




Reference material

C-TYPE CIRCLIP STANDARDS LIST

Category	Application		Standard	Width (Tolerance)												
				For shaft				For hole								
 C-type stop ring	For shaft	For hole		0.5	+0.14 0	0.305	+0.051	1.15	+0.14 0	9	+0.14 0	0.457	+0.051			
				0.7		0.457	0	1.35		1.1		0.457	0			
0.8	0.737	+0.076 0	1.75	1.3		0.737	+0.102 0	2.2		1.6		0.991	+0.127 0	1.727	+0.076	
0.9	0.991		1.95	1.85		0.991		2.7		1.727		0				
1.1	1.168	2.2	2.15	1.168		3.2	2.65	1.422		+0.102		0	1.422	+0.102		
1.3	1.422	2.7	1.85	1.422		4.2	3.15	1.727		0		1.727	0	1.727	0	
1.6	1.727	3.2	2.65	1.727		4.2	4.15	2.184		+0.127		0	2.184	+0.127	0	
1.85	2.184	4.2	3.15	2.184		6.2	5.15	3.048		+0.152		0	3.048	+0.152	0	
2.15	2.616	+0.18 0	3.531	+0.152		0	6.2	+0.22 0		0		0	6.2	+0.22 0	0	0
2.65	3.048		0	0		0	0	0		0						
 C-type concentric stop ring	For shaft	For hole	ANSI B27.7/27.8 (US) BS 3673 (UK) DIN 471/472 (De) NF E 22 163 (Fr) UNI 7435/7438 (It)													
			JIS B 2804 (JP)													
 E-type stop ring	For shaft		N1*** American	0.32	+0.05	0.305	+0.051	0.3	+0.05							
			0.5	0	0.457	0	0.4	0								
				0.7	+0.10	0.584	0	0.5	0							
				1.0	0	0.737	+0.076	0.7	+0.10							
				1.2	+0.14	0.991	0	0.9	0							
				1.4	0	1.168	0	1.15	0							
						1.422	+0.102	1.75	+0.14							
						1.727	0	2.2	0							

O-RING STANDARDS

Category	Standard	Width (Tolerance)		
		General	For oil pressure	For air pressure
For stable	DIN 3770/3771 (De)	2.54 3.18 4.32 6.1 8.0	+0.13 0	
	JIS B 2401 (JP) ISO 3601	3.2 4.0 7.5 11.0	+0.2 0	2.5 3.2 4.7 7.5 11.1
For dynamic	SMS 1586/1588 (Se) BS 1806/4518 (UK)			1.9 2.3 2.9 3.6 4.5 5.5 7.0
	SAE AS-568 (US)	2.39 3.58 4.78 7.14 9.58	+0.25 0	2.3 3.1 3.7 6.4 9.0
				2.2 3.4 4.6 6.9 9.3

- G-class insert with MF breaker is available for single-step machining.
- Conventional GY series insert is available for single-step machining.
- Machined in multiple steps or by cross feed machining.

L dimension tolerance conversion table

Grooving Width CW (mm)	*1 Dimensions L (mm)	*2 Dimensional tolerance (mm) versus standard dimension (L) of each breaker						
		GU	GS/GM	MS/MM	R/L-GM	Flat Top	MF	BM
1.50	14.70		0					
2.00	20.70	0	0	0	0.10	-0.30	0.35	0.20
2.24	*3 (20.7)						0.35	
2.39	20.70	0	0			-0.30	0.35	
2.50	20.70	0	0	0	0.125	-0.30	0.35	0.20
2.74	*3 (20.7)						0.35	
3.00	20.70	0	0	0	0.15	-0.30	0.35	0.20
3.18	20.70	0	0			-0.30	0.35	0.20
3.24	*3 (20.7)						0.35	
4.00	25.65	0	0	0	0.20	-0.35	0.30	0.15
4.24	*3 (25.65)						0.30	
4.75	25.65	0	0			-0.35	0.30	0.15
5.00	25.65	0	0	0	0.30	-0.35	0.30	0.15
5.24	*3 (25.65)						0.30	
6.00	25.65	0	0	0			0.30	0.25
6.31	*3 (25.65)						0.30	
6.35	25.65	0	0				0.30	0.25
8.00	30.50		0	0				0.30

- *1 This value is used at the described holder dimension.
- *2 when there is no applicable breaker.
- *3 The standard dimensions shown here use an approximate insert width.