

Pierścienie rozprężno-zaciskowe

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Code

KL AB 019

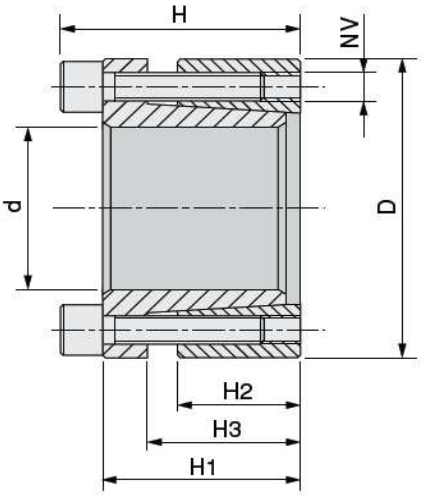
locking set | type | shaft

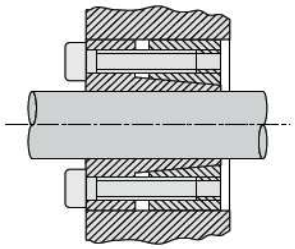
Type	AA	AB	BB	CC	DA	DB	EE	FF	GG	HH	MM	NN	PP	FC	RR	SS
Self-centering	●	●	●	●	●	●	●	●							●	●
Not self-centering									●	●	●	●	●	●		
Min. radial dimensions				●				●				●		●		
Rapid maintenance and assembly	●	●	●	●	●	●		●	●	●	●	●	●	●	●	●
Medium-to-low torque								●		●		●		●		●
Medium-to-high torque	●	●		●					●		●		●		●	
High torque			●		●	●	●									

Duty factor (s)	Load type		
	Constant	Intermittent	Alternating
Electric motor	1 - 1,2	1,2 - 1,5	1,5 - 2
Combustion engine	1,2 - 1,5	1,5 - 2	2 - 3

Series KLAA







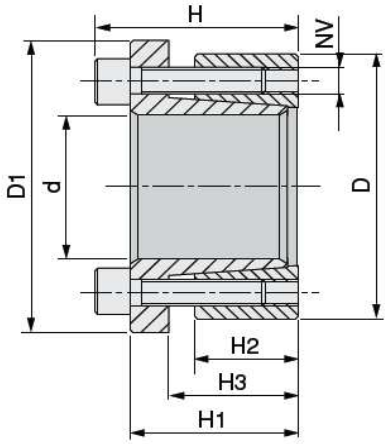
Material C 45 E - UNI EN 10083-1

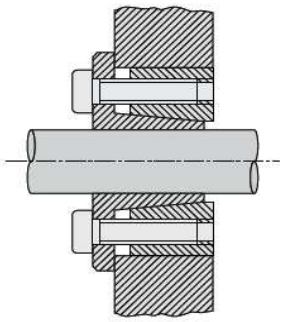
Dimentions before mounting

Our code	Dimentions						Tightening			Loosening		Performances		Surface pressures	
	d	D	H	H1	H2	H3	NV	Tv (Nm)	No. of screws	NV	No. of screws	Mt (Nm)	Ta (KN)	Pa (N/mm²)	Pm (N/mm²)
KLAA019	19	47	34	28	17	22	M6x20	13	5	M6x20	3	273	29	262	106
KLAA020	20	47	34	28	17	22	M6x20	13	5	M6x20	3	287	29	249	106
KLAA022	22	47	34	28	17	22	M6x20	13	5	M6x20	3	316	29	227	106
KLAA024	24	50	34	28	17	22	M6x20	13	6	M6x20	3	413	34	249	120
KLAA025	25	50	34	28	17	22	M6x20	13	6	M6x20	3	431	34	239	120
KLAA028	28	55	34	28	17	22	M6x20	13	6	M6x20	3	482	34	213	109
KLAA030	30	55	34	28	17	22	M6x20	13	6	M6x20	3	517	34	199	109
KLAA032	32	60	34	28	17	22	M6x20	13	8	M6x20	4	734	46	249	133
KLAA035	35	60	34	28	17	22	M6x20	13	8	M6x20	4	803	46	227	133
KLAA038	38	65	34	28	17	22	M6x20	13	8	M6x20	4	872	46	210	122
KLAA040	40	65	34	28	17	22	M6x20	13	8	M6x20	4	918	46	199	122
KLAA045	45	75	41	33	20	25	M8x25	32	7	M8x25	3	1674	74	244	146
KLAA050	50	80	41	33	20	25	M8x25	32	7	M8x25	3	1860	74	219	137
KLAA055	55	85	41	33	20	25	M8x25	32	8	M8x25	4	2340	85	228	148
KLAA060	60	90	41	33	20	25	M8x25	32	8	M8x25	4	2553	85	209	139
KLAA065	65	95	41	33	20	25	M8x25	32	9	M8x25	3	3110	96	217	149
KLAA070	70	110	50	40	24	30	M10x30	65	8	M10x30	4	4838	138	243	154
KLAA075	75	115	50	40	24	30	M10x30	65	8	M10x30	4	5184	138	226	148
KLAA080	80	120	50	40	24	30	M10x30	65	8	M10x30	4	5530	138	212	142
KLAA085	85	125	50	40	24	30	M10x30	65	9	M10x30	3	6610	156	225	153
KLAA090	90	130	50	40	24	30	M10x30	65	9	M10x30	3	6998	156	212	147
KLAA095	95	135	50	40	24	30	M10x30	65	10	M10x30	4	8208	173	223	157
KLAA100	100	145	56	44	26	32	M12x35	110	8	M12x35	4	9742	195	221	152
KLAA110	110	155	56	44	26	32	M12x35	110	8	M12x35	4	10716	195	201	143
KLAA120	120	165	56	44	26	32	M12x35	110	9	M12x35	4	13154	219	207	151
KLAA130	130	180	64	52	34	40	M12x35	110	12	M12x35	6	18996	292	195	141
KLAA140	140	190	68	54	34	40	M14x40	170	9	M14x40	4	20336	291	180	133
KLAA150	150	200	68	54	34	40	M14x40	170	10	M14x40	5	24211	323	187	140

Series KLAB







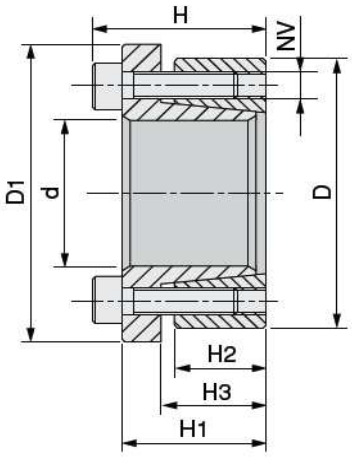
Material C 45 E - UNI EN 10083-1

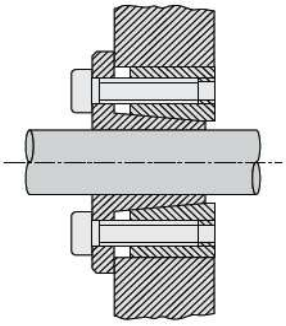
Dimentions before mounting

Our code	Dimentions							Tightening			Loosening		Performances		Surface pressures	
	d	D	D1	H	H1	H2	H3	NV	Tv (Nm)	No. of screws	NV	No. of screws	Mt (Nm)	Ta (KN)	Pa (N/mm²)	Pm (N/mm²)
KLAB019	19	47	56	34	28	17	22	M6x20	17	5	M6x20	3	243	26	234	94
KLAB020	20	47	56	34	28	17	22	M6x20	17	5	M6x20	3	256	26	222	94
KLAB022	22	47	56	34	28	17	22	M6x20	17	5	M6x20	3	282	26	202	94
KLAB024	24	50	59	34	28	17	22	M6x20	17	6	M6x20	3	368	31	222	106
KLAB025	25	50	59	34	28	17	22	M6x20	17	6	M6x20	3	383	31	213	106
KLAB028	28	55	64	34	28	17	22	M6x20	17	6	M6x20	3	429	31	190	97
KLAB030	30	55	64	34	28	17	22	M6x20	17	6	M6x20	3	460	31	177	97
KLAB032	32	60	69	34	28	17	22	M6x20	17	8	M6x20	4	655	41	222	118
KLAB035	35	60	69	34	28	17	22	M6x20	17	8	M6x20	4	716	41	203	118
KLAB038	38	65	74	34	28	17	22	M6x20	17	8	M6x20	4	778	41	187	109
KLAB040	40	65	74	34	28	17	22	M6x20	17	8	M6x20	4	819	41	178	109
KLAB045	45	75	84	41	33	20	25	M8x25	41	7	M8x25	3	1458	65	212	127
KLAB050	50	80	89	41	33	20	25	M8x25	41	7	M8x25	3	1620	65	191	119
KLAB055	55	85	94	41	33	20	25	M8x25	41	8	M8x25	4	2037	74	199	129
KLAB060	60	90	99	41	33	20	25	M8x25	41	8	M8x25	4	2223	74	182	121
KLAB065	65	95	104	41	33	20	25	M8x25	41	9	M8x25	3	2710	83	189	129
KLAB070	70	110	119	50	40	24	30	M10x30	83	8	M10x30	4	4203	120	211	134
KLAB075	75	115	124	50	40	24	30	M10x30	83	8	M10x30	4	4754	120	197	128
KLAB080	80	120	129	50	40	24	30	M10x30	83	8	M10x30	4	4804	120	184	123
KLAB085	85	125	134	50	40	24	30	M10x30	83	9	M10x30	3	5742	135	195	133
KLAB090	90	130	139	50	40	24	30	M10x30	83	9	M10x30	3	6080	135	184	128
KLAB095	95	135	144	50	40	24	30	M10x30	83	10	M10x30	4	7131	150	194	137
KLAB100	100	145	154	56	44	26	32	M12x35	145	8	M12x35	4	8732	175	198	137
KLAB110	110	155	164	56	44	26	32	M12x35	145	8	M12x35	4	9605	175	180	128
KLAB120	120	165	174	56	44	26	32	M12x35	145	9	M12x35	4	11787	196	186	135
KLAB130	130	180	189	64	52	34	40	M12x35	145	12	M12x35	6	17024	262	175	126
KLAB140	140	190	199	68	54	34	40	M14x40	230	9	M14x40	4	18703	267	166	122
KLAB150	150	200	209	68	54	34	40	M14x40	230	10	M14x40	5	22259	297	172	129

Series KLBB







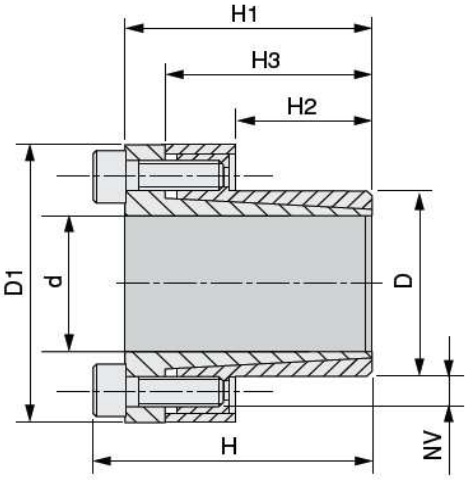
Material C 45 E - UNI EN 10083-1

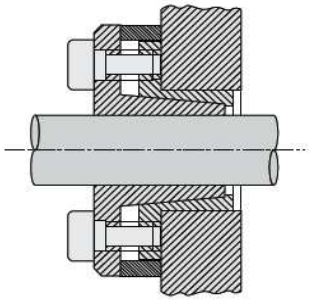
Dimentions before mounting

Our code	Dimentions							Tightening			Loosening		Performances		Surface pressures	
	d	D	D1	H	H1	H2	H3	NV	Tv (Nm)	No. of screws	NV	No. of screws	Mt (Nm)	Ta (KN)	Pa (N/mm²)	Pm (N/mm²)
KLBB114	14	55	62	39	31	17	22	M8x25	37	4	M8x25	2	234	33	415	106
KLBB116	16	55	62	39	31	17	22	M8x25	37	4	M8x25	2	268	33	363	106
KLBB118	18	55	62	39	31	17	22	M8x25	41	4	M8x25	2	333	37	357	117
KLBB119	19	55	62	39	31	17	22	M8x25	41	4	M8x25	2	352	37	338	117
KLBB120	20	55	62	39	31	17	22	M8x25	41	4	M8x25	2	370	37	321	117
KLBB122	22	55	62	39	31	17	22	M8x25	41	4	M8x25	2	407	37	292	117
KLBB124	24	55	62	39	31	17	22	M8x25	41	4	M8x25	2	445	37	268	117
KLBB125	25	55	62	39	31	17	22	M8x25	41	4	M8x25	2	463	37	257	117
KLBB128	28	55	62	39	31	17	22	M8x25	41	4	M8x25	2	519	37	229	117
KLBB130	30	55	62	39	31	17	22	M8x25	41	4	M8x25	2	556	37	214	117
KLBB224	24	65	72	39	31	17	22	M8x25	41	5	M8x25	3	556	46	335	124
KLBB225	25	65	72	39	31	17	22	M8x25	41	5	M8x25	3	579	46	321	124
KLBB228	28	65	72	39	31	17	22	M8x25	41	5	M8x25	3	649	46	287	124
KLBB230	30	65	72	39	31	17	22	M8x25	41	5	M8x25	3	695	46	268	124
KLBB232	32	65	72	39	31	17	22	M8x25	41	5	M8x25	3	741	46	251	124
KLBB233	33	65	72	39	31	17	22	M8x25	41	5	M8x25	3	764	46	242	124
KLBB235	35	65	72	39	31	17	22	M8x25	41	5	M8x25	3	811	46	230	124
KLBB238	38	65	72	39	31	17	22	M8x25	41	5	M8x25	3	917	46	211	124
KLBB240	40	65	72	39	31	17	22	M8x25	41	5	M8x25	3	966	46	201	124
KLBB330	30	80	87	41	33	20	25	M8x25	41	7	M8x25	3	972	65	318	119
KLBB332	32	80	87	41	33	20	25	M8x25	41	7	M8x25	3	1037	65	299	119
KLBB333	33	80	87	41	33	20	25	M8x25	41	7	M8x25	3	1069	65	289	119
KLBB335	35	80	87	41	33	20	25	M8x25	41	7	M8x25	3	1134	65	273	119
KLBB338	38	80	87	41	33	20	25	M8x25	41	7	M8x25	3	1231	65	251	119
KLBB340	40	80	87	41	33	20	25	M8x25	41	7	M8x25	3	1296	65	239	119
KLBB342	42	80	87	41	33	20	25	M8x25	41	7	M8x25	3	1361	65	227	119
KLBB345	45	80	87	41	33	20	25	M8x25	41	7	M8x25	3	1458	65	212	119
KLBB348	48	80	87	41	33	20	25	M8x25	41	7	M8x25	3	1555	65	199	119
KLBB350	50	80	87	41	33	20	25	M8x25	41	7	M8x25	3	1620	65	191	119

Series KLCC







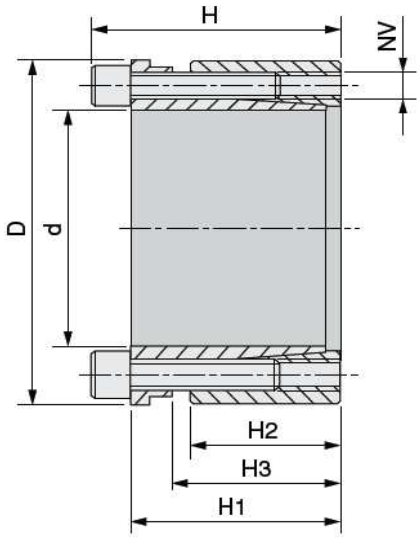
Material C 45 E - UNI EN 10083-1

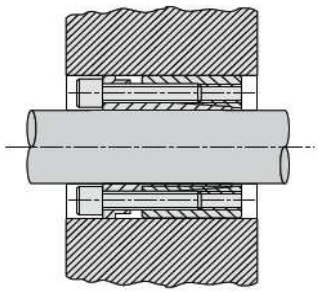
Dimentions before mounting

Our code	Dimentions							Tightening			Loosening		Performances		Surface pressures	
	d	D	D1	H	H1	H2	H3	NV	Tv (Nm)	No. of screws	NV	No. of screws	Mt (Nm)	Ta (KN)	Pa (N/mm²)	Pm (N/mm²)
KLCC008	8	15	28	28	24	12	21	M4x10	4,81	4	M4x10	3	39	10	299	159
KLCC009	9	16	32	31	27	14	23	M4x12	5,2	4	M4x12	3	44	10	227	128
KLCC010	10	16	32	31	27	14	23	M4x12	5,2	4	M4x12	3	49	10	205	128
KLCC011	11	18	34	31	27	14	23	M4x12	5,2	4	M4x12	3	53	10	186	114
KLCC012	12	18	34	31	27	14	23	M4x12	5,2	4	M4x12	3	58	10	171	114
KLCC014	14	23	39	31	27	14	23	M4x12	5,2	4	M4x12	3	68	10	146	89
KLCC015	15	24	45	42	36	16	29	M6x18	17	3	M6x18	2	120	16	196	123
KLCC016	16	24	45	42	36	16	29	M6x18	17	3	M6x18	2	128	16	184	123
KLCC018	18	26	47	44	38	18	31	M6x18	17	4	M6x18	3	191	21	194	134
KLCC019	19	27	48	44	38	18	31	M6x18	17	4	M6x18	3	202	21	183	129
KLCC020	20	28	49	44	38	18	31	M6x18	17	4	M6x18	3	213	21	174	124
KLCC022	22	32	54	51	45	25	38	M6x18	17	4	M6x18	3	234	21	114	78
KLCC024	24	34	56	51	45	25	38	M6x18	17	4	M6x18	3	255	21	105	74
KLCC025	25	34	56	51	45	25	38	M6x18	17	4	M6x18	3	266	21	100	74
KLCC028	28	39	61	51	45	25	38	M6x18	17	5	M6x18	3	373	27	112	81
KLCC030	30	41	63	51	45	25	38	M6x18	17	6	M6x18	3	480	32	126	92
KLCC032	32	43	65	56	50	30	43	M6x18	17	6	M6x18	3	511	32	98	73
KLCC035	35	47	69	56	50	30	43	M6x18	17	8	M6x18	4	747	43	120	89
KLCC038	38	50	72	56	50	30	43	M6x18	17	8	M6x18	4	811	43	110	84
KLCC040	40	53	75	58	52	32	45	M6x18	17	9	M6x18	4	959	48	110	83
KLCC042	42	55	77	58	52	32	45	M6x18	17	9	M6x18	4	1007	48	105	80
KLCC045	45	59	85	72	64	40	56	M8x22	42	8	M8x22	4	1781	79	130	99
KLCC048	48	62	88	72	64	40	56	M8x22	42	8	M8x22	4	1900	79	122	94
KLCC050	50	65	92	82	74	50	66	M8x22	42	10	M8x22	5	2473	99	117	90
KLCC055	55	71	98	82	74	50	66	M8x22	42	10	M8x22	5	2721	99	106	82
KLCC060	60	77	104	82	74	50	66	M8x22	42	10	M8x22	5	2968	99	97	76
KLCC065	65	84	111	82	74	50	66	M8x22	42	10	M8x22	5	3215	99	90	69
KLCC070	70	90	122	101	91	60	80	M10x25	84	8	M10x25	4	4430	127	89	69
KLCC075	75	95	126	101	91	60	80	M10x25	84	9	M10x25	4	5338	142	93	74
KLCC080	80	100	131	106	96	65	85	M10x25	84	12	M10x25	5	7595	190	108	86
KLCC085	85	106	137	106	96	65	85	M10x25	84	12	M10x25	5	8069	190	101	81
KLCC090	90	112	143	106	96	65	85	M10x25	84	14	M10x25	6	9968	222	112	90
KLCC095	95	120	153	106	96	65	85	M10x25	84	14	M10x25	6	10522	222	106	84
KLCC100	100	125	162	114	102	65	89	M12x30	145	12	M12x30	5	13651	273	124	99
KLCC110	110	140	177	119	107	70	94	M12x30	145	12	M12x30	5	15016	273	105	82
KLCC120	120	155	195	139	127	90	114	M12x30	145	16	M12x30	7	21844	364	99	77
KLCC130	130	165	205	139	127	90	114	M12x30	145	16	M12x30	7	23664	364	92	72
KLCC140	140	175	215	139	127	90	114	M12x30	145	16	M12x30	7	25485	364	85	68
KLCC150	150	185	225	139	127	90	114	M12x30	145	16	M12x30	7	27305	364	80	64

Series KLDA







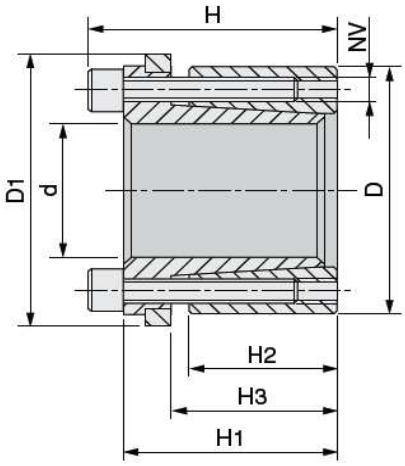
Material C 45 E - UNI EN 10083-1

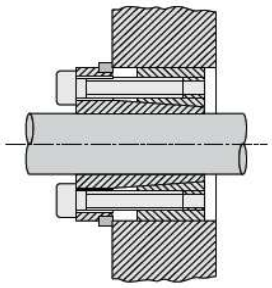
Dimentions before mounting

Our code	Dimentions						Tightening			Loosening		Performances		Surface pressures	
	d	D	H	H1	H2	H3	NV	Tv (Nm)	No. of screws	NV	No. of screws	Mt (Nm)	Ta (KN)	Pa (N/mm²)	Pm (N/mm²)
KLDA019	19	47	45	39	26	31	M6x25	17	4	M6x25	2	307	32	193	78
KLDA020	20	47	45	39	26	31	M6x25	17	4	M6x25	2	323	32	183	78
KLDA022	22	47	45	39	26	31	M6x25	17	4	M6x25	2	355	32	166	78
KLDA024	24	50	45	39	26	31	M6x25	17	6	M6x25	3	382	48	229	110
KLDA025	25	50	45	39	26	31	M6x25	17	6	M6x25	3	606	48	220	110
KLDA028	28	55	45	39	26	31	M6x25	17	6	M6x25	3	679	48	196	100
KLDA030	30	55	45	39	26	31	M6x25	17	6	M6x25	3	727	48	183	100
KLDA032	32	60	45	39	26	31	M6x25	17	8	M6x25	4	1033	65	229	122
KLDA035	35	60	45	39	26	31	M6x25	17	8	M6x25	4	1130	65	209	122
KLDA038	38	65	45	39	26	31	M6x25	17	8	M6x25	4	1227	65	193	113
KLDA040	40	65	45	39	26	31	M6x25	17	8	M6x25	4	1292	65	183	113
KLDA042	42	75	55	47	30	36	M8x30	41	6	M8x30	3	1835	87	204	115
KLDA045	45	75	55	47	30	36	M8x30	41	6	M8x30	3	1966	87	191	115
KLDA048	48	80	55	47	30	36	M8x30	41	6	M8x30	3	2097	87	179	107
KLDA050	50	80	55	47	30	36	M8x30	41	6	M8x30	3	2184	87	172	107
KLDA055	55	85	55	47	30	36	M8x30	41	8	M8x30	4	3202	116	208	135
KLDA060	60	90	55	47	30	36	M8x30	41	8	M8x30	4	3493	116	191	127
KLDA065	65	95	55	47	30	36	M8x30	41	8	M8x30	4	3784	116	176	120
KLDA070	70	110	67	57	40	46	M10x35	83	8	M10x35	4	6607	189	199	127
KLDA075	75	115	72	62	40	46	M10x35	83	8	M10x35	4	7079	189	186	121
KLDA080	80	120	72	62	40	46	M10x35	83	8	M10x35	4	7551	189	174	116
KLDA085	85	125	72	62	40	46	M10x35	83	10	M10x35	4	10029	236	205	139
KLDA090	90	130	72	62	40	46	M10x35	83	10	M10x35	4	10619	236	193	134
KLDA095	95	135	72	62	40	46	M10x35	83	10	M10x35	4	11209	236	183	129
KLDA100	100	145	89	77	46	52	M12x45	145	8	M12x45	4	13738	275	176	121
KLDA110	110	155	89	77	46	52	M12x45	145	8	M12x45	4	15111	278	160	114
KLDA120	120	165	89	77	46	52	M12x45	145	10	M12x45	4	20606	343	183	133
KLDA130	130	180	89	77	46	52	M12x45	145	12	M12x45	4	26788	412	203	147
KLDA140	140	190	98	84	51	59	M14x45	230	8	M14x45	4	26142	373	154	114
KLDA150	150	200	98	84	51	59	M14x45	230	10	M14x45	5	35016	467	180	135

Series KLDB







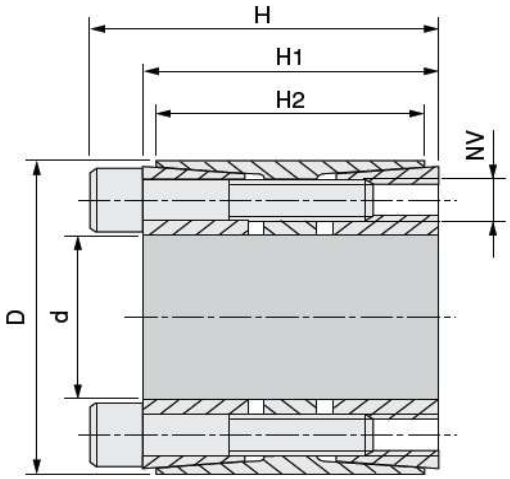
Material C 45 E - UNI EN 10083-1

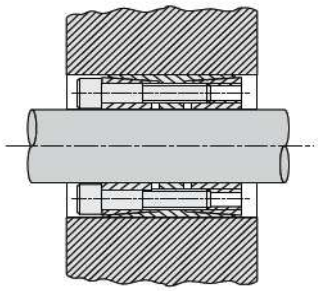
Dimentions before mounting

Our code	Dimentions							Tightening			Loosening		Performances		Surface pressures	
	d	D	D1	H	H1	H2	H3	NV	Tv (Nm)	No. of screws	NV	No. of screws	Mt (Nm)	Ta (KN)	Pa (N/mm²)	Pm (N/mm²)
KLDB019	19	47	53	45	39	26	31	M6x20	17	4	M6x20	2	202	21	127	51
KLDB020	20	47	53	45	39	26	31	M6x20	17	4	M6x20	2	213	21	121	51
KLDB022	22	47	53	45	39	26	31	M6x20	17	4	M6x20	2	234	21	110	51
KLDB024	24	50	56	45	39	26	31	M6x20	17	6	M6x20	3	384	32	151	73
KLDB025	25	50	56	45	39	26	31	M6x20	17	6	M6x20	3	400	32	145	73
KLDB028	28	55	61	45	39	26	31	M6x20	17	6	M6x20	3	448	32	129	66
KLDB030	30	55	61	45	39	26	31	M6x20	17	6	M6x20	3	480	32	121	66
KLDB032	32	60	66	45	39	26	31	M6x20	17	8	M6x20	4	683	43	151	81
KLDB035	35	60	66	45	39	26	31	M6x20	17	8	M6x20	4	747	43	138	81
KLDB038	38	65	71	45	39	26	31	M6x20	17	8	M6x20	4	811	43	127	74
KLDB040	40	65	71	45	39	26	31	M6x20	17	8	M6x20	4	853	43	121	74
KLDB042	42	75	81	55	47	30	36	M8x30	41	6	M8x30	3	1216	58	135	76
KLDB045	45	75	81	55	47	30	36	M8x30	41	6	M8x30	3	1302	58	126	76
KLDB048	48	80	86	55	47	30	36	M8x30	41	6	M8x30	3	1389	58	119	71
KLDB050	50	80	86	55	47	30	36	M8x30	41	6	M8x30	3	1447	58	114	71
KLDB055	55	85	91	55	47	30	36	M8x30	41	8	M8x30	4	2124	77	138	89
KLDB060	60	90	96	55	47	30	36	M8x30	41	8	M8x30	4	2317	77	127	84
KLDB065	65	95	101	55	47	30	36	M8x30	41	8	M8x30	4	2510	77	117	80
KLDB070	70	110	116	67	57	40	46	M10x35	83	8	M10x35	4	4381	125	132	84
KLDB075	75	115	121	72	62	40	46	M10x35	83	8	M10x35	4	4694	125	123	80
KLDB080	80	120	126	72	62	40	46	M10x35	83	8	M10x35	4	5007	125	115	77
KLDB085	85	125	131	72	62	40	46	M10x35	83	10	M10x35	4	6651	156	136	92
KLDB090	90	130	136	72	62	40	46	M10x35	83	10	M10x35	4	7042	156	128	89
KLDB095	95	135	141	72	62	40	46	M10x35	83	10	M10x35	4	7433	156	121	85
KLDB100	100	145	151	89	77	46	52	M12x45	145	8	M12x45	4	9104	182	117	81
KLDB110	110	155	161	89	77	46	52	M12x45	145	8	M12x45	4	10015	182	106	75
KLDB120	120	165	171	89	77	46	52	M12x45	145	10	M12x45	4	13653	228	122	88
KLDB130	130	180	186	89	77	46	52	M12x45	145	12	M12x45	4	17747	273	135	97
KLDB140	140	190	196	98	84	51	59	M14x45	230	8	M14x45	4	17328	248	102	75
KLDB150	150	200	206	98	84	51	59	M14x45	230	10	M14x45	5	23207	309	119	89

Series KLEE





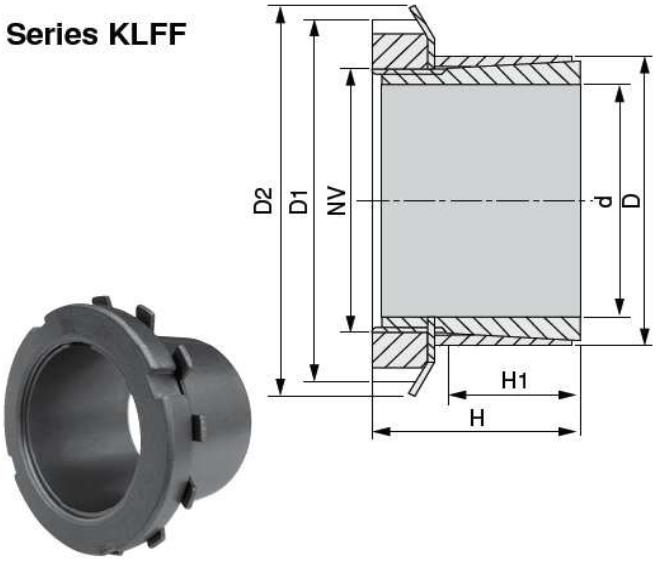


Material C 45 E - UNI EN 10083-1

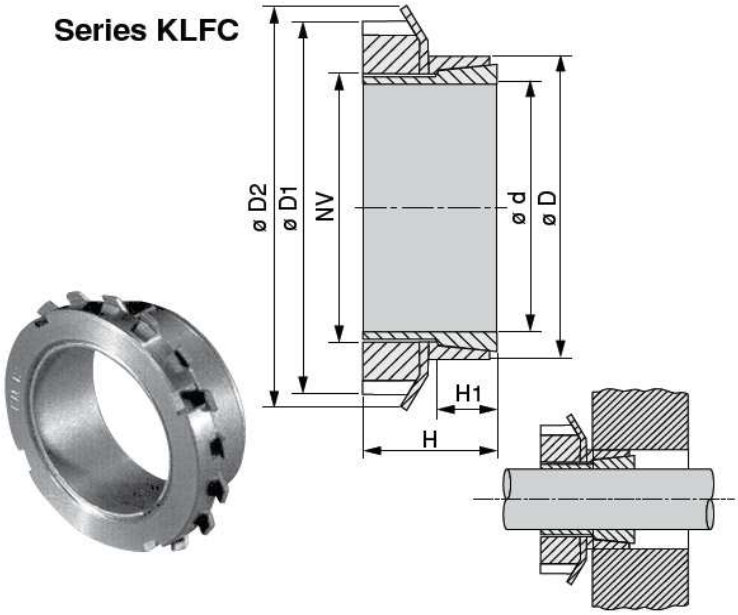
Dimentions before mounting

Our code	Dimentions					Tightening			Loosening		Performances		Surface pressures	
	d	D	H	H1	H2	NV	Tv (Nm)	No. of screws	NV	No. of screws	Mt (Nm)	Ta (KN)	Pa (N/mm²)	Pm (N/mm²)
KLEE025	25	55	46	40	32	M6x35	17	6	M6x35	3	799	64	314	107
KLEE028	28	55	46	40	32	M6x35	17	6	M6x35	3	895	64	281	107
KLEE030	30	55	46	40	32	M6x35	17	6	M6x35	3	959	64	262	107
KLEE035	35	60	60	54	44	M6x45	17	7	M6x45	3	1306	75	185	83
KLEE038	38	75	62	54	44	M8x50	41	7	M8x50	3	2567	135	308	121
KLEE040	40	75	62	54	44	M8x50	41	7	M8x50	3	2702	135	293	121
KLEE042	42	75	62	54	44	M8x50	41	7	M8x50	3	2837	135	279	121
KLEE045	45	75	62	54	44	M8x50	41	7	M8x50	3	3040	135	260	121
KLEE048	48	80	72	64	56	M8x55	41	8	M8x55	4	3707	154	216	102
KLEE050	50	80	72	64	56	M8x55	41	8	M8x55	4	3861	154	207	102
KLEE055	55	85	72	64	56	M8x55	41	9	M8x55	4	4779	174	212	108
KLEE060	60	90	72	64	56	M8x55	41	10	M8x55	4	5793	193	216	113
KLEE065	65	95	72	64	56	M8x55	41	10	M8x55	4	6276	193	199	107
KLEE070	70	110	88	78	70	M10x60	83	10	M10x60	4	10951	313	235	120
KLEE075	75	115	88	78	70	M10x60	83	10	M10x60	4	11733	313	220	115
KLEE080	80	120	88	78	70	M10x60	83	11	M10x60	4	13768	344	227	121
KLEE085	85	125	88	78	70	M10x60	83	12	M10x60	5	15959	376	233	127
KLEE090	90	130	88	78	70	M10x60	83	12	M10x60	5	16898	376	220	122
KLEE095	95	135	88	78	70	M10x60	83	12	M10x60	5	17837	376	208	117
KLEE100	100	145	112	100	90	M12x80	145	11	M12x80	4	25029	501	211	113
KLEE110	110	155	112	100	90	M12x80	145	12	M12x80	5	30039	546	209	115
KLEE120	120	165	112	100	90	M12x80	145	14	M12x80	6	38226	637	224	127
KLEE130	130	180	130	116	104	M14x90	230	12	M14x90	5	48270	743	201	117
KLEE140	140	190	130	116	104	M14x90	230	14	M14x90	7	60654	866	217	129
KLEE150	150	200	130	116	104	M14x90	230	15	M14x90	7	69628	928	217	132
KLEE160	160	210	130	116	104	M14x90	230	16	M14x90	7	79220	990	217	134
KLEE170	170	225	164	148	134	M16x120	360	14	M16x120	7	100851	1186	206	116
KLEE180	180	235	164	148	134	M16x120	360	15	M16x120	7	114414	1271	208	119
KLEE190	190	250	164	148	134	M16x120	360	16	M16x120	7	128814	1356	210	119
KLEE200	200	260	164	148	134	M16x120	360	16	M16x120	7	135594	1356	200	115
KLEE220	220	285	164	148	134	M16x120	360	18	M16x120	8	167805	1526	204	118

Series KLFF



Series KLFC



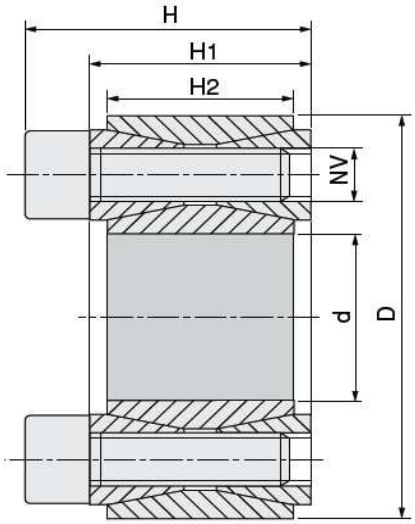
Material C 45 E - UNI EN 10083-1
Dimentions before mounting

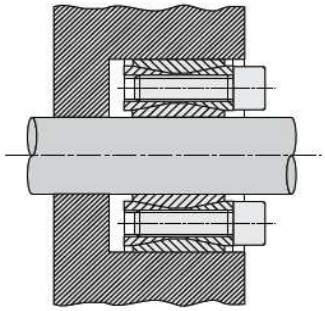
Our code	Dimentions						Blocking power		Performances		Surface pressures	
	d	D	D1	D2	H	H1	NV	Tv (Nm)	Mt (Nm)	Ta (KN)	Pa (N/mm²)	Pm (N/mm²)
KLFF015	15	25	32	34	31	20	M20 x 1	95	77	9	91	55
KLFF018	18	30	38	41	33	21	M25 x 1,5	160	125	13	98	59
KLFF019	19	30	38	41	33	21	M25 x 1,5	160	132	13	93	59
KLFF020	20	30	38	41	33	21	M25 x 1,5	160	139	13	88	59
KLFF024	24	35	45	48	38	25	M30 x 1,5	220	202	15	74	51
KLFF025	25	35	45	48	38	25	M30 x 1,5	220	210	15	71	51
KLFF028	28	40	52	55	44	28	M35 x 1,5	340	312	20	76	53
KLFF030	30	40	52	55	44	28	M35 x 1,5	340	335	20	71	53
KLFF035	35	45	58	61	45	28	M40 x 1,5	480	483	25	75	58
KLFF040	40	50	65	67	46	28	M45 x 1,5	680	696	31	82	66
KLFF045	45	55	70	73	47	28	M50 x 1,5	870	902	36	84	69
KLFF050	50	60	75	81	47	28	M55 x 2	970	1014	37	77	64
KLFF055	55	65	80	87	48	28	M60 x 2	1100	1158	38	73	61
KLFF060	60	70	85	93	50	28	M65 x 2	1300	1379	41	73	62

Our code	Dimentions						Blocking power		Performances		Surface pressures	
	d	D	D1	D2	H	H1	NV	Tv (Nm)	Mt (Nm)	Ta (KN)	Pa (N/mm²)	Pm (N/mm²)
KLFC014	14	25	32	34	17	6,5	M20 x 1	95	52	7	241	135
KLFC015	15	25	32	34	17	6,5	M20 x 1	95	56	7	225	135
KLFC016	16	25	32	34	17	6,5	M20 x 1	95	60	7	211	135
KLFC018	18	30	38	41	17,5	6,5	M25 x 1,5	160	91	10	256	154
KLFC019	19	30	38	41	18	6,5	M25 x 1,5	160	96	10	242	154
KLFC020	20	30	38	41	18	6,5	M25 x 1,5	160	102	10	230	154
KLFC024	24	35	45	48	18	6,5	M30 x 1,5	220	139	12	218	150
KLFC025	25	35	45	48	18	6,5	M30 x 1,5	220	144	12	210	150
KLFC028	28	40	52	55	18	6,5	M35 x 1,5	340	215	15	248	174
KLFC030	30	40	52	55	20	8	M35 x 1,5	340	230	15	188	141
KLFC035	35	45	58	61	22	8	M40 x 1,5	480	331	19	199	155
KLFC040	40	50	65	67	25	10	M45 x 1,5	680	477	24	176	141
KLFC045	45	55	70	73	26	10	M50 x 1,5	870	617	27	180	147
KLFC048	48	60	75	81	26	10	M55 x 2	970	669	28	171	137
KLFC050	50	60	75	81	26	10	M55 x 2	970	697	28	164	137
KLFC055	55	65	80	87	27	12	M60 x 2	1100	796	29	129	109
KLFC060	60	70	85	93	29	12	M65 x 2	1300	946	32	129	111
KLFC070	70	84	98	104	31,5	13,5	M75 x 2	2000	1433	41	128	106

Series KLGG







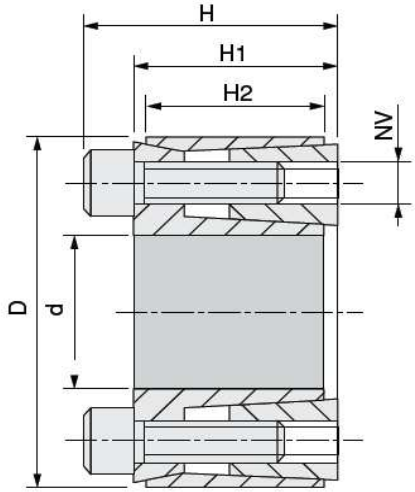
Material C 45 E - UNI EN 10083-1

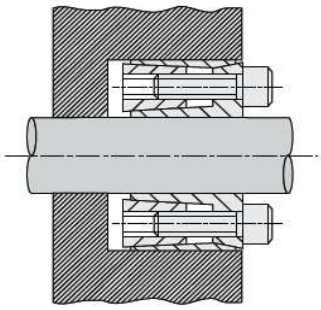
Dimentions before mounting

Our code	Dimentions					Tightening			Loosening		Performances		Surface pressures	
	d	D	H	H1	H2	NV	Tv (Nm)	No. of screws	NV	No. of screws	Mt (Nm)	Ta (KN)	Pa (N/mm²)	Pm (N/mm²)
KLGG019	19	47	26	20	17	M6x18	14,9	8	M6x18	2	298	31	286	116
KLGG020	20	47	26	20	17	M6x18	14,9	8	M6x18	2	313	31	272	116
KLGG022	22	47	26	20	17	M6x18	14,9	8	M6x18	2	345	31	247	116
KLGG024	24	50	26	20	17	M6x18	14,9	9	M6x18	3	424	35	255	123
KLGG025	25	50	26	20	17	M6x18	14,9	9	M6x18	3	441	35	245	123
KLGG028	28	55	26	20	17	M6x18	14,9	10	M6x18	3	549	39	243	124
KLGG030	30	55	26	20	17	M6x18	14,9	10	M6x18	3	588	39	227	124
KLGG032	32	60	26	20	17	M6x18	14,9	12	M6x18	4	758	47	255	136
KLGG035	35	60	26	20	17	M6x18	14,9	12	M6x18	4	822	47	233	136
KLGG038	38	65	26	20	17	M6x18	14,9	14	M6x18	4	1042	55	250	146
KLGG040	40	65	26	20	17	M6x18	14,9	14	M6x18	4	1097	55	238	146
KLGG042	42	75	32	24	20	M8x22	35	12	M8x22	4	1740	83	291	163
KLGG045	45	75	32	24	20	M8x22	35	12	M8x22	4	1864	83	271	163
KLGG048	48	80	32	24	20	M8x22	35	12	M8x22	4	1988	83	254	153
KLGG050	50	80	32	24	20	M8x22	35	12	M8x22	4	2071	83	244	153
KLGG055	55	85	32	24	20	M8x22	35	14	M8x22	4	2658	97	259	168
KLGG060	60	90	32	24	20	M8x22	35	14	M8x22	4	2900	64	238	158
KLGG065	65	95	32	24	20	M8x22	35	16	M8x22	4	3587	110	250	171
KLGG070	70	110	38	28	24	M10x25	69	14	M10x25	4	5345	153	268	171
KLGG075	75	115	38	28	24	M10x25	69	14	M10x25	4	5727	153	250	163
KLGG080	80	120	38	28	24	M10x25	69	14	M10x25	4	6108	153	235	156
KLGG085	85	125	38	28	24	M10x25	69	16	M10x25	4	7417	175	252	172
KLGG090	90	130	38	28	24	M10x25	69	16	M10x25	4	7854	175	238	165
KLGG095	95	135	38	28	24	M10x25	69	18	M10x25	4	9326	196	254	179
KLGG100	100	145	45	33	26	M12x30	123,3	14	M12x30	4	11362	227	258	178
KLGG110	110	155	45	33	26	M12x30	123,3	14	M12x30	4	12498	227	234	166
KLGG120	120	165	45	33	26	M12x30	123,3	16	M12x30	4	15578	260	245	178
KLGG130	130	180	50	38	34	M12x35	123,3	20	M12x35	4	21095	325	217	156
KLGG140	140	190	50	38	34	M12x35	123,3	22	M12x35	4	24993	357	221	163
KLGG150	150	200	50	38	34	M12x35	123,3	24	M12x35	4	29217	390	225	169
KLGG160	160	210	50	38	34	M12x35	123,3	26	M12x35	4	33756	422	229	174
KLGG170	170	225	58	44	38	M14x40	187	22	M14x40	4	39483	465	212	160
KLGG180	180	235	58	44	38	M14x40	187	24	M14x40	4	45606	507	218	167
KLGG190	190	250	66	52	46	M14x45	187	28	M14x45	4	56163	591	199	152
KLGG200	200	260	66	52	46	M14x45	187	30	M14x45	4	63342	633	203	156

Series KLHH





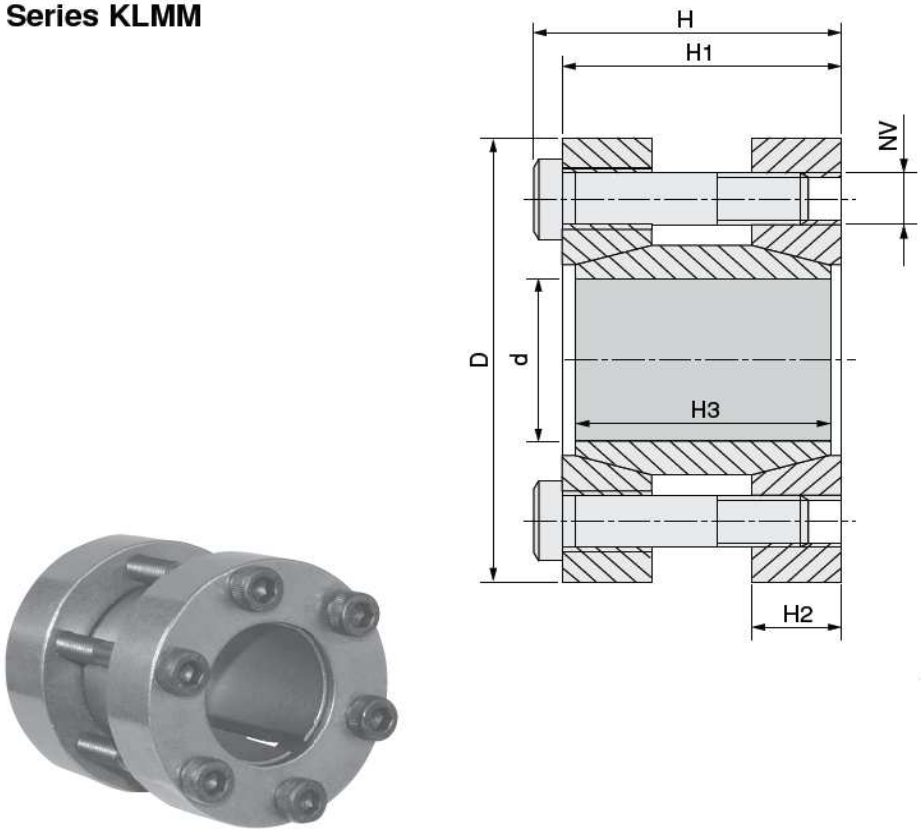


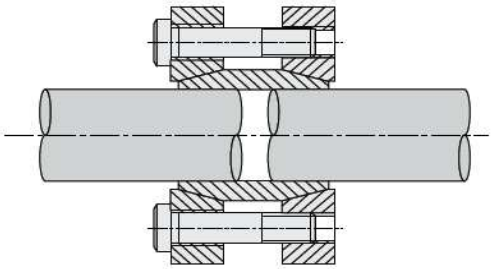
Materiale C 45 E - UNI EN 10083-1

Dimentions before mounting

Our code	Dimentions					Tightening			Loosening		Performances		Surface pressures	
	d	D	H	H1	H2	NV	Tv (Nm)	No. of screws	NV	No. of screws	Mt (Nm)	Ta (KN)	Pa (N/mm²)	Pm (N/mm²)
KLHH018	18	40	24	18	14,7	M6x16	17	4	M6x16	2	165	18	185	83
KLHH019	19	41	24	18	14,7	M6x16	17	4	M6x16	2	174	18	176	81
KLHH020	20	42	24	18	14,7	M6x16	17	4	M6x16	2	183	18	167	79
KLHH024	24	46	24	18	14,7	M6x16	17	6	M6x16	3	329	27	209	109
KLHH025	25	47	24	18	14,7	M6x16	17	6	M6x16	3	343	27	200	106
KLHH028	28	50	24	18	14,7	M6x16	17	6	M6x16	3	384	27	179	100
KLHH030	30	52	24	18	14,7	M6x16	17	6	M6x16	3	412	27	167	96
KLHH035	35	57	28	22	18	M6x18	17	6	M6x18	3	480	27	117	78
KLHH038	38	60	28	22	18	M6x18	17	8	M6x18	4	695	36,5	143	91
KLHH040	40	62	28	22	18	M6x18	17	8	M6x18	4	732	36,5	136	88
KLHH042	42	70	36	28	23,5	M8x25	42	8	M8x25	4	1427	68	185	111
KLHH045	45	73	36	28	23,5	M8x25	42	8	M8x25	4	1529	68	172	106
KLHH048	48	76	36	28	23,5	M8x25	42	8	M8x25	4	1631	68	161	102
KLHH050	50	78	36	28	23,5	M8x25	42	8	M8x25	4	1699	68	155	99
KLHH055	55	83	36	28	23,5	M8x25	42	8	M8x25	4	1869	68	141	93
KLHH060	60	88	36	28	23,5	M8x25	42	8	M8x25	4	2039	68	129	88
KLHH070	70	105	45	35	30	M10x30	83	8	M10x30	4	3759	107	137	91
KLHH080	80	115	45	35	30	M10x30	83	8	M10x30	4	4296	107	120	83

Series KLMM





Materiale C 45 E - UNI EN 10083-1

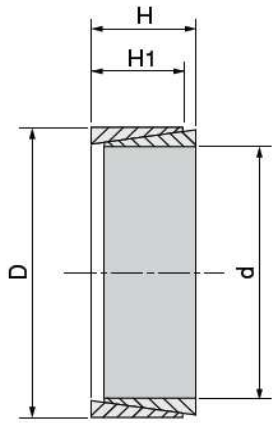
Dimentions before mounting

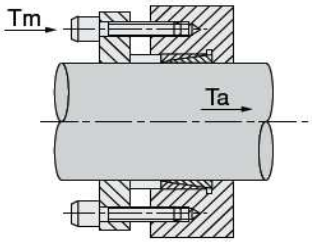
Our code	Dimentions						Tightening			Performances		Surface pressures
	d	D	H	H1	H2	H3	NV	Tv (Nm)	No. of screws	Mt (Nm)	Ta (KN)	Pa (N/mm²)
KLMM017	17	50	56	50	16	44	M6 x 45	17	4	179	21	166
KLMM018	18	50	56	50	16	44	M6 x 45	17	4	190	21	157
KLMM019	19	50	56	50	16	44	M6 x 45	17	4	200	21	149
KLMM020	20	50	56	50	16	44	M6 x 45	17	4	211	21	141
KLMM024	24	55	66	60	18,5	54	M6 x 55	17	6	378	32	144
KLMM025	25	55	66	60	18,5	54	M6 x 55	17	6	394	32	138
KLMM028	28	60	66	60	18,5	54	M6 x 55	17	6	442	32	123
KLMM030	30	60	66	60	18,5	54	M6 x 55	17	6	473	32	115
KLMM032	32	63	66	60	18,5	54	M6 x 55	17	6	505	32	108
KLMM035	35	75	83	75	22	67	M8 x 70	42	4	682	39	98
KLMM038	38	75	83	75	22	67	M8 x 70	42	4	741	39	90
KLMM040	40	75	83	75	22	67	M8 x 70	42	4	780	39	86
KLMM042	42	78	83	75	22	67	M8 x 70	42	4	819	39	82
KLMM045	45	85	93	85	24,5	76	M8 x 80	42	6	1317	59	101
KLMM048	48	90	93	85	24,5	76	M8 x 80	42	6	1405	59	95
KLMM050	50	90	93	85	24,5	76	M8 x 80	42	6	1463	59	91
KLMM055	55	94	93	85	24,5	76	M8 x 80	42	8	2147	78	110
KLMM060	60	100	93	85	24,5	76	M8 x 80	42	8	2343	78	101
KLMM065	65	105	93	85	24,5	76	M8 x 80	42	8	2538	78	93
KLMM070	70	115	110	100	29	90	M10 x 95	83	8	4321	123	116

Series KLNN



example of assembly





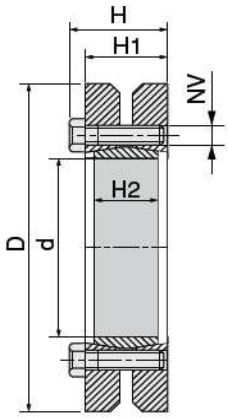
Material C 45 E - UNI EN 10083-1

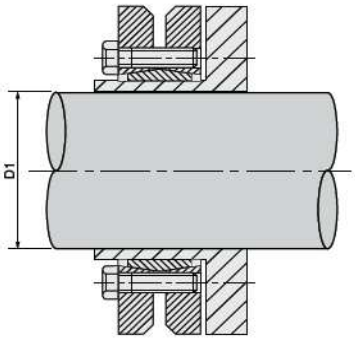
Dimentions before mounting

Our code	Dimentions				Performances			Surface pressures	
	d	D	H	H1	Mt (Nm)	Ta (KN)	Tm (KN)	Pa (N/mm²)	Pm (N/mm²)
KLNN008	8	11	4,5	3,7	4,2	1,06	5	100	70
KLNN009	9	12	4,5	3,7	5,8	1,29	13,3	100	79
KLNN010	10	13	4,5	3,7	7,6	1,53	14,4	100	86
KLNN012	12	15	4,5	3,7	9,9	1,65	14,5	100	80
KLNN014	14	18	6,3	5,3	18,9	2,7	23,8	100	77
KLNN015	15	19	6,3	5,3	22,1	2,94	24,3	100	79
KLNN016	16	20	6,3	5,3	25,4	3,18	24,5	100	81
KLNN018	18	22	6,3	5,3	31,8	3,53	25,3	100	82
KLNN019	19	24	6,3	5,3	35,8	3,76	29,7	100	80
KLNN020	20	25	6,3	5,3	38,8	3,88	30,1	100	79
KLNN022	22	26	6,3	5,3	47,9	4,35	28,9	100	86
KLNN024	24	28	6,3	5,3	56,4	4,7	30	100	86
KLNN025	25	30	6,3	5,3	61,7	4,94	32,4	100	84
KLNN028	28	32	6,3	5,3	77,4	5,53	32,6	100	88
KLNN030	30	35	6,3	5,3	88,2	5,88	35,5	100	86
KLNN032	32	36	6,3	5,3	100	6,23	36,7	100	88
KLNN035	35	40	7	6,0	136	7,76	45,7	100	88
KLNN038	38	44	7	6,0	161	8,47	49,7	100	87
KLNN040	40	45	8	6,6	195	9,8	58,8	100	89
KLNN042	42	48	8	6,6	215	10,2	62,6	100	87
KLNN045	45	52	10	8,6	323	14,3	92,2	100	87
KLNN048	48	55	10	8,6	367	15,3	94,6	100	88
KLNN050	50	57	10	8,6	397	15,9	96,5	100	88
KLNN055	55	62	10	8,6	479	17,4	101,8	100	88
KLNN060	60	68	12	10,4	691	23	133,4	100	88
KLNN065	65	73	12	10,4	814	25	140,4	100	89
KLNN070	70	79	14	12,2	1107	31,6	176	100	89
KLNN075	75	84	14	12,2	1266	33,8	189,6	100	89
KLNN080	80	91	17	15,0	1769	44,2	251	100	89
KLNN090	90	101	17	15,0	2244	49,9	272,4	100	89
KLNN100	100	114	21	18,7	3452	69	377,7	100	89
KLNN110	110	124	21	18,7	4178	76	415	100	89
KLNN120	120	134	21	18,7	4967	82,8	440,2	100	89
KLNN130	130	148	28	25,3	7896	121	654,2	100	89
KLNN140	140	158	28	25,3	9146	131	689	100	89
KLNN150	150	168	28	25,3	10505	140	727,5	100	89

Series KLPP





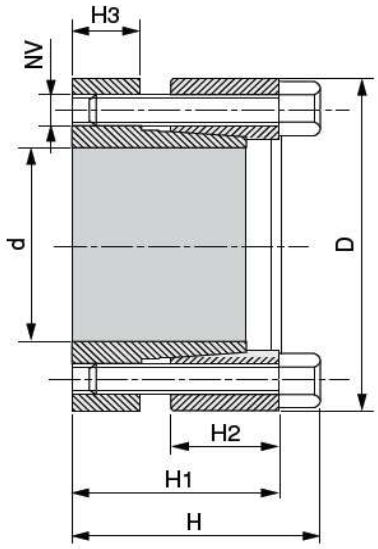


Materiale C 45 E - UNI EN 10083-1

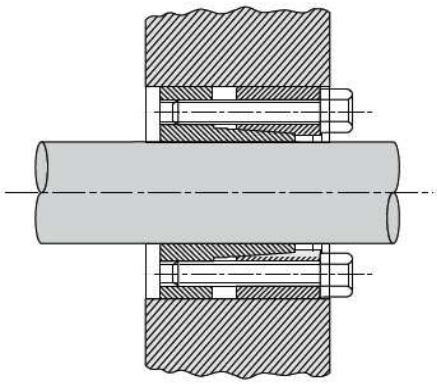
Dimentions before mounting

Our code	Dimentions						Tightening			Performances		Surface pressures
	d	D	D1	H	H1	H2	NV	Tv (Nm)	No. of screws	Mt (Nm)	Ta (KN)	Pa (N/mm²)
KLPP024	24	50	19 20 21	23	19,5	14	M5 x 18	4	6	216 265 314	23 27 30	272
KLPP030	30	60	24 25 26	25	21,5	16	M5 x 18	4	7	372 421 461	31 34 36	221
KLPP036	36	72	26 28 30	27,5	23,5	18	M6 x 20	12	5	471 550 713	36,3 39,3 47,5	292
KLPP044	44	80	32 35 36	29,5	25,5	20	M6 x 20	12	7	925 1175 1275	57,8 67,1 70,8	301
KLPP050	50	90	38 40 42	31,5	27,5	22	M6 x 25	12	8	1313 1638 1925	69,1 81,9 91,7	275
KLPP055	55	100	42 45 48	34,5	30,5	23	M6 x 25	12	8	1450 1900 2350	69 84,4 97,9	239
KLPP062	62	110	48 50 52	34,5	30,5	23	M6 x 25	12	10	2775 3275 3613	116 131 139	265
KLPP068	68	115	50 55 60	34,5	30,5	23	M6 x 25	12	10	2500 3125 3938	100 114 131	242
KLPP075	75	138	55 60 65	37,8	32,5	25	M8 x 30	30	7	3125 4000 4938	114 133 152	259
KLPP080	80	145	60 65 70	37,8	32,5	25	M8 x 30	30	7	4000 4875 5750	133 150 164	243
KLPP090	90	155	65 70 75	44,3	39	30	M8 x 35	30	10	5938 7500 9063	183 214 242	257
KLPP100	100	170	70 75 80	49,3	44	34	M8 x 35	30	12	8625 9375 11250	246 250 281	245
KLPP110	110	185	75 80 85	56,4	50	39	M10 x 40	59	9	9000 11250 13500	240 281 318	232
KLPP125	125	215	85 90 95	60,4	54	42	M10 x 40	59	12	13750 16250 18750	324 361 395	253
KLPP140	140	230	95 100 105	68	60,5	46	M12 x 45	100	10	18875 22000 25125	397 440 479	251
KLPP155	155	265	105 110 115	72	64,5	50	M12 x 50	100	12	27500 31250 35000	524 568 609	250
KLPP165	165	290	115 120 125	81	71	56	M16 x 55	250	8	38750 43750 48750	674 729 780	263

Series KLRR







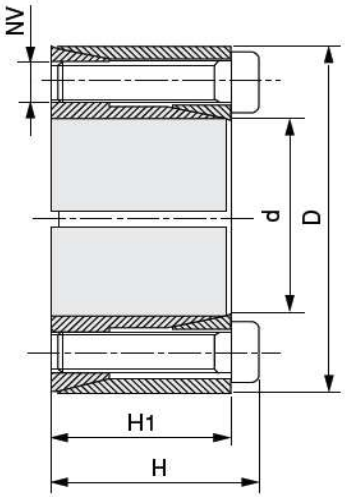
Material C 45 E - UNI EN 10083-1

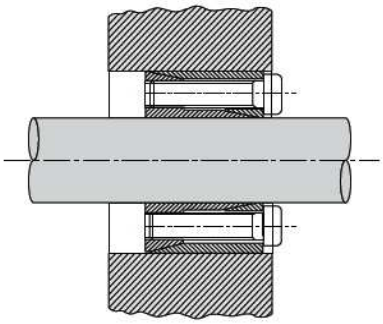
Dimentions before mounting

Our code	Dimentions						Tightening			Loosening		Performances		Surface pressures	
	d	D	H	H1	H2	H3	NV	Tv (Nm)	No. of screws	NV	No. of screws	Mt (Nm)	Ta (KN)	Pa (N/mm²)	Pm (N/mm²)
KLRR020	20	47	34	28	14	10	M6x25	13	5	M6x25	3	294	29	328	139
KLRR022	22	47	34	28	14	10	M6x25	13	5	M6x25	3	323	29	298	139
KLRR024	24	50	34	28	14	10	M6x25	14	6	M6x25	3	455	38	353	169
KLRR025	25	50	34	28	14	10	M6x25	14	6	M6x25	3	474	38	338	169
KLRR030	30	55	34	28	14	10	M6x25	14	6	M6x25	3	569	38	282	154
KLRR035	35	60	34	28	14	10	M6x25	14	8	M6x25	4	885	51	322	188
KLRR038	38	65	34	28	14	10	M6x25	14	8	M6x25	4	961	51	297	174
KLRR040	40	65	34	28	14	10	M6x25	14	8	M6x25	4	1012	51	282	174
KLRR042	42	75	43	35	18	12	M8x30	32	7	M8x30	4	1594	76	313	176
KLRR045	45	75	43	35	18	12	M8x30	32	7	M8x30	4	1707	76	293	176
KLRR050	50	80	43	35	18	12	M8x30	32	7	M8x30	4	1897	76	263	165
KLRR055	55	85	43	35	18	12	M8x30	32	8	M8x30	4	2387	87	274	177
KLRR060	60	90	43	35	18	12	M8x30	32	8	M8x30	4	2604	87	251	167
KLRR065	65	95	43	35	18	12	M8x30	32	9	M8x30	4	3172	98	260	178
KLRR070	70	110	56	46	24	16	M10x40	65	8	M10x40	4	4937	141	262	167

Series KLSS







Material C 45 E - UNI EN 10083-1

Dimentions before mounting

Our code	Dimentions				Tightening			Loosening		Performances		Surface pressures	
	d	D	H	H1	NV	Tv (Nm)	No. of screws	NV	No. of screws	Mt (Nm)	Ta (KN)	Pa (N/mm²)	Pm (N/mm²)
KLSS010	10	20	15,5	13	M2,5x12	1,2	4	M2,5x12	2	19	3,8	89	45
KLSS011	11	22	15,5	13	M2,5x12	1,2	4	M2,5x12	2	21	3,8	81	41
KLSS012	12	22	15,5	13	M2,5x12	1,2	4	M2,5x12	2	23	3,8	75	41
KLSS014	14	26	20	17	M3x16	2,1	4	M3x16	2	39	5,5	71	38
KLSS015	15	28	20	17	M3x16	2,1	4	M3x16	2	42	5,5	66	35
KLSS016	16	32	21	17	M4x16	4,9	4	M4x16	2	77	9,6	107	54
KLSS017	17	35	25	21	M4x20	4,9	4	M4x20	2	82	9,6	81	40
KLSS018	18	35	25	21	M4x20	4,9	4	M4x20	2	87	9,6	77	40
KLSS019	19	35	25	21	M4x20	4,9	4	M4x20	2	91	9,6	73	40
KLSS020	20	38	26	21	M5x20	10	4	M5x30	2	157	15,7	113	60
KLSS022	22	40	26	21	M5x20	10	4	M5x20	2	173	15,7	103	57
KLSS024	24	47	32	26	M6x24	17	4	M6x24	2	268	22,3	110	56
KLSS025	25	47	32	26	M6x24	17	4	M6x24	2	279	22,3	105	56
KLSS028	28	50	32	26	M6x24	17	6	M6x24	3	468	33,5	141	79
KLSS030	30	55	32	26	M6x24	17	6	M6x24	3	502	33,5	132	72
KLSS032	32	55	32	26	M6x24	17	6	M6x24	3	535	33,5	123	72
KLSS035	35	60	37	31	M6x28	17	8	M6x28	4	781	44,6	125	73
KLSS038	38	65	37	31	M6x28	17	8	M6x28	4	848	44,6	115	67
KLSS040	40	65	37	31	M6x28	17	8	M6x28	4	892	44,6	110	67
KLSS042	42	75	44	36	M8x34	41	6	M8x34	3	1272	60,6	122	68
KLSS045	45	75	44	36	M8x34	41	6	M8x34	3	1363	60,6	113	68
KLSS048	48	80	44	36	M8x34	41	8	M8x34	4	1938	80,8	142	85
KLSS050	50	80	44	36	M8x34	41	8	M8x34	4	2019	80,8	136	85