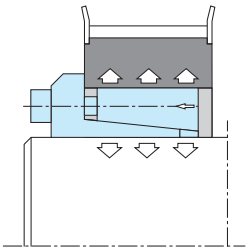
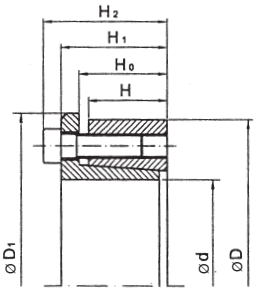
SIT-LOCK® 8 - Self-centering

Locking assembly with single taper design. The flange design prevents axial movement during installation.
SIT-LOCK® 8 has a very small axial dimension, is self centering and has been designed to suit various shaft diameters although the overall dimensions are the same. SIT-LOCK® 8 is recommended for applications with medium torques which need a good axial positioning. The limited number of screws make the installation fast.





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® 8

Dimensions [mm]						Performances		Pressure [N/mm²]		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]
14 x 55	17	22	30	38	62	130	19	208	53	3	M 8	25
16 x 55	17	22	30	38	62	149	19	182	53	3	M 8	25
18 x 55	17	22	30	38	62	168	19	162	53	3	M 8	25
19 x 55	17	22	30	38	62	177	19	153	53	3	M 8	25
20 x 55	17	22	30	38	62	186	19	145	53	3	M 8	25
22 x 55	17	22	30	38	62	288	26	186	74	3	M 8	35
24 x 55	17	22	30	38	62	314	26	170	74	3	M 8	35
25 x 55	17	22	30	38	62	328	26	164	74	3	M 8	35
28 x 55	17	22	30	38	62	441	32	176	89	3	M 8	41
30 x 55	17	22	30	38	62	473	32	164	89	3	M 8	41
24 x 65	17	22	30	38	72	448	37	243	90	5	M 8	30
25 x 65	17	22	30	38	72	467	37	233	90	5	M 8	30
28 x 65	17	22	30	38	72	611	44	243	105	5	M 8	35
30 x 65	17	22	30	38	72	655	44	227	105	5	M 8	35
32 x 65	17	22	30	38	72	699	44	213	105	5	M 8	35
35 x 65	17	22	30	38	72	919	53	234	126	5	M 8	41
38 x 65	17	22	30	38	72	998	53	216	126	5	M 8	41
40 x 65	17	22	30	38	72	1.051	53	205	126	5	M 8	41
30 x 80	20	25	33	41	87	785	52	231	87	7	M 8	30
32 x 80	20	25	33	41	87	837	52	217	87	7	M 8	30
35 x 80	20	25	33	41	87	1.070	61	232	101	7	M 8	35
38 x 80	20	25	33	41	87	1.162	61	213	101	7	M 8	35
40 x 80	20	25	33	41	87	1.223	61	203	101	7	M 8	35
42 x 80	20	25	33	41	87	1.544	74	232	122	7	M 8	41
45 x 80	20	25	33	41	87	1.655	74	217	122	7	M 8	41
48 x 80	20	25	33	41	87	1.765	74	203	122	7	M 8	41
50 x 80	20	25	33	41	87	1.838	74	195	122	7	M 8	41

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