



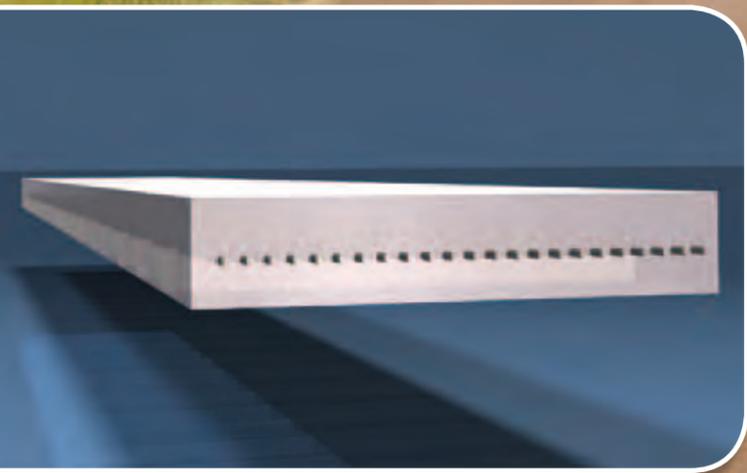
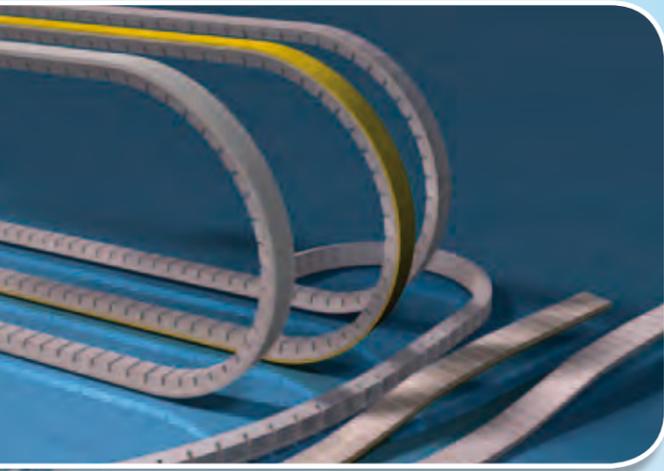
We move
the world }
for you.

FERR□PAN[®] - V-belts

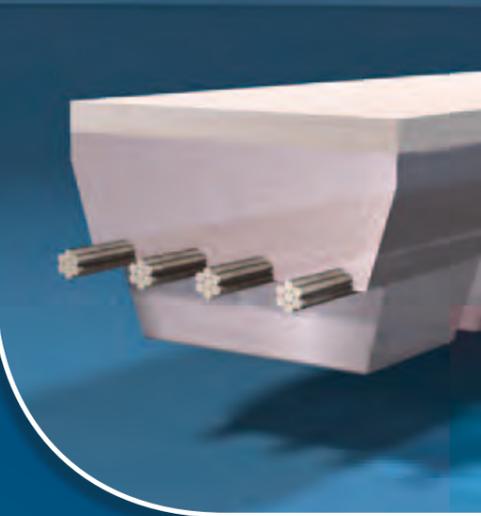
An element with
outstanding properties.



Klocke



FERROPAN® - V-belt & the elephant: two kindred spirits



Every day, 394 different skeletal muscles ensure the smooth and safe movement of up to seven tonnes of live weight, even at speeds of nearly 40 km/h. Remarkable traction and, above all, incredible strength! The **impressive strength** and **excellent traction**, however, are by no means the only things that the elephant and the FERROPAN® V-belt have in common.

The technically advanced FERROPAN® V-belt – the “gentle giant” among V-belts – also has an **exceptional load capacity**. It is so **impervious, maintenance-free and durable** that one could think it was surrounded by a thick protective skin.

But there is more: the FERROPAN® V-belt also has special conveying properties. It is ideally suited for heavy loads on long conveyor runs – even under challenging conditions.

The “wood and furniture industry” is not the only place FERROPAN® and the elephant call home. The FERROPAN® V-belt and this trunked animal also provide faithful services in the agricultural industry, for example. Speaking of trunks, 40,000 bundles of interwoven muscles give this part of the body its flexibility. FERROPAN® performs its drive and conveying tasks with just as much **flexibility** and **power**.

By the way, did you know that the elephant walks on its tiptoes and has a sixth toe at the back of its feet? An extraordinarily intelligent whim of nature, which is reflected in the clever integration of the absolutely **secure steel cords** in FERROPAN® V-belts for higher tensile strength. Elephant and FERROPAN® – **two kindred spirits**.

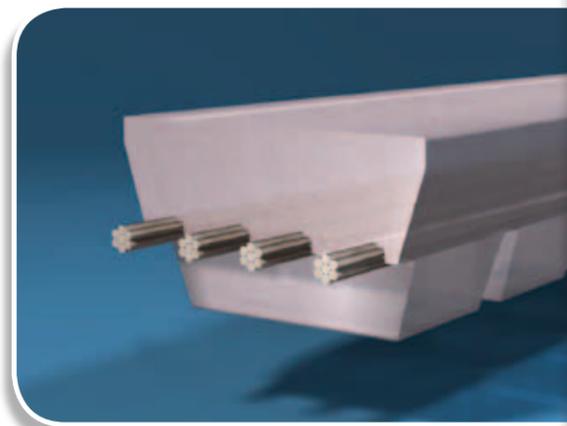


An element with outstanding properties

- **structurally sound**
- **straight running**
- **minimal take up adjustment necessary**
- **long lifespan**
- **resistant to oil and grease**
- **tropicalised and flexible at low temperatures**
- **pliable**
- **small pulleys**
- **low elongation**
- **excellent tear resistance**
- **tight length tolerance**
- **resistant to ageing**
- **maintenance free**

The properties of FERROPAN® V-belts meet today's high practical demands. A tear-resistant and stretch-resistant highly flexible steel cord and very structurally stable, ageing-resistant polyurethane guarantee operational reliability.

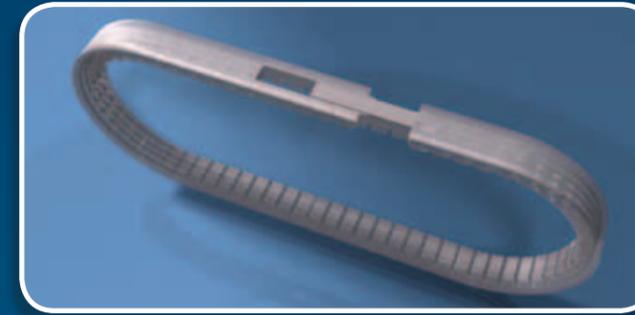
FERROPAN® V-belts are produced using a special manufacturing process. A highly stable connection with above-average bond strength is created between the steel cords and the polyurethane.



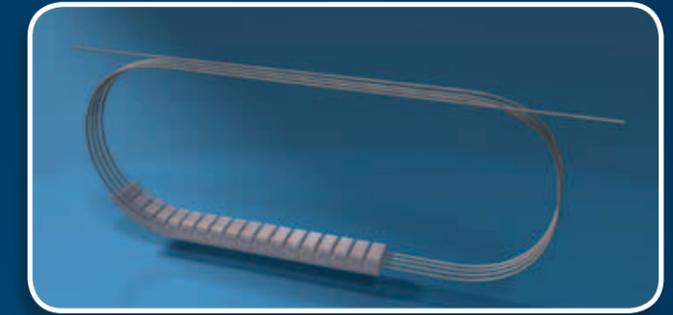
The advantages:

- high bond strength connection between the steel cord and polyurethane
- endless length with high strength welds
- high tensile strength
- excellent resistance to wear and abrasion
- extreme resistance to rough conditions
- excellent elasticity and damping properties in the heavy load range

FERROPAN® V-belts are prepared and delivered according to your individual requirements. Whether made endless through welding or manufactured from continuous polyurethane. Integrated steel tension members provide high rigidity, as well as low elongation during operation.



Welded FERROPAN® V-belt



Truly Endless FERROPAN® V-belt
(without tension member interruption)

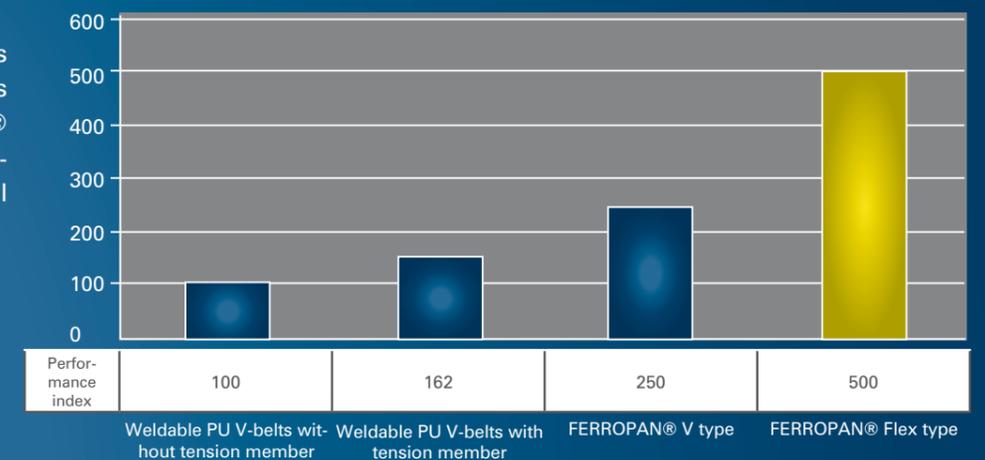
The well-established FERROPAN® V V-belts start as open ended roll stock. The bulk stock is securely welded together to produce an endless V-belt, which can be delivered quickly at any length required and without additional tool costs.

Properties and tolerances meet the highest technical and chemical standards. This simple FERROPAN® design solution is more cost-effective than comparable solutions not utilizing FERROPAN® V.

FERROPAN® Flex is the next development stage of V. FERROPAN® Flex belts are endless V-belts with a continuous tension member, which are used for particularly demanding conditions, especially high pull forces. FERROPAN® Flex enables greater load capacities due to the embedded steel cord tension member even in applications with back bending.

FERROPAN® performance comparison

The following chart shows how effective the properties of the FERROPAN® product range are compared to conventional PU V-belts:

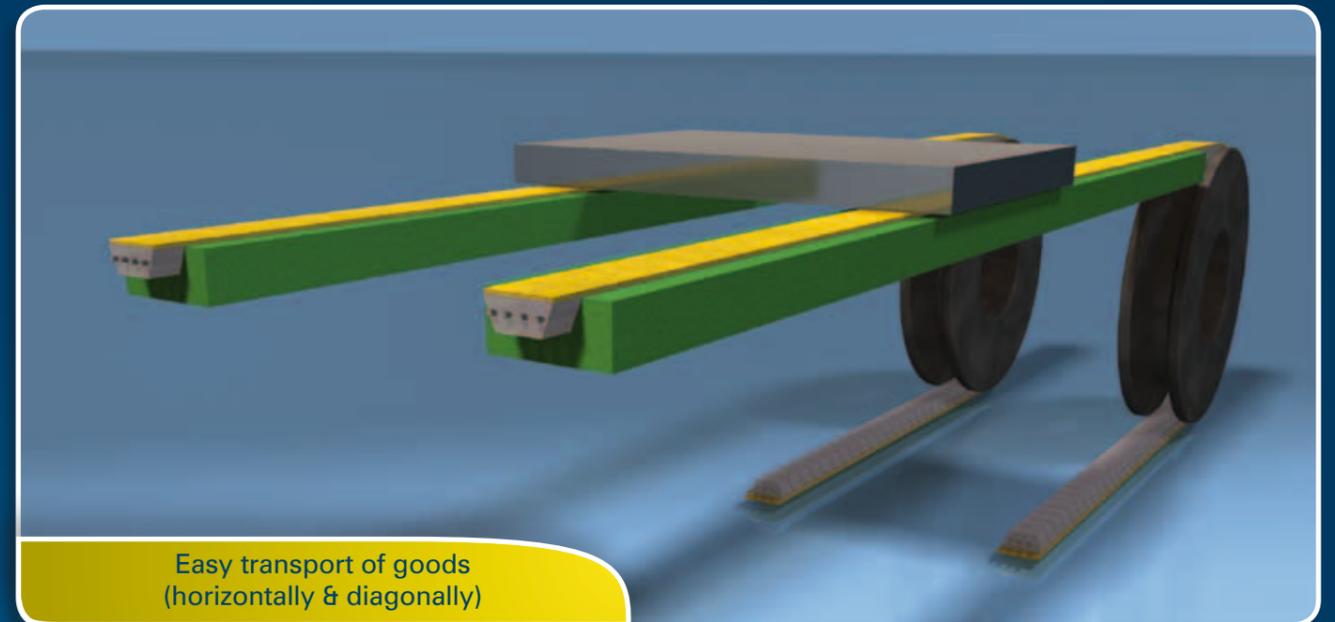


FERROPAN[®] V-belts are very well suited for use on long conveyor runs. Even increasing or decreasing slopes and shaft spacings of over 25 m are no problem! Instead of more intricate wide conveyor belts – use them individually or with several lines alongside each other.

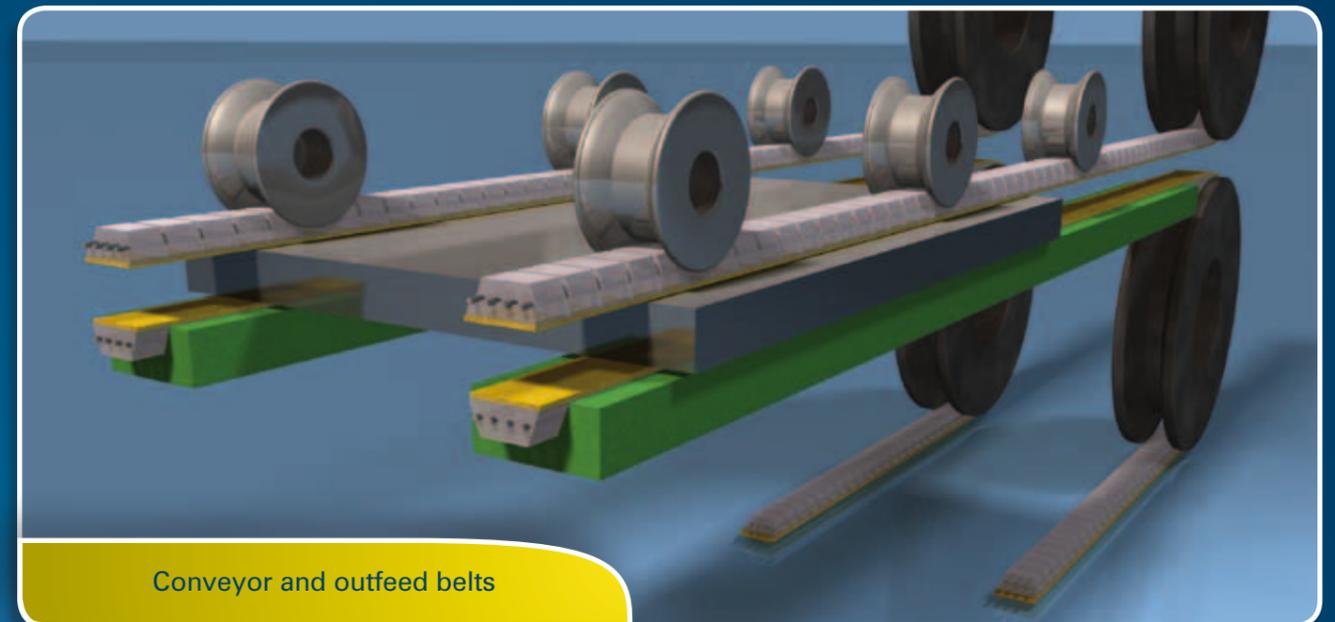
The excellent durability under tough requirements and demanding conditions sets the impressive FERROPAN[®] V-belt apart. Whether as a drive belt or conveyor belt: FERROPAN[®] V-belts always deliver excellent performance in every application.

Areas of use

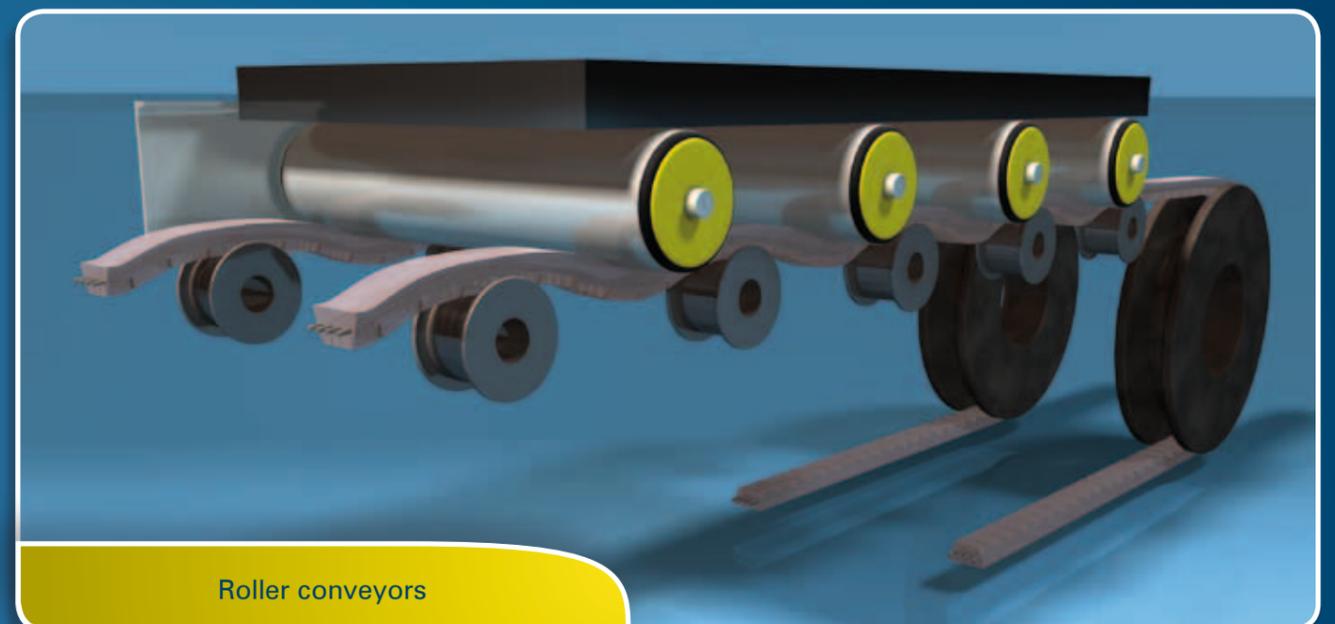
Wood and furniture industry, stone and concrete plants, glass factories, beverage industry, packaging machines, shipping departments, paper factories, sheet metal processing, automotive industry, foil processing, textile operations, agriculture and other industries.



Easy transport of goods
(horizontally & diagonally)



Conveyor and outfeed belts



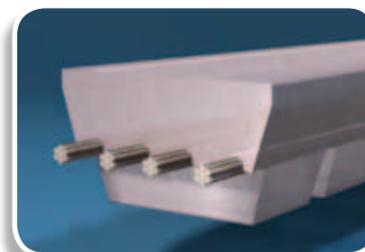
Roller conveyors

Profile and combination options

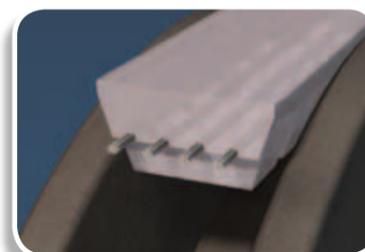
Guide, support and pressure rollers with a wedge angle of 38 degrees match the FERROPAN® geometry. The drive and diverting pulley angles are to be designed in accordance with DIN ISO. The geometric consistency of the FERROPAN® V-belts and the good material properties allow for belt tracking with guide, support and pressure rollers at the edge or base of the pulley. In special cases, it is also possible to combine both options.

To ensure that the FERROPAN® V-belt conveys smoothly, refer to the pulley size chart on the following page. The FERROPAN® V-belt is ideal for use as a conveyor belt. Belts with an added cover, such as foam or rubber, utilize the same standard pulleys. The additional thickness of the belt can be used as a take away conveyor. Reducing the outside diameter of the pulley exposes more belt and cover for product transport.

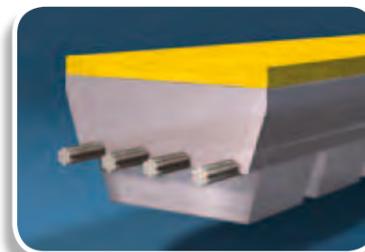
FERROPAN® profile	Associated groove profile
Profile 13	Standard groove 13/A SPA
Profile 17	Standard groove 17/B SPB
Profile 20	Standard groove 20
Profile 30	Groove 30
Profile 32	Standard groove 32/D



Ferropan profile

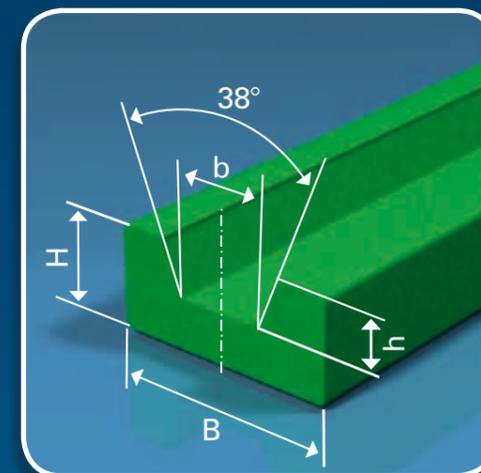


Standard configuration



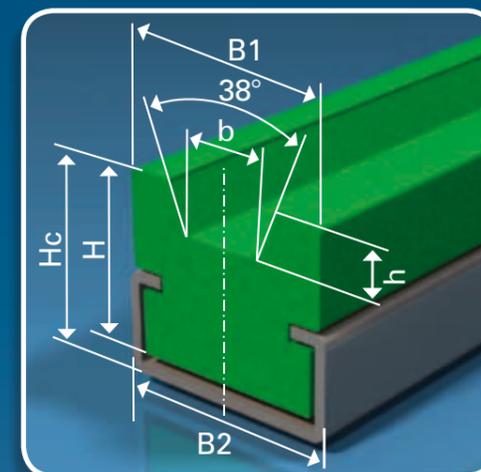
Conveyor design coated

Slider beds



Slider beds are precisely matched up to the standard V-belt geometry. The rail is used to track the V-belt and can handle side load. The standard length of the slider bed is 2000 mm.

FERROPAN® profile	Type	B	H	b	h
Profile 13	KR13	20	12	9,2	6
Profile 17	KR17	30	15	11,5	8
Profile 20	KR20	30	20	13,5	9
Profile 30	KR30	50	25	22	10,5
Profile 32	KR32	50	30	21	16



Guide rails with lateral guides are preferable if large lateral forces act on the belt. The C-profile provides stabilisation and is made of sheet steel. Due to the relatively high temperature expansion of the sliding material, expansion joints must be included in the rail design.

FERROPAN® profile	Type	B1	B2	H	Hc	b	h
Profile 13	KRC13	25	28	18	22	9,2	6
Profile 17	KRC17	30	28	18	24	11,5	8
Profile 20	KRC20	30	28	18	24	13,5	9
Profile 30	KRC30	50	50	23	25	22	10,5
Profile 32	KRC32	60	60	35	40	21	16

Special designs available on request.

Additional coatings



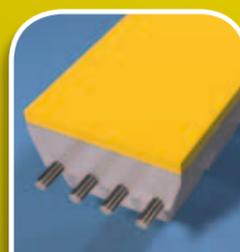
Type T



PU yellow



Linatex



RP 400

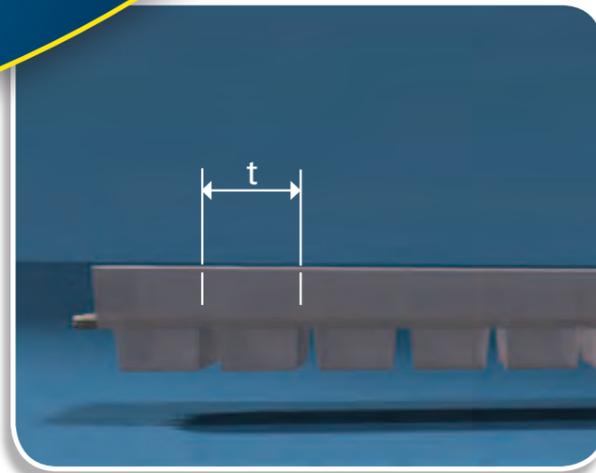


Supergrip

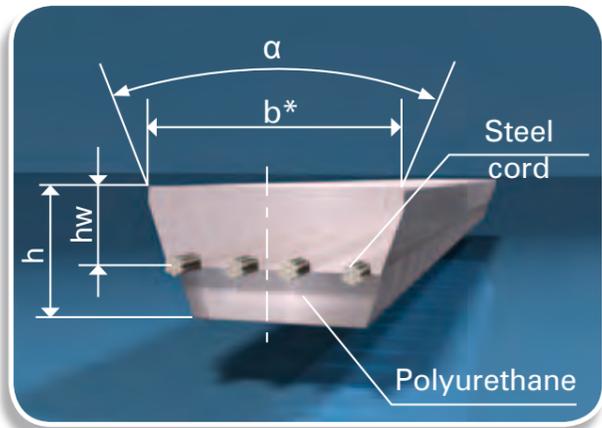
Coating material	Resistance	Areas of use
Type T	-20°C to +80°C; resistant to simple oils and greases, petrol, ozone	General conveyor tasks, glass, sheet metals and mechanically aggressive parts
PU yellow	-10°C to +70°C; resistant to simple oils and greases, non-water-resistant	Infeed and outfeed conveyors on weighing systems, vacuum conveyors and the paper, textile, glass and wood industry
Linatex	-40°C to +70°C; limited oil resistance, resistant to wet abrasion, avoid direct sunlight	Conveyor or outfeed belt with high friction and vacuum bands
RP 400	-35°C to +80°C; resistant to simple oils and greases	Glass and steel industry and abrasion protection
Supergrip	-15°C to +90°C; blue: not oil-resistant; green: limited resistance to solvents, oils and greases, resistant to acids and bases	Inclined conveying, elevating conveyors and the glass industry

Other coatings and colours on request.

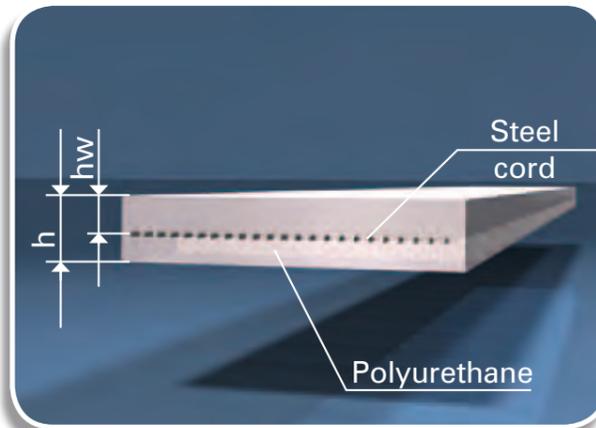
Dimensions



Pitch t



FERROPAN® V-belt



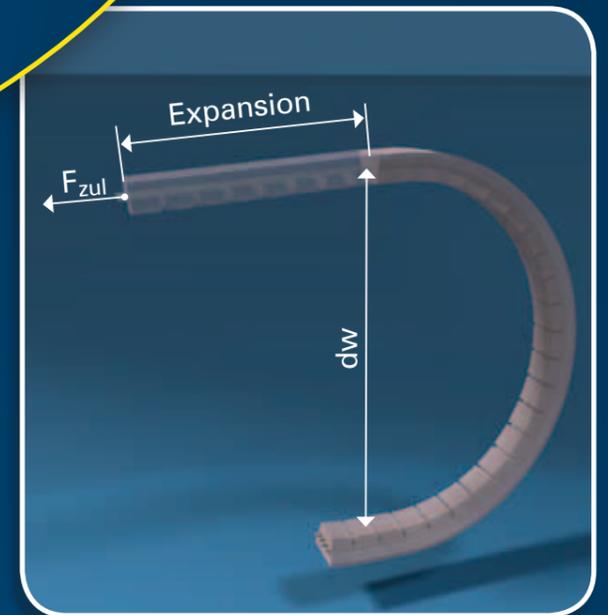
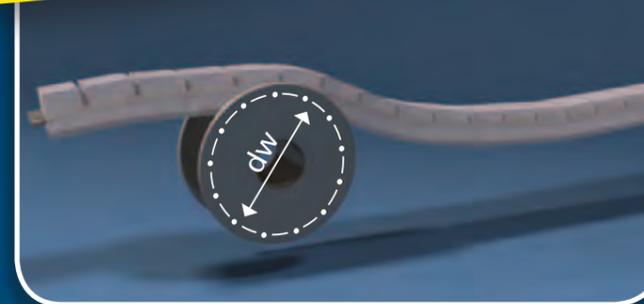
FERROPAN® flat belt

Type: V and Flex	Profile 13	Profile 17	Profile 20	Profile 30	Profile 32	Flat belt 30x6	Unit
Minimum length, Lw min. V type	1200	1500	1600	2000	2500	850	mm
Minimum length, Lw min. Flex type	2500	2500	2500	2500	2500	2000	mm
Length tolerance	± 0,125	± 0,125	± 0,125	± 0,125	± 0,125	± 0,125	%
upper Width, b* ± 0,25	12	16	19	29	31	30	mm
Height, h ± 0,25	6,50	11	10	15	20	6	mm
Wedge angle α	38	38	38	38	38	90	degrees
hw value (for Lw determination)	3,25	4	5	9	8	3,70	mm
Pitch t	8	10	10	15	15	10	mm
Slitted type	yes	yes	yes	yes	yes	yes	

* Due to the capped tips, the upper width size is about 1 mm smaller than the nominal width.

Before choosing a profile and making calculations, please ask for technical assistance.

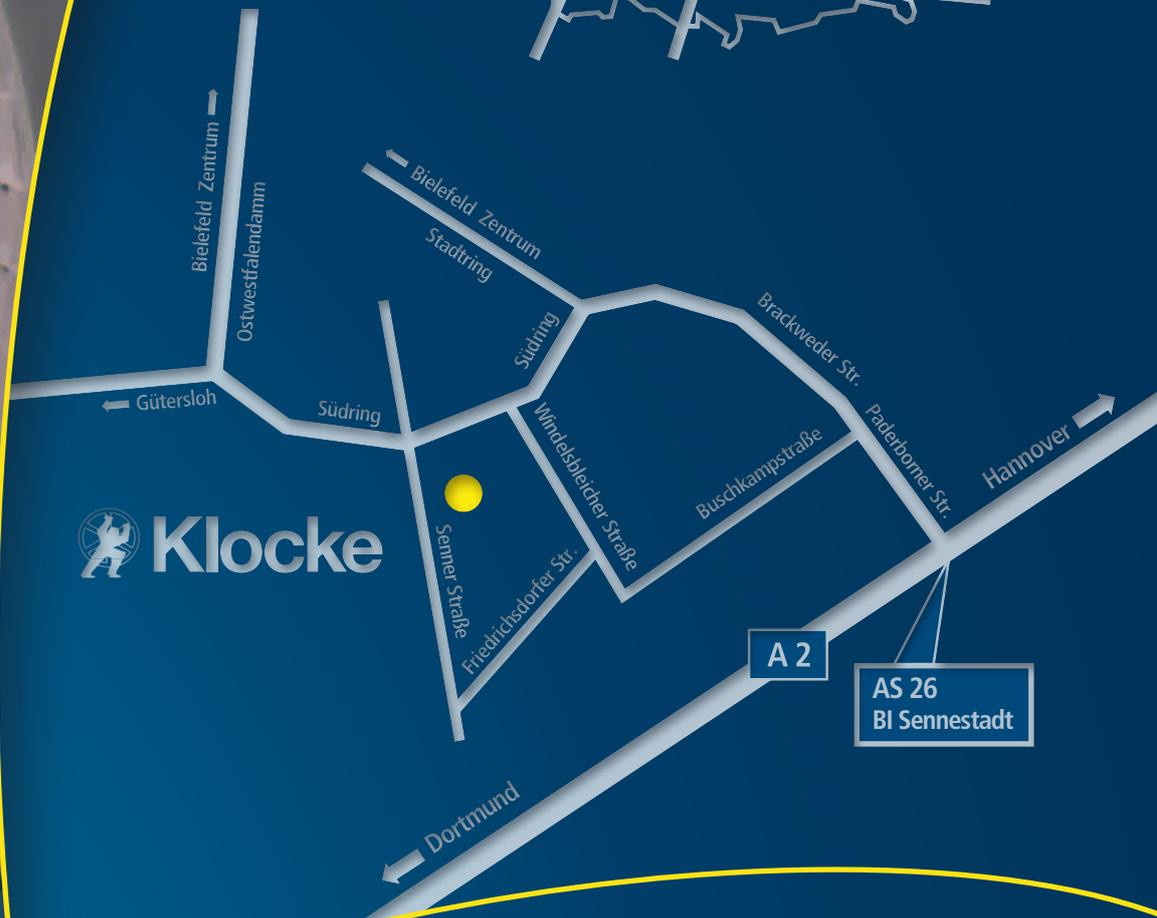
Performance values



Type: V (welded)	Profile 13	Profile 17	Profile 20	Profile 30	Profile 32	Flat belt 30x6	Unit
Not suitable for use with back bending							
V-belt pulley diameter dw min.	75	110	110	200	200	75	mm
Permissible tensile load Fzul (in the connection)	500	800	800	2900	2900	600	N
Elongation with permissible load (in the connection)	0,20 (0,40)	0,20 (0,40)	0,20 (0,40)	0,20 (0,40)	0,20 (0,40)	0,20 (0,40)	%
Breakage resistance* in the connection approx.	4	4	4	4	4	4	
Oil and grease resistance	Resistant to simple oils and greases						
Tear and abrasion resistance	Very good						
Weight per metre, approx.	0,10	0,22	0,25	0,58	0,75	0,24	kg

Type: FLEX	Profile 13	Profile 17	Profile 20	Profile 30	Profile 32	Flat belt 30x6	Unit
Without counterbending							
V-belt pulley diameter dw min.	75	110	110	200	200	75	mm
With counterbending							
V-pulley diameter dw min.	100	160	160	250	250	100	mm
V-pulley diameter da min. (flat back pulley)	150	210	210	400	450	150	mm
Permissible tensile load Fzul	1000	1600	1600	5800	5800	1200	N
Expansion with permissible load	0,40	0,40	0,40	0,40	0,40	0,40	%
Breakage resistance* approx.	4	4	4	4	4	4	
Oil and grease resistance	Resistant to simple oils and greases						
Tear and abrasion resistance	Very good						
Weight per metre, approx.	0,10	0,22	0,25	0,58	0,75	0,24	kg

*The breakage resistance figures relate to the theoretical breakage load of the tension members, based on an even load on all tension members.



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