

FIG. SUP CLASS
5365**DETAILS ENLARGED**

No specific angularity exists between internal and external serrations. The serrated sectors will be diametrically opposite.

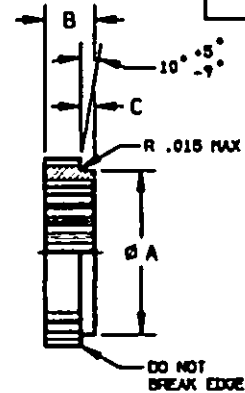
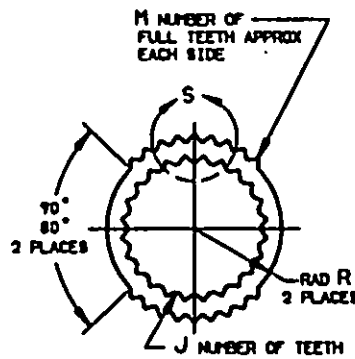


TABLE I. DIMENSIONS

DASH NUMBERS	Ø A	B	C	Ø E +.004 -.003	Ø F +.005 -.004	Ø G +.003 -.004	Ø H	J	K° +1° -2°	M	N°	R RAD REF
102P	.223	.084	.027	.161	.189	.274	.246	14	102°	6	100°	.120
103P	.253	.099	.040	.189	.223	.308	.279	16	90°	5	100°	.135
104P	.298	.099	.040	.213	.252	.354	.324	13	102°	6	90°	.159
105P	.343	.112	.040	.264	.315	.399	.363	17	84°	6	70°	.180
106P	.400	.138	.040	.323	.364	.468	.430	20	102°	7	70°	.214
107P	.480	.145	.040	.390	.425	.545	.511	24	102°	9	70°	.252
108P	.560	.145	.040	.468	.505	.624	.589	26	102°	10	70°	.293
109P	.702	.161	.049	.574	.613	.767	.731	26	111°	11	100°	.362
110P	.837	.176	.056	.695	.740	.910	.871	30	111°	12	100°	.431
111P	.958	.176	.056	.795	.845	1.040	.994	30	111°	10	111°	.492
112P	1.078	.176	.056	.908	.950	1.170	1.113	38	102°	11	102°	.531
113P	1.232	.193	.070	1.035	1.093	1.326	1.274	36	111°	10	111°	.629
114P	1.371	.193	.070	1.189	1.247	1.456	1.402	48	90°	10	102°	.692
115P	1.509	.193	.070	1.282	1.339	1.611	1.531	42	111°	8	111°	.770

REQUIREMENTS:**1. MATERIAL:**

Steel, carbon, Grade 1117 (UNS 011170) conforming to AMS 5022 or ASTM A108 or Grade 1018 (UNS 010180) conforming to AMS 5049 or ASTM A108.

Steel, corrosion-resistant, Type A286 (UNS S46286) conforming to AMS 5731, AMS 5734 or AMS 5737, heat treated and aged as applicable.

2. PROTECTIVE COATING OR TREATMENT:

Steel, carbon, shall be cadmium plated conforming to QQ-P-416, Type II, Class 3. Steel, corrosion-resistant, shall be cleaned, descaled and passivated in accordance with QQ-P-35.

3. SURFACE ROUGHNESS:

Machined surfaces to be 125 microinches Ra in accordance with ANSI/ASME B46.1, except serrations.

4. HARDNESS:

Carbon steel rings shall be case hardened to 36-45 HRC in accordance with procurement specification.

Corrosion-resistant steel rings shall have a hardness of 269 HB minimum in accordance with procurement specification.

5. FILLETS:

Fillets shall be R .015 maximum.

6. EDGES:

Unless otherwise specified, edges broken .003-.015 except serrations.

7. TOLERANCES:

Linear dimensions ±.005, angular dimensions ±2°.

8. PART IDENTIFYING NUMBER (PIN):

The PIN shall consist of the basic MS number followed by a dash number. Add "E" in lieu of "-" for corrosion-resistant steel.

Example of PIN:

MS1990

Basic
MS number

Dash number

-

"-" for carbon steel

"E" in lieu of "-" for
corrosion-resistant steel

104P

Dash number
per Table I

MS1990-104P Ring, Lock, Carbon Steel, .334 External Serration Major Diameter.

MS1990E104P Ring, Lock, Corrosion-Resistant Steel, .334 External Serration Major Diameter.

(B) ENTIRE STANDARD REVISED

INCH-POUND

P.A.	AR	INTERNATIONAL INTEREST	TITLE	MILITARY STANDARD
Other Cont	AS		RING, LOCK, SERRATED	MS 51990
	99			
PROCUREMENT SPECIFICATION	SUPERSEDES:		PAGE 1 OF 2	
MIL-1-45910				

DD FORM 672-1 (COORDINATED)

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

5365-0145

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AMSC N/A

User activities:
Navy - MC

Reviewer activities:
Army - AT, AV, CR, ER, GL, HE
Air Force - 82
NSA - NS
DLA - IS

APPROVED 30 JUN 66 REVISED (B) 19 JAN 69

TABLE II
INTERCHANGEABILITY
(see note 4)

DASH NUMBERS	
INACTIVE	NEW
-102	-102P
-103	-103P
-104	-104P
-105	-105P
-106	-106P
-107	-107P
-108	-108P
-109	-109P
-110	-110P
-111	-111P
-112	-112P
-113	-113P
-114	-114P
-115	-115P
C102	E102P
C103	E103P
C104	E104P
C105	E105P
C106	E106P
C107	E107P
C108	E108P
C109	E109P
C110	E110P
C111	E111P
C112	E112P
C113	E113P
C114	E114P
C115	E115P

NOTES:

1. Dimensions are in inches.
2. In the event of a conflict between the text of this standard and the references cited herein, the text of this standard shall take precedence.
3. Referenced Government (or non-Government) documents of the issue listed in that issue of the Department of Defense Index of Specifications and Standards (DODISS) specified in the solicitation form a part of this standard to the extent specified herein.
4. The dash numbers "-100" and "C100" series lockrings in the original issue of this standard were inactivated 10 Feb 69. The inactivated lockrings should be used on existing callouts until stock is depleted. Use the new "-100P" and "E100P" series lockrings for replacement of "-100" and "C100" series lockrings in accordance with table II. Use "-100P" and "E100P" series lockrings for all new designs.

APPROVED 30 JUN 64 REVISED (B) For changes see pages 1 and 2

P.A. Other Cast	AR AS 99	INTERNATIONAL INTEREST	TITLE RING, LOCK, SERRATED	MILITARY STANDARD MS 51990
PROCUREMENT SPECIFICATION MIL-I-45910		SUPERSEDES:		PAGE 2 OF 2

User activities:
Navy - MCReviewer activities:
Army - AT, AV, CR, ER GL, HE
Air Force - 82
NSA - NS
DLA - IS

This military standard is approved for use by all Departments and Agencies of the Department of Defense. Selections for all new engineering and design applications and for repetitive use shall be made from this document when applicable.