



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
- Widely used in linear positioning, light power transmission applications
- Double sided tooth available (on request for special cords)

STANDARD TOLERANCES

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

TECHNICAL DATA

Standard steel cord

Belt width b [mm]		10	15	25	50	75	100
Allowable tensile load	F_{Tzul} [N]*	920	1500	2650	5520	8400	11270
Breaking load	F_{Br} [N]	3360	5460	9660	20160	30660	41160
Specific spring rate	C_{spez} [N]	230000	375000	662500	1380000	2100000	2817500
Weight	[kg/m]	0,05	0,07	0,12	0,24	0,36	0,48

Other widths are available on request

Specialties

Belt width b [mm]		10	15	25	50	75	100
ARAMID CORD	F_{Tzul} [N]*	880	1430	2530	5280	8030	10780
	F_{Br} [N]	3600	5850	10350	21600	32850	44100
STAINLESS STEEL	F_{Tzul} [N]*	600	980	1730	3600	5475	7350
	F_{Br} [N]	2400	3900	6900	14400	21900	29400

Tooth shear strength

rpm	0	20	40	60	80	100	200	300	400	500	600	700	800	900	1000	1100
F_{Uspez} [N/cm]	36,80	36,25	35,75	35,30	34,89	34,52	33,13	30,87	30,10	29,31	28,56	27,86	27,21	26,61	26,05	25,52

rpm	1200	1300	1400	1440	1500	1600	1700	1800	1900	2000	2200	2400	2600	2800	3000	3200
F_{Uspez} [N/cm]	25,03	24,56	24,13	23,96	23,71	23,32	22,94	22,58	22,24	21,91	21,30	20,72	20,19	19,69	19,23	18,78

rpm	3400	3600	3800	4000	4500	5000	5500	6000	6500	7000	7500	8000	8500	9000	9500	10000
F_{Uspez} [N/cm]	18,37	17,97	17,59	17,23	16,40	15,64	14,95	14,32	13,74	13,19	12,68	12,20	11,75	11,33	10,92	10,53

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

Elatech® V Joined informations
 Allowable tensile load of joined belt is 50% of M - open end [*]