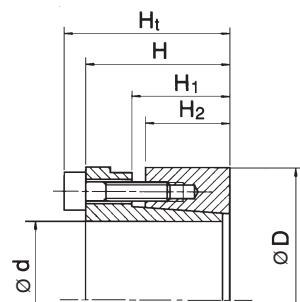
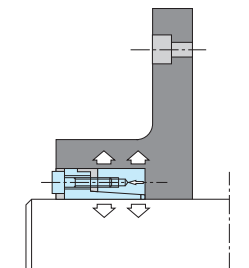


SIT-LOCK® 5A - Self-Centering

Locking assembly with single taper design. It is suitable for high torques. Provide good concentricity and self centring. A small axial movement of the hub during the installation operation

may occur. Applications in need of an accurate axial positioning are not recommended with this type of locking assembly.



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

- carefully 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

Gradually loosen all locking screws. Remove and transfer the screws into the releasing tapped holes and tighten them until the SIT-LOCK® is released.

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

Concentricity

For self-centering locking assemblies the clamping element has a centering effect and the concentricity error can be considered 0.02-0.04 mm.

Maximum allowable roughness
Rt 16 µm
Maximum recommended tolerance
shaft h 8 - hub H 8

SIT-LOCK® 5A

Dimensions [mm]					Performances		Pressure [N/mm²]		Clamping screws (DIN 912 - 12,9)		
d x D	H _i	H	H ₁	H ₂	M _T [Nm]	F _{ax} [kN]	p _w	p _n	N°	Type	M _s [Nm]
20 x 47	48	42	29	26	547	55	279	119	6	M 6	17
22 x 47	48	42	29	26	602	55	254	119	6	M 6	17
24 x 50	48	42	29	26	657	55	233	112	6	M 6	17
25 x 50	48	42	29	26	684	55	223	112	6	M 6	17
28 x 55	48	42	29	26	776	55	199	101	6	M 6	17
30 x 55	48	42	29	26	821	55	186	101	6	M 6	17
32 x 60	48	42	29	26	1.313	82	262	140	9	M 6	17
35 x 60	48	42	29	26	1.436	82	239	140	9	M 6	17
38 x 65	48	42	29	26	1.559	82	220	129	9	M 6	17
40 x 65	48	42	29	26	1.641	82	209	129	9	M 6	17
42 x 75	59	51	34,4	30	2.123	101	213	119	6	M 8	41
45 x 75	59	51	34,4	30	2.275	101	199	119	6	M 8	41
48 x 80	59	51	34,4	30	2.426	101	186	112	6	M 8	41
50 x 80	59	51	34,4	30	2.527	101	179	112	6	M 8	41
55 x 85	59	51	34,4	30	4.170	152	244	158	9	M 8	41
60 x 90	59	51	34,4	30	4.549	152	223	149	9	M 8	41
65 x 95	59	51	34,4	30	4.928	152	206	141	9	M 8	41
70 x 110	66	56	45	40	6.555	187	177	113	7	M10	83
75 x 115	66	56	45	40	7.023	187	166	108	7	M10	83
80 x 120	66	56	45	40	7.491	187	155	103	7	M10	83
85 x 125	66	56	45	40	9.096	214	167	114	8	M10	83
90 x 130	66	56	45	40	9.631	214	158	109	8	M10	83
95 x 135	66	56	45	40	12.708	268	187	131	10	M10	83
100 x 145	77	65	52	46	13.634	273	157	108	7	M12	145
110 x 155	77	65	52	46	14.997	273	143	101	7	M12	145
120 x 165	77	65	52	46	18.697	312	150	109	8	M12	145
130 x 180	77	65	52	46	25.319	390	173	125	10	M12	145
140 x 190	87,5	73,5	58,5	51	41.154	588	218	161	11	M14	230
150 x 200	87,5	73,5	58,5	51	48.102	641	222	167	12	M14	230
160 x 210	87,5	73,5	58,5	51	55.585	695	226	172	13	M14	230
170 x 225	87,5	73,5	58,5	51	63.602	748	229	173	14	M14	230
180 x 235	87,5	73,5	58,5	51	67.343	748	216	166	14	M14	230

Note: For larger sizes, please contact our technical office.

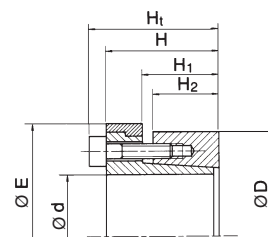
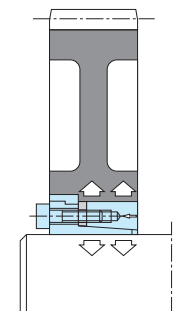
It is possible to decrease the screws tightening torque M_s by up to 40% of the value stated in the table. Consequently, M_T, F_{ax}, P_w and P_n will decrease proportionally.

M _s	Screw tightening torque	Nm
M _T	Transmissible torque moment	Nm
F _{ax}	Transmissible axial load	N
p _w	Shaft pressure	N/mm ²
p _n	Hub pressure	N/mm ²

SIT-LOCK® 5B - Self-Centering

Locking assembly with single taper design. It is suitable for high torques. Provide good concentricity and self centring.

It is recommended for medium torques and is self-centering. The flange design prevent axial movement during installation.



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

- carefully 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

Gradually loosen all locking screws. Remove and transfer the screws into the releasing tapped holes and tighten them until the SIT-LOCK® is released.

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

Concentricity

For self-centering locking assemblies, the clamping element has a centering effect and the concentricity error can be considered 0.02-0.04 mm.

Max allowable roughness
Rt 16 µm
Maximum recommended tolerance
shaft h 8 - hub H 8

SIT-LOCK® 5B

Dimensions [mm]						Performances		Pressure [N/mm ²]		Clamping screws (DIN 912 - 12,9)		
d x D	H _t	H	H ₁	H ₂	E	M _T [Nm]	F _{ax} [kN]	p _w	p _n	N°	Type	M _s [Nm]
20 x 47	48	42	29	26	53	341	34	174	74	6	M 6	17
22 x 47	48	42	29	26	53	375	34	158	74	6	M 6	17
24 x 50	48	42	29	26	56	409	34	145	70	6	M 6	17
25 x 50	48	42	29	26	56	426	34	139	70	6	M 6	17
28 x 55	48	42	29	26	61	478	34	124	63	6	M 6	17
30 x 55	48	42	29	26	61	512	34	116	63	6	M 6	17
32 x 60	48	42	29	26	66	819	51	163	87	9	M 6	17
35 x 60	48	42	29	26	66	895	51	149	87	9	M 6	17
38 x 65	48	42	29	26	71	972	51	137	80	9	M 6	17
40 x 65	48	42	29	26	71	1.023	51	131	80	9	M 6	17
42 x 75	59	51	34,4	30	81	1.324	63	133	74	6	M 8	41
45 x 75	59	51	34,4	30	81	1.418	63	124	74	6	M 8	41
48 x 80	59	51	34,4	30	86	1.513	63	116	70	6	M 8	41
50 x 80	59	51	34,4	30	86	1.576	63	111	70	6	M 8	41
55 x 85	59	51	34,4	30	91	2.600	95	152	98	9	M 8	41
60 x 90	59	51	34,4	30	96	2.836	95	139	93	9	M 8	41
65 x 95	59	51	34,4	30	102	3.073	95	129	88	9	M 8	41
70 x 110	66	56	45	40	117	4.087	117	111	70	7	M10	83
75 x 115	66	56	45	40	122	4.379	117	103	67	7	M10	83
80 x 120	66	56	45	40	127	4.670	117	97	65	7	M10	83
85 x 125	66	56	45	40	132	5.671	133	104	71	8	M10	83
90 x 130	66	56	45	40	137	6.005	133	98	68	8	M10	83
95 x 135	66	56	45	40	142	7.923	67	116	82	10	M10	83
100 x 145	77	65	52	46	153	8.500	70	98	68	7	M12	145
110 x 155	77	65	52	46	163	9.350	70	89	63	7	M12	145
120 x 165	77	65	52	46	173	11.657	94	93	68	8	M12	145
130 x 180	77	65	52	46	188	15.786	243	108	78	10	M12	145
140 x 190	87,5	73,5	58,5	51	199	25.658	367	136	100	11	M14	230
150 x 200	87,5	73,5	58,5	51	209	29.990	400	139	104	12	M14	230
160 x 210	87,5	73,5	58,5	51	219	34.656	433	141	107	13	M14	230
170 x 225	87,5	73,5	58,5	51	234	39.654	467	143	108	14	M14	230
180 x 235	87,5	73,5	58,5	51	244	41.987	467	135	103	14	M14	230

Note: For larger sizes, please contact our technical office.

It is possible to decrease the screws tightening torque M_s by up to 40% of the value stated in the table. Consequently, M_T, F_{ax}, P_w and P_n will decrease proportionally.

M _s	Screw tightening torque	Nm
M _T	Transmissible torque moment	Nm
F _{ax}	Transmissible axial load	N
p _w	Shaft pressure	N/mm ²
p _n	Hub pressure	N/mm ²