

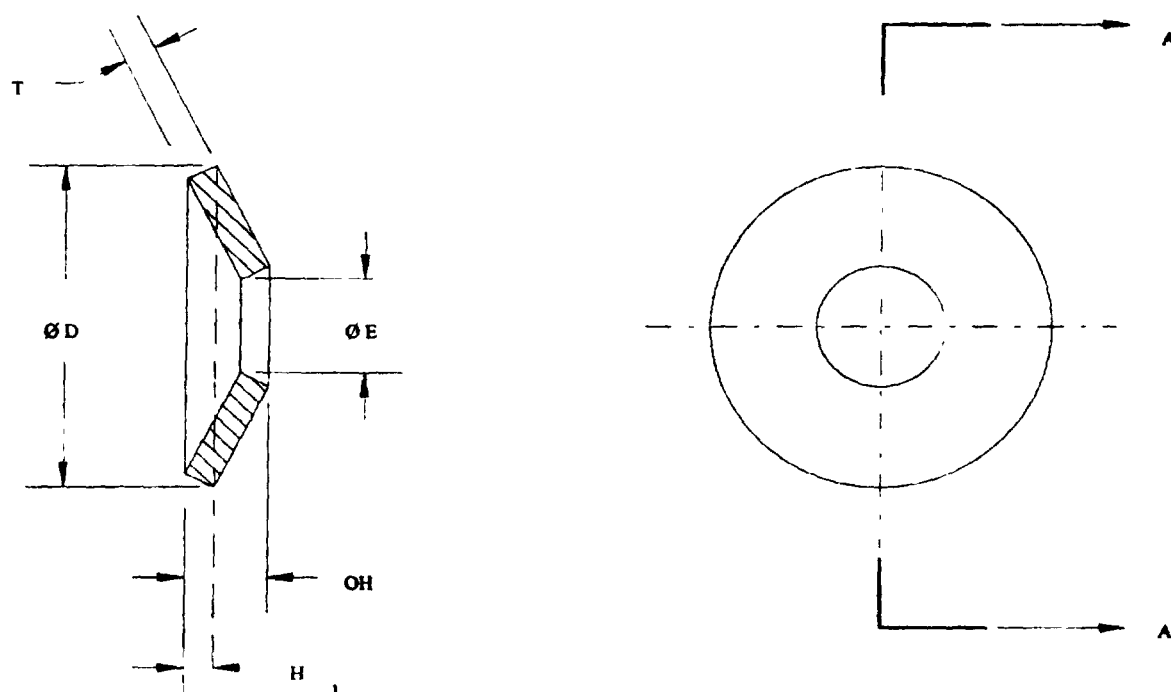
INCH-POUND

MIL-W-12133/1C
17 JUNE 1994
SUPERSEDING
MIL-W-12133/1B
25 APRIL 1986

MILITARY SPECIFICATION SHEET

WASHER, SPRING TENSION, BELLEVILLE SPRING, SPRING STEEL

This specification is approved for use by all Departments and Agencies of the Department of Defense. The complete requirements for acquiring the washers described herein shall consist of this specification and the latest issue of MIL-W-12133.



SECTION A-A

NOTES

1 All dimensions are in inches. See Table I herein for tabulated data.

FIGURE 1 WASHER, SPRING TENSION, BELLEVILLE SPRING, SPRING STEEL.

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TABLE I DASH NUMBERS AND DIMENSIONS

DASH NO	Ø D		Ø E		T THICKNESS		OH FREE HEIGHT		H I TEST DEFLECTION (REF)	LOAD AT H I (LBS) +/- 10%	BOLT DIAMETER (REF)
	OD	TOL + .000	ID	TOL - .000	NOM	TOL	NOM	TOL			
62	250	- .015	125	+ .015	.009	+/- .001	.017	+/- .003	.006	14	.112
1	250	- .015	125	+ .015	.013	+/- .001	.020	+/- .003	.005	37	.112
69	315	- .015	125	+ .010	.012	+/- .001	.022	+/- .003	.0072	26	.112
60	281	- .015	138	+ .015	.015	+/- .001	.023	+/- .003	.006	53	.138
2	312	- .015	156	+ .015	.017	+/- .001	.025	+/- .003	.006	63	.138
61	343	- .015	164	+ .015	.016	+/- .001	.023	+/- .003	.005	35	.164
63	375	- .015	195	+ .015	.020	+/- .001	.030	+/- .003	.008	96	.190
3	375	- .015	195	+ .015	.015	+/- .001	.027	+/- .003	.009	49	.190
4	500	- .020	258	+ .020	.020	+/- .001	.035	+/- .003	.011	78	.250
64	500	- .020	258	+ .020	.018	+/- .001	.034	+/- .003	.012	64	.250
5	625	- .020	.317	+ .020	.032	+/- .002	.051	+/- .005	.014	252	.313
65	750	- .020	.382	+ .020	.028	+/- .002	.050	+/- .005	.017	144	.375
6	750	- .025	.382	+ .020	.032	+/- .002	.054	+/- .005	.016	203	.375
66	750	- .025	.382	+ .020	.040	+/- .002	.059	+/- .005	.014	334	.438
68	875	- .020	.442	+ .010	.045	+/- .002	.067	+/- .005	.011	286	.438
7	1.000	- .025	.445	+ .025	.035	+/- .002	.067	+/- .005	.024	218	.438
67	1.000	- .025	.505	+ .025	.050	+/- .002	.075	+/- .005	.019	493	.500
8	1.000	- .025	.512	+ .025	.039	+/- .002	.075	+/- .005	.027	369	.500
9	1.102	- .025	.512	+ .025	.049	+/- .002	.083	+/- .005	.025	503	.500
10	1.375	- .030	.637	+ .025	.059	+/- .002	.102	+/- .008	.032	724	.625
11	1.500	- .030	.761	+ .030	.059	+/- .002	.114	+/- .008	.041	861	.750
12	1.500	- .030	.761	+ .030	.078	+/- .002	.121	+/- .008	.032	1431	.750
13	1.750	- .030	.880	+ .030	.085	+/- .003	.128	+/- .008	.032	1333	.875
14	2.000	- .040	1.016	+ .030	.079	+/- .003	.138	+/- .008	.044	1184	1.000
15	2.375	- .040	1.016	+ .030	.098	+/- .003	.177	+/- .008	.059	2020	1.000

1 All dimensions are in inches See Table I herein for tabulated data

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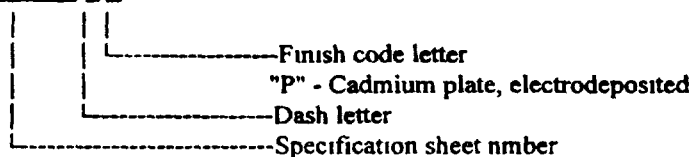
REQUIREMENTS

1 Material. Spring steel, Grades 1070 thru 1095, (UNS G10700 thru G10950) as specified in ASTM A684/A684M

2 Protective coating and surface treatment Cadmium plate, mechanically or electrodeposited, mechanically deposited zinc, or plain, as applicable (See requirement 3 herein) in accordance with MIL-W-12133

3 Part number. The part number consists of the letter "M", the basic number of this specification, followed by a dash number taken from Table I and a finish code letter, "P" for Cadmium plate (electrodeposited), "M" for Cadmium plate (mechanically deposited), "Z" for Zinc (mechanically deposited), or No Code for Plain

EXAMPLE M12133/1-1 P



M12133/1-1P - Indicates - Washer, Spring Tension, Belleville Sprung, Spring Steel, 250 OD, 125 ID, .013 thick, .020 free height; Cadmium plate, electrodeposited

Custodians

Army - AR
Navy - OS
Air Force - 99

Preparing Activity

DLA - IS

Review Activities

Army - ER, MI, CR
Navy - AS, MC, YD
Air Force - 11, 82

(Project 5310-1891)