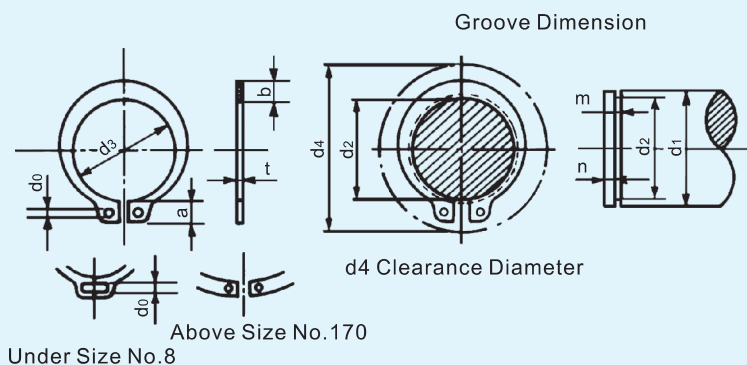




Retaining Rings (External)

(JIS B 2804)



Unit:mm

Size-No.	Ring dimension							Ref. d4	Groove dimension				
	d3		t		b	a	d0		d1	d2		m	
	Basic	Tol.	Basic	Tol.	Approx.	Approx.	Min			Basic	Tol.	Basic	Tol.
STW- *3x0.25t	2.7		0.25	±0.025	0.5	1.7	0.7	7.0	3	2.85		0.35	
*3x0.30t	2.7	+0.04	0.30	±0.025	0.5	1.7	0.7	7.0	3	2.85	+0	0.35	
*4	3.7	-0.15	0.40	±0.03	0.9	2.2	0.8	9.0	4	3.80	-0.04	0.50	0.3
*5	4.7		0.60		1.1	2.4		10.5	5	4.80		0.70	
*6	5.6		0.70		1.3	2.8		12.0	6	5.70		0.80	0.5
*7	6.5	+0.10	0.80		1.4	3.0	1.0	14.0	7	6.70	+0	0.90	
*8	7.4	-0.20			1.6	3.0		15.0	8	7.60	-0.06		0.6
*9	8.4				1.8	3.2		16.0	9	8.60			
*10	9.3	±0.15			1.8	3.0	1.5	17.0	10	9.60	±0.09		
*11	10.2			±0.04	2.0	3.1		18.0	11	10.50			
*12	11.1				2.1	3.2		19.0	12	11.50			
*13	12.0		1.00		2.1	3.3		20.0	13	12.40		1.15	
*14	12.9				2.2	3.4		22.0	14	13.40	+0		
*15	13.8	±0.18			2.2	3.5	1.7	23.0	15	14.30	-0.11		
16	14.7				2.2	3.6		24.0	16	15.20			
17	15.7				2.2	3.7		25.0	17	16.20			
18	16.5				2.6	3.8		26.0	18	17.00			
19	17.5				2.7	3.8		27.0	19	18.00			
20	18.5				2.7	3.9		28.0	20	19.00			
21	19.5				2.7	4.0		30.0	21	20.00			
22	20.5		1.20		2.7	4.1		31.0	22	21.00			
*23	21.4				2.9	4.5		32.5	23	22.00		1.35	
24	22.2				3.1	4.2		33.0	24	22.90	+0		1.5
25	23.2				3.1	4.3	2.0	34.0	25	23.90	-0.21		
26	24.2	±0.20		±0.05	3.1	4.4		35.0	26	24.90			
*27	25.0				3.3	4.5		36.0	27	25.80			
28	25.9				3.1	4.6		38.0	28	26.60			
29	26.9				3.5	4.7		39.0	29	27.60		1.65	0.14
30	27.9				3.5	4.8		40.0	30	28.60			0
*31	28.8		1.50		3.5	4.9	2.5	41.5	31	29.50			
32	29.6				3.5	5.0		43.0	32	30.30			
*33	30.6				3.9	5.0		44.0	33	31.30			
34	31.5				4.0	5.3		45.0	34	32.30			
35	32.2	±0.25			4.0	5.4		46.0	35	33.00			
36	33.2				4.0	5.4	2.5	47.0	36	34.00			
*37	34.2				4.2	5.8		49.5	37	35.00			
38	35.2				4.5	5.6		50.0	38	36.00			
*39	36.1				4.5	5.7		51.5	39	37.00			
40	37.0				4.5	5.8		53.0	40	38.00	+0		
*41	37.8				4.5	6.1	2.9	54.0	41	38.80	-0.25		
42	38.5		1.75	±0.06	4.5	6.2	2.5	55.0	42	39.50		1.90	2.0
*43	39.5				4.6	6.7	2.8	56.0	43	40.50			
*44	40.5	±0.40			4.7	6.7		57.0	44	41.50			
45	41.5				4.8	6.3		58.0	45	42.50			
*46	42.5				5.0	6.4		59.0	46	43.50			
*47	43.4				5.0	6.6	2.5	61.0	47	44.50			
48	44.5				4.8	6.5		62.0	48	45.50			
*49	45.1				4.9	6.6		63.0	49	46.20			

Unit:mm

Size-No.	Ring dimension							Ref. d4	Groove dimension									
	d3		t		b	a	d0		d1	d2		m		Ref.n				
	Basic	Tol.	Basic	Tol.	Approx.	Approx.	Min			Basic	Tol.	Basic	Tol.	Min				
STW-50	45.8	±0.40	2.0	±0.06	5.0	6.7	2.5	64	50	47.0	0	2.2	+0.14 0	2.0				
52	47.8				5.0	6.8		66	52	49.0	±0.25							
*54	49.8	5.0			7.0	69		54	51.0	0 -0.30								
55	50.8	5.0			7.0	70		55	52.0									
56	51.8	5.0			7.0	71		56	53.0									
58	53.8	5.5			7.1	73		58	55.0									
60	55.8	5.5			7.2	75		60	57.0									
62	57.8	5.5			7.2	77		62	59.0									
63	58.8	5.5			7.3	78		63	60.0									
65	60.8	±0.45	2.5	±0.06	6.4	7.4		81	65	62.0	2.7	+0.18 0	2.5					
68	63.5				6.4	7.8		84	68	65.0								
70	65.5				6.4	7.8		86	70	67.0								
72	67.5				7.0	7.9		88	72	69.0								
75	70.5				7.0	7.9		92	75	72.0								
78	73.5				7.4	8.1		95	78	75.0								
80	74.5				7.4	8.2		97	80	76.5								
82	76.5				7.4	8.3		99	82	78.5								
85	79.5				±0.55	3.0	±0.07	8.0	8.4	103				85	81.5	3.2	+0.20 0	3.0
88	82.5	8.0	8.6	106				88	84.5	0 -0.35								
90	84.5	8.0	8.7	108				90	86.5									
95	89.5	8.6	9.1	114				95	91.5									
100	94.5	9.0	9.5	119				100	96.5	0 -0.54	4.2	+0.25 0	4.0					
105	98.0	9.5	9.8	125				105	101.0									
110	103.0	9.5	10.0	131				110	106.0									
115	108.0	9.5	10.5	137				115	111.0	0 -0.63				6.0	7.5			
120	113.0	10.3	10.9	143				120	116.0									
125	118.0	10.3	11.3	148	125	121.0												
130	123.0	11.0	11.5	154	130	126.0												
135	128.0	11.0	11.5	159	135	131.0												
140	133.0	11.0	11.8	164	140	136.0												
145	138.0	11.6	11.8	170	145	141.0												
150	142.0	11.6	12.3	175	150	145.0												
155	146.0	+0.63 -1.26	4.0	±0.09	12.2	12.7	181	155	150.0		4.2	+0.25 0	9.0					
160	151.0				12.2	12.9	186	160	155.0									
165	155.5				12.9	13.1	192	165	160.0									
170	160.5				12.9	—	197	170	165.0									
175	165.5				12.9	—	202	175	170.0									
180	170.5				13.5	—	208	180	175.0									
185	175.5				13.5	—	213	185	180.0									
190	180.5				14.0	—	219	190	185.0									
195	185.5				14.0	—	224	195	190.0									
200	190.5	+0.72 -1.44	5.0	±0.15	14.0	—	229	200	195.0	5.2	+0.25 0	12.0						
210	198.0				14.0	—	239	210	204.0									
220	208.0				14.0	—	249	220	214.0									
230	218.0				14.0	—	259	230	224.0									
240	228.0				14.0	—	269	240	234.0									
250	238.0				14.0	—	279	250	244.0									
260	245.0				16.0	—	293	260	252.0									
270	255.0				16.0	—	303	270	262.0									
280	265.0				16.0	—	313	280	272.0									
290	275.0	+0.81 -1.62	5.0	±0.15	16.0	—	323	290	282.0	5.2	+0.25 0	12.0						
300	285.0				16.0	—	333	300	292.0									

Material = Carbon spring steel / Stainless spring steel (SUS#420)
Hardness = HRC 44~52
Finish = Black oxide / phosphate (ACP)

材質 = 碳鋼 / 不銹鋼 (SUS#420)
硬度 = HRC44~52
表面處理 = 染黑 / 磷酸鹽