SELF-CENTERING KEYLESS LOCKING POWER

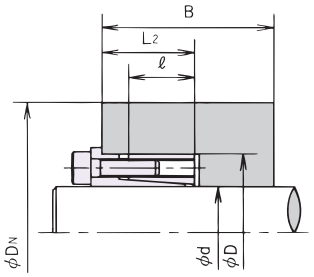
KE Metric Series

Installing to hubs with a guide portion

when B≧2ℓ
(See Installation Example A)

D_N is the minimum hub diameter required to tolerate P' or the pressure exerted from within the hub.

<EXAMPLE> Hub Material Yield Point = 35500 psi
PL030X048KE = 2.904" min. hub diameter



Installation Example A
When installing to hubs with a guide portion,
the hub configuration coefficient is as follows: K_3=0.8

Min. Hub Dia. (D_N in inches)

Model Number	Hub Contact Pressure P' (psi)	Yield Point and Material examples									
		147 Mpa	176 Mpa	206 Mpa	225 Mpa	245 Mpa	274 Mpa	294 Mpa	343 Mpa	392 Mpa	441 Mpa
		21300 psi	25500 psi	29900 psi	32600 psi	35500 psi	39700 psi	42600 psi	49700 psi	56900 psi	64000 psi
				1010 304SS 316SS	1015 1118	1020	1030	1035 1040 1144	4140 1045	1055	
PL005X016 KE	10153	0.941	0.876	0.833	0.812	0.795	0.775	0.764	0.743	0.727	0.716
PL006X017 KE	9573	0.975	0.912	0.870	0.850	0.833	0.814	0.803	0.782	0.766	0.755
PL008X021 KE	12764	1.393	1.263	1.180	1.143	1.111	1.075	1.055	1.018	0.991	0.971
PL010X023 KE	11603	1.444	1.326	1.249	1.213	1.183	1.149	1.130	1.094	1.068	1.048
PL011X024 KE	11168	1.477	1.362	1.286	1.251	1.222	1.188	1.169	1.133	1.107	1.088
PL012X026 KE	13779	1.814	1.625	1.508	1.455	1.411	1.361	1.334	1.282	1.246	1.218
PL014X028 KE	13344	1.911	1.721	1.602	1.548	1.503	1.452	1.424	1.371	1.333	1.305
PL015X029 KE	15519	2.222	1.942	1.777	1.704	1.644	1.577	1.541	1.473	1.425	1.390
PL016X030 KE	14939	2.226	1.962	1.804	1.734	1.676	1.611	1.575	1.509	1.462	1.427
PL017X031 KE	14504	2.246	1.993	1.839	1.770	1.713	1.649	1.613	1.548	1.501	1.466
PL018X032 KE	14069	2.266	2.023	1.872	1.805	1.749	1.686	1.651	1.586	1.540	1.505
PL019X033 KE	13634	2.286	2.051	1.905	1.839	1.784	1.722	1.688	1.624	1.578	1.543
PL020X038 KE	15519	2.912	2.545	2.328	2.233	2.155	2.067	2.019	1.931	1.868	1.821
PL022X040 KE	14649	2.921	2.586	2.383	2.293	2.218	2.134	2.088	2.002	1.941	1.895
PL024X042 KE	18565	3.910	3.216	2.853	2.702	2.581	2.449	2.378	2.250	2.161	2.095
PL025X043 KE	18130	3.881	3.226	2.876	2.730	2.611	2.482	2.413	2.286	2.197	2.132
PL028X046 KE	16970	3.844	3.276	2.957	2.820	2.708	2.585	2.519	2.396	2.310	2.247
PL030X048 KE	17985	4.289	3.577	3.195	3.034	2.904	2.761	2.685	2.545	2.448	2.376
PL032X050 KE	17405	4.297	3.630	3.262	3.105	2.978	2.838	2.763	2.624	2.528	2.456
PL035X057 KE	15374	4.332	3.795	3.476	3.336	3.220	3.090	3.020	2.889	2.796	2.726
PL038X060 KE	18130	5.415	4.502	4.014	3.809	3.644	3.463	3.366	3.189	3.066	2.975
PL040X062 KE	17695	5.432	4.560	4.085	3.884	3.721	3.543	3.447	3.271	3.148	3.057
PL042X064 KE	17115	5.398	4.587	4.134	3.940	3.783	3.609	3.515	3.342	3.221	3.132
PL045X067 KE	16390	5.402	4.653	4.224	4.038	3.885	3.716	3.624	3.455	3.336	3.247
PL048X070 KE	18710	6.587	5.397	4.780	4.524	4.319	4.095	3.976	3.759	3.609	3.498
PL050X072 KE	21176	8.378	6.304	5.392	5.038	4.762	4.469	4.316	4.041	3.854	3.718
PL055X077 KE	19871	7.941	6.287	5.485	5.162	4.906	4.631	4.485	4.221	4.040	3.907
PL060X082 KE	19871	8.456	6.695	5.841	5.497	5.224	4.931	4.776	4.496	4.303	4.161
PL065X087 KE	18710	8.186	6.708	5.940	5.623	5.367	5.090	4.942	4.672	4.485	4.347
PL070X097 KE	21466	11.633	8.634	7.349	6.854	6.470	6.065	5.852	5.474	5.216	5.029
PL075X102 KE	20451	11.068	8.584	7.427	6.968	6.606	6.221	6.017	5.651	5.400	5.216
PL080X107 KE	22771	15.035	10.305	8.555	7.912	7.422	6.913	6.650	6.185	5.872	5.646
PL085X112 KE	21756	13.866	10.138	8.585	7.993	7.535	7.053	6.802	6.354	6.050	5.829
PL090X123 KE	23932	20.885	12.812	10.349	9.488	8.845	8.188	7.853	7.266	6.875	6.594
PL095X128 KE	22916	18.359	12.443	10.298	9.513	8.918	8.300	7.981	7.419	7.040	6.768
PL100X133 KE	22046	17.028	12.247	10.316	9.587	9.025	8.436	8.130	7.585	7.217	6.949

KE Metric Series

Installing to hubs with a guide portion

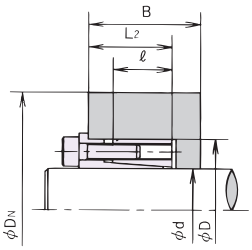
when L2<B<2ℓ
(See Installation Example B)

Installing to hubs without a guide portion

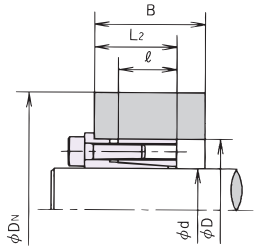
(See Installation Example C)

D_N is the minimum hub diameter required to tolerate P' or the pressure exerted from within the hub.

<EXAMPLE> Hub Material Yield Point = 35500 psi
PL030X048KE = 3.300" min. hub diameter



Installation Example B
When installing to hubs with a guide portion, the hub configuration coefficient is as follows:
$K_3 = 1.0$



Installation Example C
When installing to hubs without a guide portion, the hub configuration coefficient is as follows:
$K_3 = 1.0$

Min. Hub Dia. (D_N in inches)

Model Number	Hub Contact Pressure P' (psi)	Yield Point and Material examples									
		147 Mpa	176 Mpa	206 Mpa	225 Mpa	245 Mpa	274 Mpa	294 Mpa	343 Mpa	392 Mpa	441 Mpa
		21300 psi	25500 psi	29900 psi	32600 psi	35500 psi	39700 psi	42600 psi	49700 psi	56900 psi	64000 psi
				1010 304SS 316SS	1015 1118	1020	1030	1035 1040 1144	4140 1045	1055	
PL005X016 KE	10153	1.057	0.960	0.897	0.869	0.845	0.818	0.803	0.775	0.755	0.739
PL006X017 KE	9573	1.085	0.993	0.933	0.905	0.882	0.856	0.841	0.813	0.793	0.778
PL008X021 KE	12764	1.650	1.432	1.305	1.250	1.204	1.153	1.126	1.075	1.039	1.012
PL010X023 KE	11603	1.667	1.479	1.364	1.313	1.271	1.223	1.197	1.148	1.114	1.088
PL011X024 KE	11168	1.690	1.510	1.400	1.350	1.308	1.261	1.235	1.187	1.153	1.127
PL012X026 KE	13779	2.208	1.872	1.686	1.606	1.541	1.470	1.431	1.360	1.311	1.274
PL014X028 KE	13344	2.298	1.969	1.782	1.702	1.636	1.563	1.524	1.451	1.400	1.362
PL015X029 KE	15519	2.877	2.312	2.030	1.915	1.823	1.725	1.672	1.577	1.511	1.462
PL016X030 KE	14939	2.815	2.309	2.046	1.937	1.849	1.754	1.703	1.610	1.546	1.498
PL017X031 KE	14504	2.798	2.326	2.074	1.968	1.883	1.789	1.739	1.648	1.584	1.537
PL018X032 KE	14069	2.783	2.342	2.101	1.998	1.915	1.824	1.775	1.685	1.622	1.576
PL019X033 KE	13634	2.770	2.358	2.126	2.027	1.947	1.858	1.810	1.721	1.659	1.613
PL020X038 KE	15519	3.770	3.030	2.660	2.509	2.389	2.260	2.191	2.066	1.980	1.916
PL022X040 KE	14649	3.657	3.026	2.693	2.553	2.441	2.319	2.253	2.133	2.050	1.988
PL024X042 KE	18565	6.291	4.161	3.422	3.154	2.952	2.744	2.636	2.447	2.321	2.229
PL025X043 KE	18130	5.953	4.113	3.422	3.167	2.973	2.770	2.666	2.480	2.356	2.266
PL028X046 KE	16970	5.372	4.036	3.450	3.223	3.046	2.858	2.760	2.584	2.464	2.377
PL030X048 KE	17985	6.487	4.539	3.791	3.513	3.300	3.078	2.963	2.760	2.622	2.523
PL032X050 KE	17405	6.190	4.526	3.833	3.568	3.364	3.149	3.036	2.836	2.701	2.602
PL035X057 KE	15374	5.575	4.504	3.964	3.743	3.566	3.375	3.273	3.089	2.961	2.868
PL038X060 KE	18130	8.306	5.739	4.775	4.419	4.148	3.866	3.719	3.461	3.287	3.161
PL040X062 KE	17695	8.007	5.734	4.823	4.480	4.216	3.940	3.796	3.541	3.368	3.243
PL042X064 KE	17115	7.617	5.673	4.835	4.511	4.260	3.994	3.855	3.607	3.438	3.315
PL045X067 KE	16390	7.294	5.650	4.885	4.582	4.344	4.090	3.955	3.714	3.549	3.428
PL048X070 KE	18710	10.792	7.020	5.748	5.292	4.948	4.594	4.413	4.093	3.879	3.725
PL050X072 KE	21176	48.521	9.287	6.866	6.143	5.633	5.135	4.888	4.466	4.192	3.999
PL055X077 KE	19871	na	8.588	6.759	6.149	5.701	5.251	5.023	4.627	4.366	4.180
PL060X082 KE	19871	na	9.146	7.198	6.548	6.072	5.592	5.349	4.928	4.650	4.452
PL065X087 KE	18710	na	8.725	7.144	6.577	6.150	5.710	5.484	5.087	4.821	4.630
PL070X097 KE	21466	na	12.991	9.435	8.405	7.687	6.989	6.645	6.060	5.681	5.415
PL075X102 KE	20451	na	12.085	9.278	8.382	7.736	7.094	6.771	6.216	5.852	5.593
PL080X107 KE	22771	na	17.636	11.466	9.985	9.004	8.085	7.643	6.907	6.439	6.113
PL085X112 KE	21756	na	15.614	11.118	9.860	8.991	8.154	7.743	7.047	6.599	6.284
PL090X123 KE	23932	na	26.962	14.567	12.346	10.963	9.718	9.134	8.181	7.586	7.176
PL095X128 KE	22916	na	21.708	13.877	12.049	10.846	9.725	9.187	8.293	7.726	7.332
PL100X133 KE	22046	na	19.357	13.482	11.899	10.819	9.785	9.280	8.430	7.883	7.501