



STANDARD TOLERANCES

WIDTH TOLERANCE: $\pm 0,5$ [mm]
 LENGTH TOLERANCE: $\pm 0,5$ [mm/m]
 THICKNESS TOLERANCE: $\pm 0,2$ [mm]

BELT CHARACTERISTICS

- Polyurethane timing belt with round tooth profile and high tensile load tension cords.
- Tooth profile according to ISO 13050
- Metric pitch 5 mm
- The round tooth profile allows a uniform load distribution that guarantees high performances, high transmissible torque and precise tooth engagement
- PAZ fabric on tooth side delivered as standard reduces noise in the drive
- Widely used in linear positioning, light power transmission applications

TECHNICAL DATA

Standard steel cord

Belt width b [mm]		10	15	25	30	50	100
Allowable tensile load	F_{Tzul} [N]*	920	1500	2650	3220	5520	11270
Breaking load	F_{Br} [N]	3360	5460	9660	11760	20160	41160
Specific spring rate	C_{spez} [N]	230000	375000	662500	805000	1380000	2817500
Weight	[kg/m]	0,05	0,07	0,12	0,15	0,23	0,46

Other widths are available on request

Specialties

Belt width b [mm]		10	15	25	30	50	100
ARAMID CORD	F_{Tzul} [N]*	880	1430	2530	3080	5280	10780
	F_{Br} [N]	3600	5850	10350	12600	21600	44100
STAINLESS STEEL	F_{Tzul} [N]*	600	980	1730	2100	3600	-
	F_{Br} [N]	2400	3900	6900	8400	14400	-
HFE High Flexibility	F_{Tzul} [N]*	960	1560	2760	3360	5760	-
	F_{Br} [N]	3440	5590	9890	12040	20640	-

Tooth shear strength

rpm	0	20	40	60	80	100	200	300	400	500	600	700	800	900	1000	1100
F_{Uspez} [N/cm]	37,80	37,25	36,75	36,30	35,89	35,52	34,13	32,87	32,10	31,31	30,56	29,86	29,21	28,61	28,05	27,52

rpm	1200	1300	1400	1440	1500	1600	1700	1800	1900	2000	2200	2400	2600	2800	3000	3200
F_{Uspez} [N/cm]	27,03	26,56	26,13	25,96	25,71	25,32	24,94	24,58	24,24	23,91	23,30	22,72	22,19	21,69	21,23	20,78

rpm	3400	3600	3800	4000	4500	5000	5500	6000	6500	7000	7500	8000	8500	9000	9500	10000
F_{Uspez} [N/cm]	20,37	19,97	19,59	19,23	18,40	17,64	16,95	16,32	15,74	15,19	14,68	14,20	13,75	13,33	12,92	12,53

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	16	30 mm	25	60 mm
ARAMID	16	30 mm	25	60 mm
STAINLESS	18	40 mm	25	65 mm
HFE	15	25 mm	20	40 mm

Elatech® V Joined informations

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