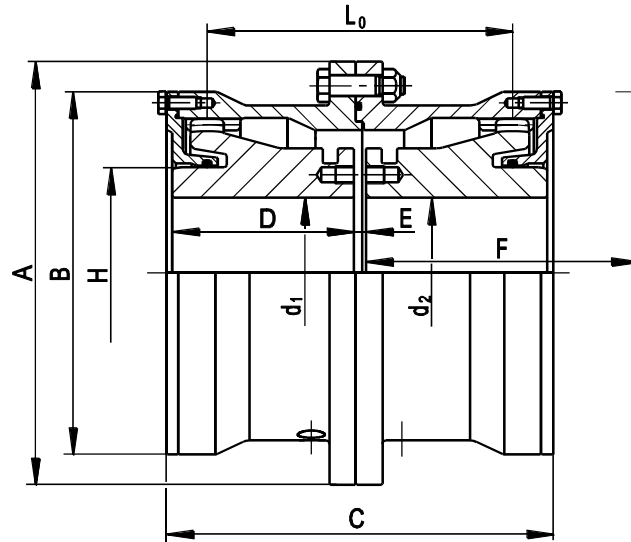

3.7 Designs and dimension tables of the product family SB

Designs	Series	Page
Basic design	SB	40
Basic design with retaining ring	SBR	41
Spacer design	SBL	42
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Design with brake disc for shoe brake	SBD	50
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Tab. 15: Designs of the product family SB

SB series

Dimension table no.: B744388-0



B376332-1

Size	Nominal torque T_{KN} kNm	Speed n_{max} rpm	Dimensions										Max. static radial offset $\Delta K_r^{(1)}$ mm	Mass moment of inertia ²⁾ kgm ²	Weight ²⁾ kg
			Bore $d_1; d_2$		A	B	C	D	E	F ³⁾	H	L ₀			
			min mm	max mm	mm	mm	mm	mm	mm	mm	mm	mm			
30	0.95	7500	12	34	118	92	108	50	5	75	45	77	1.95	0.006	4.4
40	2.1	6900	22	46	145	115	128	60	5	90	60	96	2.7	0.017	7.5
50	3.5	6300	22	58	165	135	148	70	5	110	75	113	3.0	0.033	11.2
60	5.9	5900	28	70	200	160	172	80	6	120	90	132	3.45	0.082	18.4
70	9	5400	28	78	220	178	192	90	6	130	100	148	3.9	0.13	26
80	13	5000	32	92	240	196	212	100	6	150	120	166	4.35	0.20	32
90	18	4700	32	100	270	225	236	110	8	170	130	184	4.8	0.38	47
100	23	4300	55	110	280	240	256	120	8	180	140	202	5.25	0.49	54
110	30.5	4000	65	120	310	265	276	130	8	190	155	218	5.7	0.82	72
125	42	3700	75	138	340	295	320	150	10	215	175	250	6.45	1.35	100
140	61	3400	85	156	390	325	350	165	10	230	200	276	7.2	2.41	142
160	90	3100	120	180	435	370	404	190	12	270	230	320	8.4	4.3	199
180	130	2900	140	200	480	415	456	220	12	300	260	366	9.6	7.5	285
200	189	2700	160	225	545	465	512	245	14	340	290	408	10.8	14.1	420
220	245	2400	160	273	580	510	556	270	16	360	355	452	12.0	19.7	514
240	330	2200	180	300	645	560	598	290	18	380	390	486	12.8	29.9	657
260	390	2100	200	319	680	595	640	310	20	400	415	524	13.5	42.3	797
280	535	2000	220	354	745	660	702	340	22	440	460	568	14.25	69	1065
300	580	1900	240	369	775	675	744	360	24	470	480	608	15.0	84	1220
320	740	1800	260	404	825	725	786	380	26	500	525	638	16.5	119	1470
340	950	1700	280	431	915	795	808	390	28	520	560	638	16.5	184	1870

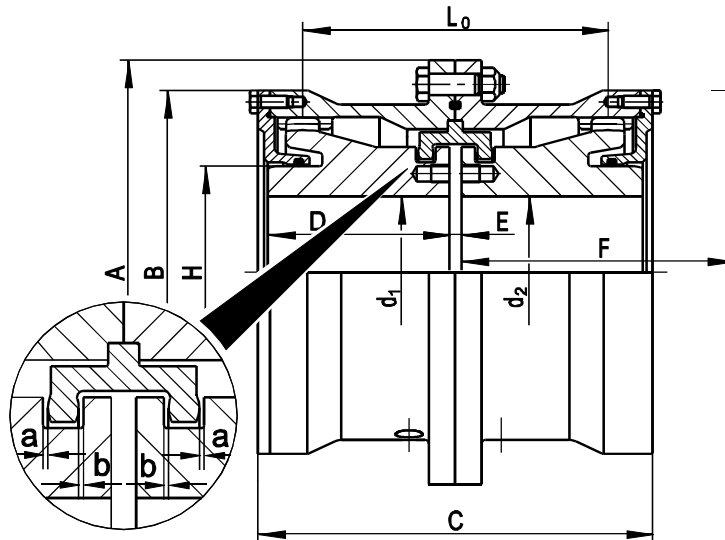
¹⁾ In relation to a permissible angular displacement of $\Delta K_w = 1.5^\circ$ for each coupling half.

²⁾ Values for the complete coupling for bore $d_1; d_2$ max.

³⁾ The dismounting dimension F is required for the vertical installation and removal of the machine and for changing the O-rings.

SBR series

Dimension table no.: B744389-0



B376339-1

Size	Nominal torque T_{KN} kNm	Speed n_{max} rpm	Dimensions										Axial clearances a and b ¹⁾ mm	Mass moment of inertia ²⁾ kgm ²	Weight ²⁾ kg
			Bore $d_1; d_2$		A	B	C	D	E	F ³⁾	H	L ₀			
30	0.95	7500	12	34	118	92	110	50	5	75	45	77	0.5	0.006	4.7
40	2.1	6900	22	46	145	115	131	60	5	90	60	96	0.5	0.017	7.8
50	3.5	6300	22	58	165	135	151	70	5	110	75	113	0.5	0.035	12
60	5.9	5900	28	70	200	160	175	80	6	120	90	132	0.5	0.085	19.4
70	9	5400	28	78	220	178	197	90	6	130	100	148	0.5	0.14	27.3
80	13	5000	32	92	240	196	217	100	6	150	120	166	0.5	0.21	33
90	18	4700	32	100	270	225	241	110	8	170	130	184	0.5	0.4	50
100	23	4300	55	110	280	240	261	120	8	180	140	202	1	0.52	57
110	30.5	4000	65	120	310	265	282	130	8	190	155	218	1	0.83	74
125	42	3700	75	138	340	295	325	150	10	215	175	250	1	1.41	105
140	61	3400	85	156	390	325	355	165	10	230	200	276	1	2.45	148
160	90	3100	120	180	435	370	410	190	12	270	230	320	1	4.51	209
180	130	2900	140	200	480	415	462	220	12	300	260	366	1	7.8	297
200	189	2700	160	225	545	465	519	245	14	340	290	408	1	14.6	428
220	245	2400	160	273	580	510	556	270	16	360	355	452	1.5	21.7	540
240	330	2200	180	300	645	560	598	290	18	380	390	486	1.5	32.5	682
260	390	2100	200	319	680	595	640	310	20	400	415	524	1.5	44.3	832
280	535	2000	220	354	745	660	702	340	22	440	460	568	1.5	73	1130
300	580	1900	240	369	775	675	744	360	24	470	480	608	1.5	88	1275
320	740	1800	260	404	825	725	786	380	26	500	525	638	1.5	124	1535
340	950	1700	280	431	915	795	808	390	28	520	560	638	2	185	1900

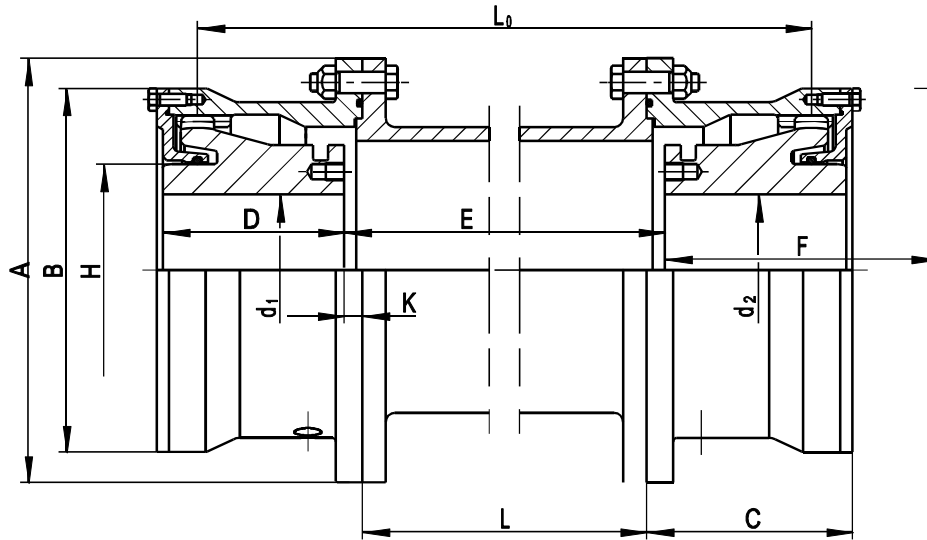
¹⁾ With these axial clearances, the permissible angular displacement $\Delta K_w = 0.6^\circ$ for each coupling half.
The axial clearances a and b can be changed if necessary.

²⁾ Values for the complete coupling for bore $d_1; d_2$ max.

³⁾ The dismounting dimension F is required for the vertical installation and removal of the machine, for installation of the retaining ring and for changing the O-rings.

SBL series

Dimension table no.: B744390-0



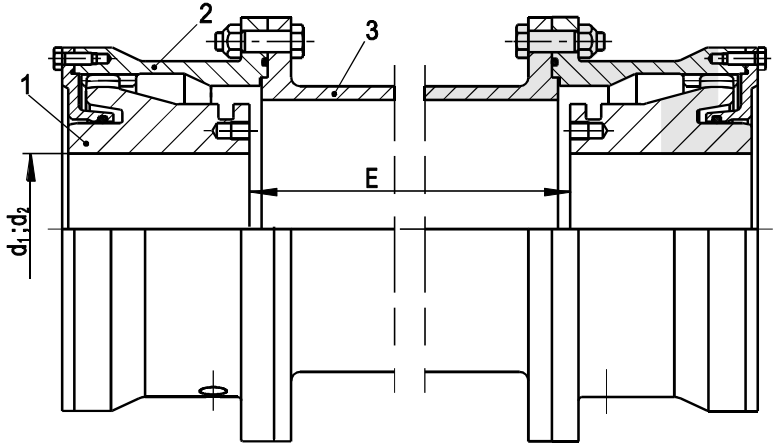
B376338-1

Size	Nominal torque T_{KN} kNm	Speed ³⁾ n_{max} rpm	Dimensions											Mass moment of inertia ¹⁾ kgm ²	Weight ¹⁾ kg
			Bore $d_1; d_2$		A	B	C	D	F ²⁾	H	K	L	L ₀		
			min mm	max mm											
30	0.95	7500	12	34	118	92	55	50	75	45	3.5	E-7	E+72	0.007	4.5
40	2.1	6900	22	46	145	115	68.5	60	90	60	7	E-14	E+91	0.018	8
50	3.5	6300	22	58	165	135	78.5	70	110	75	7	E-14	E+108	0.035	11.8
60	5.9	5900	28	70	200	160	91.5	80	120	90	8.5	E-17	E+126	0.085	19.2
70	9	5400	28	78	220	178	102	90	130	100	9	E-18	E+142	0.138	26.4
80	13	5000	32	92	240	196	112	100	150	120	9	E-18	E+160	0.21	32.5
90	18	4700	32	100	270	225	126	110	170	130	12	E-24	E+176	0.4	50
100	23	4300	55	110	280	240	136	120	180	140	12	E-24	E+194	0.51	57
110	30.5	4000	65	120	310	265	146	130	190	155	12	E-24	E+210	0.85	75
125	42	3700	75	138	340	295	170	150	215	175	15	E-30	E+240	1.65	104
140	61	3400	85	156	390	325	185	165	230	200	15	E-30	E+266	2.45	147
160	90	3100	120	180	435	370	213	190	270	230	17	E-34	E+308	4.51	208
180	130	2900	140	200	480	415	239	220	300	260	17	E-34	E+354	7.8	295
200	189	2700	160	225	545	465	269	245	340	290	20	E-40	E+394	14.1	422
220	245	2400	160	273	580	510	294	270	360	355	24	E-48	E+436	20.4	532
240	330	2200	180	300	645	560	316	290	380	390	26	E-52	E+468	31.9	687
260	390	2100	200	319	680	595	338	310	400	415	28	E-56	E+504	43.7	832
280	535	2000	220	354	745	660	370	340	440	460	30	E-60	E+546	71	1110
300	580	1900	240	369	775	675	390	360	470	480	30	E-60	E+584	85.8	1255
320	740	1800	260	404	825	725	410	380	500	525	30	E-60	E+612	121	1515
340	950	1700	280	431	915	795	430	390	520	560	40	E-80	E+610	188	1930

¹⁾ Values for the complete coupling, without spacer, for bore $d_1; d_2$ max.

²⁾ The dismounting dimension F is required for the vertical installation and removal of the machine and for changing the O-rings.

³⁾ The speed n_{max} depends on the length and weight of the spacer.



Legend

- 1 Hub
- 2 Housing
- 3 Spacer

Weight of the spacer

- G₁ = spacer at E_{min}
- G₂ = per 1 mm spacer length
- G₃ = spacer at E > E_{min}

Torsional stiffness of the coupling

- C₁ = coupling at E_{min}
- C₂ = per 1 mm spacer length
- C₃ = coupling at E > E_{min}

Mass moment of inertia spacer

- J₁ = spacer at E_{min}
- J₂ = per 1 mm spacer length
- J₃ = spacer at E > E_{min}

$$G_3 = G_1 + (E - E_{min}) \cdot G_2$$

$$C_3 = \frac{1}{\frac{1}{C_1} + \frac{E - E_{min}}{C_2}}$$

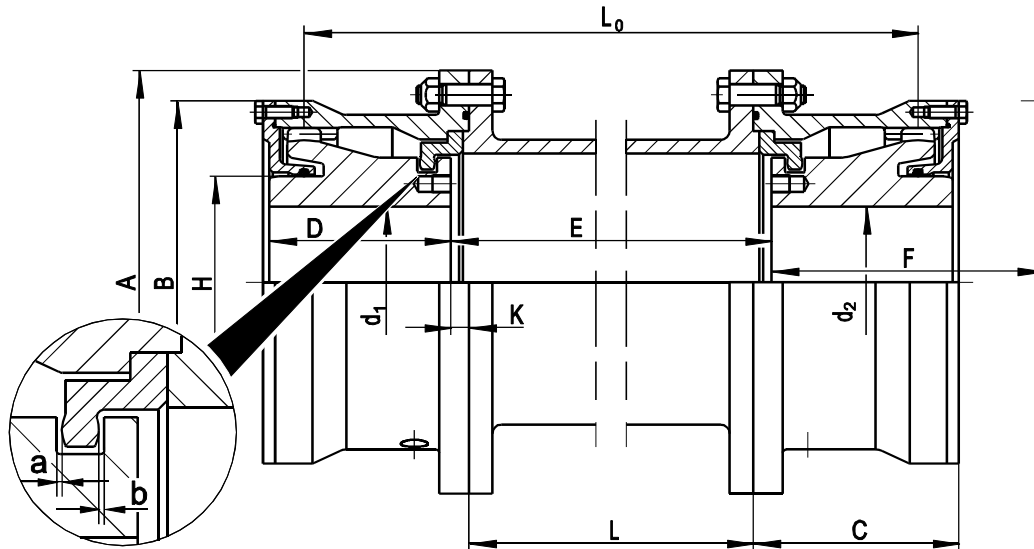
$$J_3 = J_1 + (E - E_{min}) \cdot J_2$$

Size	E _{min} mm	G ₁ kg	G ₂ kg/mm	C ₁ MNm/rad	C ₂ MNm · mm/rad	J ₁ kgm ²	J ₂ kgm ² /mm
30	82	2.17	0.011	0.38	186	0.00401	0.000011
40	94	3.20	0.014	0.92	274	0.00876	0.000020
50	94	4.40	0.018	1.72	537	0.0146	0.000041
60	117	6.70	0.022	2.94	897	0.0368	0.000072
70	118	8.20	0.029	4.07	1335	0.055	0.000113
80	118	8.70	0.030	6.49	1895	0.075	0.00017
90	144	13.0	0.034	8.49	2637	0.138	0.00023
100	144	13.5	0.040	10.68	3556	0.159	0.00032
110	179	19.2	0.041	12.49	4690	0.292	0.00043
125	185	22.8	0.048	17.66	6909	0.423	0.00064
140	205	32.0	0.053	24.76	8928	0.783	0.00088
160	239	49.0	0.070	36.70	14028	1.46	0.0014
180	239	52.0	0.080	50.58	23220	2.04	0.0023
200	280	96.0	0.120	68.69	36882	4.41	0.0036

Information based on d₁; d₂ max.
 G₃ and J₃ refer exclusively to the spacer.
 C₃ relates to the entire coupling.

SRL series

Dimension table no.: B744391-0



B376344-1

Size	Nominal torque T_{KN} kNm	Speed ⁴⁾ n_{max} rpm	Dimensions											Axial clearances a and b ¹⁾ mm	Mass moment of inertia ²⁾ kgm ²	Weight ²⁾ kg	
			Bore $d_1; d_2$		A	B	C	D	F ³⁾	H	K	L	L ₀				
			min	max	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm			
30	0.95	7500	12	34	118	92	55	50	75	45	3.5	E-7	E+72	0.5	0.01	4.7	
40	2.1	6900	22	46	145	115	68.5	60	90	60	7	E-14	E+91	0.5	0.02	8.3	
50	3.5	6300	22	58	165	135	78.5	70	110	75	7	E-14	E+108	0.5	0.04	12.4	
60	5.9	5900	28	70	200	160	91.5	80	120	90	9	E-18	E+126	0.5	0.09	20	
70	9	5400	28	78	220	178	102	90	130	100	9	E-18	E+142	0.5	0.14	27.7	
80	13	5000	32	92	240	196	112	100	150	120	9	E-18	E+160	0.5	0.22	34	
90	18	4700	32	100	270	225	126	110	170	130	12	E-24	E+176	0.5	0.42	53	
100	23	4300	55	110	280	240	136	120	180	140	12	E-24	E+194	1	0.54	60	
110	30.5	4000	65	120	310	265	146	130	190	155	12	E-24	E+210	1	0.88	79	
125	42	3700	75	138	340	295	170	150	215	175	15	E-30	E+240	1	1.7	108	
140	61	3400	85	156	390	325	185	165	230	200	15	E-30	E+266	1	2.55	153	
160	90	3100	120	180	435	370	213	190	270	230	17	E-34	E+308	1	4.71	217	
180	130	2900	140	200	480	415	239	220	300	260	17	E-34	E+354	1	8.1	306	
200	189	2700	160	225	545	465	269	245	340	290	20	E-40	E+394	1	14.5	443	
220	245	2400	160	273	580	510	294	270	360	355	24	E-48	E+436	1.5	21.4	559	
240	330	2200	180	300	645	560	316	290	380	390	26	E-52	E+468	1.5	33.5	722	
260	390	2100	200	319	680	595	338	310	400	415	28	E-56	E+504	1.5	45.7	872	
280	535	2000	220	354	745	660	370	340	440	460	30	E-60	E+546	1.5	75	1170	
300	580	1900	240	369	775	675	390	360	470	480	30	E-60	E+584	1.5	91.4	1335	
320	740	1800	260	404	825	725	410	380	500	525	30	E-60	E+612	1.5	128	1610	
340	950	1700	280	431	915	795	430	390	520	560	40	E-80	E+610	2	198	2040	

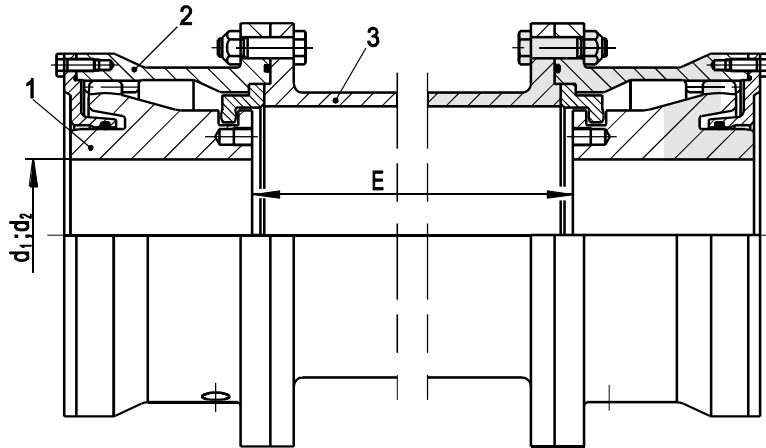
¹⁾ With these axial clearances, the permissible angular displacement $\Delta K_w = 0.6^\circ$ for each coupling half.

The axial clearances a and b can be changed if necessary.

²⁾ Values for the complete coupling, without spacer, for bore $d_1; d_2$ max.

³⁾ The dismounting dimension F is required for the vertical installation and removal of the machine, for installation of the retaining rings and for changing the O-rings.

⁴⁾ The speed n_{max} depends on the length and weight of the spacer.



B831336-0

Legend

1 Hub

2 Sleeve

3 Spacer

Weight of the spacer G_1 = spacer at E_{min} G_2 = per 1 mm spacer length G_3 = spacer at $E > E_{min}$

$$G_3 = G_1 + (E - E_{min}) \cdot G_2$$

Torsional stiffness of the coupling C_1 = coupling at E_{min} C_2 = per 1 mm spacer length C_3 = coupling at $E > E_{min}$

$$C_3 = \frac{1}{\frac{1}{C_1} + \frac{E - E_{min}}{C_2}}$$

Mass moment of inertia spacer J_1 = spacer at E_{min} J_2 = per 1 mm spacer length J_3 = spacer at $E > E_{min}$

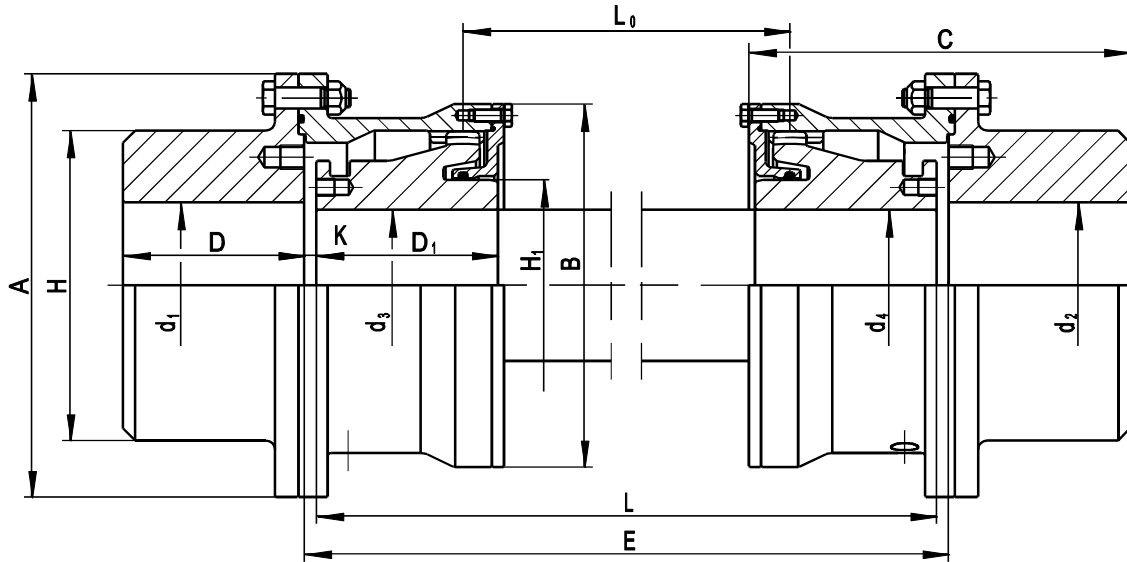
$$J_3 = J_1 + (E - E_{min}) \cdot J_2$$

Size	E_{min} mm	G_1 kg	G_2 kg/mm	C_1 MNm/rad	C_2 MNm · mm/rad	J_1 kgm ²	J_2 kgm ² /mm
30	82	2.17	0.011	0.38	186	0.00401	0.000011
40	94	3.20	0.014	0.92	274	0.00876	0.000020
50	94	4.40	0.018	1.72	537	0.0146	0.000041
60	117	6.70	0.022	2.94	897	0.0368	0.000072
70	118	8.20	0.029	4.07	1335	0.055	0.000113
80	118	8.70	0.030	6.49	1895	0.075	0.00017
90	144	13.0	0.034	8.49	2637	0.138	0.00023
100	144	13.5	0.040	10.68	3556	0.159	0.00032
110	179	19.2	0.041	12.49	4690	0.292	0.00043
125	185	22.8	0.048	17.66	6909	0.423	0.00064
140	205	32.0	0.053	24.76	8928	0.783	0.00088
160	239	49.0	0.070	36.70	14028	1.46	0.0014
180	239	52.0	0.080	50.58	23220	2.04	0.0023
200	280	96.0	0.120	68.69	36882	4.41	0.0036

Information based on d_1 ; d_2 max. G_3 and J_3 refer exclusively to the spacer. C_3 relates to the entire coupling.

SBG series

Dimension table no.: B744392-0



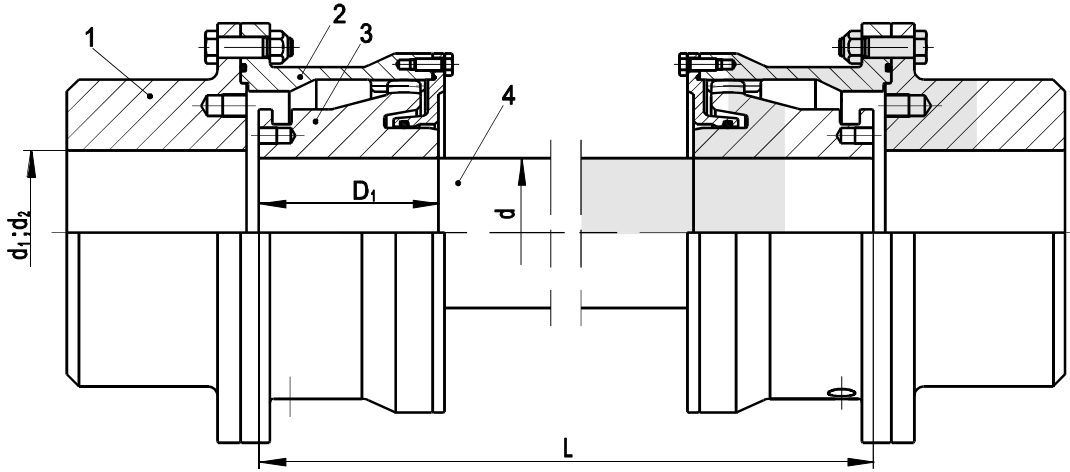
B376336-1

Size	Nominal torque T_{KN} kNm	Speed ²⁾ n_{max} rpm	Dimensions													Mass moment of inertia ¹⁾ kgm ²	Weight ¹⁾ kg
			Bore $d_1; d_2$		Bore $d_3; d_4$		A	B	C	D/D ₁	H	H ₁	K	L ₀			
			min mm	max mm	min mm	max mm	mm	mm	mm	mm	mm	mm	mm	mm	mm		
30	0.95	7500	12	61	12	34	118	92	105	50	80	45	3.5	E-79	0.01	7.7	
40	2.1	6900	22	73	22	46	145	115	126.5	60	95	60	5	E-101	0.03	12.6	
50	3.5	6300	22	86	22	58	165	135	146.5	70	112	75	5	E-118	0.06	19	
60	5.9	5900	28	100	28	70	200	160	169	80	130	90	6	E-138	0.14	31	
70	9	5400	28	115	28	78	220	178	189	90	150	100	6	E-154	0.23	45	
80	13	5000	32	131	32	92	240	196	209	100	170	120	6	E-172	0.36	56	
90	18	4700	32	146	32	100	270	225	232	110	190	130	8	E-192	0.67	83	
100	23	4300	55	158	55	110	280	240	252	120	205	140	8	E-210	0.88	97	
110	30.5	4000	65	173	65	120	310	265	272	130	225	155	8	E-226	1.45	129	
125	42	3700	75	192	75	138	340	295	315	150	250	175	10	E-260	2.4	180	
140	61	3400	85	219	85	156	390	325	345	165	285	200	10	E-286	4.34	252	
160	90	3100	110	250	120	180	435	370	398	190	325	230	12	E-332	8.1	365	
180	130	2900	134	277	140	200	480	415	454	220	360	260	12	E-378	13.8	508	
200	189	2700	150	315	160	225	545	465	508	245	410	290	14	E-422	25.3	742	
220	245	2400	160	346	160	273	580	510	556	270	450	355	16	E-468	36.9	934	
240	330	2200	180	369	180	300	645	560	598	290	480	390	18	E-504	54.5	1175	
260	390	2100	200	400	200	319	680	595	640	310	520	415	20	E-544	77	1450	
280	535	2000	220	423	220	354	745	660	700	340	550	460	20	E-586	120	1885	
300	580	1900	240	446	240	369	775	675	740	360	580	480	20	E-624	150	2170	
320	740	1800	260	477	260	404	825	725	780	380	620	525	20	E-652	208	2620	
340	950	1700	280	500	280	431	915	795	808	390	650	560	28	E-666	316	3310	

¹⁾ Values for the complete coupling, without intermediate shaft, for bore $d_1; d_2$ max. and $d_3; d_4$ max.

²⁾ The speed n_{max} depends on the length and weight of the intermediate shaft.

$L = E - 2 \cdot K$



B831339-0

Legend

- 1 Flange
- 2 Sleeve
- 3 Hub
- 4 Intermediate shaft

Weight of the intermediate shaft

G = intermediate shaft at $L_{existing}$
 d = shaft diameter

Torsional stiffness of the coupling

C_1 = coupling without intermediate shaft
 C_2 = intermediate shaft at $L_{existing}$
 C_3 = coupling at $L_{existing}$

Inertia intermediate shaft

J = intermediate shaft at $L_{existing}$

$$G = 6.165 \cdot \frac{d^2 \cdot L}{10^6}$$

$$C_2 = 7.805 \cdot \frac{d^4}{L - 2 \cdot D_1} \quad C_3 := \frac{1}{\frac{1}{C_1} + \frac{1}{C_2}}$$

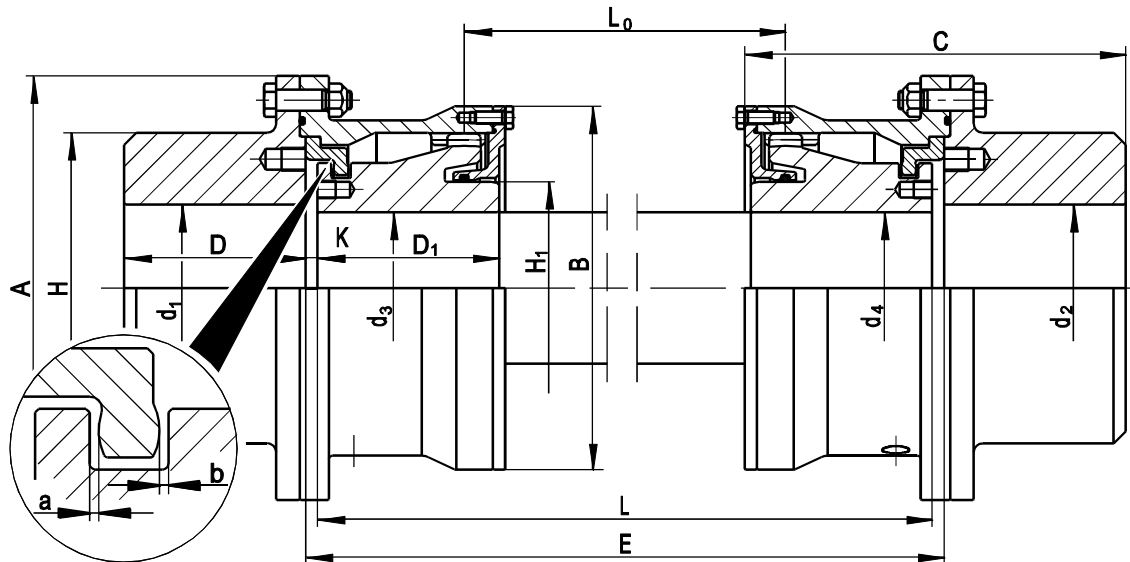
$$J = \frac{G \cdot d^2}{8 \cdot 10^6}$$

Size	$C_1^{(1)}$ MNm/rad	Size	$C_1^{(1)}$ MNm/rad	Size	$C_1^{(1)}$ MNm/rad	Size	$C_1^{(1)}$ MNm/rad
30	0.48	90	12.1	160	57.3	260	235.6
40	1.19	100	14.2	180	73.9	280	299.4
50	2.19	110	18.5	200	101.2	300	357.3
60	3.92	125	25.5	220	150.0	320	458.5
70	5.56	140	38.7	240	184.3	340	620.4
80	8.52						

¹⁾ Values for the complete coupling for bore d_1 ; d_2 max., the intermediate shaft is considered only in the range of hub lengths D_1 . For the exposed part of the shaft, the data must be calculated using the above formula.

SRG series

Dimension table no.: B744393-0



B376342-1

Size	Nominal torque T_{KN} kNm	Speed ³⁾ n_{max} rpm	Dimensions											Axial clearances a and b ¹⁾ mm	Mass moment of inertia ²⁾ kgm ²	Weight ²⁾ kg	
			Bore $d_1; d_2$		Bore $d_3; d_4$		A	B	C	D/D ₁	H	H ₁	K				L ₀
			min	max	min	max	mm	mm	mm	mm	mm	mm	mm	mm			
30	0.95	7500	12	61	12	34	118	92	105	50	80	45	3.5	E-79	0.5	0.01	8
40	2.1	6900	22	73	22	46	145	115	126.5	60	95	60	5	E-101	0.5	0.03	13
50	3.5	6300	22	86	22	58	165	135	146.5	70	112	75	5	E-118	0.5	0.06	19.8
60	5.9	5900	28	100	28	70	200	160	169	80	130	90	6	E-138	0.5	0.14	32
70	9	5400	28	115	28	78	220	178	189	90	150	100	6	E-154	0.5	0.24	46
80	13	5000	32	131	32	92	240	196	209	100	170	120	6	E-172	0.5	0.38	58
90	18	4700	32	146	32	100	270	225	232	110	190	130	8	E-192	0.5	0.69	86
100	23	4300	55	158	55	110	280	240	252	120	205	140	8	E-212	1	0.9	99
110	30.5	4000	65	173	65	120	310	265	272	130	225	155	8	E-226	1	1.49	133
125	42	3700	75	192	75	138	340	295	315	150	250	175	10	E-260	1	2.7	187
140	61	3400	85	219	85	156	390	325	345	165	285	200	10	E-286	1	4.42	259
160	90	3100	110	250	120	180	435	370	398	190	325	230	12	E-332	1	8.2	374
180	130	2900	134	277	140	200	480	415	454	220	360	260	12	E-378	1	14.1	521
200	189	2700	150	315	160	225	545	465	508	245	410	290	14	E-422	1	25.6	765
220	245	2400	160	346	160	273	580	510	556	270	450	355	16	E-468	1.5	37.9	964
240	330	2200	180	369	180	300	645	560	598	290	480	390	18	E-504	1.5	57.3	1210
260	390	2100	200	400	200	319	680	595	640	310	520	415	20	E-544	1.5	79.3	1485
280	535	2000	220	423	220	354	745	660	700	340	550	460	20	E-586	1.5	124	1950
300	580	1900	240	446	240	369	775	675	740	360	580	480	20	E-624	1.5	155	2255
320	740	1800	260	477	260	404	825	725	780	380	620	525	20	E-652	1.5	216	2710
340	950	1700	280	500	280	431	915	795	808	390	650	560	28	E-666	2	326	3420

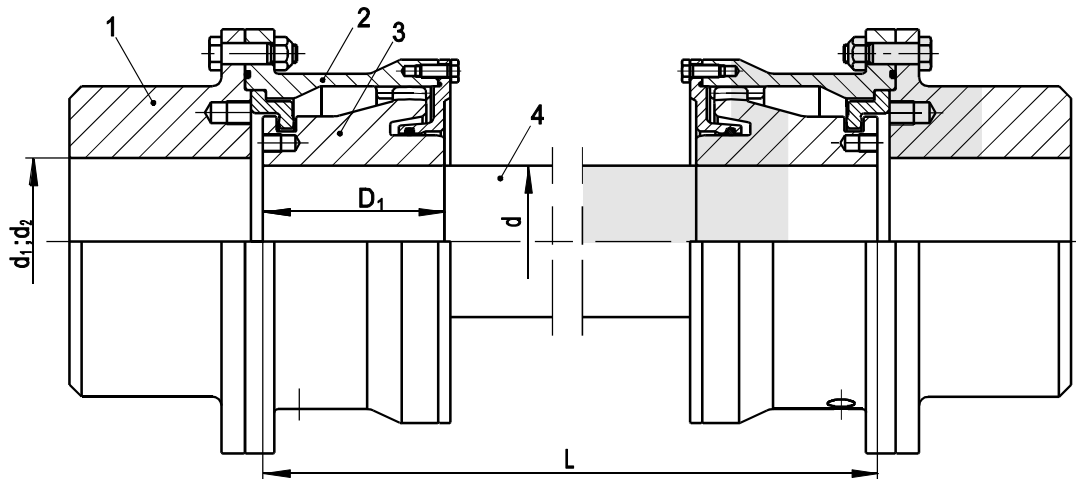
¹⁾ With these axial clearances, the permissible angular displacement $\Delta K_w = 0.6^\circ$ for each coupling half.

The axial clearances a and b can be changed if necessary.

²⁾ Values for the complete coupling, without intermediate shaft, for bore $d_1; d_2$ max. and $d_3; d_4$ max.

³⁾ The speed n_{max} depends on the length and weight of the intermediate shaft.

$$L = E - 2 \cdot K$$



B831340-0

Legend

- 1 Flange
- 2 Sleeve
- 3 Hub
- 4 Intermediate shaft

Weight of the intermediate shaft

G = intermediate shaft at $L_{existing}$
 d = shaft diameter

$$G = 6.165 \cdot \frac{d^2 \cdot L}{10^6}$$

Torsional stiffness of the coupling

C_1 = coupling without intermediate shaft
 C_2 = intermediate shaft at $L_{existing}$
 C_3 = coupling at $L_{existing}$

$$C_2 = 7.805 \cdot \frac{d^4}{L - 2 \cdot D_1} \quad C_3 := \frac{1}{\frac{1}{C_1} + \frac{1}{C_2}}$$

Inertia intermediate shaft

J = intermediate shaft at $L_{existing}$

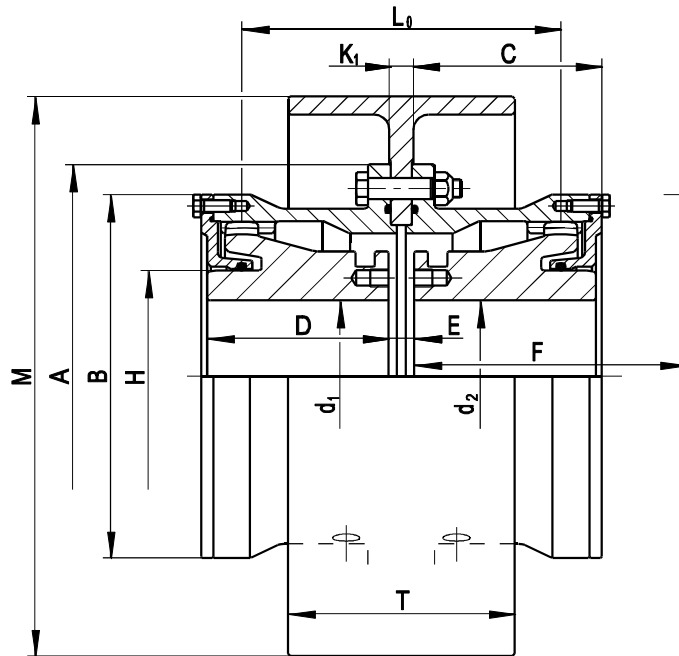
$$J = \frac{G \cdot d^2}{8 \cdot 10^6}$$

Size	$C_1^{(1)}$ MNm/rad	Size	$C_1^{(1)}$ MNm/rad	Size	$C_1^{(1)}$ MNm/rad	Size	$C_1^{(1)}$ MNm/rad
30	0.48	90	12.1	160	57.3	260	235.6
40	1.19	100	14.2	180	73.9	280	299.4
50	2.19	110	18.5	200	101.2	300	357.3
60	3.92	125	25.5	220	150.0	320	458.5
70	5.56	140	38.7	240	184.3	340	620.4
80	8.52						

¹⁾ Values for the complete coupling for bore d_1 ; d_2 max., the intermediate shaft is considered only in the range of hub lengths D_1 . For the exposed part of the shaft, the data must be calculated using the above formula.

SBD series

Dimension table no.: B744394-0



B376335-1

Size	Nominal torque T_{KN} kNm	Speed ⁴⁾ n_{max} rpm	Dimensions										Max. static radial offset $\Delta K_1^{1)}$ mm	Mass moment of inertia ²⁾ kgm ²	Weight ²⁾ kg
			Bore $d_1; d_2$		A	B	C	D	E	F ³⁾	H	L ₀			
			min mm	max mm	mm	mm	mm	mm	mm	mm	mm	mm			
30	0,95	7500	12	34	118	92	53	50	K ₁ +3	75	45	K ₁ +75	1,95	0,007	4,4
40	2,1	6900	22	46	145	115	62,5	60	K ₁ +2	90	60	K ₁ +93	2,70	0,016	7,4
50	3,5	6300	22	58	165	135	72,5	70	K ₁ +2	110	75	K ₁ +110	3,00	0,029	11,1
60	5,9	5900	28	70	200	160	84,5	80	K ₁ +3	120	90	K ₁ +129	3,45	0,075	18,3
70	9	5400	28	78	220	178	93,5	90	K ₁ +1	130	100	K ₁ +143	3,90	0,13	25,4
80	13	5000	32	92	240	196	103,5	100	K ₁ +1	150	120	K ₁ +161	4,35	0,19	31,4
90	18	4700	32	100	270	225	115,5	110	K ₁ +3	170	130	K ₁ +179	4,80	0,37	46
100	23	4300	55	110	280	240	125,5	120	K ₁ +3	180	140	K ₁ +197	5,25	0,47	54
110	30,5	4000	65	120	310	265	135	130	K ₁ +2	190	155	K ₁ +212	5,70	0,81	72
125	42	3700	75	138	340	295	157,5	150	K ₁ +5	215	175	K ₁ +245	6,45	1,31	100
140	61	3400	85	156	390	325	172,5	165	K ₁ +5	230	200	K ₁ +271	7,20	2,35	140
160	90	3100	120	180	435	370	199	190	K ₁ +6	270	230	K ₁ +314	8,40	4,2	198
180	130	2900	140	200	480	415	225	220	K ₁ +6	300	260	K ₁ +360	9,60	7,4	283
200	189	2700	160	225	545	465	252,5	245	K ₁ +7	340	290	K ₁ +401	10,80	14	417

¹⁾ In relation to a permissible angular displacement of $\Delta K_w = 1.5^\circ$ for each coupling half. These values do not apply to the braking equipment.

²⁾ Values for the complete coupling, without brake disc, for bore $d_1; d_2$ max.

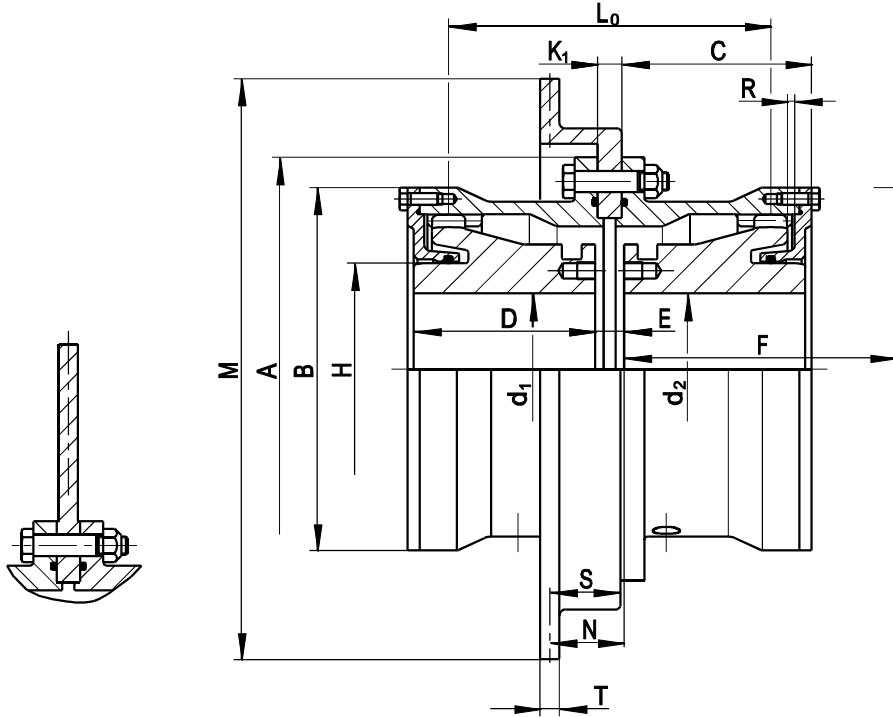
³⁾ The dismounting dimension F is required for changing the O-rings.

⁴⁾ The speed n_{max} depends on the permissible circumferential speed of the brake disc. Observe the brake manufacturer's specifications!

K₁, M, T see Page 84

SBT series

Dimension table no.: B744395-0



B376340-1

Size	Nominal torque T_{KN} kNm	Speed ⁵⁾ n_{max} rpm	Dimensions													Max. static radial offset ΔK_1 ¹⁾ mm	Mass moment of inertia ²⁾ kgm ²	Weight ²⁾ kg																				
			Bore $d_1; d_2$		A	B	C	D	E	F ³⁾	H	N	R ⁴⁾	L ₀																								
			min	max	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
30	0.95	7500	12	34	118	92	53	50	K ₁ +3	75	45	36.15	2	K ₁ +75	1.95	0.007	4.4																					
40	2.1	6900	22	46	145	115	62.5	60	K ₁ +3	90	60	36.15	2	K ₁ +94	2.70	0.016	7.4																					
50	3.5	6300	22	58	165	135	72.5	70	K ₁ +4	110	75	49.65	2	K ₁ +112	3.00	0.029	11.1																					
60	5.9	5900	28	70	200	160	84.5	80	K ₁ +5	120	90	50.15	2	K ₁ +131	3.45	0.075	18.3																					
70	9	5400	28	78	220	178	93.5	90	K ₁ +5	130	100	50.15	2	K ₁ +147	3.90	0.13	25.4																					
80	13	5000	32	92	240	196	103.5	100	K ₁ +5	150	120	50.15	2	K ₁ +165	4.35	0.19	31.4																					
90	18	4700	32	100	270	225	115.5	110	K ₁ +5	170	130	50.15	3	K ₁ +181	4.80	0.37	46																					
100	23	4300	55	110	280	240	125.5	120	K ₁ +7	180	140	51.15	3	K ₁ +201	5.25	0.47	54																					
110	30.5	4000	65	120	310	265	135	130	K ₁ +6	190	155	50.65	3	K ₁ +216	5.70	0.81	72																					
125	42	3700	75	138	340	295	157.5	150	K ₁ +11	215	175	53.15	3	K ₁ +251	6.45	1.31	100																					
140	61	3400	85	156	390	325	172.5	165	K ₁ +11	230	200	53.15	3	K ₁ +277	7.20	2.35	140																					
160	90	3100	120	180	435	370	199	190	K ₁ +14	270	230	54.65	3	K ₁ +322	8.40	4.2	198																					
180	130	2900	140	200	480	415	225	220	K ₁ +16	300	260	55.65	3	K ₁ +370	9.60	7.4	283																					
200	189	2700	160	225	545	465	252.5	245	K ₁ +19	340	290	57.15	4	K ₁ +413	10.80	14	417																					

¹⁾ In relation to a permissible angular displacement of $\Delta K_w = 1.5^\circ$ for each coupling half. These values do not apply to the braking equipment.

²⁾ Values for the complete coupling, without brake disc, for bore $d_1; d_2$ max.

³⁾ The dismounting dimension F is required for changing the O-rings.

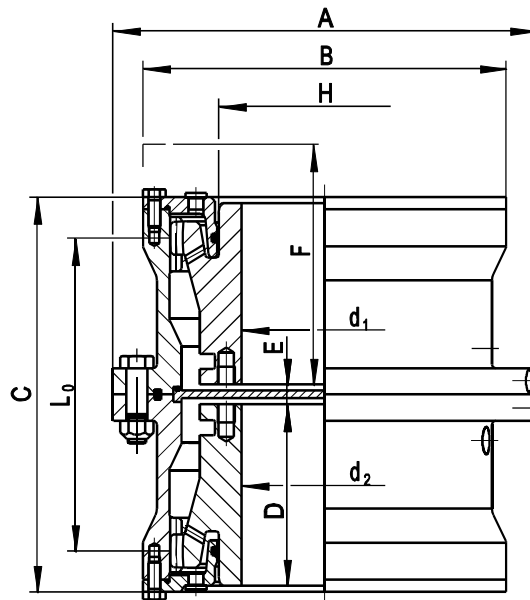
⁴⁾ Check the clearance R with the axial clearance for the brake clamps.

⁵⁾ The speed n_{max} depends on the permissible circumferential speed of the brake disc. Observe the brake manufacturer's specifications!

K_1, M, S, T see Page 85

VSB series

Dimension table no.: B744396-0



B376345-1

Size	Nominal torque T_{KN} kNm	Speed n_{min} rpm n_{max} rpm		Dimensions										Max. static radial offset $\Delta K_{\omega}^{(1)}$ mm	Mass moment of inertia ⁽²⁾ kgm ²	Weight ⁽²⁾ kg
				Bore $d_1; d_2$		A	B	C	D	E	F ⁽³⁾	H	L ₀			
				min mm	max mm	mm	mm	mm	mm	mm	mm	mm	mm			
30	0.95	1300	7500	12	34	118	92	110	50	7	75	45	79	1.95	0.007	4.6
40	2.1	1300	6900	22	46	145	115	131	60	8	90	60	99	2.70	0.018	7.9
50	3.5	1300	6300	22	58	165	135	151	70	8	110	75	116	3.00	0.035	11.8
60	5.9	900	5900	28	70	200	160	175	80	9	120	90	135	3.45	0.084	19.1
70	9	900	5400	28	78	220	178	197	90	11	130	100	153	3.90	0.14	27
80	13	900	5000	32	92	240	196	217	100	11	150	120	171	4.35	0.21	34
90	18	650	4700	32	100	270	225	241	110	13	170	130	189	4.80	0.40	49
100	23	650	4300	55	110	280	240	261	120	13	180	140	207	5.25	0.57	56
110	30.5	650	4000	65	120	310	265	282	130	14	190	155	224	5.70	0.85	75
125	42	650	3700	75	138	340	295	325	150	15	215	175	255	6.45	1.4	104
140	61	500	3400	85	156	390	325	355	165	15	230	200	281	7.20	2.5	147
160	90	500	3100	120	180	435	370	410	190	18	270	230	326	8.40	4.41	204
180	130	500	2900	140	200	480	415	462	220	18	300	260	372	9.60	7.62	292
200	189	500	2700	160	225	545	465	519	245	21	340	290	415	10.80	14.3	430

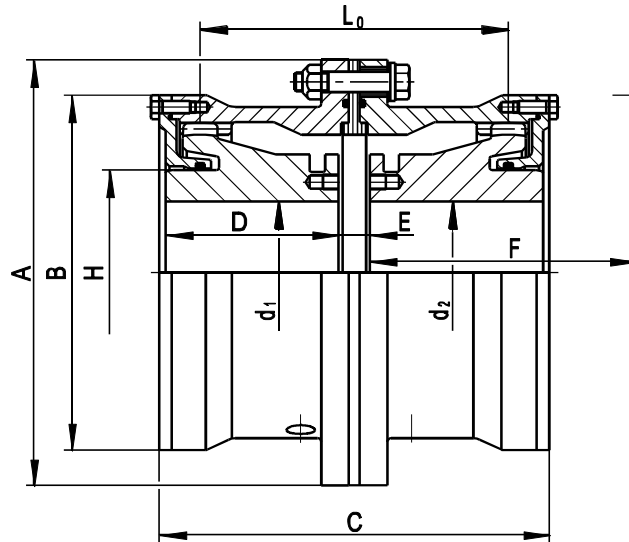
¹⁾ In relation to a permissible angular displacement of $\Delta K_{\omega} = 1.5^\circ$ for each coupling half.

²⁾ Values for the complete coupling for bore $d_1; d_2$ max.

³⁾ The dismounting dimension F is required for changing the O-rings.

SBi series

Dimension table no.: B744397-0



B376337-2

Size	Nominal torque T_{KN} kNm	Speed n_{max} rpm	Dimensions									Max. static radial offset $\Delta K_r^{(1)}$ mm	Mass moment of inertia ⁽²⁾ kgm ²	Weight ⁽²⁾ kg	
			Bore $d_1; d_2$		A	B	C	D	E	F ⁽³⁾	H				L ₀
			min	max	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
40	2.1	6900	22	46	145	115	135	60	9	90	60	100	2.70	0.017	8
50	3.5	6300	22	58	165	135	155	70	9	110	75	117	3.00	0.033	11.8
60	5.9	5900	28	70	200	160	180	80	11	120	90	137	3.45	0.082	19.2
70	9	5400	28	78	220	178	203	90	12	130	100	154	3.90	0.133	26.4
80	13	5000	32	92	240	196	223	100	12	150	120	172	4.35	0.2	32.5
90	18	4700	32	100	270	225	248	110	15	170	130	191	4.80	0.38	50
100	23	4300	55	110	280	240	268	120	15	180	140	209	5.25	0.49	57
110	30.5	4000	65	120	310	265	289	130	15	190	155	225	5.70	0.82	75
125	42	3700	75	138	340	295	333	150	18	215	175	258	6.45	1.35	104
140	61	3400	85	156	390	325	363	165	18	230	200	284	7.20	2.41	147
160	90	3100	120	180	435	370	418	190	20	270	230	328	8.40	4.3	208
180	130	2900	140	200	480	415	470	220	20	300	260	374	9.60	7.5	295
200	189	2700	160	225	545	465	527	245	22	340	290	416	10.80	14.1	422

¹⁾ In relation to a permissible angular displacement of $\Delta K_w = 1.5^\circ$ for each coupling half.

²⁾ Values for the complete coupling for bore $d_1; d_2$ max.

³⁾ The dismounting dimension F is required for the vertical installation and removal of the machine and for changing the O-rings.