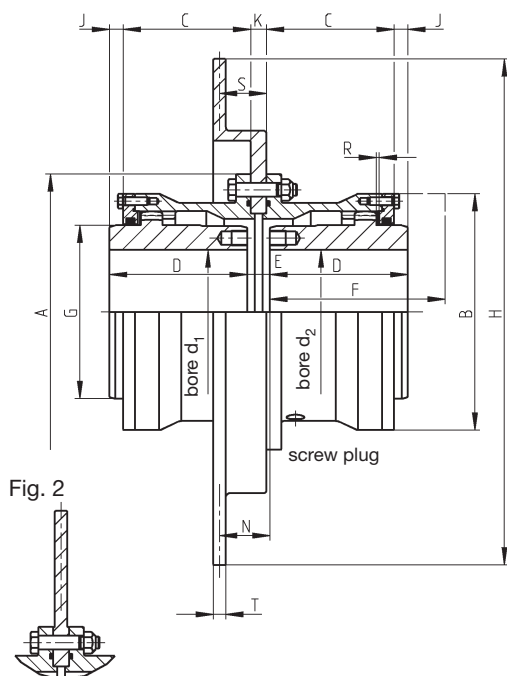


Curved Tooth Couplings

Construction Series SBkT

Dimension Table No. 243 140



As an option, the couplings can be supplied with straight brake disk.

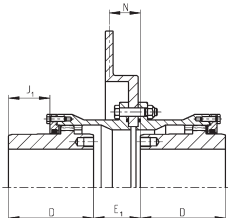
For coupling selection, please see page 6.

1) The speed n_{max} depends on the permissible circumferential speed of the brake disk. The specifications of the brake supplier have to be observed!

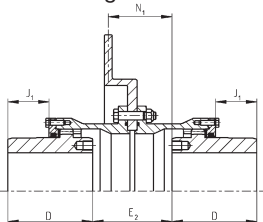
The maximum speed capacity is determined by the misalignment. Please see table 'Speed Factors'.

Other sizes available on request.

Hub configuration II



Hub configuration III



The constructional design of the SBkT series allows different hub configurations in the sleeve, so that larger shaft distances are possible. With tapered bores, the extended E-dimension provides space for the installation of shaft nuts.

2) Based on a permissible angular misalignment of $\Delta K_{w \text{ perm.}} = 0,75^\circ$ per coupling half.

These values only apply to the couplings, not to the brake.

3) Values of the complete coupling, without brake disk, with bore d_1 ; $d_2 \text{ max.}$

4) Values are based on the largest coupling size allocated.

Coupling size	Recommended brake disk allocation			
	Brake disk ØH (nominal dimension)			
	mm	mm	mm	mm
38	300			
48	300			
60	350			
70	400	460	515	
80	400	460	515	
90	460	515	610	
100	460	515	610	710
110	515	610	710	
125	515	610	710	810
140	610	710	810	
160	610	710	810	915
180	710	810	915	
200	710	810	915	
225	810	915		

Brake disk dimensions				Mass ⁴⁾ moment of inertia	Weight ⁴⁾
ØH	T	K	S		
mm	mm	mm	mm	kgm ²	kg
300	12.7	8	34.65	0.099	6.7
356	12.7	10	47.65	0.19	10
406	12.7	13	47.65	0.30	12
457	12.7	16	47.65	0.48	16
514	12.7	16	47.65	0.57	20
610	12.7	16	47.65	1.5	26
711	12.7	18	47.65	2.9	39
812	12.7	23	47.65	5.8	61
915	12.7	23	47.65	10.0	92

5) The axial clearances have to be checked in relation to the brake calipers.

The dismounting dimension F is required for the vertical installation and removal of the machines and O-ring replacement.

Torsional stiffness values are contained in the data table for SBk-type couplings.

Type SBkT	Norm. Speed cont. duty ¹⁾	Dimensions																Max. static radial misalignment $\Delta K_{max.}^{2)}$	Total grease quantity	Mass ³⁾ moment of inertia J	Weight ³⁾		
		bore d_1, d_2		A	B	C	D	E	E ₁	E ₂	F	G	J	J ₁	N	N ₁	R ⁵⁾						
Size	$\frac{P_{KN}}{n}$	$n_{max.}$	min	max	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	kg	kgm ²	kg
38	0.082	7500	12	42	118	92	56.5	60	K+ 3	K+ 15	K+ 27	90	60.0	5.0	17.0	36.15	48.15	2	±1.01	0.11	0.007	4.2	
48	0.146	6900	22	55	145	115	66.0	70	K+ 3	K+ 24	K+ 45	100	77.0	5.5	26.5	36.15	57.15	2	±1.26	0.12	0.017	7.8	
60	0.288	6300	22	65	165	135	76.0	80	K+ 5	K+ 32	K+ 59	110	90.0	6.5	33.5	50.15	77.15	2	±1.50	0.20	0.035	11.7	
70	0.50	5900	28	80	200	160	87.5	90	K+ 5	K+ 41	K+ 77	120	112.5	5.0	41	50.15	86.15	2	±1.73	0.28	0.085	19.8	
80	0.82	5400	28	92	220	178	96.5	100	K+ 5	K+ 47	K+ 89	130	128.0	6.0	48	50.15	92.15	2	±1.95	0.45	0.13	26.5	
90	1.14	5000	32	105	240	196	106.5	110	K+ 7	K+ 55	K+103	140	145.0	7.0	55	51.15	99.15	2	±2.25	0.65	0.21	32.5	
100	1.64	4700	32	115	270	225	119.5	125	K+ 5	K+ 56	K+107	150	160.5	8.0	59	50.15	101.15	3	±2.40	0.80	0.40	46	
110	2.30	4300	55	126	280	240	129.5	140	K+ 7	K+ 61	K+115	170	176.0	14	68	51.15	105.15	3	±2.70	0.95	0.53	57	
125	2.88	4000	65	145	310	265	139.0	150	K+ 8	K+ 66	K+124	180	200.5	15	73	51.65	109.65	3	±2.85	1.3	0.84	59	
140	4.60	3700	75	162	340	295	162.5	170	K+11	K+ 81	K+151	200	224.5	13	83	53.15	123.15	3	±3.30	1.6	1.5	111	
160	6.48	3400	85	185	390	325	177.5	190	K+15	K+ 87	K+159	230	256.5	20	92	55.15	127.15	3	±3.60	2.0	2.6	153	
180	9.24	3100	120	210	435	370	205.0	220	K+14	K+102	K+190	260	288.5	22	110	54.65	142.65	3	±4.20	3.4	4.7	217	
200	12.92	2900	140	230	480	415	235.0	250	K+18	K+120	K+222	300	320.5	24	126	56.65	158.65	3	±4.80	4.4	8.1	303	
225	18.4	2700	160	260	545	465	262.5	280	K+21	K+133	K+245	330	362.0	28	140	58.15	170.15	4	±5.40	6.6	15.2	442	

Subject to change due to technical improvement.