

AUTOMOTIVE TECHNOLOGY COMPACT CATALOGUE





AUTOMOTIVE TECHNOLOGY COMPACT CATALOGUE



ABOUT US

140 years of quality

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CAR POWER

CAR POWER Product information,
MARATHON 1, ZRK, RBK and KIT,
OEM references

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TRUCK POWER

TRUCK POWER Product information
(COMMERCIAL VEHICLES & BUSES),
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OEM references

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SALES PROMOTION

TecDoc, OPTIBELT ConNect,
sales promotion material

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QUALITY PRODUCTS BY OPTIBELT FOR OVER 140 YEARS, AHEAD

optibelt **ZRK**

top quality for
cam shaft drives in
vehicle engines

WHETHER THEN OR NOW: MAGNIFICENT PRODUCT
QUALITY IS OPTIBELT'S SECRET TO SUCCESS.

Passion meets precision – this is
OPTIBELT's motto. In addition to that,
it is also the title of a fascinating
success story. Why? Because
only a combination of passion for
technical progress and maximum
precision in the production process
results in products that fully satisfy
the highest of requirements.

Years of development have caused
OPTIBELT to become a brand name for
quality and innovative drive solutions
throughout the industry and beyond.
Furthermore, it has established

drive belts as an efficient and cost-
effective alternative to mechanical
drives and chain drives in first class
technical equipment. The result:
Being a transmission element in many
technically sophisticated products such
as harvesters, household appliances
or machine tools, not to mention
motor vehicles for example, we could
never imagine a world without belts.

But also, even though a lot has
been achieved – one thing is
for sure: The next innovations
are already in progress.

PASSION MEETS PRECISION

From rubber thread production in a Westphalian
province to an international group – the story
of OPTIBELT has not only been full of success,
but has also been quite eventful.



SCAN A QR CODE – SHOWTIME!



OPTIBELT – HEAD OF ITS TIME



LETTERKENNY, IE

BURNHAUPT-LE-HAUT, FR

RINTELN, DE

HÖXTER, DE

BAD BLANKENBURG, DE

TAUTII-MAGHERAUS, RO

TAICANG, CN

INFINITELY GOOD: TOTAL QUALITY MANAGEMENT AT OPTIBELT

Seven locations – one quality.
You can count on it.

Whether manufactured in China, Ireland, or Germany: OPTIBELT guarantees quality for all its products that is consistent worldwide. An extensive Total Quality Management system makes this possible throughout the entire value-added chain. Starting from the selection of materials used and the laboratory equipment, all the way to the unique and, in part, self-developed machine engineering technology that is implemented around the globe using the same processes and procedures – for each area, high standards of quality

apply that are continuously being verified and optimised.

The heart and soul of all our products naturally consist of the people that put in their commitment, their expertise and their ideas on a daily basis here at OPTIBELT. The continuous training of all our members of staff is therefore our utmost priority. Experiences have shown: The introduction of Total Quality Management has been a complete success. In other words: Where the name OPTIBELT is printed, there is always OPTIBELT on the inside.

OPTIBELT CAR POWER

“For professionals,
there is no getting
past OE quality!”

Michael, 33, mechatronics technician



TRUST IS THE MOST VALUABLE
CAPITAL OF A PROFESSIONAL
WORKSHOP

Trust is the basis for success. Nothing is more aggravating than to frivolously jeopardise this trust – e.g., by installing cheap components. It is for this reason that more and more professional repair shops worldwide rely on OE quality by OPTIBELT. The engineers of the German family-run business invest a lot of time and even more energy into the research of materials. In the process, drive belts come into being that stand up to ever-increasing levels of stress and are impressive due to their extreme level of durability.



Ribbed V-belts
optibelt **RBK**
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Repair kit
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Tension and guide idler pulleys
optibelt **SUR**
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optibelt MARATHON 1

V-BELTS

RAW EDGE, MOULDED EDGE

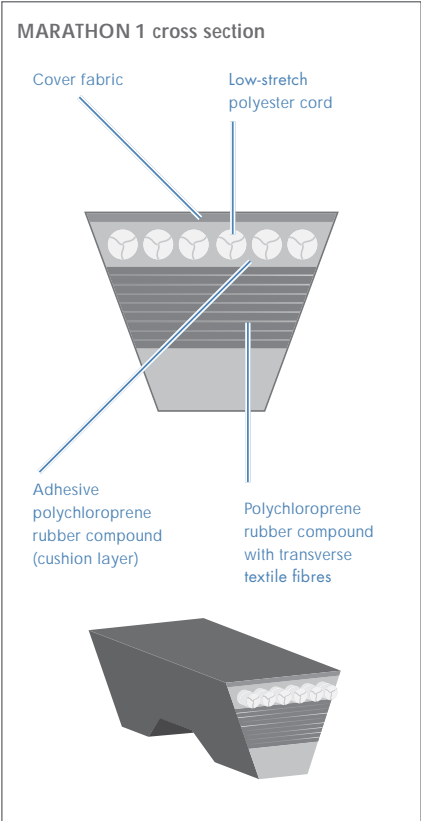


The **optibelt MARATHON 1** was especially developed for the drive of ancillary components in passenger car engines. This raw edge and moulded edge V-belt is distinguished by its high level of durability and its low-stretch tension behaviour.

The characteristics of the **MARATHON 1** make its use especially cost-effective requiring low maintenance. Any mechatronic engineer would be enthused by its smooth running, even in the case of small pulley diameters for propelling alternators, water pumps, air conditioning compressors, or power steering.

PROFILES
AVX 10; AVX 13; AVX 11; AVX 11,2; AVX 11,5; AVX 11,9
With regard to their cross sections and dimensions, the AVX 10 and AVX 13 profiles are compliant with DIN 7753, part 3, as well as the standards ISO 2790 and SAE.
V10; V13; V15; V20 JASO E107:2000, Attachment 1
10A; 11A; 13A; 15A; 17A; 20A SAE J636

- PRODUCT BENEFITS**
- High level of durability
 - High efficiency
 - Low-maintenance operation
 - Very smooth running
 - Excellent tension behaviour



optibelt RBK

RIBBED V-BELTS

RIBBED V-BELTS, ELASTIC



The **optibelt RBK** is a high-performance ribbed V-belt for all modern standard ancillary component drives in passenger cars and transporters.

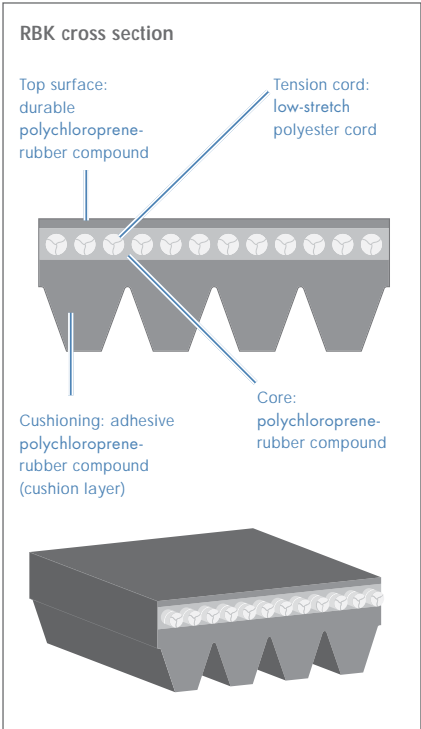
By means of its high level of flexibility, this belt construction enables space to be saved when configuring ancillary components, an ever-increasing constraint in the passenger vehicles of today. By using elastic ribbed V-belts, tensioning systems can be done without. This solution supports the automotive industry in its endeavours to increase flexibility, reduce weight, optimise costs and reduce CO₂ emissions.

Even under environmental influences such as dust, moisture and extreme temperatures, the **RBK** provides for secure and silent power transmission. Whether combined with modern tensioning systems or as elastic ribbed V-belts: the **RBK** satisfies vehicle manufacturer requirements and achieves the highest level of operational performance.

PROFILES
PJ; PK; DPK; EPK

PRODUCT BENEFITS

- High transmission ratio
- High power transmission
- Minimum slip
- High resistance to temperature
- Low levels of noise and vibrations



optibelt ZRK

TIMING BELTS



The **optibelt ZRK** fulfils the high demands of automobile manufacturers. This timing belt provides synchronous drives for cam drive pulleys or balance shafts even after thousands of kilometres. Due to ideally matched materials, the **ZRK** achieves outstanding results with regard to performance and durability.

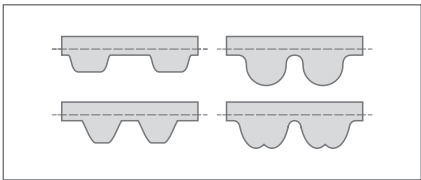
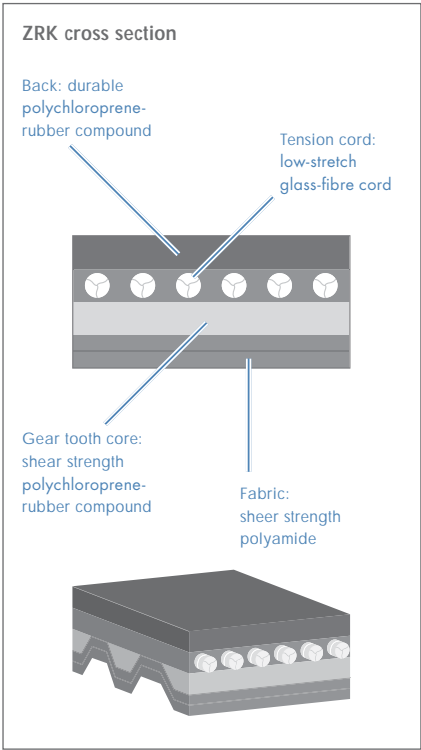
Its sophisticated material combinations are exemplary including abrasion resistant fabric, stretch-free tension members and resistant elastomers.

PROFILE ASSORTMENT

Profiles and dimensions upon request

PRODUCT BENEFITS

- High efficiency
- Maximum durability and operational safety
- High resistance against abrasion, heat and cold
- High tensile strength and length stability



FILEX



optibelt RBK

I B L E



THE ELASTIC RIBBED V-BELT BY OPTIBELT

Optimal for frictional drives in passenger cars: Elastic ribbed V-belts by OPTIBELT do without tensioning devices or automatic tensioners whilst maintaining the same level of operational performance. Elastic ribbed V-belts are implemented at medium power ranges and centre distances. Tension is maintained throughout the entire product lifespan thanks to elastic tension members. Elastic ribbed V-belts by OPTIBELT are light weight and save on space, thereby sinking the costs of the drive.

THE ADVANTAGES OF ELASTIC RIBBED V-BELTS:

- Lower costs in both the original equipment and replacement business
- Belt tensioners have to be replaced at low effort during maintenance
- By doing away with tensioning devices, vehicle manufacturers are supported with regard to their developments in the field of lightweight construction

EVERYTHING

THE OPTIBELT KIT REPAIR SETS

Those leery of making compromises concerning spare parts can offer maximum security and a drive system that functions flawlessly. Worldwide, professional repair shops play it safe when changing timing belts and rely on precision by OPTIBELT.

Our repair kits are made of optimally aligned components which are changed in a single working process for safety and economical reasons.

- Vehicle specific **optibelt ZRK** timing belts
- Appropriate tension and guide idler pulleys
- Relevant accessories
- Optional with or without a water pump

The **optibelt KIT** repair sets save from having to carry out the laborious process of ordering individual parts.



ALL ADVANTAGES AT A GLANCE!

all parts included
in a single repair set –
optional with or without
a water pump

in tried and tested
OE quality

functional packaging

for all conventional
passenger cars

YOU NEED



The **optibelt SUR** tension and guide idler pulleys provide for the necessary operational tension in addition to guiding timing belts in passenger vehicle engines. Due to high requirements concerning durability, noise level and

safety, it is necessary to change components in a belt drive all at the same time. From fixed eccentric tension pulleys all the way to modern systems with hydraulic or mechanical attenuation, the **SUR** assortment includes all the necessary components. In doing so, high quality standards ensure that the necessary replacement intervals are maintained and prevent problems with respect to sensitive engine management.

Made in
Germany

optibelt

Made in
Germany

optibelt



OPTIBELT IS THE FIRST CHOICE

The **innovative** and **highly complex engine** of the **1 series BMW** won the "Engine of the Year" award. A success that made us very happy. This is because OPTIBELT had designed a perfectly matched ribbed drive, especially for this model.

Even at Porsche, our drive solutions have been successful:

For the **911 series, Boxster & Cayman**, the premium manufacturer from Zuffenhausen trusts in OEM quality from OPTIBELT.





PORSCHE



OPTIBELT – GIGANTIC EVEN IN THE SMALLEST DETAIL

For the Volkswagen Group, we have developed a belt with improved resistance to slip due to moisture. The **VW up!**, among other models, is equipped with this. Its advantage: It works absolutely free of noise even under the most extreme conditions.

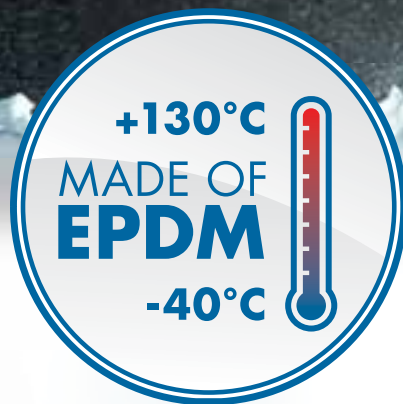


ORIGINAL EQUIPMENT QUALITY BY OPTIBELT

Original equipment quality by OPTIBELT is impressive worldwide. The German company manufactures high performance products using precision tooling and machines that derive from in-house development according to processes that only implement the use of OPTIBELT. Furthermore, all materials are subject to a very demanding series of tests. For example, they are tested for durability and resistance against chemical effects. In this way, products come into being with characteristics that ensure the quality advantage of OPTIBELT again and again. Long ago, the company made a name for itself as a partner of the international auto industry and proudly looks back to a continuously growing list of references.

TWO FOR ALL

OPTIBELT has the right ribbed V-belts for every type of environment and every drive geometry. Having optimised wet slip resistance, the optibelt **RBK** doesn't slip even under the wettest of conditions. At extreme temperatures, you can rely on the RBK made of EPDM.



THE RBK MADE OF EPDM

Conventional drive belts get hot and cold. Not to mention that **optibelt RBK** ribbed V-belts made of EPDM clearly go beyond the limits of performance for drive belts. With temperature resistance from -40 to +130°C, they deliver high performance even in extreme climate zones. Thanks to optimised slip resistance and low-level noise development, they open up a complete new scope with regard to innovative drive design.



L ELEMENTS

THE RBK WITH LOTUS EFFECT

The water simply forms beads on these drive belts and the power transmission takes place completely free of noise. Does not slip. Does not squeal. Enables optimal performance, even in a moist environment.



DEVELOPMENT AUTOMOTIVE T

OPTIBELT provides for trouble-free drive, and not just under an engine cowl. Our technology is in many other details: Door opener, headrest and exterior mirror are electronically operated with the aid of timing belts for example. Our elastomer film is used in ventilation flaps. Thanks to OPTIBELT's development expertise, there is an appropriate solution for every application.

Navigation system

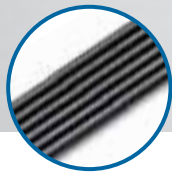
Glove compartment

Ancillary components /
engine management

Bend lighting

Breaks

Exterior mirror



ANCILLARY
COMPONENTS /
ENGINE
MANAGEMENT
optibelt **RBK**
optibelt **ZRK**

The construction of new engines is facing ever-increasing demands on minimum space requirements. Small pulley diameters and shallow construction depths help in doing this. Being especially silent and versatile, the flexible ribbed V-belt, **optibelt RBK** provides for control of the ancillary components.



EXTERNAL
MIRROR
optibelt **OMEGA**

Timing belts for
electronic adjustment
of external mirrors

T EXPERTISE TECHNOLOGY



HEADREST optibelt **OMEGA**

Timing belts for electronic adjustment of headrests



DOOR OPENER optibelt **ALPHA**

Timing belt for automatically opening and closing doors



VENTILATION FLAPS optibelt **OPTIMIT**

We develop special elastomer films for leading automobile manufacturers. These are used in ventilation flaps.

OPTIBELT TRUCK POWER

“No compromises.
With OPTIBELT,
I’m on the move.”

Jens, 41, professional driver



THE HIGHEST LEVEL OF RELIABILITY

There is hardly any other field that is more reliant on engine safety and reliability than the freight and long distance transport industry. Replacing cheap components and the resulting downtimes cost enormous amounts, especially when a company is operating under the conditions of Just-In-Time production. It is for this reason that professional repair shops responsible for the maintenance of such fleets rely on the OE quality and precision that OPTIBELT offers.



V-belts
optibelt **MARATHON 2 M=S**
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optibelt TRUCK POWER MARATHON 2 M=S

V-BELTS

RAW EDGE, MOULDED EDGE



The **optibelt MARATHON 2 M=S** was especially developed for driving ancillary components in commercial vehicles and buses.

In the case of multi-groove drives, due to its manufacturing tolerances, the precision ground V-belt can even be used unmeasured in the set. This can be identified by the additional specification M=S (matched sets). The characteristic of being the same in length makes handling simpler, prevents double inventory and enables extremely smooth running – especially in the case of multi-groove drives.

Furthermore, the **MARATHON 2 M=S** is especially low stretch and extremely durable. Its durability is around 40–60% higher than that of a standard belt. This enables cost-effective and safe operation of the lorries and buses.

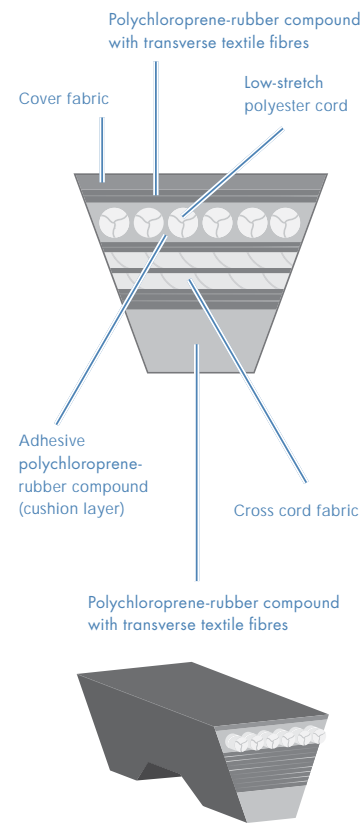
PROFILES

AVX 10; AVX 13; AVP 13

PRODUCT BENEFITS

- Installed without measuring
- Reinforced construction
- High level of operational safety
- Low-maintenance operation and predictable maintenance intervals
- High abrasion resistance

MARATHON 2 M=S cross section



optibelt

TRUCK POWER KBX

KRAFTBANDS

RAW EDGE, MOULDED EDGE



The **optibelt KBX** kraftbands are especially well suited for critical drive systems in commercial vehicles and buses. By means of their compact construction, vibrations of extended wheelbases can be considerably reduced. With tear resistant, transversely rigid top surface and precision-milled substructure, **KBX** kraftbands serve many vehicle manufacturers as a troubleshooter on high stress drives in air compressors, air conditioning units and ventilator fans.

PROFILES

AVX 10 – 2 ribs
AVX 13 – 2 ribs
XPB – 2 ribs

PRODUCT BENEFITS

- Low-maintenance operation
- Very smooth running
- No twisting in the belts
- Low level of vibration
- High abrasion resistance

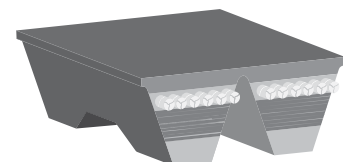
KBX cross section

Top surface made from durable polychloroprene-rubber compound

Low-stretch polyester cord

Polychloroprene-rubber compound with transverse textile fibres

Adhesive polychloroprene-rubber compound (cushion layer)



optibelt

TRUCK POWER RBK

RIBBED V-BELTS

RIBBED V-BELTS, ELASTIC



The **optibelt RBK** is a high performance ribbed V-belt for all modern standard ancillary component drives in commercial vehicles and buses.

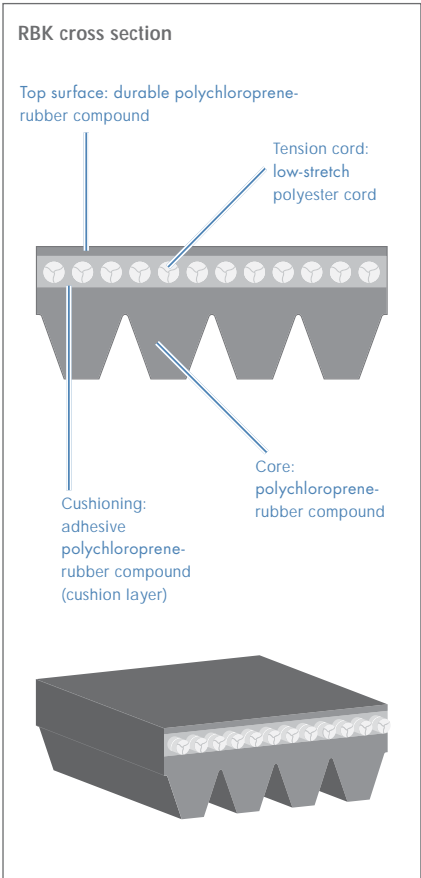
By means of its high level of flexibility, this belt construction enables space to be saved when configuring ancillary components, an ever-increasing constraint in the commercial vehicles and buses of today. Tensioning systems can even be done without using additional elastic ribbed V-belts. This solution supports the automotive industry in its endeavours to achieve flexibility, light construction, and cost optimisation.

Even under environmental influences such as dust, moisture and extreme temperatures, the **RBK** provides for secure and silent power transmission. Whether combined with modern tensioning systems or as an elastic ribbed V-belt: the **RBK** satisfies vehicle manufacturer requirements and achieves the highest level of operational performance.

PROFILES
PK

PRODUCT BENEFITS

- High transmission ratio
- High power transmission
- Minimum slip
- High resistance to temperature
- Low levels of noise and vibrations
- Optimised wet slip resistance



OPTIBELT KIT TRUCK POWE

Whether people or goods are being conveyed:

In the transport business, there is really strong competition. That makes it even more important to avoid expensive and time-consuming vehicle failure. Therefore, OPTIBELT offers complete repair sets that are especially assembly-friendly. An **optibelt KIT** for commercial vehicles comprises a ribbed V-belt with corresponding tension and guide idler pulleys.

All components are perfectly aligned to one another. We always recommend to change them completely. If regularly checked, such failures due to wrong tension caused by defect tension pulleys can be almost completely excluded. Upon request, we would be happy to send you the **KIT** cross-over list or our brochure **Assembly and Maintenance** with more details on the repair sets and how to use them.



ALL ADVANTAGES AT A GLANCE!

all parts included
in a single repair set

in tried and tested
OE quality

functional packaging

for all conventional
commercial vehicles
and buses



FOR HIGH PE



An ever-increasing number of commercial vehicle manufacturers are deciding on drive solutions by OPTIBELT for original equipment. Our products already rank number one in Germany for buses. Our customers include renowned manufacturers such as Mercedes-Benz, Volvo, NEOPLAN, MAN and SETRA. Our advantage: In developing drive solutions, we cooperate intensively with our customers. Even for small series runs, we offer individual solutions. In this way, we not only achieve a high level of efficiency and a low level of fuel consumption, but also considerably higher durability. Furthermore, by using highly dynamic rubber combined with cord designs and aramid fibres, we have developed a belt that enables operational performance lasting over a million kilometres. Workshop visits and downtimes are considerably reduced in this manner.

YEARS OF EXPERIENCE

Already produced and improved since 1948, OPTIBELT vehicle drive solutions. This results in products of the highest level of quality.

ALL-ROUND SERVICE

Starting from the planning of a new belt drive to quick help in the case of repair – we address your needs.



PERFORMANCE

LESS FUEL CONSUMPTION,
LONGER HOURS OF OPERATION,
MORE PROFITABILITY

Every drive solution by OPTIBELT is a perfectly aligned construction: One of our most used belts is the **optibelt RBK 15**. In addition to higher operational performance and power transmission, it is impressive due to excellent noise behaviour and is therefore called **OPTIBELT WHISPERING BELTS** in the industry.



DAF VOLVO



RENAULT
TRUCKS



TRUCK POWER
TRUCK POWER
TRUCK POWER

SERVICE TOOLS



optibelt
OPTIKRIK O, I, II, III
for measuring the tension
of V-belts, kraftbands,
and ribbed V-belts

Regularly use the tension gauge to check if the V-belt, the kraftband or the ribbed V-belt is running properly in your vehicle. Handling the measuring gauges is simple. Our field service team will be happy to assist you.



optibelt
MEASURING GAUGE
for measuring inner lengths
of V-belts, timing belts
and ribbed V-belts

The **optibelt MEASURING GAUGE** is the perfect aid for measuring inner lengths. It is possible to measure lengths between 500 and 2500 mm.

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



optibelt **LASER POINTER II**
for the precise alignment
of the drive

OPTIBELT recommends the handy **optibelt LASER POINTER II** for aligning drives. Alignment is easier because it is not necessary to hold a levelling cord and the powerful and bright laser beam is visible on the silver target magnets.

The assembly engineer can perform alignment quicker and more accurately. Less friction means less wear on pulleys and belts, longer running time, thus resulting in fewer downtimes. Reduction in spare parts costs. In the case of severe or large drives therefore, use of several the **LASER POINTER II** pays off already in the first month of purchase.



optibelt

MT-A & MT-A II

for safe and proper installation of elastic
optibelt **EPK** V-ribbed belt

With the **optibelt MT-A** you have a universal tool at your disposal that can replace many expensive special tools used by automobile manufacturers. The belts can therefore be installed properly and quickly. The **EPK** belt and a screw driver or socket spanner are the only things that are additionally needed to manually turn the driving pulley.

Maintenance can be performed on several vehicles due to this special functionality of the tool. It is designed for use of the long term. Its purchase is recommended to every workshop that would like to be, and must be equipped for the new generation of belts and their special type of assembly.



SCAN A QR CODE – SHOWTIME!
THE OPTIBELT MT-A & MT-A II IN USE



PRODUCT BENEFITS

- Easy handling
- Additional aid for disassembly of old belts
- Prevents twisting or damage to belts

optibelt

TT-A

for quick and exact determination
of correct drive belt tension

The new **optibelt TT-A** frequency meter makes it possible for commercial vehicle repair shops to determine and regulate the correct tension quickly and in an uncomplicated manner. In this way, during maintenance and the replacement of drive belts, you are always on the safe side. Using the device is simple: After start up, the device is immediately ready for measuring. The pretensioned belt is caused to vibrate by plucking it with a finger or another object. The resulting belt vibrations are detected by the detecting element.

The measured value is indicated in Hertz on the display of the device. The required configuration values for multiple vehicles can be determined simply by checking the supplied manual. This type of measurement has stood the test of time for years at OPTIBELT and reflects the current state of the art. The **TT-A** measures the tension of **RBK** and **ZRK** belts as well as OE and OE-identical timing belts and ribbed V-belts.



PRODUCT BENEFITS

- Simple 1-button operation
- Compact detecting element, even in the case of narrow engine compartments and areas that are difficult to access
- Well readable LCD display
- Automatic shut-down after 3 min.
- Acoustical measuring signal

PROBLEMS, CAUSES AND REMEDIES

HARDENED, POLISHED EDGES

CAUSES

1. Pulleys do not align
2. Reinforcement damaged through improper assembly
3. Incorrect set combination

REMEDIES

1. Check drive, align non-aligned pulleys, and install a new belt set properly
2. Change belts and ensure professional assembly
3. Always replace the entire belt set



HEAVY DUTY WEAR ON EDGES, BRITTLE EDGES

CAUSES

1. Slip too great
2. Pulleys do not align
3. Rinsed pulley grooves

REMEDIES

1. Change belts, set correct tension
2. Check drive, align non-aligned pulleys, replace if necessary
3. Align or replace pulleys, change belts



BREAKAGE AND FRAYING IN THE BASE COMPOUND/PROFILE

CAUSES

1. Belt tensioning too high/low
2. Lifetime has been exceeded
3. Foreign objects

REMEDIES

1. Change belts, set correct tension
2. Change belts
3. Change belts



RUNNING NOISE OF THE BELT

CAUSES

1. Tension too low
2. Lifetime has been exceeded

REMEDIES

1. Re-tension the belt or replace
2. Change belts



SOILING OF THE BELT**CAUSES**

1. Leakage in engine or engine compartment (e.g., escape of oil, antifreeze etc.)

REMEDIES

1. Remove leak, change belts

**UNEVEN WEAR OF THE PROFILE****CAUSES**

1. Pulleys do not align
2. Strong belt vibrations

REMEDIES

1. Check drive, align non-aligned pulleys, change belts if necessary
2. Check tension, re-tension the belts or replace if required

**BELT CRACK AFTER SHORT RUNNING TIME****CAUSES**

1. Reinforcement damaged due to improper assembly
2. Tension too high

REMEDIES

1. Change belts and ensure professional assembly
2. Change belts, set correct tension

**HARDENED, POLISHED EDGES****CAUSES**

1. Improper tensioning
2. Reinforcement of the belt damaged through improper assembly

REMEDIES

1. Change belts, set correct tension
2. Change belts and ensure professional assembly



Due to the high and maintenance-free performance, continued use of the optibelt **MARATHON 1** and **MARATHON 2 M = S** is particularly economical.

PROBLEMS, CAUSES AND REMEDIES

optibelt **ZRK** – optimal power transmission even after thousands of hours of operation under extreme forms of stress. It is for these high requirements that OPTIBELT developed the ZRK timing belt.

WEAR ON EDGES

CAUSES

1. No axially parallel setting; belts run against flanged pulley
2. Wheels are not set axially or timing belt cannot run aligned
3. Flanged pulley has an imperfection bearing clearance of components
4. Clearance of components

REMEDIES

1. Check drive, align non-aligned pulleys and replace if necessary, change belts
2. See REMEDY 1.
3. Replace guide idler pulleys
4. See REMEDY 3.



CRACKING

CAUSES

1. Ambient temperature too high/low
2. Foreign-media contamination
3. Stiff backside idler
4. Ageing

REMEDIES

1. Detect causes (e. g., cooling capacity test) and find remedies, change belts
2. Change belts, ensure the cover is sitting properly
3. Replace pulley, change belts
4. Change belts



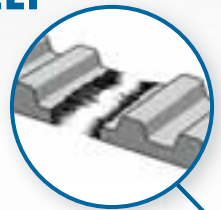
TIMING BELT RIPS

CAUSES

1. Foreign objects in the drive
2. Foreign media contamination
3. Pre-tension too high
4. Kinking the belt before or during assembly

REMEDIES

1. Remove foreign objects, change belts
2. Change belts, ensure the cover is sitting properly
3. Change belts, set correct tension
4. Change belts and ensure professional assembly



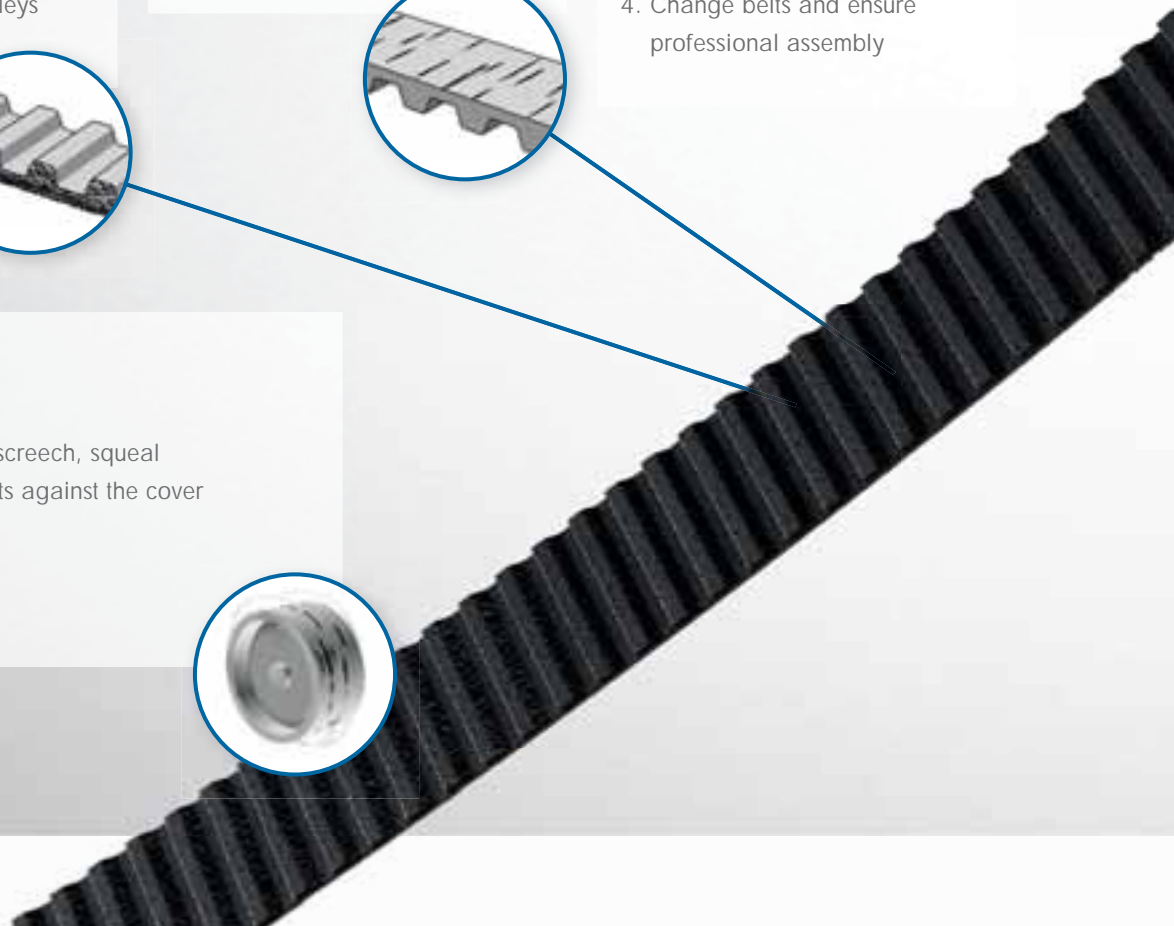
NOISE

CAUSES

1. Tension too high: Belts screech, squeal
2. Tension too low: Belt hits against the cover

REMEDIES

1. Set correct tension
2. See REMEDY 1.



WEAR OF THE FABRIC OF THE BASE

CAUSES

1. Tension set too high
2. Worn timing belt pulley

REMEDIES

1. Change belts, set correct tension
2. Replace timing belt pulley, change belts and ensure professional assembly

WEAR OF THE TOOTH FLANKS / SECTION BREAKS AND TOOTH SHEARER

CAUSES

1. Tension too high / low
2. Foreign objects contamination
3. Fixed timing belt pulley and tension idler

REMEDIES

1. Change belts, set correct tension
2. Remove foreign objects, ensure the cover is sitting properly, change belts
3. Find causes (e.g., faulty storage) and create remedies, change belts

TEETH AND FABRIC DETACH FROM THE BASE COMPOUND

CAUSES

1. Leakage of engine or engine compartment (e.g., escape of oil, antifreeze etc.)

REMEDIES

1. Remove leak, change belts

RUN MARKS ON THE TOOTHED SIDE

CAUSES

1. Foreign objects during timing belt operation
2. Imperfection on the toothing of the timing belt pulley caused by foreign objects or tools during assembly
3. Timing belts damaged before/during assembly

REMEDIES

1. Remove foreign objects, change belts, ensure the cover is sitting properly
2. Replace timing belt pulley, change belts and ensure professional assembly
3. Change belts and ensure professional assembly

FAULTY SYSTEM COMPONENTS

CAUSES

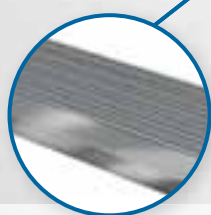
1. Bearing clearance
2. Damaged tread surface

REMEDIES

1. Replace guide roller, tension roller and/or guide roller
2. See REMEDY 1.

PROBLEMS, CAUSES AND REMEDIES

optibelt **RBK** – RBK ribbed V-belts provide for drive of ancillary components in passenger cars, commercial vehicles and buses. Whilst dampening vibrations, they give a generator, air conditioning compressor or a power steering pump the perfect twist.



HARDENED, POLISHED EDGES

CAUSES

1. Improper tensioning
2. Reinforcement of the belt damaged through improper assembly

REMEDIES

1. Change belts, set correct tension
2. Change belts and ensure professional assembly



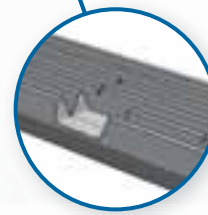
BELT CRACK AFTER SHORT RUNNING TIME

CAUSES

1. Reinforcement of the belt damaged through improper assembly
2. Tension too high

REMEDIES

1. Change belts and ensure professional assembly
2. Change belts, set correct tension



BREAKAGE AND FRAYING BASE COMPOUND / PROFILE

CAUSES

1. Belt tensioning too high / low
2. Lifetime has been exceeded
3. Foreign objects

REMEDIES

1. Change belts, set correct tension
2. Change belts
3. See REMEDY 2.

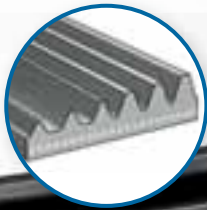
UNEVEN WEAR OF THE PROFILE

CAUSES

1. Pulleys do not align
2. Strong belt vibrations

REMEDIES

1. Check drive, align non-aligned pulleys, change belts if necessary
2. Check tension, re-tension the belts or replace if required



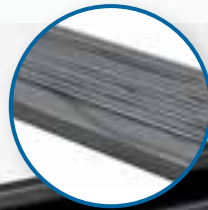
SOILING OF THE BELT

CAUSES

1. Leakage of engine or engine compartment (e.g., escape of oil, antifreeze etc.)

REMEDIES

1. Remove leak, change belts



RUNNING NOISE OF THE BELT

CAUSES

1. Tension too low
2. Lifetime has been exceeded

REMEDIES

1. Re-tension the belt or replace
2. Change belts



FAULTY SYSTEM COMPONENTS

CAUSES

1. Bearing clearance
2. Damaged tread surface

REMEDIES

1. Replace tension and guide idler pulleys
2. See REMEDY 1.

SAFETY TIPS

1. Please observe installation regulations and safety instructions supplied by the manufacturer of the passenger vehicle.
2. Please only perform assembly of the drive belts with special tools and a minimum exertion of force! The use of screwdrivers, crowbars or the like is prohibited.
3. Do not treat the control unit components with corrosive chemicals. Belts must not come into contact with oil or similar substances.
4. Fill in the timing belt adhesive label legibly and stick it firmly in the engine compartment.
5. If individual components are faulty, the other components must also be replaced.

STORAGE

1. Store timing belts at +15 to 25°C.
2. If stored properly, the level of quality will be maintained for years.
3. If stored improperly, e.g. through contamination of oxygen, light, extreme temperatures or moisture, the physical properties can change and the belts will become unusable.

IMPORTANT

Until they are used, the drive belts should remain in their original packaging and stored free of any tension. When stacking, a height of 300mm should not be exceeded or deformation may occur.

AT FULL BLAST

For our distribution partners, we are giving all we've got: Whether purchasing or sales – with various measures of action and services OPTIBELT ensures that business runs **better**.



TECDOC

THE HIGHEST LEVEL OF PRECISION WHEN TRANSFERRING DATA – OPTIBELT IS A "TECDOC CERTIFIED DATA SUPPLIER".

TecDoc provides repair shops and business with current and comprehensive data for the identification and ordering of parts – for the passenger cars industry as well as the industry for commercial vehicles. The information is made available directly from the data bases of cooperating automotive component manufacturers in standardised catalogue format. As a reliable TecDoc partner that meets the related quality criteria require in every aspect, OPTIBELT was awarded the quality label "TecDoc Certified Data Supplier".

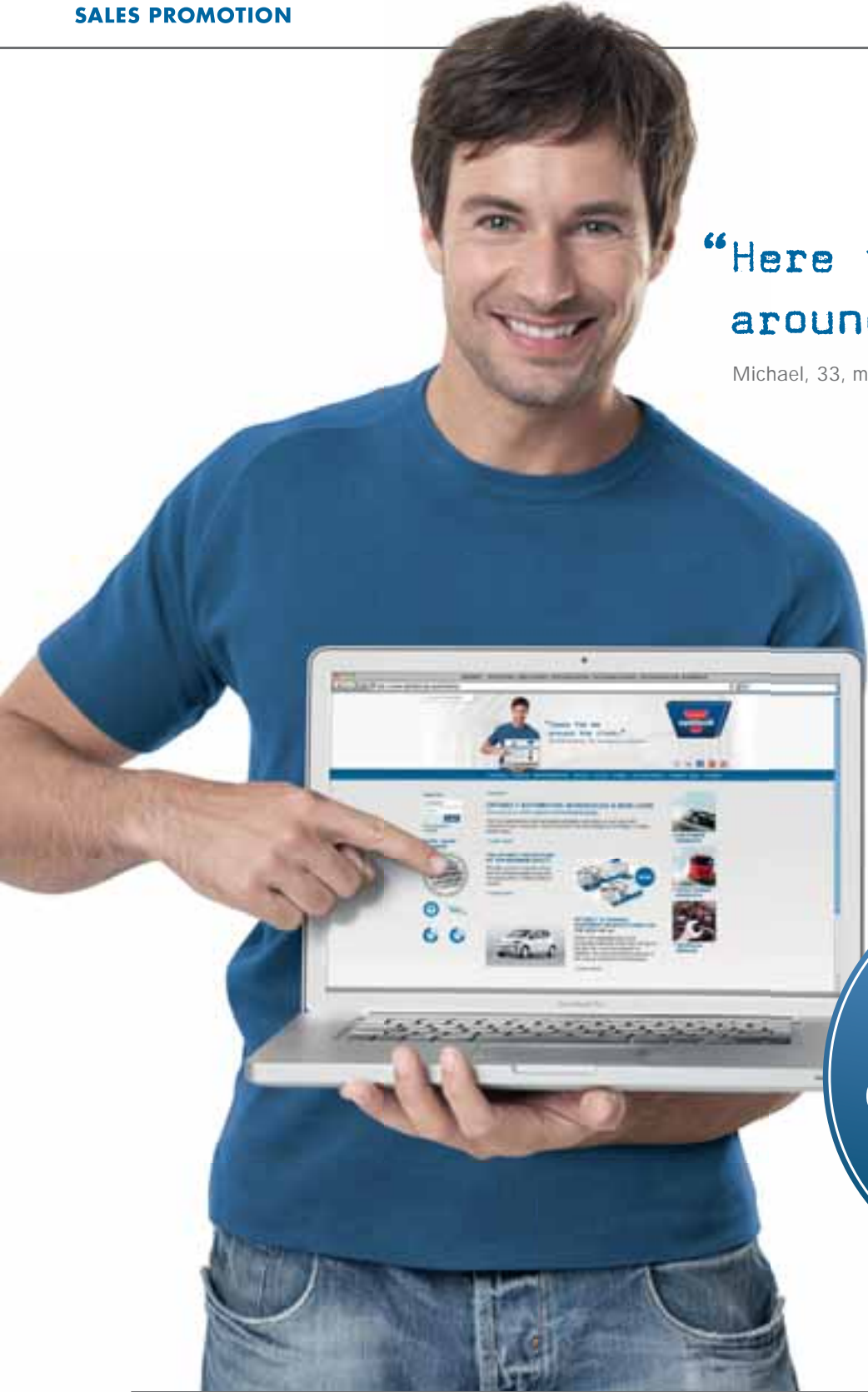


PARTSLIFE

ENVIRONMENTAL PROTECTION MEANS MORE TO OPTIBELT THAN JUST COMPLYING WITH LEGAL REQUIREMENTS.

The question is: How can we reduce ecological, economic and social responsibility down to a common denominator? With the environmental management system, Partslife, which is specialised for the motor vehicle industry, OPTIBELT has a reliable system with regard to environmental protection at its side.





“Here for me,
around the clock.”

Michael, 33, mechatronics technician

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OPTIBELT SALES PROMOTION

Customer service is OPTIBELT's first priority. Simple and clearly arranged exposure to our products and information is very important to us. In order to provide an optimal presentation and sales support for both businesses and repair shops, we would like to offer you a large range of POS materials with the current OPTIBELT look, such as posters, compact catalogues, stand-up floor and counter displays. Guaranteed, with a single glance, you will find the necessary information or the right product, whether it be V-belts, timing belts, toothed ribbed belts, tension and guide idler pulleys, or our service tools. And for a little fresh drive here and there, there is the "power to go" energy drink from the chic OPTIBELT cooler.

QUIPPED



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