



SNAP RINGS

for Bearings with Ring Groove

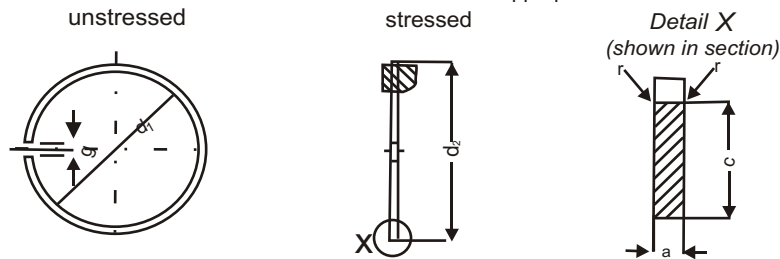
DIN 5417

For connection with DIN 616 and 464, see Explanations.

This Standard specifies the dimensions of snap rings required for securing bearings with ring groove according to Diameter series 0, 2, 3 and 4

Dimensions in mm

Details not shown are to be selected as appropriate.



Designation of a snap ring (symbol SP 72) for a bearing of $D = 72$ mm outside diameter:

Snap ring SP 72 DIN 5417

Symbol	a	c	unstressed		stressed	r	Weight (7.85 kg/dm ³) kg/1000 pieces ≈	Dimensions of the rings grooves in the bearing according to DIN 616 (see example of application)			
			d ₁	g				d ₂	D	D ₁	
										perm.dev	≈
SP 30	1.12	3.25	27.4	3	34.7	0.4	2.78	30	28.17	+ 0.0 - 0.25	
SP 32			29.4		36.7		2.98	32	30.15		
SP 35			32.4		39.7		3.22	35	33.17		
SP 37			34		41.3		3.36	37	34.77		
SP 40			37.3		44.6		3.6	40	38.10		
SP 42			38.9		46.3		3.75	42	39.75		
SP 44			40.9		48.3		4	44	41.75		
SP 47			43.7		52.7		5.3	47	44.60		
SP 50		4.04	4	46.7	55.7	5.78	50	47.60			
SP 52				48.8	57.9	5.92	52	49.73			
SP 55				51.7	60.7	6.17	55	52.60			
SP 56				52.4	61.7	6.45	56	53.60			
SP 58				54.4	63.7	6.67	58	55.60			
SP 62				58.2	67.7	10.5	62	59.61			
SP 65				61.2	70.7	11	65	62.60			
SP 68				4.85	5	63.4	74.6	12.6	68		64.82
SP 72	67.4	78.6	14.7			72	68.81				
SP 75	70.4	81.6	15.3			75	71.83				
SP 80	75.4	86.6	16.3			80	76.81				
SP 85	80.4	91.6	17.5			85	81.81				
SP 90	85.4	96.5	26.6			90	86.79				

Table continued

Symbol	a	c	unstressed		g	stressed		r $(r_{\max}=\frac{a}{2})$ min.	Weight (7.85 kg/dm ³) kg/1000 pieces ≈	Dimensions of the rings grooves in the bearing according to DIN 616 (see example of application)		
			d ₁	perm.dev		d ₂	max.			D	D ₁	perm.dev
SP 95	2.46	4.85	90.4	+0.8 -0.0	5	101.6	0.7	28.2	95	91,82	+0.0 -0.5	
SP 100			95.2			106.5		29.2	100	96,80		
SP 110			105.2			116.6		32.8	110	106,81		
SP 115	2.82	7.21	110.2	+1.0 -0.0	7	121.6	34.4	115	111,81			
SP 120			113.6			129.7	60.6	120	115,21			
SP 125			118.6			134.7	63	125	120,22			
SP 130			123.6			139.7	65.6	130	125,22			
SP 140			133			149.7	70.6	140	135,23			
SP 145			138			154.7	73	145	140,23			
SP 150			142.9			159.7	77.2	150	145,24			
SP 160	152.9	+1.6 -0.0	169.7	81	160	155,22						
SP 170	3,1	4,04	161.3	+1.8 -0.0	10	182.9	1.2	122	170	163,65		
SP 180			171.2					192.9	128	180		173,66
SP 190			181					202.9	139	190		183,64
SP 200			191					212.9	148	200		193,65
SP 210			200.9					222.8	156	210		203,6
SP 215	205.9		227.8	160	215	208,6						
SP 225	3.5	10	214.3			237	196	225	217			
SP 130			219.2		242	200	230	222				
SP 240			229.2		252	209	240	232				
SP 250			239.2		262	220	250	242				

Material: Spring steel 450 to 620 HV

Finish: Outside edges sharp or rounded in the same way as the inside edges, at the manufacturer's choice.

All thickness a within the permissible deviation of $\begin{matrix} +0.0 \\ -0.10 \end{matrix}$ mm may be found in one consignment. On the other hand, for each individual snap ring of this consignment, the thickness 'a' at the thickness point may not differ by more than 0.06 mm from the thickness at the thinnest point.

Example of application

The dimensions 'D' and 'D1' refer to the following bearing.

