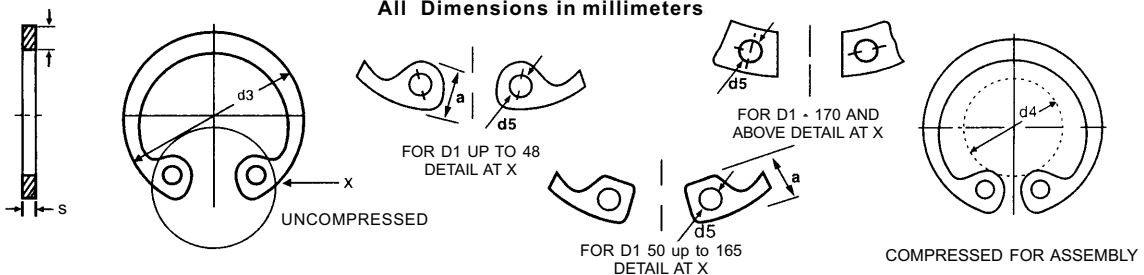




INTERNAL CIRCLIPS

DIN 472
IS: 3075



Bore Dia d1	CIRCLIP							GROOVE DATA												
	S H11	a Max	b Approx	D3	Tol. On D3	D4 Compr essed	d5 Min.	d2	Tol. On d2	M1 H13	M2 min	N min	Axial Force Kgf							
8	0.8	2.4	1.1	8.7	+0.36 -0.18	2.8	1	8.4	H11	0.9	1	0.6	128							
9		2.5	1.3	9.8		3.5		9.4					144							
10	1	3.2	1.4	10.8		+0.42 -0.21	3.1	1.2		10.4	H12				160					
11		3.3	1.5	11.8			3.9			11.4					176					
12		3.4	1.7	13		+0.50 -0.25	4.7	1.5		12.5					0.75	240				
13		3.6	1.8	14.1			5.3			13.6						314				
14		3.7	1.9	15.1		+0.78 -0.39	6	1.7		14.6				1.1	1.2	1.1	336			
15			2	16.2			7			15.7							422			
16		3.8	2	17.3			+0.92 -0.46	7.7		2				16.8				1.2	515	
17		3.9	2.1	18.3				8.4						17.8					547	
18		4.1	2.2	19.5	+0.50 -0.25		8.9	2	19									725		
19			2.3	20.5			9.8		20									764		
20	4.2	2.4	21.5	+0.78 -0.39			10.6	2	21								1.5	780		
21		2.5	22.5				11.6		22									810		
22	2.5	23.5	12.6				+0.50 -0.25	12.6	2			23							835	
24	4.4	2.6	25.9					14.2				25.2							1160	
25	4.5	2.7	26.9			+0.78 -0.39	15	2	26.2								1.8	1200		
26		2.8	27.9				15.6		27.2									1250		
28	4.8	2.9	30.1				+0.92 -0.46	17.4	2.5				29.4			1.3	1.4		1330	
30		3	32.1					19.4					31.4						1370	
31	5.2	3.2	33.4		+0.50 -0.25			19.6	2.5	32.7								2.1	1380	
32		3.2	34.4					20.2		33.7									1390	
34	5.4	3.3	36.5	+0.78 -0.39				22.2	2.5	35.7						1.6	1.7	2.6	2320	
35		3.4	37.8					23.2		37									2690	
36	5.5	3.5	38.8					+0.92 -0.46	24.2	2.5				38					3	2640
37		3.6	39.8						25					39						2716
38	3.7	40.8	26			40			2820											
40	5.8	3.9	43.5			+0.78 -0.39			27.4	2.5		42.5					1.85	2	3.8	4050
42		4.1	45.5				29.2		44.5			4250								
45	6.2	4.3	48.5				+0.92 -0.46		31.6	2.5		47.5								4310
47		4.4	50.5		33.2				49.5			4350								
48	6.4	4.5	51.5		+0.78 -0.39				34.6	2.5		50.5								4320
51		4.6	54.2	36					53		6070									
52	6.7	4.7	56.2	+0.92 -0.46					37.6	2.5	55									6025
55		5	59.2					40.4	58		6350									

Bore Dia d1	CIRCLIP							GROOVE DATA					
	S H11	a Max	b Approx	D3	Tol. On D3	D4 Compressed	d5 Min.	d2	Tol. On d2	M1 H13	M2 min	N min	Axial Force Kgf
56		6.8	5.1	60.2	+0.92 -0.46	41.4	2.5	59	H12	2.65	2.8	4.5	6075
58		6.9	5.2	62.2		43.2		61					6150
60	2	7.3	5.4	64.2		44.4		63					6210
62			5.5	66.2		46.4		65					6170
63			5.6	67.2		47.4		66					6160
65	2.5	7.6	5.8	69.2	48.8	68	7820						
68			7.8	6.1	72.5	51.4	71	8170					
70				6.2	74.5	53.4	73	8420					
72		6.4		76.5	55.4	75	8650						
75		6.6		79.5	58.4	78	9000						
78		8.5	6.8	82.5	60	81	9350						
80			7	85.5	62	83.5	11200						
82	87.5			64	85.5	11500							
85	3	8.6	7.2	90.5	66.8	88.5	11900						
88			7.4	93.5	69.8	91.5	12300						
90			7.6	95.5	71.8	93.5	12600						
92		8.7	7.8	97.5	73.6	195.5	12900						
95			8.1	100.5	76.4	198.5	13300						
98		9	8.3	103.5	79	101.5	13700						
100			8.4	105.5	81	103.5	14000						
102	4	9.2	8.5	108	82.6	106	16300						
105			8.7	112	85.6	109	16800						
108		9.5	8.9	115	88	112	17300						
110			9	117	88.2	114	17600						
112		10.5	9.1	119	90	116	17900						
115			9.3	122	93	119	18400						
120			9.7	127	97	124	19200						
125		11	10	132	102	129	19900						
130			10.2	137	107	134	20700						
135		11.2	10.5	142	112	139	21500						
140	10.7		147	117	144	22300							
145	11.4		10.9	152	122	149	23100						
150			11.2	158	125	155	30000						
155	12	11.4	164	130	160	30900							
160		11.6	169	133	165	31900							
170		12.2	179.5	145	175	33900							
175	5	14 Max	12.7	184.5	149	180	34800						
180			13.2	189.5	153	185	34500						
185			13.7	194.5	157	190	34930						
190		16 Max	13.8	199.5	162	195	34000						
195			13.8	204.5	167	200	33000						
200			209.5	171	205	32500							
210			222	181	216	50000							
220	232	191	226	52200									
230	242	201	236	54900									
240	252	211	221	246	256	50500							
250							262	221	256	50500			
260	5	16 Max	275	227	268	54000							
270			285	237	278	51800							
280			295	247	288	50000							
290			305	257	298	48200							
300			315	267	308	46500							

Material: Spring steel HRC = 47 to 52 or HV = 480 to 558 kp / mm2 up to 38 mm bore diameter
HRC = 44 to 49 or HV = 440 to 510 kp / mm2 from 40 to 200 mm bore diameter
HRC = 40 to 45 or HV = 392 to 453 kp / mm2 from 210 to 300 mm bore diameter