

# Section 2 Non-Threaded Fasteners, Etc.



## INTERNAL RETAINING RINGS # 472

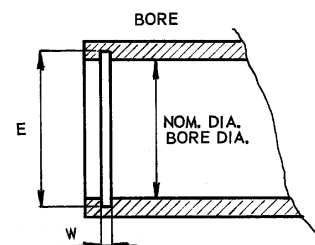
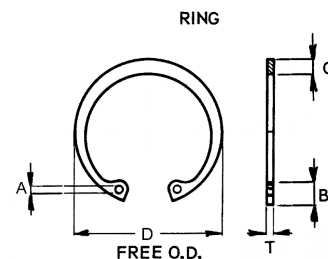
Ref: DIN 471 - For Shafts - **Nominal Diameter equals bore diameter**

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		# 472 Steel	# 472 SX Stainless
	Thickness T h11	Free O.D. D	Pin Hole A	C	B max.	W H13 Width	E Dia.		
8	0.8	8.7	1	1.1	2.4	0.9	8.4	x	-
9	0.8	9.8	1	1.4	2.5	0.9	9.4	x	-
10	1	10.8	1.2	1.6	3.2	1.1	10.4	x	x
11	1	11.8	1.2	1.6	3.3	1.1	11.4	x	x
12	1	13	1.5	2	3.4	1.1	12.5	x	x
13	1	14.1	1.5	2	3.6	1.1	13.6	x	x
14	1	15.1	1.7	2	3.7	1.1	14.6	x	x
15	1	16.2	1.7	2	3.7	1.1	15.7	x	x
16	1	17.3	1.7	2	3.8	1.1	16.8	x	x
17	1	18.3	1.7	2	3.9	1.1	17.8	x	x
18	1	19.5	2	2.5	4.1	1.1	19	x	x
19	1	20.5	2	2.5	4.1	1.1	20	x	x
20	1	21.5	2	2.5	4.2	1.1	21	x	x
21	1	22.5	2	2.5	4.2	1.1	22	x	-
22	1	23.5	2	2.5	4.2	1.1	23	x	x
23	1.2	24.6	2	2.5	4.4	1.3	24.1	x	-
24	1.2	25.9	2	2.5	4.4	1.3	25.2	x	x
25	1.2	26.9	2	3	4.5	1.3	26.2	x	x
26	1.2	27.9	2	3	4.7	1.3	27.2	x	x
27	1.2	29.1	2	3	4.7	1.3	28.4	x	-
28	1.2	30.1	2	3	4.8	1.3	29.4	x	x
29	1.2	31.1	2	3	4.8	1.3	30.4	x	-
30	1.2	32.1	2	3	4.8	1.3	31.4	x	x
31	1.2	33.4	2.5	3.5	5.2	1.3	32.7	x	-
32	1.2	34.4	2.5	3.5	5.2	1.3	33.7	x	x
33	1.2	35.5	2.5	3.5	5.2	1.3	34.7	x	-
34	1.5	36.5	2.5	3.5	5.4	1.6	35.7	x	-
35	1.5	37.8	2.5	3.5	5.4	1.6	37	x	x
36	1.5	38.8	2.5	3.5	5.4	1.6	38	x	x
37	1.5	39.8	2.5	3.5	5.5	1.6	39	x	-
38	1.5	40.8	2.5	4	5.5	1.6	40	x	x
39	1.5	42	2.5	4	5.5	1.6	41	x	-
40	1.75	43.5	2.5	4	5.8	1.85	42.5	x	x
41	1.75	44.5	2.5	4	5.8	1.85	43.5	x	-
42	1.75	45.5	2.5	4	5.9	1.85	44.5	x	x
43	1.75	46.5	2.5	4.5	5.9	1.85	45.5	x	-
44	1.75	47.5	2.5	4.5	5.9	1.85	46.5	x	-
45	1.75	48.5	2.5	4.5	6.2	1.85	47.5	x	x
46	1.75	49.5	2.5	4.5	6.2	1.85	48.5	x	-
47	1.75	50.5	2.5	4.5	6.4	1.85	49.5	x	x
48	1.75	51.5	2.5	4.5	6.4	1.85	50.5	x	-
50	2	54.2	2.5	4.5	6.5	2.15	53	x	-
51	2	55.2	2.5	5.1	6.7	2.15	54	x	x
52	2	56.2	2.5	5.1	6.7	2.15	55	x	x
53	2	57.2	2.5	5.1	6.7	2.15	56	x	-
54	2	58.2	2.5	5.1	6.7	2.15	57	x	-
55	2	59.2	2.5	5.1	6.8	2.15	58	x	x
56	2	60.2	2.5	5.1	6.8	2.15	59	x	-
57	2	61.2	2.5	5.1	6.9	2.15	60	x	-
58	2	62.2	2.5	5.1	6.9	2.15	61	x	-
60	2	64.2	2.5	5.5	6.9	2.15	63	x	x
62	2	66.2	2.5	5.5	7.3	2.15	65	x	-
63	2	67.2	2.5	5.5	7.3	2.15	66	x	-
65	2.5	69.2	3	5.5	7.6	2.65	68	x	x



\*x denotes stock availability - Sizes continue

~Pin holes and Tip design may vary at manufacturers discretion.

### How to Order

Item #: 472

Size: 30

Quantity: 500

Tel: 1-888-966-MMCC

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