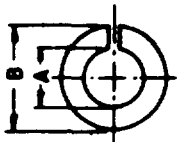
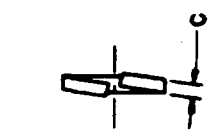
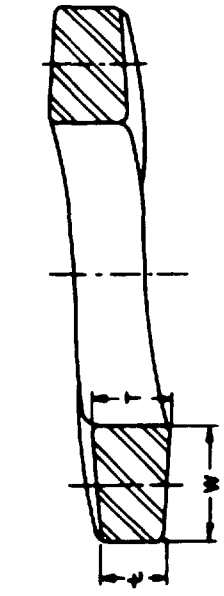


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NOMINAL SIZE	INSIDE DIAMETER - A-		WIDTH - W-		THICKNESS - C- $I + \frac{3}{2}$		OUTSIDE DIAMETER - B-		STEEL						CORROSION RESISTING		PHOSPHOR BRONZE			
	MAX	MIN	MIN	MAX	MAX	MIN	MAX	MAX	PLAIN (UNCOATED)		CADMIUM OR ZINC OPTIONAL		CADMIUM		PHOSPHATE		PASSIVATED		CADMIUM	
									DASH NO.	FIIN	DASH NO.	FIIN	DASH NO.	FIIN	DASH NO.	FIIN	DASH NO.	FIIN	DASH NO.	FIIN
#2	.088	.097	.030	.021	.015	.021	.165	1 019-2298	20	39	58	019-2303	77	058-2990	96	058-2990	101	043-5862	106	189-6811
#4	.112	.124	.035	.026	.020	.026	.202	2 011-8871	21	40	59	013-1195	78	098-2949	97	098-2949	102		107	
#6	.138	.141	.040	.031	.025	.031	.239	3 011-8872	22	41	60	013-1196	79	043-1754	98	043-1754	103		108	
#8	.164	.170	.047	.037	.031	.037	.280	4 011-8873	23	42	61	013-1197	80	042-9067	99	042-9067	104		109	
#10	.190	.205	.055	.046	.040	.046	.323	5 011-8873	24	43	62	274-8708	81	058-2951	100	058-2951	105	261-7125	110	
1/4	.255	.267	.107	.097	.047	.097	.489	6 011-3114	25	44	63	274-8714	82	043-5862	101	043-5862	106		111	
3/16	.319	.333	.117	.086	.056	.086	.718	7 011-2723	26	45	64	013-1201	83		102		107		112	
1/8	.382	.398	.136	.080	.070	.080	.768	8 011-0730	27	46	65	274-8719	84		103		108		113	
7/16	.446	.466	.154	.095	.085	.095	.780	9 011-0405	28	47	66	012-1739	85		104		109		114	
1/2	.509	.529	.170	.109	.099	.109	.877	10 010-6500	29	48	67	013-1203	86		105					
9/16	.573	.595	.186	.123	.113	.123	.975	11 011-2724	30	49	68		87		106					
5/8	.636	.666	.201	.136	.126	.136	1.082	12 010-3334	31	50	69		88		107					
3/4	.701	.763	.223	.163	.153	.163	1.277	13 010-3335	32	51	70		89		108					
7/8	.769	.822	.244	.199	.179	.199	1.470	14 010-3336	33	52	71		90		109					
1	1.017	1.053	.289	.222	.208	.222	1.656	15 011-7661	34	53	72		91		110					
1-1/8	1.184	1.184	.314	.244	.224	.244	1.837	16 187-3202	35	54	73		92		111					
1-1/4	1.315	1.271	.336	.264	.244	.264	2.012	17 011-7613	36	55	74		93		112					
1-3/8	1.446	1.398	.356	.284	.264	.284	2.183	18 011-8028	37	56	75		94		113					
1-1/2	1.577	1.525	.375	.302	.282	.302	2.352	19 011-8029	38	57	76		95		114					



MATERIAL: STEEL, CARBON, F51080, ROCKWELL "C" 45-53, SPECIFICATION QQ-S-633.  
CORROSION RESISTING STEEL, FEDERAL STANDARD NO. 66, STEEL NUMBERS 302 ROCKWELL "C" 35-43 OR 420 ROCKWELL "C" 43-53.  
PHOSPHOR BRONZE, SPECIFICATION QQ-B-746, COMPOSITION A, HARD.

**CANCELLED AFTER 21 MAR 1966**  
FOR REPLACEMENT AND NEW DESIGN  
USE MS35338.

**(B)**

PROTECTIVE COATING:  
CADMIUM PLATE, SPECIFICATION QQ-P-416, TYPE II, CLASS C.  
ZINC PLATE, SPECIFICATION QQ-Z-323, TYPE II, CLASS 3.  
PHOSPHATE, SPECIFICATION MIL-C-1623, TYPE II.

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: MS35337-1.  
NOTES: (1) REFERENCED DOCUMENTS SHALL BE OF THE ISSUE IN EFFECT ON INVITATIONS FOR BID.  
(2) THIS STANDARD TAKES PRECEDENCE OVER DOCUMENTS REFERENCED HEREIN.  
(3) THIS DOCUMENT HAS BEEN PROMULGATED BY THE DEPARTMENT OF DEFENSE AS THE MILITARY STANDARD TO LIMIT THE SELECTION OF THE ITEM, PRODUCT OR DESIGN COVERED HEREIN IN ENGINEERING, DESIGN AND PROCUREMENT. THIS STANDARD SHALL BECOME EFFECTIVE NOT LATER THAN 90 DAYS AFTER THE LATEST DATE OF APPROVAL SHEET.

FED. SUP. CLASS  
**5310**

CUSTOMERS  
A-ORD  
N-SHIPS  
AF-AF

OTHER INT.  
ACES 10T  
MCOAS Y

**MILITARY STANDARD**  
WASHER, LOCK, SPLIT, HELICAL, LIGHT SERIES

**MS35337**

PROCUREMENT SPECIFICATION  
FF-W-84

SUPERSEDES:

REV 1 2 3

APPROVED MAR 4 1964 REVISED 21 MAR 1966