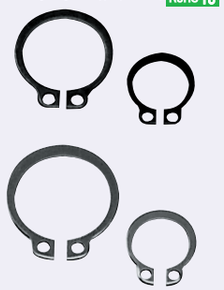
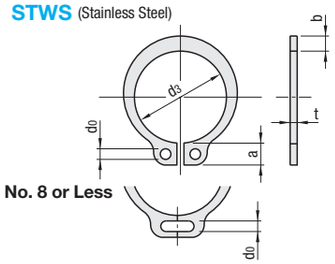
Retaining Rings - C Type (External) / E Type

Cost-saving box package is available when large quantity is required. P167

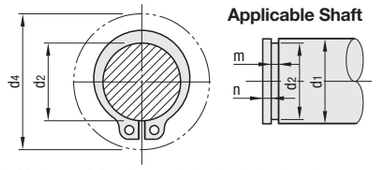
■Retaining Rings - C Type (External) RoHS10



STWN
STWS (Stainless Steel)



Applicable Shaft



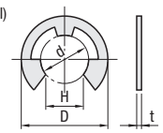
d4: Maximum O.D. when retaining ring is fitted on d1 (Clearance O.D.)

Type	M Material	H Hardness
STWN	Spring Steel	44~53HRC
STWS	304 Stainless Steel	36~44HRC

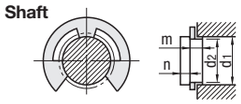
Part Number		Retaining Ring							Reference	Applicable Shaft (Reference)							STWN				STWS			
																	Small Order Charge	Unit Price	Volume Discount Rate		Small Order Charge	Unit Price	Volume Discount Rate	
Type	No.	d3	Tolerance	t	Tolerance	b (Approx.)	a (Approx.)	d0 (Min.)	d4	d1	d2	Tolerance	m	Tolerance	n (Min.)		1~4 pc(s).	5~49 pcs.	50~199 pcs.	200 or More	1~4 pc(s).	5~49 pcs.	50~199 pcs.	200 or More
STWN	3	2.7	+0.04 -0.15	0.25	±0.025	0.5	1.7	0.7	7	3	2.85	0 -0.04	0.35	+0.10 0	0.3									
	4	3.7		0.4	±0.03	0.9	2.2	0.8	9	4	3.8		0.5											
	5	4.7		0.6	±0.04	1.1	2.4		10.5	5	4.8		0.7											
	6	5.6	+0.06 -0.2	0.7		1.3	2.8	1	12	6	5.7		0.8		0.5									
	7	6.5		0.8		1.4	3		14	7	6.7	0 -0.06	0.9											
	8	7.4		0.8		1.6	3		15	8	7.6				0.6									
STWS (Stainless Steel)	4	3.6	±0.1	0.25	±0.03	0.7	1.4	0.7	9	4	3.7	±0.06	0.3	+0.10 0	1.0									
	5	4.5		0.4	±0.04	0.7	1.4		10.5	5	4.7		0.45		1.5									
	6	5.5				0.8	2.0		12	6	5.7													
	7	6.3		0.65		0.9	2.0	1	14	7	6.5		0.7											
	8	7.1				1.0	2.2		15	8	7.4													
STWN / STWS (Stainless Steel)	10	9.3	±0.15	1	±0.05	1.8	3	1.2	17	10	9.6	0 -0.09	1.15	+0.14 0	1.5									
	11	10.2				2	3.1		18	11	10.5	0 -0.11												
	12	11.1	±0.18			2.1	3.2	1.5	19	12	11.5													
	13	12					3.3		20	13	12.4													
	14	12.9				2.2	3.4	1.7	22	14	13.4													
	15	13.8					3.5		23	15	14.3													
	16	14.7					3.6		24	16	15.2													
	17	15.7					3.7		25	17	16.2													
	18	16.5		1.2	±0.06	2.6	3.8	2	26	18	17		1.35											
	19	17.5				2.7	3.8		27	19	18													
	20	18.5	±0.2				3.9		28	20	19	0 -0.21												
	21	19.5					4		30	21	20													
	22	20.5					4.1		31	22	21													
	23	21.4				2.9	4.5		32.5	23	22													
	24	22.2				3.1	4.2		33	24	22.9													
	25	23.2					4.3		34	25	23.9													
	26	24.2					4.4		35	26	24.9													
	28	25.9		1.5			4.6		38	28	26.6		1.65											
	29	26.9				3.5	4.7		39	29	27.6													
	30	27.9					4.8		40	30	28.6													
	32	29.6					5	2.5	43	32	30.3													
	35	32.2	±0.25			4	5.4		46	35	33	0 -0.25												
	40	37	±0.4	1.75	±0.07	4.5	5.8		53	40	38		1.9											
	45	41.5				4.8	6.3		58	45	42.5													
	50	45.8		2		5	6.7		64	50	47				2									
	52	47.8					6.8		66	52	49		2.2											
	60	55.8	±0.45			5.5	7.2		75	60	57	0 -0.3												
	80	74.5		2.5	±0.08	7.4	8.2		97	80	76.5		2.7		2.5									

■Retaining Rings - E Type RoHS10

NETW
NETWS (Stainless Steel)



Applicable Shaft



Type	M Material	H Hardness	S Surface Treatment
NETW	Spring Steel	44~53HRC	Trivalent Chromate
NETWS	304 Stainless Steel	37~46HRC	-

Part Number		Retaining Ring								Applicable Shaft (Reference)								NETW NETWS	NETW	NETWS	NETW NETWS
										d1 Class								Small Order Charge	Unit Price		Volume Discount Rate
Type	No.	d	Tolerance	D	Tolerance	H	Tolerance	t	Tolerance	Over	or Less	d2	Tolerance	m	Tolerance	n (Min.)		1~4 pc(s).	5~199 pcs.	5~199 pcs.	200 or More
NETW / NETWS (Stainless Steel)	1.2	1.2	0 -0.09	3	±0.1	1	0 -0.25	0.3	±0.025	1.4	2	1.2	+0.06 0	0.4	+0.05 0	0.6					
	1.5	1.5		4	±0.2	1.3		0.4	±0.03	2	2.5	1.5		0.5		0.8					
	2	2		5		1.7				2.5	3.2	2									
	2.5	2.5		6		2.1				3.2	4	2.5				1					
	3	3		7		2.6		0.6	±0.04	4	5	3		0.7							
	4	4	0 -0.12	9		3.5	0 -0.30			5	7	4	+0.075 0		+0.1 0	1.2					
	5	5		11		4.3				6	8	5									
	6	6		12		5.2		0.8		7	9	6		0.9							
	7	7	0 -0.15	14		6.1	0 -0.35			8	11	7	+0.09 0			1.5					
	8	8		16		6.9				9	12	8				1.8					
	9	9		18		7.8				10	14	9				2					

Ordering Example: Part Number STWS6, NETW9

Days to Ship

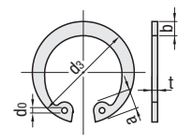
Configure Online

Price Configure Online

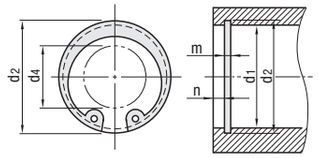
Retaining Rings - C Type (Internal) / Retaining Ring Pliers

■Retaining Rings - C Type (Internal) RoHS10

RTWN
RTWS (Stainless Steel)



Applicable Hole



d4: Minimum circumferential diameter when retaining ring is fitted inside d1 (Clearance I.D.)

Type	M Material	H Hardness
RTWN	Spring Steel	44~53HRC
RTWS	304 Stainless Steel	36~44HRC

Part Number		Retaining Ring							Reference	Applicable Bore (Reference)							RTWN				RTWS			
																	Small Order Charge	Unit Price	Volume Discount Rate		Small Order Charge	Unit Price	Volume Discount Rate	
Type	No.	d3	Tolerance	t	Tolerance	b (Approx.)	a (Approx.)	d0 (Min.)	d4	d1	d2	Tolerance	m	Tolerance	n (Min.)		1~4 pc(s).	5~49 pcs.	50~199 pcs.	200 or More	1~4 pc(s).	5~49 pcs.	50~199 pcs.	200 or More
RTWN / RTWS (Stainless Steel)	10	10.7	±0.18	1	±0.05	1.5	2.8	1.2	4	10	10.4	+0.11 0	1.15	+0.14 0	1.5									
	11	11.8					3		4	11	11.4													
	12	13				1.7	3.1	1.5	5	12	12.5													
	13	14.1					3.1		6	13	13.6													
	14	15.1				1.9	3.6	1.7	7	14	14.6													
	15	16.2					3.6		8	15	15.7													
	16	17.3					3.7		8	16	16.8													
	17	18.3	±0.2				3.8		9	17	17.8													
	19	20.5				2.5	4	2	11	19	20	+0.21 0												
	20	21.5					4		12	20	21													
	21	22.5					4.1		12	21	22													
	22	23.5					4.1		13	22	23													
	24	25.9		1.2	±0.06		4.3		15	24	25.2		1.35											
	25	26.9				3	4.4		16	25	26.2													
	26	27.9					4.6		16	26	27.2													
	28	30.1					4.6		18	28	29.4													
	30	32.1	±0.25				4.7		20	30	31.4													
	32	34.4				3.5	5.2		21	32	33.7													
	35	37.8		1.5			5.2		24	35	37	+0.25 0	1.65		2									
	37	39.8					5.2		26	37	39													
	40	43.5	±0.4	1.75	±0.07	4	5.7	2.5	28	40	42.5		1.9											
	42	45.5					5.8		30	42	44.5													
	45	48.5				4.5	5.9		33	45	47.5													
	47	50.5					6.1		34	47	49.5													
	52	56.2	±0.45	2		5.1	6.5		39	52	55	+0.3 0	2.2											
	55	59.2					6.5		41	55	58													
	60	64.2				5.5	6.8		46	60	63													
	62	66.2					6.9		48	62	65													
	68	72.5		2.5	±0.08	6	7.4		53	68	71		2.7											
	72	76.5				6.6	7.4		57	72	75													
	80	85.5	±0.55			7	8		64	80	83.5	+0.35 0												

Ordering Example: Part Number RTWN10, RTWS20

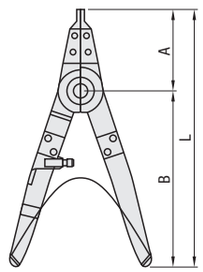
Days to Ship

Configure Online

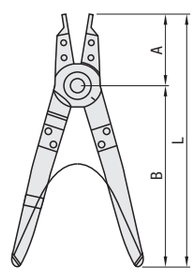
Price Configure Online

■Retaining Ring Pliers

STWP (External)



RTWP (Internal)



M Material: Body: Low Carbon Steel, Finger: Carbon Steel

Part Number		Applicable Retaining Ring Size	L	A	B	STWP (External)		RTWP (Internal)	
Type	No.					Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate
						1~9 pc(s).	10~20 pcs.	1~9 pc(s).	10~20 pcs.
STWP (External) / RTWP (Internal)	4-9	No.4~9	200	50	150			-	-
	10-18	No.10~18							
	19-30	No.19~30							
	32-58	No.32~58	245	65	180				
	60-80	No.60~80	285	75	210				

For orders larger than indicated quantity, please request a quotation.

Ordering Example: Part Number STWP 4-9

Days to Ship

Configure Online