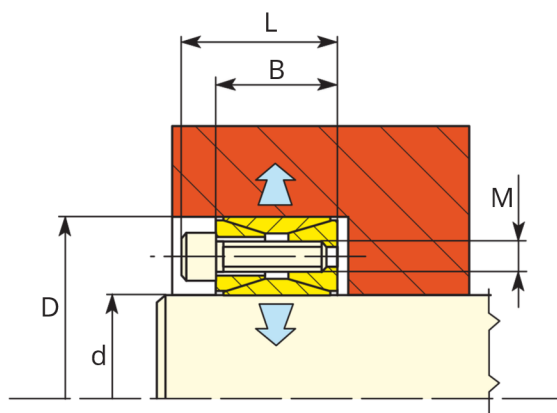


Power Lock Z2 (A)

Non autocentrante coppie medio-alte

Not self centering medium-high torques



Type : Z2

d mm	D mm	B mm	L mm	M mm	T _s Nm	T Nm	F Kn	P N/mm ²
17	47	20	26	M 6	16	260	31	104
18	47	20	26	M 6	16	280	31	104
19	47	20	26	M 6	16	290	31	104
20	47	20	26	M 6	16	310	31	104
22	47	20	26	M 6	16	340	31	104
24	50	20	26	M 6	16	370	31	98
25	50	20	26	M 6	16	390	31	98
28	55	20	26	M 6	16	650	46	133
30	55	20	26	M 6	16	700	47	133
32	60	20	26	M 6	16	750	47	122
35	60	20	26	M 6	16	820	47	122
38	65	20	26	M 6	16	1100	58	141
40	65	20	26	M 6	16	1170	59	141
42	75	24	32	M 8	40	1670	80	145
45	75	24	32	M 8	40	1790	80	145
48	80	24	32	M 8	40	1900	79	136
50	80	24	32	M 8	40	1990	80	136
55	85	24	32	M 8	40	2740	100	160
60	90	24	32	M 8	40	2990	100	151
65	95	24	32	M 8	40	3240	100	143
70	110	28	38	M 10	78	5550	159	160
75	115	28	38	M 10	78	5950	159	153
80	120	28	38	M 10	78	6350	159	146
85	125	28	38	M 10	78	6740	159	140
90	130	28	38	M 10	78	7140	159	135
95	135	28	38	M 10	78	9000	189	156
100	145	32	44	M 12	135	11600	232	164
110	155	32	44	M 12	135	12750	232	153
120	165	32	44	M 12	135	14800	247	153
130	180	38	50	M 12	135	20150	310	134

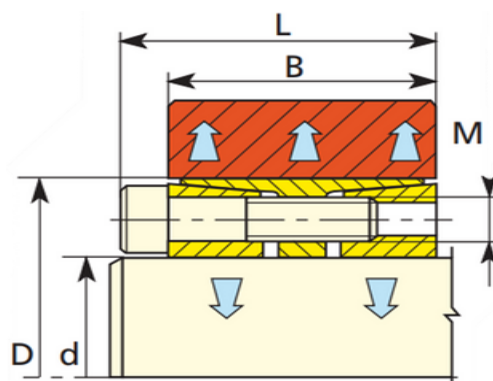
Type : Z2

d mm	D mm	B mm	L mm	M mm	T _s Nm	T Nm	F Kn	P N/mm ²
140	190	38	50	M 12	135	23850	341	140
150	200	38	50	M 12	135	27850	371	145
160	210	38	50	M 12	135	32200	403	150
170	225	44	58	M 14	208	36850	434	135
180	235	44	58	M 14	208	42550	473	141
190	250	52	66	M 14	208	52400	552	127
200	260	52	66	M 14	208	59000	590	131
220	285	56	72	M 16	312	75000	682	127
240	305	56	72	M 16	312	94500	788	137
260	325	56	72	M 16	312	116000	892	146
280	355	66	84	M 18	425	142000	1014	127
300	375	66	84	M 18	425	171500	1143	135
320	405	78	98	M 20	610	237000	1481	135
340	425	78	98	M 20	610	252000	1482	129
360	455	90	112	M 22	820	332000	1844	128
380	475	90	112	M 22	820	350000	1842	123
400	495	90	112	M 22	820	369000	1845	118
420	515	90	112	M 24	820	430000	2048	126
440	545	102	130	M 24	1100	492000	2236	113
460	565	102	130	M 24	1100	514000	2235	109
480	585	102	130	M 24	1100	563000	2346	111
500	605	102	130	M 24	1100	615000	2460	112
520	630	102	130	M 24	1100	654000	2515	110
540	650	102	130	M 24	1100	679000	2515	107
560	670	102	130	M 24	1100	751000	2682	111
580	690	102	130	M 24	1100	810000	2793	112
600	710	102	130	M 24	1100	838000	2793	109
620	730	102	130	M 24	1100	901000	2906	110
640	750	102	130	M 24	1100	966000	3019	111

Power Lock F

Autocentrante- coppie molto alte

Self centering - very high torque



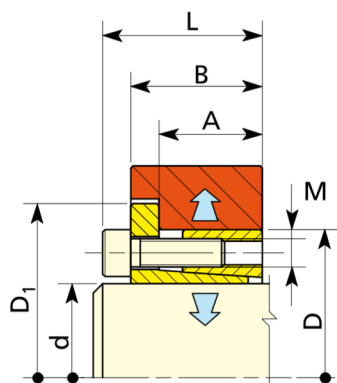
Type : F

d mm	D mm	B mm	L mm	M mm	T _s Nm	T Nm	F Kn	P N/mm ²
25	50	40	46	M 6	17	799	64	107
28	55	40	46	M 6	17	895	64	107
30	55	40	46	M 6	17	959	64	107
35	60	54	62	M 6	17	1306	75	121
38	65	54	62	M 8	41	2567	135	121
40	65	54	62	M 8	41	2702	135	121
42	75	54	62	M 8	41	2837	135	121
45	75	54	62	M 8	41	3040	135	121
48	80	64	72	M 8	41	3707	154	102
50	80	64	72	M 8	41	3861	154	102
55	85	64	72	M 8	41	4779	174	108
60	90	64	72	M 8	41	5793	193	113
65	95	64	72	M 8	41	6276	193	107
70	110	78	88	M 10	83	10951	313	120
75	115	78	88	M 10	83	11733	313	115
80	120	78	88	M 10	83	13768	344	121
85	125	78	88	M 10	83	15959	376	127
90	130	78	88	M 10	83	16898	376	122
95	135	78	88	M 10	83	17837	376	117

Type : F

d mm	D mm	B mm	L mm	M mm	T _s Nm	T Nm	F Kn	P N/mm ²
100	145	100	112	M 12	145	25029	501	113
110	155	100	112	M 12	145	30039	546	115
120	165	100	112	M 12	145	38226	637	127
130	180	116	130	M 14	230	48270	743	117
140	190	116	130	M 14	230	60654	866	129
150	200	116	130	M 14	230	69628	928	132
160	210	116	130	M 14	230	79220	990	134
170	225	148	164	M 16	360	100851	1186	116
180	235	148	164	M 16	360	114414	1271	119
190	250	148	164	M 16	360	128814	1356	119
200	260	148	164	M 16	360	135594	1356	115
220	285	148	164	M 16	360	167805	1526	118
240	305	150	166	M 16	360	195100	1626	131
260	325	150	166	M 16	360	221930	1707	129
280	355	177	197	M 20	690	314194	2244	131
300	375	177	197	M 20	690	374042	2494	138
320	405	177	197	M 20	690	418936	2618	134
340	425	177	197	M 20	690	466307	2743	134

Power Lock ES



Self centering - high transmissible torque
(during the clamping the hub can axially displace)

Autocentrante - coppie trasmissibili alte
(durante il bloccaggio il pezzo può spostarsi assialmente)

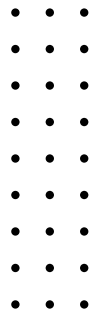
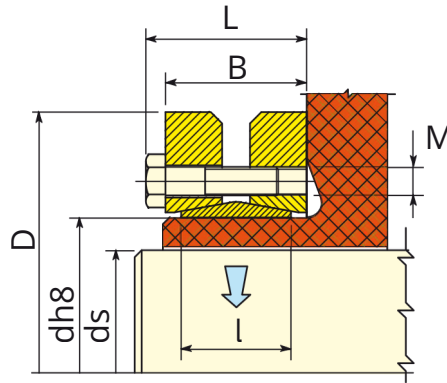
Type : ES

d mm	D mm	D ₁ mm	A mm	B mm	L mm	M mm	T ₂ Nm	T Nm	F Kn	P N/mm ²
18	47	53	22	28	34	M 6	17	290	32	100
19	47	53	22	28	34	M 6	17	300	32	100
20	47	53	22	28	34	M 6	17	320	32	100
22	47	53	22	28	34	M 6	17	350	32	100
24	50	56	22	28	34	M 6	17	390	32	100
25	50	56	22	28	34	M 6	17	400	32	100
28	55	61.4	22	28	34	M 6	17	450	32	90
30	55	61.4	22	28	34	M 6	17	490	32	90
32	60	67	22	28	34	M 6	17	700	43	110
35	60	67	22	28	34	M 6	17	760	43	110
38	65	72	22	28	34	M 6	17	820	43	100
40	65	72	22	28	34	M 6	17	870	43	100
42	75	84	25	33	41	M 8	41	1700	80	140
45	75	84	25	33	41	M 8	41	1800	80	140
48	80	89	24	33.5	41	M 8	41	1900	80	130
50	80	89	24	33.5	41	M 8	41	2000	80	130
55	85	94	24	33.5	41	M 8	41	2200	80	120
60	90	99	24	33.5	41	M 8	41	2400	80	120
65	95	104	24	33.5	41	M 8	41	2600	80	110
70	110	119	29	40	50	M 10	83	4600	130	130
75	115	124	29	40	50	M 10	83	5000	130	130
80	120	129	29	40	50	M 10	83	5300	130	120
85	125	134	29	40	50	M 10	83	7000	160	150
90	130	139	29	40	50	M 10	83	7400	160	140
95	135	144	29	40	50	M 10	83	7800	160	130
100	145	154	31	44	56	M 12	145	9700	200	140
110	155	164	31	44	56	M 12	145	10700	200	130
120	165	174	31	44	56	M 12	145	13100	220	150
130	180	189	39	52	64	M 12	145	19000	290	130
140	190	199	39	54	68	M 14	230	20500	300	140
150	200	209	39	54	68	M 14	230	24500	330	130
160	210	219	39	54	68	M 14	230	31300	390	150
170	225	234	49	64	78	M 14	230	33200	390	110
180	235	244	49	64	78	M 14	230	35000	390	100
190	250	259	49	64	78	M 14	230	46500	500	120
200	260	269	49	64	78	M 14	230	49000	500	110

Shrink Disc Z7

External clamping excellent concentricity

Surface roughness on the pressure surfaces of the shaft and the hub should be $Ra \leq 3.2 \mu m$ (good finishing on lathe)

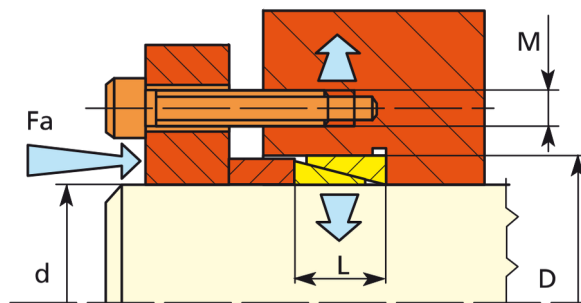


Type : Z7

d mm	D mm	ds mm	L mm	B mm	l mm	M mm	T _s Nm	T Nm	F Kn
24	50	19 - 20 - 21	23.0	19.5	14	M5	4.9	162 - 200 - 238	15.0 - 18.5 - 21.0
30	60	24 - 25 - 26	25.0	21.5	16	M5	4.9	285 - 323 - 361	15.7 - 23.7 - 26.7
36	72	28 - 30 - 31	27.5	23.5	18	M6	11.8	418 - 542 - 599	27.0 - 38.0 - 43.0
44	80	32 - 35 - 36	29.5	25.5	20	M6	11.8	689 - 741 - 817	44.0 - 49.0 - 54.0
50	90	38 - 40 - 42	31.5	27.5	22	M6	11.8	893 - 1102 - 1311	48.8 - 58.8 - 69.0
55	100	42 - 45 - 48	34.5	30.5	23	M6	11.8	1102 - 1444 - 1786	48.0 - 61.7 - 77.0
62	110	48 - 50 - 52	34.5	30.5	23	M6	11.8	1758 - 2090 - 2280	69.0 - 80.9 - 90.0
68	115	50 - 55 - 60	34.5	30.5	23	M6	11.8	1900 - 2375 - 2993	71.2 - 80.9 - 95.7
75	138	55 - 60 - 65	37.8	32.5	25	M8	29.4	2375 - 3040 - 3753	94.4 - 111.0 - 126.0
80	145	60 - 65 - 70	37.8	32.5	25	M8	29.4	3040 - 3705 - 4370	99.3 - 115.0 - 130.0
90	155	65 - 70 - 75	44.3	39.0	30	M8	29.4	4513 - 5700 - 6888	141.0 - 160.0 - 178.0
100	170	70 - 75 - 80	49.3	44.0	34	M8	29.4	6555 - 7125 - 8550	163.0 - 182.0 - 202.0
110	185	75 - 80 - 85	56.4	50.0	39	M10	57.8	6840 - 8550 - 10260	185.0 - 207.0 - 221.0
125	215	85 - 90 - 95	60.4	54.0	42	M10	57.8	10450 - 12350 - 14250	240.0 - 262.0 - 285.0
140	230	95 - 100 - 105	68.0	60.5	46	M12	98.0	14345 - 16720 - 19095	308.0 - 331.0 - 357.0
155	265	105 - 110 - 115	72.0	64.5	50	M12	98.0	20900 - 23750 - 26600	366.0 - 392.0 - 417.0
165	290	115 - 120 - 125	81.0	71.0	56	M16	245.0	29450 - 33250 - 37050	513.0 - 544.0 - 564.0
175	300	125 - 130 - 135	81.0	71.0	56	M16	250.0	34200 - 38950 - 45000	576.0 - 630.0 - 666.0

Power Lock (Taper Ring) Z1

Not self centering
Small radial dimensions



Type : Z1

d mm	D mm	L mm	T Nm	F Kn	P N/mm ²	F _A Kn
8	11	4.5	4.3	1.09	98	9.1
10	13	4.5	6.9	1.37	98	12.1
12	15	4.5	9.8	1.64	98	12.4
13	16	4.5	12.0	1.80	98	12.7
14	18	6.3	19.2	2.74	98	20.4
15	19	6.3	22.1	2.94	98	23.5
16	20	6.3	25.1	3.14	98	23.9
17	21	6.3	28.3	3.33	98	24.2
18	22	6.3	31.8	3.53	98	24.8
19	24	6.3	35.3	3.72	98	29.1
20	25	6.3	39.2	3.92	98	29.5
22	26	6.3	47.0	4.31	98	28.3
24	28	6.3	56.8	4.70	98	29.4
25	30	6.3	60.8	4.90	98	31.8
28	32	6.3	76.4	5.49	98	31.9
30	35	6.3	88.2	5.88	98	34.8
32	36	6.3	100.0	6.27	98	35.9
35	40	7.0	136.0	7.74	98	44.8
36	42	7.0	144.0	7.94	98	47.3
38	44	7.0	160.0	8.43	98	48.8

Type : Z1

d mm	D mm	L mm	T Nm	F Kn	P N/mm ²	F _A Kn
40	45	8.0	195	9.75	98	57.6
42	48	8.0	216	10.30	98	61.4
45	52	10.0	321	14.30	98	90.3
48	55	10.0	367	15.30	98	92.7
50	57	10.0	397	15.90	98	94.7
55	62	10.0	480	17.40	98	99.7
56	64	12.0	603	21.60	98	125.6
60	68	12.0	692	23.00	98	130.6
63	71	12.0	764	24.20	98	134.6
65	73	12.0	813	25.00	98	134.9
70	79	14.0	1110	31.60	98	172.4
71	80	14.0	1140	32.00	98	174.0
75	84	14.0	1260	33.80	98	185.7
80	91	17.0	1770	44.10	98	247.1
90	101	17.0	2240	50.00	98	266.2
100	114	21.0	3450	69.60	98	370.8
110	124	21.0	4170	76.40	98	406.1
120	134	21.0	4950	83.30	98	432.0
130	148	28.0	7840	122.00	98	640.8
140	158	28.0	9110	131.00	98	676.5

F_A Preload force. It is produced by the nr. of screws on the flange, tightened with the torque T_s .
Every screw produces the force F_s , and the number of screws should be: $n \cdot F_s = F_A$.
The preload force F_A generates the transmissible torque T or axial force F .

Viti tipo Screw size	T _s Nm	F _s kN
M 6	10	9
M 8	26	16
M 10	49	26
M 12	85	38
M 14	135	52