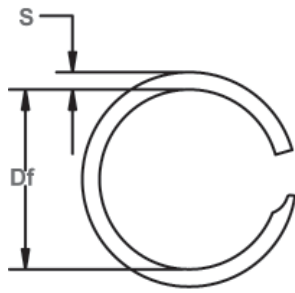
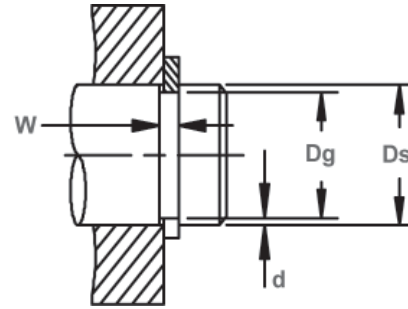


CL Spiral Shaft Rings

External, Light Duty
These single-turn snap rings are ideal for light duty applications.



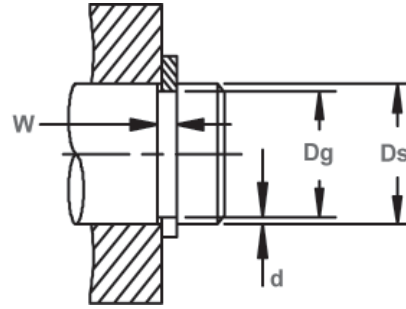
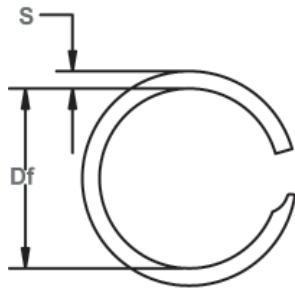
Free Diameter & Ring Measurements



Shaft Diameter & Groove Dimensions

RING NO.	SHAFT DIAMETER (In.)	GROOVE SIZE					RING SIZE					THURST LOAD (lbs.)		R.P.M. LIMITS Standard Material (Carbon Steel)		
		DIAMETER		WIDTH		DEPTH	FREE DIAMETER			THICKNESS		SECTION			RING Safety factor of 3	GROOVE Safety factor of 2
		Ds	Dg	Tol.	W	Tol.	d	Df	Tol.	T	Tol.	S	Tol.			
CL-25*	.250	.238		.015		.006	.236		.012		.020		481	106	45227	
CL-31*	.312	.297		.018		.008	.294	+.000	.015		.025		750	165	39946	
CL-37*	.375	.351		.018		.012	.348	-.010	.015		.025		901	318	31161	
CL-43	.437	.413	+.002	.018		.012	.410	+.000/-.012	.015		.035		1050	371	24067	
CL-50	.500	.472	-.002	.022		.014	.467		.018		.045		1300	500	28030	
CL-56	.562	.534		.022		.014	.529		.018		.045		1460	560	21060	
CL-62	.625	.597		.022		.014	.591		.018		.045		1630	620	17850	
CL-68	.687	.659		.022		.014	.652	+.000	.018		.045		1790	680	15340	
CL-75	.750	.722		.022		.014	.715	-.013	.018		.045		1950	740	12350	
CL-81	.812	.770		.026	+.002	.021	.762		.021	+.0015	.065		2460	1210	15380	
CL-87	.875	.833	+.003	.026	-.000	.021	.825		.021	-.0015	.065		2660	1300	12800	
CL-93	.937	.895	-.003	.026		.021	.886		.021		.065		2840	1390	11500	
CL-100	1.000	.958		.026		.021	.949		.021		.065		3040	1480	9800	
CL-106	1.062	1.018		.031		.022	1.008		.025		.088		3500	1650	11490	
CL-112	1.125	1.081		.031		.022	1.071		.025		.088		3710	1750	9990	
CL-118	1.187	1.143		.031		.022	1.132		.025		.088		3920	1850	9220	
CL-125	1.250	1.206	+.004	.031		.022	1.194	+.000	.025		.088		4120	1940	8500	
CL-131	1.312	1.268	-.004	.031		.022	1.255	-.015	.025		.088		4330	2040	7880	
CL-137	1.375	1.331		.031		.022	1.318		.025		.088		4540	2140	7030	
CL-143	1.437	1.393		.031		.022	1.379		.025		.088		4740	2240	6560	
CL-150	1.500	1.456		.031		.022	1.442		.025		.088		4950	2330	5900	
CL-156	1.562	1.505		.039		.029	1.488		.031		.118	+.004	6390	3200	7720	
CL-162	1.625	1.568		.039		.029	1.550		.031		.118	-.004	6650	3330	7220	
CL-168	1.687	1.630		.039		.029	1.612		.031		.118		6900	3460	6590	
CL-175	1.750	1.693	+.005	.039		.029	1.674	+.000	.031		.118		7160	3590	6200	
CL-181	1.812	1.755	-.005	.039		.029	1.736	-.020	.031		.118		7410	3710	5700	
CL-187	1.875	1.818		.039		.029	1.798		.031		.118		7670	3840	5380	
CL-193	1.937	1.880		.039		.029	1.859		.031		.118		7920	3970	5100	
CL-200	2.000	1.943		.039		.029	1.922		.031		.118		8180	4100	4720	
CL-206	2.062	1.986		.039		.038	1.963		.031		.158		8430	5540	5970	
CL-212	2.125	2.049		.039		.038	2.026		.031		.158		8690	5710	5550	
CL-218	2.187	2.111		.039		.038	2.087		.031		.158		8950	5870	5290	
CL-225	2.250	2.174		.039		.038	2.149		.031	+.002	.158		9200	6040	5050	
CL-231	2.312	2.236		.039	+.003	.038	2.211		.031	-.002	.158		9460	6210	4720	
CL-237	2.375	2.299		.039	-.000	.038	2.273		.031		.158		9720	6380	4520	
CL-243	2.437	2.361		.039		.038	2.335	+.000	.031		.158		9970	6550	4240	
CL-250	2.500	2.424		.039		.038	2.397	-.025	.031		.158		10230	6720	4063	
CL-256	2.562	2.486	+.006	.039		.038	2.458		.031		.158		10480	6880	3900	
CL-262	2.625	2.549	-.006	.039		.038	2.521		.031		.158		10740	7050	3680	
CL-268	2.687	2.611		.039		.038	2.582		.031		.158		10990	7220	3540	
CL-275	2.750	2.674		.039		.038	2.644		.031		.158		11250	7390	3400	
CL-281	2.812	2.736		.039		.038	2.706		.031		.158		11500	7550	3220	
CL-287	2.875	2.799		.039		.038	2.768		.031		.158		11760	7720	3100	
CL-293	2.937	2.861		.039		.038	2.830		.031		.158		12010	7890	2940	
CL-300	3.000	2.924		.039		.038	2.892		.031		.158		12270	8060	2840	
CL-306	3.062	2.970		.044		.046	2.938	+.000	.039		.188	+.005	15760	9960	3670	
CL-312	3.125	3.033		.044		.046	3.001	-.030	.039		.188	-.005	16080	10160	3030	

* No Removal Notch.



Free Diameter & Ring Measurements

Shaft Diameter & Groove Dimensions

RING NO.	SHAFT DIAMETER (In.)	GROOVE SIZE					RING SIZE				SECTION		THRUST LOAD (lbs.)		R.P.M. LIMITS Standard Material (Carbon Steel)
		DIAMETER		WIDTH		DEPTH	FREE DIAMETER			THICKNESS		RING Safety factor of 3	GROOVE Safety factor of 2		
		Dg	Tol.	W	Tol.	d	Df	Tol.	T	Tol.	S			Tol.	
CL-318	3.187	3.095		.044		.046	3.062		.039		.188		16400	10360	2930
CL-325	3.250	3.158		.044		.046	3.125		.039		.188		16720	10570	2790
CL-331	3.312	3.220		.044		.046	3.186		.039		.188		17040	10770	2700
CL-337	3.375	3.283		.044		.046	3.248		.039		.188		17370	10970	2630
CL-343	3.437	3.345		.044		.046	3.310		.039		.188		17690	11180	3500
CL-350	3.500	3.408	+ .006	.044	+ .003	.046	3.372	+ .000	.039		.188		18010	11380	2440
CL-356	3.562	3.47	- .006	.044	- .000	.046	3.433	- .030	.039		.188		18330	11580	2370
CL-362	3.625	3.533		.044		.046	3.496		.039		.188		18650	11790	2270
CL-368	3.687	3.595		.044		.046	3.557		.039		.188		18970	11990	2210
CL-375	3.750	3.658		.044		.046	3.620		.039		.188		19300	12190	2120
CL-381	3.812	3.720		.044		.046	3.681		.039		.188		19620	12400	2060
CL-387	3.875	3.783		.044		.046	3.743		.039		.188		19940	12600	2010
CL-393	3.937	3.845		.044		.046	3.805		.039		.188		20260	12800	1930
CL-400	4.000	3.908		.044		.046	3.867		.039		.188		20580	13010	1880
CL-412	4.125	4.015		.052		.055	3.973		.046		.225	+ .005	23850	16040	2090
CL-425	4.250	4.140		.052		.055	4.097		.046		.225	- .005	24570	16520	1960
CL-437	4.375	4.265		.052		.055	4.221		.046		.225		25290	17010	1850
CL-450	4.500	4.390		.052		.055	4.345	+ .000	.046		.225		26010	17500	1750
CL-462	4.625	4.515		.052		.055	4.468	- .035	.046		.225		26740	17980	1670
CL-475	4.750	4.640		.052		.055	4.592		.046	+ .002	.225		27460	18470	1580
CL-487	4.875	4.765	+ .007	.052		.055	4.715		.046	- .002	.225		28180	18950	1520
CL-500	5.000	4.890	- .007	.052		.055	4.839		.046		.225		28900	19440	1440
CL-525	5.250	5.119		.067	+ .004	.066	5.067		.061		.225		40240	24490	1310
CL-550	5.500	5.363		.067	- .000	.069	5.309		.061		.225		42160	26830	1190
CL-575	5.750	5.606		.067		.072	5.550		.061		.225		44080	29260	1090
CL-600	6.000	5.850		.067		.075	5.792	+ .000	.061		.225		45990	31810	
CL-625	6.250	6.094		.067		.078	6.033	- .045	.061		.265		47910	34460	
CL-650	6.500	6.338		.067		.081	6.275		.061		.265		49830	37220	
CL-675	6.750	6.581		.067		.085	6.515		.061		.265		51740	40560	
CL-700	7.000	6.825		.067		.088	6.757		.061		.265		53660	43540	
CL-725	7.250	7.069		.067		.091	6.998		.061		.300		55580	46640	
CL-750	7.500	7.313		.067		.094	7.240		.061		.300		57490	49830	
CL-775	7.750	7.556		.067		.097	7.480		.061		.300		59410	53140	
CL-800	8.000	7.800	+ .008	.067	- .008	.100	7.722	+ .000	.061		.300		61320	56550	
CL-825	8.250	8.044		.082		.103	7.964	- .060	.076		.345		78790	60070	
CL-850	8.500	8.288		.082		.106	8.205		.076		.345	+ .004	81180	63690	
CL-875	8.750	8.531		.082		.110	8.446		.076		.345	- .008	83570	68040	
CL-900	9.000	8.775		.082		.113	8.687		.076		.345		85950	71890	
CL-925	9.250	9.019		.082	+ .005	.116	8.929	+ .000	.076		.345		88340	75850	
CL-950	9.500	9.263		.082	- .005	.119	9.170	- .070	.076		.345		90730	79910	
CL-975	9.750	9.506		.082		.122	9.411		.076		.345		93120	84080	
CL-1000	10.000	9.750		.082		.125	9.653		.076		.345		95500	88360	

CONTACT FACTORY REGARDING MAX RPM LIMITS FOR LARGER DIAMETER RINGS