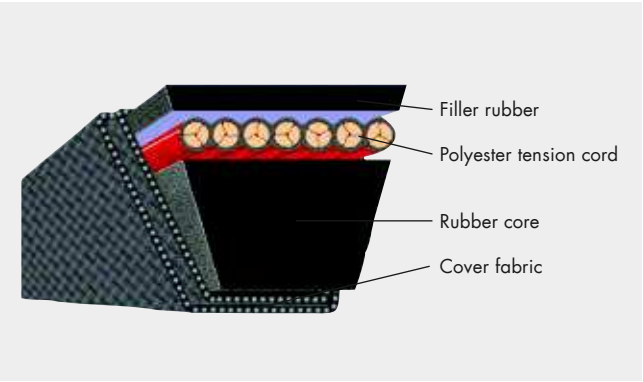
PRODUCT DESCRIPTION
optibelt VB CLASSIC V-BELTS
DIN 2215 / ISO 4184

Structure/Properties
optibelt VB classic V-belts are manufactured using the same production processes as those for optibelt SK high performance wedge belts.



The components used are perfectly suited to the power ratings P_N. These values are far above those given by DIN 2218. Thus the operational safety in existing drives is increased and overloading is avoided.

- optibelt VB classic V-belts have a height-width ratio of 1:1.6.
- The maximum belt speed v_{max} = 30 m/s should not be exceeded.
- The allowed flexibility rate is far below that of wedge belts. It is $f_{B\ max}$ = 80 s^{-1}.

Application areas
optibelt VB classic V-belts are mainly employed as replacement parts for industrial drives. For new drives, the use of high performance wedge belts is almost always recommended due to reasons of space and cost. However, special drives such as V-flat drives can often only be operated with classic V-belts. In special constructions, optibelt VB classic V-belts tackle difficult drives in the gardening sector and in agricultural machinery.

For these applications special belt constructions and calculation methods are required which are not included in this manual. In these cases we ask you to give us the according drive data.

Standardisation/Dimensions
optibelt VB classic V-belts in the profiles Y/6, Z/10, A/13, B/17, C/22, D/32 and E/40 are standardised according to DIN 2215 and ISO 4184.
Further, non-standardised ISO profiles 5, 8, 20 and 25 are available. These profiles should however not be used due to reasons of exchangeability and rationalisation.

The ISO standard 4184 specifies the datum length for measuring the belt length. The former belt designation of the inside length L_i is replaced by the datum length L_d. For the conversion factors from pitch to inside length, please see page 161.

Note: Electrically conductive according to ISO 1813.

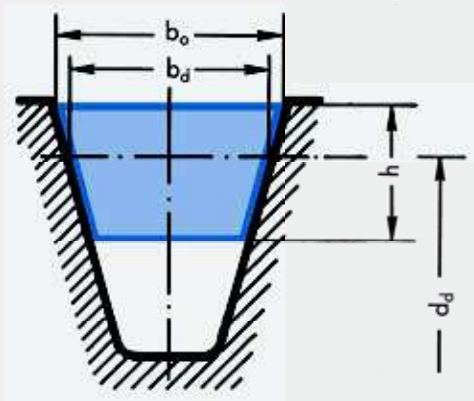


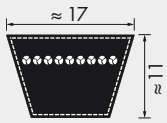
Table 7

Profile	DIN 2215	(5)	6	(8)	10	13	17	(20)	22	(25)	32	40
	ISO 4184	–	Y	–	Z	A	B	–	C	–	D	E
Belt top width	b_o ≈	5	6	8	10	13	17	20	22	25	32	40
Datum width	b_d	4.2	5.3	6.7	8.5	11	14	17	19	21	27	32
Belt height	h ≈	3	4	5	6	8	11	12.5	14	16	20	25
Recommended minimum pulley outside diameter	$d_{d\ min}$	20	28	40	50	75	125	160	200	250	355	500
Belt weight (kg/m)	≈	0.018	0.026	0.042	0.064	0.109	0.190	0.266	0.324	0.420	0.690	0.958
Flex rate (s^{-1})	$f_{B\ max}$ ≈	80										
Belt speed (m/s)	v_{max} ≈	30										

STANDARD RANGE

optibelt VB CLASSIC V-BELTS

DIN 2215 / ISO 4184



B/17

Profile B/17

Belt no.	Datum length ISO L_d [mm]	Inside length L_i [mm]	Belt no.	Datum length ISO L_d [mm]	Inside length L_i [mm]	Belt no.	Datum length ISO L_d [mm]	Inside length L_i [mm]	Belt no.	Datum length ISO L_d [mm]	Inside length L_i [mm]
B 23	610	570	**B 51**	**1340**	**1300**	**B 87**	**2250**	**2210**	**B 140**	**3590**	**3550**
B 24	655	615	**B 52**	**1360**	**1320**	**B 88**	**2280**	**2240**	**B 142**	**3640**	**3600**
B 25	670	630	**B 52½**	**1375**	**1335**	**B 89**	**2301**	**2261**	**B 144**	**3698**	**3658**
B 26	690	650	**B 53**	**1390**	**1350**	**B 90**	**2326**	**2286**	**B 146**	**3740**	**3700**
B 26½	710	670	**B 53½**	**1400**	**1360**	**B 91**	**2340**	**2300**	**B 148**	**3790**	**3750**
B 27	726	686	**B 54**	**1412**	**1372**	**B 92**	**2377**	**2337**	**B 150**	**3850**	**3810**
B 28	750	710	**B 55**	**1440**	**1400**	**B 93**	**2400**	**2360**	**B 151**	**3890**	**3850**
B 29	765	725	**B 56**	**1462**	**1422**	**B 94**	**2428**	**2388**	**B 152**	**3901**	**3861**
B 30	790	750	**B 57**	**1490**	**1450**	**B 94½**	**2440**	**2400**	**B 154**	**3952**	**3912**
B 31	815	775	**B 58**	**1513**	**1473**	**B 95**	**2453**	**2413**	**B 155**	**3990**	**3950**
B 32	840	800	**B 59**	**1540**	**1500**	**B 96**	**2478**	**2438**	**B 156**	**4002**	**3962**
B 32½	865	825	**B 60**	**1565**	**1525**	**B 96½**	**2490**	**2450**	**B 158**	**4040**	**4000**
B 33	876	836	**B 61**	**1590**	**1550**	**B 97**	**2505**	**2465**	**B 160**	**4104**	**4064**
B 34	890	850	**B 62**	**1615**	**1575**	**B 98**	**2540**	**2500**	**B 162**	**4155**	**4115**
B 34½	915	875	**B 63**	**1640**	**1600**	**B 99**	**2555**	**2515**	**B 165**	**4240**	**4200**
B 35	929	889	**B 64**	**1665**	**1625**	**B 100**	**2580**	**2540**	**B 167**	**4290**	**4250**
B 36	940	900	**B 65**	**1690**	**1650**	**B 101**	**2605**	**2565**	**B 173**	**4434**	**4394**
B 37	965	925	**B 66**	**1716**	**1676**	**B 102**	**2640**	**2600**	**B 175**	**4490**	**4450**
B 37½	990	950	**B 67**	**1740**	**1700**	**B 103**	**2656**	**2616**	**B 177**	**4540**	**4500**
B 38	1005	965	**B 68**	**1765**	**1725**	**B 104**	**2690**	**2650**	**B 180**	**4612**	**4572**
B 38½	1015	975	**B 69**	**1790**	**1750**	**B 105**	**2707**	**2667**	**B 187**	**4790**	**4750**
B 39	1040	1000	**B 69½**	**1801**	**1761**	**B 106**	**2740**	**2700**	**B 195**	**4993**	**4953**
B 40	1056	1016	**B 70**	**1815**	**1775**	**B 107**	**2758**	**2718**	**B 197**	**5040**	**5000**
B 40½	1070	1030	**B 71**	**1840**	**1800**	**B 108**	**2790**	**2750**	**B 208**	**5340**	**5300**
B 41	1080	1040	**B 72**	**1869**	**1829**	**B 110**	**2840**	**2800**	**B 210**	**5374**	**5334**
B 41½	1090	1050	**B 73**	**1890**	**1850**	**B 112**	**2885**	**2845**	**B 220**	**5640**	**5600**
B 42	1100	1060	**B 74**	**1920**	**1880**	**B 114**	**2940**	**2900**	**B 236**	**6040**	**6000**
B 42½	1115	1075	**B 75**	**1940**	**1900**	**B 115**	**2961**	**2921**	**B 240**	**6136**	**6096**
B 43	1130	1090	**B 76**	**1970**	**1930**	**B 116**	**2990**	**2950**	**B 248**	**6340**	**6300**
B 43¼	1140	1100	**B 77**	**1990**	**1950**	**B 118**	**3040**	**3000**	**B 264**	**6740**	**6700**
B 44	1160	1120	**B 78**	**2021**	**1981**	**B 120**	**3088**	**3048**	**B 276**	**7040**	**7000**
B 45	1190	1150	**B 79**	**2040**	**2000**	**B 122**	**3139**	**3099**	**B 280**	**7140**	**7100**
B 45½	1203	1163	**B 80**	**2072**	**2032**	**B 124**	**3190**	**3150**			
B 46	**1215**	**1175**	**B 81**	**2100**	**2060**	**B 126**	**3240**	**3200**			
B 46½	**1220**	**1180**	**B 82**	**2123**	**2083**	**B 128**	**3290**	**3250**			
B 47	**1240**	**1200**	**B 83**	**2140**	**2100**	**B 130**	**3342**	**3302**			
B 48	**1255**	**1215**	**B 83½**	**2160**	**2120**	**B 132**	**3390**	**3350**			
B 48½	**1265**	**1225**	**B 84**	**2174**	**2134**	**B 134**	**3444**	**3404**			
B 49	**1290**	**1250**	**B 85**	**2200**	**2160**	**B 136**	**3490**	**3450**			
B 50	**1315**	**1275**	**B 86**	**2240**	**2200**	**B 138**	**3545**	**3505**			

Maximum production length: 21 000 mm L_i
Minimum order quantity:
Over 1800 mm =
21 pieces for non-standard length ranges
63 pieces for special constructions
Weight: ≈ 0.196 kg/m

Datum length L_d ≙ Pitch length L_w/L_p Further sizes on request

Lengths in **bold** type are in S=C plus (SetConstant).