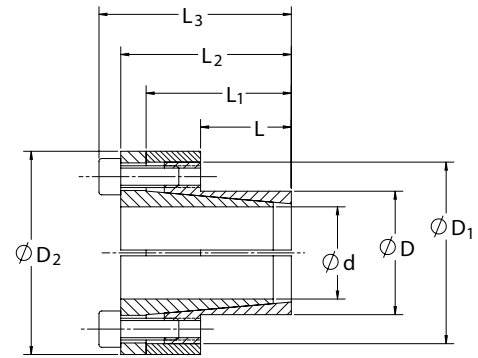




SERIES C170 LOCKING ASSEMBLY

- Single taper design with flange and integrated spacer
- Excellent concentricity
- Thin cross section accommodates smaller diameter mounted component

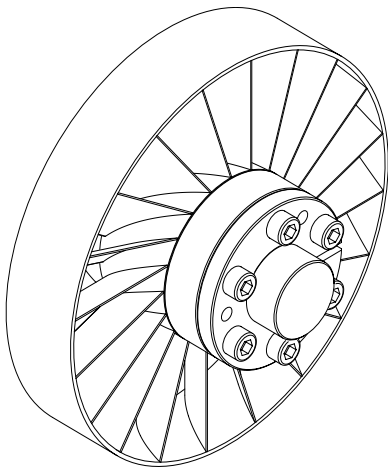


Inch

CLIMAX Part No.	Shaft Size (in)	d	D	D ₁	D ₂	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)
C170E-025	1/4	0.250	0.551	0.906	0.984	0.394	0.748	0.866	1.024	17	1,643	44,278	20,083	0.891	3	M4 x 10	3.7
C170E-031	5/16	0.313	0.591	0.945	1.063	0.472	0.866	0.984	1.142	21	1,643	29,519	15,620	0.848	3	M4 x 10	3.7
C170E-037	3/8	0.375	0.630	1.024	1.142	0.551	0.945	1.063	1.220	34	2,191	28,113	16,736	0.931	4	M4 x 10	3.7
C170E-043	7/16	0.438	0.709	1.102	1.260	0.551	0.945	1.083	1.240	40	2,191	24,097	14,877	0.999	4	M4 x 10	3.7
C170E-050	1/2	0.500	0.906	1.299	1.496	0.551	0.945	1.083	1.240	46	2,191	21,085	11,643	1.180	4	M4 x 10	3.7
C170E-062	5/8	0.625	0.945	1.575	1.732	0.630	1.161	1.437	1.673	98	3,759	25,326	16,752	1.397	3	M6 x 16	13
C170E-075	3/4	0.750	1.063	1.693	1.929	0.709	1.280	1.555	1.791	157	5,012	25,013	17,648	1.609	4	M6 x 16	13
C170E-087	7/8	0.875	1.260	1.890	2.126	0.984	1.575	1.850	2.087	183	5,012	15,437	10,721	1.606	4	M6 x 16	13
C170E-093	15/16	0.938	1.339	1.969	2.205	0.984	1.575	1.850	2.087	294	7,518	21,611	15,136	1.899	6	M6 x 16	13
C170E-100	1	1.000	1.339	1.969	2.205	0.984	1.575	1.850	2.087	313	7,518	20,261	15,136	1.899	6	M6 x 16	13
C170E-112	1 1/8	1.125	1.535	2.165	2.402	0.984	1.575	1.850	2.087	352	7,518	18,009	13,195	2.077	6	M6 x 16	13
C170E-118	1 3/16	1.188	1.614	2.244	2.441	0.984	1.575	1.850	2.087	372	7,518	17,062	12,552	2.150	6	M6 x 16	13
C170E-125	1 1/4	1.250	1.693	2.323	2.559	0.984	1.575	1.850	2.087	522	10,024	21,611	15,957	2.453	8	M6 x 16	13
C170E-137	1 3/8	1.375	1.850	2.441	2.677	1.260	1.850	2.126	2.362	574	10,024	15,349	11,406	2.398	8	M6 x 18	13
C170E-143	1 7/16	1.438	1.969	2.598	2.835	1.260	1.850	2.126	2.362	600	10,024	14,682	10,721	2.510	8	M6 x 18	13
C170E-150	1 1/2	1.500	1.969	2.598	2.835	1.260	1.850	2.126	2.362	626	10,024	14,070	10,721	2.510	8	M6 x 18	13
C170E-162	1 5/8	1.625	2.165	2.795	3.071	1.260	1.850	2.126	2.362	679	10,024	12,988	9,747	2.698	8	M6 x 18	13
C170E-168	1 11/16	1.688	2.323	3.150	3.386	1.772	2.441	2.756	3.071	1,302	18,521	16,433	11,938	3.048	8	M8 x 22	30
C170E-175	1 3/4	1.750	2.323	3.150	3.386	1.772	2.441	2.756	3.071	1,350	18,521	15,846	11,938	3.048	8	M8 x 22	30
C170E-187	1 7/8	1.875	2.441	3.189	3.425	1.772	2.441	2.756	3.071	1,447	18,521	14,789	11,360	3.160	8	M8 x 22	30
C170E-193	1 15/16	1.938	2.559	3.386	3.622	1.772	2.441	2.756	3.071	1,495	18,521	14,312	10,836	3.272	8	M8 x 22	30
C170E-200	2	2.000	2.795	3.622	3.858	2.165	2.874	3.189	3.504	1,736	20,836	12,762	9,131	3.434	9	M8 x 22	30
C170E-212	2 1/8	2.125	2.795	3.622	3.858	2.165	2.874	3.189	3.504	1,845	20,836	12,011	9,131	3.434	9	M8 x 22	30
C170E-218	2 3/16	2.188	3.031	3.858	4.094	2.165	2.874	3.189	3.504	1,899	20,836	11,668	8,420	3.663	9	M8 x 22	30
C170E-237	2 3/8	2.375	3.031	3.858	4.094	2.165	2.874	3.189	3.504	2,062	20,836	10,747	8,420	3.663	9	M8 x 22	30
C170E-243	2 7/16	2.438	3.307	4.134	4.370	2.165	2.874	3.189	3.504	2,116	20,836	10,471	7,718	3.933	9	M8 x 22	30
C170E-250	2 1/2	2.500	3.307	4.134	4.370	2.165	2.874	3.189	3.504	2,170	20,836	10,210	7,718	3.933	9	M8 x 22	30
C170E-262	2 5/8	2.625	3.543	4.449	4.685	2.559	3.386	3.780	4.173	3,741	34,204	13,506	10,006	4.442	9	M10 x 25	61
C170E-275	2 3/4	2.750	3.543	4.449	4.685	2.559	3.386	3.780	4.173	3,919	34,204	12,892	10,006	4.442	9	M10 x 25	61
C170E-287	2 7/8	2.875	3.740	4.685	4.961	2.559	3.386	3.780	4.173	4,097	34,204	12,332	9,479	4.632	9	M10 x 25	61
C170E-293	2 15/16	2.938	3.740	4.685	4.961	2.559	3.386	3.780	4.173	4,186	34,204	12,069	9,479	4.632	9	M10 x 25	61
C170E-300	3	3.000	3.740	4.685	4.961	2.559	3.386	3.780	4.173	4,275	34,204	11,818	9,479	4.632	9	M10 x 25	61
C170E-312	3 1/8	3.125	3.937	4.921	5.157	2.559	3.386	3.780	4.173	5,938	45,605	15,127	12,007	5.175	12	M10 x 25	61
C170E-325	3 1/4	3.250	4.173	5.157	5.394	2.559	3.386	3.780	4.173	6,176	45,605	14,545	11,327	5.398	12	M10 x 25	61
C170E-337	3 3/8	3.375	4.173	5.157	5.394	2.559	3.386	3.780	4.173	6,413	45,605	14,006	11,327	5.398	12	M10 x 25	61
C170E-343	3 7/16	3.438	4.409	5.394	5.669	2.559	3.386	3.780	4.173	6,532	45,605	13,752	10,720	5.622	12	M10 x 25	61
C170E-350	3 1/2	3.500	4.409	5.394	5.669	2.559	3.386	3.780	4.173	6,651	45,605	13,506	10,720	5.622	12	M10 x 25	61
C170E-362	3 5/8	3.625	4.409	5.394	5.669	2.559	3.386	3.780	4.173	6,888	45,605	13,040	10,720	5.622	12	M10 x 25	61
C170E-375	3 3/4	3.750	4.724	5.591	5.866	2.559	3.386	3.780	4.173	8,313	53,206	14,707	11,673	6.161	14	M10 x 25	61
C170E-387	3 7/8	3.875	4.921	6.024	6.299	2.756	3.701	4.213	4.685	10,997	68,108	16,917	13,321	6.677	12	M12 x 30	107
C170E-393	3 15/16	3.938	4.921	6.024	6.299	2.756	3.701	4.213	4.685	11,174	68,108	16,649	13,321	6.677	12	M12 x 30	107
C170E-400	4	4.000	4.921	6.024	6.299	2.756	3.701	4.213	4.685	11,351	68,108	16,389	13,321	6.677	12	M12 x 30	107
C170E-425	4 1/4	4.250	5.512	6.614	6.850	2.756	3.701	4.213	4.685	12,061	68,108	15,425	11,894	7.226	12	M12 x 30	107
C170E-437	4 3/8	4.375	5.512	6.614	6.850	2.756	3.701	4.213	4.685	12,416	68,108	14,984	11,894	7.226	12	M12 x 30	107
C170E-443	4 7/16	4.438	6.102	7.362	7.795	3.543	4.528	5.039	5.512	16,791	90,811	15,320	11,140	7.858	16	M12 x 30	107
C170E-450	4 1/2	4.500	6.102	7.362	7.795	3.543	4.528	5.039	5.512	17,027	90,811	15,107	11,140	7.858	16	M12 x 30	107
C170E-475	4 3/4	4.750	6.102	7.362	7.795	3.543	4.528	5.039	5.512	17,973	90,811	14,312	11,140	7.858	16	M12 x 30	107
C170E-493	4 15/16	4.938	6.496	7.756	8.189	3.543	4.528	5.039	5.512	18,683	90,811	13,769	10,465	8.233	16	M12 x 30	107

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.



SERIES C170 LOCKING ASSEMBLY

CLIMAX Series C170 used to mount a high-speed turbine blade. For high-speed applications, elimination of the keyway greatly improves dynamic balance characteristics.



Metric

CLIMAX Part No.	Shaft Size (mm)	d	D	D ₁	D ₂	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)
C170M-6X14	6	0.236	0.551	0.906	0.984	0.394	0.748	0.866	1.024	16	1,643	46,861	20,083	0.891	3	M4 x 10	3.7
C170M-7X15	7	0.276	0.591	0.945	1.063	0.472	0.866	0.984	1.142	19	1,643	33,472	15,620	0.848	3	M4 x 10	3.7
C170M-8X15	8	0.315	0.591	0.945	1.063	0.472	0.866	0.984	1.142	22	1,643	29,288	15,620	0.848	3	M4 x 10	3.7
C170M-9X16	9	0.354	0.630	1.024	1.142	0.551	0.945	1.063	1.220	32	2,191	29,753	16,736	0.931	4	M4 x 10	3.7
C170M-10X16	10	0.394	0.630	1.024	1.142	0.551	0.945	1.063	1.220	36	2,191	26,778	16,736	0.931	4	M4 x 10	3.7
C170M-11X18	11	0.433	0.709	1.102	1.260	0.551	0.945	1.083	1.240	40	2,191	24,343	14,877	0.999	4	M4 x 10	3.7
C170M-12X18	12	0.472	0.709	1.102	1.260	0.551	0.945	1.083	1.240	43	2,191	22,315	14,877	0.999	4	M4 x 10	3.7
C170M-13X23	13	0.512	0.906	1.299	1.496	0.551	0.945	1.083	1.240	47	2,191	20,598	11,643	1.180	4	M4 x 10	3.7
C170M-14X23	14	0.551	0.906	1.299	1.496	0.551	0.945	1.083	1.240	50	2,191	19,127	11,643	1.180	4	M4 x 10	3.7
C170M-15X24	15	0.591	0.945	1.575	1.732	0.630	1.161	1.437	1.673	92	3,759	26,803	16,752	1.397	3	M6 x 16	13
C170M-16X24	16	0.630	0.945	1.575	1.732	0.630	1.161	1.437	1.673	99	3,759	25,128	16,752	1.397	3	M6 x 16	13
C170M-17X25	17	0.669	0.984	1.614	1.772	0.709	1.280	1.555	1.791	140	5,012	28,029	19,060	1.547	4	M6 x 16	13
C170M-18X26	18	0.709	1.024	1.654	1.850	0.709	1.280	1.555	1.791	148	5,012	26,472	18,327	1.577	4	M6 x 16	13
C170M-19X27	19	0.748	1.063	1.693	1.929	0.709	1.280	1.555	1.791	156	5,012	25,079	17,648	1.609	4	M6 x 16	13
C170M-20X28	20	0.787	1.102	1.732	1.969	0.709	1.280	1.555	1.791	164	5,012	23,825	17,018	1.641	4	M6 x 16	13
C170M-22X32	22	0.866	1.260	1.890	2.126	0.984	1.575	1.850	2.087	181	5,012	15,595	10,721	1.606	4	M6 x 16	13
C170M-24X34	24	0.945	1.339	1.969	2.205	0.984	1.575	1.850	2.087	296	7,518	21,443	15,136	1.899	6	M6 x 16	13
C170M-25X34	25	0.984	1.339	1.969	2.205	0.984	1.575	1.850	2.087	308	7,518	20,585	15,136	1.899	6	M6 x 16	13
C170M-28X39	28	1.102	1.535	2.165	2.402	0.984	1.575	1.850	2.087	345	7,518	18,379	13,195	2.077	6	M6 x 16	13
C170M-30X41	30	1.181	1.614	2.244	2.441	0.984	1.575	1.850	2.087	370	7,518	17,154	12,552	2.150	6	M6 x 16	13
C170M-32X43	32	1.260	1.693	2.323	2.559	0.984	1.575	1.850	2.087	526	10,024	21,443	15,957	2.453	8	M6 x 16	13
C170M-35X47	35	1.378	1.850	2.441	2.677	1.260	1.850	2.126	2.362	576	10,024	15,316	11,406	2.398	8	M6 x 18	13
C170M-38X50	38	1.496	1.969	2.598	2.835	1.260	1.850	2.126	2.362	625	10,024	14,107	10,721	2.510	8	M6 x 18	13
C170M-40X53	40	1.575	2.087	2.717	2.953	1.260	1.850	2.126	2.362	658	10,024	13,402	10,114	2.623	8	M6 x 18	13
C170M-42X55	42	1.654	2.165	2.795	3.071	1.260	1.850	2.126	2.362	691	10,024	12,763	9,747	2.698	8	M6 x 18	13
C170M-45X59	45	1.772	2.323	3.150	3.386	1.772	2.441	2.756	3.071	1,367	18,521	15,652	11,938	3.048	8	M8 x 22	30
C170M-48X62	48	1.890	2.441	3.189	3.425	1.772	2.441	2.756	3.071	1,458	18,521	14,674	11,360	3.160	8	M8 x 22	30
C170M-50X65	50	1.969	2.559	3.386	3.622	1.772	2.441	2.756	3.071	1,519	18,521	14,087	10,836	3.272	8	M8 x 22	30
C170M-55X71	55	2.165	2.795	3.622	3.858	2.165	2.874	3.189	3.504	1,880	20,836	11,787	9,131	3.434	9	M8 x 22	30
C170M-60X77	60	2.362	3.031	3.858	4.094	2.165	2.874	3.189	3.504	2,051	20,836	10,805	8,420	3.663	9	M8 x 22	30
C170M-65X84	65	2.559	3.307	4.134	4.370	2.165	2.874	3.189	3.504	2,222	20,836	9,974	7,718	3.933	9	M8 x 22	30
C170M-70X90	70	2.756	3.543	4.449	4.685	2.559	3.386	3.780	4.173	3,928	34,204	12,865	10,006	4.442	9	M10 x 25	61
C170M-75X95	75	2.953	3.740	4.685	4.961	2.559	3.386	3.780	4.173	4,208	34,204	12,007	9,479	4.632	9	M10 x 25	61
C170M-80X100	80	3.150	3.937	4.921	5.157	2.559	3.386	3.780	4.173	5,985	45,605	15,009	12,007	5.175	12	M10 x 25	61
C170M-85X106	85	3.346	4.173	5.157	5.394	2.559	3.386	3.780	4.173	6,359	45,605	14,126	11,327	5.398	12	M10 x 25	61
C170M-90X112	90	3.543	4.409	5.394	5.669	2.559	3.386	3.780	4.173	6,733	45,605	13,341	10,720	5.622	12	M10 x 25	61
C170M-95X120	95	3.740	4.724	5.591	5.866	2.559	3.386	3.780	4.173	8,292	53,206	14,745	11,673	6.161	14	M10 x 25	61
C170M-100X125	100	3.937	4.921	6.024	6.299	2.756	3.701	4.213	4.685	11,173	68,108	16,651	13,321	6.677	12	M12 x 30	107
C170M-110X140	110	4.331	5.512	6.614	6.850	2.756	3.701	4.213	4.685	12,290	68,108	15,137	11,894	7.226	12	M12 x 30	107
C170M-120X155	120	4.724	6.102	7.362	7.795	3.543	4.528	5.039	5.512	17,876	90,811	14,390	11,140	7.858	16	M12 x 30	107
C170M-130X165	130	5.118	6.496	7.756	8.189	3.543	4.528	5.039	5.512	19,366	90,811	13,283	10,465	8.233	16	M12 x 30	107

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.