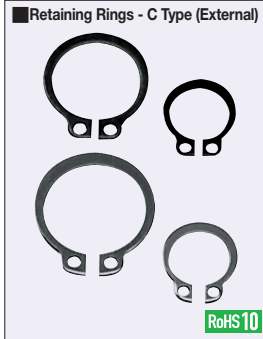
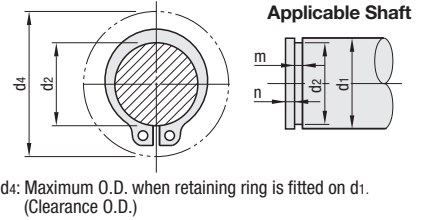
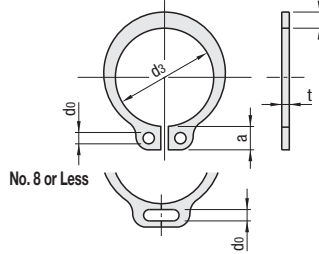


Retaining Rings - C Type (External) / E Type

When large quantities are needed, box package sales is more economical. **P.273**



STWN
STWS (Stainless Steel)



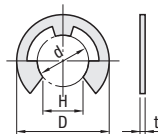
Type	Material	Hardness
STWN	Spring Steel	44-53HRC
STWS	SUS304-CSP	36-44HRC

Part Number	Retaining Ring										Applicable Shaft (Reference)				STWN			STWS				
	Type	No.	d3	Tolerance	t	Tolerance	b (Approx.)	a (Approx.)	d0 (Min.)	d4	d1	d2	Tolerance	m	Tolerance	n (Min.)	1-49	50-199	200-1000	1-49	50-199	200-500
STWN	3	2.7	+0.04	0.25	±0.025	0.5	1.7	0.7	7	3	2.85	0	0.35	0	0.3							
	4	3.7	-0.15	0.4	±0.03	0.9	2.2	0.8	9	4	3.8	0	0.5	0	0.5							
	5	4.7		0.6		1.1	2.4		10.5	5	4.8	-0.04	0.7	0	0.8							
	6	5.6		0.7		1.3	2.8		12	6	5.7		0.8	0	0.8							
	7	6.5		0.8	±0.04	1.4	3	1	14	7	6.7	0	0.9	0	0.9							
	8	7.4		0.8	-0.2	1.6	3		15	8	7.6	-0.06	0.9	0	0.9							
	4	3.6		0.25	±0.03	0.7	1.4		9	4	3.7		0.3	0	1.0							
	5	4.5		0.4		0.7	1.4		10.5	5	4.7		0.45	0	1.5							
STWS (Stainless Steel)	6	5.5	±0.1	0.4	±0.04	0.8	2.0		12	6	5.7	±0.06	0.7	0	1.5							
	7	6.3		0.65		0.9	2.0	1	14	7	6.5		0.7	0	1.5							
	8	7.1		1.0	2.2	1.0	2.2	1	15	8	7.4		0.7	0	1.5							
STWN	10	9.3	±0.15	1.8	3	1.8	3	1.2	17	10	9.6	-0.09	1.15	0	1.5							
	11	10.2		2	3.1	2.1	3.3	1.5	18	11	10.5		1.35	0	1.5							
	12	11.1		2.1	3.2	2.1	3.3	1.5	19	12	11.5		1.35	0	1.5							
	13	12		2.2	3.4	2.2	3.5	1.7	20	13	12.4		1.35	0	1.5							
	14	12.9		2.2	3.4	2.2	3.5	1.7	22	14	13.4		1.35	0	1.5							
	15	13.8	±0.18	2.2	3.5	2.2	3.5	1.7	23	15	14.3		1.35	0	1.5							
	16	14.7		2.2	3.6	2.2	3.6	1.7	24	16	15.2		1.35	0	1.5							
	17	15.7		2.2	3.7	2.2	3.7	1.7	25	17	16.2		1.35	0	1.5							
	18	16.5		2.6	3.8	2.6	3.8	1.7	26	18	17		1.35	0	1.5							
	19	17.5		2.6	3.8	2.6	3.8	1.7	27	19	18		1.35	0	1.5							
STWS (Stainless Steel)	20	18.5		2.7	3.9	2.7	4	2	28	20	19		1.65	0	2							
	21	19.5		2.7	4	2.7	4	2	30	21	20		1.65	0	2							
	22	20.5		2.9	4.1	2.9	4.1	2	31	22	21		1.65	0	2							
	23	21.4		2.9	4.5	2.9	4.5	2	32.5	23	22		1.65	0	2							
	24	22.2	±0.2	3.1	4.2	3.1	4.3	2	33	24	22.9	0	1.9	0	2							
	25	23.2		3.1	4.3	3.1	4.3	2	34	25	23.9	-0.21	1.9	0	2							
	26	24.2		3.1	4.4	3.1	4.4	2	35	26	24.9		1.9	0	2							
	28	25.9		4.6	4.6	4.6	4.6	2	38	28	26.6		1.9	0	2							
	29	26.9		4.7	4.7	4.7	4.7	2	39	29	27.6		1.9	0	2							
	30	27.9		3.5	4.8	3.5	4.8	2	40	30	28.6		1.9	0	2							
32	29.6		5	5	5	5	2	43	32	30.3		1.9	0	2								
35	32.2	±0.25	4	5.4	4	5.4	2	46	35	33		1.9	0	2								
40	37		4.5	5.8	4.5	5.8	2.5	53	40	38	0	2.2	0	2.5								
45	41.5	±0.4	4.8	6.3	4.8	6.3	2.5	58	45	42.5	-0.25	2.2	0	2.5								
50	45.8		5	6.7	5	6.7	2.5	64	50	47		2.2	0	2.5								
52	47.8		6.8	6.8	6.8	6.8	2.5	66	52	49		2.2	0	2.5								
60	55.8		5.5	7.2	5.5	7.2	2.5	75	60	57	0	2.7	0	2.5								
80	74.5	±0.45	7.4	8.2	7.4	8.2	2.5	97	80	76.5	-0.3	2.7	0	2.5								

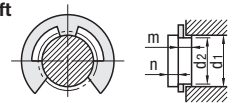
For orders larger than indicated quantity, please check with WOS.



NETW
NETWS (Stainless Steel)



Applicable Shaft



Type	Material	Hardness	Surface Treatment
NETW	Spring Steel	44-53HRC	Trivalent Chromate
NETWS	SUS304-CSP	37-46HRC	-

Part Number	Retaining Ring										Applicable Shaft (Reference)						NETW			NETWS		
	Type	No.	d	Tolerance	D	Tolerance	H	Tolerance	t	Tolerance	d1 Class	Over	or Less	d2	Tolerance	m	Tolerance	n (Min.)	1-199	5-199	200-1000	
NETW	1.2	1.2		3	±0.1	1		0.3	±0.025	1.4	2	1.2		0.6	0	0.6						
	1.5	1.5		4		1.3		0.4	±0.03	2	2.5	1.5		0.5	+0.05	0						
	2	2	0	5		1.7	0	-0.25		2.5	3.2	2		0	0							
	2.5	2.5	-0.09	6		2.1				3.2	4	2.5		0	0							
	3	3		7		2.6				4	5	3		0	0							
NETWS (Stainless Steel)	4	4	0	9	±0.2	3.5	0		±0.04	5	7	4		0.7	+0.075	0						
	5	5	-0.12	11		4.3	0	-0.30		6	8	5		0	0							
	6	6		12		5.2				7	9	6		0.9	0							
	7	7		14		6.1				8	11	7		0	0							
	8	8	0	16		6.9	0			8	12	8		0	+0.09	0						
	9	9	-0.15	18		7.8	-0.35			9	14	9		0	0							

For orders larger than indicated quantity, please check with WOS.

