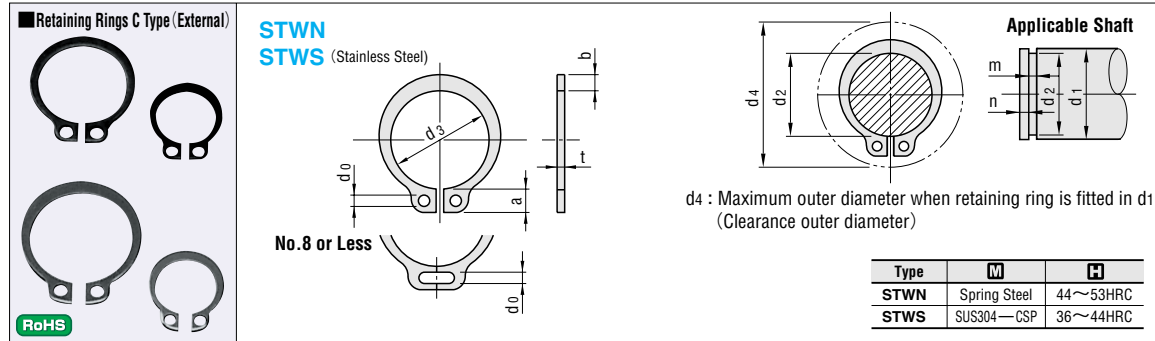


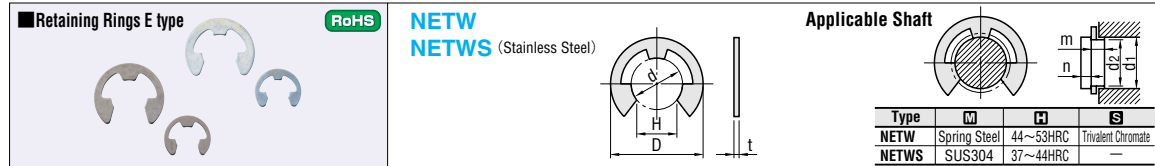
Retaining Rings

—C Type (External), E Type—

 CAD Data Folder Name : Misc



Catalog No.		Retaining Rings							Reference	Applicable Shaft (Reference)						Unit Price	STWN	Unit Price	STWS																																																																
Type	No.	d ₃	Tolerance	t	Tolerance	b	a	d ₀	d ₄	d ₁	d ₂	Tolerance	m	Tolerance	n	Qty. 1~199	200~	Qty. 1~199	200~																																																																
						(Approx.)	(Approx.)	(Min.)							(Min.)																																																																				
STWN	3	2.7	+0.04	0.25	±0.025	0.5	1.7	0.7	7	3	2.85	0.35	+0.10 0	0.3	52	10	—	—																																																																	
	4	3.7	—0.15	0.4	±0.03	0.9	2.2	0.8	9	4	3.8	0							0.5																																																																
	5	4.7		0.6		1.1	2.4		10.5	5	4.8	—0.04							0.7																																																																
	6	5.6	+0.06	0.7	±0.04	1.3	2.8	1	12	6	5.7	0							0.8																																																																
	7	6.5	—0.2	0.8		1.4	3		14	7	6.7	0							0.9																																																																
STWS (Stainless Steel)	8	7.4		0.8		1.6	3		15	8	7.6	—0.06		0.6	+0.10 0	1.5	—	—	57	11																																																															
	4	3.6		0.25	±0.03	0.7	1.4	0.7	9	4	3.7		0.3																																																																						
	5	4.5		0.4		0.7	1.4		10.5	5	4.7	±0.06	0.45																																																																						
	6	5.5	±0.1		±0.04	0.8	2.0	1	12	6	5.7		0.7																																																																						
	7	6.3		0.65		0.9	2.0		14	7	6.5																																																																								
STWN STWS (Stainless Steel)	8	7.1		1.0	2.2	1.5	8	7.4	15	8	7.4	—0.09	1.15	+0.14 0	1.5	95	19	124	24																																																																
	10	9.3	±0.15			1.8	3	1.2	17	10	9.6									—0.11																																																															
	11	10.2				2	3.1	1.5	18	11	10.5									—0.21	1.35	1.65	2	250	50	110	156																																																								
	12	11.1				2.1	3.2		19	12	11.5																	0																																																							
	13	12				2.1	3.3		20	13	12.4																	—0.25	1.9	2.2	290	50	550	196																																																	
	14	12.9	±0.18			2.2	3.5	1.7	22	14	13.4																								0																																																
	15	13.8				2.2	3.6		23	15	14.3																								—0.3	2.7	2.5	730	146	1,970	399																																										
	16	14.7				2.2	3.7		24	16	15.2																															0																																									
	17	15.7				2.6	3.8	2	25	17	16.2																															—0.25	1.9	2.2	360	72	980	196																																			
	18	16.5				2.6	3.8		26	18	17																																						0																																		
	19	17.5				2.7	3.9		27	19	18																																						—0.25	1.9	2.2	360	72	980	196																												
	20	18.5				2.7	4		28	20	19																																													0																											
	21	19.5				2.7	4		30	21	20																																													—0.25	1.9	2.2	360	72	980	196																					
	22	20.5				2.9	4.1		31	22	21																																																				0																				
	23	21.4				2.9	4.5		32.5	23	22																																																				—0.25	1.9	2.2	360	72	980	196														
	24	22.2	±0.2			3.1	4.2	2	33	24	22.9																																																											0													
	25	23.2				3.1	4.3		34	25	23.9																																																											—0.25	1.9	2.2	360	72	980	196							
	26	24.2				3.1	4.4		35	26	24.9																																																																		0						
	28	25.9				3.1	4.6		38	28	26.6																																																																		—0.25	1.9	2.2	360	72	980	196
	29	26.9				3.5	4.7		39	29	27.6																																																																								
30	27.9				3.5	4.8		40	30	28.6	—0.25	1.9	2.2	360	72	980	196																																																																		
32	29.6				3.5	5		43	32	30.3								0																																																																	
35	32.2	±0.25			4	5.4		46	35	33								—0.25	1.9	2.2	360	72	980	196																																																											
40	37				4	5.8		53	40	38															0																																																										
45	41.5	±0.4			4.8	6.3	2.5	58	45	42.5															—0.25	1.9	2.2	360	72	980	196																																																				
50	45.8				5	6.7		64	50	47																						0																																																			
52	47.8				5	6.8		66	52	49																						—0.25	1.9	2.2	360	72	980	196																																													
60	55.8	±0.45			5.5	7.2		75	60	57																													0																																												
80	74.5				5.5	7.2		75	60	57																													—0.25	1.9	2.2	360	72	980	196																																						
80	74.5				5.5	7.2		75	60	57																																				0																																					
80	74.5				5.5	7.2		75	60	57																																				—0.25	1.9	2.2	360	72	980	196																															
80	74.5				5.5	7.2		75	60	57																																											0																														
80	74.5				5.5	7.2		75	60	57																																											—0.25	1.9	2.2	360	72	980	196																								
80	74.5				5.5	7.2		75	60	57																																																		0																							
80	74.5				5.5	7.2		75	60	57																																																		—0.25	1.9	2.2	360	72	980	196																	
80	74.5				5.5	7.2		75	60	57																																																									0																
80	74.5				5.5	7.2		75	60	57																																																									—0.25	1.9	2.2	360	72	980	196										
80	74.5				5.5	7.2		75	60	57																																																																0									
80	74.5				5.5	7.2		75	60	57																																																																—0.25	1.9	2.2	360	72	980	196			
80	74.5				5.5	7.2		75	60	57																																																																							0		
80	74.5				5.5	7.2		75	60	57	—0.25	1.9	2.2	360	72	980	196																																																																		
80	74.5				5.5	7.2		75	60	57																																																																							0		
80	74.5				5.5	7.2		75	60	57								—0.25	1.9	2.2	360	72	980	196																																																											
80	74.5				5.5	7.2		75	60	57																																																																							0		
80	74.5				5.5	7.2		75	60	57															—0.25	1.9	2.2	360	72	980	196																																																				
80	74.5				5.5	7.2		75	60	57																																																																							0		
80	74.5				5.5	7.2		75	60	57																						—0.25	1.9	2.2	360	72	980	196																																													
80	74.5				5.5	7.2		75	60	57																																																																							0		
80	74.5				5.5	7.2		75	60	57																													—0.25	1.9	2.2	360	72	980	196																																						
80	74.5				5.5	7.2		75	60	57																																																																							0		
80	74.5				5.5	7.2		75	60	57																																				—0.25	1.9	2.2	360	72	980	196																															
80	74.5				5.5	7.2		75	60	57																																																																							0		
80	74.5				5.5	7.2		75	60	57																																											—0.25	1.9	2.2	360	72	980	196																								
80	74.5				5.5	7.2		75	60	57																																																																							0		
80	74.5				5.5	7.2		75	60	57																																																		—0.25	1.9	2.2	360	72	980	196																	
80	74.5				5.5	7.2		75	60	57																																																																							0		
80	74.5				5.5	7.2		75	60	57																																																									—0.25	1.9	2.2	360	72	980	196										
80	74.5				5.5	7.2		75	60	57																																																																							0		
80	74.5				5.5	7.2		75	60	57																																																																—0.25	1.9	2.2	360	72	980	196			
80	74.5				5.5	7.2		75	60	57																																																																							0		
80	74.5				5.5	7.2		75	60	57	—0.25	1.9	2.2	360	72	980	196																																																																		
80	74.5				5.5	7.2		75	60	57																																																																							0		
80	74.5				5.5	7.2		75	60	57								—0.25	1.9	2.2	360	72	980	196																																																											
80	74.5				5.5	7.2		75	60	57																																																																							0		
80	74.5				5.5	7.2		75	60	57															—0.25	1.9	2.2	360	72	980	196																																																				
80	74.5				5.5	7.2		75	60	57																																																																							0		
80	74.5				5.5	7.2		75	60	57																						—0.25	1.9	2.2	360	72	980	196																																													
80	74.5				5.5	7.2		75	60	57																																																																							0		
80	74.5				5.5	7.2		75	60	57																													—0.25	1.9	2.2	360	72	980	196																																						
80	74.5				5.5	7.2		75	60	57																																																																							0		
80	74.5				5.5	7.2		75	60	57																																				—0.25	1.9	2.2	360	72	980	196																															
80	74.5				5.5	7.2		75	60	57																																																																							0		
80	74.5				5.5	7.2		75	60	57																																											—0.25	1.9	2.2	360	72	980	196																								
80	74.5				5.5	7.2		75	60	57																																																																							0		
80	74.5				5.5	7.2		75	60	57																																																		—0.25	1.9	2.2	360	72	980	196																	
80	74.5				5.5	7.2		75	60	57																																																																							0		
80	74.5				5.5	7.2		75	60	57																																																									—0.25	1.9	2.2	360	72	980	196										
80	74.5				5.5	7.2		75	60	57																																																																							0		
80	74.5				5.5	7.2		75	60	57																																																																—0.25	1.9	2.2	360	72	980	196			
80	74.5				5.5	7.2		75	60	57																																																																							0		
80	74.5				5.5	7.2		75	60	57	—0.25	1.9	2.2	360	72	980	196																																																																		
80	74.5				5.5	7.2		75	60	57																																																																							0		
80	74.5				5.5	7.2		75	60	57								—0.25	1.9	2.2	360	72	980	196																																																											
80	74.5				5.5	7.2		75	60	57																																																																							0		
80	74.5				5.5	7.2		75	60	57															—0.25	1.9	2.2	360	72	980	196																																																				
80	74.5				5.5	7.2		75	60	57																																																																							0		
80	74.5				5.5	7.2		75	60	57																						—0.25	1.9	2.2	360	72	980	196																																													
80	74.5				5.5	7.2		75	60	57																																																																							0		
80	74.5				5.5	7.2		75	60	57																													—0.25	1.9	2.2	360	72	980	196																																						
80	74.5				5.5	7.2		75	60	57																																																																							0		
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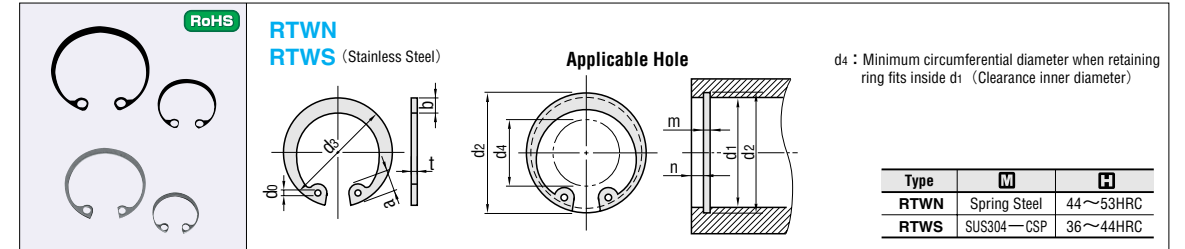


Catalog No.		Retaining Rings										Applicable Shaft (Reference)						NETW - NETWS	
Type	No.	d	Tolerance	D	Tolerance	H	Tolerance	t	Tolerance	d1 Class Or More or Less	d2	Tolerance	m	Tolerance	n (Min.)	Qty. 1~199	200~		
NETW	1.2	1.2		3	±0.1	1				±0.025	1.4	2	1.2	0.4	+0.05 0	0.6	42	8	
	1.5	1.5		4		1.3		0.3	2.5		1.5		0.8			42	8		
	2	2	0	5		1.7	0	0.4	2.5		3.2	2	+0.06 0			0.5	1	42	8
	2.5	2.5	-0.09	6		2.1	-0.25		3.2		4	2.5						42	8
	3	3		7		2.6			4		5	3						52	10
NETWS (Stainless Steel)	4	4		9	±0.2	3.5		0.6	±0.04	5	7	4	0.7	+0.1 0	1.2	52	10		
	5	5	0	11		4.3	0			6	8	5				+0.075 0	52	10	
	6	6	-0.12	12		5.2	-0.30			7	9	6					52	10	
	7	7	0	14		6.1		8	11	7	+0.09 0	0.9	1.5	52	10				
	8	8	0	16		6.9	0	9	12	8				1.8	52	10			
	9	9	-0.15	18		7.8	-0.35	10	14	9				2	61	12			

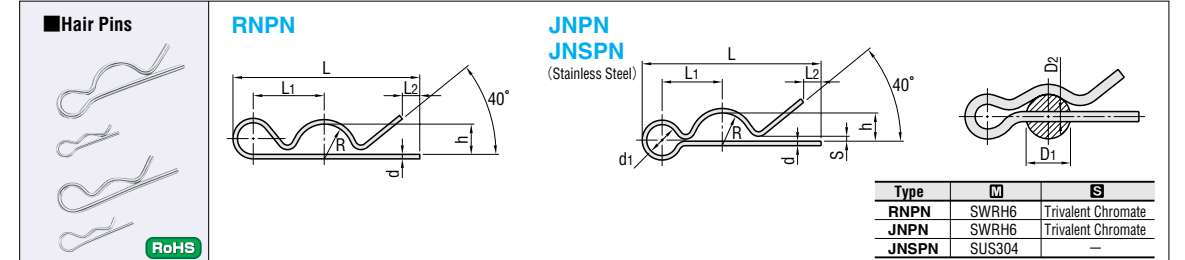


Retaining Rings/Hair Pins/Split Pins — C Type (Internal) —

 CAD Data Folder Name : Misc



Catalog No.				Retaining Rings					Reference		Applicable Hole (Reference)					Unit Price		RTWN	Unit Price		RTWS
Type	No.	d ₂	Tolerance	t	Tolerance	b (Approx.)	a (Approx.)	d ₀ (Min.)	d ₄	d ₁	d ₂	Tolerance	m	Tolerance	n (Min.)	Qty.1~199	200~	Qty.1~199	200~		
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		1.5	52	15	78	23		
	11	11.8					3		4	11	11.4										
	12	13					3.1		5	12	12.5										
	13	14.1					3.1		6	13	13.6										
	14	15.1				3.6	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				3.8	9	17	17.8												
	19	20.5	4	11	19	20	+0.21 0	1.35	+0.14 0	66	19	90	27								
	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	4.3	15	24	25.2															
	26	27.9	4.6	16	26	27.2															
	28	30.1	4.6	18	28	29.4															
	30	32.1	4.7	20	30	31.4								+0.25 0		1.65	2	120	36	285	85
	32	34.4	5.2	21	32	33.7															
	35	37.8	5.2	24	35	37															
	37	39.8	5.2	26	37	39															
	40	43.5	5.7	28	40	42.5															
	42	45.5	5.8	30	42	44.5															
	45	48.5	5.9	33	45	47.5															
	47	50.5	6.1	34	47	49.5															
	52	56.2	6.5	39	52	55	+0.3 0	2.2	2.5	300	90	1,100	330								
	55	59.2	6.5	41	55	58															
	60	64.2	6.8	46	60	63															
	62	66.2	6.9	48	62	65															
	68	72.5	7.4	53	68	71															
72	75.5	7.4	57	72	75																
80	86.5	8	64	80	83.5																
80	86.5	±0.55	7	8	64	80								83.5	±0.35	2.7	400	120	1,480	444	



Catalog No.		d	L	L ₁	L ₂	R	h	D ₁	D ₂	Unit Price	
Type	No.	(Wire Dia.)						(Applicable Shaft Dia.)	(Shaft Hole Dia.)	Qty. 1~199	200~
RNPN	6	1.2	25.2	9.7	3.9	3	1.4	6	1.5	53	13
	8	1.6	33.8	13.1	5.3	4	2.1	8	1.9	70	17
	10	1.8	40.2	15.7	5.7	5	3	10	2.2	88	22
	12	2	46	17.5	6	6	4	12	2.4	99	24

