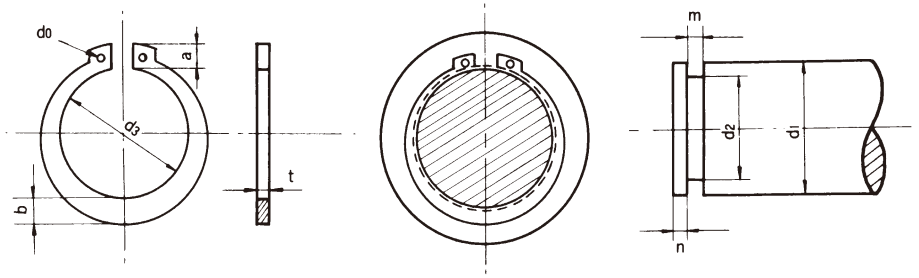


# C-Type Retaining Rings for Shafts (Nominals $\phi 10 - \phi 63$ )

JIS B 2804 (Ref.)



Unit: mm

Dimensions Codes	Nominals $d_1$	Dimensions of Retaining Rings							Thrust Loading Allowance (Ref.) kN	Groove Dimensions (Ref.)							
		$d_3$		t		b	a	$d_0$		$d_2$		m		n			
		Basic	Tolerance	Basic	Tolerance	Approx.	Approx.	Min.		Basic	Tolerance	Basic	Tolerance	Min.			
18010	10	9.3	±0.15	1	±0.05	1.6	3	1.2	4.81	9.6	1.15	1.5	1.5				
18011	11	10.2				1.8	3.1		1.5	5.27				10.5			
18012	12	11.1	±0.18			1.7	3.2	1.5	5.69	11.5							
18013	13	12					3.3		6.41	12.4							
18014	14	12.9	±0.11			1.7	2	1.7	6.86	13.4							
18015	15	13.8					2.1		3.5	7.41				14.3			
18016	16	14.7	±0.2			1.2	±0.06	2.2	3.6	2				8.24	15.2	1.35	1.5
18017	17	15.7						2.6	3.7					8.39	16.2		
18018	18	16.5	±0.2			1.2	±0.06	3.1	3.8	2				10.71	17	1.65	1.5
18019	19	17.5							2.7					3.8	11.22		
18020	20	18.5	±0.25	1.5	±0.06	3.1	3.9	2	11.61	19	1.90	2					
18021	21	19.5					4		12.16	20							
18022	22	20.5	±0.4	1.75	±0.07	4	4.1	2.5	12.94	21	2.2	2					
18024	24	22.2					4.2		4.3	13.89			22.9				
18025	25	23.2	±0.25	1.75	±0.07	4	4.3	2.5	14.51	23.9	1.90	2					
18026	26	24.2					4.4		14.98	24.9							
18028	28	25.9	±0.4	1.75	±0.07	4.5	4.6	2.5	14.98	24.9	1.90	2					
18029	29	26.9					4.7		21.14	27.6							
18030	30	27.9	±0.25	1.5	±0.06	3.5	4.8	2.5	21.93	28.6	1.65	1.5					
18032	32	29.6					5		23.14	30.3							
18034	34	31.5	±0.25	1.5	±0.06	4	5.3	2.5	24.63	32.3	1.65	1.5					
18035	35	32.2					5.4		25.50	33							
18036	36	33.2	±0.4	1.75	±0.07	4.5	5.4	2.5	31.38	34	1.90	2					
18038	38	35.2					5.6		32.17	36							
18040	40	37.0	±0.4	1.75	±0.07	4.5	5.8	2.5	33.73	38	1.90	2					
18042	42	38.5					6.2		36.48	39.5							
18045	45	41.5	±0.45	2	±0.07	4.8	6.3	2.5	37.78	42.5	2.2	2					
18048	48	44.5					6.5		40.80	45.5							
18050	50	45.8	±0.45	2	±0.07	5	6.7	2.5	48.05	47	2.2	2					
18052	52	47.8					6.8		50.21	49							
18055	55	50.8	±0.45	2	±0.07	5	7	2.5	53.35	52	2.2	2					
18056	56	51.8					7		54.52	53							
18058	58	53.8	±0.45	2	±0.07	5.5	7.1	2.5	56.09	55	2.2	2					
18060	60	55.8					7.2		57.66	57							
18062	62	57.8	±0.45	2	±0.07	5.5	7.2	2.5	60.41	59	2.2	2					
18063	63	58.8					7.3		61.19	60							

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Unit: mm

Dimensions Codes	Nominals $d_1$	Dimensions of Retaining Rings							Thrust Loading Allowance (Ref.) kN	Groove Dimensions (Ref.)												
		$d_s$		t		b	a	$d_0$		$d_2$		m		n								
		Basic	Tolerance	Basic	Tolerance	Approx.	Approx.	Min.		Basic	Tolerance	Basic	Tolerance	Min.								
18065	65	60.8	±0.45	2.5	±0.08	6.4	7.4	2.5	79.24	62	0 -0.3	2.7	+0.14 0	2.5								
18068	68	63.5					7.8		81.20	65												
18070	70	65.5					7.8		83.94	67												
18072	72	67.5					7.9		87.08	69												
18075	75	70.5				7.9	90.22		72													
18078	78	73.5				8.1	94.14		75													
18080	80	74.5				8.2	96.50		76.5													
18082	82	76.5				8.3	98.85		78.5													
18085	85	79.5				8.4	122.39		81.5													
18088	88	82.5				±0.55	3		±0.09	8					8.6	3	127.09	84.5	0 -0.35	3.2		3
18090	90	84.5	8.7	130.23	86.5																	
18095	95	89.5	8.6	138.86	91.5																	
18100	100	94.5	9	142.00	96.5																	
18105	105	98.0	9.8	200.84	101																	
18110	110	103	10	211.82	106																	
18115	115	108	10.5	221.24	111																	
18120	120	113	10.9	231.44	116																	
18125	125	118	11.3	240.07	121																	
18130	130	123	11.5	252.62	126																	
18135	135	128	±0.63 -1.26	4	±0.10	11	11.5	3.5	258.90	131	0 -0.63	4.2		6								
18140	140	133				11.8	271.45		136													
18145	145	138				11.6	279.29		141													
18150	150	142				12.3	290.28		145													
18155	155	146				12.2	299.69		150													
18160	160	151				12.9	307.54		155													
18165	165	155.5				13.1	320.09		160													
18170	170	160.5				12.9	333.43		165													
18175	175	165.5				±0.72 -1.44	4		±0.10	13.5					337.35	4.0	337.35	170	0 -0.72	7.5		7.5
18180	180	170.5													13.5		345.19	175				
18185	185	175.5	13.5	356.96	180																	
18190	190	180.5	14	368.73	185																	
18195	195	185.5	14	376.58	190																	
18200	200	190.5		388.34	195																	

Remarks: 1. Allowable thrust load varies according to the material types and hardness of mating axial components, and also with the shear strength of retaining rings.  
2. Allowable thrust load is calculated with safety factor 4.

Notes: The stainless steel products that deviate from the JIS standard (JIS G 4313: Cold Rolled Stainless Steel Strip for Springs) in thickness are classified into SUS304-CSP.

Product code	118	Material code	02...SUS304-CSP		Part Number Structure (Standardized Product Code)				
					Product	Surface	Material		
Surface code	01...Burnished		Hardness	HRC 37 - 46					