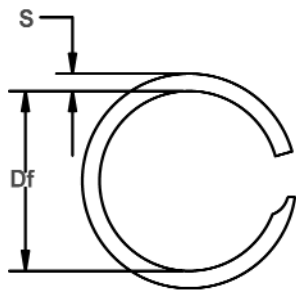


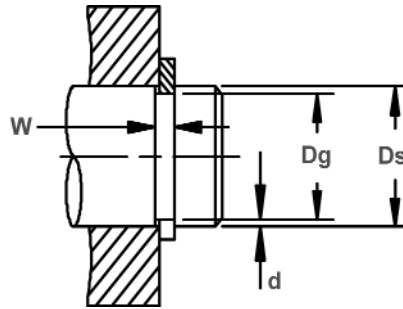
CLR Spiral Shaft Rings

External, Heavy-Duty Snap Ring

These single-turn snap rings are ideal for applications involving high thrust loads.

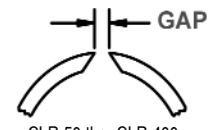


Free Diameter & Ring Measurements

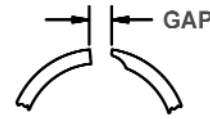


Shaft Diameter & Groove Dimensions

Optional End Designs

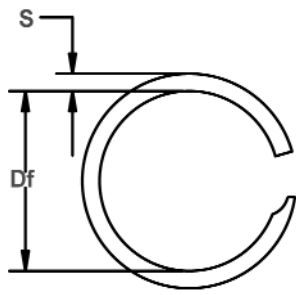


CLR-50 thru CLR-400

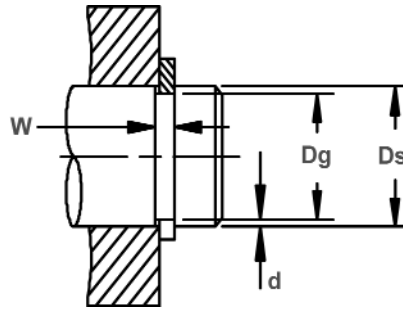


CLR-412 thru CLR-1100

RING NO.	SHAFT DIAMETER (In.)	GROOVE SIZE				RING SIZE						THRUST LOAD (lbs.)	
		DIAMETER		WIDTH		FREE DIAMETER		THICKNESS		SECTION		RING Safety factor of 3	GROOVE Safety factor of 2
		Ds	Dg	Tol.	W	Tol.	Df	Tol.	T	Tol.	S		
CLR-50	.500	.476		.043		.471		.037		.055		2325	424
CLR-56	.562	.532	+ .000	.043		.524		.037		.055		2613	596
CLR-62	.625	.595	- .004	.043		.590		.037		.065		2906	663
CLR-68	.687	.655		.043		.649		.037		.065		3194	777
CLR-75	.750	.710		.051		.701	+ .000	.045		.075		4241	1060
CLR-81	.812	.772	+ .000	.051		.764	- .013	.045		.075		4592	1148
CLR-87	.875	.831	- .005	.051		.820		.045		.075		4948	1361
CLR-93	.937	.893		.051		.886		.045		.085		5334	1457
CLR-100	1.000	.952	+ .000	.051		.933		.045		.085		5693	1696
CLR-106	1.062	1.014	- .008	.051		1.004		.045	± .002	.085	+ .003	6045	1802
CLR-112	1.125	1.077		.063		1.069		.057		.128	- .005	7615	1909
CLR-118	1.187	1.131		.063		1.116		.057		.128		8035	2349
CLR-125	1.250	1.188		.063		1.176	+ .000	.057		.128		8461	2739
CLR-131	1.312	1.242		.063		1.223	- .015	.057		.128		8881	3246
CLR-137	1.375	1.297		.063		1.282		.057		.128		9307	3791
CLR-143	1.437	1.359		.073		1.344		.067		.158		11408	3961
CLR-150	1.500	1.422		.073		1.402		.067		.158		11908	4135
CLR-156	1.562	1.470	+ .000	.073	+ .006	1.457		.067		.158		12400	5079
CLR-162	1.625	1.533	- .010	.073	- .000	1.517		.067		.158		12901	5284
CLR-168	1.687	1.595		.073		1.578	+ .000	.067		.158		13393	5485
CLR-175	1.750	1.658		.073		1.640	- .020	.067		.158		13893	5690
CLR-181	1.812	1.720		.073		1.697		.067		.158		14385	5892
CLR-187	1.875	1.783		.073		1.767		.067		.158		14885	6097
CLR-193	1.937	1.819		.085		1.800		.076		.200		16649	8078
CLR-200	2.000	1.882		.085		1.862		.076		.200		17191	8341
CLR-206	2.062	1.944		.085		1.924		.076		.200		17724	8599
CLR-212	2.125	2.007		.085		1.987		.076		.200		18265	8862
CLR-218	2.187	2.069		.085		2.048		.076		.200		18798	9121
CLR-225	2.250	2.132		.085		2.110	+ .000	.076		.200		19340	9384
CLR-231	2.312	2.194		.085		2.171	- .025	.076		.200		19873	9642
CLR-237	2.375	2.257		.085		2.226		.076		.200	+ .004	20414	9905
CLR-243	2.437	2.319		.085		2.296		.076		.200	- .006	20947	10163
CLR-250	2.500	2.382		.085		2.357		.076		.200		21488	10426
CLR-256	2.562	2.444	+ .000	.104		2.415		.095	± .003	.200		26252	10685
CLR-262	2.625	2.507	- .012	.104		2.486		.095		.200		26898	10947
CLR-268	2.687	2.569		.104		2.537		.095		.200		27533	11206
CLR-275	2.750	2.632		.104		2.607		.095		.200		28179	11469
CLR-281	2.812	2.694		.104		2.665		.095		.200		28814	11727
CLR-287	2.875	2.757		.104		2.727		.095		.200		29460	11990
CLR-293	2.937	2.819		.104		2.789	+ .000	.095		.200		30095	12249
CLR-300	3.000	2.882		.104		2.852	- .030	.095		.200		30740	12511
CLR-306	3.062	2.944		.104		2.916		.095		.200		31376	12770
CLR-312	3.125	2.987		.104		2.955		.095		.237		32021	15242
CLR-318	3.187	3.049		.104		3.016		.095		.237	± .005	32657	15544
CLR-325	3.250	3.112		.104		3.079		.095		.237		33302	15851

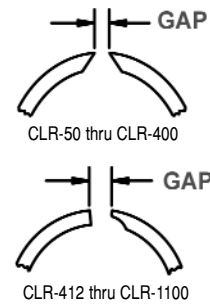


Free Diameter & Ring Measurements



Shaft Diameter & Groove Dimensions

Optional End Designs



RING NO.	SHAFT DIAMETER (In.)	GROOVE SIZE				RING SIZE						THRUST LOAD (lbs.)	
		DIAMETER		WIDTH		FREE DIAMETER		THICKNESS		SECTION		RING Safety factor of 3	GROOVE Safety factor of 2
		Dg	Tol.	W	Tol.	Df	Tol.	T	Tol.	S	Tol.		
CLR-331	3.312	3.174		.124		3.140	+ .000-.030	.115		.248		39088	16154
CLR-337	3.375	3.237		.124		3.203		.115		.248		39831	16461
CLR-343	3.437	3.299		.124		3.264		.115		.248		40563	16763
CLR-350	3.500	3.362		.124		3.326		.115		.248		41307	17071
CLR-356	3.562	3.424		.124		3.378		.115		.248		42038	17373
CLR-362	3.625	3.487	+ .000	.124		3.451	+ .000	.115	± .003	.248		42782	17680
CLR-368	3.687	3.549	- .014	.124		3.512	- .035	.115		.248		43514	17983
CLR-375	3.750	3.612		.124		3.570		.115		.248		44257	18290
CLR-381	3.812	3.674		.124		3.636		.115		.248		44989	18592
CLR-387	3.875	3.737		.124		3.689		.115		.248		45732	18900
CLR-393	3.937	3.799		.124		3.760		.115		.248	± .005	46464	19202
CLR-400	4.000	3.862		.124		3.828		.115		.248		47208	19509
CLR-412	4.125	3.967	+ .000	.163		3.930		.153		.265		62126	23035
CLR-425	4.250	4.092	- .021	.163		4.050		.153		.265		64008	23733
CLR-437	4.375	4.217		.163		4.174		.153		.265		65891	24431
CLR-450	4.500	4.342		.163		4.297	+ .000	.153		.265		67774	25129
CLR-462	4.625	4.467		.163		4.421	- .051	.153		.265		69656	25827
CLR-475	4.750	4.592		.163		4.530		.153		.265		71539	26525
CLR-487	4.875	4.717		.163		4.668		.153		.265		73421	27223
CLR-500	5.000	4.842		.163		4.792		.153		.265		75304	27921
CLR-525	5.250	5.092	+ .000	.163	+ .007	5.039		.153	± .004	.265		79069	29317
CLR-550	5.500	5.342	- .024	.163	- .000	5.292		.153		.265		82834	30713
CLR-575	5.750	5.592		.163		5.535		.153		.265		86599	32109
CLR-600	6.000	5.804		.163		5.744		.153		.316	± .006	90365	41563
CLR-625	6.250	6.054		.163		5.992	+ .000	.153		.316		94130	43295
CLR-650	6.500	6.304		.163		6.236	- .060	.153		.316		97985	45027
CLR-675	6.750	6.554		.163		6.486		.153		.316		101727	46759
CLR-700	7.000	6.804		.163		6.734		.153		.316		105494	48490
CLR-725	7.250	7.054		.163		6.993		.153		.316		109262	50222
CLR-750	7.500	7.304		.163		7.219		.153		.316		113030	51954
CLR-775	7.750	7.554		.163		7.477		.153		.316		116797	53686
CLR-800	8.000	7.764	+ .000	.203		7.683	+ .000	.192		.435		142932	66727
CLR-825	8.250	8.014	- .028	.203		7.940	- .070	.192		.435		147399	68813
CLR-850	8.500	8.264		.203		8.179		.192		.435		151866	70898
CLR-875	8.750	8.514		.203		8.427		.192		.435		156332	72983
CLR-900	9.000	8.764		.203		8.673		.192		.435		160799	75068
CLR-925	9.250	9.014		.203		8.922		.192		.435	± .007	165265	77154
CLR-950	9.500	9.240		.203		9.130		.192	± .005	.435		169732	87297
CLR-975	9.750	9.490		.203		9.393		.192		.435		174199	98594
CLR-1000	10.000	9.686		.203		9.586		.192		.500		178665	110977
CLR-1025	10.250	9.936	+ .000	.203		9.826	+ .000	.192		.500		183132	113751
CLR-1050	10.500	10.186	- .031	.203		10.081	- .091	.192		.500		187599	116526
CLR-1075	10.750	10.436		.203		10.329		.192		.500		192056	119300
CLR-1100	11.000	10.686		.203		10.584		.192		.500		196532	122074