
TABLE IB. Dimensions for high flow sizes.

High Flow Size		Tube OD	Thread T SAE AS8879	A	B	C ± .031	D ± .031	J	K
Al Alloy 7075	Al Alloy 1/ 2014/2024								
W4H	-4H	.250	.4375-20UNJF-3B	.312	.594	.688	.297	.625	1.219
W5H	-5H	.312	.500-20UNJF-3B	.375	.594	.750	.312	.625	1.250
W6H	-6H	.375	.5625-18UNJF-3B	.406	.594	.812	.375	.625	1.312
W8H	-8H	.500	.750-16UNJF-3B	.422	.594	1.125	.625	.750	1.500

1/ Aluminum alloy 2014 and 2024 parts are cancelled. Use Aluminum alloy 7075 parts for new design.  
Cancelled parts may be used till stock is exhausted.

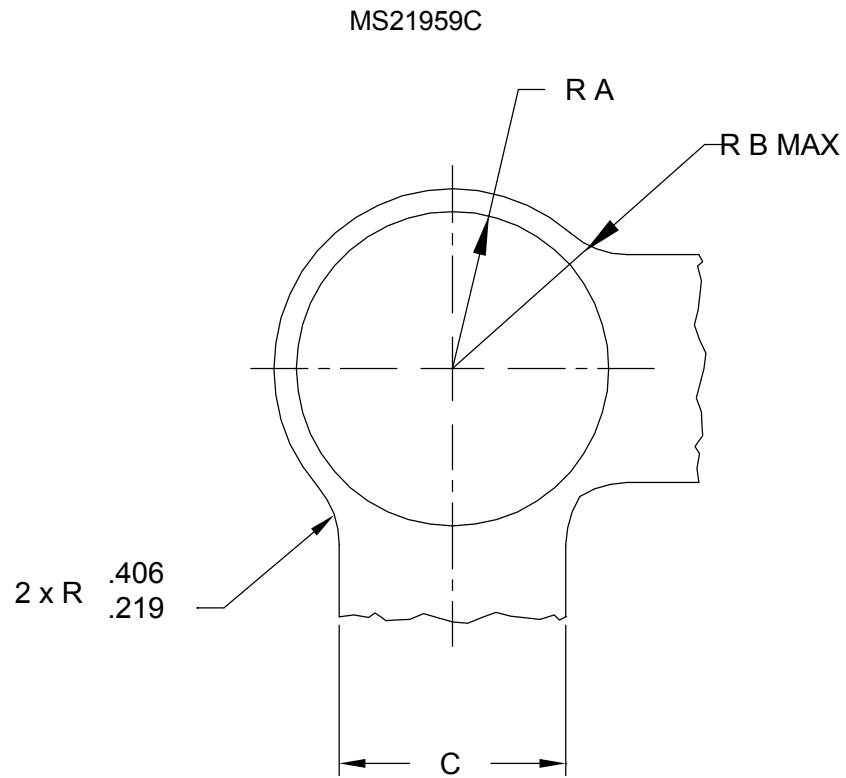
## MS21959C

CORNER ON R A MAY  
BE BROKEN .031 MAX



## MOUNTING END DIMENSIONS

FIGURE 2. Mounting end.



## CONTOUR DIMENSIONS EXTERNAL

FIGURE 3. External contour.

TABLE II. Dimensions for contour and mounting end.

## MS21959C

Type Fitting	A ± .031	B Max 1/	C Max 2/	D Max 2/	F ± .0005	G ± .004	H ± .005	J ± .010	K ± .010	L ± .004	M ± .005
Low Flow	.562	.636	.844	.995	.5000	.664	1.000	.797	.312	.249	.143
High Flow	.812	.909	1.156	1.188	.8125	1.045	1.188	1.078	.375	.283	.175

1/ B radius is the max envelope dimension for forging draft, flash, and other projections on A radius.

2/ Dimensions C and D represent the max envelope which shall be large enough to meet final part dimensions.

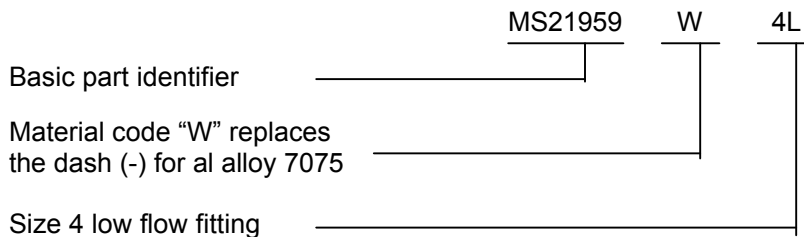
## REQUIREMENTS:

1. The requirements for acquiring the product described herein shall consist of this specification sheet and SAE AS4875.
2. Material: Aluminum alloy 7075-T73 per AMS-QQ-A-225/9. Aluminum alloy forging, 7075-T73 per AMS-QQ-A-367.
3. Finish: See acquisition standard SAE AS4875. Aluminum alloy 7075 fittings shall be dyed brown.
4. All machined surfaces shall be finished to 250  $\mu$ in  $R_a$ , unless otherwise specified. Surface finish shall be in accordance with ASME B46.1.
5. Fittings shall be free of all burrs and slivers.

## NOTES:

1. Dimensions in inches. Unless otherwise specified, tolerances: decimals  $\pm$  .010, angles  $\pm$  1/2°.
2. Dimensioning and tolerancing per ASME Y14.5.
3. Part Identification number (PIN)

Example of PIN: MS21959W4L



MS21959C

Custodians:  
Air Force - 99  
Navy - AS  
DLA - CC

Preparing activity:  
DLA - CC  
  
(Project 4730-0821)

Review activities:  
Air Force - 82  
Navy - SA