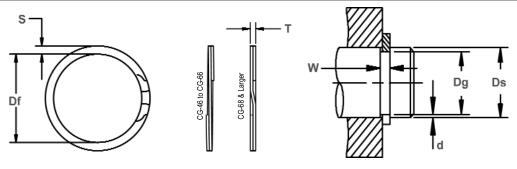


External, Heavy DutyThe rigors of the toughest applications are easily handled by this external series. Its large size, and ease of application and removal, transfers into an assurance of quality for demanding uses.

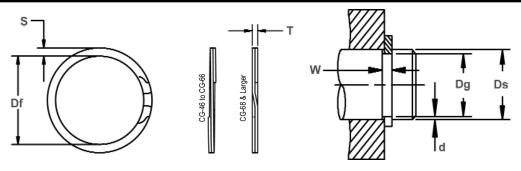


Free Diameter & Ring Measurements

Shaft Diameter & Groove Dimensions

RING	SHAFT			GROOVE S					THRUST L	.OAD (lbs.)				
NO.	DIAMETER	DIAMETER		WIDTH		DEPTH	FREE DIAMETER		THICKNESS		SECTION		RING Safety factor of	GROOVE Safety factor of
	(In.)	Dg	Tol.	W	Tol.	d	Df	Tol.	T	Tol.	S	Tol.	3	2
CG-46	.469	.443		.029		.013	.439		.025		.045		1880	430
CG-50	.500	.468	+.002	.039		.016	.464		.035		.050		2530	570
CG-55	.551	.519	002	.039		.016	.514		.035		.050		2790	620
CG-56	.562	.530		.039		.016	.525		.035]	.050		2840	640
CG-59	.594	.559		.039		.018	.554		.035		.050		3000	760
CG-62	.625	.588		.039		.019	.583		.035]	.055		3160	840
CG-66	.669	.629		.039		.020	.623		.035]	.055		3380	950
CG-68	.688	.646		.046	+.003	.021	.641		.042]	.065		4180	1020
CG-75	.750	.704	+.003	.046	000	.023	.698		.042		.065		4550	1220
CG-78	.781	.733	003	.046		.024	.727		.042		.065		4740	1330
CG-81	.812	.762		.046		.025	.756	+.000	.042	+.002	.065	+.004	4930	1440
CG-87	.875	.821		.046		.027	.814	013	.042	002	.075	004	5310	1670
CG-93	.938	.882		.046		.028	.875		.042		.075		5690	1860
CG-98	.984	.926		.046		.029	.919		.042]	.085		5970	2020
CG-100	1.000	.940		.046		.030	.932		.042		.085		6070	2120
CG-102	1.023	.961		.046		.031	.953		.042		.085		6210	2240
CG-106	1.062	.998		.056		.032	.986		.050		.103		7010	2400
CG-112	1.125	1.059		.056		.033	1.047		.050		.103		7420	2620
CG-118	1.188	1.118		.056		.035	1.105		.050		.103		7840	2940
CG-125	1.250	1.176	+.004	.056		.037	1.163		.050		.103		8250	3270
CG-131	1.312	1.232	004	.056	+.004	.040	1.218		.050		.118		8660	3710
CG-137	1.375	1.291		.056	000	.042	1.277		.050		.118		9070	4080
CG-143	1.438	1.350		.056		.044	1.336		.050		.118		9490	4470
CG-150	1.500	1.406		.056		.047	1.390		.050		.118		9900	4980
CG-156	1.562	1.468	+.005	.068		.047	1.453	+.000	.062	+.003	.128		12780	5190
CG-162	1.625	1.529	005	.068		.048	1.513	020	.062	003	.128	l	13290	5510





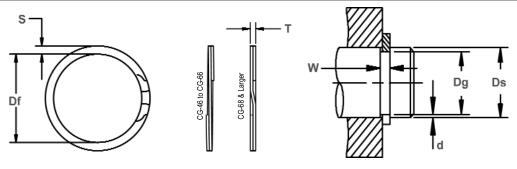
Free Diameter & Ring Measurements

Shaft Diameter & Groove Dimensions

RING	SHAFT			GROOVE S					THRUST LOAD (lbs.)					
NO.	DIAMETER	DIAMETER		W	IDTH	DEPTH		REE	THICKNESS		SECTION		RING	GROOVE
							DIAN	METER					Safety factor of	Safety factor of
	(In.)	Dq	Tol.	w	Tol.	d	Df I	Tol.	т	Tol.	S	Tol.	190101.01	2
CG-168	1.687	1.589	101.	.068	101.	.049	1.573	101.	.062	101.	.128	101.	13800	5840
CG-175	1.750	1.650		.068		.050	1.633		.062		.128	l	14320	6190
CG-177	1.771	1.669	+.005	.068	+.004	.051	1.651	+.000	.062		.128	+.004	14490	6380
CG-181	1.812	1.708	005	.068	000	.052	1.690	020	.062		.128	004	14820	6660
CG-187	1.875	1.769		.068		.053	1.751		.062		.158	1	15340	7020
CG-196	1.969	1.857		.068		.056	1.838		.062		.158	1	16110	7790
CG-200	2.000	1.886		.068		.057	1.867		.062		.158	1	16360	8060
CG-206	2.062	1.946		.086		.058	1.932		.078		.168		21220	8450
CG-212	2.125	2.003		.086		.061	1.989		.078		.168]	21870	9160
CG-215	2.156	2.032		.086		.062	2.018		.078		.168]	22190	9450
CG-225	2.250	2.120		.086		.065	2.105		.078		.168		23160	10340
CG-231	2.312	2.178		.086		.067	2.163	+.000	.078	+.003	.168	1	23800	10950
CG-237	2.375	2.239		.086		.068	2.223	025	.078	003	.200		24440	11420
CG-243	2.437	2.299		.086		.069	2.283		.078		.200		25080	11890
CG-250	2.500	2.360		.086		.070	2.343		.078		.200	+.005 005	25730	12370
CG-255	2.559	2.419		.086	1	.070	2.402		.078		.200		26340	12660
CG-262	2.625	2.481	+.006	.086	+.005	.072	2.464		.078		.200		27020	13360
CG-268	2.687	2.541	006	.086	000	.073	2.523		.078		.200		27660	13870
CG-275	2.750	2.602		.103		.074	2.584		.093		.225		32140	14390
CG-287	2.875	2.721		.103		.077	2.702		.093		.225		33600	15650
CG-293	2.937	2.779		.103		.079	2.760		.093		.225		34320	16400
CG-300	3.000	2.838		.103		.081	2.818	. 000	.093		.225		35060	17180
CG-306	3.062	2.898		.103		.082	2.878	+.000	.093		.225		35790	17750
CG-312	3.125	2.957		.103		.084	2.936	030	.093		.225		36520	18560
CG-315	3.156	2.986		.103		.085	2.965		.093		.225		36880 37980	18960
CG-325	3.250	3.076		.103			3.054		.093		.225			19990
CG-334	3.344	3.166 3.257		.103		.089	3.144		.093		.225		39080	21040
CG-343	3.437	3.25/		.103		.090	3.234		.093		.225	<u> </u>	40170	21870



External, Heavy DutyThe rigors of the toughest applications are easily handled by this external series. Its large size, and ease of application and removal, transfers into an assurance of quality for demanding uses.

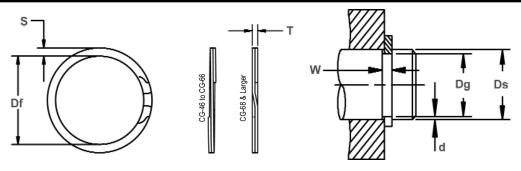


Free Diameter & Ring Measurements

Shaft Diameter & Groove Dimensions

RING	SHAFT			GROOVE S					THRUST LOAD (lbs.)					
NO.	DIAMETER	DIAMETER		WIDTH		DEPTH	DIAN	FREE DIAMETER		THICKNESS		SECTION		GROOVE Safety factor of
	(In.)	Dg	Tol.	W	Tol.	d	Df	Tol.	T	Tol.	S	Tol.	3	2
CG-354	3.543	3.357		.120		.093	3.333		.111		.270		49420	23290
CG-362	3.625	3.435		.120		.095	3.411		.111		.270]	50560	24340
CG-368	3.687	3.493		.120		.097	3.469		.111		.270		51430	25280
CG-375	3.750	3.552	+.006	.120	+.005	.099	3.527	+.000	.111	+.003	.270	+.005	52310	26240
CG-387	3.875	3.673	006	.120	000	.101	3.647	035	.111	003	.270	005	54050	27670
CG-393	3.938	3.734		.120		.102	3.708		.111		.270		54930	28390
CG-400	4.000	3.792		.120		.104	3.765		.111		.270]	55800	29410
CG-425	4.250	4.065		.120		.093	4.037		.111		.270]	59280	27940
CG-437	4.375	4.190		.120		.093	4.161		.111		.270]	61030	28760
CG-450	4.500	4.310		.120		.095	4.280		.111		.270]	62770	30220
CG-475	4.750	4.550		.120		.100	4.518		.111		.270]	66260	36930
CG-500	5.000	4.790		.120		.105	4.756		.111		.270		69740	37110
CG-525	5.250	5.030		.139		.110	4.995		.127		.350		83790	40820
CG-550	5.500	5.265	+.007	.139	+.006	.118	5.228	+.000	.127	+.004	.350	+.006	87780	45880
CG-575	5.750	5.505	007	.139	000	.123	5.466	050	.127	004	.350	006	91770	49990
CG-600	6.000	5.745		.139		.128	5.705		.127		.350		95760	54290
CG-625	6.250	5.985		.174		.133	5.938		.156		.418		122520	58760
CG-650	6.500	6.225		.174		.138	6.181	+.000	.156		.418]	127420	63410
CG-675	6.750	6.465		.174		.143	6.410	060	.156		.418]	132330	68230
CG-700	7.000	6.705		.174		.148	6.648		.156		.418	1	137230	73230
CG-725	7.250	6.942	+.008	.174	+.008	.154	6.891		.156	+.005	.418	+.007	142130	78920
CG-750	7.500	7.180	008	.209	000	.160	7.130		.187	005	.437	007	176240	84820
CG-775	7.750	7.420		.209		.165	7.368	+.000	.187		.437]	182120	90390
CG-800	8.000	7.660		.209		.170	7.606	070	.187	1	.437	1	187990	96130
CG-825	8.250	7.900		.209		.175	7.845		.187	1	.437	1	193870	102050
CG-850	8.500	8.140		.209		.180	8.083		.187	1	.437	1	199740	108150





Free Diameter & Ring Measurements

Shaft Diameter & Groove Dimensions

RING	SHAFT			GROOVE S					THRUST LOAD (lbs.)					
NO.	DIAMETER	DIAMETER		METER WIDTH		DEPTH	FREE		THICKNESS		SECTION		RING	GROOVE
							DIAN	METER					Safety	Safety
													factor of	factor of
	(In.)	Dg	Tol.	W	Tol.	d	Df	Tol.	T	Tol.	S	Tol.	3	2
CG-875	8.750	8.383		.209		.184	8.324		.187		.437		205620	113800
CG-900	9.000	8.620		.209		.190	8.560		.187		.500		211490	120870
CG-925	9.250	8.860	+.008	.209		.195	8.798	+.000	.187		.500]	217370	127500
CG-950	9.500	9.100	008	.209		.200	9.036	070	.187		.500		223240	134300
CG-975	9.750	9.338		.209		.206	9.275		.187		.500	+.007	229120	141970
CG-1000	10.000	9.575		.209		.213	9.508		.187		.500	007	234990	150560
CG-1025	10.250	9.814		.209		.218	9.745		.187		.500		240870	157950
CG-1050	10.500	10.054		.209		.223	9.984		.187		.500		246740	165510
CG-1075	10.750	10.293		.209		.229	10.221		.187		.500		252620	174010
CG-1100	11.000	10.533		.209		.234	10.459		.187		.500		258490	181950
CG-1125	11.250	10.772	+.010	.209	+.008	.239	10.692	+.000	.187	+.005	.500		264360	190060
CG-1150	11.500	11.011	010	.209	000	.245	10.934	090	.187	005	.562		270240	199160
CG-1175	11.750	11.250		.209]	.250	11.171		.187		.562		276120	207640
CG-1200	12.000	11.490		.209		.255	11.410		.187		.562		281990	216300
CG-1225	12.250	11.729		.209		.261	11.647		.187		.562		287860	226000
CG-1250	12.500	11.969		.209		.266	11.885		.187		.562		293740	235030
CG-1275	12.750	12.208		.209		.271	12.124		.187		.562		299610	244240
CG-1300	13.000	12.448		.209		.276	12.361		.187		.662	+.015	305490	253620
CG-1325	13.250	12.687		.209		.282	12.598		.187		.662	010	311360	264120
CG-1350	13.500	12.927		.209		.287	12.837		.187		.662		317240	273870
CG-1375	13.750	13.166	+.012	.209		.292	13.074	+.000	.187		.662		323110	283800
CG-1400	14.000	13.405	012	.209		.298	13.311	110	.187		.662		328990	294900
CG-1425	14.250	13.644		.209		.303	13.548		.187		.662		334860	305200
CG-1450	14.500	13.884		.209		.308	13.787		.187		.750		340740	315680
CG-1475	14.750	14.123		.209		.314	14.024		.187		.750		346610	327380
CG-1500	15.000	14.363		.209		.319	14.262		.187		.750	l	352490	338230