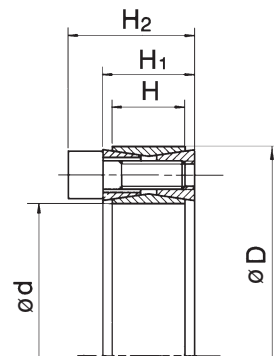
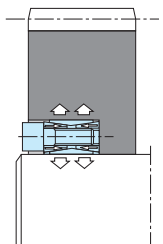


SIT-LOCK® 1 - Not Self-Centering

SITLOCK® locking assembly unit consists of four pieces with two inside double-cone rings joined through a set of tightening

screws. It is recommended for medium torques. Although it is not self centering, it can be easily assembled and disassembled.



Installation

Carefully clean contact surfaces of shaft and hub. Then, lightly oil both surfaces with standard mineral oil. Position the SIT-LOCK® on the shaft and into the hub machined bore. Align them as required by the application. Gradually and uniformly tighten the locking screws to the tightening torque (Ms).

You must tighten the screws in diametrically opposite sequence in stages:

- hand tighten the screws until the surfaces are in contact

- check the position of the hub on the shaft
- tighten the screws to half the value of the tightening torque (Ms) stated in the catalogue
- repeat the operation until the tightening torque is reached using the dynamometric screw-driver
- check every locking screw to insure it has been tightened to the specific tightening torque

Do not use lubricant like "Molykote" or molybdenum disulfide based oils.

Removal

SIT-LOCK® 1 are not self-locking. The inner rings are tapered so that they spring apart when all screws are released. Gradually loosen opposite locking screws in stages until the SIT-LOCK® is released. DO NOT remove the screws completely. In case it should jam, it is necessary to lightly hammer the released screws, so the back cone ring is pushed backwards.

Note: To reuse the locking element, carefully oil the screws and the conical surfaces, then follow installation instructions.

Percentering hub selection

In order to perform an accurate centering, it is necessary to machine with accuracy a precentering hub section which

should be longer than $\geq di \times 2 \times H_2$.

Axial displacement

During the Installation of the unit no axial displacement of the hubs on the shaft occurs.

Maximum allowable roughness
Rt 16 µm
Maximum recommended tolerance
shaft h 11 - hub H 11

Calculation of (M _T) with more SIT-LOCK®1	
1 unit	M _T = M _T table
2 units	M _T = M _T table x 1,9
3 units	M _T = M _T table x 2,7
4 units	M _T = M _T table x 3,55

SIT-LOCK® 1

Dimensions [mm]				Performances		Pressure [N/mm ²]		Clamping screws (DIN 912 - 12,9)		
d x D	H ₁	H	H ₂	M _T [Nm]	F _{ax} [kN]	p _w	p _n	N°	Type	M _S [Nm]
20 x 47	20	17	27,5	288	29	225	96	8	M 6	15
22 x 47	20	17	27,5	317	29	204	96	8	M 6	15
24 x 50	20	17	27,5	345	29	187	90	8	M 6	15
25 x 50	20	17	27,5	360	29	180	90	8	M 6	15
28 x 55	20	17	27,5	498	36	198	101	10	M 6	15
30 x 55	20	17	27,5	533	36	185	101	10	M 6	15
32 x 60	20	17	27,5	676	42	206	110	12	M 6	15
35 x 60	20	17	27,5	739	42	188	110	12	M 6	15
38 x 65	20	17	27,5	928	49	201	117	14	M 6	15
40 x 65	20	17	27,5	977	49	190	117	14	M 6	15
42 x 75	24	20	33,5	1.587	76	239	134	12	M 8	37
45 x 75	24	20	33,5	1.701	76	223	134	12	M 8	37
48 x 80	24	20	33,5	1.814	76	209	125	12	M 8	37
50 x 80	24	20	33,5	1.889	76	200	125	12	M 8	37
55 x 85	24	20	33,5	2.397	87	210	136	14	M 8	37
60 x 90	24	20	33,5	2.615	87	193	128	14	M 8	37
65 x 95	24	20	33,5	3.204	99	201	138	16	M 8	37
70 x 110	28	24	39,5	4.589	131	207	132	14	M10	70
75 x 115	28	24	39,5	4.917	131	193	126	14	M10	70
80 x 120	28	24	39,5	5.245	131	181	121	14	M10	70
85 x 125	28	24	39,5	6.290	148	192	131	16	M10	70
90 x 130	28	24	39,5	6.660	148	182	126	16	M10	70
95 x 135	28	24	39,5	7.819	165	192	135	18	M10	70
100 x 145	33	26	47	9.703	194	198	137	14	M12	127
110 x 155	33	26	47	10.673	194	180	128	14	M12	127
120 x 165	33	26	47	13.262	221	188	137	16	M12	127
130 x 180	38	34	52	17.850	275	165	119	20	M12	127
140 x 190	38	34	52	21.089	301	168	124	22	M12	127
150 x 200	38	34	52	24.586	328	171	128	24	M12	127
160 x 210	38	34	52	28.343	354	173	132	26	M12	127
170 x 225	44	38	60	33.541	395	162	122	22	M14	195
180 x 235	44	38	60	38.636	429	166	128	24	M14	195
190 x 250	52	46	68	47.337	498	151	115	28	M14	195
200 x 260	52	46	68	53.261	533	154	118	30	M14	195
220 x 285	56	50	74	68.790	625	151	116	26	M16	300
240 x 305	56	50	74	86.127	718	159	125	30	M16	300
260 x 325	56	50	74	105.229	809	165	132	34	M16	300
280 x 355	66	60	86,5	128.456	918	145	114	32	M18	410
300 x 375	66	60	86,5	154.066	1.027	151	121	36	M18	410
320 x 405	78	72	100,5	211.342	1.321	152	120	36	M20	590
340 x 425	78	72	100,5	224.551	1.321	143	115	36	M20	590
360 x 455	90	84	116	289.095	1.606	141	111	36	M22	790
380 x 475	90	84	116	305.156	1.606	133	107	36	M22	790
400 x 495	90	84	116	321.217	1.606	127	102	36	M22	790
420 x 515	90	84	116	372.740	1.775	133	109	40	M22	790
440 x 545	102	96	130	447.549	2.034	128	103	40	M24	1.000
460 x 565	102	96	130	467.892	2.034	122	99	40	M24	1.000
480 x 585	102	96	130	511.273	2.130	123	101	42	M24	1.000
500 x 605	102	96	130	556.488	2.226	123	102	44	M24	1.000
520 x 630	102	96	130	591.149	2.274	121	100	45	M24	1.000
540 x 650	102	96	130	613.885	2.274	116	97	45	M24	1.000
560 x 670	102	96	130	676.552	2.416	119	100	48	M24	1.000
580 x 690	102	96	130	728.173	2.511	120	101	50	M24	1.000
600 x 710	102	96	130	753.282	2.511	116	98	50	M24	1.000
620 x 730	102	96	130	807.649	2.605	116	99	52	M24	1.000
640 x 750	102	96	130	863.810	2.699	117	99	54	M24	1.000
660 x 770	102	96	130	921.758	2.793	117	100	56	M24	1.000
680 x 790	102	96	130	949.690	2.793	113	98	56	M24	1.000
700 x 810	102	96	130	1.042.991	2.980	118	102	60	M24	1.000
720 x 830	102	96	130	1.072.791	2.980	114	99	60	M24	1.000
740 x 850	102	96	130	1.136.994	3.073	115	100	62	M24	1.000
760 x 870	102	96	130	1.202.959	3.166	115	101	64	M24	1.000
780 x 890	102	96	130	1.252.660	3.212	114	100	65	M24	1.000
800 x 910	102	96	130	1.303.261	3.258	113	99	66	M24	1.000
820 x 930	102	96	130	1.373.654	3.350	113	100	68	M24	1.000
840 x 950	102	96	130	1.445.789	3.442	113	100	70	M24	1.000
860 x 970	102	96	130	1.519.663	3.534	114	101	72	M24	1.000
880 x 990	102	96	130	1.595.268	3.626	114	101	74	M24	1.000
900 x 1010	102	96	130	1.652.075	3.671	113	100	75	M24	1.000

Note:
For assemblies requiring larger dimensions, contact our Technical Department.

M_S Screw tightening torque Nm
M_T Transmissible torque moment Nm
F_{ax} Transmissible axial load N

p_w Shaft pressure N/mm²
p_n Hub pressure N/mm²