



**POWER TRANSMISSION  
COMPACT CATALOGUE**



\*\*\*  
**ENGINEERED IN  
GERMANY**  
\*\*\*

Three different types of industrial belts are shown in a circular inset: a red and white striped belt, a blue and white striped belt, and a solid black belt. The text "ENGINEERED IN GERMANY" is written in white on a blue background within the inset.



# OPTIBELT CELEBRATES ITS 150TH ANNIVERSARY

This year, the Arntz Optibelt Group is celebrating its 150<sup>th</sup> anniversary. We have built up a long history, that is rich in events and milestones, and which has shaped us into the company we are today. We can look back with pride on our company's journey from its early beginnings and at all the developments our company has undergone since it was founded.

When Emil Arntz established the Höxtersche Gummifädenfabrik in May 1872, the world back then was a completely different place. People then did not have electric light bulbs and it was also before the era when motor cars and aeroplanes were invented. Even the telephone did not become patented until four years later.

Since then, Optibelt has developed from a producer of rubber threads to one of the world's most important manufacturers of high-performance drive belts. The small company that started off with just ten employees has now become a globally active company.

Constant investment in materials research and production technology as well as growing knowledge about the constraints associated with various uses have pushed the boundaries of machine capacity to new limits thanks to further development of the belt into a high-tech drive system.



# 86322726

8 PRODUCTION SITES IN 6 COUNTRIES 32 SALES LOCATIONS IN 27 COUNTRIES 26 LOGISTICS CENTRES IN 20



## ON SITE - WORLDWIDE

With 32 sales locations in 27 countries on 6 continents, customer proximity at Optibelt is anything but an empty promise. Committed contacts, short decision paths, fast delivery times and a comprehensive range of services are the keys to a high level of customer satisfaction, which is always the focus at Optibelt. From consultancy, product briefing and commissioning to troubleshooting and replacement of drive components, experienced Optibelt teams ensure professional and rapid solutions of sustainable efficiency directly on site. A service that Optibelt provides as a matter of course and which has already received several independent awards.

## IN THE RIGHT PLACE AT THE RIGHT TIME

Thanks to a sophisticated, dynamic logistics system, the world literally becomes a village for Optibelt. With 26 logistics centres in 20 countries, the Arntz Optibelt Group offers its



20

COUNTRIES

**ONE WORLD - ONE QUALITY**

Optibelt stands internationally for excellent brand quality. To ensure that the label "Made by Optibelt" always meets the same high standard around the globe, the Arntz Optibelt Group has 8 production sites in 6 countries, all of which are equally committed to a demanding quality management system. In order to ensure that there are no deviations in product properties and quality, the same binding guidelines apply to all locations with regard to the manufacturing processes and the quality specifications for the selection and processing of the corresponding raw materials. This means that every single customer worldwide can rely on the outstanding Optibelt quality across all industries.

**EXPANSIVE EXPERTISE**

In more than 150 years, Optibelt has become a company with global expertise. And that's not all: Optibelt stands on a solid foundation. With a strong tradition and lived innovation. With these qualities, we are expanding all over the world.

customers virtually unlimited availability across the entire product portfolio at all times, without having to compromise on quality. More than 25 000 belt models are therefore available worldwide at all times, and are also promptly implemented in line with customer requirements and costs. Speed, flexibility and product diversity are therefore not mutually exclusive, which only underlines Optibelt's high status as a globally sought-after partner for innovative drive solutions.

# THE WORLD'S IN MOTION. WE ARE THE DRIVING FORCE!

The requirements for Optibelt products are as varied as the industries in which they are used. From robust kraftbands for agricultural machinery to high performance V-belts used in road construction and precise timing belts for the textile industry – Optibelt products are at home in many different industries and endure extreme conditions.

Wherever dust, heat, cold, abrasive chemicals or extremely high speeds put the material to the test, Optibelt shows its strengths. Wherever smooth, low vibration running is called for in spite of high speeds, Optibelt ensures lossless operation. Wherever extreme tensile forces or strong friction have to be defied, Optibelt delivers untiring performance. Whether enormous and powerful or delicate and precise.



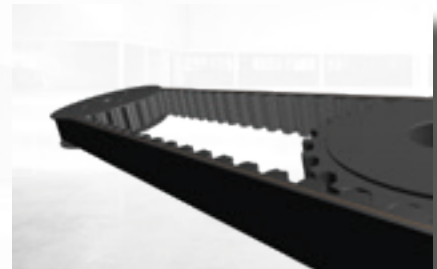
## LOGISTICS AND SERVICES

Page 4 and 5



## RAW EDGE V-BELTS AND KRAFTBANDS

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**WRAPPED V-BELTS  
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**PERFORMANCE COMPARISON  
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**PERFORMANCE COMPARISON  
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**SPECIAL BELTS**

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# WRAPPED V-BELTS AND KRAFTBANDS



## BETTER PERFORMANCE

Power transmission increased by up to 50% compared with conventional standard V-belts



## MAINTENANCE-FREE

When correctly pretensioned, regular maintenance can be dispensed with throughout the entire service life.



## HIGH TEMPERATURE RESISTANCE

Temperature resistance from -30°C to +100°C



## S=C PLUS

V-belts, set constant without measuring



## MORE EFFICIENCY - MORE POWER

Up to 97% efficiency

## optibelt **RED POWER 3** – MAINTENANCE-FREE HIGH PERFORMANCE

Wrapped V-belts consist of a rubber core, tension cord, rubber top surface and an enveloping fabric wrap. The wrapping is particularly gentle on the flanks of the belt pulleys. The design of the tension cords determines the performance and ease of maintenance of the drive. The **optibelt RED POWER 3**, for example, uses a transverse fibre blend that can withstand high dynamic loads. Flexibility, abrasion resistance and bending flexibility included.



# PERFORM FOR EVERY REQUIREMENT

**SPECIALLY DEVELOPED FOR HEAVY-DUTY APPLICATIONS IN MECHANICAL ENGINEERING, THE COMMERCIALY AVAILABLE NARROW V-BELTS AND **optibelt RED POWER 3** PROVIDE POWERFUL DRIVE SOLUTIONS FOR EVERY REQUIREMENT.**

Both belts operate at a constant rate with an efficiency of almost 97 percent, while commercially available V-belts only achieve a maximum of 94 percent.

Smooth power transmission results in more power, while at the same time, using less energy. In addition, the commercially available narrow V-belt offers a favourable price/performance ratio with considerably reduced follow-up costs due to extended maintenance intervals compared to commercially available V-belts.

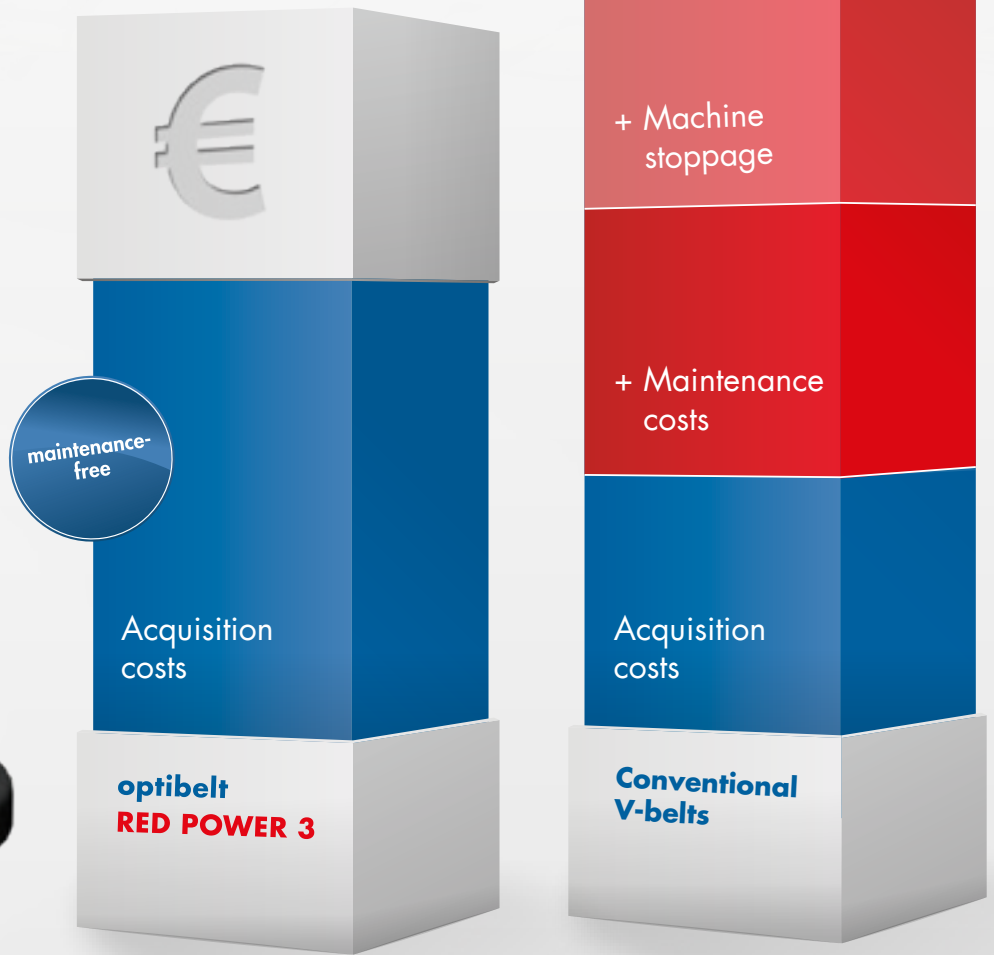
The **optibelt RED POWER 3** requires a higher initial investment, but is maintenance-free and especially the best choice when high performance is required with a slim design. Since it achieves up to 50 percent higher performance compared to standard V-belts, **optibelt RED POWER 3** belts achieve the same power peaks in identical drive situations without any loss using fewer belts overall. This results in sustainable overall savings in terms of materials and maintenance.





# ADVANCE

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**RED POWER 3** S=C Plus  
SET CONSTANT

# optibelt RED POWER 3 S=C Plus

## HIGH PERFORMANCE WEDGE BELTS



Maintenance-free **optibelt RED POWER 3** V-belts and kraftbands have an up to 50% higher power transmission capacity compared to wedge belts in their technical standard design. Thanks to lower maintenance costs and a reduced demand for replacements due to fewer belts and smaller pulleys, up to 35% cost savings are possible.

This means that up to 18% of the costs can be saved even for new acquisitions. Additional cost savings result from the space-saving design as well as minimised shafts and bearings.

The tension cord consists of a special polyester cord. Thanks to special treatment of the tension cord, the **optibelt RED POWER 3** high performance wedge belt is highly stretch-resistant and maintenance-free so that re-tensioning is not necessary. The transverse fibre blend above and below the tension cord provides especially high dimensional stability. The abrasion-resistant special wrapping fabric improves the flexibility compared to wedge belts in their technical standard design.

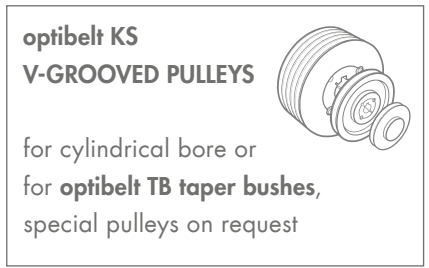
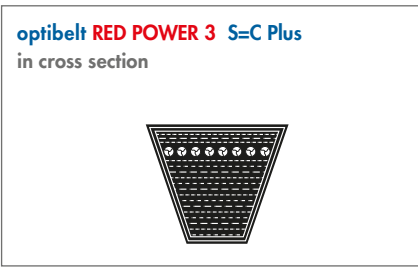
### Advantages and Characteristics

- maintenance-free; optimum tension over the entire lifetime
- new version: more compact, affordable structure compared to drives with conventional wedge belts
- S=C Plus, always the right length for sets without measuring
- up to 97% efficiency
- suitable for back bend idlers
- problem solver: much longer service life and clearly reduced maintenance requirement when used in overloaded existing drives
- temperature-resistant from -30 °C to +100 °C
- meets ISO 1813 anti-static requirements

### Profiles and Belt Length Ranges

SPZ	1170 – 18 000 mm
SPA	1170 – 18 000 mm
SPB	1170 – 12 000 mm
SPC	1900 – 21 000 mm
3V	460 – 7 080 in /
9N	1168 – 17 983 mm
5V	460 – 4 720 in /
15N	1168 – 11 989 mm
8V	820 – 7 080 in /
25N	2083 – 17 983 mm

Other profiles and lengths on request



# optibelt RED POWER 3 Classic S=C Plus

## CLASSIC HIGH PERFORMANCE V-BELTS



optibelt RED POWER 3 Classic S=C Plus has a classic belt section and replaces standard technical models of classic belts in existing drives. These belt profiles allow a flatter design compared to wedge belts, making smaller pulley diameters possible despite an identical upper width. The minimum pulley diameters are correspondingly smaller.

optibelt RED POWER 3 Classic belts meet the well-known close S=C Plus nominal length tolerances and so are always the right length for sets without measuring.

### Applications

As a classic among V-belts, **optibelt RED POWER 3 Classic** is used in many general mechanical engineering applications, mainly in existing drives in America and Asia. Classic belt sections are still very common there.

### Advantages and Characteristics

- S=C Plus, always the right length for sets without measuring
- maintenance-free, optimum tension over the entire lifespan
- meets ISO 1813 anti-static requirements
- allows smaller pulley diameters than with wedge belts
- up to 20% higher performance than in technical standard design

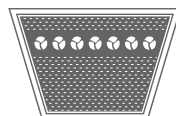
### Sections and Belt Length Ranges

- A 52 – 120 in
- B 52 – 148 in

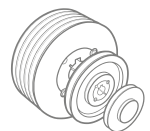
Other dimensions on request



optibelt RED POWER 3 Classic S=C Plus in cross section



optibelt KS V-GROOVED PULLEYS



for cylindrical bore or for **optibelt TB taper bushes**, special pulleys on request



# optibelt BLUE POWER 2

## HIGH PERFORMANCE WEDGE BELTS



The **optibelt BLUE POWER 2** high performance wrapped wedge belt has a high-flex aramid tension cord and is ideal as an individual belt, or in a set or as a kraft-band, and is particularly suitable for large, very heavily loaded drives.

The use of high-quality raw materials and semi-finished products, an optimal manufacturing process and higher power density thanks to the use of EPDM characterise **optibelt BLUE POWER 2** high performance wedge belts.

Bending losses are reduced by using fewer belts. Belt flexibility is enhanced by the use of a special fabric and the high-flex aramid tension cord.

The **optibelt BLUE POWER 2** has an efficiency of up to 97%, making it more effective than standard commercially available V-belts.

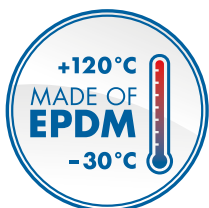
### Advantages and Characteristics

- Optibelt ensures that belts with the same class designation can be used in a set without the need for measuring.
- **optibelt BLUE POWER 2** V-belts ensure consistent power transmission within a temperature range of  $-30\text{ }^{\circ}\text{C}$  to  $+120\text{ }^{\circ}\text{C}$ .
- With the low-maintenance **optibelt BLUE POWER 2**, maintenance work and costs can be minimised.
- up to 10% more power compared to the previous **optibelt BLUE POWER**

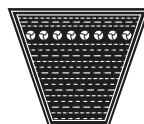
### Profiles and Belt Length Ranges

SPB	1800 – 21000 mm
SPC	1900 – 21000 mm
5V	71 – 8260 in /
15N	1800 – 21000 mm
8V	75 – 8260 in /
25N	1900 – 21000 mm

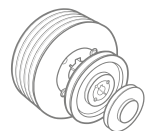
Other profiles and lengths on request



**optibelt BLUE POWER 2**  
in cross section



**optibelt KS**  
**V-GROOVED PULLEYS**



for cylindrical bore or  
for **optibelt TB taper bushes**,  
special pulleys on request

# optibelt **SK S=C Plus**

## WEDGE BELTS



The **optibelt SK** wrapped wedge belt was developed particularly with mechanical engineering in mind, where it replaces the classic V-belt. It transmits some 50% more power in comparison and so makes it possible to use more compact and lower-priced drives as a result when making new acquisitions.

Existing drives, such as B/17, with a classic profile can be replaced with the SPB wedge belt profile. In order to do so, it is essential to take account of the minimum pulley diameter required for wedge belts, which is greater than for classic V-belts, despite its identical width, due to the increased thickness of the wedge belt. It is also necessary to use suitable pulleys for wedge belts.

The wrapped wedge belt has the attributes of the outstanding Optibelt S=C Plus, with an efficiency of nearly 97%, and is always the right length for sets without measuring.

### Advantages and Characteristics

- high efficiency
- considerable energy-saving
- excellent running properties
- superior price-performance ratio
- low maintenance costs
- S=C Plus, always the right length for sets without measuring

### Profiles and Belt Length Ranges

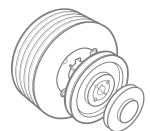
SPZ	1170 – 18 000 mm
SPA	1170 – 18 000 mm
SPB	1170 – 21 000 mm
SPC	1900 – 21 000 mm
3V	460 – 7080 in /
9N	1168 – 17983 mm
5V	460 – 8260 in /
15N	1170 – 21 000 mm
8V	820 – 8260 in /
25N	2083 – 20980 mm
9N	460 – 7080 in /
3V	1168 – 17983 mm

Other lengths on request

optibelt **SK S=C Plus**  
in cross section



optibelt **KS**  
V-GROOVED PULLEYS



for cylindrical bore or  
for **optibelt TB taper bushes**,  
special pulleys on request



# optibelt **VB S=C Plus**

## CLASSICAL V-BELTS



Due to its versatile applications, the **optibelt VB** is the classic model among drive belts. The qualities of this product really come into their own with difficult drives in agricultural machines just as with unusual drive solutions, such as V-flat drives in mechanical engineering.

**optibelt VB** classic V-belts are S=C Plus and are always the right length for sets without measuring.

### Advantages and Characteristics

- excellent operating reliability
- up to 97% efficiency
- optimum operating features
- uniform power transmission
- abrasion-resistant cover fabric
- many special designs
- for universal application

### Profiles and Belt Length Ranges

5	200 – 610 mm
Y/6	295 – 865 mm
8	335 – 1 270 mm
Z/10	312 – 4 500 mm
A/13	437 – 21 000 mm
B/17	610 – 21 000 mm
20	950 – 21 000 mm
C/22	1 148 – 21 000 mm
25	1 170 – 21 000 mm
D/32	2 000 – 21 000 mm
E/40	2 000 – 21 000 mm

Other lengths on request

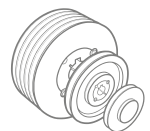


**optibelt VB S=C Plus**  
in cross section



**optibelt KS**  
**V-GROOVED PULLEYS**

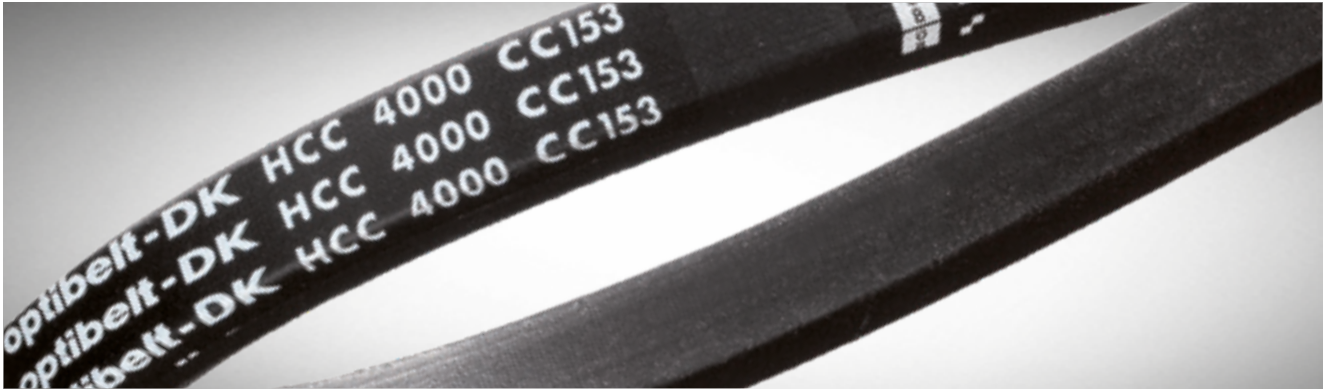
for cylindrical bore or  
for **optibelt TB taper bushes**,  
special pulleys on request





# optibelt DK

## DOUBLE SECTION V-BELTS



Due to the tensile cord situated in the centre of the belt section, **optibelt DK** double section V-belts are extremely flexible and low-stretch.

They are therefore particularly suitable for use where two-way bending occurs.

**optibelt DK** double section V-belts are used if several pulleys are located on one level and the direction of rotation of one or several driven pulleys is to be changed without crossing the belt. The **optibelt DK** double section V-belt is ideally suited for use in typical serpentine designs.

Special versions with different belt structures are possible. Double section V-belts are mainly used for agricultural machinery. They are increasingly used, however, in mechanical engineering.

### Advantages and Characteristics

- flexible and low-stretch design
- excellent running properties
- outstanding flexibility
- low-stretch characteristics
- high level of performance

### Profiles and Belt Length Ranges

AA / HAA	2000 – 3920 mm
BB / HBB	1980 – 5639 mm
CC / HCC	2280 – 5750 mm
DD / HDD	on request
22 x 22	5180 – 6270 mm
25 x 22	on request

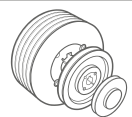
Other dimensions on request

**optibelt DK**  
in cross section



**optibelt KS**  
V-GROOVED PULLEYS

for cylindrical bore or  
for **optibelt TB** taper bushes,  
special pulleys on request



# MINIMUM TOLERANCE

- **SAVING: SAVES COSTS FOR ARTICLE MAINTENANCE AND STORAGE**
- **WITHOUT EXTRA SET IDENTIFICATION: ONE BELT FOR EACH POSITION**
- **SET CONSTANT: CAN BE USED IN A SET WITHOUT MEASUREMENT**



The norm is not enough for us. Because precision is in demand in our business. This is the only way our customers can count on the best. This is why our **S=C Plus** V-belts are closer to the nominal dimension than standards such as DIN and ISO specify. Our **S=C Plus** V-belts do not need to be bought as a set. They do not have a set ID. Thanks to the closest tolerances to the nominal dimension, each belt fits anywhere in the set without any additional measurement.



optibelt **SK** S=C Plus



optibelt **VB** S=C Plus



optibelt **RED POWER 3** S=C Plus

# MAXIMUM EFFECT.

**S=C Plus:** Due to very close tolerances to the nominal dimension, **optibelt S=C Plus** V-belts can be used anywhere in a set without being measured.

This is quality made by Optibelt.

## THE OPTIBELT

### S=C Plus STANDARD

from  $\pm 2$  mm (depending on length)



## THE PERMITTED

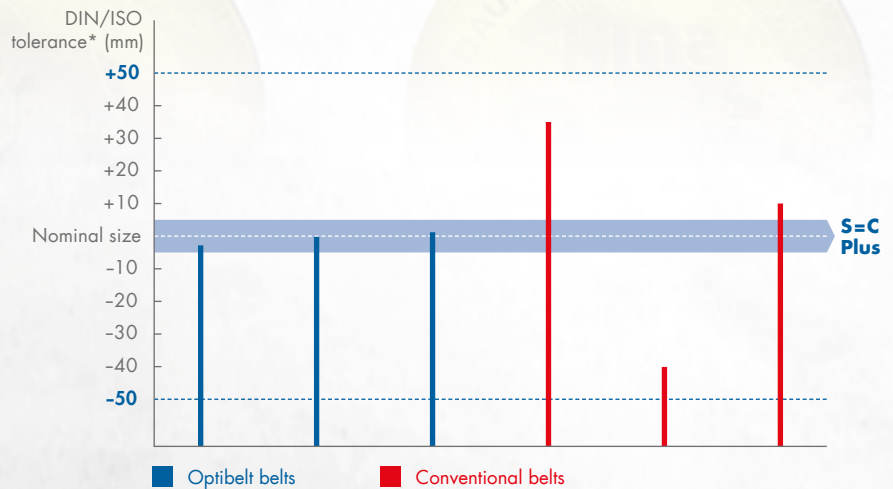
### DIN/ISO TOLERANCE

$\pm 1\%$ \*



### THE DIAGRAM SHOWS:

In comparison with the belts of our competitors, the belt sizes of our **S=C Plus** V-belts are not only closest to the nominal dimension, but also closer to the nominal length than the standard specifies for belt sets in multi-groove drives. The designation **S=C Plus** for Set=Constant guarantees a constant belt length and the lowest tolerances.



\* at nominal size 5000 mm

Example: \* Nominal dimension: 5000 mm, S=C Plus Length tolerance:  $\pm 2$  mm, Set tolerance: 4 mm, DIN - ISO Length tolerance:  $\pm 50$  mm, Set tolerance: 6 mm



# optibelt KB RED POWER 3

## HIGH PERFORMANCE KRAFTBANDS



Maintenance-free **optibelt RED POWER 3** V-belts and kraftbands achieve an up to 50% higher power transmission capacity compared to wedge belts in technical standard design. Thanks to lower maintenance costs and a reduced demand for replacements due to fewer belts and smaller pulleys, up to 35% cost savings are possible. This means that up to 18% of the costs can be saved even for new acquisitions. Additional cost savings are due to the space-saving design as well as minimised shafts and bearings.

The tension cord consists of a special polyester cord. Thanks to special treatment of the tension cord, the **optibelt RED POWER 3** high performance wedge belt is very low-stretch and maintenance-free so that re-tensioning is not necessary. The transverse fibre blend above and below the tension cord provides especially high dimensional stability. The abrasion-resistant special wrapping fabric improves the flexibility compared to wedge belts in technical standard design.

### Advantages and Characteristics

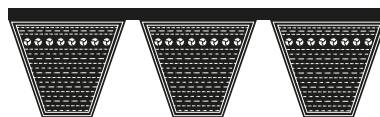
- single belt characteristics
- low-vibration operation
- V-grooved / flat pulley drives
- coupling drives
- conveying jobs

### Profiles and Belt Length Ranges

SPB KB	2240 – 10000 mm
SPC KB	2240 – 10000 mm
3V KB	880 – 3930 in /
9J	2235 – 9982 mm
5V KB	880 – 3930 in /
15J	2235 – 9982 mm
8V KB	820 – 8260 in /
25J	2083 – 20980 mm

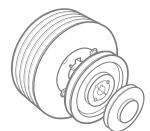
Other profiles and lengths on request

**optibelt KB RED POWER 3**  
in cross section



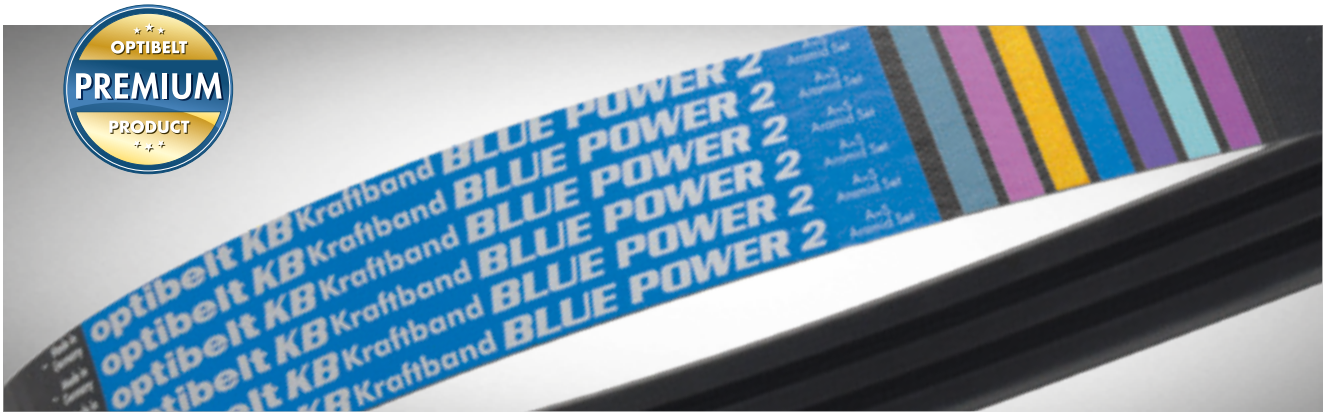
### optibelt KS V-GROOVED PULLEYS

for cylindrical bore or  
for **optibelt TB taper bushes**,  
special pulleys on request



# optibelt KB BLUE POWER 2

## HIGH PERFORMANCE KRAFTBANDS



The **optibelt KB BLUE POWER 2** Kraftbands consist of wrapped **optibelt BLUE POWER 2** high performance wedge belts which are joined together with a highly wear-resistant top surface. This compact drive element is primarily used with long centre distances and vertical shafts.

All **optibelt BLUE POWER 2** kraftbands have a set code. Each colour represents a specific set code class.

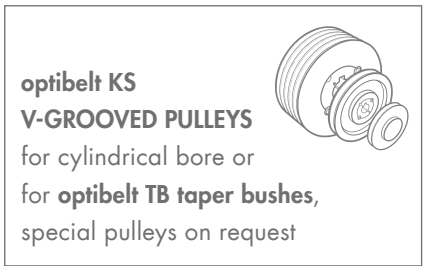
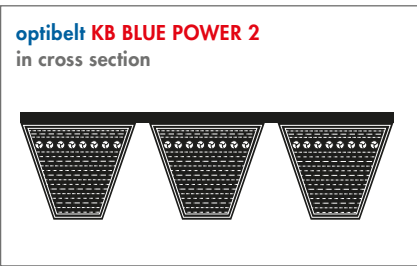
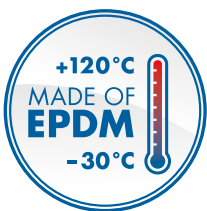
### Advantages and Characteristics

- Optibelt ensures that belts with the same class designation can be used in a set without the need for measuring.
- **optibelt KB BLUE POWER 2** V-belts ensure consistent power transmission within a temperature range of  $-30^{\circ}\text{C}$  to  $+120^{\circ}\text{C}$ .
- With the low-maintenance **optibelt KB BLUE POWER 2**, maintenance work and costs can be minimised.
- up to 10% more power compared to the previous **optibelt KB BLUE POWER**

### Profiles and Belt Length Ranges

SPC KB	2000 – 12000 mm
5V KB	80 – 492 in /
15J	2030 – 12500 mm
8V KB	80 – 826 in /
25J	2000 – 21000 mm

Other profiles and lengths on request



# optibelt **KB SK**

## KRAFTBANDS WITH WEDGE BELTS



**optibelt KB SK** kraftbands consist of single high-quality wrapped belts which are joined together with a top surface. Depending on the application, up to five wedge belts may be used per kraftband.

In special cases, kraftbands with more than five V-belts can be supplied. If several kraftbands are used next to each other, they must be ordered as a set.

**optibelt KB SK** kraftbands are used above all with extreme shock loads or large centre distances in combination with small pulley diameters and with vertical shafts.

### Advantages and Characteristics

- single belt characteristics
- low-vibration operation
- V-grooved / flat pulley drives
- coupling drives
- conveying jobs

### Profiles and Belt Length Ranges

SPZ	1170 – 18 000 mm
SPA	1170 – 18 000 mm
SPB	1170 – 21 000 mm
SPC	1900 – 21 000 mm
3V	460 – 7 080 in /
9J	1168 – 17 983 mm
5V	460 – 8 260 in /
15J	1170 – 21 000 mm
8V	820 – 8 260 in /
25J	2083 – 20 980 mm

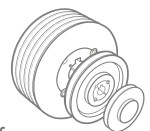
Other dimensions on request

**optibelt KB SK**  
in cross section



**optibelt KS**  
**V-GROOVED PULLEYS**

for cylindrical bore or for  
**optibelt TB** taper bushes,  
special pulleys on request





# optibelt **KB VB**

## KRAFTBANDS WITH CLASSIC V-BELTS



**optibelt KB VB** kraftbands consist of single high-quality wrapped belts which are joined together with a top surface. Depending on the application, up to five classic V-belts may be used per kraftband.

In special cases, kraftbands with more than five V-belts can be supplied. If several kraftbands are used next to each other, they must be ordered as a set.

**optibelt KB VB** kraftbands are used above all with extreme shock loads or large centre distances in combination with small pulley diameters and with vertical shafts.

### Advantages and Characteristics

- single belt characteristics
- low-vibration operation
- V-grooved / flat pulley drives
- coupling drives
- conveying jobs

### Profiles and Belt Length Ranges

A KB	1170 – 10000 mm
B KB	1170 – 21000 mm
C KB	1200 – 21000 mm
D KB	2200 – 21000 mm
E KB	3000 – 12500 mm

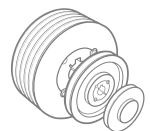
Other dimensions on request

**optibelt KB VB**  
in cross section



### optibelt KS V-GROOVED PULLEYS

for cylindrical bore or  
for **optibelt TB** taper bushes,  
special pulleys on request



# THE GENER

The maintenance-free **optibelt SUPER XE-POWER PRO M=S** is one of the best performing drive belts on the market. The innovative design of this open-flank V-belt opens up new scope in the design of frictional drives, even on the smallest pulley diameters, in extreme temperature ranges and at maximum speeds.

## PROFILES

XPZ; XPA; XPB; XPC;  
3VX/9NX; 5VX/15NX

587 – 3550 mm



# NEXT GENERATION



optibelt  
**SUPER**  
**XE-POWER**  
**PRO M=S**



# optibelt SUPER XE-POWER PRO M=S

## HIGH PERFORMANCE WEDGE BELTS



Continuous further development of the manufacturing process, improved materials, a low-stretch polyester tensile member and optimised serration form the basis of this new generation of belts.

The **optibelt SUPER XE-POWER PRO M=S** makes complex drive solutions possible in all areas of mechanical engineering under the most difficult conditions and extreme operational demands.

### Advantages and Characteristics

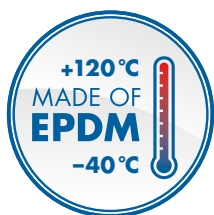
- belt made of EPDM
- temperature-resistant from  $-40\text{ }^{\circ}\text{C}$  to  $+120\text{ }^{\circ}\text{C}$
- red cushion compound for optimised bonding of the tension cord
- maintenance-free
- suitable for back bend idlers
- high power transmission with up to 20 % higher efficiency compared to standard V-belts
- M=S is always the right length for sets without measuring
- efficiency-optimised
- optimised, exceptionally smooth running properties
- static conductive; meets ISO 1813 anti-static requirements
- ATEX and RoHS compliant

### Profiles and Belt Length Ranges

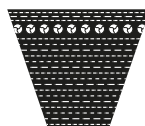
XPZ	587 – 3550 mm
XPA	707 – 3550 mm
XPB	1250 – 3550 mm
XPC	2000 – 3550 mm

3VX/9NX	250 – 1400 in
5VX/15NX	500 – 1400 in

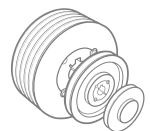
Other dimensions on request



optibelt SUPER XE-POWER PRO M=S in cross section



optibelt KS  
V-GROOVED PULLEYS  
for cylindrical bore or  
for **optibelt TB taper bushes**,  
special pulleys on request



# optibelt **SUPER X-POWER M=S**

## HIGH PERFORMANCE WEDGE BELTS



The set-constant **optibelt SUPER X-POWER M=S** V-belt is raw edge and moulded cogged. The belt is suitable for its reliability, durability and efficiency for demanding, multi-grooved drives.

Due to their identical length, the belts are always the right length for sets without measuring and are designed for extremely high loads.

### Advantages and Characteristics

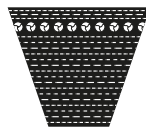
- highest performance, raw edge, moulded cogged
- up to 15% higher performance
- extremely low-stretch
- extended maintenance intervals
- optimised running characteristics
- excellent resistance to oil and heat
- M=S set-constant; is always the right length for sets without measuring
- energy and weight saving
- meets ISO 1813 anti-static requirements

### Profiles and Belt Length Ranges

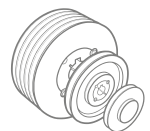
XPZ	587 – 3550 mm
XPA	707 – 3550 mm
XPB	1250 – 3550 mm
XPC	2000 – 3550 mm
3VX	250 – 1400 in /
9NX	635 – 3556 mm
5VX	500 – 1400 in /
15NX	1270 – 3556 mm

Other dimensions on request

**optibelt SUPER X-POWER M=S**  
in cross section



**optibelt KS**  
**V-GROOVED PULLEYS**  
for cylindrical bore or  
for **optibelt TB taper bushes**,  
special pulleys on request



# optibelt SUPER KBX-POWER

## HIGH PERFORMANCE KRAFTBANDS



optibelt SUPER KBX-POWER kraftbands consist of optibelt SUPER X-POWER V-belts which are joined together with a highly wear-resistant top surface.

These kraftbands display considerably improved tension behaviour compared to conventional raw edge kraftbands.

Depending on the application, up to five ribs may be used per kraftband. If several kraftbands are used next to each other, they must be ordered as a set.

optibelt SUPER KBX-POWER kraftbands are recommended for use with extreme impact loads, vertically running axes, large centre distances and many other special tasks in the field of mechanical and vehicle engineering. The power ratings correspond to the profiles of optibelt SUPER X-POWER V-belts.

### Advantages and Characteristics

- compact drive solutions
- increased power transmission capacity
- low-stretch / low maintenance
- optimised running characteristics
- small pulley diameter / large belt span

#### Kraftbands

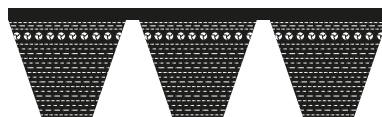
- single belt characteristics
- low-vibration operation
- V-grooved / flat pulley drives
- coupling drives
- conveying jobs

### Profiles and Belt Length Ranges

3VX KB	500 – 1400 in /
9JX	1270 – 3556 mm
5VX KB	500 – 1400 in /
15JX	1270 – 3556 mm

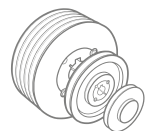
Other dimensions on request

optibelt SUPER KBX-POWER  
in cross section



### optibelt KS V-GROOVED PULLEYS

for cylindrical bore or  
for optibelt TB taper bushes,  
special pulleys on request





# optibelt VARIO POWER

## VARIABLE SPEED BELTS



The base compound consists of a poly-chloroprene rubber compound with fibres inlaid transversely to the running direction. The high-quality and extremely low-stretch polyester or aramid tension cord is embedded in a cushion compound. It is reinforced with a fabric outer surface, and the transverse fibres incorporated provide transverse rigidity without sacrificing flexibility.

**optibelt VARIO POWER** variable speed belts are the preferred choice for infinitely variable speed control. The special belt structure allows high dynamic loads, superior power transmission capability and excellent control characteristics.

**Also available as a double-sided belt.**

### Advantages and Characteristics

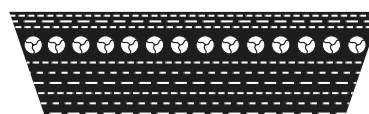
- high power transmission
- long service life
- smooth running even at high speeds
- high flexibility
- optimised heat dissipation

### Profiles and Belt Length Ranges

Width: from 10 to ~85 mm  
 Height: from 5 to ~30 mm  
 Inside length: from 550 to ~3500 mm  
 Angles: from 22° to 42°  
 These dimensions can be manufactured on request

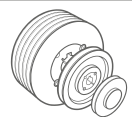
Other dimensions on request

**optibelt VARIO POWER**  
in cross section



### optibelt KS V-GROOVED PULLEYS

for cylindrical bore or for **optibelt TB** taper bushes, variator pulleys on request



# V-RIBBED BELTS



Very good dynamic power transmission capability



High performance



Low vibration,  
Low noise



Withstands shock loads and short-term overload



High belt speeds are possible



Use with deflection pulleys is possible

**optibelt RB – FLEXIBLE SERVICE PROVIDER**

The V-ribbed belt combines the high flexibility of the flat belt with the high performance of the V-belt. The wear-resistant rubber compound ensures smooth running, maximum oil and heat resistance and a long service life.





# optibelt **RB**

## RIBBED BELTS



The **optibelt RB** ribbed belt combines the high flexibility of flat belts with the high performance of V-belts. The V-shaped parallel ribs are made from a wear-resistant rubber compound. The high strength tension cord is designed for the many applications of the ribbed belt.

It is embedded in a rubber adhesive mixture and covers the entire width of the ribbed belt. Fibre-reinforced, wear-resistant rubber compounds ensure quiet operation, oil and heat resistance and a long belt life.

The smallest possible pulley pulley diameters meet the requirements of drives with high speed ratios as well as the demands of slow running drives.

### Advantages and Characteristics

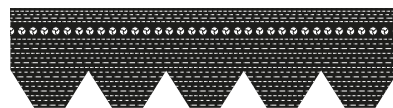
- very good dynamic power transmission capability
- good coefficient of friction and high performance
- low vibration and noise
- withstands shock loads and short-term overload
- high belt speeds are possible
- can be used with idler pulleys, e.g. in serpentine drives

### Profiles and Belt Length Ranges

PH	698 – 2155 mm
PJ	280 – 2489 mm
PK	630 – 2845 mm
PL	954 – 6096 mm
PM	2286 – 15266 mm

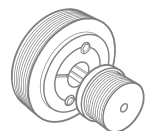
Other dimensions on request

**optibelt RB**  
in cross section



### optibelt RIBBED BELT PULLEYS

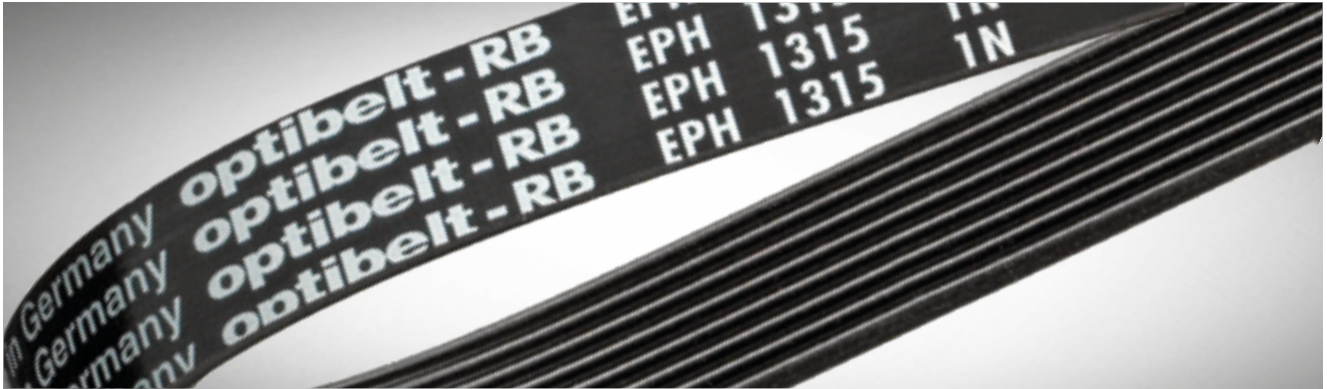
all standard pulleys,  
special pulleys on request





# optibelt ERB

## ELASTIC RIBBED BELTS



Elastic ribbed belt profiles EPH and EPJ consist of a superstructure, an elastic tension cord and a base compound.

The superstructure is made from a fibre-reinforced rubber mixture. The fibres are laid perpendicular to the direction of belt travel and stabilise the belt during dynamic operation.

The tension cord is a high modulus polyamide material embedded in a rubber compound and covers the entire width of the ribbed belt. The rib compound is characterised by high wear resistance and damping properties.

### Advantages and Characteristics

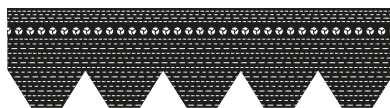
- Assembly is possible on fixed centres with no need for adjustment for belt tensioning.
- easy assembly on the production line
- Only one belt length may be usable for different drive configurations.
- good shock load resistance due to high elasticity of belt
- maintenance-free
- easy assembly in service areas

### Profiles and Belt Length Ranges

EPH	698 – 2155 mm
EPJ	280 – 2489 mm

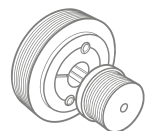
Other dimensions on request

optibelt ERB  
in cross section



optibelt  
RIBBED BELT PULLEYS

standard range,  
special pulleys on request



# TIMING BELTS

## RUBBER



### LONGER SERVICE LIFE

The use of new materials makes it possible to extend the life span even further compared to **optibelt OMEGA HP**, depending on the application.



### REDUCED NOISE LEVEL

Lower noise emissions thanks to an optimised tooth form with a comparable width and profile



### TEMPERATURE RESISTANCE

Temperature resistance from -30 °C to +100 °C



### ELECTRICALLY CONDUCTIVE

Certified as per ISO 9563



### LIMITED OIL RESISTANCE

The aramid fibre-reinforced polychloroprene rubber compound shows significantly greater resistance to oil than comparable EPDM compounds.



### MORE EFFICIENCY - MORE POWER

Up to 98 % efficiency



**optibelt OMEGA High Power - HIGH PERFORMANCE AND UNIVERSAL**

Timing belt for extreme loads and synchronous power transmission





# MASTERY OF THE DRIVE

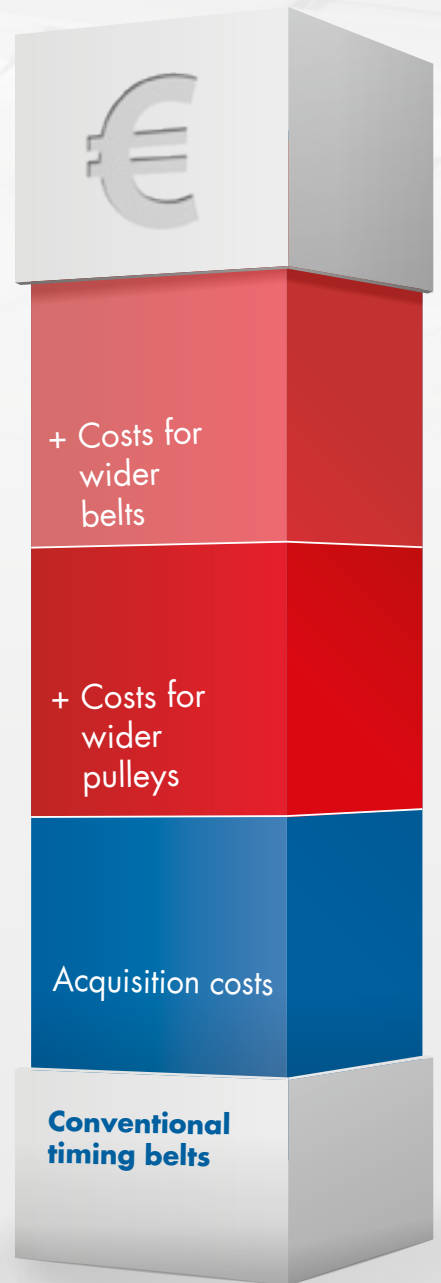
**TIMING BELTS OF THE optibelt OMEGA SERIES ARE OPTIMISED FOR USE IN SYNCHRONOUS POWER AND POSITIONING DRIVES.**

Since their geometry has been matched to the common rounded pulleys, they are not only universally applicable, but also work maintenance-free without speed loss and with a constant transmission ratio, while at the same time running very quietly. While the **optibelt OMEGA** standard belt meets medium power requirements for slow and fast running drives, the **optibelt OMEGA High Power** is the best choice for extremely heavily loaded, fast running drives. It is not only narrower, which reduces the bearing load and further reduces material costs for the drive implementation, but also achieves a performance level that is up to 150 percent higher than that of a standard belt in a direct comparison with it.



optibelt OMEGA High





n Power

# OMEGA 2 IN 1

## PERFECT FIT WITH HTD AND RPP

### OPTIMAL COMPATIBILITY

The enhanced profile of the **optibelt OMEGA 2in1** fits perfectly with HTD and RPP drive pulleys with 3, 5, 8 and 14 mm gaps. The **optibelt OMEGA 2in1** is the logical further development of rounded and curvilinear tooth profiles. With an efficiency of 98 %, the **optibelt OMEGA 2in1** combines maximum economy with optimum power transmission. Its special profile is compatible with HTD and RPP drive pulleys. That is: One drive belt covers both pulley types perfectly - without any double stockholding. And thanks to the special tooth profile, it is audibly quieter than other timing belts.



#### MINIMUM NOISE LEVEL

Lower noise emissions due to special Omega tooth shape



#### TEMPERATURE RESISTANCE

Temperature resistance from -30°C to +100°C



#### OPTIMAL COMPATIBILITY

For use in HTD and RPP pulleys



#### MORE EFFICIENT – MORE POWER

Up to 98 % efficiency



#### MAXIMUM ECONOMY

Maintenance-free



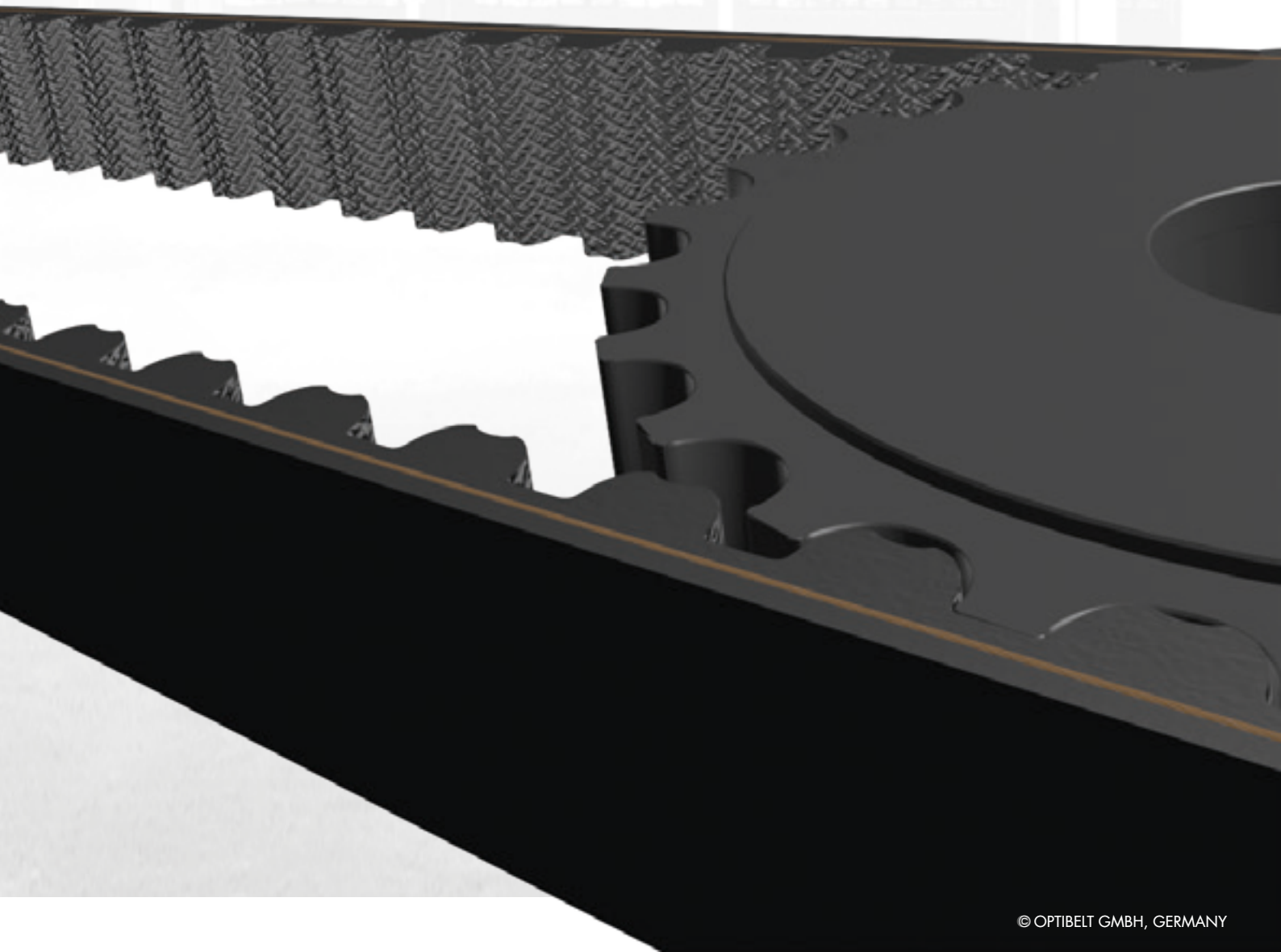
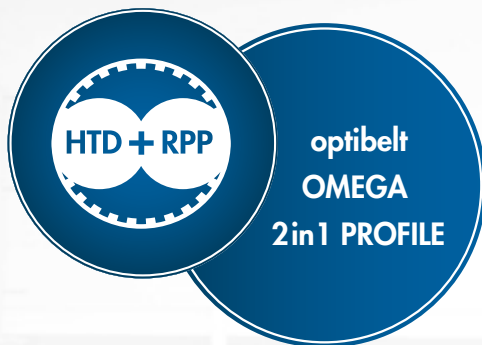
#### FLEXIBLE USE

No double stockholding



### THE PROFILE MAKES THE DIFFERENCE

Thanks to the special tooth form of the **optibelt OMEGA 2in1**, air can escape laterally from the drive pulleys. Contact with the drive pulley is virtually frictionless and noiseless.



# optibelt OMEGA High Power

## HIGH PERFORMANCE TIMING BELTS



Compact synchronous drives are used throughout the entire spectrum of mechanical drive engineering. A high performance capacity, good running behaviour and high operational reliability are just some of the requirements placed on timing belts. Modern manufacturing techniques and quality testing in all processing stages ensure products with maximum reliability and a consistently high quality standard.

**optibelt OMEGA High Power** high performance timing belts have been specially developed for very heavily loaded, slow and fast running drives that are subject to even loading without heavy impacts. This extremely high level of performance is based on improved materials and an optimised combination of these materials.

### Advantages and Characteristics

Due to the combination of a very dimensionally stable structure and good flexibility, very low permanent and elastic elongation of the cord, and a shear-resistant fabric with minimised friction and abrasion, it is possible to achieve the following:

- up to 2.5 times the power transmission capacity of the basic **optibelt OMEGA** timing belts, and a performance increase of up to +150 %
- an increase of around 25 % in power transmission compared to the proven high performance **optibelt OMEGA HP**
- suitable for low and high speed drives with high dynamic loading
- good resistance during even running, with low and medium impact loading
- broad application spectrum
- Electrical conductivity can be verified according to ISO 9563 on request.

### Profiles and Belt Length Ranges

8M 288 – 3600 mm

14M 966 – 4578 mm

S8M 560 – 2600 mm

Other dimensions on request

#### optibelt OMEGA High Power in cross section

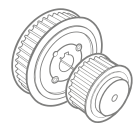


#### optibelt ZRS TIMING BELT PULLEYS

8M/ 14M timing belts

run in standard HTD/RPP pulleys.

S8M timing belts run in STD pulleys.





# optibelt OMEGA High Load

## HIGH PERFORMANCE TIMING BELTS



The **optibelt OMEGA High Load** with 8M and 14M profiles has been specially designed for drives with high torques and high-impact loading. The design and the material of the timing belt have been optimised so that the highest functional reliability and optimum efficiency are achieved when a drive is reconfigured.

The innovative glass cord used in the belt is characterised by the following properties:

- good resistance to impact loads
- excellent resistance to dynamic loading
- very low permanent and elastic elongation

The pre-tensioning loss of the **optibelt OMEGA High Load** under load is minimal compared to that of the aramid cord. This means that the pitch is maintained and the teeth are evenly loaded. The **optibelt OMEGA High Load** also demonstrates its strength in the medium and high speed ranges – which expands its area of application even further.

### Advantages and Characteristics

Due to the combination of a very dimensionally stable structure and good flexibility, very low permanent and elastic elongation of the cord, and a shear-resistant fabric with minimised friction and abrasion, it is possible to achieve the following:

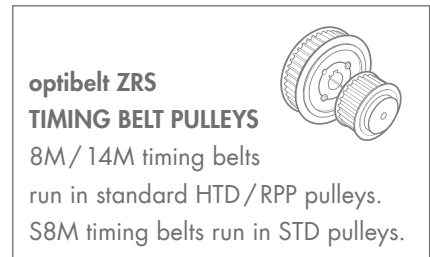
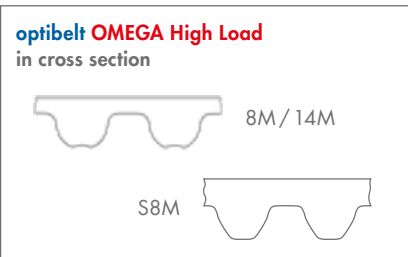
- up to 3 times the power transmission capacity of the basic **optibelt OMEGA** timing belts, and a performance increase of up to +222 %
- an increase of around 30 % in power transmission compared to the proven high performance **optibelt OMEGA High Power**
- suitable for low and high speed drives with high dynamic loading
- good resistance even to medium and high impact loading

### Profiles and Belt Length Ranges

8M 288 – 3600 mm  
14M 966 – 4578 mm

S8M 560 – 2600 mm

Other dimensions on request



# optibelt OMEGA HP

## CHLOROPRENE TIMING BELTS



The **optibelt OMEGA HP** high performance timing belt was especially developed for heavily loaded, high speed drives. Improved materials and highly developed process engineering form the basis for this high performance level.

For every power transmission requirement there is an appropriate belt section. Faster, stronger, more compact – that's how the **optibelt OMEGA HP** presents itself. A timing belt to meet the highest demands.

### Advantages and Characteristics

- glass cord
- suitable for low and high speed, high dynamic load drives
- shear-resistant fabric with minimised wear and friction
- up to 2 times the power transmission capacity of the **optibelt OMEGA** standard

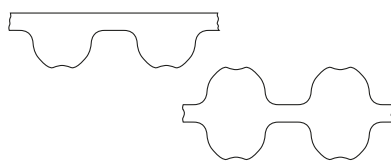
### Profiles and Belt Length Ranges

2M HP	74 – 1224 mm
3M HP	111 – 1692 mm
5M HP	180 – 2525 mm
8M HP	288 – 3600 mm
14M HP	966 – 4578 mm

D8M HP 1120 – 3600 mm

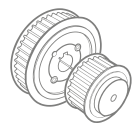
Other dimensions on request

**optibelt OMEGA HP / double-sided**  
in cross section



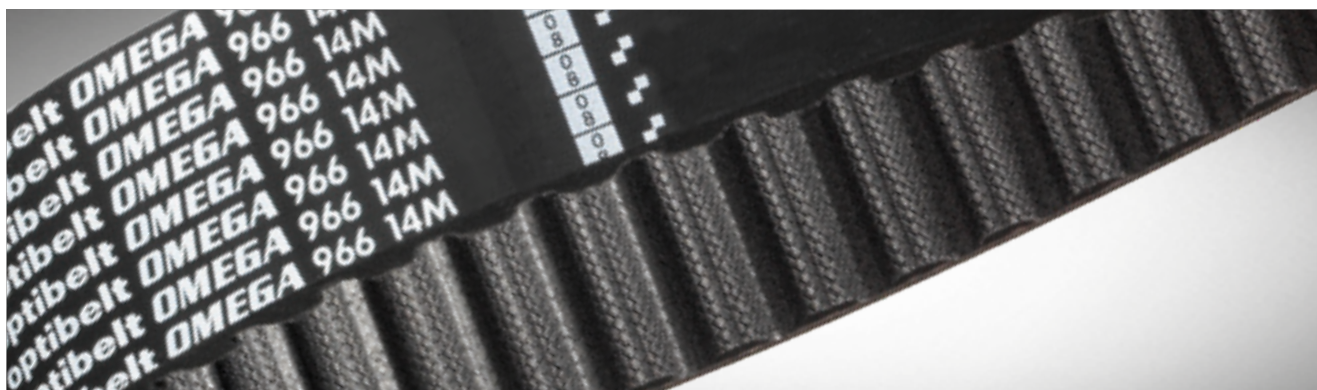
### optibelt ZRS TIMING BELT PULLEYS

**optibelt OMEGA**  
timing belts run in  
standard HTD and RPP pulleys



# optibelt OMEGA

## CHLOROPRENE TIMING BELTS



The **optibelt OMEGA** timing belt has the same performance level as the established **optibelt HTD** timing belt and supersedes it. The **optibelt OMEGA** is best for medium performance drives in all speed ranges without heavy shock loading.

Double-sided timing belts for drives with reversible speed can be delivered with HTD profiles.

**optibelt OMEGA** timing belts set standards for synchronous power transmission and positioning drives.

### Advantages and Characteristics

- glass cord
- synchronous speed
- highest precision
- perceptibly lower noise level due to the **optibelt OMEGA** tooth profile
- maintenance-free
- temperature-resistant  
from  $-30\text{ }^{\circ}\text{C}$  to  $+100\text{ }^{\circ}\text{C}$
- up to 98% efficiency

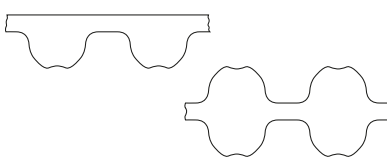
### Profiles and Belt Length Ranges

2M	74 – 1224 mm
3M	111 – 1863 mm
5M	120 – 2525 mm
8M	288 – 4400 mm
14M	966 – 4578 mm

D8M	1120 – 3600 mm
D14M	1190 – 4578 mm

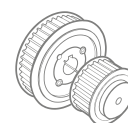
Other dimensions on request

**optibelt OMEGA / double-sided**  
in cross section



### optibelt ZRS TIMING BELT PULLEYS

**optibelt OMEGA**  
timing belts run in  
standard HTD and RPP pulleys



# optibelt **OMEGA FAN POWER**

## HIGH PERFORMANCE CHLOROPRENE TIMING BELTS



The requirements placed upon fan drives in the oil industry are high. The following product characteristics are expected: long service life, maintenance-free, high level of power transmission and anti-static behaviour in accordance with ISO 9563, non-sensitive to external influences such as temperature fluctuations and moisture.

The special tooth form and the use of particularly resistant materials ensure that **optibelt OMEGA FAN POWER** fulfills these fan drive requirements without compromise.

### Advantages and Characteristics

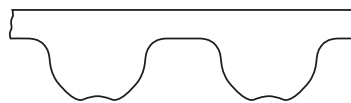
- glass cord
- anti-static in accordance with ISO 9563
- optimised for low tooth meshing wear
- long service life
- maintenance-free
- high efficiency
- constant flow of air thanks to synchronous operation
- resistant to external influences such as variations in temperature and moisture

### Profiles and Belt Length Ranges

8M FP 960 – 3600 mm  
14M FP 1400 – 4578 mm

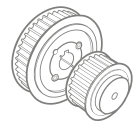
Other dimensions on request

**optibelt OMEGA FAN POWER**  
in cross section



**optibelt ZRS**  
**TIMING BELT PULLEYS**  
**optibelt OMEGA**

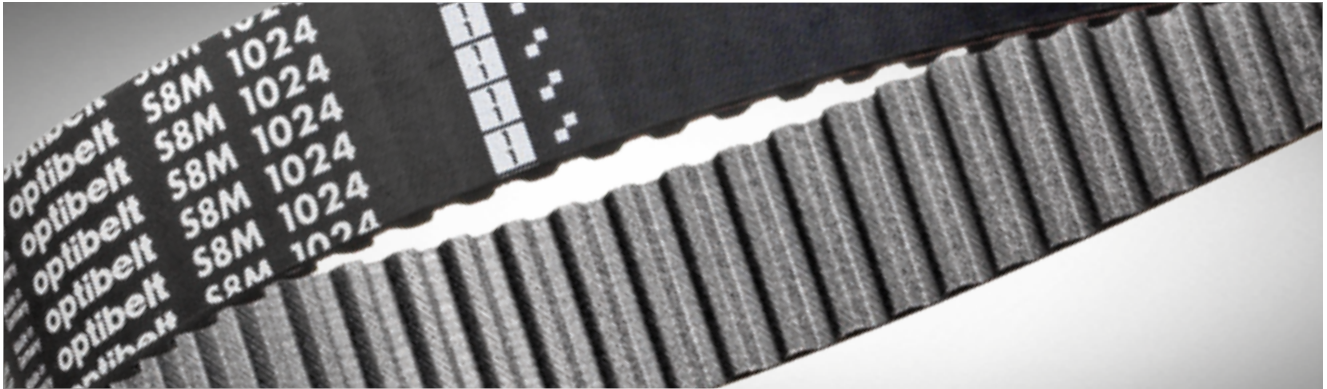
timing belts run in  
standard HTD and RPP pulleys





# optibelt STD

## CHLOROPRENE TIMING BELTS



optibelt STD timing belts have semi-circular teeth for special shear strength.

The timing belt tooth geometry combined with the belt structure leads to even load distribution and optimised engagement with the timing belt pulley.

optibelt STD are also available in HP or HL quality.

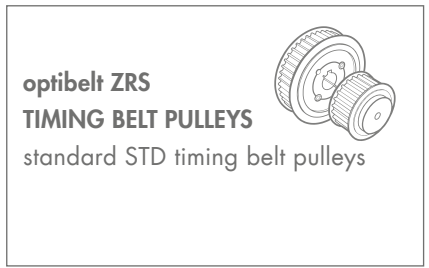
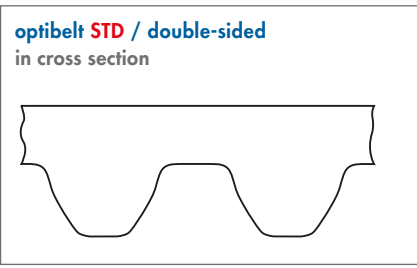
### Advantages and Characteristics

- for existing drives with STD profile
- noise level comparable to **optibelt OMEGA** profile
- interchangeability of the belt for existing pulleys
- for universal application
- ability to run in existing pulleys without loss of performance
- maintenance-free
- temperature-resistant from  $-30\text{ }^{\circ}\text{C}$  to  $+100\text{ }^{\circ}\text{C}$

### Profiles and Belt Length Ranges

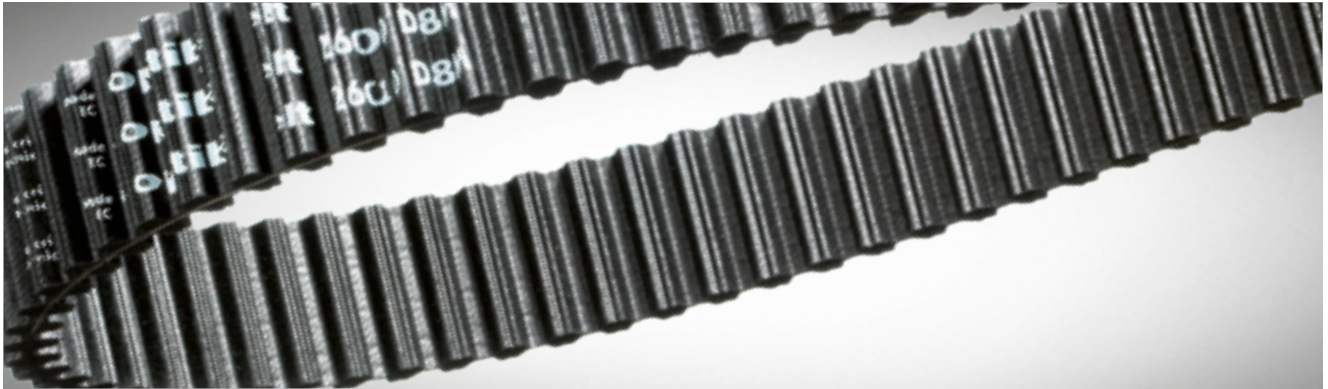
S3M	120 – 633 mm
S5M	255 – 2000 mm
S8M	440 – 3200 mm
S14M	1400 – 5012 mm
DS8M	1160 – 1776 mm

Other dimensions on request



# optibelt **OMEGA** double-sided

## TIMING BELTS MADE OF CHLOROPRENE



The double-sided **optibelt OMEGA** timing belt delivers the same proven high performance levels as the double-sided **optibelt HTD** timing belt which it replaces.

The **optibelt OMEGA** timing belt meets today average power requirements for slow to fast running drives without special shock loading.

### Advantages and Characteristics

- high precision, synchronous running
- reduced noise levels
- maintenance-free
- up to 98 % efficiency

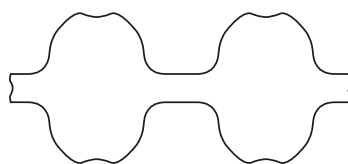
### Profiles and Belt Length Ranges

D8M 1120 – 3600 mm  
D14M 1190 – 4578 mm

Other dimensions on request

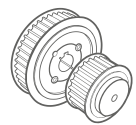


**optibelt OMEGA** double-sided  
in cross section



### optibelt ZRS TIMING BELT PULLEYS

**optibelt OMEGA**  
timing belts run in  
standard HTD and RPP pulleys



# optibelt OMEGA HP double-sided

## HIGH PERFORMANCE CHLOROPRENE TIMING BELTS



The double-sided **optibelt OMEGA HP** high performance timing belt was especially developed for heavily loaded, high speed drives.

Improved materials and highly developed process engineering are the basis for this very high performance level.

In contrast to double-sided **optibelt OMEGA** timing belts, the **optibelt OMEGA HP** with improved performance achieves clear cost savings in new designs of multi-pulley drives due to significantly smaller **optibelt ZRS** timing belt pulleys. In the case of existing, but overloaded multi-pulley drives with RPP, HTD or **optibelt OMEGA** timing belts of basic design, **optibelt OMEGA HP** high performance timing belts are also suitable as problem-solvers that have the potential to greatly increase short operating times.

Faster, stronger, more compact – that is how the new double-sided **optibelt OMEGA HP** presents itself. A timing belt to meet the highest demands.

### Advantages and Characteristics

- suitable for low and high speed, dynamically heavily loaded drives with speed reversion
- approximately double the power transfer compared to **optibelt OMEGA** timing belts in the basic design
- broad application spectrum
- for HTD and RPP timing belt pulleys

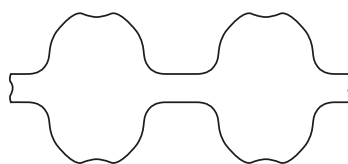
### Profiles and Belt Length Ranges

8M FP 1120 – 3600 mm

Other dimensions on request

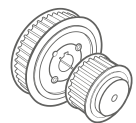


**optibelt OMEGA HP double-sided**  
in cross section



### optibelt ZRS TIMING BELT PULLEYS

**optibelt OMEGA** timing belts run in standard HTD and RPP pulleys





# optibelt **OMEGA HP LINEAR**

## OPEN-ENDED HIGH PERFORMANCE TIMING BELTS



optibelt **OMEGA HP LINEAR** timing belts made of chloroprene with glass cord are open-ended timing belts made from spiral cut coils.

### Advantages and Characteristics

- high tensile strength
- low stretch
- high positioning accuracy
- maintenance-free

### Profiles and Belt Length Ranges

3M HP	6 – 15 mm
5M HP	10 – 25 mm
8M HP	10 – 30 mm

Standard roll length 30 m

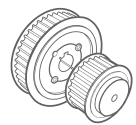
optibelt **OMEGA HP LINEAR**  
in cross section



### TIMING BELT PULLEYS

optibelt **OMEGA**

timing belts run in standard HTD and RPP pulleys



# optibelt OMEGA LINEAR

## TIMING BELTS



optibelt OMEGA LINEAR timing belts made of chloroprene with glass cord are open-ended timing belts made from spiral cut coils.

### Advantages and Characteristics

- high tensile strength
- low stretch
- high positioning accuracy
- maintenance-free

### Profiles and Belt Length Ranges

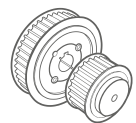
3M	9 mm
5M	10 – 25 mm
8M	10 – 25 mm

### optibelt OMEGA LINEAR in cross section



### TIMING BELT PULLEYS optibelt OMEGA

timing belts run in standard HTD and RPP pulleys



# optibelt **STD LINEAR**

## OPEN-ENDED HIGH PERFORMANCE TIMING BELTS



**optibelt STD LINEAR** timing belts made of chloroprene with glass cord are open-ended timing belts made from spiral cut coils.

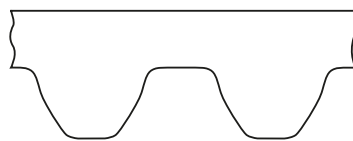
### Advantages and Characteristics

- high tensile strength
- low stretch
- high positioning accuracy
- quieter than **optibelt HTD**, **optibelt ZR** and timing belts made of polyurethane
- maximum angular misalignment 0.67° (depending on width)
- maintenance-free
- for medium to high loading
- with reference to ISO 13050

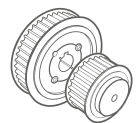
### Profiles and Belt Length Ranges

- S5M HP 10 – 25 mm
- S8M HP 10 – 25 mm

**optibelt STD LINEAR**  
in cross section



**optibelt ZRS**  
TIMING BELT PULLEYS  
standard STD timing belt pulleys





# optibelt DELTA Chain



# POLYURETHANE TIMING BELTS



## **BETTER PERFORMANCE**

For drives with  
high torque



## **UNMATCHED SHOCK RESISTANCE**

Tear and shock load-resistant  
for heavy-duty use



## **DOUBLE POWER TRANSMISSION**

Compared to high performance rubber timing belts  
– particularly in the case of high torques and dynamic  
loads



## **NEWLY DEVELOPED FABRIC**

Innovative special fabric  
with optimised tooth form



**optibelt DELTA Chain – POWERFUL INNOVATION**

Optibelt is setting new standards in drive technology with the **optibelt DELTA Chain** with exceptional tensile strength and durability. Designed for high torques, this innovative high-performance timing belt with carbon cord delivers optimum performance even under extreme loads and is therefore an optimum alternative to drives with roller chains.



optibelt DELTA Chain 896 8MDC-21  
optibelt DELTA Chain 896 8MDC-21  
optibelt DELTA Chain 896 8MDC-21  
optibelt DELTA Chain 896 8MDC-21





# optibelt DELTA Chain

## HIGH PERFORMANCE POLYURETHANE TIMING BELTS



Highly dynamic, tough, tear-resistant, durable, and brand new:

The **optibelt DELTA Chain** with carbon cord is the perfect alternative to drives with roller chains. Designed for high torque, it delivers the best performance values even under extreme conditions and high loads.

Our innovation studies showed in extensive tests that a performance increase of up to 100% over comparable high performance rubber timing belts is possible.

### Advantages and Characteristics

- optimised tooth form
- unmatched shock resistance
- best temperature resistance
- double power transmission
- newly developed special fabric
- high reliability

### A NEW MATERIAL GENERATION

- tear-resistant for heavy demand
- durable
- for drives with high torque

### Profiles and Belt Length Ranges

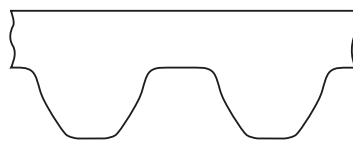
8M DC 640 – 4480 mm

14M DC 994 – 4410 mm  
(on request)

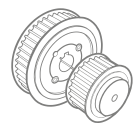
Other dimensions on request



**optibelt DELTA Chain**  
in cross section



**optibelt ZRS**  
**TIMING BELT PULLEYS**  
**optibelt DELTA Chain**



timing belts run in standard  
ZRS DC, CTD and PC pulleys

# optibelt ALPHA POWER

## HIGH PERFORMANCE POLYURETHANE TIMING BELTS



The powerful **optibelt ALPHA POWER** timing belts are the result of consistent further development. The wide-ranging experience gained with ALPHA standard timing belts is now reflected in this belt generation. Made with a new, more resistant and more durable polyurethane compound, the performance of this generation is up to 30% higher than that of the previous standard belt.

By enabling a more compact drive design, the **optibelt ALPHA POWER** cuts costs, starting with the purchase costs for new belts and pulleys. The optimised interplay of the polyurethane and steel cord components guarantees the **optibelt ALPHA POWER** an extremely economical solution for a wide range of applications.

### Advantages and Characteristics

- higher power transfer – up to 30% in comparison with conventional standard polyurethane timing belts
- very accurate pitch and low tolerances
- strong attachment of polyurethane to tension cord
- variable position of the tolerance zone, for fixed centre distances, for example
- tension cords: steel, highly flexible steel, stainless steel

### Profiles and Belt Length Ranges

T2,5	107,5 – 950 mm
T5	165 – 1440 mm
T10	260 – 2250 mm
AT3	150 – 816 mm
AT5	200 – 1500 mm
AT10	500 – 1940 mm
DT5	300 – 1100 mm
DT10	600 – 1880 mm

Other dimensions on request

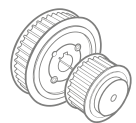


**optibelt ALPHA POWER**  
in cross section



### optibelt ZRS TIMING BELT PULLEYS

all standard pulleys,  
special pulleys on request



# optibelt ALPHA TORQUE

## POLYURETHANE TIMING BELTS



The **optibelt ALPHA TORQUE** is extremely abrasion-resistant; oil resistance is a standard feature as well as some resistance to acids and alkaline solutions.

Low-stretch steel cords with high flexibility are used.

### Advantages and Characteristics

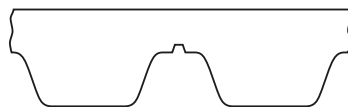
- useful sleeve widths of up to 380 mm
- unlimited choice of colours on request
- position of tolerance field variable, e.g. for fixed drive centre distances
- tension cords: steel, highly flexible steel, stainless steel, aramid, polyester, Vectran®

### Profiles and Belt Length Ranges

T2,5	107.5 – 950 mm
T5	165 – 1440 mm
T10	260 – 2250 mm
AT5	200 – 1500 mm
AT10	500 – 1940 mm
DT5	300 – 1100 mm
DT10	260 – 1880 mm
MXL	2.40 – 32.00 in
XL	6.00 – 67.00 in
L	12.38 – 60.00 in

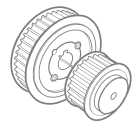
Other dimensions on request

**optibelt ALPHA TORQUE**  
in cross section



### optibelt ZRS TIMING BELT PULLEYS

all standard pulleys,  
special pulleys on request



# optibelt ALPHA FLEX

## POLYURETHANE TIMING BELTS



The **optibelt ALPHA FLEX** timing belt is manufactured as an endless belt without any breaks in the tensile reinforcement. This means that two spirally wound tension cords are used. This ideal combination of extremely strong tension cords and the use of polyurethane makes these timing belts suitable for universal application in areas where high performance must be transmitted in systems with large centre distances.

The principal uses are drive systems requiring very long belts, such as very long conveyors, or in operational situations with demanding performance requirements.

### Advantages and Characteristics

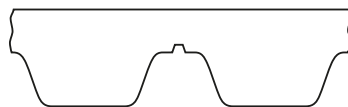
- length range can be manufactured according to gradations in pitch
- production widths 100 mm and 150 mm
- optionally with polyamide fabric on the teeth
- direct welding on of cams and wedges possible
- with options of highly flexible and stainless steel tension cords
- available with S or Z cord twist
- double-sided profiles for DT5, DT10, DAT5, DAT10, D5M, D8M available

### Profiles and Belt Length Ranges

T5	1100 – 12000	mm
T5K6	1500 – 12000	mm
T10	1100 – 12000	mm
T20	1500 – 12000	mm
AT5	1100 – 12000	mm
AT5K6	1500 – 12000	mm
AT10	1100 – 12000	mm
AT10K13	1500 – 12000	mm
AT20	1500 – 12000	mm
5M	1100 – 12000	mm
8M	1104 – 12000	mm
14M	1512 – 11 998	mm
H	1104.9 – 11 998.8	mm

Other dimensions on request

**optibelt ALPHA FLEX**  
in cross section



### optibelt ZRS TIMING BELT PULLEYS

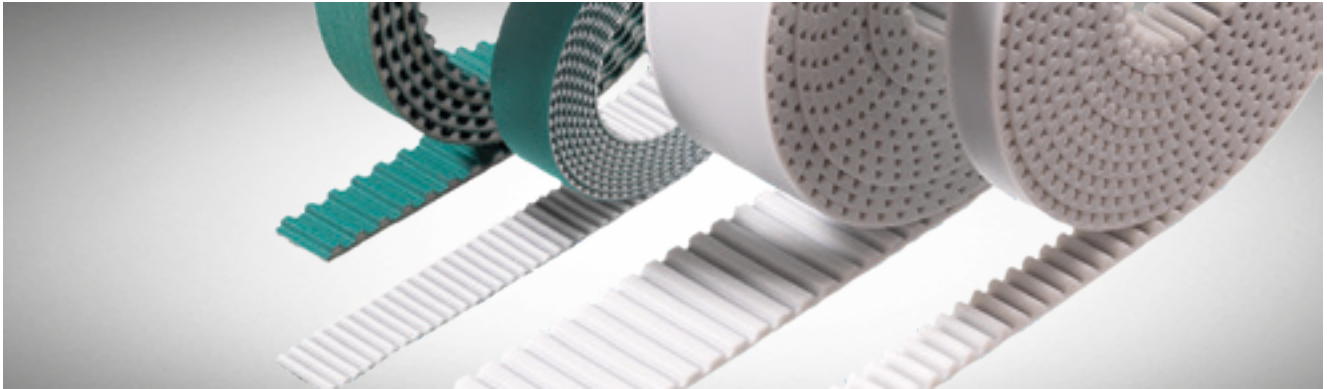
all standard pulleys,  
special pulleys on request





# optibelt ALPHA LINEAR

## POLYURETHANE TIMING BELTS



The **optibelt ALPHA LINEAR** timing belt is predominantly used in linear drive systems as a large-dimension open-ended belt. The aramid or steel tension cord has extremely low elasticity. The large range of profiles and lengths makes a host of drive solutions possible.

The thermoplastic polyurethane surface is ideal for applying various coatings and welding on cams and lugs.

The main areas of application for the **optibelt ALPHA LINEAR** are found in the field of transport and conveyor technology as well as in the areas of processing and control technology.

### Advantages and Characteristics

- high tensile strength with low elongation
- high-precision positioning
- tension cords: steel, highly flexible steel, stainless steel, aramid
- with options of reinforced belt back, T2, yellow PU foam and APL plus
- ATL version timing belts for linear drives
- polyamide fabric supports on tooth side and/or belt top surface available
- PU also available with FDA approval for food contact
- optional colours available

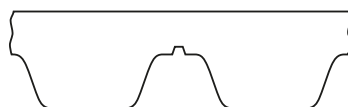
### Profiles

XL; L; H; XH;  
 T5; T10; T20;  
 AT5; AT10; AT20;  
 ATL5; ATL10; ATL20;  
 5M; 8M; 14M; 8ML; 14ML; 14MLP;  
 S8M;  
 F2; F2.5; F3; F4.5; FL3;  
 T5K6; T10K6; T10K13;  
 AT5K6; AT10K6; AT10K13;  
 DT5; DT10; DAT5; DAT10

### Roll Length

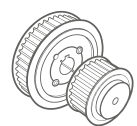
50 m or 100 m  
 > 100 m available on request

**optibelt ALPHA LINEAR**  
 in cross section



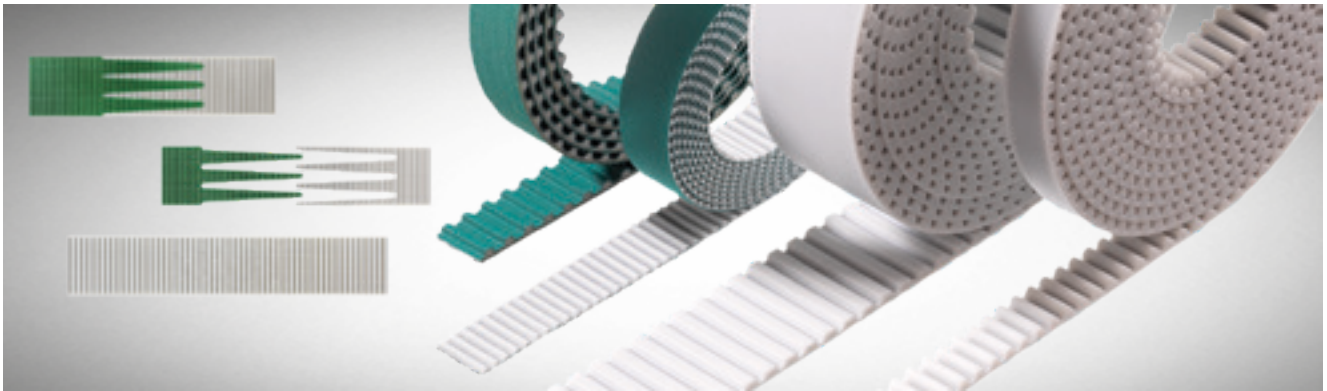
**optibelt ZRS**  
**TIMING BELT PULLEYS**

all standard pulleys,  
 special pulleys on request



# optibelt ALPHA V

## POLYURETHANE TIMING BELTS



The **optibelt ALPHA V** timing belts are made from open-ended, extruded **optibelt ALPHA LINEAR** timing belts that are welded together to achieve the specified length. They are used primarily in transport systems.

Due to the high strength of the thermoplastic polyurethane, welded timing belts exhibit, despite the interrupted tensile reinforcement, a permissible connection tensile force in the finger-shaped connection point, which reaches at least 50 % of the permissible tensile reinforcement of a belt with uninterrupted cords.

When polyamide fabric is welded to the polyurethane belts, the fabric is simply butt jointed and not bonded together at its ends. In contrast, reinforced top surfaces and T2, yellow PU foam and APL plus coatings as well as the tooth side of the belt can be welded together as a joint-free composite.

### Advantages and characteristics

- lengths can be manufactured according to gradations in pitch
- can be supplied cost-effectively and at short notice
- ideal for transport drives
- Also available with polyamide fabric on the tooth side and/or belt back
- PU also available with FDA approval for food contact
- the reinforced top surface version and the T2, yellow PU foam and APL plus versions can be welded on without a joint
- direct welding on of cams and wedges
- despite discontinuous tension cords, these belts offer approx. 50% of the performance of endless timing belts

### Profiles

XL; L; H; XH;  
 T5; T10; T20; TT5;  
 AT5; AT10; AT20;  
 5M; 8M; 14M;  
 T5K6; T10K6; T10K13;  
 AT5K6; AT10K6; AT10K13;  
 F2; F2.5; F3; F4.5;  
 ATC10; ATC20;  
 DT5; DT10; DAT5; DAT10

### Minimum welding length

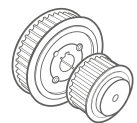
All profiles and widths from 1100 mm, smaller widths depending on the profile from 400 mm length

**optibelt ALPHA V**  
in cross section



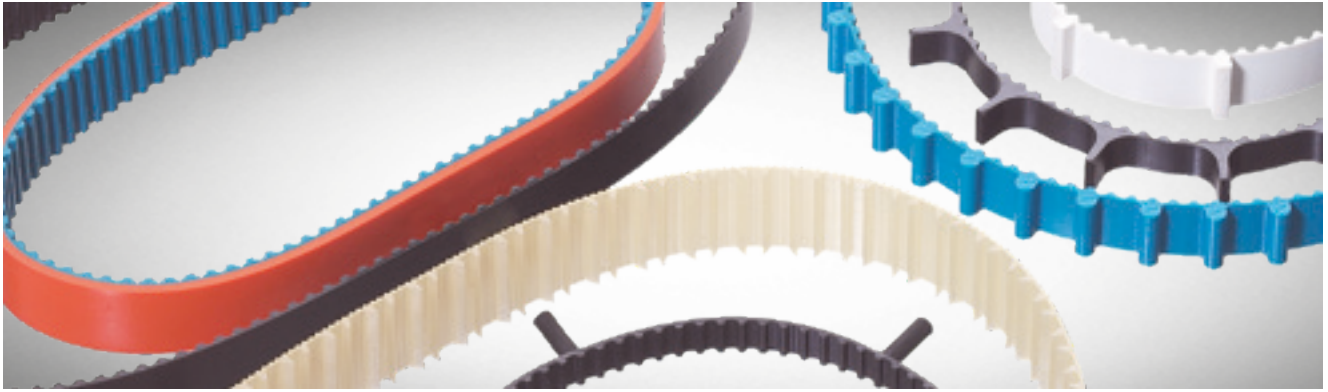
**optibelt ZRS**  
TIMING BELT PULLEYS

all standard pulleys,  
special pulleys on request



# optibelt ALPHA SRP

## TIMING BELTS



The **optibelt ALPHA SRP** timing belt with cast cleats and coatings is manufactured in a single production step and used in conveying systems.

The liquid polyurethane is cast between the core mould and the special outer mould with correspondingly increased internal diameter or special outer moulds with the desired contour for the cleats.

By rotating the inner and outer moulds around the central axis, a Shore hardness that differs from that of the teeth can be cast using a centrifugal casting process.

### Advantages and Characteristics

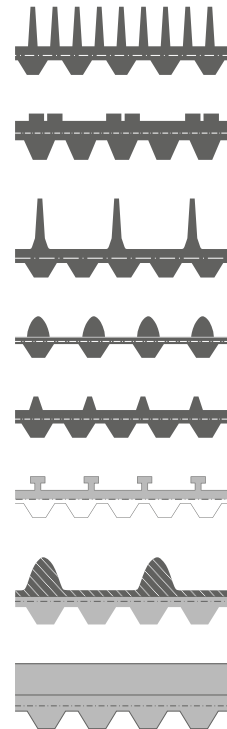
- high number of cleats in a very small space
- strong connection between cleat and base belt
- coating with no butt joints, no binding in direction of travel
- production in moulds allows small, coated belts to be manufactured
- reproducible high precision
- strong connection between cleat/coating and base belt due to consistent cross-linking
- finely formed cleat geometry thanks to liquid cast polyurethane

### Dimensions

T2.5; T5; T10; T20; AT5; AT10; AT20; MXL; XL; L

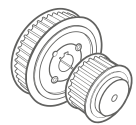
Other dimensions on request

### optibelt ALPHA SRP in cross section



### TIMING BELT PULLEYS

all standard pulleys,  
special pulleys on request.



# optibelt **KK** / **KK Plus**

## V-BELTS MADE OF THERMOPLASTIC POLYURETHANE



Optibelt V-belts consist of high-quality materials, which are manufactured by special manufacturing processes as open-ended metre ware in different dimensions. The **optibelt KK Plus** version of the V-belt additionally incorporates a tension cord.

### Advantages and characteristics

- favourable coefficient of friction
- good slip resistance for conveying goods
- good abrasion and wear resistance
- high elasticity and damping
- high tensile strength
- colour-fast
- resistant to greases, oils and numerous chemicals (see resistance list)
- UV and ozone resistant
- **optibelt KK Plus** version particularly low stretch
- welding takes place on site, this also applies to the **optibelt KK Plus** version
- no disassembly of the drive/shafts
- rapid troubleshooting
- short downtimes
- easy to store (supplied in rolls)
- immediate availability
- wide variety of design options, since any length can be produced

### Profiles and Belt Length Ranges

**KK:** 8; Z/10; A/13; B/17; C/22

**KK Plus:** A/13; B/17; C/22

8	50,000 mm
Z / 10	50,000 mm
A / 13	50,000 mm
B / 17	50,000 mm
C / 22	25,000 mm

Other lengths on request

**optibelt KK / KK Plus**  
in cross section



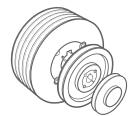
**optibelt KK**



**optibelt KK Plus**

**optibelt KS**  
**V-GROOVE PULLEYS**

for cylindrical bore  
or for **optibelt TB taper bushes**,  
special pulleys on request





# optibelt **ALPHA ATC**

## POLYURETHANE TIMING BELTS WITH FLEXIBLE CLEAT SYSTEM

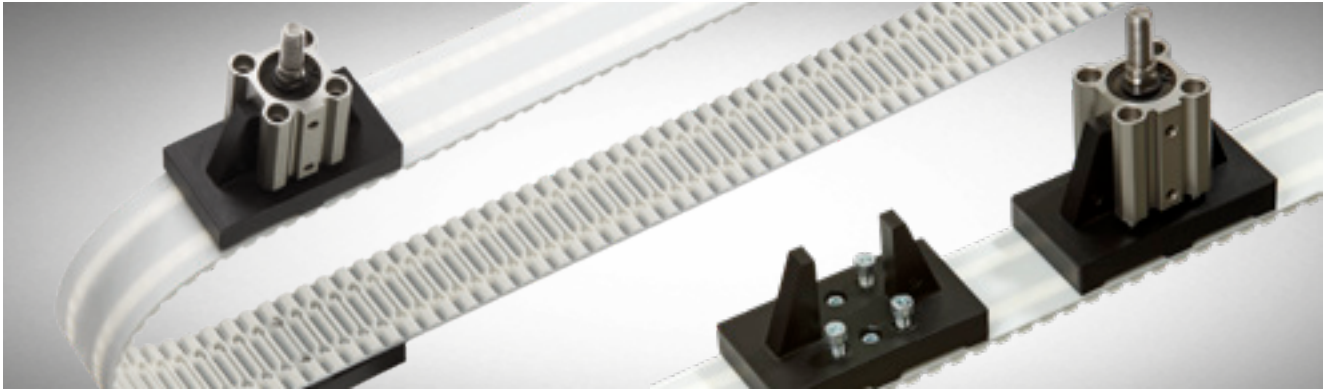
- PATENTED SYSTEM SOLUTION
- QUICK AND EASY INSTALLATION
- FLEXIBLE CLEAT POSITIONING ON SITE

**NEW**  
IN OUR  
ASSORTMENT



# optibelt ALPHA ATC

## POLYURETHANE TIMING BELTS



The **optibelt ALPHA ATC** enables the use of complex drive solutions in many areas of mechanical engineering under even the most difficult conditions and extreme operational demands.

The user of the **ATC-SYSTEM** can fasten screw-on cleats quickly and easily to a freely selectable tooth on the spot. The fastening and detaching of the connection can directly be performed by the user. As a result, varying forms of transported goods can be adjusted on the same drive and base belt using different screw-on cleats.

**ATC** inserts also make it possible to screw parts on directly, such as highly precise metal workpiece carriers, without using welded-on, specially manufactured cleats with inserts. Furthermore, screw-on cleats can transmit higher forces in comparison to permanently connected cleats.

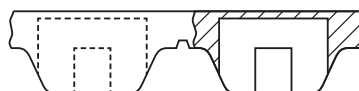
### Advantages and Characteristics

- patented system solution
- quick and easy installation
- flexible cleat positioning on site

### Profiles and Minimum Welding Lengths

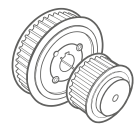
ATC10	25, 32, 50, 75, 100, 150 mm length 850 mm up to 1150 mm (depending on width)
ATC10K6	50, 100 mm length 1000 mm up to 1050 mm (depending on width)
ATC20	50, 100, 150 mm length 1060 mm up to 1160 mm (depending on width)

**optibelt ALPHA ATC**  
in cross section



### optibelt ZRS TIMING BELT PULLEYS

all standard pulleys,  
special pulleys on request



# SPECIAL BELTS



## **SPECIAL FABRIC**

Particularly  
low stretch



## **VERSATILE**

Available in different  
colour variations



## **VARIABLE**

Ideal for use in  
long conveyors



## optibelt **OPTIMAT** – THE SPECIALIST FOR PARTICULAR CASES

Special thermoplastic polyurethane belts have been developed in terms of their shape and further processing to make them suitable for special applications. Whether as round belts in open-ended metre ware, as flexible variants that can be made shorter or with special perforations: no conveying task is too complex for these specialists.





# optibelt RR / RR Plus

## ROUND BELTS MADE OF THERMOPLASTIC POLYURETHANE



Optibelt round belts consist of high-quality materials, which are manufactured by special manufacturing processes as open-ended metre ware in different diameters.

The **optibelt RR Plus** version of the round belt additionally incorporates a polyester tension cord. The round section belts with tension cords are particularly low-stretch and therefore especially useful when used in long conveyors.

### Advantages and Characteristics

- welding takes place on site, this also applies to the **optibelt RR Plus** version
- no disassembly of the drive/shafts
- quick rectification of breakdowns
- short downtimes
- easy to store (supplied in rolls)
- immediate availability
- wide variety of design options, since any length can be produced
- favourable coefficient of friction
- good slip resistance for conveying goods
- good abrasion and wear resistance
- high elasticity, good damping
- high tensile strength
- colour-fast
- resistant to greases, oils and numerous chemicals
- UV and ozone resistant
- the **optibelt RR Plus** version is particularly low-stretch

### Roll Lengths

2	200 m	8*	100 m
3	200 m	10*	100 m
4	200 m	12*	50 m
5	200 m	15*	50 m
6*	100 m	18	30 m
7*	100 m		

\* Also available with tension cord

**optibelt RR / RR Plus**  
in cross section



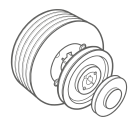
**optibelt RR**



**optibelt RR Plus**

**optibelt KS**  
**V-GROOVE PULLEYS**

for cylindrical bore or  
for **optibelt TB taper bushes**,  
special pulleys on request



# optibelt HRR

## ROUND BELTS MADE OF THERMOPLASTIC POLYURETHANE



Optibelt hollow round belts consist of high-quality materials, which are manufactured by special manufacturing processes as open-ended metre ware in different diameters.

**optibelt HRR** belts are particularly suitable for use in light drive systems and conveyor systems, especially for small pulley diameters.

### Advantages and Characteristics

- for use with small pulley diameters (**75 SHORE A**)
- short downtimes
- for use with medium drives, for quick repairs (**85 SHORE A**)
- easy to store (supplied in rolls)
- immediate availability
- wide variety of design options, since any length can be produced
- favourable coefficient of friction
- good slip resistance for conveying goods
- good abrasion and wear resistance
- high elasticity, good damping
- high tensile strength
- colour-fast
- resistant to greases, oils and numerous chemicals
- UV and ozone resistant

#### 75 SHORE A RED/SMOOTH

DIAMETER	ROLL LENGTH ON SPOOL
4.8 mm	200
6.3 mm	100
8.0 mm	100
9.5 mm	100

#### Recomm. belt tension:

Welded	4...8 %
Nipple connector*	max. 3...6 %

#### 85 SHORE A GREEN/ROUGH

DIAMETER	ROLL LENGTH ON SPOOL
4.8 mm	200
6.3 mm	100

#### Recomm. belt tension:

Welded	4...8 %
Nipple connector*	max. 3...6 %

\* Nipple connector not included in scope of delivery. Please order separately.

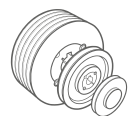
**optibelt HRR**  
in cross section



optibelt HRR

### optibelt KS V-GROOVE PULLEYS

for cylindrical bore or  
for **optibelt TB** taper bushes,  
special pulleys on request



# optibelt **OPTIMAT OE / DK / FK / PKR** OPEN-ENDED V-BELTS – PERFORATED



**V-PULLEYS**  
usable in DIN/ISO  
V-belt pulleys

## optibelt **OPTIMAT OE / DK / FK**

### OPEN-ENDED V-BELTS

perforated, DIN 2216

### SPECIAL VERSIONS

- available with black chloroprene cover belts
- electrically conductive (on request)

**OPTIMAT OE**  
V-belts,  
DIN 2216, perforated

**OPTIMAT DK**  
Double-sided V-belts,  
perforated

**OPTIMAT FK**  
Conveyor belts,  
perforated



PKR 0



PKR 1



PKR 2

HEIGHT OF TOP SURFACE			
TYPE OF TOP SURFACE	STANDARD (mm)	MAX. (mm)	PITCH (mm)
PKR 0	2	3	–
PKR 1*	3	3	10
PKR 2	3	–	–

## optibelt **OPTIMAT PKR**

### OPEN-ENDED V-BELTS

DIN 2216, with top surface

Profiles: Z/10, A/13, B/17, C/22, 25\*, D/32\*

\*For special versions are only available in fabrication lengths of 50 m ± 10%

\*For the profiles 25 and D/32 height of top surface is only available with 5 mm

**V-GROOVED PULLEYS**  
all standard pulleys,  
special pulleys on request



**FOR OPTIMUM PERFORMANCE  
AND CUSTOMER-SPECIFIC  
SOLUTIONS.**

# BELTS MADE TO MEASURE



Where performance is required  
in combination with customer-specific  
drive solutions, Optibelt  
delivers masterly solutions.



# INDUSTRY-SPECIFIC DRIVE SOLUTIONS



## **optibelt CONVEYOR POWER** FOR ROLLER CONVEYOR BELTS

Developed specifically for the transport and logistics sector, the drive belts from the **optibelt CONVEYOR POWER** range are real all-rounders. Since they are specially designed for roller conveyor applications, they offer a maximum range of uses.





## **optibelt GREEN GARDEN**

FOR GARDEN APPLIANCES

Whether for coupling or uncoupling ride-on mowers or chopping and shredding garden waste: The professional drive solutions from **optibelt GREEN GARDEN** ensure maximum power transmission.



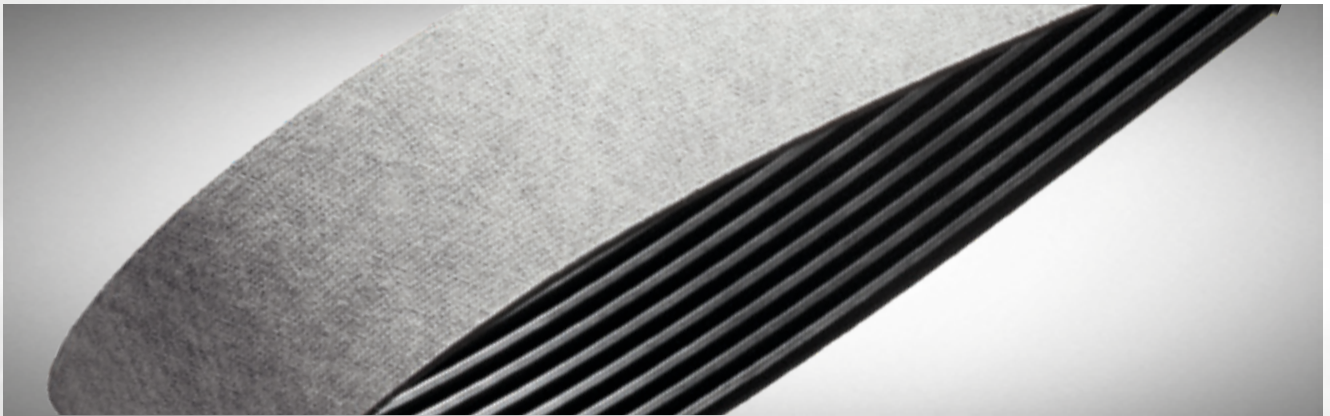
## **optibelt AGRO POWER**

FOR AGRICULTURAL MACHINERY

**optibelt AGRO POWER** ensures a good power connection with high performance at the same time. The drive belts run with low vibration and noise, even at high belt speeds.



# CUSTOM DRIVE SOLUTIONS



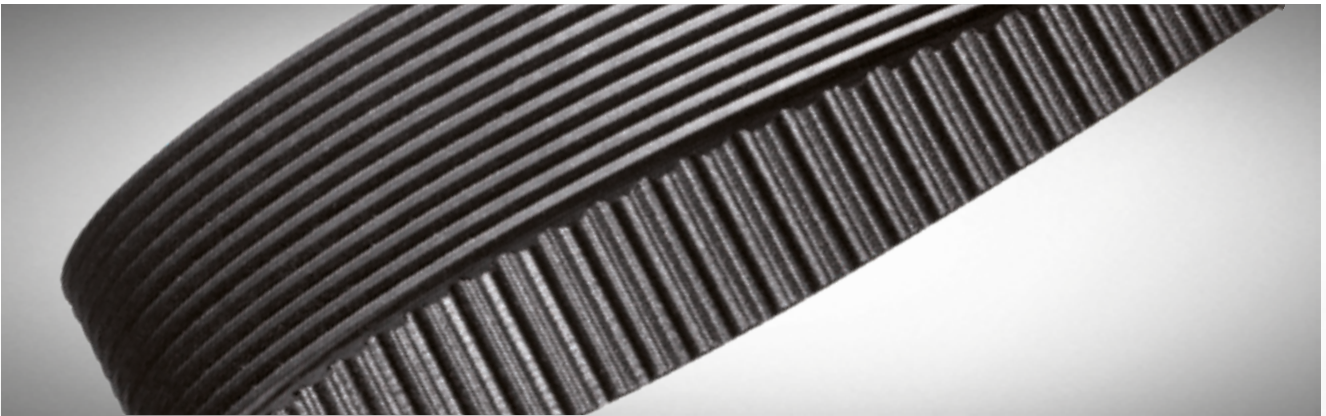
**optibelt ERB SPECIAL**  
FOR ESCALATORS AND WALKWAYS

This coated V-ribbed belt was developed in cooperation with a manufacturer of escalators and walkways. It moves the powerful drive of a moving staircase and guarantees smooth and almost noiseless practical use.



**optibelt OMEGA SPECIAL**  
FOR USE IN PRINTING MACHINES

This seamless silicone-coated special timing belt is manufactured in just one production process. It is perfect for critical applications in printing presses as it is highly temperature and UV resistant.



**optibelt OMEGA RB**  
FOR MILL DRIVES

This maintenance-free timing belt with additional PK V-ribbed belt on the rear side of the belt is the first choice for mill drives. It is extremely wear-resistant and is also suitable for mills in which the direction of the drive pulley on the rear can be reversed.



# METAL



## **DRIVE PULLEYS**

Drive pulleys for force-locking or form-fit connections in all common profiles and materials - V-grooved pulleys, V-ribbed pulleys, timing belt pulleys and special pulleys for taper bushings and cylindrical bores



# optibelt **KS**

## V-GROOVED PULLEYS



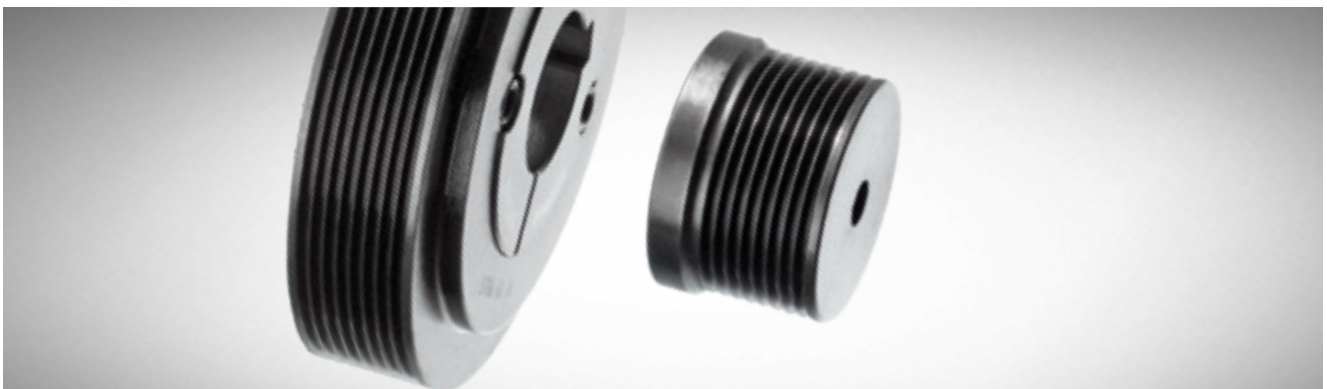
FOR CYLINDRICAL BORES*		
PROFILE	DATUM DIAMETER	GROOVES
SPZ / 10	45 – 355 mm	1 – 3
SPA / 13	50 – 560 mm	1 – 5
SPB / 17	56 – 630 mm	1 – 6
SPC / 22	180 – 630 mm	1 – 6

FOR TAPER BUSHES*		
PROFILE	DATUM DIAMETER	GROOVES
SPZ / 10	50 – 630 mm	1 – 8
SPA / 13	63 – 630 mm	1 – 5
SPB / 17	100 – 1000 mm	1 – 10
SPC / 22	200 – 1250 mm	2 – 10

\* in accordance with DIN 221 1

# optibelt **RBS**

## RIBBED BELT PULLEYS



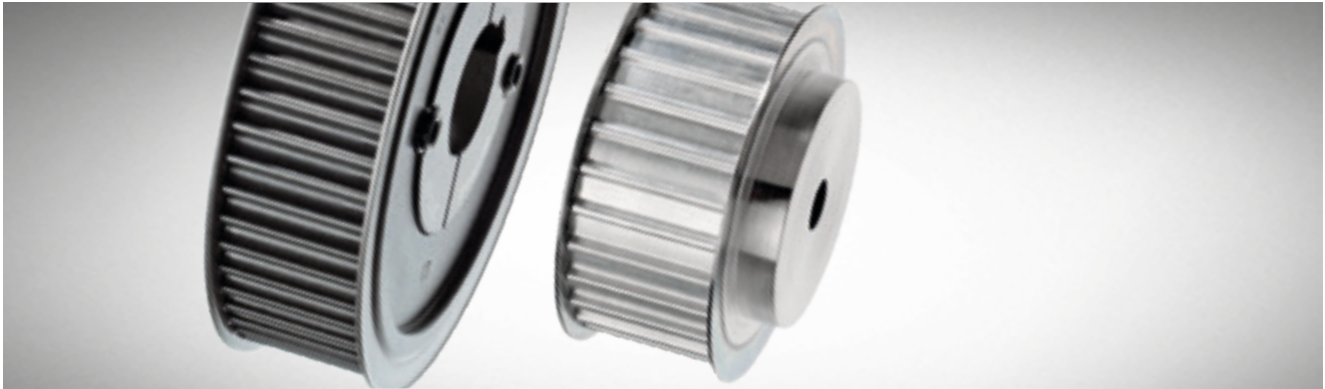
FOR CYLINDRICAL BORES		
DESIGNATION	DIMENSIONS	GROOVES
4 PJ	22.5 – 42.5 mm	4
8 PJ	22.5 – 42.5 mm	8
12 PJ	22.5 – 42.5 mm	12

FOR TAPER BUSHES		
DESIGNATION	DIMENSIONS	GROOVES
TB 4 PJ	47.5 – 222.5 mm	4
TB 8 PJ	47.5 – 222.5 mm	8
TB 12 PJ	62.5 – 222.5 mm	12

TB 16 PJ	62.5 – 222.5 mm	16
TB 6 PL	78 – 388 mm	6
TB 8 PL	78 – 388 mm	8
TB 10 PL	88 – 388 mm	10
TB 12 PL	88 – 388 mm	12
TB 16 PL	103 – 388 mm	16

# optibelt ZRS

## STANDARD TIMING BELT PULLEYS

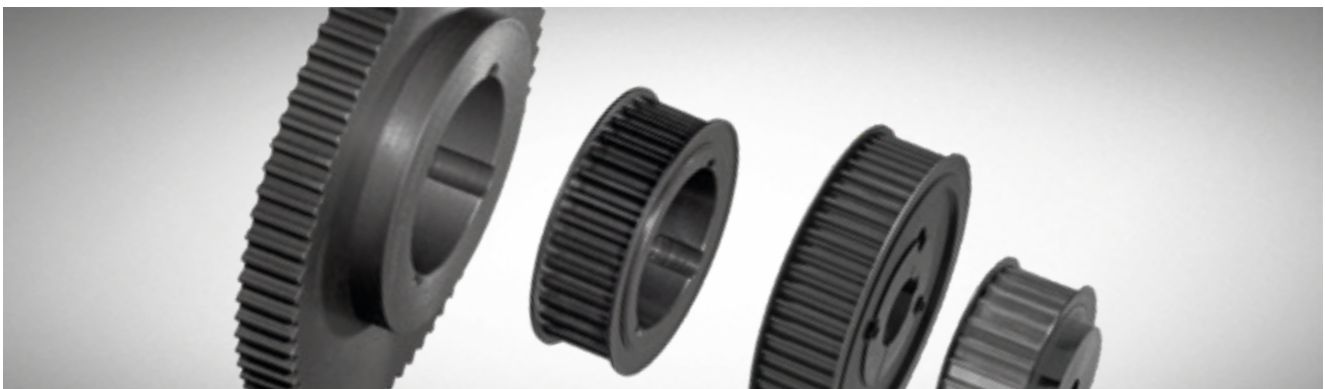


FOR TAPER BUSHES			FOR CYLINDRICAL BORES		
PROFILE	BELT WIDTH (mm)	TEETH	PROFILE	BELT WIDTH (mm)	TEETH
L	12.7 / 19.1 / 25.4	18–120	XH	50.8 / 76.2 / 101.6	18–48 / 20–48
H	25.4 / 38.1 / 50.8 / 76.2	16–120 / 18–120 / 20–120	L	12.7 / 19.1 / 25.4	10–84
			H	19.1 / 25.4 / 38.1 / 50.8 / 76.2	14–48 / 14–120 / 16–120
			XH	50.8 / 76.2 / 101.6	18–96
			XL	6.4 / 7.9 / 9.5	10–72

# optibelt ZRS DC

## STANDARD TIMING BELT PULLEYS

The 8M DELTA Chain pulleys are available in 4 different widths of 12 mm, 21 mm, 36 mm and 62 mm, matching the **optibelt DELTA Chain** belt range.



FOR TAPER BUSHES			FOR CYLINDRICAL BORES		
PROFILE	BELT WIDTH	TEETH	PROFILE	BELT WIDTH	TEETH
8MDC	12 mm / 21 mm / 36 mm	22–192 / 22–192 / 22–192	8MDC	62 mm	22–192
			14MDC	20 mm / 37 mm / 68 mm / 90 mm / 125 mm	



# optibelt TB

## TAPER BUSHES



DIMENSIONS					
TAPER BUSHES	BORE DIAMETER				
1008	10 – 25 mm	1310	14 – 35 mm	3030	35 – 75 mm
1108	10 – 28 mm	1610	14 – 42 mm	3525	35 – 90 mm
1210	11 – 32 mm	1615	14 – 42 mm	3535	35 – 90 mm
1215	11 – 32 mm	2012	14 – 50 mm	4040	40 – 100 mm
		2517	16 – 60 mm	4545	55 – 110 mm
		3020	25 – 75 mm	5050	70 – 125 mm

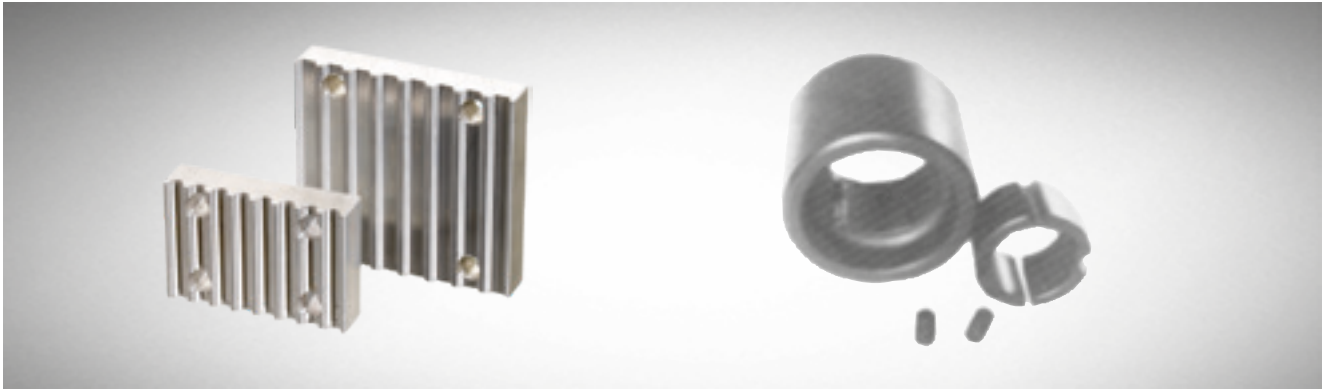
# optibelt CE

## CLAMPING BUSHINGS



DIMENSIONS					
DESIGNATION	BORE DIAMETER				
CE01	18 – 400 mm	CE05	20 – 200 mm	CE12	16 – 60 mm
CE02 / CE03	6 – 100 mm	CE06	20 – 180 mm	CE13	15 – 70 mm
CE04	20 – 180 mm	CE07	20 – 200 mm	CE14	24 – 260 mm
		CE08	25 – 200 mm		
		CE09	45 – 100 mm		
		CE10 / CE11	14 – 60 mm		

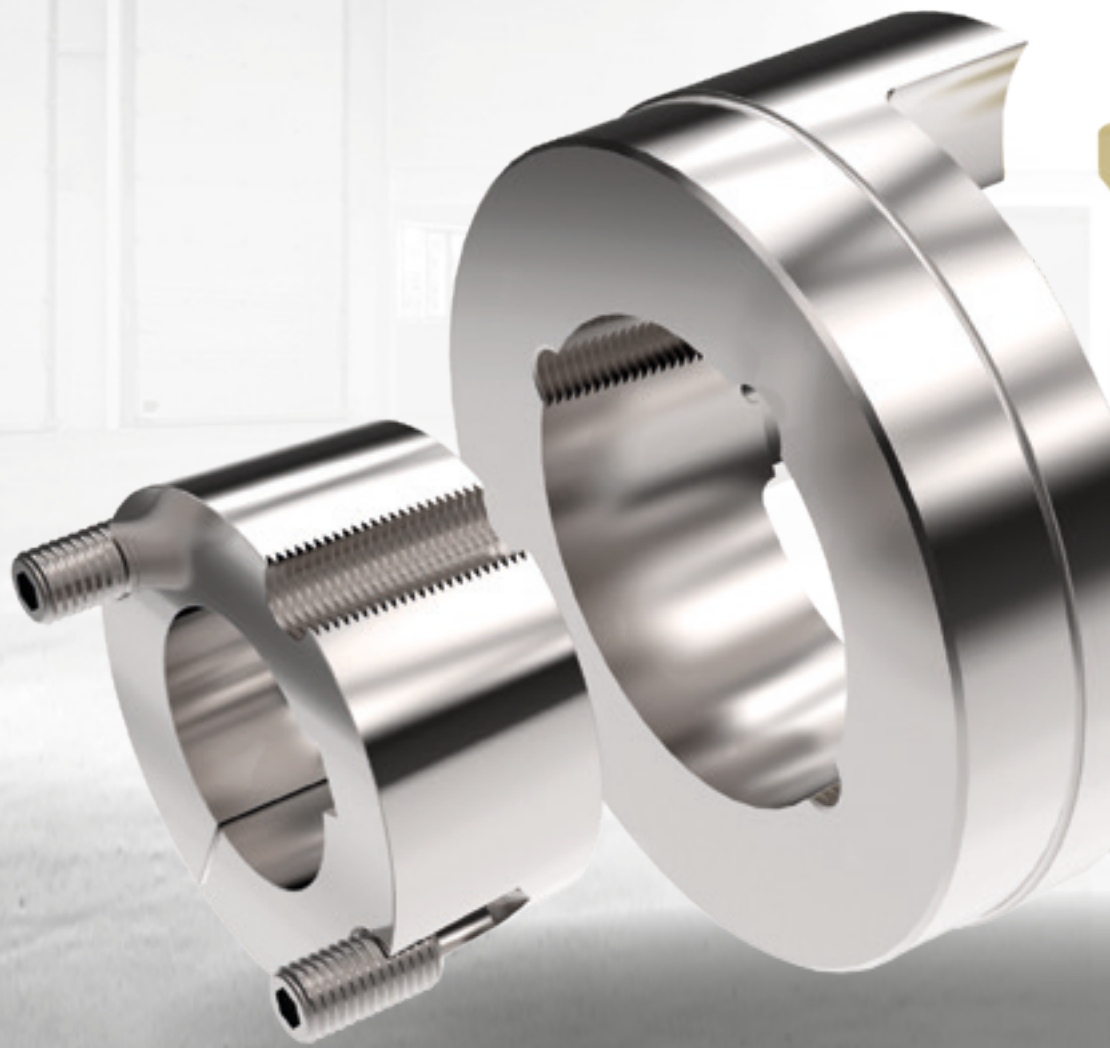
# optibelt METAL ACCESSORIES

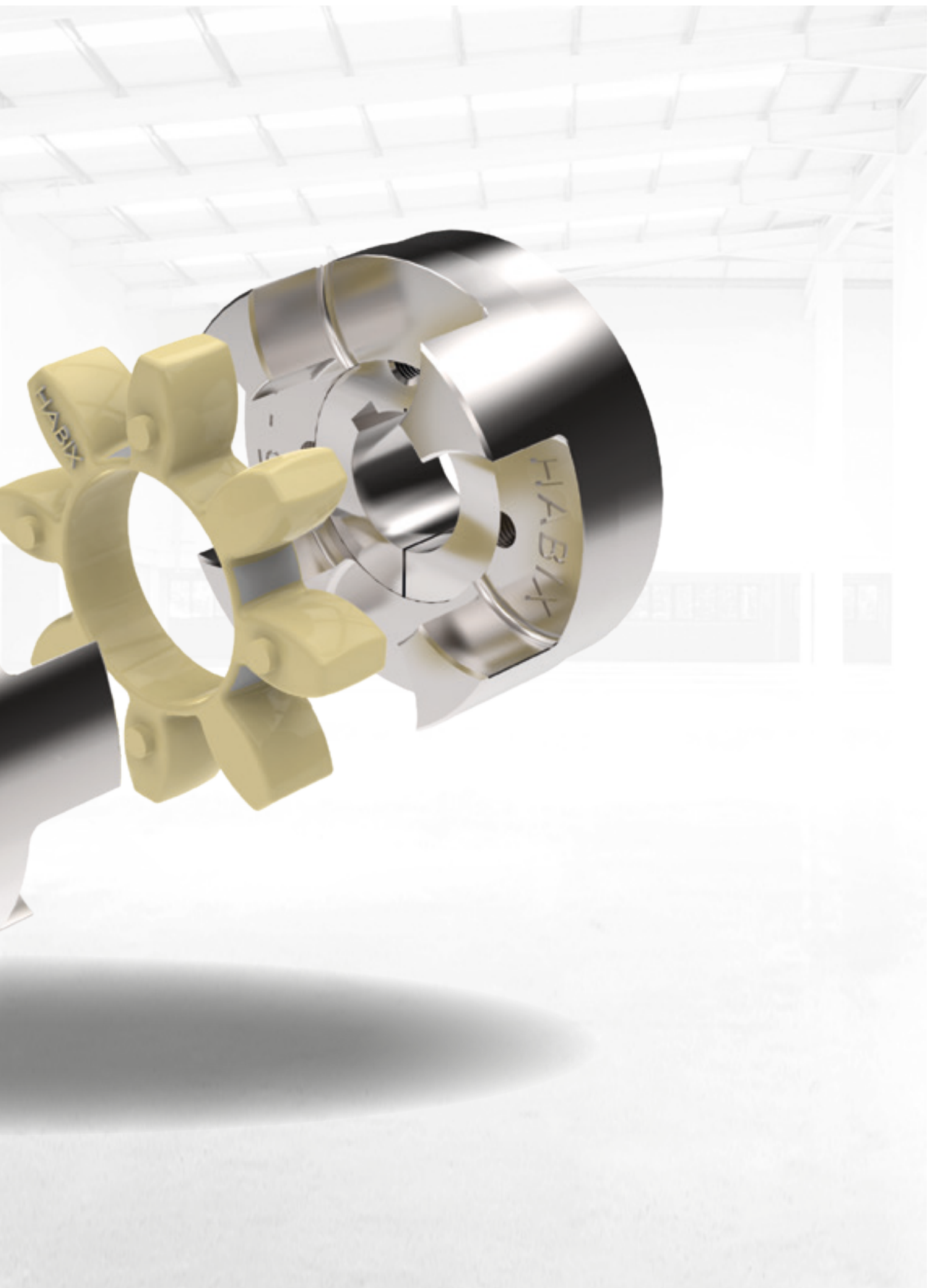


**optibelt CP**  
Clamping plates

**optibelt FS**  
Flat belt pulleys for taper bushes

# COUPLINGS







# ELASTIC COUPLINGS

## HABIX



- Fail-safe plug-in/jaw coupling with flexible element (star)
- Types: HWN, HWT
- Sizes: 15 – 90
- Standard applications with normal requirements regarding torque and damping capabilities

## HADEFLEX



- Fail-safe plug-in/jaw coupling with flexible element (star)
- Types: XW (pre-drilled), TX (with taper bush), F
- Sizes: 24 – 260
- Standard applications with normal requirements regarding torque and damping capabilities

## HRC



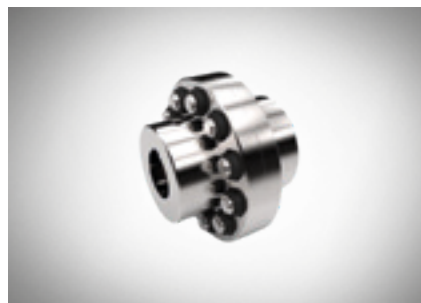
- Fail-safe encapsulated plug-in/ jaw coupling with flexible element (star)
- Sizes: 70 – 280
- Applications with increased requirements regarding torque and damping capabilities

## FLEX



- Highly flexible backlash-free tyre coupling
- Sizes: 40 – 250
- Applications with increased requirements for damping properties at low torques to be transmitted

## ORPEX



- Fail-safe pin coupling with flexible elements
- Sizes: 105 – 2000
- Applications with high requirements with regard to the torque to be transmitted and the damping characteristics

## PEX



- Fail-safe plug-in/jaw coupling with flexible elements
- Sizes: 58 – 250
- Applications with increased requirements regarding torque and damping capabilities.

# RIGID COUPLINGS

## GEAR COUPLING GC



- Greased curved bevel gear coupling
- Sizes: 50 – 165
- Applications with highest to maximum requirements regarding transmitted torque

## CLAMP COUPLING



- Easy-to-assemble shaft connection
- Sizes: 10 – 180
- Simple and easy-to-assemble shaft connections with no specific requirements for damping capabilities

## FLANGE COUPLING



- Easy-to-assemble and particularly robust shaft connection
- Sizes: 25 – 500
- Simple, particularly robust and easy-to-assemble shaft connections with no specific requirements regarding damping capabilities

## CLAMP COUPLING



- Easy-to-assemble shaft connection
- Sizes: 10 – 220
- Simple and easy-to-assemble shaft connections with no specific requirements for damping capabilities
- Steel / Stainless steel

## MINI COUPLING



- Slotted, backlash-free and very heat-resistant rigid clamp coupling
- Sizes: 16 – 80
- Applications with lower requirements with regard to the torque to be transmitted and the damping characteristics. Ideal for restricted installation spaces.

# SERVICES



# TOOLS



ALSO AS  
**RFID**  
VERSION





# SERVICE TOOLS

## optibelt SERVICE KIT

### SERVICE CASE

Cost-effective environmental protection and thus ways to reduce energy and costs can be achieved quickly and easily by simple means. The objective should be to operate existing power drives in a more cost-effective manner, and by implementing every suggestion to immediately have a positive impact on the environment. This increases the effective performance and makes the total cost of drives with Optibelt belts and pulleys understandable for everyone.

Implementing measures to reduce costs and energy can be done quickly and easily using simple means, such as technical devices. The wide range of Optibelt service options has been expanded a step further. The practical **optibelt SERVICE KIT** contains a number of technical devices that can be used to carry out a series of optimisations on existing drives.





### optibelt TT / TT RFID / TT DATA FREQUENCY TENSION TESTER

The **optibelt TT** frequency tension tester is used to check the tension of drive belts by measuring their frequency of vibration. Due to its compact design, it offers universal application possibilities for drives in mechanical engineering, in the automotive industry and for many other technical applications. The **optibelt TT** is designed even for difficult-to-reach places, making it ideal for quickly and easily checking the tension of V-belts, V-ribbed belts and timing belts.

### optibelt LASER POINTER II ALIGNMENT OF BELT DRIVES

The **optibelt LASER POINTER II** makes it easier to align belt drives. The belt pulleys are aligned with each other via the front or lateral faces. The **optibelt LASER POINTER II** is simple to handle and can be fixed in place in a matter of seconds. This is a practical aid for professional alignment of belt pulleys.



### optibelt SERVICE BOX FOR QUICK HELP ON SITE

The **optibelt SERVICE BOX** was designed as an on-site support for many fields of application. Drive centre distances, belt lengths and pulley diameters can be determined trouble-free with the flexible fabric measuring tape.

### optibelt NOTEBOX TENSION NOTEBOX

The proven Optibelt "Tension Notes" stickers document the default values for the proper pretensioning methods whenever required and so provide service technicians with reliable information in future without the need for a long search.



**optibelt**  
**MEASURING GAUGE**  
**INNER LENGTH MEASURING**  
**GAUGE**



The **optibelt MEASURING GAUGE** is the perfect aid for measuring inner lengths. The possible measuring ranges are:

- 500–2500 mm inner length (Li)
- 500–3550 mm inner length (Li)

Please note: All inner lengths determined are only reference values! Determination of exact lengths must be carried out according to DIN-/ISO-/RMA standard.

**optibelt**  
**CUT II**  
**BELT SLITTER**



The **optibelt CUT II** belt slitter was specifically developed for modern storage for the technical trade.

**optibelt**  
**OPTIKRIK 0, I, II, III**  
**TENSION MEASURING DEVICE**



Tension gauges check if the V-belt, the kraftband or the V-ribbed belt is running properly in your vehicle. The tension gauges are easy to use. Our field service team will be happy to assist you.

**optibelt**  
**FRICION WELDING TOOL**  
**RS02**  
**SPLICING TOOL**



For round, wedge and special profiles

**optibelt**  
**V-BELTS AND**  
**PULLEY GROOVE TEMPLATE**



Valuable help for the measurement of belt and pulley profiles

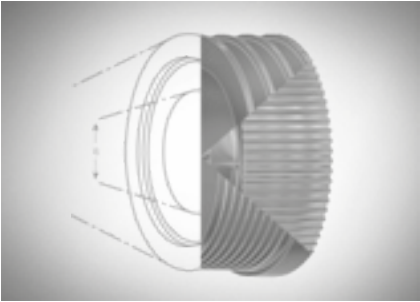
**optibelt**  
**BASIC AND**  
**PREMIUM CASE**  
**SPLICING TOOL**



These five-piece sets (including welding tool and guiding tongs) allow urethane belts to be welded quickly and easily. The basic equipment is suitable for occasional use, the premium equipment for daily use.

# OPTIBELT SOFTWARE

## **optibelt CAD** PULLEYS AND BUSHES IN 2D/3D



Download CAD files for the standard product range of pulleys and bushes in 2D and 3D models

## **optibelt CAP** MULTI-PULLEY TIMING BELT RANGE



With this software, the user can design simple 2-pulley drives or calculate the correct timing belt for complicated multi-pulley drives.

Those who do not yet own CAP software can register on the Optibelt website







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