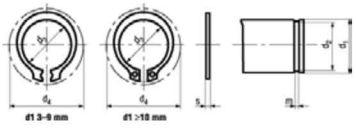
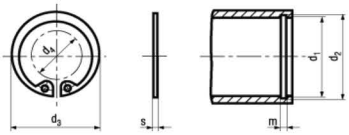
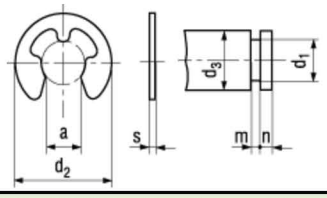


DIN 471 External Retaining Rings				
Nominal Size d1	Groove Dia. d2	Groove Width m	Free Dia. d3	Thickness s
0.8				
1.2				
1.5				
1.9				
2.3				
3	2.8	0.5	2.7	0.4
3.2				
4	3.8	0.5	3.7	0.4
5	4.8	0.7	4.7	0.6
6	5.7	0.8	5.6	0.7
7	6.7	0.9	6.5	0.8
8	7.6	0.9	7.4	0.8
9	8.6	1.1	8.4	1
10	9.6	1.1	9.3	1
11	10.5	1.1	10.2	1
12	11.5	1.1	11	1
13	12.4	1.1	11.9	1
14	13.4	1.1	12.9	1
15	14.3	1.1	13.8	1
16	15.2	1.1	14.7	1
17	16.2	1.1	15.7	1
18	17	1.3	16.5	1.2
19	18	1.3	17.5	1.2
20	19	1.3	18.5	1.2
21	20	1.3	19.5	1.2
22	21	1.3	20.5	1.2
24	22.9	1.3	22.2	1.2
25	23.9	1.3	23.2	1.2
26	24.9	1.3	24.2	1.2
28	26.6	1.6	25.9	1.5
29	27.6	1.6	26.9	1.5
30	28.6	1.6	27.9	1.5
31				
32	30.3	1.6	29.6	1.5
34	32.3	1.6	31.5	1.5
35	33	1.6	32.2	1.5
36	34	1.85	33.2	1.75
37				
38	36	1.85	35.2	1.75
40	37.5	1.85	36.5	1.75
42	39.5	1.85	38.5	1.75
45	42.5	1.85	41.5	1.75
47				
48	45.5	1.85	44.5	1.75
50	47	2.15	45.8	2
52	49	2.15	47.8	2
55	52	2.15	50.8	2
56	53	2.15	51.8	2
58	55	2.15	53.8	2
60	57	2.15	55.8	2
62	59	2.15	57.8	2
63	60	2.15	58.8	2
65	62	2.65	60.8	2.5
68	65	2.65	63.5	2.5
70	67	2.65	65.5	2.5
72	69	2.65	67.5	2.5
75	72	2.65	70.5	2.5
78	75	2.65	73.5	2.5
80	76.5	2.65	74.5	2.5
82	78.5	2.65	76.5	2.5
85	81.5	3.15	79.5	3



DIN 472 Internal Retaining Rings			
Groove Dia. d2	Groove Width m	Free Dia. d3	Thickness s
8.4	0.9	8.7	0.8
9.4	0.9	9.8	0.8
10.4	1.1	10.8	1
11.4	1.1	11.8	1
12.5	1.1	13	1
13.6	1.1	14.1	1
14.6	1.1	15.1	1
15.7	1.1	16.2	1
16.8	1.1	17.3	1
17.8	1.1	18.3	1
19	1.1	19.5	1
20	1.1	20.5	1
21	1.1	21.5	1
22	1.1	22.5	1
23	1.1	23.5	1
25.2	1.3	25.9	1.2
26.2	1.3	26.9	1.2
27.2	1.3	27.9	1.2
29.4	1.3	30.1	1.2
31.4	1.3	32.1	1.2
32.7	1.3	33.4	1.2
33.7	1.3	34.4	1.2
35.7	1.6	36.5	1.5
37	1.6	37.8	1.5
38	1.6	38.8	1.5
39	1.6	39.8	1.5
40	1.6	40.8	1.5
42.5	1.85	43.5	1.75
44.5	1.85	45.5	1.75
47.5	1.85	48.5	1.75
49.5	1.85	50.5	1.75
50.5	1.85	51.5	1.75
53	2.15	54.2	2
55	2.15	56.2	2
58	2.15	59.2	2
59	2.15	60.2	2
61	2.15	62.2	2
63	2.15	64.2	2
65	2.15	66.2	2
66	2.15	67.2	2
68	2.65	69.2	2.5
71	2.65	72.5	2.5
73	2.65	74.5	2.5
75	2.65	76.5	2.5
78	2.65	79.5	2.5
81	2.65	82.5	2.5
83.5	2.65	85.5	2.5
85.5	2.65	87.5	2.5
88.5	3.15	90.5	3



DIN 6799 Clips For Grooved Shafts			
Shaft Dia. (from to)	Groove Width m	Groove Dia. Same as Nominal Size	Thickness s
1.0 to 1.4	0.24	0.8	0.4
1.4 to 2.0	0.34	1.2	0.6
2.0 to 2.5	0.44	1.5	0.8
2.5 to 3.0	0.54	1.9	1
3.0 to 4.0	0.64	2.3	1
4.0 to 5.0	0.64	3.2	1
5.0 to 7.0	0.74	4	1.2
6.0 to 8.0	0.74	5	1.2
7.0 to 9.0	0.74	6	1.2
8.0 to 11.0	0.94	7	1.5
9.0 to 12.0	1.05	8	1.8
10.0 to 14.0	1.15	9	2
11.0 to 15.0	1.25	10	2
13.0 to 18.0	1.35	12	2.5
16.0 to 24.0	1.55	15	3
		16	
		17	
		18	
20.0 to 31.0	1.8	19	3.5
25.0 to 38.0	2.05	24	4
32.0 to 42.0	2.55	30	4.5