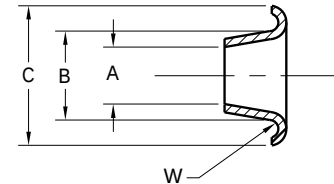
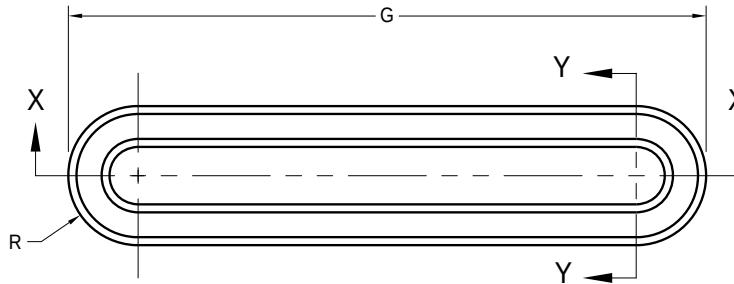


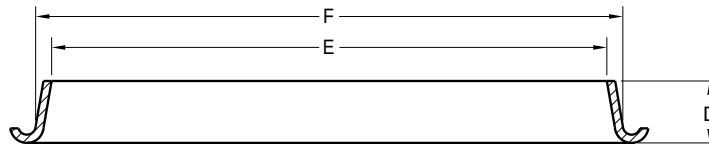
FED. SUPPLY CLASS

5325

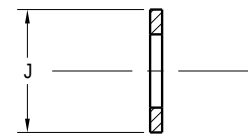
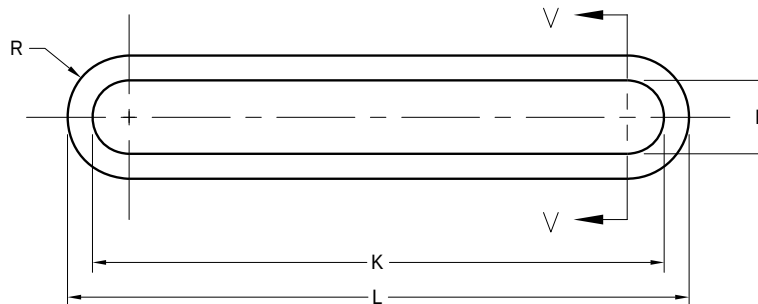


SECTION Y-Y

GROMMET



SECTION X-X



SECTION V-V

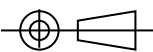
WASHER

TABLE I – DIMENSIONS

DASH NUMBER	GROMMET									WASHER				
	A +.000 -.002	B +.000 -.002	C ±.005	D ±.005	E +.000 -.002	F ±.003	G ±.005	W ±.003	NOM MATL THKNS	H ±.003	J ±.003	K ±.003	L ±.003	NOM MATL THKNS
1	.1875	.221	.406	.235	1.24	1.284	1.470	.03125	.013	.250	.4375	1.312	1.50	.020

THE INITIAL RELEASE OF THIS DOCUMENT SUPERSEDES MIL-G-16491/2. PART NUMBERS REMAIN M16491/2.

THIRD
ANGLE
PROJECTION



CUSTODIAN
NATIONAL AEROSPACE STANDARDS COMMITTEE

REVISION

2

PROCUREMENT
SPECIFICATION

NASM16491

TITLE

**GROMMET, METALLIC, OBLONG,
WITH FLAT WASHER (TYPE IV)**

CLASSIFICATION
PART STANDARD

NASM16491-2

SHEET 1 OF 2

AEROSPACE INDUSTRIES ASSOCIATION OF AMERICA, INC.
1000 WILSON BLVD.
ARLINGTON, VA 22209

THIS DRAWING SUPERSEDES ALL ANTECEDENT STANDARD DRAWINGS FOR THE SAME
PRODUCT AND SHALL BECOME EFFECTIVE NO LATER THAN SIX MONTHS FROM THE LAST
REVISION DATE.

FORM 12-01

REVISION DATE: FEBRUARY 29, 2016

ISSUE DATE: DECEMBER 1998

MATERIAL:

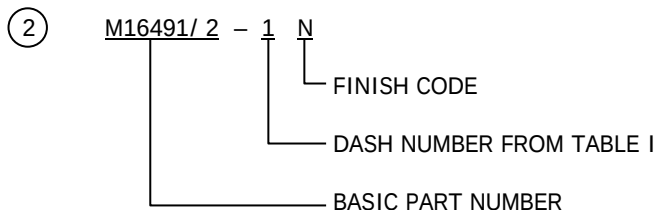
- ② BRASS SHEET, COMPOSITION 11 IN ACCORDANCE WITH ~~QQ-B-613~~ ASTM B36/B36M OR ASTM B121/B121M.

FINISH:

- ② CODE "B" — BLACK ENAMEL FINISH IN ACCORDANCE WITH ~~TT-E-489~~ MASTER PAINTERS INSTITUTE, REFERENCE #9, ALKYD, EXTERIOR, GLOSS, (MPI GLOSS LEVEL 6) AND REFERENCE #94, ALKYD, EXTERIOR, SEMI-GLOSS, (MPI GLOSS LEVEL 5).
CODE "C" — BLACK CHEMICAL FINISH IN ACCORDANCE WITH MIL-F-495.
CODE "N" — NICKEL PLATING IN ACCORDANCE WITH AMS-QQ-N-290.

EXAMPLE OF PART NUMBER:

THE PART NUMBER CONSISTS OF THE LETTER "M", THE BASIC NUMBER OF THIS SPECIFICATION SHEET, AND A DASH NUMBER TAKEN FROM TABLE I FOLLOWED BY A FINISH CODE LETTER.



- ② M16491/2-1N = GROMMET, OBLONG, WITH FLAT WASHER (TYPE IV), GROMMET DIMENSIONS FROM TABLE I, WASHER DIMENSIONS FROM TABLE I, NICKEL PLATED.

NOTES:

- (1) DIMENSIONS IN INCHES.
- (2) THIS STANDARD TAKES PRECEDENCE OVER DOCUMENTS REFERENCED HEREIN.
- (3) UNLESS OTHERWISE SPECIFIED, PART INVENTORY MANUFACTURED TO PREVIOUS REVISIONS OF THE APPLICABLE DRAWING OR SPECIFICATION MAY BE PROCURED AND USED UNTIL STOCK IS DEPLETED.
- (4) UNLESS OTHERWISE SPECIFIED HEREIN, REFERENCED DOCUMENTS SHALL BE THE ISSUE IN EFFECT ON DATE OF MANUFACTURE. HOWEVER, EXISTING MATERIAL INVENTORY CERTIFIED TO A PREVIOUS REVISION OF THE APPLICABLE MATERIAL SPECIFICATION(S) IS ACCEPTANCE FOR USE UNTIL DEPLETION.
- (5) THE ASSEMBLY SHALL CONSIST OF ONE GROMMET AND ONE WASHER OF THE SAME MATERIAL.
- ② (6) DIMENSIONING AND TOLERANCING PER ANSI Y14.5M-1982.

REVISION

2

NAS 61691-2

SHEET 2



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