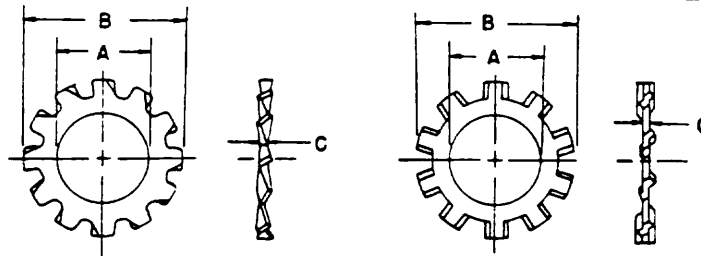


REVIEWER: AT, AV, GL, IS, MI, MU, NSA
 USER: AS, EL, MC, ME, OS, YD



FED. SUP CLASS
 5310

ACCEPTABLE DESIGNS

TABLE I

NOMINAL SIZE	A INSIDE DIAMETER		B OUTSIDE DIAMETER		C THICKNESS		STEEL		TIN-BRASS OR PHOSPHOR BRONZE OPTIONAL	
							CARBON	CORROSION RESISTING		
							CADMIUM PLATE			PASSIVATED
MAX	MIN	MAX	MIN	MAX	MIN	DASH NO.	DASH NO.	DASH NO.		
#4	.112	.123	.115	.260	.245	.019	.015	29	57	55
#6	.135	.150	.141	.320	.305	.022	.016	30	58	56
#8	.164	.176	.165	.351	.365	.023	.018	31	59	57
#10	.190	.204	.195	.410	.395	.025	.020	32	60	58
1/4	.250	.267	.256	.510	.494	.025	.023	33	61	59
5/16	.312	.332	.320	.610	.595	.025	.025	34	62	60
3/8	.375	.395	.384	.694	.670	.040	.032	35	63	61
7/16	.435	.464	.445	.760	.740	.040	.032	36	64	62
1/2	.500	.530	.513	.900	.880	.045	.037	37	65	63
9/16	.562	.596	.576	.955	.960	.045	.037	38	66	64
5/8	.625	.663	.641	1.070	1.045	.050	.042	39	67	65
3/4	.750	.795	.765	1.260	1.220	.055	.047	40	68	66
7/8	.875	.927	.897	1.410	1.380	.060	.052	41	69	67
1	1.000	1.060	1.025	1.620	1.590	.067	.059	42	70	68

NOTES:

- MATERIAL:** Carbon Steel in accordance with procurement specification.
 Corrosion-Resisting Steel in accordance with procurement specification.
 Tin-Brass, Copper Development Association Inc., Alloy Number 425.
 Phosphor Bronze, composition A, hard, in accordance with procurement specification.
- PROTECTIVE COATING:** Carbon steel - Cadmium plated in accordance with QQ-P-410, Type II, Class 2. (Cadmium plating in accordance with QQ-P-410, Type II, Class 3 may be furnished until 20 Mar 1974.)
 Corrosion-resisting steel - Passivate in accordance with procurement specification.
- DIMENSIONS:** All dimensions are in inches, unless otherwise specified.
- PART NUMBER:** The MS part number consists of the MS number, plus the dash number.
 Example: MS35335-29.
- The number of teeth shall be at the option of the manufacturer.
- 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 invitations for bid.
- These lock washers shall be used with fasteners having heads large enough to contact lock washer teeth.

(E) FOR CHANGES SEE SHEET I.

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

P.A. WC Other Cust 82	TITLE WASHER, LOCK, FLAT-EXTERNAL TOOTH (IN./MM)	MILITARY STANDARD MS 35335
PROCUREMENT SPECIFICATION FF-W-100	SUPERSEDES MS16213 in part, AN936 in part and BEAX7	SHEET 1 OF 2

APPROVED 4 MARCH 1954 REVISED (A) 18 APRIL 1956 (B) 5 DEC. 1963 (C) 7 DEC 1967 (D) 30 MAR 1970 (E) 20 MAR 1972

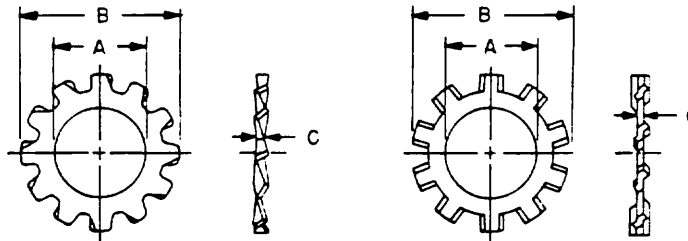
INTERCHANGEABILITY TABLE

The following dash numbers of MS35335 and AN936 are cancelled after 5 Dec 1963. The following dash numbers of MS16213 are cancelled after 7 Dec 1967. The cancelled washers cannot always replace the new washers and should be used until existing stocks are depleted. Use only the new washers for design and engineering. Replacement shall be in accordance with this table.

TABLE II

PART NUMBERS									
CANCELLED			NEW			CANCELLED			NEW
AN936	MS35335	MS35335	AN936	MS35335	MS35335	AN936	MS16213	MS35335	MS35335
B3	--	**	B716	8	36	B3B	--	--	**
B4	1	29	--	22	36	B4B	71	71	85
--	15	29	--	50	36	B6B	72	72	86
--	43	29	--	9	37	B6B	73	73	87
B6	2	30	B816	23	37	B10B	74	74	88
--	16	30	--	51	37	B416B	75	75	89
--	44	30	B916	10	38	B516B	76	76	90
B8	3	31	--	24	38	B616B	77	77	91
--	17	31	--	52	38	B716B	78	78	92
--	45	31	B1016	11	39	--	79	79	93
B10	4	32	--	25	39	--	--	80	94
--	18	32	--	53	39	--	--	81	95
--	46	32	B1216	12	40	--	--	82	96
B416	5	33	--	26	40	--	--	83	97
--	19	33	--	54	40	--	--	84	98
--	47	33	B1416	13	41	--	--	--	--
B516	6	34	--	27	41	--	--	--	--
--	20	34	--	55	41	--	--	--	--
--	48	34	B1616	14	42	--	--	--	--
B616	7	35	--	28	42	--	--	--	--
--	21	35	--	56	42	--	--	--	--
--	49	35	--	--	--	--	--	--	--

** No replacement



ACCEPTABLE DESIGNS

TABLE III
METRIC TRANSLATION OF TABLE I

NOMINAL SIZE	A INSIDE DIA		B OUTSIDE DIA		C THICKNESS		DASH NUMBER		
	MAX	MIN	MAX	MIN	MAX	MIN	CARBON STEEL	CRES	TIN-BRASS OR BRONZE
2.545	3.124	2.921	6.604	6.223	.453	.381	29	57	65
3.505	3.510	3.561	8.125	7.747	.559	.406	30	58	66
4.166	4.470	4.267	9.677	9.271	.564	.457	31	59	67
4.526	5.152	4.953	10.414	10.033	.635	.506	32	60	68
6.350	6.752	6.502	12.954	12.548	.711	.554	33	61	69
7.925	8.433	8.125	15.494	14.935	.864	.711	34	62	90
9.525	10.109	9.754	17.626	17.018	1.016	.813	35	63	91
11.125	11.786	11.379	19.304	18.796	1.016	.813	36	64	92
12.700	13.462	13.030	22.660	22.352	1.143	.940	37	65	93
14.275	15.138	14.630	25.019	24.384	1.143	.940	38	66	94
15.875	16.640	16.281	27.178	26.543	1.270	1.067	39	67	95
19.050	20.193	19.507	32.004	30.985	1.397	1.194	40	68	96
22.225	23.546	22.764	35.514	35.052	1.524	1.321	41	69	97
25.400	26.924	26.035	41.145	40.356	1.702	1.499	42	70	98

NOTE: All dimensions are in millimeters.

P.A. WC	TITLE	MILITARY STANDARD
Other Cust 62	WASHER, LOCK, FLAT-EXTERNAL TOOTH (IN./MM)	MS 35335
PROCUREMENT SPECIFICATION FF-W-100	SUPERSEDES AN936 in part, MS16213 in part and BEAX7	SHEET 2 OF

DD FORM 672-1 (Coordinated)

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE

REVISIONS: AT,AV,GL,IS,MI,MU,NSA
SER:AS,EL,MC,ME,OS,YD

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

APPROVED 4 MAR 1954 REVISED (A) 18 APR 1956 (B) 5 DEC 1963 (C) 7 DEC 1967 (D) 30 MAR 1970 (E) FOR CHANGES SEE SHEET I.