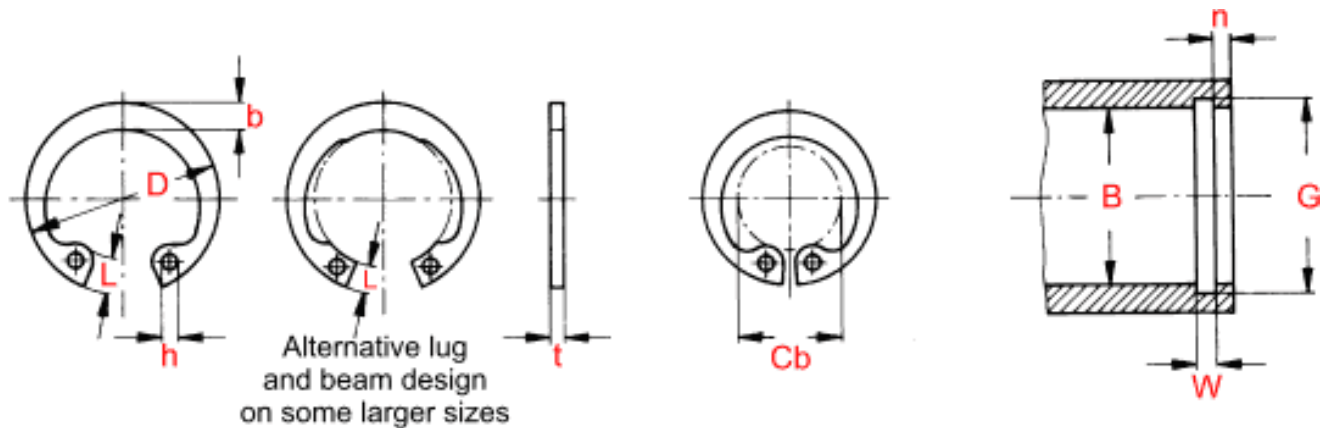


Standard Internal Circlips



Standard Internal Circlips: To DIN 472 Metric

The most common form of axially fitted circlips for bores with grooves. The circlip has a large free diameter and gap width, consequently it fits more tightly into the groove and provides higher and more uniform thrust load capacity. Lugs with holes are provided for rapid fitting or removal with circlip pliers.

Standard material: Carbon Spring Steel - Standard Finish: Phosphate and Oil.
(Standard circlips are also available in Stainless Steel)

Most sizes over 170mm are without lugs										Measurements in mm & kN					
Bore B	Circlip Dimensions									Groove Dimensions					Code No.
	t	Tol	D	Tol	Cb	b	L	h	Fr kN	G	Tol	W	n	Fr kN	
8	0.80	+0.00	8.7	+0.36 -0.10	3.0	1.1	2.4	1.0	2.0	8.4	+0.09	0.90	0.6	0.86	INT0080
9	0.80	-0.50	9.8		3.7	1.3	2.5	1.0	2.0	9.4	-0.00	0.90	0.6	0.96	INT0090
10	1.00		10.8		3.3	1.4	3.2	1.2	4.0	10.4	+0.11 -0.00	1.10	0.6	1.08	INT0100
11	1.00		11.8		4.1	1.5	3.3	1.2	4.0	11.4		1.10	0.6	1.17	INT0110
12	1.00		13.0		4.9	1.7	3.4	1.5	4.0	12.5		1.10	0.8	1.6	INT0120
13	1.00		14.1		5.4	1.8	3.6	1.5	4.2	13.6		1.10	0.9	2.1	INT0130
14	1.00		15.1		6.2	1.9	3.7	1.7	4.5	14.6		1.10	0.9	2.25	INT0140
15	1.00		16.2		7.2	2.0	3.7	1.7	5.0	15.7		1.10	1.1	2.8	INT0150
16	1.00		17.3		8.0	2.0	3.8	1.7	5.5	16.8		1.10	1.2	3.4	INT0160
17	1.00		18.3		8.8	2.1	3.9	1.7	6.0	17.8		1.10	1.2	3.6	INT0170
18	1.00		19.5		9.4	2.2	4.1	2.0	6.5	19.0		1.10	1.5	4.8	INT0180

19	1.00		20.5	+0.42 -0.13	10.4	2.2	4.1	2.0	6.8	20.0	+0.13 -0.00	1.10	1.5	5.1	INT0190
20	1.00		21.5		11.2	2.3	4.2	2.0	7.2	21.0		1.10	1.5	5.4	INT0200
21	1.00		22.5		12.2	2.4	4.2	2.0	7.6	22.0		1.10	1.5	5.7	INT0210
22	1.00		23.5		13.2	2.5	4.2	2.0	8.0	23.0		1.10	1.5	5.9	INT0220
23	1.20	+0.00 -0.06	24.6	+0.42 -0.21	14.2	2.5	4.2	2.0	13.8	24.1	+0.21 -0.00	1.30	1.5	6.8	INT0230
24	1.20		25.9		14.8	2.6	4.4	2.0	13.9	25.2		1.30	1.8	7.7	INT0240
25	1.20		26.9		15.5	2.7	4.5	2.0	14.6	26.2		1.30	1.8	8.0	INT0250
26	1.20		27.9		16.1	2.8	4.7	2.0	13.85	27.2		1.30	1.8	8.4	INT0260
27	1.20		29.1		17.1	2.9	4.7	2.0	13.3	28.4		1.30	2.1	10.1	INT0270
28	1.20		30.1		17.9	2.9	4.8	2.0	13.3	29.4		1.30	2.1	10.5	INT0280
29	1.20		31.1		18.4	3.0	4.8	2.0	13.6	30.4		1.30	2.1	10.9	INT0290
30	1.20		32.1		19.9	3.0	4.8	2.0	13.7	31.4		1.30	2.1	11.3	INT0300
31	1.20	33.4	20.0	3.2	5.2	2.5	13.8	32.7	1.30	2.6	14.1	INT0310			
32	1.20	34.4	20.6	3.2	5.4	2.5	13.8	33.7	1.30	2.6	14.6	INT0320			
33	1.20	35.5	21.6	3.3	5.4	2.5	14.3	34.7	1.30	2.6	15.0	INT0330			
34	1.50	36.5	22.6	3.3	5.4	2.5	26.2	35.7	1.60	2.6	15.4	INT0340			
35	1.50	37.8	23.6	3.4	5.4	2.5	26.9	37.0	1.60	3.0	18.8	INT0350			
36	1.50	38.8	24.6	3.5	5.4	2.5	26.4	38.0	1.60	3.0	19.4	INT0360			
37	1.50	39.8	25.4	3.6	5.5	2.5	27.1	39.0	1.60	3.0	19.8	INT0370			
38	1.50	40.8	26.4	3.7	5.5	2.5	28.2	40.0	1.60	3.0	22.5	INT0380			
39	1.50	42.0	27.2	3.8	5.6	2.5	28.8	41.0	1.60	3.0	26.0	INT0390			
40	1.75	43.5	27.8	3.9	5.8	2.5	44.6	42.5	1.85	3.8	27.0	INT0400			
41	1.75	44.5	28.6	4.0	5.9	2.5	45.0	43.5	1.85	3.8	27.6	INT0410			
42	1.75	45.5	29.6	4.1	5.9	2.5	44.7	44.5	1.85	3.8	28.4	INT0420			
43	1.75	46.5	30.6	4.2	5.9	2.5	44.5	45.5	1.85	3.8	28.8	INT0430			
44	1.75	47.5	31.4	4.2	6.0	2.5	43.3	46.5	1.85	3.8	29.5	INT0440			
45	1.75	48.5	32.0	4.3	6.2	2.5	43.1	47.5	1.85	3.8	30.2	INT0450			
46	1.75	49.5	32.7	4.4	6.3	2.5	42.9	48.5	1.85	3.8	30.8	INT0460			
47	1.75	50.5	33.5	4.4	6.4	2.5	43.5	49.5	1.85	3.8	31.4	INT0470			
48	1.75	51.5	34.5	4.5	6.4	2.5	43.2	50.5	1.85	3.8	32.0	INT0480			
50	2.00	54.2	36.3	4.6	6.5	2.5	60.8	53.0	2.15	4.5	40.5	INT0500			
51	2.00	55.2	37.3	4.7	6.5	2.5	60.2	54.0	2.15	4.5	41.2	INT0510			
52	2.00	56.2	37.9	4.7	6.7	2.5	60.25	55.0	2.15	4.5	42.0	INT0520			
53	2.00	57.2	38.9	4.9	6.7	2.5	60.7	56.0	2.15	4.5	42.9	INT0530			
54	2.00	58.2	39.9	5.0	6.7	2.5	60.4	57.0	2.15	4.5	43.6	INT0540			

Most sizes over 170mm are without lugs										Measurements in mm & kN					
										Key to table headings and abbreviations					
Bore B	Circlip Dimensions									Groove Dimensions				Code No.	
	t	Tol	D	Tol	Cb	b	L	h	Fr kN	G	Tol	W	n		Fr kN
55	2.00		59.2		40.7	5.0	6.8	2.5	60.3	58.0		2.15	4.5	44.4	INT0550
56	2.00		60.2		41.7	5.1	6.8	2.5	60.3	59.0		2.15	4.5	45.2	INT0560
57	2.00		61.2		42.7	5.1	6.8	2.5	60.8	60.0		2.15	4.5	46.0	INT0570
58	2.00		62.2		43.5	5.2	6.9	2.5	60.8	61.0		2.15	4.5	46.7	INT0580
60	2.00		64.2		44.7	5.4	7.3	2.5	61.0	63.0		2.15	4.5	48.3	INT0600
62	2.00		66.2		46.7	5.5	7.3	2.5	60.9	65.0		2.15	4.5	49.8	INT0620
63	2.00		67.2		47.7	5.6	7.3	2.5	60.8	66.0		2.15	4.5	50.6	INT0630
64	2.00		68.2	+1.10 -0.46	48.2	5.7	7.5	2.5	60.6	67.0	+0.30 -0.00	2.15	4.5	51.4	INT0640
65	2.50	+0.00 -0.07	69.2		49.0	5.8	7.6	3.0	121.0	68.0		2.65	4.5	51.8	INT0650
67	2.50		71.5		50.8	6.0	7.7	3.0	121.0	70.0		2.65	4.5	53.8	INT0670
68	2.50		72.5		51.6	6.1	7.8	3.0	121.5	71.0		2.65	4.5	54.5	INT0680
70	2.50		74.5		53.6	6.2	7.8	3.0	119.0	73.0		2.65	4.5	56.2	INT0700
72	2.50		76.5		55.6	6.4	7.8	3.0	119.2	75.0		2.65	4.5	58.0	INT0720
75	2.50		79.5		58.6	6.6	7.8	3.0	118.0	78.0		2.65	4.5	60.0	INT0750
77	2.50		81.5		60.4	6.7	7.9	3.0	121.1	80.0		2.65	4.5	61.6	INT0770
78	2.50		82.5		60.1	6.8	8.5	3.0	122.5	81.0		2.65	4.5	62.3	INT0780
80	2.50		85.5		62.1	7.0	8.5	3.0	120.9	83.5		2.65	5.3	74.6	INT0800
82	2.50		87.5		64.1	7.0	8.5	3.0	119.0	85.5		2.65	5.3	76.6	INT0820
85	3.00		90.5		66.9	7.2	8.6	3.5	201.4	88.5		3.15	5.3	79.5	INT0850
87	3.00		92.5		68.9	7.3	8.6	3.5	204.5	90.5		3.15	5.3	81.3	INT0870
88	3.00		93.5		69.9	7.4	8.6	3.5	209.4	91.5	+0.35 -0.00	3.15	5.3	82.1	INT0880
90	3.00		95.5		71.9	7.6	8.6	3.5	199.0	93.5		3.15	5.3	84.0	INT0900
92	3.00	+0.00 -0.08	97.5		73.7	7.8	8.7	3.5	201.0	95.5		3.15	5.3	85.8	INT0920
95	3.00		100.5	+1.30 -0.54	76.5	8.1	8.8	3.5	195.0	98.5		3.15	5.3	88.6	INT0950
97	3.00		102.5		78.5	8.2	8.8	3.5	193.0	100.5		3.15	5.3	90.5	INT0970
98	3.00		103.5		79.0	8.3	9.0	3.5	191.0	101.5		3.15	5.3	91.3	INT0980
100	3.00		105.5		80.6	8.4	9.2	3.5	188.0	103.5		3.15	5.3	93.1	INT1000
102	4.00		108.0		82.0	8.5	9.5	3.5	439.0	106.0		4.15	6.0	108.8	INT1020
105	4.00		112.0		85.0	8.7	9.5	3.5	436.0	109.0		4.15	6.0	112.0	INT1050
108	4.00		115.0		88.0	8.9	9.5	3.5	419.0	112.0	+0.54	4.15	6.0	115.0	INT1080

110	4.00		117.0		88.2	9.0	10.4	3.5	415.0	114.0	-0.00	4.15	6.0	117.0	INT1100
112	4.00		119.0		90.0	9.1	10.5	3.5	418.0	116.0		4.15	6.0	119.0	INT1120
115	4.00		122.0		93.0	9.3	10.5	3.5	409.0	119.0		4.15	6.0	122.0	INT1150
120	4.00		127.0		96.9	9.7	11.0	3.5	396.0	124.0		4.15	6.0	127.0	INT1200
125	4.00		132.0		101.9	10.0	11.0	4.0	385.0	129.0		4.15	6.0	132.0	INT1250
130	4.00		137.0		106.9	10.2	11.0	4.0	374.0	134.0		4.15	6.0	138.0	INT1300
135	4.00		142.0		111.5	10.5	11.2	4.0	358.0	139.0		4.15	6.0	143.0	INT1350
140	4.00		147.0		116.5	10.7	11.2	4.0	350.0	144.0		4.15	6.0	148.0	INT1400
145	4.00	+0.00 -0.10	152.0	+1.50 -0.63	121.0	10.9	11.4	4.0	336.0	149.0	+0.63 -0.00	4.15	6.0	153.0	INT1450
150	4.00		158.0		124.8	11.2	12.0	4.0	326.0	155.0		4.15	7.5	191.0	INT1500
155	4.00		164.0		129.8	11.4	12.0	4.0	324.0	160.0		4.15	7.5	206.0	INT1550
160	4.00		169.0		132.7	11.6	13.0	4.0	321.0	165.0		4.15	7.5	212.0	INT1600
165	4.00		174.5		137.7	11.8	13.0	4.0	319.0	170.0		4.15	7.5	219.0	INT1650
170	4.00		179.5		141.6	12.2	13.5	4.0	349.0	175.0		4.15	7.5	225.0	INT1700
175	4.00		184.5		146.6	12.7	13.5	4.0	351.0	180.0		4.15	7.5	232.0	INT1750
180	4.00		189.5		150.2	13.2	14.2	4.0	347.0	185.0		4.15	7.5	238.0	INT1800
185	4.00		194.5	+1.70 -0.72	155.2	13.7	14.2	4.0	349.0	190.0	+0.72 -0.00	4.15	7.5	245.0	INT1850
190	4.00		199.5		160.2	13.8	14.2	4.0	340.0	195.0		4.15	7.5	251.0	INT1900
195	4.00		204.5		165.2	13.8	14.2	4.0	330.0	200.0		4.15	7.5	258.0	INT1950
200	4.00		209.5		170.2	14.0	14.2	4.0	325.0	205.0		4.15	7.5	265.0	INT2000

Most sizes over 170mm are without lugs

Measurements in mm & kN

Bore B	Circlip Dimensions									Groove Dimensions					Code No.
	t	Tol	D	Tol	Cb	b	L	h	Fr kN	G	Tol	W	n	Fr kN	
205	5.00		217.0		175.2	14.0	14.2	4.0	616.0	211.0		5.15	9.0	326.0	INT2050
210	5.00		222.0		180.2	14.0	14.2	4.0	601.0	216.0		5.15	9.0	333.0	INT2100
215	5.00		227.0		185.2	14.0	14.2	4.0	586.0	221.0		5.15	9.0	341.0	INT2150
220	5.00		232.0	+1.70 -0.72	190.2	14.0	14.2	4.0	574.0	226.0	+0.72 -0.00	5.15	9.0	349.0	INT2200
225	5.00		237.0		195.2	14.0	14.2	4.0	560.0	231.0		5.15	9.0	357.0	INT2250
230	5.00		242.0		200.2	14.0	14.2	4.0	549.0	236.0		5.15	9.0	365.0	INT2300
235	5.00		247.0		205.2	14.0	14.2	4.0	536.0	241.0		5.15	9.0	373.0	INT2350
240	5.00		252.0		210.2	14.0	14.2	4.0	525.0	246.0		5.15	9.0	380.0	INT2400
245	5.00		257.0		215.2	14.0	14.2	4.0	514.0	251.0		5.15	9.0	389.0	INT2450
250	5.00	+0.00 -0.12	262.0		220.2	14.0	14.2	4.0	504.0	256.0		5.15	9.0	396.0	INT2500
255	5.00		270.0		221.0	16.0	16.2	5.0	549.0	263.0		5.15	12.0	541.0	INT2550

260	5.00		275.0		226.0	16.0	16.2	5.0	538.0	268.0		5.15	12.0	553.0	INT2600
265	5.00		280.0		231.0	16.0	16.2	5.0	528.0	273.0		5.15	12.0	563.0	INT2650
270	5.00		285.0	+2.00 -0.81	236.0	16.0	16.2	5.0	518.0	278.0	+0.81 -0.00	5.15	12.0	573.0	INT2700
275	5.00		290.0		241.0	16.0	16.2	5.0	509.0	283.0		5.15	12.0	585.0	INT2750
280	5.00		295.0		246.0	16.0	16.2	5.0	499.0	288.0		5.15	12.0	593.0	INT2800
285	5.00		300.0		251.0	16.0	16.2	5.0	491.0	293.0		5.15	12.0	605.0	INT2850
290	5.00		305.0		256.0	16.0	16.2	5.0	482.0	298.0		5.15	12.0	615.0	INT2900
295	5.00		310.0		261.0	16.0	16.2	5.0	474.0	303.0		5.15	12.0	625.0	INT2950
300	5.00		315.0		266.0	16.0	16.2	5.0	466.0	308.0		5.15	12.0	636.0	INT3000
310	6.00		327.0		268.0	20.0	20.2	6.0	947.0	320.0		6.20	15.0	823.0	INT3100
320	6.00		337.0		278.0	20.0	20.2	6.0	919.0	330.0		6.20	15.0	850.0	INT3200
330	6.00		347.0		288.0	20.0	20.2	6.0	894.0	340.0		6.20	15.0	876.0	INT3300
340	6.00		357.0		298.0	20.0	20.2	6.0	869.0	350.0		6.20	15.0	903.0	INT3400
350	6.00		367.0		308.0	20.0	20.2	6.0	846.0	360.0	+0.89 -0.00	6.20	15.0	929.0	INT3500
360	6.00	+0.00 -0.18	377.0	+2.50 -1.00	318.0	20.0	20.2	6.0	823.0	370.0		6.20	15.0	955.0	INT3600
370	6.00		387.0		328.0	20.0	20.2	6.0	803.0	380.0		6.20	15.0	981.0	INT3700
380	6.00		397.0		338.0	20.0	20.2	6.0	784.0	390.0		6.20	15.0	1008.0	INT3800
390	6.00		407.0		348.0	20.0	20.2	6.0	764.0	400.0		6.20	15.0	1033.0	INT3900
400	6.00		417.0		358.0	20.0	20.2	6.0	746.0	410.0	+1.00 -0.00	6.20	15.0	1060.0	INT4000