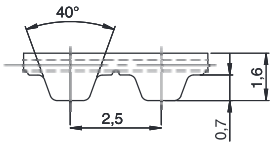
T 2,5



Belt characteristics

- Polyurethane timing belt with steel tension cords
- Tooth profile according to ISO 17396
- Metric pitch 2,5 mm
- Ideal for drives where high belt flexibility is requested
- Widely used for conveying, linear drive and light power transmission applications
- Color: white

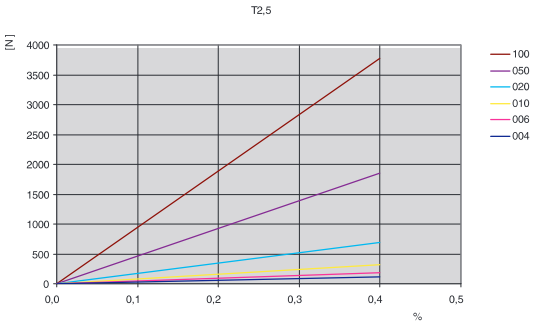
- Width tolerance: ±0,3 [mm]
- Length tolerance: ±0,5 [mm/m]
- Thickness tolerance: ±0,15 [mm]

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]
4	130	-	500	32500	0,004
6	190	-	750	47500	0,007
10	320	160	1250	80000	0,011
20	700	350	2750	175000	0,022
50	1860	930	7250	465000	0,055
100	3780	1890	14750	945000	0,110

Other widths are available on request.

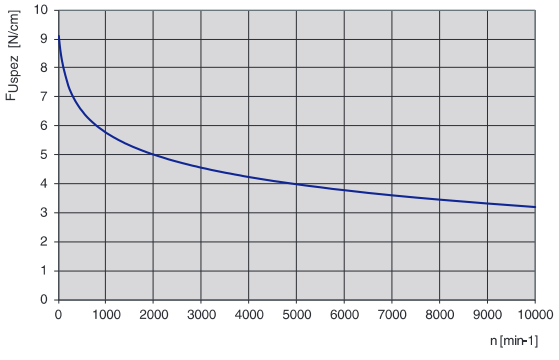
Load / Elongation [%]



Tooth shear strength

rpm	F_{Uspez} [N/cm]	rpm	F_{Uspez} [N/cm]	rpm	F_{Uspez} [N/cm]	rpm	F_{Uspez} [N/cm]
0	9,10	**700**	6,13	**1800**	5,11	**4000**	4,22
20	8,77	**800**	5,99	**1900**	5,05	**4500**	4,09
40	8,51	**900**	5,86	**2000**	4,99	**5000**	3,97
60	8,30	**1000**	5,75	**2200**	4,88	**5500**	3,86
80	8,13	**1100**	5,64	**2400**	4,79	**6000**	3,76
100	8,00	**1200**	5,55	**2600**	4,70	**6500**	3,67
200	7,39	**1300**	5,46	**2800**	4,62	**7000**	3,59
300	7,00	**1400**	5,38	**3000**	4,54	**7500**	3,51
400	6,71	**1440**	5,35	**3200**	4,47	**8000**	3,44
500	6,48	**1500**	5,31	**3400**	4,40	**8500**	3,37
600	6,29	**1600**	5,24	**3600**	4,34	**9000**	3,30
700	6,13	**1700**	5,17	**3800**	4,28	**10000**	3,18

Tooth shear strength / rpm



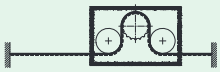
The specific load F_{Uspez} is the maximum load which one single belt tooth 1 cm wide can withstand in all operating conditions.
This force is related to the drive rpm.
The total load F_U transmissible by the belt in the drive is calculated by:

F_U [N] = F_{Uspez} • z_e • 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

T 2,5

Flexibility

Minimum pulley number of teeth and minimum idler diameter		Type of cord
		STANDARD
Drive without reverse bending	Timing pulley z_{min}	15
	Flat idler running on belt teeth d_{min}	15 mm
Drive with reverse bending	Timing pulley z_{min}	18
	Flat idler running on belt back d_{min}	18 mm

Timing pulleys

z	da	dw
10	7,46	7,96
11	8,25	8,75
12	9,05	9,55
13	9,85	10,35
14	10,64	11,14
15	11,44	11,94
16	12,23	12,73
17	13,03	13,53
18	13,82	14,32
19	14,62	15,12
20	15,42	15,92
21	16,21	16,71
22	17,01	17,51
23	17,80	18,30
24	18,60	19,10
25	19,39	19,89
26	20,19	20,69
27	20,99	21,49
28	21,78	22,28
29	22,58	23,08
30	23,37	23,87
31	24,17	24,67
32	24,97	25,47
33	25,76	26,26
34	26,56	27,06
35	27,35	27,85
36	28,15	28,65
37	28,94	29,44
38	29,74	30,24
39	30,54	31,04
40	31,33	31,83
41	32,13	32,63
42	32,92	33,42

z	da	dw
43	33,72	34,22
44	34,52	35,02
45	35,31	35,81
46	36,11	36,61
47	36,90	37,40
48	37,70	38,20
49	38,49	38,99
50	39,29	39,79
51	40,09	40,59
52	40,88	41,38
53	41,68	42,18
54	42,47	42,97
55	43,27	43,77
56	44,06	44,56
57	44,86	45,36
58	45,66	46,16
59	46,45	46,95
60	47,25	47,75
61	48,04	48,54
62	48,84	49,34
63	49,64	50,14
64	50,43	50,93
65	51,23	51,73
66	52,02	52,52
67	52,82	53,32
68	53,61	54,11
69	54,41	54,91
70	55,21	55,71
71	56,00	56,50
72	56,80	57,30
73	57,59	58,09
74	58,39	58,89
75	59,18	59,68

z	da	dw
76	59,98	60,48
77	60,78	61,28
78	61,57	62,07
79	62,37	62,87
80	63,16	63,66
81	63,96	64,46
82	64,76	65,26
83	65,55	66,05
84	66,35	66,85
85	67,14	67,64
86	67,94	68,44
87	68,73	69,23
88	69,53	70,03
89	70,33	70,83
90	71,12	71,62
91	71,92	72,42
92	72,71	73,21
93	73,51	74,01
94	74,31	74,81
95	75,10	75,60
96	75,90	76,40
97	76,69	77,19
98	77,49	77,99
99	78,28	78,78
100	79,08	79,58
101	79,88	80,38
102	80,67	81,17
103	81,47	81,97
104	82,26	82,76
105	83,06	83,56
106	83,85	84,35
107	84,65	85,15
108	85,45	85,95

z	da	dw
109	86,24	86,74
110	87,04	87,54
111	87,83	88,33
112	88,63	89,13
113	89,43	89,93
114	90,22	90,72
115	91,02	91,52
116	91,81	92,31
117	92,61	93,11
118	93,40	93,90
119	94,20	94,70
120	95,00	95,50
121	95,79	96,29
122	96,59	97,09
123	97,38	97,88
124	98,18	98,68
125	98,97	99,47
126	99,77	100,27
127	100,57	101,07
128	101,36	101,86
129	102,16	102,66
130	102,95	103,45
131	103,75	104,25
132	104,55	105,05
133	105,34	105,84
134	106,14	106,64
135	106,93	107,43
136	107,73	108,23
137	108,52	109,02
138	109,32	109,82
139	110,12	110,62
140	110,91	111,41