

# SKH

## Backlash free torque limiters (with fully split clamping hub)

0.1 – 2,800 Nm



### Features

- Radial mounting possible
- Very easy to mount and dismount
- Torque limiter system: spring loaded ball-detent principle

### Material

- **Bellows:** high grade stainless steel
- **Torque limiter element:** hardened steel
- **Clamping hubs:** up to size 80 aluminum. size 150 and up steel

### Design

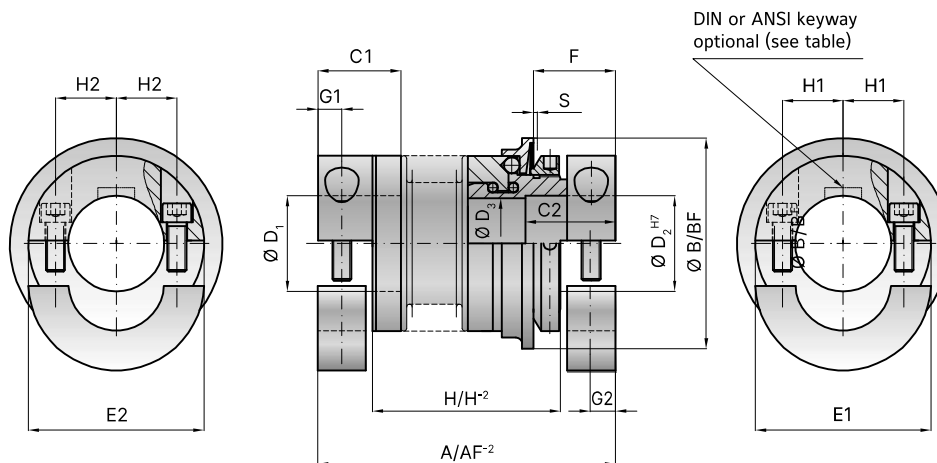
Two clamping hubs with two clamping screw in each.  
Torque limiter system: spring loaded ball-detent principle.

### 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

## Model SKH

SIZE			1.5	2	4.5	10	15	30	60
Adjustment range available from - to (approx. values)	(Nm)	T	0.1-0.6 0.4-1 0.8-1.5	0.2-1.5 or 0.5-2	1-3 or 3-6	2-6 or 4-12	5-10 or 8-20	10-25 or 20-40	10-30 or 25-80
Adjustment range available from - to (approx. values) ("F" Version)	(Nm)	T <sup>F</sup>	0.3-0.8 or 0.6-1.3	0.2-1 or 0.7-2	2.5-4.5	2-5 or 5-10	7-15	8-20 or 16-30	20-40 or 30-60
Overall length	(mm)	A	42	48 54	60 68	68 78	76 83	89 97	104 114
Distance	(mm)	H	27	30.5 36	37.5 45.5	45.5 55.5	46 53	54.5 62.5	62.5 72.5
Overall length ("F" Version)	(mm)	A <sup>F</sup>	42	48 54	60 68	68 78	76 83	89 97	104 114
Distance ("F" Version)	(mm)	H <sup>F</sup>	27	30.5 36	37.5 45.5	45.5 55.5	46 53	54.5 62.5	62.5 72.5
Actuation ring Ø	(mm)	B	23	29	35	45	55	65	73
Actuation ring Ø, ("F" Version)(mm)		B <sup>F</sup>	24	32	42	51.5	62	70	83
Clamping fit length	(mm)	C1	11	12.8	16	16	22	26.5	31
Clamping fit length	(mm)	C2	7.2	8.4	11.5	11.4	23.1	28.2	33
Inside diameter from Ø to Ø H7	(mm)	D1	3-8	4-12.7	5-16	5-20	10-28	10-30	14-35
Inside diameter from Ø to Ø H7 (with DIN 6885 keyway)	(mm)	D1 <sup>N</sup>	6-8	6-12.7	6-16	6-20	10-28	10-30	14-35
Inside diameter from Ø to Ø H7	(mm)	D2	4-8	4-12	5-14	5-20	10-26	10-30	14-32
Inside diameter from Ø to Ø H7 (with DIN 6885 keyway)	(mm)	D2 <sup>N</sup>	6	6-8	6-12	6-12	10-22	10-28	14-32
Diameter	(mm)	D3	6	8	12	12	21.1	24.1	32.1
Outside diameter of clamping hubs D1/D2	(mm)	E1/E2	21.2/20	25/27	32/32	40/40	49/49	55/55	66/66
Distance	(mm)	F	12.5-13.4	15.4-16.1	17.6-18.5	18.9-19.5	21.5-22.5	25.5-26.5	29-30
Distance ("F" Version)	(mm)	F <sup>F</sup>	12.5-13.4	14.8-15.5	17.4-18.2	18-19	21-22	23-25	27.5-29
Distance (approx. values)	(mm)	G1/G2	3.5/3.2	4.1/4.2	5.1/5.1	5.1/5.1	7/7	7.5/7.5	9.5/9.5
Distance between centers	(mm)	H1/H2	7.2/6.5	8/9.5	10.3/11	14.7/14.7	17.5/17.5	19/19	23.2/23.2
Screw ISO 4762	(mm)	I	4xM2.5	4xM3	4xM4	4xM4	4xM5	4xM6	4xM8
Tightening torque	(Nm)		1	2	4	4.5	8	15	40
Approx. weight	(kg)		0.047	0.07	0.2	0.3	0.4	0.6	1
Moment of inertia (10 <sup>-3</sup> kgm <sup>2</sup> )		J <sub>ges</sub>	0.01	0.01 0.01	0.02 0.02	0.06 0.07	0.10 0.15	0.27 0.32	0.75 0.80
Torsional stiffness (10 <sup>3</sup> Nm/rad)		CT	0.7	1.2 1.3	7 5	9 8	20 15	39 28	76 55
Lateral ± (mm)		max. values	0.15	0.15 0.20	0.20 0.25	0.20 0.30	0.15 0.20	0.20 0.25	0.20 0.25
Angular ± (degree)			1	1 1.5	1.5 2	1.5 2	1 1.5	1 1.5	1 1.5
Lateral spring stiffness (N/mm)			70	40 30	290 45	280 145	475 137	900 270	1,200 420
Actuation distance from EBS / from - to	(mm)	S	0.3-0.7	0.3-0.8	0.4-1	0.4-1	0.8-1.3	1-1.4	1.1-1.6



## Model SKH

SIZE		150	200	300	500	800	1,500	2,500
Adjustment range available from - to (approx. values) (Nm)	T	20-70 45-150 80-180	30-90 60-160 120-240	100-200 150-240 200-320	80-200 200-350 300-500	400-600 500-800 650-850	650-800 700-1,200 1,000-1,800	1,500-2,000 2,000-2,500 2,300-2,800
Adjustment range available from - to (approx. values) ("F" Version) (Nm)	T <sup>F</sup>	20-60 40-80 80-150	80-140 or 130-200	120-180 or 160-300	60-150 100-300 300-500	200-400 or 450-800	1,000-1,250 or 1,250-1,500	1,400-2,200 or 1,800-2,700
Overall length (mm)	A	118 130	130.5 142.5	141 155	164 178	189	224.1	308
Distance (mm)	H	70 82	76.5 88.5	84.5 98.5	93 107	115	130.1	198
Overall length ("F" Version) (mm)	A <sup>F</sup>	120 132	134.5 146.4	143.5 157.5	169 183	201	236	314
Distance ("F" Version) (mm)	H <sup>F</sup>	72 84	80.5 92.5	87 101	98 112	126.5	142	204
Actuation ring Ø (mm)	B	92	99	120	135	152	174	243
Actuation ring Ø, ("F" Version) (mm)	B <sup>F</sup>	98	117	132	155	177	187	258
Clamping fit length (mm)	C1	35.5	40.5	42.5	50.5	45	65	82
Clamping fit length (mm)	C2	37	44	44.3	54.5	47.7	67	78.5
Inside diameter from Ø to Ø H7 (mm)	D1	19-42	24-45	30-60	35-60	40-75	50-80	60-100
Inside diameter from Ø to Ø H7 (with DIN 6885 keyway) (mm)	D1 <sup>N</sup>	19-42	24-45	30-60	35-60	40-75	50-80	60-100
Inside diameter from Ø to Ø H7 (mm)	D2	19-42	24-45	30-60	35-60	40-75	50-80	60-100
Inside diameter from Ø to Ø H7 (with DIN 6885 keyway) (mm)	D2 <sup>N</sup>	19-42	24-45	30-60	35-60	40-75	50-80	60-100
Diameter (mm)	D3	38.05	42.5	58	60.1	60.1	68.1	100.1
Outside diameter of clamping hubs D1/D2 (mm)	E1/E2	81/81	90/90	110/110	122.5/122.5	132/132	157/157	198/198
Distance (mm)	F	32-33	36-37.5	38-40.5	47-49	49.5-51.5	60-62	81-83
Distance ("F" Version) (mm)	F <sup>F</sup>	33-35	36.5-40	36-39	48-51.5	53-57.5	59-63	79-83
Distance (approx. values) (mm)	G1/G2	12/11	12.5/12.5	14/13	16.8/16.8	17.5/17.5	22.5/22.5	26/26
Distance between centers (mm)	H1/H2	27.3/27.3	30.5/30.5	39/39	41/41	48/48	55/55	75/75
Screw ISO 4762 (mm)	I	4xM10	4xM12	4xM12	4xM16	4xM16	4xM20	4xM20
Tightening torque (Nm)	I	70	120	130	200	250	470	500
Approx. weight (kg)		2.4	4	5.9	9.6	14	21	43
Moment of inertia (10 <sup>-3</sup> kgm <sup>2</sup> )	J <sub>ges</sub>	2.5 2.8	5.1 5.3	11.5 11.8	22.8 23.0	42.0	83.0	348
Torsional stiffness (10 <sup>3</sup> Nm/rad)	CT	175 110	191 140	420 350	510 500	780	1,304	3,400
Lateral ± (mm)	max. values	0.20 0.25	0.25 0.30	0.25 0.30	0.30 0.35	0.35	0.35	0.35
Angular ± (degree)	max. values	1 1.5	1.5 2	1.5 2	2 2.5	2.5	2.5	2.5
Lateral spring stiffness (N/mm)		1,550 435	2,040 610	3,750 1,050	2,500 840	2,000	3,600	6,070
Actuation distance from EBS / from - to (mm)	S	1.1-1.7	1.7-2.3	1.8-2.4	1.9-2.6	1.7-2.5	2.4-3	2.8-3.2