Curved Tooth Couplings

Construction Series SBD

Dimension Table No. 243 137

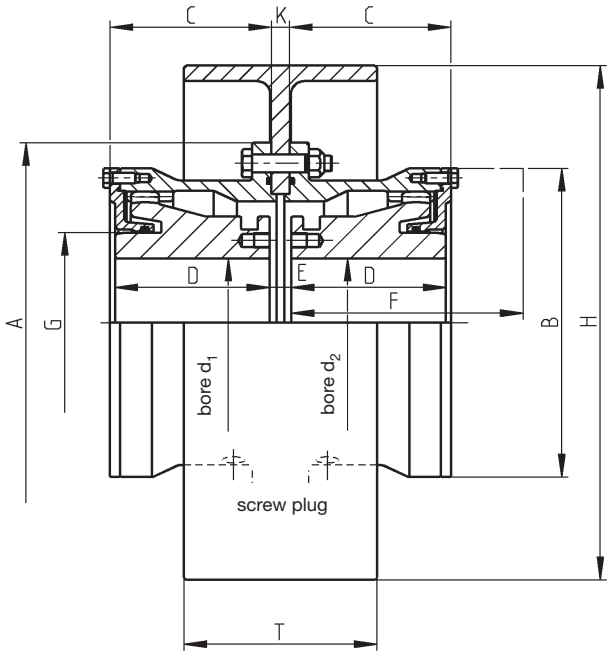
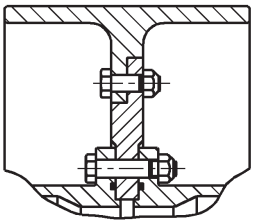


Fig. 2



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

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

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

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

2) Based on a permissible angular misalignment of $\Delta K_{w\ perm.} = 1.5°$ per coupling half.

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

Recommended brake disk allocation			
Coupling size	Brake disk ØH		
	mm	mm	mm
30	200	250	
40	200	250	315
50	200	250	315
60	250	315	400
70	250	315	400
80	315	400	
90	315	400	500
100	315	400	500
110	400	500	630
125	400	500	630
140	500	630	710
160	500	630	710
180	630	710	
200	630	710	

Brake disk dimensions				
ØH	T	K	Mass [4] moment of inertia	Weight [4]
mm	mm	mm	kgm^2	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

3) Values of the complete coupling, without brake disk, with d_1; $d_{2\ max.}$

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

For coupling selection, please see page 6.

Other sizes available on request.

Type SBD Size	Norm. cont. duty $\frac{P_{KN}}{n}$ kW·min	Speed [1] $n_{max.}$ rpm	Dimensions bore $d_1;d_2$ pre mm	min mm	max mm	A mm	B mm	C mm	D mm	E mm	F mm	G mm	Max. static radial mialignment $\Delta K_{max.}$ [2] mm	Total grease quantity kg	Total oil quantity litres	Mass [3] moment of inertia J kgm^2	Weight [3] kg
30	0.082	7500	10	12	32	118	92	53	50	K+3	75	45	±1.95	0.085	0.027	0.007	4.4
40	0.146	6900	20	22	46	145	115	62.5	60	K+2	90	60	±2.70	0.09	0.043	0.016	7.4
50	0.288	6300	20	22	58	165	135	72.5	70	K+2	110	75	±3.00	0.17	0.070	0.029	11.1
60	0.50	5900	26	28	70	200	160	84.5	80	K+3	120	90	±3.45	0.25	0.11	0.075	18.3
70	0.82	5400	26	28	78	220	178	93.5	90	K+1	130	100	±3.90	0.35	0.15	0.13	25.4
80	1.14	5000	30	32	92	240	196	103.5	100	K+1	150	120	±4.35	0.40	0.20	0.19	31.4
90	1.64	4700	30	32	100	270	225	115.5	110	K+3	170	130	±4.80	0.60	0.30	0.37	46
100	2.30	4300	53	55	110	280	240	125.5	120	K+3	180	140	±5.25	0.75	0.35	0.47	54
110	2.88	4000	63	65	120	310	265	135.0	130	K+2	190	155	±5.70	1.0	0.45	0.81	72
125	4.60	3700	73	75	138	340	295	157.5	150	K+5	215	175	±6.45	1.3	0.65	1.31	100
140	6.48	3400	83	85	156	390	325	172.5	165	K+5	230	200	±7.20	1.6	0.85	2.35	140
160	9.24	3100	118	120	180	435	370	199.0	190	K+6	270	230	±8.40	2.6	1.4	4.2	198
180	12.92	2900	138	140	200	480	415	225.0	220	K+6	300	260	±9.60	3.3	1.8	7.4	283
200	18.4	2700	158	160	225	545	465	252.5	245	K+7	340	290	±10.80	4.8	2.5	14	417

Subject to change due to technical improvement.