

# SW Series of Washers

to sustain Preload &  
Avoid Loosening



## Serrated Safety Washers (Rib washers)

Disc and Belleville Inc. Serrated Safety Washers are ready to fit washer to sustain preload and avoid loosening. When you tighten the screw, the serrations crunch into the mating faces and prevents the screw from loosening up due to vibrations etc. Also the disc shape supports to hold the necessary tension.

They are available in various sizes for Bolts and screws.

Serrated Washers are Disc Springs with Trapezoidal Cross Section on both sides for gripping. The diameters for Serrated Washer are matched to screw dimensions.

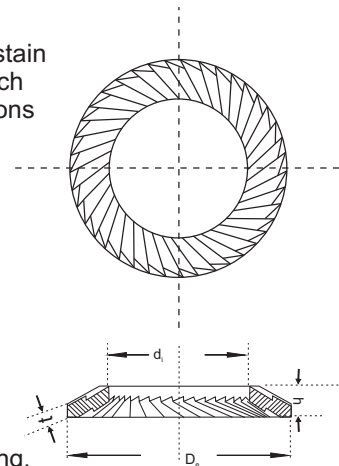
The outer diameter of washer is matched to the head diameter of pan head.

This allows using the Serrated Safety Washers with almost every screw and bolt including recessed heads except countersunk screw.

### The Advantages of Serrated Safety Washers are:

1. Used for high vibration resistance due to positive rib contact.
2. Excellent pretensioning
3. Through proper radius selection, no splitting/cracking occurs during tightening.
4. The concentric force of the washer eliminates the chances of bending the fastener.
5. Extensive application and flexibility.

Disc and Belleville Inc. has ready stock of all the sizes of Serrated Safety Washers.



Part No.	Dimension										For Bolts		Nominal Size (mm)
	Inches					mm					Inch.	Metric	
	D <sub>e</sub>	d <sub>i</sub>	t	h (min)	D <sub>e</sub> (h14)	d <sub>i</sub> (h14)	t	h (max)	h (min)				
SW-030103	0.126	0.067	0.014	0.024	3.20	1.70	0.35	0.60	0.38		1.6	1.60	
SW-040203	0.157	0.087	0.014	0.024	4.00	2.20	0.35	0.60	0.39		2	2.00	
SW-040204	0.189	0.106	0.018	0.035	4.80	2.70	0.45	0.90	0.49		2.5	2.50	
SW-050304	0.217	0.126	0.018	0.035	5.50	3.20	0.45	0.90	0.51	1/8	3	3.00	
SW-060304	0.236	0.146	0.018	0.035	6.00	3.70	0.45	0.90	0.52		3.5	3.50	
SW-070405	0.276	0.169	0.020	0.039	7.00	4.30	0.50	1.00	0.59	5/32	4	4.00	
SW-090506	0.354	0.209	0.024	0.043	9.00	5.30	0.60	1.10	0.73	3/16	5	5.00	
SW-100607	0.394	0.252	0.028	0.047	10.00	6.40	0.70	1.20	0.82		6	6.00	
SW-090607	0.374	0.264	0.028	0.047	9.50	6.70	0.70	1.20	0.79	1/4		6.35	
SW-120707	0.472	0.291	0.028	0.051	12.00	7.40	0.70	1.30	0.89		7	7.00	
SW-130808	0.512	0.331	0.031	0.055	13.00	8.40	0.80	1.40	0.98	5/16	8	8.00	
SW-161010	0.630	0.413	0.039	0.063	16.00	10.50	1.00	1.60	1.21	3/8	10	10.00	
SW-151110	0.626	0.457	0.039	0.063	15.90	11.60	1.00	1.60	1.18	7/16		11.10	
SW-181311	0.709	0.512	0.043	0.067	18.00	13.00	1.10	1.70	1.31		12	12.00	
SW-191311	0.748	0.539	0.043	0.071	19.00	13.70	1.10	1.80	1.33	1/2		12.70	
SW-221512	0.866	0.591	0.047	0.079	22.00	15.00	1.20	2.00	1.52	9/16	14	14.00	
SW-241713	0.945	0.669	0.051	0.083	24.00	17.00	1.30	2.10	1.63	5/8	16	16.00	
SW-271915	1.063	0.748	0.059	0.091	27.00	19.00	1.50	2.30	1.85		18	18.00	
SW-302015	1.181	0.787	0.059	0.098	30.00	20.00	1.50	2.50	1.98	3/4		19.00	
SW-302115	1.181	0.827	0.059	0.098	30.00	21.00	1.50	2.50	1.94		20	20.00	
SW-332315	1.299	0.906	0.059	0.106	33.00	23.00	1.50	2.70	2.08	7/8	22	22.00	
SW-362518	1.417	1.008	0.071	0.114	36.00	25.60	1.80	2.90	2.32		24	24.00	
SW-382720	1.496	1.063	0.079	0.122	38.00	27.00	2.00	3.10	2.52	1		25.40	
SW-392820	1.535	1.126	0.079	0.122	39.00	28.60	2.00	3.10	2.52		27	27.00	
SW-453120	1.772	1.244	0.079	0.142	45.00	31.60	2.00	3.60	2.78	1 1/8	30	30.00	
SW-543825	2.126	1.496	0.098	0.165	54.00	38.00	2.50	4.20	3.38	1 3/8	36	36.00	