



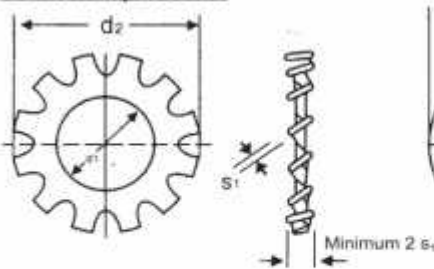
SHAKE - PROOF WASHERS

(Star Washers)

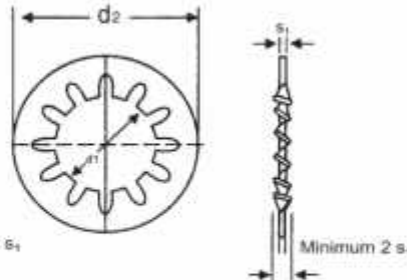
DIN 6797
IS: 5371

All Dimensions in mm

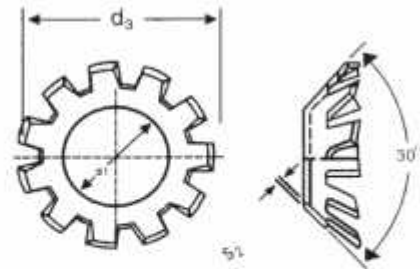
A Externally toothed



J Internally toothed



V Countersunk
for $d_1 = 2.2$ to 16.5



Details left unspecified are to be designed as required.

Designation of multi-tooth lock washer type J of inside diameter $d_1 = 6.4$ mm in spring steel, surface phosphated and oiled 1):

Multi-tooth lock washer J 6.4 Din 6797 - phosphated oiled

If Multi-tooth lock washer for screw with left-hand thread are required, the designation then reads e.g.:

Multi-tooth lock washer J 6.4 left-hand Din 6797 - phosphated oiled

Inside diameter d_1	d_2	d_3 ≈	s_1	s_2	Number of teeth Minimum Type		Weight kg/1000 pieces ≈ Type			For screw	
					A and J	V	A	J	V	Metric	Whitworth
1.8	3.8	-	0.3	-	6	-	0.015	-	-	M 1.7	
2.2	4.5	4.6	0.3	0.2	6	6	0.025	0.030	0.020	M 2	
2.5	5	5.1	0.4	0.2	6	6	0.030	0.040	0.025	M 2.3	
2.8	5.5	5.6	0.4	0.2	6	6	0.040	0.045	0.025	M 2.6	
3.2	6	6.2	0.4	0.2	6	6	0.045	0.045	0.025	M 3	
(3.7)	7	6.7	0.5	0.25	6	6	0.075	0.085	0.040	M 3.5	
4.3	8	7.8	0.5	0.25	8	8	0.095	0.100	0.050	M 4	
5.1	9	-	0.5	-	8	-	0.140	0.150	-	M 5	
(5.3)	10	10	0.6	0.3	8	8	0.180	0.200	0.120	M 5*	
6.4	11	11	0.7	0.4	8	10	0.220	0.250	0.200	M 6	
7.4**)	12.5	-	0.8	-	8	-	0.300	0.350	-	M 7	
8.2	14	-	0.8	-	8	-	0.400	0.450	-	M 8	
(8.4)	15	14.5	0.8	0.4	8	10	0.450	0.550	0.400	M 8*	
10.5	18	18	0.9	0.5	9	10	0.800	0.900	0.700	M 10	
12.5	20.5	26	1	0.5	10	10	1.10	1.30	1.20	M 12	
(13.2)	22	-	1	-	10	-	1.30	1.50	-		1/2"
(14.5)	24	29	1	0.6	10	12	1.70	2.00	1.40	M 14	
16.5	26	32	1.2	0.6	12	12	2.10	2.50	1.40	M 16	5/8"
(19)	30	-	1.4	-	12	-	3.50	3.70	-	M 18	
(20)	32	-	1.4	-	12	-	3.60	3.90	-		3/4"
21	33	-	1.4	-	12	-	3.80	4.10	-	M 20	
(23)	36	-	1.5	-	14	-	5.00	6.00	-	M 22	7/8"
25	38	-	1.5	-	14	-	6.00	6.50	-	M 24	
(26)	40	-	1.6	-	14	-	6.30	7.10	-		1"
28	44	-	1.6	-	14	-	8.00	8.50	-	M 27	
31	48	-	1.6	-	14	-	9.00	9.50	-	M 30	1 1/2"

Bracketed sizes should be avoided where possible.

*) Only valid for hexagon screws with the previous widths across flats 9 or 14 mm.

***) Only for automotive engineering purpose

Material : Spring steel (to DIN 17222), HRC = 44 to 49 HV = 410 to 490 kg / mm²