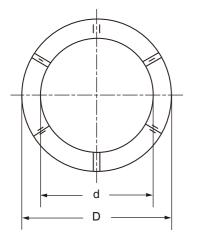
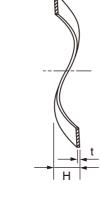
### Wave Washer





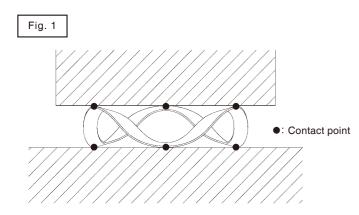
Unit: mm

Size No.	d		D		ŀ	1	t		
Size No.	Basic	Tol.	Basic	Tol.	Basic	Tol.	Basic	Tol.	
WW- 4	4.3	+0.3 - 0.15	8	0 -0.5	1.5	+0.5 0 +0.7 0	0.2	±0.02	
5	5.4		9		1.5		0.3		
6	6.4		11		1.5		0.3	±0.025 ±0.03	
8	8.5		12.5		2		0.3		
10	10.5		14.5		2		0.3		
12	12.5		17		2.5		0.3		
14	14.5		20		2.5		0.3		
16	16.7		22.5		2.5		0.3		
18	18.7		26		3		0.3		
20	20.7		29.1		3		0.3		
23	23.5		31	0 -0.8	3.5	+1 - +1 0.5	0.3		
26	26.4	+0.5	34.2		3.5		0.3		
30	30.4	-0.3	39.3		3.5		0.3		
32	33.9		46		4.5		0.3		
38	39		51		5		0.3		
40	40.6		53.5	0 1.2	5		0.3		
46	47.5	+0.7 -0.5	61		5.5		0.4		
50	51.4		67.5		5.5		0.4		
53	54		69.8		6		0.45		
60	61.9		79		6.5		0.45		

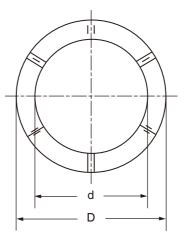
Material = Carbon spring steel Hardness = 40 through 50HRC, Finish = Phosphate coating (ACP)

#### Notes

- 1. The value d is the diameter of inscribed circle. The value D is the diameter of circumscribed circle.
- 2. The value H is a dimension when three threads are flush with each other with parallel two planes compressed (see Fig. 1).
- 3. Our products with little marketability may not be in stock. When employing our products, consult with us for their availability.



# Wave Washer for Bearing



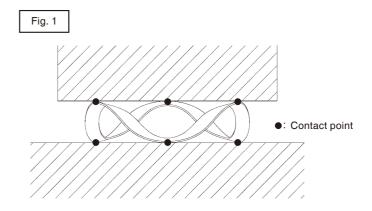
Size No.	Bearing outer diameter	d	D	н	t	Applicable bearing No.					
BWW- 624	13	8.8	12.8	1.5	0.15	695		624	633		
625	16	12	15	2	0.15			625	634		
626	19	12.7	18.1	2.5	0.2	698	607	626	635		
608	22	14.5	21	2.4	0.2	6900	608	627	636		
629	26	19.5	24.8	3.2	0.2		6000	629	637		
6001	28	20.9	26.9	3	0.25	6902	6001		638		
6200	30	22	28.5	4.1	0.25	6903		6200	639		
6201	32	23.5	30.5	4	0.25		6002	6201			
6202	35	26.4	33.9	3.5	0.3		6003	6202	6300		
6203	40	29.8	38.3	5	0.3			6203			
6302	42	30.1	40.6	4.5	0.3	6905	6004		6302		
6303	47	33.7	45.5	5	0.3	6906	6005	6204	6303		
6304	52	38.5	50	7.2	0.3			6205	6304		
6305	62	47.2	60.2	6.5	0.4	6908	6007	6206	6305	6403	
6306	72	55	70.5	7	0.45	6910		6207	6306	6404	
6307	80	61.3	77.8	8.5	0.45	6911	6010	6208	6307	6405	
6308	90	69	88.5	7	0.6	6913	6011	6210	6308	6406	
6309	100	79.3	98.8	6.5	0.7	6914	6013	6211	6309	6407	
6310	110	88.9	108.9	8	0.8	6916	6014	6212	6310	6408	
6311	120	95.8	118.9	8.5	0.8	6917		6213	6311	6409	
6312	130	108.3	128.3	11	0.8	6919	6017	6215	6312	6410	
6313	140	112.4	138.4	11	0.8	6920	6018	6216	6313	6411	

Material = Carbon spring steel Hardness = 40 through 50HRC, Finish = Phosphate coating (ACP)

#### Notes

1. The value d is the diameter of inscribed circle. The value D is the diameter of circumscribed circle. 2. The value H is a dimension when three threads are flush with each other with parallel two planes compressed (see Fig. 1).

3. Our products with little marketability may not be in stock. When employing our products, consult with us for their availability.







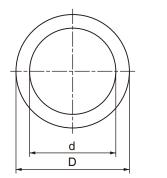


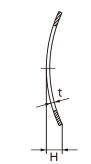
Unit: mm

RETAINING RINGS

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# Curved Washer





Unit: mm

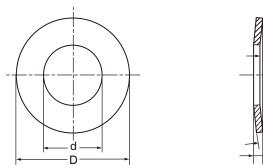
Size No. –	C	b	[	C	ŀ	+	
	Basic	Tol.	Basic	Tol.	Basic	Tol.	L .
MB-4301	4.3	+0.2	6.8	-	1	±0.2	0.15
4302	4.3	+0.3	8	±0.2	1.2	±0.2	0.3
5011	5		7.9	+0.05 -0.15	1.2	±0.15	0.15
5301	5.3	±0.2	10	±0.2	1.4	±0.2	0.3
6203	6.2	0.2	11		1.4		0.15
6301	6.3		11		1.5		0.4

Material = Carbon spring steel Hardness = 40 through 50HRC, Finish = Phosphate coating (ACP)

#### Notes

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# **Dish Spring**





Unit: mm

	d		D			H (For he	eavy duty)		L (For light duty)			
Size No.		ŭ		U		t		h+t	t		h	h+t
	Basic	Tol.	Basic	Tol.	Basic	Tol.	(Approx.)	(Approx.)	Basic	Tol.	(Approx.)	(Approx.)
DB- 4	4.2		8	±0.3 0.4 0.5 0.7	0.4	±0.03	0.2	0.6	0.3	±0.025	0.25	0.55
5	5.2		10		0.5	±0.03	0.25	0.75	0.4		0.3	0.7
6	6.2	+0.3	12.5		±0.04	0.3	1	0.5	±0.03	0.35	0.85	
7	7.2	-0.1	14	-0.0	0.8	±0.04	0.3	1.1	0.5		0.4	0.9
8	8.2		16		0.9		0.35	1.25	0.6	±0.04	0.45	1.05
9	9.2		18		1		0.4	1.4	0.7		0.5	1.2
10	10.2	+0.4	20	1 ±0.4		0.45	1.45	0.8	-0.04	0.55	1.35	
11	11.2		22.5			0.5	1.7	0.8		0.65	1.45	
12	12.2		25	-0.4	1.5	±0.06	0.55	2.05	0.9	±0.05	0.7	1.6
14	14.2		28		1.5		0.65	2.15	1		0.8	1.8
16	16.3		31.5	1.75		0.7	2.45	1.2	ĺ	0.9	2.1	
18	18.3		35.5		2	±0.07 ±0.08 ±0.09	0.8	2.8	1.2	±0.06 ±0.07	1	2.2
20	20.4	+0.5	40	±0.5	2		0.9	2.9	1.5		1.15	2.65
22	22.4	-0.2	45	-0.0	2.5		1	3.5	1.75		1.3	3.05
25	25.4		50		3		1.1	4.1	2		1.4	3.4
28	28.5		56		3		1.3	4.3	2		1.6	3.6
30	31		63		3.5	-0.00	1.4	4.9	2.5	±0.08	1.75	4.25
35	36	+0.6 -0.4	71	±0.6	4		1.6	5.6	2.5		2	4.5
40	41		80	-0.0	5	±0.15	1.7	6.7	3	±0.09	2.3	5.3
45	46		91		5		2	7	3.5		2.5	6
50	51	±0.7	100	±0.7	6		2.2	8.2	3.5		2.8	6.3

Material = Carbon spring steel Hardness = 40 through 50HRC, Finish = Phosphate coating (ACP)

### Notes

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