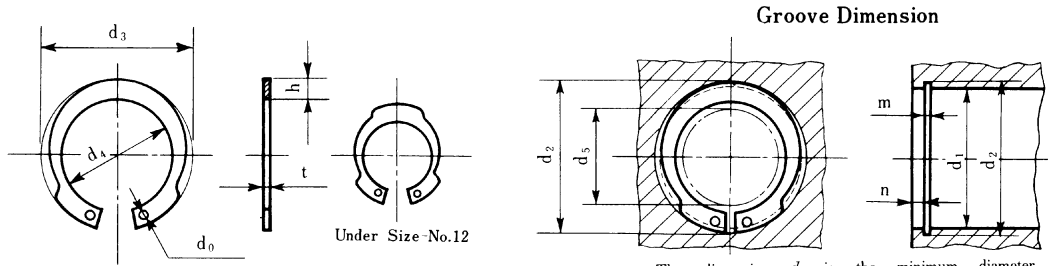


## Inverted Retaining Rings ( Internal )



Under Size-No.12

The dimension  $d_5$  is the minimum diameter of inner periphery when the retaining ring is set in the hole.  
 $d_5$ : CLEARANCE DIAMETER

Unit : mm

Size-No.	Ring dimension									Groove dimension						
	$d_s$		$d_4$	$t$		$h$	$d_0$	Gen. Tol.	$d_s$	$d_1$	$d_2$		$m$	$n$		
	Basic	Tol.		Basic	Tol.						Basic	Tol.			Basic	Tol.
IRTW - 10	11.1	±0.18	7.7	1	±0.05	1.7	0.9	+0.3	5.9	10	10.4	+0.11	1.15	+0.14	1.5	
11	12.2		8.6			1.8			6.6	11	11.4	0		0		
12	13.3		9.7			1.8			7.6	12	12.5					
13	14.1		10.9			1.6			9	13	13.6					
14	15.1		11.7			1.7			9.8	14	14.6					
15	16.2		12.6			1.8			10.6	15	15.7					
16	17.3		13.5			1.9			11.4	16	16.8					
17	18.3	±0.2	14.3			2			12.2	17	17.8					
18	19.5		15.3			2.1	1		13	18	19	+0.21				
19	20.5		16.1			2.2			13.8	19	20	0				
20	21.5		16.9			2.3			14.5	20	21					
21	22.5		17.7			2.4	1.2	+0.4	15	21	22					
22	23.5		18.7			2.4			16	22	23					
24	25.9		20.7	1.2	±0.06	2.6			17.5	24	25.2		1.35			
25	26.9		21.5			2.7			18.5	25	26.2					
26	27.9		22.3			2.8			19	26	27.2					
28	30.1	±0.25	24.1			3			20.5	28	29.4					
30	32.1		25.7			3.2	1.4		22.5	30	31.4	+0.25				
32	34.4		27.4			3.5	1.6		23.5	32	33.7	0				
34	36.5		29.1	1.5		3.7			25	34	35.7		1.65		2	
35	37.8		30			3.9			26	35	37					
36	38.8		30.8			4			26.5	36	38					
37	39.8		31.6			4.1			27.5	37	39					
38	40.8		32.4			4.2			28	38	40					
40	43.5	±0.4	34.7	1.75	±0.07	4.4	2		30	40	42.5		1.9			
42	45.5		36.3			4.6		+0.5	31	42	44.5					
45	48.5		38.9			4.8			33	45	47.5					
47	50.5	±0.45	40.7			4.9			35	47	49.5					
48	51.5		41.5			5			36	48	50.5	+0.3				
50	54.2		44	2		5.1	2.2		38	50	53	0	2.2			
52	56.2		45.8			5.2			40	52	55					
55	59.2		48			5.6			42	55	58					
56	60.2		48.8			5.7	2.5		43	56	59					
58	62.2		50.4			5.9			44	58	61					
60	64.2		52			6.1			46	60	63					
62	66.2		53.6			6.3	2.8		47	62	65					
63	67.2		54.4			6.4			48	63	66					
65	69.2		55.8	2.5	±0.08	6.7	3.2		49	65	68		2.7		2.5	
68	72.5		58.5			7			52	68	71					
70	74.5		60.1			7.2			53	70	73					
72	76.5		61.7			7.4		±0.7	55	72	75					
75	79.5		63.9			7.8			57	75	78					
78	82.5	±0.55	66.3			8.1			59	78	81	+0.35				
80	85.5		68.9			8.3			61	80	83.5	0				
• 82	87.5		70.5			8.5			62	82	85.5					
85	90.5		72.7	3	±0.09	8.9	4		64	85	88.5		3.2	+0.18	3	
• 88	93.5		75.1			9.2			67	88	91.5			0		
90	95.5		76.7			9.4			68	90	93.5					
• 92	97.5		78.3			9.6			70	92	95.5					
• 95	100.5		80.5			10			72	95	98.5					
• 98	103.5		82.9			10.3			75	98	101.5					
100	105.5		84.5			10.5			76	100	103.5					

●Material=Carbon spring steel. Hardness=HRC44~52. Finish=Phosphate coating, Zinc plate plus Chromate.  
 Note; Enquire these sizes of '•' mark before you formally order it.