CLIMAX
METAL PRODUCTS COMPANY
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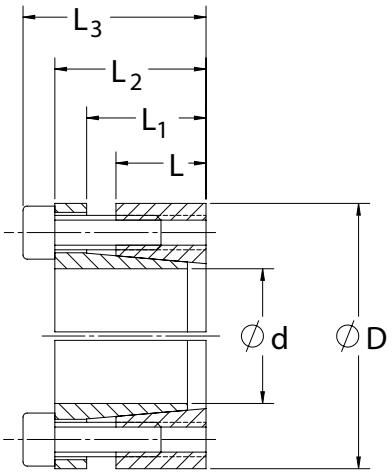
SERIES C123 LOCKING ASSEMBLY

- Single taper design
- Flangeless design mounts flush inside component bore
- Mounted component moves axially during installation

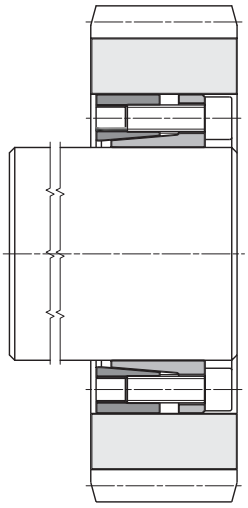


Inch

CLIMAX Part No.	Shaft Size (in)	d	D	L	L_1	L_2	L_3	M_t (ft-lbs)	F_{ax} (lbs.F)	P_s (psi)	P_h (psi)	D_n*	Locking Screws Qty.	Size	M_a (ft-lbs)
C123E-075	3/4	0.750	1.850	0.669	0.886	1.122	1.358	196	6,265	33,106	13,418	2.517	5	M6 x 20	10
C123E-087	7/8	0.875	1.850	0.669	0.886	1.122	1.358	228	6,265	28,376	13,418	2.517	5	M6 x 20	10
C123E-100	1	1.000	1.969	0.669	0.886	1.122	1.358	313	7,518	29,795	15,136	2.793	6	M6 x 20	10
C123E-112	1 1/8	1.125	2.165	0.669	0.886	1.122	1.358	352	7,518	26,485	13,760	2.970	6	M6 x 20	10
C123E-118	1 3/16	1.188	2.165	0.669	0.886	1.122	1.358	372	7,518	25,091	13,760	2.970	6	M6 x 20	10
C123E-125	1 1/4	1.250	2.362	0.669	0.886	1.122	1.358	522	10,024	31,781	16,818	3.499	8	M6 x 20	10
C123E-137	1 3/8	1.375	2.362	0.669	0.886	1.122	1.358	574	10,024	28,892	16,818	3.499	8	M6 x 20	10
C123E-143	1 7/16	1.438	2.559	0.669	0.886	1.122	1.358	600	10,024	27,636	15,524	3.667	8	M6 x 20	10
C123E-150	1 1/2	1.500	2.559	0.669	0.886	1.122	1.358	626	10,024	26,485	15,524	3.667	8	M6 x 20	10
C123E-162	1 5/8	1.625	2.953	0.787	1.043	1.358	1.673	1,097	16,206	33,596	18,489	4.569	7	M8 x 25	26
C123E-168	1 11/16	1.688	2.953	0.787	1.043	1.358	1.673	1,139	16,206	32,351	18,489	4.569	7	M8 x 25	26
C123E-175	1 3/4	1.750	2.953	0.787	1.043	1.358	1.673	1,182	16,206	31,196	18,489	4.569	7	M8 x 25	26
C123E-187	1 7/8	1.875	3.150	0.787	1.043	1.358	1.673	1,266	16,206	29,116	17,333	4.728	7	M8 x 25	26
C123E-193	1 15/16	1.938	3.150	0.787	1.043	1.358	1.673	1,308	16,206	28,177	17,333	4.728	7	M8 x 25	26
C123E-200	2	2.000	3.150	0.787	1.043	1.358	1.673	1,350	16,206	27,297	17,333	4.728	7	M8 x 25	26
C123E-212	2 1/8	2.125	3.346	0.787	1.043	1.358	1.673	1,640	18,521	29,361	18,644	5.200	8	M8 x 25	26
C123E-218	2 3/16	2.188	3.346	0.787	1.043	1.358	1.673	1,688	18,521	28,522	18,644	5.200	8	M8 x 25	26
C123E-225	2 1/4	2.250	3.543	0.787	1.043	1.358	1.673	1,736	18,521	27,730	17,608	5.357	8	M8 x 25	26
C123E-237	2 3/8	2.375	3.543	0.787	1.043	1.358	1.673	1,833	18,521	26,270	17,608	5.357	8	M8 x 25	26
C123E-243	2 7/16	2.438	3.740	0.787	1.043	1.358	1.673	2,116	20,836	28,796	18,767	5.831	9	M8 x 25	26
C123E-250	2 1/2	2.500	3.740	0.787	1.043	1.358	1.673	2,170	20,836	28,076	18,767	5.831	9	M8 x 25	26
C123E-256	2 9/16	2.563	3.740	0.787	1.043	1.358	1.673	2,225	20,836	27,392	18,767	5.831	9	M8 x 25	26
C123E-268	2 11/16	2.688	4.331	0.945	1.201	1.594	1.988	3,405	30,403	31,759	19,708	6.927	8	M10 x 30	51
C123E-275	2 3/4	2.750	4.331	0.945	1.201	1.594	1.988	3,484	30,403	31,037	19,708	6.927	8	M10 x 30	51
C123E-287	2 7/8	2.875	4.528	0.945	1.201	1.594	1.988	3,642	30,403	29,687	18,852	7.075	8	M10 x 30	51
C123E-293	2 15/16	2.938	4.528	0.945	1.201	1.594	1.988	3,721	30,403	29,056	18,852	7.075	8	M10 x 30	51
C123E-300	3	3.000	4.724	0.945	1.201	1.594	1.988	3,800	30,403	28,450	18,066	7.229	8	M10 x 30	51
C123E-325	3 1/4	3.250	4.921	0.945	1.201	1.594	1.988	4,632	34,204	29,545	19,511	7.829	9	M10 x 30	51
C123E-337	3 3/8	3.375	4.921	0.945	1.201	1.594	1.988	4,810	34,204	28,450	19,511	7.829	9	M10 x 30	51
C123E-343	3 7/16	3.438	5.118	0.945	1.201	1.594	1.988	4,899	34,204	27,933	18,761	7.978	9	M10 x 30	51
C123E-350	3 1/2	3.500	5.118	0.945	1.201	1.594	1.988	4,988	34,204	27,434	18,761	7.978	9	M10 x 30	51
C123E-375	3 3/4	3.750	5.315	0.945	1.201	1.594	1.988	5,938	38,004	28,450	20,073	8.588	10	M10 x 30	51
C123E-393	3 15/16	3.938	5.709	1.024	1.299	1.772	2.244	7,449	45,406	29,883	20,611	9.363	8	M12 x 35	89
C123E-400	4	4.000	5.709	1.024	1.299	1.772	2.244	7,568	45,406	29,416	20,611	9.363	8	M12 x 35	89
C123E-443	4 7/16	4.438	6.102	1.024	1.299	1.772	2.244	8,395	45,406	26,516	19,281	9.648	8	M12 x 35	89
C123E-475	4 3/4	4.750	6.496	1.024	1.299	1.772	2.244	10,110	51,081	27,867	20,377	10.585	9	M12 x 35	89
C123E-493	4 15/16	4.938	7.087	1.339	1.614	2.165	2.717	14,135	68,706	27,575	19,212	11.183	9	M14 x 40	140
C123E-500	5	5.000	7.087	1.339	1.614	2.165	2.717	14,314	68,706	27,230	19,212	11.183	9	M14 x 40	140
C123E-543	5 7/16	5.438	7.480	1.339	1.614	2.165	2.717	15,566	68,706	25,039	18,201	11.487	9	M14 x 40	140
C123E-593	5 15/16	5.938	7.874	1.339	1.614	2.165	2.717	18,886	76,340	25,478	19,212	12.425	10	M14 x 40	140
C123E-643	6 7/16	6.438	8.858	1.732	2.008	2.559	3.110	24,572	91,608	21,790	15,836	12.794	12	M14 x 40	140
C123E-693	6 15/16	6.938	9.252	1.732	2.008	2.559	3.110	26,480	91,608	20,220	15,162	13.137	12	M14 x 40	140
C123E-700	7	7.000	9.252	1.732	2.008	2.559	3.110	26,719	91,608	20,039	15,162	13.137	12	M14 x 40	140
C123E-743	7 7/16	7.438	9.843	1.732	2.008	2.559	3.110	35,486	114,510	23,576	17,815	14.961	15	M14 x 40	140
C123E-793	7 15/16	7.938	10.236	1.732	2.008	2.559	3.110	37,872	114,510	22,091	17,130	15.283	15	M14 x 40	140
C123E-800	8	8.000	10.236	1.732	2.008	2.559	3.110	38,170	114,510	21,918	17,130	15.283	15	M14 x 40	140

All dimensions are shown in inches unless stated otherwise. All dimensions and capacities are subject to change without notice.

* Minimum hub outside diameter based on a **Pressure Reduction Factor** of C=1.0 and hub material with tensile yield point ≥ 45,000 psi. For details refer to page 8.



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SERIES C123 LOCKING ASSEMBLY

CLIMAX Series C123 is shown in a typical application under a straight-sided spur gear. Note that the gear will move axially – left to right in this illustration – during installation.

Metric

CLIMAX Part No.	Shaft Size (mm)	d	D	L	L_1	L_2	L_3	M_t (ft-lbs)	F_{ax} (lbs.F)	P_s (psi)	P_h (psi)	D_n*	Locking Screws Qty.	Size	M_a (ft-lbs)
C123M-14X32	14	0.551	1.260	0.551	0.709	0.846	1.004	50	2,191	19,127	8,368	1.521	4	M4 x 12	3
C123M-15X32	15	0.591	1.260	0.551	0.709	0.846	1.004	54	2,191	17,852	8,368	1.521	4	M4 x 12	3
C123M-16X32	16	0.630	1.260	0.551	0.709	0.846	1.004	57	2,191	16,736	8,368	1.521	4	M4 x 12	3
C123M-18X47	18	0.709	1.850	0.669	0.886	1.122	1.358	185	6,265	35,037	13,418	2.517	5	M6 x 20	10
C123M-19X47	19	0.748	1.850	0.669	0.886	1.122	1.358	195	6,265	33,193	13,418	2.517	5	M6 x 20	10
C123M-20X47	20	0.787	1.850	0.669	0.886	1.122	1.358	206	6,265	31,533	13,418	2.517	5	M6 x 20	10
C123M-22X47	22	0.866	1.850	0.669	0.886	1.122	1.358	226	6,265	28,667	13,418	2.517	5	M6 x 20	10
C123M-24X50	24	0.945	1.969	0.669	0.886	1.122	1.358	296	7,518	31,533	15,136	2.793	6	M6 x 20	10
C123M-25X50	25	0.984	1.969	0.669	0.886	1.122	1.358	308	7,518	30,272	15,136	2.793	6	M6 x 20	10
C123M-28X55	28	1.102	2.165	0.669	0.886	1.122	1.358	345	7,518	27,028	13,760	2.970	6	M6 x 20	10
C123M-30X55	30	1.181	2.165	0.669	0.886	1.122	1.358	370	7,518	25,227	13,760	2.970	6	M6 x 20	10
C123M-32X60	32	1.260	2.362	0.669	0.886	1.122	1.358	526	10,024	31,533	16,818	3.499	8	M6 x 20	10
C123M-35X60	35	1.378	2.362	0.669	0.886	1.122	1.358	576	10,024	28,830	16,818	3.499	8	M6 x 20	10
C123M-38X65	38	1.496	2.559	0.669	0.886	1.122	1.358	625	10,024	26,554	15,524	3.667	8	M6 x 20	10
C123M-40X65	40	1.575	2.559	0.669	0.886	1.122	1.358	658	10,024	25,227	15,524	3.667	8	M6 x 20	10
C123M-42X75	42	1.654	2.953	0.787	1.043	1.358	1.673	1,117	16,206	33,016	18,489	4.569	7	M8 x 25	26
C123M-45X75	45	1.772	2.953	0.787	1.043	1.358	1.673	1,196	16,206	30,815	18,489	4.569	7	M8 x 25	26
C123M-48X80	48	1.890	3.150	0.787	1.043	1.358	1.673	1,276	16,206	28,889	17,333	4.728	7	M8 x 25	26
C123M-50X80	50	1.969	3.150	0.787	1.043	1.358	1.673	1,329	16,206	27,733	17,333	4.728	7	M8 x 25	26
C123M-55X85	55	2.165	3.346	0.787	1.043	1.358	1.673	1,671	18,521	28,814	18,644	5.200	8	M8 x 25	26
C123M-60X90	60	2.362	3.543	0.787	1.043	1.358	1.673	1,823	18,521	26,413	17,608	5.357	8	M8 x 25	26
C123M-65X95	65	2.559	3.740	0.787	1.043	1.358	1.673	2,222	20,836	27,429	18,767	5.831	9	M8 x 25	26
C123M-70X110	70	2.756	4.331	0.945	1.201	1.594	1.988	3,491	30,403	30,970	19,708	6.927	8	M10 x 30	51
C123M-75X115	75	2.953	4.528	0.945	1.201	1.594	1.988	3,741	30,403	28,906	18,852	7.075	8	M10 x 30	51
C123M-80X120	80	3.150	4.724	0.945	1.201	1.594	1.988	3,990	30,403	27,099	18,066	7.229	8	M10 x 30	51
C123M-85X125	85	3.346	4.921	0.945	1.201	1.594	1.988	4,769	34,204	28,693	19,511	7.829	9	M10 x 30	51
C123M-90X130	90	3.543	5.118	0.945	1.201	1.594	1.988	5,050	34,204	27,099	18,761	7.978	9	M10 x 30	51
C123M-95X135	95	3.740	5.315	0.945	1.201	1.594	1.988	5,923	38,004	28,525	20,073	8.588	10	M10 x 30	51
C123M-100X145	100	3.937	5.709	1.024	1.299	1.772	2.244	7,448	45,406	29,886	20,611	9.363	8	M12 x 35	89
C123M-110X155	110	4.331	6.102	1.024	1.299	1.772	2.244	8,193	45,406	27,169	19,281	9.648	8	M12 x 35	89
C123M-120X165	120	4.724	6.496	1.024	1.299	1.772	2.244	10,055	51,081	28,018	20,377	10.585	9	M12 x 35	89
C123M-130X180	130	5.118	7.087	1.339	1.614	2.165	2.717	14,652	68,706	26,602	19,212	11.183	9	M14 x 40	140
C123M-140X190	140	5.512	7.480	1.339	1.614	2.165	2.717	15,779	68,706	24,701	18,201	11.487	9	M14 x 40	140
C123M-150X200	150	5.906	7.874	1.339	1.614	2.165	2.717	18,784	76,340	25,616	19,212	12.425	10	M14 x 40	140
C123M-160X210	160	6.299	8.268	1.339	1.614	2.165	2.717	22,040	83,974	26,417	20,127	13.378	11	M14 x 40	140
C123M-170X225	170	6.693	8.858	1.732	2.008	2.559	3.110	25,547	91,608	20,959	15,836	12.794	12	M14 x 40	140
C123M-180X235	180	7.087	9.252	1.732	2.008	2.559	3.110	27,050	91,608	19,794	15,162	13.137	12	M14 x 40	140
C123M-190X250	190	7.480	9.843	1.732	2.008	2.559	3.110	35,690	114,510	23,441	17,815	14.961	15	M14 x 40	140
C123M-200X260	200	7.874	10.236	1.732	2.008	2.559	3.110	37,569	114,510	22,269	17,130	15.283	15	M14 x 40	140
C123M-220X285	220	8.661	11.220	1.969	2.244	2.874	3.504	45,638	126,459	19,674	15,187	15.943	12	M16 x 45	218
C123M-240X305	240	9.449	12.008	1.969	2.244	2.874	3.504	62,234	158,073	22,543	17,739	18.216	15	M16 x 45	218
C123M-260X325	260	10.236	12.795	1.969	2.244	2.874	3.504	80,904	189,688	24,971	19,977	20.618	18	M16 x 45	218
C123M-280X355	280	11.024	13.976	2.362	2.638	3.346	4.055	92,692	201,803	20,557	16,214	20.381	16	M18 x 50	299
C123M-300X375	300	11.811	14.764	2.362	2.638	3.346	4.055	111,726	227,028	21,585	17,268	22.123	18	M18 x 50	299

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