

STANDARD TOLERANCES

WIDTH TOLERANCE: $\pm 0,8$ [mm]
 LENGTH TOLERANCE: $\pm 0,8$ [mm/m]
 THICKNESS TOLERANCE: $\pm 0,3$ [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 8 mm
- **Extremely reduced noise generation**
- Offers excellent operational reliability in linear positioning and medium power transmission 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]		16	25	32	50
Allowable tensile load	F_{Tzul} [N]*	2450	4170	5390	8580
Breaking load	F_{Br} [N]	9500	16150	20900	33250
Specific spring rate	C_{spez} [N]	612500	1042500	1347500	2145000
Weight	[kg/m]	0,085	0,145	0,180	0,300

Other widths are available on request

Specialties

Belt width b [mm]		16	25	32	50
ARAMID CORD	F_{Tzul} [N]*	2200	3740	4840	7700
	F_{Br} [N]	10000	17000	22000	35000
STAINLESS STEEL	F_{Tzul} [N]*	1800	3060	3960	6300
	F_{Br} [N]	7500	12750	16500	26250
HPL High Performance	F_{Tzul} [N]	3840	6720	8640	14400
	F_{Br} [N]	14000	24500	31500	52500

Tooth shear strength

rpm	0	20	40	60	80	100	200	300	400	500	600	700	800	900	1000	1100
F_{Uspez} [N/cm]	85,00	83,78	82,62	81,49	80,42	79,38	74,78	71,01	67,93	65,52	63,36	61,42	59,66	58,05	56,58	55,22

rpm	1200	1300	1400	1440	1500	1600	1700	1800	1900	2000	2200	2400	2600	2800	3000	3200
F_{Uspez} [N/cm]	53,95	52,77	51,66	51,23	50,61	49,62	48,69	47,80	46,95	46,14	44,62	43,22	41,91	40,70	39,56	38,49

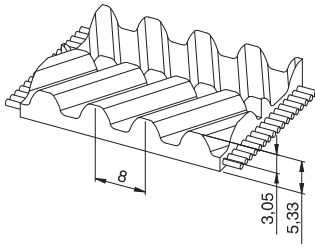
rpm	3400	3600	3800	4000	4500	5000	5500	6000	6500	7000	7500	8000	8500	9000	9500	10000
F_{Uspez} [N/cm]	37,48	36,52	35,61	34,75	32,75	30,94	29,30	27,79	26,40	25,11	23,90	22,77	21,70	20,69	19,73	18,82

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	20	50 mm	30	120 mm
ARAMID	20	50 mm	30	120 mm
STAINLESS	24	70 mm	40	120 mm
HPL	30	80 mm	30	150 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 8 mm
- **Extremely reduced noise generation**
- The special profile allows most compact drive

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WIDTH TOLERANCE: $\pm 0,8$ [mm]
 THICKNESS TOLERANCE: $\pm 0,3$ [mm]

TECHNICAL DATA

Standard steel cord

Belt width b [mm]	16	25	32	50
Allowable tensile load [N]	2695	4165	5390	8330
Weight [kg/m]	0,085	0,145	0,18	0,30

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]	10,823	10,668	10,519	10,376	10,239	10,107	9,521	9,042	8,649	8,343	8,067	7,820	7,596	7,392	7,204	7,030
P _{spez} [W/cm]	0,000	0,223	0,441	0,652	0,858	1,058	1,994	2,840	3,623	4,368	5,068	5,732	6,363	6,966	7,543	8,098
rpm [min ⁻¹]	1200	1300	1400	1440	1500	1600	1700	1800	1900	2000	2200	2400	2600	2880	3000	3200
M _{spez} [Ncm/cm]	6,869	6,719	6,577	6,523	6,444	6,318	6,199	6,086	5,977	5,874	5,681	5,502	5,337	5,182	5,037	4,901
P _{spez} [W/cm]	8,631	9,146	9,642	9,836	10,122	10,585	11,035	11,470	11,892	12,302	13,087	13,828	14,529	15,450	15,824	16,422
rpm [min ⁻¹]	3400	3600	3800	4000	4500	5000	5500	6000	6500	-	-	-	-	-	-	-
M _{spez} [Ncm/cm]	4,772	4,650	4,535	4,424	4,169	3,940	3,731	3,539	3,362	-	-	-	-	-	-	-
P _{spez} [W/cm]	16,991	17,531	18,044	18,531	19,647	20,627	21,486	22,234	22,880	-	-	-	-	-	-	-

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	20	50 mm	30	120 mm

Min. available length

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