

Main industry segments

Glass, Hygienic, Ceramics, Packaging, Materials Handling

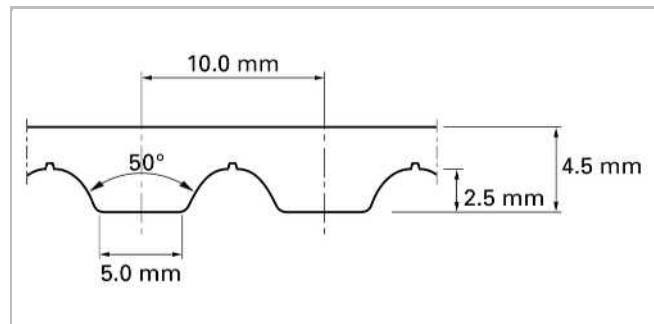
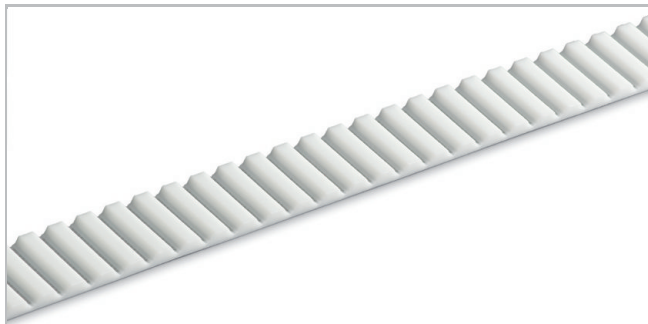
Belt applications

General conveying for higher strength and precision, power transmission applications, packaging machinery, ceramic tile conveying, hygienic paper production, pick-n-place transports, windshield and window glass conveying

Description

Trapezoid teeth with a 50° tooth angle are spaced on 10 mm centers.

White thermoplastic polyurethane with 92 Shore A provides wear resistance on the tooth side and protects the steel tensile member. Our material also provides high lubricity, which yields low noise and vibration meshing in and out of the drive pulley.



Sketch of basic shape

Belt data

| Belt slitting width, nominal | | Admissible tensile force, truly endless belt | | Ultimate tensile strength | | Tensile force for 1% elongation | | Mass of belt | |
|------------------------------|------|--|-----|---------------------------|------|---------------------------------|------|--------------|-------|
| mm | inch | N | lbf | N | lbf | N | lbf | kg/m | lb/ft |
| 25 | 0.98 | 3500 | 787 | 15200 | 3417 | 8750 | 1967 | 0.15 | 0.10 |

Standard belt widths are equal to, or multiples of the nominal belt slitting width.

Maximum belt width (150 mm / 6 inch): All **non-standard belt widths** can be slitted on request.

Temperature range of matrix material: -20 to 80 °C (-4 to 176 °F)

The tensile force for 1% elongation (k1% static) per unit of width determines the stress-strain behavior of the belt. It defines the resulting strain if a certain stress is applied and vice versa. This value corresponds to the belt without joint.

The admissible tensile force of a running belt is defined by the strength of a truly endless belt. Habasit defines an admissible belt force for all belts, which always corresponds to a belt elongation of 0.4 %.

The unit load table displays per rotational speed (RPM); tooth shear strength (F_t), torque (M_t) and power (P_t).

Please contact Habasit for detailed information and calculations.

All data are approximate values under **standard climatic conditions**: 23 °C / 73 °F, 50% relative humidity (DIN 50005 / ISO 554), and are based on the Master Joining Method.

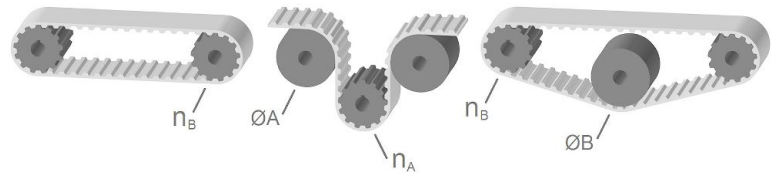
Unit load table

| RPM | F _i | M _i | P _i | RPM | F _i | M _i | P _i | RPM | F _i | M _i | P _i |
|----------------------|----------------|----------------|----------------|----------------------|----------------|----------------|----------------|----------------------|----------------|----------------|----------------|
| [min ⁻¹] | [N/cm] | [Nm/cm] | [w/cm] | [min ⁻¹] | [N/cm] | [Nm/cm] | [w/cm] | [min ⁻¹] | [N/cm] | [Nm/cm] | [w/cm] |
| 0 | 78.40 | 0.1167 | 0.000 | 1200 | 50.27 | 0.0749 | 9.432 | 3600 | 33.91 | 0.0507 | 19.174 |
| 20 | 77.17 | 0.1149 | 0.241 | 1300 | 49.19 | 0.0736 | 10.042 | 3800 | 33.05 | 0.0496 | 19.780 |
| 40 | 76.03 | 0.1136 | 0.477 | 1400 | 48.12 | 0.0718 | 10.550 | 4000 | 32.22 | 0.0480 | 20.152 |
| 60 | 75.00 | 0.1118 | 0.704 | 1500 | 47.15 | 0.0705 | 11.108 | 4500 | 30.31 | 0.0451 | 21.303 |
| 80 | 73.99 | 0.1106 | 0.929 | 1600 | 46.20 | 0.0694 | 11.655 | 5000 | 28.61 | 0.0428 | 22.494 |
| 100 | 73.02 | 0.1089 | 1.144 | 1700 | 45.34 | 0.0677 | 12.090 | 5500 | 27.10 | 0.0407 | 23.504 |
| 200 | 69.01 | 0.1035 | 2.173 | 1800 | 44.48 | 0.0666 | 12.585 | 6000 | 25.71 | 0.0382 | 24.038 |
| 300 | 66.33 | 0.0987 | 3.108 | 1900 | 43.65 | 0.0650 | 12.965 | 6500 | 24.42 | 0.0367 | 25.020 |
| 400 | 63.43 | 0.0947 | 3.976 | 2000 | 42.90 | 0.0639 | 13.427 | 7000 | 23.17 | 0.0348 | 25.552 |
| 500 | 61.26 | 0.0909 | 4.773 | 2200 | 41.49 | 0.0618 | 14.286 | 7500 | 22.08 | 0.0329 | 25.925 |
| 600 | 59.20 | 0.0879 | 5.540 | 2400 | 40.20 | 0.0599 | 15.095 | 8000 | 20.99 | 0.0317 | 26.603 |
| 700 | 57.29 | 0.0855 | 6.287 | 2600 | 38.94 | 0.0580 | 15.835 | 8500 | 20.00 | 0.0299 | 26.708 |
| 800 | 55.66 | 0.0828 | 6.959 | 2800 | 37.66 | 0.0567 | 16.658 | 9000 | 19.05 | 0.0287 | 27.150 |
| 900 | 54.15 | 0.0807 | 7.626 | 3000 | 36.71 | 0.0549 | 17.282 | 9500 | 18.16 | 0.0270 | 26.962 |
| 1000 | 52.75 | 0.0787 | 8.264 | 3200 | 35.73 | 0.0536 | 18.015 | 10000 | 17.31 | 0.0259 | 27.232 |
| 1100 | 51.46 | 0.0768 | 8.866 | 3400 | 34.78 | 0.0519 | 18.518 | | | | |

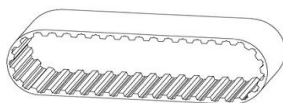
Belt options

| Description | | ØA | | n _A | ØB | | n _B |
|---|---|-----|------|----------------|----|------|----------------|
| | | mm | inch | | mm | inch | |
| Tooth side: unprocessed matrix material | U | 120 | 4.72 | 25 | 50 | 1.97 | 15 |
| Conveying side: unprocessed matrix material | U | | | | | | |
| Tooth side: Polyamide fabric, green | P | 120 | 4.72 | 25 | 50 | 1.97 | 15 |
| Conveying side: unprocessed matrix material | U | | | | | | |

For **detailed material properties** (e.g. coefficient of friction, colors, etc.) please contact your Habasit representative.



- A** = with counter flection
- B** = without counter flection



Truly endless (T)

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