



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 steel tension cords
- Tooth profile according to ISO 17396
- Metric pitch 10 mm
- Tooth profile and dimension are optimised to guarantee uniform load distribution and minimum deformation under load
- High resistance and low stretch steel cords to guarantee high stability and low elongation
- Reduced polygonal effect with reduced drive vibration
- Particularly suitable for linear drives and medium power transmission applications with high axial and angular positioning accuracy
- Double sided tooth available (on request for special cords)
- Negative length tolerance available on request

TECHNICAL DATA

Standard steel cord

Belt width b [mm]		16	25	32	50	75	100	150
Allowable tensile load	F_{Tzul} [N]*	2450	4170	5390	8580	12990	17400	26220
Breaking load	F_{Br} [N]	9500	16150	20900	33250	50350	67450	101650
Specific spring rate	C_{spez} [N]	612500	1042500	1347500	2145000	3247500	4350000	6555000
Weight	[kg/m]	0,09	0,15	0,19	0,30	0,44	0,59	0,90

Other widths are available on request

Specialties

Belt width b [mm]		16	25	32	50	75	100	150
ARAMID CORD	F_{Tzul} [N]*	2200	3740	4840	7700	11660	15620	23540
	F_{Br} [N]	10000	17000	22000	35000	53000	71000	107000
STAINLESS STEEL	F_{Tzul} [N]*	1800	3060	3960	6300	9540	12780	-
	F_{Br} [N]	7500	12750	16500	26250	39750	53250	-
HFE High Flexibility	F_{Tzul} [N]*	2000	3400	4400	7000	-	-	-
	F_{Br} [N]	8500	14450	18700	29750	-	-	-

Tooth shear strength

rpm	0	20	40	60	80	100	200	300	400	500	600	700	800	900	1000	1100
F_{Uspez} [N/cm]	88,57	87,06	85,66	84,35	83,13	81,99	77,36	75,09	71,99	69,27	66,88	64,75	62,83	61,09	59,49	58,02

rpm	1200	1300	1400	1440	1500	1600	1700	1800	1900	2000	2200	2400	2600	2800	3000	3200
F_{Uspez} [N/cm]	56,66	55,39	54,20	53,74	53,08	52,02	51,02	50,06	49,16	48,29	46,67	45,18	43,80	42,51	41,30	40,17

rpm	3400	3600	3800	4000	4500	5000	5500	6000	6500	7000	7500	8000	8500	9000	9500	10000
F_{Uspez} [N/cm]	39,09	38,08	37,11	36,20	34,08	32,17	30,43	28,84	27,37	26,01	24,73	23,53	22,41	21,34	20,33	19,37

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	15	50 mm	25	120 mm
ARAMID	15	50 mm	20	120 mm
STAINLESS	20	70 mm	40	120 mm
HFE	12	50 mm	20	80 mm

Elatech® V Joined informations

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