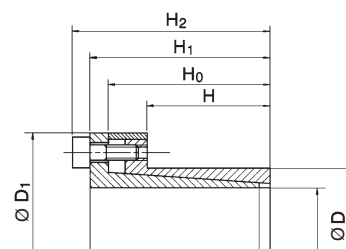
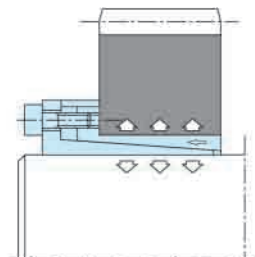


SIT-LOCK® 3 - Self-Centering

Locking assembly with single taper design. Consists of two tapered rings and a spacer. It has minimum overall dimensions in virtue of the reduced thickness of the cones. SIT-LOCK® 3 is suitable for the applications where small hubs are

requested. It is recommended for mid-high torques and is self centering.

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



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

Dimensions [mm]						Performances		Pressure [N/mm ²]		Clamping screws (DIN 912 - 12,9)		
d x D	H	H ₀	H ₁	H ₂	D ₁	M _T [Nm]	F _{ax} [kN]	P _w	P _n	N°	Type	M _s [Nm]
6 x 14	10	18,5	21	24	25	12	4	180	77	3	M 3	2
7 x 15	12	22	25	29	27	26	7	234	109	3	M 4	4,9
8 x 15	12	22	25	29	27	30	7	204	109	3	M 4	4,9
9 x 16	14	23	26	30	28	44	10	208	117	4	M 4	4,9
10 x 16	14	23	26	30	28	49	10	187	117	4	M 4	4,9
11 x 18	14	23	26	30	32	54	10	170	104	4	M 4	4,9
12 x 18	14	23	26	30	32	59	10	156	104	4	M 4	4,9
13 x 23	14	23	26	30	38	64	10	144	81	4	M 4	4,9
14 x 23	14	23	26	30	38	69	10	134	81	4	M 4	4,9
15 x 24	16	29	36	42	45	128	17	189	118	3	M 6	17
16 x 24	16	29	36	42	45	136	17	177	118	3	M 6	17
17 x 26	18	31	38	44	47	193	23	197	129	4	M 6	17
18 x 26	18	31	38	44	47	205	23	186	129	4	M 6	17
19 x 27	18	31	38	44	49	216	23	176	124	4	M 6	17
20 x 28	18	31	38	44	50	227	23	168	120	4	M 6	17
22 x 32	25	38	45	51	54	250	23	110	75	4	M 6	17
24 x 34	25	38	45	51	56	273	23	101	71	4	M 6	17
25 x 34	25	38	45	51	56	284	23	97	71	4	M 6	17
28 x 39	25	38	45	51	61	478	34	129	93	6	M 6	17
30 x 41	25	38	45	51	62	512	34	121	88	6	M 6	17
32 x 43	25	38	45	51	65	546	34	113	84	6	M 6	17
35 x 47	32	45	52	58	69	796	45	108	80	8	M 6	17
38 x 50	32	45	52	58	72	864	45	99	75	8	M 6	17
40 x 53	32	45	52	58	75	910	45	94	71	8	M 6	17
42 x 55	32	45	52	58	78	955	45	90	69	8	M 6	17
45 x 59	45	62	70	78	86	1.891	84	110	84	8	M 8	41
48 x 62	45	62	70	78	87	2.017	84	103	80	8	M 8	41
50 x 65	45	62	70	78	92	2.101	84	99	76	8	M 8	41
55 x 71	55	72	80	88	98	2.600	95	83	64	9	M 8	41
60 x 77	55	72	80	88	104	2.836	95	76	59	9	M 8	41
65 x 84	55	72	80	88	111	3.073	95	70	54	9	M 8	41
70 x 90	65	86	96	106	119	5.254	150	88	68	9	M10	83
75 x 95	65	86	96	106	126	5.630	150	82	64	9	M10	83
80 x 100	65	86	96	106	131	8.006	200	102	82	12	M10	83
85 x 106	65	86	96	106	137	8.507	200	96	77	12	M10	83
90 x 112	65	86	96	106	144	9.007	200	91	73	12	M10	83
95 x 120	65	86	96	106	149	11.092	234	100	79	14	M10	83
100 x 125	65	86	96	106	154	15.012	300	123	98	18	M10	83
110 x 140	90	114	128	140	180	16.029	291	78	61	12	M12	145
120 x 155	90	114	128	140	198	17.486	291	72	55	12	M12	145
130 x 165	90	114	128	140	208	25.257	389	88	69	16	M12	145

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