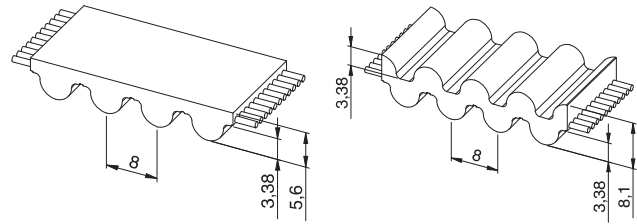


BELT CHARACTERISTICS

- Polyurethane timing belt with round tooth profile and high tensile load tension cords.
- Tooth profile according to ISO 13050
- Metric pitch 8 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, medium power transmission applications
- Double sided tooth available (on request for special cords)



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 | 20 | 30 | 50 | 85 | 100 | 150 |
|------------------------|-----------------|--------|--------|--------|---------|---------|---------|---------|---------|
| Allowable tensile load | F_{Tzul} [N]* | 1470 | 2210 | 3190 | 4660 | 8580 | 14700 | 17400 | 26220 |
| Breaking load | F_{Br} [N] | 5700 | 8550 | 12350 | 18050 | 33250 | 57000 | 67450 | 101650 |
| Specific spring rate | C_{spez} [N] | 367500 | 552500 | 797500 | 1165000 | 2145000 | 3675000 | 4350000 | 6555000 |
| Weight | [kg/m] | 0,07 | 0,10 | 0,14 | 0,21 | 0,35 | 0,59 | 0,69 | 0,95 |

Other widths are available on request

Specialties

| Belt width b [mm] | | 10 | 15 | 20 | 30 | 50 | 85 | 100 | 150 |
|----------------------|-----------------|------|------|-------|-------|-------|-------|--------|--------|
| ARAMID CORD | F_{Tzul} [N]* | 1320 | 1980 | 2860 | 4180 | 7700 | 13200 | 15620 | 23540 |
| | F_{Br} [N] | 6000 | 9000 | 13000 | 19000 | 35000 | 60000 | 71000 | 107000 |
| STAINLESS STEEL | F_{Tzul} [N]* | 1080 | 1620 | 2340 | 3420 | 6300 | 10800 | 12780 | - |
| | F_{Br} [N] | 4500 | 6750 | 9750 | 14250 | 26250 | 45000 | 53250 | - |
| HPL High performance | F_{Tzul} [N] | - | - | 5280 | 8160 | 14400 | 24480 | 29280 | 44160 |
| | F_{Br} [N] | - | - | 19250 | 29750 | 52500 | 89250 | 106750 | 161000 |

Tooth shear strength

| | | | | | | | | | | | | | | | | |
|--------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| rpm | 0 | 20 | 40 | 60 | 80 | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 |
| F_{Uspez} [N/cm] | 74,00 | 72,62 | 71,34 | 70,16 | 69,07 | 68,07 | 64,09 | 61,68 | 59,03 | 56,71 | 54,66 | 52,84 | 51,20 | 49,71 | 48,35 | 47,09 |
| rpm | 1200 | 1300 | 1400 | 1440 | 1500 | 1600 | 1700 | 1800 | 1900 | 2000 | 2200 | 2400 | 2600 | 2800 | 3000 | 3200 |
| F_{Uspez} [N/cm] | 45,93 | 44,84 | 43,82 | 43,43 | 42,86 | 41,96 | 41,10 | 40,29 | 39,52 | 38,78 | 37,39 | 36,12 | 34,94 | 33,83 | 32,80 | 31,83 |
| rpm | 3400 | 3600 | 3800 | 4000 | 4500 | 5000 | 5500 | 6000 | - | - | - | - | - | - | - | - |
| F_{Uspez} [N/cm] | 30,91 | 30,05 | 29,22 | 28,44 | 26,63 | 25,00 | 23,51 | 22,15 | - | - | - | - | - | - | - | - |

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 | 18 | 50 mm | 30 | 120 mm |
| ARAMID | 18 | 50 mm | 30 | 120 mm |
| STAINLESS | 24 | 70 mm | 40 | 120 mm |
| HPL | 30 | 80 mm | 30 | 150 mm |

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