

vetter

The compact class
of conveyors

Product catalogue



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Your small conveyor specialist

More than 25 years of experience and solid know-how have made Vetter Kleinförderbänder a specialist in conveyor technology. Flexibility and foresight make it possible for us to recognise new application areas at an early stage and meet the challenges of the present and future with high quality standards.

We adapt our products to suit your needs. For this reason, we work closely together with you. We ask the right questions about your use case and stand by your side as an expert partner with advice and support.

In order to ensure short delivery times, we work together with a supplier pool of reliable partners, the majority of whom are based in close proximity to our site.



On the one hand, we take great pleasure in our own innovations, while on the other hand, we also enjoy being inspired and challenged by the many different applications our customers have. Cooperating within our own team, with our suppliers and with our customers is a top priority for us. This has resulted in healthy growth of the enterprise which benefits all those involved.

Dirk Steinmann,
Managing Director

Value-orientated corporate culture

APPRECIATION is written in big letters here and is the basis of our cooperation – no matter whether it's company management or amongst co-workers, with external partners or in relation to our products, equipment or resour-

ces. The basis for this, in turn, is treating ourselves with appreciation and a focus on our values.

One more thing which is important to us:

Responsibility

In the work we do, we bear and take on responsibility – day in, day out. Whether it's for ourselves and our actions, whether it's the way we treat the people in our network and other companies, or for the environment.

Personal growth

In our company, it isn't just economic success that counts. We continuously develop ourselves further and support our employees in discovering their strengths and developing further on a personal level.

Commitment

We stand behind what we say. Commitment for us is the combination of reliability and sincerity as well as mutual respect and empathy – the prerequisites for fair dealings with each other.

Innovation

"Nothing endures but change," said the Greek philosopher Heraclitus about 2,500 years ago. This quote is more pertinent today than ever. We respond to modern requirements with our advanced innovations.

Quality

Products from Vetter combine the utmost individuality with maximum quality. This is not just evident in our products; the way we work and our organization are marked by quality.

Clear communication

Clear communication – internally within the team as well as externally with our partners – prevents misunderstandings and is just as important as cooperative collaboration and mutual support.

Mechanical engineering

Sturdy can do more



Powerful and durable

Our small conveyors unite top performance and maximum quality with select materials. They are therefore powerful at low current ratings and also function with absolute reliability even in 3-shift operation. The well-designed construction without interference contours in the series with internal and transverse drive integrates easily in your systems.

Our modular kit system makes it possible for us to manufacture custom solutions fast. Our standard products can also be flexibly extended as required.

Thanks to the extra-low voltage of just 24 V DC, no special protective measures are necessary.

- Long service life also in 3-shift operation
- Speeds of up to 40 m/min
- Top quality with select materials
- Easy installation in your systems
- Powerful motors
- Conveyed load up to 100 N
- Large selection of conveyor belts
- Flexible adaptation designs and extension options

Microtechnology

For the smallest of the small



Top precision in microtechnology

We also have mini conveyors in our range for particularly small parts. For instance, our smallest conveyor with internal drive has a housing height of a mere 12 mm with a housing width of just 20 mm.

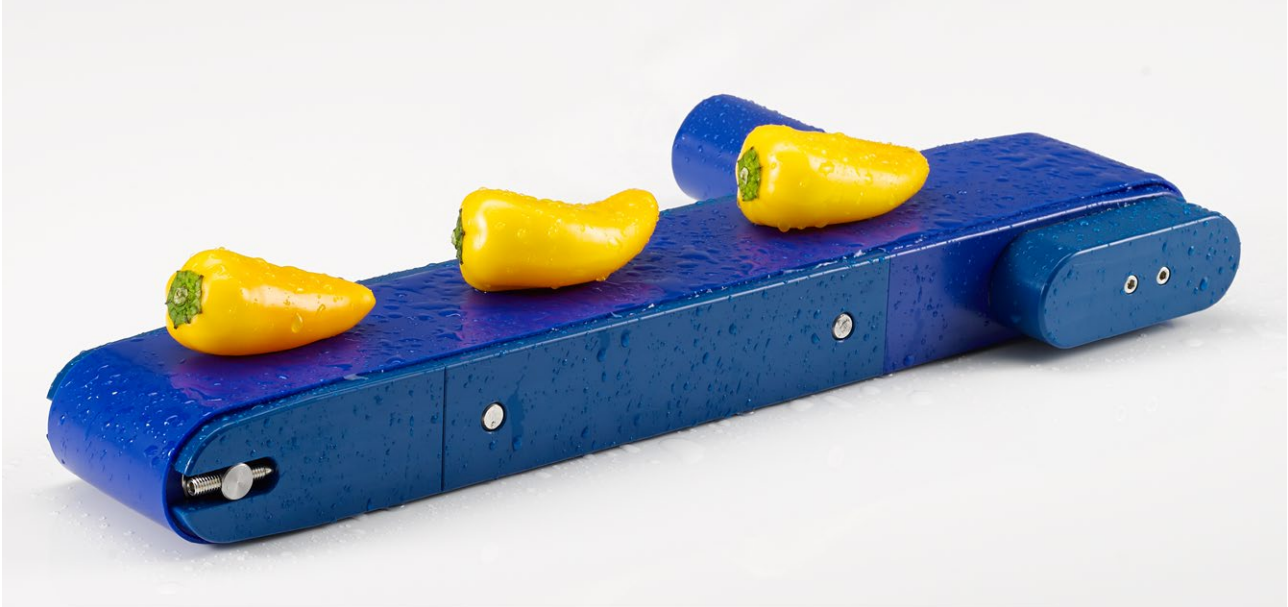
The conveyors can also be used for exact positioning tasks or cyclic operation thanks to the integrated controller.

Optionally, we can equip some models with transmitted light units for electronic image processing – to ensure you keep an even more precise eye on your conveyed goods.

- Conveyors with widths starting from 20 mm
- Speeds starting from 0.5 m/min
- Cyclic operation by means of speed controller (start/stop functions)
- Lateral guides and custom carriers possible
- Integration of image processing
- Special ESD conveyor belt in the range

Food

Precision meets hygiene



Top specifications for our food

Our small conveyor FR-40-80-Q-P was specially designed for sensitive ambient conditions and fulfils the hygienic specifications which are required for the production of food.

The drive housing, a 100 % plastic part, is just as protected against the ingress of liquids and dust as the sealed stainless steel ball bearings. The conveyor belt is easy to disassemble and reassemble without the use of tools, which makes cleaning the conveyor easy.

- Design optimized for hygiene
- Sealed stainless steel ball bearings and drive housing
- Conveyor belt is easy to disassemble for cleaning
- Materials: Stainless steel and FDA plastics
- Mounting and fastening bores easy to produce in the 100 % plastic part
- Many different FDA conveyor belts to choose from

A wide range of combination options

Likewise, our conventional small conveyors with anodized aluminium housings, Item aluminium profiles and stainless steel components are often used in the production of food. In this case too, the wide selection of FDA-compliant conveyor belts in various colours meet the specifications required for food production.

**Product details
on page 36**

Pharmaceuticals

Reaching the destination reliably and safely



For sterile environments

Our small conveyors are also often used in the pharmaceuticals industry and in medical technology. Our series with transverse drive meets all the requirements for sensitive environments for manufacturing pharmaceutical products. The sealed drive housing ensures that no contamination particles whatsoever reach the outside.

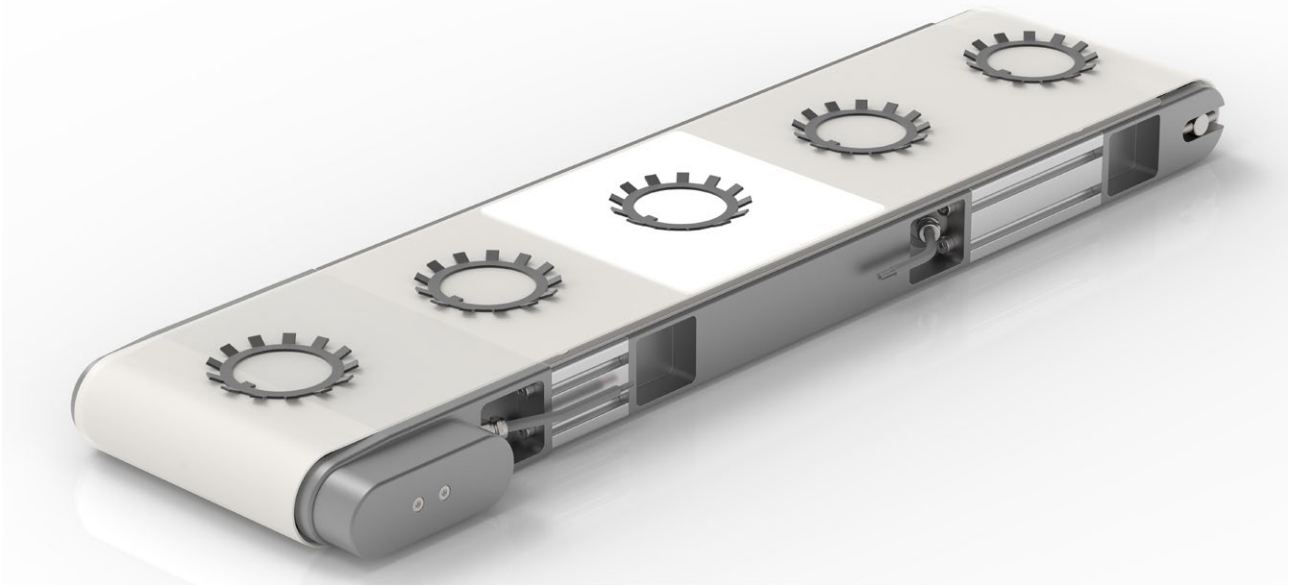
Even the usually open profiles can be replaced by closed profiles to avoid dirt deposits at this point.

Likewise, in the case of the strictest hygiene specifications, our blue conveyor FR-40-80-Q-P made of 100 % FDA-plastic parts can be used in the pharmaceuticals field. The drive housing is also dependably protected, as are the sealed stainless steel ball bearings.

- Hygienic as a result of the sealed drive housing
- Many different FDA conveyor belts to choose from
- Conveyor belt is easy to disassemble for cleaning
- Optionally available with image processing unit

Image processing

And there is light



For one perfect image after the next

Integrated transmitted light units allow for image recognition and image processing during production without interfering reflexes and shadows. This solution replaces rotating or vibrating glass panes.

The high-quality, durable LED panels come with the corresponding controllers and ensure extremely short exposure times as a result of the huge illuminance levels. Drive unit and transmitted light technology are integrated in the small conveyor in such a way that they remain compact, typically Vetter, and have no interference contours.

- Colour: White
- Colour temperature: 5,000 K
- No formation of shadows, no reflections
- Minimized impact of extraneous light
- Lighting intensity can be dimmed via analog signal 0–10 V DC (except: FR-12-20-DL and BK-20-20-DL)
- Lighting duration can be controlled via a trigger signal, max. 10 ms (except: FR-12-20-DL and BK-20-20-DL)
- Operation as continuous light possible

FR-12-20-DL



Our smallest model FR-12-20 with transmitted light unit.
Transmitted light field: 15 x 20.4 mm

FR-20-40-DL



Model with internal drive and foil keypad for speed control.
Transmitted light field: 30 x 30 mm

FR-40-80-Q-DL



Small conveyor with transverse drive and 80-mm housing width.
Transmitted light field: 60 x 60 mm

FR-40-120-Q-DL



Small conveyor with transverse drive with 120-mm housing width.
Transmitted light field: 100 x 100 mm

FR-40-160-Q-DL



Small conveyor with transverse drive with 160-mm housing width.
Transmitted light field: 140 x 140 mm

FR-40-200-Q-DL



Small conveyor with transverse drive with 200-mm housing width.
Transmitted light field: 180 x 180 mm

BK-20-20-DL



Small conveyor from the modular kit with 20-mm housing width.
Transmitted light field: 15 x 20.4 mm

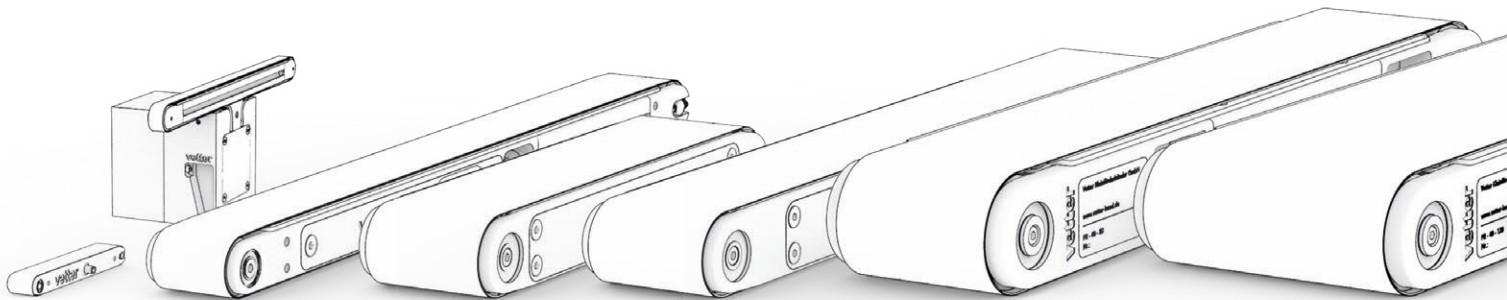
BK-20-40-DL

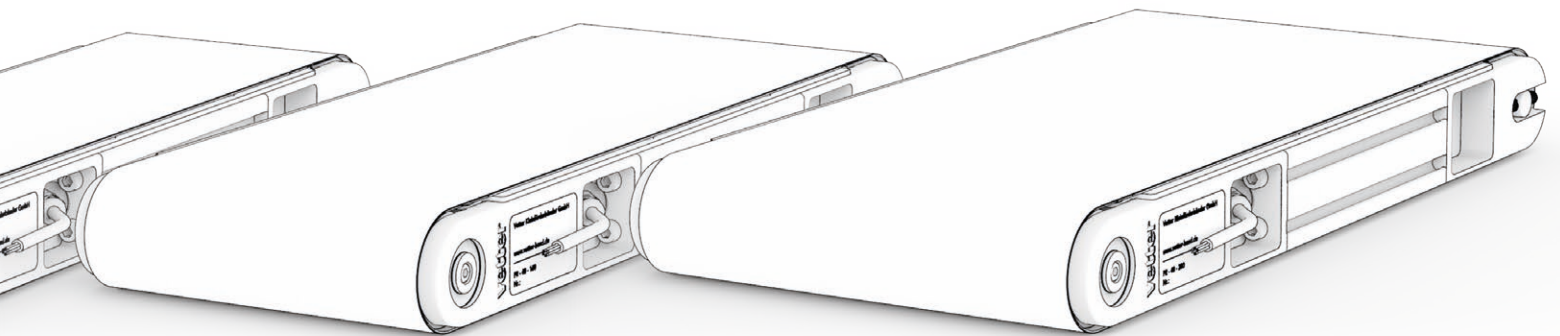


Small conveyor from the modular kit with 40-mm housing width.
Transmitted light field: 30 x 30 mm

**Product details
from page 58**

From mini to maxi Housing widths from 20 to 200 mm







Internal drive



When space is scarce

Conveyors with internal motor are the unique selling point of our products. As a result of the drive which is elegantly integrated in the housing, the conveyor excels with easy integration in your systems. You'll have absolutely no interference contours caused by the motor.

Advantages

- No interference contours, simple design and problem-free integration in existing systems
- Use of Item aluminium profiles:
Simple design and simple integration
- 24 V DC extra-low voltage
 - No special protection measures required
 - Simple speed control optional
 - Low current input at high conveying capacity
- Use of high-grade materials: stainless steel and aluminum
- Selection of conveyor belts, as well as custom models
- Service-friendly: Conveyors integrated in existing automation systems can be easily disassembled
- Custom solutions after prior consultation

Overview

Conveyor type	Housing height	Housing width	Belt width	Max. conveyed load	Conveyor speed	Page
FR-12-20	12 mm	20 mm	17 mm	2 N	1.5 m/min	18
FR-20-40	20 mm	40 mm	32 mm	5 N or 15 N	2–8 m/min 0.7–3 m/min	19
FR-30-60-200	30 mm	60 mm	50 mm	20 N or 40 N	2–10 m/min 0.5–3.5 m/min	20
FR-30-60	30 mm	60 mm	50 mm	20 N or 40 N	2–10 m/min 0.5–3.5 m/min	21
FR-40-80	40 mm	80 mm	65 mm	50 N or 100 N	2–10 m/min 0.5–3 m/min	22
FR-40-120	40 mm	120 mm	105 mm	50 N or 100 N	2–10 m/min 0.5–3 m/min	23
FR-40-160	40 mm	160 mm	145 mm	50 N or 100 N	2–10 m/min 0.5–3 m/min	24
FR-40-200	40 mm	200 mm	185 mm	50 N or 100 N	2–10 m/min 0.5–3 m/min	25
ZR-40-80	40 mm	80 mm	50 mm	50 N or 100 N	2–10 m/min 0.5–3 m/min	26

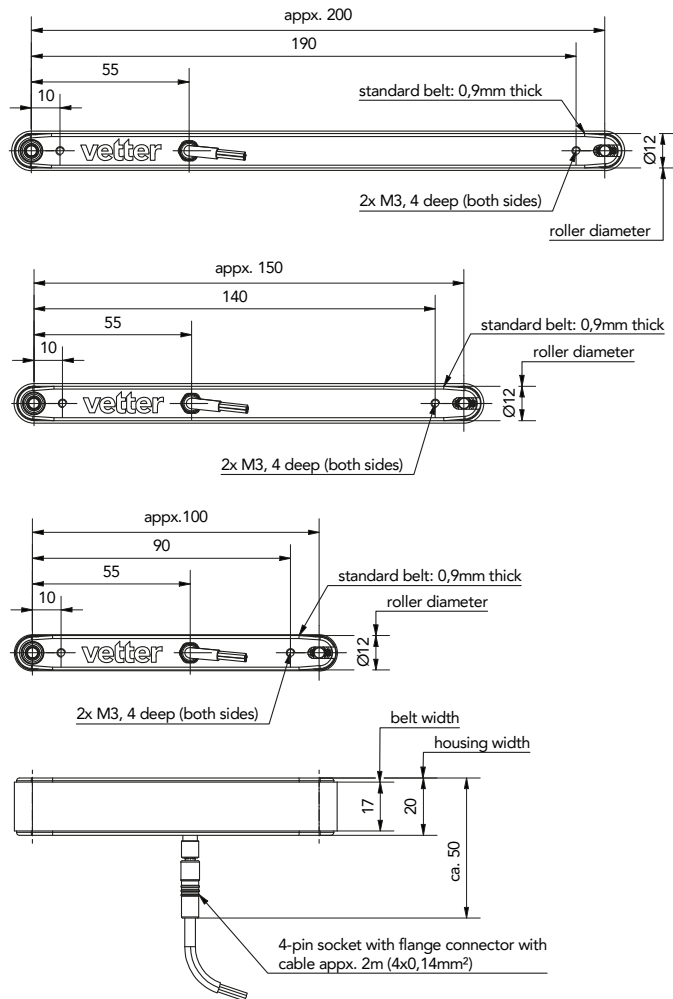
Internal drive

FR-12-20



Housing height	12 mm
Housing width	20 mm
Belt width	17 mm

Centre distance	100, 150 or 200 mm
Conveyor speeds / load	1.5 m/min at max. 2 N
Conveyor belts	translucent, FDA (others available on request)
Extensions	transmitted light
Supply voltage	6 V DC
Further information	Conveying direction variable



Internal drive

FR-20-40

Housing height	20 mm
Housing width	40 mm
Belt width	32 mm

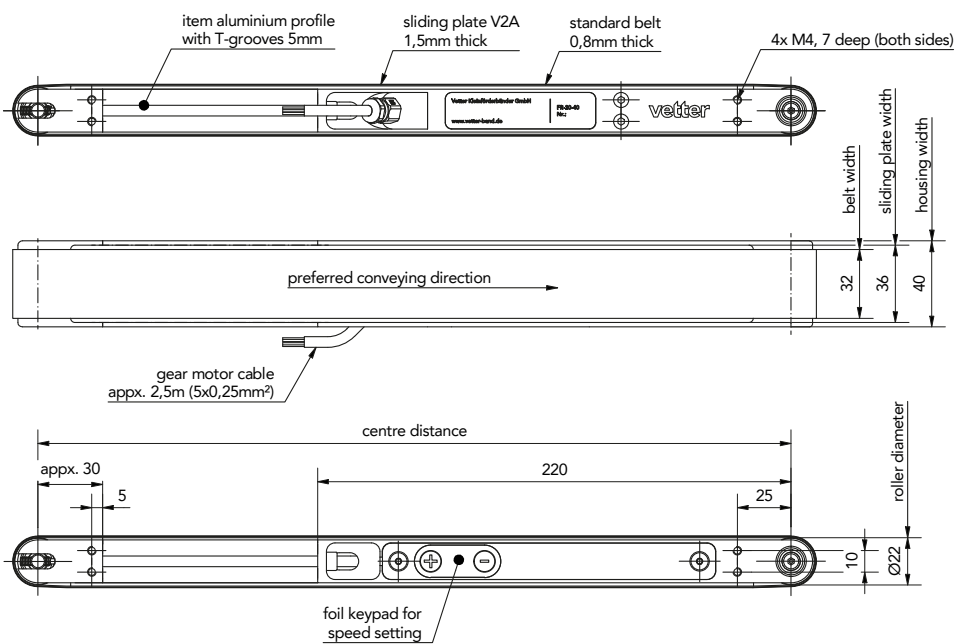
Centre distance	in mm (available at short notice): 300, 350, 400, 450, 500, 600, 700, 800, 900, 1,000 Custom centre distances on request
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Conveyor speeds / load	2 - 8 m/min at max. 5 N or 0.7 - 3 m/min at max. 15 N Speed controller integrated and easy to set by means of +/- keys or via external analog signal 0 - 10 V.
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Conveyor belts	white, FDA, antistatic (others available on request)
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Extensions	<ul style="list-style-type: none"> - transmitted light (other belt) - sliding supports (e.g. lateral guides) - knife edge (other belt) - drive shaft stub - encoder-drive shaft - setpoint device VR-24-SW-11 - setpoint device VSW-11
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Supply voltage	24 V DC
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Internal drive

FR-30-60-200



Housing height	30 mm
Housing width	60 mm
Belt width	50 mm

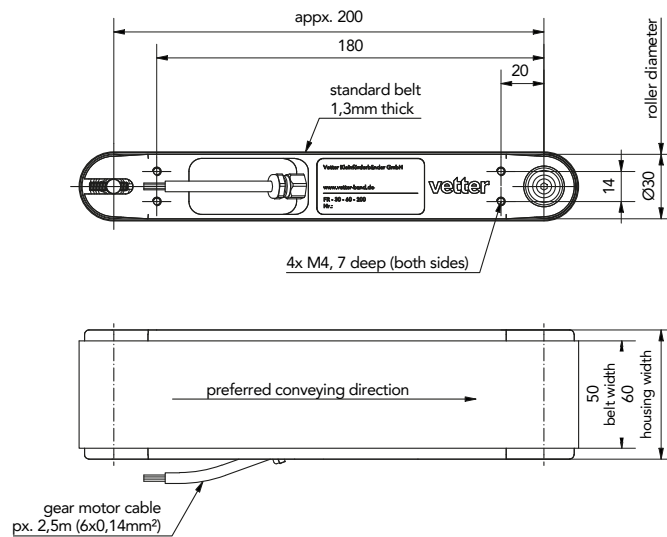
Centre distance	200 mm
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Conveyor speeds / load	2 - 10 m/min at max. 20 N or 0.5 - 3.5 m/min at max. 40 N
	Speed adjustable via analog signal 0-10 V: GND or 0 - 0.3 V Programmed, fixed value 0.5 - 0.9 V Motor stop 1 - 10 V Speed adjustable from min. up to max. up to 11 Speed increase up to 110 % of rated speed with Vetter setpoint device

Conveyor belts	green, FDA, antistatic (others available on request)
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Extensions	- sliding supports (e.g. lateral guides) - drive shaft stub - encoder-drive shaft - setpoint device VR-24-SW-11 - setpoint device VSW-11
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Supply voltage	24 V DC
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Housing height	30 mm
Housing width	60 mm
Belt width	50 mm

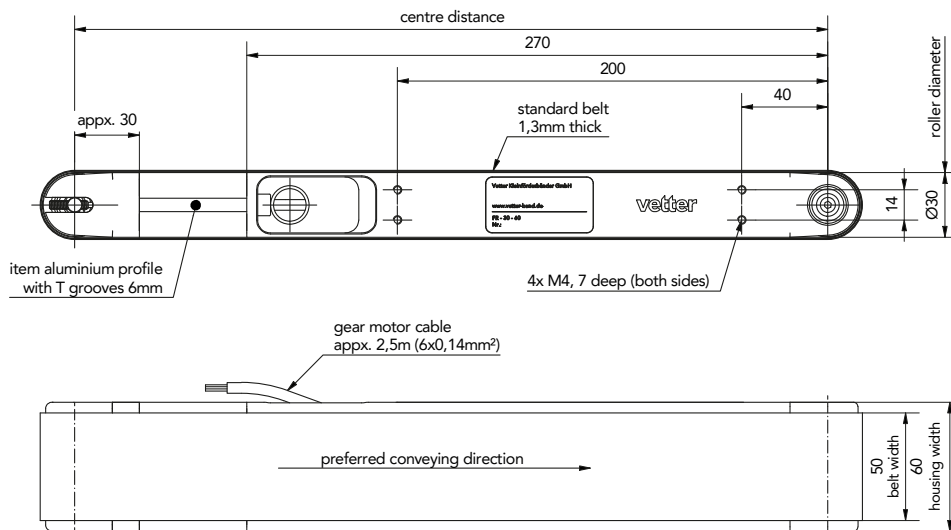
Centre distance	in mm (available at short notice): 300 (without Item profile), 400, 450, 500, 600, 700, 800, 900, 1,000, 1,200 Custom centre distances on request
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Conveyor speeds / load	2 - 10 m/min at max. 20 N or 0.5 - 3.5 m/min at max. 40 N
	Speed adjustable via analog signal 0-10 V: GND or 0 - 0.3 V Programmed, fixed value 0.5 - 0.9 V Motor stop 1 - 10 V Speed adjustable from min. up to max. up to 11 V Speed increase up to 110 % of rated speed with Vetter setpoint device

Conveyor belts	green, FDA, antistatic (others available on request)
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Extensions	- sliding supports (e.g. lateral guides) - knife edge (other belt) - drive shaft stub - encoder-drive shaft - setpoint device VR-24-SW-11 - setpoint device VSW-11
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Supply voltage	24 V DC
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Internal drive

FR-40-80

Housing height	40 mm
Housing width	80 mm
Belt width	65 mm



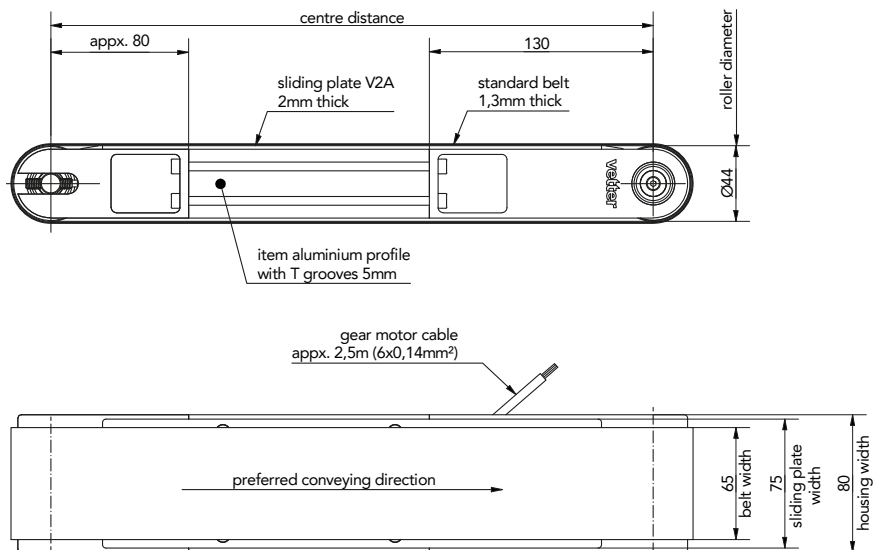
Centre distance	in mm (available at short notice): 350, 400, 450, 500, 600, 700, 800, 900, 1,000, 1,200, 1,400, 1,600 Custom centre distances on request
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Conveyor speeds / load	2 - 10 m/min at max. 20 N or 0.5 - 3 m/min at max. 40 N
	Speed adjustable via analog signal 0-10 V: GND or 0 - 0.3 V Programmed, fixed value 0.5 - 0.9 V Motor stop 1 - 10 V Speed adjustable from min. up to max. up to 11 V Speed increase up to 110 % of rated speed with Vetter setpoint device

Conveyor belts	green, FDA, antistatic (others available on request)
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Extensions	- sliding supports (e.g. lateral guides) - knife edge (other belt) - drive shaft stub - encoder-drive shaft - coupled conveyors (2-track) - setpoint device VR-24-SW-11 - setpoint device VSW-11
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Supply voltage	24 V DC
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Internal drive
FR-40-120

Housing height	40 mm
Housing width	120 mm
Belt width	105 mm

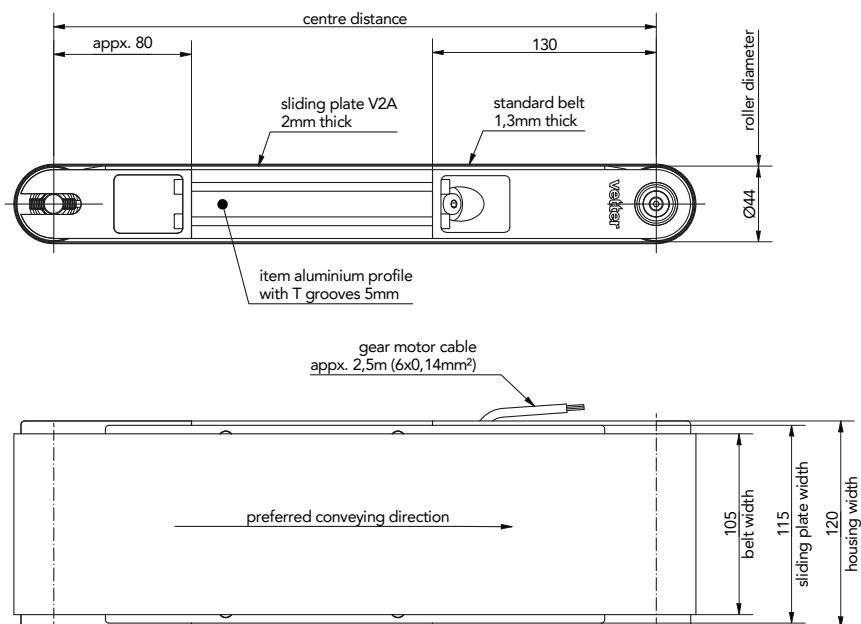
Centre distance	in mm (available at short notice): 350, 400, 450, 500, 600, 700, 800, 900, 1,000, 1,200, 1,400, 1,600 Custom centre distances on request
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Conveyor speeds / load	2 - 10 m/min at max. 20 N or 0.5 - 3 m/min at max. 40 N
	Speed adjustable via analog signal 0-10 V: GND or 0 - 0.3 V Programmed, fixed value 0.5 - 0.9 V Motor stop 1 - 10 V Speed adjustable from min. up to max. up to 11 V Speed increase up to 110 % of rated speed with Vetter setpoint device

Conveyor belts	green, FDA, antistatic (others available on request)
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Extensions	- sliding supports (e.g. lateral guides) - knife edge (other belt) - drive shaft stub - encoder-drive shaft - coupled conveyors (2-track) - setpoint device VR-24-SW-11 - setpoint device VSW-11
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Supply voltage	24 V DC
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Internal drive FR-40-200

Housing height	40 mm
Housing width	200 mm
Belt width	185 mm

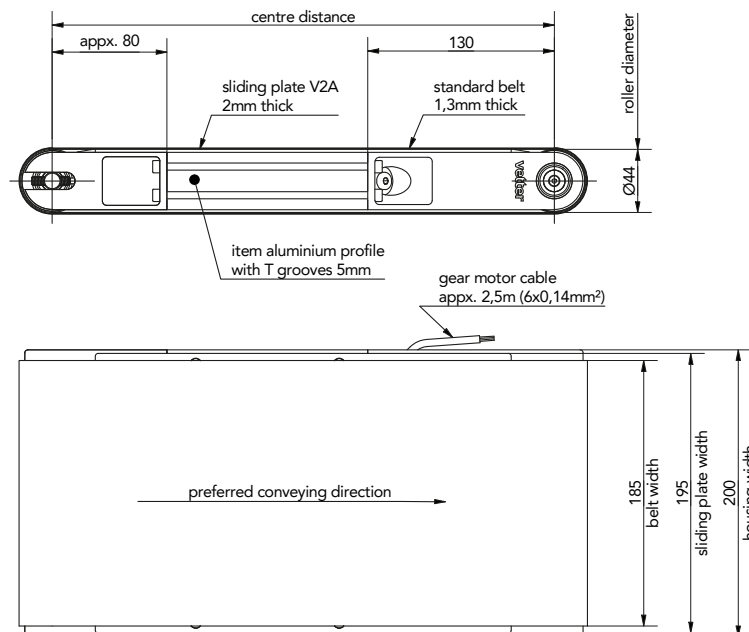
Centre distance	in mm (available at short notice): 350, 400, 450, 500, 600, 700, 800, 900, 1,000, 1,200, 1,400, 1,600 Custom centre distances on request
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Conveyor speeds / load	2 - 10 m/min at max. 20 N or 0.5 - 3 m/min at max. 40 N
	Speed adjustable via analog signal 0-10 V: GND or 0 - 0.3 V Programmed, fixed value 0.5 - 0.9 V Motor stop 1 - 10 V Speed adjustable from min. up to max. up to 11 V Speed increase up to 110 % of rated speed with Vetter setpoint device

Conveyor belts	green, FDA, antistatic (others available on request)
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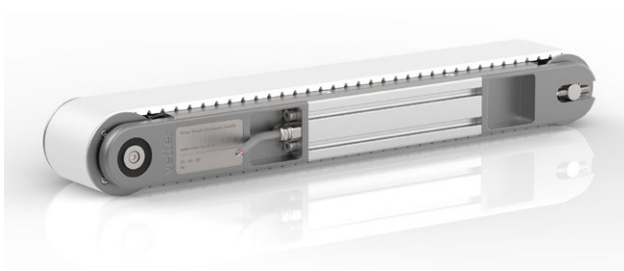
Extensions	- sliding supports (e.g. lateral guides) - knife edge (other belt) - drive shaft stub - encoder-drive shaft - coupled conveyors (2-track) - setpoint device VR-24-SW-11 - setpoint device VSW-11
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Supply voltage	24 V DC
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Internal drive

ZR-40-80



Housing height	40 mm
Housing width	80 mm
Belt width	50 mm

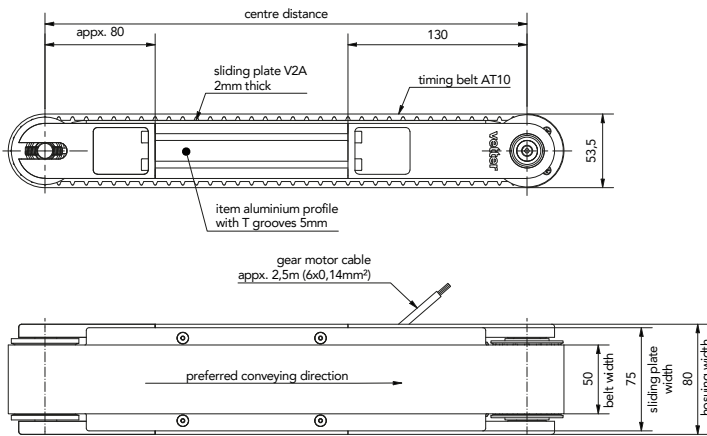
Centre distance	in consultation
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Conveyor speeds / load	2 - 10 m/min at max. 20 N or 0.5 - 3 m/min at max. 40 N
	Speed adjustable via analog signal 0-10 V: GND or 0 - 0.3 V Programmed, fixed value 0.5 - 0.9 V Motor stop 1 - 10 V Speed adjustable from min. up to max. up to 11 V Speed increase up to 110 % of rated speed with Vetter setpoint device

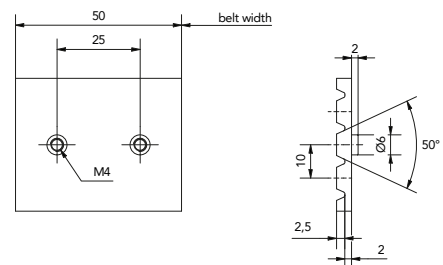
Conveyor belts	timing belt, optionally with insert nuts (others on request)
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Extensions	<ul style="list-style-type: none"> - sliding supports (e.g. lateral guides) - knife edge (other belt) - drive shaft stub - encoder-drive shaft - coupled conveyors (2-track) - setpoint device VR-24-SW-11 - setpoint device VSW-11
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Supply voltage	24 V DC
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Option timing belt ATN10 with insert nuts



Lateral guides



Knife edge



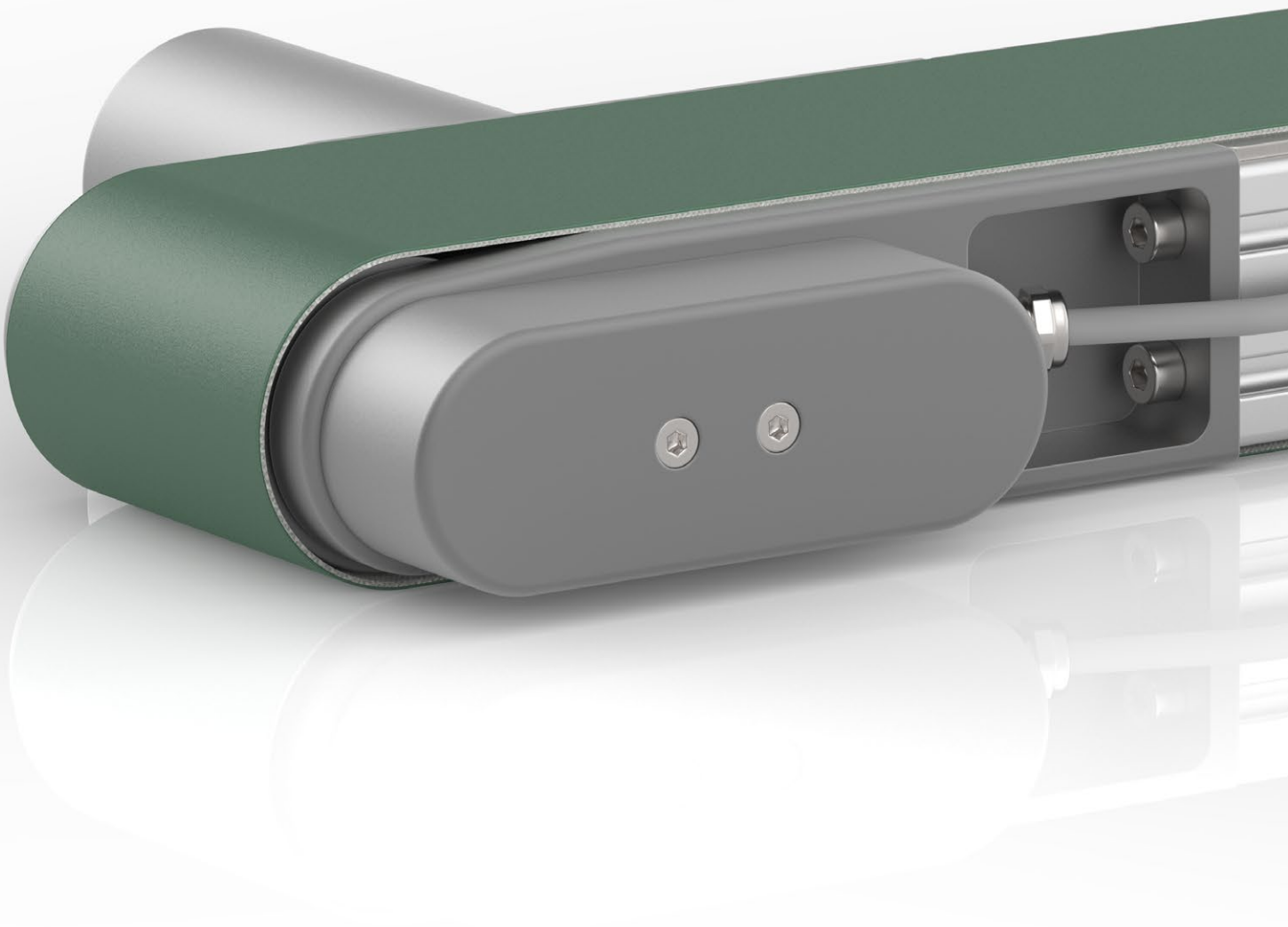
Encoder shaft



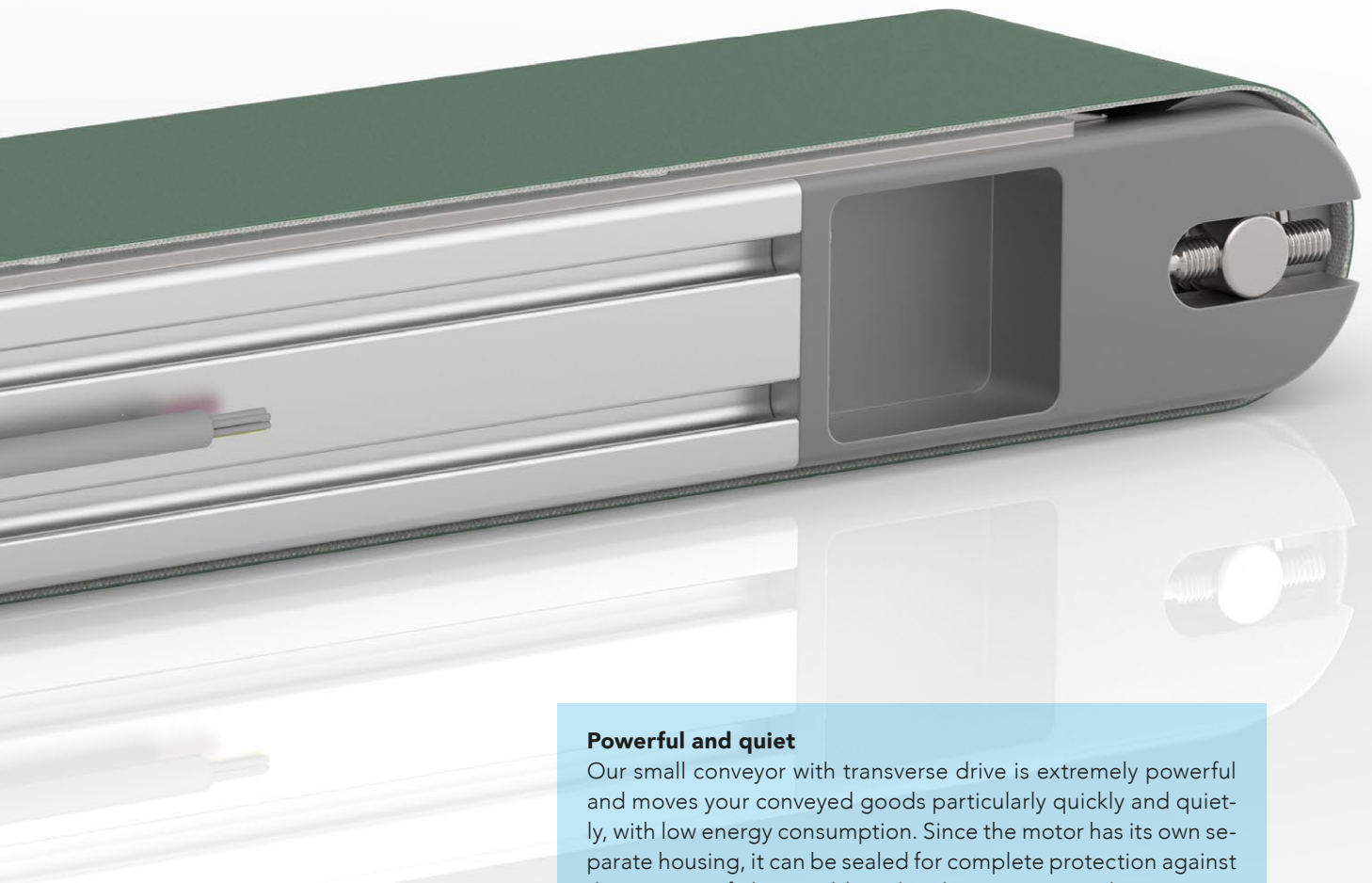
Shaft stub instead of motor



**Further details
from page 70**



Transverse drive



Powerful and quiet

Our small conveyor with transverse drive is extremely powerful and moves your conveyed goods particularly quickly and quietly, with low energy consumption. Since the motor has its own separate housing, it can be sealed for complete protection against the ingress of dust and liquids. The conveyor with transverse drive is therefore ideal in applications with ambient conditions which are not clean.

In the case of this product series as well, the motor is for the most part integrated in the housing and has no interference contours at the installation height, which facilitates integration in your systems.

Advantages

- Drive housing can be sealed for complete protection against the ingress of dust and liquids.
- Higher belt speeds
- Motor integrated in the housing for the most part, with external cover for protection against contact
- No interference contours at the installation height
- Use of Item aluminium profiles:
Simple design and simple integration
- 24 V DC extra-low voltage
 - No special protection measures required
 - Simple speed control option
 - Low current input at high conveying capacity
- Use of high-grade materials:
Stainless steel and aluminium
- Large selection of conveyor belts, as well as custom models
- Service-friendly: Conveyors integrated in existing automation systems can be easily disassembled

Overview

Conveyor type	Housing height	Housing width	Belt width	Max. conveyed load	Conveyor speed	Page
FR-40-80-Q	40 mm	80 mm	65 mm	20 N or 40 N or 100 N	5 - 30 m/min 4 - 24 m/min 1.5 - 10 m/min	32
FR-40-120-Q	40 mm	120 mm	105 mm	20 N or 40 N or 100 N	5 - 30 m/min 4 - 24 m/min 1.5 - 10 m/min	33
FR-40-160-Q	40 mm	160 mm	145 mm	20 N or 40 N or 100 N	5 - 30 m/min 4 - 24 m/min 1.5 - 10 m/min	34
FR-40-200-Q	40 mm	200 mm	185 mm	20 N or 40 N or 100 N	5 - 30 m/min 4 - 24 m/min 1.5 - 10 m/min	35
FR-40-80-Q-P	40 mm	80 mm	65 mm	20 N or 40 N or 100 N	5 - 30 m/min 4 - 24 m/min 1.5 - 10 m/min	36
ZR-40-80-Q	40 mm	80 mm	50 mm	20 N or 40 N or 100 N	5 - 30 m/min 4 - 24 m/min 1.5 - 10 m/min	37

Transverse drive
FR-40-120-Q

Housing height	40 mm
Housing width	120 mm
Belt width	105 mm

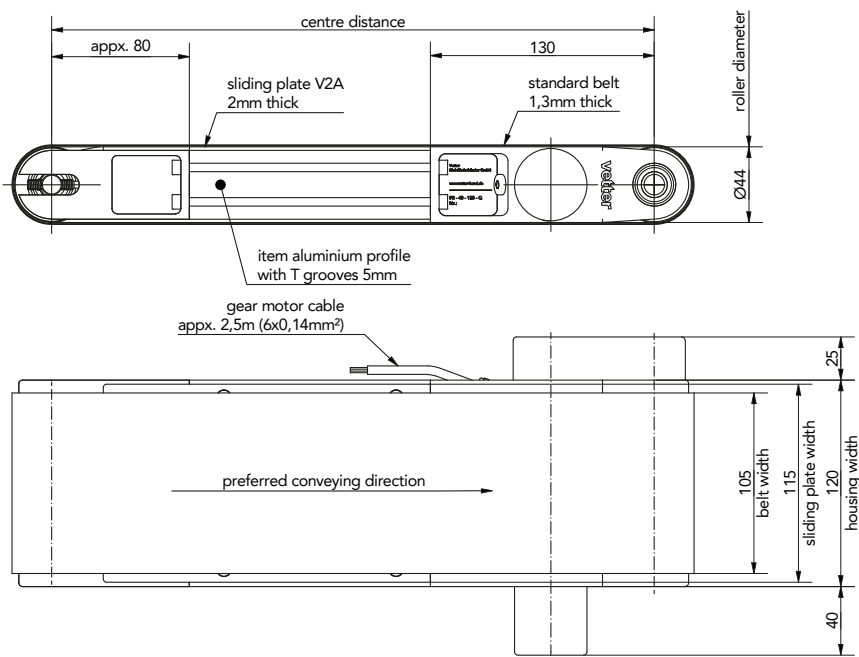
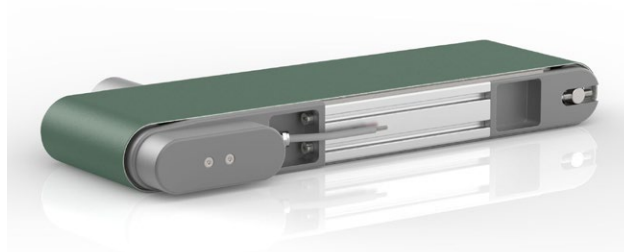
Centre distance	in mm (available at short notice): 300, 350, 400, 450, 500, 600, 700, 800, 900, 1,000, 1,200, 1,400, 1,600 Custom centre distances on request
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Conveyor speeds / load	5 - 30 m/min at max. 20 N or 4 - 24 m/min at max. 40 N or 1.5 - 10 m/min at max. 100 N
	Speed adjustable via analog signal 0-10 V: GND or 0 - 0.3 V Programmed, fixed value 0.5 - 0.9 V Motor stop 1 - 10 V Speed adjustable from min. up to max. up to 11 V Speed increase up to 110 % of rated speed with Vetter setpoint device

Conveyor belts	green, FDA, antistatic (others available on request)
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Extensions	<ul style="list-style-type: none"> - transmitted light (other belt) - sliding supports (e.g. lateral guides) - knife edge (other belt) - drive shaft stub - encoder-drive shaft - coupled conveyors (2-track) - setpoint device VR-24-SW-11 - setpoint device VSW-11 - vacuum (perforated belt)
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Supply voltage	24 V DC
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Transverse drive
FR-40-200-Q

Housing height	40 mm
Housing width	200 mm
Belt width	185 mm

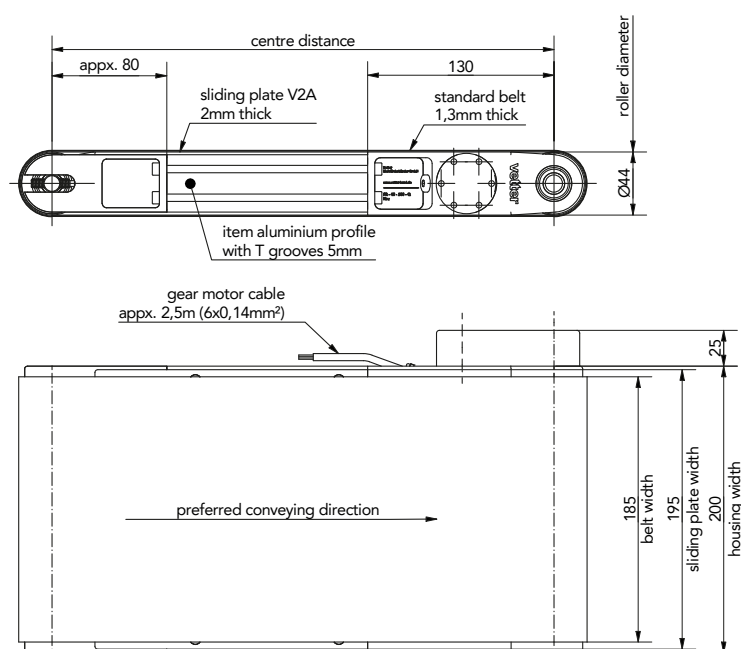
Centre distance	in mm (available at short notice): 300, 350, 400, 450, 500, 600, 700, 800, 900, 1,000, 1,200, 1,400, 1,600 Custom centre distances on request
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Conveyor speeds / load	5 - 30 m/min at max. 20 N or 4 - 24 m/min at max. 40 N or 1.5 - 10 m/min at max. 100 N
	Speed adjustable via analog signal 0-10 V: GND or 0 - 0.3 V Programmed, fixed value 0.5 - 0.9 V Motor stop 1 - 10 V Speed adjustable from min. up to max. up to 11 V Speed increase up to 110 % of rated speed with Vetter setpoint device

Conveyor belts	green, FDA, antistatic (others available on request)
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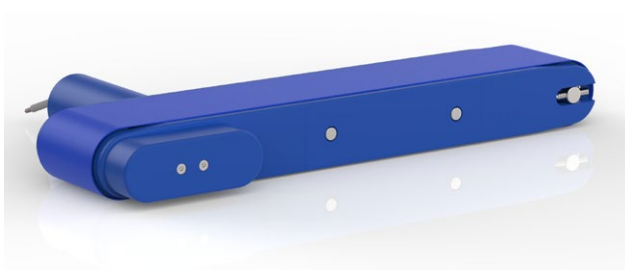
- Extensions
- transmitted light (other belt)
 - sliding supports (e.g. lateral guides)
 - knife edge (other belt)
 - drive shaft stub
 - encoder-drive shaft
 - coupled conveyors (2-track)
 - setpoint device VR-24-SW-11
 - setpoint device VSW-11
 - vacuum (perforated belt)

Supply voltage	24 V DC
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Transverse drive

FR-40-80-Q-P



Housing height	40 mm
Housing width	80 mm
Belt width	65 mm

Centre distance	in consultation
Conveyor speeds / load	5 - 30 m/min at max. 20 N or 4 - 24 m/min at max. 40 N or 1.5 - 10 m/min at max. 100 N

Speed adjustable via analog signal 0-10 V:
 GND or 0 - 0.3 V Programmed, fixed value
 0.5 - 0.9 V Motor stop
 1 - 10 V Speed adjustable from min.
 up to max.
 up to 11 V Speed increase up to 110 %
 of rated speed with Vetter
 setpoint device

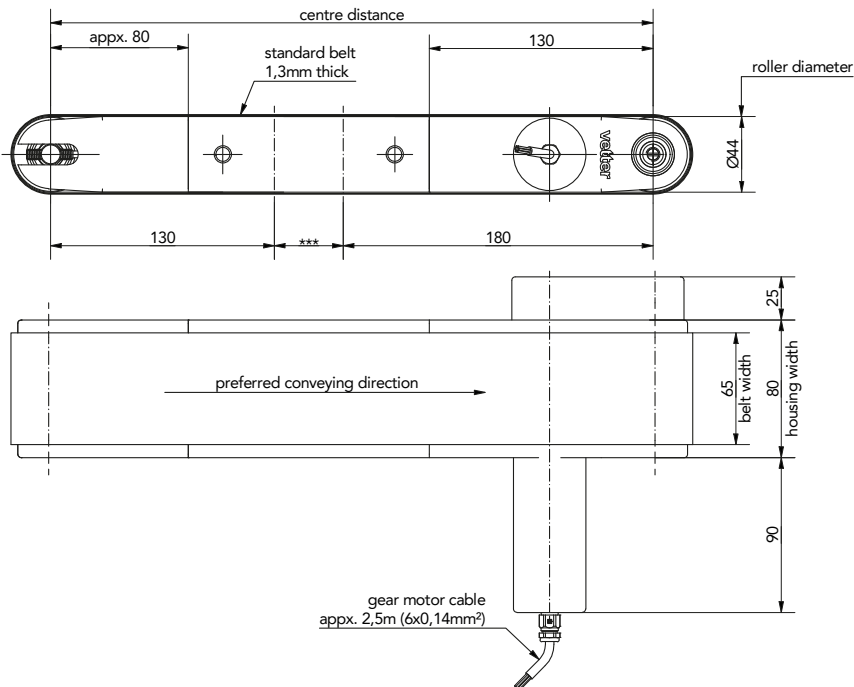
Conveyor belts	blue, FDA, antistatic (others available on request)
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Extensions	- setpoint device VR-24-SW-11 - setpoint device VSW-11
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Supply voltage	24 V DC
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Further information

- Specifically for the food industry:
- Materials: Stainless steel and FDA plastics
- Sealed stainless steel ball bearing and drive housing
- Design optimized for hygiene
- Conveyor belt is simple to disassemble for easy cleaning
- Many different FDA conveyor belts to choose from
- Mounting and fastening bores easy to produce in the 100 % plastic part



Transverse drive ZR-40-80-Q

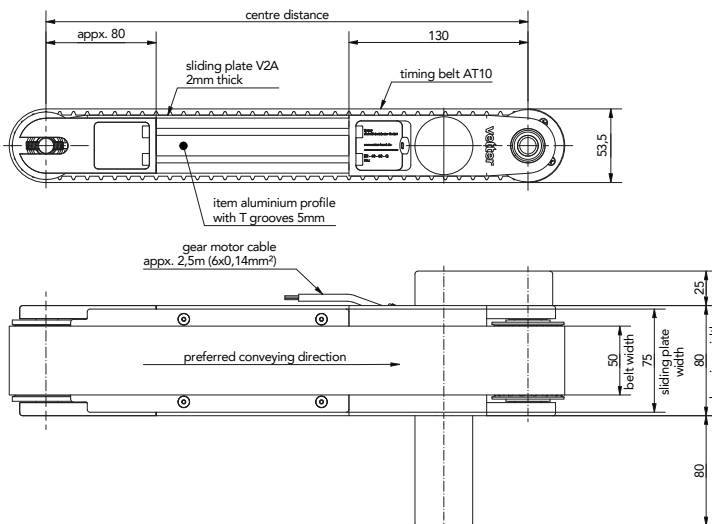
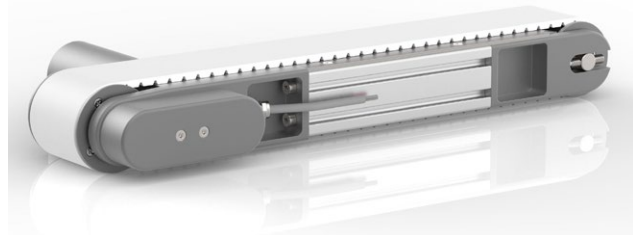
Housing height	40 mm
Housing width	80 mm
Belt width	50 mm

Centre distance	in consultation
Conveyor speeds / load	<p>5 - 30 m/min at max. 20 N or 4 - 24 m/min at max. 40 N or 1.5 - 10 m/min at max. 100 N</p> <p>Speed adjustable via analog signal 0-10 V: GND or 0 - 0.3 V Programmed, fixed value 0.5 - 0.9 V Motor stop 1 - 10 V Speed adjustable from min. up to max. up to 11 V Speed increase up to 110 % of rated speed with Vetter setpoint device</p>

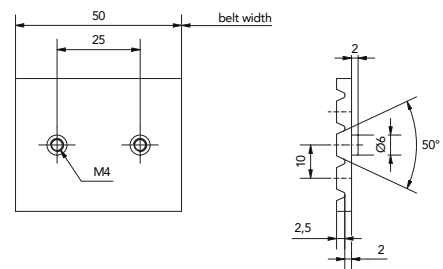
Conveyor belts	timing belt, optionally with insert nuts (others on request)
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Extensions	<ul style="list-style-type: none"> - sliding supports (e.g. lateral guides) - drive shaft stub - encoder-drive shaft - coupled conveyors (2-track) - setpoint device VR-24-SW-11 - setpoint device VSW-11 - part carriers
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Supply voltage	24 V DC
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Option timing belt ATN10 with insert nuts



**Fast and flexible**

With its external motor, our conveyor with centre drive is extremely powerful and runs quickly and smoothly. One special feature that sets this series apart is the flexibility of the drive unit, which can be moved across the entire length of the conveyor. This makes it possible for you to install several belts right next to one another which run independently of one another.

Centre drive



Centre drive

FR-20-20-M



Housing height	20 mm
Housing width	20 mm
Belt width	15 mm

Centre distance	in mm (available at short notice): 200, 300, 400, 500, 600, 700, 800, 900, 1,000 Custom centre distances on request
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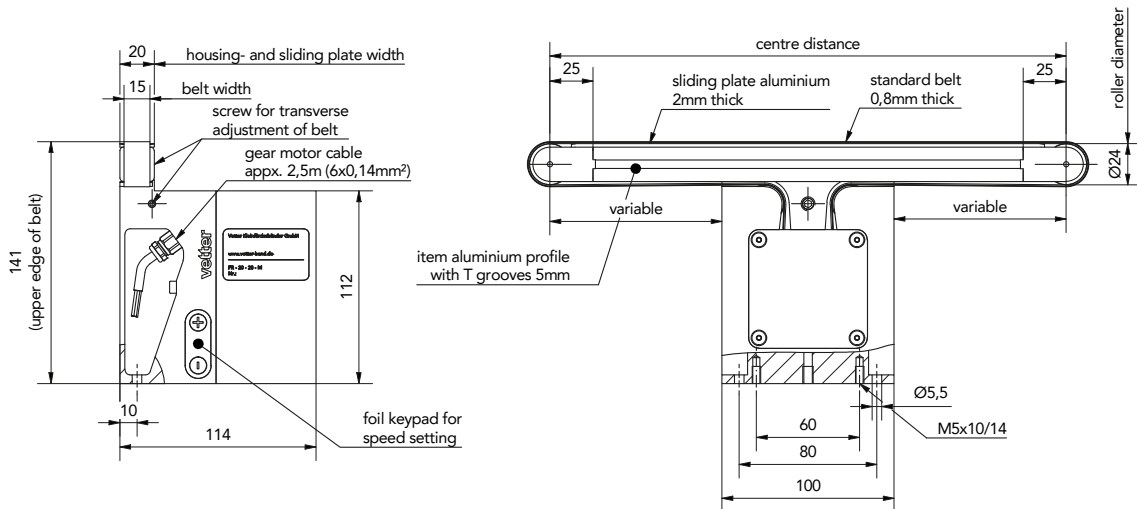
Conveyor speeds / load	2 - 40 m/min at max. 30N Speed controller integrated and easy to set by means of +/- keys or via external analog signal 0-10 V.
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Conveyor belts	white, FDA, antistatic (others available on request)
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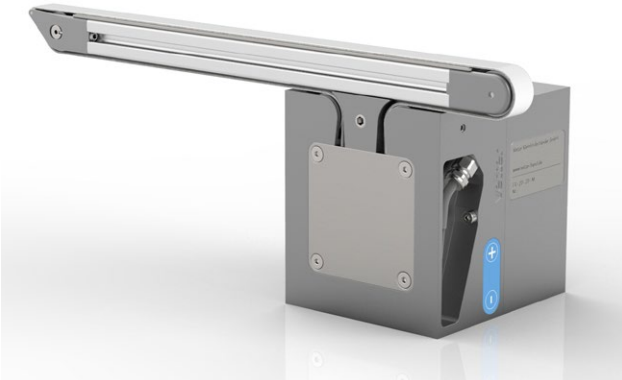
Extensions	- sliding supports (e.g. lateral guides) - knife edge (other belt) - setpoint device VR-24-SW-11 - setpoint device VSW-11
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Supply voltage	24 V DC
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Further information	Conveying direction variable
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Knife edge



2-track oppositely



2-track



3-track





Modular kit



More freedom to combine – more individuality

You've got specific requirements for our conveyors? You prefer our standard components so that you can save time and money you would otherwise have to spend on extensive new developments? Then our modular kit system is just right for you.

From a multitude of standard components from Vetter, we choose the ones which suit your task and combine them flexibly. This allows us to create new combinations without a lot of effort which are precisely tailored to your requirements.

Advantages

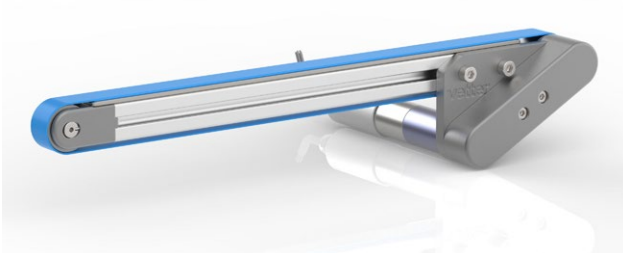
- More flexibility through the modular kit
- Combine several conveyors in a parallel arrangement: placed right next to one another or with a gap for easy access.
- Simple design and problem-free integration in existing systems
- Use of Item aluminium profiles: Simple integration
- 24 V DC extra-low voltage
 - No special protection measures required
 - Simple speed control optional
 - Low current input at high conveying capacity
- Use of high-grade materials: stainless steel and aluminium
- Selection of conveyor belts, as well as custom models
- Service-friendly: Conveyors integrated in existing automation systems can be easily disassembled

Overview

Conveyor type	Housing height	Housing width	Belt width	Max. conveyed load	Conveyor speed	Page
BK-20-20	20 mm	20 mm	15 mm	10 N or 20 N	2.5 - 20 m/min 0.8 - 6 m/min	46
BK-20-40	20 mm	40 mm	32 mm	10 N or 20 N	2.5 - 20 m/min 0.8 - 6 m/min	47
BK-20-60	20 mm	60 mm	52 mm	40 N or 100 N	2 - 15 m/min 0.8 - 5 m/min	48
BK-20-80	20 mm	80 mm	72 mm	40 N or 100 N	2 - 15 m/min 0.8 - 5 m/min	49
BK-20-100	20 mm	100 mm	92 mm	40 N or 100 N	2 - 15 m/min 0.8 - 5 m/min	50
BK-20-120	20 mm	120 mm	112 mm	40 N or 100 N	2 - 15 m/min 0.8 - 5 m/min	51
BK-20-140	20 mm	140 mm	132 mm	40 N or 100 N	2 - 15 m/min 0.8 - 5 m/min	52
BK-20-160	20 mm	160 mm	152 mm	40 N or 100 N	2 - 15 m/min 0.8 - 5 m/min	53
BK-20-180	20 mm	180 mm	172 mm	40 N or 100 N	2 - 15 m/min 0.8 - 5 m/min	54
BK-20-200	20 mm	200 mm	192 mm	40 N or 100 N	2 - 15 m/min 0.8 - 5 m/min	55
BK-30-60	30 mm	60 mm	50 mm	30 N or 100 N	3 - 20 m/min 1 - 7 m/min	56

Modular kit

BK-20-20



Housing height	20 mm
Housing width	20 mm
Belt width	15 mm

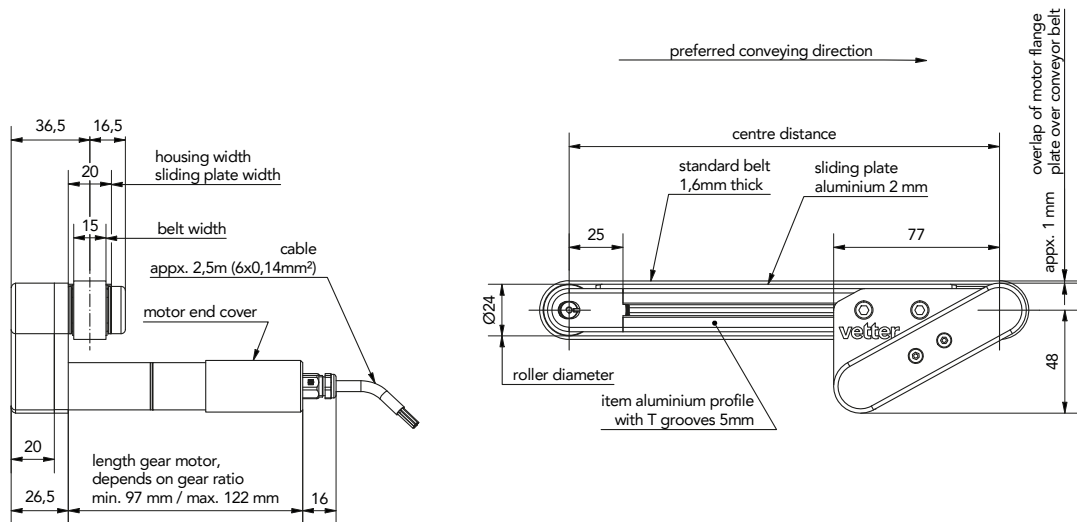
Centre distance	in consultation
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Conveyor speeds / load	2.5 - 20 m/min at max. 10 N or 0.8 - 6 m/min at max. 20 N
Speed adjustable via analog signal 0-10 V:	
GND or 0 - 0.3 V	Programmed, fixed value
0.5 - 0.9 V	Motor stop
1 - 10 V	Speed adjustable from min. up to max.
up to 11 V	Speed increase up to 110 % of rated speed with Vetter setpoint device

Conveyor belts	blue, FDA
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Extensions	<ul style="list-style-type: none"> - transmitted light (other belt) - sliding supports (e.g. lateral guides) - knife edge (other belt) - drive shaft stub - encoder-drive shaft - coupled conveyors (2-track) - coupled conveyors (multiple-track) - setpoint device VR-24-SW-11 - setpoint device VSW-11 - vacuum (perforated belt) - round belt
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Supply voltage	24 V DC
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BK-20-40

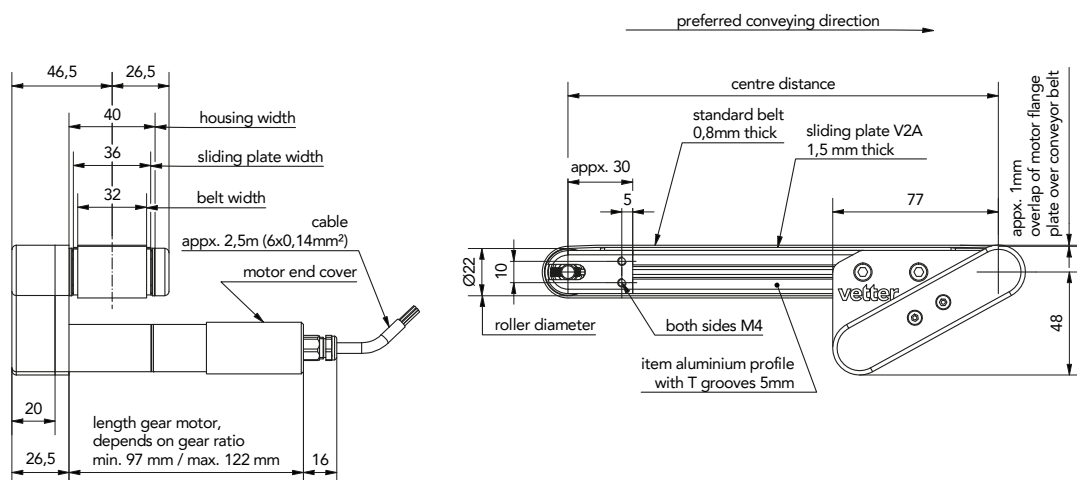
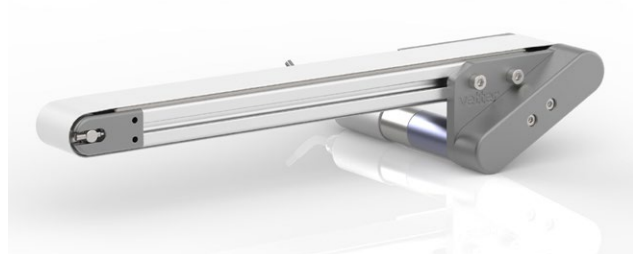
Housing height	20 mm
Housing width	40 mm
Belt width	32 mm

Centre distance	in consultation
Conveyor speeds / load	2.5 - 20 m/min at max. 10 N or 0.8 - 6 m/min at max. 20 N
	Speed adjustable via analog signal 0-10 V: GND or 0 - 0.3 V Programmed, fixed value 0.5 - 0.9 V Motor stop 1 - 10 V Speed adjustable from min. up to max. up to 11 V Speed increase up to 110 % of rated speed with Vetter setpoint device

Conveyor belts	white, FDA, antistatic
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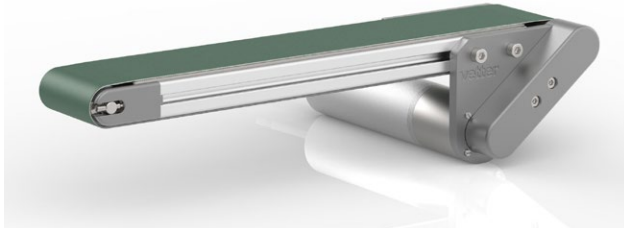
- Extensions
- transmitted light (other belt)
 - sliding supports (e.g. lateral guides)
 - knife edge (other belt)
 - drive shaft stub
 - encoder-drive shaft
 - coupled conveyors (2-track)
 - coupled conveyors (multiple-track)
 - setpoint device VR-24-SW-11
 - setpoint device VSW-11
 - vacuum (perforated belt)
 - round belt

Supply voltage	24 V DC
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Modular kit

BK-20-60



Housing height	20 mm
Housing width	60 mm
Belt width	52 mm

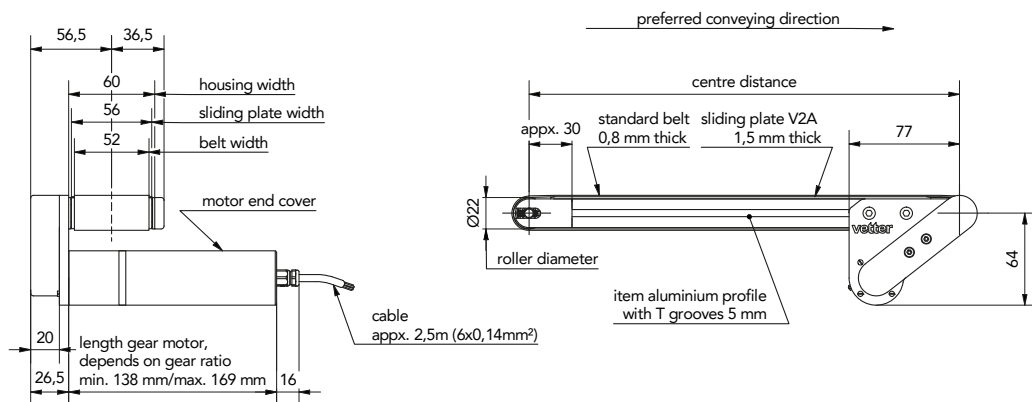
Centre distance	in consultation
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Conveyor speeds / load	2 - 15 m/min at max. 40 N or 0.8 - 5 m/min at max. 100 N
Speed adjustable via analog signal 0-10 V:	
GND or 0 - 0.3 V	Programmed, fixed value
0.5 - 0.9 V	Motor stop
1 - 10 V	Speed adjustable from min. up to max.
up to 11 V	Speed increase up to 110 % of rated speed with Vetter setpoint device

Conveyor belts	white or green, FDA, antistatic
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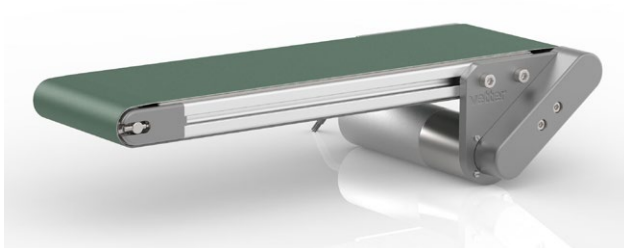
Extensions	<ul style="list-style-type: none"> - sliding supports (e.g. lateral guides) - drive shaft stub - encoder-drive shaft - coupled conveyors (2-track) - coupled conveyors (multiple-track) - setpoint device VR-24-SW-11 - setpoint device VSW-11 - vacuum (perforated belt)
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Supply voltage	24 V DC
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Modular kit

BK-20-100



Housing height	20 mm
Housing width	100 mm
Belt width	92 mm

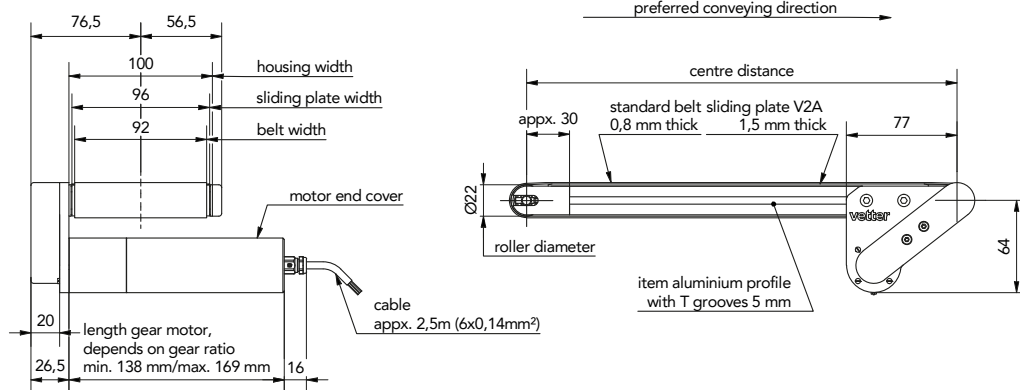
Centre distance	in consultation
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Conveyor speeds / load	2 - 15 m/min at max. 40 N or 0.8 - 5 m/min at max. 100 N
Speed adjustable via analog signal 0-10 V:	
GND or 0 - 0.3 V	Programmed, fixed value
0.5 - 0.9 V	Motor stop
1 - 10 V	Speed adjustable from min. up to max.
up to 11 V	Speed increase up to 110 % of rated speed with Vetter setpoint device

Conveyor belts	white or green, FDA, antistatic
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Extensions	<ul style="list-style-type: none"> - sliding supports (e.g. lateral guides) - drive shaft stub - encoder-drive shaft - coupled conveyors (2-track) - coupled conveyors (multiple-track) - setpoint device VR-24-SW-11 - setpoint device VSW-11 - vacuum (perforated belt)
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Supply voltage	24 V DC
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Housing height	20 mm
Housing width	120 mm
Belt width	112 mm

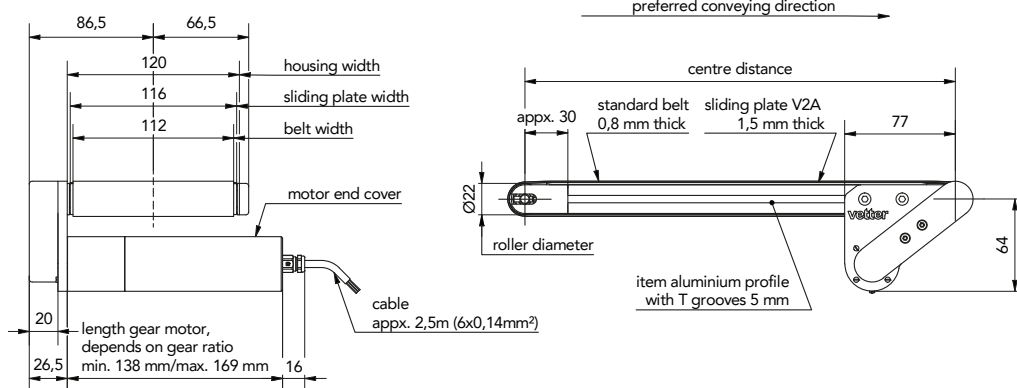
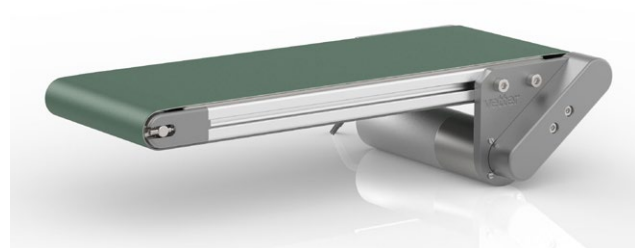
Centre distance	in consultation
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Conveyor speeds / load	2 - 15 m/min at max. 40 N or 0.8 - 5 m/min at max. 100 N
	Speed adjustable via analog signal 0-10 V: GND or 0 - 0.3 V Programmed, fixed value 0.5 - 0.9 V Motor stop 1 - 10 V Speed adjustable from min. up to max. up to 11 V Speed increase up to 110 % of rated speed with Vetter setpoint device

Conveyor belts	white or green, FDA, antistatic
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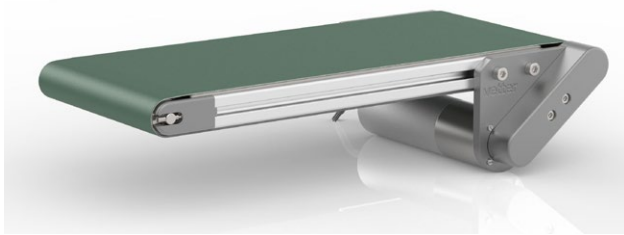
Extensions	<ul style="list-style-type: none"> - sliding supports (e.g. lateral guides) - drive shaft stub - encoder-drive shaft - coupled conveyors (2-track) - coupled conveyors (multiple-track) - setpoint device VR-24-SW-11 - setpoint device VSW-11 - vacuum (perforated belt)
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Supply voltage	24 V DC
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Modular kit

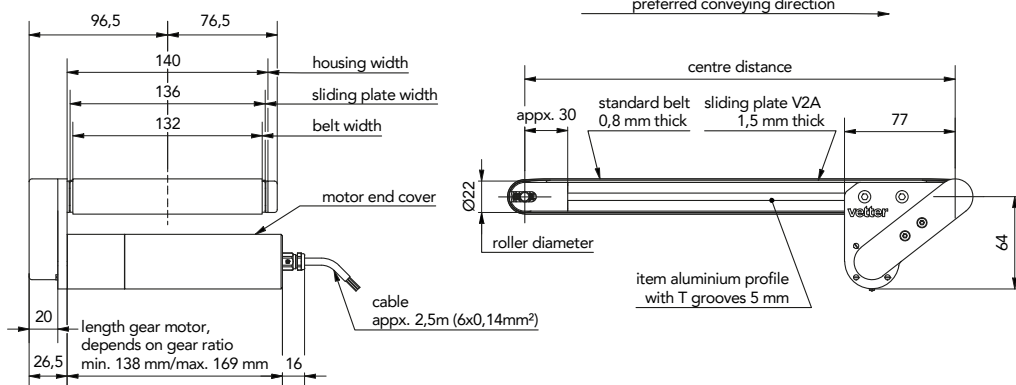
BK-20-140



Housing height	20 mm
Housing width	140 mm
Belt width	132 mm

Centre distance	in consultation
Conveyor speeds / load	2 - 15 m/min at max. 40 N or 0.8 - 5 m/min at max. 100 N
Speed adjustable via analog signal 0-10 V:	
GND or 0 - 0.3 V	Programmed, fixed value
0.5 - 0.9 V	Motor stop
1 - 10 V	Speed adjustable from min. up to max.
up to 11 V	Speed increase up to 110 % of rated speed with Vetter setpoint device

Conveyor belts	white or green, FDA, antistatic
Extensions	<ul style="list-style-type: none"> - sliding supports (e.g. lateral guides) - drive shaft stub - encoder-drive shaft - coupled conveyors (2-track) - coupled conveyors (multiple-track) - setpoint device VR-24-SW-11 - setpoint device VSW-11 - vacuum (perforated belt)
Supply voltage	24 V DC



Housing height	20 mm
Housing width	160 mm
Belt width	152 mm

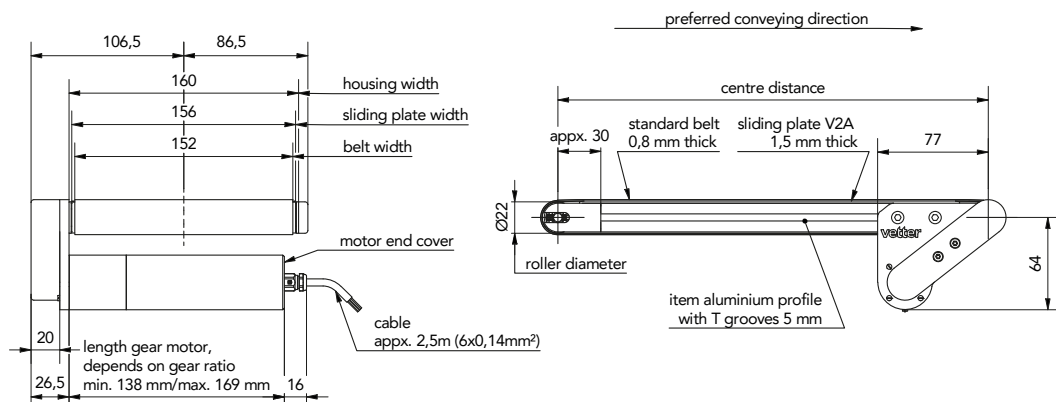
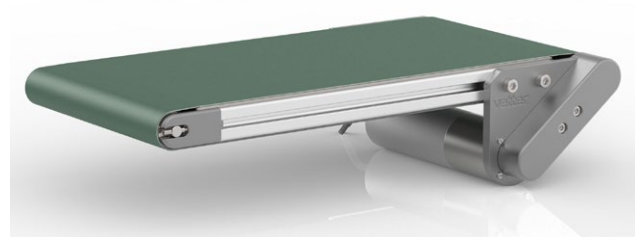
Centre distance	in consultation
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Conveyor speeds / load	2 - 15 m/min at max. 40 N or 0.8 - 5 m/min at max. 100 N
	Speed adjustable via analog signal 0-10 V:
	GND or 0 - 0.3 V Programmed, fixed value
	0.5 - 0.9 V Motor stop
1 - 10 V Speed adjustable from min. up to max.	
up to 11 V Speed increase up to 110 % of rated speed with Vetter setpoint device	

Conveyor belts	white or green, FDA, antistatic
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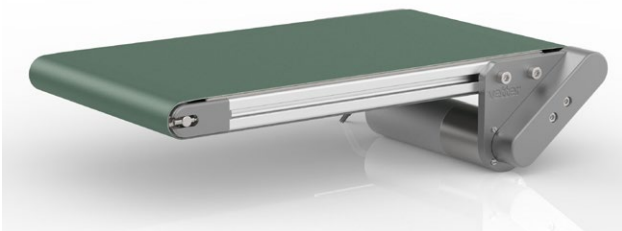
Extensions	<ul style="list-style-type: none"> - sliding supports (e.g. lateral guides) - drive shaft stub - encoder-drive shaft - coupled conveyors (2-track) - coupled conveyors (multiple-track) - setpoint device VR-24-SW-11 - setpoint device VSW-11 - vacuum (perforated belt)
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Supply voltage	24 V DC
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Modular kit

BK-20-180



Housing height	20 mm
Housing width	180 mm
Belt width	172 mm

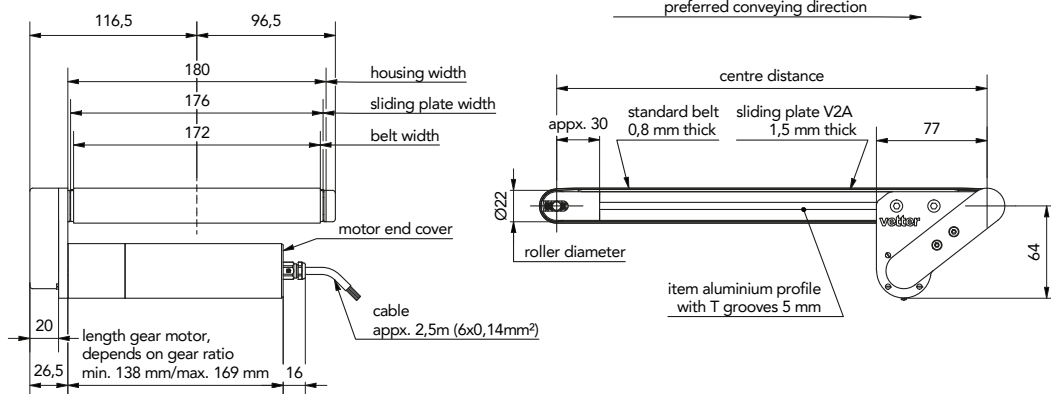
Centre distance	in consultation
Conveyor speeds / load	2 - 15 m/min at max. 40 N or 0.8 - 5 m/min at max. 100 N

Speed adjustable via analog signal 0-10 V:
 GND or 0 - 0.3 V Programmed, fixed value
 0.5 - 0.9 V Motor stop
 1 - 10 V Speed adjustable from min. up to max.
 up to 11 V Speed increase up to 110 % of rated speed with Vetter setpoint device

Conveyor belts	white or green, FDA, antistatic
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- Extensions
- sliding supports (e.g. lateral guides)
 - drive shaft stub
 - encoder-drive shaft
 - coupled conveyors (2-track)
 - coupled conveyors (multiple-track)
 - setpoint device VR-24-SW-11
 - setpoint device VSW-11
 - vacuum (perforated belt)

Supply voltage	24 V DC
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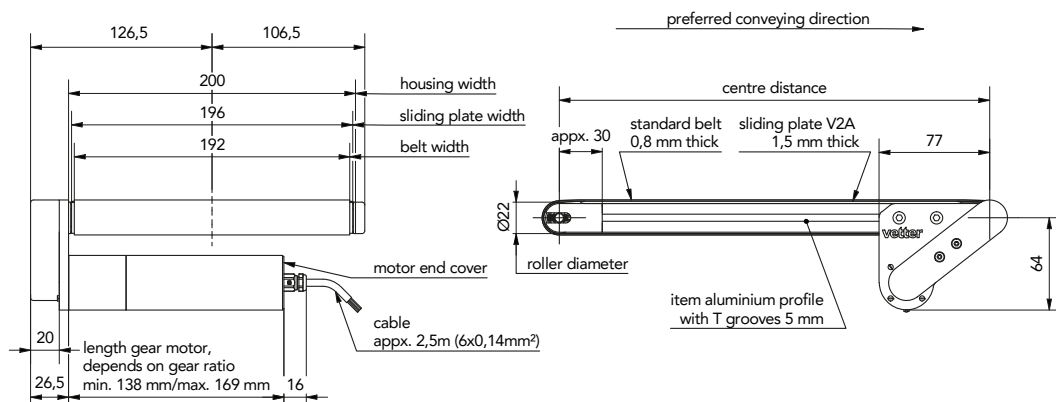
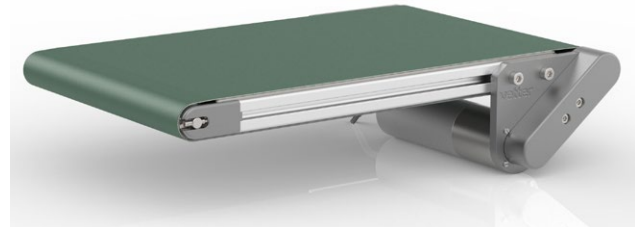
Modular kit
BK-20-200

Housing height	20 mm
Housing width	200 mm
Belt width	192 mm

Centre distance	in consultation
Conveyor speeds / load	<p>2 - 15 m/min at max. 40 N or 0.8 - 5 m/min at max. 100 N</p> <p>Speed adjustable via analog signal 0-10 V: GND or 0 - 0.3 V Programmed, fixed value 0.5 - 0.9 V Motor stop 1 - 10 V Speed adjustable from min. up to max. up to 11 V Speed increase up to 110 % of rated speed with Vetter setpoint device</p>

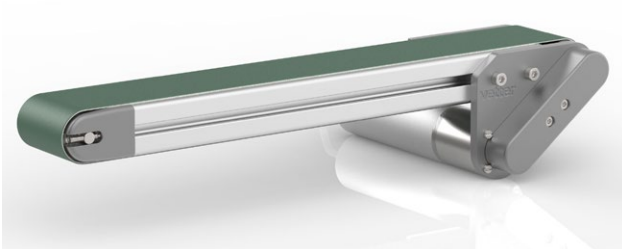
Conveyor belts	white or green, FDA, antistatic
Extensions	<ul style="list-style-type: none"> - sliding supports (e.g. lateral guides) - drive shaft stub - encoder-drive shaft - coupled conveyors (2-track) - coupled conveyors (multiple-track) - setpoint device VR-24-SW-11 - setpoint device VSW-11 - vacuum (perforated belt)

Supply voltage	24 V DC
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Modular kit

BK-30-60



Housing height 30 mm

Housing width 60 mm

Belt width 50 mm

Centre distance in consultation

Conveyor speeds / load 3 - 20 m/min at max. 30 N or
1 - 7 m/min at max. 100 N

Speed adjustable via analog signal 0-10 V:

GND or 0 - 0.3 V Programmed, fixed value

0.5 - 0.9 V Motor stop

1 - 10 V Speed adjustable from min.

up to max.

up to 11 V Speed increase up to 110 %

of rated speed with Vetter
setpoint device

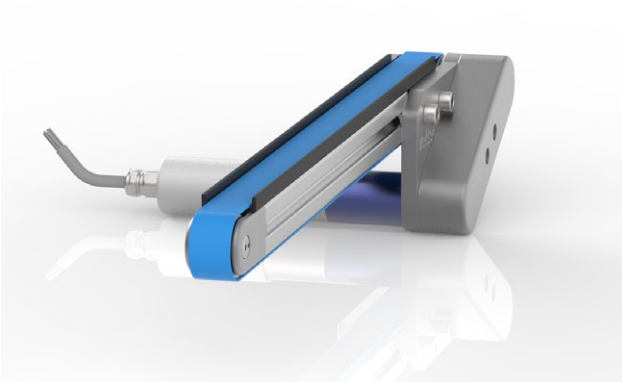
Conveyor belts green, FDA, antistatic

Extensions

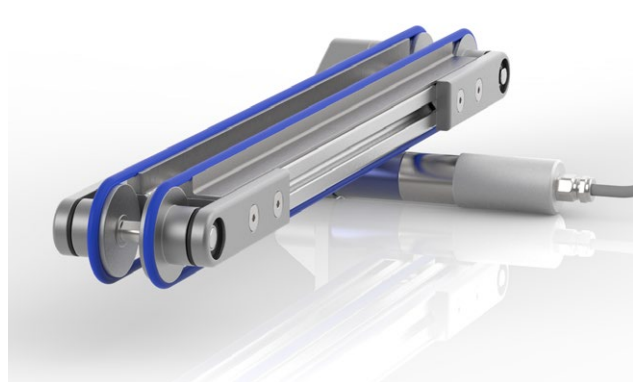
- sliding supports (e.g. lateral guides)
- knife edge (other belt)
- drive shaft stub
- encoder-drive shaft
- coupled conveyors (2-track)
- coupled conveyors (multiple-track)
- setpoint device VR-24-SW-11
- setpoint device VSW-11
- vacuum (perforated belt)

Supply voltage 24 V DC

Lateral guides



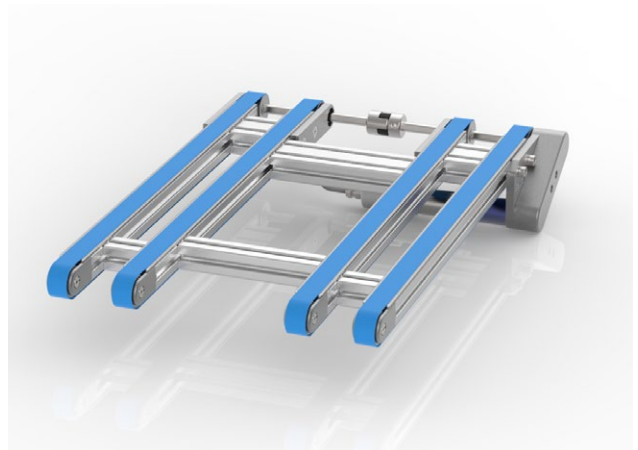
Round belts



2-track



4-track



**Further details
from page 70**



Transmitted light



For one perfect image after the next

Integrated transmitted light units allow for image recognition and image processing during production without interfering reflexes and shadows. This solution replaces rotating or vibrating glass panes.

The high-quality, durable LED panels come with the corresponding controllers and ensure extremely short exposure times as a result of the huge illuminance levels. Drive unit and transmitted light technology are integrated in the small conveyor in such a way that they remain compact, typically Vetter, and have no interference contours.

Advantages

- High-quality, durable LED panels
- Huge illuminance levels - extremely short exposure times
- No formation of shadows, no reflections
- Minimized impact of extraneous light
- Colour: White
- Colour temperature: 5,000 K
- Lighting intensity can be dimmed via analog signal 0–10 V DC (except: FR-12-20-DL and BK-20-20-DL)
- Lighting duration can be controlled via a trigger signal, max. 10 ms (except: FR-12-20-DL and BK-20-20-DL)
- Operation as continuous light possible
- Drive unit and transmitted light technology are integrated in such a way that they remain compact, typically Vetter, and have no interference contours.

Overview

Conveyor type	Housing height	Housing width	Belt width	Max. conveyed load	Conveyor speed	Page
FR-12-20-DL Internal drive	12 mm	20 mm	17 mm	2 N	1.5 m/min	62
FR-20-40-DL Internal drive	20 mm	40 mm	32 mm	5 N or 15 N	2 - 8 m/min 0.7 - 3 m/min	63
FR-40-80-Q-DL Transverse drive	40 mm	80 mm	65 mm	20 N or 40 N or 100 N	5 - 30 m/min 4 - 24 m/min 1.5 - 10 m/min	64
FR-40-120-Q-DL Transverse drive	40 mm	120 mm	105 mm	20 N or 40 N or 100 N	5 - 30 m/min 4 - 24 m/min 1.5 - 10 m/min	65
FR-40-160-Q-DL Transverse drive	40 mm	160 mm	145 mm	20 N or 40 N or 100 N	5 - 30 m/min 4 - 24 m/min 1.5 - 10 m/min	66
FR-40-200-Q-DL Transverse drive	40 mm	200 mm	185 mm	20 N or 40 N or 100 N	5 - 30 m/min 4 - 24 m/min 1.5 - 10 m/min	67
BK-20-20-DL Modular kit	20 mm	20 mm	17 mm	10 N or 20 N	2.5 - 20 m/min 0.8 - 6 m/min	68
BK-20-40-DL Modular kit	20 mm	40 mm	32 mm	10 N or 20 N	2.5 - 20 m/min 0.8 - 6 m/min	69

Transmitted light

FR-12-20-DL



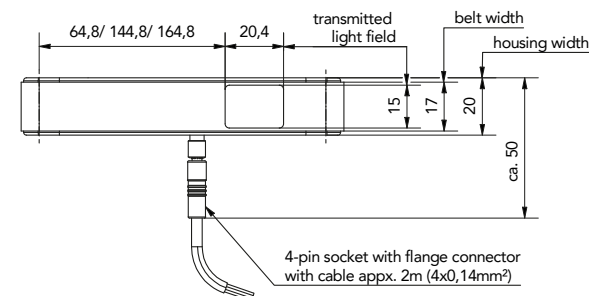
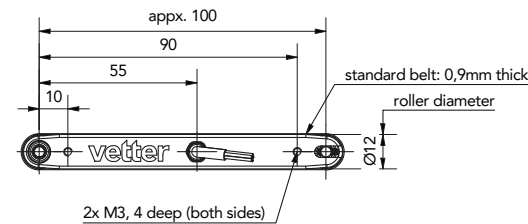
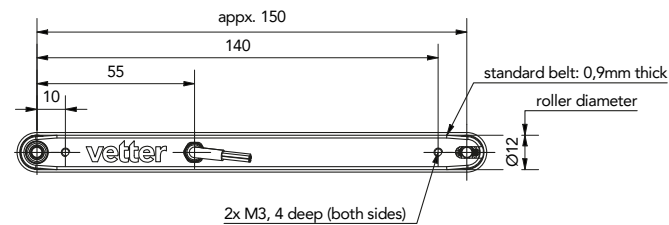
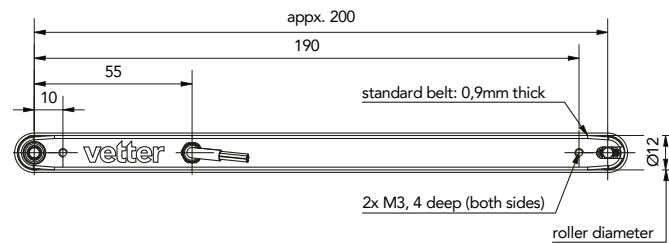
Housing height	12 mm
Housing width	20 mm
Belt width	17 mm

Centre distance	100, 150 or 200 mm
Conveyor speeds / load	1.5 m/min at max. 2 N
Conveyor belts	translucent, FDA

Supply voltage	6 V DC
Further information	Conveying direction variable

Transmitted light:

- Dimensions transmitted light field: 15 x 20.4 mm
- Colour: White
- Colour temperature: 5,000 K
- Operation as continuous light
- Supply voltage / current input transmitted light: 24 V DC (18 - 30 V DC) / 0.05 A



Housing height	20 mm
Housing width	40 mm
Belt width	32 mm

Centre distance	in mm (available at short notice): 350, 400, 450, 500, 600, 700, 800, 900, 1,000 Custom centre distances on request
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Conveyor speeds / load	2 - 8 m/min at max. 5 N or 0.7 - 3 m/min at max. 15 N Speed controller integrated and easy to set by means of +/- keys or via external analog signal 0 - 10 V.
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Conveyor belts	translucent, FDA
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Extensions	- sliding supports (e.g. lateral guides) - drive shaft stub - encoder-drive shaft - setpoint device VR-24-SW-11 - setpoint device VSW-11
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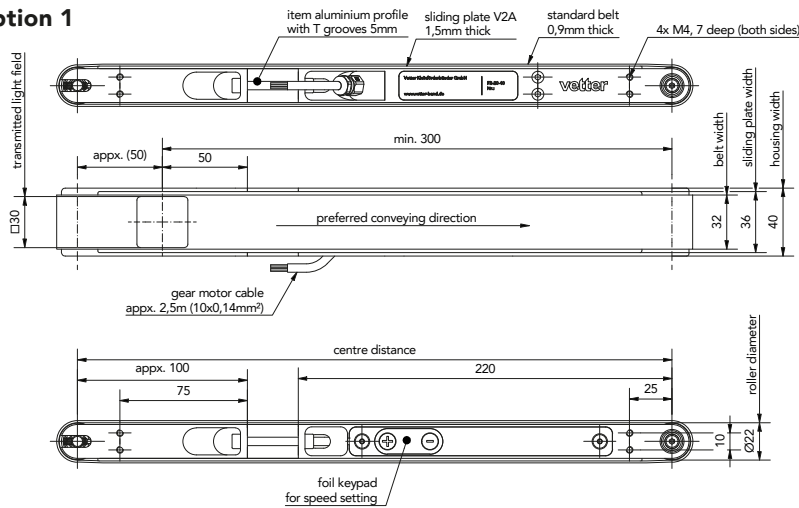
Supply voltage	24 V DC
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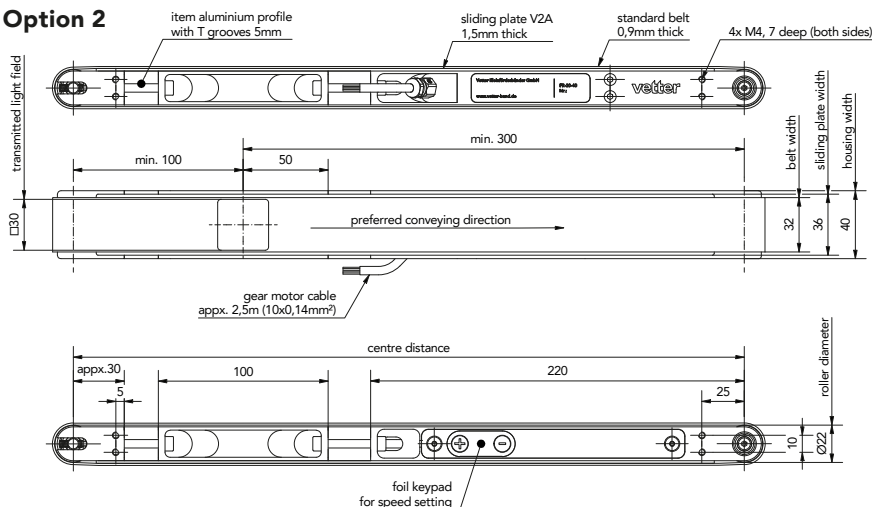
Further information

- Dimensions transmitted light field: 30 x 30 mm
- Colour: White
- Colour temperature: 5,000 K
- Operation as continuous light
- Lighting duration can be controlled via a trigger signal, max. 10 ms
- Lighting intensity can be dimmed via analog signal 0-10 V DC
- Supply voltage / current input transmitted light: 24 V DC (18 - 30 V DC) / 0,1 A

Option 1



Option 2



Transmitted light

FR-40-80-Q-DL



Housing height	40 mm
Housing width	80 mm
Belt width	65 mm

Centre distance	in mm (available at short notice): 450, 500, 600, 700, 800, 900, 1,000, 1,200, 1,400, 1,600 Custom centre distances on request
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Conveyor speeds / load	5 - 30 m/min at max. 20 N or 4 - 24 m/min at max. 40 N or 1.5 - 10 m/min at max. 100 N
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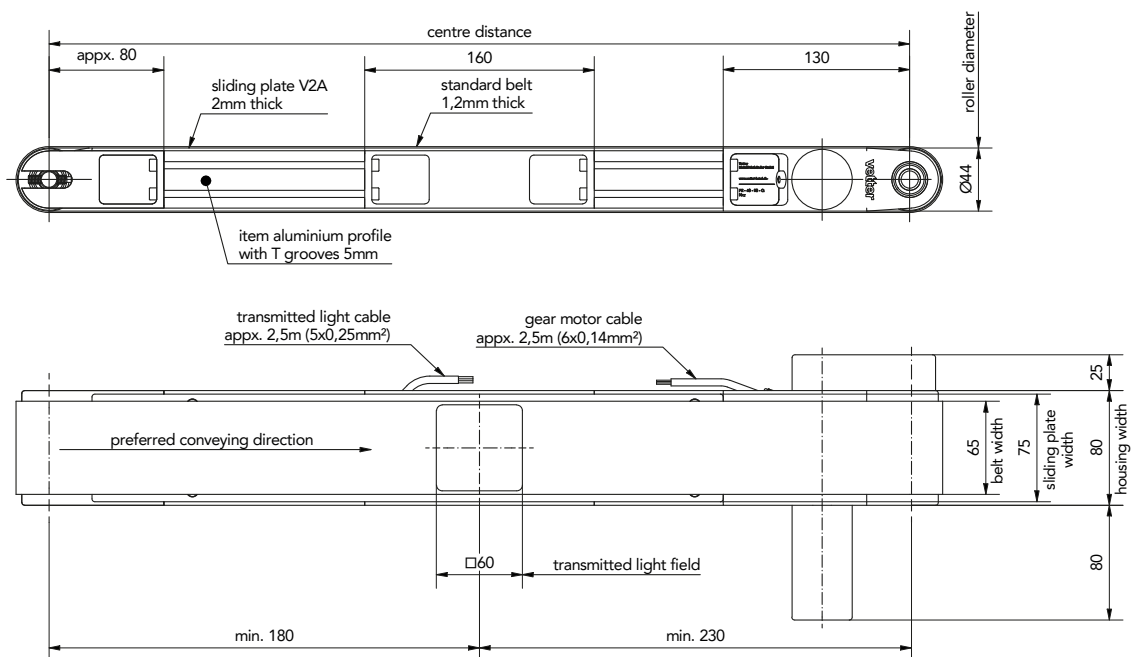
Speed adjustable via analog signal 0-10 V:
 GND or 0 - 0.3 V Programmed, fixed value
 0.5 - 0.9 V Motor stop
 1 - 10 V Speed adjustable from min. up to max.
 up to 11 V Speed increase up to 110 % of rated speed with Vetter setpoint device

Conveyor belts	translucent, FDA
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- Extensions
- sliding supports (e.g. lateral guides)
 - drive shaft stub
 - encoder-drive shaft
 - setpoint device VR-24-SW-11
 - setpoint device VSW-11

Supply voltage	24 V DC
----------------	---------

- Further information
- Dimensions transmitted light field: 60 x 60 mm
 - Colour: White
 - Colour temperature: 5,000 K
 - Operation as continuous light
 - Lighting duration can be controlled via a trigger signal, max. 10 ms
 - Lighting intensity can be dimmed via analog signal 0-10 V DC
 - Supply voltage / current input transmitted light: 24 V DC (18 - 30 V DC) / 0.42 A



FR-40-120-Q-DL

Housing height	40 mm
Housing width	120 mm
Belt width	105 mm

Centre distance	in mm (available at short notice): 450, 500, 600, 700, 800, 900, 1,000, 1,200, 1,400, 1,600 Custom centre distances on request
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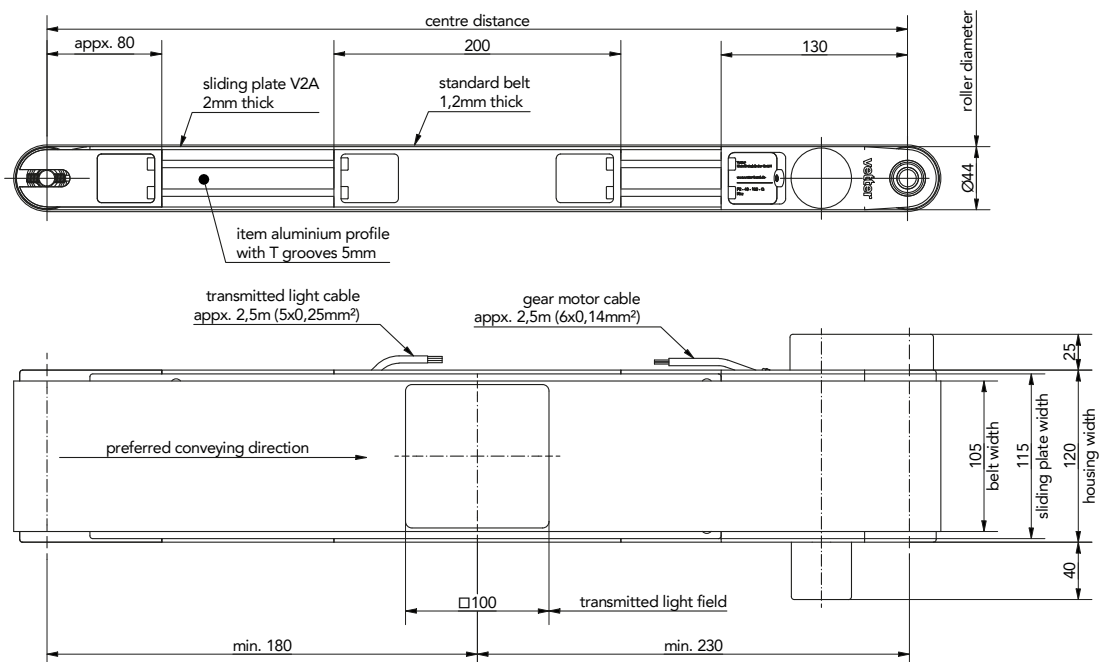
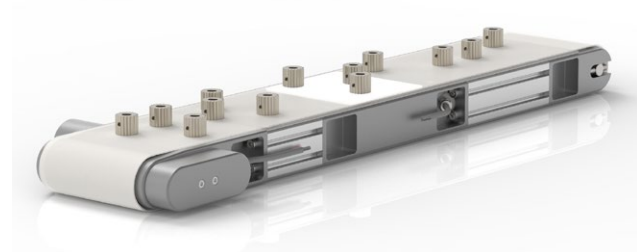
Conveyor speeds / load	5 - 30 m/min at max. 20 N or 4 - 24 m/min at max. 40 N or 1.5 - 10 m/min at max. 100 N
	Speed adjustable via analog signal 0-10 V: GND or 0 - 0.3 V Programmed, fixed value 0.5 - 0.9 V Motor stop 1 - 10 V Speed adjustable from min. up to max. up to 11 V Speed increase up to 110 % of rated speed with Vetter setpoint device

Conveyor belts	translucent, FDA
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Extensions	- sliding supports (e.g. lateral guides) - drive shaft stub - encoder-drive shaft - setpoint device VR-24-SW-11 - setpoint device VSW-11
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Supply voltage	24 V DC
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Further information	- Dimensions transmitted light field: 100 x 100 mm - Colour: White - Colour temperature: 5,000 K - Operation as continuous light - Lighting duration can be controlled via a trigger signal, max. 10 ms - Lighting intensity can be dimmed via analog signal 0-10 V DC - Supply voltage / current input transmitted light: 24 V DC (18 - 30 V DC) / 0.93 A
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Transmitted light

FR-40-160-Q-DL



Housing height	40 mm
Housing width	160 mm
Belt width	145 mm

Centre distance	in mm (available at short notice): 500, 600, 700, 800, 900, 1,000, 1,200, 1,400, 1,600 Custom centre distances on request
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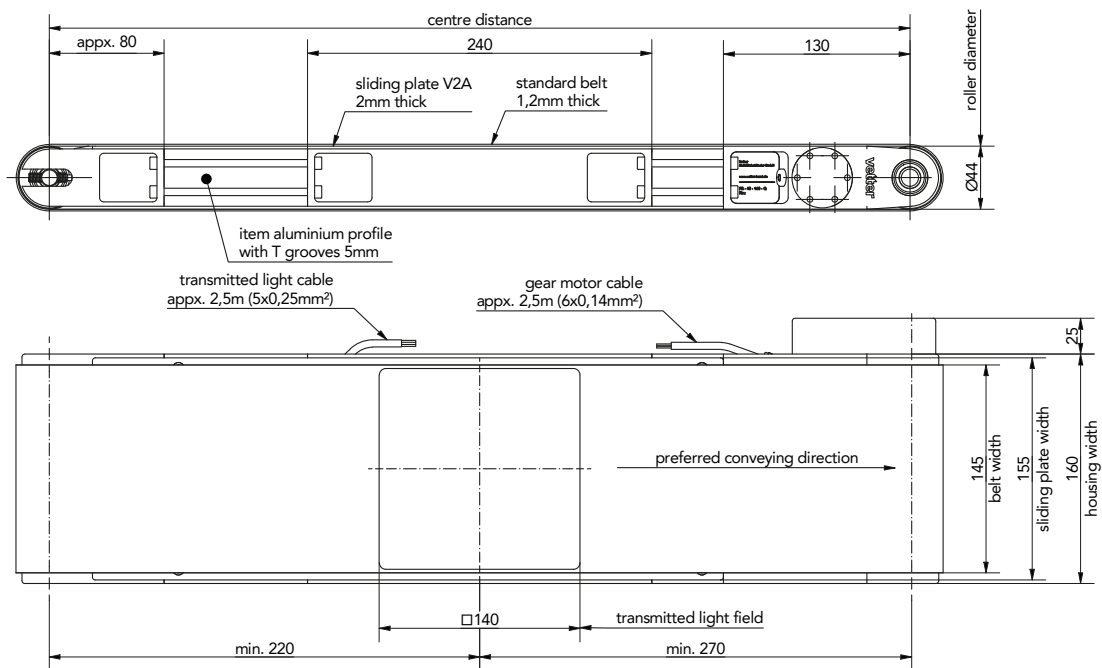
Conveyor speeds / load	5 - 30 m/min at max. 20 N or 4 - 24 m/min at max. 40 N or 1.5 - 10 m/min at max. 100 N
	Speed adjustable via analog signal 0-10 V: GND or 0 - 0.3 V Programmed, fixed value 0.5 - 0.9 V Motor stop 1 - 10 V Speed adjustable from min. up to max. up to 11 V Speed increase up to 110 % of rated speed with Vetter setpoint device

Conveyor belts	translucent, FDA
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Extensions	- sliding supports (e.g. lateral guides) - drive shaft stub - encoder-drive shaft - setpoint device VR-24-SW-11 - setpoint device VSW-11
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Supply voltage	24 V DC
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Further information	- Dimensions transmitted light field: 140 x 140 mm - Colour: White - Colour temperature: 5,000 K - Operation as continuous light - Lighting duration can be controlled via a trigger signal, max. 10 ms - Lighting intensity can be dimmed via analog signal 0-10 V DC - Supply voltage / current input transmitted light: 24 V DC (18 - 30 V DC) / 1.23 A
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FR-40-200-Q-DL

Housing height	20 mm
Housing width	200 mm
Belt width	185 mm

Centre distance	in mm (available at short notice): 600, 700, 800, 900, 1,000, 1,200, 1,400, 1,600 Custom centre distances on request
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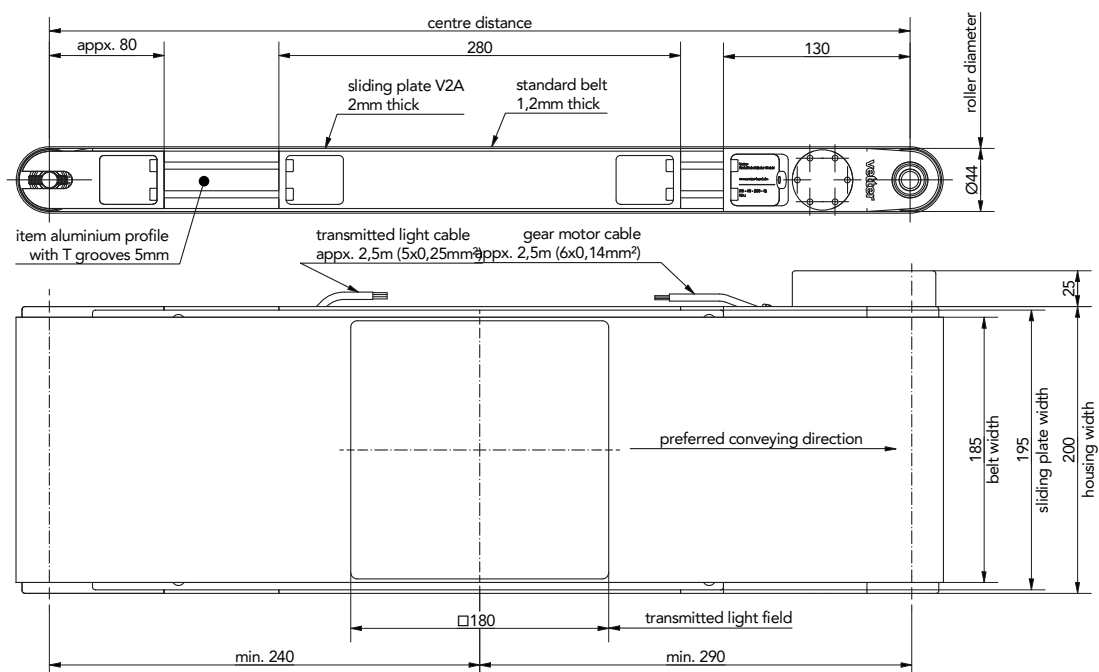
Conveyor speeds / load	5 - 30 m/min at max. 20 N or 4 - 24 m/min at max. 40 N or 1.5 - 10 m/min at max. 100 N
	Speed adjustable via analog signal 0-10 V: GND or 0 - 0.3 V Programmed, fixed value 0.5 - 0.9 V Motor stop 1 - 10 V Speed adjustable from min. up to max. up to 11 V Speed increase up to 110 % of rated speed with Vetter setpoint device

Conveyor belts	translucent, FDA
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Extensions	- sliding supports (e.g. lateral guides) - drive shaft stub - encoder-drive shaft - setpoint device VR-24-SW-11 - setpoint device VSW-11
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Supply voltage	24 V DC
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Further information	- Dimensions transmitted light field: 180 x 180 mm - Colour: White - Colour temperature: 5,000 K - Operation as continuous light - Lighting duration can be controlled via a trigger signal, max. 10 ms - Lighting intensity can be dimmed via analog signal 0-10 V DC - Supply voltage / current input transmitted light: 24 V DC (18 - 30 V DC) / 1.68 A
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Transmitted light

BK-20-20-DL



Housing height	20 mm
Housing width	20 mm
Belt width	15 mm

Centre distance	in consultation
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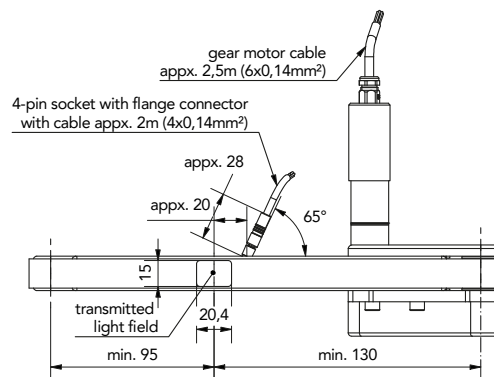
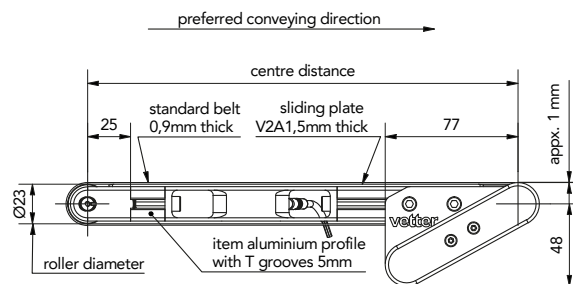
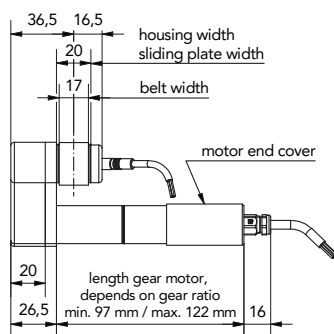
Conveyor speeds / load	2.5 - 20 m/min at max. 10 N or 0.8 - 6 m/min at max. 20 N
	Speed adjustable via analog signal 0-10 V: GND or 0 - 0.3 V Programmed, fixed value 0.5 - 0.9 V Motor stop 1 - 10 V Speed adjustable from min. up to max. up to 11 V Speed increase up to 110 % of rated speed with Vetter setpoint device

Conveyor belts	translucent, FDA
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Extensions	- sliding supports (e.g. lateral guides) - drive shaft stub - encoder-drive shaft - setpoint device VR-24-SW-11 - setpoint device VSW-11
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Supply voltage	24 V DC
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Further information	- Dimensions transmitted light field: 15 x 20.4 mm - Colour: White - Colour temperature: 5,000 K - Operation as continuous light - Supply voltage / current input transmitted light: 24 V DC (18 - 30 V DC) / 0.05 A
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Transmitted light BK-20-40-DL

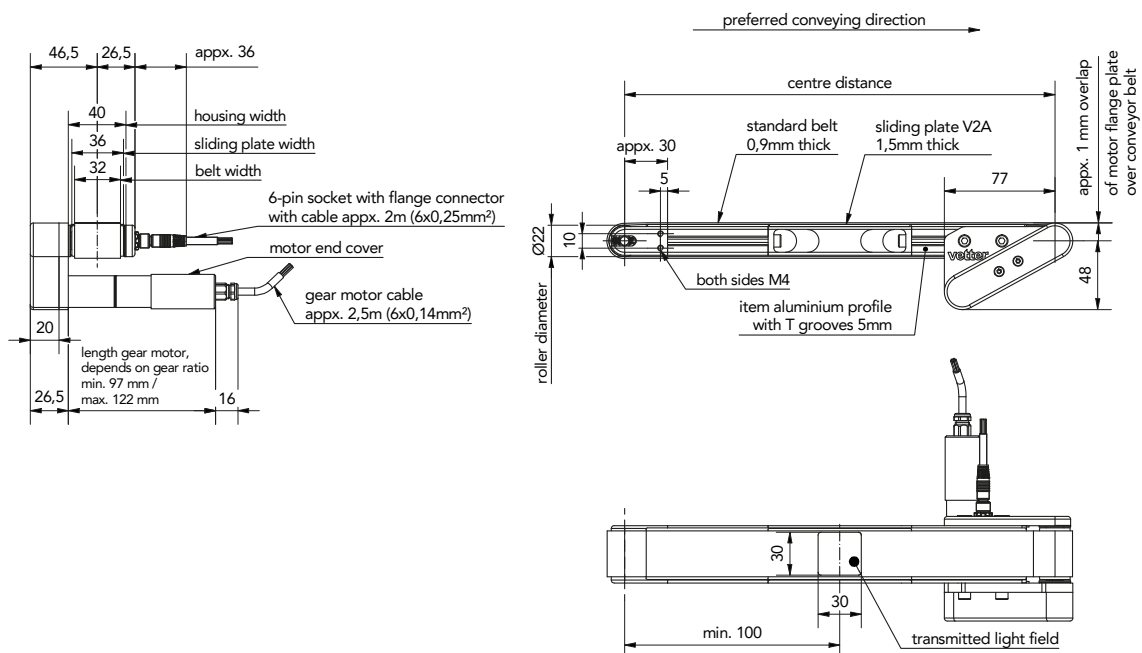
Housing height	20 mm
Housing width	40 mm
Belt width	32 mm

Centre distance	in consultation
Conveyor speeds / load	2.5 - 20 m/min at max. 10 N or 0.8 - 6 m/min at max. 20 N
	Speed adjustable via analog signal 0-10 V: GND or 0 - 0.3 V Programmed, fixed value 0.5 - 0.9 V Motor stop 1 - 10 V Speed adjustable from min. up to max. up to 11 V Speed increase up to 110 % of rated speed with Vetter setpoint device

Conveyor belts	translucent, FDA
Extensions	- sliding supports (e.g. lateral guides) - drive shaft stub - encoder-drive shaft - setpoint device VR-24-SW-11 - setpoint device VSW-11

Supply voltage	24 V DC
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Further information	- Dimensions transmitted light field: 30 x 30 mm - Colour: White - Colour temperature: 5,000 K - Operation as continuous light - Lighting duration can be controlled via a trigger signal, max. 10 ms - Lighting intensity can be dimmed via analog signal 0-10 V DC - Supply voltage / current input transmitted light: 24 V DC (18 - 30 V DC) / 0.1 A
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Custom solutions

Lateral guides

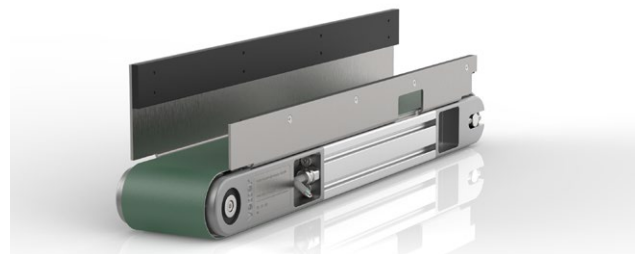
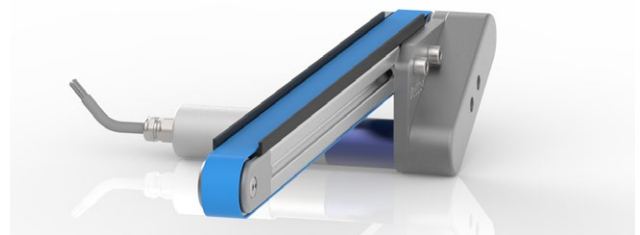
From time to time, conveyed goods require special "guidance". To make sure parts that are round or especially light don't fall off the belt, a special sliding plate is needed.

Solution

The small conveyor is equipped with a special sliding support instead of the usual sliding plate. The plate is manufactured from a single piece and bent upwards to form a "U-shaped groove". This is how the integrated lateral guides are formed. We'd be happy to talk with you about the height you require.

Material: Stainless steel or plastic.

It is possible to add lateral guides to any of the conveyor models.



Vacuum belt

The small conveyor with vacuum function is often used to transport products which are particularly lightweight and which under no circumstances are to be permitted to "fly off".

In the illustrated example, our customer manufactures small plastic bags and needs a small conveyor for intermediate transport of the product which provides the option of keeping the bags on the belt by means of suction.

Solution

The solution is a small conveyor with a vacuum belt made of polyurethane. The conveyor belt has many perforations through which intake air can flow to create the vacuum. The foils to be conveyed thus remain lying in the desired position on the conveyor belt.

The housing of the conveyor is equipped with several connections for the intake air in order to enable high air throughput.



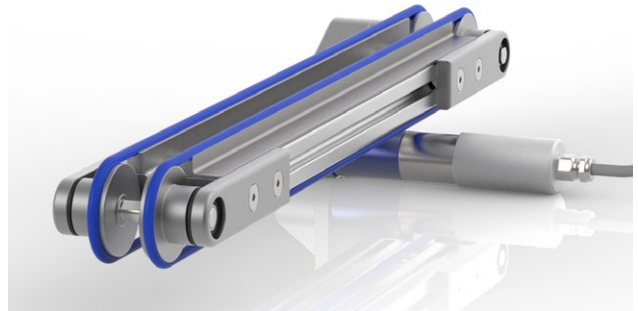
Round belts

If a flat conveyor belt is not the ideal surface for your conveyed goods, it is also possible to use round belts. Round belts are always used when the product requires an exact belt line. In the example shown here, the product is also to be able to hang down between the tracks along the entire length of the conveyor.

Solution

For free conveyance of the components protruding downward, special drive and deflector rollers are used which enable the required clearance height above the drive shaft. In addition, special sliding guides are used for the round belts.

The belts are made of elastic PU material and are available in various diameters and surfaces.



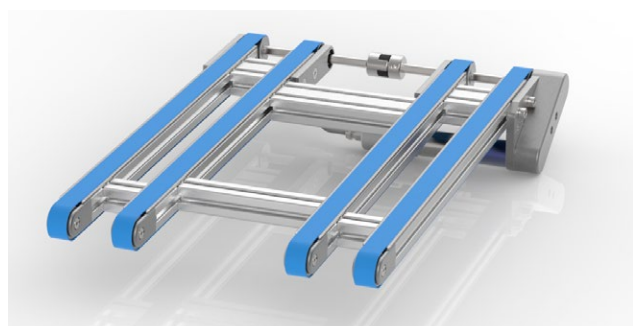
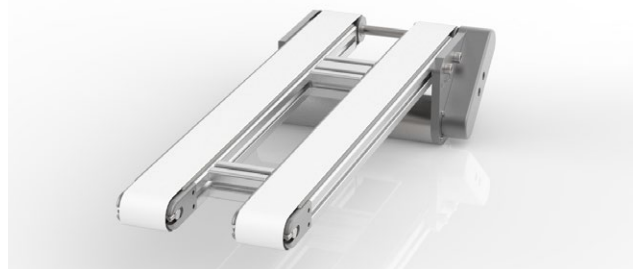
Modular kit multi-track

Multiple-track conveyor solutions are often required when complex products should also hang down between the tracks.

Other conceivable application cases include testing or assembly tasks. For example, it is possible to fit stoppers or ejectors between the tracks.

Solution

We manufacture multiple-track conveyor solutions using our flexible modular kit system. The solution consists of a motor and any number of conveyor tracks. This version makes it possible for us to ensure that all conveyors run synchronously at the exact same speed. If more complex products are to be conveyed on all tracks, synchronous running is essential. On request, the transverse profiles shown in the picture can also be fitted at a different point for mounting. You are flexible with regard to housing width and in your choice of conveyor belts.



Custom solutions

Knife edge

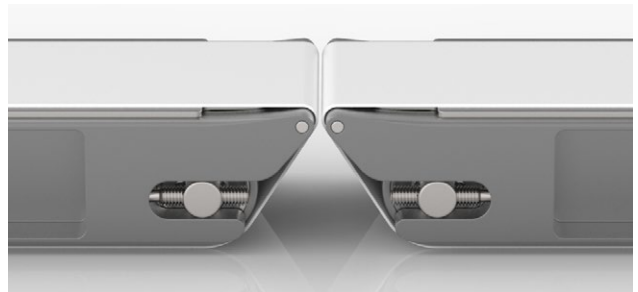
If especially small parts are to be transferred from one conveyor to the next one, a special solution is needed. Another knife edge use case is when products are to be scanned from below while being conveyed from A to B.

Solution

Although the roller diameter of Vetter small conveyors is already small, further reduction is necessary. With roller diameters of 5 and 8 mm, especially small parts can be transferred from one conveyor to the next one without any problems.

The gap between the two belts is thus considerably reduced and can, for instance, also be used for scanning the products from below.

For this application, we have special belts in our range which we have successfully tested for the increased load at the knife edge. On request, we can also rely on belts for this application, which are endless and therefore have no weld seam. This provides an even calmer and more accurate runnability.



Encoder shaft

If you would like to mount your own encoder on the conveyor, we are happy to meet the requirements. A use case is, for example, the recording of the exact positions of your goods on the conveyor.

Solution

If desired, we can equip our products with an encoder shaft. You can use the connection to easily connect the external rotary encoder and access the output signals.



Sealed profiles

For use in sterile environments, e.g. in the pharmaceuticals industry or in food processing, the requirements our products must meet are particularly strict. The objective is to create a product which offers no chance for dirt particles or impurities to accumulate. Recesses and grooves of all kinds must be avoided.

Solution

For this special case, we have further optimized our small conveyors with transverse drive. The drive is integrated in the housing for the most part and comes with an external cover for protection against contact. The drive housing can thus be optimally sealed to protect against the ingress of dust and liquids.

The example shows a further optimization which results from replacing conventional profiles with sealed profiles. The solution is possible for all conveyors in which profiles are integrated.



Shaft stub

If you would like to use your own drive technology, you can also purchase our conveyors without an engine.

Solution

We equip the conveyor with a shaft stub, which you can use to flexibly connect your own drive.



Drive and control technology

Powerful motors

All Vetter small conveyors (with the exception of FR-12-20) are equipped with state-of-the-art Faulhaber EC motors (brushless DC motors) with integrated speed controller.

Interference contours? No, thanks! Along with the gear motors, the control electronics are integrated in the housing of the small conveyors in the typical "Vetter" fashion.

Service made easy: The new generation of motors is mechanically fully compatible with the brushed motors which have been in use for more than 20 years now. Replacement is considerably simplified as a result of the electrical plug connectors.



One drive – all kinds of options

Cyclic operation

The small conveyor can also be operated cyclically using the analogue signal. If you additionally use programmed acceleration and deceleration ramps in your controller, this is easy on the mechanical system. Thanks to brushless technology, it is possible to achieve high acceleration currents without causing motor wear.

Conveying direction

The speed controllers integrated in the motor have a signal input for specifying the direction of rotation, which makes it easy to change the conveying direction.

Positioning tasks

The signal output provides you with 32 pulses per motor shaft rotation for processing in your controller. This makes it possible to implement positioning tasks without additional encoders. We would be happy to help you calculate the resolution.

Speed control with Vetter setpoint devices

To ensure that your conveyed goods always arrive at their destination at the right time, our range includes suitable electronic setpoint devices for our small conveyors.

The setpoint devices are installed upstream of the drive of the corresponding conveyor and are easy to operate manually or can be electronically controlled via one of your system's existing controllers. This way, you individually determine the conveying speed of your conveyed goods to suit your requirements.



VSW-11

- 24 V DC input voltage
- 0 – 11 V DC reference value output
- 0 – 110 % conveyor speed
- Connection assignment optimized for Vetter small conveyors
- Easy installation in control cabinets

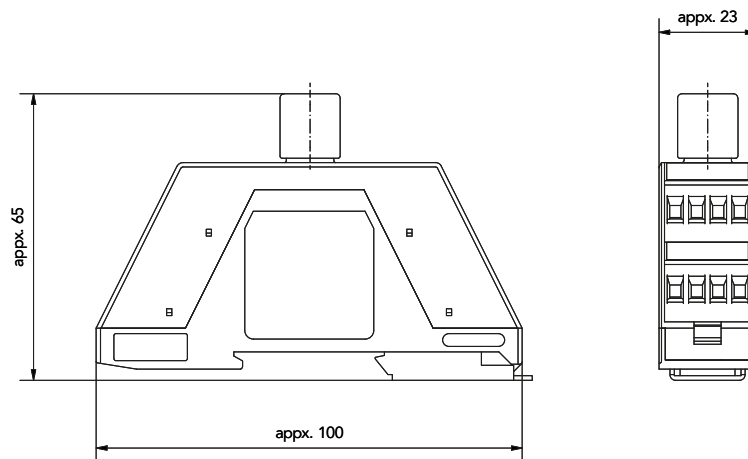


VR-24-SW-11

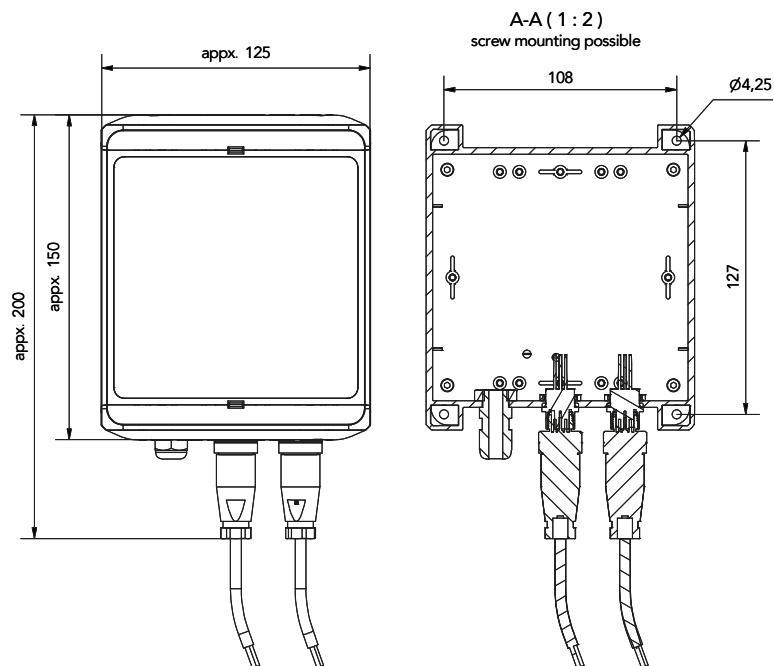
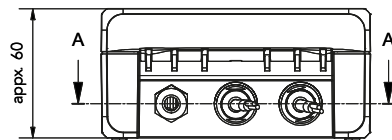
- 100 – 240 V AC / 50 – 60 Hz / 1.3 A input voltage
- 24 V DC / 2 A output voltage
- 0 – 11 V DC reference value output
- 0 – 110 % conveyor speed
- Easy wall or table mounting
- Protection class IP 67
- Connection via connectors
(housing does not need to be opened)

Setpoint device

VSW-11



Setpoint device
VR-24-SW-11



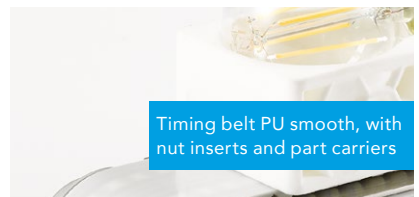
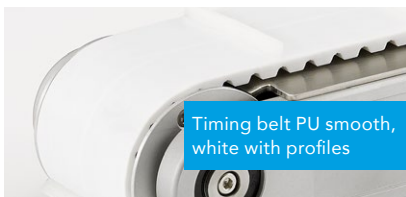
Conveyor belts

Adapted to suit your conveyed goods

Our selection of conveyor belts is just as varied as our product range. Whether you want to use accumulating mode operation, require an especially good friction grip or even need a "combination" of the two – we'll find a

solution for your application and are happy to advise you. Further belt models, colours and structures are available on request.





May we ask you?

What do you want to transport?

- Dimensions single part
 - Weight
- Quantity on the conveyor

Which dimensions should the conveyor have?

- Length (centre distance)
- Width
- Height

Which transport speed do you need (m/min)?

- Fix programmed
- Range min/max

What are the environmental conditions?

(Dust, liquids, temperature, clean room or similar)

Which operating mode do you require?

- single transport or accumulation of parts on the belt
- start-stop-operation (frequency)
- forward-backward-transport (shares in %)

Do you need extensions such as lateral guides or transmitted light for image processing?

Can you provide an analog signal (0 - 10 V) or do you need a manual potentiometer?

The way to your small conveyor

Know your dimensions?

With the product finder on our website you will quickly find the right conveyor for your specifications.



www.vetter-band.de/en/product-finder/

Incl. 3D data
for download

Product finder

Belt width



Housing width



Housing height

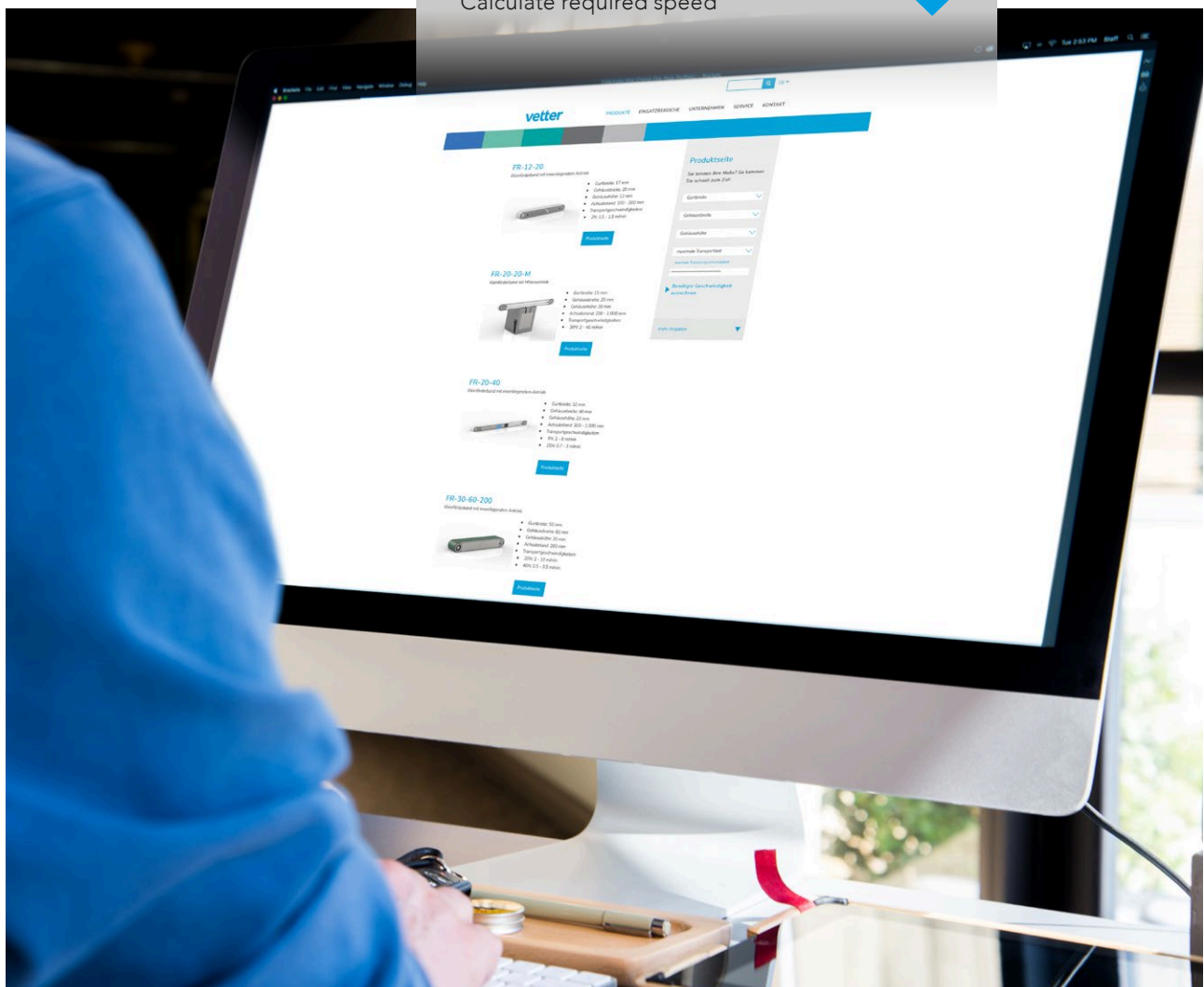


Maximum conveyed load



Maximum conveyor speed

Calculate required speed



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