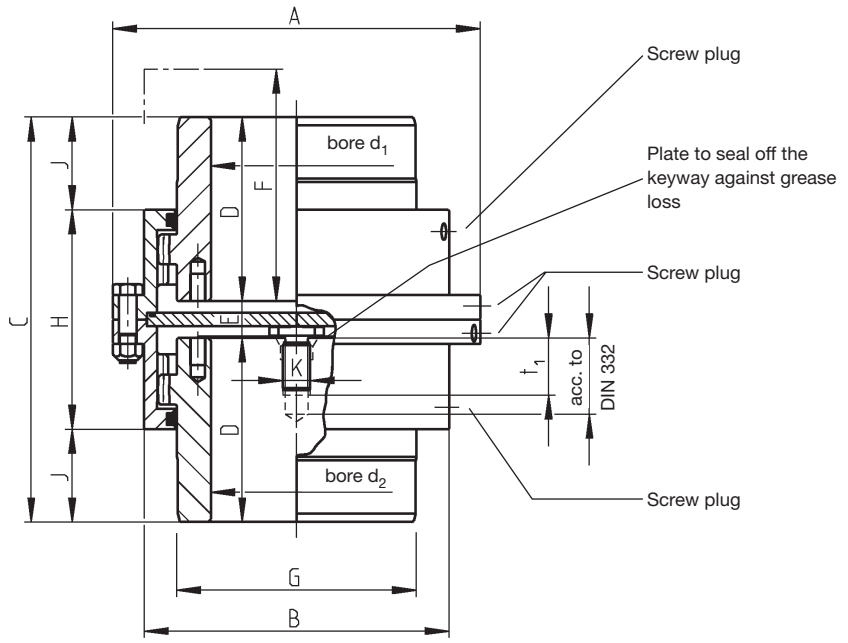
Curved Tooth Couplings

Construction Series VLBk

Dimension Table No. 243 144



Centering bores with thread acc. to DIN 332			
Diameter range of shaft ends in mm		K mm	t_1 mm
over 24	to 30	M10	22
over 30	to 38	M12	28
over 38	to 50	M16	36
over 50	to 85	M20	42
over 85	to 130	M24	50
over 130	to 160	M30	60
over 160	to 200	M36	80
over 200	to 250	M48	100
over 250	to 300	M56	125

Couplings of the VLBk series are intended for vertical installation. They are equipped with two separate lubricant chambers and optionally suitable for oil or grease lubrication.

The couplings can also be supplied with a spacer or intermediate shaft so as to accommodate larger shaft distances.

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

For coupling selection, please see page 6.

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

1) Based on a permissible angular misalignment of $\Delta K_{w\ perm.} = 0{,}75°$ per coupling half.
Higher misalignment capacity is possible, but requires special measures.

2) Values for the complete coupling, with bore d_1; $d_{2\ max.}$

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

Other sizes available on request.

Type VLBk Size	Norm. cont. duty P_{KN}/n kW·min	Speed 3) $n_{max.}$ 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	F mm	G mm	H mm	J mm	Max. static radial misalignment $\Delta K_{max.}$ 1) mm	Grease quantity per coupling half kg	Mass 2) moment of inertia J kgm²	Weight 2) kg
32	0.050	8500	12	35	105	74	106	45	16	75	48	90	8.0	±0.57	0.028	0.004	3.0
38	0.082	7500	12	42	115	87	127	55	17	85	60	101	13.0	±0.69	0.052	0.006	4.5
48	0.146	6900	22	55	145	108	147	65	17	95	77	102	22.5	±0.71	0.069	0.016	7.6
60	0.288	6300	22	65	165	125	168	75	18	105	90	107	30.5	±0.77	0.11	0.025	10.0
70	0.50	5900	28	80	195	146	191	85	21	115	112	112	39.5	±0.78	0.14	0.062	16.0
80	0.82	5400	28	92	215	168	212	95	22	125	128	119	46.5	±0.84	0.21	0.103	21.5
90	1.14	5000	32	105	230	185	234	105	24	135	145	127	53.5	±0.92	0.27	0.150	26.5
100	1.64	4700	32	115	265	210	266	120	26	155	160	148	59.0	±1.08	0.40	0.303	41.0
110	2.30	4300	55	126	270	224	297	135	27	170	176	161	68.0	±1.23	0.52	0.390	48.5
125	2.88	4000	65	145	305	245	317	145	27	180	200	175	71.0	±1.34	0.58	0.675	65.0
140	4.60	3700	75	162	330	270	359	165	29	200	224	197	81.0	±1.44	0.69	1.10	87.5
160	6.48	3400	85	185	375	305	400	185	30	225	256	221	89.5	±1.70	0.94	1.97	126
180	9.24	3100	120	210	425	348	462	215	32	255	288	250	106	±1.89	1.5	3.74	185
200	12.92	2900	140	230	470	392	524	245	34	290	320	272	126	±2.12	2.3	6.39	255
225	18.4	2700	160	260	535	437	587	275	37	330	362	315	136	±2.42	3.1	11.62	363

Subject to change due to technical improvement.