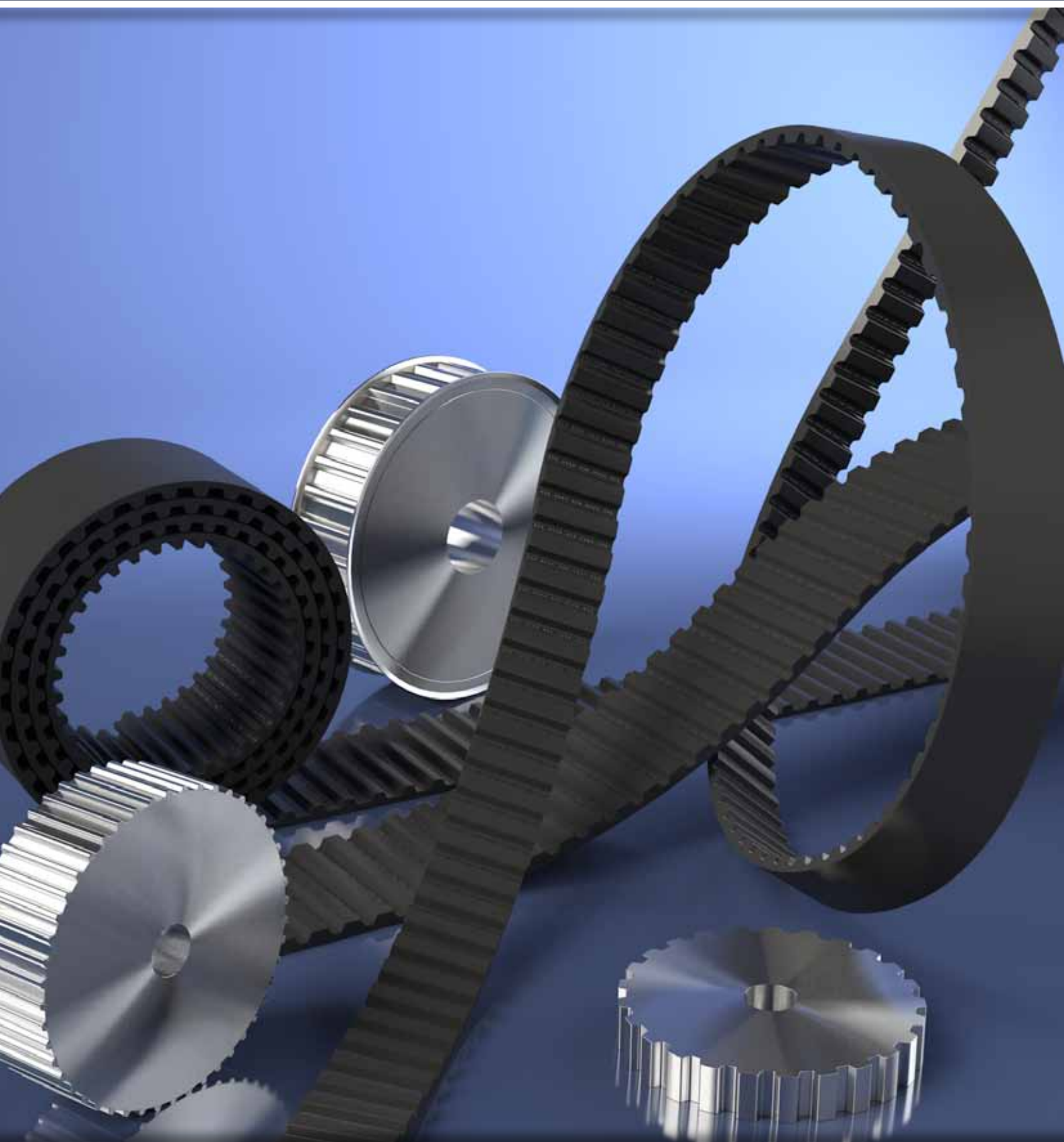


BRECO[®] - Timing Belts

Simple. Good. Reliable.



BRECO is a member of Mulco Europe EWIV





Keeping things moving!

Timing belts from BRECO are high-quality, versatile and reliable drive elements. Continuous development and refinement of our production processes, the use of high-grade raw materials and the resulting improvements in terms of product qualities relating to precision, power transfer and wear have all helped to elevate the timing belts marketed under the brand names BRECO® and BRECOFLEX® to premium-level products in the field of positive-fit drive elements.

The range of potential applications for polyurethane timing belts has increased in recent years. The availability of a wide choice of raw materials along with the options for modifying them to suit the widest range of operating conditions have and will have an impact on the further application and development potential of timing belts.

The importance of different chemical and mechanical properties of polyurethane timing belts can vary given the diversity of the potential fields of application. As a result, there is no such thing as an „all-rounder“, i.e. a timing belt which is equally well suited to simple and more challenging applications. However, there is one property that all timing belts must deliver at all times - and that is quality. The name BRECO stands for this quality.

With the BRECObasic®, users now have access to an inexpensive branded product for simple applications in linear and transport technology, e.g. in the glass and wood industries.

Staying safely on the move.



| Contents | Page |
|---|------|
| The difference is BRECO | 5 |
| BRECObasic® - Simple. Good. Reliable..... | 6 |
| Coatings | 10 |
| Sales partners..... | 12 |
| Product catalogues..... | 14 |
| Warranties | 15 |



The difference is BRECO

The range of products offered by BRECO under the banner of the „BRECObasic“ brand is an inexpensive alternative for simple applications that require less than the full potential strength of standard-type BRECO® timing belts. The range is designed for applications that do not come with special demands relating e.g. to restricted tolerances, particular durability/resilience requirements or further processing options for the timing belts.

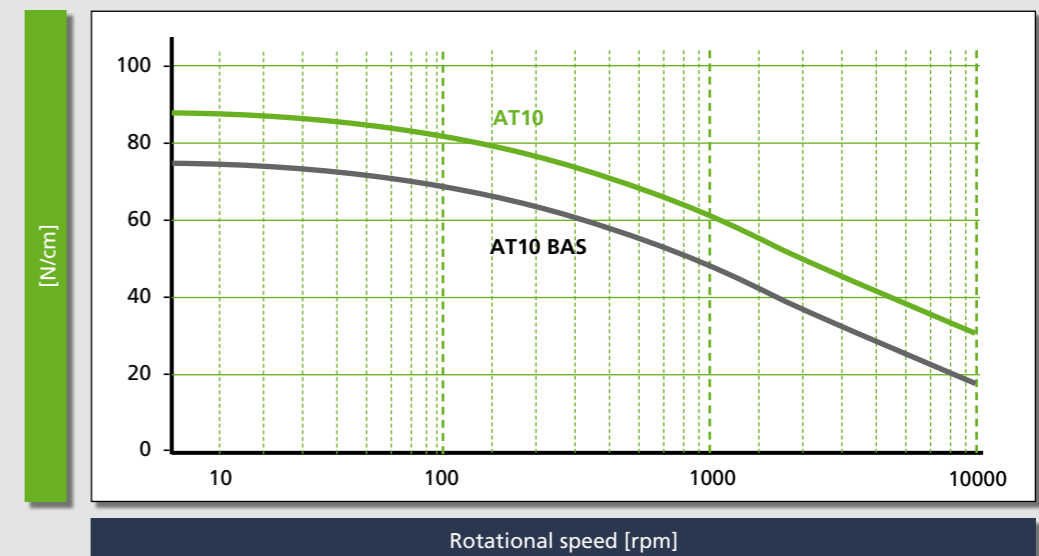
BRECObasic® timing belts are produced exclusively as a by-the-metre product and can be welded to form endless belts if required.

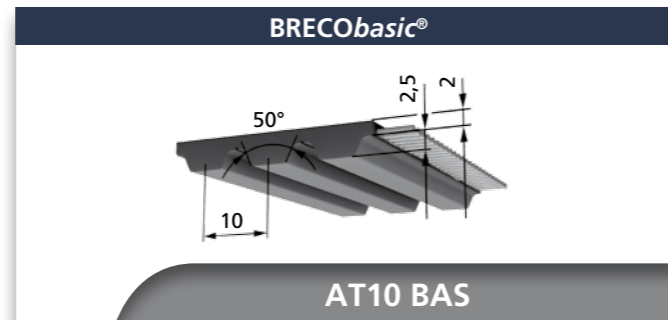
Like all other BRECO products, the BRECObasic® range stands for quality and reliability of operation.

| Comparison of supply options | BRECObasic® (M/V) (AT10 BAS, T10 BAS) | BRECO® (M/V) (AT10, T10) |
|--|---|-----------------------------|
| Special materials (polyurethane) | No | Yes |
| Special materials (tension member) | No | Yes |
| Special widths | No | Yes |
| Reduced longitudinal/lateral tolerance | No | Yes |
| Mechanical belt processing | No | Yes |
| Coating materials | Restrictions to the choice of coatings due to the particular production process | No restrictions |
| Standard colour | Anthracite | White |
| Colouring options | No | Yes |
| Individual labelling | No | Yes |

BRECObasic® offers a tooth shear strength that is comparable to most commercially available timing belts. By contrast, the tooth shear strength of a standard BRECO® timing belt is around 20% higher, including in comparison to BRECObasic® belts.

Comparison of specific forces acting on the teeth – AT10 BAS and AT10





| BRECO® AT10 BAS (M/V) | | Specific tooth force | | | |
|----------------------------------|------------------------------|----------------------------------|------------------------------|----------------------------------|------------------------------|
| R.p.m. n [min ⁻¹] | F _{tspez} [N/cm] | R.p.m. n [min ⁻¹] | F _{tspez} [N/cm] | R.p.m. n [min ⁻¹] | F _{tspez} [N/cm] |
| 0 | 73,50 | 1200 | 47,20 | 3600 | 31,90 |
| 20 | 72,40 | 1300 | 46,20 | 3800 | 31,10 |
| 40 | 71,40 | 1400 | 45,20 | 4000 | 30,30 |
| 60 | 70,50 | 1500 | 44,30 | 4500 | 28,50 |
| 80 | 69,60 | 1600 | 43,40 | 5000 | 26,90 |
| 100 | 68,70 | 1700 | 42,60 | 5500 | 25,50 |
| 200 | 65,00 | 1800 | 41,80 | 6000 | 24,20 |
| 300 | 62,10 | 1900 | 41,00 | 6500 | 23,00 |
| 400 | 59,50 | 2000 | 40,30 | 7000 | 21,80 |
| 500 | 57,40 | 2200 | 39,00 | 7500 | 20,80 |
| 600 | 55,50 | 2400 | 37,80 | 8000 | 19,77 |
| 700 | 53,70 | 2600 | 36,60 | 8500 | 18,84 |
| 800 | 52,20 | 2800 | 35,50 | 9000 | 17,95 |
| 900 | 50,80 | 3000 | 34,50 | 9500 | 17,12 |
| 1000 | 49,50 | 3200 | 33,60 | 10000 | 16,32 |
| 1100 | 48,30 | 3400 | 32,70 | | |

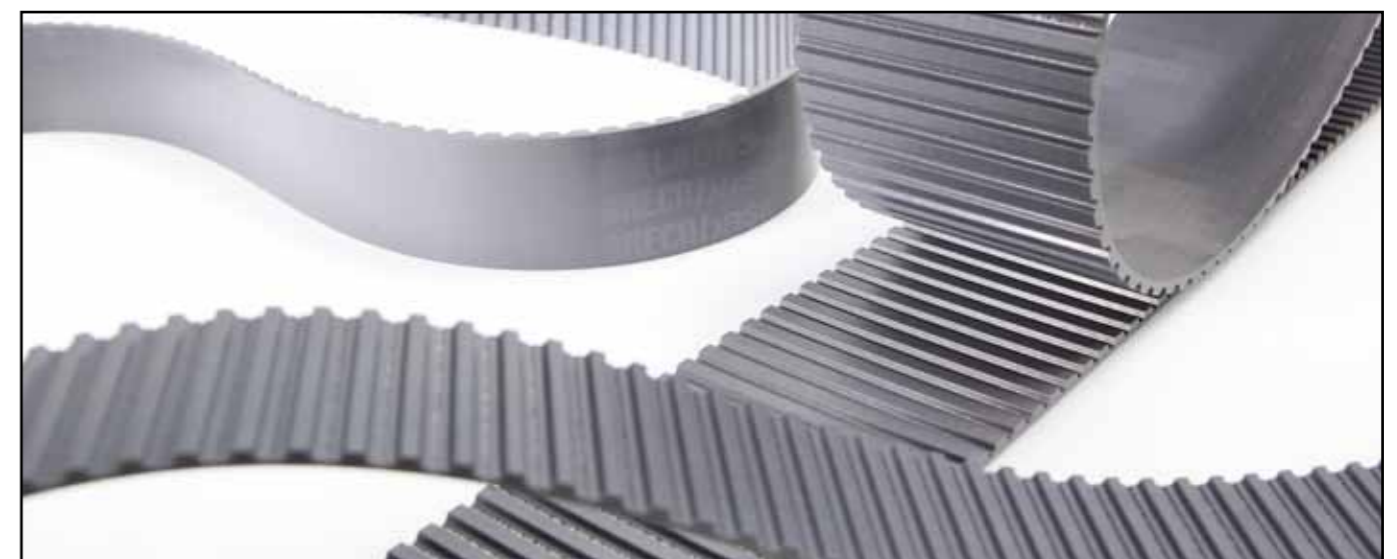
| Belt widths b [mm] | AT10R3 BAS | | | AT10R4 BAS | | |
|-------------------------|------------|----|----|------------|----|----|
| Production widths [mm] | 96 | | | 100 | | |
| Possible cutting widths | 16 | 32 | 64 | 25 | 50 | 75 |

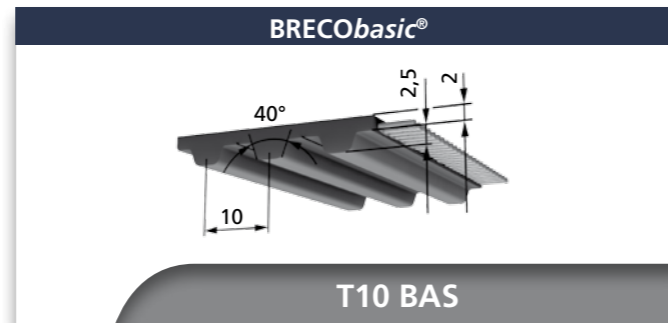
| AT10 BAS (M/V) | Available lengths and versions | |
|-------------------------------|--------------------------------|-----------------------------|
| Standard delivery lengths (M) | 50 or 100-metre roll | |
| Belt colour | anthracite | |
| Minimum length joined (V) | 880 mm | Request minimum order value |
| PAZ | Available | |

| BRECObasic 100 AT10R4 BAS 50000 M | |
|-----------------------------------|--|
| Width b | |
| Type/pitch | |
| Length in mm | |
| By-the-metre product | |

| AT10 BAS (M/V) | | Admissible tension cord strength F _{Tadm} / Specific elasticity / Belt weight | | | | | | | | |
|----------------|----------------------|--|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Belt width | | b [mm] | 16 | 25 | 32 | 50 | 64 | 75 | 96 | 100 |
| M | Basic tension member | F _{Tadm} [N] | 2750 | 4250 | 5500 | 8500 | 11000 | 12750 | 16500 | 17000 |
| | Specific elasticity | C _{spez} [N] | 0,69·10 ⁶ | 1,06·10 ⁶ | 1,37·10 ⁶ | 2,12·10 ⁶ | 2,72·10 ⁶ | 3,18·10 ⁶ | 4,08·10 ⁶ | 4,25·10 ⁶ |
| V | Basic tension member | F _{Tadm} [N] | 1375 | 2125 | 2750 | 4250 | 5500 | 6375 | 8250 | 8500 |
| Belt weight | | [kg/m] | 0,093 | 0,158 | 0,186 | 0,290 | 0,372 | 0,436 | 0,558 | 0,581 |

| AT10 BAS (M/V) | | Flexibility (minimum diameter) | | |
|--|------------------------|--------------------------------|-----|-----|
| | | | M | V |
| z _{min} d _{min} | Without contra-flexure | z _{min} | 15 | 15 |
| | | d _{min} [mm] | 50 | 50 |
| z _{min} d _{min} | With contra-flexure | z _{min} | 25 | 25 |
| | | d _{min} [mm] | 120 | 120 |





| BRECO® T10 BAS (M/V) | | Specific tooth force | | | |
|-------------------------------|--------------------------|-------------------------------|--------------------------|-------------------------------|--------------------------|
| R.p.m. n [min ⁻¹] | F _{tpez} [N/cm] | R.p.m. n [min ⁻¹] | F _{tpez} [N/cm] | R.p.m. n [min ⁻¹] | F _{tpez} [N/cm] |
| 0 | 50,50 | 1200 | 29,30 | 3600 | 20,70 |
| 20 | 49,00 | 1300 | 28,70 | 3800 | 20,30 |
| 40 | 47,70 | 1400 | 28,20 | 4000 | 19,86 |
| 60 | 46,60 | 1500 | 27,60 | 4500 | 18,91 |
| 80 | 45,70 | 1600 | 27,10 | 5000 | 18,06 |
| 100 | 44,80 | 1700 | 26,70 | 5500 | 17,28 |
| 200 | 41,40 | 1800 | 26,20 | 6000 | 16,58 |
| 300 | 39,10 | 1900 | 25,80 | 6500 | 15,93 |
| 400 | 37,20 | 2000 | 25,40 | 7000 | 15,33 |
| 500 | 35,70 | 2200 | 24,60 | 7500 | 14,76 |
| 600 | 34,40 | 2400 | 23,90 | 8000 | 14,24 |
| 700 | 33,30 | 2600 | 23,30 | 8500 | 13,74 |
| 800 | 32,40 | 2800 | 22,70 | 9000 | 13,28 |
| 900 | 31,50 | 3000 | 22,20 | 9500 | 12,84 |
| 1000 | 30,70 | 3200 | 21,70 | 10000 | 12,42 |
| 1100 | 30,00 | 3400 | 21,20 | | |

| Belt widths b [mm] | T10R3 BAS | | | T10R4 BAS | | |
|-------------------------|-----------|----|----|-----------|----|----|
| Production widths [mm] | 96 | | | 100 | | |
| Possible cutting widths | 16 | 32 | 64 | 25 | 50 | 75 |

| T10 BAS (M/V) | Available lengths and versions | |
|-------------------------------|--------------------------------|-----------------------------|
| Standard delivery lengths (M) | 50 or 100-metre roll | |
| Belt colour | anthracite | |
| Minimum length joined (V) | 880 mm | Request minimum order value |
| PAZ | Available | |

| BRECObasic 96 T10R3 BAS 4000 V | |
|--------------------------------|-----------|
| Width b | 96 |
| Type/pitch | T10R3 BAS |
| Length in mm | 4000 |
| Welded | V |

| T10 BAS (M/V) | | Admissible tension cord strength F _{Tadm} / Specific elasticity / Belt weight | | | | | | | | |
|---------------|----------------------|--|---------------------|---------------------|---------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Belt width | | b [mm] | 16 | 25 | 32 | 50 | 64 | 75 | 96 | 100 |
| M | Basic tension member | F _{Tadm} [N] | 1400 | 2200 | 2800 | 4400 | 5600 | 6600 | 8400 | 8800 |
| | Specific elasticity | C _{spez} [N] | 3,5·10 ⁵ | 5,5·10 ⁵ | 7,0·10 ⁵ | 11,0·10 ⁵ | 14,1·10 ⁵ | 16,5·10 ⁵ | 21,1·10 ⁵ | 22,0·10 ⁵ |
| V | Basic tension member | F _{Tadm} [N] | 700 | 1100 | 1400 | 2200 | 2800 | 3300 | 4200 | 4400 |
| Belt weight | | [kg/m] | 0,073 | 0,114 | 0,145 | 0,227 | 0,290 | 0,341 | 0,435 | 0,454 |

| T10 BAS (M/V) | | Flexibility (minimum diameter) | | |
|---------------|------------------------|--------------------------------|----|----|
| | | | M | V |
| | Without contra-flexure | z _{min} | 12 | 12 |
| | | d _{min} [mm] | 60 | 60 |
| | With contra-flexure | z _{min} | 20 | 20 |
| | | d _{min} [mm] | 60 | 60 |



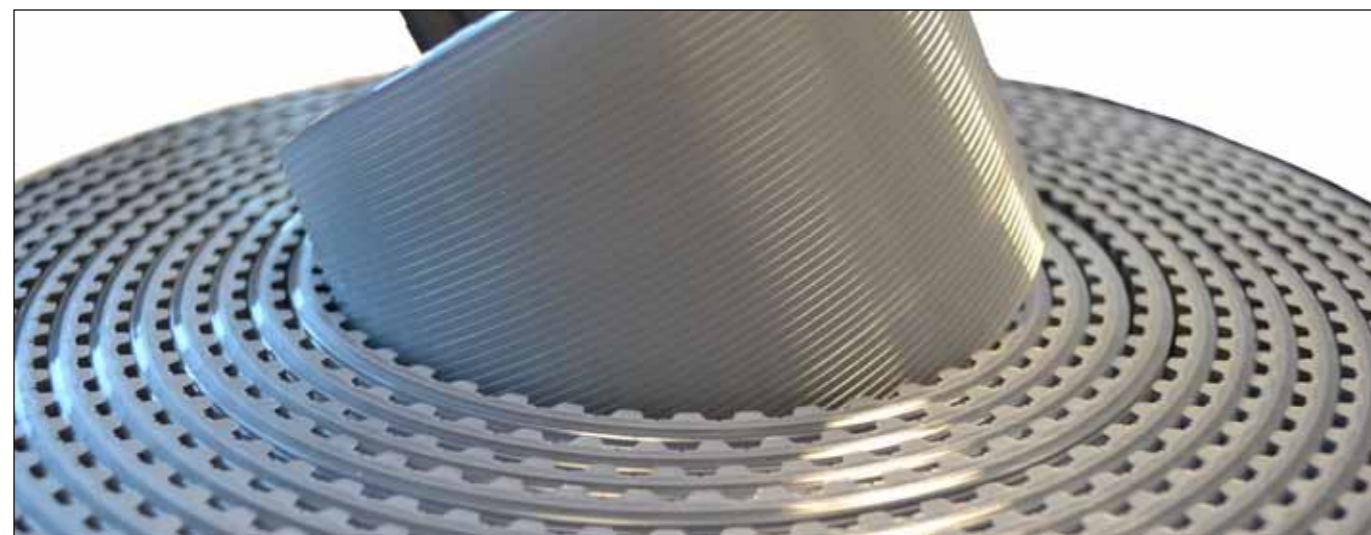
Coatings for BRECObasic®-timing belts



| Properties | |
|---------------------------|--|
| Colour | transparent |
| Standard thickness | 2 mm |
| Min. pulley diameter [mm] | 80 |
| Material / Hardness | polyurethane / Approx. 85 Shore A |
| Tolerances | ±0.25 mm |
| Temperature resistance | -20°C to +80°C |
| Chemical resistance | resistant to simple oils and grease, petrol, ozone |
| Potential applications | general transport tasks (glass, metal panels, mechanically aggressive parts) |



| Properties | |
|---------------------------|--|
| Colour | transparent |
| Standard thickness | 2.4 mm, groove depth: 0.5 mm |
| Min. pulley diameter [mm] | 80 |
| Material / Hardness | polyurethane / Approx. 70 Shore A |
| Tolerances | ±0.25 mm |
| Temperature resistance | -20°C to +80°C |
| Chemical resistance | resistant to simple oils and grease, petrol, ozone |
| Potential applications | general transport tasks in wet areas (water, oil) |



Coatings for BRECObasic®-timing belts



| Properties | |
|---------------------------|---|
| Colour | yellow |
| Standard thickness | 2 mm |
| Min. pulley diameter [mm] | 60 |
| Material / Hardness | Polyurethane foam / Approx. 55 Shore A |
| Tolerances | ±0.25 mm |
| Temperature resistance | -10°C to +70°C |
| Chemical resistance | resistant to simple oils and grease, not water-resistant |
| Potential applications | feed and discharge lines on weighing units, vacuum transport conveyors, paper/textile/glass/wood industry |



| Properties | |
|---------------------------|--|
| Colour | blue-green |
| Standard thickness | 4.5 mm |
| Min. pulley diameter [mm] | 60 |
| Material / Hardness | PVC, approx. 45 Shore A |
| Tolerances | ±0.3 mm |
| Temperature resistance | -5°C to +70°C |
| Chemical resistance | limited resistance to solvents, oils and grease, resistant to acids and alkaline solutions, with the exception of very potent oxidants (such as concentrated sulphuric acid and nitric acid) |
| Potential applications | inclined conveyance, elevating conveyors, glass industry |



| Properties | |
|------------------------|---|
| Colour | green |
| Standardstärke | 0.5 mm |
| Material / Hardness | Polyamide |
| Tolerances | ± 0.2 mm |
| Temperature resistance | -20°C to +50°C |
| Chemical resistance | Resistant to simple oils and grease |
| Potential applications | Reduced friction, e.g. when using supporting rails or guide rails |

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THE POWER OF A WELL-MESHED GROUP.

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Great Britain

BRECO not only believes in high standards of quality for production, but also when it comes to advice and service concerning all aspects of polyurethane timing belt technology. Our sales partners are all specialists in this field and can offer you the very best customer support.

BRECO is a member of Mulco Europe EWIV, a European economic interest grouping. All of its members are seen as pioneers in the field of polyurethane timing belt technology. The trust that has grown during the course of many years and the intensive level of cooperation between members was and will remain the basis for the development of innovative drive solutions for general engineering in the future.

BRECO® and BRECOFLEX® timing belts – safety in motion.

Available product catalogues - for every application the right product

BRECO® and BRECOFLEX® timing belts

- General information (application and calculation notes)
- Endless timing belts (BRECOFLEX®)
- Open length timing belts (BRECO® M)
- Endless joined timing belts (BRECO® V)
- Timing belt lock for AT10, T10

ATN-System - BRECO® timing belts for transport technology

- General information (application information and notes on calculations)
- ATN timing belts
- ATN timing belt lock
- ATN standard profile connection
- ATN profiles
- ATN components

BRECO® und BRECOFLEX® flat belts

- General information
- Endless flat belts (BRECOFLEX®)
- Open length timing belts (BRECO® M)
- Open length flat belts (BRECO® M)
- Endless joined flat belts (BRECO® V)

Finishing of timing belts

- Coatings for polyurethane timing belts
- Mechanical rework of coatings
- Mechanical rework of timing belts
- Welded-on profiles
- High strength profile connection

Components

- General information
- Timing pulleys
- Synchronising pulleys with tensioners
- Synchronising shafts
- Tension rollers
- BRECO® fix-clamping elements

BRECObasic®-timing belts

- Product range
- Coatings for BRECObasic® timing belts

Further information about:

- Sales partners
- New products and developments
- Available catalogues can be found at www.breco.de

Warranty

All information has been compiled with the utmost care and attention and reflects the current state of knowledge. However, we would like to particularly draw your attention to the fact that all technical data is quoted subject to tolerances and must not be interpreted as a guaranteed delivery specification. We reserve the right to make technical changes as part of our continuous product development process.



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Keeping things moving!



This company positioning confronts
BRECO Antriebstechnik Breher GmbH & Co. KG,
manufacturer of BRECO® and BRECOFLEX® timing belts,
with new great challenges, which are accepted with pleasure.

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