Curved Tooth Couplings

Construction Series SBkD

Dimension Table No. 243 139

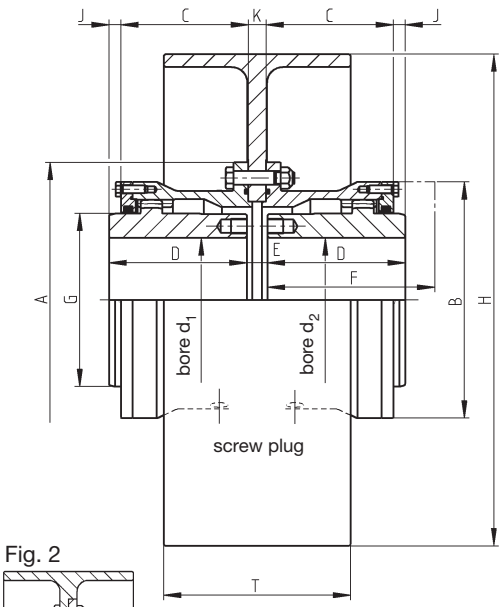
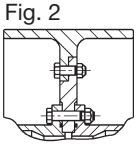
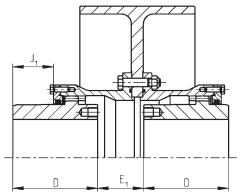


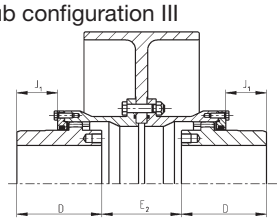
Fig. 2



Hub configuration II



Hub configuration III



The constructional design of the SBkD 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.

Recommended brake disk allocation			
Coupling size	Brake disk ØH		
	mm	mm	mm
38	200	250	
48	200	250	315
60	200	250	315
70	250	315	400
80	315	400	
90	315	400	
100	400	500	
110	400	500	
125	400	500	630
140	400	500	630
160	500	630	710
180	500	630	710
200	630	710	
225	710		

Brake disk dimensions			Mass [4] moment of inertia	Weight [4]
ØH	T	K		
mm	mm	mm	kgm²	kg
200	75	8	0.033	4.22
250	95	9	0.09	7.25
315	118	11	0.28	13.5
400	150	14	0.90	28
500	190	18	2.35	45
630	236	22	7.50	94
710	265	22	12.5	123

Split brake disks allow the vertical installation and removal of the machines.

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

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

For coupling selection,
please see page 6.

Other sizes available on request.

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 is determined by the misalignment.

Please see table 'Speed Factors'.

2) Based on a permissible angular misalignment of $\Delta K_{w\ perm.} = 0.75°$ 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; $d_{2\ max.}$

4) Weights and mass moments of inertia are based on the largest coupling size allocated.

Type SBkD Size	Norm. cont. duty $\frac{P_{KN}}{n}$ kW·min	Speed [1] $n_{max.}$ rpm	bore $d_1;d_2$ min mm	bore $d_1;d_2$ max mm	Dimensions A mm	B mm	C mm	D mm	E mm	E_1 mm	E_2 mm	F mm	G mm	J mm	J_1 mm	Max. static radial misalignment $\Delta K_{max.}$ [2] mm	Total grease quantity kg	Mass [3] moment of inertia J kgm²	Weight [3] 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	±1.01	0.11	0.007	4.2
48	0.146	6900	22	55	145	115	66.0	70	K+2	K+ 23	K+ 44	100	77.0	5.0	26.0	±1.26	0.12	0.017	7.8
60	0.288	6300	22	65	165	135	76.0	80	K+3	K+ 30	K+ 57	110	90.0	5.5	32.5	±1.50	0.20	0.035	11.7
70	0.50	5900	28	80	200	160	87.5	90	K+3	K+ 39	K+ 75	120	112.5	4	40	±1.73	0.28	0.085	19.8
80	0.82	5400	28	92	220	178	96.5	100	K+1	K+ 43	K+ 85	130	128.0	4	46	±1.95	0.45	0.13	26.5
90	1.14	5000	32	105	240	196	106.5	110	K+3	K+ 51	K+ 99	140	145.0	5	53	±2.25	0.65	0.21	32.5
100	1.64	4700	32	115	270	225	119.5	125	K+3	K+ 54	K+105	150	160.5	7	58	±2.40	0.80	0.40	46
110	2.30	4300	55	126	280	240	129.5	140	K+3	K+ 57	K+111	170	176.0	12	66	±2.70	0.95	0.53	57
125	2.88	4000	65	145	310	265	139.0	150	K+4	K+ 62	K+120	180	200.5	13	71	±2.85	1.3	0.84	59
140	4.60	3700	75	162	340	295	162.5	170	K+5	K+ 75	K+145	200	224.5	10	80	±3.30	1.6	1.5	111
160	6.48	3400	85	185	390	325	177.5	190	K+7	K+ 79	K+151	230	256.5	16	88	±3.60	2.0	2.6	153
180	9.24	3100	120	210	435	370	205.0	220	K+6	K+ 94	K+182	260	288.5	18	106	±4.20	3.4	4.7	217
200	12.92	2900	140	230	480	415	235.0	250	K+8	K+110	K+212	300	320.5	19	121	±4.80	4.4	8.1	303
225	18.4	2700	160	260	545	465	262.5	280	K+9	K+121	K+233	330	362.0	22	134	±5.40	6.6	15.2	442

Subject to change due to technical improvement.