


Self-tracking timing belts with V-profile guides


Keiper self-tracking PU timing belts are made of abrasion-resistant polyurethane and high-strength steel or aramid cords. They are produced in open lengths. The V-guide either is integrated in the timing belt during production or welded onto the belt later. These timing belts exhibit the same properties as standard timing belts. In addition, axial movements are prevented. Keiper self-guiding PU track timing belts are available as endless welded belts and cut goods, in almost any length and width.

Properties and special features:

- Prevents axial movements
- V-guides can be combined with any tooth profile in all sizes
- Eliminate the need for flanged pulleys
- The notched design gives rise to extra flexibility

Applications:

Long-length conveying and positioning applications with large center distances.
Applications in which axial movement is a problem and flanged pulleys cannot be used.

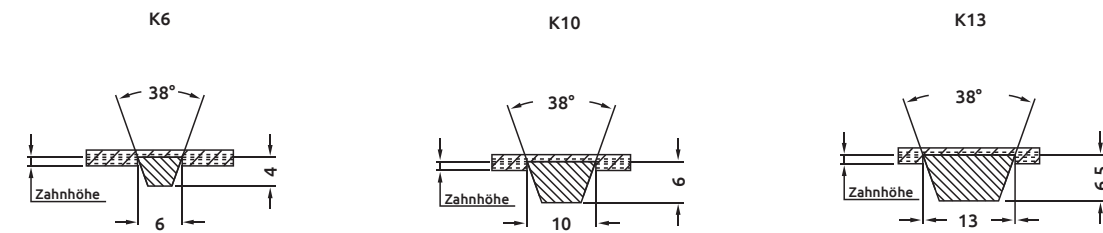
Integral V-guide

	TK5 K6	TK10 K6	TK10 K13	TK20 K13
Integral V-guide, width x height mm	6x4	6x4	13x6,5	13x6,5
Min. length -V in mm	960	960	960	1500
Slitting lanes mm	25	25	25	
Full roll length in m	100	100	100	50
Min. no. of teeth without counter flection Zmin	15	25	25	18
Tension pulley on tooth side dmin mm	60	60	80	120
Min. no. of teeth with counter flection Zmin	25	25	25	25
Tension pulley on belt back dmin mm	60	80	80	180
Polyamide fabric on tooth side NT	x	x	x	x
Polyamide fabric on back side NB	x	x	x	
Polyamide fabric on both sides NTB	x	x	x	

	ATK5 K6	ATK5L K6	ATK10 K13	ATK20 K13	HK K13
Integral V-guide, width x height mm	6x4	6x4	13x6,5	13x6,5	12,5x6
Min. length -V in mm	960		960	1000	914
Slitting lanes mm	25	25	25		25,4
Full roll length in m	100	100	100	50	61
Min. no. of teeth without counter flection Zmin	15	15	20	20	18
Tension pulley on tooth side dmin mm	60	60	60	120	80
Min. no. of teeth with counter flection Zmin	25	25	25	25	20
Tension pulley on belt back dmin mm	60	60	120	180	120
Polyamide fabric on tooth side NT	x	x	x	x	x
Polyamide fabric on back side NB	x	x	x		x
Polyamide fabric on both sides NTB	x	x	x		x

Welded V-guide (possible for all tooth profiles)

Min. length welded	800 mm	800 mm	800 mm	800 mm	800 mm
Design	K6 x 4	K10 x 6	K13 x 6,5	K13 x 8	K17 x 11
Smooth	x	x	x	x	x
Notched	x		x		


V-guide dimensions


Pitch	Standard width	Max. width	Specific belt weight			Ultimate tensile strength			Allowable belt force open ended			Allowable belt force welded			Allowable effective force
			msp (kg/m)			Fbreak (N)			Fzul (N)			Fzul (N)			
			Steel	Ara-mid	HF	Steel	Ara-mid	HF	Steel	Ara-mid	HF	Steel	Ara-mid	HF	
TK5 K6	25	150	0.07	0.07		3375	8370		840	916		420	687		676
TK5 K6	32	150	0.09	0.08		4250	10800		1058	1181		529	886		926
TK5 K6	50	150	0.13	0.12		6875	17050		1711	1865		856	1399		1566
TK5 K6	100	150	0.24	0.22		13875	34410		3453	3764		1727	2823		3346
TK10 K6	25	150	0.13	0.11		7140	9163		1909	1064		954	798		1284
TK10 K6	32	150	0.16	0.13		9240	11880		2470	1381		1235	1036		1758
TK10 K6	50	150	0.24	0.20		14700	18865		3929	2189		1965	1648		2974
TK10 K13	25	150	0.18	0.16		7140	9163		1909	1064		954	798		811
TK10 K13	32	150	0.21	0.18		9240	11880		2470	1381		1235	1036		1284
TK10 K13	50	150	0.29	0.25		14700	18865		3929	2189		1965	1648		2501
TK10 K13	75	150	0.40	0.34		22260	28567		5950	3332		2975	2499		4191
TK10 K13	100	150	0.50	0.43		29820	38269		7971	4467		3985	3350		5881
TK10 K13	150	150	0.72	0.61		44940	57673		12012	6736		6006	5052		9261
ATK5 K6	25	150	0.10	0.09		7125	8350		1761	1210		880	908		980
ATK5 K6	50	150	0.19	0.15		14535	17034		3591	2468		1796	1851		2270
ATK5L K6	25	150	0.09			10540			2340						980
ATK5L K6	50	150	0.16			21700			4818						2270
ATK10 K13	25	150	0.21	0.17	0.21	14250	16185	12975	3741	1750	3456	1871	1313	1728	1238
ATK10 K13	32	150	0.25	0.20	0.24	18050	21019	16435	4739	2273	4378	2369	1705	2189	1961
ATK10 K13	50	150	0.35	0.28	0.34	29450	33449	26815	7731	3617	7142	3866	2713	3571	3818
ATK10 K13	75	150	0.50	0.38	0.48	44650	50713	40655	11722	5483	10829	5861	4113	5414	6398
HK K13	50.80	152.4	0.27	0.23		14700	16709		3992	2233		1996	1675		2955
HK K13	76.20	152.4	0.37	0.31		22260	25333		6045	3386		3023	2593		4915
HK K13	101.6	152.4	0.47	0.39		29820	33957		8098	4538		4049	3404		6875
HK K13	152.4	152.4	0.67	0.56		44940	51205		12205	6843		6102	5132		10795