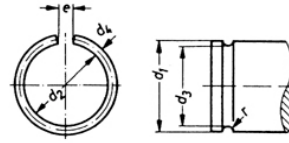


# Section 2

## Non-Threaded Fasteners, Etc.

### EXTERNAL SNAP RINGS # 7993 A

Ref: DIN 7993 A - For Shafts  
Round Spring Wire - Hardened



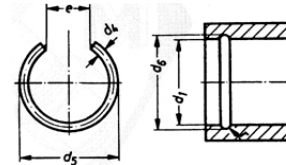
SHAFT DIA.	d 2	d 3	d 4	r
4	3.1	3.2	0.8	0.5
5	4.1	4.2	0.8	0.5
6	5.1	5.2	0.8	0.5
7	6.1	6.2	0.8	0.5
8	7.1	7.2	0.8	0.5
10	9.1	9.2	0.8	0.5
12	10.8	11	1	0.6
14	12.8	13	1	0.6
16	14.2	14.4	1.6	0.9
18	16.2	16.4	1.6	0.9
20	17.7	18	2	1.1
22	19.7	20	2	1.1
24	21.7	22	2	1.1
25	22.7	23	2	1.1
26	23.7	24	2	1.1
28	25.7	26	2	1.1
30	27.7	28	2	1.1
32	29.1	29.5	2.5	1.4
35	32.1	32.5	2.5	1.4

SHAFT DIA.	d 2	d 3	d 4	r
38	35.1	35.5	2.5	1.4
40	37.1	37.5	2.5	1.4
42~	39	39.5	2.5	1.4
45	42	42.5	2.5	1.4
48~	45	45.5	2.5	1.4
50	47	47.5	2.5	1.4
55	51.1	51.8	3.2	1.4
60	56.1	56.8	3.2	1.8
65	61.1	61.8	3.2	1.8
70~	66	66.8	3.2	1.8
75	71	71.8	3.2	1.8
80~	76	76.8	3.2	1.8
85	81	81.8	3.2	1.8
90~	86	86.8	3.2	1.8
95~	91	91.8	3.2	1.8
100	95.8	96.8	3.2	1.8
105				
110				

~Minimum production order quantities may apply.

### INTERNAL SNAP RINGS # 7993 B

Ref: DIN 7993 B - For Bores  
Round Spring Wire - Hardened



SHAFT DIA.	d 4	d 5	d 6	r
7~	0.8	7.9	7.8	0.5
8	0.8	8.9	8.8	0.5
10	0.8	10.9	10.8	0.5
12	1	13.2	13	0.6
14	1	15.2	15	0.6
16	1.6	17.8	17.6	0.9
18	1.6	19.8	19.6	0.9
20	2	22.3	22	1.1
22	2	24.3	24	1.1
24~	2	26.3	26	1.1
25	2	27.3	27	1.1
26	2	28.3	28	1.1
28	2	30.3	30	1.1
30	2	32.3	32	1.1
32	2.5	32.3	34.5	1.4
35	2.5	34.9	37.5	1.4

SHAFT DIA.	d 4	d 5	d 6	r
38~	2.5	40.9	40.5	1.4
40	2.5	42.9	42.5	1.4
42	2.5	45	44.5	1.4
45~	2.5	48	47.5	1.4
48~	2.5	51	50.5	1.4
50~	2.5	53	52.5	1.4
55~	3.2	58.9	58.2	1.8
60	3.2	63.9	63.2	1.8
65	3.2	68.9	68.2	1.8
70	3.2	74	73.2	1.8
75	3.2	79	78.2	1.8
80	3.2	84	83.2	1.8
85	3.2	89	88.2	1.8
90	3.2	94	93.2	1.8
95~	3.2	99	98.2	1.8
100~	3.2	104.2	103.2	1.8

~Minimum production order quantities may apply.

**How to Order**  
Item #: 7993 A  
Size: 12  
Quantity: 300  
Tel: 1-888-966-MMCC