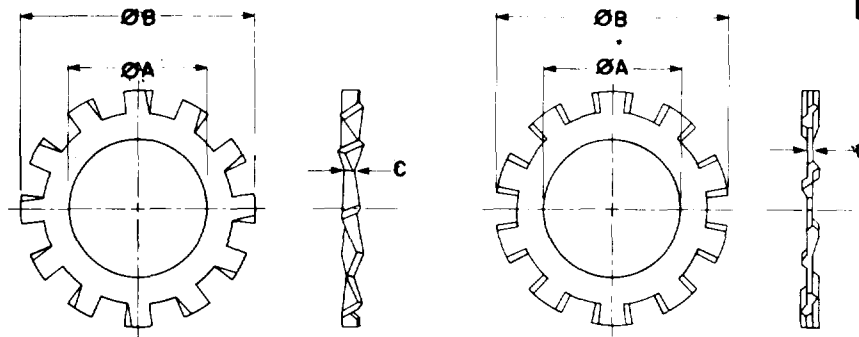


USER ACTIVITIES:  
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ACCEPTABLE DESIGNS

TABLE I. DASH NUMBERS AND DIMENSIONS.

DASH NUMBER		Ø A INSIDE DIAMETER		Ø B OUTSIDE DIAMETER		C THICKNESS	
STEEL, CARBON	PHOSPHOR BRONZE	MAX	MIN	MAX	MIN	MAX	MIN
9	10	.123	.115	.260	.245	.019	.015
1	11	.150	.141	.320	.305	.022	.016
2	12	.176	.168	.381	.365	.023	.018
3	13	.204	.195	.410	.395	.025	.020
4	14	.267	.256	.510	.494	.028	.023
5	15	.332	.320	.610	.588	.034	.028
6	16	.398	.384	.694	.670	.040	.032
7	17	.464	.448	.760	.740	.040	.032
8	18	.530	.513	.900	.880	.045	.037

REQUIREMENTS:

1. **MATERIAL:** STEEL, CARBON, GRADES 1050 (UNS G10500) THRU 1064 (UNS G10640), IN ACCORDANCE WITH PROCUREMENT SPECIFICATION. PHOSPHOR BRONZE, COMPOSITION A, HARD (UNS C51000), IN ACCORDANCE WITH QQ-B-750.
2. **PROTECTIVE COATING AND SURFACE TREATMENT:** STEEL, CARBON, SHALL BE ZINC COATED IN ACCORDANCE WITH ASTM B633, TYPE II, CLASS Fe/Zn 5. PHOSPHOR BRONZE SHALL BE CADMIUM PLATED IN ACCORDANCE WITH QQ-P-416, TYPE II, CLASS 2.
3. **PART NUMBER:** THE PART NUMBER SHALL CONSIST OF THE BASIC MS NUMBER FOLLOWED BY A DASH NUMBER FROM TABLE I.

EXAMPLE: MS51414-1

— DASH NUMBER  
— BASIC MS NUMBER

MS51414-1 INDICATES - WASHER, LOCK, FLAT-EXTERNAL TOOTH; STEEL, CARBON; INSIDE DIAMETER .150 MAX .141 MIN; OUTSIDE DIAMETER .320 MAX .305 MIN; THICKNESS .022 MAX .016 MIN

NOTES:

1. ALL DIMENSIONS ARE IN INCHES.
2. THE NUMBER OF TEETH SHALL BE AT THE OPTION OF THE CONTRACTOR.
3. WASHERS SHALL BE USED WITH FASTENERS HAVING HEAD BEARING SURFACES LARGE ENOUGH TO CONTACT WASHER TEETH.
4. 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.
5. REFERENCED GOVERNMENT (OR NONGOVERNMENT) 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.
6. ZINC COATED WASHERS ARE INTENDED FOR USE IN NON-AEROSPACE, HIGH TEMPERATURE/PETROLEUM ENVIRONMENT.

Ⓐ ENTIRE STANDARD REVISED

P. A. ARMY-AR Other Cust NAVY-SH AIR FORCE-99	INTERNATIONAL INTEREST	TITLE  WASHER, LOCK, FLAT-EXTERNAL TOOTH	MILITARY STANDARD  MS51414
PROCUREMENT SPECIFICATION FF-W-100	SUPERSEDES:	PAGE   OF	

APPROVED 18 OCT 82 REVISED Ⓐ 17 MAR 86