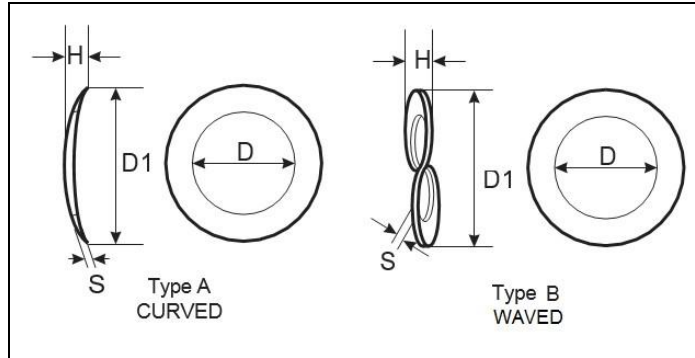




## Product Dimensions and Weights

## DIN 137 Technical Specifications

### Metric DIN 137 Curved & Waved Spring Lock Washers



Dimensions of spring lock washers DIN 137, Waved Type B

Bolt Dia	D	D1	S	H min.	H max.	Weight kg/1000pcs
M3	3.2	8.0	0.5 ± 0.05	0.8	1.6	0.166
M3.5	3.7	8.0	0.5 ± 0.05	0.9	1.8	0.154
M4	4.3	9.0	0.5 ± 0.05	1.0	2.0	0.193
M5	5.3	11.0	0.5 ± 0.05	1.1	2.2	0.286
M6	6.4	12.0	0.5 ± 0.05	1.3	2.6	0.318
M7	7.4	14.0	0.8 ± 0.06	1.5	3.0	0.700
M8	8.4	15.0	0.8 ± 0.06	1.5	3.0	0.762
M10	10.5	21.0	1 ± 0.07	2.1	4.2	2.040
M12	13.0	24.0	1.2 ± 0.07	2.5	5.0	3.010
M14	15.0	28.0	1.6 ± 0.08	3.0	6.0	5.510
M16	17.0	30.0	1.6 ± 0.08	3.2	6.4	6.030
M18	19.0	34.0	1.6 ± 0.08	3.3	6.6	7.840
M20	21.0	36.0	1.6 ± 0.08	3.7	7.4	8.430
M22	23.0	40.0	1.8 ± 0.1	3.9	7.8	11.900
M24	25.0	44.0	1.8 ± 0.1	4.1	8.2	14.500
M27	28.0	50.0	2 ± 0.1	4.7	9.4	21.100
M30	31.0	56.0	2.2 ± 0.1	5.0	10.0	29.500
M33	34.0	60.0	2.2 ± 0.1	5.3	10.6	33.100
M36	37.0	68.0	2.5 ± 0.15	5.8	11.6	50.200

All measurements are in mm



## Dimensions of spring lock washers DIN 137, Waved Type A

Bolt size	D	D1	S		H		Weight kg/1000pcs
			Nominal size	tol.	min.	max.	
M3	3.2	8	0.5	±0.05	0.8	1.6	0.166
M3.5	3.7	8	0.5	±0.05	0.9	1.8	0.154
M4	4.3	9	0.5	±0.05	1	2	0.193
M5	5.3	11	0.5	±0.05	1.1	2.2	0.286
M6	6.4	12	0.5	±0.05	1.3	2.6	0.318
M7	7.4	14	0.8	±0.06	1.5	3	0.7
M8	8.4	15	0.8	±0.06	1.5	3	0.762
M10	10.5	21	1	±0.07	2.1	4.2	2.04
M12	13	24	1.2	±0.07	2.5	5	3.01
M14	15	28	1.6	±0.08	3	6	5.51
M16	17	30	1.6	±0.08	3.2	6.4	6.03
M18	19	34	1.6	±0.08	3.3	6.6	7.84
M20	21	36	1.6	±0.08	3.7	7.4	8.43
M22	23	40	1.8	±0.1	3.9	7.8	11.9
M24	25	44	1.8	±0.1	4.1	8.2	14.5
M27	28	50	2	±0.1	4.7	9.4	21.1
M30	31	56	2.2	±0.1	5	10	29.5
M33	34	60	2.2	±0.1	5.3	10.6	33.1
M36	37	68	2.5	±0.15	5.8	11.6	50.2

All measurements are in mm



Metric DIN 137 Type A and B Spring Lock Washers are specialty spring lock washers – Unlike standard split helical spring lock washers, the DIN 137 lock washers are uninterrupted formed disks in either a curved or waved configuration that are non-directional allowing the screw and or nut to be tightened in a clockwise or counterclockwise manner. When compressed by tightening the nut, the DIN 137 lock washers exert a spring force between the tightened bolt and the substrate creating frictional resistance to rotation. UNIQUE Fasteners offers over 500,000 unique fastener products from stock in inch and metric standard in a variety of materials and finishes. The following sizes of DIN 137 Type A and B Spring Lock Washers are available for immediate shipping from stock: Diameters ranging from M2 to M36 in steel and stainless steel A2 and A4.

DIN (**D**eutsches Institut für **N**ormung - German Institute for Standardization) standards are issued for a variety of components including industrial fasteners as Metric DIN 137 Type A and B Spring Lock Washers. The DIN standards remain common in Germany, Europe and globally even though the transition to ISO standards is taking place. DIN standards continue to be used for parts which do not have ISO equivalents or for which there is no need for standardization as in the case for DIN 137 Type A and B Spring Lock Washers.