

**SK1**

# WITH CONICAL CLAMP

0.1 - 2,800 Nm



## PROPERTIES

### MATERIAL

- ▶ **Clutch system:** hardened steel
- ▶ **Clamping ring size 1.5 - 10:** aluminum
- ▶ **Conical clamping bushing size 15 - 2500:** steel

### DESIGN

Size 1.5 - 10 with clamping ring and a single clamping screw.  
Size 15 - 2500 with conical clamping bushing and six screws.

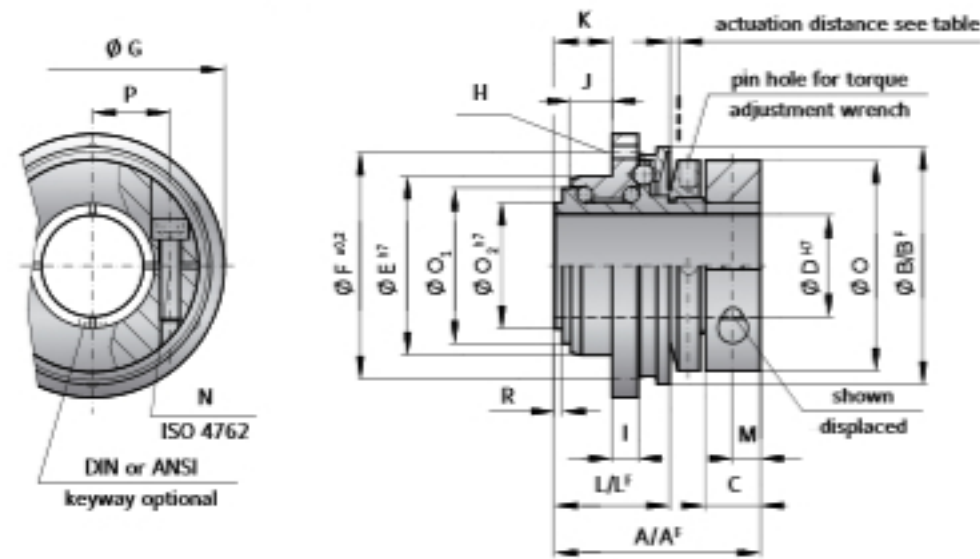
Clutch system: spring loaded ball-detent principle. Operable temperature range from -30 to +120° C.

### AVAILABLE FUNCTION SYSTEMS

- ▶ **W** = Single position / automatic re-engagement (standard)
- ▶ **D** = Multi-position / automatic re-engagement
- ▶ **G** = Load holding / load blocking
- ▶ **F** = Full disengagement / manual re-engagement

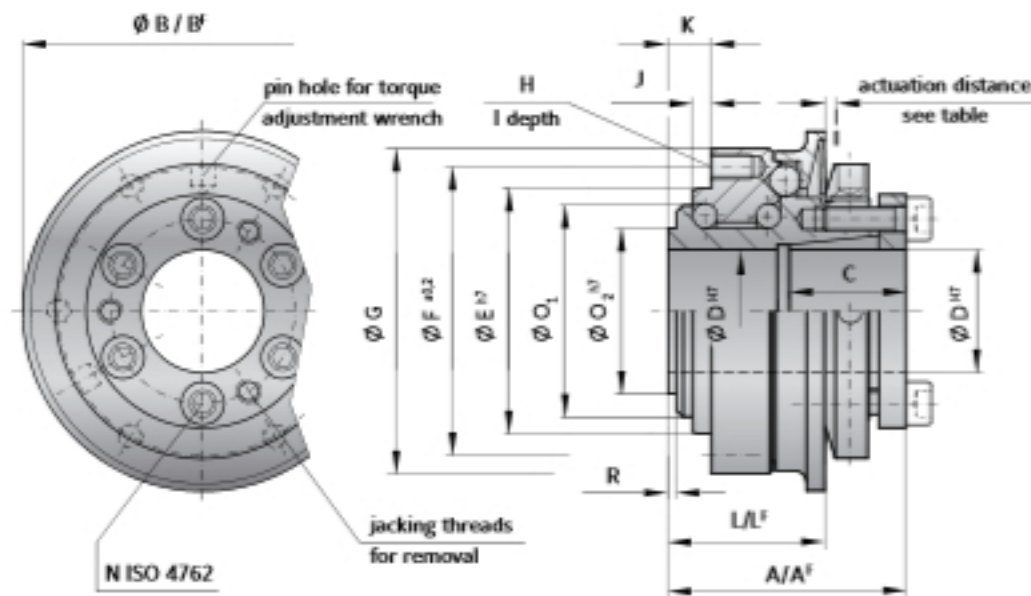
## MINIATURE DESIGN | SIZE 1.5 - 10

### Standard with clamping collar



## STANDARD DESIGN | SIZE 15 - 2,500

### Standard with conical clamping bushing



## MODEL SK1

		MINIATURE DESIGN													
SIZE		1.5	2	4.5	10	15	30	60	150	200	300	500	800	1500	2500
Adjustment range available from - to (approx. values) (Nm)	$T_{ok}$	0.1-0.6	0.2-1.5	1-3	2-6	5-15	5-20	10-30	20-70	30-90	100-200	80-200	400-650	600-800	1500-2000
		0.4-1	0.5-2.2	2-4.5	4-12	12-25	10-30	25-80	45-150	60-160	150-240	200-350	500-800	700-1200	2000-2500
		0.8-2	1.5-3.5	3-7	7-18	20-40	20-60	50-115	80-225	140-280	220-440	320-650	650-950	1000-1800	2300-2800
Adjustment range available from - to (approx. values) ("F" Version) (Nm)	$T_{ok}$	0.3-0.8	0.2-1	2.5-4.5	2-5	7-15	8-20	10-30	20-60	80-140	120-180	50-150	200-400	1000-1250	1400-2200
		0.6-1.3	0.7-2		4-10		16-30	30-60	80-150	130-200	300-450	250-500	450-850	1250-1500	1800-2700
Overall length (mm)	A	23	28	32	39	40	50	54	58	63	70	84	95	109	146
Overall length ("F" Version) (mm)	A'	23	28	32	39	40	50	54	58	66	73	88	95	117	152
Actuation ring $\phi$ (mm)	B	23	29	35	45	55	65	73	92	99	120	135	152	174	242
Actuation ring $\phi$ , ("F" Version) (mm)	B'	24	32	42	51.5	62	70	83	98	117	132	155	177	187	258
Clamping fit length (mm)	C	7	8	11	11	19	22	27.5	32	32	41	41	49	61	80
Inner diameter from $\phi$ to $\phi$ H7 (mm)	D	4-8	4-12	5-14	6-20	8-22	12-22	12-29	15-37	20-44	25-56	25-56	30-60	35-70	50-100
Pilot diameter h7 (mm)	E	14	22	25	34	40	47	55	68	75	82	90	100	125	168
Bolt-hole circle diameter $\pm 0.2$ (mm)	F	22	28	35	43	47	54	63	78	85	98	110	120	148	202
Flange outside diameter $-0.2$ (mm)	G	26	32	40	50	53	63	72	87	98	112	128	140	165	240
Thread	H	4xM2	4xM2.5	6xM2.5	6xM3	6xM4	6xM5	6xM5	6xM6	6xM6	6xM8	6xM8	6xM10	6xM12	6xM16
Thread depth (mm)	I	3	4	4	5	6	8	9	10	10	12	15	16	24	
Centering length $-0.2$ (mm)	J	2.5	3.5	5	8	3	5	5	5	5	6	9	10	13.5	20
Distance (mm)	K	5	6	8	11	8	11	11	12	12	15	21	19	25	34
Distance (mm)	L	11	15	17	22	27	35	37	39	44	47	59	67	82	112
Distance, ("F" Version) (mm)	L'	11.5	16	18	24	27	37	39	41.5	47	51.5	68	75	94	120
Distance (mm)	M	3.5	4	5	5										
Screw ISO 4762	N	1xM2.5	1xM3	1xM4	1xM4	6xM4	6xM5	6xM5	6xM6	6xM6	6xM8	6xM8	6xM10	6xM12	6xM16
Tightening torque (Nm)		1	2	4	4.5	4	6	8	12	14	18	25	40	70	120
Outside diameter clamp ring $\phi$ (mm)	O	20	25	32	40										
Diameter (mm)	O <sub>1</sub>	13	18	21	30	35	42	49	62	67	75	84	91	112	154
Diameter h7 (mm)	O <sub>2</sub>	11	14	17	24	27	32	39	50	55	65	72	75	92	128
Distance between centers (mm)	P	6.5	8	10	15										
Distance (mm)	R	1	1.3	1.5	1.5	2.5	2.5	2.5	2.5	3	3	4	4	4.5	6
Moment of inertia (10 <sup>-6</sup> kgm <sup>2</sup> )	J <sub>sp</sub>	0.01	0.02	0.05	0.07	0.15	0.25	0.50	1.60	2.70	5.20	8.6	20	31.5	210
Approx. weight (kg)		0.03	0.065	0.12	0.22	0.4	0.7	1.0	1.3	2.0	3.0	4.0	5.5	10	28
Actuation distance (mm)		0.7	0.8	0.8	1.2	1.5	1.7	1.7	1.9	2.2	2.2	2.2	2.2	3.0	3.0

A', B', L' = Full disengagement / manual re-engagement version (F)

ORDERING EXAMPLE	SK1	10	W	12.7	4	2-6	XX
Model	•						Special designation only (e.g. special bore / keyway dimensions).
Size		•					
Function system			•				
Bore D1 H7				•			
Disengagement torque Nm					•		
Torque adjustment range Nm						•	

For custom features place an XX at the end of the part number and describe the special requirements (e.g. SK1 / 10 / W / 12.7 / 4 / 2-6 / XX; XX=stainless steel)

