



Unit: mm

Dimensions Codes	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	$\begin{matrix} 0 \\ -0.08 \end{matrix}$	2	±0.1	0.7	0	±0.02	0.3	0.8	$\begin{matrix} +0.05 \\ 0 \end{matrix}$	0.3	0.4
※ 11012	1.2	1.4~2	1.2	$\begin{matrix} 0 \\ -0.09 \end{matrix}$	3		1							
※ 11015	1.5	2~2.5	1.5		$\begin{matrix} 0 \\ -0.09 \end{matrix}$	4	±0.2	1.3	-0.25	±0.03	0.6	1.5	$\begin{matrix} +0.06 \\ 0 \end{matrix}$	0.5
※ 11020	2	2.5~3.2	2	5		1.7		0.4						
※ 11025	2.5	3.2~4	2.5	$\begin{matrix} 0 \\ -0.09 \end{matrix}$	6	±0.2	2.1	-0.25	±0.03	0.8	2.5	$\begin{matrix} +0.06 \\ 0 \end{matrix}$	0.5	1
※ 11030	3	4~5	3		7		2.6							
※ 11040	4	5~7	4	$\begin{matrix} 0 \\ -0.12 \end{matrix}$	9	±0.2	3.5	-0.3	±0.04	1.1	4	$\begin{matrix} +0.075 \\ 0 \end{matrix}$	0.7	1.2
※ 11050	5	6~8	5		11		4.3							
※ 11060	6	7~9	6	$\begin{matrix} 0 \\ -0.15 \end{matrix}$	12	±0.2	5.2	-0.35	±0.04	1.4	6	$\begin{matrix} +0.09 \\ 0 \end{matrix}$	0.9	1.2
※ 11070	7	8~11	7		14		6.1							
※ 11080	8	9~12	8	$\begin{matrix} 0 \\ -0.15 \end{matrix}$	16	±0.2	6.9	-0.35	±0.04	1.8	8	$\begin{matrix} +0.09 \\ 0 \end{matrix}$	0.9	1.8
※ 11090	9	10~14	9		18		7.8							
※ 11100	10	11~15	10	$\begin{matrix} 0 \\ -0.18 \end{matrix}$	20	±0.3	8.7	-0.45	±0.05	2.2	10	$\begin{matrix} +0.11 \\ 0 \end{matrix}$	1.15	2
11120	12	13~18	12		23		10.4							
11150	15	16~24	15	$\begin{matrix} 0 \\ -0.21 \end{matrix}$	29	±0.3	13	-0.5	±0.06	2.8	15	$\begin{matrix} +0.13 \\ 0 \end{matrix}$	1.65	3
11190	19	20~31	19		37		16.5							
11240	24	25~38	24	44	20.8	2	±0.07	5.0	24	2.2	4	4		

Notes: Items marked with ※ are also available as stacked package versions (change product code to 245 and first two digits of dimensions code to 45).

Product code	211	Material code	70...Spring Steel	Part Number Structure (Standardized Product 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
				Material			Dimensions code							