



# 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

APPRECIATIONiswritten 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.

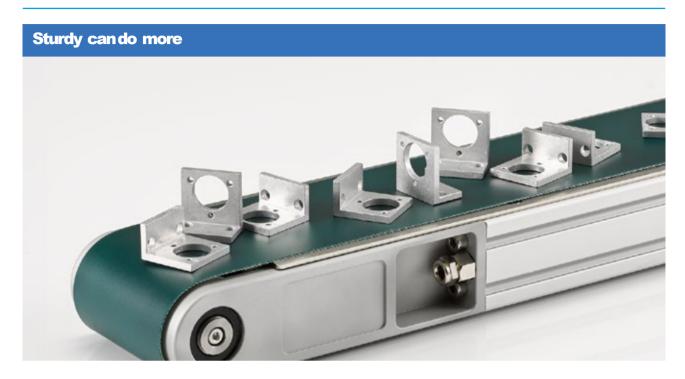
### Quality

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



#### **Powerful and durable**

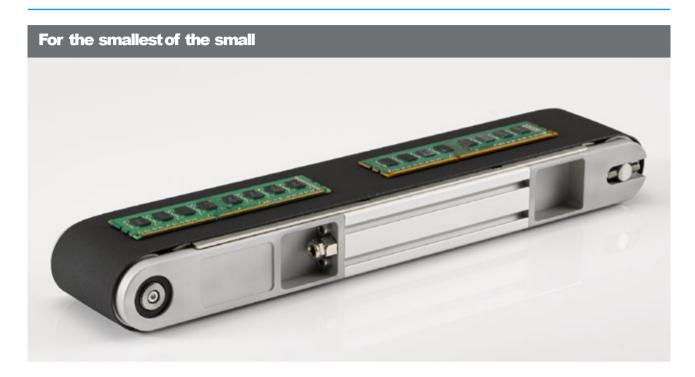
Our smallconveyorsunite top performance and maximum quality with select materials. They are therefore powerful at low current ratings and also function with absolute reliability even in 3-shift operation. The well-designed construction without interference contours in the series with internal and transverse 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
- · Easyinstallation in your systems
- · Powerfulmotors
- Conveyed load up to 100 N
- · Large selection of conveyor belts
- · Flexible adaptation designs and extension options

# Microtechnology



### 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 cyclicoperation 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 0.5m/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



### 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.

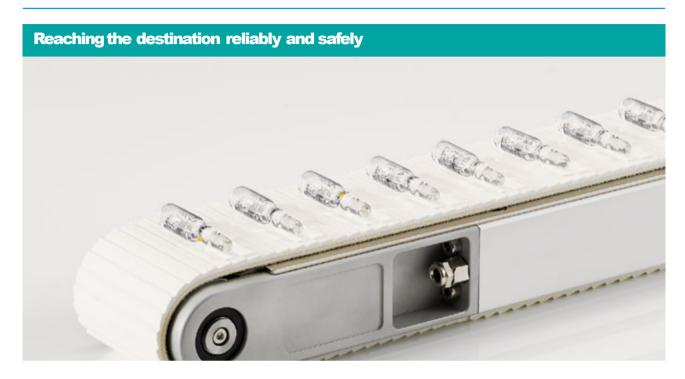
- · Design optimized for hygiene
- · Sealed stainless steel ball bearings and drive housing
- · Conveyor belt is easy to disassemble for cleaning
- · Materials: Stainless steel and FDA plastics
- Mounting and fastening bores easyto produce in the 100 % plastic part
- · Many different FDA conveyorbelts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



#### 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 conveyorbelts 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-DLand BK-20-20-DL)
- Lighting duration can be controlled via a trigger signal, max. 10 ms (except: FR-12-20-DLand BK-20-20-DL)
- · Operation as continuous light possible

#### FR-12-20-DL



Our smallest model FR-12-20with 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

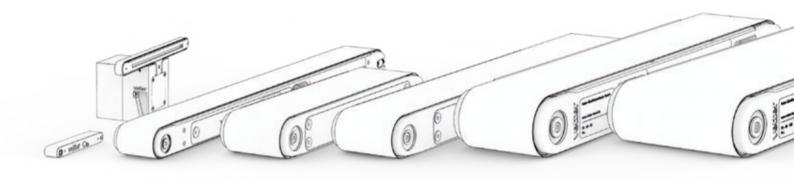


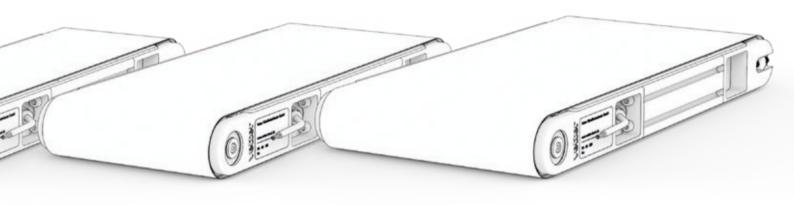
Small conveyor from the modular kit with 40-mm housing width.

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**



# 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	2-8 m/min	19
				15 N	0.7-3 m/min	
FR-30-60-200	30 mm	60 mm	50 mm	20 N or	2-10 m/min	20
				40 N	0.5-3.5 m/min	
FR-30-60	30 mm	60 mm	50 mm	20 N or	2–10 m/min	21
				40 N	0.5-3.5 m/min	
FR-40-80	40 mm	80 mm	65 mm	50 N or	2–10 m/min	22
				100 N	0.5-3 m/min	
FR-40-120	40 mm	120 mm	105 mm	50 N	2–10 m/min	23
				or 100 N	0.5-3 m/min	
FR-40-160	40 mm	160 mm	145 mm	50 N	2–10 m/min	24
				or 100 N	0.5-3 m/min	
FR-40-200	40 mm	200 mm	185 mm	50 N	2-10 m/min	25
				or 100 N	0.5-3 m/min	
ZR-40-80	40 mm	80 mm	50 mm	50 N	2-10 m/min	26
				or 100 N	0.5-3 m/min	

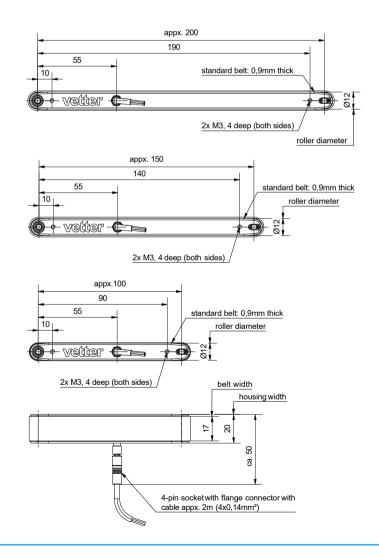
### Internal drive

# 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

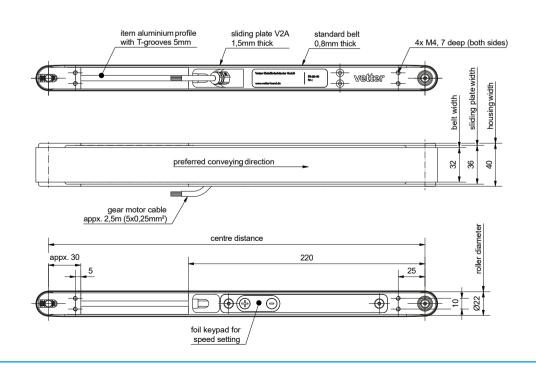


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Housing height	20 mm
Housing width	40 mm
Belt width	32 mm

Centre distance	in mm (available at short notice): 300, 350, 400, 450, 500, 600, 700, 800, 900, 1,000 Custom centre distances on request
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 easyto set by means of +/- keys or via external analog signal 0 - 10 V.
Conveyor belts	white, FDA, antistatic (others available on request)
Extensions	- 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
Supply voltage	24 V DC





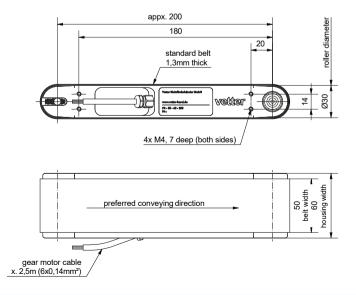
### Internal drive

# FR-30-60-200

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



Centre distance	200 mm	
Conveyor speeds / load	2 - 10 m/min at max. 0.5 - 3.5 m/min at ma	
	Speed adjustable via GND or 0 - 0.3 V 0.5 - 0.9 V 1 - 10 V up to 11	a analog signal 0-10V: Programmed, fixed value Motor stop Speed adjustable from min. up to max. Speed increase up to 110 % of rated speed with Vetter setpoint device
Conveyor belts	green, FDA, antistation	c (othersavailable on request)
Extensions	- sliding supports (e - drive shaft stub - encoder-drive shaf - setpoint device VR - setpoint device VS	it 1-24-SW-11
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), 350, 400, 450, 500, 600, 700, 800, 900, 1,000, 1,200 Custom centre distances on request

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 0-10V: GND or 0 - 0.3 V Programmed, fixed value

0.5 - 0.9 V 1 - 10 V

Motor stop
Speed adjustable from

min. up to max.

Speed increase up to 110 % up to 11 V

of rated speed with Vetter

setpoint device

Conveyor belts green, FDA, antistatic (othersavailable on request)

- sliding supports (e.g. lateral guides) - knife edge (other belt) Extensions

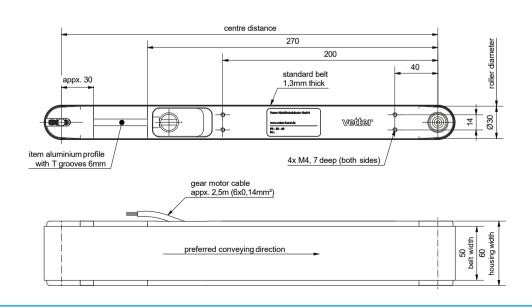
- drive shaft stub - encoder-drive shaft

- setpoint device VR-24-SW-11

- setpoint device VSW-11

Supply voltage 24 V DC





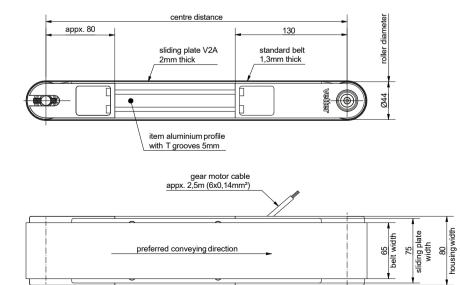
### Internal drive

# 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	
Conveyor speeds / load	2 - 10 m/min at max 0.5 - 3 m/min at max Speed adjustable vi GND or 0 - 0.3 V 0.5 - 0.9 V 1 - 10 V up to 11 V	
Conveyor belts	green, FDA, antistatic (othersavailable on request)	
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	
Supply voltage	24 V DC	



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

### FR-40-120

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

Conveyor speeds / load

2 - 10 m/min at max. 50 N or

0.5 - 3 m/min at max. 100 N

Speed adjustable via analog signal 0-10V: Programmed, fixed value

GND or 0 - 0.3 V 0.5 - 0.9 V 1 - 10 V

Motor stop
Speed adjustable from min. up to max.

Speed increase up to 110 % up to 11 V

of rated speed with Vetter

setpoint device

Conveyor belts green, FDA, antistatic (othersavailable on request)

- sliding supports (e.g. lateral guides) - knife edge (other belt) Extensions

- drive shaft stub - encoder-drive shaft

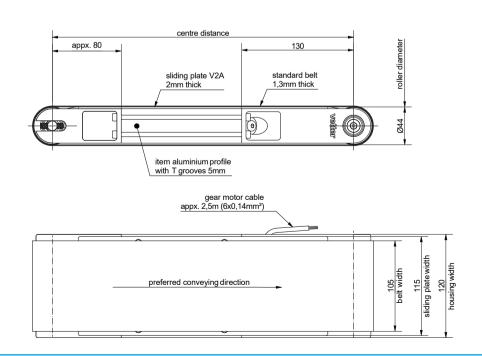
- coupled conveyors (2-track)

- setpoint device VR-24-SW-11

- setpoint device VSW-11

24 V DC Supply voltage





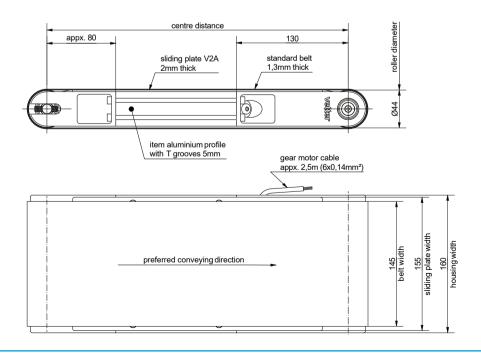
### Internal drive

### FR-40-160

Housing height	40 mm
Housing width	160 mm
Belt width	145 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 Conveyor speeds / load 2 - 10 m/min at max. 50 N or 0.5 - 3 m/min at max. 100 N Speed adjustable via analog signal 0-10V: Programmed, fixed value GND or 0 - 0.3 V Motor stop
Speed adjustable from min. 0.5 - 0.9 V 1 - 10 V up to max. Speed increase up to 110 % up to 11 V of rated speed with Vetter setpoint device green, FDA, antistatic (othersavailable on request) Conveyor belts - sliding supports (e.g. lateral guides) - knife edge (other belt) Extensions - drive shaft stub - encoder-drive shaft - coupled conveyors (2-track) - setpoint device VR-24-SW-11 - setpoint device VSW-11 24 V DC Supply voltage



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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

Conveyor speeds / load

2 - 10 m/min at max. 50 N or

0.5 - 3 m/min at max. 100 N

Speed adjustable via analog signal 0-10V: GND or 0 - 0.3 V Programmed, fixed value

0.5 - 0.9 V 1 - 10 V

Motor stop
Speed adjustable from

min. up to max.

Speed increase up to 110 % up to 11 V

of rated speed with Vetter

setpoint device

Conveyor belts green, FDA, antistatic (othersavailable on request)

- sliding supports (e.g. lateral guides) - knife edge (other belt) Extensions

- drive shaft stub

- encoder-drive shaft

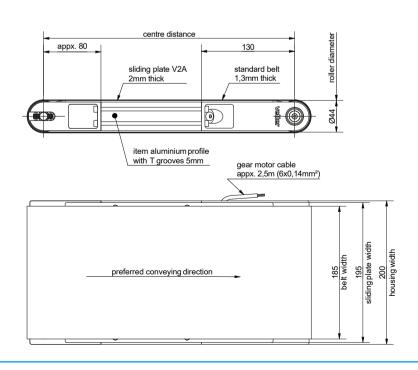
- coupled conveyors (2-track)

- setpoint device VR-24-SW-11

- setpoint device VSW-11

24 V DC Supply voltage





### Internal drive

# ZR-40-80

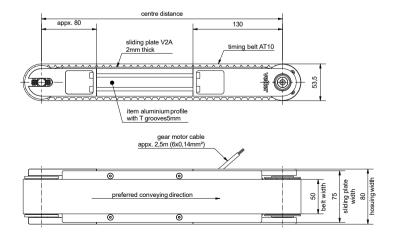
Housing height	40 mm	
Housing width	80 mm	
Belt width	50 mm	

in consultation

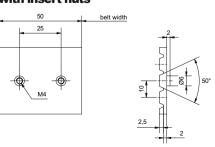
Centre distance



Conveyor speeds / load	2 - 10 m/min at max. 50 N or 0.5 - 3 m/min at max. 100 N	
	Speed adjustable vic GND or 0 - 0.3 V 0.5 - 0.9 V 1 - 10 V up to 11 V	a analog signal 0-10V: Programmed, fixed value Motor stop Speed adjustable from min. up to max. Speed increase up to 110 % of rated speed with Vetter setpoint device
Conveyor belts	timing belt, optionally with insert nuts (others on request)	
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	
Supply voltage	24 V DC	



# Option timing belt ATN10 with insert nuts



# Extensions

Lateral guides



Knife edge



**Encoder shaft** 



Shaft stub instead of motor



Further details from page 70



# **Transverse drive**



# 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	5 - 30 m/min	32
				40 N	4 - 24 m/min	
				or 100 N	1.5 - 10 m/min	
R-40-120-Q	40 mm	120 mm	105 mm	20 N or	5 - 30 m/min	33
				40 N	4 - 24 m/min	
				or 100 N	1.5 - 10 m/min	
FR-40-160-Q	40 mm	160 mm	145 mm	20 N	5 - 30 m/min	34
				or 40 N	4 - 24 m/min	
				or		
				100 N	1.5 - 10 m/min	
R-40-200-Q	40 mm	200 mm	185 mm	20 N	5 - 30 m/min	35
				or 40 N	4 - 24 m/min	
				or 100 N	1.5 - 10 m/min	
				10014	1.5 - 1011/111111	
FR-40-80-Q-P	40 mm	80 mm	65 mm	20 N	5 - 30 m/min	36
				or 40 N	4 - 24 m/min	
				or 100 N	1.5 - 10 m/min	
				TOU IN	1.5- 10 111/111111	
ZR-40-80-Q	40 mm	80 mm	50 mm	20 N	5 - 30 m/min	37
				or 40 N	4 - 24 m/min	
				or		
				100 N	1.5 - 10 m/min	

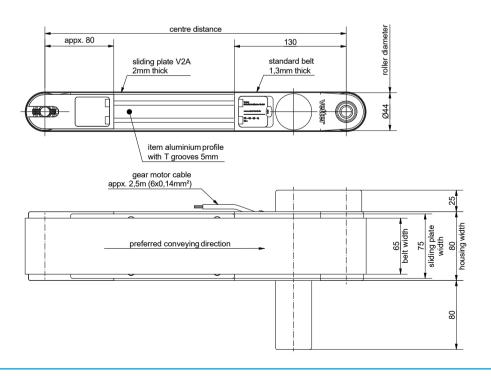
### Transverse drive

# FR-40-80-Q

Housing height	40 mm
Housing width	80 mm
Belt width	65 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 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 0-10V: Programmed, fixed value
Motor stop GND or 0 - 0.3 V 0.5 - 0.9 V 1 - 10 V Speed adjustable from min. up to max. Speed increase up to 110 % up to 11 V of rated speed with Vetter setpoint device Conveyor belts green, FDA, antistatic (othersavailable on request) 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) 24 V DC Supply voltage



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

### FR-40-120-Q

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

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 0-10V: Programmed, fixed value
Motor stop GND or 0 - 0.3V

0.5 - 0.9 V

1 - 10 V

Speed adjustable from min. up to max.

Speed increase up to 110 % up to 11 V

of rated speed with Vetter

setpoint device

Conveyor belts green, FDA, antistatic (othersavailable on request)

Extensions - transmitted light (other belt)

- sliding supports (e.g. lateral guides)

- knife edge (other belt)
- drive shaft stub

- encoder-drive shaft

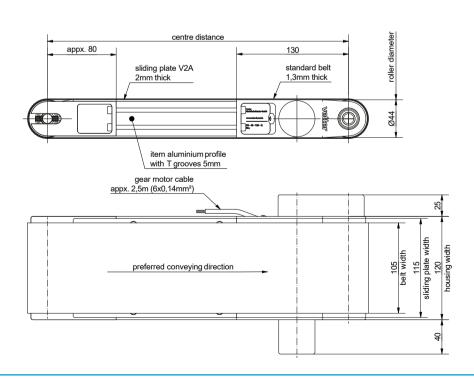
- coupled conveyors (2-track) - setpoint device VR-24-SW-11

- setpoint device VSW-11

- vacuum (perforated belt)

24 V DC Supply voltage



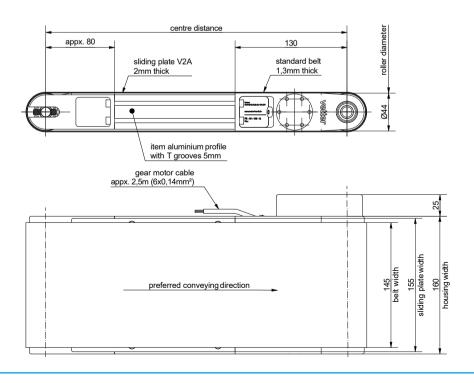


### FR-40-160-Q

Housing height	40 mm
Housing width	160 mm
Belt width	145 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 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 0-10V: Programmed, fixed value Motor stop GND or 0 - 0.3 V 0.5 - 0.9 V 1 - 10 V Speed adjustable from min. up to max. Speed increase up to 110 % up to 11 V of rated speed with Vetter setpoint device Conveyor belts green, FDA, antistatic (othersavailable on request) 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) 24 V DC Supply voltage



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

### FR-40-200-Q

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

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 0-10V:

GND or 0 - 0.3V 0.5 - 0.9 V

Programmed, fixed value Motor stop

1 - 10 V

Speed adjustable from

min. up to max.

Speed increase up to 110 % up to 11 V

of rated speed with Vetter

setpoint device

Conveyor belts green, FDA, antistatic (othersavailable on request)

Extensions - transmitted light (other belt)

- sliding supports (e.g. lateral guides)

- knife edge (other belt)

- drive shaft stub

- encoder-drive shaft

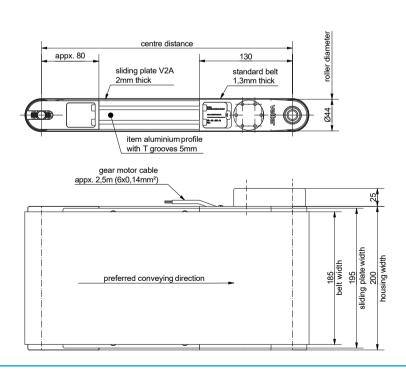
- coupled conveyors (2-track) - setpoint device VR-24-SW-11

- setpoint device VSW-11

- vacuum (perforated belt)

Supply voltage 24 V DC



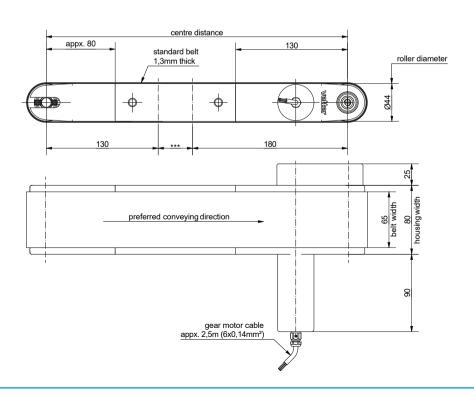


# FR-40-80-Q-P

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 vi GND or 0 - 0.3 V 0.5 - 0.9 V 1 - 10 V up to 11 V	ia analog signal 0-10V: Programmed, fixed value Motor stop Speed adjustable from min. up to max. Speed increase up to 110 % of rated speed with Vetter setpoint device	
Conveyor belts	blue, FDA, antistatic (others available on request)		
Extensions	- setpoint device VR-24-SW-11 - setpoint device VSW-11		
Supply voltage	24 V DC		
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 beltsto choose from  - Mounting and fastening boreseasy to produce in the 100 % plastic part		

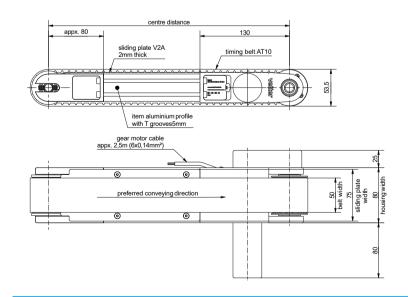


Housing height	40 mm
Housing width	80 mm
Belt width	50 mm

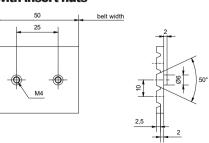
## ZR-40-80-Q

Centre distance	in consultation			
Certife distance	iii 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 GND or 0 - 0.3 V 0.5 - 0.9 V 1 - 10 V up to 11 V	a analog signal 0-10V: Programmed, fixed value Motor stop Speed adjustable from min. up to max. Speed increase up to 110 % of rated speed with Vetter setpoint device		
Conveyor belts	timing belt, optional (others on request)	lly with insert nuts		
Extensions	- 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			
Supply voltage	24 V DC			





## Option timing belt ATN10 with insert nuts





# **Centre drive**



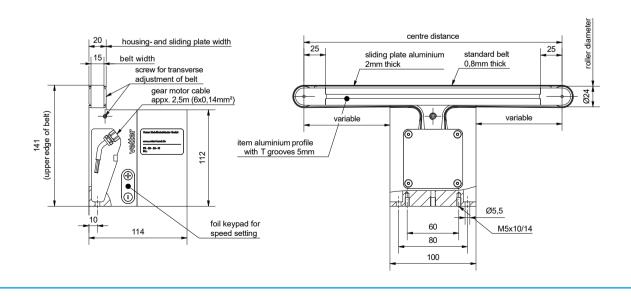
### Centre drive

## 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
Conveyor speeds / load	2 - 40 m/min at max. 30N
	Speed controller integrated and easyto set by means of +/- keys or via external analog signal 0-10 V.
Conveyor belts	white, FDA, antistatic (othersavailable on request)
Extensions	- sliding supports (e.g. lateral guides) - knife edge (other belt) - setpoint device VR-24-SW-11 - setpoint device VSW-11
Supply voltage	24 V DC
Further information	Conveying direction variable



## Extensions

Knife edge



2-track oppositely



2-track



3-track





# **Modular kit**



## Advantages

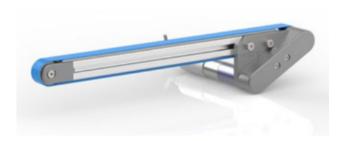
- · More flexibility through the modular kit
- Combine several conveyors in a parallel arrangement: placed right next to one another or with a gap for easy access.
- Simple design and problem-free integration in existing systems
- Use of Item aluminium profiles: Simple integration
- 24 V DC extra-low 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**

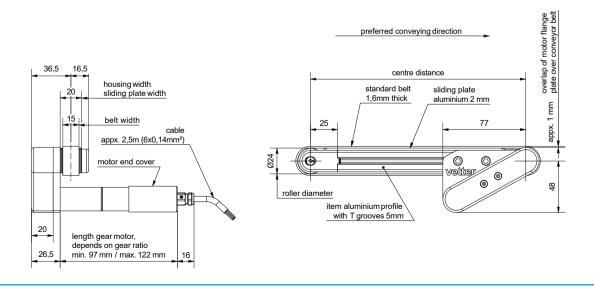
Conveyor type	Housing height	Housing width	Belt width	Max. conveyed load	Conveyor speed	Page
3K-20-20	20 mm	20 mm	15 mm	10 N or	2.5 - 20 m/min	46
BK-20-40	20 mm	40 mm	32 mm	20 N 10 N	0.8 - 6 m/min 2.5 - 20 m/min	47
DI(-20-40	20 111111	40 11111	32 IIIII	or 20 N	0.8 - 6 m/min	47
BK-20-60	20 mm	60 mm	52 mm	40 N or	2 - 15 m/min	48
				100 N	0.8 - 5 m/min	
BK-20-80	20 mm	80 mm	72 mm	40 N or	2 - 15 m/min	49
				100 N	0.8 - 5 m/min	
BK-20-100	20 mm	100 mm	92 mm	40 N	2 - 15 m/min	50
				or 100 N	0.8 - 5 m/min	
BK-20-120	20 mm	120 mm	112 mm	40 N	2 - 15 m/min	51
				or 100 N	0.8 - 5 m/min	
BK-20-140	20 mm	140 mm	132 mm	40 N	2 - 15 m/min	52
				or 100 N	0.8 - 5 m/min	
BK-20-160	20 mm	160 mm	152 mm	40 N	2 - 15 m/min	53
				or 100 N	0.8 - 5 m/min	
BK-20-180	20 mm	180 mm	172 mm	40 N	2 - 15 m/min	54
				or 100 N	0.8 - 5 m/min	
BK-20-200	20 mm	200 mm	192 mm	40 N	2 - 15 m/min	55
				or 100 N	0.8 - 5 m/min	
BK-30-60	30 mm	60 mm	50 mm	30 N	3 - 20 m/min	56
				or 100 N	1 - 7 m/min	

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

in consultation



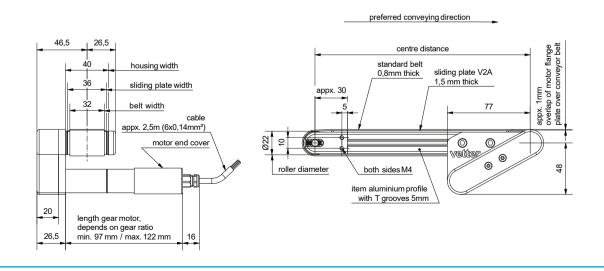
/min at max. 10 N or nin at max. 20 N  justable via analog signal 0-10V: -0.3 V Programmed, fixed value Motor stop Speed adjustable from min. up to max. Speed increase up to 110 % of rated speed with Vetter setpoint device
-0.3 V Programmed, fixed value Motor stop Speed adjustable from min. up to max. Speed increase up to 110 % of rated speed with Vetter
ted light (other belt) upports (e.g. lateral guides) ge (other belt) aft stub -drive shaft conveyors (2-track) conveyors (multiple-track) device VR-24-SW-11 device VSW-11 (perforated belt) elt



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 0.5 - 0.9 V Motor stop 1 - 10 V Speed adjustable in Sp			
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 0.5 - 0.9 V Motor stop			
GND or 0 - 0.3V Programmed, fixed 0.5 - 0.9 V Motor stop			
1 - 10 V Speed adjustable to min. up to max.  up to 11 V Speed increase up of rated speed with setpoint device	from to 110 %		
Conveyor belts white, FDA, antistatic			
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	- 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			





### Modular kit

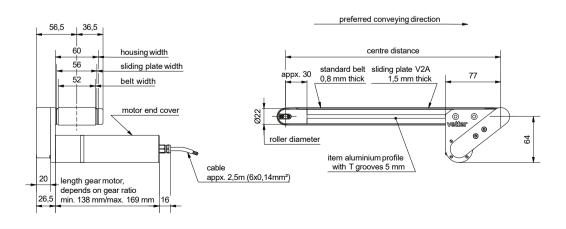
## BK-20-60

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

in consultation



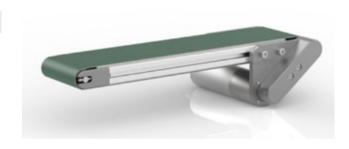
Conveyor speeds / load	2 - 15m/min at max 0.8 - 5 m/min at max	
	Speed adjustable vi GND or 0 - 0.3 V 0.5 - 0.9 V 1 - 10 V up to 11 V	ia analog signal 0-10V: Programmed, fixed value Motor stop Speed adjustable from min. up to max. Speed increase up to 110 % of rated speed with Vetter setpoint device
Conveyor belts	white or green, FD/	A, antistatic
Extensions	- sliding supports (control of the state of	oft rs (2-track) rs (multiple-track) R-24-SW-11 SW-11
Supply voltage	24 V DC	

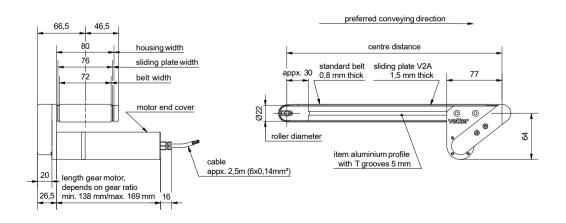


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Housing height	20 mm
Housing width	80 mm
Belt width	72 mm

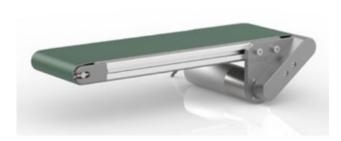
Centre distance	in consultation	
Conveyor speeds / load	2 - 15m/min at max 0.8 - 5 m/min at max	
	Speed adjustable vi GND or 0 - 0.3 V 0.5 - 0.9 V 1 - 10 V up to 11 V	a analog signal 0-10V: Programmed, fixed value Motor stop Speed adjustable from min. up to max. Speed increase up to 110 % of rated speed with Vetter setpoint device
Conveyor belts	white or green, FD/	A, antistatic
Extensions	- sliding supports (c - drive shaft stub - encoder-drive sha - coupled conveyor - coupled conveyor - setpoint device Vf - setpoint device Vs - vacuum (perforate	oft s (2-track) s (multiple-track) R-24-SW-11 SW-11
Supply voltage	24 V DC	



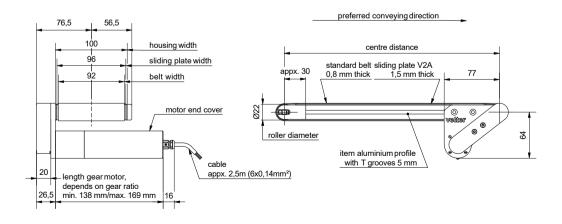


Housing height	20 mm	
Housing width	100 mm	
Belt width	92 mm	

in consultation



Conveyor speeds / load	2 - 15m/min at max 0.8 - 5 m/min at ma	
	Speed adjustable v GND or 0 - 0.3 V 0.5 - 0.9 V 1 - 10 V up to 11 V	via analog signal 0-10V: Programmed, fixed value Motor stop Speed adjustable from min. up to max. Speed increase up to 110 % of rated speed with Vetter setpoint device
Conveyor belts	white or green, FD	A, antistatic
Extensions	- sliding supports ( - drive shaft stub - encoder-drive shaft sub - coupled conveyor - coupled conveyor - setpoint device V - setpoint device V - vacuum (perforate	aft rs (2-track) rs (multiple-track) 'R-24-SW-11
Supply voltage	24 V DC	

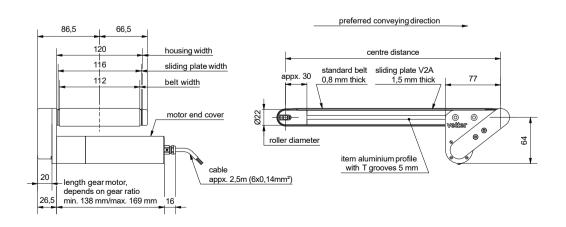


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Housing height	20 mm
Housing width	120 mm
Belt width	112 mm

Centre distance	in consultation	
Conveyor speeds / load	2 - 15m/min at max. 40 N or 0.8 - 5 m/min at max. 100 N	
	Speed adjustable vi GND or 0 - 0.3V 0.5 - 0.9 V 1 - 10 V up to 11 V	a analog signal 0-10V: Programmed, fixed value Motor stop Speed adjustable from min. up to max. Speed increase up to 110 % of rated speed with Vetter setpoint device
Conveyor belts	white or green, FDA	A, antistatic
Extensions	- sliding supports (e - drive shaft stub - encoder-drive sha - coupled conveyor - coupled conveyor - setpoint device VS - setpoint device VS - vacuum (perforate	ft s (2-track) s (multiple-track) R-24-SW-11 SW-11
Supply voltage	24 V DC	



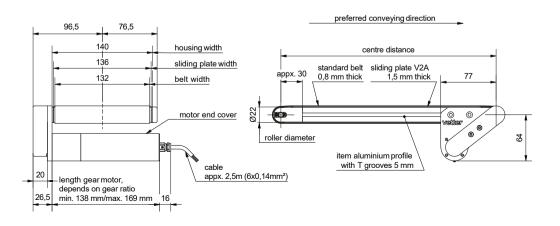


Housing height	20 mm
Housing width	140 mm
Belt width	132 mm

in consultation



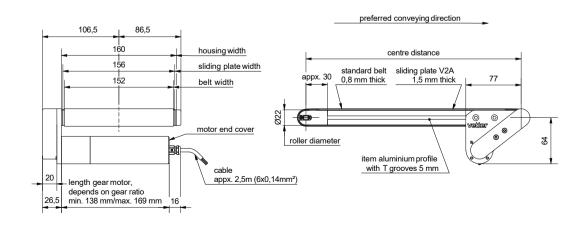
Conveyor speeds / load	2 - 15m/min at max 0.8 - 5 m/min at max	
	Speed adjustable vi GND or 0 - 0.3 V 0.5 - 0.9 V 1 - 10 V up to 11 V	ia analog signal 0-10V: Programmed, fixed value Motor stop Speed adjustable from min. up to max. Speed increase up to 110 % of rated speed with Vetter setpoint device
Conveyor belts	white or green, FD/	A, antistatic
Extensions	- sliding supports (control of the shaft stub) - encoder-drive shaft coupled conveyor coupled conveyor setpoint device VC setpoint device VC vacuum (perforate	oft rs (2-track) rs (multiple-track) R-24-SW-11 SW-11
Supply voltage	24 V DC	



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

Centre distance	in consultation	
Conveyor speeds / load	2 - 15m/min at max. 40 N or 0.8 - 5 m/min at max. 100 N	
	Speed adjustable vi GND or 0 - 0.3V 0.5 - 0.9 V 1 - 10 V up to 11 V	a analog signal 0-10V: Programmed, fixed value Motor stop Speed adjustable from min. up to max. Speed increase up to 110 % of rated speed with Vetter setpoint device
Conveyor belts	white or green, FDA	A, antistatic
Extensions	- sliding supports (e - drive shaft stub - encoder-drive sha - coupled conveyors - coupled conveyors - setpoint device VF - setpoint device VS - vacuum (perforate	ft s (2-track) s (multiple-track) R-24-SW-11 SW-11
Supply voltage	24 V DC	



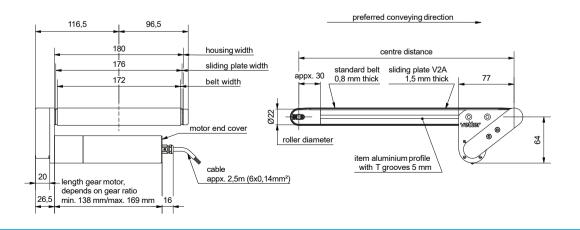


Housing height	20 mm
Housing width	180 mm
Belt width	172 mm

in consultation



Conveyor speeds / load	2 - 15m/min at max 0.8 - 5 m/min at ma	
	Speed adjustable v GND or 0 - 0.3 V 0.5 - 0.9 V 1 - 10 V up to 11 V	via analog signal 0-10V: Programmed, fixed value Motor stop Speed adjustable from min. up to max. Speed increase up to 110 % of rated speed with Vetter setpoint device
Conveyor belts	white or green, FD	0A, antistatic
Extensions	- sliding supports ( - drive shaft stub - encoder-drive sh - coupled conveyo - coupled conveyo - setpoint device V - setpoint device V - vacuum (perforat	rs (2-track) ors (multiple-track) /R-24-SW-11 /SW-11
Supply voltage	24 V DC	

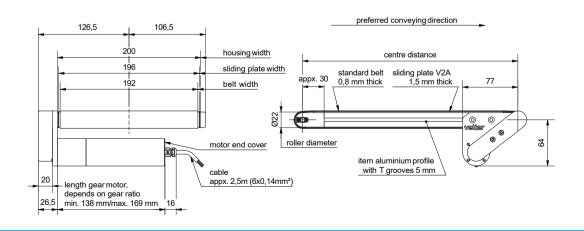


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Housing height	20 mm	
Housing width	200 mm	
Belt width	192 mm	

Centre distance	in consultation	
Conveyor speeds / load	2 - 15m/min at max. 0.8 - 5 m/min at max	
	Speed adjustable vi GND or 0 - 0.3 V 0.5 - 0.9 V 1 - 10 V up to 11 V	a analog signal 0-10V: Programmed, fixed value Motor stop Speed adjustable from min. up to max. Speed increase up to 110 % of rated speed with Vetter setpoint device
Conveyor belts	white or green, FDA	A, antistatic
Extensions	- sliding supports (e - drive shaft stub - encoder-drive sha - coupled conveyors - coupled conveyors - setpoint device VF - setpoint device VS - vacuum (perforate	ft s (2-track) s (multiple-track) R-24-SW-11 SW-11
Supply voltage	24 V DC	

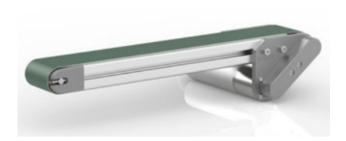




### Modular kit

## BK-30-60

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



Centre distance	in consultation		
Conveyor speeds / load	0 =0111/111111 01111101	3 - 20 m/min at max. 30 N or 1 - 7 m/min at max. 100 N	
	Speed adjustable v GND or 0 -0.3 V 0.5 -0.9 V 1 - 10 V up to 11 V	ria analog signal 0-10V: Programmed, fixed value Motor stop Speed adjustable from min. up to max. Speed increase up to 110 % of rated speed with Vetter setpoint device	
Conveyor belts	green, FDA, antista	atic	
Extensions	- sliding supports ( - knife edge (other - drive shaft stub - encoder-drive sha - coupled conveyor - coupled conveyor - setpoint device V - setpoint device V - vacuum (perforate	aft rs (2-track) rs (multiple-track) R-24-SW-11	
Supply voltage	24 V DC		

## **Extensions**

### Lateral guides



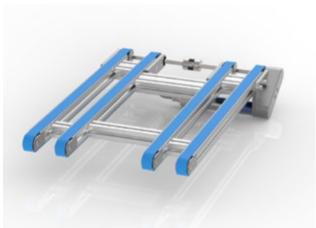
**Round belts** 



2-track



4-track



Further details from page 70



# **Transmitted light**



## Advantages

- · High-quality, durable LEDpanels
- 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-DLand BK-20-20-DL)
- Lighting duration can be controlled via a trigger signal, max. 10 ms (except: FR-12-20-DLand 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	5 - 30 m/min 4 - 24 m/min	64
FR-40-120-Q-DL Transverse drive	40 mm	120 mm	105 mm	100 N 20 N or	1.5 - 10 m/min 5 - 30 m/min	65
				40 N or 100 N	4 - 24 m/min 1.5 - 10 m/min	
FR-40-160-Q-DL Transverse drive	40 mm	160 mm	145 mm	20 N or 40 N or	5 - 30 m/min 4 - 24 m/min	66
FR-40-200-Q-DL Transverse drive	40 mm	200 mm	185 mm	100 N 20 N or 40 N	1.5 - 10 m/min 5 - 30 m/min 4 - 24 m/min	67
				or 100 N	1.5 - 10 m/min	
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

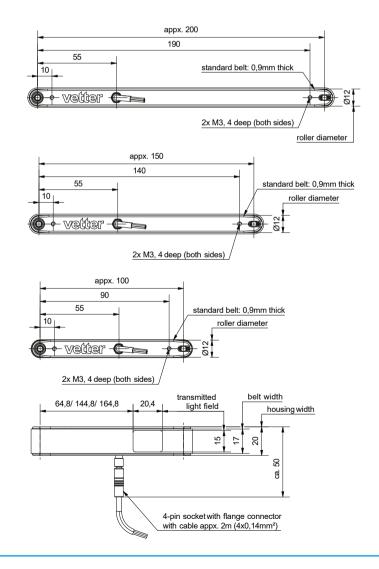
### Transmitted light

## 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: 15x 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

### FR-20-40-DL

Centre distance	in mm (available at short notice): 350, 400, 450, 500, 600, 700, 800, 900, 1,000 Custom centre distances on request

Conveyor speeds / load 2 - 8 m/min at max. 5 N or 0.7 - 3 m/min at max. 15 N

Supply voltage

Speed controller integrated and easyto set by means of +/- keys or via external analog signal 0 - 10 V.

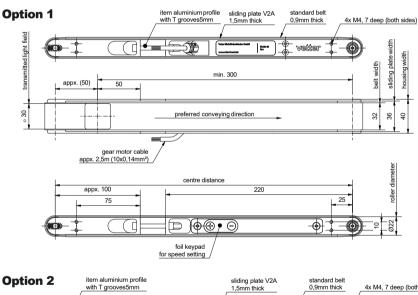
Conveyor belts	translucent, FDA
Extensions	- sliding supports (e.g. lateral guides) - drive shaft stub - encoder-drive shaft - setpoint device VR-24-SW-11 - setpoint device VSW-11

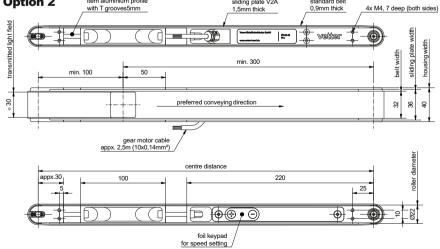
24 V DC



Further information

- Dimensions transmitted light field:  $30 \times 30 \text{ mm}$
- 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





### Transmitted light

## FR-40-80-Q-DL

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



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 0-10V:
GND or 0 - 0.3 V Programmed, fixed value
0.5 - 0.9 V Motor stop

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

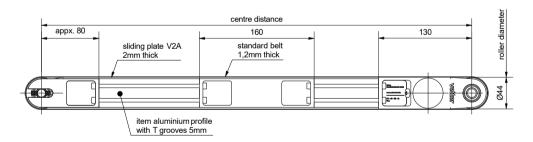
Extensions

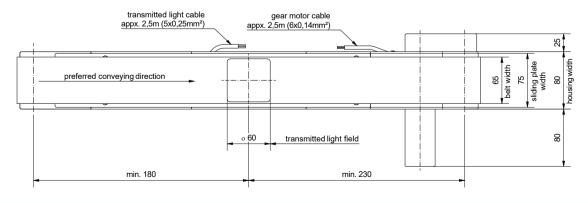
- sliding supports (e.g. lateral guides)
- drive shaft stub
- encoder-drive shaft
- setpoint device VR-24-SW-11
- setpoint device VSW-11

### Supply voltage 24 V DC

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





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

### FR-40-120-Q-DL

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

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 0-10V: Programmed, fixed value GND or 0 - 0.3 V

Motor stop 0.5 - 0.9 V

1 - 10 V Speed adjustable from min. up to max.

Speed increase up to 110 % up to 11 V

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

Further information - Dimensions transmitted light field: 100 x 100 mm

- Colour: White

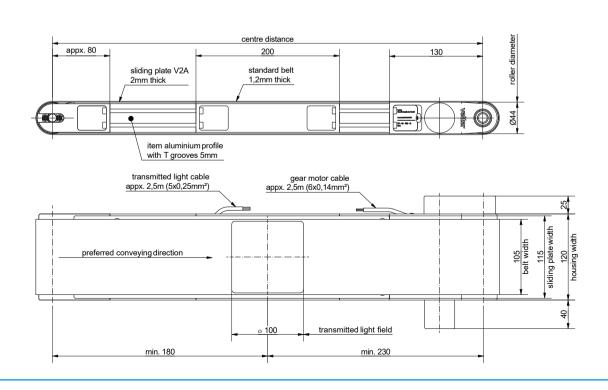
- Colour temperature: 5,000 K - Operation as continuous light

- 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





### 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

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 0-10V:
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 shaftsetpoint device VR-24-SW-11setpoint device VSW-11

Supply voltage 24 V DC

Further information - Dimensions transmitted light field: 140x 140mm

- Colour: White

- Colour temperature: 5,000 K

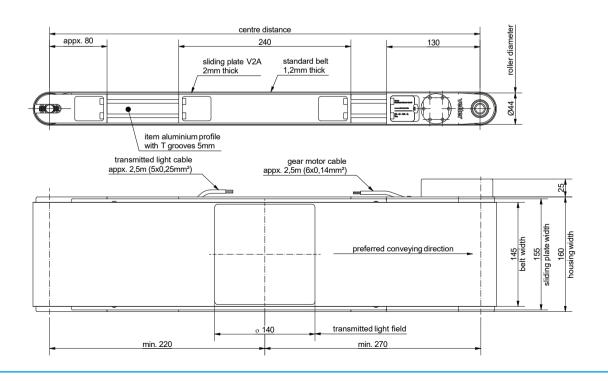
- Operation as continuous light

- 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



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

### FR-40-200-Q-DL

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

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 0-10V:
GND or 0 - 0.3V Programmed, fixed value

0.5 - 0.9 V Motor stop 1 - 10 V Speed adjustable f

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
y voltage 24 V DC

Supply voltage 24 V D0

Further information - Dimensions transmitted light field: 180 x 180 mm

- Colour: White

- Colour temperature: 5,000 K

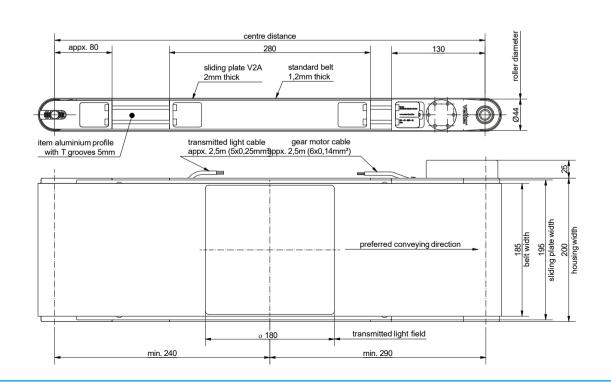
- Operation as continuous light

- 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





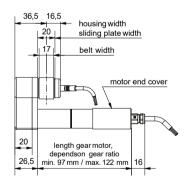
### Transmitted light

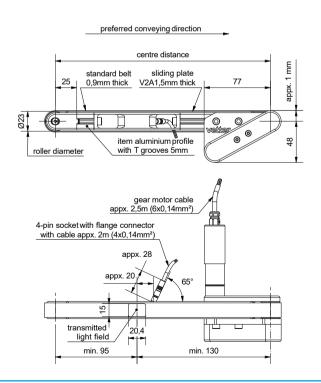
## BK-20-20-DL

Housing height	20 mm
Housing width	20 mm
Belt width	15 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 GND or 0 - 0.3V 0.5 - 0.9 V 1 - 10 V up to 11 V	analog signal 0-10V: Programmed, fixed value Motor stop Speed adjustable from min. up to max. 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	
	Further information	- Dimensions transmitted light field: 15x 20.4mm - 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	



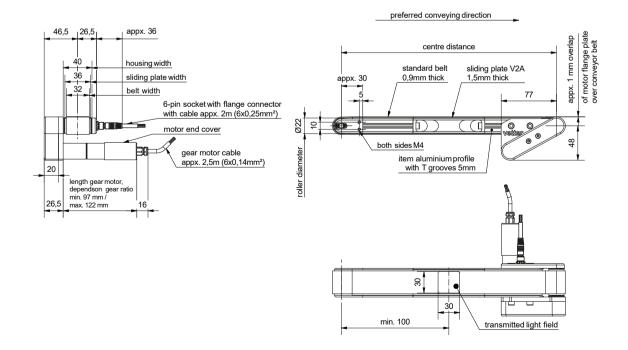


Housing height	20 mm
Housing width	40 mm
Belt width	32 mm

## BK-20-40-DL

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 GND or 0 - 0.3V 0.5 - 0.9 V 1 - 10 V up to 11 V	analog signal 0-10V: Programmed, fixed value Motor stop Speed adjustable from min. up to max. 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	
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	





### **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 PUmaterial and are available in various diameters and surfaces.



#### Modular kit multi-track

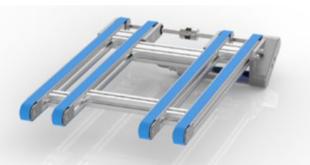
Multiple-track conveyor solutions are often required when complex products should also hang down between the tracks.

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 accessthe 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 chancefor dirt particles or impurities to accumulate. Recessesand 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 (brushlessDC 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 mechanicallyfully 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
- · Easyinstallation in control cabinets

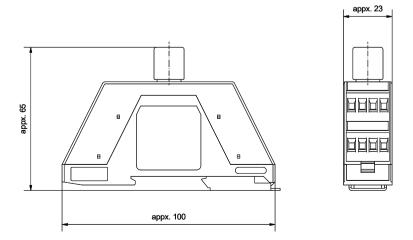


### VR-24-SW-11

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

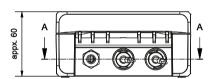
# VSW-11

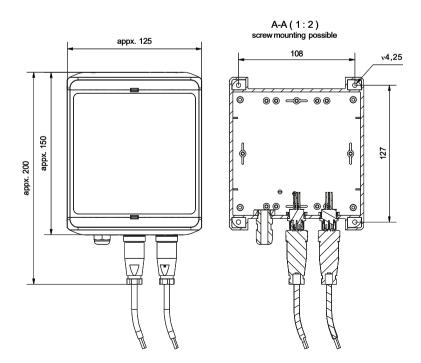




# VR-24-SW-11





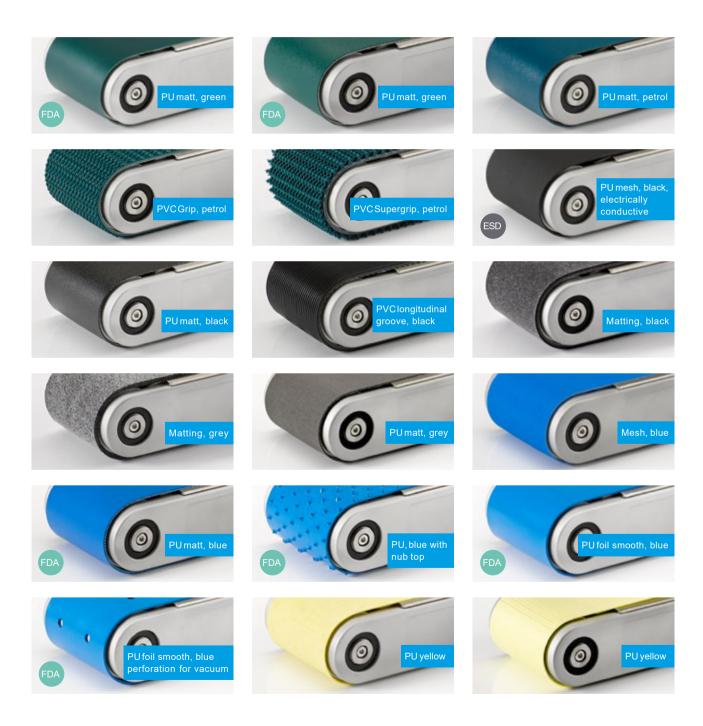


## Conveyor belts

### 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
- Rangemin/max

## What are the environmental conditions?

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

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

# Which operating mode do you require?

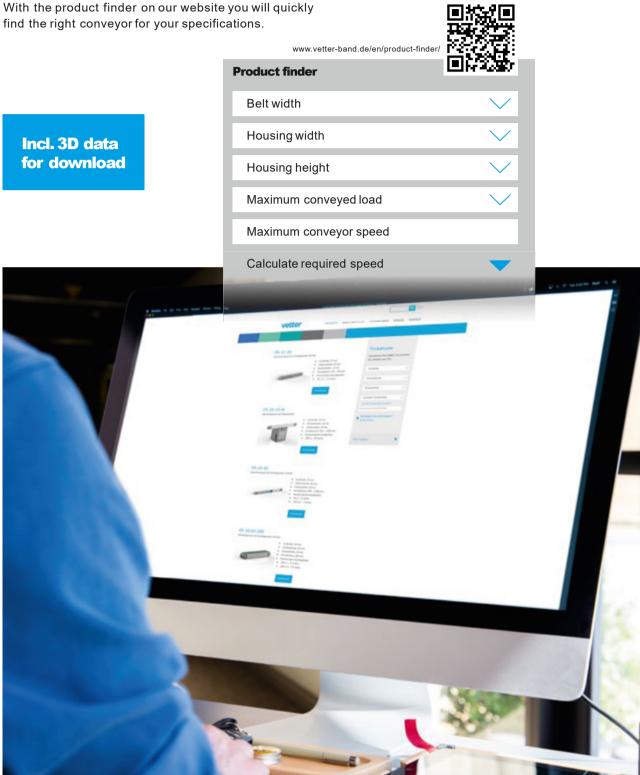
- single transport or accumulation of parts on the belt
- start-stop-operation (frequency)
  - forward-backward-transport (shares in %)

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



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