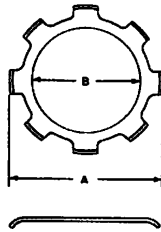


EXTERNAL TOOTH RETAINERS

SPRINGGRIP™ RETAINERS - EXTERNAL TOOTH

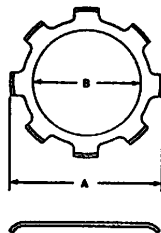
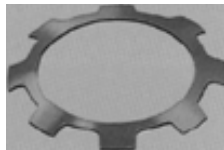


External tooth retainers function as spacers or retaining collars when inserted into recesses or tubular parts. The external teeth flex, engaging the full circumference of the recess wall to resist any pull-out forces. Ideal for retaining knob inlays or other inserts.

HOLE SIZE DESIGN +/- .002	WCL PRODUCT NUMBER	OUTSIDE DIAMETER A		INSIDE DIAMETER A NOM.	MATERIAL THICKNESS
		MIN.	MAX.		
.375	8069-37-02	.378	.383	.190	.012
.750	8069-75-00	.763	.768	.542	.015
.750	8069-75-00	.763	.768	.543	.036
.812	8069-83-02	.818	.831	.197	.030
1.125	8069-88-04	1.130	1.137	.875	.015

NOTE: Due to shaft design and material variations, we suggest that you request samples prior to placing orders.

TYPE B RETAINERS - EXTERNAL TOOTH

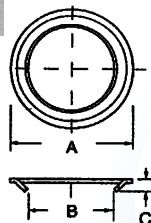
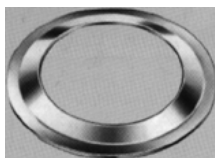


HOLE SIZE DESIGN +/- .002	WCL PRODUCT NUMBER	OUTSIDE DIAMETER A		INSIDE DIAMETER A NOM.	MATERIAL THICKNESS
		MIN.	MAX.		
.580	R-103612-1	.596	.604	.354	.012
.625	R-104010-1	.636	.640	.394	.010
.650	R-114315-1	.730	.669	.425	.015
.740	R-145515-1	.750	.760	.556	.015
.750	ER-125015-1	.753	.763	.505	.015
.750	R-125415-1	.768	.763	.543	.015
.812	R-132030-1	.831	.818	.198	.030
.812	R-135410-1	.825	.835	.540	.010
.895	R-167115-1	.905	.915	.709	.015
.900	R-156315-1	.908	.920	.625	.015
1.095	R-208715-1	1.268	1.272	.866	.015
1.125	R-187615-1	1.132	1.137	.755	.015
1.335	R-25J715-1	1.36	1.370	1.063	.015
2.115	R-39P615-1	2.13	2.140	1.653	.015
2.375	R-38R815-1	2.387	2.382	1.880	.015
3.000	R-48W820-1	3.018	3.010	2.385	.020

NOTE: Due to shaft design and material variations, we suggest that you request samples prior to placing orders.

SOLID I.D. RETAINERS

TOOTHLESS



These slightly dished, smooth I.D. retainers provide full 360° contact with shafts, studs or other round projections. They do not work off or collapse under shock or vibration. Their low profile and small O.D. make them ideal for restricted areas.

SHAFT SIZE DESIGN +/- .002	WCL PRODUCT NUMBER	OUTSIDE DIAMETER A		INSIDE DIAMETER A NOM.		HEIGHT D MIN. MAX.		MATERIAL THICKNESS
		MIN.	MAX.					
125	8063-12-11	.315	.335	.113	.119	.020	.030	.006
250	6614-61-35	.432	.442	.241	.247	.050	.065	.010
280	8959-20-03	.462	.482	.269	.275	.045	.055	.018
300	R-082920-1	.495	.505	.290	.295	.050	.060	.020
312	R-113022-1	.670	.687	.305	.307	.045	.055	.022
365	8959-20-02	.550	.570	.356	.362	.045	.055	.018

NOTE: Due to shaft design and material variations, we suggest that you request samples prior to placing orders.