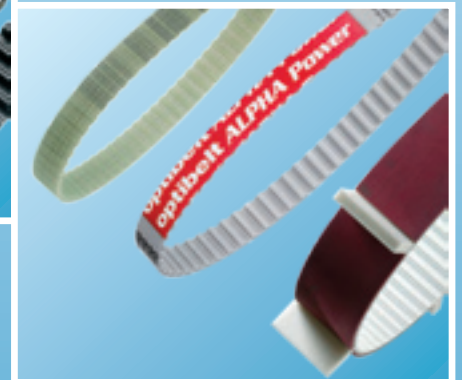


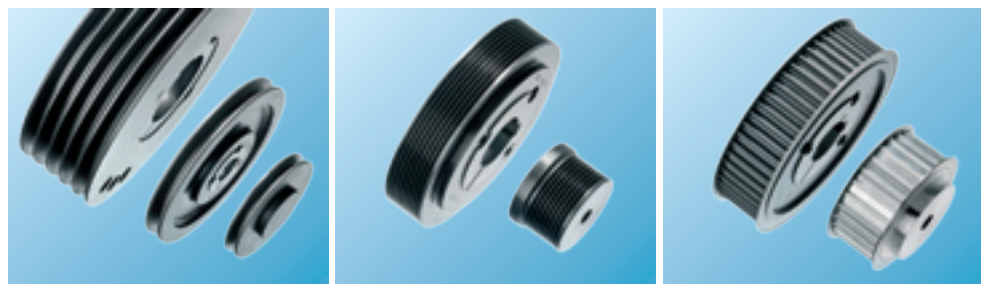
SALES CATALOG

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Edition 2009



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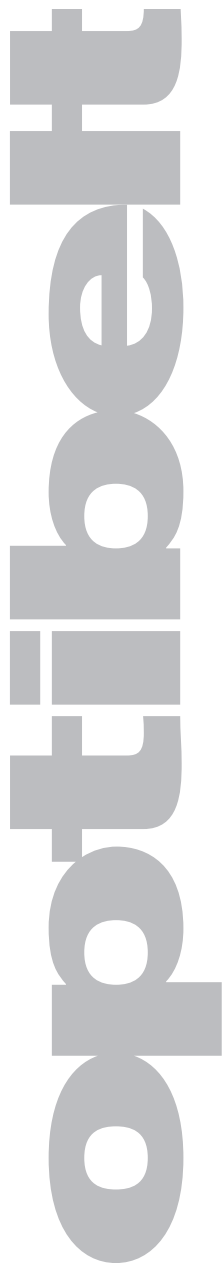
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Optibelt is a supplier of first class products for drive systems. Optibelt has been setting the standards in systems, engineering and service for decades.

Machines and vehicles on all continents are reliably set in motion by accessory drive belts made by Optibelt.

Additionally Optibelt develops special drive solutions for customer specific applications.

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General Introduction



Power Transmission

All Optibelt V-Belts are manufactured with carefully chosen raw materials utilizing continually updated manufacturing methods.

The modernization of production processes, large scale laboratory testing, and the careful control of the basic materials will guarantee a consistent quality for every Optibelt power transmission component.

Product function, efficiency and durability are of major importance to Optibelt.

Characteristics

Oil resistant

The oil resistant cover of the belt protects it from contamination by mineral oil/grease splash. Contamination by animal or vegetable oil or water solvent cutting oil will reduce belt life. In extreme cases the use of special construction XOR is recommended.

Heat resistant

Standard construction Optibelts will operate in ambient temperatures up to +158 °F/+ 70 °C.

Higher aging temperatures will lead to premature aging and subsequent belt failure. In this case our special construction XHR is recommended.

Cold resistant

Standard construction Optibelt V-Belts will perform satisfactorily in ambient temperatures down to

–40 °F/–40 °C for wrapped construction and –22 °F/–30 °C for raw edge construction.

Under critical conditions practical tests are necessary.

Antistatic

In order to comply with product safety requirements the specific antistatic properties of any V-Belts must be tested to ISO 1813. A test certificate will be issued and a 20% surcharge will be applied.

Antistatic V-Belts should be specified separately to ensure that the correct certification is carried out.

Special Constructions

The following are examples of surcharges applicable to special constructions.

Smooth running – LR

Extra oil resistant – XOR

Extra heat resistant – XHR

V-Belts with

patterned top surfaces – PKR

Other constructions on request.

Observance of special tolerances will be charged according to actual cost.

Non Standard Lengths and Special Constructions for Wrapped V-Belts

We are able to supply non standard lengths and special constructions for wrapped belts. The minimum production quantity (3 production sets) which is supplied without surcharge is to be found at the bottom of each belt section.

Above 1800 mm any intermediate length can be manufactured. Inquiries for intermediate sizes below 1800 mm will have to be checked for each individual size.

Minimum quantities may be required for certain special constructions (e.g. belts with Aramid tension cord) which are different than those shown. If in doubt ask your Optibelt representative.

Optibelt V-Belts with Aramid Tension Cord

On drives where additional power transmission capacity is required or where there are limited adjustments for stretch and wear Optibelt V-Belts with Aramid tension cord may be used. Aramid is a fiber having a tensile strength double that of polyester with an accompanying stretch only a fraction of polyester.

The high tensile strength and low stretch characteristics of Aramid have very little effect on the flexibility of belts into which it is incorporated. Therefore, larger diameter sheaves are rarely required.

Warning: The higher power ratings of belts with Aramid tension cord require the use of higher belt tensions. Sheaves commercially available in North America manufactured to RMA/MPTA standards may not withstand the higher tensions and could fail

catastrophically resulting in serious personal injury and/or equipment damage. A change to belts with Aramid tension cord on existing drives must be accompanied by a review of the strength of the sheaves with the sheave manufacturer. New designs using this type of belt must be discussed with the belt and/or sheave manufacturer.

optibelt S=C PLUS

S=C PLUS means SetConstant! These belts can be assembled into sets without being measured.

The manufacturing process has been patented in many countries.

optibelt SUPER TX M=S

Optibelt SUPER TX belts, marked M=S, of the same nominal length can be used as sets without re-measurement and matching. All international standards have been considered by Optibelt to ensure that our length tolerances comply with matched set tolerances. According to normal practice, if one belt from a set fails the whole set must be replaced.

Abbreviations

L_i = Inside length
 L_o = Outside length
 L_p = Pitch length

Accessories

The following technical devices and literature are available:

- Tension gauges for the determination of correct static tension of V-Belt drives.
- Belt and groove gauge for checking V-Belt sections and grooves.
- Optibelt Technical Manuals.

Our General Conditions of Sale, copies available on request, are applicable for all transactions.

Construction of Optibelt V-Belts



Power Transmission



Base rubber extrusion

Base Rubber

The base rubber for Optibelt V-Belts is extruded in long lengths from a specially prepared rubber mixture. This extrusion has a very high cross-sectional accuracy and also creates uniformity of belt weight per unit length. Uniformity of density throughout a V-Belt is of prime importance for vibration free running.

Tension Cord

The tension cord for Optibelt V-Belts is manufactured from polyester fiber spun into various thread configurations. The physical properties of a tension cord are matched to the nature of the belt application and are dependant upon the configuration into which the cord is spun. To ensure that the tension cord has good adhesion within the V-Belt, it is specially impregnated so that it

is fully compatible with rubber, and then sprayed. A completely homogeneous bond with the base and filler rubber is therefore guaranteed.

External Cover Fabric

The cover consists mainly of a cotton fabric which has a highly twisted, shear resistant, warp and weft fibers. Broad widths of the fabric are treated on both sides with a neoprene natural rubber mixture, and then cut into diagonal strips; the width being determined by the section of the V-Belt to be covered.

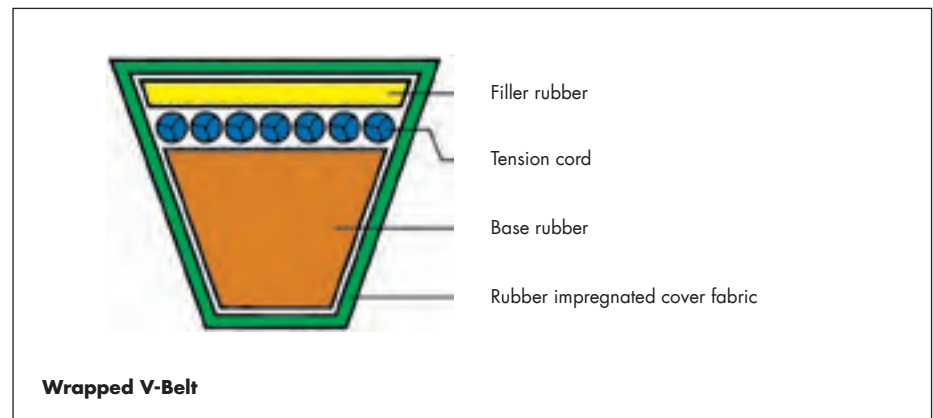
Manufacture

Optibelt V-Belts are manufactured on highly automated machines. Every V-Belt is constructed individually. A measured length of tension cord having an exact number of turns is guided over two rolls, together with the filler rubber. The accurately extruded base rubber is then mounted onto the filler rubber complete with the tension cord mem-

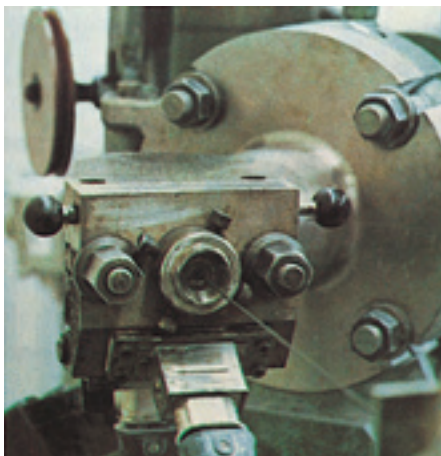


Fabric strips ready for the external covering of V-belts

ber. The pre-prepared strip of cover fabric is finally wrapped around the V-Belt. The semi-finished V-Belt is now ready for vulcanization.



Tension Cord



Sprayed cord emerging from the heated spray nozzle



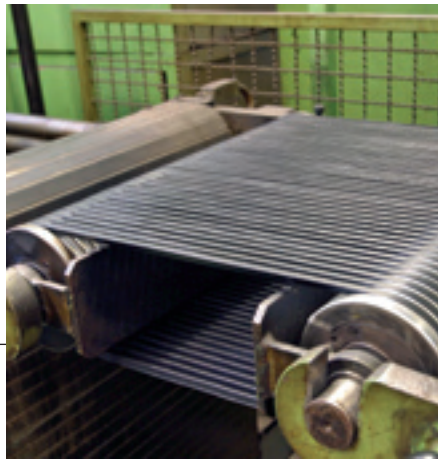
A three roll calendering machine shown with a processed width of cover fabric



Manufacturing



Vulcanizing machine



A cord stabilization unit

The ORV Vulcanization Process

The ORV (Optibelt Rotary-Vulcanization) process, which was developed by us, differs quite considerably from the traditional methods of vulcanization. In the ORV process, V-Belts are vulcanized in heated V-grooves while rotation takes place, hence in the same mode of motion and shape in which they will subsequently give service.

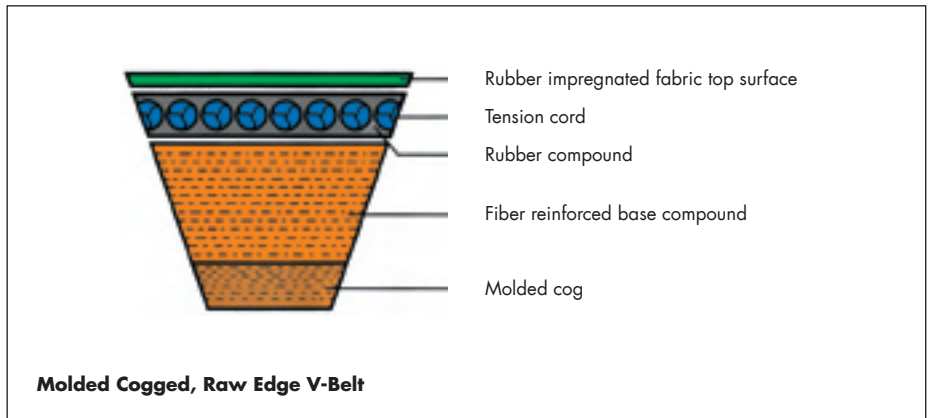
With the traditional methods of vulcanization it is very difficult to exercise any control over the retention of the nominal lengths of the belts, whereas by means of our electronically controlled cord stabilization process, which we have patented in many countries, the nominal length tolerances of V-Belts vulcanized by the ORV process are restricted to a minimum.

A 'Panzerband', which revolves around guide rollers and is tensioned by means of a hydraulically operated tension drum, presses the V-Belts into the V-grooves of the heated vulcanizing drum. The V-Belts are thus vulcanized in circular form. The result of this procedure is an almost perfect fitting condition between the V-Belt flanks and the sides of the pulley grooves, without significant distortion.

Cord Stabilization

Electronically controlled cord stabilization during manufacture gives Optibelt V-Belts their unique SetConstant feature.

Optibelt SetConstant V-Belts of similar nominal length can be assembled into matched sets at random without further measurement. Length stability is guaranteed over many years, even under adverse storage conditions.



Manufacturing

Construction of Optibelt Molded Cogged, Raw Edge V-Belt



Vulcanization



Cutting machine

Product Range



See page 20 and 23

Optibelt BLUE POWER High-performance wedge belts with aramid cord

The new, wrapped high-performance wedge belt Optibelt BLUE POWER has a high-strength aramid cord and as an individual belt, as a set or as a Kraftband is particularly suited for large, heavily loaded drives. The capacity of an Optibelt BLUE POWER wedge belt is about twice that of a wedge belt with standard technical design. This corresponds to additional performance of up to 100%.

Sections:
5V; 8V

Optibelt RED POWER II maintenance free High capacity Wedge Belts and Kraftbands

The second generation of Red Power II V-belts and Kraftbands produces results that are really worth talking about: up to 42% more power while at the same time cutting costs by up to 20%.

Improved production processes and consistent development of basic products have led to these excellent results. The cost savings are explained as follows:

- Fewer belts**
- + narrower pulleys**
- + saving in drive space**
- = lower costs.**



See page 19, 22 and 41 to 42



See page 21

Optibelt SK Wedge Belts to RMA/MPTA Standards

These belts are designed for general application in the engineering industry. The use of superior materials and the compact design has made these belts economical and efficient. They can transmit two to three times more hp/kW than classical V-Belts with the same top width. Drives with power ratings up to 2600 hp are not unusual.

Sections: 3V; 5V; 8V

Optibelt VB Classical V-Belts to RMA/MPTA Standards

Through the use of new high quality components and with the ORV (Optibelt Rotary-Vulcanization) process Optibelt V-Belts have been progressively improved. This has had the effect of increasing operational safety and prolonging belt life on existing drives.

Sections: A; B; C; D; E



See pages 30 to 32

Product Range



Power Transmission



See page 28 and 45

Optibelt Super X-POWER M=S Molded Cogged, Raw Edge Wedge Belts and V-Belts to RMA/MPTA Standards

Optibelt Super X-POWER M=S molded cogged raw edge belts can be used in place of conventional wrapped belts on drives having unusual features such as

- extremely small sheave diameters
- high belt speeds
- unusual power transmission requirements

The Super X-POWER M=S belts have greater heat and oil resistance than conventional belts because of improvements in the rubber compounds.

Sections: 3VX; 5VX

Optibelt SUPER TX M=S Molded Cogged, Raw Edge Wedge Belts and V-Belts to RMA/MPTA Standards

Optibelt SUPER TX M=S molded cogged, raw edge belts can be used in place of conventional wrapped belts on drives having unusual features such as

- extremely small sheave diameters
- high belt speeds
- unusual power transmission requirements

The SUPER TX M=S belts have greater heat and oil resistance than conventional belts because of improvements in the rubber compounds.

Sections: AX; BX; CX



See page 35

Optibelt LD Light Duty V-Belts to RMA/MPTA Standards

Special belts for fractional horsepower drives with small diameter sheaves with loads and service requirements within the capacity of single belts. The service of such belts is usually infrequent or intermittent rather than continuous. Typical applications are domestic laundry machines, home workshop tools, small fans and blowers etc.

Sections: 2L; 3L; 4L/A; 5L/B



See pages 40 and 46 to 50

Optibelt SK and VB Metric Wedge and Classical Belts

In addition to belts manufactured to RMA/MPTA standards Optibelt manufacture to other International Standard requirements. All such standards are based on the metric system of units and often have different section designations. Premier amongst these standards are those used in Germany (DIN 7753, DIN 2215).

Wedge belt sections: SPZ; SPA; SPB; SPC; 19

Classical V-Belt sections: 5; 6; 8; 10; 13; 17; 22; 32; 40

Product Range



See pages 23 and 33 to 34 Kraftband with special top surfaces: see page 52

Optibelt KB Kraftbands

Optibelt KB kraftbands consist of SetConstant single V-belts bound firmly together by a common surface. They are available in both wedge and classical sections.

Optibelt KB kraftbands represent economical drive components above all in extraordinary drive situations, such as extreme shock loads, vertical drive shafts, V-flat drives, and clutch drives. They are also well suited for conveying purposes because of their large top surface, their high carrying capacity and their invariably straight run.

Available in Aramid cord constructions also.

Sections: 3V; 5V; 8V; B; C; D

Optibelt Super KBX-POWER

Optibelt Super KBX-Power Kraftbands consist of Optibelt Super X-Power V-Belts and are connected to a highly wear resistant top surface. Optibelt Super KBX-Power Kraftbands have a considerably better tension behaviour compared to conventional raw edge Kraftbands.

These Kraftbands are used as multi rib belts, or as a combination of sets.

Sections: 3VX/9JX; 5VX/15JX; XPB; XPZ; XPA on request



See pages 29 and 36



See pages 53 to 55

Optibelt SUPER VX Molded Cogged, Raw Edge Variable Speed Belts

Optibelt SUPER VX variable speed belts have been developed specifically for stepless variator drives. The belts are used in the general engineering and farm machinery industries.

The belt base consists of a polychloroprene compound incorporating short fibers laid across the section to give strength and support. The extremely strong, low stretch tension cords with layers of high quality rubber impregnated fabric. The special base and the top fabric give the belt superb resistance to section distortion while allowing it to bend around small sheaves.

Sections: RMA/MPTA, ISO 1604 and others to customer's requirements

Optibelt DK Double V-Belts

The polyester cord tension members contained in the Optibelt DK double V-Belts achieve an optimum of flexibility and low stretch. They are thus particularly suitable for applications demanding the belt to bend in both directions.

Optibelt DK double V-Belts are applied where several sheaves on one level need to be simultaneously driven clock- and counter-clockwise. Such drives are mainly found on agricultural machines but their numbers in general engineering are also growing.

Sections: AA; BB; CC; DD



See page 37

Product Range



Power Transmission

Optibelt PKR Endless V-Belts with Patterned Top Surfaces

Optibelt PKR belts consist of a basic power transmission belt (endless V-Belt, open-ended V-Belting or kraftband) plus a tailor made surface. Both components are firmly bound together by a special vulcanization process. The variety of applications demands a large range of designs and qualities. These types of belts are used in place of costly conveyor belts. They run singly or in sets and transport the goods not only horizontally but also on inclines.

Optibelt KB kraftbands are also available with special top surfaces. They are suitable for the transportation of containers or other heavy items, e. g. for the loading of planes.



See page 56

Optibelt RB Ribbed Belts

The belts consist of a polychloroprene rubber mixture with inlaid synthetic fiber tension members and polyester tension cords. They have V-shaped ribs on the inner surface. A wide range of drive ratios are accurately maintained, and both inside and outside sheaves are permissible. Belt turnover in the sheaves is eliminated; minimal slip and the usage of very small sheave diameters are additional advantages. Ribbed belts represent a new approach to power transmission, with all the advantages of traditional drive belts. Main features include simplicity, flexibility and small sectional thickness.

**Sections: J/PJ; L/PL; M/PM;
(H/PH and K/PK on request)**

Optimat OE Open-Ended V-Belting, Punched

This oil and heat resistant open-ended V-Belting can be fitted in a very short space of time. The belt connectors ensure ease of installation. This belting is used on applications where endless V-Belts can either not be installed or only installed with considerable difficulty.

The sturdy fabric filler of the belting gives the connectors strong hold in order to avoid premature connector pull-outs and belt failure.

Sections: A; B; C; D; E
Metric sections: 6; 8; 10; 20; 25; SPZ; SPA
Light duty sections: 2L; 3L; 4L



See page 51

Optimat PKR Open-Ended V-Belting with Special Top Surfaces

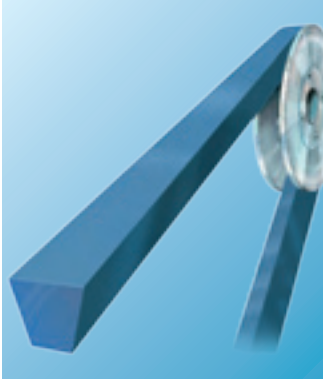
These belts are designed for the transportation of wood, tiles, paper (books), and agricultural produce. They are available with brown or white colored top surfaces.

Sections: A; B; C; D

Product Range



Power Transmission



See page 97

Optibelt KK Plastic V-Belting

This plastic V-Belting is suitable for both high power transmission and conveying. It is available in three different qualities distinguished by the color (green, brown or blue).

Optibelt KK V-Belting is chemical resistant and is resistant to various liquids. Each of the qualities is available in a number of standard cross sections.

Also available: plastic and polyurethane belting with special surfaces.

Optibelt RR Plastic Round Section Belting

This round section belting is for conveying and use on lighter drives, e.g. domestic appliances, computers and film projectors, etc.



See page 97



See pages 69 to 73

Optibelt ZR Timing Belts/ZR D Double Timing Belts

The Optibelt ZR timing belt is made from neoprene with glass fiber tension members and a nylon cover.

Slip free, synchronized power transmission and high efficiency is ensured by the positive engagement of the teeth.

Optibelt ZR timing belts are manufactured with different pitches to cover as wide a range of applications as possible. Each of these pitches is available in many standard lengths and widths for suitable multiple power transmission applications:

- a) camshaft drives on cars
- b) drives for office machines, computers, projectors, tape-records, domestic appliances, machine tools, textile machines and heavy industrial equipment

Types: MXL; XL; L; H; XH; XXH; D-XL; D-L; D-H

Optibelt OMEGA Timing Belts

Intensive development in our laboratories and confirmed by field trials has resulted in the powerful Optibelt OMEGA range of timing belts. Our years of experience with Optibelt ZR and Optibelt HTD® belts set targets for synchronous power transmission and positioning drives. The geometry of the OMEGA tooth form is such that the belts will fit in conventional curvilinear toothed pulleys. So, for example, OMEGA timing belts will run in standard HTD pulleys available from stock in sections 3M, 5M, 8M and 14M. Pulleys with special tooth forms are not required for the OMEGA timing belt range.

Types: 2M; 3M; 5M; 8M; 14M



See pages 65 to 67

Product Range



Power Transmission



See pages 65 to 67

Optibelt OMEGA HL High performance timing belts, maintenance free

The new high power timing belt for extremely high loads over the total range of speeds.

Optibelt developed this belt in the pitches 8M and 14M especially for drives with high torques and intermittent loads like those commonly used in machines. For this application, the design and the material of the timing belt was optimised in such a way so as to achieve the highest possible functional reliability in combination with an optimum efficiency when used on new drive applications.

Types: 8M HL; 14M HL

Optibelt OMEGA HP High performance timing belts, maintenance free

Compact synchronous drives are used across the entire spectrans of mechanical drive engineering. For that, performance, optimized running behavior and operational reliability are only some of the high demands made on the timing belt. Modern manufacturing technologies plus quality inspections in all stages of processing guarantee super reliability and a continuously high quality standard for Optibelt products. 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 very high performance level. For every power transmission requirement there is an appropriate belt section.

Types: 2M; 3M; 5M; 8M; 14M



See pages 65 to 67



See pages 92

Optibelt OMEGA HP linear Optibelt OMEGA linear

Optibelt OMEGA linear timing belting is open-ended timing belting made from rubber with a glass fibre tension cord manufactured out of sleeves using the spiral cut method.

**Sections: Omega 3M 9
Omega 5M 10, 5M 15, 5M 25
Omega 8M 10, 8M 15, 8M 20, 8M 25
Omega HP 3M 9
Omega HP 5M 10, 5M 15, 5M 25
Omega HP 8M 10, 8M 15, 8M 20, 8M 25**

Optibelt ZR linear

Optibelt ZR linear timing belting with trapezoidal teeth sections are manufactured out of sleeves using the spiral cut method. This open-ended timing belting has a glass fibre tension cord.

**Sections: XL 025, XL 037, XL 050
L 050, L 100
H 075, H 100**



See pages 92

Product Range



Power Transmission



See pages 78 to 82

Optibelt ALPHA POWER Metric Timing Belts and Optibelt ALPHA POWER D Metric Double Timing Belts

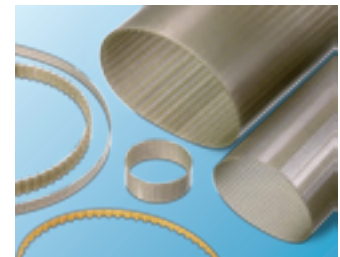
These belts are made from polyurethane with steel cords. They are able to withstand temperatures from $-20\text{ }^{\circ}\text{F}/-30\text{ }^{\circ}\text{C}$ up to $+176\text{ }^{\circ}\text{F}/+80\text{ }^{\circ}\text{C}$.

Types: T 2.5; T 5; T 10; AT 5; AT 10; DT 5; DT 10

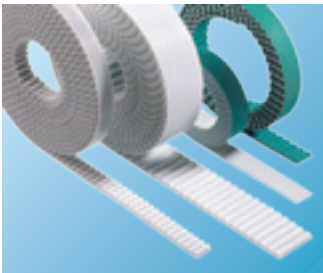
Optibelt ALPHA Timing Belts, Imperial

The Optibelt ZRP is produced using a special manufacturing process and observes the narrowest of tolerances. This means that there is a standard range of abrasion and oil resistant belts available in inch pitch sections that also displays some resistance to a host of aggressive chemicals.

Sections: ZRP: K-MXL, K-XL, K-L



See pages 83 to 85



See pages 90 to 91

Optibelt ALPHA linear/V Timing belts

Optibelt ZRL timing belting is employed as long length open ended product predominantly in linear drive systems. The aramid or steel tension cord has extremely low elasticity. The flexible range of sections and lengths generate a host of drive solutions. The thermoplastic polyurethane surface is ideal for the application of various coatings and cams and lugs may be welded on.

These belts can also be spliced forming a continuous belt.

**Sections: XL, L, H, XH, 5M, 8M, 14M,
T5, T10, T20,
AT5, AT10, AT20**

Optibelt ALPHAflex Timing Belts Manufactured endless

The Optiflex timing belt is manufactured without interruption of the tension member; this means an endless spirally wound steel tension cord is used. This optimum combination of extremely strong tension cord and polyurethane makes these timing belts suitable for universal application in areas where high performance must be transmitted synchronously in systems with large centre distances.

**Sections: T5, T10, T20,
AT5, AT10, AT20,
DT5, DT10,
AT5D, AT10D,
5M, 8M, 14M,
D-5M, D-8M**



See pages 86 to 89

**The drive determines the
performance characteristics.**

Optibelt S=C PLUS

**ensures perfect
power transmission and meets
highest requirements.**



optibelt *S=C PLUS*

The name speaks for itself:
Optibelt S=C PLUS, this is a byword
for "SetConstant" V-belts.

The unrivalled length
tolerances of this
first class product are
the result of modern
manufacturing
processes,
many years of
experience of experts,
as well as continuous
improvements
in raw materials.



Other Benefits:

- Distinct energy savings
- High efficiency
- Smooth power transmission
- Longer service life
- Excellent running characteristics
- Low internal belt friction,
thus less internal heat created
- Cooler running – increased life
- Extended maintenance periods
- Simplified storage
- Substantial cost reduction

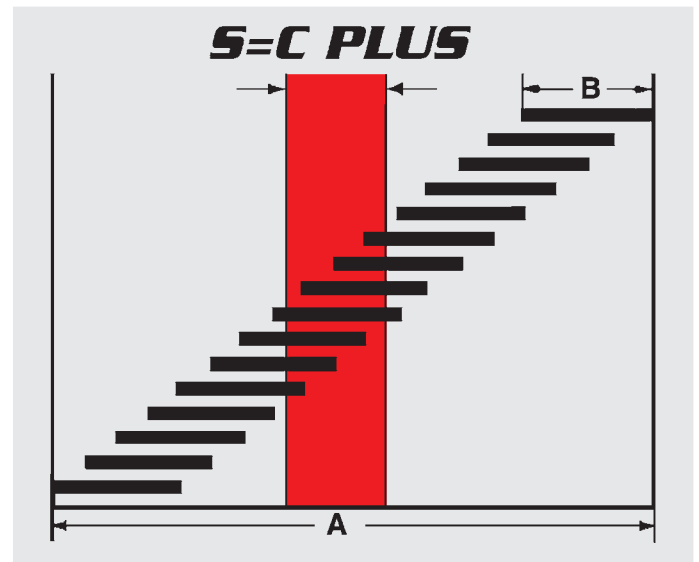
S=C PLUS
can be used in sets without
further measurement

Optibelt S=C PLUS – Power Transmission for Perfectionists

Whether in automobiles, machine tools or electric devices – there is one thing that applies anywhere and at any time: The drive determines the capacity! Optibelt S=C PLUS has been developed for special requirements. This V-belt has an extraordinarily high load capacity and meets the most demanding requirements even under difficult conditions. Perfect, precise, and reliable.



Special manufacturing methods = proven quality

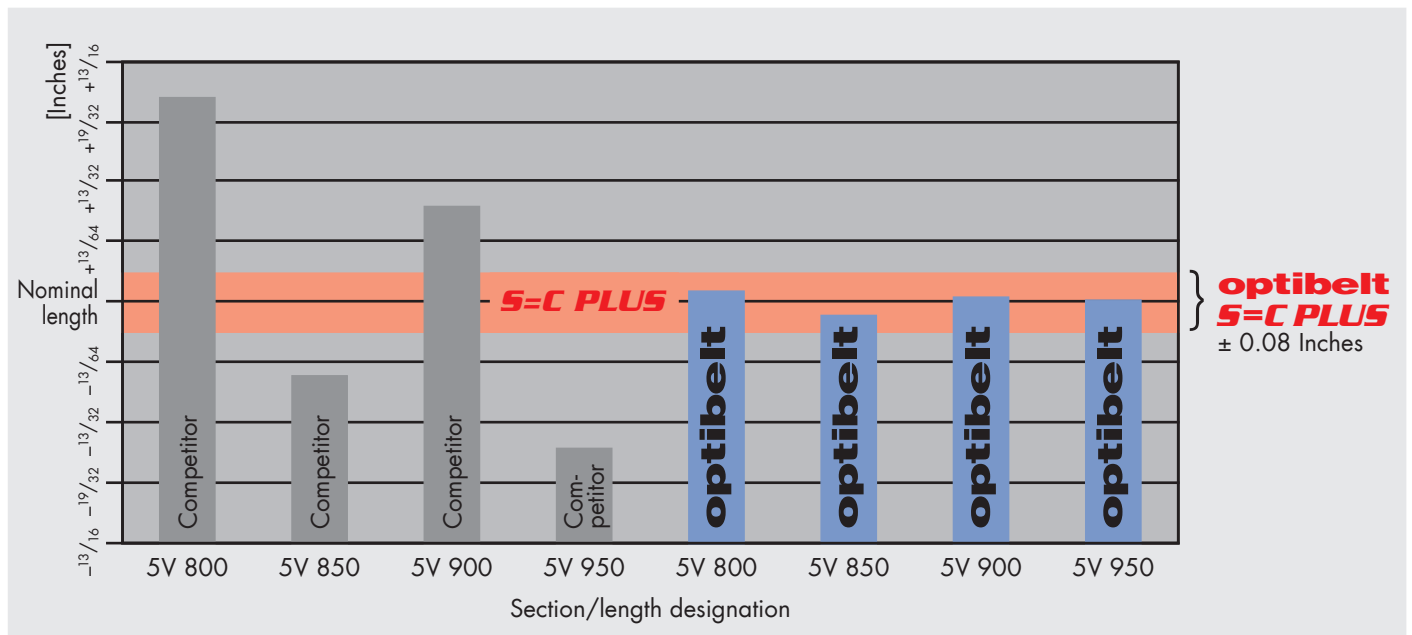


Optibelt S=C PLUS – the Formula for First Class Quality

For single belts with a nominal length of 180 Inches, a maximum deviation of ± 0.08 Inches is permitted by DIN/ISO standards (Dimension A). If multiple belt drives are used, the individual belts are combined into a set. In this case the following applies: The deviation from the nominal length must not exceed 0.225 Inches (Dimension B). Optibelt S=C PLUS meets both requirements with ease, providing a guaranteed length tolerance of merely ± 0.08 Inches.

Closer to the Nominal size

Optibelt S=C PLUS length tolerances are around nominal lengths.



Comparison graph Optibelt S=C PLUS V-belts are always around the nominal belt length.

The revolution
has a name:

optibelt RED POWER II S=C PLUS
optibelt RED POWER II S=C PLUS
optibelt RED POWER II S=C PLUS

Made in Germany

Made in Germany

Made in Germany

optibelt

**RED
POWER II**
S=C PLUS

MAINTENANCE FREE

optibelt **RED POWER II**

Wrapped Wedge Belts, Kraftbands and Pulleys



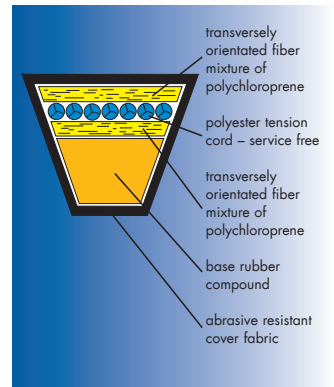
Power Transmission

Advantage

1

maintenance free

New production methods and new raw materials enable us for the first time to manufacture a wrapped wedge belt which requires absolutely no maintenance and which is of such low stretch that an Optibelt RED POWER II wedge belt correctly pretensioned once, does not require any further retensioning. As far as initial fitting of the Optibelt RED POWER II wedge belt is concerned, the same calculation methods and pretension values apply as for Optibelt standard wedge belts.



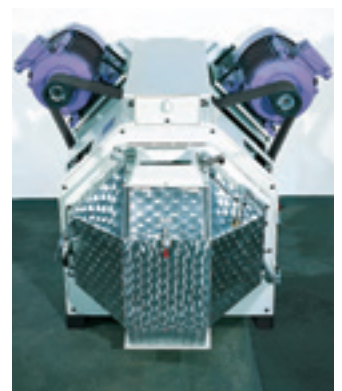
Advantage

2

strong power rating

The power ratings of Optibelt RED POWER II speak for themselves. Compared to present day wrapped wedge belts, they are extremely high depending on section and pulley diameter. In many cases, the performance level reaches the values of raw edge, molded cogged wedge belts. Drive efficiency is as high as 97 %. Optibelt RED POWER II are oil, heat and dust resistant as standard. References for anti static properties are to be found in our technical documents.

Heat resistance is also comprade to raw edge V-belts but hiading a smoother running belt drive.



Advantage

3

cost savings

A special advantage of the Optibelt RED POWER II is the fact that real money can be saved. Based on its high power ratings, fewer belts per drive are to be used! With other words: fewer belts, narrower pulleys and less space required. Therefore: lower costs and higher power rating.

What an argument!

By the way: Optibelt RED POWER II is also available as a kraftband.



Advantage

4

SetConstant

Naturally, S=C PLUS applies to Optibelt RED POWER II, too. Because of the fact that it is insensitive towards performance shocks, the "new one" runs especially well in sets, proverbial smooth running. The tolerances of Optibelt RED POWER II are substantially lower than the set tolerances fixed by industry standards.

Advantage

5

environmentally friendly

Contrary to many other transmission belts, there is virtually no material waste during the production of the service free wrapped wedge belt Optibelt RED POWER II. We can proudly say that we achieved the goal of producing the most environmentally friendly transmission belt.



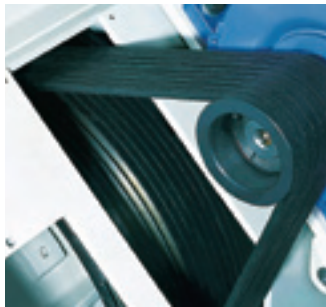
optibelt *RED POWER II*

**Maintenance Free Wedge Belts
Manufactured to RMA/MPTA Standards**



A practical example

16 hours a day, 260 days a year endurance run of a transmission element in a pelletizer press in a feed mill. Based on 25,000 hours life time, belt life should be in excess of 6 years.



With 8 standard wedge belts	1500
Driver pulley	8 grooves, 6.7 Inch dia.
Driven pulley	8 grooves, 37.5 Inch dia.
Pulley face width	6.2 Inch
Theoretical belt life	25,000 hours
Retensioning	10 times

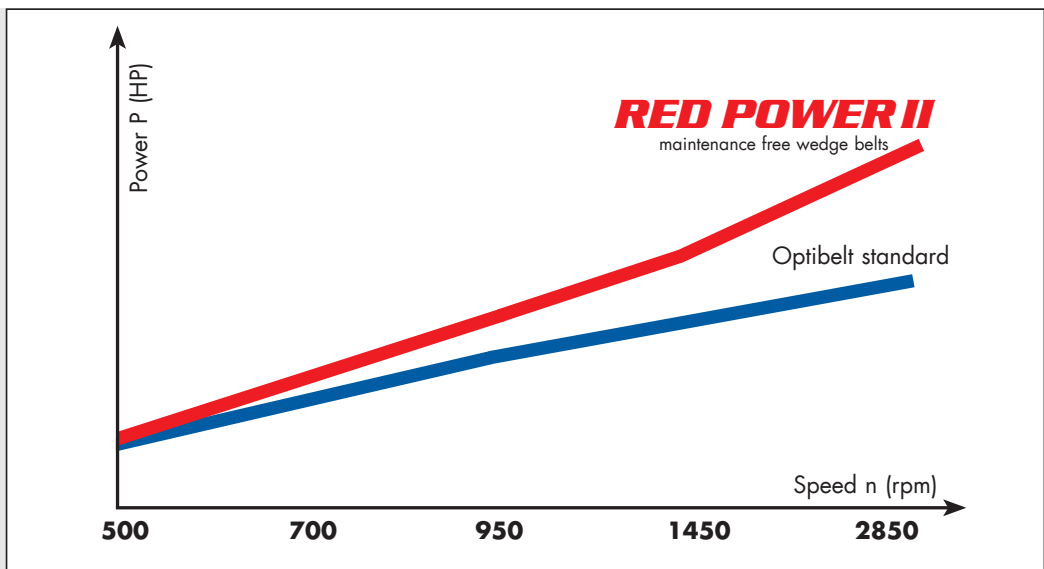
The same drive location, the same application: however, this time with the improved Optibelt RED POWER II



With 6 RED POWER II	1500
Driver pulley	6 grooves, 6.7 Inch dia.
Driven pulley	6 grooves, 37.5 Inch dia.
Pulley face width	4.7 Inch
Theoretical belt life	25,000 hours
Retensioning	None

Costs saved for the drive system: approx. 20 %

Power rating comparison between Optibelt standard wedge belt and Optibelt RED POWER II, section 5V, pulley diameter 11 inch



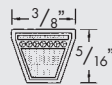
Sections and Sizes

optibelt RED POWER II Maintenance Free Wedge Belts

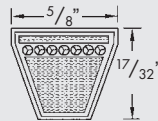
Manufactured to RMA/MPTA Standards



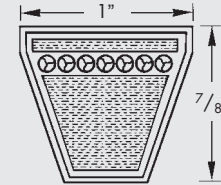
Power Transmission



3V



5V



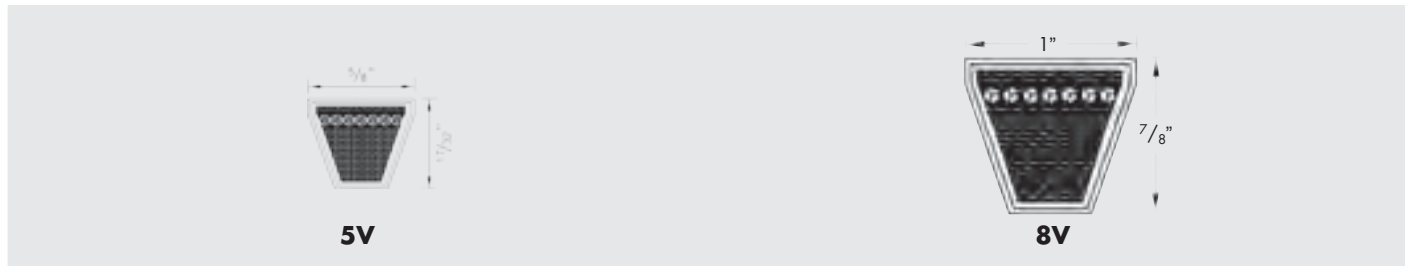
8V

Section 3V		Section 5V		Section 8V	
USA-Designation	Outside length (inch)	USA-Designation	Outside length (inch)	USA-Designation	Outside length (inch)
3V 475	47.5	5V 500	50.0	8V 1000	100.0
3V 500	50.0	5V 530	53.0	8V 1060	106.0
3V 530	53.0	5V 560	56.0	8V 1120	112.0
3V 560	56.0	5V 600	60.0	8V 1180	118.0
3V 600	60.0	5V 630	63.0	8V 1250	125.0
3V 630	63.0	5V 670	67.0	8V 1320	132.0
3V 670	67.0	5V 710	71.0	8V 1400	140.0
3V 710	71.0	5V 750	75.0	8V 1500	150.0
3V 750	75.0	5V 800	80.0	8V 1600	160.0
3V 800	80.0	5V 850	85.0	8V 1700	170.0
3V 850	85.0	5V 900	90.0	8V 1800	180.0
3V 900	90.0	5V 950	95.0	8V 1900	190.0
3V 950	95.0	5V 1000	100.0	8V 2000	200.0
3V 1000	100.0	5V 1060	106.0	8V 2120	212.0
3V 1060	106.0	5V 1120	112.0	8V 2240	224.0
3V 1120	112.0	5V 1180	118.0	8V 2360	236.0
3V 1180	118.0	5V 1250	125.0	8V 2500	250.0
3V 1250	125.0	5V 1320	132.0	8V 2650	265.0
3V 1320	132.0	5V 1400	140.0	8V 2800	280.0
3V 1400	140.0	5V 1500	150.0	8V 3000	300.0
		5V 1600	160.0	8V 3150	315.0
		5V 1700	170.0	8V 3350	335.0
		5V 1800	180.0	8V 3550	355.0
		5V 1900	190.0		
		5V 2000	200.0		
		5V 2120	212.0		
		5V 2240	224.0		
		5V 2360	236.0		
		5V 2500	250.0		
		5V 2650	265.0		
		5V 2800	280.0		
		5V 3000	300.0		
		5V 3150	315.0		
Maximum manufacturing length: 4000 mm L ₀ Minimum production quantity: over 1800 mm L ₀ = 80 pieces for non standard lengths Belt weight: ≈ 0.004 lbs/inch (0.074 kg/m)		Maximum manufacturing length: 8000 mm L ₀ Minimum production quantity: over 1800 mm L ₀ = 50 pieces for non standard lengths Belt weight: ≈ 0.011 lbs/inch (0.195 kg/m)		Maximum manufacturing length: 8500 mm L ₀ Minimum production quantity: over 2540 mm L ₀ = 40 pieces for non standard lengths Belt weight: ≈ 0.032 lbs/inch (0.575 kg/m)	

Sections and Sizes

optibelt *BLUE POWER* Wedge Belts

Manufactured to RMA/MPTA Standards



Section 5V		Section 8V	
USA-Designation			Outside length (inch)
5V 500	50.0	8V 1000	100.0
5V 530	53.0	8V 1060	106.0
5V 560	56.0	8V 1120	112.0
5V 600	60.0	8V 1180	118.0
5V 630	63.0	8V 1250	125.0
5V 670	67.0	8V 1320	132.0
5V 710	71.0	8V 1400	140.0
5V 750	75.0	8V 1500	150.0
5V 800	80.0	8V 1600	160.0
5V 850	85.0	8V 1700	170.0
5V 900	90.0	8V 1800	180.0
5V 950	95.0	8V 1900	190.0
5V 1000	100.0	8V 2000	200.0
5V 1060	106.0	8V 2120	212.0
5V 1120	112.0	8V 2240	224.0
5V 1180	118.0	8V 2360	236.0
5V 1250	125.0	8V 2500	250.0
5V 1320	132.0	8V 2650	265.0
5V 1400	140.0	8V 2800	280.0
5V 1500	150.0	8V 3000	300.0
5V 1600	160.0	8V 3150	315.0
5V 1700	170.0	8V 3350	335.0
5V 1800	180.0	8V 3550	355.0
5V 1900	190.0	8V 3750	375.0
5V 2000	200.0	8V 4000	400.0
5V 2120	212.0	8V 4250	425.0
5V 2240	224.0	8V 4500	450.0
5V 2360	236.0	8V 4750	475.0
5V 2500	250.0	8V 5000	500.0
5V 2650	265.0	8V 5600	560.0
5V 2800	280.0	8V 6000	600.0
5V 3000	300.0		
5V 3150	315.0		
5V 3350	335.0		
5V 3550	355.0		

Minimum quantity and other belt information like it is for the other banded belts.

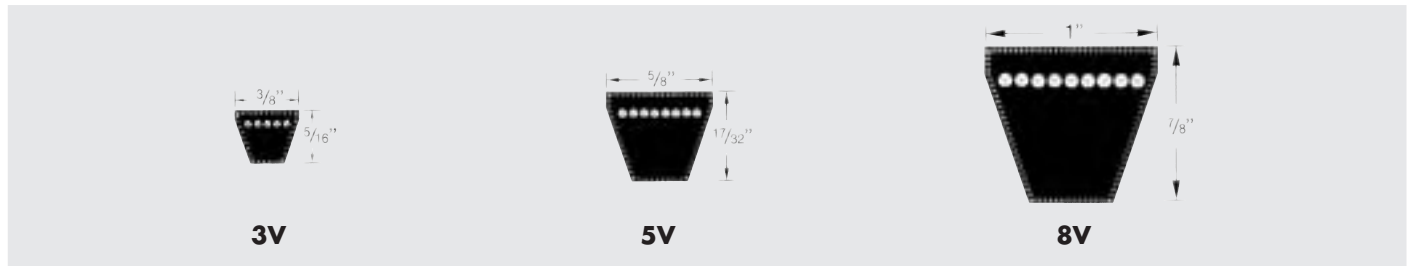
Sections and Sizes

optibelt 5K Wedge Belts

Manufactured to a Tolerance Three Times Closer than RMA/MPTA Standards



Power Transmission



Section 3V		Section 5V		Section 8V	
Belt No.	Outside length (inch)	Belt No.	Outside length (inch)	Belt No.	Outside length (inch)
3V 250	25.0	5V 500	50.0	8V 1000	100.0
3V 265	26.5	5V 530	53.0	8V 1060	106.0
3V 280	28.0	5V 560	56.0	8V 1120	112.0
3V 300	30.0	5V 600	60.0	8V 1180	118.0
3V 315	31.5	5V 630	63.0	8V 1250	125.0
3V 335	33.5	5V 670	67.0	8V 1320	132.0
3V 355	35.5	5V 710	71.0	8V 1400	140.0
3V 375	37.5	5V 750	75.0	8V 1500	150.0
3V 400	40.0	5V 800	80.0	8V 1600	160.0
3V 425	42.5	5V 850	85.0	8V 1700	170.0
3V 450	45.0	5V 900	90.0	8V 1800	180.0
3V 475	47.5	5V 950	95.0	8V 1900	190.0
3V 500	50.0	5V 1000	100.0	8V 2000	200.0
3V 530	53.0	5V 1060	106.0	8V 2120	212.0
3V 560	56.0	5V 1080	108.0	8V 2240	224.0
3V 600	60.0	5V 1120	112.0	8V 2360	236.0
3V 630	63.0	5V 1180	118.0	8V 2500	250.0
3V 670	67.0	5V 1250	125.0	8V 2650	265.0
3V 710	71.0	5V 1320	132.0	8V 2800	280.0
3V 750	75.0	5V 1400	140.0	8V 3000	300.0
3V 800	80.0	5V 1500	150.0	8V 3150	315.0
3V 830	83.0	5V 1600	160.0	8V 3350	335.0
3V 850	85.0	5V 1700	170.0	8V 3550	355.0
3V 900	90.0	5V 1800	180.0	8V 3750	375.0
3V 950	95.0	5V 1900	190.0	8V 4000	400.0
3V 1000	100.0	5V 2000	200.0	8V 4250	425.0
3V 1060	106.0	5V 2120	212.0	8V 4500*	450.0
3V 1120	112.0	5V 2240	224.0	8V 4750*	475.0
3V 1180	118.0	5V 2360	236.0	8V 5000*	500.0
3V 1250	125.0	5V 2500	250.0	8V 5600*	560.0
3V 1320	132.0	5V 2650	265.0	8V 6000*	600.0
3V 1400	140.0	5V 2800	280.0		
		5V 3000	300.0		
		5V 3150	315.0		
		5V 3350	335.0		
		5V 3550	355.0		
					* Non standard sizes
Maximum manufacturing length: 177 inches (4500 mm) Non standard lengths available above 71 inches (1800 mm) Minimum production quantity: 20 pieces for non standard lengths Belt weight: ≈ 0.004 lbs/inch (0.074 kg/m)		Maximum manufacturing length: 393 inches (10000 mm) Non standard lengths available above 71 inches (1800 mm) Minimum production quantity: 25 pieces Belt weight: ≈ 0.011 lbs/inch (0.195 kg/m)		Maximum manufacturing length: 708 inches (18000 mm) Non standard lengths available above 100 inches (2540 mm) Minimum production quantity: 11 pieces Belt weight: ≈ 0.032 lbs/inch (0.575 kg/m)	

Lengths in **bold print** are in the S=C PLUS range.

Sections and Sizes

optibelt RED POWER II Maintenance Free Kraftbands with Wedge Belts RMA/MPTA



	Section	3V		5V		8V	
		(inch)	(mm)	(inch)	(mm)	(inch)	(mm)
	$b_b \approx$	$\frac{3}{8}$	9.0	$\frac{5}{8}$	15.0	1	25,0
	$h_b \approx$	$\frac{25}{64}$	9.9	$\frac{5}{8}$	15.1	$1\frac{1}{64}$	25,5

Section 3V		Section 5V		Section 8V	
Belt No.	Belt No.	Belt No.	Belt No.	Belt No.	Belt No.
3V 500	3V 1180	5V 500	5V 1400	8V 1000	8V 2800
3V 530	3V 1250	5V 530	5V 1500	8V 1060	8V 3000
3V 560	3V 1320	5V 560	5V 1600	8V 1120	8V 3150
3V 600	3V 1400	5V 600	5V 1700	8V 1180	8V 3350
3V 630		5V 630	5V 1800	8V 1250	8V 3550
3V 670		5V 670	5V 1900	8V 1320	8V 3750
3V 710		5V 710	5V 2000	8V 1400	8V 4000
3V 750		5V 750	5V 2120	8V 1500	8V 4250
3V 800		5V 800	5V 2240	8V 1600	8V 4500
3V 850		5V 850	5V 2360	8V 1700	8V 4750
3V 900		5V 900	5V 2500	8V 1800	
3V 950		5V 950	5V 2650	8V 1900	
3V 1000		5V 1000	5V 2800	8V 2000	
3V 1060		5V 1060	5V 3000	8V 2120	
3V 1120		5V 1120	5V 3150	8V 2240	
		5V 1180		8V 2360	
		5V 1250		8V 2500	
		5V 1320		8V 2650	

Non stock items. Further sizes on request.

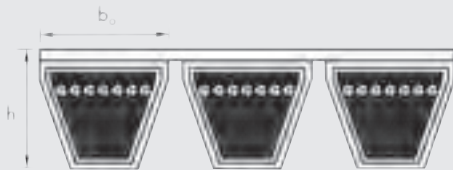
<p>Maximum manufacturing length: 157 inches (4000 mm) L_a Intermediate lengths from 50 inches (1270 mm) L_a</p> <p>Minimum quantities for non-listed sizes: 50 inches (1270 mm) L_a – 80 inches (2032 mm) L_a 19 pieces with 5 ribs or 24 pieces with 4 ribs or 32 pieces with 3 ribs or 48 pieces with 2 ribs or multiples thereof</p> <p>Over 80 inches (2032 mm) L_a 23 pieces with 5 ribs or 29 pieces with 4 ribs or 38 pieces with 3 ribs or 58 pieces with 2 ribs or multiples thereof</p> <p>Belt weight: 1 rib \approx 0.006 lbs/inch (0.122 kg/m)</p>	<p>Maximum manufacturing length: 375 inches (9525 mm) L_a Intermediate lengths from 56 inches (1422 mm) L_a</p> <p>Minimum quantities for non-listed sizes: 50 inches (1270 mm) L_a – 80 inches (2032 mm) L_a 12 pieces with 5 ribs or 15 pieces with 4 ribs or 20 pieces with 3 ribs or 30 pieces with 2 ribs or multiples thereof</p> <p>Over 80 inches (2032 mm) L_a – 157 inches (4000 mm) L_a 13 pieces with 5 ribs or 16 pieces with 4 ribs or 22 pieces with 3 ribs or 33 pieces with 2 ribs or multiples thereof</p> <p>Over 157 inches (4000 mm) L_a 6 pieces with 5 ribs or 7 pieces with 4 ribs or 10 pieces with 3 ribs or 15 pieces with 2 ribs or multiples thereof</p> <p>Belt weight: 1 rib \approx 0.014 lbs/inch (0.252 kg/m)</p>	<p>Maximum manufacturing length: 591 inches (15000 mm) L_a Above 591 inches (15000 mm) – 709 inches (18000 mm) on request Intermediate lengths from 100 inches (2540 mm) L_a</p> <p>Minimum quantities for all sizes: 2 pieces with 5 ribs or 2 pieces with 4 ribs or 3 pieces with 3 ribs or multiples thereof</p> <p>Belt weight: 1 rib \approx 0.039 lbs/inch (0.693 kg/m)</p>
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Sections and Sizes

optibelt *BLUE POWER* Kraftbands with Wedge Belts RMA/MPTA



Power Transmission



Section	5V	8V
$b_o \approx$ (mm)	15,0	25,0
$h \approx$ (mm)	15,1	25,5

Section 5V		Section 8V	
USA-Designation	Outside length (inch)	USA-Designation	Outside length (inch)
5V 800	80.0	8V 1000	100.0
5V 850	85.0	8V 1060	106.0
5V 900	90.0	8V 1120	112.0
5V 950	95.0	8V 1180	118.0
5V 1000	100.0	8V 1250	125.0
5V 1060	106.0	8V 1320	132.0
5V 1120	112.0	8V 1400	140.0
5V 1180	118.0	8V 1500	150.0
5V 1250	125.0	8V 1600	160.0
5V 1320	132.0	8V 1700	170.0
5V 1400	140.0	8V 1800	180.0
5V 1500	150.0	8V 1900	190.0
5V 1600	160.0	8V 2000	200.0
5V 1700	170.0	8V 2120	212.0
5V 1800	180.0	8V 2240	224.0
5V 1900	190.0	8V 2360	236.0
5V 2000	200.0	8V 2500	250.0
5V 2120	212.0	8V 2650	265.0
5V 2240	224.0	8V 2800	280.0
5V 2360	236.0	8V 3000	300.0
5V 2500	250.0	8V 3150	315.0
5V 2650	265.0	8V 3350	335.0
5V 2800	280.0	8V 3550	355.0
5V 3000	300.0	8V 3750	375.0
5V 3150	315.0	8V 4000	400.0
		8V 4250	425.0
		8V 4500	450.0
		8V 4750	475.0

Maximum manufacturing length: 9525 mm L_d
 Intermediate lengths from 2032 mm L_d
 Minimum quantities:
 6 pieces with 5 ribs or
 7 pieces with 4 ribs or
 10 pieces with 3 ribs or
 15 pieces with 2 ribs
 or multiples thereof
 Belt weight: 1 rib \approx 0,253 kg/m

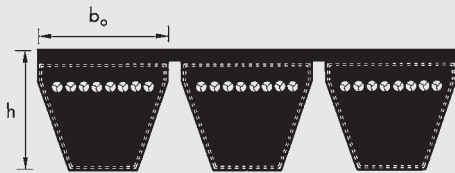
Maximum manufacturing length: 12065 mm L_d
 Intermediate lengths from 2540 mm L_d
 Minimum quantities:
 3 pieces with 5 ribs or
 3 pieces with 4 ribs or
 5 pieces with 3 ribs or
 7 pieces with 2 ribs
 or multiples thereof
 Belt weight: 1 rib \approx 0,738 kg/m

Sections and Sizes

optibelt *KB* Kraftbands with Wedge Belts RMA/MPTA



Power Transmission



Section	3V		5V		8V	
	(inch)	(mm)	(inch)	(mm)	(inch)	(mm)
$b_b \approx$	$\frac{3}{8}$	9.0	$\frac{5}{8}$	15.0	1	25.0
$h_b \approx$	$\frac{25}{64}$	9.9	$\frac{5}{8}$	15.1	$1\frac{1}{64}$	25.5

Section 3V		Section 5V				Section 8V	
Belt No.	Outside length (inch)	Belt No.	Outside length (inch)	Belt No.	Outside length (inch)	Belt No.	Outside length (inch)
3V 450	45.0	5V 500	50.0	5V 2120	212.0	8V 1000	100.0
3V 475	47.5	5V 530	53.0	5V 2240	224.0	8V 1060	106.0
3V 500	50.0	5V 560	56.0	5V 2360	236.0	8V 1120	112.0
3V 530	53.0	5V 600	60.0	5V 2500	250.0	8V 1180	118.0
3V 560	56.0	5V 630	63.0	5V 2650	265.0	8V 1250	125.0
3V 600	60.0	5V 670	67.0	5V 2800	280.0	8V 1320	132.0
3V 630	63.0	5V 710	71.0	5V 3000	300.0	8V 1400	140.0
3V 670	67.0	5V 750	75.0	5V 3150	315.0	8V 1500	150.0
3V 710	71.0	5V 800	80.0	5V 3350	335.0	8V 1600	160.0
3V 750	75.0	5V 850	85.0	5V 3550	355.0	8V 1700	170.0
3V 800	80.0	5V 900	90.0			8V 1800	180.0
3V 850	85.0	5V 950	95.0			8V 1900	190.0
3V 900	90.0	5V 1000	100.0			8V 2000	200.0
3V 950	95.0	5V 1060	106.0			8V 2120	212.0
3V 1000	100.0	5V 1120	112.0			8V 2240	224.0
3V 1060	106.0	5V 1180	118.0			8V 2360	236.0
3V 1120	112.0	5V 1250	125.0			8V 2500	250.0
3V 1180	118.0	5V 1320	132.0			8V 2650	265.0
3V 1250	125.0	5V 1400	140.0			8V 2800	280.0
3V 1320	132.0	5V 1500	150.0			8V 3000	300.0
3V 1400	140.0	5V 1600	160.0			8V 3150	315.0
		5V 1700	170.0			8V 3350	335.0
		5V 1800	180.0			8V 3550	355.0
		5V 1900	190.0			8V 3750	375.0
		5V 2000	200.0			8V 4000	400.0
						8V 4250*	425.0
						8V 4500	450.0
						8V 4750*	475.0
						8V 5000*	500.0
						8V 5600*	560.0
						8V 6000*	600.0

Maximum manufacturing length: 167 inches (4250 mm)
 Non standard lengths available above 71 inches (1800 mm)
 Minimum production quantities for non-listed sizes:
 9 pieces with 5 ribs or
 12 pieces with 4 ribs or
 16 pieces with 3 ribs or
 24 pieces with 2 ribs or multiples thereof
 Belt weight (per rib): ≈ 0.007 lbs/inch (0.122 kg/m)

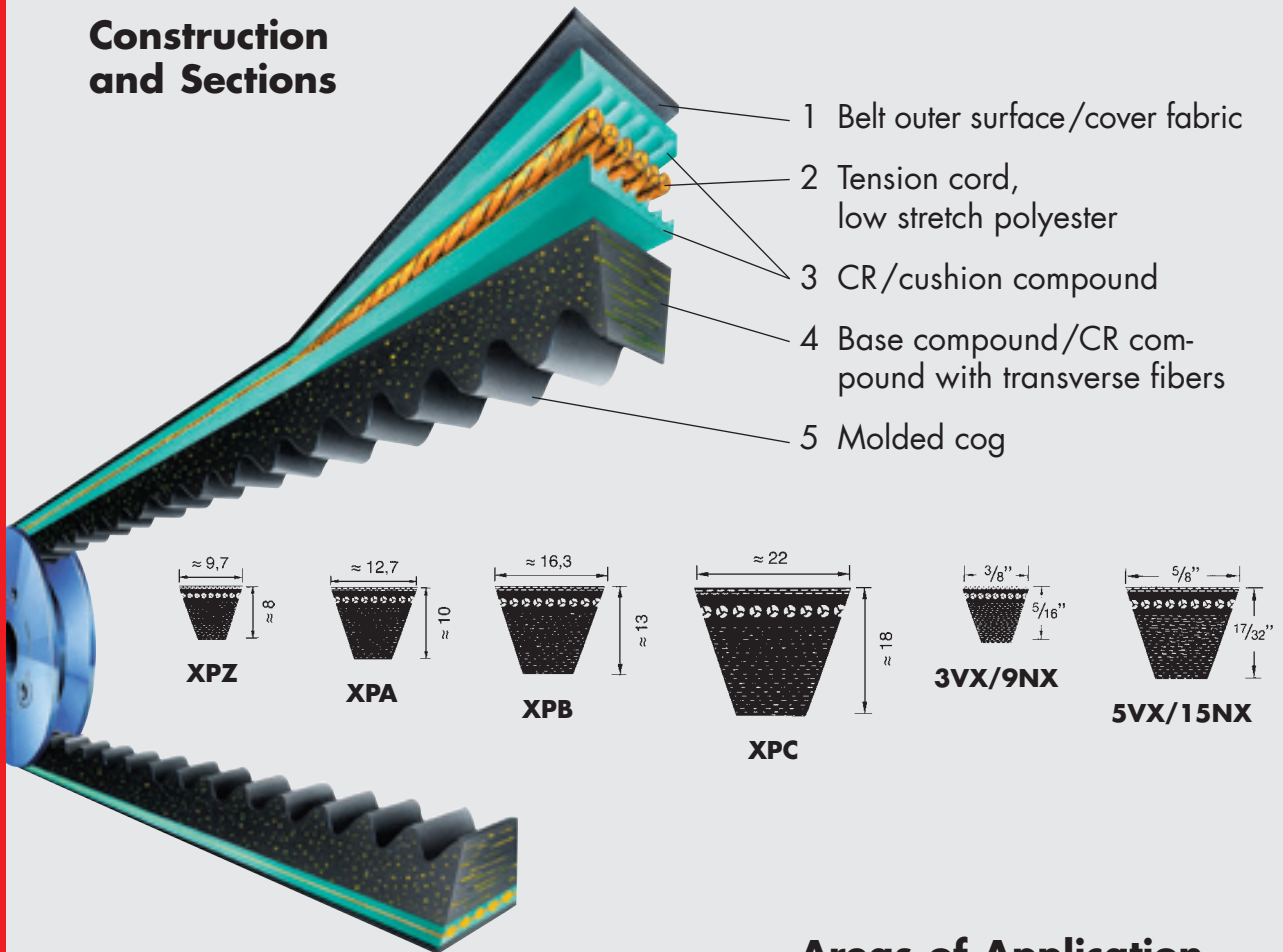
Maximum manufacturing length: 393 inches (10000 mm)
 Non standard lengths available above 71 inches (1800 mm)
 Minimum production quantities for non-listed sizes:
 6 pieces with 5 ribs or
 7 pieces with 4 ribs or
 10 pieces with 3 ribs or
 15 pieces with 2 ribs or multiples thereof
 Belt weight (per rib): ≈ 0.014 lbs/inch (0.252 kg/m)

Maximum manufacturing length: 708 inches (18000 mm)
 Non standard lengths available above 100 inches (2540 mm)
 Minimum production quantities for all sizes:
 2 pieces with 5 ribs or
 2 pieces with 4 ribs or
 3 pieces with 3 ribs or multiples thereof
 Belt weight (per rib): ≈ 0.039 lbs/inch (0.693 kg/m)

Aramid kraftbands available up on request.

The Optibelt Super X-POWER M=S is a new style of raw edge, molded cogged V-belt

Construction and Sections



- 1 Belt outer surface/cover fabric
- 2 Tension cord, low stretch polyester
- 3 CR/cushion compound
- 4 Base compound/CR compound with transverse fibers
- 5 Molded cog

Areas of Application

Machine construction

- Compressors
- Fans
- Soil compactors
- Pumps
- Wood working machines
- High performance saws
- Special machines

Machine tools

- Lathes and drills
- Grinders

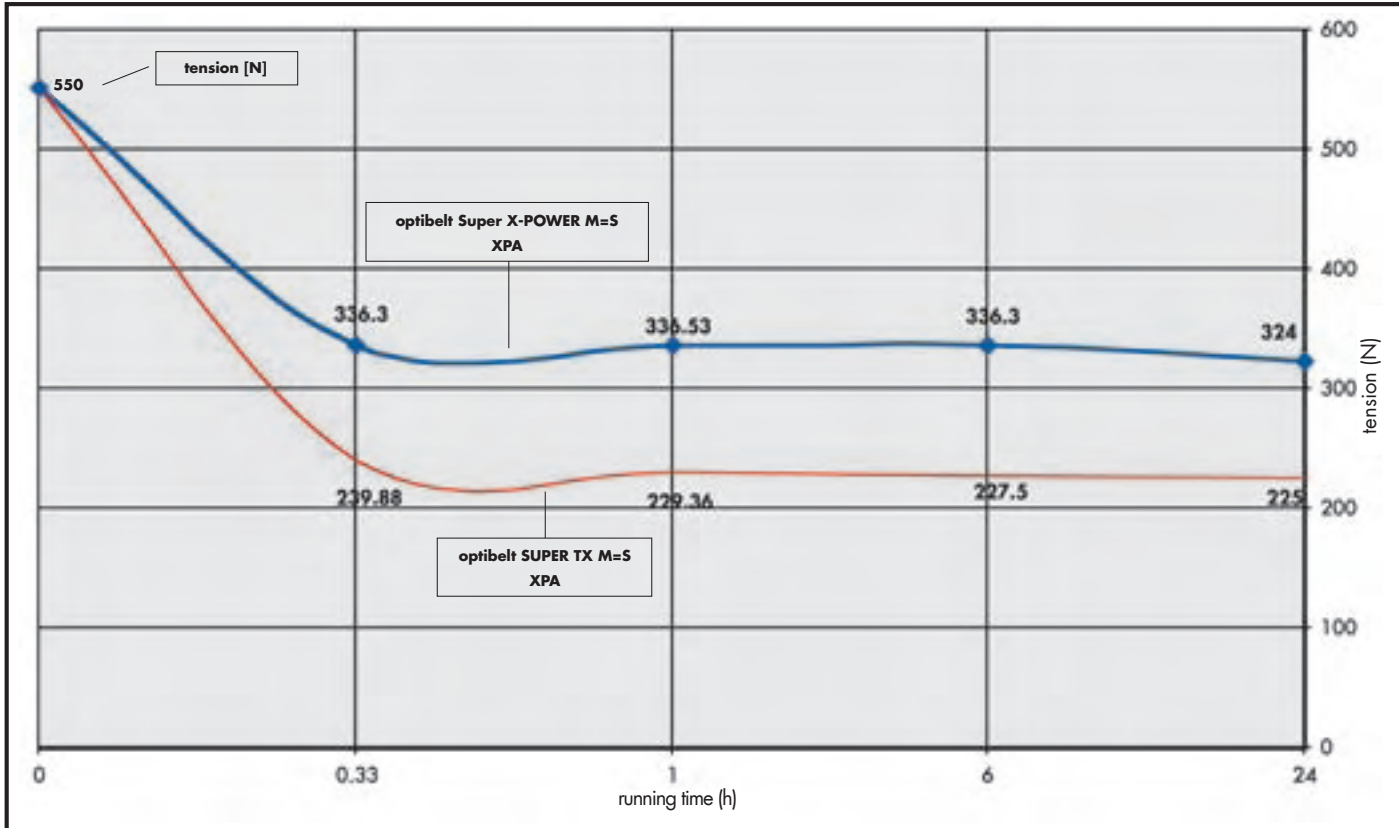


Consistent further development of the production process, improved materials, low stretch polyester cords and optimised molded cogs are the basis for this new belt generation.

Optibelt Super X-POWER M=S allow complex drive solutions in the whole area of machine construction under the most difficult conditions and extreme operational demands.



Power Transmission



Comparative Test: Tension behaviour (N), power P = 17.0 HP, n₁ = 4700 rpm



Test Result:

Optibelt Super X-POWER M=S belts display an improved tension behaviour compared to SUPER TX M=S belts. The fiber-reinforced belt substructure together with the low stretch polyester tension cord and the optimised molded cog lead to more dynamic and effective power transmission.

M=S "Matched" Sets

All Optibelt Super X-POWER M=S V-belts may be used in sets without further measurement. Special manufacturing techniques ensure the achievement of minute length tolerances.

That is why V-belts of the same nominal length can be made into sets arbitrarily.

Set code numbers and the tying into sets are not necessary. As a result, warehousing and other costs are reduced.

Heat Resistance

The service life of V-belts may be strongly affected by ambient temperature. Due to the use of high quality polychloroprene rubber compound, Optibelt Super X-POWER M=S are far more heat resistant than wrapped V-belts.

These V-belts are suitable for ambient temperatures of up to approx. +90 °C.

Higher temperatures lead to premature ageing and embrittlement of the V-belts.

Standard Characteristics

Smooth Running

High demands, such as smooth running and precision, are in particular made on V-belts which are used for drives on machine tools and special machines.

Due to the special manufacturing processes, Optibelt Super X-POWER M=S wedge belts offer especially smooth running and guarantee a vibration free contact with the pulley grooves.

Electrically Conductive

Electrical conductivity enables secure discharge of electrostatic build up. The use of electrically conductive V-belts requires that they be examined in accordance with ISO 1813. Our inspection certificate (issued in line with EN 10204 "3.1.B") verifies the electrical conductivity. We strongly recommend you to always order conductive V-belts separately.

Applications for Special Requirements

For special applications in the area of general machine construction, in the area of gardening machines, on special drives with tension, guide and reverse idlers, under extreme operating conditions and other special applications, our engineers from the Applications Engineering Department will provide advice.

Oil Resistance

Oil resistance prevents the damaging effects of mineral oils and greases, if these materials are not in permanent contact with the V-belts and do not appear in large quantities.

Animal and vegetable fats as well as water soluble cooling and cutting oils negatively affect the service life.

Under these conditions, Optibelt Super X-POWER M=S belts offer reliable service.

sets without measurement

many
Made in
Germany

Optibelt
Optibelt

Super X-POWER
Super X-POWER

M=S
M=S

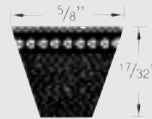
XPB
XPB

Sections and Sizes

optibelt Super X-POWER M=5 Molded Cogged, Raw Edge Wedge Belts to RMA/MPTA Standards



3VX



5VX

Section 3VX		Section 5VX			
Belt No.	Outside length (inch)	Belt No.	Outside length (inch)	Belt No.	Outside length (inch)
3VX 250	25.0	5VX 450*	45.0	5VX 1000	100.0
3VX 265	26.5	5VX 470*	47.0	5VX 1030*	103.0
3VX 280	28.0	5VX 490*	49.0	5VX 1060	106.0
3VX 300	30.0	5VX 500	50.0	5VX 1080*	108.0
3VX 315	31.5	5VX 510*	51.0	5VX 1120	112.0
3VX 335	33.5	5VX 530	53.0	5VX 1180	118.0
3VX 355	35.5	5VX 540*	54.0	5VX 1230*	123.0
3VX 375	37.5	5VX 550*	55.0	5VX 1250	125.0
3VX 400	40.0	5VX 560	56.0	5VX 1320	132.0
3VX 425	42.5	5VX 570*	57.0	5VX 1400	140.0
3VX 450	45.0	5VX 580*	58.0	5VX 1500*	150.0
3VX 475	47.5	5VX 590*	59.0	5VX 1600*	160.0
3VX 500	50.0	5VX 600	60.0	5VX 1700*	170.0
3VX 530	53.0	5VX 610*	61.0	5VX 1800*	180.0
3VX 560	56.0	5VX 630	63.0	5VX 1900*	190.0
3VX 600	60.0	5VX 650*	65.0	5VX 2000*	200.0
3VX 630	63.0	5VX 660*	66.0		
3VX 670	67.0	5VX 670	67.0		
3VX 710	71.0	5VX 680*	68.0		
3VX 750	75.0	5VX 690*	69.0		
3VX 800	80.0	5VX 710	71.0		
3VX 850	85.0	5VX 730*	73.0		
3VX 900	90.0	5VX 740*	74.0		
3VX 950	95.0	5VX 750	75.0		
3VX 1000	100.0	5VX 780*	78.0		
3VX 1060	106.0	5VX 800*	80.0		
3VX 1120	112.0	5VX 830*	83.0		
3VX 1180	118.0	5VX 840*	84.0		
3VX 1250	125.0	5VX 850	85.0		
3VX 1320	132.0	5VX 860*	86.0		
3VX 1400	140.0	5VX 880*	88.0		
		5VX 900	90.0		
		5VX 930*	93.0		
		5VX 950	95.0		
		5VX 960*	96.0		

Belt weight: ≈ 0.0036 lbs/inch (0.065 kg/m)

Belt weight: ≈ 0.010 lbs/inch (0.183 kg/m)

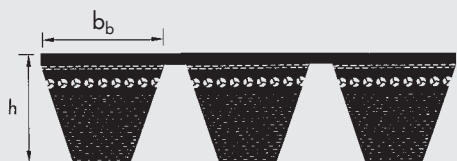
Optibelt Super X-POWER belts marked M=5, of the same length can be used in matched sets, without the need for re-measuring and matching. * Optibelt SUPER TX M=5

Sections and Sizes

optibelt *Super KBX-POWER* Kraftbands with Molded Cogged, Raw Edge Wedge Belts



Power Transmission



Section	3VX	5VX
	(inch)	(inch)
$b_b \approx$	$3/8$	$5/8$
$h_b \approx$	$25/64$	$5/8$

Section 3VX		Section 5VX	
Belt No.	Belt No.	Belt No.	Belt No.
3VX 425	3VX 1000	5VX 500	5VX 1060
3VX 475	3VX 1060	5VX 530	5VX 1120
3VX 500	3VX 1120	5VX 560	5VX 1180
3VX 510	3VX 1180	5VX 600	5VX 1250
3VX 530	3VX 1250	5VX 630	5VX 1320
3VX 560	3VX 1320	5VX 670	5VX 1400
3VX 600	3VX 1400	5VX 710	
3VX 630		5VX 730	
3VX 670		5VX 750	
3VX 710		5VX 800	
3VX 750		5VX 810	
3VX 800		5VX 850	
3VX 850		5VX 900	
3VX 900		5VX 950	
3VX 950		5VX 1000	
Further sizes on request.		Further sizes on request.	
Belt weight (per rib): ≈ 0.025 lbs/inch (0.117 kg/m)		Belt weight (per rib): ≈ 0.045 lbs/inch (0.241 kg/m)	

Aramid kraftbands available up on request.

Sections and Sizes

optibelt VB Classical V-Belts Manufactured to a Tolerance

Three Times Closer than RMA/MPTA Standards



A

Section A

Belt No.	Outside length (inch)	Belt No.	Outside length (inch)	Belt No.	Outside length (inch)	Belt No.	Outside length (inch)
A 20	22	A 50	52	A 80	82	A 124	126
A 21	23	A 51	53	A 81	83	A 125	127
A 22	24	A 52	54	A 82	84	A 128	130
A 23	25	A 53	55	A 83	85	A 133	135
A 24	26	A 54	56	A 84	86	A 136	138
A 25	27	A 55	57	A 85	87	A 140	142
A 26	28	A 56	58	A 86	88	A 144	146
A 27	29	A 57	59	A 87	89	A 155	157
A 28	30	A 58	60	A 88	90	A 158	160
A 29	31	A 59	61	A 89	91	A 173*	175
A 30	32	A 60	62	A 90	92	A 180*	182
A 31	33	A 61	63	A 91	93		
A 32	34	A 62	64	A 92	94		
A 33	35	A 63	65	A 93	95		
A 34	36	A 64	66	A 94	96		
A 35	37	A 65	67	A 95	97		
A 36	38	A 66	68	A 96	98		
A 37	39	A 67	69	A 97	99		
A 38	40	A 68	70	A 98	100		
A 39	41	A 69	71	A 99	101		
A 40	42	A 70	72	A 100	102		
A 41	43	A 71	73	A 101	103		
A 42	44	A 72	74	A 102	104		
A 43	45	A 73	75	A 103	105		
A 44	46	A 74	76	A 105	107		
A 45	47	A 75	77	A 110	112		
A 46	48	A 76	78	A 112	114		
A 47	49	A 77	79	A 114	116		
A 48	50	A 78	80	A 115	117		
A 49	51	A 79	81	A 120	122		

* Non standard sizes

Maximum manufacturing length:
394 inches (10000 mm)
Non standard lengths available above
71 inches (1800 mm)
Minimum production quantity: 31 pieces
Belt weight: ≈ 0.006 lbs/inch (0.109 kg/m)

Further sizes available on request.

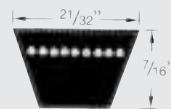
Sections and Sizes

optibelt VB Classical V-Belts Manufactured to a Tolerance

Three Times Closer than RMA/MPTA Standards



Power Transmission



B

Section B

Belt No.	Outside length (inch)	Belt No.	Outside length (inch)	Belt No.	Outside length (inch)	Belt No.	Outside length (inch)	Belt No.	Outside length (inch)
B 23	26	B 53	56	B 83	86	B 114	117	B 173	176
B 24	27	B 54	57	B 84	87	B 115	118	B 180	183
B 25	28	B 55	58	B 85	88	B 116	119	B 184	187
B 26	29	B 56	59	B 86	89	B 118	121	B 188	191
B 27	30	B 57	60	B 87	90	B 120	123	B 190	193
B 28	31	B 58	61	B 88	91	B 123	126	B 195	198
B 29	32	B 59	62	B 89	92	B 124	127	B 199	202
B 30	33	B 60	63	B 90	93	B 126	129	B 205	208
B 31	34	B 61	64	B 91	94	B 128	131	B 210	213
B 32	35	B 62	65	B 92	95	B 130	133	B 221	224
B 33	36	B 63	66	B 93	96	B 131	134	B 225	228
B 34	37	B 64	67	B 94	97	B 132	135	B 230	233
B 35	38	B 65	68	B 95	98	B 133	136	B 236	239
B 36	39	B 66	69	B 96	99	B 135	138	B 240	243
B 37	40	B 67	70	B 97	100	B 136	139	B 255	258
B 38	41	B 68	71	B 98	101	B 138	141	B 270	273
B 39	42	B 69	72	B 99	102	B 140	143	B 285	288
B 40	43	B 70	73	B 100	103	B 141	144	B 300	303
B 41	44	B 71	74	B 101	104	B 142	145	B 315	318
B 42	45	B 72	75	B 102	105	B 144	147	B 345	348
B 43	46	B 73	76	B 104	107	B 146	149	B 360	363
B 44	47	B 74	77	B 103	106	B 148	151		
B 45	48	B 75	78	B 105	108	B 150	153		
B 46	49	B 76	79	B 106	109	B 152	155		
B 47	50	B 77	80	B 108	111	B 153	156		
B 48	51	B 78	81	B 109	112	B 154	157		
B 49	52	B 79	82	B 110	113	B 156	159		
B 50	53	B 80	83	B 111	114	B 158	161		
B 51	54	B 81	84	B 112	115	B 160	163		
B 52	55	B 82	85	B 113	116	B 162	165		

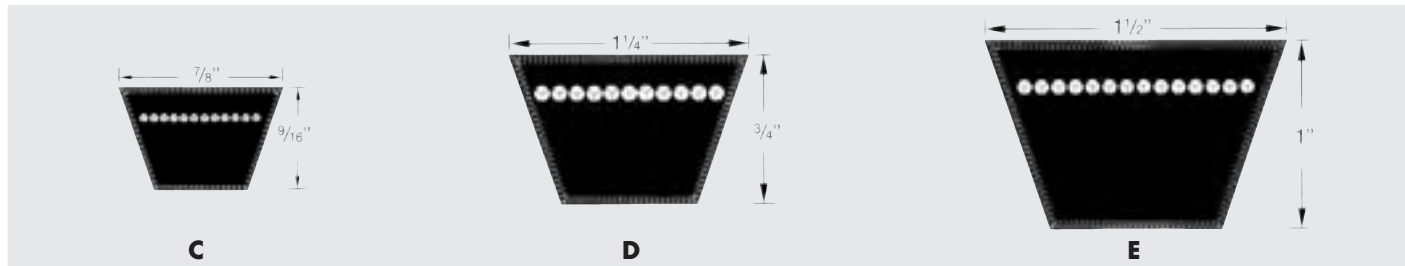
Maximum manufacturing length:
 610 inches (15.500 mm)
 Non standard lengths available above
 71 inches (1800 mm)
 Minimum production quantity: 21 pieces
 Belt weight: ≈ 0.011 lbs/inch (0.196 kg/m)

Further sizes available on request.

Sections and Sizes

optibelt VB Classical V-Belts Manufactured to a Tolerance

Three Times Closer than RMA/MPTA Standards



Section C						Section D		Section E	
Belt No.	Outside length (inch)	Belt No.	Outside length (inch)	Belt No.	Outside length (inch)	Belt No.	Outside length (inch)	Belt No.	Outside length (inch)
C 47	51	C 98	102	C 158	162	D 105	110	E 180*	187
C 48	52	C 99	103	C 162	166	D 112	117	E 195	202
C 51	55	C 100	104	C 165	169	D 120	125	E 210	217
C 54	58	C 101	105	C 169	173	D 128	133	E 240	244
C 55	59	C 103	107	C 170	174	D 140	145	E 270	274
C 57	61	C 105	109	C 173	177	D 144	149	E 300*	304
C 60	64	C 106	110	C 175	179	D 158	163	E 330	334
C 62	66	C 107	111	C 177	181	D 162	167	E 360	364
C 63	67	C 108	112	C 180	184	D 173	178	E 390*	394
C 64	68	C 109	113	C 183	187	D 180	185	E 420*	424
C 65	69	C 110	114	C 185	189	D 195	200	E 448	452
C 66	70	C 111	115	C 188	192	D 210	215	E 480*	484
C 68	72	C 112	116	C 190	194	D 225	228	E 540	544
C 70	74	C 114	118	C 195	199	D 240	243	E 600*	604
C 71	75	C 115	119	C 210	214	D 255	258		
C 72	76	C 117	121	C 214	216	D 270	273		
C 73	77	C 120	124	C 225	227	D 285	288		
C 74	78	C 122	126	C 235	237	D 300	303		
C 75	79	C 124	128	C 240	242	D 315	318		
C 76	80	C 126	130	C 246	248	D 330	335		
C 78	82	C 128	132	C 255	257	D 345	348		
C 79	83	C 131	135	C 270	272	D 360	363		
C 80	84	C 132	136	C 285	287	D 390	393		
C 81	85	C 134	138	C 300	302	D 420	423		
C 82	86	C 136	140	C 315	317	D 450*	453		
C 83	87	C 138	142	C 330	332	D 480*	483		
C 85	89	C 140	144	C 345	347	D 540*	543		
C 86	89	C 141	145	C 360	362				
C 88	92	C 144	148	C 390	392				
C 90	94	C 147	151	C 420	422				
C 92	96	C 148	152						
C 93	97	C 150	154						
C 94	98	C 151	155						
C 96	100	C 154	158						
C 97	101	C 156	160						

* Non standard sizes

* Non standard sizes

Maximum manufacturing length:
708 inches (18 000 mm)
Non standard lengths available above
71 inches (1800 mm)
Minimum production quantity: 12 pieces
Belt weight: ≈ 0.018 lbs/inch (0.324 kg/m)

Max. manufacturing length:
708 inches (18 000 mm)
Above 708 inches up to
748 inches on request
Minimum production quantity:
11 pieces
Belt weight:
≈ 0.038 lbs/inch (0.668 kg/m)

Max. manufacturing length:
748 inches (19 000 mm)
Above 708 inches up to
748 inches on request
Minimum production quantity:
7 pieces
Belt weight:
≈ 0.058 lbs/inch (0.958 kg/m)

Further sizes available on request.

Sections and Sizes

optibelt **KB** Kraftbands Manufactured to RMA/MPTA Standards for Classical V-Belts



Power Transmission



Section	B	
	(inch)	(mm)
$b_b \approx$	$2\frac{1}{32}$	17.0
$h_b \approx$	$\frac{1}{2}$	13.0

Section B

Belt No.	Belt No.	Belt No.
B 48	B 75	B 124
B 50	B 77	B 128
B 51	B 78	B 133
B 52	B 79	B 136
B 53	B 80	B 140
B 54	B 81	B 144
B 55	B 82	B 148
B 56	B 83	B 150
B 57	B 85	B 158
B 58	B 86	B 162
B 59	B 87	B 173
B 60	B 88	B 180
B 61	B 90	B 195
B 62	B 93	B 210
B 63	B 95	B 225
B 64	B 96	B 240
B 65	B 97	B 255
B 66	B 99	B 270
B 67	B 100	B 300
B 68	B 103	B 315
B 70	B 105	
B 71	B 108	
B 72	B 112	
B 73	B 116	
B 74	B 120	

Maximum manufacturing length: 393 inches (10000 mm)
 Non standard lengths available above 71 inches (1800 mm)
 Minimum production quantities for non-listed sizes:
 5 pieces with 5 ribs or
 6 pieces with 4 ribs or
 8 pieces with 3 ribs or
 13 pieces with 2 ribs
 or multiples thereof
 Belt weight (per rib): ≈ 0.015 lbs/inch (0.266 kg/m)

Aramid kraftbands available up on request.

Sections and Sizes

optibelt KB Kraftbands Manufactured to RMA/MPTA Standards for Classical V-Belts



Section	C		D	
	(inch)	(mm)	(inch)	(mm)
$b_b \approx$	$7/8$	22.0	$1\ 1/4$	32.0
$h_b \approx$	$4\ 1/64$	16.2	$7/8$	22.4

Section C		Section D	
Belt No.	Belt No.	Belt No.	Belt No.
C 81	C 180	D 105	D 285
C 85	C 195	D 120	D 300
C 90	C 210	D 128	D 315
C 96	C 225	D 140	D 330
C 97	C 240	D 144	D 345
C 99	C 255	D 158	D 360
C 100	C 270	D 162	D 390
C 105	C 285	D 173	D 420
C 108	C 300	D 180	D 540
C 109	C 315	D 195	D 600
C 112	C 330	D 210	D 660
C 115	C 345	D 225	
C 120	C 360	D 240	
C 124	C 390	D 255	
C 128	C 420	D 270	
C 136			
C 144			
C 158			
C 162			
C 173			

Maximum manufacturing length: 472 inches (12000 mm)
 Non standard lengths available above 90 inches (2286 mm)
 Minimum production quantities for non-listed sizes:
 4 pieces with 5 ribs or
 5 pieces with 4 ribs or
 6 pieces with 3 ribs or
 10 pieces with 2 ribs
 or multiples thereof
 Belt weight (per rib): \approx 0.025 lbs/inch (0.447 kg/m)

Maximum manufacturing length: 480 inches (12200 mm)
 Non standard lengths available above 100 inches (2540 mm)
 Minimum production quantities for all sizes:
 2 pieces with 5 ribs or
 2 pieces with 4 ribs or
 3 pieces with 3 ribs or
 5 pieces with 2 ribs
 or multiples thereof
 Belt weight (per rib): \approx 0.045 lbs/inch (0.798 kg/m)

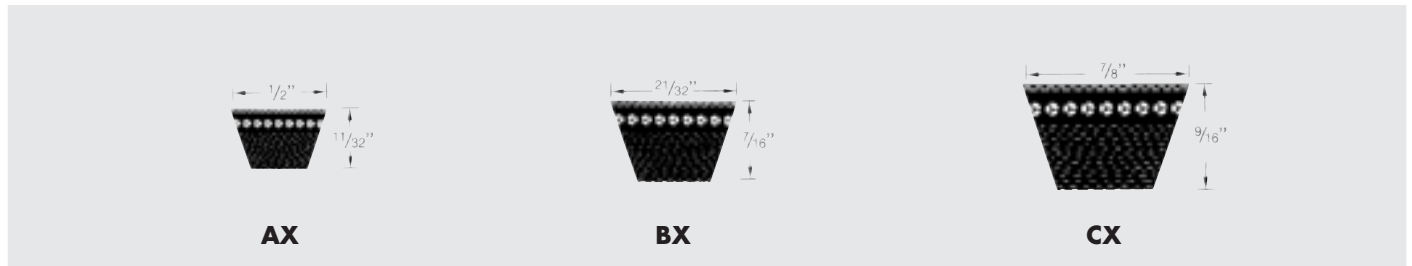
Aramid kraftbands available up on request.

Sections and Sizes

optibelt SUPER TX M=S Molded Cogged, Raw Edge V-Belts



Power Transmission



Section AX				Section BX				Section CX	
Belt No.	Outside length (inch)	Belt No.	Outside length (inch)	Belt No.	Outside length (inch)	Belt No.	Outside length (inch)	Belt No.	Outside length (inch)
AX 21	23	AX 69	71	BX 22	25	BX 78	81	CX 51	55
AX 22	24	AX 70	72	BX 28	31	BX 79	82	CX 60	64
AX 23	25	AX 71	73	BX 32	35	BX 80	83	CX 67	71
AX 24	26	AX 75	77	BX 34	37	BX 81	84	CX 68	72
AX 25	27	AX 76	78	BX 35	38	BX 82	85	CX 75	79
AX 26	28	AX 78	80	BX 36	39	BX 83	86	CX 81	85
AX 27	29	AX 80	82	BX 38	41	BX 85	88	CX 85	89
AX 28	30	AX 82	84	BX 40	43	BX 88	91	CX 90	94
AX 29	31	AX 83	85	BX 41	44	BX 90	93	CX 96	100
AX 30	32	AX 85	87	BX 42	45	BX 93	96	CX 105	109
AX 31	33	AX 88	90	BX 43	46	BX 95	98	CX 109	113
AX 32	34	AX 90	92	BX 44	47	BX 96	99	CX 112	116
AX 33	35	AX 92	94	BX 45	48	BX 97	100	CX 115	119
AX 34	36	AX 96	98	BX 46	49	BX 99	102	CX 120	124
AX 35	37	AX 97	99	BX 47	50	BX 100	103	CX 128	132
AX 36	38	AX 98	100	BX 48	51	BX 103	106	CX 136	140
AX 37	39	AX 100	102	BX 50	53	BX 105	108	CX 144	148
AX 38	40	AX 103	105	BX 51	54	BX 108	111	CX 158	162
AX 39	41	AX 105	107	BX 52	55	BX 112	115	CX 162	166
AX 40	42	AX 110	112	BX 53	56	BX 113	116	CX 173	177
AX 41	43	AX 112	114	BX 54	57	BX 115	118	CX 180	184
AX 42	44	AX 120	122	BX 55	58	BX 116	119	CX 195	199
AX 43	45	AX 128	130	BX 56	59	BX 118	121	CX 210	214
AX 45	47	AX 136	138	BX 57	60	BX 120	123	CX 225	229
AX 46	48			BX 58	61	BX 124	127	CX 240	244
AX 48	50			BX 59	62	BX 128	131	CX 255	259
AX 49	51			BX 60	63	BX 133	136	CX 270	274
AX 50	52			BX 61	64	BX 136	139	CX 300	304
AX 51	53			BX 62	65	BX 144	147		
AX 53	55			BX 63	66	BX 150	153		
AX 54	56			BX 64	67	BX 158	161		
AX 55	57			BX 65	68	BX 162	165		
AX 56	58			BX 66	69	BX 173	176		
AX 58	60			BX 67	70	BX 180	183		
AX 60	62			BX 68	71	BX 195	198		
AX 62	64			BX 70	73	BX 210	213		
AX 64	66			BX 71	74	BX 270	273		
AX 65	67			BX 75	78	BX 300	303		
AX 66	68			BX 76	79				
AX 68	70			BX 77	80				

Belt weight: ≈ 0.006 lbs/inch (0.099 kg/m)

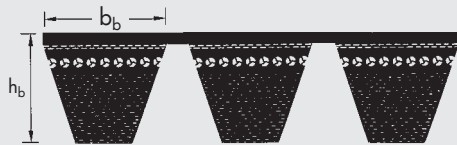
Belt weight: ≈ 0.009 lbs/inch (0.165 kg/m)

Belt weight:
≈ 0.015 lbs/inch (0.276 kg/m)

Optibelt SUPER TX belts marked M=S, of the same length can be used in matched sets, without the need for re-measuring and matching.

Sections and Sizes

optibelt *KBX* Kraftbands with Molded Cogged, Raw Edge V-Belts



Section	BX	
	(inch)	(mm)
$b_b \approx$	$2\frac{1}{32}$	17.0
$h_b \approx$	$\frac{1}{2}$	13.0

Section BX

Belt No.	Belt No.
BX 55	BX 85
BX 58	BX 90
BX 59	BX 93
BX 60	BX 95
BX 61	BX 97
BX 62	BX 100
BX 65	BX 103
BX 66	BX 105
BX 68	BX 108
BX 70	BX 112
BX 75	
BX 77	
BX 78	
BX 79	
BX 80	

Further sizes on request.

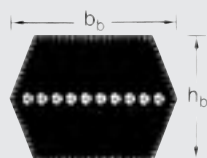
Belt weight: 1 rib \approx 0.014 lbs/inch (0.255 kg/m)

Sections and Sizes

optibelt *DK* Double V-Belts



Power Transmission



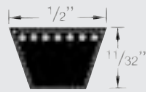
Section	b_b		h_b	
	(inch)	(mm)	(inch)	(mm)
AA	0.500	12.70	0.406	10.31
BB	0.656	16.66	0.531	13.49
CC	0.875	22.23	0.687	17.45

Section AA	Section BB	Section CC
Belt No.	Belt No.	Belt No.
AA 51 AA 55 AA 60 AA 64 AA 66 AA 68 AA 70 AA 75 AA 80* AA 85* AA 90 AA 92* AA 96* AA 105* AA 108 AA 112 AA 118 AA 120* AA 128* AA 148	BB 35* BB 38* BB 42* BB 43* BB 45* BB 53* BB 55 BB 60 BB 68 BB 71* BB 72 BB 73* BB 74* BB 75 BB 76 BB 81 BB 83 BB 85 BB 90 BB 91 BB 92* BB 93* BB 94* BB 95 BB 96* BB 97* BB 100 BB 103 BB 105 BB 107* BB 108* BB 111* BB 112 BB 115 BB 116* BB 117 BB 118 BB 120* BB 123* BB 124* BB 125 BB 128 BB 129* BB 130* BB 133 BB 136* BB 144 BB 155 BB 158 BB 162 BB 168* BB 169* BB 173 BB 180 BB 182* BB 190* BB 195 BB 210* BB 226* BB 228* BB 230* BB 240* BB 270* BB 277* BB 300*	CC 75* CC 81* CC 85* CC 90* CC 96* CC 105* CC 112* CC 120 CC 128* CC 136* CC 144* CC 158* CC 162* CC 173 CC 180* CC 193 CC 195* CC 204 CC 210 CC 240* CC 270 CC 300* CC 330* CC 360* CC 390* CC 420*
Aramid DK available up on request. * Non standard sizes		

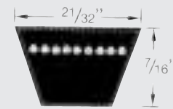
Maximum manufacturing length: 1102 inches (28 000 mm) Non standard length and constructions available above 53 inches (1350 mm) Minimum production quantity: 21 pieces Belt weight: ≈ 0.008 lbs/inch (0.150 kg/m)	Maximum manufacturing length: 1102 inches (28 000 mm) Non standard length and constructions available above 53 inches (1350 mm) Minimum production quantity: 17 pieces Belt weight: ≈ 0.014 lbs/inch (0.250 kg/m)	Maximum manufacturing length: 1102 inches (28 000 mm) Non standard length and constructions available above 63 inches (1600 mm) Minimum production quantity: 13 pieces Belt weight: ≈ 0.023 lbs/inch (0.411 kg/m)
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Sections and Sizes

optibelt HVAC POWER High Performance V-Belts
Specifically Designed for HVAC Applications



A



B

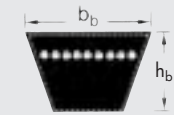
Section A	Section B
Belt No.	Belt No.
A 18 / 4L 200 A 19 / 4L 210 A 20 / 4L 220 A 21 / 4L 230 A 22 / 4L 240 A 23 / 4L 250 A 24 / 4L 260 A 25 / 4L 270 A 26 / 4L 280 A 27 / 4L 290 A 28 / 4L 300 A 29 / 4L 310 A 30 / 4L 320 A 31 / 4L 330 A 32 / 4L 340 A 33 / 4L 350 A 34 / 4L 360 A 35 / 4L 370 A 36 / 4L 380 A 37 / 4L 390 A 38 / 4L 400 A 39 / 4L 410 A 40 / 4L 420 A 41 / 4L 430 A 42 / 4L 440 A 43 / 4L 450 A 44 / 4L 460 A 45 / 4L 470	B 23 / 5L 260 B 24 / 5L 270 B 25 / 5L 280 B 26 / 5L 290 B 27 / 5L 300 B 28 / 5L 310 B 29 / 5L 320 B 30 / 5L 330 B 31 / 5L 340 B 32 / 5L 350 B 33 / 5L 360 B 34 / 5L 370 B 35 / 5L 380 B 36 / 5L 390 B 37 / 5L 400 B 38 / 5L 410
Belt weight: ≈ 0.006 lbs/inch (0.109 kg/m)	Belt weight: ≈ 0.011 lbs/inch (0.196 kg/m)

Sections and Sizes

optibelt LD Light Duty V-Belts to RMA/MPTA Standards



Power Transmission



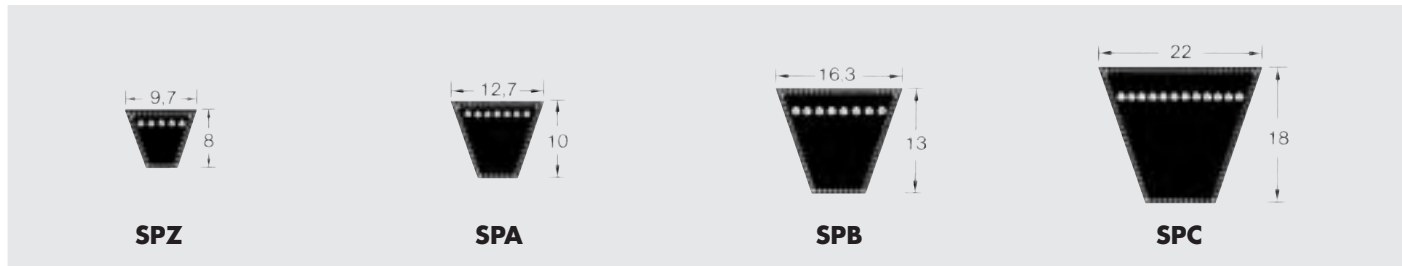
(nominal dimensions)

Section	≈ b _b		≈ h _b	
	(inch)	(mm)	(inch)	(mm)
3L	0.38	9.65	0.22	6.00
4L	0.50	12.70	0.31	8.00
5L/B	0.66	17.00	0.43	10.00

Section 3L		Section 4L			Section 5L/B	
Belt No.		Belt No.			Belt No.	
3L 130	3L 490	A14 /4L 160	A42/4L 440	A72/4L 740	B20/5L 230	B55/5L 580
3L 150	3L 500	A15 /4L 170	A43/4L 450	A73/4L 750	B21/5L 240	B56/5L 590
3L 160	3L 510	A16 /4L 180	A44/4L 460	A74/4L 760	B22/5L 250	B57/5L 600
3L 170	3L 520	A17 /4L 190	A45/4L 470	A75/4L 770	B23/5L 260	B58/5L 610
3L 180	3L 530	A18 /4L 200	A46/4L 480	A76/4L 780	B24/5L 270	B59/5L 620
3L 190	3L 540	A19 /4L 210	A47/4L 490	A77/4L 790	B25/5L 280	B60/5L 630
3L 200	3L 550	A20 /4L 220	A48/4L 500	A78/4L 800	B26/5L 290	B61/5L 640
3L 210	3L 560	A21 /4L 230	A49/4L 510	A79/4L 810	B27/5L 300	B62/5L 650
3L 220	3L 570	A22 /4L 240	A50/4L 520	A80/4L 820	B28/5L 310	B63/5L 660
3L 230	3L 580	A23 /4L 250	A51/4L 530	A86/4L 880	B29/5L 320	B64/5L 670
3L 240	3L 590	A23.5/4L 255	A52/4L 540	A88/4L 900	B30/5L 330	B65/5L 680
3L 250	3L 600	A24 /4L 260	A53/4L 550		B31/5L 340	B66/5L 690
3L 260	3L 610	A25 /4L 270	A54/4L 560		B32/5L 350	B67/5L 700
3L 270	3L 620	A25.5/4L 275	A55/4L 570		B33/5L 360	B68/5L 710
3L 280	3L 630	A26 /4L 280	A56/4L 580		B34/5L 370	B69/5L 720
3L 290	3L 640	A27 /4L 290	A57/4L 590		B35/5L 380	B70/5L 730
3L 300	3L 650	A28 /4L 300	A58/4L 600		B36/5L 390	B71/5L 740
3L 310	3L 660	A29 /4L 310	A59/4L 610		B37/5L 400	B72/5L 750
3L 320	3L 740	A30 /4L 320	A60/4L 620		B38/5L 410	B73/5L 760
3L 330		A31 /4L 330	A61/4L 630		B39/5L 420	B74/5L 770
3L 340		A32 /4L 340	A62/4L 640		B40/5L 430	B75/5L 780
3L 350		A33 /4L 350	A63/4L 650		B41/5L 440	B76/5L 790
3L 360		A34 /4L 360	A64/4L 660		B42/5L 450	B78/5L 810
3L 370		A35 /4L 370	A65/4L 670		B43/5L 460	B79/5L 820
3L 380		A36 /4L 380	A66/4L 680		B44/5L 470	B80/5L 830
3L 390		A37 /4L 390	A67/4L 690		B45/5L 480	B81/5L 840
3L 400		A38 /4L 400	A68/4L 700		B46/5L 490	B82/5L 850
3L 410		A39 /4L 410	A69/4L 710		B47/5L 500	B83/5L 860
3L 420		A40 /4L 420	A70/4L 720		B48/5L 510	B85/5L 880
3L 430		A41 /4L 430	A71/4L 730		B49/5L 520	B87/5L 900
3L 440					B50/5L 530	
3L 450					B51/5L 540	
3L 460					B52/5L 550	
3L 470					B53/5L 560	
3L 480					B54/5L 570	

Sections and Sizes

optibelt 5K Metric Wedge Belts



Section SPZ				Section SPA				Section SPB		Section SPC	
Pitch length (mm)				Pitch length (mm)				Pitch length (mm)		Pitch length (mm)	
487	962	1462	2287	707	1272	1857	2650	1250	4750	2000	8500
512	987	1487	2360	732	1282	1882	2682	1320	5000	2120	9000
562	1000	1500	2500	757	1307	1900	2732	1400	5300	2240	9500
587	1012	1512	2650	782	1320	1907	2782	1500	5600	2360	10000
612	1024	1537	2800	800	1332	1932	2800	1600	6000	2500	10600
630	1037	1562	3000	807	1357	1957	2832	1700	6300	2650	11200
637	1047	1587	3150	832	1382	1982	2847	1750	6700	2800	12500
662	1060	1600	3350	850	1400	2000	2882	1800	7100	3000	
670	1077	1612	3550	857	1407	2032	2932	1850	7500	3150	
687	1087	1637		882	1432	2057	2982	1900	8000	3350	
710	1112	1662		900	1457	2082	3000	2000		3550	
722	1120	1687		907	1482	2120	3032	2120		3750	
737	1137	1700		932	1500	2132	3082	2240		4000	
750	1162	1737		950	1507	2182	3150	2360		4250	
762	1180	1762		957	1532	2207	3182	2500		4500	
772	1187	1787		982	1557	2232	3282	2650		4750	
787	1202	1800		1000	1582	2240	3350	2800		5000	
800	1212	1812		1007	1600	2282	3382	3000		5300	
812	1237	1837		1032	1607	2300	3550	3150		5600	
825	1250	1862		1060	1632	2307	3750	3350		6000	
837	1262	1887		1082	1657	2332	4000	3550		6300	
850	1287	1900		1107	1682	2360	4250	3750		6700	
862	1312	1937		1120	1700	2382	4500	4000		7100	
875	1320	1987		1132	1707	2432		4250		7500	
887	1337	2000		1157	1732	2482		4500		8000	
900	1362	2037		1180	1757	2500					
912	1387	2120		1207	1782	2532					
925	1400	2137		1232	1800	2582					
937	1412	2187		1250	1807	2607					
950	1437	2240		1257	1832	2632					

Section 19 on request

Maximum manufacturing length: 4500 mm Minimum production quantity: 20 pieces for non standard lengths above 1800 mm Belt weight: ≈ 0.004 lbs/inch (0.074 kg/m)	Maximum manufacturing length: 4500 mm Minimum production quantity: 31 pieces for non standard lengths above 1800 mm Belt weight: ≈ 0.007 lbs/inch (0.123 kg/m)	Maximum manufacturing length: 10000 mm Minimum production quantity: 25 pieces for non standard lengths above 1800 mm Belt weight: ≈ 0.011 lbs/inch (0.195 kg/m)	Maximum manufacturing length: 18000 mm Minimum production quantity: 16 pieces for non standard lengths above 2000 mm Belt weight: ≈ 0.021 lbs/inch (0.377 kg/m)
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Lengths in **bold print** are in the S=C PLUS range.

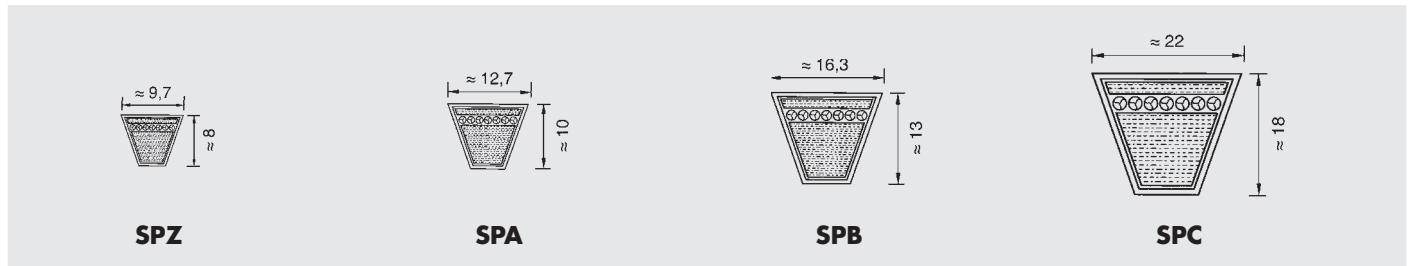
Datum length ≅ pitch length

Sections and Sizes

optibelt RED POWER II Maintenance Free Metric Wedge Belts



Power Transmission



Section SPZ		Section SPA				Section SPB		Section SPC
Datum length ISO (mm) L_d		Datum length ISO (mm) L_d				Datum length ISO (mm) L_d		Datum length ISO (mm) L_d
1202	1800	1207	1700	2282	3082	1250	5300	2000
1212	1837	1232	1707	2300	3150	1320	5600	2120
1237	1862	1250	1732	2307	3182	1400	6000	2240
1250	1887	1257	1757	2332	3282	1500	6300	2360
1262	1900	1282	1782	2360	3350	1600	6700	2500
1287	1937	1307	1800	2382	3382	1700	7100	2650
1312	1987	1320	1807	2432	3550	1800	7500	2800
1320	2000	1332	1832	2482	3750	1900	8000	3000
1337	2037	1357	1857	2500	4000	2000		3150
1362	2120	1382	1882	2532		2120		3350
1387	2137	1400	1900	2582		2240		3550
1400	2187	1407	1907	2607		2360		3750
1412	2240	1432	1932	2632		2500		4000
1437	2287	1457	1957	2650		2650		4250
1462	2360	1482	1982	2682		2800		4500
1487	2500	1500	2000	2732		3000		4750
1500	2650	1507	2032	2782		3150		5000
1512	2800	1532	2057	2800		3350		5300
1537	3000	1557	2082	2832		3550		5600
1562	3150	1582	2120	2847		3750		6000
1587	3350	1600	2132	2882		4000		6300
1600	3550	1607	2182	2932		4250		6700
1612		1632	2207	2982		4500		7100
1637		1657	2232	3000		4750		7500
1662		1682	2240	3032		5000		8000
1687								
1700								
1737								
1762								
1787								

Surcharge for Optibelt RED POWER II 30%. Non stocking sizes.

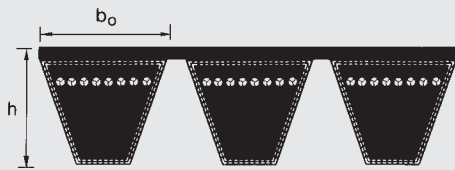
Maximum manufacturing length: 4000 mm Minimum production quantity: over 1800 mm = 120 pieces for non standard lengths Belt weight: ≈ 0.004 lbs/inch (0.074 kg/m)	Maximum manufacturing length: 4000 mm Minimum production quantity: over 1800 mm = 95 pieces for non standard lengths Belt weight: ≈ 0.007 lbs/inch (0.123 kg/m)	Maximum manufacturing length: 4000 mm Minimum production quantity: over 1800 mm = 70 pieces for non standard lengths Belt weight: ≈ 0.011 lbs/inch (0.195 kg/m)	Maximum manufacturing length: 4000 mm Minimum production quantity: over 2000 mm = 50 pieces for non standard lengths Belt weight: ≈ 0.021 lbs/inch (0.377 kg/m)
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Datum length ≈ pitch length

Sections and Sizes

optibelt **KB** Metric Kraftbands with Wedge Belts

Also available in **RED POWER II** construction upon request



Section	SPZ	SPA
$b_o \approx$ (mm)	9.7	12.7
$h \approx$ (mm)	10.5	12.5

Section SPZ		Section SPA	
Datum length ISO (mm)	Datum length ISO (mm)	Datum length ISO (mm)	Datum length ISO (mm)
1250	2360	1250	2360
1400	2500	1400	2500
1500	2650	1500	2650
1600	2800	1600	2800
1700	3000	1700	3000
1800	3150	1800	3150
1900	3350	1900	3350
2000	3550	2000	3550
2120		2120	3750
2240		2240	4000
			4250
			4500
Non stock items.			

Further sizes on request.
 Optibelt kraftbands in sections SPZ and SPA will run in standard pulleys to BS 3790, DIN 2211 and ISO 4183.
 Moulded cogged, raw edge kraftbands with XPZ and XPA belts are available on request.

Maximum manufacturing length: 4500 mm Ld
 Intermediate lengths from 1800 mm Ld
Minimum quantities for non-listed sizes:
 1800 up to \leq 2050 mm Ld
 8 pieces with 5 ribs or
 10 pieces with 4 ribs or
 14 pieces with 3 ribs or
 21 pieces with 2 ribs
 or multiples thereof
 > 2050 mm Ld
 7 pieces with 5 ribs or
 9 pieces with 4 ribs or
 12 pieces with 3 ribs or
 18 pieces with 2 ribs
 or multiples thereof
 Belt weight: 1 rib \approx 0.265 lbs/inch (0.120 kg/m)
Minimum order quantities for Aramid constructions on request.

Maximum manufacturing length: 4500 mm Ld
 Intermediate lengths from 1800 mm Ld
Minimum quantities for non-listed sizes:
 1800 up to \leq 2050 mm Ld
 6 pieces with 5 ribs or
 8 pieces with 4 ribs or
 11 pieces with 3 ribs or
 16 pieces with 2 ribs
 or multiples thereof
 > 2050 mm Ld
 5 pieces with 5 ribs or
 7 pieces with 4 ribs or
 9 pieces with 3 ribs or
 14 pieces with 2 ribs
 or multiples thereof
 Belt weight: 1 rib \approx 0.366 lbs/inch (0.166 kg/m)
Minimum order quantities for Aramid constructions on request.

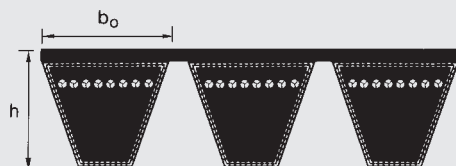
Datum length $L_d \triangleq$ Pitch length L_w/L_p Kraftbands with special top surfaces see page 52.

Sections and Sizes

optibelt *KB* Metric Kraftbands with Wedge Belts



Power Transmission



Section	SPB	SPC
$b_o \approx$ (mm)	16.5	22.0
$h \approx$ (mm)	15.6	22.6

Section SPB		Section SPC	
Datum length ISO (mm)	Datum length ISO (mm)	Datum length ISO (mm)	Datum length ISO (mm)
2000	4750	3000	7100
2120	5000	3150	7500
2240	5300	3350	8000
2360	5600	3550	8500
2500	6000	3750	9000
2650	6300	4000	9500
2800	6700	4250	10000
3000	7100	4500	10600
3150	7500	4750	11200
3350	8000	5000	11800
3550		5300	12500
3750		5600	
4000		6000	
4250		6300	
4500		6700	
Non stock items.			

Further sizes on request.

Optibelt kraftbands in sections SPB and SPC will run in standard pulleys to BS 3790, DIN 2211 and ISO 4183.

Moulded cogged, raw edge kraftbands with XPB and XPC belts are available on request.

Maximum manufacturing length: 10000 mm Ld
Intermediate lengths from 2000 mm Ld

Minimum quantities for non-listed sizes:

- 4 pieces with 5 ribs or
 - 5 pieces with 4 ribs or
 - 7 pieces with 3 ribs or
 - 11 pieces with 2 ribs
- or multiples thereof

Belt weight: 1 rib \approx 0.576 lbs/inch (0,261 kg/m)

Minimum order quantities for Aramid constructions on request.

Maximum manufacturing length: 12500 mm Ld
Intermediate lengths from 2120 mm Ld

Minimum quantities for non-listed sizes:

- 3 pieces with 5 ribs or
 - 4 pieces with 4 ribs or
 - 5 pieces with 3 ribs or
 - 8 pieces with 2 ribs
- multiples thereof

Belt weight: 1 rib \approx 1.220 lbs/inch (0,555 kg/m)

Minimum order quantities for Aramid constructions on request.

Datum length $L_d \triangleq$ Pitch length L_w/L_p

Kraftbands with special top surfaces see page 52.

Sections and Sizes

optibelt **KB RED POWER II** Maintenance Free Metric Kraftbands with Wedge Belts



Maintenance Free

Section	SPB	SPC
$b_o \approx$ (mm)	16.5	22.0
$h \approx$ (mm)	15.6	22.6

Section SPB		Section SPC	
Datum length ISO (mm)	Datum length ISO (mm)	Datum length ISO (mm)	Datum length ISO (mm)
2000	6300	3000	9500
2120	6700	3150	10000
2240	7100	3350	
2360	7500	3550	
2500	8000	3750	
2650		4000	
2800		4250	
3000		4500	
3150		4750	
3350		5000	
3550		5300	
3750		5600	
4000		6000	
4250		6300	
4500		6700	
4750		7100	
5000		7500	
5300		8000	
5600		8500	
6000		9000	

Non stock items.

Optibelt KB in sections SPB and SPC will run in standard pulleys to BS 3790, DIN 2211 and ISO 4183. Further sizes on request.

Maximum manufacturing length: 8000 mm Ld
Intermediate lengths from 2000 mm Ld

Minimum quantities for all sizes:

2000 up to 4000 mm Ld
10 pieces with 5 ribs or
12 pieces with 4 ribs or
18 pieces with 3 ribs or
26 pieces with 2 ribs
or multiples thereof

Over 4000 mm Ld
5 pieces with 5 ribs or
6 pieces with 4 ribs or
9 pieces with 3 ribs or
13 pieces with 2 ribs
or multiples thereof

Belt weight: 1 rib \approx 0.576 lbs/inch (0.261 kg/m)

Maximum manufacturing length: 10000 mm Ld
Intermediate lengths from 3000 mm Ld

Minimum quantities for all sizes:

4 pieces with 5 ribs or
5 pieces with 4 ribs or
6 pieces with 3 ribs or
10 pieces with 2 ribs
or multiples thereof

Belt weight: 1 rib \approx 1.220 lbs/inch (0.555 kg/m)

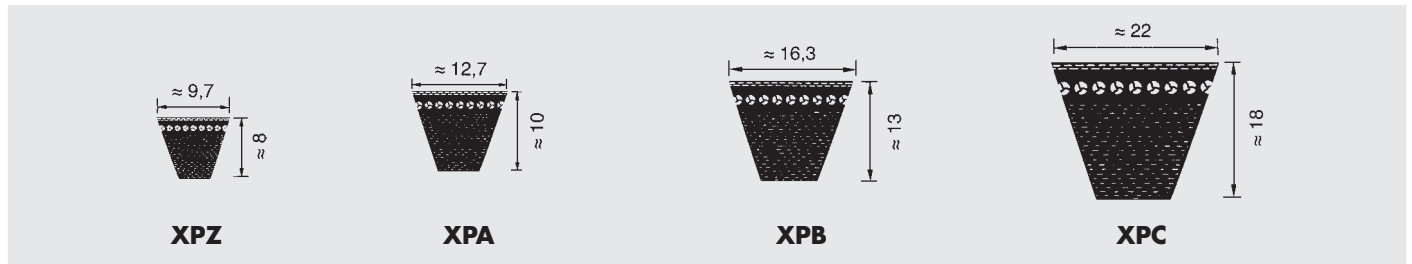
Datum length $L_d \hat{=}$ Pitch length L_w/L_p

Sections and Sizes

optibelt Super X-POWER M=S Metric Molded Cogged, Raw Edge Wedge Belts



Power Transmission

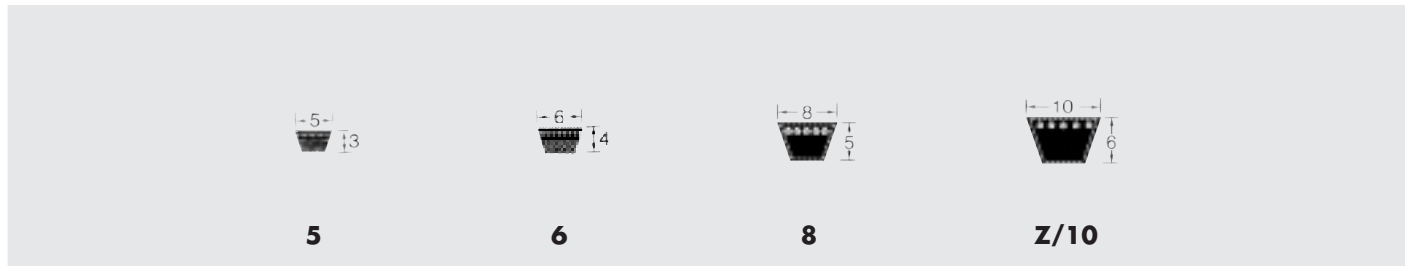


Section XPZ			Section XPA		Section XPB	Section XPC
Datum length ISO L _d (mm)	Datum length ISO L _d (mm)	Datum length ISO L _d (mm)	Datum length ISO L _d (mm)	Datum length ISO L _d (mm)	Datum length ISO L _d (mm)	Datum length ISO L _d (mm)
587	1037	1587	732	1282	1250	2000
612	1060	1600	757	1307	1320	2120
630	1077	1662	782	1320	1400	2240
637	1087	1700	800	1332	1500	2360
662	1112	1762	807	1357	1600	2500
670	1120	1800	832	1382	1700	2650
687	1137	1900	850	1400	1800	2800
710	1162	2000	857	1432	1900	3000
737	1180	2120	882	1457	2000	3150
750	1187	2150	900	1482	2020	3350
762	1202	2240	907	1500	2120	3550
772	1212	2360	932	1507	2150	
787	1237	2500	950	1532	2240	
800	1250	2540	957	1557	2280	
812	1262	2650	982	1582	2360	
825	1287	2690	1000	1600	2400	
837	1312	2800	1007	1607	2500	
850	1320	2840	1030	1632	2650	
862	1337	3000	1060	1700	2680	
875	1362	3150	1082	1757	2800	
887	1387	3350	1107	1800	2840	
900	1400	3550	1120	1882	3000	
912	1412		1132	1900	3150	
925	1437		1157	2000	3350	
937	1462		1180	2120	3550	
950	1487		1207	2240		
962	1500		1232	2360		
987	1512		1250	2500		
1000	1537		1257	2650		
1012	1562		1272	2800		
				3000		
				3150		
				3350		
				3550		
Weight: ≈ 0.143 lbs/inch (0.065 kg/m)			Weight: ≈ 0.245 lbs/inch (0.111 kg/m)		Weight: ≈ 0.404 lbs/inch (0.183 kg/m)	Weight: ≈ 1.500 lbs/inch (0.340 kg/m)

Optibelt Super X-POWER M=S V-belts of the same length can be used in matched sets, without the need for re-measuring and matching.

Sections and Sizes

optibelt VB Metric Classical V-Belts



Section 5*		Section 6*		Section 8		Section Z/10					
Datum length ISO L _d (mm)	Inside length L _i (mm)	Datum length ISO L _d (mm)	Inside length L _i (mm)	Datum length ISO L _d (mm)	Inside length L _i (mm)	Datum length ISO L _d (mm)	Inside length L _i (mm)	Datum length ISO L _d (mm)	Inside length L _i (mm)	Datum length ISO L _d (mm)	Inside length L _i (mm)
200	190	295	280	335*	315*	312*	290*	887	865	1497	1475
239	229	315	300	375*	355*	337*	315*	897	875	1522	1500
270	260	350	335	420*	400*	397*	375*	922	900	1546	1524
290	280	415	400	445*	425*	422*	400*	947	925	1572	1550
310	300	440	425	470*	450*	447*	425*	972	950	1597	1575
325	315	465	450	495*	475*	472*	450*	997	975	1622	1600
332	322	515	500	510*	490*	497*	475*	1022	1000	1648	1626
345	335	555	540	550*	530*	502*	480*	1038	1016	1673	1651
385	375	615	600	580*	560*	522*	500*	1052	1030	1697	1675
435	425	865	850	595*	575*	537*	515*	1063	1041	1722	1700
485	475			620*	600*	547*	525*	1072	1050	1747	1725
510	500			650*	630*	552*	530*	1082	1060	1772	1750
540	530			690*	670*	562*	540*	1102	1080	1797	1775
564	554			720*	700*	582*	560*	1122	1100	1822	1800
610	600			730*	710*	597	575	1142	1120	1872	1850
				770*	750*	622	600	1172	1150	1922	1900
				795*	775*	652	630	1187	1165	1997	1975
				820*	800*	672	650	1202	1180	2022	2000
				845	825	692	670	1216	1194	2142	2120
				870	850	722	700	1237	1215	2262	2240
				895	875	732	710	1247	1225	2382	2360
				920	900	747	725	1272	1250	2522	2500
				970	950	752	730	1292	1270		
				1020	1000	772	750	1317	1295		
				1040	1020	787	765	1342	1320		
				1070	1050	797	775	1368	1346		
				1095	1075	822	800	1393	1371		
				1140	1120	842	820	1422	1400		
				1220	1200	847	825	1444	1422		
				1270	1250	872	850	1472	1450		
Other sizes on request. Weight: ≈ 0.001 lbs/inch (0.018 kg/m)		Other sizes on request. Weight: ≈ 0.001 lbs/inch (0.026 kg/m)		Weight: ≈ 0.002 lbs/inch (0.042 kg/m)		Maximum manufacturing length: 4500 mm Non standard lengths above 1800 mm Minimum production quantity on request. Weight: ≈ 0.004 lbs/inch (0.064 kg/m)					

Datum length ≈ pitch length * **Raw edge, molded cogged belts** Other sizes on request.

Sections and Sizes

optibelt VB Metric Classical V-Belts



Power Transmission



13

ISO/DIN Section 13

Datum length ISO L _d (mm)	Inside length L _i (mm)	Datum length ISO L _d (mm)	Inside length L _i (mm)	Datum length ISO L _d (mm)	Inside length L _i (mm)	Datum length ISO L _d (mm)	Inside length L _i (mm)	Datum length ISO L _d (mm)	Inside length L _i (mm)
437	407	995	965	1530	1500	2240	2210	3780	3750
487	457	1005	975	1555	1525	2270	2240	4030	4000
510	480	1030	1000	1580	1550	2291	2261	4280	4250
538	508	1046	1016	1605	1575	2316	2286	4780	4750
565	535	1060	1030	1630	1600	2341	2311	5030	5000
590	560	1071	1041	1655	1625	2367	2337		
605	575	1080	1050	1680	1650	2390	2360		
630	600	1090	1060	1706	1676	2418	2388		
640	610	1105	1075	1730	1700	2443	2413		
660	630	1130	1100	1755	1725	2468	2438		
680	650	1135	1105	1780	1750	2494	2464		
700	670	1150	1120	1805	1775	2530	2500		
716	686	1173	1143	1830	1800	2570	2540		
730	700	1180	1150	1855	1825	2621	2591		
740	710	1198	1168	1884	1854	2680	2650		
760	730	1210	1180	1910	1880	2697	2667		
780	750	1230	1200	1930	1900	2755	2725		
797	767	1245	1215	1960	1930	2773	2743		
805	775	1250	1220	1986	1956	2830	2800		
830	800	1255	1225	2010	1980	2875	2845		
843	813	1280	1250	2030	2000	2926	2896		
855	825	1300	1270	2062	2032	2976	2946		
871	841	1330	1300	2090	2060	3030	3000		
880	850	1350	1320	2113	2083	3078	3048		
905	875	1380	1350	2130	2100	3180	3150		
919	889	1405	1375	2150	2120	3280	3250		
930	900	1430	1400	2164	2134	3380	3350		
944	914	1452	1422	2180	2150	3484	3454		
955	925	1480	1450	2190	2160	3580	3550		
980	950	1505	1475	2230	2200	3688	3658		

Maximum manufacturing length: 10 000 mm
 Non standard lengths above
 1800 mm
 Minimum production quantity:
 31 pieces for non standard lengths
 Weight: ≈ 0.043 lbs/inch (0.109 kg/m)

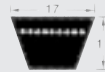
Datum length ≈ pitch length Other sizes on request.

Sections and Sizes

optibelt VB Metric Classical V-Belts



Power Transmission



17

ISO/DIN Section 17

Datum length ISO L _d (mm)	Inside length L _i (mm)	Datum length ISO L _d (mm)	Inside length L _i (mm)	Datum length ISO L _d (mm)	Inside length L _i (mm)	Datum length ISO L _d (mm)	Inside length L _i (mm)	Datum length ISO L _d (mm)	Inside length L _i (mm)	Datum length ISO L _d (mm)	Inside length L _i (mm)
610	570	1160	1120	1790	1750	2478	2438	3590	3550	7040	7000
655	615	1190	1150	1801	1761	2490	2450	3640	3600	7140	7100
670	630	1203	1163	1815	1775	2505	2465	3698	3658		
690	650	1215	1175	1840	1800	2540	2500	3740	3700		
710	670	1220	1180	1869	1829	2555	2515	3790	3750		
726	686	1240	1200	1890	1850	2580	2540	3850	3810		
750	710	1255	1215	1920	1880	2605	2565	3890	3850		
765	725	1265	1225	1940	1900	2640	2600	3901	3861		
790	750	1290	1250	1970	1930	2656	2616	3952	3912		
815	775	1315	1275	1990	1950	2690	2650	3990	3950		
840	800	1340	1300	2021	1981	2707	2667	4002	3962		
865	825	1360	1320	2040	2000	2740	2700	4040	4000		
876	836	1375	1335	2072	2032	2758	2718	4104	4064		
890	850	1390	1350	2100	2060	2790	2750	4155	4115		
915	875	1400	1360	2123	2083	2840	2800	4240	4200		
929	889	1412	1372	2140	2100	2885	2845	4290	4250		
940	900	1440	1400	2160	2120	2940	2900	4434	4394		
965	925	1462	1422	2174	2134	2961	2921	4490	4450		
990	950	1490	1450	2200	2160	2990	2950	4540	4500		
1005	965	1513	1473	2240	2200	3040	3000	4612	4572		
1015	975	1540	1500	2250	2210	3088	3048	4790	4750		
1040	1000	1565	1525	2280	2240	3139	3099	4993	4953		
1056	1016	1590	1550	2301	2261	3190	3150	5040	5000		
1070	1030	1615	1575	2326	2286	3240	3200	5340	5300		
1080	1040	1640	1600	2340	2300	3290	3250	5374	5334		
1090	1050	1665	1625	2377	2337	3342	3302	5640	5600		
1100	1060	1690	1650	2400	2360	3390	3350	6040	6000		
1115	1075	1716	1676	2428	2388	3444	3404	6136	6096		
1130	1090	1740	1700	2440	2400	3490	3450	6340	6300		
1140	1100	1765	1725	2453	2413	3545	3505	6740	6700		

Maximum manufacturing length: 15 500 mm
 Non standard lengths above
 1800 mm
 Minimum production quantity on request.
 Weight: ≈ 0.008 lbs/inch (0.196 kg/m)

Datum length ≈ pitch length Other sizes on request.

Sections and Sizes

optibelt VB Metric Classical V-Belts



Power Transmission



22

Section 20		ISO/DIN Section 22							
Datum length ISO L _d (mm)	Inside length L _i (mm)	Datum length ISO L _d (mm)	Inside length L _i (mm)	Datum length ISO L _d (mm)	Inside length L _i (mm)	Datum length ISO L _d (mm)	Inside length L _i (mm)	Datum length ISO L _d (mm)	Inside length L _i (mm)
950	900	1148	1090	2039	1981	2858	2800	4503	4445
1050	1000	1258	1200	2058	2000	2903	2845	4558	4500
1170	1120	1273	1215	2090	2032	2954	2896	4630	4572
1230	1180	1308	1250	2118	2060	2979	2921	4808	4750
1300	1250	1353	1295	2141	2083	3008	2950	4884	4826
1370	1320	1378	1320	2166	2108	3023	2965	5011	4953
1450	1400	1408	1350	2178	2120	3058	3000	5058	5000
1550	1500	1433	1375	2192	2134	3106	3048	5358	5300
1650	1600	1458	1400	2217	2159	3157	3099	5392	5334
1750	1700	1483	1425	2242	2184	3208	3150	5658	5600
1850	1800	1508	1450	2268	2210	3258	3200	5773	5715
1950	1900	1533	1475	2298	2240	3308	3250	6058	6000
2050	2000	1558	1500	2319	2261	3360	3302	6154	6096
2170	2120	1582	1524	2344	2286	3408	3350	6358	6300
2290	2240	1608	1550	2395	2337	3462	3404	6758	6700
2410	2360	1632	1574	2418	2360	3508	3450	6916	6858
2550	2500	1658	1600	2446	2388	3563	3505	7158	7100
2700	2650	1708	1650	2471	2413	3608	3550	7558	7500
2850	2800	1734	1676	2496	2438	3665	3607	7678	7620
3050	3000	1758	1700	2508	2450	3716	3658	8058	8000
3200	3150	1785	1727	2522	2464	3758	3700		
3400	3350	1808	1750	2558	2500	3808	3750		
3600	3550	1836	1778	2583	2525	3868	3810		
3800	3750	1858	1800	2598	2540	4058	4000		
4050	4000	1887	1829	2618	2560	4158	4100		
4550	4500	1912	1854	2649	2591	4274	4216		
5050	5000	1938	1880	2700	2642	4308	4250		
6050	6000	1958	1900	2725	2667	4325	4267		
		1988	1930	2750	2692	4376	4318		
		2014	1956	2808	2750	4452	4394		

Maximum manufacturing length: 10 000 mm
 Non standard lengths above 1800 mm
 Minimum production quantity on request.
 Weight: ≈ 0.011 lbs/inch (0.266 kg/m)

Maximum manufacturing length: 18 000 mm
 Non standard lengths above 1800 mm
 Minimum production quantity on request.
 Weight: ≈ 0.013 lbs/inch (0.324 kg/m)

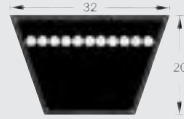
Datum length ≈ pitch length Other sizes on request.

Sections and Sizes

optibelt VB Metric Classical V-Belts



Power Transmission



32

Section 25				ISO/DIN Section 32			
Datum length ISO L _d (mm)	Inside length L _i (mm)	Datum length ISO L _d (mm)	Inside length L _i (mm)	Datum length ISO L _d (mm)	Inside length L _i (mm)	Datum length ISO L _d (mm)	Inside length L _i (mm)
1460	1400	7560	7500	2075	2000	6375	6300
1560	1500	8060	8000	2575	2500	6775	6700
1660	1600	8560	8500	2725	2650	6933	6858
1760	1700	9060	9000	2875	2800	7175	7100
1860	1800			3075	3000	7575	7500
1960	1900			3123	3048	7695	7620
2060	2000			3225	3150	8075	8000
2180	2120			3326	3251	8457	8382
2300	2240			3425	3350	8575	8500
2420	2360			3500	3425	9075	9000
2560	2500			3529	3454	9575	9500
2710	2650			3625	3550	10075	10000
2760	2700			3733	3658	11275	11200
2860	2800			3825	3750		
3060	3000			4000	3925		
3210	3150			4075	4000		
3410	3350			4190	4115		
3610	3550			4325	4250		
3810	3750			4469	4394		
4060	4000			4575	4500		
4310	4250			4647	4572		
4560	4500			4825	4750		
4810	4750			5028	4953		
5060	5000			5075	5000		
5360	5300			5375	5300		
5660	5600			5409	5334		
6060	6000			5675	5600		
6360	6300			5790	5715		
6760	6700			6075	6000		
7160	7100			6171	6096		

Maximum manufacturing length: 18 000 mm
 Non standard lengths above
 1800 mm
 Minimum production quantity on request.
 Weight: ≈ 0.017 lbs/inch (0.420 kg/m)

Maximum manufacturing length:
 18 000 mm
 Minimum production quantity on request.
 Weight: ≈ 0.024 lbs/inch (0.668 kg/m)

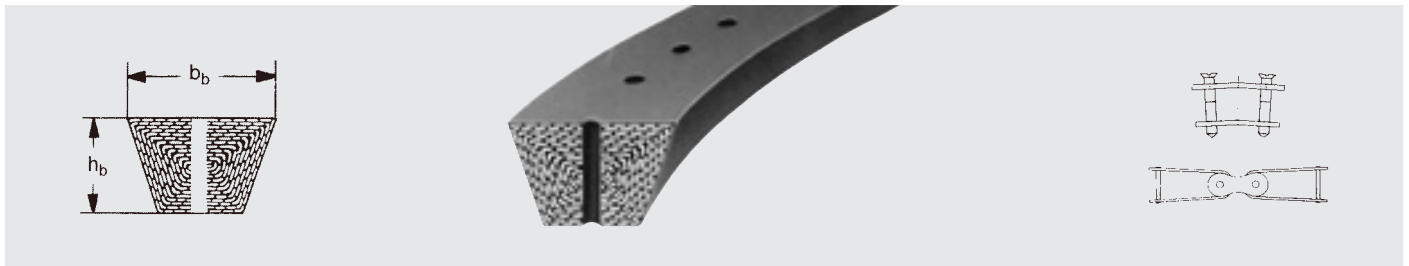
Datum length ≈ pitch length Other sizes on request.

Sections and Sizes

optimat DE Open-Ended V-Belting, Punched

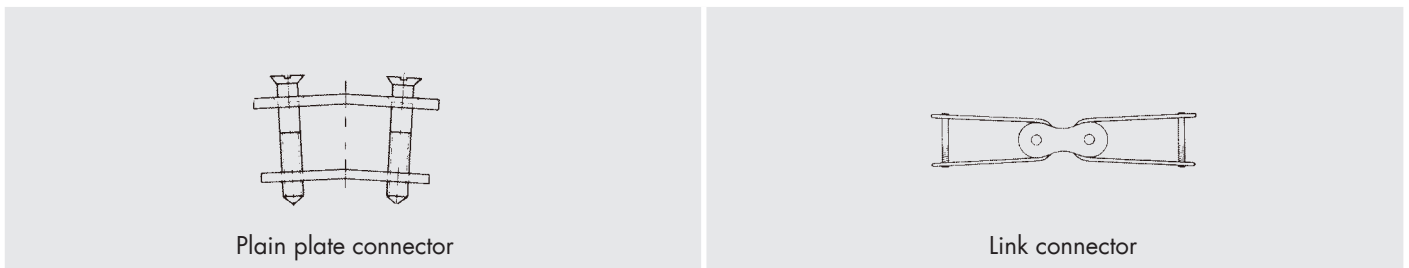


Power Transmission



Section	$b_b \times h_b$		Constructions Standard: green top surface Polyester: red top surface Special constructions: construction "S" with black neoprene cover. (Primabelt) Unpunched. Also available: metric sections 6, 8, 10, 20, 25 and wedge sections SPZ (Optimat SK)	Minimum sheave pitch diameter	
	(inch)	(mm)		(inch)	(mm)
A/13	0.51 x 0.31	13 x 8	4.0	100	
B/17	0.67 x 0.43	17 x 11	5.5	140	
C/22	0.87 x 0.55	22 x 14	8.8	224	
D/32	1.26 x 0.79	32 x 20	14.0	355	
E/40	1.57 x 1.00	40 x 25	20.0	500	

Connectors for Optimat Belting OE, SK



Plain plate connector

Link connector

Applications:

Plain plate connector:

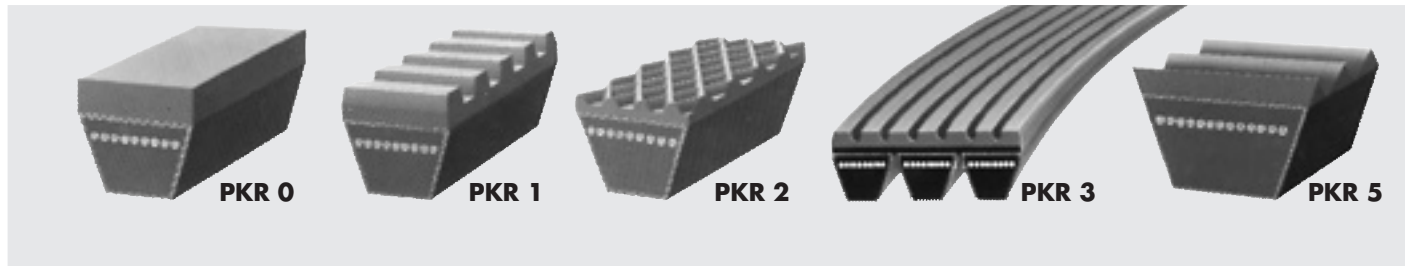
all belt types

Link connector:

all belt types where the stiffness of the joint with a plain connector could cause belt tear, e.g.: where the sheave diameter is at or approaching minimum recommended.

Sections and Sizes

optibelt PKR Endless V-Belts with Patterned Top Surfaces



Patterns	Height of patterns		Pitch (mm)	Groove width (inch)	Quality/Color	Temperature resistance (°F)	Hardness (Shore A)	Oil resistance	Marking
	Standard (inch)	Maximum (inch)							
PKR 0	0.12	0.20	—	—	SBR-NR/ light coloured	-40 to +158	55	no	no
PKR 1	0.12	0.20	0.40	—	CR/black	-13 to +212	65	limited	yes
PKR 2	0.12	0.20	—	—					
PKR 3 (Kraftband)	0.20	—	—	0.15					
PKR 5	0.20	—	0.51	—					

SBR = styrene butadiene rubber
NR = natural rubber
CR = chloroprene rubber

Section	Stand-ard height (mm)	Standard inside length (mm)	Patterns with additional height				Pattern 3 or 5 mm above standard height		Patterns within the standard height			
			Patterns				Minimum order quantities for V-belts with special surfaces PKR 0; PKR 1; PKR 2; PKR 5		Standard inside length (mm)	Pattern type		Minimum quantity
			PKR 0	PKR 1	PKR 2	PKR 5	for standard range	for intermediate length (sizes not listed in this manual)		PKR 0	PKR 2	
A/13	8.0	1 200 ≤ 5000 ¹	●	●	●	—	20 pcs. (only PKR 0) 18 pcs.	60 pcs. (only PKR 0) 31 pcs.	3 550 ≤ 10 000 ¹	●	●	10
B/17	11.0	1 200 ≤ 7100 ¹	●	●	●	—	15 pcs.	50 pcs.	2 850 ≤ 21 000 ¹	●	●	10
20	12.5	1 850 ≤ 8000 ²	●	●	●	—	13 pcs.	21 pcs.	3 550 ≤ 21 000 ¹	●	●	8
C/22	14.0	1 850 ≤ 10 000 ²	●	●	●	—	12 pcs.	57 pcs.	3 550 ≤ 21 000 ¹	●	●	8
25	16.0	1 850 ≤ 10 000 ²	●	●	●	—	11 pcs.	51 pcs.	2 850 ≤ 21 000 ¹	●	●	8
D/32	20.0	2 850 ≤ 12 500 ²	●	●	●	● ³	9 pcs.	22 pcs.	2 850 ≤ 21 000 ¹	●	●	6
E/40	25.0	—	—	—	—	—	on request	on request	4 000 ≤ 21 000 ¹	●	●	5

1 Max. production length on request.
2 Maximum production length 21 000 mm.
3 Only available in CR/black. Section Z/10 on request.

CR/black on request.

When ordering, please state the overall height of the belt including top surface. This is indicated by the section designation as follows:

Section B/17 – top surface within the standard height = 17 x 11
Section B/17 – with additional 3 mm top surface = 17 x 14
Section B/17 – with additional 5 mm top surface = 17 x 16

optibelt KB Kraftbands with Patterned Top Surface

Section	Dimension of the basic belt = width x height (inch)	Kraftband height without surface (inch)	Length (inch)	Max. production length (inch)	Patterns			
					PKR 0	PKR 1	PKR 2	PKR 3
3V	0.35 x 0.31	0.39	50 ≤ 140 L _o	167	●	—	—	—
5V	0.59 x 0.51	0.59	50 ≤ 355 L _o	394	●	—	—	—
8V	0.98 x 0.91	1.00	100 ≤ 475 L _o	590	●	—	—	—
A	0.51 x 0.31	0.39	49 ≤ 196 L _i	394	●	—	—	—
			110 ≤ 394 L _i	on request	—	—	—	●
B	0.67 x 0.43	0.51	49 ≤ 279 L _i	394	●	●	●	—
C	0.87 x 0.55	0.64	75 ≤ 279 L _i	394	●	—	—	—

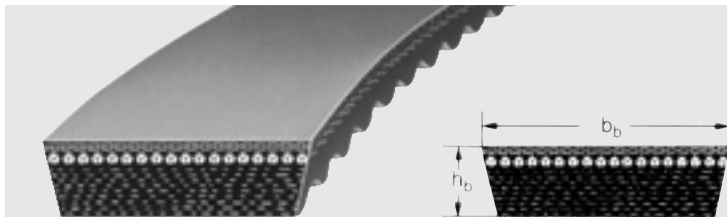
Sections and Sizes

optibelt *SUPER VX* Molded Cogged, Raw Edge

Variable Speed Belts



Power Transmission



Nominal Dimensions of American Standard Variable Speed Belts

Section	b_b		h_b	
	(inch)	(mm)	(inch)	(mm)
1422 V	0.88	22.35	0.31	7.87
1922 V	1.19	30.23	0.38	9.65
2322 V	1.44	36.58	0.44	11.18
1926 V	1.19	30.23	0.44	11.18
2926 V	1.81	45.97	0.50	12.70
3226 V	2.00	50.80	0.53	13.46
2530 V	1.56	39.62	0.59	14.99
3230 V	2.00	60.80	0.62	15.75
4430 V	2.75	69.85	0.69	17.53
4036 V	2.50	63.50	0.69	17.53
4436 V	2.75	69.85	0.72	18.29
4836 V	3.00	76.20	0.75	19.05

Belt dimensions

The belt number is a complete description of the belt, for example, 4830 V 970:

48	30	V	970
Top width in 16ths of an inch 48/16" = 3"	Angle of sheave groove 30°	Variable speed var. sp.	Pitch length 10ths of an inch 97"

Belt No.	Belt No.	Belt No.
1422 V 235	2322 V 329	3226 V 392
1422 V 300	2322 V 347	3226 V 514
1422 V 360	2322 V 364	3226 V 585
1422 V 420	2322 V 421	3226 V 603
1422 V 660	2322 V 441	3226 V 663
1430 V 215	2322 V 481	3226 V 783
1628 V 210	2322 V 521	3230 HV 821
1922 V 298	2322 V 541	3230 HV 856
1922 V 321	2322 V 601	3230 HV 931
1922 V 332	2322 V 681	3432 V 456
1922 V 338	2326 V 310	4230 V 556
1922 V 363	2330 V 273	4430 V 610
1922 V 403	2430 V 345	4430 V 630
1922 V 426	2530 V 660	4430 V 690
1922 V 443	2530 V 670	4430 V 700
1922 V 454	2830 V 363	4430 V 730
1922 V 484	2830 V 367	4430 V 790
1922 V 526	2830 V 393	4430 V 850
1922 V 544	2926 V 486	4430 V 970
1922 V 604	2926 V 521	
1926 V 427	2926 V 586	
2230 V 273	2926 V 606	
2230 V 275	2926 V 666	
2230 V 285	2926 V 686	
2230 V 326	2926 V 834	

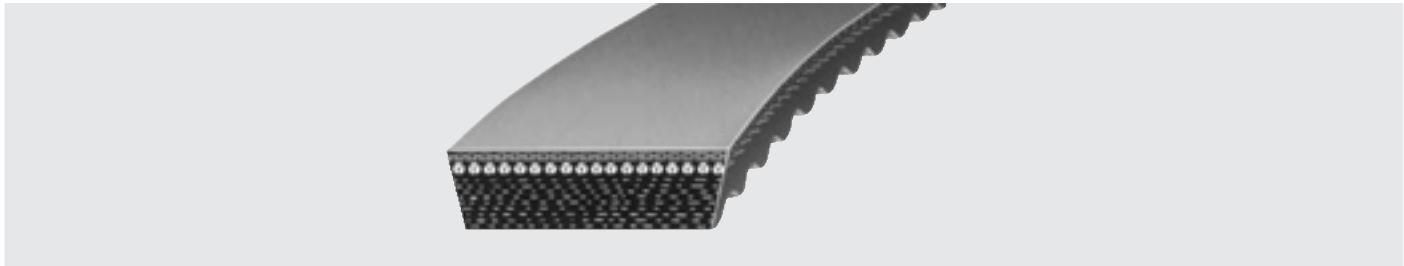
Sections and Sizes

optibelt *SUPER VX* Molded Cogged, Raw Edge

Metric Variable Speed Belts



Power Transmission



Section (mm)	Inside length (mm)	ISO designation (pitch length)	Section (mm)	Inside length (mm)	ISO designation (pitch length)	Section (mm)	Inside length (mm)	ISO designation (pitch length)
13 x 5	468		28 x 8	600		32 x 10	950	W31.5 1000
13 x 5	500		28 x 8	650		32 x 10	1000	W31.5 1050
			28 x 8	700		32 x 10	1073	W31.5 1120
17 x 5	426	W 16 450	28 x 8	750		32 x 10	1120	W31.5 1170
17 x 5	476	W 16 500	28 x 8	800		32 x 10	1180	W31.5 1230
17 x 5	536	W 16 560	28 x 8	850		32 x 10	1200	W31.5 1250
17 x 5	570	W 16 600	28 x 8	900		32 x 10	1353	W31.5 1400
17 x 5	606	W 16 630	28 x 8	950				
17 x 5	776	W 16 800	28 x 8	1000		37 x 10	660	
			28 x 8	1060		37 x 10	800	
21 x 6	530	W 20 560	28 x 8	1120		37 x 10	850	
21 x 6	600	W 20 630	28 x 8	1180		37 x 10	900	
21 x 6	610	W 20 640	28 x 8	1250		37 x 10	950	
21 x 6	675	W 20 710	28 x 8	1320		37 x 10	1000	
21 x 6	770	W 20 800	28 x 8	1400		37 x 10	1020	
21 x 6	870	W 20 900	28 x 8	1450		37 x 10	1060	
21 x 6	970	W 20 1000	28 x 8	1500		37 x 10	1120	
21 x 6	1220	W 20 1250				37 x 10	1180	
			30 x 10	650		37 x 10	1250	
22 x 8	485		30 x 10	665		37 x 10	1320	
22 x 8	525		30 x 10	700		37 x 10	1400	
22 x 8	565		30 x 10	800		37 x 10	1500	
22 x 8	650		30 x 10	850		37 x 10	1600	
22 x 8	700		30 x 10	875		37 x 10	1700	
22 x 8	750		30 x 10	900		37 x 10	1800	
22 x 8	800		30 x 10	950				
22 x 8	850		30 x 10	1000		41 x 13	925	W 40 990
22 x 8	900		30 x 10	1035		41 x 13	1000	W 40 1060
22 x 8	950		30 x 10	1050		41 x 13	1040	W 40 1100
22 x 8	1000		30 x 10	1120		41 x 13	1060	W 40 1120
22 x 8	1060		30 x 10	1200		41 x 13	1120	W 40 1180
22 x 8	1185		30 x 10	1320		41 x 13	1180	W 40 1240
			30 x 10	1340		41 x 13	1190	W 40 1250
26 x 8	655	W 25 690	30 x 10	1500		41 x 13	1250	W 40 1310
26 x 8	672	W 25 710	30 x 10	1600		41 x 13	1340	W 40 1400
26 x 8	710	W 25 750				41 x 13	1440	W 40 1500
26 x 8	750	W 25 790	32 x 10	750	W31.5 800	41 x 13	1600	W 40 1660
26 x 8	762	W 25 800	32 x 10	790	W31.5 840	41 x 13	1740	W 40 1800
26 x 8	800	W 25 840	32 x 10	820	W31.5 870	41 x 13	1940	W 40 2000
26 x 8	862	W 25 900	32 x 10	850	W31.5 900			
26 x 8	962	W 25 1000	32 x 10	900	W31.5 950			
26 x 8	1082	W 25 1120						

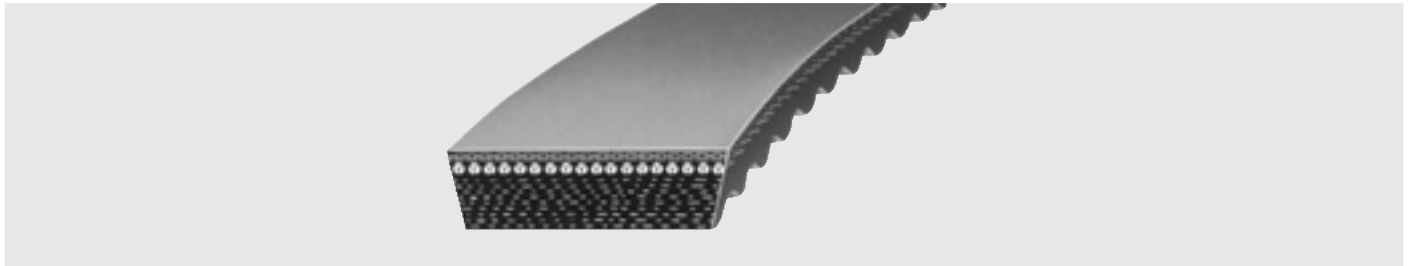
Sections and Sizes

optibelt *SUPER VX* Molded Cogged, Raw Edge

Metric Variable Speed Belts



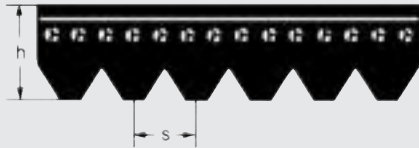
Power Transmission



Section (mm)	Inside length (mm)	ISO designation (pitch length)	Section (mm)	Inside length (mm)	ISO designation (pitch length)	Section (mm)	Inside length (mm)	ISO designation (pitch length)
47 x 13	1000							
47 x 13	1060							
47 x 13	1120							
47 x 13	1180							
47 x 13	1250							
47 x 13	1320							
47 x 13	1400							
47 x 13	1500							
47 x 13	1600							
47 x 13	1700							
47 x 13	1800							
52 x 16	1180	W 50 1250						
52 x 16	1250	W 50 1320						
52 x 16	1325	W 50 1400						
52 x 16	1400	W 50 1480						
52 x 16	1525	W 50 1600						
52 x 16	1600	W 50 1680						
52 x 16	1725	W 50 1800						
52 x 16	1925	W 50 2000						
52 x 16	2165	W 50 2240						
52 x 16	2240	W 50 2320						
55 x 16	1400							
55 x 16	1500							
55 x 16	1600							
55 x 16	1700							
55 x 16	1800							
65 x 20	1706	W 63 1800						
65 x 20	1906	W 63 2000						
70 x 18	1600							
70 x 18	1700							
70 x 18	1800							
70 x 18	1900							
70 x 18	2000							
70 x 18	2240							
70 x 18	2500							

Sections and Sizes

optibelt RB Ribbed Belts



Section	H/PH		J/PJ		K/PK		L/PL		M/PM	
	(inch)	(mm)	(inch)	(mm)	(inch)	(mm)	(inch)	(mm)	(inch)	(mm)
s	0.063	1.60	0.092	2.34	0.140	3.56	0.185	4.70	0.370	9.40
h	0.12	3.00	0.14	3.50	0.22	5.50	0.28	7.00	0.51	13.00

Section J/PJ		Section L/PL		Section M/PM	
RMA Belt No.	DIN/ISO Belt No.	RMA Belt No.	DIN/ISO Belt No.	RMA Belt No.	DIN/ISO Belt No.
150 J	PJ 381	500 L	PL 1270	900 M	PM 2286
170 J	PJ 432	540 L	PL 1371	940 M	PM 2388
180 J	PJ 457	560 L	PL 1422	990 M	PM 2515
190 J	PJ 483	615 L	PL 1562	1060 M	PM 2693
200 J	PJ 508	655 L	PL 1664	1115 M	PM 2832
210 J	PJ 533	675 L	PL 1715	1150 M	PM 2921
220 J	PJ 559	695 L	PL 1764	1185 M	PM 3010
240 J	PJ 610	725 L	PL 1841	1230 M	PM 3124
260 J	PJ 660	765 L	PL 1943	1310 M	PM 3327
280 J	PJ 711	780 L	PL 1981	1390 M	PM 3531
300 J	PJ 762	795 L	PL 2020	1470 M	PM 3734
320 J	PJ 813	815 L	PL 2070	1610 M	PM 4089
340 J	PJ 864	840 L	PL 2134	1650 M	PM 4191
360 J	PJ 914	865 L	PL 2197	1760 M	PM 4470
380 J	PJ 965	915 L	PL 2324	1830 M	PM 4648
400 J	PJ 1016	930 L	PL 2362	1980 M	PM 5029
430 J	PJ 1092	975 L	PL 2476	2130 M	PM 5410
442 J	PJ 1123	990 L	PL 2515	2410 M	PM 6121
460 J	PJ 1168	1065 L	PL 2705	2560 M	PM 6502
470 J	PJ 1194	1080 L	PL 2743	2710 M	PM 6883
490 J	PJ 1244	1140 L	PL 2895	3010 M	PM 7646
497 J	PJ 1262	1150 L	PL 2921	3310 M	PM 8408
500 J	PJ 1270	1180 L	PL 2997	3610 M	PM 9169
520 J	PJ 1321	1215 L	PL 3086	3960 M	PM 10058
525 J	PJ 1333	1230 L	PL 3124	4210 M	PM 10693
550 J	PJ 1397	1295 L	PL 3289	4810 M	PM 12217
567 J	PJ 1439	1310 L	PL 3327	5410 M	PM 13741
580 J	PJ 1473	1455 L	PL 3696	6010 M	PM 15266
610 J	PJ 1549	1820 L	PL 4622		
650 J	PJ 1651				
690 J	PJ 1752				
730 J	PJ 1854				
870 J	PJ 2210				
920 J	PJ 2337				
980 J	PJ 2489				
				Non stocking sizes	

Section H/PH for domestic appliances and section K/PK for automotive applications on request.



optibelt *OMEGA HP*

**The high performance timing belt
for extreme
high speed drives!**



optibelt **OMEGA HP**

... for high performance drives



Optibelt OMEGA HP high performance timing belts were especially developed for high speed drives. Improved materials and optimized engineering technology form the basis for the high performance level. For each performance class, there is an appropriate Optibelt OMEGA.

Advantages

- High precision, exact synchronicity
- Temperature resistant from $-22\text{ }^{\circ}\text{F}$ to $+212\text{ }^{\circ}\text{F}$
- Up to 18 times longer service life than standard timing belts
- Lower low noise level
- Lower bearing load
- Maintenance free
- Optimized wear behaviour
- Cost savings due to reduction of the frame sizes
- Up to 2 times the power transmission of Optibelt OMEGA
- Electrical conductivity pursuant to ISO 9563 is available on request (sections 8M HP and 14M HP)

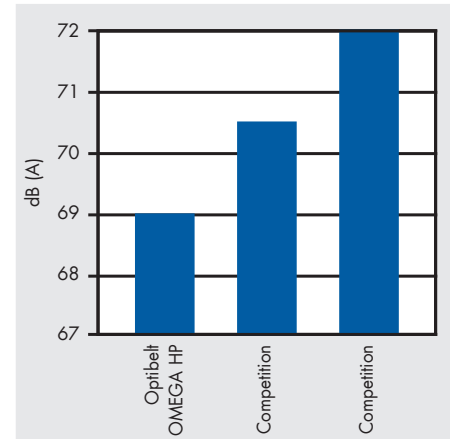
Areas of Application

- Textile machinery
- Machine tools
- Compressors
- Printing machines
- Woodworking machines
- Paper machines

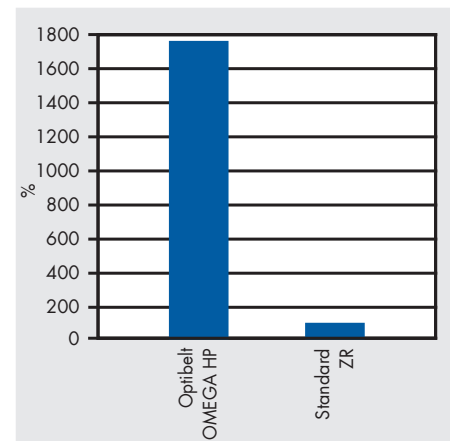
Timing Pulleys

Optibelt OMEGA HP timing belts do not require any special pulleys. The section is adapted to the common HTD[®] and RPP[®] pulleys.

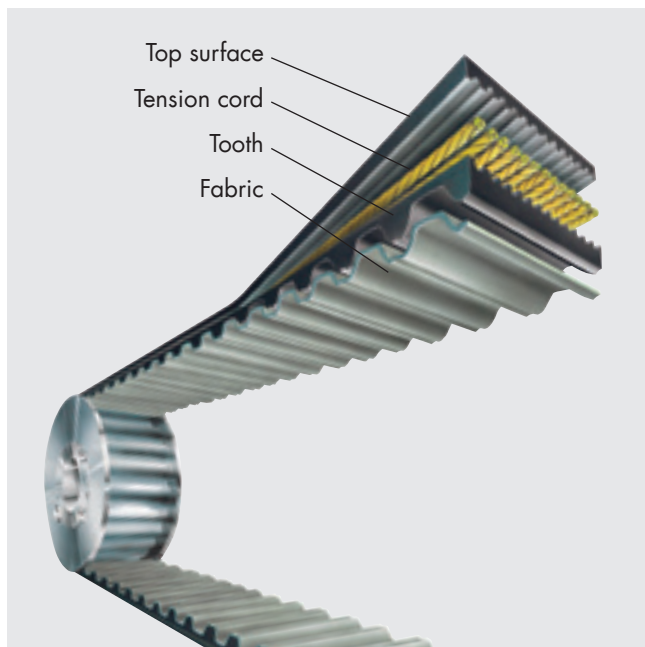
Noise level



Life



Product Description



Structure

Top surface

A durable and flexible top surface protects the tension cord from external influences. Furthermore, the polychloroprene material is resistant to mineral oils and moisture and protects from wear due to friction.

Tension cord

The tension member consists of twisted contra-rotating special glass fiber cords in pairs. This tension cord is characterized by high tensile strength, very good flexibility and very low stretch.

Teeth

The teeth consist of a new type of material mixed with aramid fibers, guaranteeing high shear strength. They are designed to engage into the pulley teeth with the lowest friction. The indent in the tooth tip promotes low noise generation.

Fabric

The specially developed nylon fabric impresses with its extraordinarily low coefficient of friction and its low noise characteristics. Furthermore, it protects the tooth from early wear and prevents tooth shear.

Standard Properties and Special Constructions

As a standard all Optibelt OMEGA HP timing belts are resistant to a limited extend to oil, heat, cold, tropical conditions and ozone and are, therefore, insensitive to the influences of the weather. There are no special markings.

Oil resistance

The oil resistance prevents the damaging influence of mineral oils and greases, so long as these substances are not permanently, or in larger amounts, in contact with the timing belt.

Temperature resistance

The timing belt accepts ambient temperatures of $\approx -22\text{ }^{\circ}\text{F}$ up to $+212\text{ }^{\circ}\text{F}$.

Temperatures exceeding these values will result in early ageing and brittleness and thus in early belt failure.

Electrical conductivity (antistatic)

The electrical conductivity allows the safe leakage of electrostatic charges. On timing belt drives such charges can be so high that without this electrical conductivity there is a danger of ignition due to sparking. The application of timing belts with electrically conductive (antistatic) properties requires a test in accordance with ISO 9563 and confirmation by the issue of a final inspection certificate.

Noise generation

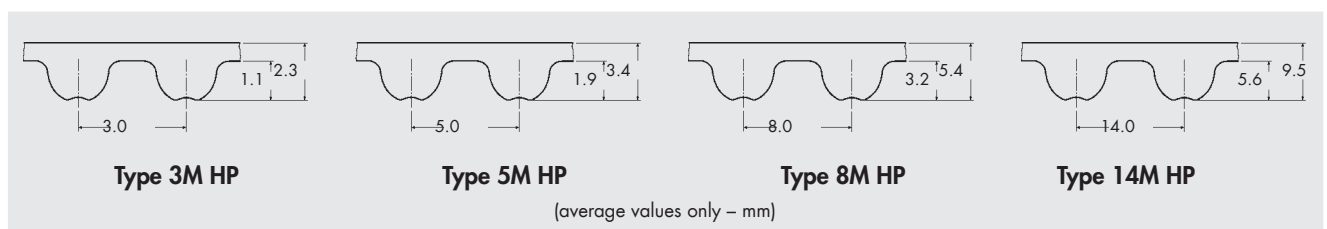
The optimised tooth shape and the indent in the tip of the tooth of the Optibelt OMEGA HP results in substantially lower noise levels. In connection with the newly developed materials, the noise level can be further reduced even with high speeds and high belt tensions.

Belt life

Dynamic tests with the Optibelt OMEGA HP suggest a life expectancy up to 18 times longer than standard timing belts. This results in a substantially higher operational reliability.

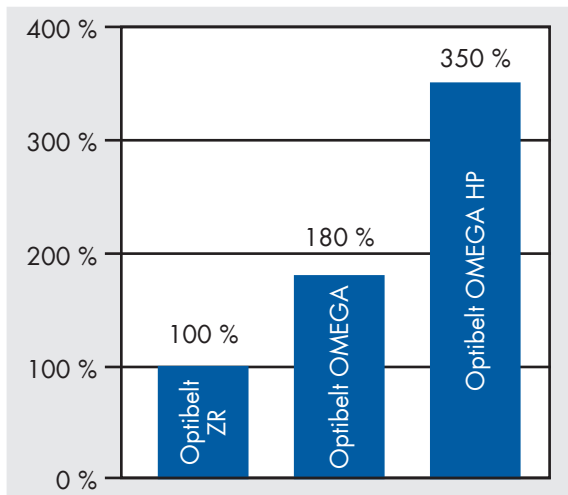
Efficiency

The specially developed tooth fabric and the flexible belt structure allow a nearly friction free drive with an efficiency of 98 %.



High performance drives today require best in class drive belts. Extended lifetime, high performance, reduction of replacement intervals, material and system cost savings – all these requirements apply to the new generation of Optibelt timing belts.

The answer is: **optibelt**
OMEGA HP



Comparison of Performance

This new product is best in class due:

18 times longer life
Twice the performance
(in 5M section,
up to 3 times the power rating of standard timing belts)
–40% system cost savings with the same performance

= optimised drive dimensioning and utilization



Optibelt OMEGA HP, the name speaks for itself:

- O** – Optimized tooth section
- M** – Made in Germany
- E** – Energy savings
- G** – Greatly reduced overall width
- A** – A wide range of application

HP – High Performance

Optibelt OMEGA HP:
the first choice for design engineers



Due to the unique shape of the teeth, Optibelt OMEGA HP high performance timing belts can be used with most commercially available standard timing pulleys with curvilinear teeth. No special pulleys are required.



**The high power timing belt
for high torques with both low and
high belt speeds**

optibelt *OMEGA HL*



Specification:

Belt dimension:
1120 8M HL 20

Wattage: $P = 6.4$ HP

Drive pulleys:

$n_1 = 3000$ rpm

$z_1 = 22; z_2 = 44$

Shaft loading: 600 N

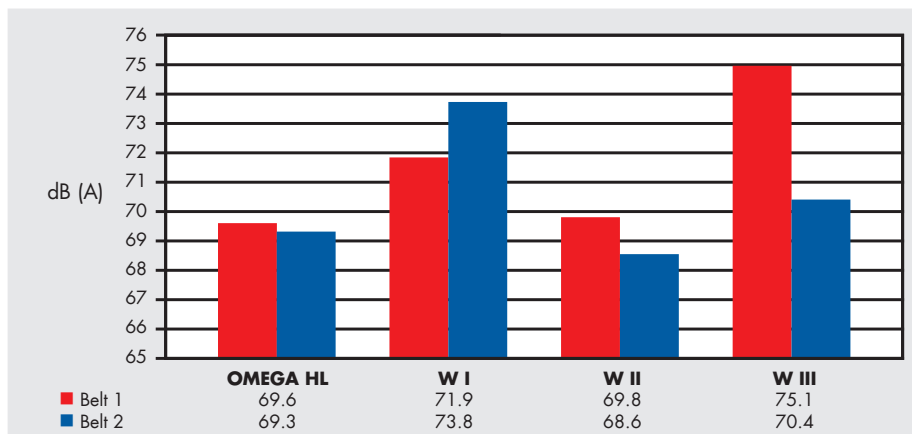


Optibelt developed this belt in the pitches 8M and 14M especially for drives with high torques and intermittent loads like those commonly used in production machinery.

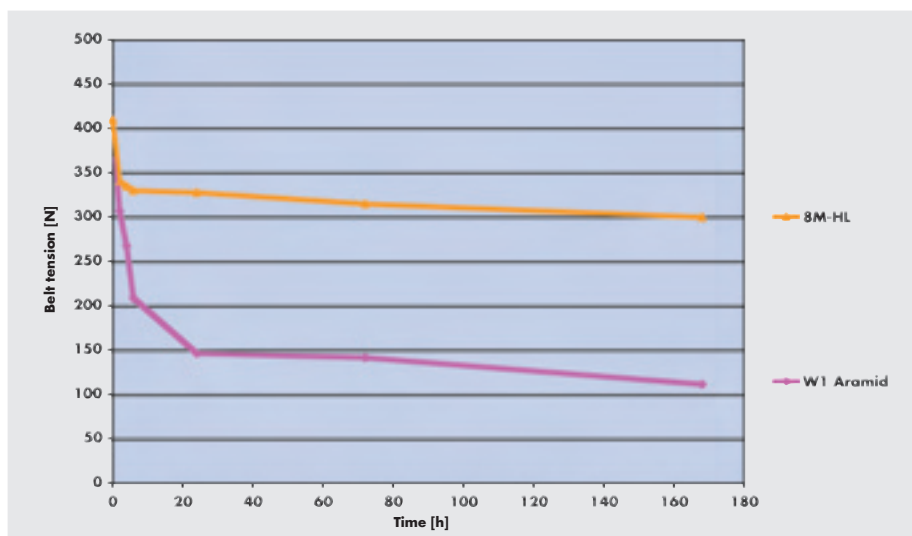
Advantages

- Suitable for high torques
- Highest possible precision, exact synchronicity
- Optimised absorption of shock loading
- Extremely low noise
- System cost savings due to a reduction of the drive volume
- Maintenance free
- Temperature resistant from -22 °F to $+212$ °F
- Up to 2.5 times the power transmission capability of Optibelt OMEGA
- Lower bearing load
- Optimised wear behaviour

Noise level



Belt Tension Loss



Areas of Application

- Machine drives
- Replacement of chains, depending on the application
- Conveyor systems
- Lumber mills and the paper industry
- Textile machinery
- Garden machinery

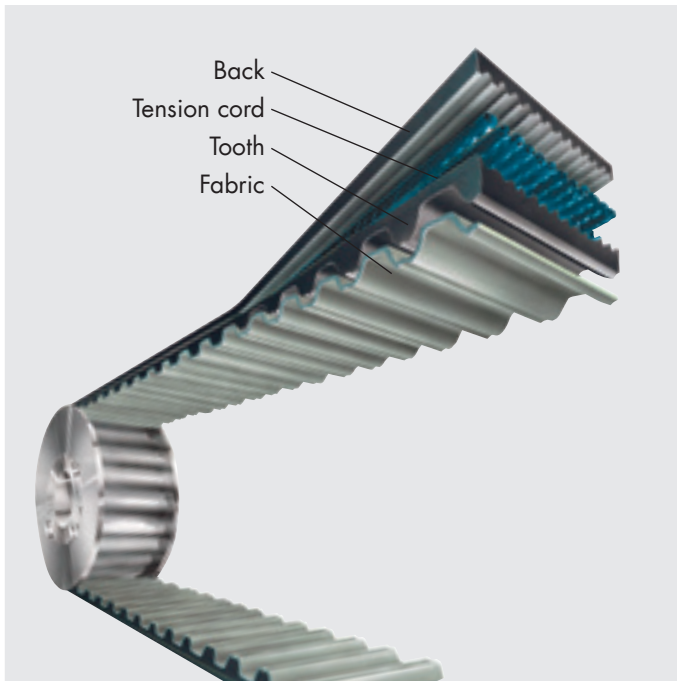
Timing Pulleys

Optibelt OMEGA HL timing belts do not require any special pulleys. The section is tailored to the standard HTD[®] and RPP[®] pulleys.

optibelt *OMEGA HL*



Power Transmission



Structure

Back

Like the material of the teeth, the back of the Optibelt OMEGA HL is made of polychloroprene reinforced by aramid fibers. Because of that, an even more abrasion resistant surface is in contact with reverse idler. Additionally this protects the cords against environmental influences.

Tension cord

In contrast to the Optibelt OMEGA HP with glass fiber cord, a substantially reinforced glass fiber cord is used in Optibelt OMEGA HL. In this way, its capacity can be further increased by up to 25 % and its resistance to shock loading is considerably increased.

Teeth

Underneath the fabric on the tooth face, a high strength polychloroprene compound provides a safe power transfer to the tension cord. The tooth hardness which is substantially higher than that of Optibelt OMEGA is achieved by using aramid fiber mixed into the compound. This material ensures in a very high tooth shape stability and an increased shear strength of every individual tooth of Optibelt OMEGA HL.

Fabric

The shear strength of the teeth is reinforced by a strong fabric with superior adhesion to the interior compounds. The design of the section of the Optibelt OMEGA and the minimal friction from the fabric ensure a comparatively smooth engagement of the belt tooth into the pulley tooth. In addition, the polyamide fabric used is extremely abrasion resistant.

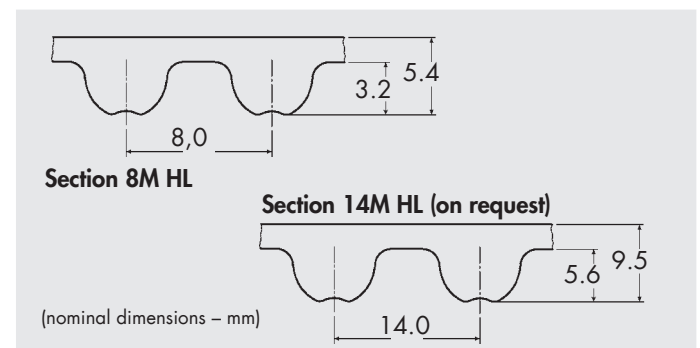
Optibelt developed this belt in the pitches 8M and 14M especially for drives with high torques and intermittent shock loads often found in high performance machinery. For this construction, the design and the material of the timing belt was optimised in such a way so as to achieve the highest possible functional reliability in combination with an optimum efficiency when used for new drive designs.

It is initially available in section 8M.

Optibelt OMEGA, OMEGA HP and OMEGA HL timing belts are tailored to Optibelt ZRS timing pulleys with HTD® or RPP® teeth. For applications using other pulleys, please contact the Optibelt Application Engineering Department. A reinforced glass fiber tension cord is used. This innovative material is characterised by a combination of the following important properties:

- Good resistance to shock loads
- Very high dynamic loading capacity
- Elastic stretch and subsequent elongation that is only very small

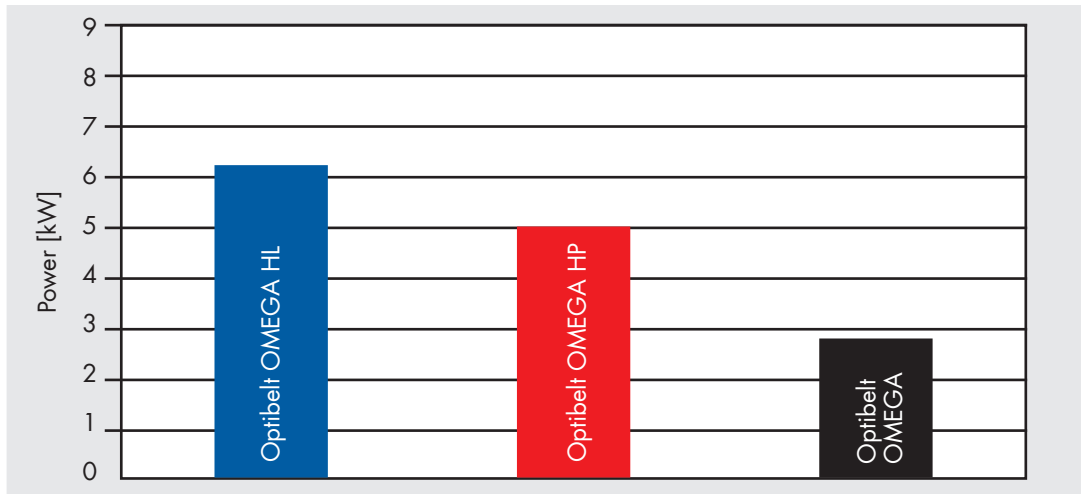
By means of these properties, the belt power transmission capability can be increased by another 25 % in comparison with the OMEGA HP. In contrast to an aramid tension cord which also has a very high resistance to shock load, the reinforced glass fiber cord shows a very small remaining elongation over the belt life. The aramid cord shows a very pronounced remaining elongation, for details see diagram. The pitch length can be maintained despite this minimal loss of tension of the reinforced glass cord and so the belt teeth are evenly stressed during the operational life. In addition, the reinforced glass cord allows the belts to be used on medium and high speed drives, in contrast belts with an aramid cord can only be used on low to medium speed drives. Reinforced glass cord enables the area of application to be substantially expanded in comparison to that for belts with aramid cord.



The new high power timing belt for extremely high loads over the total range of speeds



Power Comparison



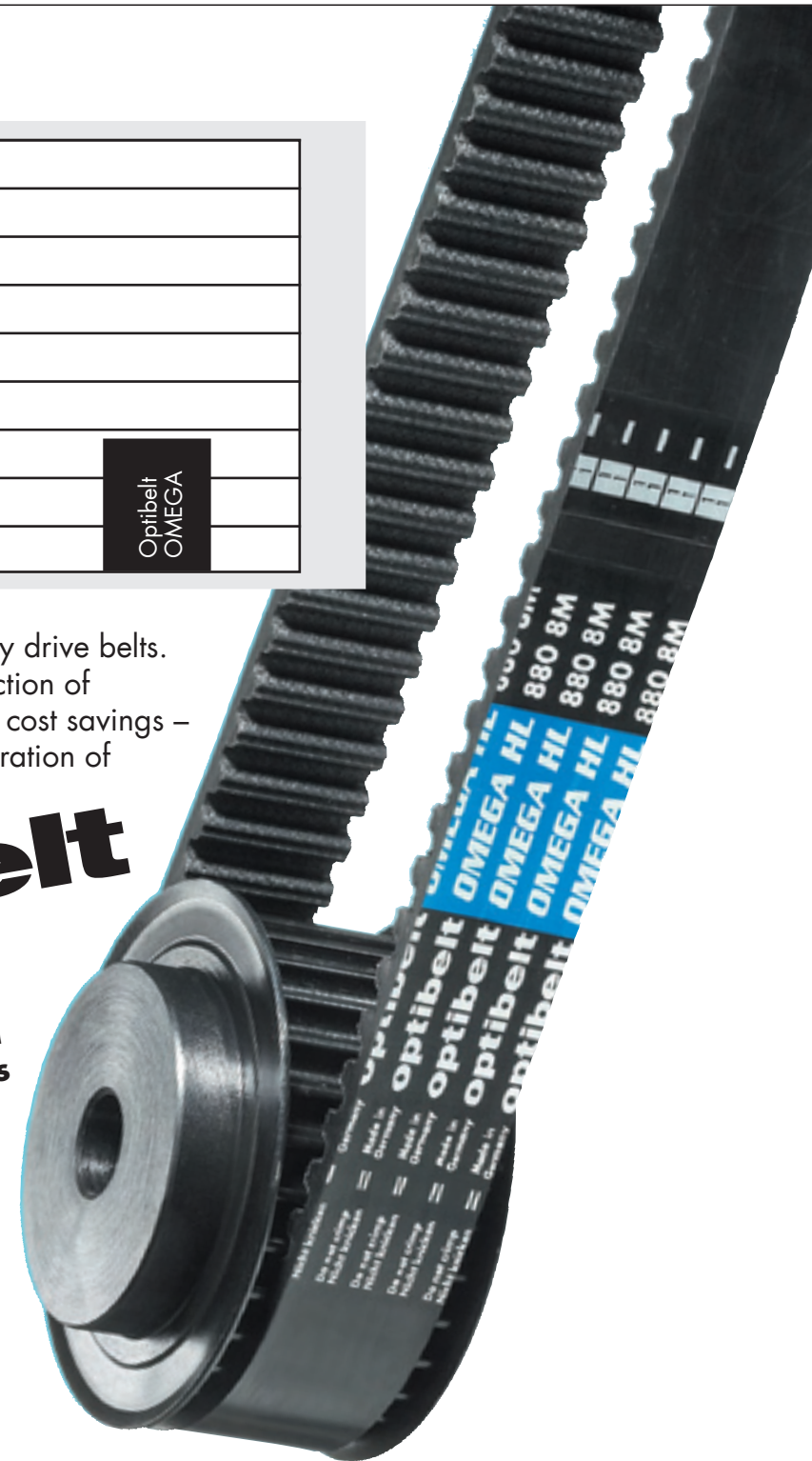
Nowadays, high power drives demand high quality drive belts. Prolonged operating life, increased capacity, reduction of replacement intervals, material savings and system cost savings – all these requirements are fulfilled by the new generation of Optibelt timing belts. – The answer is:

optibelt OMEGA HL

= optimised configuration and utilization of drives

Optibelt OMEGA HL,
the name speaks for itself:

- O** – Optimized tooth shape
 - M** – Made in Germany
 - E** – Energy savings
 - G** – Generally narrow overall width
 - A** – Application variety
- HL** – High Load



Optibelt OMEGA HL:
the first choice of design engineers

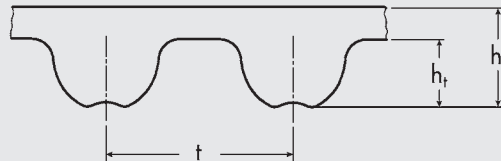
Sections and Sizes

optibelt OMEGA Timing Belts



Power Transmission

Available in OMEGA, OMEGA HP



Type	t (mm)	h _t (mm)	h _s (mm)
2M	2	0.7	1.5
3M	3	1.1	2.3

Section 2M

Belt No. and construction	Pitch length (mm)	Number of teeth	Belt No. and construction	Pitch length (mm)	Number of teeth	Belt No. and construction	Pitch length (mm)	Number of teeth	Belt No. and construction	Pitch length (mm)	Number of teeth
90 2M	90	45	148 2M	148	74	266 2M	266	133	370 2M	370	185
100 2M	100	50	180 2M	180	90	274 2M	274	137	426 2M	426	213
104 2M	104	52	184 2M	184	92	280 2M	280	140	448 2M	448	224
112 2M	112	56	188 2M	188	94	286 2M	286	143	558 2M	558	279
118 2M	118	59	200 2M	200	100	308 2M	308	154	560 2M	560	280
120 2M	120	60	208 2M	208	104	310 2M	310	155	710 2M	710	355
124 2M	124	62	216 2M	216	108	328 2M	328	164	984 2M	984	492
130 2M	130	65	232 2M	232	116	330 2M	330	165	1066 2M	1066	533
140 2M	140	70	250 2M	250	125	340 2M	340	170	1224 2M	1224	612

Standard widths: 3 mm, 6 mm, 9 mm. Non stocking sizes.

Section 3M

111 3M	111	37	225 3M*	225	75	384 3M*	384	128	570 3M	570	190
129 3M*	129	43	240 3M*	240	80	390 3M*	390	130	597 3M*	597	199
141 3M*	141	47	252 3M*	252	84	420 3M	420	140	600 3M*	600	200
144 3M*	144	48	255 3M	255	85	426 3M*	426	142	606 3M*	606	202
150 3M*	150	50	267 3M*	267	89	447 3M	447	149	615 3M*	615	205
165 3M	165	55	285 3M	285	85	462 3M	462	154	633 3M*	633	211
168 3M*	168	56	288 3M	288	96	474 3M	474	158	669 3M	669	223
174 3M*	174	58	291 3M*	291	97	480 3M	480	160	675 3M*	675	225
177 3M*	177	59	294 3M*	294	98	486 3M*	486	162	711 3M*	711	237
180 3M	180	60	300 3M	300	100	495 3M*	495	165	738 3M*	738	237
183 3M	183	61	312 3M*	312	104	501 3M*	501	167	804 3M*	804	268
186 3M*	186	62	315 3M	315	105	513 3M	513	171	843 3M*	843	281
192 3M*	192	64	318 3M*	318	106	519 3M*	519	173	882 3M	882	294
195 3M*	195	65	330 3M	330	110	522 3M*	522	174	888 3M*	888	296
201 3M*	201	67	339 3M*	339	113	525 3M*	525	175	1062 3M*	1062	354
204 3M*	204	68	345 3M*	345	115	531 3M*	531	177	1569 3M*	1569	523
207 3M*	207	69	357 3M	357	119	537 3M*	537	179	1587 3M	1587	529
210 3M*	210	70	363 3M*	363	121	558 3M*	558	186			
213 3M*	213	71	366 3M*	366	122	564 3M	564	188			

Standard widths: 6 mm, 9 mm, 15 mm. * Non stocking sizes. Minimum quantity 2 sleeves. Sleeve width 18.5" / 470 mm.

Example:

Timing belt: Optibelt OMEGA 150 3M 15

150 = 150 mm pitch length
 3M = Section and construction
 15 = 15 mm belt width

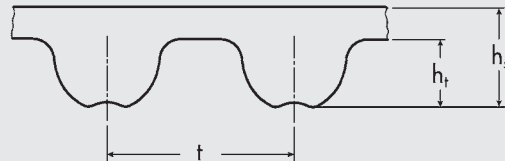
Sections and Sizes

optibelt OMEGA Timing Belts



Power Transmission

Available in OMEGA, OMEGA HP



Type	t (mm)	ht (mm)	hs (mm)
5M	5	1.9	3.4

Section 5M

Belt No. and construction	Pitch length (mm)	Number of teeth	Belt No. and construction	Pitch length (mm)	Number of teeth	Belt No. and construction	Pitch length (mm)	Number of teeth
180 5M*	18036		565 5M	565113		980 5M*	980196	
225 5M*	22545		575 5M	575115		1000 5M*	1000200	
255 5M	25551		580 5M*	580116		1035 5M*	1035207	
265 5M	26553		600 5M	600120		1050 5M	1050210	
270 5M*	27054		610 5M*	610122		1100 5M	1100220	
280 5M*	28056		615 5M*	615123		1125 5M	1125225	
295 5M	29559		630 5M*	630126		1135 5M*	1135227	
305 5M*	30561		635 5M	635127		1200 5M*	1200240	
325 5M*	32565		640 5M	640128		1270 5M	1270254	
330 5M	33066		645 5M	645129		1420 5M	1420284	
340 5M*	34068		665 5M*	665133		1425 5M	1425285	
350 5M	35070		670 5M	670134		1500 5M	1500300	
360 5M*	36072		700 5M	700140		1595 5M	1595319	
365 5M*	36573		710 5M	710142		1690 5M	1690338	
370 5M*	37074		740 5M	740148		1790 5M	1790358	
375 5M	37575		750 5M	750150		1870 5M*	1870374	
385 5M*	38577		755 5M	755151		1895 5M	1895379	
400 5M*	40080		775 5M	775155		2000 5M*	2000400	
415 5M*	41583		790 5M	790158		2110 5M	2110422	
425 5M	42585		800 5M	800160		2350 5M	2350470	
450 5M	45090		825 5M*	825165		2525 5M*	2525505	
475 5M	47595		835 5M*	835167				
490 5M	49098		850 5M*	850170				
500 5M	500100		860 5M	860172				
520 5M	520104		890 5M	890178				
525 5M	525105		900 5M	900180				
535 5M HTD	535107		925 5M	925185				
540 5M	540108		935 5M*	935187				
550 5M	550110		950 5M*	950190				
560 5M	560112		965 5M*	965193				

Standard widths: 9 mm, 15 mm, 25 mm. * Non stocking sizes.

Minimum quantity 2 sleeves for non stocking sizes. Sleeve width 18.5" / 470 mm.

Example:

Timing belt: Optibelt OMEGA 1200 8M 50

1200 = 1200 mm pitch length
 8M = Section and construction
 50 = 50 mm belt width

Sections and Sizes

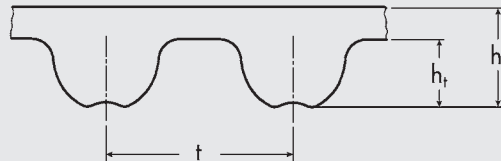
optibelt OMEGA Timing Belts

Available in OMEGA, OMEGA HP, OMEGA HL



Power Transmission

* Available in OMEGA HP only.



Type	t (mm)	h _t (mm)	h _s (mm)
8M	8	3.2	5.4
14M	14	5.6	9.5

Section 8M*

Belt No. and construction	Pitch length (mm)	Number of teeth	Belt No. and construction	Pitch length (mm)	Number of teeth	Belt No. and construction	Pitch length (mm)	Number of teeth	Belt No. and construction	Pitch length (mm)	Number of teeth
320 8M HTD	320	40	800 8M	800	100	1184 8M	1184	148	1696 8M	1696	212
376 8M HTD	376	47	824 8M	824	103	1200 8M	1200	150	1728 8M	1728	216
424 8M	424	53	840 8M	840	105	1216 8M	1216	152	1760 8M	1760	220
480 8M	480	60	848 8M	848	106	1224 8M	1224	153	1800 8M	1800	225
512 8M	512	64	856 8M	856	107	1248 8M	1248	156	1904 8M	1904	238
520 8M	520	65	880 8M	880	110	1256 8M	1256	157	1936 8M	1936	242
560 8M	560	70	896 8M	896	112	1264 8M	1264	158	2000 8M	2000	250
576 8M	576	72	912 8M	912	114	1280 8M	1280	160	2080 8M	2080	260
600 8M	600	75	920 8M	920	115	1304 8M	1304	163	2104 8M	2104	263
608 8M	608	76	960 8M	960	120	1328 8M	1328	166	2240 8M	2240	280
624 8M	624	78	976 8M	976	122	1344 8M	1344	168	2248 8M	2248	281
632 8M	632	79	1000 8M	1000	125	1360 8M	1360	170	2272 8M	2272	284
640 8M	640	80	1040 8M	1040	130	1400 8M	1400	175	2400 8M	2400	300
656 8M	656	82	1056 8M	1056	132	1424 8M	1424	178	2504 8M	2504	313
680 8M	680	85	1064 8M	1064	133	1432 8M HTD	1432	179	2600 8M	2600	325
712 8M	712	89	1080 8M	1080	135	1440 8M	1440	180	2800 8M	2800	350
720 8M	720	90	1096 8M	1096	137	1520 8M	1520	190			
760 8M	760	95	1120 8M	1120	140	1552 8M	1552	194			
776 8M	776	97	1128 8M	1128	141	1600 8M	1600	200			
784 8M	784	98	1160 8M	1160	145	1680 8M	1680	210			

Standard widths: 20 mm, 30 mm, 50 mm, 85 mm

Section 14M*

924 14M	924	66	1610 14M	1610	115	2450 14M	2450	175	3850 14M	3850	275
966 14M	966	69	1778 14M	1778	127	2590 14M	2590	185	4004 14M HTD	4004	286
1092 14M	1092	78	1890 14M	1890	135	2800 14M	2800	200	4326 14M	4326	309
1190 14M	1190	85	2100 14M	2100	150	3150 14M	3150	225	4578 14M	4578	327
1400 14M	1400	100	2310 14M	2310	165	3500 14M	3500	250			

Standard widths: 40 mm, 55 mm, 85 mm, 115 mm, 170 mm

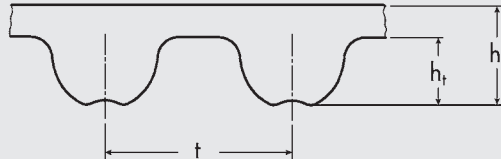
Example:

Timing belt: Optibelt OMEGA 1200 8M 50

1200 = 1200 mm pitch length
 8M = Section and construction
 50 = 50 mm belt width

Sections and Sizes

optibelt OMEGA FanPower Timing Belts



Type	t (mm)	ht (mm)	hs (mm)
8M FP	??	??	??
14M FP	??	??	??

Section 8M FP

Belt No. and construction	Pitch length (mm)	Number of teeth
2000 8M FP	2000	250
2240 8M FP	2240	280
2400 8M FP	2400	300
2600 8M FP	2600	325
2800 8M FP	2800	350

Section 14M FP

3150 14M FP	3150	225
3360 14M FP	3360	240
3500 14M FP	3500	250
3850 14M FP	3850	275
4326 14M FP	4326	309
4578 14M FP	4578	327

Standard widths: 8M FP – 30 mm, 50 mm, 85 mm – 14M FP – 55 mm, 85 mm.

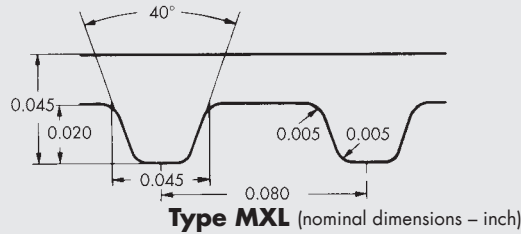
Example:

Timing belt: Optibelt OMEGA FanPower 2000 8M FP 30

2000 = 2000 mm pitch length
 8M FP = Section and construction
 30 = 30 mm belt width

Sections and Sizes

optibelt ZR Timing Belts



Type MXL – pitch 0.080 inch

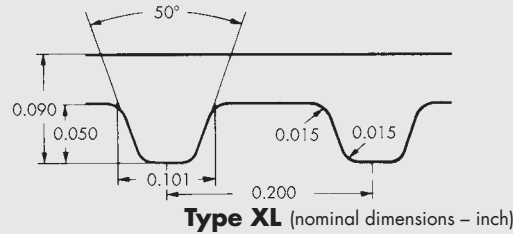
Belt No.	Pitch length		Number of teeth	Belt No.	Pitch length		Number of teeth	Belt No.	Pitch length		Number of teeth
	(inch)	(mm)			(inch)	(mm)			(inch)	(mm)	
264 MXL	2.64	67.06	33	864 MXL	8.64	219.46	108	2144 MXL	21.44	544.58	268
360 MXL	3.60	91.44	45	912 MXL	9.12	231.65	114	2240 MXL	22.40	568.96	280
432 MXL	4.32	109.73	54	920 MXL	9.20	233.68	115	2384 MXL	23.84	605.54	298
440 MXL	4.40	111.76	55	960 MXL	9.60	243.84	120	2480 MXL	24.80	629.92	310
448 MXL	4.48	113.79	56	984 MXL	9.84	249.94	123	2520 MXL	25.20	640.08	315
456 MXL	4.56	115.82	57	1000 MXL	10.00	254.00	125	2680 MXL	28.80	680.72	335
480 MXL	4.80	121.92	60	1008 MXL	10.08	256.03	126	2776 MXL	27.76	705.10	347
488 MXL	4.88	123.95	61	1040 MXL	10.40	264.16	130	2880 MXL	28.80	731.52	360
536 MXL	5.36	136.14	67	1056 MXL	10.56	268.22	132	2920 MXL	29.20	741.68	365
544 MXL	5.44	138.18	68	1072 MXL	10.72	272.29	134	3200 MXL	32.00	812.80	400
568 MXL	5.68	144.27	71	1112 MXL	11.12	282.45	139	3472 MXL	34.72	881.89	434
576 MXL	5.76	146.30	72	1120 MXL	11.20	284.48	140	3624 MXL	36.24	920.50	453
600 MXL	6.00	152.40	75	1136 MXL	11.36	288.54	142	3704 MXL	37.04	940.82	463
632 MXL	6.32	160.53	79	1176 MXL	11.76	298.70	147	3784 MXL	37.84	961.14	473
640 MXL	6.40	162.56	80	1184 MXL	11.84	300.74	148	4040 MXL	40.40	1026.16	505
656 MXL	6.56	166.62	82	1200 MXL	12.00	304.80	150				
672 MXL	6.72	170.69	84	1224 MXL	12.24	310.90	153				
680 MXL	6.80	172.72	85	1272 MXL	12.72	323.09	159				
704 MXL	7.04	178.82	88	1280 MXL	12.80	325.12	160				
728 MXL	7.28	184.91	91	1320 MXL	13.20	335.28	165				
736 MXL	7.36	186.94	92	1400 MXL	14.00	355.60	175				
752 MXL	7.52	191.01	94	1472 MXL	14.72	373.89	184				
760 MXL	7.60	193.04	95	1520 MXL	15.20	386.08	190				
776 MXL	7.76	197.10	97	1560 MXL	15.60	396.24	195				
800 MXL	8.00	203.20	100	1600 MXL	16.00	406.40	200				
808 MXL	8.08	205.23	101	1768 MXL	17.68	449.07	221				
816 MXL	8.16	207.26	102	1888 MXL	18.88	479.55	236				
824 MXL	8.24	209.30	103	1984 MXL	19.84	503.94	248				
840 MXL	8.40	213.36	105	1992 MXL	19.92	505.97	249				
856 MXL	8.56	217.42	107	2048 MXL	20.48	520.19	256				

Non stocking sizes

Further sizes and belt sleeves available on request. Sleeve width 18.5".

Sections and Sizes

optibelt ZR Timing Belts



Type XL – pitch 0.200 inch

Belt No.	Pitch length		Number of teeth	Belt No.	Pitch length		Number of teeth	Belt No.	Pitch length		Number of teeth
	(inch)	(mm)			(inch)	(mm)			(inch)	(mm)	
60 XL	6.00	152.40	30	178 XL	17.80	452.12	89	360 XL	36.00	914.40	180
70 XL	7.00	177.80	35	180 XL	18.00	457.20	90	380 XL*	38.00	965.20	190
80 XL	8.00	203.20	40	182 XL	18.20	462.28	91	382 XL	38.20	970.28	191
86 XL	8.60	218.44	43	184 XL	18.40	467.36	92	388 XL	38.80	985.52	194
88 XL*	8.80	223.52	44	188 XL	18.80	477.52	94	390 XL*	39.00	990.60	195
90 XL	9.00	228.60	45	190 XL	19.00	482.60	95	392 XL	39.20	995.68	196
92 XL	9.20	233.68	46	192 XL	19.20	487.68	96	412 XL	41.20	1046.48	206
94 XL	9.40	238.76	47	194 XL	19.40	492.76	97	414 XL	41.40	1051.56	207
96 XL	9.60	243.84	48	196 XL	19.60	497.84	98	432 XL	43.20	1097.28	216
100 XL	10.00	254.00	50	200 XL	20.00	508.00	100	438 XL	43.80	1112.52	219
102 XL	10.20	259.08	51	210 XL	21.00	533.40	105	460 XL	46.00	1168.40	230
106 XL	10.60	269.24	53	220 XL	22.00	558.80	110	498 XL	49.80	1264.92	249
108 XL	10.80	274.32	54	230 XL	23.00	584.20	115	506 XL	50.60	1285.24	253
110 XL	11.00	279.40	55	240 XL	24.00	609.60	120	514 XL	51.40	1305.56	257
112 XL	11.20	284.48	56	244 XL	24.40	619.76	122	580 XL	58.00	1473.20	290
116 XL*	11.60	294.64	58	248 XL	24.80	629.92	124	630 XL	63.00	1600.20	315
118 XL	11.80	299.72	59	250 XL	25.00	635.00	125				
120 XL	12.00	304.80	60	260 XL	26.00	660.40	130				
124 XL	12.40	314.96	62	270 XL*	27.00	685.80	135				
126 XL	12.60	320.04	63	272 XL	27.20	690.88	136				
128 XL	12.80	325.12	64	274 XL	27.40	695.96	137				
130 XL	13.00	330.20	65	280 XL	28.00	711.20	140				
134 XL	13.40	340.36	67	286 XL	28.60	726.44	143				
136 XL	13.60	345.44	68	290 XL	29.00	736.60	145				
138 XL	13.80	350.52	69	296 XL	29.60	751.84	148				
140 XL	14.00	355.60	70	300 XL	30.00	762.00	150				
148 XL	14.80	375.92	74	306 XL	30.60	777.24	153				
150 XL	15.00	381.00	75	310 XL	31.00	787.40	155				
156 XL	15.60	396.24	78	316 XL	31.60	802.64	158				
160 XL	16.00	406.40	80	320 XL	32.00	812.80	160				
162 XL	16.20	411.48	81	322 XL	32.20	817.88	161				
168 XL	16.80	426.72	84	330 XL*	33.00	838.20	165				
170 XL	17.00	431.80	85	340 XL*	34.00	863.60	170				
174 XL	17.40	441.96	87	344 XL	34.40	873.76	172				
176 XL	17.60	447.04	88	350 XL*	35.00	889.00	175				

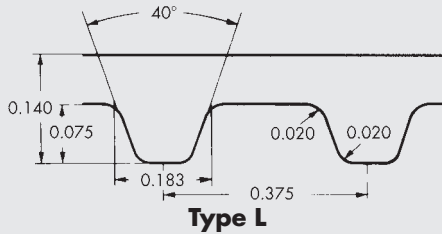
Further sizes and belt sleeves available on request. Sleeve width 18.5". Belts marked with * are non stock sizes.

Sections and Sizes

optibelt ZR Timing Belts

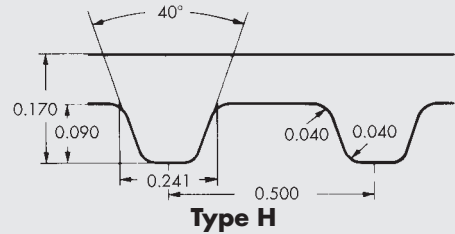


Power Transmission



Type L

(nominal dimensions – inch)



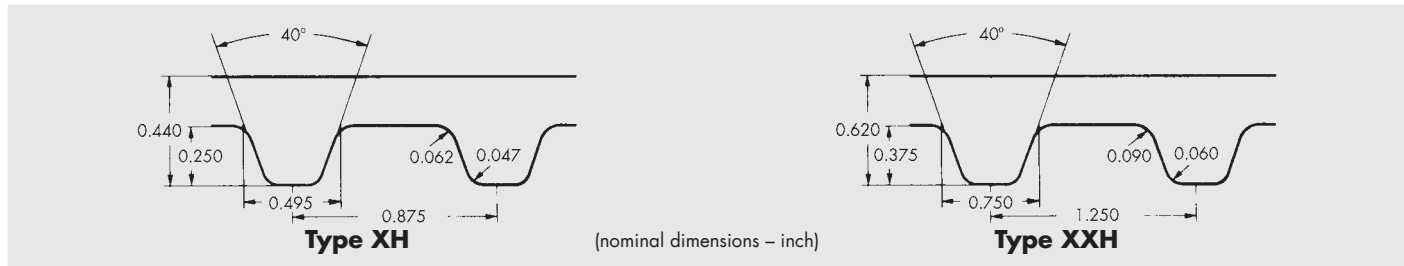
Type H

Type L – pitch 0.375 inch				Type H – pitch 0.500 inch			
Belt No.	Pitch length		Number of teeth	Belt No.	Pitch length		Number of teeth
	(inch)	(mm)			(inch)	(mm)	
109 L	10.88	276.23	29	230 H	23.00	584.20	46
124 L	12.38	314.33	33	240 H	24.00	609.60	48
150 L	15.00	381.00	40	255 H	25.50	647.70	51
169 L	16.88	428.63	45	270 H	27.00	685.80	54
173 L	17.25	438.15	46	280 H	28.00	711.20	56
187 L	18.75	476.25	50	300 H	30.00	762.00	60
210 L	21.00	533.40	56	330 H	33.00	838.20	66
225 L	22.50	571.50	60	335 H	33.50	850.90	67
236 L	23.63	600.08	63	350 H	35.00	889.00	70
240 L	24.00	609.60	64	360 H	36.00	914.40	72
255 L	25.50	647.70	68	370 H	37.00	939.80	74
270 L	27.00	685.80	72	390 H	39.00	990.60	78
285 L	28.50	723.90	76	400 H	40.00	1016.00	80
300 L	30.00	762.00	80	420 H	42.00	1066.80	84
322 L	32.25	819.15	86	430 H	43.00	1092.20	86
345 L	34.50	876.30	92	450 H	45.00	1143.00	90
360 L	36.00	914.40	96	465 H	46.50	1181.10	93
367 L	36.75	933.45	98	480 H	48.00	1219.20	96
390 L	39.00	990.60	104	510 H	51.00	1295.40	102
405 L	40.50	1028.70	108	540 H	54.00	1371.60	108
420 L	42.00	1066.80	112	560 H	56.00	1422.40	112
435 L	43.50	1104.90	116	570 H	57.00	1447.80	114
450 L	45.00	1143.00	120	600 H	60.00	1524.00	120
454 L	45.38	1152.53	121	630 H	63.00	1600.20	126
480 L	48.00	1219.20	128	650 H	65.00	1651.00	130
510 L	51.00	1295.40	136	660 H	66.00	1676.40	132
525 L	52.50	1333.50	140	680 H	68.00	1727.20	136
540 L	54.00	1371.60	144	700 H	70.00	1778.00	140
600 L	60.00	1524.00	160	730 H	73.00	1854.20	146
630 L	63.00	1600.20	168	750 H	75.00	1905.00	150
660 L	66.00	1676.40	176	770 H	77.00	1955.80	154
				800 H	80.00	2032.00	160
				850 H	85.00	2159.00	170
				860 H	86.00	2184.40	172
				900 H	90.00	2286.00	180
				950 H	95.00	2413.00	190
				1000 H	100.00	2540.00	200
				1100 H	110.00	2794.00	220
				1250 H	125.00	3175.00	250
				1400 H	140.00	3556.00	280
				1700 H	170.00	4318.00	340

Further sizes and belt sleeves available on request. Sleeve width 18.5". Belts marked with * are non stock sizes.

Sections and Sizes

optibelt ZR Timing Belts



Type XH – pitch 0.875 inch				Type XXH – pitch 1.250 inch			
Belt No.	Pitch length		Number of teeth	Belt No.	Pitch length		Number of teeth
	(inch)	(mm)			(inch)	(mm)	
507 XH*	50.75	1289.0	58	700 XXH	70	1778	56
560 XH	56.00	1422.4	64	800 XXH	80	2032	64
630 XH	63.00	1600.2	72	900 XXH	90	2286	72
700 XH	70.00	1778.0	80	1000 XXH	100	2540	80
770 XH	77.00	1955.8	88	1200 XXH	120	3048	96
840 XH	84.00	2133.6	96	1400 XXH	140	3556	112
980 XH	98.00	2489.2	112	1600 XXH	160	4064	128
1120 XH	112.00	2844.8	128	1800 XXH	180	4572	144
1260 XH	126.00	3200.4	144				
1400 XH	140.00	3556.0	160				
1540 XH	154.00	3911.6	176				
1750 XH*	175.00	4445.0	200				
Non stocking sizes							
When ordering, give belt number (belt length and pitch) and width. Example: 420 H 075 420 = belt length 42" H = type H – 0.500 inch pitch 075 = belt width 3/4"							

Further sizes and belt sleeves available on request. Sleeve width 18.5". Belts marked with * are non stock sizes.

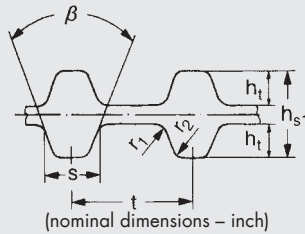
Standard belt widths											
MXL		XL		L		H		XH		XXH	
Code	Width (inch)	Code	Width (inch)	Code	Width (inch)	Code	Width (inch)	Code	Width (inch)	Code	Width (inch)
012	0.125	025	0.250	050	0.500	075	0.750	200	2.000	200	2.000
019	0.188	031	0.313	075	0.750	100	1.000	300	3.000	300	3.000
025	0.250	037	0.375	100	1.000	150	1.500	400	4.000	400	4.000
		050	0.500	150	1.500	200	2.000	500	5.000	500	5.000
		075	0.750	200	2.000	300	3.000	600	6.000		
		100	1.000	300	3.000	400	4.000	700	7.000		
						500	5.000				

Sections and Sizes

optibelt ZR D Double Timing Belts



Power Transmission



Type	t (inch)	ht (inch)	hst (inch)	s (inch)	β (degrees)	r1 (inch)	r2 (inch)
D-XL	0.200	0.050	0.120	0.101	50	0.015	0.015
D-L	0.375	0.075	0.180	0.183	40	0.020	0.020
D-H	0.500	0.090	0.226	0.241	40	0.040	0.040

Type D-XL – pitch 0.200 inch				Type D-L – pitch 0.375 inch				Type D-H – pitch 0.500 inch			
Belt No.	Pitch length		Number of teeth	Belt No.	Pitch length		Number of teeth	Belt No.	Pitch length		Number of teeth
	(inch)	(mm)			(inch)	(mm)			(inch)	(mm)	
150 D-XL	15	381.0	75	150 D-L	15.00	381.0	40	240 D-H	24	609.6	48
160 D-XL	16	406.4	80	169 D-L	16.90	429.3	45	270 D-H	27	685.8	54
170 D-XL	17	431.8	85	187 D-L	18.70	476.2	50	300 D-H	30	762.0	60
180 D-XL	18	457.2	90	210 D-L	21.00	533.4	56	330 D-H	33	838.2	66
190 D-XL	19	482.6	95	225 D-L	22.50	571.5	60	360 D-H	36	914.4	72
200 D-XL	20	508.0	100	240 D-L	24.00	609.6	64	390 D-H	39	990.6	78
210 D-XL	21	533.4	105	255 D-L	25.50	647.7	68	420 D-H	42	1066.8	84
220 D-XL	22	558.8	110	270 D-L	27.00	685.8	72	450 D-H	45	1143.0	90
230 D-XL	23	584.2	115	285 D-L	28.50	723.9	76	480 D-H	48	1219.2	96
240 D-XL	24	609.6	120	300 D-L	30.00	762.0	80	510 D-H	51	1295.4	102
250 D-XL	25	635.0	125	322 D-L	32.25	819.1	86	540 D-H	54	1371.6	108
260 D-XL	26	660.4	130	345 D-L	34.50	876.3	92	570 D-H	57	1447.8	114
280 D-XL	28	711.2	140	367 D-L	36.75	933.4	98	600 D-H	60	1524.0	120
300 D-XL	30	762.0	150	390 D-L	39.00	990.6	104	630 D-H	63	1600.2	126
310 D-XL	31	787.4	155	420 D-L	42.00	1066.8	112	660 D-H	66	1676.4	132
				450 D-L	45.00	1143.0	120	700 D-H	70	1778.0	140
				480 D-L	48.00	1219.2	128	750 D-H	75	1905.0	150
				510 D-L	51.00	1295.4	136	800 D-H	80	2032.0	160
				540 D-L	54.00	1371.6	144	850 D-H	85	2159.0	170
				600 D-L	60.00	1524.0	160	900 D-H	90	2286.0	180
				660 D-L	66.00	1676.4	176	1000 D-H	100	2540.0	200
								1100 D-H	110	2794.0	220
								1250 D-H	125	3175.0	250
								1400 D-H	140	3556.0	280
								1700 D-H	170	4318.0	340

Non stocking sizes

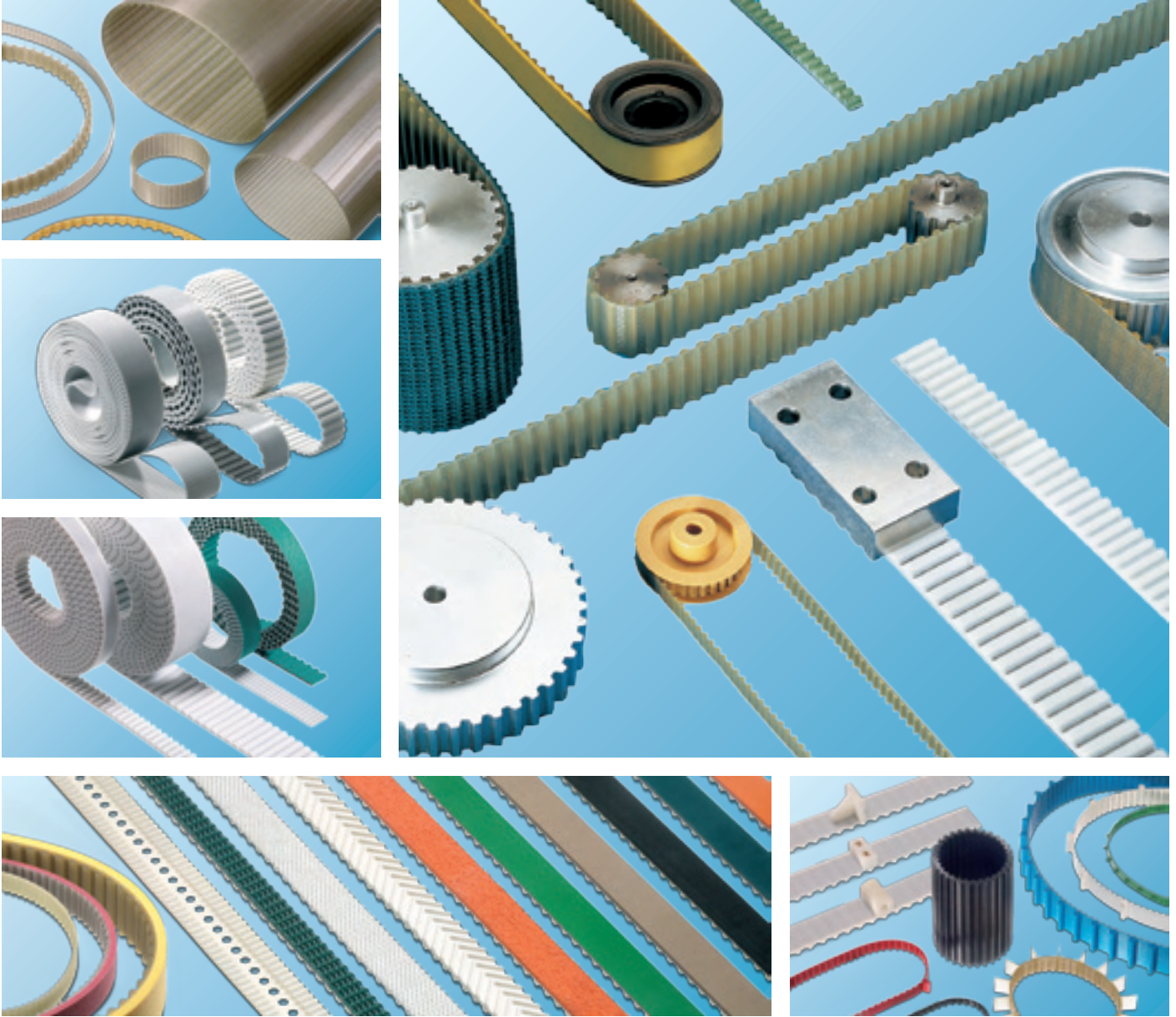
Further sizes and belt sleeves available on request. Sleeve width 18.5".

Non stocking sizes

Standard belt widths

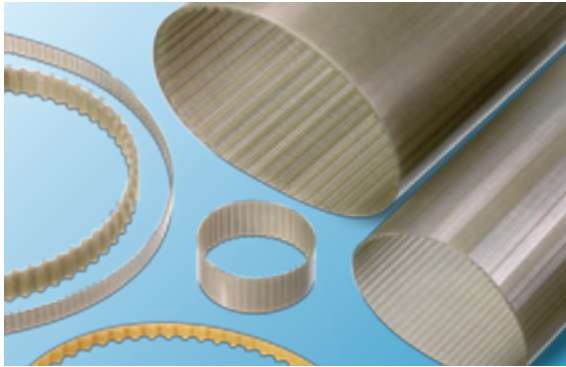
D-XL		D-L		D-H	
Code	Width (inch)	Code	Width (inch)	Code	Width (inch)
025	0.250	050	0.50	075	0.75
031	0.310	075	0.75	100	1.00
037	0.375	100	1.00	150	1.50
				200	2.00
				300	3.00

optibelt *ALPHA*



**For drive solutions
with polyurethane
Optibelt timing belts**

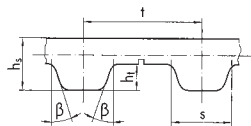
for drive performance



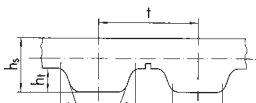
Optibelt ALPHA timing belts are manufactured in molds and consist of a high tensile strength, flexible tension cord and abrasion resistant polyurethane – also available as double section belts.

The molding process offers the following advantages:

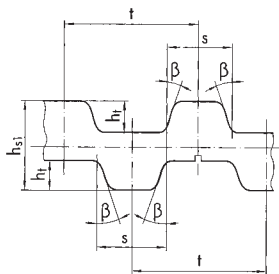
- High pitch accuracy and low tolerances
- Excellent bonding of the polyurethane to the tension cord
- Belt lengths of up to 2,350 mm
- Nominal sleeve widths up to 380 mm



Sections: MXL; XL; L; T2,5; T5; T10; T20



Sections: AT5; AT10; AT20



Sections: DT5; DT10; DT20

Available versions:

- Teeth on one side (standard); teeth on both sides (sections T2,5; T5; T10; T20)
- Colored, antistatic, equipped with cams or lugs (SRP)
- Special tension cords: E tension cord – highly flexible; high grade stainless steel; aramid; polyester

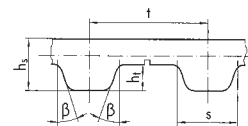
for drive performance



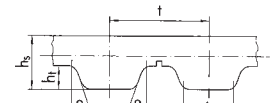
Optibelt ALPHAflex timing belts are manufactured endless from thermoplastic polyurethane – with no breaks in the tension cord – by means of an extrusion process.

The advantages are as follows:

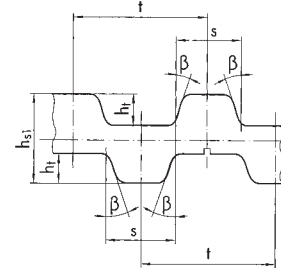
- Length range of approx. 1,500-24,000 mm
- Length ranges can be produced in any multiple of the tooth pitch
- Double sections are available
- Fabric facing on the teeth or the belt top surface can be supplied
- Identical in performance to Optibelt ALPHA molded belts
- Speeds of up to 10,000 rpm



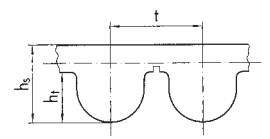
Sections: T5; T10; T20



Sections: AT5; AT10; AT20



Sections: T5D; T10D; T20D

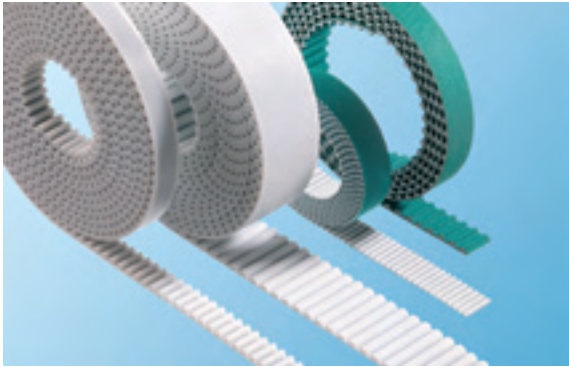


Sections: 5M; 8M; 14M

Available versions:

- Teeth one side (standard); teeth on both sides (sections T5; T10; T20)
- Equipped with cams or lugs
- Special tension cords: highly flexible tension cord; aramid; high grade stainless steel (sections AT10/AT20)

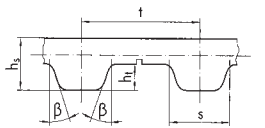
for linear drives



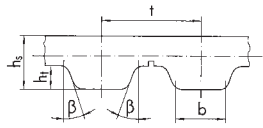
Optibelt ALPHA linear is extruded, open-ended timing belting with tension cords parallel to the belt edges. It is primarily used in linear and conveying drives.

The advantages are:

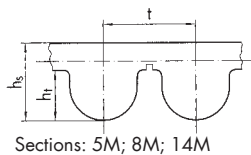
- High tensile strength permits heavy loads to be transmitted
- Available in roll lengths of up to 100 meters
- Fabric coating on tooth face and/or belt back possible
- Versions with additional reinforcement are available for linear drives
- Low maintenance
- High positioning accuracy



Sections: L; H; XH; T5; T10; T20



Sections: AT5; AT10; AT10L; AT20

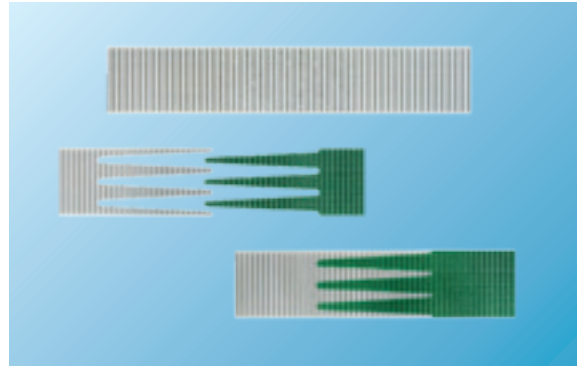


Sections: 5M; 8M; 14M

Available versions:

- Mechanically finished
- With cleats and coatings
- Fabric on tooth face and/or belt top surface
- Special tension cords: highly flexible tension cords; aramid; high grade stainless steel
- Colored

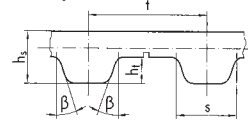
for flexible drive solutions



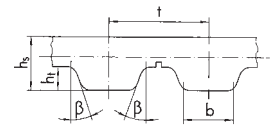
Optibelt ALPHA V are joined endless timing belts manufactured from Optibelt ALPHA linear belting. The belt joint means that the tension cord is not endless. They are primarily used in transport/conveyor drives but they can also be used for normal drives provided a reduction in power transmission capability is accepted.

The advantages are:

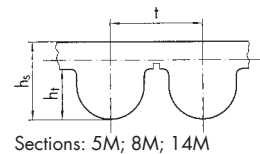
- Any length can be made in multiples of the belt tooth pitch
- Cost effective with a short delivery time
- Large range of different versions (also with fabric coating)
- Approx. 50 % of the power transmission capability of endlessly manufactured timing belts in spite of the join in the tension cord
- Ideal for conveyor systems
- Special tension cords available



Sections: L; H; XH; T5; T10; T20



Sections: AT5; AT10; AT10L; AT20

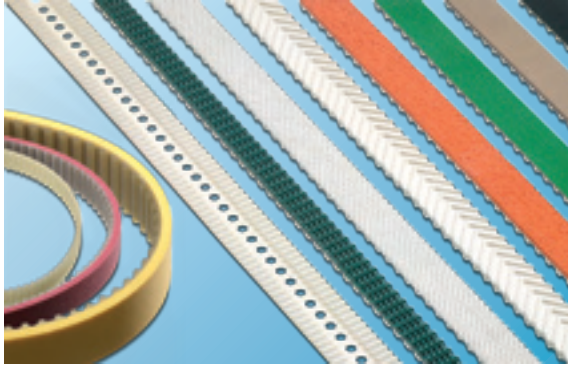


Sections: 5M; 8M; 14M

Available versions:

- Mechanically finished
- With cleats and coatings
- Fabric on tooth face and/or belt top surface
- Special tension cord: E tension cord – highly flexible; aramid; high grade stainless steel
- Colored

special timing belts for conveying requirements



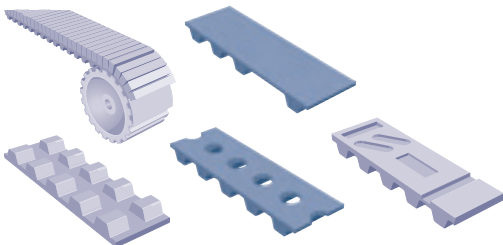
Coatings

Optibelt special timing belts may be made with special top surfaces, cleats, lugs or fins using either a molding process (as Optibelt ALPHA SRP belts) or using Optibelt ALPHAflex or Optibelt ALPHA linear/ALPHA V as the base belt with the top surfaces added mechanically. Due to the huge variety of coatings and finishing possibilities plus the properties of the timing belt or belting, innovative solutions can be developed in the field of conveying technology.

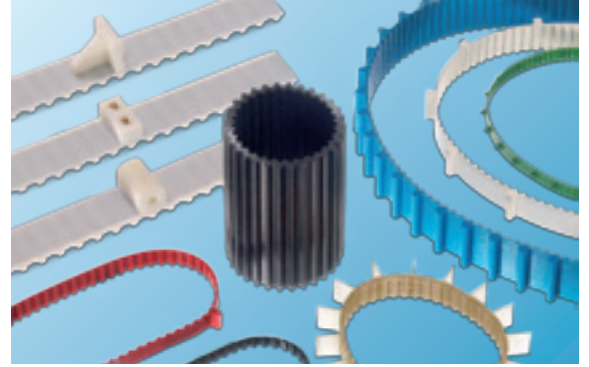
Mechanical Finishing

In order to make the Optibelt ALPHA Spezial timing belts most suitable for the required task, the following additional processing steps are available:

- Ground belt top surface
- Ground belt width
- Machined grooves longitudinally in the belt top surface
- Machined grooves longitudinally in the tooth side
- Remove individual teeth
- Pierce toothed belts
- Separate coatings
- Milled grooves in the belt top surface/ coating

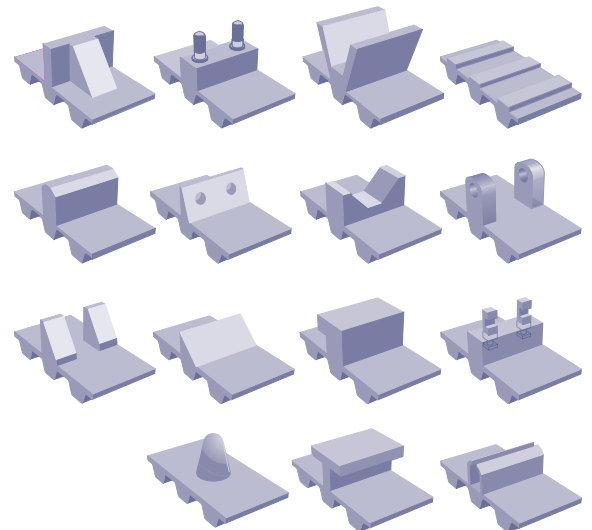


special timing belts for conveying requirements



Cleats

Optibelt ALPHA V Spezial/ALPHAflex special timing belts have cleats or lugs added separately to the base belt Optibelt ALPHA V or Optibelt ALPHAflex. Optibelt ALPHA SRP belts are molded endless belts where the cleats, lugs or fins are a part of the design of the outer part of the mold. Should the present product range not provide a shape or pitch of the cleat or lug appropriate to your requirements, it can be cost effectively manufactured/adjusted according to your specifications. On this page, you will see an extract from our standard product range. We would be delighted to support you to help solve your conveying problems.

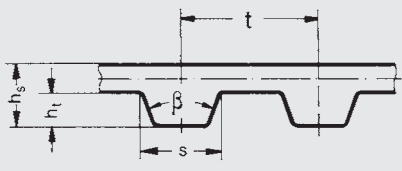


Sections and Sizes

optibelt ALPHA POWER Polyurethane Timing Belts, Metric



Power Transmission



(T2.5; T5; T10)					
Type	t (mm)	h ₁ (mm)	h ₂ (mm)	s (mm)	β
T2.5	2.5	0.70	1.30	1.50	40°
T5	5.0	1.20	2.20	2.65	40°
T10	10.0	2.50	4.50	5.30	40°

Construction: polyurethane with steel tension cord

T2.5 – pitch 2.5 mm				T5 – pitch 5 mm							
Belt No.	Pitch length (mm)	Number of teeth	Sleeve width (mm) ± 10 mm	Belt No.	Pitch length (mm)	Number of teeth	Sleeve width (mm) ± 10 mm	Belt No.	Pitch length (mm)	Number of teeth	Sleeve width (mm) ± 10 mm
T2.5/120*	120	48	200	T5/165*	165	33	200	T5/ 525	525	105	380
T2.5/145	145	58		T5/185*	185	37	200	T5/ 545	545	109	380
T2.5/160*	160	64	200	T5/200	200	40	200	T5/ 550	550	110	380
T2.5/177.5*	177.5	71	200	T5/215	215	43	200	T5/ 560	560	112	380
T2.5/180	180	72		T5/220*	220	44	200	T5/ 575	575	115	380
T2.5/200*	200	80	200	T5/225	225	45	200	T5/ 590	590	118	
T2.5/210	210	84		T5/245	245	49	200	T5/ 600	600	120	
T2.5/230*	230	92	200	T5/250*	250	50	200	T5/ 610	610	122	380
T2.5/245*	245	98	200	T5/255	255	51	200	T5/ 620	620	124	380
T2.5/265*	265	106	200	T5/260	260	52	200	T5/ 625	625	125	
T2.5/277.5	277.5	111		T5/270	270	54	200	T5/ 630	630	126	200
T2.5/285*	285	114	200	T5/275	275	55	200	T5/ 640	640	128	200
T2.5/290	290	116		T5/280	280	56	200	T5/ 650	650	130	145
T2.5/305*	305	122	200	T5/295	295	59	200	T5/ 660	660	132	380
T2.5/317.5*	317.5	127	200	T5/300*	300	60	200	T5/ 675	675	135	380
T2.5/330*	330	132	380	T5/305	305	61	200	T5/ 690	690	138	380
T2.5/342.5	342.5	137		T5/320	320	64		T5/ 700	700	140	380
T2.5/380*	380	152	380	T5/325	325	65	380	T5/ 720	720	144	380
T2.5/420*	420	168	380	T5/330	330	66	380	T5/ 725	725	145	
T2.5/480*	480	192	200	T5/340	340	68	380	T5/ 750	750	150	380
T2.5/500*	500	200	380	T5/350	350	70	380	T5/ 780	780	156	380
T2.5/540	540	216		T5/355	355	71	380	T5/ 800	800	160	
T2.5/600*	600	240	380	T5/360	360	72		T5/ 815	815	163	380
T2.5/650*	650	260	380	T5/365	365	73	380	T5/ 840	840	168	380
T2.5/780*	780	312	200	T5/375	375	75		T5/ 850	850	170	380
T2.5/915*	915	366	200	T5/390	390	78	380	T5/ 860	860	172	
T2.5/950*	950	380	200	T5/400	400	80	380	T5/ 900	900	180	380
				T5/410	410	82	380	T5/ 940	940	188	
				T5/420	420	84	380	T5/ 990	990	198	380
				T5/425*	425	85	380	T5/1000	1000	200	380
				T5/430	430	86		T5/1075	1075	215	380
				T5/440	440	88	380	T5/1100	1100	220	380
				T5/445	445	89		T5/1115	1115	223	
				T5/450	450	90		T5/1140	1140	228	
				T5/455	455	91	380	T5/1215	1215	243	380
				T5/460	460	92	380	T5/1315	1315	263	
				T5/475	475	95	380	T5/1350	1350	270	
				T5/480	480	96	380	T5/1380	1380	276	380
				T5/500	500	100	380	T5/1440*	1440	288	380
				T5/510	510	102	380				

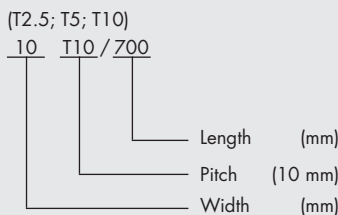
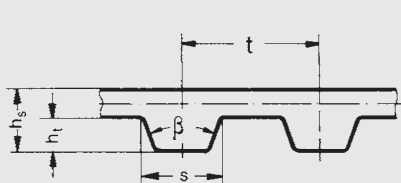
Further sizes available on request. * Non stock items

Sections and Sizes

optibelt ALPHA POWER Polyurethane Timing Belts, Metric



Power Transmission



Type	t (mm)	h ₁ (mm)	h ₂ (mm)	s (mm)	β
T2.5	2.5	0.70	1.30	1.50	40°
T5	5.0	1.20	2.20	2.65	40°
T10	10.0	2.50	4.50	5.30	40°

Construction: polyurethane with steel tension cord

T10 – pitch 10 mm

Belt No.	Pitch length (mm)	Number of teeth	Sleeve width (mm) ± 10 mm	Belt No.	Pitch length (mm)	Number of teeth	Sleeve width (mm) ± 10 mm
T10/ 260	260	26		T10/1000	1000	100	
T10/ 320	320	32		T10/1010	1010	101	380
T10/ 350	350	35		T10/1050	1050	105	380
T10/ 370	370	37	380	T10/1080	1080	108	380
T10/ 400	400	40	380	T10/1100	1100	110	
T10/ 410	410	41	380	T10/1110	1110	111	380
T10/ 440	440	44	380	T10/1140	1140	114	380
T10/ 450	450	45	380	T10/1150	1150	115	380
T10/ 500	500	50	380	T10/1200	1200	120	
T10/ 530	530	53	380	T10/1210	1210	121	380
T10/ 550	550	55		T10/1240	1240	124	380
T10/ 560	560	56	380	T10/1250	1250	125	380
T10/ 600	600	60	380	T10/1300	1300	130	380
T10/ 610	610	61	380	T10/1320	1320	132	380
T10/ 630	630	63	380	T10/1350	1350	135	380
T10/ 650	650	65		T10/1390	1390	139	380
T10/ 660	660	66	380	T10/1400	1400	140	380
T10/ 690	690	69	380	T10/1420	1420	142	380
T10/ 700	700	70	380	T10/1440	1440	144	380
T10/ 720	720	72	380	T10/1450	1450	145	380
T10/ 750	750	75	380	T10/1460	1460	146	380
T10/ 780	780	78	380	T10/1500	1500	150	380
T10/ 800	800	80		T10/1560	1560	156	380
T10/ 810	810	81	380	T10/1600	1600	160	200
T10/ 840	840	84	380	T10/1610	1610	161	200
T10/ 850	850	85	380	T10/1700	1700	170	200
T10/ 880	880	88	380	T10/1750	1750	175	200
T10/ 890	890	89	380	T10/1780	1780	178	200
T10/ 900	900	90	380	T10/1800	1800	180	
T10/ 910*	910	91	380	T10/1880	1880	188	200
T10/ 920	920	92	380	T10/1960	1960	196	200
T10/ 950	950	95	380	T10/2250	2250	225	200
T10/ 960	960	96	380				
T10/ 970	970	97	380				
T10/ 980	980	98	380				

Further sizes available on request. * Non stock items

Sections and Sizes

optibelt ALPHA POWER Polyurethane Timing Belts, Metric



Power Transmission

Type	t (mm)	h _t (mm)	h _s (mm)	b (mm)	β
AT5	5,0	1,20	2,70	2,50	25°

Pitch length (mm)
 Pitch (5 mm)
 Width (mm)

Construction: Polyurethane with steel wire cord

Type AT5 – pitch 5 mm

Belt No.	Pitch length (mm)	Number of teeth	Belt No.	Pitch length (mm)	Number of teeth
AT5/ 225	225.00	45	AT5/ 710	710.00	142
AT5/ 255	255.00	51	AT5/ 720	720.00	144
AT5/ 280	280.00	56	AT5/ 750	750.00	150
AT5/ 300	300.00	60	AT5/ 780	780.00	156
AT5/ 340	340.00	68	AT5/ 825	825.00	165
AT5/ 375	375.00	75	AT5/ 860	860.00	172
AT5/ 390	390.00	78	AT5/ 975	975.00	195
AT5/ 420	420.00	84	AT5/1050	1050.00	210
AT5/ 450	450.00	90	AT5/1125	1125.00	225
AT5/ 455	455.00	91	AT5/1500	1500.00	300
AT5/ 500	500.00	100			
AT5/ 545	545.00	109			
AT5/ 600	600.00	120			
AT5/ 610	610.00	122			
AT5/ 660	660.00	132			

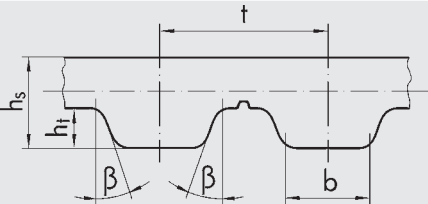
Further sizes on request.

Sections and Sizes

optibelt ALPHA POWER Polyurethane Timing Belts, Metric



Power Transmission



AT10

16 AT10/ 700

Pitch length (mm)

Pitch (10 mm)

Width (mm)

Type	t (mm)	h _t (mm)	h _s (mm)	b (mm)	β
AT10	10,0	2,50	5,00	5,00	25°

Construction: Polyurethane with steel wire cord

Type AT10 – pitch 10 mm

Belt No.	Pitch length (mm)	Number of teeth	Belt No.	Pitch length (mm)	Number of teeth
AT10/ 500	500.00	50	AT10/1150	1150.00	115
AT10/ 530	530.00	53	AT10/1200	1200.00	120
AT10/ 560	560.00	56	AT10/1210	1210.00	121
AT10/ 600	600.00	60	AT10/1250	1250.00	125
AT10/ 610	610.00	61	AT10/1280	1280.00	128
AT10/ 660	660.00	66	AT10/1300	1300.00	130
AT10/ 700	700.00	70	AT10/1320	1320.00	132
AT10/ 730	730.00	73	AT10/1350	1350.00	135
AT10/ 780	780.00	78	AT10/1360	1360.00	136
AT10/ 800	800.00	80	AT10/1400	1400.00	140
AT10/ 840	840.00	84	AT10/1420	1420.00	142
AT10/ 890	890.00	89	AT10/1480	1480.00	148
AT10/ 920	920.00	92	AT10/1500	1500.00	150
AT10/ 960	960.00	96	AT10/1600	1600.00	160
AT10/ 980	980.00	98	AT10/1700	1700.00	170
AT10/1000	1000.00	100	AT10/1720	1720.00	172
AT10/1010	1010.00	101	AT10/1800	1800.00	180
AT10/1050	1050.00	105	AT10/1860	1860.00	186
AT10/1080	1080.00	108	AT10/1940	1940.00	194
AT10/1100	1100.00	110			

Further sizes on request.

Sections and Sizes

optibelt ALPHA POWER D Metric Double Timing Belts



Power Transmission

Type	t (mm)	h _t (mm)	h _{s1} (mm)	s (mm)	β
DT5	5.0	1.20	3.40	2.65	40°
DT10	10.0	2.50	7.00	5.30	40°

Construction: Polyurethane with steel tension cord

DT5 – pitch 5 mm				DT10 – pitch 10 mm							
Belt No.	Pitch length (mm)	Number of teeth	Sleeve width (mm) ± 10 mm	Belt No.	Pitch length (mm)	Number of teeth	Sleeve width (mm) ± 10 mm	Belt No.	Pitch length (mm)	Number of teeth	Sleeve width (mm) ± 10 mm
DT5/ 300	300	60		DT10/ 260*	260	26	190	DT10/1350*	1350	135	190
DT5/ 350	350	70		DT10/ 530*	530	53	145	DT10/1400	1400	140	
DT5/ 400	400	80		DT10/ 600*	600	60	145	DT10/1420*	1420	142	190
DT5/ 410*	410	82	145	DT10/ 630*	630	63	145	DT10/1500*	1500	150	190
DT5/ 450	450	90		DT10/ 660*	660	66	145	DT10/1600	1600	160	
DT5/ 460*	460	92	190	DT10/ 700*	700	70	145	DT10/1610*	1610	161	190
DT5/ 480*	480	96	145	DT10/ 720*	720	72	145	DT10/1700*	1700	170	145
DT5/ 500*	500	100	145	DT10/ 750	750	75		DT10/1800*	1800	180	145
DT5/ 515*	515	103	145	DT10/ 800*	800	80	145	DT10/1880*	1880	188	145
DT5/ 550*	550	110	145	DT10/ 840*	840	84	145				
DT5/ 590*	590	118	190	DT10/ 900*	900	90	145				
DT5/ 600	600	120		DT10/ 980*	980	98	145				
DT5/ 620*	620	124	190	DT10/1000*	1000	100					
DT5/ 650*	650	130	145	DT10/1100*	1100	110	145				
DT5/ 700*	700	140	145	DT10/1200	1200	120					
DT5/ 750*	750	150	145	DT10/1210*	1210	121	145				
DT5/ 800*	800	160	145	DT10/1240*	1240	124	145				
DT5/ 815*	815	163	145	DT10/1250*	1250	125	190				
DT5/ 860*	860	172	145	DT10/1300	1300	130					
DT5/ 900*	900	180	145	DT10/1320*	1320	132	190				
DT5/ 940*	940	188	190								
DT5/1100*	1100	220	145								

Further sizes available on request. * Non stock items

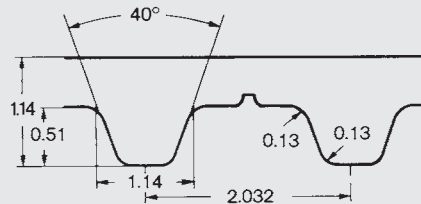
Standard belt widths									
T2.5		T5		T10		DT5		DT10	
Code	Width (inch)	Code	Width (inch)	Code	Width (inch)	Code	Width (inch)	Code	Width (inch)
4	4	6	6	10	10	6	6	10	10
6	6	8	8	12	12	8	8	12	12
8	8	10	10	16	16	10	10	16	16
10	10	12	12	20	20	12	12	20	20
12	12	16	16	25	25	16	16	25	25
		20	20	32	32	20	20	32	32
		25	25	50	50	25	25	50	50
		32	32	75	75	32	32		

Sections and Sizes

optibelt ALPHA Polyurethane Timing Belts, Inch



Power Transmission



Construction:
polyurethane with Aramid tension cord

Type MXL (nominal dimensions – mm)

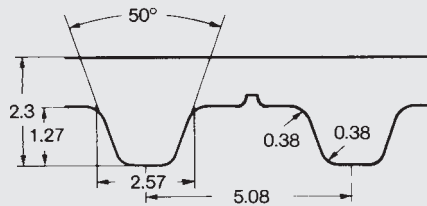
Type MXL – pitch 2.032 mm

Belt No.	Pitch length		Number of teeth	Belt No.	Pitch length		Number of teeth
	(inch)	(mm)			(inch)	(mm)	
K 240 MXL•	2.40	60.96	30	K 1640 MXL•	16.40	416.56	205
K 280 MXL•	2.80	71.12	35	K 1680 MXL•	16.80	426.72	210
K 320 MXL•	3.20	81.28	40	K 1720 MXL•	17.20	436.88	215
K 360 MXL•	3.60	91.44	45	K 1760 MXL•	17.60	447.04	220
K 400 MXL•	4.00	101.60	50	K 1800 MXL•	18.00	457.20	225
K 440 MXL•	4.40	111.76	55	K 1840 MXL•	18.40	467.36	230
K 480 MXL•	4.80	121.92	60	K 1880 MXL•	18.80	477.52	235
K 520 MXL•	5.20	132.08	65	K 1920 MXL•	19.20	487.68	240
K 560 MXL•	5.60	142.24	70	K 1960 MXL•	19.60	497.84	245
K 600 MXL•	6.00	152.40	75	K 2000 MXL•	20.00	508.00	250
K 640 MXL•	6.40	162.56	80	K 2040 MXL•	20.40	518.16	255
K 680 MXL•	6.80	172.72	85	K 2080 MXL•	20.80	528.32	260
K 720 MXL•	7.20	182.88	90	K 2120 MXL•	21.20	538.48	265
K 760 MXL•	7.60	193.04	95	K 2160 MXL•	21.60	548.64	270
K 800 MXL•	8.00	203.20	100	K 2200 MXL•	22.00	558.80	275
K 840 MXL•	8.40	213.36	105	K 2240 MXL•	22.40	568.96	280
K 880 MXL•	8.80	223.52	110	K 2280 MXL•	22.80	579.12	285
K 920 MXL•	9.20	233.68	115	K 2320 MXL•	23.20	589.28	290
K 960 MXL•	9.60	243.84	120	K 2360 MXL•	23.60	599.44	295
K 1000 MXL•	10.00	254.00	125	K 2400 MXL•	24.00	609.60	300
K 1040 MXL•	10.40	264.16	130	K 2480 MXL•	24.80	629.92	310
K 1080 MXL•	10.80	274.32	135	K 2560 MXL•	25.60	650.24	320
K 1120 MXL•	11.20	284.48	140	K 2640 MXL•	26.40	670.56	330
K 1160 MXL•	11.60	294.64	145	K 2720 MXL•	27.20	690.88	340
K 1200 MXL•	12.00	304.80	150	K 2800 MXL•	28.00	711.20	350
K 1240 MXL•	12.40	314.96	155	K 2880 MXL•	28.80	731.52	360
K 1280 MXL•	12.80	325.12	160	K 2960 MXL•	29.60	751.84	370
K 1320 MXL•	13.20	335.28	165	K 3040 MXL•	30.40	772.16	380
K 1360 MXL•	13.60	345.44	170	K 3120 MXL•	31.20	792.48	390
K 1400 MXL•	14.00	355.60	175	K 3200 MXL•	32.00	812.80	400
K 1440 MXL•	14.40	365.76	180				
K 1480 MXL•	14.80	375.92	185				
K 1520 MXL•	15.20	386.08	190				
K 1560 MXL•	15.60	396.24	195				
K 1600 MXL•	16.00	406.40	200				

Further sizes on request. • Non stock items, minimum order quantity: 2 sleeves.

Sections and Sizes

optibelt ALPHA Polyurethane Timing Belts, Inch



Construction:
polyurethane with steel wire cord

Type XL (nominal dimensions – mm)

Type XL – pitch 5.08 mm

Belt No.	Pitch length		Number of teeth	Belt No.	Pitch length		Number of teeth
	(inch)	(mm)			(inch)	(mm)	
K 60 XL•	6.00	152.40	30	K 186 XL•	18.60	472.44	93
K 70 XL•	7.00	177.80	35	K 190 XL	19.00	482.60	95
K 76 XL•	7.60	193.04	38	K 200 XL	20.00	508.00	100
K 80 XL•	8.00	203.20	40	K 210 XL	21.00	533.40	105
K 84 XL•	8.40	213.36	42	K 212 XL•	21.20	538.48	106
K 90 XL•	9.00	228.60	45	K 220 XL	22.00	558.80	110
K 94 XL•	9.40	238.76	47	K 230 XL	23.00	584.20	115
K 96 XL•	9.60	243.84	48	K 240 XL	24.00	609.60	120
K 100 XL	10.00	254.00	50	K 250 XL	25.00	635.00	125
K 102 XL•	10.20	259.08	51	K 254 XL•	25.40	645.16	127
K 104 XL	10.40	264.16	52	K 260 XL	26.00	660.40	130
K 106 XL•	10.60	269.24	53	K 270 XL	27.00	685.80	135
K 110 XL	11.00	279.40	55	K 290 XL	29.00	736.60	145
K 114 XL•	11.40	289.56	57	K 300 XL	30.00	762.00	150
K 116 XL•	11.60	294.64	58	K 320 XL•	32.00	812.80	160
K 120 XL	12.00	304.80	60	K 330 XL	33.00	838.20	165
K 124 XL•	12.40	314.96	62	K 360 XL•	36.00	914.40	180
K 126 XL•	12.60	320.04	63	K 376 XL•	37.60	955.04	188
K 128 XL•	12.80	325.12	64	K 384 XL•	38.40	975.36	192
K 130 XL	13.00	330.20	65	K 390 XL	39.00	990.60	195
K 136 XL•	13.60	345.44	68	K 414 XL•	41.40	1051.56	207
K 140 XL	14.00	355.60	70	K 460 XL•	46.00	1168.40	230
K 150 XL	15.00	381.00	75	K 480 XL•	48.00	1219.20	240
K 152 XL•	15.20	386.08	76	K 512 XL•	51.20	1300.48	256
K 154 XL•	15.40	391.16	77	K 550 XL•	55.00	1397.00	275
K 160 XL	16.00	406.40	80	K 564 XL•	56.40	1432.56	282
K 166 XL•	16.60	421.64	83	K 630 XL•	63.00	1600.20	315
K 168 XL	16.80	426.72	84	K 670 XL•	67.00	1701.80	335
K 170 XL	17.00	431.80	85				
K 180 XL	18.00	457.20	90				

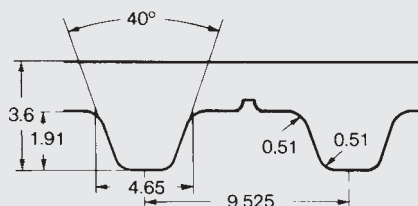
Further sizes on request. • Non stock items, minimum order quantity: 2 sleeves.

Sections and Sizes

optibelt ALPHA Polyurethane Timing Belts, Inch



Power Transmission



Construction:
polyurethane with steel wire cord

Type L (nominal dimensions – mm)

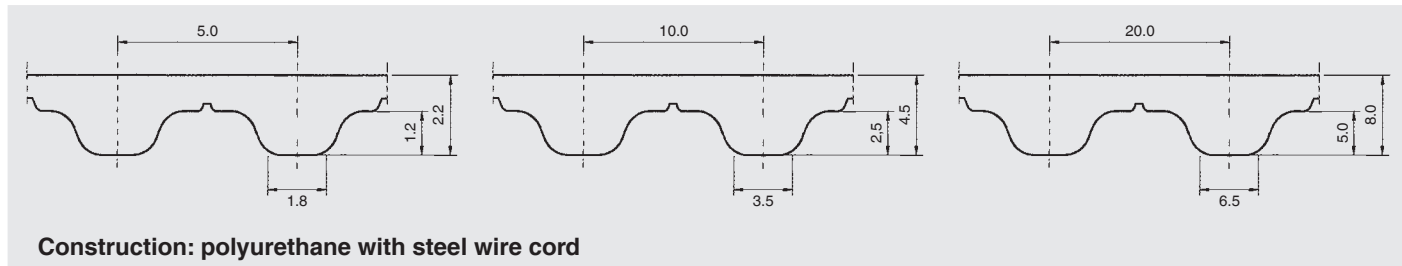
Type L – pitch 9.525 mm

Belt No.	Pitch length		Number of teeth	Belt No.	Pitch length		Number of teeth
	(inch)	(mm)			(inch)	(mm)	
K 124 L	12.38	314.33	33	K 375 L•	37.50	952.50	100
K 150 L	15.00	381.00	40	K 390 L	39.00	990.60	104
K 165 L•	16.50	419.10	44	K 420 L	42.00	1066.80	112
K 173 L•	17.25	438.15	46	K 427 L•	42.75	1085.85	114
K 187 L	18.75	476.25	50	K 450 L	45.00	1143.00	120
K 210 L	21.00	533.40	56	K 480 L	48.00	1219.20	128
K 225 L	22.50	571.50	60	K 510 L	51.00	1295.40	136
K 240 L	24.00	609.60	64	K 525 L•	52.50	1333.50	140
K 255 L	25.50	647.70	68	K 540 L	54.00	1371.60	144
K 270 L	27.00	685.80	72	K 600 L	60.00	1524.00	160
K 285 L	28.50	723.90	76				
K 300 L	30.00	762.00	80				
K 322 L	32.25	819.15	86				
K 345 L	34.50	876.30	92				
K 367 L	36.75	933.45	98				

Further sizes on request. • Non stock items, minimum order quantity: 2 sleeves.

Sections and Sizes

optibelt *ALPHAflex* Polyurethane Timing Belts, Manufactured Endless



Type T5 – pitch 5 mm			Type T10 – pitch 10 mm			Type T20 – pitch 20 mm		
Belt No.	Pitch length (mm)	Number of teeth	Belt No.	Pitch length (mm)	Number of teeth	Belt No.	Pitch length (mm)	Number of teeth
T5/1500•	1500	300	T10/1500•	1500	150	T20/1500•	1500	75
T5/1600•	1600	320	T10/1600•	1600	160	T20/1600•	1600	80
T5/1700•	1700	340	T10/1700•	1700	170	T20/1700•	1700	85
T5/1800•	1800	360	T10/1800•	1800	180	T20/1800•	1800	90
T5/1900•	1900	380	T10/1900•	1900	190	T20/1900•	1900	95
T5/2000•	2000	400	T10/2000•	2000	200	T20/2000•	2000	100
T5/2100•	2100	420	T10/2100•	2100	210	T20/2100•	2100	105
T5/2200•	2200	440	T10/2200•	2200	220	T20/2200•	2200	110
T5/2300•	2300	460	T10/2300•	2300	230	T20/2300•	2300	115
T5/2400•	2400	480	T10/2400•	2400	240	T20/2400•	2400	120
T5/2500•	2500	500	T10/2500•	2500	250	T20/2500•	2500	125
T5/2600•	2600	520	T10/2600•	2600	260	T20/2600•	2600	130
T5/2700•	2700	540	T10/2700•	2700	270	T20/2700•	2700	135
T5/2800•	2800	560	T10/2800•	2800	280	T20/2800•	2800	140
T5/2900•	2900	580	T10/2900•	2900	290	T20/2900•	2900	145
T5/3000•	3000	600	T10/3000•	3000	300	T20/3000•	3000	150
T5/3200•	3200	640	T10/3200•	3200	320	T20/3200•	3200	160
T5/3400•	3400	680	T10/3400•	3400	340	T20/3400•	3400	170
T5/3600•	3600	720	T10/3600•	3600	360	T20/3600•	3600	180
T5/3800•	3800	760	T10/3800•	3800	380	T20/3800•	3800	190
T5/4000•	4000	800	T10/4000•	4000	400	T20/4000•	4000	200
T5/4200•	4200	840	T10/4200•	4200	420	T20/4200•	4200	210
T5/4400•	4400	880	T10/4400•	4400	440	T20/4400•	4400	220
T5/4600•	4600	920	T10/4600•	4600	460	T20/4600•	4600	230
T5/4800•	4800	960	T10/4800•	4800	480	T20/4800•	4800	240
T5/5000•	5000	1000	T10/5000•	5000	500	T20/5000•	5000	250
T5/5200•	5200	1040	T10/5200•	5200	520	T20/5200•	5200	260
T5/5400•	5400	1080	T10/5400•	5400	540	T20/5400•	5400	270
T5/5600•	5600	1120	T10/5600•	5600	560	T20/5600•	5600	280
T5/5800•	5800	1160	T10/5800•	5800	580	T20/5800•	5800	290
T5/6000•	6000	1200	T10/6000•	6000	600	T20/6000•	6000	300
T5/6200•	6200	1240	T10/6200•	6200	620	T20/6200•	6200	310
T5/6400•	6400	1280	T10/6400•	6400	640	T20/6400•	6400	320
T5/6600•	6600	1320	T10/6600•	6600	660	T20/6600•	6600	330
T5/6800•	6800	1360	T10/6800•	6800	680	T20/6800•	6800	340
T5/7000•	7000	1400	T10/7000•	7000	700	T20/7000•	7000	350

ALPHAflex timing belts are available with PAZ-fabric.
Length: 1500 mm - 24 000 mm

Minimum according to production capability
quantity: (100 mm or 150 mm)

Double toothed timing belts section DT5 – on request.

Lengths over 7000 mm on request.

• Non stock items.

ALPHAflex timing belts are available with PAZ-fabric.
Length: 1500 mm - 24 000 mm

Minimum according to production capability
quantity: (100 mm or 150 mm)

Double toothed timing belts section DT10 – on request.

Lengths over 7000 mm on request.

• Non stock items.

ALPHAflex timing belts are available with PAZ-fabric.
Length: 1500 mm - 24 000 mm

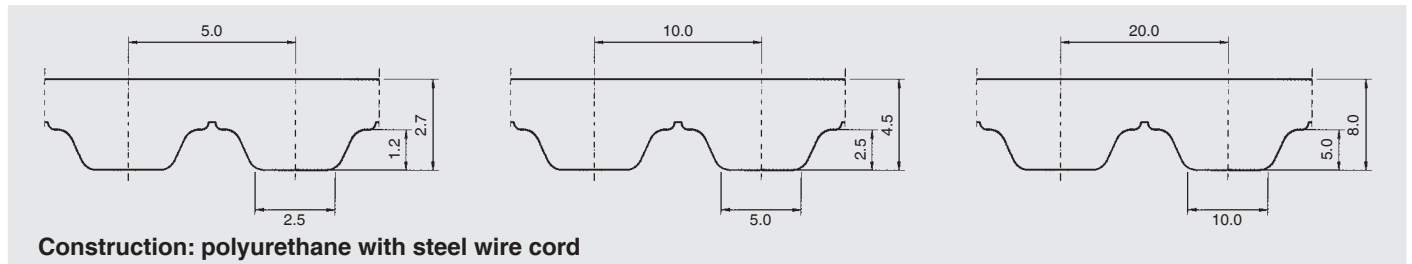
Minimum according to production capability
quantity: (100 mm or 150 mm)

Lengths over 7000 mm on request.

• Non stock items.

Sections and Sizes

optibelt *ALPHAflex* Polyurethane Timing Belts, Manufactured Endless



Construction: polyurethane with steel wire cord

Type AT5 – pitch 5 mm			Type AT10 – pitch 10 mm			Type AT20 - pitch 20 mm		
Belt No.	Pitch length (mm)	Number of teeth	Belt No.	Pitch length (mm)	Number of teeth	Belt No.	Pitch length (mm)	Number of teeth
AT5/1500•	1500	300	AT10/1500•	1500	150	AT20/1500•	1500	75
AT5/1600•	1600	320	AT10/1600•	1600	160	AT20/1600•	1600	80
AT5/1700•	1700	340	AT10/1700•	1700	170	AT20/1700•	1700	85
AT5/1800•	1800	360	AT10/1800•	1800	180	AT20/1800•	1800	90
AT5/1900•	1900	380	AT10/1900•	1900	190	AT20/1900•	1900	95
AT5/2000•	2000	400	AT10/2000•	2000	200	AT20/2000•	2000	100
AT5/2100•	2100	420	AT10/2100•	2100	210	AT20/2100•	2100	105
AT5/2200•	2200	440	AT10/2200•	2200	220	AT20/2200•	2200	110
AT5/2300•	2300	460	AT10/2300•	2300	230	AT20/2300•	2300	115
AT5/2400•	2400	480	AT10/2400•	2400	240	AT20/2400•	2400	120
AT5/2500•	2500	500	AT10/2500•	2500	250	AT20/2500•	2500	125
AT5/2600•	2600	520	AT10/2600•	2600	260	AT20/2600•	2600	130
AT5/2700•	2700	540	AT10/2700•	2700	270	AT20/2700•	2700	135
AT5/2800•	2800	560	AT10/2800•	2800	280	AT20/2800•	2800	140
AT5/2900•	2900	580	AT10/2900•	2900	290	AT20/2900•	2900	145
AT5/3000•	3000	600	AT10/3000•	3000	300	AT20/3000•	3000	150
AT5/3200•	3200	640	AT10/3200•	3200	320	AT20/3200•	3200	160
AT5/3400•	3400	680	AT10/3400•	3400	340	AT20/3400•	3400	170
AT5/3600•	3600	720	AT10/3600•	3600	360	AT20/3600•	3600	180
AT5/3800•	3800	760	AT10/3800•	3800	380	AT20/3800•	3800	190
AT5/4000•	4000	800	AT10/4000•	4000	400	AT20/4000•	4000	200
AT5/4200•	4200	840	AT10/4200•	4200	420	AT20/4200•	4200	210
AT5/4400•	4400	880	AT10/4400•	4400	440	AT20/4400•	4400	220
AT5/4600•	4600	920	AT10/4600•	4600	460	AT20/4600•	4600	230
AT5/4800•	4800	960	AT10/4800•	4800	480	AT20/4800•	4800	240
AT5/5000•	5000	1000	AT10/5000•	5000	500	AT20/5000•	5000	250
AT5/5200•	5200	1040	AT10/5200•	5200	520	AT20/5200•	5200	260
AT5/5400•	5400	1080	AT10/5400•	5400	540	AT20/5400•	5400	270
AT5/5600•	5600	1120	AT10/5600•	5600	560	AT20/5600•	5600	280
AT5/5800•	5800	1160	AT10/5800•	5800	580	AT20/5800•	5800	290
AT5/6000•	6000	1200	AT10/6000•	6000	600	AT20/6000•	6000	300
AT5/6200•	6200	1240	AT10/6200•	6200	620	AT20/6200•	6200	310
AT5/6400•	6400	1280	AT10/6400•	6400	640	AT20/6400•	6400	320
AT5/6600•	6600	1320	AT10/6600•	6600	660	AT20/6600•	6600	330
AT5/6800•	6800	1360	AT10/6800•	6800	680	AT20/6800•	6800	340
AT5/7000•	7000	1400	AT10/7000•	7000	700	AT20/7000•	7000	350

ALPHAflex timing belts are available with PAZ-fabric.
Length: 1500 mm - 24 000 mm

Minimum according to production capability
quantity: (100 mm or 150 mm)

Double toothed timing belts section AT5D – on request.

Lengths over 7000 mm on request.

- Non stock items.

ALPHAflex timing belts are available with PAZ-fabric.
Length: 1500 mm - 24 000 mm

Minimum according to production capability
quantity: (100 mm or 150 mm)

Double toothed timing belts section AT10D – on request.

Lengths over 7000 mm on request.

- Non stock items.

ALPHAflex timing belts are available with PAZ-fabric.
Length: 1500 mm - 24 000 mm

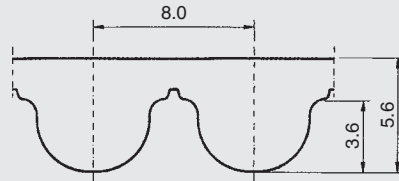
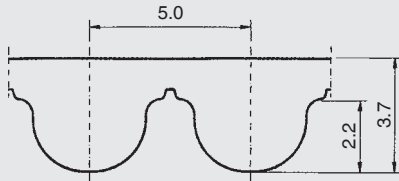
Minimum according to production capability
quantity: (100 mm or 150 mm)

Lengths over 7000 mm on request.

- Non stock items.

Sections and Sizes

optibelt *ALPHAflex* Polyurethane Timing Belts, Manufactured Endless



Construction: polyurethane with steel wire cord

Type 5M – pitch 5 mm			Type 8M – pitch 8 mm		
Belt No.	Pitch length (mm)	Number of teeth	Belt No.	Pitch length (mm)	Number of teeth
5M/1500•	1500	300	8M/1504•	1504	188
5M/1600•	1600	320	8M/1600•	1600	200
5M/1700•	1700	340	8M/1704•	1704	213
5M/1800•	1800	360	8M/1800•	1800	225
5M/1900•	1900	380	8M/1904•	1904	238
5M/2000•	2000	400	8M/2000•	2000	250
5M/2100•	2100	420	8M/2104•	2104	263
5M/2200•	2200	440	8M/2200•	2200	275
5M/2300•	2300	460	8M/2304•	2304	288
5M/2400•	2400	480	8M/2400•	2400	300
5M/2500•	2500	500	8M/2504•	2504	313
5M/2600•	2600	520	8M/2600•	2600	325
5M/2700•	2700	540	8M/2704•	2704	338
5M/2800•	2800	560	8M/2800•	2800	350
5M/2900•	2900	580	8M/2904•	2904	363
5M/3000•	3000	600	8M/3000•	3000	375
5M/3200•	3200	640	8M/3200•	3200	400
5M/3400•	3400	680	8M/3400•	3400	425
5M/3600•	3600	720	8M/3600•	3600	450
5M/3800•	3800	760	8M/3800•	3800	475
5M/4000•	4000	800	8M/4000•	4000	500
5M/4200•	4200	840	8M/4200•	4200	525
5M/4400•	4400	880	8M/4400•	4400	550
5M/4600•	4600	920	8M/4600•	4600	575
5M/4800•	4800	960	8M/4800•	4800	600
5M/5000•	5000	1000	8M/5000•	5000	625
5M/5200•	5200	1040	8M/5200•	5200	650
5M/5400•	5400	1080	8M/5400•	5400	675
5M/5600•	5600	1120	8M/5600•	5600	700
5M/5800•	5800	1160	8M/5800•	5800	725
5M/6000•	6000	1200	8M/6000•	6000	750
5M/6200•	6200	1240	8M/6200•	6200	775
5M/6400•	6400	1280	8M/6400•	6400	800
5M/6600•	6600	1320	8M/6600•	6600	825
5M/6800•	6800	1360	8M/6800•	6800	850
5M/7000•	7000	1400	8M/7000•	7000	875

ALPHAflex timing belts are available with PAZ-fabric.

Length: 1500 mm - 24 000 mm

Minimum according to production capability
quantity: (100 mm or 150 mm)

Double toothed timing belts section D5M – on request.

Lengths over 7000 mm on request.

• Non stock items.

ALPHAflex timing belts are available with PAZ-fabric.

Length: 1500 mm - 24 000 mm

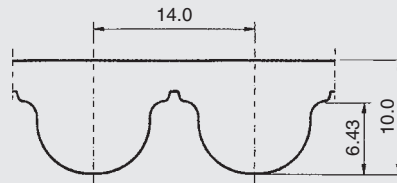
Minimum according to production capability
quantity: (100 mm or 150 mm)

Lengths over 7000 mm on request.

• Non stock items.

Sections and Sizes

optibelt *ALPHAflex* Polyurethane Timing Belts, Manufactured Endless



Construction: polyurethane with steel wire cord

Type 14M - pitch 14 mm

Belt No.	Pitch length (mm)	Number of teeth	Belt No.	Pitch length (mm)	Number of teeth
14M/1512•	1512	108	14M/4550•	4550	325
14M/1596•	1596	114	14M/4606•	4606	329
14M/1694•	1694	121	14M/4704•	4704	336
14M/1750•	1750	125	14M/4802•	4802	343
14M/1806•	1806	129	14M/4900•	4900	350
14M/1904•	1904	136	14M/4998•	4998	357
14M/2002•	2002	143	14M/5096•	5096	364
14M/2100•	2100	150	14M/5194•	5194	371
14M/2198•	2198	157	14M/5250•	5250	375
14M/2296•	2296	164	14M/5306•	5306	379
14M/2394•	2394	171	14M/5404•	5404	386
14M/2450•	2450	175	14M/5502•	5502	393
14M/2506•	2506	179	14M/5600•	5600	400
14M/2604•	2604	186	14M/5698•	5698	407
14M/2702•	2702	193	14M/5796•	5796	414
14M/2800•	2800	200	14M/5894•	5894	421
14M/2898•	2898	207	14M/5950•	5950	425
14M/2996•	2996	214	14M/6006•	6006	429
14M/3094•	3094	221			
14M/3150•	3150	225			
14M/3206•	3206	229			
14M/3304•	3304	236			
14M/3402•	3402	243			
14M/3500•	3500	250			
14M/3598•	3598	257			
14M/3696•	3696	264			
14M/3794•	3794	271			
14M/3850•	3850	275			
14M/3906•	3906	279			
14M/4004•	4004	286			
14M/4102•	4102	293			
14M/4200•	4200	300			
14M/4298•	4298	307			
14M/4396•	4396	314			
14M/4494•	4494	321			

ALPHAflex timing belts are available with PAZ-fabric.

Length: 1512 mm - 24 000 mm

Minimum according to production capability
quantity: (100 mm or 150 mm)

Lengths over 6006 mm on request.

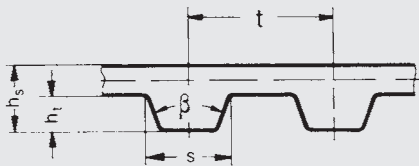
• Non stock items.

Sections and Sizes

optibelt ALPHA linear Open-Ended Timing Belting – Polyurethane Construction



Power Transmission



Type	XL	L	H	XH	8M	14M
β (degrees)	50°	40°	40°	40°	—	—
h_t (mm)	1.27	1.91	2.29	6.35	3.38	6.10
s (mm)	2.57	4.65	6.12	12.57	—	—
h_s (mm)	2.30	3.60	4.30	11.20	5.60	10.00

Aramid Tension Cord					Steel Tension Cord				
Type/Width	Pitch		Belt width		Type/Width	Pitch		Belt width	
	(inch)	(mm)	(inch)	(mm)		(inch)	(mm)	(inch)	(mm)
XL 025*	0.200	—	0.250	—	XL 025 - St*	0.200	—	0.250	—
XL 031*	0.200	—	0.313	—	XL 031 - St*	0.200	—	0.313	—
XL 037*	0.200	—	0.375	—	XL 037 - St*	0.200	—	0.375	—
XL 050*	0.200	—	0.500	—	XL 050 - St*	0.200	—	0.500	—
XL 075*	0.200	—	0.750	—	XL 075 - St*	0.200	—	0.750	—
XL 100*	0.200	—	1.000	—	XL 100 - St*	0.200	—	1.000	—
L 037*	0.375	—	0.375	—	L 037 - St*	0.375	—	0.375	—
L 050*	0.375	—	0.500	—	L 050 - St*	0.375	—	0.500	—
L 075*	0.375	—	0.750	—	L 075 - St*	0.375	—	0.750	—
L 100*	0.375	—	1.000	—	L 100 - St*	0.375	—	1.000	—
L 150*	0.375	—	1.500	—	L 150 - St*	0.375	—	1.500	—
L 200*	0.375	—	2.000	—	L 200 - St*	0.375	—	2.000	—
H 050*	0.500	—	0.500	—	H 050 - St*	0.500	—	0.500	—
H 075*	0.500	—	0.750	—	H 075 - St*	0.500	—	0.750	—
H 100*	0.500	—	1.000	—	H 100 - St*	0.500	—	1.000	—
H 150*	0.500	—	1.500	—	H 150 - St*	0.500	—	1.500	—
H 200*	0.500	—	2.000	—	H 200 - St*	0.500	—	2.000	—
H 300*	0.500	—	3.000	—	H 300 - St*	0.500	—	3.000	—
H 400*	0.500	—	4.000	—	H 400 - St*	0.500	—	4.000	—
XH 100*	0.875	—	1.000	—	XH 100 - St*	0.875	—	1.000	—
XH 200*	0.875	—	2.000	—	XH 200 - St*	0.875	—	2.000	—
XH 300*	0.875	—	3.000	—	XH 300 - St*	0.875	—	3.000	—
XH 500*	0.875	—	5.000	—	XH 500 - St*	0.875	—	5.000	—
5M 10*	—	5	—	10	5M 10 - St*	—	5	—	10
5M 15*	—	5	—	15	5M 15 - St*	—	5	—	15
5M 25*	—	5	—	25	5M 25 - St*	—	5	—	25
5M 50*	—	5	—	50	5M 50 - St*	—	5	—	50
8M 20*	—	8	—	20	8M 20 - St*	—	8	—	20
8M 25*	—	8	—	25	8M 25 - St*	—	8	—	25
8M 30*	—	8	—	30	8M 30 - St*	—	8	—	30
8M 50*	—	8	—	50	8M 50 - St*	—	8	—	50
8M 85*	—	8	—	85	8M 85 - St*	—	8	—	85
14M 25*	—	14	—	25	14M 25 - St*	—	14	—	25
14M 40*	—	14	—	40	14M 40 - St*	—	14	—	40
14M 55*	—	14	—	55	14M 55 - St*	—	14	—	55
14M 85*	—	14	—	85	14M 85 - St*	—	14	—	85

Minimum lengths for belts made endless from open-ended timing belting with aramid tension cord:

XL = 1000 mm
L = 1000 mm
H = 1000 mm

XH = 1000 mm
8M = 1000 mm
14M = 1000 mm

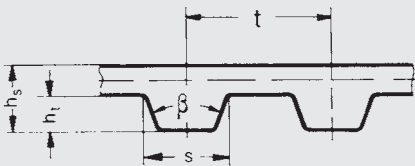
Wider belting available on request.
Sizes marked with * are not available from stock.
Steel cord belting is not available joined endless.
Roll length: 164 ft/50 m.
Belts with aramid tension cords can be joined to make endless belts.

Sections and Sizes

optibelt ALPHA linear Open-Ended Timing Belting – Polyurethane Construction



Power Transmission



Type	T5	T10	T20	AT5	AT10	AT20
β (degrees)	40°	40°	40°	50°	50°	50°
h _t (mm)	1.20	2.50	5.00	1.20	2.50	5.00
s (mm)	2.65	5.30	10.15	2.50	5.00	10.00
h _s (mm)	2.20	4.50	8.00	2.70	4.50	8.00

Aramid Tension Cord					Steel Tension Cord				
Type/Width	Pitch		Belt width		Type/Width	Pitch		Belt width	
	(inch)	(mm)	(inch)	(mm)		(inch)	(mm)	(inch)	(mm)
6 T5*	—	5	—	6	6 T5 - St*	—	5	—	6
8 T5*	—	5	—	8	8 T5 - St*	—	5	—	8
10 T5*	—	5	—	10	10 T5 - St*	—	5	—	10
12 T5*	—	5	—	12	12 T5 - St*	—	5	—	12
16 T5*	—	5	—	16	16 T5 - St*	—	5	—	16
20 T5*	—	5	—	20	20 T5 - St*	—	5	—	20
25 T5*	—	5	—	25	25 T5 - St*	—	5	—	25
32 T5*	—	5	—	32	32 T5 - St*	—	5	—	32
50 T5*	—	5	—	50	50 T5 - St*	—	5	—	50
10 T10*	—	10	—	10	10 T10 - St*	—	10	—	10
12 T10*	—	10	—	12	12 T10 - St*	—	10	—	12
16 T10*	—	10	—	16	16 T10 - St*	—	10	—	16
20 T10*	—	10	—	20	20 T10 - St*	—	10	—	20
25 T10*	—	10	—	25	25 T10 - St*	—	10	—	25
32 T10*	—	10	—	32	32 T10 - St*	—	10	—	32
40 T10*	—	10	—	40	40 T10 - St*	—	10	—	40
50 T10*	—	10	—	50	50 T10 - St*	—	10	—	50
75 T10*	—	10	—	75	75 T10 - St*	—	10	—	75
100 T10*	—	10	—	100	100 T10 - St*	—	10	—	100
25 T20*	—	20	—	25	25 T20 - St*	—	20	—	25
32 T20*	—	20	—	32	32 T20 - St*	—	20	—	32
50 T20*	—	20	—	50	50 T20 - St*	—	20	—	50
75 T20*	—	20	—	75	75 T20 - St*	—	20	—	75
100 T20*	—	20	—	100	100 T20 - St*	—	20	—	100
6 AT5*	—	5	—	6	6 AT5 - St*	—	5	—	6
10 AT5*	—	5	—	10	10 AT5 - St*	—	5	—	10
16 AT5*	—	5	—	16	16 AT5 - St*	—	5	—	16
25 AT5*	—	5	—	25	25 AT5 - St*	—	5	—	25
32 AT5*	—	5	—	32	32 AT5 - St*	—	5	—	32
50 AT5*	—	5	—	50	50 AT5 - St*	—	5	—	50
16 AT10*	—	10	—	16	16 AT10 - St*	—	10	—	16
25 AT10*	—	10	—	25	25 AT10 - St*	—	10	—	25
32 AT10*	—	10	—	32	32 AT10 - St*	—	10	—	32
50 AT10*	—	10	—	50	50 AT10 - St*	—	10	—	50
75 AT10*	—	10	—	75	75 AT10 - St*	—	10	—	75
100 AT10*	—	10	—	100	100 AT10 - St*	—	10	—	100
25 AT20*	—	20	—	25	25 AT20 - St*	—	20	—	25
32 AT20*	—	20	—	32	32 AT20 - St*	—	20	—	32
50 AT20*	—	20	—	50	50 AT20 - St*	—	20	—	50
75 AT20*	—	20	—	75	75 AT20 - St*	—	20	—	75
100 AT20*	—	20	—	100	100 AT20 - St*	—	20	—	100

Minimum lengths for belts made endless from open ended timing belting with aramid tension cord:

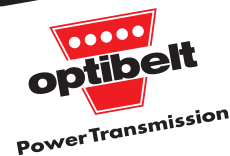
T5 = 600 mm AT5 = 1000 mm
 T10 = 600 mm AT10 = 1000 mm
 T20 = 1000 mm AT20 = 1000 mm

Wider belting available on request.
 Sizes marked with * are not available from stock.
 Steel cord belting is not available joined endless.
 Roll length: 164 ft/50 m.
 Belts with aramid tension cords can be joined to make endless belts.

OMEGA HP linear

OMEGA linear

ZR linear



optibelt

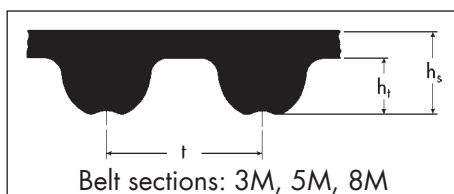


Optibelt OMEGA linear timing belting is open-ended timing belting made from rubber with a glass fiber tension cord manufactured out of sleeves using the spiral cut method.

- High tensile strength
- Low stretch
- High positioning stability
- Less noise than Optibelt HTD®, Optibelt timing belts and polyurethane timing belts
- Angular misalignment max. 0.67° (dependent on the width)
- Maintenance free
- For medium to high loading
- In accordance with ISO 13050
- Standard roll length 30 m

Special Constructions

- Antistatic conforming to ISO 9563
- Enhanced oil resistance
- Expanded temperature range



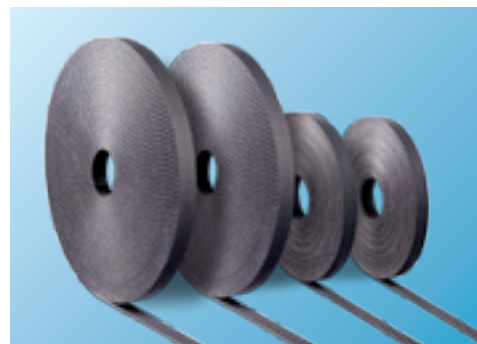
Standard Range; Sections, Widths

OMEGA 3M 9
 OMEGA 5M 10, 5M 15, 5M 25
 OMEGA 8M 10, 8M 15, 8M 20, 8M 25
 OMEGA HP 3M 9
 OMEGA HP 5M 10, 5M 15, 5M 25
 OMEGA HP 8M 10, 8M 15, 8M 20, 8M 25

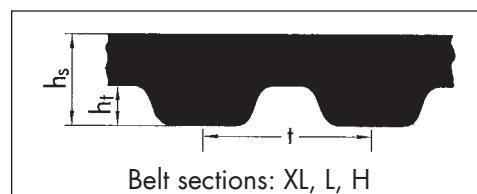
Order Example:

for 30 meters OMEGA HP, profile 8M 15 mm:
 OMEGA HP 15, 30 m
 Further sizes on request.

Optibelt ZR linear timing belting with trapezoidal teeth sections are manufactured out of sleeves using the spiral cut method. This open-ended timing belting has a glass fiber tension cord.



- High tensile strength
- Angular misalignment max. 0.67° (dependent on the width)
- Maintenance free
- Approved worldwide
- For low loading
- Sections standardised according to ISO 5296 / ISO 5294
- Standard roll length 30 m



Standard Range; Sections, Widths

XL 025, XL 037, XL 050
 L 050, L 100
 H 075, H 100

Examples of Product Applications:

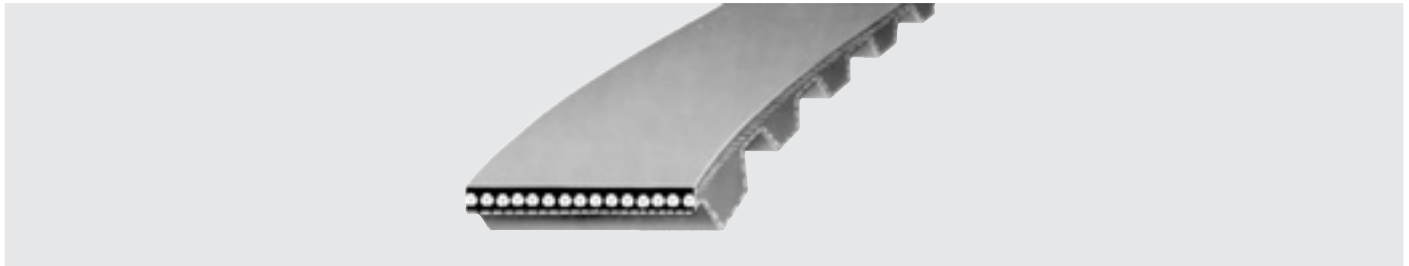
door and gate drives
 robots
 positioning drives

Sections and Sizes

optibelt ZR Open-Ended Timing Belting – Neoprene Construction



Power Transmission



Glass Fiber Tension Cord

Type	Belt width (inch)	Roll length	
		(m)	(feet)
NE - XL 025*	0.250	30	98
NE - XL 031*	0.313	30	98
NE - XL 037*	0.375	30	98
NE - XL 050*	0.500	30	98
NE - L 037*	0.375	30	98
NE - L 050*	0.500	30	98
NE - L 075*	0.750	30	98
NE - L 100*	1.000	30	98
NE - H 050*	0.500	30	98
NE - H 075*	0.750	30	98
NE - H 100*	1.000	30	98
NE - H 150*	1.500	30	98
NE - H 200*	2.000	30	98

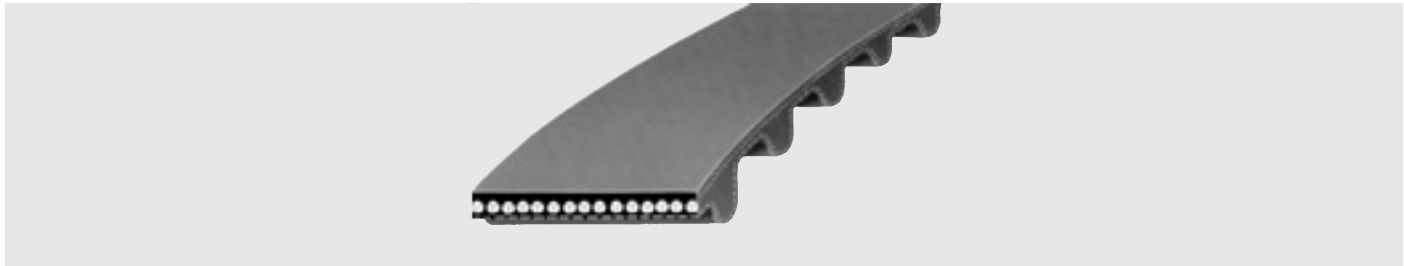
Steel Tension Cord

Type	Belt width (inch)	Roll length	
		(m)	(feet)
NE - XL 025 - St*	0.250	30	98
NE - XL 031 - St*	0.313	30	98
NE - XL 037 - St*	0.375	30	98
NE - XL 050 - St*	0.500	30	98
NE - L 037 - St*	0.375	30	98
NE - L 050 - St*	0.500	30	98
NE - L 075 - St*	0.750	30	98
NE - L 100 - St*	1.000	30	98
NE - H 050 - St*	0.500	30	98
NE - H 075 - St*	0.750	30	98
NE - H 100 - St*	1.000	30	98
NE - H 150 - St*	1.500	30	98
NE - H 200 - St*	2.000	30	98

Non standard sizes available up on request.

Sections and Sizes

optibelt HTD® Open-Ended Timing Belting – Neoprene Construction



Glass Fiber Tension Cord

Type	Belt width (inch)	Roll length	
		(m)	(feet)
NE - 3M 06	6	30	98
NE - 3M 09	9	30	98
NE - 3M 15	15	30	98
NE - 5M 06	6	30	98
NE - 5M 09	9	30	98
NE - 5M 15	15	30	98
NE - 5M 25	25	30	98
NE - 8M 10	10	30	98
NE - 8M 15	15	30	98
NE - 8M 20	20	30	98
NE - 8M 30	30	30	98
NE - 8M 50	50	30	98
NE - 8M 85	85	30	98
NE - 14M 25	25	30	98
NE - 14M 40	40	30	98
NE - 14M 55	55	30	98
NE - 14M 85	85	30	98

Steel Tension Cord

Type	Belt width (inch)	Roll length	
		(m)	(feet)
NE - 3M 06 - St	6	30	98
NE - 3M 09 - St	9	30	98
NE - 3M 15 - St	15	30	98
NE - 5M 06 - St	6	30	98
NE - 5M 09 - St	9	30	98
NE - 5M 15 - St	15	30	98
NE - 5M 25 - St	25	30	98
NE - 8M 10 - St	10	30	98
NE - 8M 15 - St	15	30	98
NE - 8M 20 - St	20	30	98
NE - 8M 30 - St	30	30	98
NE - 8M 50 - St	50	30	98
NE - 8M 85 - St	85	30	98
NE - 14M 25 - St	25	30	98
NE - 14M 40 - St	40	30	98
NE - 14M 55 - St	55	30	98
NE - 14M 85 - St	85	30	98

Non standard sizes available up on request.

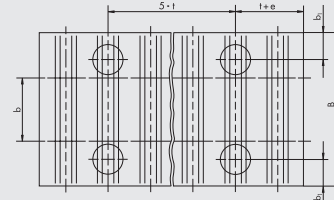
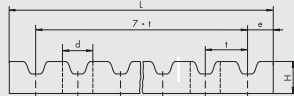
Sections and Sizes

optibelt CP Clamping Plates

(for Open-Ended Polyurethane Timing Belting)



Power Transmission



Designation	Pitch t (mm)	Belt width b (mm)	Material	B (mm)	b ₁ (mm)	L (mm)	e (mm)	H (mm)	d (mm)	Weight ≈ (lbs)	Weight ≈ (kg)
CP-XL 025	5.080	6.35	Al	25.5	6.0	42.5	3.5	8.0	5.5	0.044	0.020
CP-XL 037	5.080	9.53	Al	28.5	6.0	42.5	3.5	8.0	5.5	0.055	0.025
CP-XL 050	5.080	12.70	Al	32.0	6.0	42.5	3.5	8.0	5.5	0.060	0.027
CP-XL 075	5.080	19.05	Al	38.0	6.0	42.5	3.5	8.0	5.5	0.071	0.032
CP-XL 10*	5.080	25.40	Al	45.0	6.0	42.5	3.5	8.0	5.5	0.084	0.038
CP-L 037	9.525	9.53	Al	36.0	8.0	76.6	5.0	15.0	9.0	0.209	0.095
CP-L 050	9.525	12.70	Al	39.0	8.0	76.6	5.0	15.0	9.0	0.229	0.104
CP-L 075	9.525	19.05	Al	45.0	8.0	76.6	5.0	15.0	9.0	0.267	0.121
CP-L 100	9.525	25.40	Al	51.5	8.0	76.6	5.0	15.0	9.0	0.309	0.140
CP-L 150	9.525	38.10	Al	64.0	8.0	76.6	5.0	15.0	9.0	0.390	0.177
CP-L 200	9.525	50.80	Al	77.0	8.0	76.6	5.0	15.0	9.0	0.474	0.215
CP-H 050	12.700	12.70	Al	45.0	10.0	106.9	9.0	22.0	11.0	0.110	0.050
CP-H 075	12.700	19.05	Al	51.0	10.0	106.9	9.0	22.0	11.0	0.165	0.075
CP-H 100	12.700	25.40	Al	57.5	10.0	106.9	9.0	22.0	11.0	0.220	0.100
CP-H 150	12.700	38.10	Al	70.0	10.0	106.9	9.0	22.0	11.0	0.331	0.150
CP-H 200	12.700	50.80	Al	83.0	10.0	106.9	9.0	22.0	11.0	0.441	0.200
CP-H 300	12.700	76.20	Al	108.0	10.0	106.9	9.0	22.0	11.0	0.661	0.300
CP-H 400*	12.700	101.60	Al	134.0	10.0	106.9	9.0	22.0	11.0	0.882	0.400
CP-5M 06	5.000	6.00	Al	25.0	6.0	41.8	3.2	8.0	5.5	0.033	0.015
CP-5M 09	5.000	9.00	Al	28.0	6.0	41.8	3.2	8.0	5.5	0.040	0.018
CP-5M 15	5.000	15.00	Al	34.0	6.0	41.8	3.2	8.0	5.5	0.049	0.022
CP-5M 25	5.000	25.00	Al	44.0	6.0	41.8	3.2	8.0	5.5	0.066	0.030
CP-8M 10	8.000	10.00	Al	35.0	8.0	66.0	5.0	15.0	9.0	0.165	0.075
CP-8M 15	8.000	15.00	Al	40.0	8.0	66.0	5.0	15.0	9.0	0.187	0.085
CP-8M 20	8.000	20.00	Al	45.0	8.0	66.0	5.0	15.0	9.0	0.220	0.100
CP-8M 30	8.000	30.00	Al	55.0	8.0	66.0	5.0	15.0	9.0	0.265	0.120
CP-8M 50	8.000	50.00	Al	75.0	8.0	66.0	5.0	15.0	9.0	0.375	0.170
CP-8M 85	8.000	85.00	Al	110.0	8.0	66.0	5.0	15.0	9.0	0.551	0.250
CP-14M 25	14.000	25.00	Al	56.0	10.0	116.0	9.0	22.0	11.0	0.694	0.315
CP-14M 40	14.000	40.00	Al	71.0	10.0	116.0	9.0	22.0	11.0	0.893	0.405
CP-14M 55	14.000	55.00	Al	86.0	10.0	116.0	9.0	22.0	11.0	1.091	0.495
CP-14M 85	14.000	85.00	Al	116.0	10.0	116.0	9.0	22.0	11.0	1.896	0.860
CP-14M 115*	14.000	115.00	Al	146.0	10.0	116.0	9.0	22.0	11.0	2.635	1.195

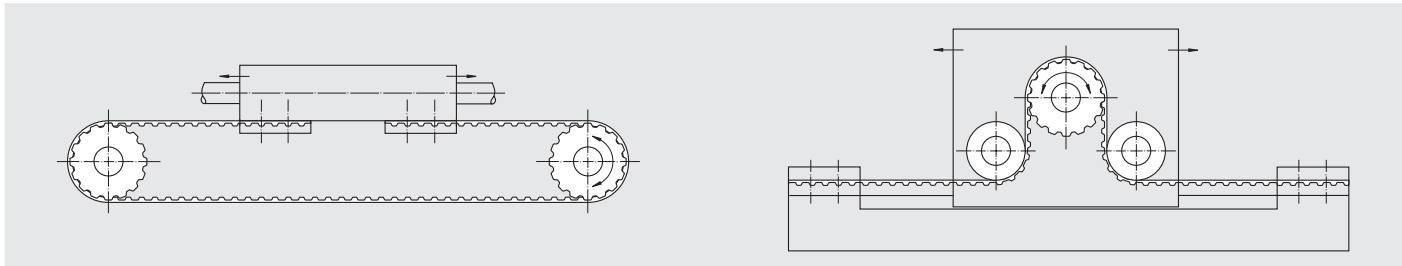
Sections and Sizes

optibelt CP Clamping Plates

(for Open-Ended Polyurethane Timing Belting)



Power Transmission



Designation	Pitch t (mm)	Belt width b (mm)	Material	B (mm)	b ₁ (mm)	L (mm)	e (mm)	H (mm)	d (mm)	Weight ≈ (lbs)	Weight ≈ (kg)
CP- 6 T5	5.000	6.00	Al	25.0	6.0	41.8	3.2	8.0	5.5	0.044	0.020
CP- 10 T5	5.000	10.00	Al	29.0	6.0	41.8	3.2	8.0	5.5	0.055	0.025
CP- 16 T5	5.000	16.00	Al	35.0	6.0	41.8	3.2	8.0	5.5	0.066	0.030
CP- 25 T5	5.000	25.00	Al	44.0	6.0	41.8	3.2	8.0	5.5	0.079	0.036
CP- 32 T5	5.000	32.00	Al	51.0	6.0	41.8	3.2	8.0	5.5	0.093	0.042
CP- 50 T5*	5.000	50.00	Al	69.0	6.0	41.8	3.2	8.0	5.5	0.112	0.051
CP- 16 T10	10.000	16.00	Al	41.0	8.0	80.0	5.0	15.0	9.0	0.254	0.115
CP- 25 T10	10.000	25.00	Al	50.0	8.0	80.0	5.0	15.0	9.0	0.309	0.140
CP- 32 T10	10.000	32.00	Al	57.0	8.0	80.0	5.0	15.0	9.0	0.353	0.160
CP- 50 T10	10.000	50.00	Al	75.0	8.0	80.0	5.0	15.0	9.0	0.474	0.215
CP- 75 T10*	10.000	75.00	Al	100.0	8.0	80.0	5.0	15.0	9.0	0.639	0.290
CP-100 T10*	10.000	100.00	Al	125.0	8.0	80.0	5.0	15.0	9.0	0.816	0.370
CP- 25 T20	20.000	25.00	Al	56.0	10.0	160.0	10.0	20.0	11.0	0.849	0.385
CP- 32 T20	20.000	32.00	Al	65.0	10.0	160.0	10.0	20.0	11.0	0.992	0.450
CP- 50 T20	20.000	50.00	Al	81.0	10.0	160.0	10.0	20.0	11.0	1.257	0.570
CP- 75 T20	20.000	75.00	Al	106.0	10.0	160.0	10.0	20.0	11.0	1.664	0.755
CP-100 T20*	20.000	100.00	Al	132.0	10.0	160.0	10.0	20.0	11.0	2.072	0.940
CP- 6 AT5	5.000	6.00	Al	25.0	6.0	41.8	3.2	8.0	5.5	0.035	0.016
CP- 10 AT5	5.000	10.00	Al	29.0	6.0	41.8	3.2	8.0	5.5	0.042	0.019
CP- 16 AT5	5.000	16.00	Al	35.0	6.0	41.8	3.2	8.0	5.5	0.053	0.024
CP- 25 AT5	5.000	25.00	Al	44.0	6.0	41.8	3.2	8.0	5.5	0.068	0.031
CP- 32 AT5	5.000	32.00	Al	51.0	6.0	41.8	3.2	8.0	5.5	0.079	0.036
CP- 50 AT5*	5.000	50.00	Al	61.0	6.0	41.8	3.2	8.0	5.5	0.095	0.043
CP- 16 AT10	10.000	16.00	Al	41.0	8.0	80.0	5.0	15.0	9.0	0.243	0.110
CP- 25 AT10	10.000	25.00	Al	50.0	8.0	80.0	5.0	15.0	9.0	0.298	0.135
CP- 32 AT10	10.000	32.00	Al	57.0	8.0	80.0	5.0	15.0	9.0	0.342	0.155
CP- 50 AT10	10.000	50.00	Al	75.0	8.0	80.0	5.0	15.0	9.0	0.452	0.205
CP- 75 AT10	10.000	75.00	Al	100.0	8.0	80.0	5.0	15.0	9.0	0.617	0.280
CP-100 AT10*	10.000	100.00	Al	125.0	8.0	80.0	5.0	15.0	9.0	0.772	0.350
CP- 25 AT20	20.000	25.00	Al	56.0	10.0	160.0	10.0	20.0	11.0	0.849	0.385
CP- 32 AT20	20.000	32.00	Al	65.0	10.0	160.0	10.0	20.0	11.0	0.992	0.450
CP- 50 AT20	20.000	50.00	Al	81.0	10.0	160.0	10.0	20.0	11.0	1.257	0.570
CP- 75 AT20	20.000	75.00	Al	106.0	10.0	160.0	10.0	20.0	11.0	1.664	0.755
CP-100 AT20*	20.000	100.00	Al	132.0	10.0	160.0	10.0	20.0	11.0	2.072	0.940

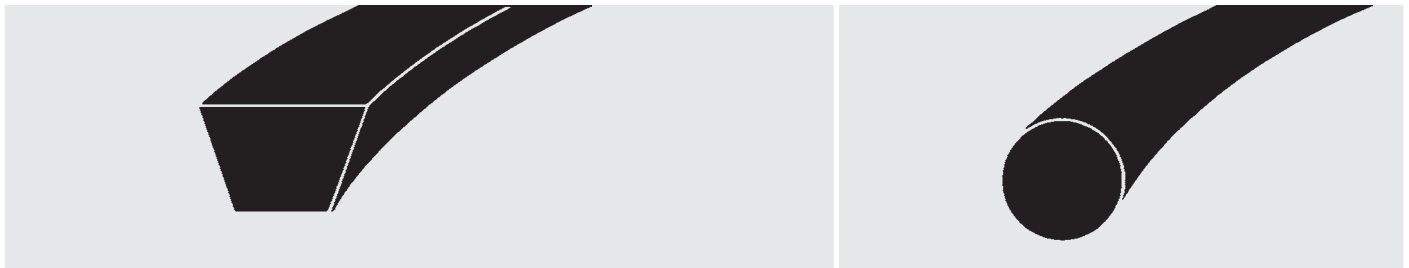
Sections and Sizes

optibelt *KK* Polyurethane V-Belting

optibelt *RR* Polyurethane Round Section Belting



Power Transmission



Section	Width x Height (inch)	Width x Height (mm)	Roll length (m/Ft)	Weight (≈ lbs/m)	Weight (≈ kg/m)	Diameter (inch)	Diameter (mm)	Roll length (m/Ft)
A/13	1/2 x 11/32"	13 x 8	50/164		0.098	0.12	3	200/656
B/17	21/32 x 7/16"	17 x 11	50/164		0.173	0.16	4	200/656
C/22	7/8 x 9/16"	22 x 14	25/ 82		0.275	0.20	5	200/656
						0.24	6	100/328
						0.28	7	100/328
						0.32	8	100/328
						0.39	10	100/328
						0.47	12	50/164
						0.59	15	50/164

Orange, 87 Shore A; White, 92 Shore A; White, 98 Shore A

Green, 87 Shore A; Orange 87 Shore A food approved.
Also available in Yellow, 82 Shore A; White, 92 Shore A; Blue, 98 Shore A

optibelt *KK* Polyurethane V-Belting with Special Top Surfaces

(White, 92 Shore A) Polyurethane V-Belting with Profiled Carrying Surfaces



Section	Width x Height (inch)	Width x Height (mm)	Roll length (m/Ft)	Form	Section	Roll length (m/Ft)
A/13	1/2 x 11/32"	13 x 8	50/164	1	A/13	25/82*
B/17	21/32 x 7/16"	17 x 11	50/164	2	A/13	25/82*
C/22	7/8 x 9/16"	22 x 14	25/ 82	1	B/17	25/82*
				2	B/17	25/82*
				1	C/22	25/82*
				2	C/22	25/82*

* Non stock items

Sections and Sizes

optibelt WR Polyurethane Wide Angle Belts (60°)



3M = 3 x 2 mm
 5M = 5 x 3 mm
 7M = 7 x 5 mm
 11M = 11 x 7 mm

Outside length (mm)	Section 3M	Section 5M	Section 7M	Section 11M	Outside length (mm)	Section 3M	Section 5M	Section 7M	Section 11M
180	●	—	—	—	650	●	●	●	—
185	●	—	—	—	670	●	●	●	—
190	●	—	—	—	690	●	●	●	—
195	●	—	—	—	710	●	●	●	●
200	●	—	—	—	730	●	●	●	●
206	●	—	—	—	750	●	●	●	●
212	●	—	—	—	775	—	●	●	●
218	●	—	—	—	800	—	●	●	●
224	●	—	—	—	825	—	●	●	●
230	●	—	—	—	850	—	●	●	●
236	●	—	—	—	875	—	●	●	●
243	●	—	—	—	900	—	●	●	●
250	●	—	—	—	925	—	●	●	●
258	●	—	—	—	950	—	●	●	●
265	●	—	—	—	975	—	●	●	●
272	●	—	—	—	1000	—	●	●	●
280	●	●	—	—	1030	—	●	●	●
290	●	●	—	—	1060	—	●	●	●
300	●	●	—	—	1090	—	●	●	●
307	●	●	—	—	1120	—	●	●	●
315	●	●	—	—	1150	—	●	●	●
325	●	●	—	—	1180	—	●	●	●
335	●	●	—	—	1220	—	●	●	●
345	●	●	—	—	1250	—	●	●	●
355	●	●	—	—	1280	—	●	●	●
365	●	●	—	—	1320	—	●	●	●
375	●	●	—	—	1360	—	●	●	●
387	●	●	—	—	1400	—	●	●	●
400	●	●	—	—	1450	—	●	●	●
412	●	●	—	—	1500	—	●	●	●
425	●	●	—	—	1550	—	—	●	●
437	●	●	—	—	1600	—	—	●	●
450	●	●	—	—	1650	—	—	●	●
462	●	●	—	—	1700	—	—	●	●
475	●	●	—	—	1750	—	—	●	●
487	●	●	—	—	1800	—	—	●	●
500	●	●	●	—	1850	—	—	●	●
515	●	●	●	—	1900	—	—	●	●
530	●	●	●	—	1950	—	—	●	●
545	●	●	●	—	2000	—	—	●	●
560	●	●	●	—	2060	—	—	●	●
580	●	●	●	—	2120	—	●	●	●
600	●	●	●	—	2180	—	—	●	●
615	●	●	●	—	2240	—	—	●	●
630	●	●	●	—	2300	—	—	●	●

METAL

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Sheaves and Bushings

Sections and Sizes

optibelt QD Bushings with inch bores



Power Transmission

Keyseat dimensions to NEMA Standards unless marked with *

QD Bushing Material Ductile Iron SAE J434 Grade D4512

	JA	SH	SDS	SD	SK	SF	E	F	J	M	N
Bore Diameter (inch)	7/16	1/2	1/2	1/2	1/2	1/2	7/8	1	1 7/16	1 15/16	2 15/16
	1/2	9/16	9/16	9/16	9/16	9/16	15/16	1 1/16	1 1/2	2	2 15/16
	9/16	5/8	5/8	5/8	5/8	5/8	1	1 1/4	1 9/16	2 1/6	3
	5/8	11/16	11/16	11/16	11/16	11/16	1 1/16	1 1/8	1 5/8	2 1/8	3 1/8
	11/16	3/4	3/4	3/4	3/4	3/4	1 1/4	1 1/4	1 11/16	2 3/16	3 3/16
	3/4	13/16	13/16	13/16	13/16	13/16	1 1/8	1 5/16	1 3/4	2 1/4	3 1/4
	13/16	7/8	7/8	7/8	7/8	7/8	1 1/4	1 3/8	1 13/16	2 5/16	3 5/16
	7/8	15/16	15/16	15/16	15/16	15/16	1 5/16	1 7/16	1 7/8	2 3/8	3 1/4
	15/16	1	1	1	1	1	1 3/8	1 1/2	1 15/16	2 7/16	3 5/16
1	1 1/16	1 1/16	1 1/16	1 1/16	1 1/16	1 1/16	1 7/16	1 9/16	2	2 1/2	3 3/8
1 1/16	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4	1 1/2	1 5/8	2 1/6	2 9/16	3 7/16
1 1/4*	1 1/8	1 1/8	1 1/8	1 1/8	1 1/8	1 1/8	1 9/16	1 11/16	2 1/8	2 5/8	3 1/2
1 1/8*	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4	1 5/8	1 3/4	2 3/16	2 11/16	3 5/8
1 1/4•	1 5/16	1 5/16	1 5/16	1 5/16	1 5/16	1 5/16	1 11/16	1 13/16	2 1/4	2 3/4	3 11/16
	1 3/8	1 3/8	1 3/8	1 3/8	1 3/8	1 3/8	1 3/4	1 7/8	2 5/16	2 13/16	3 3/4
	1 7/16*	1 7/16	1 7/16	1 7/16	1 7/16	1 7/16	1 13/16	1 15/16	2 3/8	2 7/8	3 13/16
	1 1/2*	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 7/8	2	2 7/16	2 15/16	3 7/8
	1 9/16*	1 9/16	1 9/16	1 9/16	1 9/16	1 9/16	1 15/16	2 1/6	2 1/2	2 15/16	3 15/16
	1 5/8*	1 5/8	1 5/8	1 5/8	1 5/8	1 5/8	2	2 1/8	2 9/16	3	4
	1 11/16•	1 11/16	1 11/16	1 11/16	1 11/16	1 11/16	2 1/6	2 3/16	2 5/8	3 1/8	4 1/8
		1 3/4*	1 3/4*	1 3/4	1 3/4	1 3/4	2 1/8	2 1/4	2 11/16	3 3/16	4 3/16
		1 13/16*	1 13/16*	1 13/16	1 13/16	1 13/16	2 3/16	2 5/16	2 3/4	3 1/4	4 1/4
		1 7/8*	1 7/8*	1 7/8	1 7/8	1 7/8	2 1/4	2 3/8	2 13/16	3 5/16	4 3/8
		1 15/16*	1 15/16*	1 15/16	1 15/16	1 15/16	2 5/16	2 7/16	2 7/8	3 1/4	4 7/16
		2•	2•	2	2	2	2 3/8	2 1/2	2 15/16	3 5/16	4 1/2
					2 1/6	2 1/6	2 7/16	2 9/16	2 15/16	3 3/8	4 5/8
					2 1/8	2 1/8	2 1/2	2 5/8	3	3 7/16	4 1/16
					2 3/16*	2 3/16	2 9/16	2 11/16	3 1/8	3 1/2	4 3/4
					2 1/4*	2 1/4*	2 5/8	2 3/4	3 3/16	3 5/8	4 7/8
					2 5/16*	2 5/16*	2 11/16	2 13/16	3 1/4	3 11/16	4 15/16
					2 3/8*	2 3/8*	2 3/4	2 7/8	3 5/16	3 3/4	5
					2 7/16*	2 7/16*	2 13/16*	2 15/16	3 1/4	3 13/16	5 3/16*
					2 1/2*	2 1/2*	2 7/8*	2 15/16	3 5/16	3 7/8	5 7/16*
					2 9/16•	2 9/16*	2 15/16*	3	3 3/8	3 15/16	5 1/2*
					2 5/8•	2 5/8*	2 15/16*	3 1/8	3 7/16	4	
						2 11/16*	3*	3 3/16	3 1/2	4 1/8	
						2 3/4*	3 1/8*	3 1/4	3 5/8	4 3/16	
						2 13/16*	3 3/16*	3 5/16*	3 11/16	4 1/4	
						2 7/8*	3 1/4*	3 1/4*	3 3/4	4 3/8	
						2 15/16•	3 5/16*	3 5/16*	3 13/16*	4 7/16	
							3 1/4*	3 3/8*	3 7/8*	4 1/2	
							3 5/16*	3 7/16*	3 15/16*	4 5/8	
							3 3/8*	3 1/2*	4*	4 1/16	
							3 7/16*	3 5/8*	4 1/8*	4 3/4	
							3 1/2•	3 11/16*	4 3/16*	4 7/8*	
								3 3/4*	4 1/4*	4 15/16*	
								3 7/8*	4 3/8*	5*	
								3 15/16*	4 7/16*	5 3/16*	
								4•	4 1/2*	5 1/4*	
										5 3/8*	
										5 7/16*	
										5 1/2*	

* Shallow Key-Keystock supplied with bushing • No Key

Sections and Sizes

optibelt QD Bushings with metric bores



Keyway dimensions to DIN 6885 Part 1

	Material Ductile Iron SAE J434 Grade D4512										
	QD Bushing			SD	SK	SF	E	F	J	M	N
	JA	SH	SDS	SD	SK	SF	E	F	J	M	N
Bore	15	15	24	24	14	28	35	42	50	80	100
Size	16	20	25	25	20	30	38	45	55	90	120
mm (d ₂)	19	22	28	28	24	32	40	48	60	100	
	20	24	30	30	25	35	42	50	65	120	
	22	25	32	32	28	38	45	55	70		
	24	30	35	35	30	40	48	60	75		
	25	32	38	38	32	42	50	65	80		
	28	35	40	40	35	45	55	70	85		
		38	42	42	38	48	60	75	90		
					40	50	65	80	95		
					42	55	70	85	100		
					45	60	75	90			
					48	65	80				
					50						
					55						
					60						

Sections and Sizes

optibelt *KS* Sheaves for QD Bushings



Section 3V								
OD (inch)	No of Grooves	Weight (lb.)	Bushing	OD (inch)	No of Grooves	Weight (lb.)	Bushing	
2.20	1	0.7	JA	5.00	1	2.3	SH	
	2	0.9	JA		2	2.9	SH	
2.35	1	0.7	JA		3	3.9	SDS	
	2	0.9	JA		4	4.3	SDS	
2.50	1	0.8	JA		5	4.8	SDS	
	2	1.0	JA		6	5.7	SK	
	3	1.2	JA		8	6.8	SK	
2.65	1	0.6	JA		10	8.1	SK	
	2	0.8	JA		5.30	1	3.0	SH
	3	1.1	JA			2	3.1	SH
	4	1.4	JA	3		4.0	SDS	
2.80	1	0.7	JA	4		5.0	SDS	
	2	1.0	JA	5		5.9	SK	
	3	1.3	JA	6		6.7	SK	
	4	1.7	JA	8		7.6	SK	
3.00	1	0.8	JA	10		8.8	SK	
	2	1.1	JA	5.60		1	2.8	SH
	3	1.7	SH			2	3.4	SH
	4	2.0	SH		3	4.4	SDS	
3.15	1	0.9	JA		4	5.5	SDS	
	2	1.2	JA		5	6.8	SK	
	3	1.8	SH		6	7.5	SK	
	4	2.0	SH		8	8.7	SK	
3.35	1	1.1	JA		10	10.1	SK	
	2	1.2	SH		6.00	1	3.7	SH
	3	1.6	SH			2	3.8	SH
	4	1.9	SH	3		4.9	SDS	
3.65	1	1.3	SH	4		7.0	SK	
	2	1.7	SH	5		8.0	SK	
	3	2.0	SH	6		8.8	SK	
	4	2.3	SH	8		10.3	SK	
4.12	1	1.8	SH	10		11.5	SK	
	2	2.3	SH	6.50		1	3.4	SH
	3	2.7	SH			2	4.5	SDS
	4	3.1	SH		3	5.8	SDS	
4.50	1	3.1	SH		4	7.3	SK	
	2	3.5	SH		5	8.1	SK	
	3	2.2	SDS		6	9.3	SK	
	4	2.8	SDS		8	10.7	SK	
4.75	1	2.1	SH		10	13.7	SK	
	2	2.6	SH		6.90	1	4.1	SH
	3	3.6	SDS			2	4.7	SDS
	4	3.7	SDS	3		5.9	SDS	
	5	4.3	SDS	4		8.2	SK	
	6	5.0	SK	5		9.2	SK	
	8	5.8	SK	6		10.0	SK	
	10	6.9	SK	8		11.8	SK	
						10	14.1	SK

Sections and Sizes

optibelt *K5* Sheaves for QD Bushings



Power Transmission

Section 3V									
OD (inch)	No of Grooves	Weight (lb.)	Bushing	OD (inch)	No of Grooves	Weight (lb.)	Bushing		
8.00	1	4.8	SDS	19.00	1	18.0	SK		
	2	4.8	SDS		2	20.6	SK		
	3	8.2	SK		3	26.0	SF		
	4	9.4	SK		4	29.7	SF		
	5	10.8	SK		5	37.6	SF		
	6	11.7	SK		6	24.2	E		
	8	15.5	SF		8	47.2	E		
	10	18.1	SF		10	54.0	E		
	10.60	1	7.4		SDS	25.00	2	31.5	SF
		2	9.6		SK		3	42.0	SF
3		12.0	SK	4	44.0		SF		
4		13.4	SK	5	53.0		E		
5		15.3	SK	6	65.7		E		
6		19.1	SF	8	67.8		E		
8		21.9	SF	10	90.0		F		
10		29.2	E	33.50	3		70.8	SF	
14.00		1	12.1		SK		4	78.0	E
		2	12.6		SK		5	87.0	E
	3	14.8	SK		6	80.0	E		
	4	18.3	SK		8	112.0	F		
	5	23.4	SF		10	178.0	F		
	6	24.2	SF						
	8	33.4	E						
	10	37.0	E						

Sections and Sizes

optibelt *KS* Sheaves for QD Bushings



Section 5V								
OD (inch)	No of Grooves	Weight (lb.)	Bushing	OD (inch)	No of Grooves	Weight (lb.)	Bushing	
4.40	2	3.3	SH	8.00	3	12.7	SF	
	3	4.2	SDS		2	10.0	SK	
	4	5.4	SD		4	18.0	E	
	5	6.4	SD		5	19.7	E	
	6	7.7	SD		6	22.7	E	
4.65	2	3.7	SDS		8	26.8	E	
	3	4.7	SDS		10	30.9	E	
	4	6.3	SD		8.50	2	10.8	SK
	5	7.2	SD			3	14.5	SF
	6	8.1	SD			4	20.1	E
4.90	2	3.9	SDS	5		23.1	E	
	3	4.8	SDS	6		26.0	E	
	4	6.8	SD	8	29.5	E		
	5	7.8	SD	10	34.9	E		
	6	8.1	SD	9.00	2	11.4	SK	
5.20	2	4.6	SDS		3	15.6	F	
	3	5.9	SDS		4	22.3	E	
	4	7.7	SD		5	26.4	E	
	5	9.0	SD		6	29.4	E	
	6	10.5	SD	8	35.0	E		
5.50	2	5.1	SDS	10	43.7	F		
	3	6.6	SDS	9.25	2	12.0	SK	
	4	8.9	SD		3	15.9	SF	
	5	10.2	SD		4	23.9	E	
	6	12.0	SD		5	28.3	E	
5.90	2	5.6	SDS		6	30.8	E	
	3	7.5	SD	8	40.5	SF		
	4	10.2	SD	10	45.6	F		
	5	10.8	SK	9.75	2	12.6	SK	
	6	12.6	SK		3	17.0	SF	
6.30	2	7.4	SK		4	23.3	E	
	3	9.3	SK		5	26.2	E	
	4	10.8	SK		6	35.0	E	
	5	12.3	SK	8	46.0	F		
	6	14.5	SK	10	51.0	F		
6.70	2	7.5	SK	10.30	2	14.5	SK	
	3	10.8	SK		3	18.2	SF	
	4	12.4	SK		4	25.5	E	
	5	13.4	SF		5	28.5	E	
	6	15.4	SF		6	33.0	E	
7.10	2	7.9	SK	8	47.3	F		
	3	11.4	SF	10	59.0	F		
	4	13.4	SF	10.90	2	15.5	SK	
	5	15.2	SF		3	19.4	SF	
	6	17.4	SF		4	28.0	E	
8	20.7	SF	5		30.7	E		
7.50	2	8.7	SK		6	35.6	E	
	3	12.5	SF	8	48.5	F		
	4	15.1	SF	10	65.5	F		
	5	16.9	SF					
	6	19.4	SF					
8	23.1	SF						

Sections and Sizes

optibelt K5 Sheaves for QD Bushings



Power Transmission

Section 5V							
OD (inch)	No of Grooves	Weight (lb.)	Bushing	OD (inch)	No of Grooves	Weight (lb.)	Bushing
11.30	2	14.3	SK	18.70	2	32.6	SF
	3	20.0	F		3	42.8	E
	4	28.5	E		4	51.8	E
	5	32.3	E		5	67.0	F
	6	36.7	E		6	70.0	F
	8	50.0	F		8	94.0	J
	10	60.8	F		10	109.5	J
11.80	2	17.1	SK	21.20	2	38.0	SF
	3	21.2	SF		3	49.4	E
	4	29.9	E		4	58.4	E
	5	33.5	E		5	88.0	F
	6	41.4	E		6	78.0	F
	8	53.0	F		8	106.0	J
	10	63.0	F		10	122.0	J
12.50	2	18.8	SF	23.60	2	46.0	E
	3	28.3	E		3	56.4	E
	4	31.2	E		4	70.0	F
	5	36.3	E		5	114.9	F
	6	45.2	F		6	117.5	J
	8	56.3	F		8	120.0	J
	10	71.3	J		10	174.0	M
13.20	2	19.8	SF	28.00	2	71.1	E
	3	29.9	E		3	70.0	E
	4	33.7	E		4	92.0	F
	5	38.4	E		5	126.0	F
	6	50.0	F		6	125.0	J
	8	59.0	F		8	145.0	J
	10	79.5	J		10	214.0	M
14.00	2	22.3	SF	31.50	3	95.0	F
	3	31.1	E		4	108.0	F
	4	34.4	E		5	132.0	J
	5	40.0	E		6	145.0	J
	6	52.6	F		8	196.2	M
	8	63.5	F		10	238.0	M
	10	88.0	J				
15.00	2	23.9	SF	37.50	3	151.5	F
	3	32.5	E		4	138.0	F
	4	37.0	E		5	174.0	J
	5	42.7	E		6	235.0	J
	6	55.2	F		8	248.0	M
	8	68.0	F		10	283.0	M
	10	94.5	J				
16.00	2	26.0	SF	50.00	3	185.0	F
	3	35.6	E		4	227.0	J
	4	39.6	E		5	247.0	J
	5	58.0	E		6	330.0	M
	6	58.0	F		8	367.0	M
	8	74.0	F		10	427.0	M
	10	101.2	J				

Sections and Sizes

optibelt *KS* Sheaves for QD Bushings



Section 8V							
OD (inch)	No of Grooves	Weight (lb.)	Bushing	OD (inch)	No of Grooves	Weight (lb.)	Bushing
12.50	4	60.0	F	22.40	4	150.0	J
	5	82.8	F		5	182.0	M
	6	81.0	F		6	221.0	M
	8	117.0	J		8	244.0	M
	10	134.0	J		10	332.0	N
13.20	4	64.0	F	24.80	4	211.0	M
	5	96.0	F		5	201.0	M
	6	85.4	F		6	248.0	M
	8	131.0	J		8	365.7	N
	10	150.5	J		10	356.0	N
14.00	4	68.3	F	30.00	4	264.0	M
	5	81.0	F		5	254.0	M
	6	96.0	F		6	276.0	M
	8	127.0	J		8	410.0	N
	10	167.0	J		10	425.0	N
15.00	4	72.6	F	35.50	4	367.0	M
	5	84.5	F		5	298.0	M
	6	110.0	J		6	444.0	N
	8	146.0	J	40.00	8	508.0	N
	10	225.0	M		4	300.0	M
16.00	4	77.0	F	40.00	5	337.0	M
	5	95.5	F		6	519.0	N
	6	118.0	J		8	592.0	N
	8	162.0	J	53.00	6	768.0	N
	10	263.0	M		10	1137.0	P
17.00	4	83.5	F				
	5	104.5	J				
	6	126.0	J				
	8	228.0	M				
	10	267.5	M				
18.00	4	90.0	F				
	5	115.2	J				
	6	133.0	J				
	8	230.0	M				
	10	272.0	M				
19.00	4	112.0	F				
	5	122.0	J				
	6	157.0	J				
	8	222.0	M				
	10	269.0	M				
20.00	4	114.0	J				
	5	133.0	J				
	6	185.0	M				
	8	213.0	M				
	10	253.0	M				
21.20	4	140.0	J				
	5	140.0	J				
	6	194.0	M				
	8	230.0	M				
	10	267.0	M				

Sections and Sizes

optibelt K5 Sheaves for QD Bushings



Power Transmission

Sheave for B section with QD Bushing Mounting							
Pitch diameter (inch)	No. of Grooves	Weight (lb.)	Bushing	Pitch diameter (inch)	No. of Grooves	Weight (lb.)	Bushing
3.40	1	1.4	SH	5.00	1	3.1	SDS
	2	2.4	SH		2	5.0	SDS
	3	3.3	SH		3	7.2	SD
	4	4.3	SD		4	8.4	SD
	5	5.2	SD		5	9.9	SD
	6	5.8	SD		6	11.7	SD
3.60	1	1.6	SH	5.20	1	3.3	SDS
	2	2.7	SH		2	5.4	SDS
	3	3.6	SH		3	7.8	SD
	4	4.8	SD		4	9.2	SD
	5	5.7	SD		5	10.9	SD
	6	6.8	SD		6	12.0	SD
3.80	1	1.7	SH	5.40	1	3.7	SDS
	2	2.9	SH		2	5.8	SDS
	3	3.8	SH		3	8.4	SD
	4	5.2	SD		4	9.8	SD
	5	6.2	SD		5	10.5	SK
	6	7.1	SD		6	12.5	SK
4.00	1	1.9	SH	5.60	8	15.5	SK
	2	3.2	SH		10	18.5	SK
	3	4.2	SH		1	4.2	SDS
	4	5.6	SD		2	6.1	SDS
	5	6.5	SD		3	9.0	SD
	6	7.7	SD		4	10.7	SD
4.20	1	2.2	SH	5.80	5	11.4	SK
	2	3.7	SH		6	13.3	SK
	3	4.8	SH		8	16.6	SK
	4	6.2	SD		10	19.8	SK
	5	7.1	SD		1	3.9	SDS
	6	8.6	SD		2	6.1	SDS
4.40	1	2.5	SH	6.00	3	9.7	SD
	2	4.1	SH		4	11.4	SDD
	3	5.3	SH		5	12.3	SK
	4	6.6	SD		6	14.1	SK
	5	7.8	SD		8	17.1	SK
	6	9.3	SD		10	21.2	SK
4.60	1	2.5	SDS	6.00	1	4.0	SDS
	2	4.2	SDS		2	6.4	SDS
	3	6.0	SD		3	8.9	SD
	4	7.2	SD		4	10.9	SD
	5	8.5	SD		5	12.8	SK
	6	9.8	SD		6	15.4	SK
4.80	1	2.8	SDS	6.00	8	18.7	SK
	2	4.6	SDS		10	22.3	SK
	3	6.5	SD				
	4	7.9	SD				
	5	9.2	SD				
	6	10.8	SD				

Sections and Sizes

optibelt *KS* Sheaves for QD Bushings



Sheave for B section with QD Bushing Mounting

Pitch diameter (inch)	No. of Grooves	Weight (lb.)	Bushing	Pitch diameter (inch)	No. of Grooves	Weight (lb.)	Bushing
6.20	1	4.2	SDS	8.00	1	6.6	SDS
	2	6.7	SDS		2	10.8	SK
	3	9.4	SD		3	13.6	SK
	4	11.3	SD		4	16.3	SK
	5	13.6	SK		5	19.3	SF
	6	16.4	SK		6	25.4	SF
	8	19.3	SF	8.60	1	6.8	SDS
10	22.8	SF	2		11.7	SK	
6.40	1	4.3	SDS		3	14.6	SK
	2	7.1	SDS		4	17.7	SK
	3	9.7	SD		5	21.6	SF
	4	11.7	SD		6	25.7	SF
	5	14.6	SK		8	35.3	E
	6	17.3	SK	10	41.0	E	
	8	20.3	SF	9.40	1	7.4	SDS
10	24.2	SF	2		13.2	SK	
6.60	1	5.1	SDS		3	16.6	SK
	2	7.6	SDS		4	19.7	SK
	3	10.0	SD		5	24.0	SF
	4	12.2	SD		6	27.9	SF
	5	15.9	SK		8	41.9	E
	6	17.9	SK	10	47.8	E	
	8	21.3	SF	11.00	1	10.5	SDS
10	25.6	SF	2		16.4	SK	
6.80	1	5.3	SDS		3	20.8	SK
	2	7.8	SDS		4	25.2	SK
	3	11.1	SD		5	28.7	SF
	4	13.0	SD		6	33.5	SF
	5	16.7	SK		8	44.9	E
	6	19.3	SK	10	58.0	E	
	8	22.9	SF	12.40	1	11.5	SDS
10	26.8	SF	2		18.3	SK	
7.00	1	5.6	SDS		3	22.5	SK
	2	9.5	SK		4	28.4	SK
	3	11.4	SK		5	33.8	SF
	4	13.7	SK		6	37.5	SF
	5	17.1	SF		8	52.0	E
	6	19.8	SF	10	65.0	E	
	8	24.7	SF	13.60	1	12.9	SDS
10	28.3	SF	2		20.3	SK	
7.40	1	6.0	SDS		3	25.3	SK
	2	10.2	SK		4	31.3	SK
	3	12.5	SK		5	37.0	SF
	4	14.8	SK		6	42.0	SF
	5	18.7	SF		8	55.0	E
	6	22.4	SF	10	80.0	F	
	8	26.5	SF				
10	31.4	SF					

Sections and Sizes

optibelt K5 Sheaves for QD Bushings



Power Transmission

Sheave for B section with QD Bushing Mounting									
Pitch diameter (inch)	No. of Grooves	Weight (lb.)	Bushing	Pitch diameter (inch)	No. of Grooves	Weight (lb.)	Bushing		
15.40	1	17.1	SK	25.00	1	39.0	SF		
	2	23.8	SK		2	45.0	SF		
	3	29.8	SK		3	56.0	SF		
	4	37.6	SF		4	72.0	E		
	5	43.0	SF		5	85.0	E		
	6	48.9	SF		6	94.0	E		
	8	61.0	E		8	116.0	F		
	10	87.0	F		10	148.0	F		
	16.00	1	18.6		SK	30.00	1	57.0	SF
		2	24.3		SK		2	71.2	SF
3		30.3	SK	3	77.0		SF		
4		38.6	SF	4	97.0		E		
5		48.0	SF	5	85.0		E		
6		48.8	SF	6	131.0		E		
8		64.0	E	8	157.0		F		
10		89.0	F	10	188.0		F		
18.40		1	23.8	SK	38.00		2	103.0	F
		2	31.8	SK			3	115.0	E
	3	39.1	SK	4		151.1	E		
	4	45.2	SK	5		159.0	E		
	5	51.8	SK	6		183.0	E		
	6	60.0	SK	8		216.0	F		
	8	82.0	F	10		291.0	J		
	10	102.0	F						
	20.00	1	27.0	SK					
		2	33.4	SF					
3		43.0	SF						
4		52.0	SF						
5		62.0	E						
6		72.0	E						
8		93.0	F						
10		112.0	F						

Sections and Sizes

optibelt *KS* Sheaves for QD Bushings



Sheave for C section with QD Bushing Mounting

Pitch diameter (inch)	No. of Grooves	Weight (lb.)	Bushing	Pitch diameter (inch)	No. of Grooves	Weight (lb.)	Bushing		
5.00	3	8.4	SD	9.50	1	13.3	SF		
	4	10.2	SD		2	18.1	SF		
5.40	3	10.5	SD		3	29.1	E		
	4	11.8	SD		4	34.9	E		
5.50	3	11.1	SD		5	39.1	E		
	4	12.4	SD		6	49.1	F		
5.60	3	11.4	SD		8	57.6	F		
	4	12.4	SD		10	67.8	J		
6.00	1	6.8	SK		10.00	1	14.2	SF	
	2	11.4	SF			2	19.4	SF	
	3	10.1	SF	3		30.1	E		
	4	10.9	SF	4		38.1	E		
	5	12.5	SF	5		42.4	E		
	6	14.0	SF	6		54.0	F		
7.00	1	9.7	SF	8		62.6	F		
	2	12.4	SF	10		74.1	J		
	3	15.9	SF	10.50		1	15.2	SF	
	4	18.0	SF			2	20.6	SF	
	5	20.8	SF		3	30.8	E		
	6	23.6	SF		4	35.9	E		
	8	29.2	SF		5	40.4	E		
	7.50	1	11.4		SF	6	60.0	F	
2		14.4	SF		8	69.0	F		
3		18.0	SF		10	82.2	J		
4		20.5	SF		11.00	1	16.2	SF	
5		23.6	SF			2	22.0	SF	
6		26.6	SF	3		32.9	E		
8.00	1	13.0	SF	4		38.4	E		
	2	16.3	SF	5		43.1	E		
	3	20.9	E	6		66.2	F		
	4	24.0	E	8		75.6	F		
	5	27.3	E	10		90.6	J		
8.50	6	30.6	E	12.00		1	18.6	SF	
	8	37.3	E			2	24.2	SF	
	10	43.9	E		3	38.4	E		
	8.50	1	12.6		SF	4	43.6	E	
		2	16.6		SF	5	48.8	E	
		3	24.5		E	6	62.5	F	
		4	27.3		E	8	72.9	F	
		5	30.8		E	10	108.4	J	
	9.00	6	34.4		E	13.00	1	19.1	SF
		8	41.5		E		2	27.8	SF
10		48.6	E	3	42.4		E		
9.00		1	12.8	SF	4		49.4	E	
		2	17.3	SF	5		55.1	E	
		3	27.1	E	6		70.0	F	
		4	30.7	E	8		81.3	F	
		5	34.5	E	10		136.0	J	
6		43.0	F						
8		50.5	F						
10	59.6	J							

Sections and Sizes

optibelt K5 Sheaves for QD Bushings



Power Transmission

Sheave for C section with QD Bushing Mounting								
Pitch diameter (inch)	No. of Grooves	Weight (lb.)	Bushing	Pitch diameter (inch)	No. of Grooves	Weight (lb.)	Bushing	
14.00	1	20.3	SF	27.00	2	79.4	F	
	2	30.1	SF		3	103.0	F	
	3	41.7	E		4	116.8	F	
	4	50.7	E		5	129.2	F	
	5	57.2	E		6	158.8	J	
	6	73.0	F		8	226.3	J	
	8	88.0	F		30.00	2	82.4	F
	10	110.8	J			3	115.4	F
	15.00	1	22.0	SF	4	136.1	F	
		2	32.0	SF	5	160.8	F	
3		45.0	E	6	192.8	J		
4		52.0	E	8	240.0	J		
5		68.2	E	10	332.1	M		
6		75.0	F	36.00	3	161.7	F	
8		105.0	F		4	194.2	F	
16.00		1	23.5	SF	5	220.3	J	
	2	34.9	SF	6	254.5	J		
	3	49.8	E	8	355.3	M		
	4	60.2	E	10	397.5	M		
	5	71.2	E	44.00	3	242.8	F	
	6	87.7	F		4	270.4	J	
	8	108.6	F	5	293.2	J		
	10	141.3	J	6	315.0	J		
	18.00	1	27.8	SF	8	452.0	M	
		2	40.9	SF	10	531.8	M	
3		58.6	E	50.00	3	190.0	F	
4		68.6	E		4	337.4	J	
5		79.1	E	5	275.0	J		
6		98.3	F	6	325.0	M		
8		123.3	F	8	541.1	M		
10		148.7	J	10	600.0	M		
20.00		1	31.8	SF				
		2	42.1	SF				
	3	62.6	E					
	4	76.9	E					
	5	96.5	F					
	6	109.8	F					
	8	146.5	J					
	10	169.7	J					
24.00	1	41.2	SF					
	2	57.6	SF					
	3	78.7	E					
	4	100.4	F					
	5	106.7	F					
	6	122.1	F					
	8	173.4	J					
	10	263.1	M					

Sections and Sizes

optibelt *KS* Variable Pitch Light Duty Sheaves and H Bushings



Variable Pitch Adjustable Shave

Part No.	Outside Dia. (in.)	Stock Bore Sizes (in.)	Average Weigh (lb.)	3L Pitch Dia.		4L/A Pitch Dia. (in.)		5L/B Pitch Dia. (in.)	
				min. (in.)	max (in.)	min. (in.)	max (in.)	min. (in.)	max (in.)
1VP25	2.38	1/2, 5/8, 3/4	1	1.6	2.4				
1VP30	2.87	1/2, 5/8, 3/4	1.4	1.8	2.7				
1VP34	3.15	1/2, 5/8, 3/4, 7/8, 1, 1 1/8	1.6	1.7	2.5	1.9	2.9	2.4	3.2
1VP40	3.75	1/2, 5/8, 3/4, 7/8, 1, 1 1/8	2	2.3	3.1	2.4	3.4	2.7	3.7
1VP44	4.15	1/2, 5/8, 3/4, 7/8, 1, 1 1/8	2.2	2.7	3.5	2.8	3.8	3.1	4.1
1VP50	4.75	1/2, 5/8, 3/4, 7/8, 1, 1 1/8	2.8	3.3	4.1	3.4	4.4	3.7	4.7
1VP56	5.35	5/8, 3/4, 7/8, 1, 1 1/8, 1 3/8, 1 5/8	3.4	3.9	4.7	4.0	5.0	4.3	5.3
1VP60	6.00	5/8, 3/4, 7/8, 1 1/8, 1 3/8, 1 5/8	5			4.2	5.2	4.3	5.5
1VP62	5.95	5/8, 3/4, 7/8, 1, 1 1/8, 1 1/4, 1 3/8	5	4.5	5.3	4.6	5.6	4.9	5.9
1VP65	6.50	3/4, 7/8, 1, 1 1/8, 1 3/8	5.5			4.7	5.7	4.8	6.0
1VP68	6.55	5/8, 3/4, 7/8, 1, 1 1/8, 1 1/4, 1 3/8	5.5	5.1	5.9	5.2	6.2	5.5	6.5
1VP71	7.10	3/4, 7/8, 1 1/8, 1 3/8, 1 5/8	6.7			5.3	6.3	5.4	6.6
1VP75	7.50	3/4, 7/8, 1 1/8, 1 3/8, 1 5/8	7.3			5.7	6.7	5.8	7.0
2VP36	3.35	1/2, 5/8, 3/4, 7/8, 1, 1 1/8	3.8	1.9	2.7	2.0	3.0	2.5	3.3
2VP42	3.95	5/8, 3/4, 7/8, 1, 1 1/8	4.7	2.5	3.3	2.6	3.6	2.9	3.9
2VP50	4.75	5/8, 3/4, 7/8, 1, 1 1/8	6.3	3.3	4.1	3.4	4.4	3.7	4.7
2VP56	5.35	5/8, 3/4, 7/8, 1, 1 1/8, 1 3/8, 1 5/8	8	3.9	4.7	4.0	5.0	4.3	5.3
2VP60	6.00	3/4, 7/8, 1, 1 1/8, 1 3/8, 1 5/8	9.8			4.2	5.2	4.3	5.5
2VP62	5.95	3/4, 7/8, 1, 1 1/8, 1 3/8, 1 5/8	9.4	4.5	5.3	4.6	5.6	4.9	5.9
2VP65	6.50	3/4, 7/8, 1 1/8, 1 3/8, 1 5/8	12.2			4.7	5.7	4.8	6.0
2VP68	6.55	5/8, 3/4, 7/8, 1, 1 1/8, 1 3/8, 1 5/8	10.9	5.1	5.9	5.2	6.2	5.5	6.5
2VP71	7.10	3/4, 7/8, 1 1/8, 1 3/8, 1 5/8	14.3			5.3	6.3	5.4	6.6
2VP75	7.50	3/4, 7/8, 1 1/8, 1 3/8, 1 5/8	15			5.7	6.7	5.8	7.0

Numbers in bold indicate the use of a raw edge cog belt is required

H Bushing Sizes

Stock Bore (in.)	Keyway	Keyway
3/8	1/8 x 1/16	None
7/16	1/8 x 1/16	None
1/2	1/8 x 1/16	5 x 5
9/16	1/8 x 1/16	5 x 5
5/8	3/16 x 3/32	5 x 5
11/16	3/16 x 3/32	6 x 6
3/4	3/16 x 3/32	6 x 6
13/16	3/16 x 3/32	6 x 6
7/8	3/16 x 3/32	6 x 6
15/16	1/4 x 1/8	8 x 7
1	1/4 x 1/8	8 x 7
1 1/16	1/4 x 1/8	8 x 7
1 1/8	1/4 x 1/8	8 x 7
1 3/16	1/4 x 1/8	10 x 8
1 1/4	1/4 x 1/8	10 x 8
1 5/16	5/16 x 1/16*	10 x 8
1 3/8	5/16 x 1/16*	
1 7/16	3/8 x 1/16*	
1 1/2	3/8 x 1/16*	

*Shallow keyseat-keystock supplied with bushing

Standard Key Dimensions

Shaft Dia.	Keyseat (wxd)
1/2	None
5/8-7/8	3/16 x 3/32
15/16-1 1/4	1/4 x 1/8
1 5/16-1 3/8	5/16 x 5/32
1 7/16-1 3/4	3/8 x 3/16

Sections and Sizes

optibelt K5 Light Duty H Bushing Sheaves



Power Transmission

H Bushing Light Duty Sheaves section A and 2A

Part No.	OD (in.)	4L & A Pitch Dia (in.)	5L & B Pitch Dia. (in)	Part No.	OD (in.)	4L & A Pitch Dia (in.)	5L & B Pitch Dia. (in)
AK 30H	3.05	2.46	2.8	2AK 30H	3.05	2.46	2.8
AK 32H	3.25	2.66	3.0	2AK 32H	3.25	2.66	3.0
AK 34H	3.45	2.86	3.2	2AK 34H	3.45	2.86	3.2
AK 39H	3.75	3.16	3.5	2AK 39H	3.75	3.16	3.5
AK 41H	3.95	3.36	3.7	2AK 41H	3.95	3.36	3.7
AK 44H	4.25	3.66	4.0	2AK 44H	4.25	3.66	4.0
AK 46H	4.45	3.86	4.2	2AK 46H	4.45	3.86	4.2
AK 49H	4.75	4.16	4.5	2AK 49H	4.75	4.16	4.5
AK 51H	4.95	4.36	4.7	2AK 51H	4.95	4.36	4.7
AK 54H	5.25	4.66	5.0	2AK 54H	5.25	4.66	5.0
AK 56H	5.45	4.86	5.2	2AK 56H	5.45	4.86	5.2
AK 59H	5.75	5.16	5.5	2AK 59H	5.75	5.16	5.5
AK 61H	5.95	5.36	5.7	2AK 61H	5.95	5.36	5.7
AK 64H	6.25	5.66	6.0	2AK 64H	6.25	5.66	6.0
AK 66H	6.45	5.86	6.2	2AK 74H	7.25	6.66	7.0
AK 69H	6.75	6.16	6.5	2AK 84H	8.25	7.66	8.0
AK 71H	6.95	6.36	6.7	2AK 94H	9.25	8.66	9.0
AK 74H	7.25	6.66	7.0	2AK104H	10.25	9.66	10.0
AK 79H	7.75	7.16	7.5	2AK114H	11.25	10.66	11.0
AK 84H	8.25	7.66	8.0	2AK124H	12.25	11.66	12.0
AK 89H	8.75	8.16	8.5	2AK134H	13.25	12.66	13.0
AK 94H	9.25	8.66	9.0	2AK144H	14.25	13.66	14.0
AK 99H	9.75	9.16	9.5	2AK154H	15.25	14.66	15.0
AK104H	10.25	9.66	10.0	2AK184H	18.25	17.66	18.0
AK109H	10.75	10.16	10.5				
AK114H	11.25	10.66	11.0				
AK124H	12.25	11.66	12.0				
AK134H	13.25	12.66	13.0				
AK144H	14.25	13.66	14.0				
AK154H	15.25	14.66	15.0				
AK184H	18.25	17.66	18.0				

Sections and Sizes

optibelt *K5* Light Duty H Bushing Sheaves



H Bushing Light Duty Sheaves section B and 2B

Part No.	OD (in.)	4L & A Pitch Dia (in.)	5L & B Pitch Dia. (in)	Part No.	OD (in.)	4L & A Pitch Dia (in.)	5L & B Pitch Dia. (in)
BK30H	3.15	2.4	2.8	2BK32H	3.35	2.6	3.0
BK32H	3.35	2.6	3.0	2BK34H	3.55	2.8	3.2
BK34H	3.55	2.8	3.2	2BK36H	3.75	3.0	3.4
BK36H	3.75	3.0	3.4	2BK40H	3.95	3.2	3.6
BK40H	3.95	3.2	3.6	2BK45H	4.25	3.5	3.9
BK45H	4.25	3.5	3.9	2BK47H	4.45	3.7	4.1
BK47H	4.45	3.7	4.1	2BK50H	4.75	4.0	4.4
BK50H	4.75	4.0	4.4	2BK52H	4.95	4.2	4.6
BK52H	4.95	4.2	4.6	2BK55H	5.25	4.5	4.9
BK55H	5.25	4.5	4.9	2BK57H	5.45	4.7	5.1
BK57H	5.45	4.7	5.1	2BK60H	5.75	5.0	5.4
BK60H	5.75	5.0	5.4	2BK62H	5.95	5.2	5.6
BK62H	5.95	5.2	5.6	2BK65H	6.25	5.5	5.9
BK65H	6.25	5.5	5.9	2BK67H	6.45	5.7	6.1
BK67H	6.45	5.7	6.1	2BK70H	6.75	6.0	6.4
BK70H	6.75	6.0	6.4	2BK80H	7.75	7.0	7.4
BK72H	6.95	6.2	6.6	2BK90H	8.75	8.0	8.4
BK75H	7.25	6.5	6.9	2BK100H	9.75	9.0	9.4
BK77H	7.45	6.7	7.1	2BK110H	10.75	10.0	10.4
BK80H	7.75	7.0	7.4	2BK120H	11.75	11.0	11.4
BK85H	8.25	7.5	7.9	2BK130H	12.75	12.0	12.4
BK90H	8.75	8.0	8.4	2BK140H	13.75	13.0	13.4
BK95H	9.25	8.5	8.9	2BK160H	15.75	15.0	15.4
BK100H	9.75	9.0	9.4	2BK190H	18.75	18.0	18.4
BK105H	10.25	9.5	9.9				
BK110H	10.75	10.0	10.4				
BK115H	11.25	10.5	10.9				
BK120H	11.75	11.0	11.4				
BK130H	12.75	12.0	12.4				
BK140H	13.75	13.0	13.4				
BK150H	14.75	14.0	14.4				
BK160H	15.75	15.0	15.4				
BK190H	18.75	18.0	18.4				

Sections and Sizes

optibelt K5 Bored to Size Light Duty Sheaves



Power Transmission

Bore to Size Light Duty Sheaves Section 2B							
Part No.	OD (in.)	4L & A Pitch Dia (in.)	5L & B Pitch Dia. (in)	Part No.	OD (in.)	4L & A Pitch Dia (in.)	5L & B Pitch Dia. (in)
2BK25-1/2 2BK25-5/8 2BK25-3/4 2BK25-7/8	2.5	1.9	2.3	2BK40-5/8 2BK40-3/4 2BK40-7/8 2BK40-1 2BK40-1-1/8	3.95	3.2	3.6
2BK27-1/2 2BK27-5/8 2BK27-3/4 2BK27-7/8 2BK27-1 2BK27-1-1/8	2.7	2.1	2.5	2BK45-1 2BK45-1-1/8 2BK45-1-3/8	4.25	3.5	3.9
2BK28-1/2 2BK28-5/8 2BK28-3/4 2BK28-7/8 2BK28-1 2BK28-1-1/8	2.95	2.2	2.6	2BK47-7/8 2BK47-1 2BK47-1-1/8 2BK47-1-3/8			
2BK30-1/2 2BK30-5/8 2BK30-3/4 2BK30-7/8 2BK30-1 2BK30-1-1/8 2BK30-1-3/8	3.15	2.4	2.8	2BK50-3/4 2BK50-1 2BK50-1-1/8 2BK50-1-3/8	4.75	4.0	4.4
2BK32-1/2 2BK32-5/8 2BK32-3/4 2BK32-7/8 2BK32-1 2BK32-1-1/8	3.35	2.6	3.0	2BK52-5/8 2BK52-7/8 2BK52-1 2BK52-1-1/8 2BK52-1-3/8	4.95	4.2	4.6
2BK34-5/8 2BK34-3/4 2BK34-7/8 2BK34-1 2BK34-1-1/8	3.55	2.8	3.2	2BK55-1-1/8 2BK55-1-3/8	5.25	4.5	4.9
2BK36-5/8 2BK36-3/4 2BK36-7/8 2BK36-1 2BK36-1-1/8 2BK36-1-3/8	3.75	3.0	3.4	2BK57-1 2BK57-1-1/8 2BK57-1-3/8	5.45	4.7	5.1
				2BK60-3/4 2BK60-7/8 2BK60-1 2BK60-1-1/8 2BK60-1-3/8	5.75	5.0	5.4
				2BK62-1 2BK62-1-1/8	5.95	5.2	5.6
				2BK65-1 2BK65-1-1/8 2BK65-1-3/8	6.25	5.5	5.9
				2BK67-1 2BK67-1-1/8 2BK67-1-3/8	6.45	5.7	6.1

Sections and Sizes

optibelt *K5* Bored to Size Light Duty Sheaves



Power Transmission

Bore to Size Light Duty Sheaves Section 2B

Part No.	OD (in.)	4L & A Pitch Dia (in.)	5L & B Pitch Dia. (in)	Part No.	OD (in.)	4L & A Pitch Dia (in.)	5L & B Pitch Dia. (in)
2BK70-3/4 2BK70-1 2BK70-1-1/8 2BK70-1-3/8 2BK70-1-7/16	6.75	6.0	6.4	BK110-1-3/16 BK110-1-7/16			
2BK80-3/4 2BK80-1 2BK80-1-1/8 2BK80-1-3/16 2BK80-1-3/8 2BK80-1-7/16	7.75	7.0	7.4	BK120-1 BK120-1-3/16 BK120-1-7/16	11.75	11.0	11.4
2BK90-3/4 2BK90-1 2BK90-1-1/8 2BK90-1-3/16 2BK90-1-3/8 2BK90-1-7/16	8.75	8.0	8.4	BK130-1 BK130-1-3/16 BK130-1-7/16	12.75	12.0	12.4
BK100-3/4 BK100-1 BK100-1-3/16 BK100-1-3/8 BK100-1-7/16	9.75	9.0	9.4	BK140-1 BK140-1-3/16 BK140-1-7/16	13.75	13.0	13.4
BK110-1	10.75	10.0	10.4	BK160-1 BK160-1-3/16 BK160-1-7/16	15.75	15.0	15.4
				BK190-1-3/16 BK190-1-1/4 BK190-1-7/16	18.75	18.0	18.4

Standard Key Dimensions

Shaft Dia.	Keyseat (wxd)
1/2	None
5/8-7/8	3/16 x 3/32
15/16-1 1/4	1/4 x 1/8
1 5/16-1 3/8	5/16 x 5/32
1 7/16-1 3/4	3/8 x 3/16

Sections and Sizes

optibelt K5 Bored to Size Light Duty Sheaves



Power Transmission

Bore to Size Light Duty Sheaves Section 3L, A and 4L

Part No.	OD (in.)	3L Pitch Dia (in.)	4L+A Pitch Dia. (1 in.)	Part No.	OD (in.)	3L Pitch Dia (in.)	4L+A Pitch Dia. (1 in.)
AK17-1/2 AK17-5/8	1.75	1.16	1.50	AK34-1 AK34-1/2 AK34-3/4 AK34-5/8 AK34-7/8	3.45	2.86	3.20
AK20-1/2 AK20-3/4 AK20-5/8	2.00	1.46	1.80	AK39-1 AK39-1/2 AK39-1-1/8 AK39-15/16 AK39-3/4 AK39-3/4 W/2 SS AK39-5/8 AK39-7/8	3.75	3.16	3.50
AK21-1/2 AK21-3/4 AK21-5/8	2.10	1.56	1.90	AK41-1 AK41-1/2 AK41-15/16 AK41-3/4 AK41-5/8 AK41-7/8	3.95	3.36	3.70
AK22-1/2 AK22-3/4 AK22-5/8	2.20	1.66	2.00	AK44-1 AK44-1/2 AK44-1-1/8 AK44-15/16 AK44-3/4 AK44-5/8 AK44-7/8	4.25	3.66	4.00
AK23-1/2 AK23-3/4 AK23-5/8 AK23-7/8	2.30	1.76	2.10	AK46-1 AK46-1/2 AK46-1-1/8 AK46-15/16 AK46-3/4 AK46-5/8 AK46-7/8	4.45	3.86	4.20
AK25-1/2 AK25-3/4 AK25-5/8 AK25-7/8	2.50	1.96	2.30	AK49-1 AK49-1/2 AK49-1-1/8 AK49-15/16 AK49-3/4 AK49-5/8 AK49-7/8	4.75	4.16	4.50
AK26-1/2 AK26-3/4 AK26-5/8 AK26-7/8	2.60	2.06	2.40				
AK27-1/2 AK27-3/4 AK27-5/8 AK27-7/8	2.70	2.16	2.50				
AK28-1 AK28-1/2 AK28-3/4 AK28-5/8 AK28-7/8	2.80	2.26	2.60				
AK30-1 AK30-1/2 AK30-3/4 AK30-5/8 AK30-7/8	3.05	2.46	2.80				
AK32-1 AK32-1/2 AK32-3/4 AK32-5/8 AK32-7/8	3.25	2.66	3.00				

Sections and Sizes

optibelt *KS* Bored to Size Light Duty Sheaves



Power Transmission

Bore to Size Light Duty Sheaves Section 3L, A and 4L

Part No.	OD (in.)	3L Pitch Dia (in.)	4L+A Pitch Dia. (1 in.)	Part No.	OD (in.)	3L Pitch Dia (in.)	4L+A Pitch Dia. (1 in.)
AK51-1 AK51-1/2 AK51-1-1/8 AK51-3/4 AK51-5/8 AK51-7/8	4.95	4.36	4.70	AK66-1 AK66-1-1/8 AK66-3/4 AK66-5/8	6.45	5.86	6.20
AK54-1 AK54-1/2 AK54-1-1/8 AK54-1-3/16 AK54-15/16 AK54-3/4 AK54-5/8 AK54-7/8	5.25	4.66	5.00	AK69-1 AK69-1-1/8 AK69-3/4	6.75	6.16	6.50
AK56-1 AK56-1/2 AK56-1-1/8 AK56-1-3/16 AK56-15/16 AK56-3/4 AK56-5/8 AK56-7/8	5.45	4.86	5.20	AK71-1 AK71-1-1/8 AK71-1-7/16 AK71-3/4 AK71-5/8 AK71-7/8	6.95	6.36	6.70
AK59-1 AK59-1/2 AK59-1-1/8 AK59-1-3/16 AK59-15/16 AK59-3/4 AK59-5/8 AK59-7/8	5.75	5.16	5.50	AK74-1 AK74-1/2 AK74-1-1/4 AK74-1-1/8 AK74-1-3/16 AK74-15/16 AK74-1-7/16 AK74-3/4 AK74-5/8	7.25	6.66	7.00
AK61-1 AK61-1/2 AK61-1-1/8 AK61-1-3/16 AK61-15/16 AK61-3/4 AK61-5/8 AK61-7/8	5.95	5.36	5.70	AK79-1 AK79-1-1/8 AK79-1-7/16 AK79-3/4	7.75	7.16	7.50
AK64-1 AK64-1/2 AK64-1-1/8 AK64-1-3/16 AK64-15/16 AK64-3/4 AK64-5/8 AK64-7/8	6.25	5.66	6.00	AK84-1 AK84-1/2 AK84-1-3/16 AK84-15/16 AK84-1-7/16 AK84-3/4 AK84-5/8	8.25	7.66	8.00
				AK89-1 AK89-1-1/8 AK89-1-7/16 AK89-3/4	8.75	8.16	8.50
				AK94-1 AK94-1/2 AK94-1-1/4 AK94-1-3/16 AK94-15/16 AK94-1-7/16 AK94-3/4 AK94-5/8	9.25	8.66	9.00

Sections and Sizes

optibelt *K5* Bored to Size Light Duty Sheaves



Power Transmission

Bore to Size Light Duty Sheaves Section 3L, A and 4L							
Part No.	OD (in.)	3L Pitch Dia (in.)	4L+A Pitch Dia. (1 in.)	Part No.	OD (in.)	3L Pitch Dia (in.)	4L+A Pitch Dia. (1 in.)
AK99-1 AK99-1-7/16 AK99-3/4	9.75	9.16	9.50	AK144-1 AK144-1-3/16 AK144-1-7/16 AK144-3/4	14.25	13.66	14.00
AK104-1 AK104-1-1/4 AK104-1-3/16 AK104-1-3/8 AK104-1-7/16 AK104-3/4 AK104-5/8	10.25	9.66	10.00	AK154-1 AK154-1-3/16 AK154-1-3/8 AK154-1-7/16 AK154-3/4	15.25	14.66	15.00
AK109-1 AK109-1-3/8 AK109-1-7/16 AK109-3/4	10.75	10.16	10.50	AK184-1 AK184-1-3/16 AK184-1-7/16 AK184-3/4	18.25	17.66	18.00
AK114-1 AK114-1-3/16 AK114-1-7/16 AK114-3/4	11.25	10.66	11.00				
AK124-1 AK124-1-1/4 AK124-1-3/16 AK124-1-7/16 AK124-3/4 AK124-5/8 AK124-7/8	12.25	11.66	12.00				
AK134-1 AK134-1-3/16 AK134-1-3/8 AK134-1-7/16 AK134-3/4	13.25	12.66	13.00				

Standard Key Dimensions	
Shaft Dia.	Keyseat (wxd)
1/2	None
5/8-7/8	3/16 x 3/32
15/16-1 1/4	1/4 x 1/8
1 5/16-1 3/8	5/16 x 5/32
1 7/16-1 3/4	3/8 x 3/16

Sections and Sizes

optibelt *KS* Bored to Size Light Duty Sheaves



Bore to Size Light Duty Sheaves Section 2 3L, 2 A and 2 4L

Part No.	OD (in.)	3L Pitch Dia (in.)	4L+A Pitch Dia.(1 in.)	Part No.	OD (in.)	3L Pitch Dia (in.)	4L+A Pitch Dia.(1 in.)
2AK20-1/2 2AK20-3/4 2AK20-5/8 2AK20-7/8	2.00	1.46	1.80	2AK34-1 2AK34-1/2 2AK34-1-1/8 2AK34-3/4 2AK34-5/8 2AK34-7/8	3.45	2.86	3.20
2AK21-1/2 2AK21-3/4 2AK21-5/8	2.10	1.56	1.90	2AK39-1 2AK39-1/2 2AK39-1-1/8 2AK39-3/4 2AK39-5/8 2AK39-7/8	3.75	3.16	3.50
2AK22-1/2 2AK22-3/4 2AK22-5/8 2AK22-7/8	2.20	1.66	2.00	2AK41-1 2AK41-1-1/8 2AK41-3/4 2AK41-5/8 2AK41-7/8	3.95	3.36	3.70
2AK23-1 2AK23-3/4 2AK23-5/8 2AK23-7/8	2.30	1.76	2.10	2AK44-1 2AK44-1-1/8 2AK44-3/4 2AK44-5/8 2AK44-7/8	4.25	3.66	4.00
2AK25-1 2AK25-3/4 2AK25-5/8 2AK25-7/8	2.50	1.96	2.30	2AK46-1 2AK46-1-1/8 2AK46-7/8	4.45	3.86	4.20
2AK26-1 2AK26-3/4 2AK26-5/8 2AK26-7/8	2.60	2.06	2.40	2AK49-1 2AK49-1-1/8 2AK49-1-3/8 2AK49-3/4 2AK49-7/8	4.75	4.16	4.50
2AK27-1 2AK27-3/4 2AK27-5/8 2AK27-7/8	2.70	2.16	2.50	2AK51-1 2AK51-1-1/8 2AK51-1-3/8 2AK51-3/4 2AK51-7/8	4.95	4.36	4.70
2AK28-1 2AK28-3/4 2AK28-5/8 2AK28-7/8 2AK30-1	2.80	2.26	2.60	2AK54-1 2AK54-1-1/8 2AK54-1-3/8 2AK54-3/4 2AK54-5/8 2AK54-7/8	5.25	4.66	5.00
2AK30-1/2 2AK30-1-1/8 2AK30-3/4 2AK30-5/8 2AK30-7/8	3.05	2.46	2.80				
2AK32-1 2AK32-1/2 2AK32-1-1/8 2AK32-3/4 2AK32-5/8 2AK32-7/8	3.25	2.66	3.00				

Sections and Sizes

optibelt K5 Bored to Size Light Duty Sheaves



Power Transmission

Bore to Size Light Duty Sheaves Section 2 3L, 2 A and 2 4L

Part No.	OD (in.)	3L Pitch Dia (in.)	4L+A Pitch Dia. (1 in.)	Part No.	OD (in.)	3L Pitch Dia (in.)	4L+A Pitch Dia. (1 in.)
2AK56-1 2AK56-1-1/8 2AK56-1-3/8 2AK56-3/4 2AK56-5/8	5.45	4.86	5.20	2AK114-1 2AK114-1-3/16 2AK114-1-3/8 2AK114-1-7/16 2AK114-3/4	11.25	10.66	11
2AK59-1 2AK59-1-1/8 2AK59-1-3/8	5.75	5.16	5.50	2AK124-1 2AK124-1-3/16 2AK124-1-7/16 2AK124-3/4	12.25	11.66	12
2AK61-1 2AK61-1-1/8 2AK61-1-3/8 2AK61-3/4 2AK61-7/8	5.95	5.36	5.70	2AK134-1-3/16 2AK134-1-7/16	13.25	12.66	13
2AK64-1 2AK64-1-1/8 2AK64-1-3/16 2AK64-1-3/8 2AK64-1-7/16 2AK64-3/4	6.25	5.66	6.00	2AK144-1 2AK144-1-7/16	14.25	13.66	14
2AK74-1 2AK74-1-1/8 2AK74-1-3/16 2AK74-1-3/8 2AK74-1-7/16 2AK74-3/4	7.25	6.66	7.00	2AK154-1-3/16 2AK154-1-7/16	15.25	14.66	15
2AK84-1 2AK84-1-1/4 2AK84-1-1/8 2AK84-1-3/16 2AK84-1-3/8 2AK84-15/16 2AK84-1-7/16 2AK84-3/4	8.25	7.66	8.00	2AK184-1-3/16 2AK184-1-7/16	18.25	17.66	18
2AK94-1 2AK94-1-1/8 2AK94-1-3/16 2AK94-1-3/8 2AK94-3/4	9.25	8.66	9				
2AK104-1 2AK104-15/16 2AK104-1-7/16 2AK104-3/4	10.25	9.66	10				

Standard Key Dimensions

Shaft Dia.	Keyseat (wxd)
1/2	None
5/8-7/8	3/16 x 3/32
15/16-1 1/4	1/4 x 1/8
1 5/16-1 3/8	5/16 x 5/32
1 7/16-1 3/4	3/8 x 3/16

Sections and Sizes

optibelt *K5* Bored to Size Light Duty Sheaves



Bore to Size Light Duty Sheaves Section 3L, A and 4L

Part No.	OD (in.)	4L & A Pitch Dia. (in.)	5L & B Pitch Dia. (in)	Part No.	OD (in.)	4L & A Pitch Dia. (in.)	5L & B Pitch Dia. (in)
BK24-1/2 BK24-5/8 BK24-3/4 BK24-7/8	2.4	1.8	2.2	BK36-1/2 BK36-5/8 BK36-3/4 BK36-7/8	3.75	3.0	3.4
BK25-1/2 BK25-5/8 BK25-3/4 BK25-7/8 BK25-1	2.5	1.9	2.3	BK36-1 BK36-1-1/8			
BK26-1/2 BK26-5/8 BK26-3/4 BK26-7/8	2.6	2.0	2.4	BK40-1/2 BK40-5/8 BK40-3/4 BK40-7/8 BK40-1 BK40-1-1/8	3.95	3.2	3.6
BK27-1/2 BK27-5/8 BK27-3/4 BK27-7/8 BK27-1	2.7	2.1	2.5	BK45-1/2 BK45-5/8 BK45-3/4 BK45-7/8 BK45-1 BK45-1-1/8	4.25	3.5	3.9
BK28-1/2 BK28-5/8 BK28-3/4 BK28-7/8 BK28-1 BK28-1-1/8	2.95	2.2	2.6	BK47-1/2 BK47-5/8 BK47-3/4 BK47-7/8 BK47-1 BK47-1-1/8	4.45	3.7	4.1
BK30-1/2 BK30-5/8 BK30-3/4 BK30-7/8 BK30-1 BK30-1-1/8	3.15	2.4	2.8	BK50-1/2 BK50-5/8 BK50-3/4 BK50-7/8 BK50-1 BK50-1-1/8	4.75	4.0	4.4
BK32-1/2 BK32-5/8 BK32-3/4 BK32-7/8 BK32-1 BK32-1-1/8	3.35	2.6	3.0	BK52-1/2 BK52-5/8 BK52-3/4 BK52-7/8 BK52-1 BK52-1-1/8	4.95	4.2	4.6
BK34-1/2 BK34-5/8 BK34-3/4 BK34-7/8 BK34-1 BK34-1-1/8	3.55	2.8	3.2	BK55-1/2 BK55-5/8 BK55-3/4 BK55-7/8 BK55-1 BK55-1-1/8 BK55-1-3/16	5.25	4.5	4.9

Sections and Sizes

optibelt K5 Bored to Size Light Duty Sheaves



Power Transmission

Bore to Size Light Duty Sheaves Section 3L, A and 4L							
Part No.	OD (in.)	4L & A Pitch Dia. (in.)	5L & B Pitch Dia. (in)	Part No.	OD (in.)	4L & A Pitch Dia. (in.)	5L & B Pitch Dia. (in)
BK57-5/8 BK57-3/4 BK57-7/8 BK57-15/16 BK57-1 BK57-1-1/8 BK57-1-3/16	5.45	4.7	5.1	BK75-3/4 BK75-1 BK75-1-1/8	7.25	6.5	6.9
				BK77-3/4 BK77-1 BK77-1-1/8 BK77-1-3/8	7.45	6.7	7.1
BK60-1/2 BK60-5/8 BK60-3/4 BK60-7/8 BK60-1 BK60-1-1/8 BK60-1-3/16	5.75	5.0	5.4	BK80-5/8 BK80-3/4 BK80-7/8 BK80-1 BK80-1-1/8 BK80-1-3/16 BK80-1-1/4 BK80-1-3/8 BK80-1-7/16	7.75	7.0	7.4
BK62-1/2 BK62-5/8 BK62-3/4 BK62-7/8 BK62-15/16 BK62-1 BK62-1-1/8 BK62-1-3/16	5.95	5.2	5.6	BK85-3/4 BK85-1 BK85-1-1/8 BK85-1-3/8 BK85-1-7/16	8.25	7.5	7.9
BK65-5/8 BK65-3/4 BK65-1 BK65-1-1/8	6.25	5.5	5.9	BK90-3/4 BK90-7/8 BK90-15/16 BK90-1 BK90-1-1/8 BK90-1-3/16 BK90-1-3/8 BK90-1-7/16	8.75	8.0	8.4
BK67-5/8 BK67-3/4 BK67-1 BK67-1-1/8 BK67-1-3/16	6.45	5.7	6.1	BK95-3/4 BK95-1 BK95-1-1/8 BK95-1-3/8	9.25	8.5	8.9
BK70-5/8 BK70-3/4 BK70-15/16 BK70-1 BK70-7/8 BK70-1-1/8 BK70-1-3/16 BK70-1-7/16	6.75	6.0	6.4	BK100-3/4 BK100-7/8 BK100-15/16 BK100-1 BK100-1-1/8 BK100-1-3/16 BK100-1-1/4 BK100-1-3/8 BK100-1-7/16	9.75	9.0	9.4
BK72-3/4 BK72-1 BK72-1-1/8 BK72-1-3/8	6.95	6.2	6.6				

Sections and Sizes

optibelt *K5* Bored to Size Light Duty Sheaves



Bore to Size Light Duty Sheaves Section 3L, A and 4L

Part No.	OD (in.)	4L & A Pitch Dia. (in.)	5L & B Pitch Dia. (in.)	Part No.	OD (in.)	4L & A Pitch Dia. (in.)	5L & B Pitch Dia. (in.)
BK105-1 BK105-1-3/8 BK105-1-7/16	10.25	9.5	9.9	BK140-3/4 BK140-1 BK140-1-3/16 BK140-1-7/16	13.75	13.0	13.4
BK110-3/4 BK110-1 BK110-1-1/8 BK110-1-3/16 BK110-1-3/8 BK110-1-7/16	10.75	10.0	10.4	BK160-1 BK160-1-1/8 BK160-1-3/16 BK160-1-1/4 BK160-1-7/16	15.75	15.0	15.4
BK115-1 BK115-1-7/16	11.25	10.5	10.9	BK190-1 BK190-1-3/16 BK190-1-1/4 BK190-1-7/16	18.75	18.0	18.4
BK120-3/4 BK120-1 BK120-1-3/16 BK120-1-7/16	11.75	11.0	11.4				
BK130-3/4 BK130-1 BK130-1-1/8 BK130-1-3/16 BK130-1-1/4 BK130-1-7/16	12.75	12.0	12.4				

Standard Key Dimensions

Shaft Dia.	Keyseat (wxd)
1/2	None
5/8-7/8	3/16 x 3/32
15/16-1 1/4	1/4 x 1/8
1 5/16-1 3/8	5/16 x 5/32
1 7/16-1 3/4	3/8 x 3/16

Sections and Sizes

optibelt K5 Bored to Size Light Duty Sheaves



Power Transmission

Bore to Size Light Duty Sheaves Section 2 A, 2 4L, 2B and 2 5L

Part No.	OD (in.)	4L & A Pitch Dia. (in.)	5L & B Pitch Dia. (in)	Part No.	OD (in.)	4L & A Pitch Dia. (in.)	5L & B Pitch Dia. (in)
2BK25-1/2 2BK25-5/8 2BK25-3/4 2BK25-7/8	2.5	1.9	2.3	2BK40-5/8 2BK40-3/4 2BK40-7/8 2BK40-1 2BK40-1-1/8	3.95	3.2	3.6
2BK27-1/2 2BK27-5/8 2BK27-3/4 2BK27-7/8 2BK27-1 2BK27-1-1/8	2.7	2.1	2.5	2BK45-1 2BK45-1-1/8 2BK45-1-3/8 2BK47-7/8 2BK47-1 2BK47-1-1/8 2BK47-1-3/8	4.25	3.5	3.9
2BK28-1/2 2BK28-5/8 2BK28-3/4 2BK28-7/8 2BK28-1 2BK28-1-1/8	2.95	2.2	2.6	2BK50-3/4 2BK50-1 2BK50-1-1/8 2BK50-1-3/8	4.75	4.0	4.4
2BK30-1/2 2BK30-5/8 2BK30-3/4 2BK30-7/8 2BK30-1 2BK30-1-1/8 2BK30-1-3/8	3.15	2.4	2.8	2BK52-5/8 2BK52-7/8 2BK52-1 2BK52-1-1/8 2BK52-1-3/8 2BK55-1-1/8 2BK55-1-3/8	4.95	4.2	4.6
2BK32-1/2 2BK32-5/8 2BK32-3/4 2BK32-7/8 2BK32-1 2BK32-1-1/8	3.35	2.6	3.0	2BK57-1 2BK57-1-1/8 2BK57-1-3/8 2BK60-3/4 2BK60-7/8 2BK60-1 2BK60-1-1/8 2BK60-1-3/8	5.25	4.5	4.9
2BK34-5/8 2BK34-3/4 2BK34-7/8 2BK34-1 2BK34-1-1/8	3.55	2.8	3.2	2BK62-1 2BK62-1-1/8 2BK65-1 2BK65-1-1/8 2BK56-1-3/8	5.45	4.7	5.1
2BK36-5/8 2BK36-3/4 2BK36-7/8 2BK36-1 2BK36-1-1/8 2BK36-1-3/8	3.75	3.0	3.4		5.75	5.0	5.4
					5.95	5.2	5.6
					6.25	5.5	5.9

Sections and Sizes

optibelt *K5* Bored to Size Light Duty Sheaves



Power Transmission

Bore to Size Light Duty Sheaves Section 2 A, 2 4L, 2B and 2 5L

Part No.	OD (in.)	4L & A Pitch Dia. (in.)	5L & B Pitch Dia. (in.)	Part No.	OD (in.)	4L & A Pitch Dia. (in.)	5L & B Pitch Dia. (in.)
2BK67-1 2BK67-1-1/8 2BK67-1-3/8	6.45	5.7	6.1	BK110-1 BK110-1-3/16 BK110-1-7/16	10.75	10.0	10.4
2BK70-3/4 2BK70-1 2BK70-1-1/8 2BK70-1-3/8 2BK70-1-7/16	6.75	6.0	6.4	BK120-1 BK120-1-3/16 BK120-1-7/16	11.75	11.0	11.4
2BK80-3/4 2BK80-1 2BK80-1-1/8 2BK80-1-3/16 2BK80-1-3/8 2BK80-1-7/16	7.75	7.0	7.4	BK130-1 BK130-1-3/16 BK130-1-7/16	12.75	12.0	12.4
2BK90-3/4 2BK90-1 2BK90-1-1/8 2BK90-1-3/16 2BK90-1-3/8 2BK90-1-7/16	8.75	8.0	8.4	BK140-1 BK140-1-3/16 BK140-1-7/16	13.75	13.0	13.4
2BK90-3/4 2BK90-1 2BK90-1-1/8 2BK90-1-3/16 2BK90-1-3/8 2BK90-1-7/16	8.75	8.0	8.4	BK160-1 BK160-1-3/16 BK160-1-7/16	15.75	15.0	15.4
2BK90-3/4 2BK90-1 2BK90-1-1/8 2BK90-1-3/16 2BK90-1-3/8 2BK90-1-7/16	8.75	8.0	8.4	BK190-1-3/16 BK190-1-1/4 BK190-1-7/16	18.75	18.0	18.4
BK100-3/4 BK100-1 BK100-1-3/16 BK100-1-3/8 BK100-1-7/16	9.75	9.0	9.4				

Standard Key Dimensions

Shaft Dia.	Keyseat (wxd)
1/2	None
5/8-7/8	3/16 x 3/32
15/16-1 1/4	1/4 x 1/8
1 5/16-1 3/8	5/16 x 5/32
1 7/16-1 3/4	3/8 x 3/16

Sections and Sizes

optibelt TB Taper Lock Bushings for Metallic Pulleys



Power Transmission

Taper Lock Bushing with Metric Bores. Keyway to DIN 6885 Part 1

	Taper bush															Material: GG 20 – DIN 1961	
	1008	1108	1210	1215	1310	1610	1615	2012	2517	3020	3030	3525	3535	4040	4545	5050	
Bore size d ₂ (mm)	10	10	11	11	14	14	14	14	16	25	35	35	35	40	55	70	
	11	11	12	12	16	16	16	16	18	28	38	38	38	42	60	75	
	12	12	14	14	18	18	18	18	19	30	40	40	40	45	65	80	
	14	14	16	16	19	19	19	19	20	32	42	42	42	48	70	85	
	16	16	18	18	20	20	20	20	22	35	45	45	45	50	75	90	
	18	18	19	19	22	22	22	22	24	38	48	48	48	55	80	95	
	19	19	20	20	24	24	24	24	25	40	50	50	50	60	85	100	
	20	20	22	22	25	25	25	25	28	42	55	55	55	65	90	105	
	22	22	24	24	28	28	28	28	30	45	60	60	60	70	95	110	
	24▲	24	25	25	30	30	30	30	32	48	65	65	65	75	100	115	
	25▲	25	28	28	32	32	32	32	35	50	70	70	70	80	105	120	
			28▲	30	30	35	35	35	35	38	55	75	75	75	85	110	125
				32	32		38	38	38	40	60	80	80	90			
							40	40	40	42	65	85	85	95			
							42▲	42▲	42	45	70	90	90	100			
									45	48	75						
								48	50								
								50	55								
								60									
Tightening torque (Nm)	5.7	5.7	20	20	20	20	20	31	49	92	92	115	115	172	195	275	
Bush length (mm)	22.3	22.3	25.4	38.1	25.4	25.4	38.1	31.8	44.5	50.8	76.2	63.5	88.9	101.6	114.3	127.0	
Weight at d _{2 min} (≈ kg)	0.12	0.16	0.28	0.39	0.32	0.41	0.60	0.75	1.06	2.50	3.75	3.90	5.13	7.68	12.70	15.17	

Taper Lock Bushing with Inch Bores. Keyways to BS 46 Part 1

	Taper bush															Material: GG 20 – DIN 1961	
	1008	1108	1210	1215	1310	1610	1615	2012	2517	3020	3030	3525	3535	4040	4545	5050	
Bore size d ₂ (inch)	3/8*	3/8*	1/2	5/8*	1/2*	1/2	1/2	5/8*	3/4	1 1/4	1 1/4	1 1/2*	1 1/2	1 3/4*	2 1/4*	3*	
	1/2	1/2	5/8	3/4	5/8*	5/8	5/8	3/4	7/8	1 3/8	1 3/8	1 5/8*	1 5/8	1 7/8*	2 3/8*	3 1/4*	
	5/8	5/8	3/4	7/8	3/4*	3/4	3/4	7/8	1	1 1/2	1 1/2	1 3/4*	1 3/4	2*	2 1/2*	3 1/2*	
	3/4	3/4	7/8	1	7/8*	7/8	7/8	1	1 1/8	1 5/8	1 5/8	1 7/8*	1 7/8	2 1/8*	2 3/4*	3 3/4*	
	7/8*	7/8	1	1 1/8	1*	1	1	1 1/8	1 1/4	1 3/4*	1 3/4*	2*	2	2 1/4*	2 7/8*	4*	
	1▲	1	1 1/8	1 1/4	1 1/8	1 1/8	1 1/8	1 1/8	1 1/4	1 3/8	1 7/8	1 7/8	2 1/8*	2 1/8	2 3/8*	3*	4 1/4*
			1 1/8▲*	1 1/4	1 1/4	1 1/4	1 3/8	1 3/8	1 3/8	1 1/2	1 5/8	2 1/8*	2 1/8*	2 3/8*	2 3/8	2 5/8*	3 1/4*
						1 3/8	1 3/8	1 3/8	1 1/2	1 5/8	2 1/4	2 1/4	2 1/2*	2 1/2	2 3/4*	3 1/2*	5*▲
						1 1/2	1 1/2	1 1/2	1 5/8	1 3/4	2 1/4	2 1/4	2 1/2*	2 1/2	2 3/4*	3 1/2*	
						1 5/8	1 5/8	1 5/8	1 3/4	1 7/8	2 3/8	2 3/8	2 5/8*	2 5/8	2 7/8*	3 3/4*	
									1 7/8	2	2 1/2	2 1/2	2 3/4*	2 3/4	3*	4*	
									2	2 1/8	2 5/8	2 5/8	2 7/8*	2 7/8	3 1/8*	4 1/4*▲	
										2 1/4	2 3/4	2 3/4	3*	3	3 1/4*	4 1/2*▲	
										2 3/8	2 7/8	2 7/8	3 1/8*	3 1/8	3 3/8*		
										2 1/2	3	3	3 1/4*	3 1/4	3 1/2*		
													3 3/8*	3 3/8	3 3/4*▲		
												3 1/2*▲	3 1/2▲	4*▲			
Tightening torque (Nm)	5.7	5.7	20	20	20	20	20	31	49	92	92	115	115	172	195	275	
Bush length (mm)	22.3	22.3	25.4	38.1	25.4	25.4	38.1	31.8	44.5	50.8	76.2	63.5	88.9	101.6	114.3	127.0	
Weight at d _{2 min} (≈ kg)	0.12	0.16	0.28	0.39	0.32	0.41	0.60	0.75	1.06	2.50	3.75	3.90	5.13	7.68	12.70	15.17	

* Non stock items ▲ These bores have shallow keyways.

Sections and Sizes

optibelt *K5* Metric Pulleys for Taper Lock Bushing (DIN 2211)



Power Transmission

Section SPZ/10

Datum diameter d_d (mm)	No. of grooves	Weight without bush (≈ kg)	Taper bush	Datum diameter d_d (mm)	No. of grooves	Weight without bush (≈ kg)	Taper bush
50▲	1	0.3	1008	112	1	1.0	1610
	2	0.4	1008		2	1.3	1610
56▲	1	0.4	1008		3	1.3	2012
	2	0.5	1108		4	1.5	2012
60	1	0.2	1008		5	1.8	2012
	2	0.6	1108		6	1.9	2012
63	1	0.2	1108	118	1	0.9	1610
	2	0.3	1108		2	1.3	1610
	3	0.4	1108		3	1.6	2012
67	1	0.3	1108		4	1.8	2012
	2	0.4	1108		5	1.8	2012
	3	0.5	1108		6	2.0	2517
71	1	0.3	1108	125	1	1.0	1610
	2	0.4	1108		2	1.4	1610
	3	0.6	1108		3	1.8	2012
75	1	0.4	1108		4	2.2	2012
	2	0.4	1210		5	2.3	2012
	3	0.5	1210		6	2.5	2517
80	1	0.5	1210	132	1	1.1	1610
	2	0.6	1210		2	1.5	1610
	3	0.7	1210		3	2.3	2012
	4	0.8	1210		4	2.5	2012
85	1	0.6	1210		5	2.7	2517
	2	0.5	1610		6	2.9	2517
	3	0.6	1610	140	1	1.2	1610
	4	0.9	1610		2	1.7	1610
	5	1.0	1610		3	2.6	2012
90	1	0.7	1210		4	2.9	2012
	2	0.7	1610		5	3.2	2517
	3	0.8	1610		6	3.5	2517
	4	1.0	1610	8	4.0	2517	
	5	1.2	1610	150	1	1.2	1610
95	1	0.7	1210		2	2.0	2012
	2	0.8	1610		3	3.1	2012
	3	0.9	1610		4	3.7	2517
	4	1.1	1610		5	4.0	2517
	5	1.3	1610	6	4.4	2517	
100	1	0.8	1210	8	5.1	2517	
	2	0.9	1610	160	1	1.3	1610
	3	1.1	1610		2	2.5	2012
	4	1.1	1610		3	3.6	2012
	5	1.3	2012		4	4.4	2517
	6	1.4	2012		5	4.8	2517
106	1	0.9	1610		6	5.2	2517
	2	1.1	1610	8	5.6	2517	
	3	1.3	1610	170	1	1.5	1610
	4	1.3	1610		2	2.5	2012
	5	1.5	2012		3	4.2	2012
	6	1.6	2012		4	5.3	2517
					5	5.9	2517
					6	6.5	2517

Sections and Sizes

optibelt K5 Metric Pulleys for Taper Lock Bushing (DIN 2211)



Section SPZ/10							
Datum diameter d _d (mm)	No. of grooves	Weight without bush (≈ kg)	Taper bush	Datum diameter d _d (mm)	No. of grooves	Weight without bush (≈ kg)	Taper bush
180	1	1.6	1610	355	1	3.5	2012
	2	2.5	2012		2	5.1	2012
	3	4.8	2012		3	7.3	2517
	4	6.1	2517		4	8.9	2517
	5	6.3	2517		5	10.0	2517
	6	6.8	2517		6	10.7	2517
	8	7.1	3020		8	16.0	3030
	190	1	1.8		1610	400	1
2		2.6	2012	2	6.3		2517
3		4.9	2012	3	8.0		2517
4		5.3	2517	4	10.1		2517
5		6.3	2517	5	11.7		3020
6		6.9	2517	6	14.5		3020
200	1	2.3	2012	450	8	18.2	3030
	2	2.8	2012		1	6.1	2517
	3	3.5	2012		2	8.2	2517
	4	4.7	2517		3	9.8	2517
	5	5.5	2517		4	11.8	3020
	6	6.1	2517		5	13.9	3020
	8	9.3	3020		6	16.9	3030
						8	24.0
224	1	2.5	2012	500	2	9.1	2517
	2	3.2	2012		3	11.4	2517
	3	3.9	2012		4	14.3	3020
	4	5.2	2517		5	17.6	3020
	5	6.0	2517		6	19.9	3020
	6	6.6	2517		630	3	15.9
	8	11.8	3020	4		20.0	3020
	250	1	2.8	2012	5	22.7	3020
2		3.5	2012	6	33.6	3535	
3		4.3	2012				
4		5.7	2517				
5		6.4	2517				
6		7.0	2517				
8		10.5	3020				
280		1	2.9	2012			
	2	4.0	2012				
	3	5.3	2517				
	4	6.4	2517				
	5	7.1	2517				
	6	7.8	2517				
	8	10.8	3020				
	315	1	3.1	2012			
2		4.2	2012				
3		6.1	2517				
4		7.6	2517				
5		8.6	2517				
6		9.3	2517				

Sections and Sizes

optibelt *K5* Metric Pulleys for Taper Lock Bushing (DIN 2211)



Power Transmission

Section SPA/13

Datum diameter d_d (mm)	No. of grooves	Weight without bush (≈ kg)	Taper bush	Datum diameter d_d (mm)	No. of grooves	Weight without bush (≈ kg)	Taper bush
63▲	1	0.6	1108	125	1	1.4	1610
	2	0.8	1108		2	1.7	1610
67▲	1	0.3	1108		3	2.0	2012
	2	0.5	1108		4	2.5	2012
71▲	1	0.3	1108		132	5	2.7
		0.5	1108	1		1.6	1610
		0.7	1108	2		1.8	2012
75▲	2	0.4	1108	3		2.3	2012
		0.6	1108	4		2.6	2517
		0.8	1108	5	2.9	2517	
80▲	3	0.5	1210	140	1	1.8	1610
		0.6	1210		2	2.0	2012
		0.9	1210		3	2.8	2517
85	1	0.6	1210		4	3.1	2517
		0.7	1210		5	3.4	2517
		1.0	1210	150	1	1.4	1610
90	2	0.7	1210		2	2.4	2012
		0.7	1610		3	3.5	2517
		1.0	1610		4	3.8	2517
		1.2	1615		5	4.2	2517
95	3	0.8	1210	160	1	1.9	1610
		0.9	1610		2	2.9	2012
		1.1	1610		3	3.9	2517
		1.4	1615		4	4.4	2517
100	4	0.8	1610		5	5.1	2517
		0.9	1610	170	1	2.0	1610
		1.2	1610		2	3.1	2012
		1.7	1610		3	4.6	2517
		1.9	1610		4	5.5	2517
1.9	1610	5	5.9		3020		
106	1	0.9	1610	180	1	2.1	1610
		1.1	1610		2	3.4	2012
		1.4	1610		3	5.1	2517
		2.0	2012		4	5.9	2517
		2.0	2012		5	6.2	3020
112	2	1.0	1610	190	1	2.3	1610
		1.2	1610		2	3.8	2012
		1.3	2012		3	5.4	2517
		1.9	2012		4	6.8	2517
		2.1	2012		5	7.4	3020
118	3	1.2	1610	200	1	2.6	2012
		1.4	1610		2	4.1	2517
		1.8	2012		3	4.9	2517
		2.0	2012		4	7.4	3020
		2.4	2012		5	8.4	3020
	4			212	1	2.7	2012
					2	4.3	2517
					3	5.2	2517
					4	7.3	3020
					5	8.2	3020

Sections and Sizes

optibelt *K5* Metric Pulleys for Taper Lock Bushing (DIN 2211)



Power Transmission

Section SPA/13							
Datum diameter d_d (mm)	No. of grooves	Weight without bush (≈ kg)	Taper bush	Datum diameter d_d (mm)	No. of grooves	Weight without bush (≈ kg)	Taper bush
224	1	2.7	2012	560	1	11.6	2517
	2	4.4	2517		2	15.5	3020
	3	5.5	2517		3	17.8	3020
	4	7.4	3020		4	26.7	3535
	5	8.3	3020		5	30.4	3535
236	1	2.8	2012	630	1	10.1	2517
	2	4.6	2517		2	16.0	3020
	3	5.7	2517		3	22.0	3020
	4	7.8	3020		4	30.8	3535
	5	8.7	3020		5	33.7	3535
250	1	2.9	2012				
	2	4.8	2517				
	3	5.9	2517				
	4	8.0	3020				
	5	9.0	3020				
280	1	3.3	2012				
	2	5.4	2517				
	3	6.7	2517				
	4	8.8	3020				
	5	15.5	3535				
315	1	3.6	2012				
	2	6.0	2517				
	3	8.3	3020				
	4	9.7	3020				
	5	17.0	3535				
355	1	4.2	2012				
	2	6.7	2517				
	3	9.2	3020				
	4	11.0	3020				
	5	18.6	3535				
400	1	4.9	2012				
	2	8.1	2517				
	3	11.0	3020				
	4	12.8	3020				
	5	21.0	3535				
450	1	7.0	2012				
	2	10.3	2517				
	3	14.1	3020				
	4	15.5	3020				
	5	24.3	3535				
500	1	8.0	2517				
	2	11.6	2517				
	3	16.0	3020				
	4	18.2	3020				
	5	27.3	3535				

Sections and Sizes

optibelt *K5* Metric Pulleys for Taper Lock Bushing (DIN 2211)



Power Transmission

Section SPB/17

Datum diameter d_d (mm)	No. of grooves	Weight without bush (≈ kg)	Taper bush	Datum diameter d_d (mm)	No. of grooves	Weight without bush (≈ kg)	Taper bush
100▲	1	0.9	1610	180	1	4.1	1610
	2	1.2	1610		2	4.5	2517
	3	1.7	1610		3	5.5	2517
112▲	1	1.1	1610		4	6.9	2517
	2	1.5	1610		5	7.1	3020
	3	2.0	1610		6	7.7	3020
118▲	1	1.3	1610		8	9.5	3020
	2	1.7	1610		190	1	4.6
	3	2.3	1610	2		5.0	2517
125▲	1	1.5	1610	3		6.3	2517
	2	1.9	2012	4		7.6	2517
	3	2.4	2012	5		8.1	3020
	4	3.0	2012	6		9.2	3020
	5	3.5	2012	8		11.2	3030
132▲	1	1.8	1610	200		1	5.0
	2	2.2	2012		2	5.4	2517
	3	2.8	2012		3	6.5	2517
	4	3.4	2012		4	8.8	3020
	5	3.7	2012		5	9.1	3020
140	1	2.3	1610		6	10.3	3020
	2	2.7	2012		8	13.5	3535
	212	3	3.3		2012	1	4.2
		4	3.7	2517	2	4.9	2517
		5	4.5	2517	3	6.0	2517
		6	4.6	2517	4	9.8	3020
150		1	2.7	1610	5	11.0	3020
		2	3.1	2012	6	14.3	3535
	3	3.9	2517	8	16.6	3535	
	4	4.4	2517	224	1	4.7	2012
	5	5.2	2517		2	5.3	2517
	6	5.6	2517		3	6.3	2517
160	1	2.5	1610		4	11.3	3020
	2	2.9	2012		5	12.7	3020
	3	4.2	2517		6	17.0	3535
	4	4.9	2517	8	19.3	3535	
	5	6.0	2517	10	21.8	3535	
	6	5.4	3020	236	1	5.0	2012
170	1	2.9	1610		2	5.5	2517
	2	3.3	2012		3	7.0	2517
	3	4.9	2517		4	14.5	3020
	4	5.7	2517		5	16.9	3535
	5	6.1	3020		6	20.0	3535
	6	6.5	3020	8	22.3	3535	
	8	8.0	3020	10	25.3	3535	

Sections and Sizes

optibelt K5 Metric Pulleys for Taper Lock Bushing (DIN 2211)



Power Transmission

Section SPB/17									
Datum diameter d _d (mm)	No. of grooves	Weight without bush (≈ kg)	Taper bush	Datum diameter d _d (mm)	No. of grooves	Weight without bush (≈ kg)	Taper bush		
250	1	5.4	2012	375	2	9.5	3020		
	2	5.5	2517		3	11.5	3020		
	3	7.7	3020		4	16.5	3525		
	4	19.6	3020		6	25.0	3525		
	5	21.7	3535		8	28.0	3525		
	6	23.3	3535		400	2	0.0	3020	
	8	27.5	3535			3	18.3	3535	
	10	29.3	3535			4	20.5	3535	
	265	2	6.2			2517	5	23.4	3535
		3	8.0			3020	6	25.1	3535
4		9.5	3020	8	36.5	4040			
6		16.7	3525	10	41.0	4040			
8		24.0	3525	425	2	11.5	3020		
280	1	6.1	2012		3	18.0	3535		
	2	6.8	2517		4	19.5	3535		
	3	8.6	3020		6	25.1	4040		
	4	10.1	3020		8	52.5	4545		
	5	17.8	3535	450	2	12.1	3020		
	6	19.6	3535		3	21.9	3535		
	8	26.7	3535		4	24.5	3535		
	10	30.5	3535		5	27.3	3535		
	300	2	7.3		2517	6	35.5	4040	
		3	9.2	3020	8	40.9	4040		
4		14.3	3020	10	53.5	4545			
5		18.2	3535	500	2	13.2	3020		
6		21.9	3535		3	23.1	3535		
8		26.2	3535		4	26.6	3535		
315	1	7.2	2012		5	29.9	3535		
	2	7.8	2517		6	38.9	4040		
	3	9.6	3020	8	45.5	4040			
	4	17.1	3535	10	61.0	4545			
	5	18.8	3535	560	2	16.5	3030		
	6	23.0	3535		3	25.9	3535		
	8	26.0	3535		4	29.0	3535		
	10	31.5	3535		5	35.3	4040		
	335	2	7.8		2517	6	43.1	4040	
		3	10.5	3020	8	49.0	4545		
4		18.3	3535	10	55.7	4545			
5		19.5	3535	630	2	18.5	3020		
6		22.0	3535		3	28.9	3535		
8		28.2	3535		4	33.3	3535		
10		36.0	4040		5	43.1	4040		
355		2	8.7		3020	6	49.2	4040	
		3	10.8	3020	8	62.0	4545		
		4	18.6	3535	10	72.0	4545		
	5	20.8	3535	710	3	33.2	3535		
	6	22.8	3535		4	39.1	3535		
	8	27.0	3535		5	50.2	4040		
	10	38.0	4040		6	62.3	4545		
						8	71.0	4545	
					10	80.0	4545		

Sections and Sizes

optibelt *KS* Metric Pulleys for Taper Lock Bushing (DIN 2211)



Section SPB/17

Datum diameter d_d (mm)	No. of grooves	Weight without bush (≈ kg)	Taper bush	Datum diameter d_d (mm)	No. of grooves	Weight without bush (≈ kg)	Taper bush
800	3	36.7	3535				
	4	48.8	4040				
	5	56.1	4040				
	6	71.4	4545				
	8	90.9	4545				
10	102.0	4545					
900	3	46.8	3535				
	4	60.0	4040				
	5	74.8	4545				
	6	81.5	4545				
	8	110.0	4545				
10	126.0	5050					
1000	3	56.5	4040				
	4	66.5	4040				
	5	80.5	4545				
	6	90.0	4545				
	8	132.0	5050				
10	147.0	5050					

Sections and Sizes

optibelt K5 Metric Pulleys for Taper Lock Bushing (DIN 2211)



Power Transmission

Section SPC/22								
Datum diameter d_d (mm)	No. of grooves	Weight without bush (≈ kg)	Taper bush	Datum diameter d_d (mm)	No. of grooves	Weight without bush (≈ kg)	Taper bush	
200▲	3	9.0	2517	335	3	22.5	3535	
	4	10.5	3020		4	26.5	3535	
	5	14.0	3535		5	30.0	3535	
	6	17.0	3535		6	35.0	3535	
212▲	3	10.0	3020		8	58.0	4040	
	4	12.5	3020		355	3	22.9	3535
	5	15.0	3535			4	28.3	3535
6	18.0	3535	5			32.5	3535	
224	2	8.1	3020	6	36.0	3535		
	3	11.0	3020	8	67.5	4040		
	4	14.0	3535	10	121.0	4545		
	5	16.2	3535	375	3	23.8	3535	
	6	19.0	3535		4	30.0	3535	
8	24.9	3535	5		33.0	3535		
236	3	12.0	3020	6	45.5	4040		
	4	17.2	3535	8	68.0	4545		
	5	19.1	3535	400	3	24.1	3535	
	6	20.8	3535		4	28.0	3535	
8	25.5	3535	5		34.0	3535		
250	2	9.8	3020	425	3	26.0	3535	
	3	14.5	3020		4	31.0	3535	
	4	20.7	3535		5	45.0	4040	
	5	22.8	3535		6	58.0	4545	
	6	26.0	3535	8	74.0	4545		
	8	29.7	3535	450	3	28.6	3535	
	10	34.0	4040		4	33.5	3535	
265	3	21.2	3535		5	45.0	4040	
	4	24.0	3535	6	61.1	4545		
	5	26.2	3535	8	78.7	5050		
	6	29.0	3535	10	101.0	5050		
	8	33.3	3535	475	3	40.0	3535	
280	3	24.0	3535		4	47.0	3535	
	4	29.0	3535		5	47.2	4040	
	5	31.0	3535		6	62.8	4545	
	6	33.8	3535		8	81.5	5050	
	8	37.5	3535	500	3	30.9	3535	
10	45.0	4040	4		39.0	3535		
300	3	21.0	3535		5	48.7	4040	
	4	25.0	3535		6	60.2	4545	
	5	28.5	3535	8	87.4	5050		
	6	29.0	3535	10	127.0	5050		
	8	46.5	4040	560	3	36.0	3535	
10	53.5	4545	4		50.0	4040		
315	3	21.6	3535		5	63.0	4545	
	4	24.6	3535		6	77.0	5050	
	5	29.0	3535		8	94.0	5050	
	6	31.4	3535	10	115.0	5050		
	8	50.0	4040					
10	58.0	4545						

Sections and Sizes

optibelt *K5* Metric Pulleys for Taper Lock Bushing (DIN 2211)



Section SPC/22

Datum diameter d_d (mm)	No. of grooves	Weight without bush (≈ kg)	Taper bush	Datum diameter d_d (mm)	No. of grooves	Weight without bush (≈ kg)	Taper bush
630	3	48.5	4040				
	4	61.0	4545				
	5	77.0	5050				
	6	86.0	5050				
	8	105.5	5050				
10	130.0	5050					
710	3		4040				
	4		4545				
	5		5050				
	6		5050				
	8		5050				
10		5050					
800	3		4545				
	4		5050				
	5		5050				
	6		5050				
	8		5050				
10		5050					
1000	5		5050				
	6		5050				
	8		5050				
	10		5050				
1250	5		5050				
	6		5050				
	8		5050				
	10		5050				

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TECHNICAL TOOLS



optibelt TT 3

optibelt TT mini

optibelt laser pointer //

optibelt Service Box

Drive solutions with Optibelt



Technical Tools



Power Transmission

optibelt TT 3

Frequency tension tester for the universal measurement of the tensioning of V-belts, timing belts and ribbed belts



Advantages

- Database classification by product groups
- Non contact, repetition sure measurement
- Wide measuring range from 10-600 Hz
- Display in Hertz [Hz] or Newton [N].
- High accuracy of measurement
- Quality evaluation of the measuring results
- Adjustment with Optibelt tension recommendation
- Storage of own data sets possible
- Data communication via PC incl. software

Areas of Application

- General mechanical engineering
- Utility vehicle/ automobile industry
- Agricultural industry
- Household appliances and office equipment

The Optibelt TT 3 frequency tension tester brings safety to your drives. The consistent development of the frequency measuring technique is rendering the individual data acquisition of all belt drives possible. Readings are directly in Hertz [Hz]. Belt parameters are entered in Newton [N].

Technical Tools



Power Transmission



optibelt *TT mini S*

The new,
compact frequency tension tester
with a flexible
swan neck for trouble-free
measuring at spots

The Optibelt TT mini S frequency tension tester is an appliance that is used to check the tension of drive belts by means of measuring frequency.

The Optibelt TT mini S can even be used in difficult-to-reach places. V-belts, ribbed belts and timing belts can be simply and quickly reached in order to check their tension values.

optibelt laser pointer //

The user friendly, compact Optibelt laser pointer is a device which is especially helpful for daily maintenance routines.

The Optibelt laser pointer facilitates the alignment of belt drives. It helps you to identify the three most common causes of drive problems:

- Axial misalignment of the pulleys
- Horizontal angular misalignment
- Vertical angular misalignment



Technical Tools



Power Transmission



**... for fast
help on site!**

Contents:

- 4 pieces Optikrik gauges,
Types 0, I, II, III
- 1 set of V-belt and pulley groove
gauges
- 1 measuring tape, 3 m
- 1 ballpoint pen with silver refill,
packed in a sturdy plastic box
- 1 set of ribbed belt groove
gauges

optibelt Service Box

The service box from Optibelt is meant to support many application areas on site. Centre distances, belt lengths and pulley diameters can be established quickly and without problems by means of the flexible measuring tape.

V-belts and pulleys can be identified quickly and effortlessly with the V-belt and pulley groove gauges. The pulley groove flanks of V-grooved pulleys can be checked for angular deviation and wear. Where necessary, marks may be made on the belts such as measurements, reference marks etc. which are clearly readable using the special ballpoint pen with silver refill.

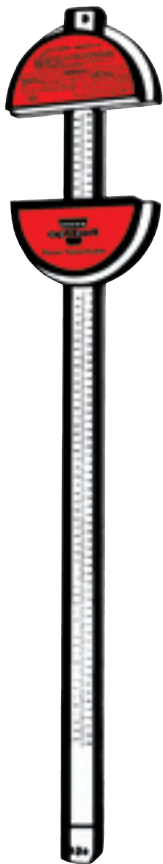
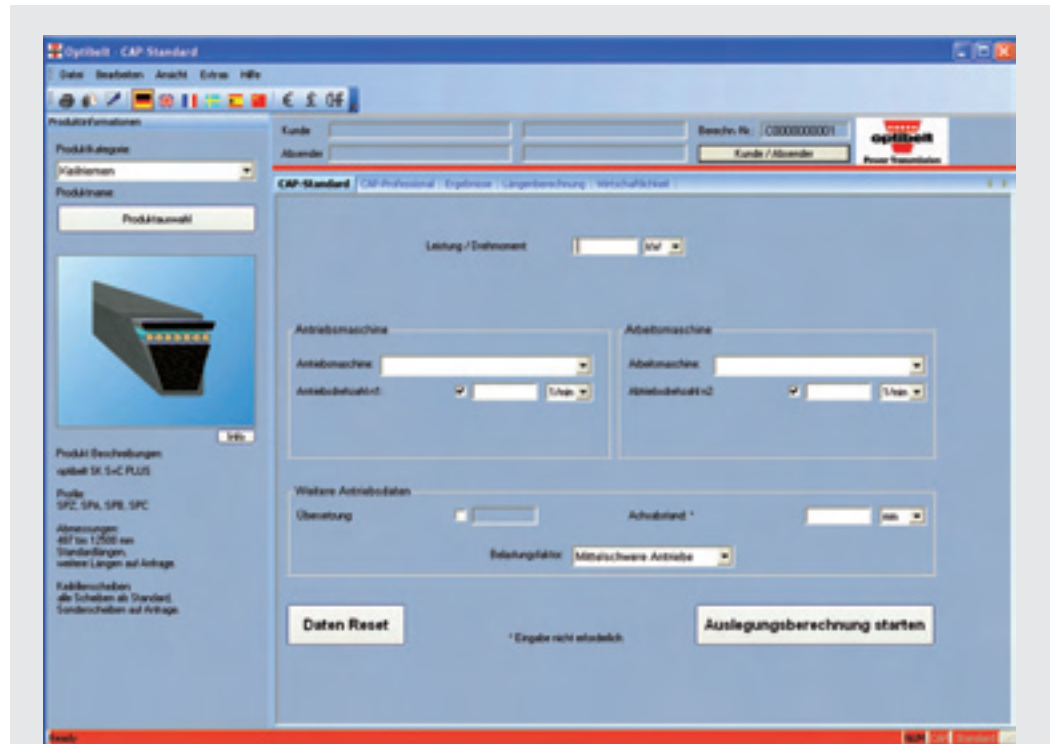
The obligatory thumb method for setting belt tension is made redundant thanks to the Optikrik belt tension gauge.

The application and control of the belt tension with the Optikrik facilitates the maintenance work of the fitter and increases the safety of drives.

● All in all a valuable "aid" that should be included in every service box

Technical Tools

Drive Calculation Program



Measuring range: 500-2,500 mm inside length (Li)

Measuring gauge

optibelt *CAP 6.0* Drive calculation program in new form

The Optibelt CAP drive calculation program has been used for many years on a worldwide basis for the calculation and design of belt drives. Now Optibelt would like to present the next generation: CAP 6.0. The new visual appearance displays the drive design in a clear illustration and facilitates a quick and well laid out drive design/drive calculation.

Design Hints

Properties



Power Transmission

	Temperature resistant from ... to ... (°F)			Oil resistant		Electrically conducting (after testing)	S=C PLUS Set Constant ¹⁾ M=S Matched Set ²⁾	API Approval No. 1B-0002 No. 1B-0002.1	Mining approval	Smooth running	Permanent stretch	
	Standard construction	Special construction XHR	Special construction XCR	Standard construction	Special construction XOR						Standard construction	Special construction
SK Wedge Belts	-40 +158	-31 +194	- 88 +158	condi- tional	good	yes	yes ¹⁾	yes in addition: 5V/8V*	yes	medium/ good	low	very low
SUPER TX M=S Molded Cogged, Raw Edge Belts	-22 +194		-104 +176	condi- tional		yes	yes ²⁾	yes		good	very low	
MARATHON 1, MARATHON 2 M=S Fan Belts	-22 +194		-104 +176	condi- tional		no	M2 yes ²⁾			good	very low	
VB Classical V-Belts	-40 +158	-31 +194	-158 +158	condi- tional	good	yes	yes ¹⁾	A/13; B/17; C/22; D/32	yes	medium/ good	low	very low
KB Kraftbands	-40 +158	-31 +194	-158 +158	condi- tional		yes		A**, B**; C; D; 3V**, 5V**, 8V		good	low	very low
DK Double V-Belts	-40 +158	-31 +194	-158 +158	condi- tional		yes				medium	low	
SUPER VX Variable Speed Belts	-22 +176		-104 +176	condi- tional		yes				very good	very low	
RB Ribbed Belts	-22 +194			condi- tional		condi- tional				very good	low	
ZR Timing Belts	-22 +185	-22 +248	-122 +176	condi- tional	good	yes				very good	none	
RR Polyurethane Round Section Belting	-40 +248			condi- tional		no				medium	high	
Optimat OE Open-Ended V-Belting, Punched DIN 2216	-4 +158			condi- tional		no					high	
PKR Endless V-Belts with Patterned Top Surfaces	-30 +158			condi- tional		yes					low	very low
Optimax HF High Capacity Flat Belts	-4 +230			condi- tional		no		* also with aramid ** also with raw-edged belts		very good	low	

Design Hints

Properties



Power Transmission

Recommended max. belt speed m/s	Efficiency	Behavior under shock loading	Vibration behavior	Speed regulation by adjustable pulleys	Synchronous running	Recommended max. speed ratio	Use with outside idler pulleys		Maintenance	Main areas of application
							Standard construction	Special construction		
≤ 42	up to 97%	good	low	possible	no	up to 1 : 10	limited	good	low	Plate compressors, mixers, rotary printing machines, extruders, screw compressors, web machines, axial flow fans, rotary compressors
varies with profile ≤ 42	up to 97%	good	low	possible	no	up to 1 : 12	limited	good	low	Fans, pumps, mixers, crushers, special machines, lathes and drills, grinding machines
≤ 42	up to 97%	good	low	possible	no	up to 1 : 12	conditional		maintenance free	Automobiles, generators, water pumps, fans
≤ 30	up to 97%	good	low	possible	no	up to 1 : 12	conditional	good	low	Pumps, presses, breakers, circular saws, pillar drills, planing machines, concrete mixers, compressors, lawn mowers, aerators, bale presses, chaff cutters
varies with profile ≤ 42	up to 97%	very good	very low	not possible	no	up to 1 : 15	conditional	good	low	Fans, shredders, road millers, extruders, rotary lawn mowers, stone breakers, saw-mills, vibration rollers, parcel conveyors, mixers, combined harvesters, pulp- ing machinery
≤ 30	up to 95%	good	low	not possible	no	up to 1 : 5	very good	very good	low	Special drives with reversing facility, looms, sweepers, harvesters
varies with profile ≤ 42	up to 95%	good	low	good	no	up to 1 : 12 with 2 adjustable pulleys	conditional	good	low	Special drives, compacting units, snow plough drives, multicolor offset machines, adjustable pulley sets, threshing drum drives, spoolers, turning machines
varies with profile ≤ 60	up to 96%	good	very low	not possible	no	up to 1 : 35	good		low	Offset machines, washing machines, milling machines, polishers, hub assemblies, main spindle drives
varies with profile ≤ 80	up to 98%	sensitive	speed dependent	not possible	yes	up to 1 : 10	good		maintenance free	Copiers, kitchen mixers, swivel arm robots, gripper drives, belt sanders, cam shaft drives, brush drives, clocks, x-ray equipment, coating machines, cameras, plotters, coin machines, main and feed drives, conveyer drives, cloth feed, printers
≤ 20	up to 95%	good	low	not possible	no	up to 1 : 10	good		frequent tightening	Special machines
≤ 20	up to 90%	good	medium	possible with qualification	no	up to 1 : 10	conditional		frequent tightening	Where installation conditions are difficult
varies with profile ≤ 20	up to 95%	good	low	possible with qualification	no	up to 1 : 10	conditional	good	low	Conveyor systems in the timber industry, in cement works, in agriculture, in the ceramics industry, in the glass industry, at airports, in coastal and inland harbors
≤ 70	up to 95%	good	very low	not possible	no	up to 1 : 12	very good		low	Water turbines, emergency power generators, saw-mills, shredders, screw compressors, roller drives, transmission drives, chuck drives, cross-cutters, floor cleaning equipment, multi-position drives, breakers, seaming drives, hammer mills

Design Hints

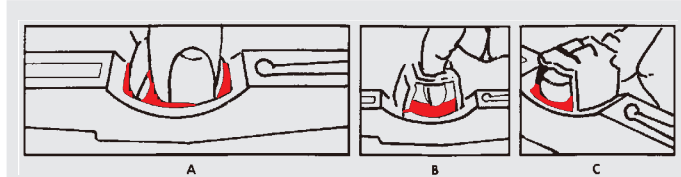
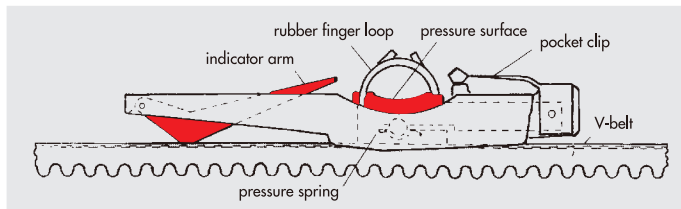
Tensioning for optibelt Belts



Power Transmission

This simplified tensioning method should be used for installation and maintenance tensioning of the belt when the important technical data is unavailable and the optimum tension cannot be calculated. This method requires only knowledge of the small pulley diameter and the belt section and construction. The gauges themselves may be used to set tensions also when the technical data is known and the optimum tension can be calculated.

Optibelt Tensioning Gauges – Instructions for Use



1. Select the gauge appropriate to the belt section and construction being tensioned. See notes below the simplified tensioning table.
2. Figure 2 shows three ways to hold the gauges so that pressure is applied to the black pad only.
3. Position the gauge on one of the belts on the drive in the middle of an accessible span length. Take care to ensure that the gauge is only in contact with one of the belts, and that the indicator is pushed down into the gauge body. Align the gauge so that its body is parallel with the sides of the belt.
4. Push slowly and firmly on the black pad. When a CLICK is heard and/or felt, stop immediately and remove the gauge carefully to avoid disturbing the indicator arm.



5. Read the gauge to judge the tension as follows.
6. Turn the gauge sideways to ascertain the exact point where the top surface of the black indicator crosses the scale.
7. Mark this point mentally or with a thumbnail and turn the gauge to read the scale.
8. Check the tension found against the simplified tensioning table. Tighten or slacken the belt, if necessary.

Simplified Tensioning Table

To use this table belt construction (standard wrapped or S-TX raw edge, molded cogged), and the diameter of the smallest pulley on the drive should be known. Note also that the belt tension is higher or lower depending on whether the belt is on first installation or whether it is being retensioned.

Example

- | | |
|--|--------|
| 1. Optibelt V-Belt section | 3V |
| 2. Smallest pulley diameter on drive | 3.15" |
| 3. Static tension – initial installation | 55 lbs |
| 4. Static tension – re-tension | 45 lbs |

Belt section	Diameter of the smallest pulley (inches)	Static tension lbs			
		Standard (wrapped)		SUPER TX M=S (raw edge)	
		Initial installation	Re-tension after	Initial installation	Re-tension after
SPZ 3V XPZ 3VX	≤ 2.80	45	35	55	45
	> 2.80 ≤ 3.65	55	45	70	55
	> 3.65 ≤ 5.00	80	55	90	70
	> 5.00 *				
SPA XPA	≤ 3.95	80	55	90	70
	> 3.95 ≤ 5.50	90	70	110	90
	> 5.50 ≤ 8.00	110	90	135	100
	> 8.00 *				
SPB 5V XPB 5VX	≤ 6.30	150	110	160	120
	> 6.30 ≤ 9.00	160	120	190	150
	> 9.00 ≤ 14.00	200	160	220	180
	> 14.00 *				
SPC XPC	≤ 9.75	220	180	310	250
	> 9.75 ≤ 14.00	310	250	360	270
	> 14.00 ≤ 21.20	400	310	450	350
	> 21.20 *				
Z/10 ZX/X10	≤ 2.20	20	15	25	20
	> 2.20 ≤ 2.80	25	20	30	25
	> 2.80 ≤ 3.95	30	25	35	30
	> 3.95 *				
A/13 AX/X13	≤ 3.15	35	25	45	35
	> 3.15 ≤ 4.12	45	35	55	45
	> 4.12 ≤ 5.20	70	55	90	70
	> 5.20 *				
B/17 BX/X17	≤ 4.90	70	55	100	80
	> 4.90 ≤ 6.30	90	70	110	90
	> 6.30 ≤ 8.00	110	90	135	100
	> 8.00 *				
C/22 CX/X22	≤ 8.00	160	110	180	140
	> 8.00 ≤ 9.75	180	140	200	160
	> 9.75 ≤ 14.00	200	160	220	180
	> 14.00 *				

* Tension values for these pulleys must be calculated.

Tension gauges:

- Optikrik 0 Range: 15 – 35 lbs
- Optikrik I Range: 30 – 150 lbs
- Optikrik II Range: 100 – 300 lbs
- Optikrik III Range: 300 – 700 lbs

The static tension values shown are calculated for maximum power transmission capability per belt and should be applied only when accurate drive data is not available.

Calculation Limitations

- Wedge belts belt speed v = 985 to 8265 feet/min
- Classical belts belt speed v = 985 to 5905 feet/min

Design Hints

Installation, Maintenance and Storage



Power Transmission

Correct design of drives using Optibelt V-Belts ensures long belt life and a high degree of operating safety. Premature failure can often be traced back to faulty installation or maintenance, thus the following recommendations are very important.

● Safety

Before beginning any maintenance it is extremely important that any and all drive motors and other drive components are completely turned off. Care should be taken that these cannot be switched on again while work is taking place. This will ensure the safety of the maintenance workers.

● Pulleys

The grooves should be in good condition, free from scores or sharp edges, and all dimensions should conform to the relevant standard.

● Alignment

Shafts and pulleys should be correctly aligned prior to belt installation. We recommend a maximum tolerance of $\pm 1/2^\circ$ in both planes.

● Multiple V-Belt Drives

For multiple V-Belt drives it is necessary to assemble the belts in matched sets either by measurement or by examination of the manufacturer's code numbers or other markings. It may also be necessary to remeasure the belts if they have been stored for any length of time. Optibelt V-Belts in S=C PLUS and Optibelt SUPER TX M=S construction may be used in matched sets without the need for reference to code marks, measurement, or remeasurement after storage.

● Installation of the V-Belts

The drive center distance should be reduced prior to the installation of the belts so that they may be fitted without undue force. The severe stresses placed upon V-Belts if they are forced over the pulley flanges can damage the cover fabric and the high quality, low stretch tension members.

● Belt Tensioning

The drive should be tensioned (see initial installation) correctly and retensioned (see re-tension) after between 30 minutes and 4 hours at full load, to compensate for the

small initial belt stretch and "bedding" into the pulley grooves.

● Idler Pulleys

Where possible the use of idler pulleys should be avoided. If for design reasons, such an arrangement is necessary, then an inside idler should be used in preference to an outside idler. For other details refer to our Technical Manual.

● Maintenance

It is recommended that V-Belt drives should be regularly inspected for loss of belt tension, unusual heat build up or wear. Retension or replace when necessary.

Should an individual belt in a matched set require replacement for any reason, a complete new set must be fitted.

Belts from different manufacturers must not be mixed on the same drive.

Optibelt V-Belts need no special attention. Belt dressings must not be used.

● Summary

The physical properties of correctly stored V-Belts will not change over a period of many years (see also DIN 7716). In poor storage conditions and with incorrect handling, rubber products are, however, subject to changes in their physical properties. These changes can for example, be caused by the effects of oxygen, ozone, temperature, light, moisture and solvents.

● Storage Area

The storage area should be dry, dust free and reasonably well ventilated.

V-Belts must not be stored close to chemicals, solvents, fuels, lubricants and acids etc.

● Temperature

The storage temperature should be between $+15^\circ\text{C}/+59^\circ\text{F}$ and $+25^\circ\text{C}/+77^\circ\text{F}$. Normally lower temperatures are not detrimental to V-Belts. Since, however, they become very stiff at low temperatures, before fitment they should be warmed to a temperature of approximately $+20^\circ\text{C}/+68^\circ\text{F}$ to avoid ruptures and cracks.

Radiators and their supply lines should be guarded. The distance between a radiator and the stored V-Belts must be at least three feet.

● Light

V-Belts should be protected against light, especially direct sunlight and high intensity artificial light having a high ultra violet content (ozone formation) such as naked fluorescent tubes. Illumination utilising conventional light bulbs is advisable.

Where possible windows should be painted with a red or orange protective paint. Under no circumstances should blue be used.

● Ozone

In order to counteract the harmful effects of ozone, warehouses should not contain any ozone producing appliances, for example fluorescent lights, mercury vapour lights or high voltage electrical equipment. Combustion gases and vapors which may lead to the formation of ozone by photo chemical processes must be avoided or eliminated.

● Moisture

Damp store rooms are unsuitable. Care must be taken to ensure that condensation does not occur. The most favorable relative air humidity is below 65%.

● Storage

Because stresses can promote both permanent deformation and the formation of cracks, care must be taken to ensure that V-Belts are stored without stress, i.e. without tension, pressure or any other form of deformation.

If V-Belts are stored horizontally and stacked upon each other, it is recommended that the stack height does not exceed 300 mm to avoid deformation. If, to save space, V-Belts are hung, the diameter of the cylinder on which the belts rest should be at least ten times the height of the belt section.

optibelt S=C PLUS and optibelt SUPER TX M=S belts do not have to be stored in sets or remeasured before sale.

● Cleaning

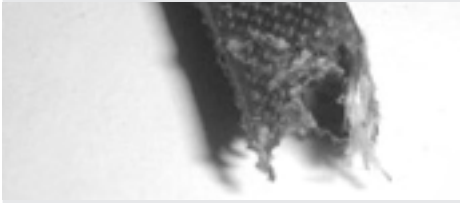



Contaminated V-Belts can be cleaned using a 10:1 glycerine-spirit mixture. Benzene, benzol, and turpentine amongst others must not be used.

In addition, sharp edged objects, wire brushes, emery paper etc. must not be used under any circumstances; such action is damaging.

Design Hints

Problems – Causes – Remedies






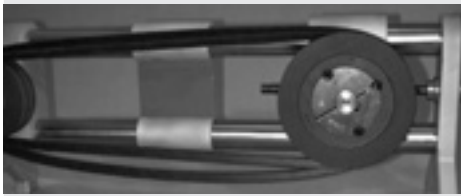
Problems	Causes	Remedies
<p>Belt breaking after fitting</p> 	<p>Forcing belt over pulley when fitting, damaging cord and cover</p> <p>Ingress of a foreign body, e.g. a stone, during running</p> <p>Insufficient belts, or wrong section, for drive</p> <p>Drive stalled</p>	<p>Reduce drive center distance to fit belt</p> <p>Fit an effective guard</p> <p>Check drive details and fit correct number or section of belts</p> <p>Ascertain cause and put right</p>
<p>Cuts and splits in the base of the belt</p>  	<p>Outside idler pulley in use</p> <p>Pulley diameter too small</p> <p>Ambient temperature too high (above +70 °C/+158 °F)</p> <p>Ambient temperatures too low (below -40 °C/-104 °F)</p> <p>Abnormal belt slip</p> <p>Contamination by oil or chemicals</p>	<p>Replace with inside idler pulley on the slack side of the drive. Increase the size of the existing idler. Use Optibelt special construction</p> <p>Redesign using recommended minimum pulley pitch diameters. Use Optibelt special construction such as Optibelt SUPER TX M=S</p> <p>Ensure good ventilation and protect the belts from direct heat. Use Optibelt XHR special construction (extra heat resistant)</p> <p>Warm area surrounding drive. Use Optibelt XCR special construction (extra cold resistant)</p> <p>Check drive design to ensure correct number of belts, redesign if necessary. Check drive tension</p> <p>Protect drive from contamination. Use Optibelt XOR special construction (extra oil resistant)</p>
<p>Severe belt vibration</p>	<p>Drive has insufficient belts</p> <p>Center distance longer than recommended</p> <p>High shock loading</p> <p>Too low belt tension</p> <p>Unbalanced pulleys</p>	<p>Check drive design and modify if necessary</p> <p>Shorten centers. Use an inside idler in the drive slack side. Redesign using Optibelt KB kraftbands</p> <p>Use Optibelt KB kraftbands. Use an inside idler pulley in the slack side. Refer to our engineers for recommendation of special construction</p> <p>Correct</p> <p>Balance pulleys</p>
<p>Belts cannot be retensioned</p> 	<p>Insufficient allowance for stretch in drive design</p> <p>Excessive stretch caused by insufficient belts or wrong belt section for drive</p> <p>Incorrect belt length</p> <p>Belts from different manufacturers used on same drive</p>	<p>Modify drive to allow more take-up</p> <p>Recalculate drive design and modify</p> <p>Use a shorter belt</p> <p>For use as a matched set, belts must be from one manufacturer</p>

Design Hints

Problems – Causes – Remedies



Power Transmission

Problems	Causes	Remedies
<p>Belts turn over in pulleys</p> 	<p>Poor drive alignment Incorrect pulley groove section or excessive wear in grooves Excessive belt flap Low belt tension Worn out belts Ingress of a foreign body</p>	<p>Realign Renew pulleys Use an inside idler on drive slack side or Optibelt KB kraftbands Retension Renew belts Use a more effective drive guard</p>
<p>Excessive wear on belt flanks</p> 	<p>Incorrect pulley groove angle Incorrect pulley section Excessive wear in pulley grooves Poor drive alignment Small pulley diameter below recommended minimum Belt catching on protruding parts</p>	<p>Renew or remachine pulleys Renew pulleys Renew or remachine pulleys Realign Redesign using correct pulley diameters. Use a special construction such as Optibelt SUPER TX M=S Remove protrusions or move drive away</p>
<p>Excessive noise</p>	<p>Poor drive alignment Incorrect belt tension Overloaded drive Unbalanced pulleys</p>	<p>Realign Retension Check drive details and redesign if necessary Balance pulleys</p>
<p>Belt swelling or softening</p> 	<p>Contamination by oil or other chemicals</p>	<p>Protect drive from contamination. Use Optibelt XOR special construction (extra oil resistant) or Optibelt SUPER TX M=S construction. Clean pulley grooves with petrol or alcohol before fitting new belts</p>
<p>Unusual belt stretch</p> 	<p>Worn or badly machined pulley grooves Used belts mixed with new belts on the drive Belts from different manufacturers used on same drive</p>	<p>Remachine or renew pulleys Replace with a completely new set of belts Belts must be from one manufacturer Optibelt S=C PLUS, Optibelt SUPER TX M=S</p>

Further clarification of the various remedies shown above can be found in the "Optibelt Technical Manual".

Notes



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optibelt

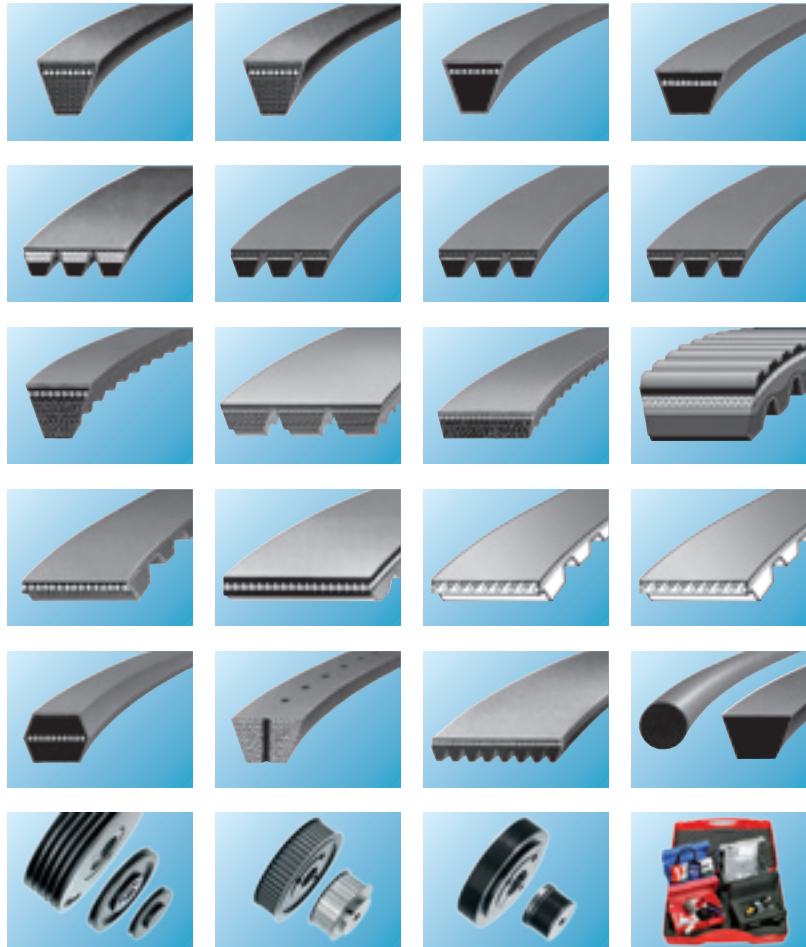


Product Range



Power Transmission

- **optibelt RED POWER II**
High performance wedge belts, maintenance-free
- **optibelt BLUE POWER**
High performance wedge belts
- **optibelt SK**
Wedge belts
- **optibelt VB**
Classical V-belts
- **optibelt DK**
Double section V-belts
- **optibelt Super X-POWER M-5**
V-belts, raw edge, moulded cogged
- **optibelt Super KBX-POWER**
Kraftbands, raw edge
- **optibelt KB RED POWER II**
High performance kraftbands
- **optibelt KB**
Kraftbands
- **optibelt SUPER VX**
Variable speed belts, raw edge, moulded cogged
- **optibelt SUPER DVX**
Double section variable speed belts, raw edge, moulded cogged



- **optibelt ZR**
optibelt ZR linear
Chloroprene timing belts
- **optibelt OMEGA HL**
optibelt OMEGA HP
optibelt OMEGA FanPower
optibelt OMEGA linear
Chloroprene timing belts
- **optibelt ALPHA Power**
optibelt ALPHA linear / V
optibelt ALPHAflex
Polyurethane timing belts
- **optibelt RB**
Ribbed belts
- **optibelt RR / RR PLUS**
Plastic round section belting
- **optibelt KK**
Plastic V-belting
- **optimat OE**
Open-ended V-belting, punched
- **optibelt K5**
V-grooved pulleys
- **optibelt ZR5**
Timing belt pulleys
- **optibelt RB5**
Ribbed belt pulleys
- **optibelt Service KIT**