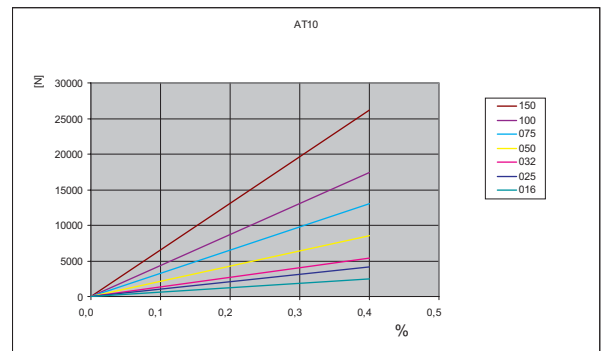

**Belt characteristics**

- Polyurethane timing belt with steel tension cords.
- 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.
- **TP (Total Protection) belt. The absence of tooth gap makes the belt protected against corrosion**
- **Widely used in application with corrosive environment**

- Width tolerance:  $\pm 0,5$  [mm]
- Length tolerance:  $\pm 0,8$  [mm/m]
- Thickness tolerance:  $\pm 0,2$  [mm]

**Technical data**

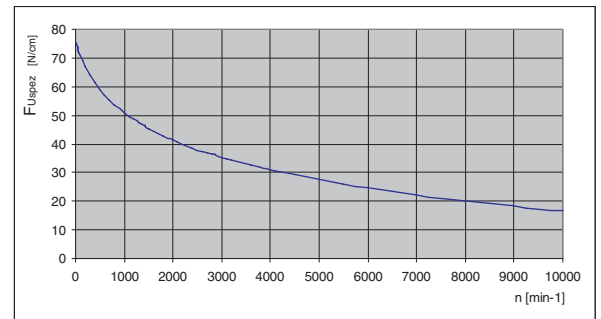
Belt width b [mm]	Allowable tensile load Type M $F_{Tzul}$ [N]	Allowable tensile load Type V $F_{Tzul}$ [N]	Breaking load Type M $F_{Br}$ [N]	Specific spring rate $C_{spez}$ [N]	Weight [kg/m]
16	2450	1225	9500	612500	0,09
25	4170	2085	16150	1042500	0,15
32	5390	2695	20900	1347500	0,19
50	8580	4290	33250	2145000	0,30
75	12990	6495	50350	3247500	0,44
100	17400	8700	67450	4350000	0,59

**Load / Elongation [ % ]**


Other widths are available on request.

**Tooth shear strength**

rpm	$F_{Uspez}$ [N/cm]	rpm	$F_{Uspez}$ [N/cm]	rpm	$F_{Uspez}$ [N/cm]	rpm	$F_{Uspez}$ [N/cm]
0	75,70	800	53,70	1900	42,02	4500	29,13
20	74,59	900	52,21	2000	41,28	5000	27,50
40	73,55	1000	50,85	2200	39,89	5500	26,01
60	72,57	1100	49,59	2400	38,62	6000	24,65
80	71,65	1200	48,43	2600	37,44	6500	23,40
100	70,78	1300	47,34	2800	36,33	7000	22,23
200	67,13	1400	46,32	3000	35,30	7500	21,14
300	64,18	1440	45,93	3200	34,33	8000	20,12
400	61,53	1500	45,36	3400	33,41	8500	19,15
500	59,21	1600	44,46	3600	32,55	9000	18,24
600	57,16	1700	43,60	3800	31,72	9500	17,38
700	55,34	1800	42,79	4000	30,94	10000	16,56



**Tooth shear strength / rpm**


The specific load  $F_{Uspez}$  is the maximum load which one single belt tooth 1 cm wide can withstand in all operating conditions. This force is related to the drive rpm. The total load  $F_U$  transmissible by the belt in the drive is calculated by:

$$F_U [N] = F_{Uspez} \cdot Z_e \cdot b$$

- $F_U$  [N] = peripheral force
- $F_{Uspez}$  [N/cm] = specific load
- $Z_e$  = number of teeth in mesh in the small pulley
- $Z_{emax}$  = max. no of teeth in mesh to be considered for the calculation of the drive
- $Z_{emax} = 12$  for ELATECH® M
- $Z_{emax} = 6$  for ELATECH® V
- $b$  [cm] = belt width in cm

### Flexibility

Minimum pulley number of teeth and minimum idler diameter		
AT10 TP		TYPE OF CORD
		STANDARD
Drive without reverse bending 	Timing pulley $z_{min}$	15
	Idler running on belt teeth $d_{min}$	50 mm
Drive with reverse bending 	Timing pulley $z_{min}$	25
	Idler running on belt back $d_{min}$	120 mm

### Timing pulleys

z	da	dw	z	da	dw	z	da	dw	z	da	dw
18	55,45	57,29	47	147,75	149,60	76	240,05	241,94	105	332,35	334,21
19	58,60	60,48	48	150,95	152,78	77	243,25	245,09	106	335,55	337,40
20	61,80	63,66	49	154,10	155,97	78	246,40	248,24	107	338,75	340,58
21	65,00	66,84	50	157,30	159,15	79	249,60	251,46	108	341,90	343,76
22	68,15	70,03	51	160,50	162,33	80	252,80	254,64	109	345,10	346,95
23	71,35	73,20	52	163,65	165,52	81	255,95	257,82	110	348,30	350,13
24	74,55	76,39	53	166,85	168,70	82	259,15	261,00	111	351,45	353,31
25	77,70	79,58	54	170,05	171,88	83	262,30	264,19	112	354,65	356,50
26	80,90	82,76	55	173,20	175,06	84	265,50	267,37	113	357,80	359,68
27	84,10	85,95	56	176,40	178,25	85	268,70	270,52	114	361,00	362,86
28	87,25	89,12	57	179,60	181,43	86	271,90	273,74	115	364,19	366,04
29	90,45	92,21	58	182,75	184,61	87	275,05	276,92	116	367,39	369,23
30	93,65	95,49	59	185,95	187,80	88	278,25	280,10	117	370,56	372,41
31	96,80	98,67	60	189,10	190,98	89	281,45	283,28	118	373,74	375,59
32	100,00	101,86	61	192,30	194,16	90	284,60	286,47	119	376,93	378,78
33	103,20	105,04	62	195,50	197,35	91	287,80	289,65	120	380,11	381,96
34	106,40	108,19	63	198,65	200,53	92	291,00	292,84			
35	109,55	111,41	64	201,85	203,71	93	294,20	296,02			
36	112,75	114,59	65	205,05	206,90	94	297,35	299,20			
37	115,90	117,77	66	208,20	210,08	95	300,55	302,39			
38	119,10	120,95	67	211,40	213,26	96	303,70	305,57			
39	122,30	124,14	68	214,60	216,44	97	306,90	308,75			
40	125,45	127,32	69	217,75	219,63	98	310,10	311,93			
41	128,65	130,50	70	220,95	222,81	99	313,25	315,12			
42	131,85	133,69	71	224,15	225,99	100	316,45	318,30			
43	135,00	136,87	72	227,30	229,18	101	319,65	321,48			
44	138,20	140,05	73	230,50	232,33	102	322,80	324,66			
45	141,40	143,24	74	233,70	235,54	103	326,00	327,85			
46	144,55	146,42	75	236,90	238,72	104	329,20	331,03			

