



Unit : mm

Dimensions Code	Nominals	Applicable Shafts d ₁	Dimensions of Retaining Rings						Groove Dimensions (Ref.)										
			Internal Diameter d		External Diameter D		H	Thickness t		b Approx.	Groove Diameter D	Groove Width m	n Min.						
11008	0.8	1~1.4	0.8	⁰ / _{-0.08}	2	±0.1	0.7	0	0.2	±0.02	0.3	0.8	^{+0.05} / ₀	0.3	^{+0.05} / ₀	0.4			
※ 11012	1.2	1.4~2	1.2	⁰ / _{-0.09}	3	±0.2	1		0.3	±0.025	0.4	1.2	^{+0.06} / ₀	0.4		0.4	0.6		
※ 11015	1.5	2~2.5	1.5		4		1.3		0.4	±0.03	0.6	1.5		0.5			0.8		
※ 11020	2	2.5~3.2	2		5		1.7	0.4	0.7		2	0.5		1					
※ 11025	2.5	3.2~4	2.5		6		2.1	0.4	0.8	2.5	0.5	1							
※ 11030	3	4~5	3	7	2.6	0.6	0	±0.04	0.9	3	0.7	^{+0.075} / ₀	0.7	^{+0.1} / ₀	1				
※ 11040	4	5~7	4	9	3.5	0.6			1.1	4	0.7				1.2				
※ 11050	5	6~8	5	⁰ / _{-0.12}	11	4.3			⁰ / _{-0.3}	0.6	1.2				5	0.7	1.2		
※ 11060	6	7~9	6	12	5.2	0.8	⁰ / _{-0.35}	±0.04	1.4	6	0.9	^{+0.09} / ₀	0.9	^{+0.1} / ₀	1.2				
※ 11070	7	8~11	7	14	6.1	0.8			1.6	7	0.9				1.5				
※ 11080	8	9~12	8	16	6.9	0.8			1.8	8	0.9				1.8				
※ 11090	9	10~14	9	18	7.8	0.8	⁰ / _{-0.45}	±0.06	2.0	9	0.9	^{+0.13} / ₀	0.9	^{+0.14} / ₀	2				
※ 11100	10	11~15	10	20	8.7	1			±0.05	2.2	10				1.15	1.15	1.65	3.5	2
11120	12	13~18	12	⁰ / _{-0.18}	23	10.4				1	2.4				12				^{+0.11} / ₀
11150	15	16~24	15	29	13	1.5	±0.06	2.8	15	1.65	^{+0.14} / ₀	1.65	3	3.5					
11190	19	20~31	19	37	16.5	1.5		4.0	19	1.65					3.5				
11240	24	25~38	24	⁰ / _{-0.21}	44	20.8		⁰ / _{-0.5}	2	±0.07					5.0	24	2.2	4	

NOTES ※: Stacked package versions are also available (product code is 245 and first two digit of dimensions code change into 45)

Product code	211	Material code	70...Spring Steel	Part Number Structure (Standardized Product Code)											
				Product	Surface	Material	Dimensions code								
Surface code	03...Temper Color 05...Phosphate Coating 30...Ep-Fe / Zn 5 / trivalent CM 2 (trivalent chromate)	Hardness	HRC 44 ~ 53	②	①	①	⑦	⑦	①	①	①	①	①	①	①