



# POWER TRANSMISSION FANS & COMPRESSORS



# SPECIALISTS

## FOR AIR CONDITIONING & FANS

“For greater efficiency.”

Norbert, 42, engineer

### IN WORLDWIDE USE

As an experienced specialist in the area of ventilator and compressor technology, OPTIBELT has the ideal drive solution for even the most extreme requirements. OPTIBELT's maintenance-free, high performance belts are highly valued for their reliability and efficiency, which guarantee optimal productivity. They have already proven their worth many times over, which is why they are now in demand across the globe.

### OPTIBELT SUCCESS STORY

## BETTER SAFETY THANKS TO optibelt RED POWER BELTS



The ventilation systems in the “THORP” reprocessing plant at Sellafield in England are liable to be exposed to high temperatures. Conventional drive belts used in these systems suffered frequent failures as a result. Unplanned maintenance in such a sensitive environment is highly undesirable, so in 2010, after advice from OPTIBELT's engineers, the operator began equipping his plant with **optibelt RED POWER** maintenance-free wedge belts.

The result: To date, there have been no further drive-related failures in the ventilation systems.

### OPTIBELT SUCCESS STORY

## LONGER LIFE-SPAN WITH LOWER COSTS

In its ice-cream and biscuit factories, the Swiss food producer Midor AG has to satisfy stringent requirements with regard to the climate in the buildings. Previously, this was only possible at great expense and with high maintenance costs.

Midor AG therefore decided to switch to **optibelt RED POWER** high performance, maintenance-free wedge belts. This allowed the company to halve the costs associated with the previously used flat-belt drives and to profit from a significantly higher level of operational reliability.



# OPTIMUM PRODUCTIVITY

No delays, no disruptions.

In many branches of industry, ventilators and compressors make a crucial contribution to maintaining perfect production conditions and processes. The drive systems used here have to withstand extreme speeds, forces and thermal conditions on a continuous basis. Such conditions call for reliable "drivers" that transmit the necessary forces efficiently and without stoppages. This is where OPTIBELT's high performance belts come into play. In addition to meeting the highest safety requirements, these belts also offer noticeable benefits with regard to costs and maintenance expenses.



## 1. PISTON COMPRESSORS

Tried-and-tested "all-rounders" in various sizes that can be used in a variety of applications: from car workshops through to large-scale industry.



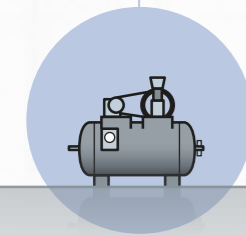
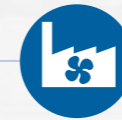
## 3. AIR-CONDITIONING IN BUILDINGS

Air-conditioning systems need to be ready for operation around the clock, and this places heavy demands on their drive mechanisms.



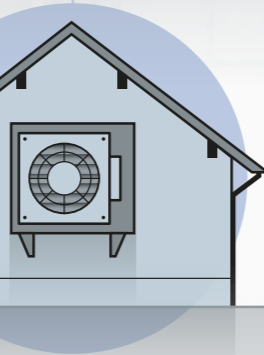
## 5. INDUSTRIAL VENTILATORS

Whether used for cooling, air-conditioning, explosion protection or transport: Today, ventilators form an integral part of production processes.



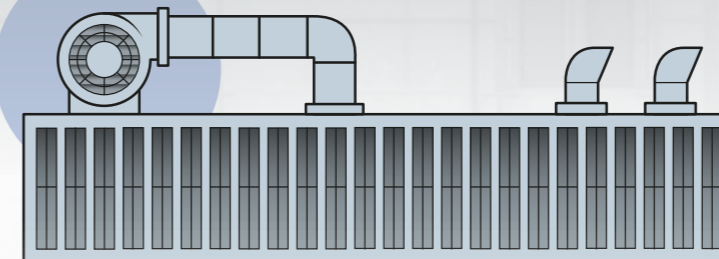
## 2. SCREW COMPRESSORS

These run particularly quietly and are used mostly in vehicle and hydraulic motors, but also for the circulation of cooling water, for example.



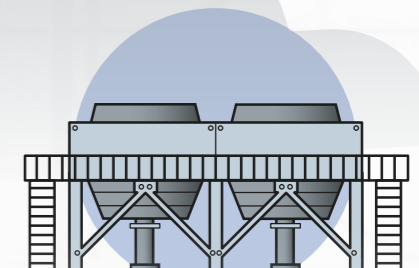
## 4. COOLING SYSTEMS

These are used in many industrial processes to protect machinery from overheating. The equipment used must therefore be robust and reliable.



## 6. HEAT EXCHANGERS

These systems have to withstand extreme thermal conditions, but still need to function perfectly at all times – this presents a particular challenge for the materials and machinery used.

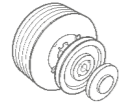


## optibelt SK S=C Plus

### HIGH PERFORMANCE WEDGE BELTS



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



#### DIMENSIONS

SPZ	487–3550 mm
SPA	732–4500 mm
SPB	1250–8000 mm
SPC	2000–12 500 mm
3V/9N	25–140 inches

Other profiles + dimensions on request

#### ADVANTAGES AND CHARACTERISTICS

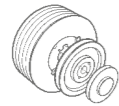
- polyester cord
- specially developed with general machine construction in mind
- transmits more power than the classic V-belts with comparable top width
- V-belts in reliable S=C Plus quality

## optibelt VB S=C Plus

### CLASSIC V-BELTS



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



#### DIMENSIONS

A/13	437–5030 mm
B/17	610–7140 mm
C/22	1148–8058 mm
D/32	2075–11 275 mm
E/40	3080–12 580 mm

Other profiles + dimensions on request

#### ADVANTAGES AND CHARACTERISTICS

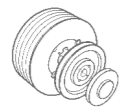
- polyester cord
- greater flexibility in bending than wedge belts
- particularly suitable for use in industrial applications
- V-belts in reliable S=C Plus quality

## optibelt RED POWER 3 S=C Plus

### HIGH PERFORMANCE WEDGE BELTS



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



#### DIMENSIONS

SPZ	1202–3550 mm
SPA	1207–4000 mm
SPB	1250–8000 mm
SPC	2000–10 000 mm
3V/9N	47.5–140 inches

Other profiles + dimensions on request

#### ADVANTAGES AND CHARACTERISTICS

- maintenance-free polyester cord
- suitable for back-bend idlers
- up to 50% higher performance than **optibelt SK**, making it possible to use smaller drives
- V-belts in reliable S=C Plus quality

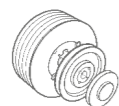
maintenance-free

## optibelt SUPER TX M=S

### CLASSIC V-BELTS



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



#### DIMENSIONS

ZX/X10	597–1522 mm
AX/X13	605–3380 mm
BX/X17	610–3390 mm
CX/X22	1058–3408 mm

Other profiles + dimensions on request

#### ADVANTAGES AND CHARACTERISTICS

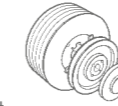
- extremely small pulley diameters
- extremely high power capacity
- extraordinary efficiency
- improved abrasion resistance
- low stretch
- M=S matched sets, can be installed without measuring

## optibelt SUPER X-POWER M=S

### HIGH PERFORMANCE WEDGE BELTS



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



#### DIMENSIONS

XPZ	587–3550 mm
XPA	707–3550 mm
XPB	1250–3550 mm
XPC	2000–3550 mm
3VX/9NX	25–140 inches
5VX/15NX	50–140 inches

#### ADVANTAGES AND CHARACTERISTICS

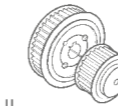
- high level of performance, extremely low stretch
- optimised running characteristics
- M=S matched sets, can be installed without measuring
- low level of maintenance

## optibelt OMEGA HP

### HIGH PERFORMANCE TIMING BELTS



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



#### DIMENSIONS

2M HP	74–1224 mm
3M HP	111–1569 mm
5M HP	180–2525 mm
8M HP	288–3280 mm
14M HP	966–4578 mm

Other profiles + dimensions on request

#### ADVANTAGES AND CHARACTERISTICS

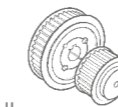
- high performance timing belt for extremely large loads at high rotational speeds
- antistatic in accordance with ISO 9563 for profiles 8M HP and 14M HP
- for HTD and RPP timing belt pulleys
- maintenance-free

## optibelt OMEGA FAN POWER

### HIGH PERFORMANCE TIMING BELTS



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



#### MODELS

**optibelt OMEGA FAN POWER**  
Temperature range in operation  
–30 °C to +100 °C

**optibelt OMEGA FAN POWER EPDM**  
Extended operating temperature range  
–40 °C to +140 °C

#### ADVANTAGES AND CHARACTERISTICS

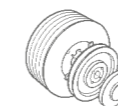
- lower noise level
- wear-resistant and long service life
- antistatic in accordance with ISO 9563
- for HTD and RPP timing belt pulleys
- maintenance-free
- with 8M FP and 14M FP profiles (see product range for lengths)

## optibelt HVAC POWER S=C Plus

### V-BELTS



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



#### DIMENSIONS

20–47 inches (450–1150 mm)
A/4L – B/5L

For the American market

Other profiles + dimensions on request

#### ADVANTAGES AND CHARACTERISTICS

- high flexibility and low fatigue
- extremely wear resistant and long lasting
- more heat resistant than standard belts
- minimal belt stretch
- smooth running
- V-belts in reliable S=C Plus quality

# THE OPTIBELT TEAM FOR DEVELOPMENT, APPLICATIONS AND SERVICE



## SOFTWARE TOOLS AND SPECIALIST CONSULTING

OPTIBELT's free CAP software allows users to quickly and easily calculate their specific drives. For more complex drive systems, CAP Professional gives users the ability to perform detailed variable calculations. CAP's efficiency calculator will also compare available drives with those already optimised.

OPTIBELT application engineers are always available to provide advice to customer's operations around the world. They can assist in optimising the drives for entire plant operations.



## SERVICE SUPPORT

To make sure that all machines run reliably, OPTIBELT also offers personal support in drive assembly, maintenance and service on site around the world. OPTIBELT's broad range of tools, measuring devices and service tools allow for easy drive optimisation, maintenance and repair.



## OPTIBELT CUSTOM PRODUCTS

OPTIBELT offers custom high performance products for all applications: Customised products are designed to precisely meet customer's drive application requirements. OPTIBELT engineers develop tailored drive solutions for superior efficiency and safety.

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