DYSTRYBUTOR

TECHNICAL

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Pasy zębate PU z metra wielorowkowe

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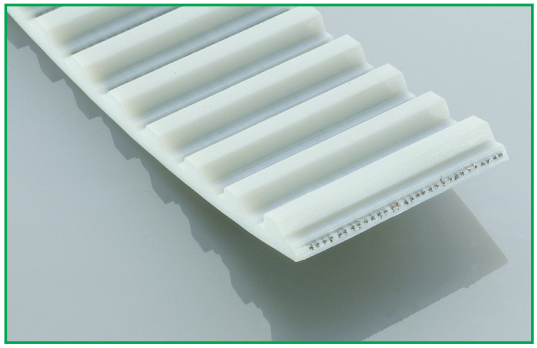
Antriebselemente

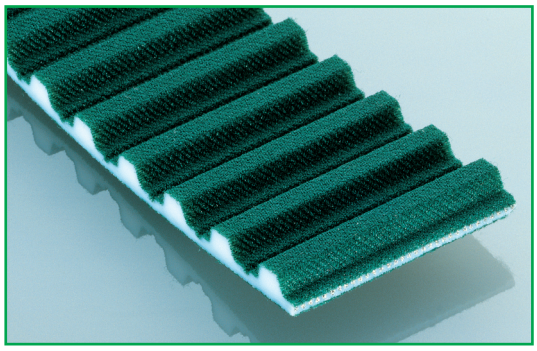
ELATECH® M and V

The timing belts manufactured by ELATECH® have been designed to comply with every need of the design engineer in linear motion, power transmission and in conveying applications where precise synchronisation is needed. ELATECH® timing belts are manufactured with the body in thermoplastic polyurethane with excellent wear resistance and with high tensile strength steel cords. A special polyamide fabric on the tooth (on request) reduces the coefficient of friction, improves the tooth engagement and reduces noise.

Standard belt



Belt with Polyamide fabric on teeth PAZ



Product declaration

- ELATECH® belts are certified to be according RoHS 2011/65/UE
- On request, it is possible to deliver belts:
  - with antistatic properties according to ISO9563
  - other special certifications available on request

Colour

The standard colour ELATECH® timing belt is white.
On demand it is possible to deliver belts in different colours.

Tension Cords

In order to maximize the application of ELATECH® timing belts, construction with special cords is available on request:

Standard Cord | HFE Cord | HPL Cord

- **HPL** high performance cords: the cord cross section is increased compared with standard. This results in a lower belt elongation and more precise positioning accuracy.

- **HFE** high Flexibility cords: the cord cross section is spread on a higher number of single filaments. This results in a lower bending stress and therefore in a higher resistance at reverse bending of the cords.
  They allow using pulleys and idlers up to 30% smaller in diameter compared to standard.

- **INOX** stainless steel cords are suitable for application in aggressive environments. They have lower tensile strength than standard cords.

- **ARAMID**: increases belt flexibility and decreases belt weight.

It is to be noted that steel cords offer the best technical performances and dimensional stability of the belts.
Belt length tolerances are valid for steel cord reinforcement. In case of other material (aramid, fibreglass) length tolerance may change.
For application with special cords ask our engineering department.

Mechanical properties:

- Excellent dimensional stability
- High abrasion resistance
- Low pretension and shaft load
- Maintenance free
- High linear and angular positioning precision
- High efficiency

Chemical properties:

High resistance to:

- Hydrolysis
- Ozone
- UVA
- Ageing
- Oils, greases and fats
- Gasoline
- Good resistance to acids
- Working temperatures range for standard material -10°C +80°C
  (peaks up to 110°C).
  For very low temperature special compound material is available on request (see dedicated table)
- Silicon free production

Executions

ELATECH® M

They are manufactured in rolls with standard length of 100 m. On request longer or shorter lengths are available. Main applications are linear drives.

Ordering example roll 100 m profile T :

ELATECH® "R" - Roll 100 m **R 025 T 10 A / Z**

- ELATECH® timing belt type "R"
- Width 25 mm (3 digits)
- Profile "T"
- Pitch 10 mm
- A= steel cords
  S= inox cords
  K= Kevlar® cords
  F= high flexiblity cords
  P= high power cords
- Z= fabric on teeth (PAZ)
  R= fabric on back (PAR)
  D= fabric on PAZ + PAR

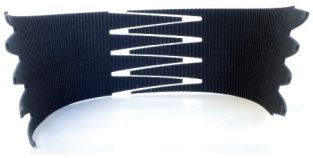
Ordering example profile H cut to length:

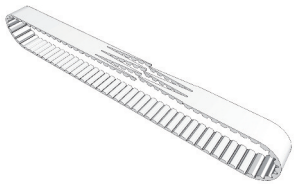
ELATECH® "M" cut to length **M 100 H A 01000 / Z**

- ELATECH® timing belt type "M"
- Width (x 0,254 = mm) - 3 digits
- Profile "H"
- A= stainless steel cords
  S= inox cords
  K= Kevlar® cords
  F= high flexiblity cords
  P= high power cords
- Length 1000 mm (5 digits)
- Z= fabric on teeth (PAZ)
  R= fabric on back (PAR)
  D= fabric on PAZ + PAR

ELATECH® V

They are jointed belts manufactured from open-end ELATECH® belts.Thanks to the specific manufacturing process, any length may be obtained tooth by tooth. Free combinations with special backing materials and welded profiles, make ELATECH® V belts ideal in synchronized conveying and highly specialised applications.





Ordering example profile AT :

ELATECH® "V" jointed **V 020 AT5 A 03410 / Z**

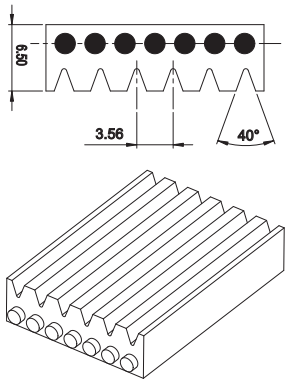
- ELATECH timing belt type "V" jointed
- Width 20 mm (3 digits)
- Profile "AT" - Pitch 5 mm
- A= stainless steel cords
  S= inox cords
  K= Kevlar® cords
  F= high flexiblity cords
  P= high power cords
- Length 3410 mm (5 digits)
- Z= fabric on teeth (PAZ)
  R= fabric on back (PAR)
  D= fabric on PAZ + PAR

Ordering example profile XL :

ELATECH® "V" jointed **V 150 XL A 00750 / Z**

- ELATECH timing belt type "V" jointed
- Width (x 0,254 = mm) - 3 digits
- Profile "XL"
- A= stainless steel cords
  S= inox cords
  K= Kevlar® cords
  F= high flexiblity cords
  P= high power cords
- Length 750 mm (5 digits)
- Z= fabric on teeth (PAZ)
  R= fabric on back (PAR)
  D= fabric on PAZ + PAR

POLY-V K



Belt characteristics

- Polyurethane Poly-V belt with K profile and high tensile load steel cords for high performance and increased flexibility
- The Poly-V profile allows torque high transmission, small pulley diameter
- Low noise generation
- Widely used in lifting applications
- Special cords available on request

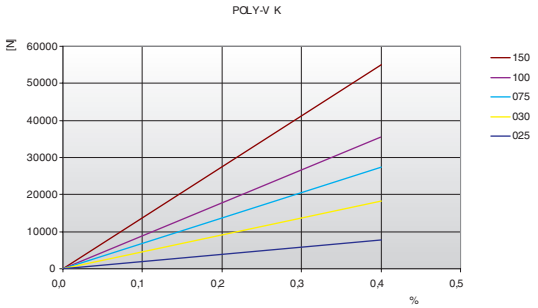
- Width tolerance: ±1,0 [mm]
- Thickness tolerance: ±0,4 [mm]

Technical Data

Belt width b [mm]	Allowable tensile load **Type M** F_{Tzul} [N]	Breaking load **Type M** F_{Br} [N]	Specific spring rate C_{spez} [N]	Weight [kg/m]
25	7700	31500	1925000	0,35
30	17600	72000	4400000	0,70
75	27500	112500	6875000	1,10
100	35200	144000	8800000	1,45
150	55000	225000	13750000	2,20

Other widths are available on request.

Load / Elongation [%]



Minimum pulley diameter	Drive without reverse bending [mm]	Drive with reverse bending [mm]
	150	250