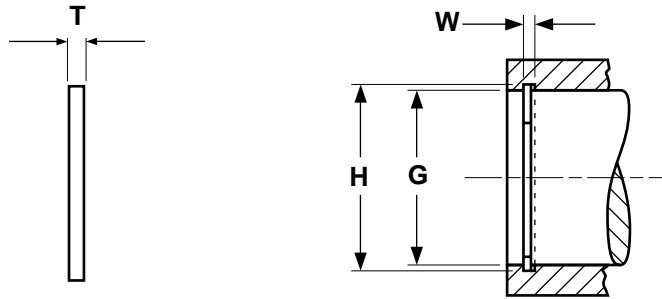


# Retaining Rings

## External Type

Carbon Spring Steel  
& Stainless Steel



EXTERNAL TYPE RETAINING RINGS								Rotor Clip®	
Carbon Spring Steel		Stainless Steel		H	G	W	F	T	
Kanebridge Part Number	Waldes Part Number	Kanebridge Part Number	Waldes Part Number	Shaft	Groove Diameter	Groove Width	Free Diameter	Thickness	
25REXBP	5100-25STPP	25REXSS	5100-25H	0.250	0.230	0.029	0.225	0.025	
28REXBP	5100-28STPP	28REXSS	5100-28H	0.281	0.261	0.029	0.256	0.025	
31REXBP	5100-31STPP	31REXSS	5100-31H	0.312	0.290	0.029	0.281	0.025	
34REXBP	5100-34STPP	-	5100-34H	0.344	0.321	0.029	0.309	0.025	
37REXBP	5100-37STPP	37REXSS	5100-37H	0.375	0.352	0.029	0.338	0.025	
40REXBP	5100-40STPP	-	5100-40H	0.406	0.382	0.029	0.366	0.025	
43REXBP	5100-43STPP	43REXSS	5100-43H	0.438	0.412	0.029	0.395	0.025	
50REXBP	5100-50STPP	50REXSS	5100-50H	0.500	0.468	0.039	0.461	0.035	
56REXBP	5100-56STPP	56REXSS	5100-56H	0.562	0.530	0.039	0.521	0.035	
59REXBP	5100-59STPP	59REXSS	5100-59H	0.594	0.559	0.039	0.550	0.035	
62REXBP	5100-62STPP	62REXSS	5100-62H	0.625	0.588	0.039	0.579	0.035	
68REXBP	5100-68STPP	68REXSS	5100-68H	0.688	0.646	0.046	0.635	0.042	
75REXBP	5100-75STPP	75REXSS	5100-75H	0.750	0.704	0.046	0.693	0.042	
81REXBP	5100-81STPP	81REXSS	5100-81H	0.812	0.762	0.046	0.751	0.042	
87REXBP	5100-87STPP	87REXSS	5100-87H	0.875	0.821	0.046	0.810	0.042	
93REXBP	5100-93STPP	93REXSS	5100-93H	0.938	0.882	0.046	0.867	0.042	
100REXBP	5100-100STPP	100REXSS	5100-100H	1.000	0.940	0.046	0.925	0.042	
106REXBP	5100-106STPP	106REXSS	5100-106H	1.062	0.998	0.056	0.982	0.050	
112REXBP	5100-112STPP	112REXSS	5100-112H	1.125	1.059	0.056	1.041	0.050	
118REXBP	5100-118STPP	118REXSS	5100-118H	1.188	1.118	0.056	1.098	0.050	
125REXBP	5100-125STPP	125REXSS	5100-125H	1.250	1.176	0.056	1.156	0.050	
131REXBP	5100-131STPP	131REXSS	5100-131H	1.312	1.232	0.056	1.214	0.050	
137REXBP	5100-137STPP	137REXSS	5100-137H	1.375	1.291	0.056	1.272	0.050	
143REXBP	5100-143STPP	-	5100-143H	1.438	1.350	0.056	1.333	0.050	
150REXBP	5100-150STPP	150REXSS	5100-150H	1.500	1.406	0.056	1.387	0.050	
156REXBP	5100-156STPP	-	5100-156H	1.562	1.468	0.068	1.446	0.062	
162REXBP	5100-162STPP	162REXSS	5100-162H	1.625	1.529	0.068	1.503	0.062	
168REXBP	5100-168STPP	-	5100-168H	1.688	1.589	0.068	1.560	0.062	
175REXBP	5100-175STPP	175REXSS	5100-175H	1.750	1.650	0.068	1.618	0.062	

®Rotor Clip is a registered trademark of Rotor Clip Company Inc.

EXTERNAL TYPE RETAINING RINGS (CONTINUED)								Rotor Clip®
Carbon Spring Steel		Stainless Steel		H	G	W	F	T
Kanebridge Part Number	Waldes Part Number	Kanebridge Part Number	Waldes Part Number	Shaft	Groove Diameter	Groove Width	Free Diameter	Thickness
181REXBP	5100-181STPP	-	5100-181H	1.812	1.708	0.068	1.675	0.062
187REXBP	5100-187STPP	-	5100-187H	1.875	1.769	0.068	1.735	0.062
200REXBP	5100-200STPP	200REXSS	5100-200H	2.000	1.886	0.068	1.850	0.062
206REXBP	5100-206STPP	-	5100-206H	2.062	1.946	0.086	1.906	0.078
212REXBP	5100-212STPP	-	5100-212H	2.125	2.003	0.086	1.964	0.078
225REXBP	5100-225STPP	-	5100-225H	2.250	2.120	0.086	2.081	0.078
231REXBP	5100-231STPP	-	5100-231H	2.312	2.178	0.086	2.139	0.078
237REXBP	5100-237STPP	-	5100-237H	2.375	2.239	0.086	2.197	0.078
243REXBP	5100-243STPP	-	5100-243H	2.438	2.299	0.086	2.255	0.078
250REXBP	5100-250STPP	-	5100-250H	2.500	2.360	0.086	2.313	0.078
262REXBP	5100-262STPP	-	5100-262H	2.625	2.481	0.086	2.428	0.078
268REXBP	5100-268STPP	-	5100-268H	2.688	2.541	0.086	2.485	0.078
275REXBP	5100-275STPP	-	5100-275H	2.750	2.602	0.103	2.543	0.093
287REXBP	5100-287STPP	-	5100-287H	2.875	2.721	0.103	2.659	0.093
300REXBP	5100-300STPP	-	5100-300H	3.000	2.838	0.103	2.775	0.093

<b>Description</b>	A ring-shaped stamping with one opening on the circumference. The two ends at the opening are called lugs and flare out slightly allowing for easier installation onto shafts.	
<b>Applications/ Advantages</b>	Tapered section design assures constant moment and, therefore, uniform circular deformation; allows for complete contact and tightness in groove. The external design is for axial assembly into machined grooves on shafts. Steel rings can be safely used within a temperature range of -100°F to 500°F. Stainless steel rings are corrosion resistant & can be used in higher heat applications from -100°F to 900°F.	
<b>Material</b>	<b>Steel:</b> Carbon spring steel SAE 1060 - 1090	<b>Stainless:</b> Precipitation Hardened Alloy 15% Chromium, 7% Nickel, 2% Molybdenum
<b>Heat Treatment</b>	Retaining rings are heat treated using the austempering method. Rings are uniformly heated to temperatures over 1500° F. They are then isothermally quenched in a molten salt bath at 600° F for 35 minutes. This results in parts with a bainite structure characterized by good mechanical properties.	
<b>Hardness</b>	<b>Steel</b> Sizes 25 & 46: Rockwell 30N 69.5 - 73 Sizes 50 - 81: Rockwell 30N 66 - 71 Sizes 87 - 102 Rockwell C 47 - 53 Sizes 106 - 343: Rockwell C 47 - 52	<b>Stainless</b> Sizes 25 - 31: Rockwell 30N 63 - 69.5 Sizes 87 & over: Rockwell C 44 - 51
<b>Tensile Strength</b>	-	<b>Stainless:</b> 225,000 psi. minimum
<b>Finish</b>	See Appendix-A for information about the coating of retaining rings.	