



BELT CHARACTERISTICS

- Polyurethane timing belt with involute tooth, high tensile load steel cords and high torque capacity
- Tooth profile according to ISO 13050
- Metric pitch 5 mm
- Low noise generation in high speed drives
- Offers excellent operational reliability in linear positioning and light power transmission applications
- The special profile allows smooth running properties

STANDARD TOLERANCES

WIDTH TOLERANCE: ±0,5 [mm]
 LENGTH TOLERANCE: ±0,5 [mm/m]
 THICKNESS TOLERANCE: ±0,2 [mm]

TECHNICAL DATA

Standard steel cord

Belt width b [mm]		10	15	25	50	100	150
Allowable tensile load	F_{Tzul} [N]*	920	1500	2650	5520	11270	17020
Breaking load	F_{Br} [N]	3360	5460	9660	20160	41160	62160
Specific spring rate	C_{spez} [N]	230000	375000	662500	1380000	2817500	4255000
Weight	[kg/m]	0,05	0,07	0,12	0,23	0,46	0,69

Other widths are available on request

Specialties

Belt width b [mm]		10	15	25	50	100	150
ARAMID CORD	F_{Tzul} [N]*	880	1430	2530	5280	10780	16280
	F_{Br} [N]	3600	5850	10350	21600	44100	66600
STAINLESS STEEL	F_{Tzul} [N]*	600	980	1730	3600	-	-
	F_{Br} [N]	2400	3900	6900	14400	-	-
HFE High Flexibility	F_{Tzul} [N]*	960	1560	2760	5760	-	-
	F_{Br} [N]	3440	5590	9890	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]	36,90	36,35	35,85	35,40	34,99	34,62	33,23	31,37	30,60	29,81	29,06	28,36	27,71	27,11	26,55	26,02

rpm	1200	1300	1400	1440	1500	1600	1700	1800	1900	2000	2200	2400	2600	2800	3000	3200
F_{Uspez} [N/cm]	25,53	25,06	24,63	24,46	24,21	23,82	23,44	23,08	22,74	22,41	21,80	21,22	20,69	20,19	19,73	19,28

rpm	3400	3600	3800	4000	4500	5000	5500	6000	6500	7000	7500	8000	8500	9000	9500	10000
F_{Uspez} [N/cm]	18,87	18,47	18,09	17,73	16,90	16,14	15,45	14,82	14,24	13,69	13,18	12,70	12,25	11,83	11,42	11,03

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 [*]