

# Section 2

## Non-Threaded Fasteners, Etc.



### EXTERNAL RETAINING RINGS # 471

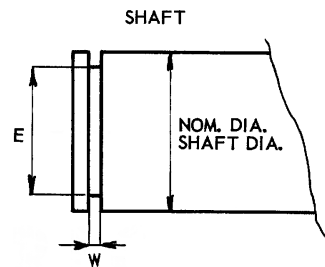
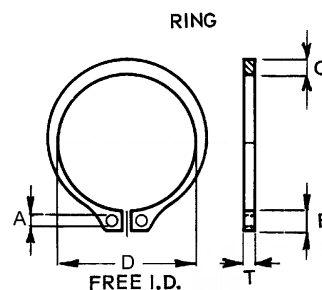
Ref: DIN 471 - For Shafts - **Nominal Diameter equals shaft diameter**

Available in two materials:

Spring Steel Phosphated  
 Hardness: HRC 47-54 for DIA. up to 48 mm,  
 HRC 44-51 for DIA. 48-200 mm,  
 HRC 40-47 for DIA. 200-300 mm

SX Stainless Steel 1.4034/1.4122  
 (Hardened 400 Series - Spring Stainless Steel)

NOM. DIA.	RING					GROOVE		# 471 Steel	# 471 SX Stainless
	Thickness T h11	Free I.D. D	Pin Hole A	B max.	C	W H13 Width	E Dia.		
3	0.4	2.7	1	1.9	0.8	0.5	2.8	x	
4	0.4	3.7	1	2.2	0.9	0.5	3.8	x	x
5	0.6	4.7	1	2.5	1.1	0.7	4.8	x	x
6	0.7	5.6	1.2	2.7	1.3	0.8	5.7	x	x
7	0.8	6.5	1.2	3.1	1.4	0.9	6.7	x	x
8	0.8	7.4	1.2	3.2	1.5	0.9	7.6	x	x
9	1	8.4	1.2	3.3	1.7	1.1	8.6	x	-
10	1	9.3	1.5	3.3	1.8	1.1	9.6	x	x
11	1	10.2	1.5	3.3	1.8	1.1	10.5	x	x
12	1	11	1.7	3.3	1.8	1.1	11.5	x	x
13	1	11.9	1.7	3.4	2	1.1	12.4	x	-
14	1	12.9	1.7	3.5	2.1	1.1	13.4	x	x
15	1	13.8	1.7	3.6	2.2	1.1	14.3	x	x
16	1	14.7	1.7	3.7	2.2	1.1	15.2	x	x
17	1	15.7	1.7	3.8	2.3	1.1	16.2	x	-
18	1.2	16.5	2	3.9	2.4	1.3	17	x	x
19	1.2	17.5	2	3.9	2.5	1.3	18	x	-
20	1.2	18.5	2	4	2.6	1.3	19	x	x
21	1.2	19.5	2	4.1	2.7	1.3	20	x	-
22	1.2	20.5	2	4.2	2.8	1.3	21	x	x
23	1.2	21.5	2	4.4	3	1.3	22	x	-
24	1.2	22.2	2	4.4	3	1.3	22.9	x	-
25	1.2	23.2	2	4.4	3	1.3	23.9	x	x
26	1.2	24.2	2	4.5	3.1	1.3	24.9	x	-
27	1.2	24.9	2	4.7	3.2	1.3	25.6	x	-
28	1.5	25.9	2	4.7	3.2	1.6	26.6	x	x
29	1.5	26.9	2	4.8	3.4	1.6	27.6	x	-
30	1.5	27.9	2	5	3.5	1.6	28.6	x	x
31	1.5	28.9	2.5	5.2	3.6	1.6	29.3	x	x
32	1.5	29.6	2.5	5.2	3.6	1.6	30.3	x	-
33	1.5	30.5	2.5	5.4	3.8	1.6	31.3	x	-
34	1.5	31.5	2.5	5.4	3.8	1.6	32.3	x	-
35	1.5	32.2	2.5	5.6	3.9	1.6	33	x	x
36	1.75	33.2	2.5	5.6	4	1.85	34	x	x
37	1.75	34.2	2.5	5.8	4.2	1.85	35	x	-
38	1.75	35.2	2.5	5.8	4.2	1.85	36	x	x
39	1.75	36	2.5	6	4.4	1.85	37	x	-
40	1.75	36.5	2.5	6	4.4	1.85	37.5	x	x
41	1.75	37.5	2.5	6.5	4.5	1.85	38.5	x	-
42	1.75	38.5	2.5	6.5	4.5	1.85	39.5	x	x
44	1.75	40.5	2.5	6.7	4.7	1.85	41.5	x	-
45	1.75	41.5	2.5	6.7	4.7	1.85	42.5	x	x
46	1.75	42.5	2.5	6.8	4.9	1.85	43.5	x	-
47	1.75	43.5	2.5	6.8	4.9	1.85	44.5	x	x
48	1.75	44.5	2.5	6.9	5	1.85	45.5	x	-
50	2	45.8	2.5	6.9	5.1	2.15	47	x	x
52	2	47.8	2.5	7	5.2	2.15	49	x	x
54	2	49.8	2.5	7.2	5.4	2.15	51	x	-
55	2	50.8	2.5	7.2	5.4	2.15	52	x	-
56	2	51.8	2.5	7.3	5.5	2.15	53	x	-
57	2	52.8	2.5	7.3	5.6	2.15	54	x	-
58	2	53.8	2.5	7.3	5.6	2.15	55	x	-
60	2	55.8	2.5	7.4	5.8	2.15	57	x	x



"x" denotes stock availability - Sizes continue

~Pin holes and Tip design for Nominal Diameters 9 and less may vary at manufacturers discretion.

**How to Order**  
 Item #:471  
 Size: 24  
 Quantity: 100  
 Tel: 1-888-966-MMCC

\*\*Please note: For sizes other than listed - **Please inquire.**