

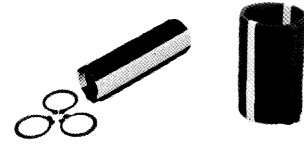
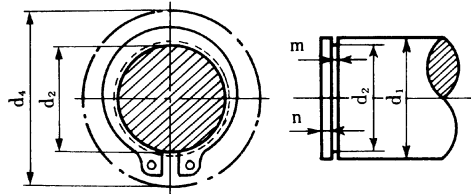
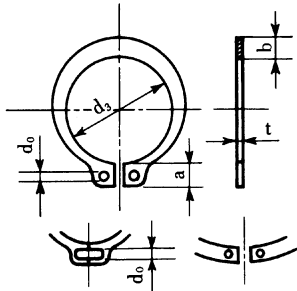
Retaining Rings (External)

JIS B 2804

(JAPANESE INDUSTRIAL STANDARD)

S-PACK

Groove Dimension



The dimension d_4 is the maximum diameter of outer periphery when the retaining ring is set on the shaft.

d_4 : CLEARANCE DIAMETER

STW-rings can be supplied in tape wrapped or banded.

Size No. 10 through 48 tape wrapped.

Size No. 50 through 125 tape wrapped or banded.

Under Size No.9 Above Size No.170

Unit : mm

Size-No.	Ring dimension								Ref. d_4	Groove dimension						Ref.n Min.
	d_3		t		b	a	d_0	d_1		d_2		m				
	Basic	Tol.	Basic	Tol.	Approx.	Approx.	Min.			Basic	Tol.	Basic	Tol.			
STW-※ 3	2.7	+0.04 -0.15	0.25	±0.025	0.5	1.7	0.7	7	3	2.85	0 -0.04	0.35	+0.1 0	0.3		
※ 4	3.7		0.4	±0.03	0.9	2.2	0.8	9	4	3.8		0.5				
※ 5	4.7		0.6	±0.04	1.1	2.4		10.5	5	4.8		0.7				
※ 6	5.6	+0.06 -0.2	0.7		1.3	2.8	1	12	6	5.7		0.8		0.5		
※ 7	6.5		0.8		1.4	3		14	7	6.7	0 -0.06	0.9		0.6		
※ 8	7.4				1.6	3		15	8	7.6						
※ 9	8.4		1	±0.05	1.8	3.2		16	9	8.6		1.15	+0.14 0			
※ 10	9.3	±0.15			1.8	3	1.2	17	10	9.6	0 -0.09			1.5		
※ 11	10.2				2	3.1		18	11	10.5	0 -0.11					
※ 12	11.1	±0.18			2.1	3.2	1.5	19	12	11.5						
※ 13	12				2.1	3.3		20	13	12.4						
※ 14	12.9				2.2	3.4	1.7	22	14	13.4						
※ 15	13.8				2.2	3.5		23	15	14.3						
16	14.7				2.2	3.6		24	16	15.2						
17	15.7				2.2	3.7		25	17	16.2						
18	16.5		1.2	±0.06	2.6	3.8		26	18	17		1.35				
19	17.5				2.7	3.8	2	27	19	18						
20	18.5	±0.2			2.7	3.9		28	20	19	0 -0.21					
21	19.5				2.7	4		30	21	20						
22	20.5				2.7	4.1		31	22	21						
※ 23	21.4				2.9	4.5		32.5	23	22						
24	22.2				3.1	4.2		33	24	22.9						
25	23.2				3.1	4.3		34	25	23.9						
26	24.2				3.1	4.4		35	26	24.9						
※ 27	25				3.3	4.5		36	27	25.8						
28	25.9		1.5		3.1	4.6		38	28	26.6		1.65				
29	26.9				3.5	4.7		39	29	27.6						
30	27.9				3.5	4.8		40	30	28.6						
32	29.6				3.5	5	2.5	43	32	30.3	0 -0.25					
34	31.5	±0.25			4	5.3		45	34	32.3						
35	32.2				4	5.4		46	35	33						
○ 36	33.2		1.75	±0.07	4	5.4		47	36	34		1.9		2		
○ 38	35.2				4.5	5.6		50	38	36						
○ 40	37	±0.4			4.5	5.8		53	40	38						
○ 42	38.5				4.5	6.2		55	42	39.5						
○ 45	41.5				4.8	6.3		58	45	42.5						
※ 47	43.4				5	6.6		61	47	44.5						
○ 48	44.5				4.8	6.5		62	48	45.5						
50	45.8		2		5	6.7		64	50	47		2.2				
52	47.8				5	6.8		66	52	49						
55	50.8	±0.45			5	7		70	55	52	0 -0.3					
56	51.8				5	7		71	56	53						

Unit : mm

Size-No.	Ring dimension							Ref. d ₄	Groove dimension						Ref.n Min.							
	d _s		t		b	a	d _o		d ₁	d ₂		m										
	Basic	Tol.	Basic	Tol.	Approx.	Approx.	Min.			Basic	Tol.	Basic	Tol.									
S T W	58	53.8	±0.45	2	±0.07	5.5	7.1	2.5	73	58	55	0 -0.3	2.2	+0.14 0	2							
	60	55.8					5.5		7.2	75	60					57						
	62	57.8				5.5	7.2	77	62	59												
	63	58.8				5.5	7.3	78	63	60												
	65	60.8		2.5	±0.08	6.4	7.4	3	81	65	62	2.7			2.5							
	68	63.5							6.4	7.8	84					68	65					
	70	65.5							6.4	7.8	86					70	67					
	72	67.5							7	7.9	88					72	69					
	75	70.5							7	7.9	92					75	72					
	78	73.5							7.4	8.1	95					78	75					
	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				3	±0.09		8	8.4	3.5					103	85	81.5	0 -0.35	3.2	+0.18 0	3
	88	82.5	±0.55													8	8.6	106				
	90	84.5						8	8.7	108		90	86.5									
	95	89.5						8.6	9.1	114		95	91.5									
	100	94.5						9	9.5	119		100	96.5									
	105	98		4				9.5	9.8	4		125	105	101	0 -0.54	4.2		4				
	110	103						9.5	10		131	110	106									
	115	108						9.5	10.5		137	115	111									
	120	113						10.3	10.9		143	120	116									
	125	118						10.3	11.3		148	125	121									
	130	123	+0.63 -1.26					11	11.5		154	130	126									
	135	128						11	11.5		159	135	131									
	140	133						11	11.8		164	140	136									
	145	138						11.6	11.8		170	145	141									
	150	142						11.6	12.3		175	150	145									
	155	146				12.2	12.7	181	155	150												
	160	151				12.2	12.9	186	160	155												
	165	155.5				12.9	13.1	192	165	160												
	170	160.5				12.9	—	197	170	165												
	175	165.5				12.9	—	202	175	170												
	180	170.5				13.5	—	208	180	175												
185	175.5	+0.72 -1.44			13.5	—	213	185	180													
190	180.5				14	—	219	190	185													
195	185.5				14	—	224	195	190													
200	190.5				14	—	229	200	195													
210	198		5	±0.15	14	—	4	239	210	204	0 -0.72	5.2	+0.25 0	9								
220	208							14	—	249					220	214						
230	218							14	—	259					230	224						
240	228							14	—	269					240	234						
250	238							14	—	279					250	244						
260	245							16	—	293					260	252						
270	255	+0.81 -1.62						16	—	303					270	262						
280	265							16	—	313					280	272						
290	275							16	—	323					290	282						
300	285							16	—	333					300	292						

●Material=Carbon spring steel. Hardness=HRC44~52. Finish=Phosphate coating, Zinc plate plus Chromate.

●Material=Stainless spring steel.

Note; ※mark and size No.130 above are according to our company's specification.

○mark is old JIS.