

STANDARD TOLERANCES

WIDTH TOLERANCE: ±1,2 [mm]
 LENGTH TOLERANCE: ±0,8 [mm/m]
 THICKNESS TOLERANCE: ±0,4 [mm]

BELT CHARACTERISTICS

- Polyurethane timing belt with helical offset tooth, high tensile load steel cords and high torque capacity
- **Self tracking no need of pulley flanges**
- Metric pitch 14 mm
- **Extremely reduced noise generation**
- Offers excellent operational reliability in linear positioning, heavy power transmission and lifting applications
- The special profile allows most compact drive
- White colour and grey fabric on tooth side (PAZ) as standard

TECHNICAL DATA

Standard steel cord

Belt width b [mm]		35	52,5	70	105
Allowable tensile load	F_{Tzul} [N]*	11900	17000	23800	35700
Breaking load	F_{Br} [N]	44800	64000	89600	134400
Specific spring rate	C_{spez} [N]	2975000	4250000	5950000	8925000
Weight	[kg/m]	0,40	0,60	0,80	1,20

Other widths are available on request

Specialties

Belt width b [mm]		35	52,5	70	105
HPF High flexibility and performance	F_{Tzul} [N]	14000	20000	28000	42000
	F_{Br} [N]	56000	80000	112000	168000

Tooth shear strength

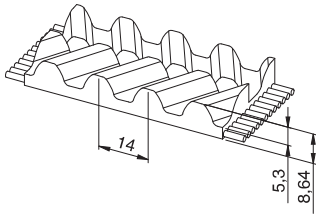
rpm	0	20	40	60	80	100	200	300	400	500	600	700	800	900	1000	1100
F_{Uspez} [N/cm]	160,00	157,00	154,22	151,64	149,24	147,01	138,04	129,87	123,12	117,24	112,07	107,48	103,35	99,60	96,17	93,01
rpm	1200	1300	1400	1440	1500	1600	1700	1800	1900	2000	2200	2400	2600	2800	3000	3200
F_{Uspez} [N/cm]	90,08	87,35	84,80	83,82	82,39	80,12	77,97	75,93	73,99	72,13	68,66	65,46	62,50	59,73	57,15	54,71
rpm	3400	3600	3800	4000	-	-	-	-	-	-	-	-	-	-	-	-
F_{Uspez} [N/cm]	52,42	50,24	48,18	46,21	-	-	-	-	-	-	-	-	-	-	-	-

Flexibility

Minimum pulley number of teeth and minimum idler diameter	Drive without reverse bending		Drive with reverse bending	
	z_{min}	idler d_{min}	z_{min}	idler d_{min}
STANDARD	32	140 mm	32	200 mm
HPF	30	130 mm	30	180 mm

Elatech® V Joined informations

Allowable tensile load of joined belt is 50% of M - open end [*]



BELT CHARACTERISTICS

- Truly endless polyurethane timing belt with helical offset tooth, high tensile load steel cords and high torque capacity
- **Self tracking no need of pulley flanges**
- Metric pitch 14 mm
- **Extremely reduced noise generation**
- The special profile allows most compact drive

STANDARD TOLERANCES

WIDTH TOLERANCE: $\pm 1,2$ [mm]

THICKNESS TOLERANCE: $\pm 0,4$ [mm]

TECHNICAL DATA

Standard steel cord

Belt width b [mm]	35	52,5	70	105
Allowable tensile load [N]	13090	18700	26180	39270
Weight [kg/m]	0,4	0,6	0,8	1,2

Other widths or special cords are available on request

Tooth shear strength

rpm [min ⁻¹]	0	20	40	60	80	100	200	300	400	500	600	700	800	900	1000	1100
M _{spez} [Ncm/cm]	35,651	34,960	34,330	33,756	33,232	32,756	30,618	28,937	27,434	26,123	24,971	23,948	23,028	22,193	21,429	20,725
P _{spez} [W/cm]	0,000	0,733	1,439	2,123	2,786	3,430	6,441	9,090	11,491	13,677	15,689	17,553	19,290	20,915	22,439	23,872
rpm [min ⁻¹]	1200	1300	1400	1440	1500	1600	1700	1800	1900	2000	2200	2400	2600	2800	3000	3200
M _{spez} [Ncm/cm]	20,072	19,464	18,894	18,676	18,358	17,852	17,373	16,918	16,485	16,072	15,299	14,586	13,925	13,310	12,733	12,191
P _{spez} [W/cm]	25,222	26,495	27,698	28,160	28,834	29,909	30,926	31,888	32,798	33,659	35,243	36,656	37,912	39,023	39,999	40,849
rpm [min ⁻¹]	3400	3600	3800	4000	-	-	-	-	-	-	-	-	-	-	-	-
M _{spez} [Ncm/cm]	11,679	11,195	10,735	10,297	-	-	-	-	-	-	-	-	-	-	-	-
P _{spez} [W/cm]	41,581	42,201	42,715	43,129	-	-	-	-	-	-	-	-	-	-	-	-

Flexibility

Minimum pulley number of teeth and minimum idler diameter	Drive without reverse bending		Drive with reverse bending	
	z _{min}	idler d _{min}	z _{min}	idler d _{min}
STANDARD	32	140 mm	32	200 mm

Min. available length

Max width	Execution	
	Standard	PAZ
105 mm	≥ 900 mm	≥ 900 mm