



THE JUST-IN-TIME CONVEYOR TECHNOLOGY



Success is often measured by efficiency and speed. For Robotunits customers this means always keeping one step ahead regarding the time required for delivery, design and assembly. Equally remarkable is the fact that our Conveyor Technology can be seamlessly integrated into a complete modular automation system.

Advantages like these, as well as great product variety, maximum technical excellence and enormous potential to save time and money in design and assembly, are what makes Robotunits so unique. We can also provide you with special designs outside the standard dimensions, when required.



Impressive lead times

- production time of your customized conveyor: 5 working days
- just-in-time delivery



Customized length and width

- select any standard frame width between 40 mm and 1200 mm
- select any conveyor length up to 12 m, longer units available upon request
- pre-assembled and height adjustable stand available as an option



Flexibility in drive options and positions

- freely selectable drive options
- individually positionable drives (side, bottom, center)



Speed

- optimized conveyor belt speed according to specific requirements
- optionally available speed controller



Idler options

- idler size adjustment according to overall heights
- nose bar (16 mm diameter) for transfer of small parts



Individual belt choice

- accumulation belt
- belt for incline operation
- belt for specific requirements (e.g. traverse cleats)



Fully integrated conveyor system

- compatible with all our extrusion sizes
- uniform 14 mm T-slot
- accessible T-slot on both sides along the length of the belt conveyor frame for easy attachment of accessories (i.e. stops)



Save time, cut cost

- impressive delivery times
- fast configuration of customized conveyors (webshop)
- every conveyor comes fully assembled and tested
- outstanding price/performance ratio



Safety

- self-adjusting safety guard between the conveyor roller and the slider bed
- timing belt cover with window for visual inspection
- CE certified conveyors with full documentation



Just-In-Time Conveyor Technology

Belt Conveyors

Page 10



Modular Belt Conveyors

Page 20



Timing Belt Conveyors

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Just-In-Time Conveyor Technology

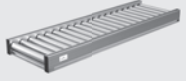

Powered Roller Conveyors

Page 34

| | | | | |
|--|--|--|---|---|
| <p>Straight Powered Roller Conveyor R5S</p>  <p>P. 38</p> | <p>Aligning Powered Roller Conveyor R5A</p>  <p>P. 39</p> | <p>Powered Roller Conveyor Merge R5M</p>  <p>P. 40</p> | <p>Curved Powered Roller Conveyor R5C</p>  <p>P. 41</p> | |
| <p>Transfer Unit 90°, 50 R5T0050</p>  <p>P. 42</p> | <p>Transfer Unit 90°, 100 R5T0100</p>  <p>P. 43</p> | <p>Turntable with Powered Roller Conveyor R5R</p>  <p>P. 44</p> | <p>Diverter R5D</p>  <p>P. 45</p> | <p>Lift Station With Powered Roller Conveyor R5L</p>  <p>P. 46</p> |
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Roller Conveyors without drive

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| | |
|--|---|
| <p>Straight Gravity Roller Conveyor R5G</p>  <p>P. 48</p> | <p>Stand for Angled Conveyor R5Z</p>  <p>P. 49</p> |
|--|---|

Side Guide

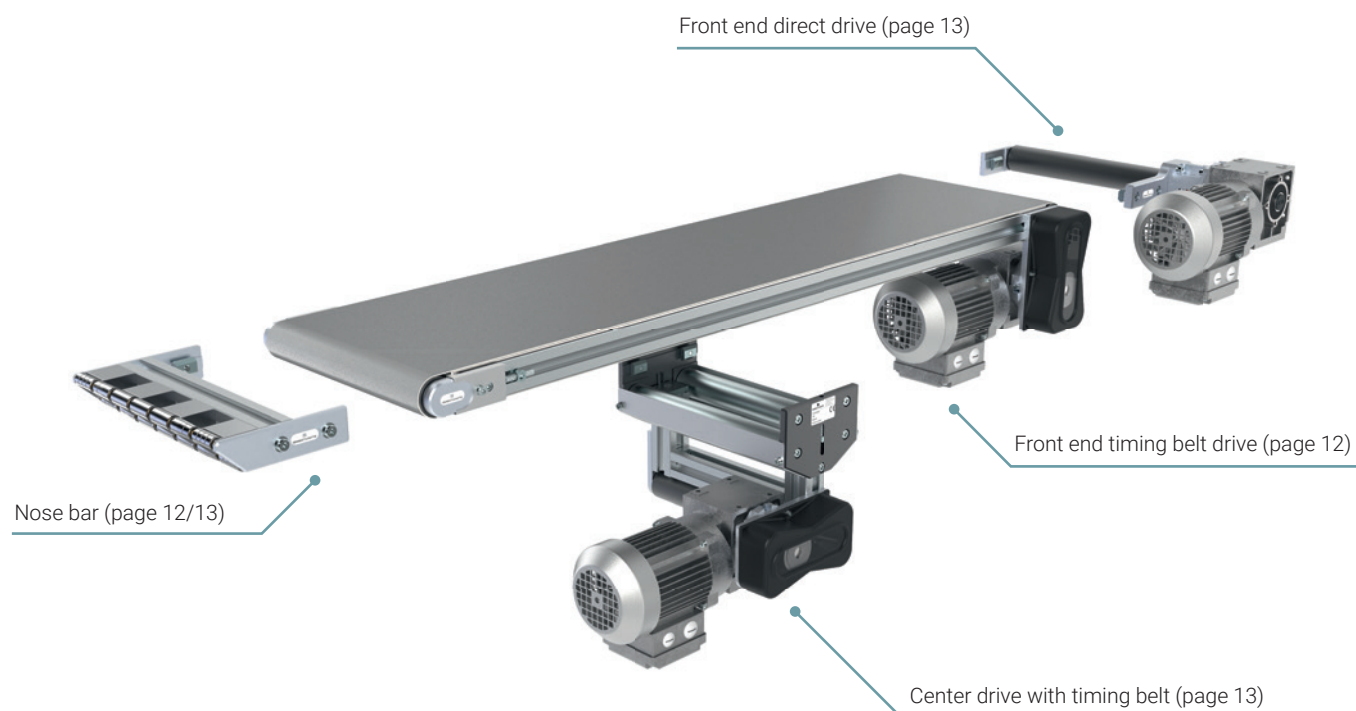
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| | | | | |
|---|---|---|---|--|
| <p>Side Guide Base COP4561</p>  <p>P. 52</p> | <p>Side Guide Clamp with Rod CO_900_</p>  <p>P. 53</p> | <p>Side Guide Clip COP4570</p>  <p>P. 54</p> | <p>Side Guide End Piece COP4590</p>  <p>P. 54</p> | <p>Side Guide Plastic COL4590</p>  <p>P. 55</p> |
|---|---|---|---|--|

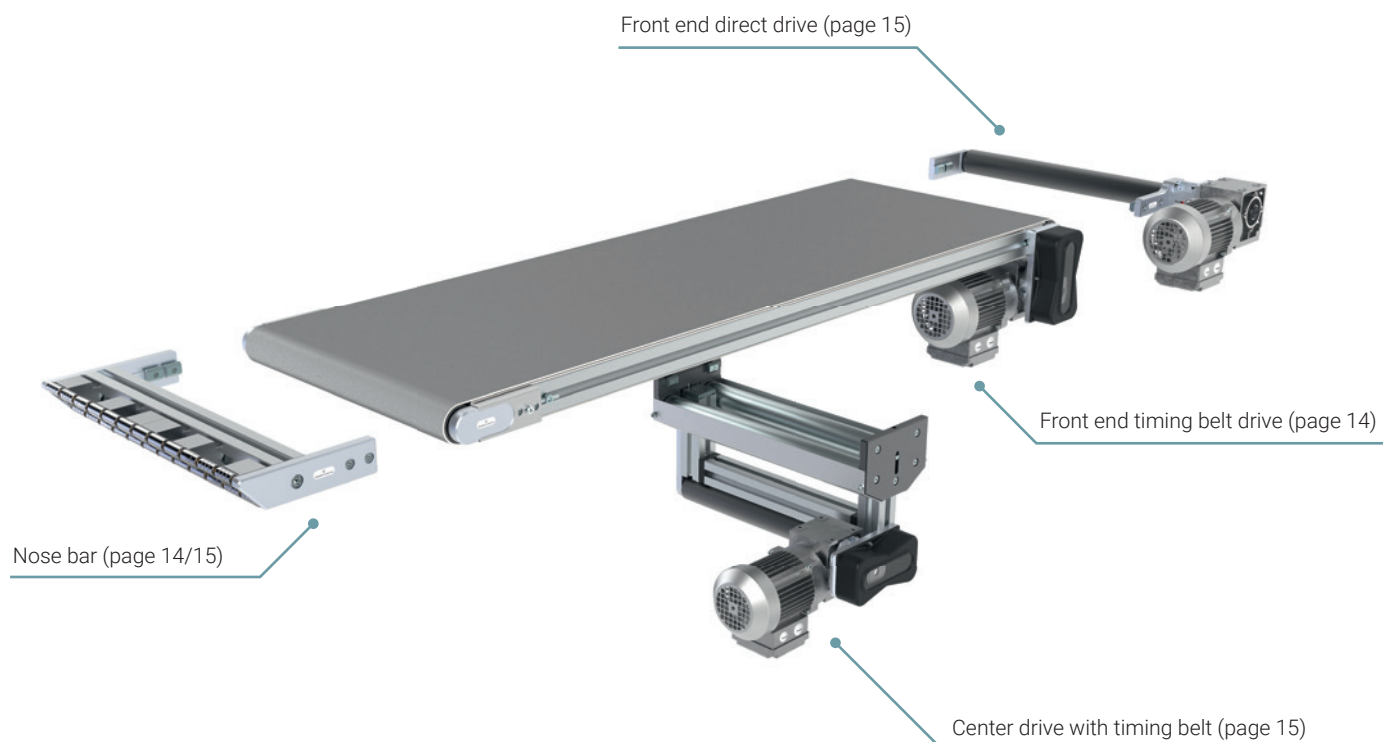
Conveyor Technology Accessories Overview

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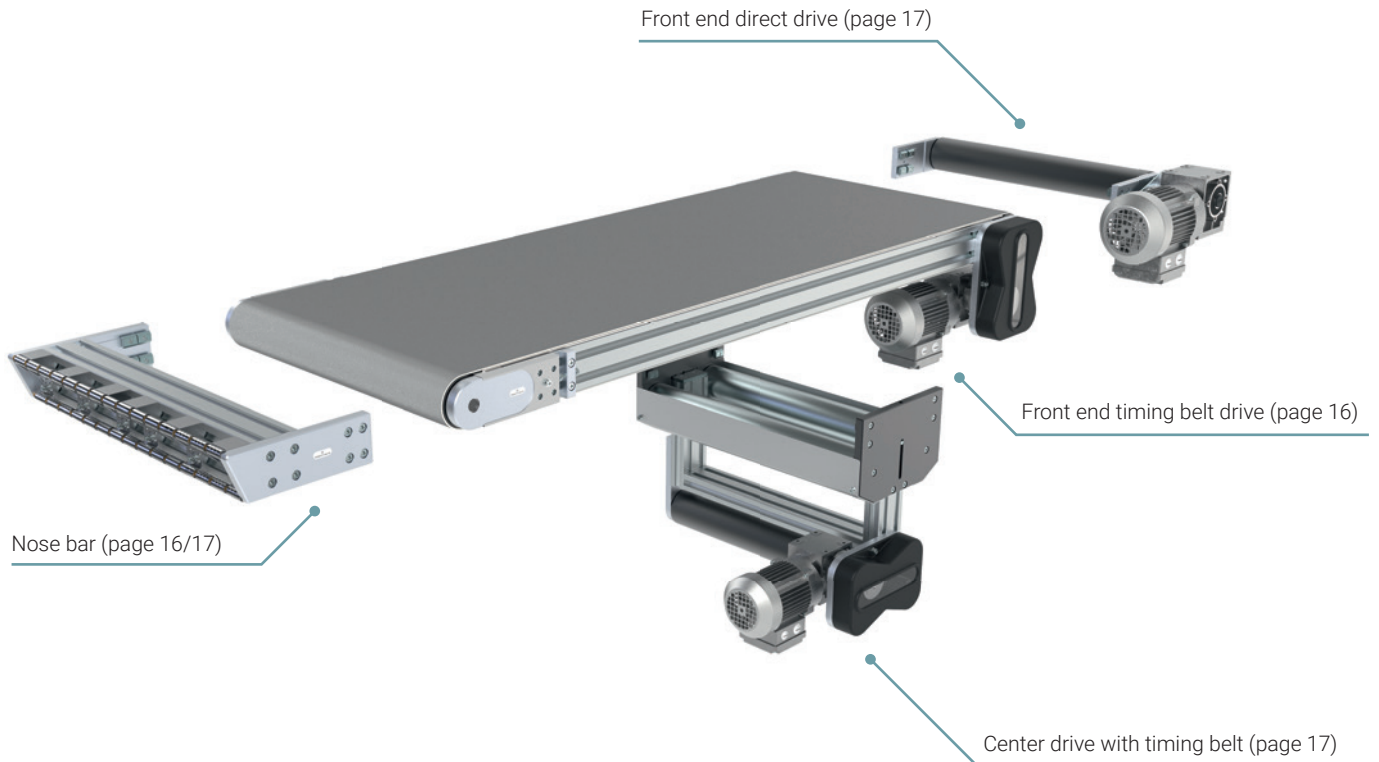
C4N Belt Conveyor Drive Options



C5N Belt Conveyor Drive Options



C8N Belt Conveyor Drive Options



C4N

Belt Conveyor 40



Side Guide for Belt Conveyor
See page 50



Storage and Feeder Hopper
Conveyors on request

Application

Conveying tasks of all kinds

Technical data

Belt speeds from 3 m/min up to 55 m/min

Drive power depending on conveyor speed and load ranging from 0.12 kW to 0.37 kW (230/400V; 50/60Hz; IP54)

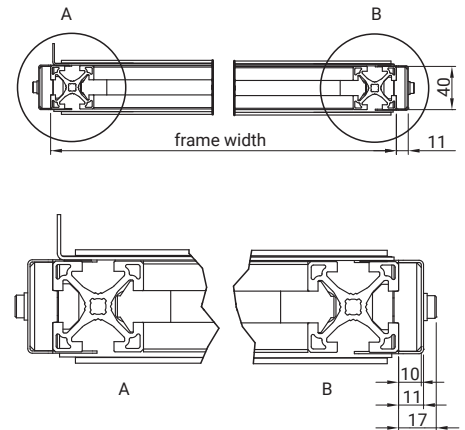
Max. total load of conveyed material: 240 kg
Temperature range: from -20°C to +40°C

Belt type

Standard application, oil resistant, food grade, adhesive and thus suitable for incline transport, cut resistant, suitable for accumulation operation, etc.

C4N without side guides

Belt width: Frame width - 10mm

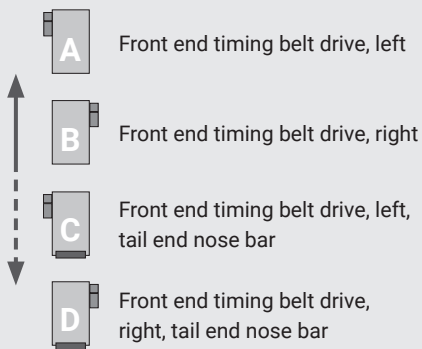
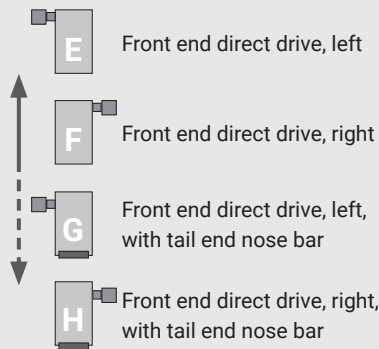
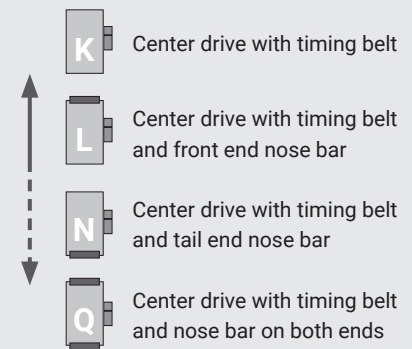
**C4N with side guides**

Frame width ≤ 120 mm

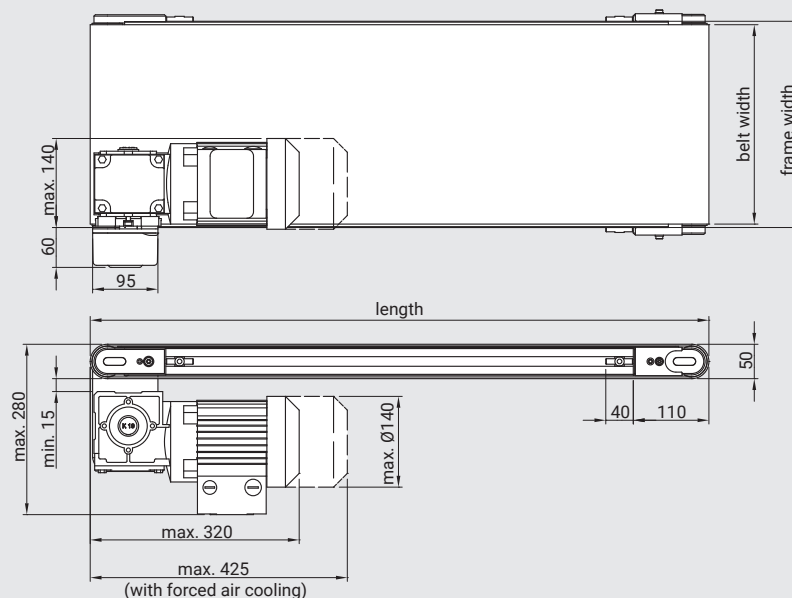
Belt width: Frame width - 15mm

Frame width > 120 mm

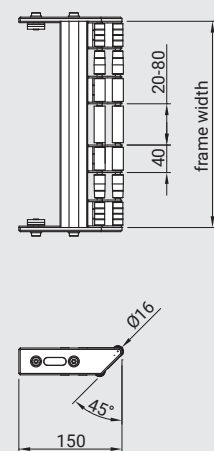
Belt width: Frame width - 20mm

Drive options¹**Front end timing belt drive****Front end direct drive****Center drive with timing belt**

Front end timing belt drive

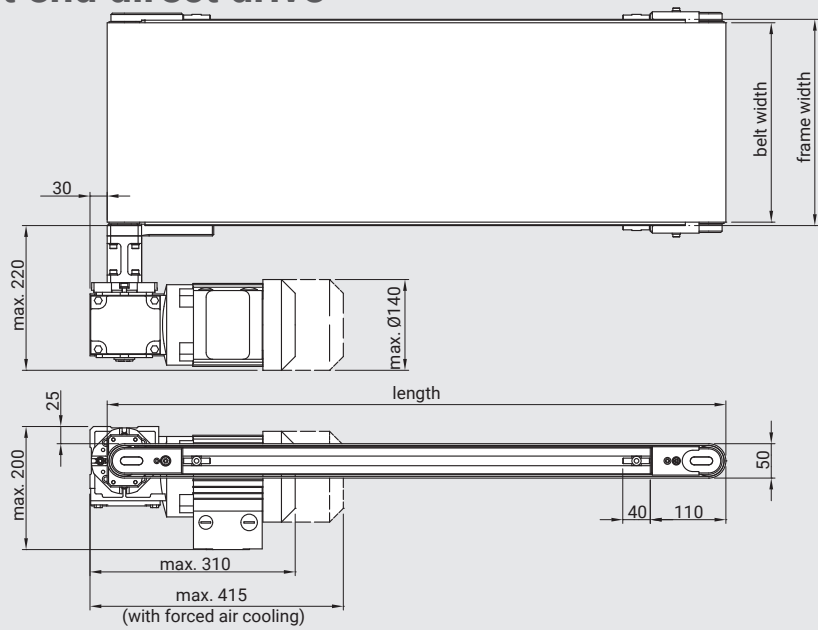


Option: nose bar

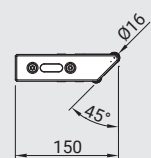
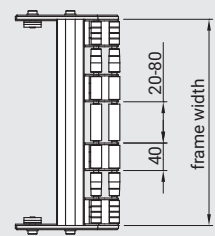


1) Standard direction is pulling. The running direction of all drives can be changed by reversing the polarity of the motor.

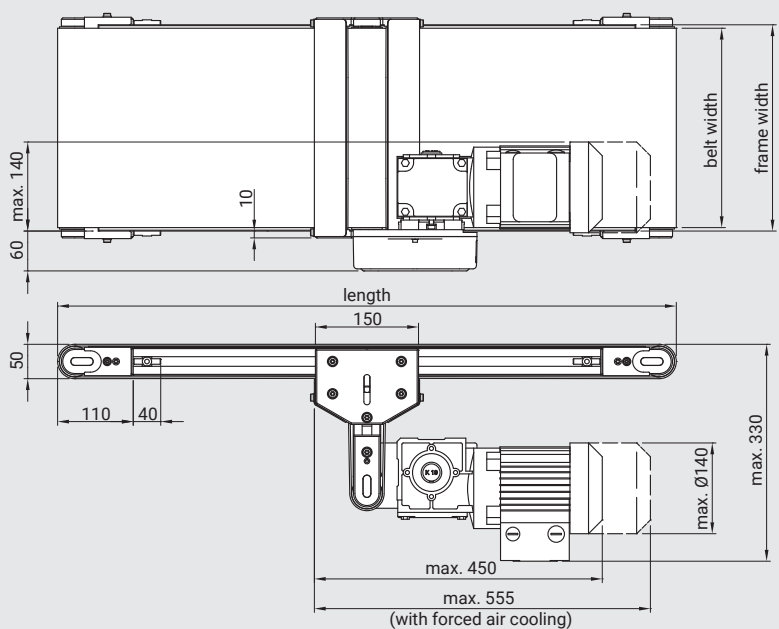
Front end direct drive



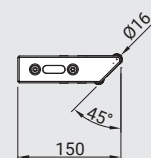
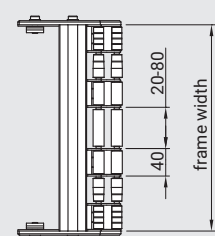
Option: nose bar



Center drive with timing belt



Option: nose bar



Standard widths and lengths²

| Description | Frame width | Max. length |
|------------------|-------------|-------------|
| Belt Conveyor 40 | 40 mm | 12000 mm |
| Belt Conveyor 40 | 80 mm | 12000 mm |
| Belt Conveyor 40 | 120 mm | 12000 mm |
| Belt Conveyor 40 | 160 mm | 12000 mm |

| Description | Frame width | Max. length |
|------------------|-------------|-------------|
| Belt Conveyor 40 | 200 mm | 12000 mm |
| Belt Conveyor 40 | 240 mm | 12000 mm |
| Belt Conveyor 40 | 300 mm | 12000 mm |
| Belt Conveyor 40 | 400 mm | 12000 mm |

Please note the minimum length to width ratio of 1.5 : 1.

Request for Quote / Order placement

Please use our Belt Conveyor configuration tool or our request form at www.robotunits.com

2) Special widths and special lengths are available upon request.
Drawings: dimensions in mm

C5N

Belt Conveyor 50



Side Guide for Belt Conveyor
See page 50

Application

Conveying tasks of all kinds

Technical data

Belt speeds from 3 m/min up to 67 m/min

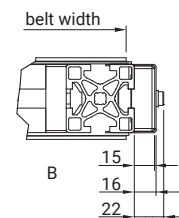
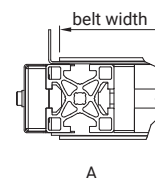
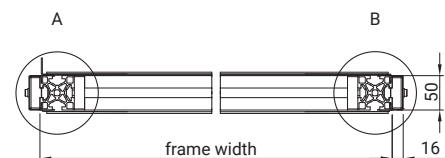
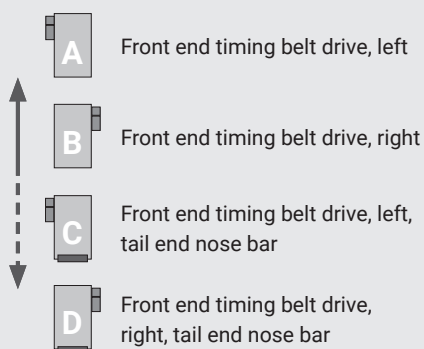
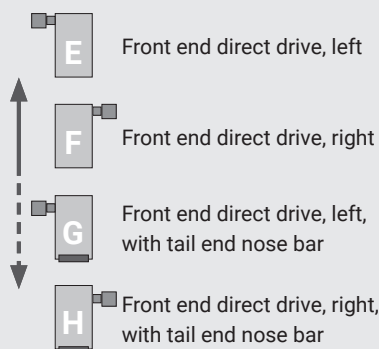
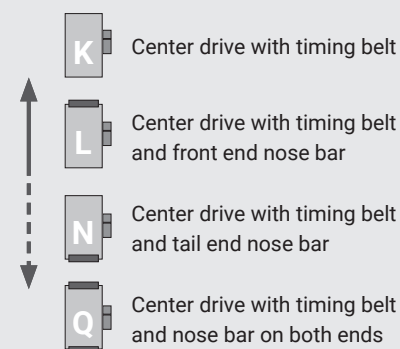
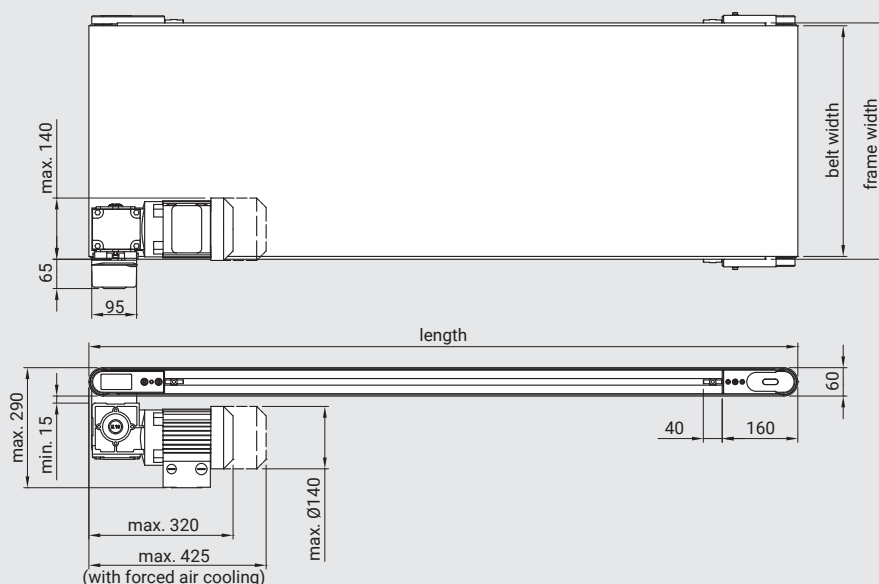
Drive power depending on conveyor speed and load ranging from 0.12 kW to 0.37 kW (230/400V; 50/60Hz; IP54)

Max. total load of conveyed material: 340 kg
Temperature range: from -20°C to +40°C

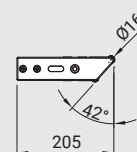
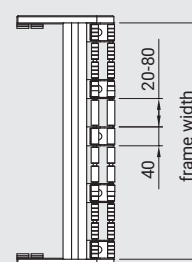
Belt type

Standard application, oil resistant, food grade, adhesive and thus suitable for incline transport, cut resistant, suitable for accumulation operation, etc.

Belt width: Frame width - 20mm

Drive options¹**Front end timing belt drive****Front end direct drive****Center drive with timing belt****Front end timing belt drive**

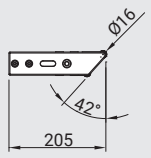
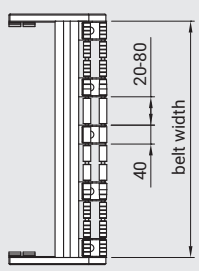
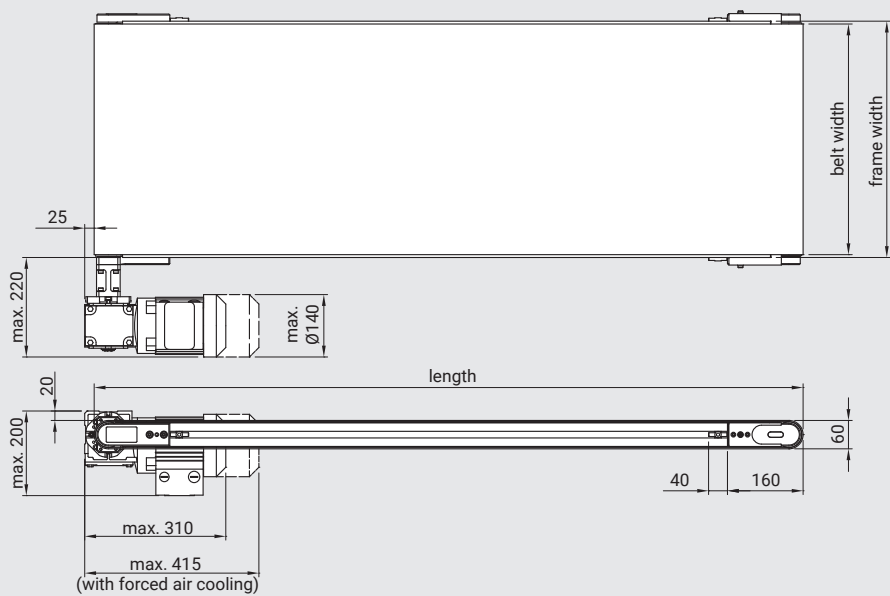
Option: nose bar



1) Standard direction is pulling. The running direction of all drives can be changed by reversing the polarity of the motor.
Drawings: dimensions in mm

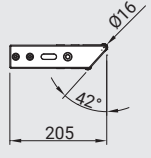
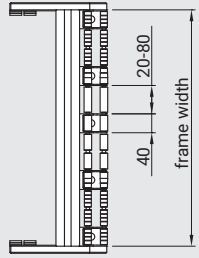
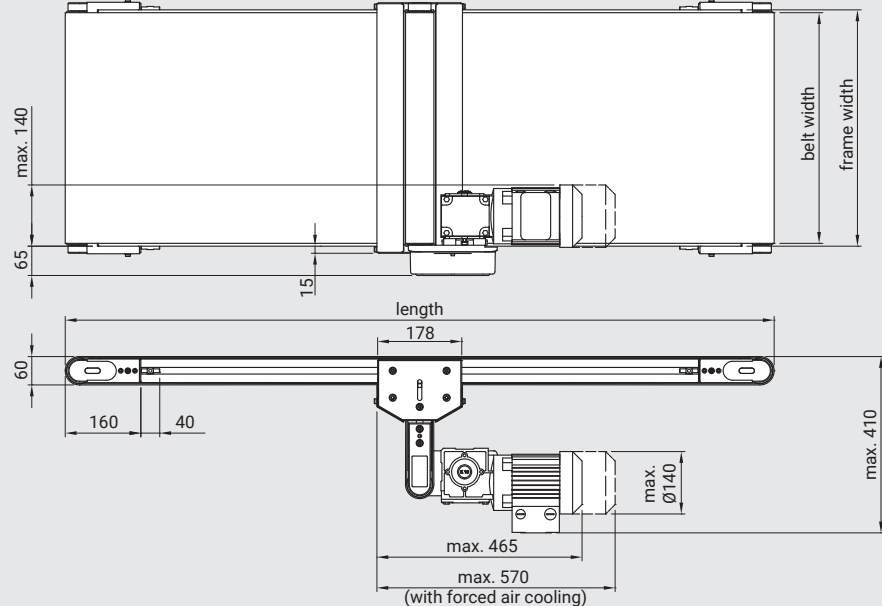
Front end direct drive

Option: nose bar



Center drive with timing belt

Option: nose bar



Standard widths and lengths²

Design options

| Description | Frame width | Max. length |
|------------------|-------------|-------------|
| Belt Conveyor 50 | 400 mm | 12000 mm |
| Belt Conveyor 50 | 500 mm | 12000 mm |
| Belt Conveyor 50 | 600 mm | 12000 mm |



Please note the minimum length to width ratio of 1.5 : 1.

Request for Quote / Order placement

Please use our Belt Conveyor configuration tool or our request form at www.robotunits.com

2) Special widths and special lengths are available upon request.
Drawings: dimensions in mm

C8N

Belt Conveyor 80

**Application**

Conveying tasks of all kinds

Technical data

Belt speeds from 5 m/min up to 65 m/min

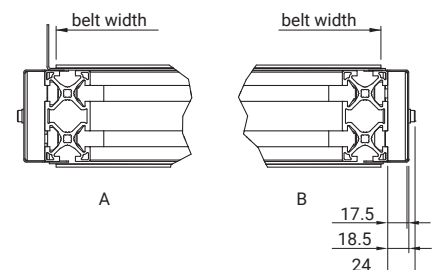
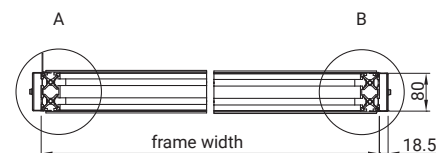
Drive power depending on conveyor speed and load ranging from 0.25 kW to 0.55 kW (230/400V; 50/60Hz; IP54)

Max. total load of conveyed material: 550 kg
Temperature range: from -20°C to +40°C

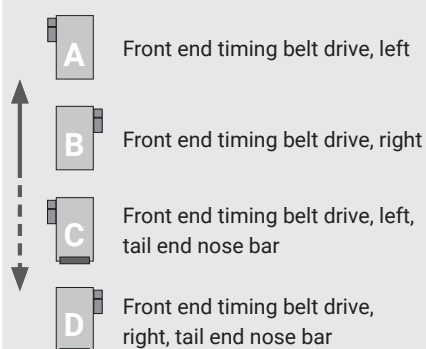
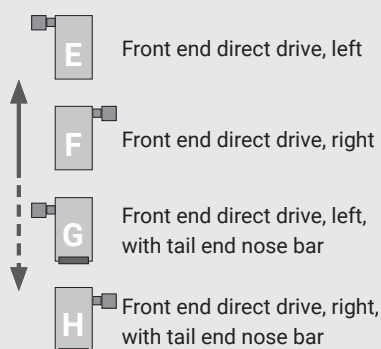
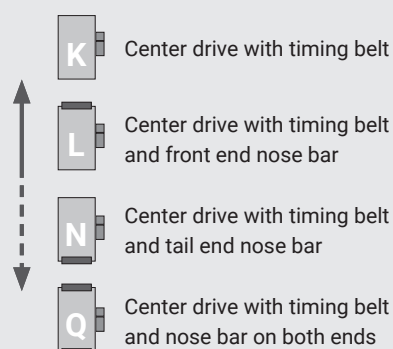
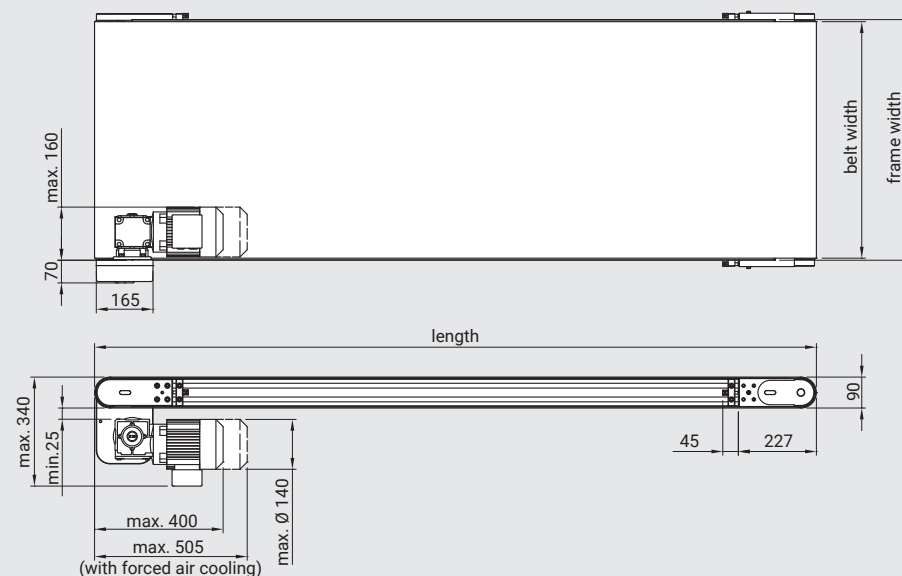
Belt type

Standard application, oil resistant, food grade, adhesive and thus suitable for incline transport, cut resistant, suitable for accumulation operation, etc.

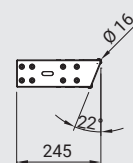
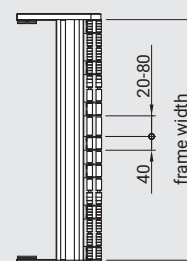
Belt width: Frame width - 20mm



Side Guide for Belt Conveyor
See page 50

Drive options¹**Front end timing belt drive****Front end direct drive****Center drive with timing belt****Front end timing belt drive**

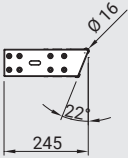
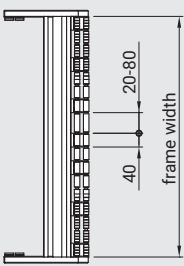
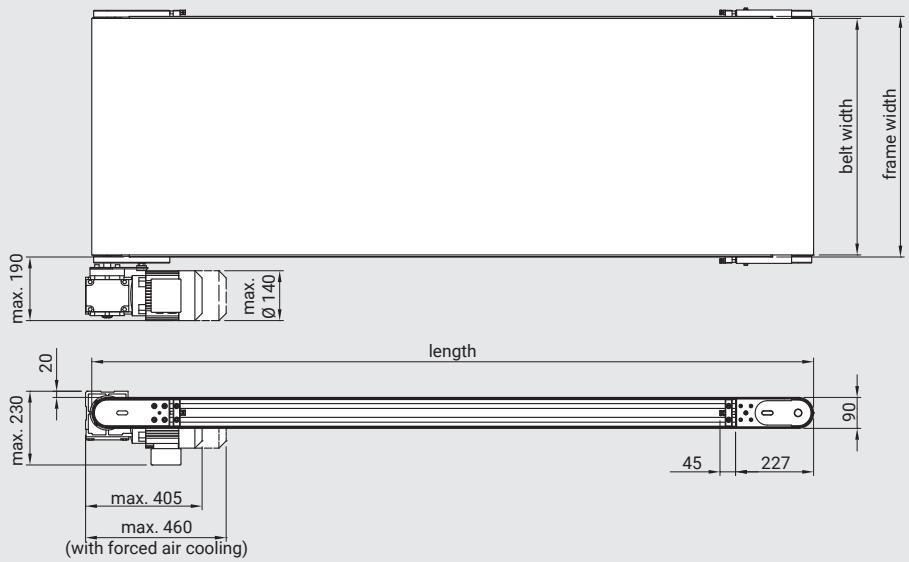
Option: nose bar



1) Standard direction is pulling. The running direction of all drives can be changed by reversing the polarity of the motor.
Drawings: dimensions in mm

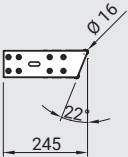
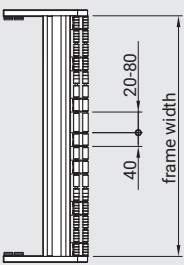
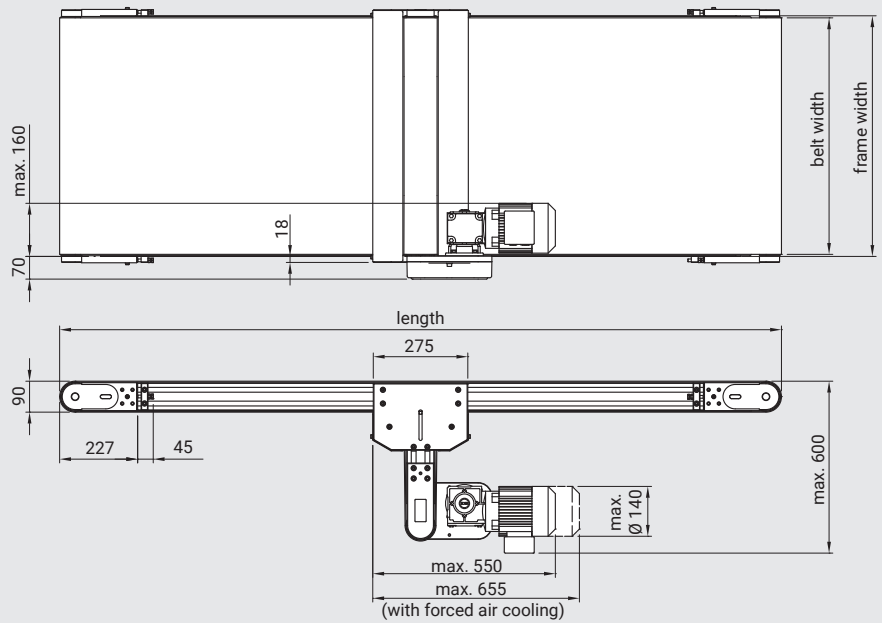
Front end direct drive

Option: nose bar



Center drive with timing belt

Option: nose bar



Standard widths and lengths²

Design options

| Description | Frame width | Max. length |
|------------------|-------------|-------------|
| Belt Conveyor 80 | 600 mm | 12000 mm |
| Belt Conveyor 80 | 700 mm | 12000 mm |
| Belt Conveyor 80 | 800 mm | 12000 mm |
| Belt Conveyor 80 | 1000 mm | 12000 mm |
| Belt Conveyor 80 | 1200 mm | 12000 mm |



Please note the minimum length to width ratio of 1.5 : 1.

Request for Quote / Order placement

Please use our Belt Conveyor configuration tool or our request form at www.robotunits.com

2) Special widths and special lengths are available upon request.
Drawings: dimensions in mm

Application

Stand for Belt Conveyor 40 and 50

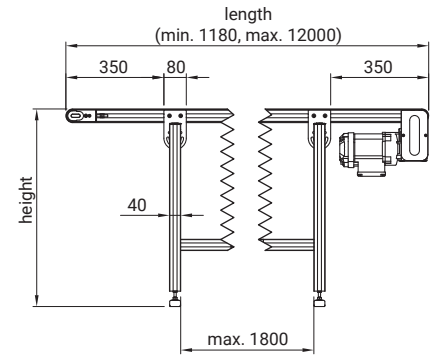
Technical data

Material: clear anodized aluminum, galvanized die-cast zinc; galvanized steel; rubber

Scope of delivery

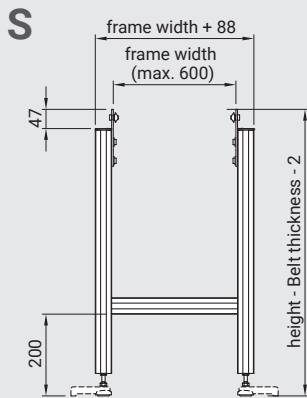
Stand segment fully assembled and attached to the conveyor belt

Wide conveyor stands (type H and G) offer additional stability for conveyors with a stand height more than 3 times the frame width.

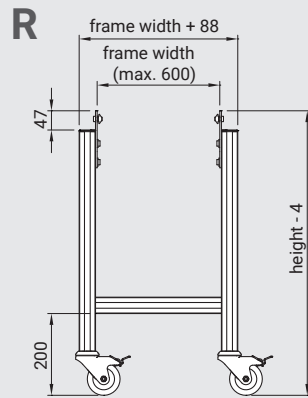


Standard conveyor stand types

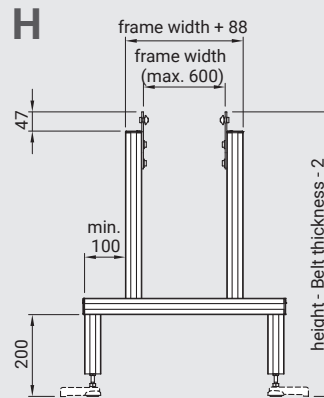
Wide conveyor stand types



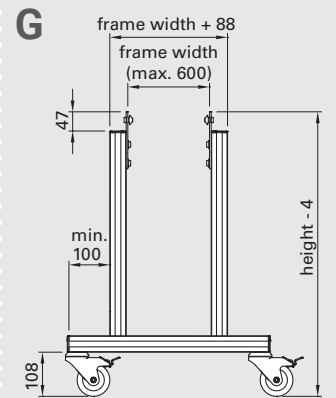
Leveling Bases BAS4008
Height adjustment ± 20 mm



Swivel Castors with brake
CAS3080



Leveling Bases BAS4008
Height adjustment ± 20 mm



Swivel Castors with brake
CAS3080

Order code

| Description | Order code ² | | | |
|-------------------|-------------------------|------|--------|--------|
| | Frame width | Type | Length | Height |
| Stand for C4N/C5N | ---- | _ NN | ---- | ---- |

1) Optionally with Floor Mounting Plate BAP4500.

2) Please complete the order code by adding the corresponding parameters for order processing.

Drawings: dimensions in mm

C8F

Stand for C8N/C8M

**Application**

Stand for Belt Conveyor 80 and Modular
Belt Conveyor 80

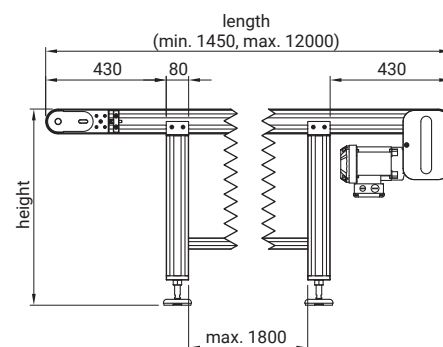
Technical data

Material: clear anodized aluminum,
galvanized die-cast zinc; galvanized steel;
rubber

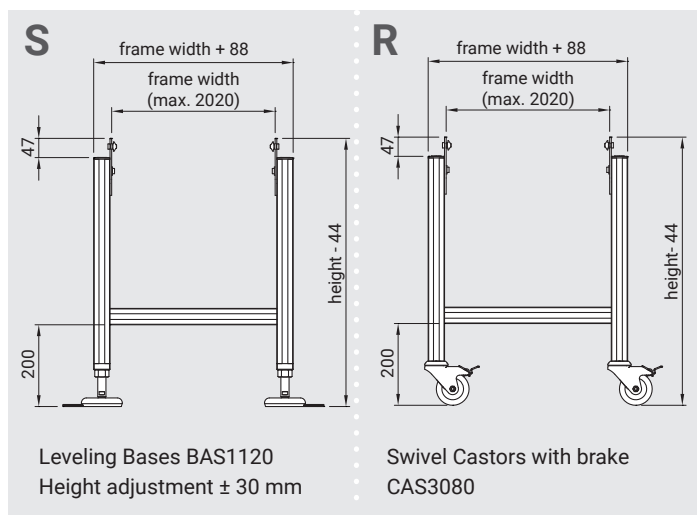
Scope of delivery

Stand segment fully assembled and
attached to the conveyor belt

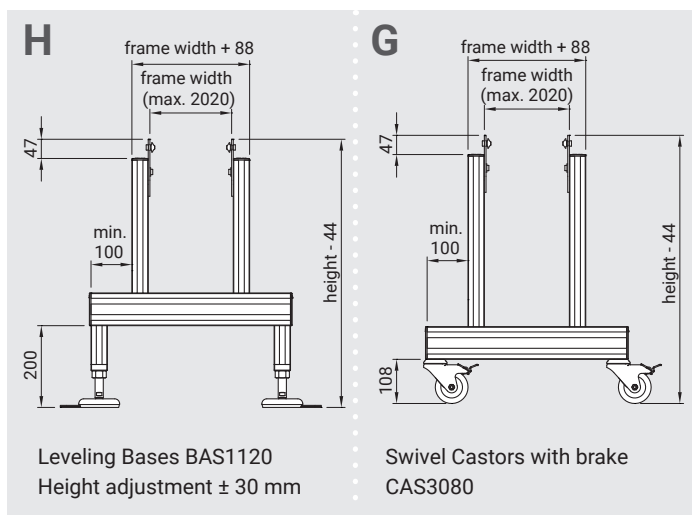
Wide conveyor stands (type H and G)
offer additional stability for conveyors
with a stand height more than 3 times the
frame width.



Standard conveyor stand types



Wide conveyor stand types

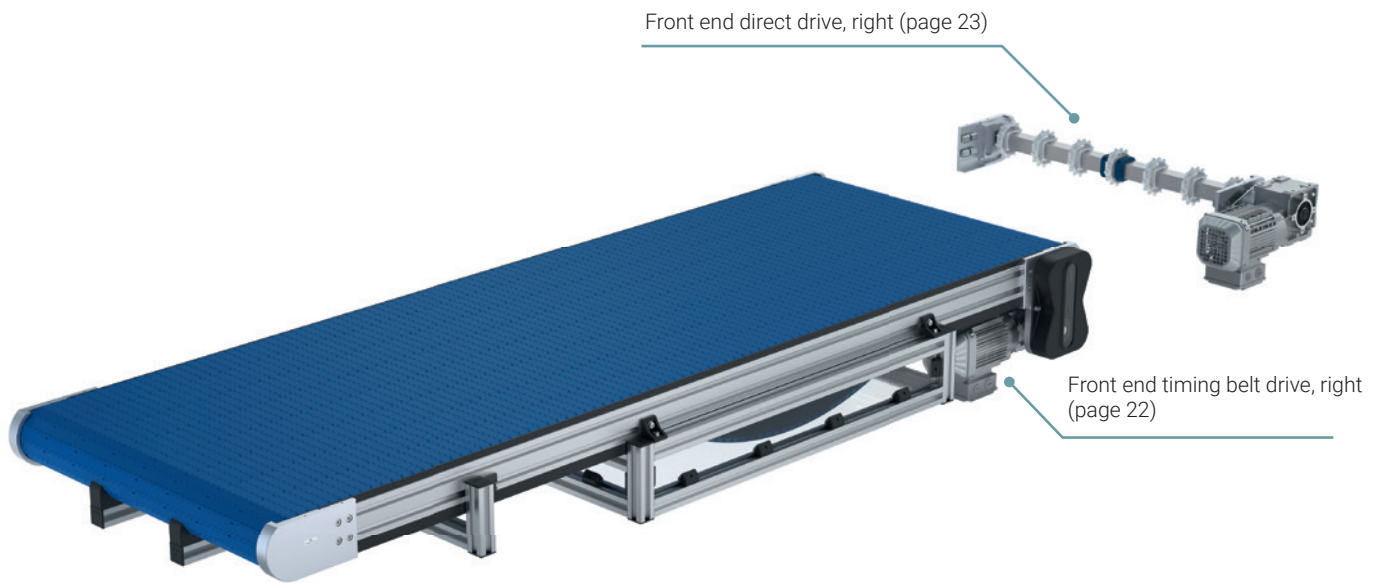


Order code

| Description | Order code ¹ | | | |
|-------------------|-------------------------|------|--------|--------|
| | Frame width | Type | Length | Height |
| Stand for C8N/C8M | C8F | ___ | ___ | ___ |

1) Please complete the order code by adding the corresponding parameters for order processing.
Drawings: dimensions in mm

C8M Straight Modular Belt Conveyor Drive Options

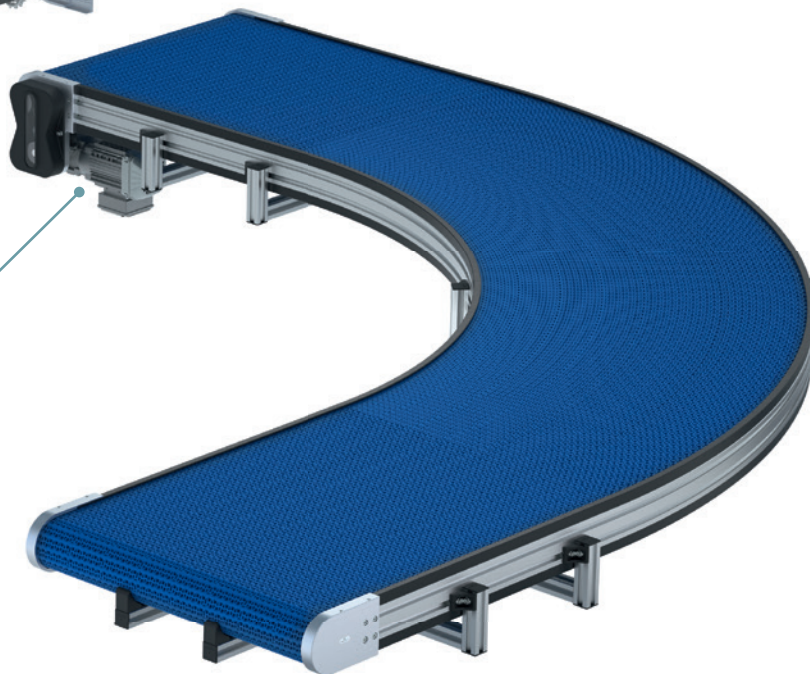


C8MC Curved Modular Belt Conveyor Drive Options

Front end direct drive, left (page 25)



Front end timing belt drive, left (page 24)





Side Guide for Modular Belt
Conveyor
See page 50

Application

Conveying tasks of all kinds

Technical data

Belt speeds from 6 m/min up to 50 m/min

Drive power depending on conveyor
speed and load ranging from 0.25 kW to
0.55 kW (230/400V; 50/60Hz; IP54)

Max. total load of conveyed material: 750 kg

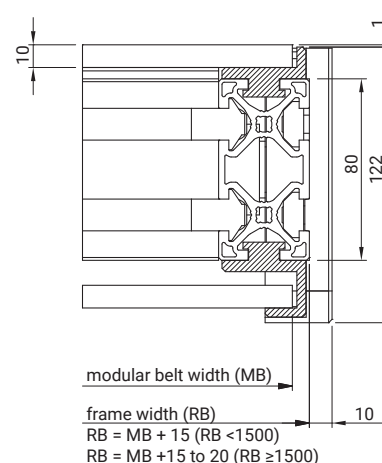
Modular belt pitch 1 inch

Temperature range: from -20°C to +40°C

Modular belt design

Modular belt open

Modular belt closed



Drive options¹

Front end timing belt drive



Front end timing belt drive, left



Front end timing belt drive, right

Front end direct drive

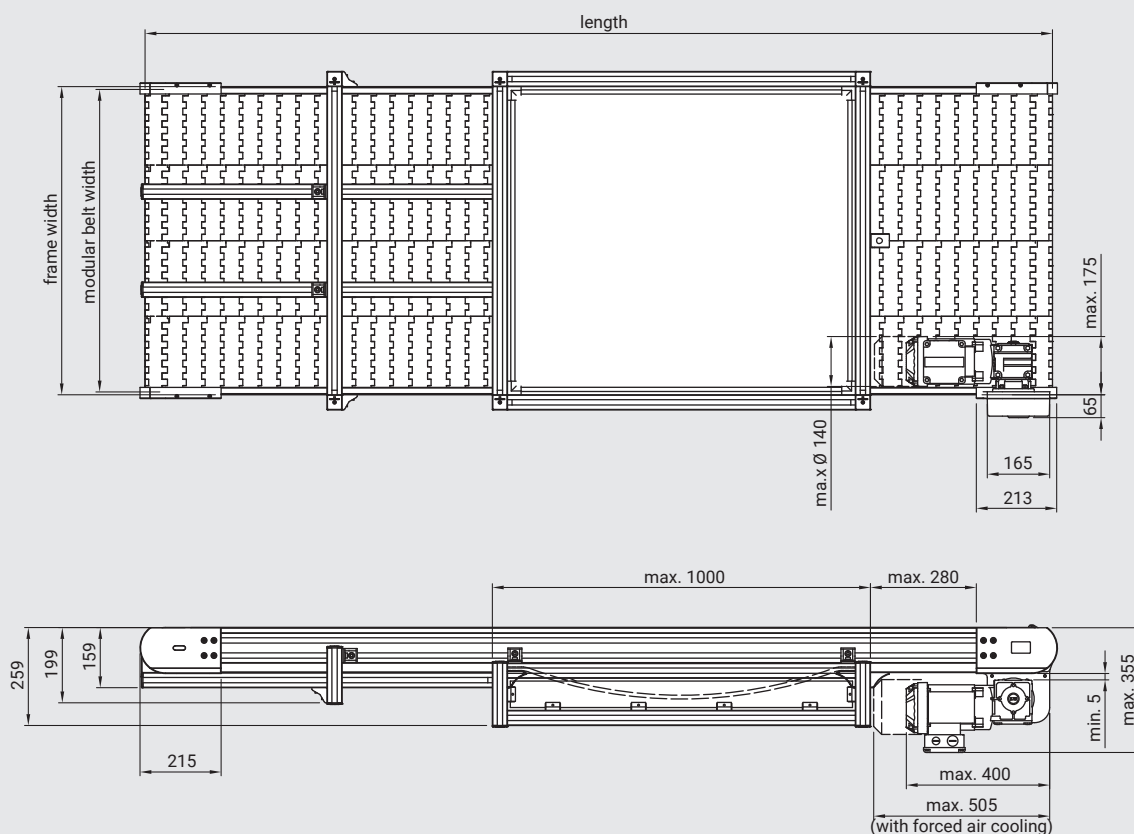


Front end direct drive, left

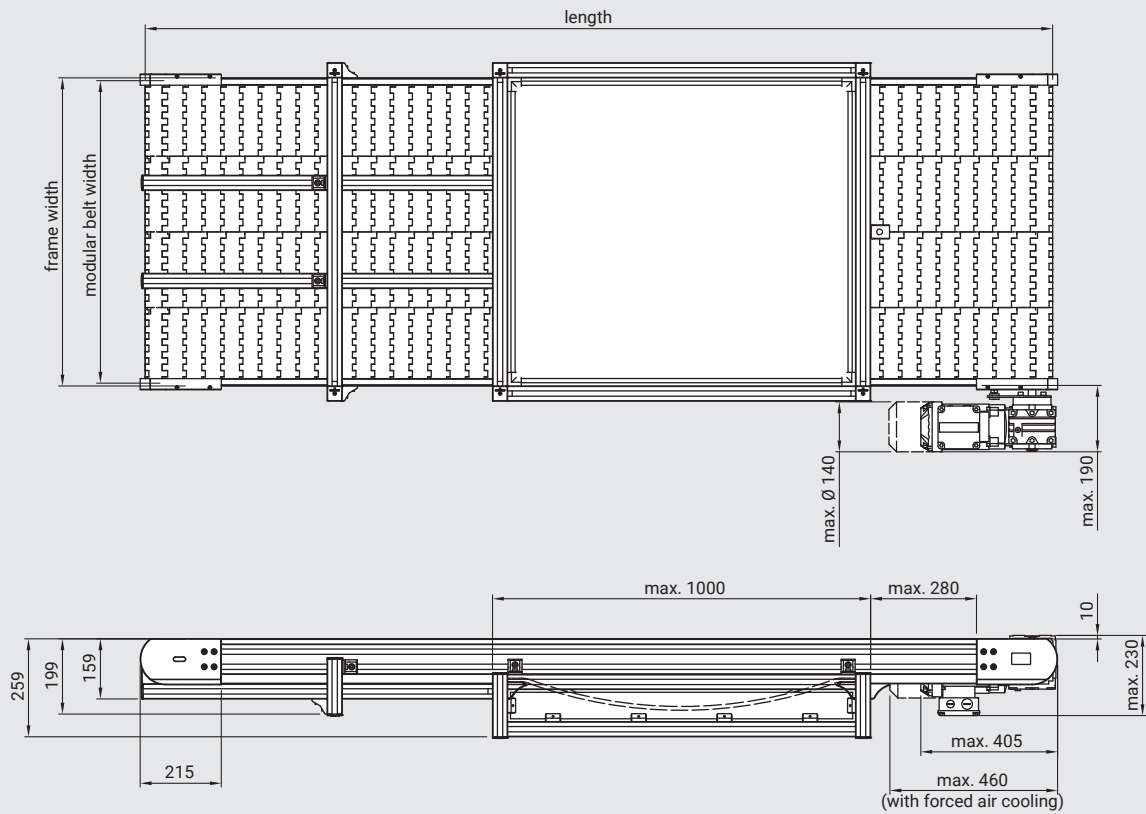


Front end direct drive, right

Front end timing belt drive



Front end direct drive



Design options²

Side view



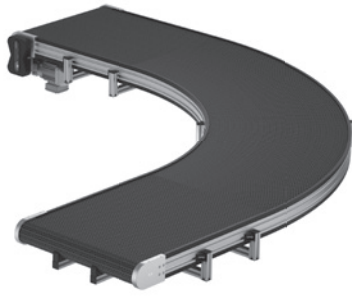
Length and frame width

| Description | Min. length ³ | Max. length ³ | Min. frame width ⁴ | Max. frame width ⁴ |
|--|--------------------------|--------------------------|-------------------------------|-------------------------------|
| C8M Straight front end timing belt drive | 1500 mm | 12000 mm | 165 mm | 2020 mm |
| C8M Straight front end direct drive | 1500 mm | 12000 mm | 165 mm | 2020 mm |

Request for Quote / Order placement

Please use our request form at www.robotunits.com.

- 1) Only pulling direction is possible
 - 2) Design options on request
 - 3) Special lengths available upon request
 - 4) Frame widths can be ordered ranging from min. 165 mm to max. 2020 mm in steps of 50 mm.
- Drawings: dimensions in mm



Side Guide for Modular Belt
Conveyor
See page 50

Application

Conveying tasks of all kinds

Technical data

Belt speeds from 6 m/min up to 30 m/min

Drive power depending on conveyor speed and load ranging from 0.25 kW to 0.55 kW (230/400V; 50/60Hz; IP54)

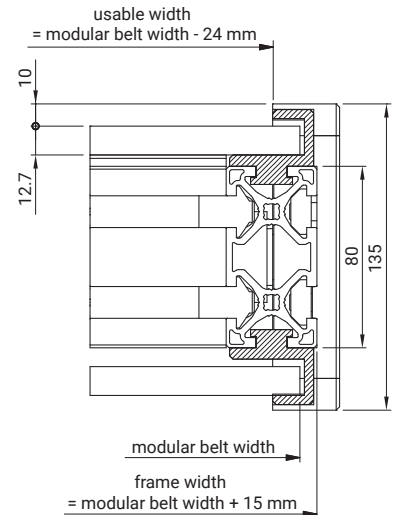
Max. total load of conveyed material: on request

Modular belt pitch 1 inch

Temperature range: from -20°C to +40°C

Modular belt design

Modular belt open



Drive options¹

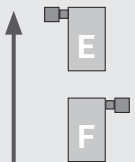
Front end timing belt drive



Front end timing belt drive, left

Front end timing belt drive, right

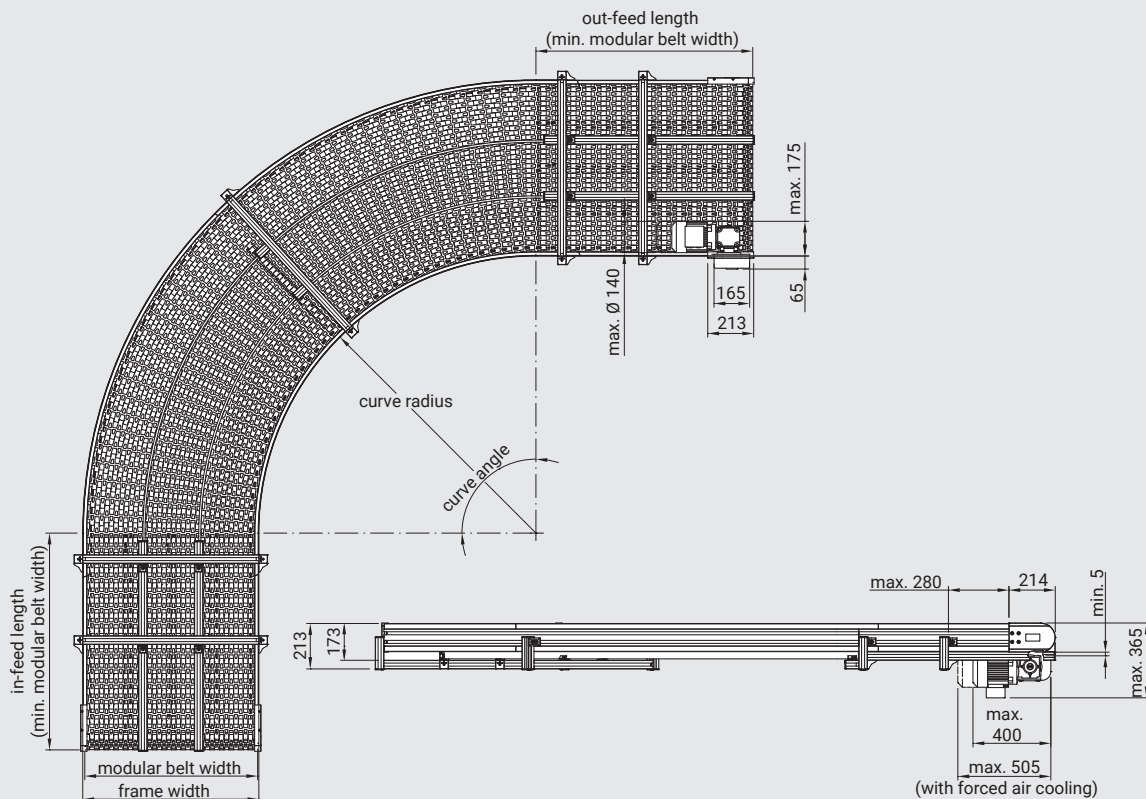
Front end direct drive



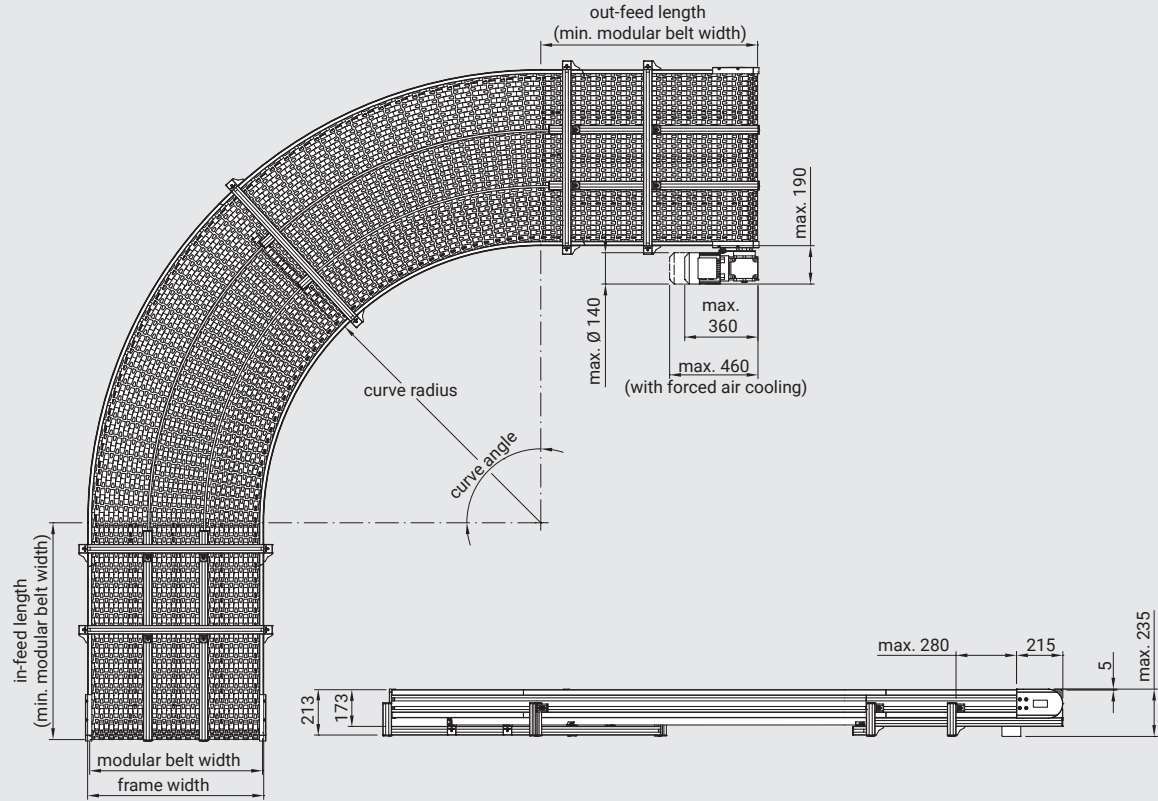
Front end direct drive, left

Front end direct drive, right

Front end timing belt drive



Front end direct drive



Design options²

Side view



Top view



Frame width

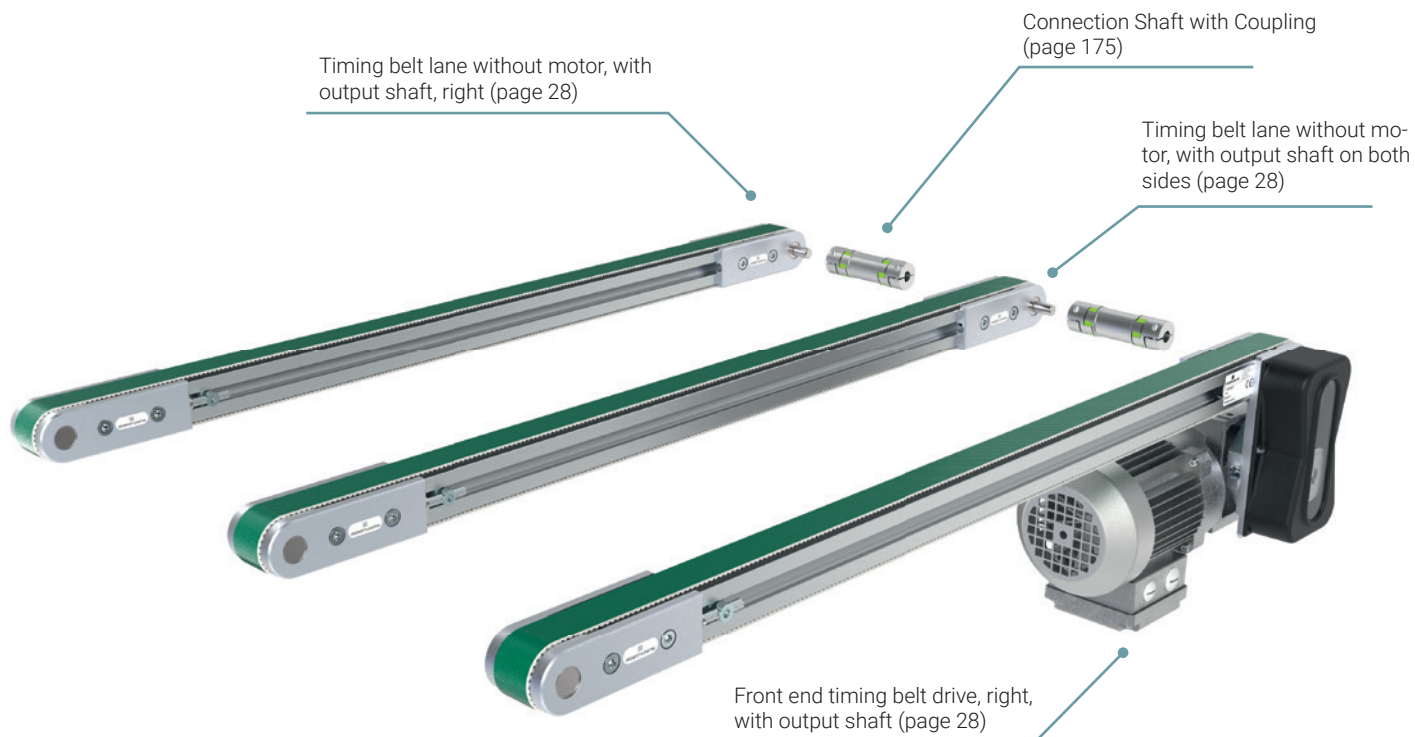
| Description | Min. frame width ³ | Max. frame width ³ |
|--|-------------------------------|-------------------------------|
| C8MC Curved conveyor front end timing belt drive | 215 mm | 1215 mm |
| C8MC Curved conveyor front end direct drive | 215 mm | 1215 mm |

Request for Quote / Order placement

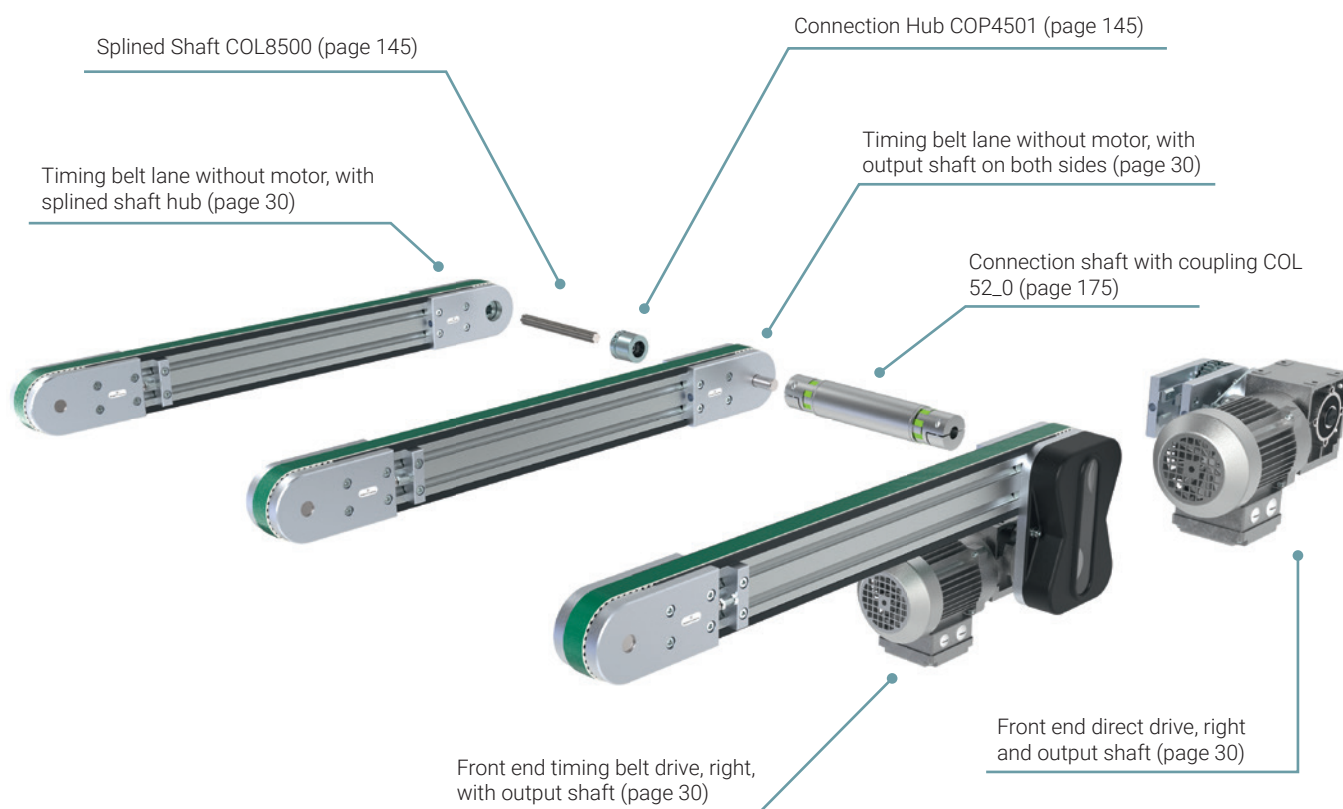
Please use our request form at www.robotunits.com.

- 1) Only pulling direction is possible
 - 2) Design options on request
 - 3) Frame widths can be ordered ranging from min. 215 mm to max. 1215 mm in steps of 50 mm.
- Drawings: dimensions in mm

C4T Timing Belt Conveyor Drive And Connection Options



C8T Timing Belt Conveyor Drive And Connection Options





Side Guide for Timing Belt
Conveyor
See page 50

Application

Conveying tasks of all kinds

Technical data

Speed: from 3 m/min to 58 m/min

Drive power depending on conveyor
speed and load ranging from 0.12 kW to
0.37 kW (230/400V; 50/60Hz; IP54)

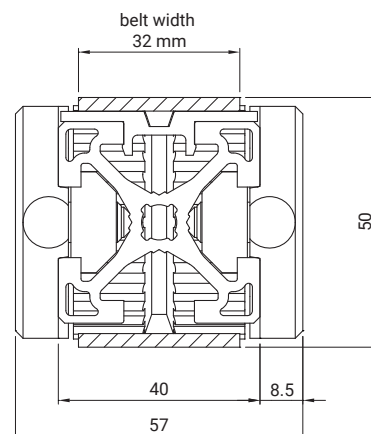
Max. total load of conveyed material: 160 kg
Temperature range: from -20°C to +40°C

Pulley

Number of teeth: 30 teeth
Pitch circle diameter: 47.75 mm

Belt type

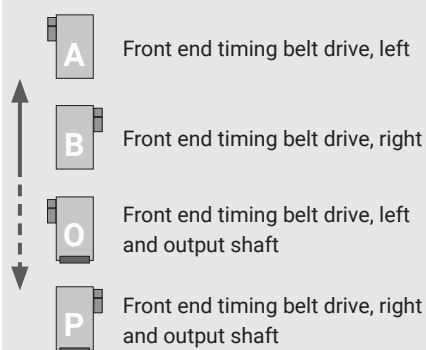
Standard application, adhesive and thus
suitable for incline transport suitable for
accumulation operation etc.



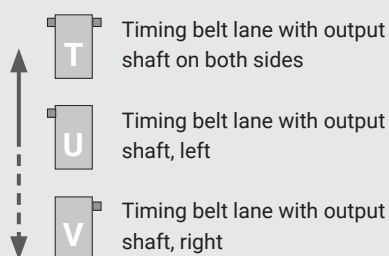
* With adhesive belt = 52 mm

Drive options¹

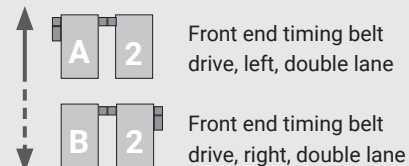
Front end timing belt drive



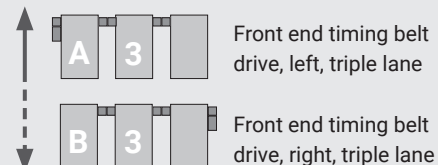
Timing Belt Lane Without Motor



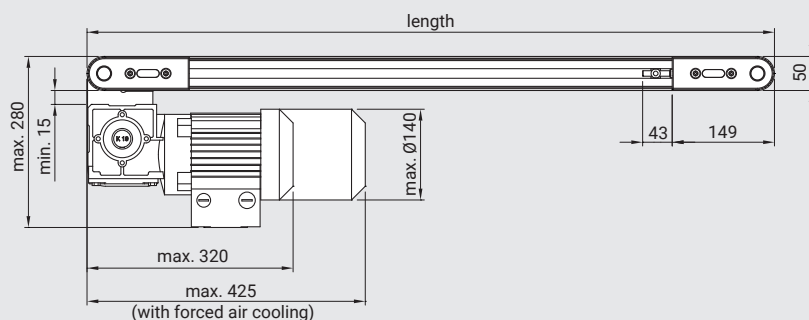
Front end timing belt drive, double lane



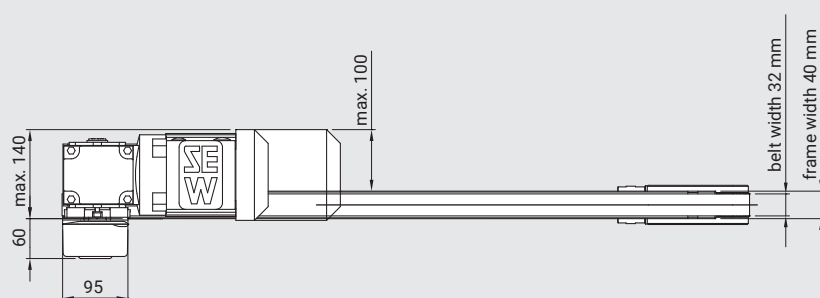
Front end timing belt drive, triple lane



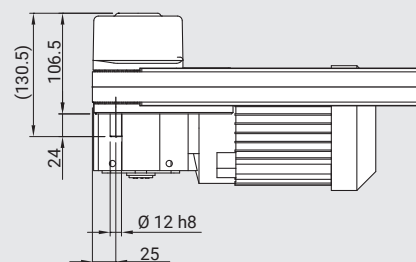
Front end timing belt drive



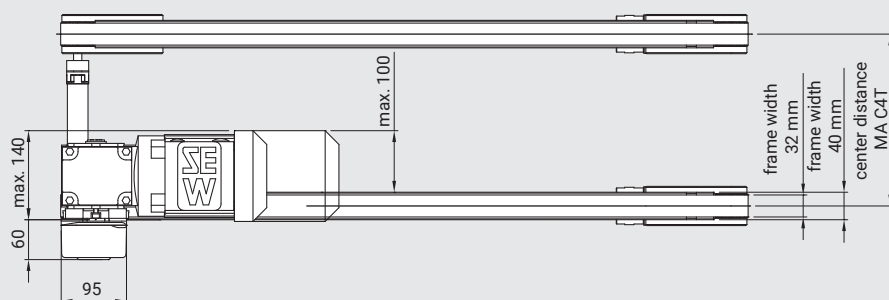
Front end timing belt drive



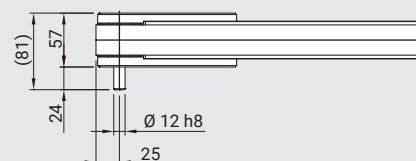
O/P



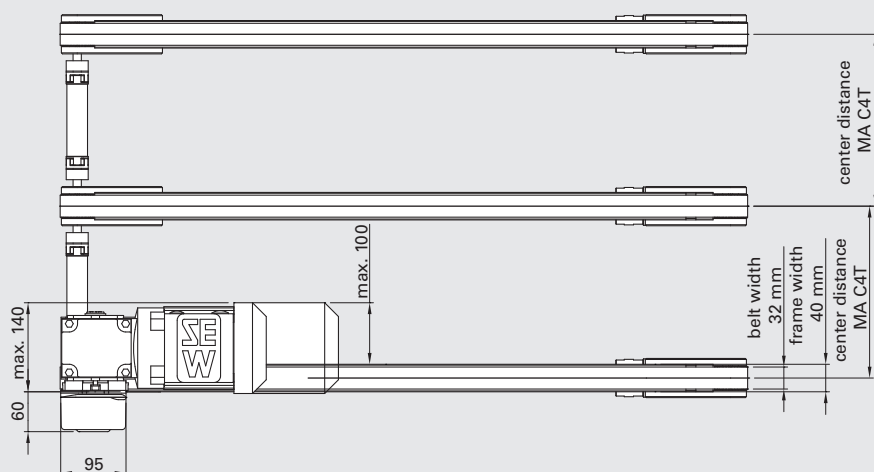
Front end timing belt drive, double lane



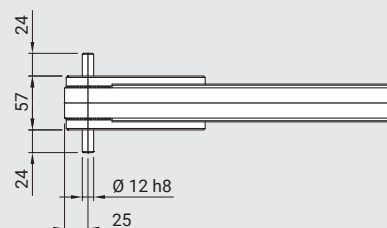
U/V



Front end timing belt drive, triple lane



T



Length and frame width

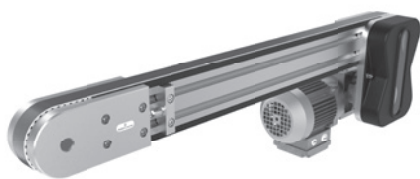
| Description | Min. length | Max. length | MA1 | MA2 |
|--|-------------|-------------|------|------|
| Timing Belt Conveyor 40 Front end timing belt drive | 400 mm | 12000 mm | | |
| Timing Belt Conveyor 40 Front end timing belt drive, double lane | 400 mm | 12000 mm | ---- | |
| Timing Belt Conveyor 40 Front end timing belt drive, triple lane | 400 mm | 12000 mm | ---- | ---- |
| Timing Belt Conveyor 40 Timing belt lane without motor | 400 mm | 12000 mm | | |

Order placement

Please use our Belt Conveyor configuration tool or our request form at www.robotunits.com

1) Standard direction is pulling. The running direction of all drives can be changed by reversing the polarity of the motor.
Drawings: dimensions in mm

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Side Guide for Timing Belt
Conveyor
See page 50

Application

Conveying tasks of all kinds

Technical data

Speed: from 6 m/min to 66 m/min

Drive power depending on conveyor
speed and load from 0.25 kW to 0.37 kW
(230/400V; 50/60Hz; IP54)

Max. total load of conveyed material: 400 kg
Temperature range: from -20°C to +40°C

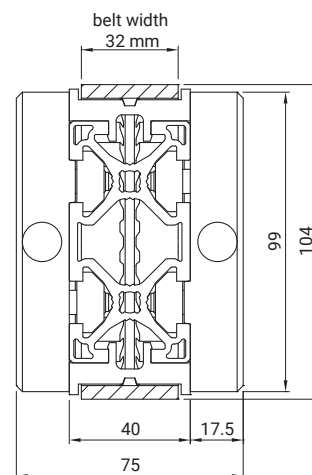
Pulley

Number of teeth: 32 teeth

Pitch circle diameter: 101.85 mm

Belt type

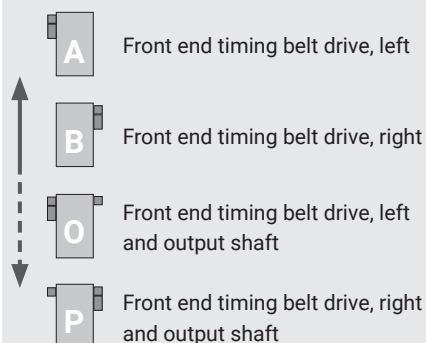
Standard application, adhesive and thus
suitable for incline transport suitable for
accumulation operation etc.



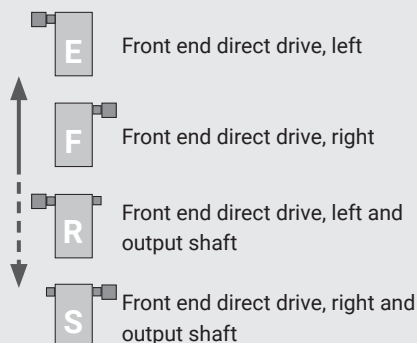
* With adhesive belt = 108 mm

Drive options¹

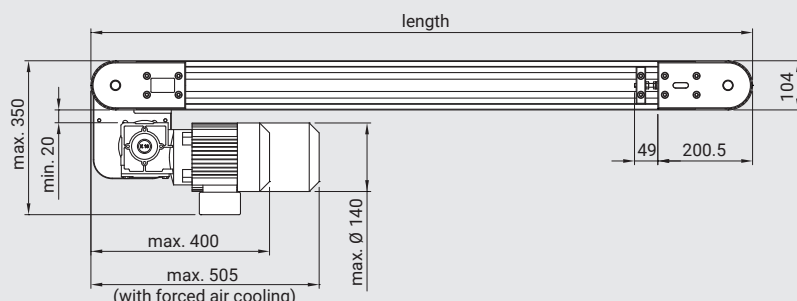
Front End Timing Belt Drive, Fmax 4000 N



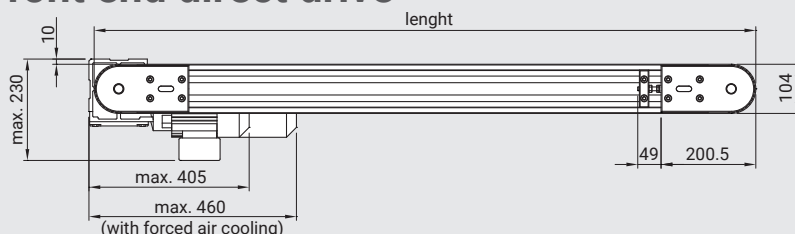
Front End Direct Drive, Fmax 6000 N



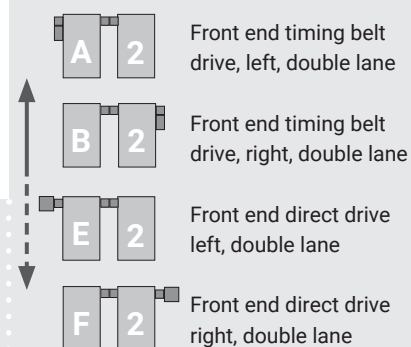
Front end timing belt drive



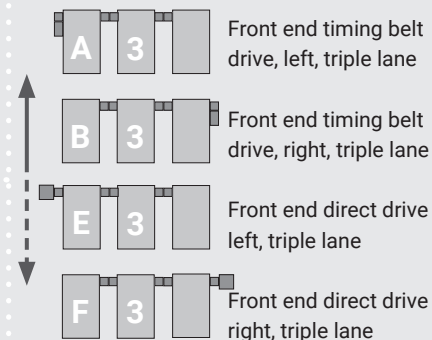
Front end direct drive



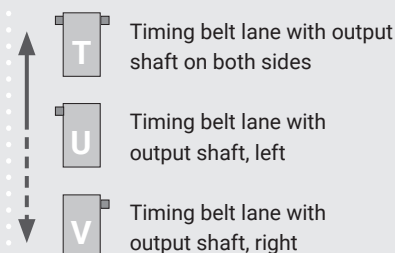
Front end drive, double lane



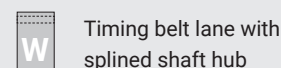
Front end drive, triple lane



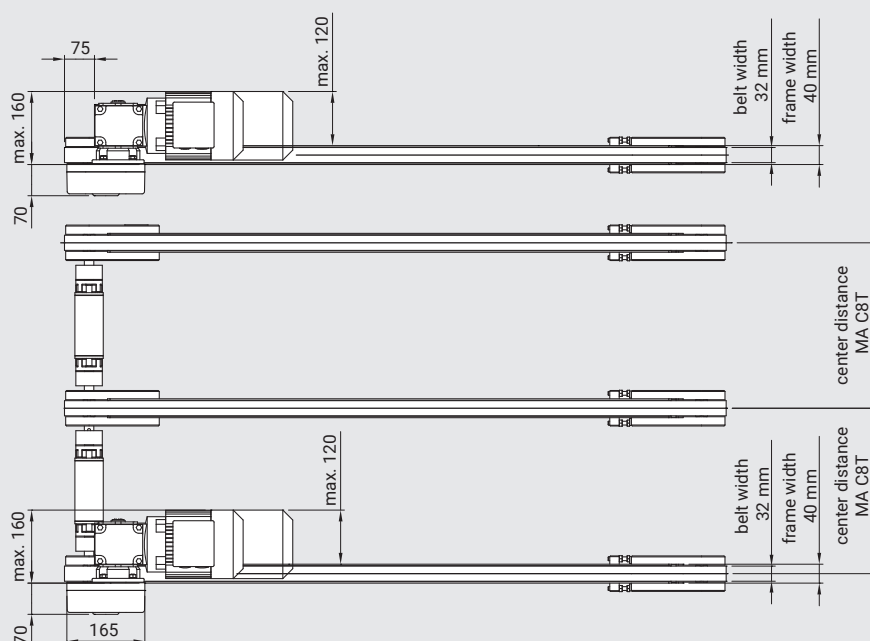
Timing Belt Lane Without Motor, Adjustable



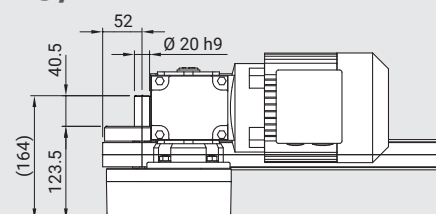
Timing Belt Lane Without Motor



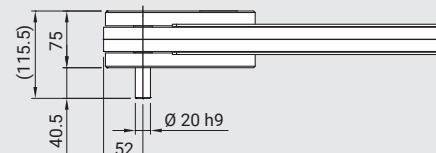
Front end timing belt drive, double/triple lane



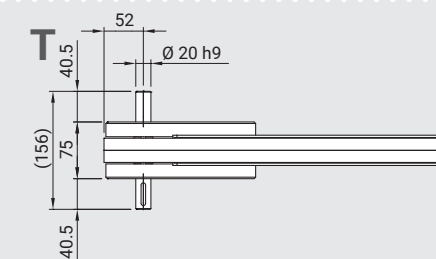
O/P



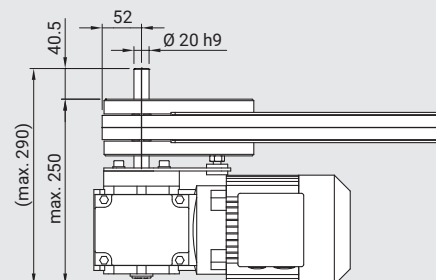
U/V



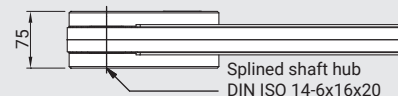
T



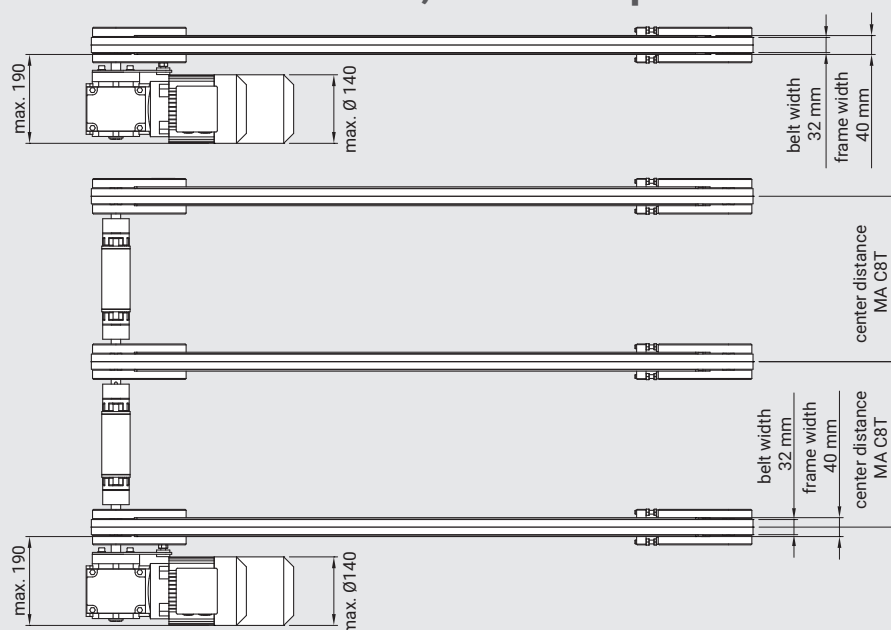
R/S



W, adjustable



Front end direct drive, double/triple lane



Length and frame width

| Description | Min. length | Max. length | MA1 | MA2 |
|--|-------------|-------------|------|------|
| Timing Belt Conveyor 80 Front end timing belt drive | 550 mm | 12000 mm | | |
| Timing Belt Conveyor 80 Front end timing belt drive, double lane | 550 mm | 12000 mm | ---- | |
| Timing Belt Conveyor 80 Front end timing belt drive, triple lane | 550 mm | 12000 mm | ---- | ---- |
| Timing Belt Conveyor 80 Front end direct drive | 550 mm | 12000 mm | | |
| Timing Belt Conveyor 80 Front end direct drive, double lane | 550 mm | 12000 mm | ---- | |
| Timing Belt Conveyor 80 Front end direct drive, triple lane | 550 mm | 12000 mm | ---- | ---- |
| Timing Belt Conveyor 80 Timing belt lane without motor | 550 mm | 12000 mm | | |

Order placement

Please use our Belt Conveyor configuration tool or our request form at www.robotunits.com

1) Standard direction is pulling. The running direction of all drives can be changed by reversing the polarity of the motor.
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C4G

Stand for C4T

**Application**

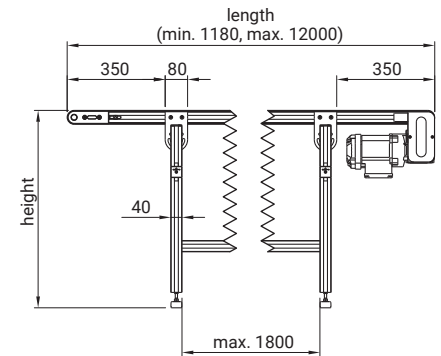
Stand for Timing Belt Conveyor 40

Technical data

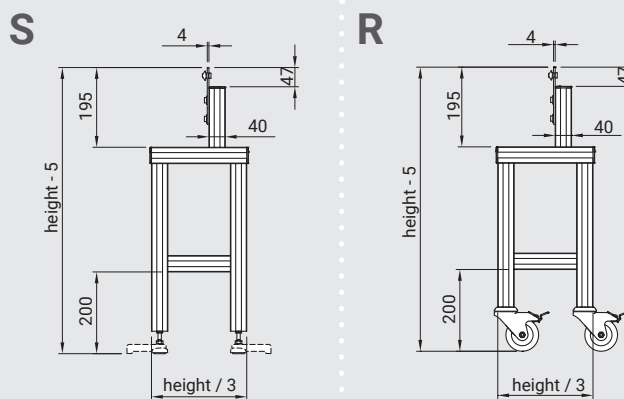
Material: clear anodized aluminum,
galvanized die-cast zinc; galvanized steel;
rubber

Scope of delivery

Stand segment fully assembled and
attached to the conveyor belt



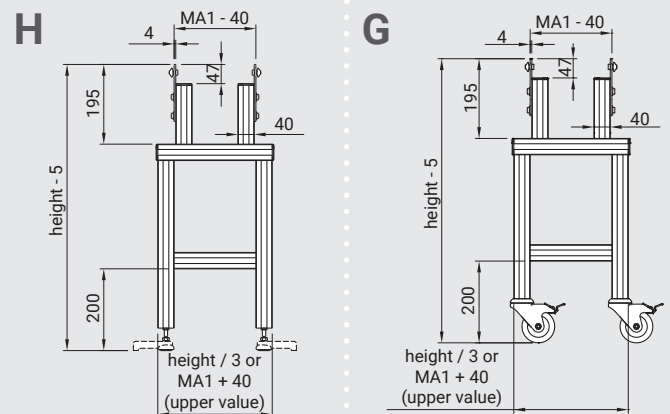
Stand types: single lane



Leveling Bases BAS 4008¹
Height adjustment ± 20 mm

Swivel Castors with brake
CAS 3080

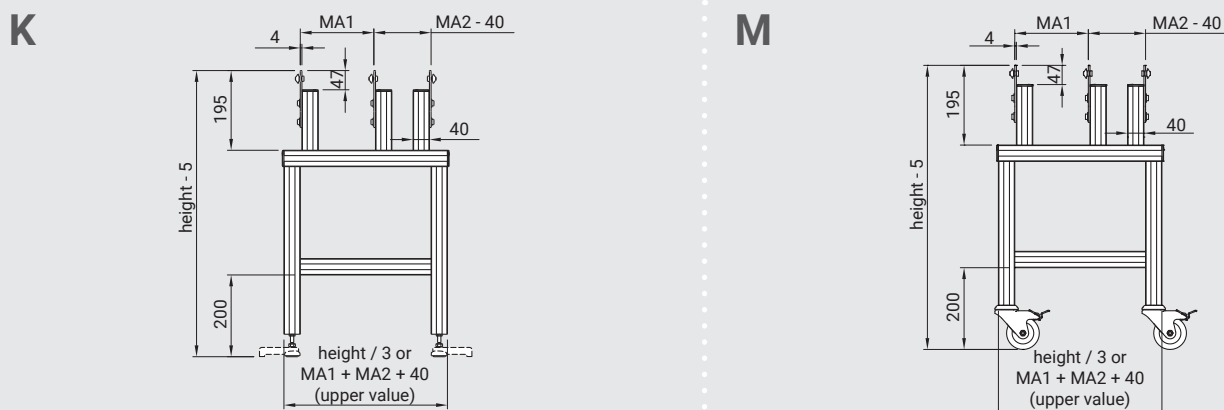
Stand types: double lane



Leveling Bases BAS 4008¹
Height adjustment ± 20 mm

Swivel Castors with brake
CAS 3080

Stand types: triple lane



Leveling Bases BAS 4008¹
Height adjustment ± 20 mm

Swivel Castors with brake
CAS 3080

Order code

| Description | Order code ² | | | | |
|---------------|-------------------------|------|--------|------|------|
| | Length | Type | Height | MA1 | MA2 |
| Stand for C4T | C4G | ---- | _ NN | ---- | ---- |

1) Optionally with Floor Mounting Plate BAP 4500

2) Please complete the order code by adding the corresponding parameters for order processing.

Drawings: dimensions in mm

C8G

Stand for C8T

**Application**

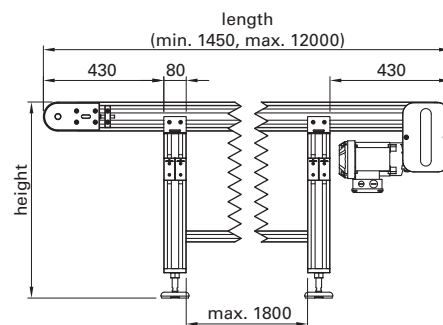
Stand for Timing Belt Conveyor 80

Technical data

Material: clear anodized aluminum,
galvanized die-cast zinc; galvanized steel;
rubber

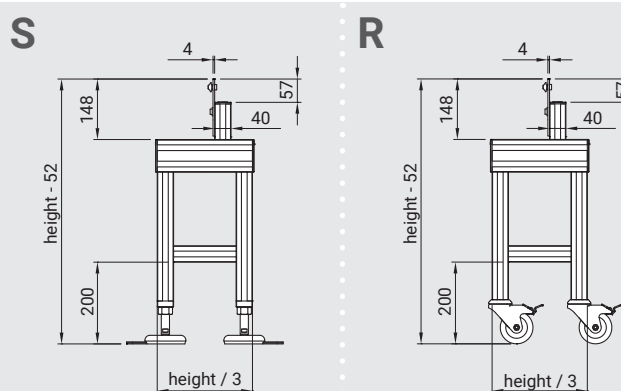
Scope of delivery

Stand segment fully assembled and
attached to the conveyor belt



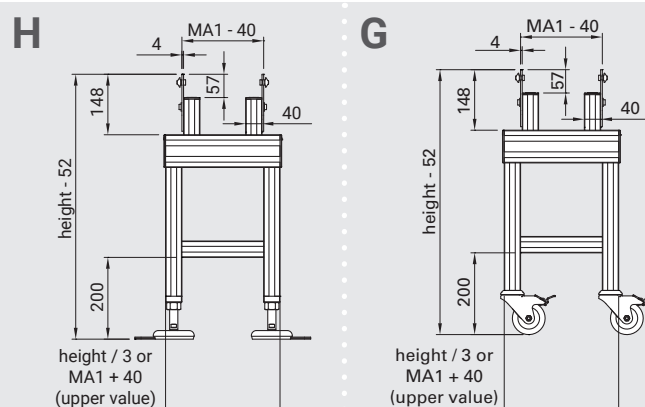
Stand types: single lane

Stand types: double lane



Leveling Bases BAS 1120
Height adjustment ± 30 mm

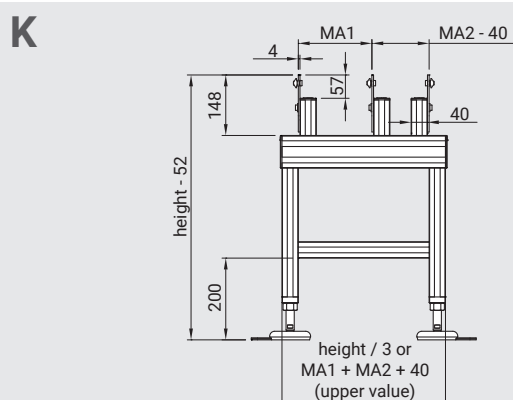
Swivel Castors with brake
CAS 3080



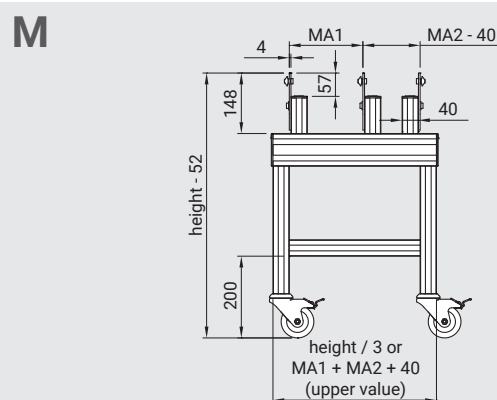
Leveling Bases BAS 1120
Height adjustment ± 30 mm

Swivel Castors with brake
CAS 3080

Stand types: triple lane



Leveling Bases BAS 1120
Height adjustment ± 30 mm



Swivel Castors with brake
CAS 3080

Order code

| Description | Order code ¹ | | | | |
|---------------|-------------------------|------|--------|------|------|
| | Length | Type | Height | MA1 | MA2 |
| Stand for C8T | ---- | — NN | ---- | ---- | ---- |

1) Please complete the order code by adding the corresponding parameters for order processing.

Drawings: dimensions in mm

Straight Powered Roller Conveyor



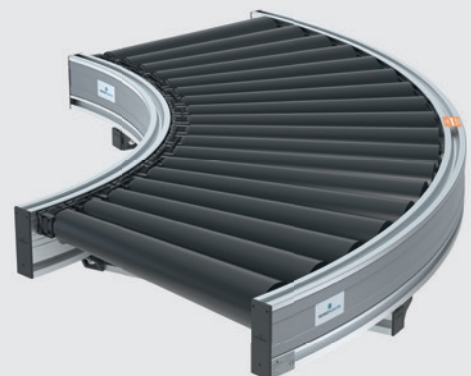
Aligning Powered Roller Conveyor



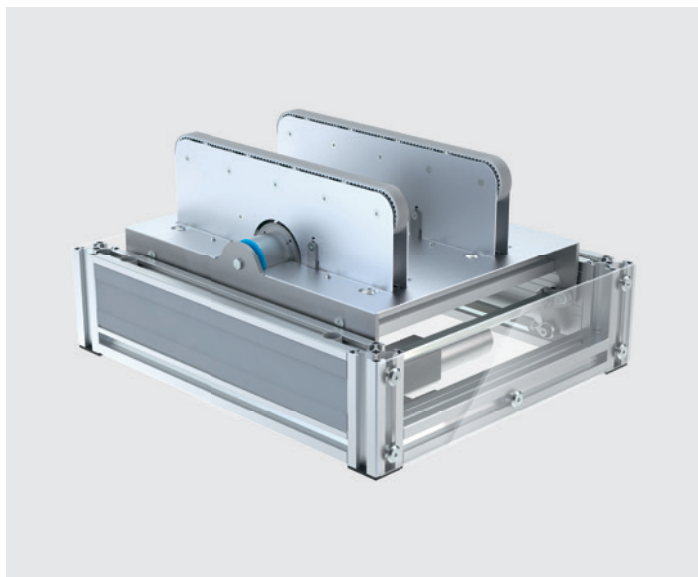
Powered Roller Conveyor Merge



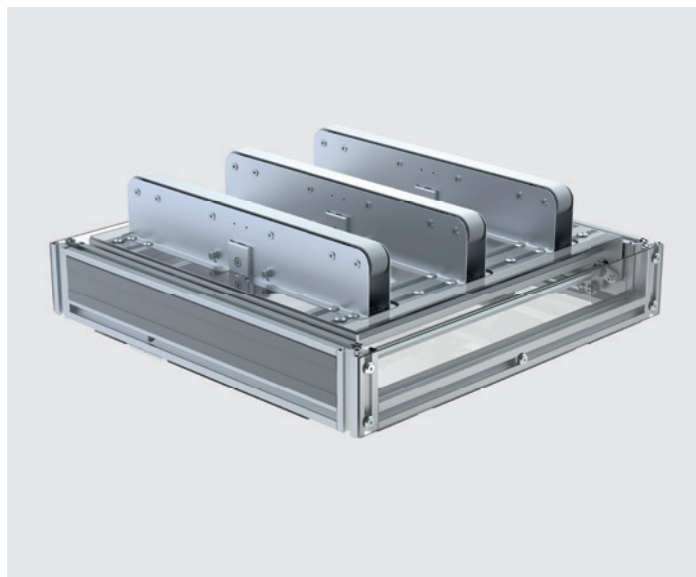
Curved Powered Roller Conv.



Transfer Unit 90°, 50



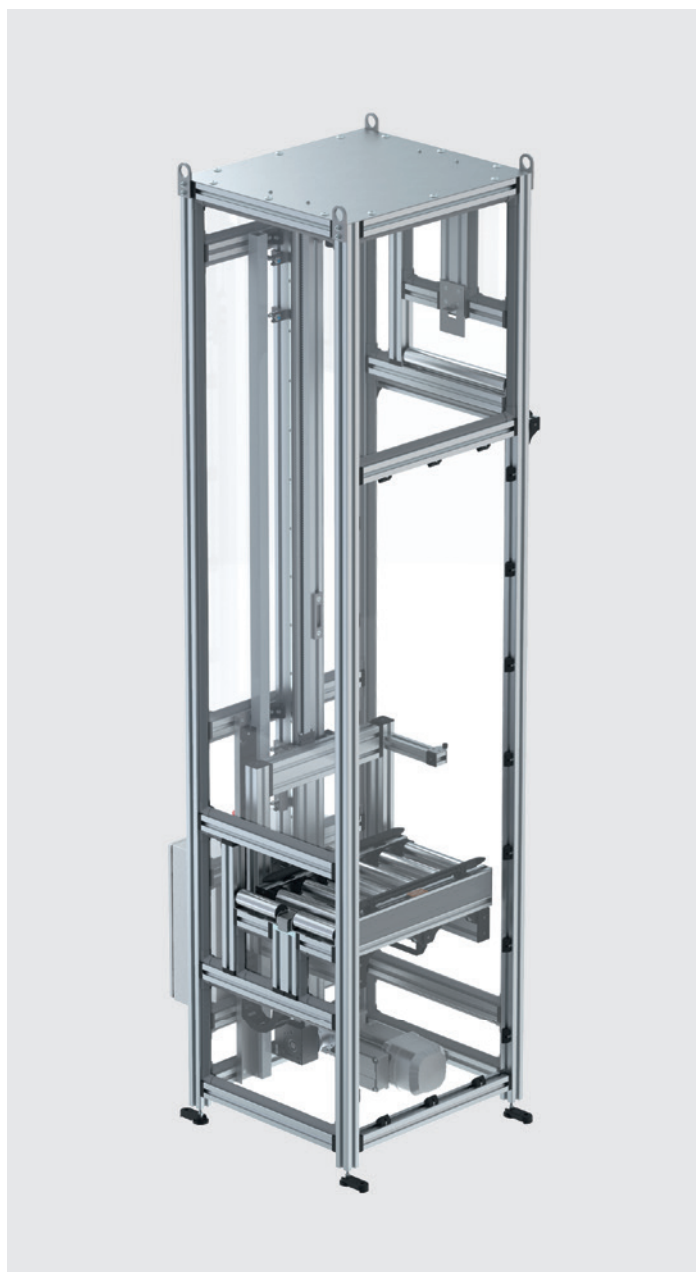
Transfer Unit 90°, 100



Turntable




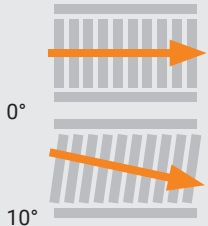


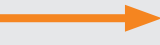
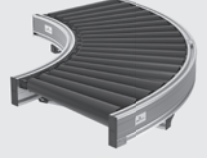

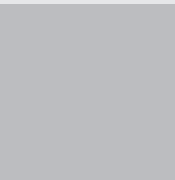



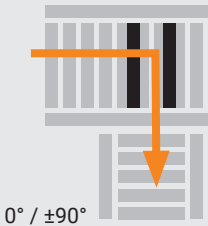


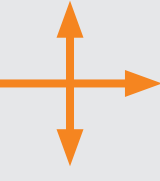
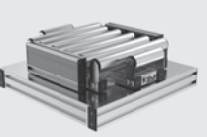
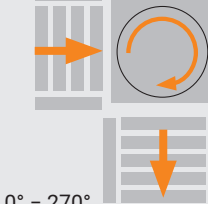
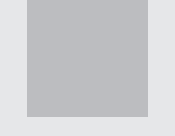



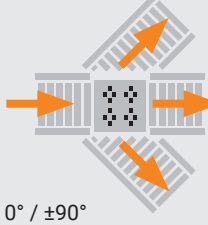
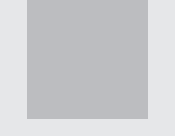

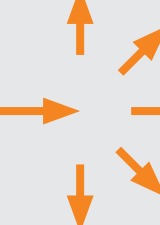

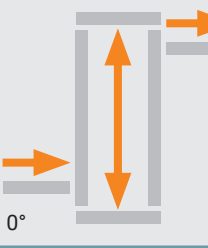


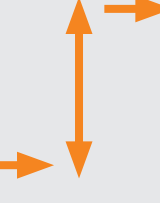
Lift Station



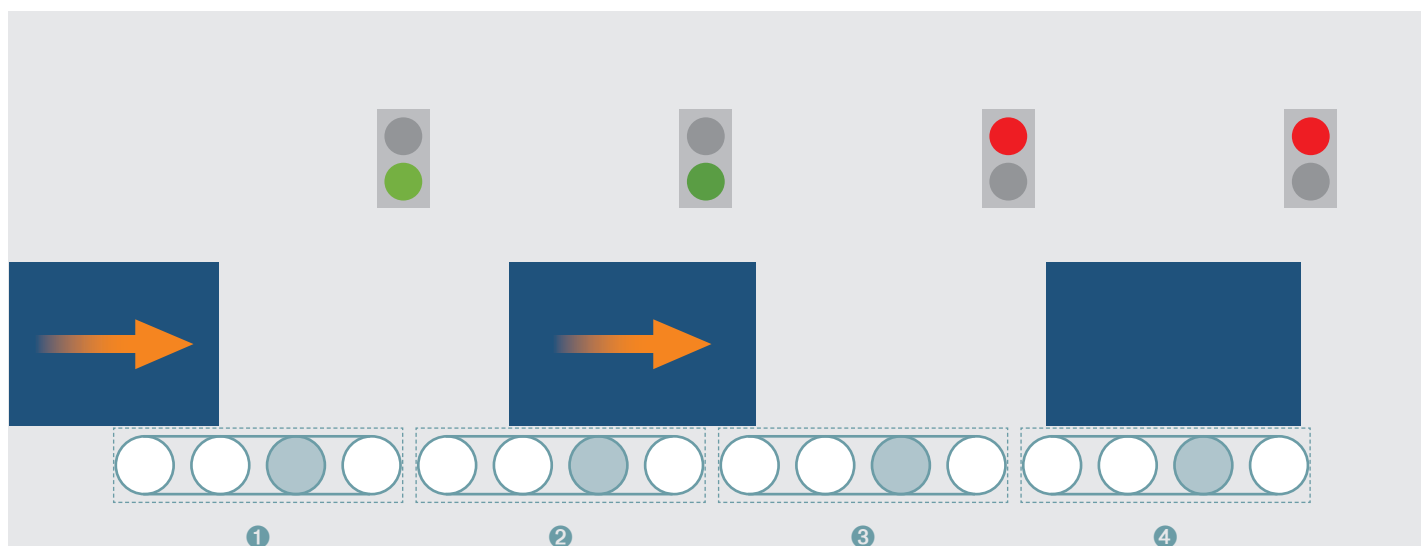
Diverter



Powered Roller Conveyor Modules

| Module | Conveyed material alignment Angular range Conveying direction | Space requirement | Output (cycles/h) | Applications |
|---|--|---|---|---|
|  |  0° 10° |  |  max. 2000 |  |
|  |  45° / 90° |  |  max. 2000 |  |
|  |  0° / ±90° |  |  max. 1500 |  |
|  |  0° - 270° |  |  max. 350 |  |
|  |  0° / ±90° |  |  max. 6000 |  |
|  |  0° |  |  max. 350 |  |

Zero pressure accumulation conveying

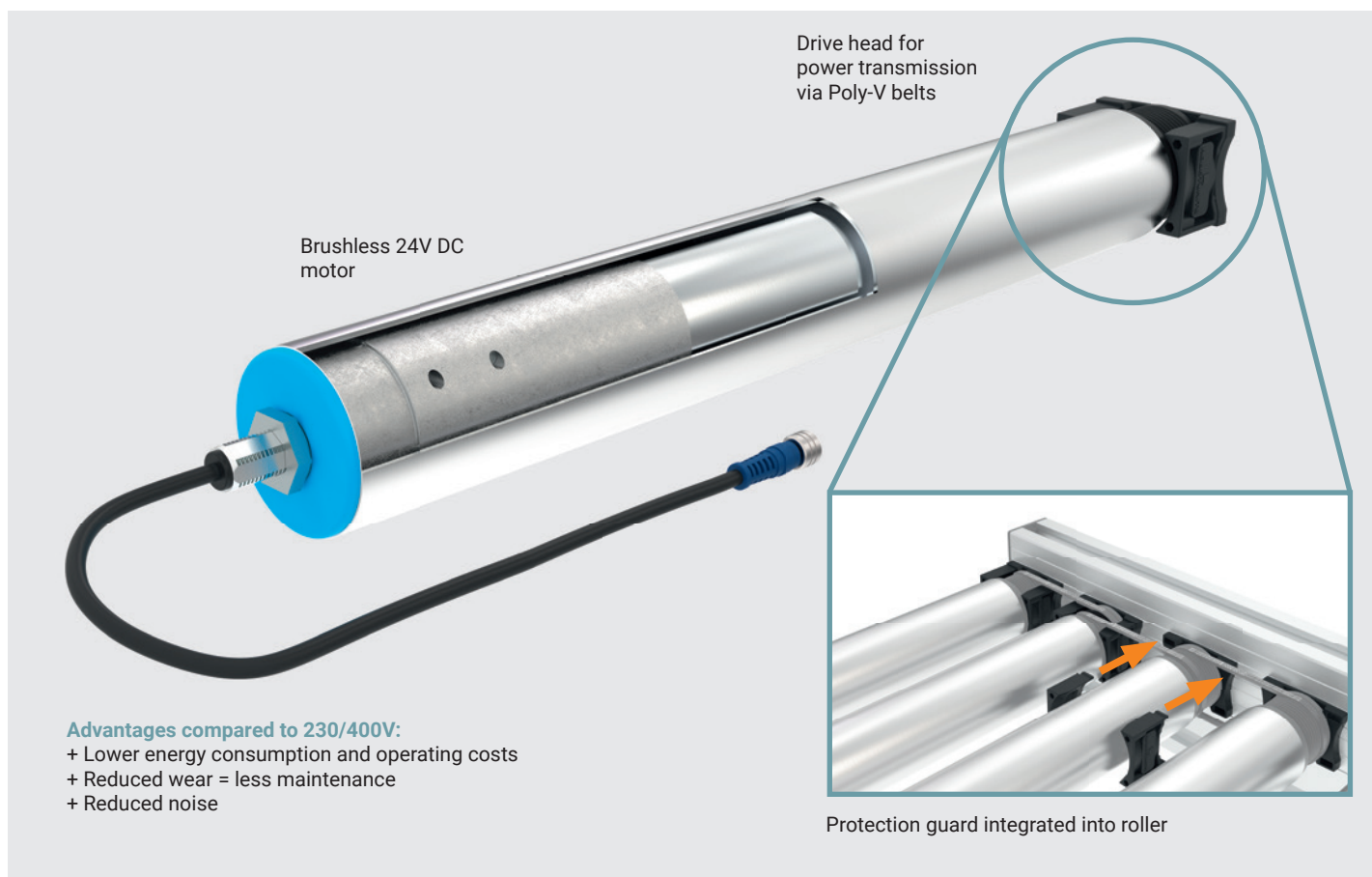


The powered roller conveyor with zero pressure accumulation (ZPA) logic is divided into several zones. These zones are interconnected and communicate with each other. If a product is conveyed towards an occupied zone ④, the product is held in the previous free zone ③. When the occupied zones become free ④, upstream zones follow automatically ③.

Advantages

- + "Plug and Play" solution with decentralized controller – no higher-level control (e.g. PLC) required
- + Only the required rollers turn = energy efficient
- + Zero pressure (no-contact) conveying

Drive technology



**Application**

Zero pressure accumulation of products in various sizes

Technical data

Brushless 24V DC motor

Speed Code / Speed:

15 = 2 to 20 m/min (Alternative)

20 = 10 to 28 m/min (Standard)

35 = 15 to 50 m/min (Alternative)

Temperature range: from +2°C to +40°C

Max. continuous current per motor roller:

2.5 A

Average continuous current per motor roller:

1.5 A

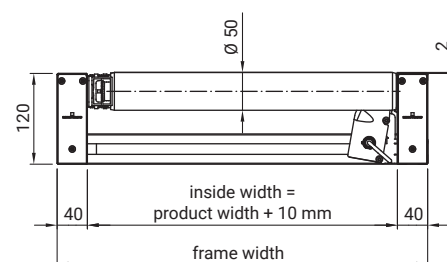
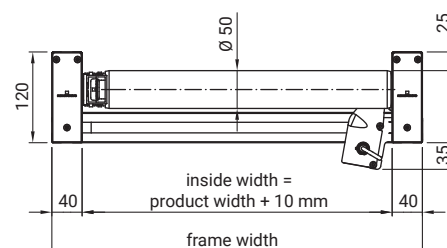
Conveyor rollers driven by Poly-V belts

Roller material: galvanized steel

Belt material: Chloroprene with PA tension members

Frame material: clear anodized aluminum

Max. weight of conveyed material: 100 kg

Option without side guides**Option with side guides****Supported control protocols:**

EtherNet/IP EtherCAT



Side Guide for Roller Conveyor
See page 51

Control unit:

Completely pre-installed incl. sensors

Configuration:

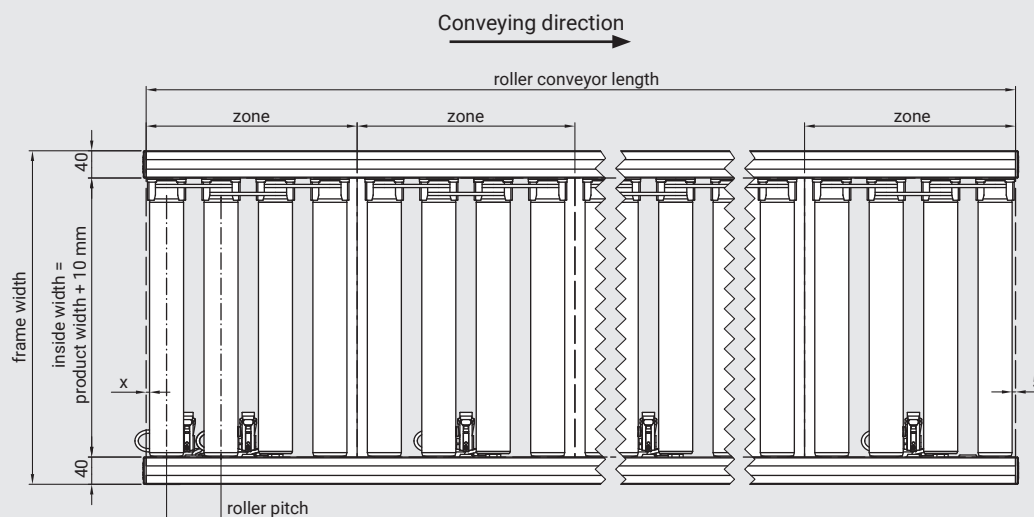
Zero pressure accumulation control logic
(not with EtherCAT)

Optional roller material:

Stainless steel

PU or PVC rubber coating

Dimensions



x: Depends on the product length

Standard dimensions

| Description | Conveyed material (LxW) | Inside width | Frame width | Roller pitch | Standard length up to |
|----------------------------------|-------------------------|--------------|-------------|--------------|-----------------------|
| Straight Powered Roller Conveyor | 400 x 300 mm | 310 mm | 390 mm | 105 mm | 6000 mm |
| Straight Powered Roller Conveyor | 300 x 400 mm | 410 mm | 490 mm | 80 mm | 6000 mm |
| Straight Powered Roller Conveyor | 600 x 400 mm | 410 mm | 490 mm | 160 mm | 6000 mm |
| Straight Powered Roller Conveyor | 400 x 600 mm | 610 mm | 690 mm | 105 mm | 6000 mm |

Conveyors with special widths (min. inside width 310 mm, max. inside width 1210 mm), special lengths and special roller pitches are available on request. Guideline for roller pitch calculation: conveyed material length in conveying direction / 3.75

R5A

Aligning Powered Roller Conveyor

**Application**

Alignment of conveyed goods in different sizes on one edge

Technical data

Brushless 24V DC motor

Speed Code / Speed:

15 = 2 to 20 m/min (Alternative)

20 = 10 to 28 m/min (Standard)

35 = 15 to 50 m/min (Alternative)

Temperature range: from +2°C to +40°C

Max. continuous current per motor roller:

2.5 A

Average continuous current per motor roller:

1.5 A

Conveyor rollers driven by Poly-V belts

Roller material: galvanized steel

Belt material: Chloroprene with PA tension members

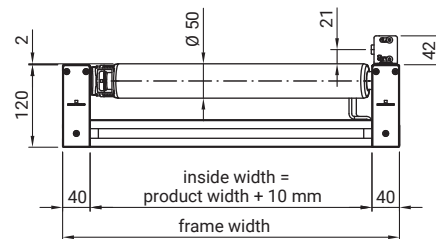
Frame material: clear anodized aluminum

Max. weight of conveyed material: 50 kg

Control unit:

Fully wired, optionally with sensors

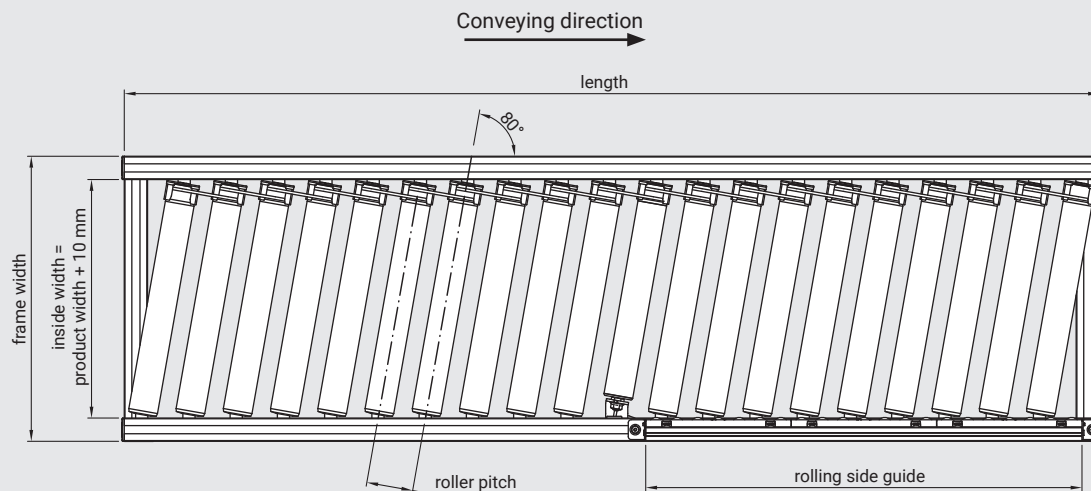
Offset per meter: 173 mm



Optional roller material:

Stainless steel

Dimensions



Inside width min. 310mm, Inside width max. 1210mm

Request for Quote / Order placement

Please use our request form at www.robotunits.com.

Drawings: dimensions in mm



Side Guide for Roller Conveyor
See page 51

Supported control protocols:



EtherNet/IP EtherCAT



Side Guide for Roller Conveyor
See page 51

Application

Zero pressure accumulation conveying and merging into a single conveyor line of conveyed material in various sizes

Technical data

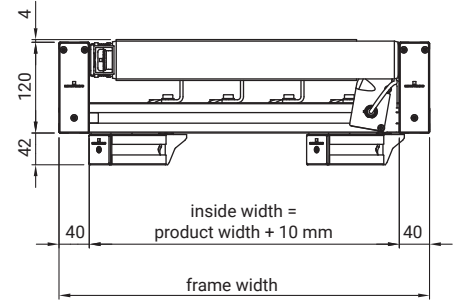
Brushless 24V DC motor
Speed Code / Speed:
15 = 2 to 20 m/min (Alternative)
20 = 10 to 28 m/min (Standard)
35 = 15 to 50 m/min (Alternative)
Temperature range: from +2°C to +40°C
Max. continuous current per motor roller: 2.5 A
Average continuous current per motor roller: 1.5 A
Conveyor rollers driven by Poly-V belts
Roller material: galvanized steel
Belt material: Chloroprene with PA tension members
Frame material: clear anodized aluminum
Max. weight of conveyed material: 50kg

Control unit:

Completely wired incl. sensors and control cabinet

Configuration:

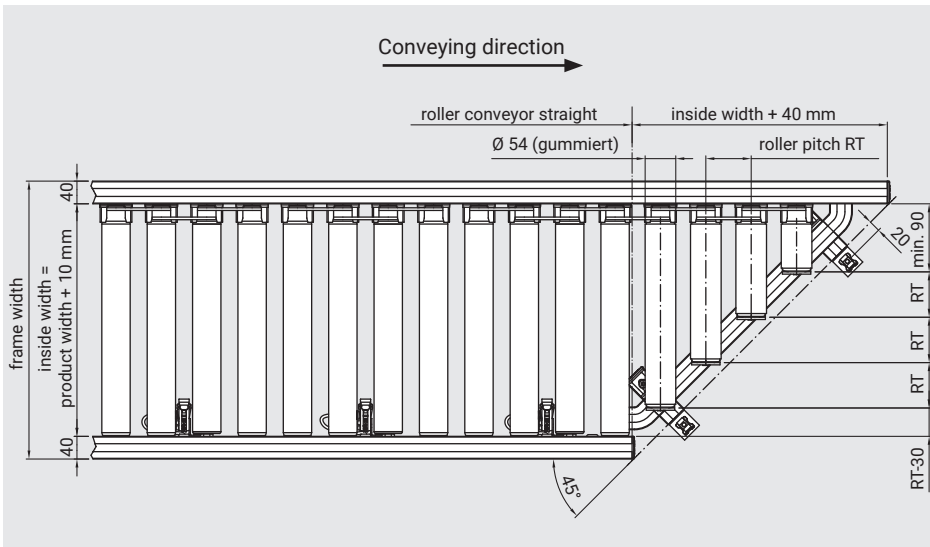
Zero pressure accumulation control logic with downstream powered roller conveyor (not with EtherCAT)



Optional roller material:

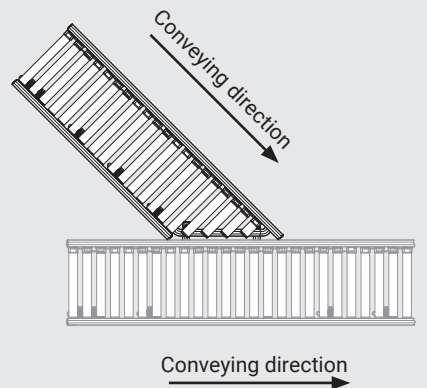
Stainless steel
PU or PVC rubber coating

Dimensions



Layout

Powered Roller Conveyor Straight with Merge



Standard dimensions

| Description | Conveyed material (LxW) | Inside width | Frame width | Roller pitch | Standard lengths up to |
|-------------------------------|-------------------------|--------------|-------------|--------------|------------------------|
| Powered Roller Conveyor Merge | 400 x 300 mm | 310 mm | 390 mm | 105 mm | 6000 mm |
| Powered Roller Conveyor Merge | 300 x 400 mm | 410 mm | 490 mm | 80 mm | 6000 mm |
| Powered Roller Conveyor Merge | 600 x 400 mm | 410 mm | 490 mm | 160 mm | 6000 mm |
| Powered Roller Conveyor Merge | 400 x 600 mm | 610 mm | 690 mm | 105 mm | 6000 mm |

Special dimensions are available on request.

R5C

Powered Roller Conveyor Curved



Side Guide for Roller Conveyor
See page 51

Supported control protocols:



EtherNet/IP EtherCAT



Side Guide for Roller Conveyor
See page 51

Application

Zero pressure accumulation of products in various sizes

Technical data

Brushless 24V DC motor

Speed Code / Speed:

15 = 2 to 20 m/min (Alternative)

20 = 10 to 28 m/min (Standard)

35 = 15 to 50 m/min (Alternative)

Temperature range: from +2°C to +40°C

Max. continuous current per motor roller:

2.5 A

Average continuous current per motor roller:

1.5 A

Conveyor rollers driven by Poly-V belts

Roller material: galvanized steel with conical

plastic attachments made of PP with 10 % GF

Belt material: Chloroprene with PA tension members

Frame material: clear anodized aluminum

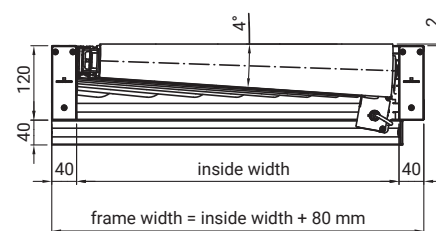
Max. weight of conveyed material: 100 kg

Control unit:

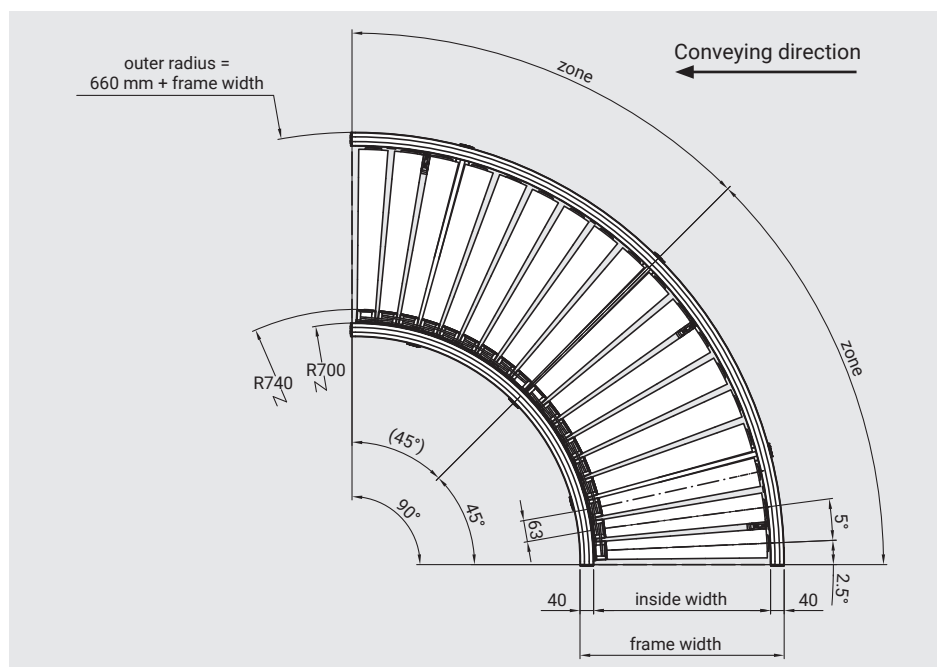
Completely pre-installed incl. sensors

Configuration:

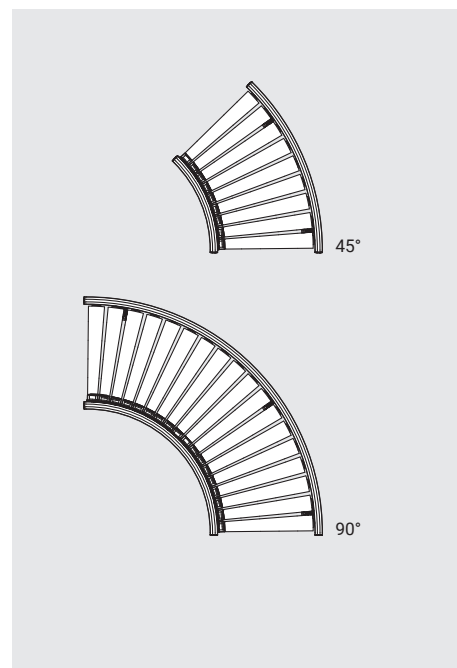
Zero pressure accumulation control logic
(not with EtherCAT)



Dimensions



Standard Angles



The inside width depends on the dimensions of the transported product. Min. inside width is 310 mm, max. inside width is 1040 mm. Curved roller conveyors with special angles are available on request.

Request for Quote / Order placement

Please use our request form at www.robotunits.com.

Distributed by Valin Corporation | www.valin.com | (800) 774-5630 | customerservice@valin.com
Drawings: dimensions in mm

R5T0050

Transfer Unit 90°, 50

**Application**

90 degree transfer of products in various sizes:

Weight max. 50 kg:

min. 300 x 400 to max. 800 x 800 mm

Weight max. 20 kg:

min. 300 x 400 to max. 400 x 1300 mm

The Transfer Unit 90° can be integrated into any zone of a Powered Roller Conveyor Straight.

Technical data

Brushless 24V DC motor for lifting unit and belt

Temperature range: from +2°C to +40°C

Max. continuous current per motor roller: 3.5 A

Roller material: galvanized steel

Timing belt material: PU

Duration of the lift movement: 0.5 s

Max. speed:

≤ 20 kg: 48 m/min

≤ 40 kg: 33 m/min

≤ 50 kg: 26 m/min

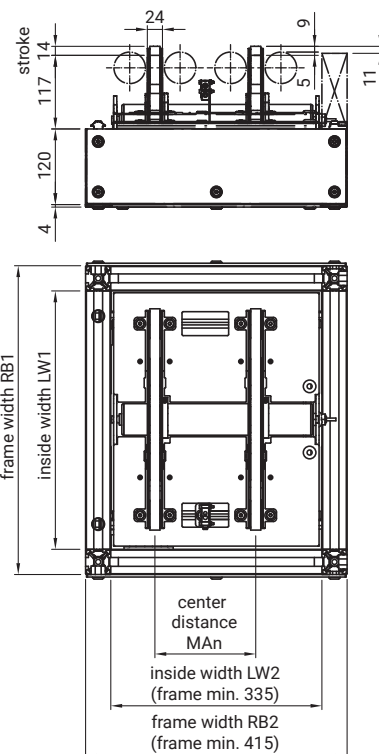
Max. weight of conveyed material: 50 kg

Control unit:

Completely pre-installed incl. sensors

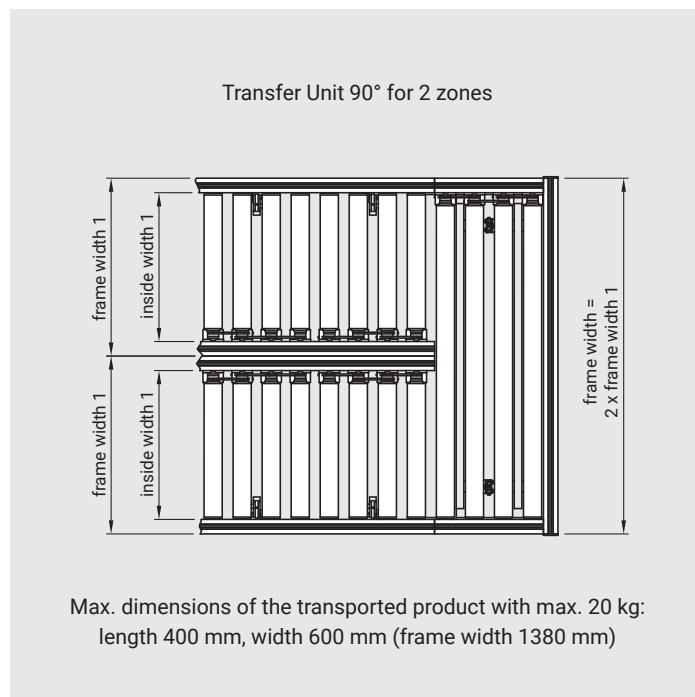
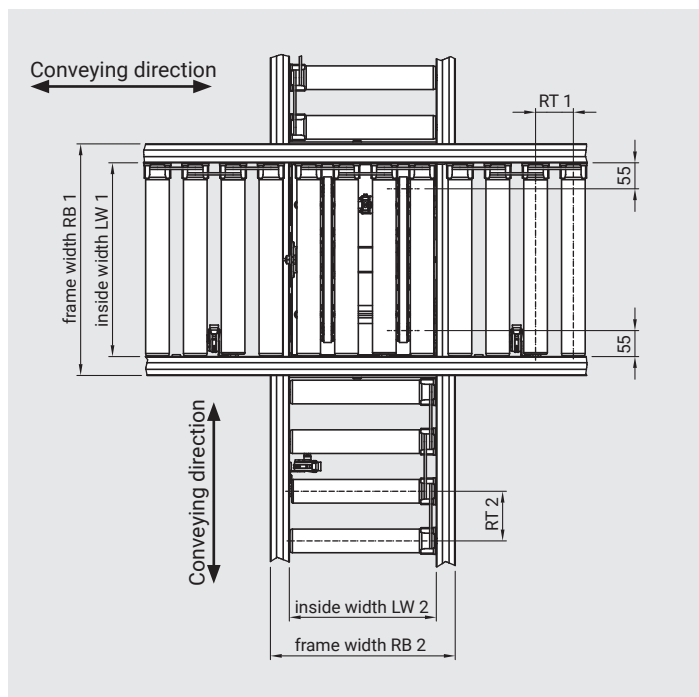
Configuration:

Zero pressure accumulation control logic with upstream and downstream Powered Roller Conveyor (not with EtherCAT)

**Supported control protocols:**

EtherNet/IP EtherCAT

Dimensions

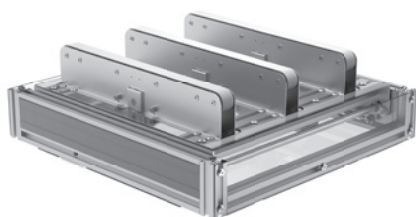


Request for Quote / Order placement

Please use our request form at www.robotunits.com.

R5T0100

Transfer Unit 90°, 100

**Application**

90 degree transfer of products in various sizes from min. 400 x 600 mm to max. 1200 x 1200 mm.

The Transfer Unit 90° can be integrated into any zone of a Powered Roller Conveyor Straight.

Technical data

Brushless 48V DC motor for lifting unit and belt

Temperature range: from +2°C to +40°C

Max. continuous current of lifting unit motor: 6.6 A

Max. continuous current of belt motor: 8.6 A

Timing belt material: PU

Duration of the lift movement: 0.5 s

Max. cycle time with 35 kg and conveyed material dimensions 600 x 400 mm:

900 cycles / hour

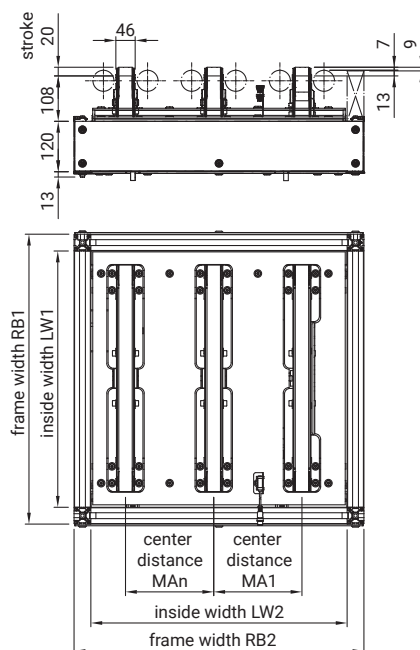
Max. weight of conveyed material: 100 kg

Control unit:

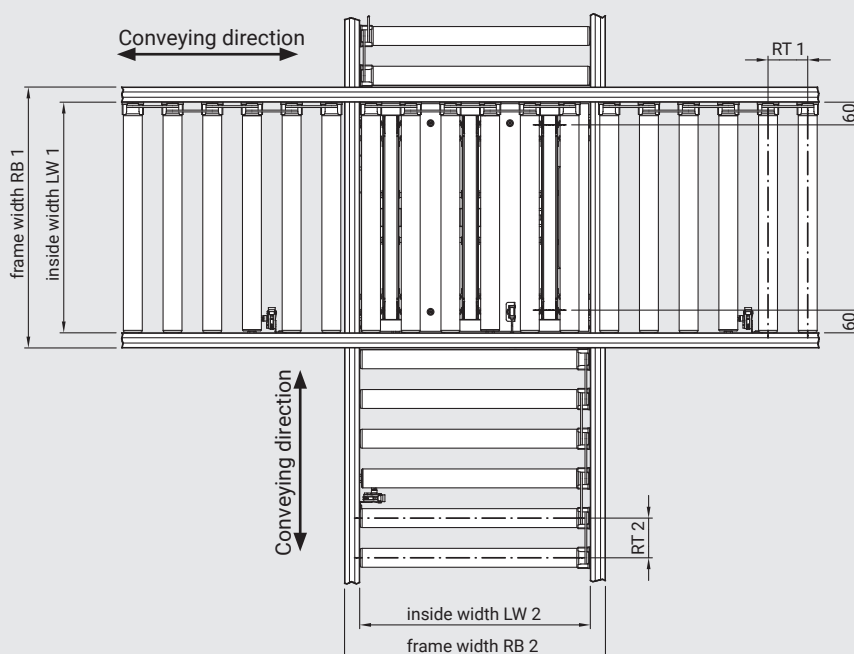
Motor control integrated in the 48 V motor, incl. 5 m cable with open end

Configuration:

Drives for lifting unit and belts are preconfigured, control by customer through higher-level control system via 24 VDC I/Os



Dimensions



Request for Quote / Order placement

Please use our request form at www.robotunits.com.


Supported control protocols:
PROFI
NET

Modbus
CC-Link
EtherNet/IP **EtherCAT**

 Side Guide for Roller Conveyor
 See page 51

Application

Correctly positioned turning of products in various sizes

Technical data

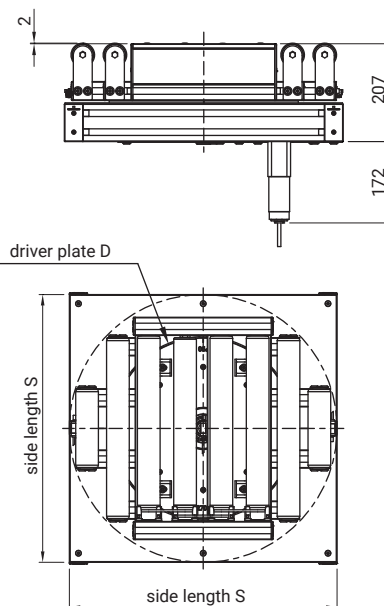
 Brushless 24V DC motor
 Temperature range: from +2°C to +40°C
 Max. continuous current per motor roller: 2.5 A
 Turning range: 0° - 270°
 Travel time for 90°: 2.5s
 Max. weight of conveyed material: 50 kg

Control unit:

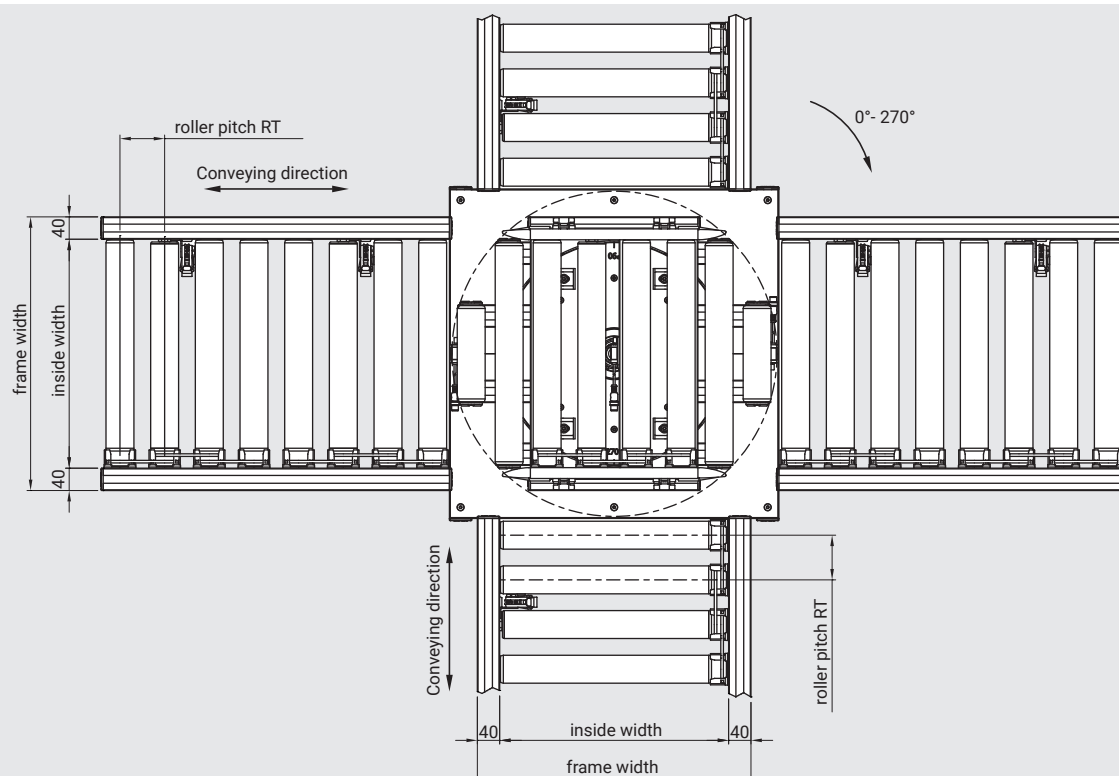
Completely pre-installed incl. sensors

Configuration:

Zero pressure accumulation control logic with upstream and downstream Powered Roller Conveyor (not with EtherCAT)



Dimensions



Standard dimensions

| Description | Conveyed material (LxW) | Roller Conveyor on the Turntable | | | Turntable | |
|--|-------------------------|----------------------------------|-------------|--------------|---------------|----------------|
| | | Inside width | Frame width | Roller pitch | Side length S | Driver plate D |
| Turntable with Powered Roller Conveyor | 400 x 300 mm | 310 mm | 390 mm | 105 mm | 590 mm | Ø 400 mm |
| Turntable with Powered Roller Conveyor | 300 x 400 mm | 410 mm | 490 mm | 80 mm | 590 mm | Ø 400 mm |
| Turntable with Powered Roller Conveyor | 600 x 400 mm | 410 mm | 490 mm | 160 mm | 790 mm | Ø 630 mm |
| Turntable with Powered Roller Conveyor | 400 x 600 mm | 610 mm | 690 mm | 105 mm | 790 mm | Ø 630 mm |

Special dimensions are available on request.

 Distributed by Valin Corporation | www.valin.com | (800) 774-5630 | customerservice@valin.com

Drawings: dimensions in mm

R5D

Diverter



Diverter without cover plate



Diverter with cover plate

Application

Sorting of conveyed products with various sizes. Can be integrated into any conveyor line

Technical data

Brushless 24 V DC motor for rotary motion and rollers (2 motorized rollers per conveyor line)

Temperature range: from +2°C to +40°C

Max. continuous current per motor roller: 2.5 A

Turning range: -90° to +90°

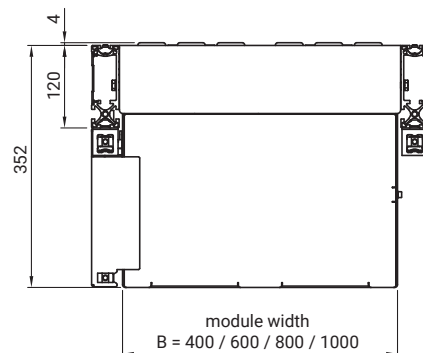
Housing material: coated steel

Roller material: PU

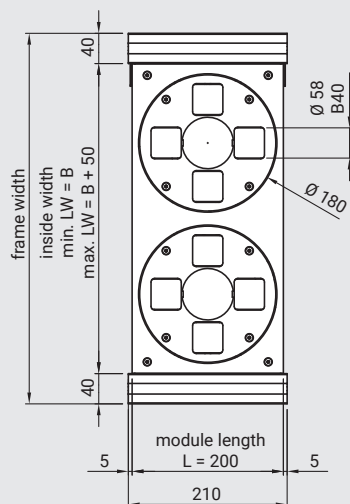
Max. weight of conveyed material: 35 kg

Max. throughput: 6,000 products per hour

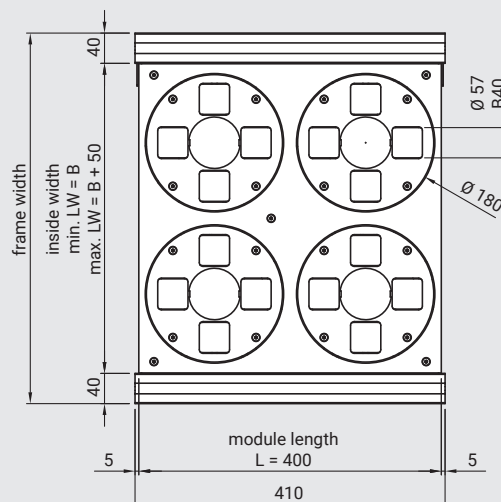
Max. roller speed: 90 m/min

**Supported control protocols:**

Single Line Diverter



Double Line Diverter



Request for Quote / Order placement

The selection of the appropriate diverter depends on the product, dimensions, weight, throughput, conveying speed and angle of ejection. For more information, visit www.robotunits.com or contact us.

Drawings: dimensions in mm



Side Guide for Roller Conveyor
See page 51

Supported control protocols:



Application

Zero pressure accumulation conveying over
2 levels of products in different sizes

Technical data

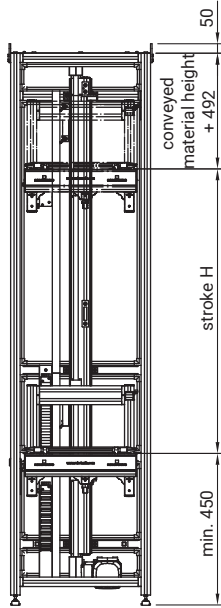
Lift station with three-phase geared motor
400V
Speed: max. 1m/s
Acceleration max. 0.7m/s²
Roller conveyor with brushless 24V DC
motor
Speed: from 10m/min to 28 m/min
Temperature range: from 2°C to 40°C
Frame material: clear anodized aluminum
Enclosure with polycarbonate panels, option-
ally with safety tunnel and door

Control unit:

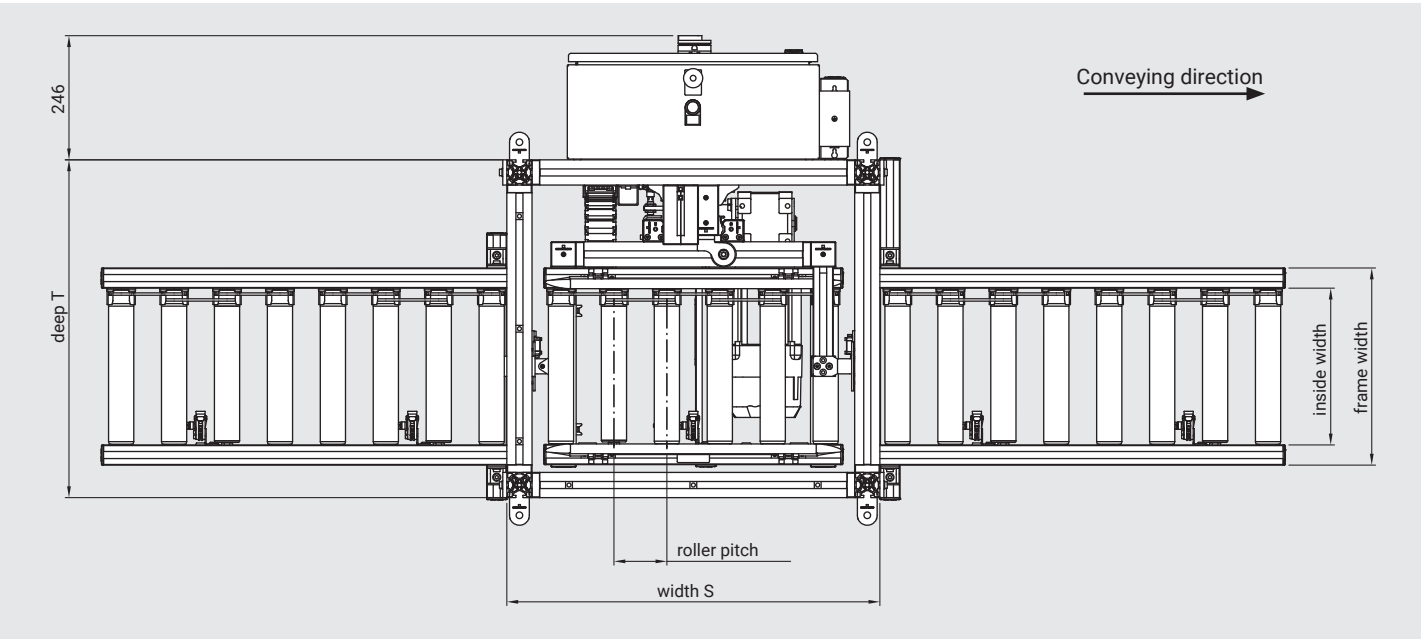
Completely wired incl. sensors and control
cabinet

Configuration:

Zero pressure accumulation control logic
with upstream and downstream Powered
Roller Conveyor (not with EtherCAT)



Dimensions



Standard dimensions

| Description | Conveyed material (LxW) | Powered Roller Conveyor on Lift Station | | | Lift Station | |
|---|-------------------------|---|-------------|--------------|-----------------|---------------|
| | | Inside width | Frame width | Roller pitch | Base area (SxT) | Max. stroke h |
| Lift Station With Powered Roller Conveyor | 400 x 300 mm | 310 mm | 390 mm | 105 mm | 740 x 670 mm | 5000 mm |
| Lift Station With Powered Roller Conveyor | 300 x 400 mm | 410 mm | 490 mm | 80 mm | 755 x 770 mm | 5000 mm |
| Lift Station With Powered Roller Conveyor | 600 x 400 mm | 410 mm | 490 mm | 160 mm | 1015 x 770 mm | 5000 mm |
| Lift Station With Powered Roller Conveyor | 400 x 600 mm | 610 mm | 690 mm | 105 mm | 740 x 970 mm | 5000 mm |

Special dimensions are available on request.

R5F

Stand for Straight Conveyor

**Application**

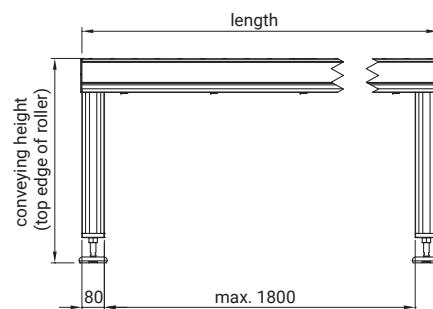
Stand for Powered Roller Conveyor Straight
and Gravity Roller Conveyor Straight

Technical data

Material: clear anodized aluminum,
galvanized die-cast zinc, galvanized steel,
PA 6 or rubber

Scope of delivery

Stand segment fully assembled

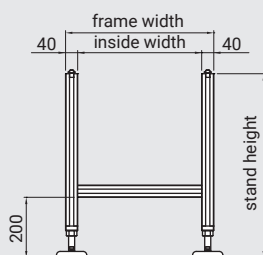


Standard conveyor stand types

S

Leveling Bases BAS1120
Height adjustment ± 30 mm

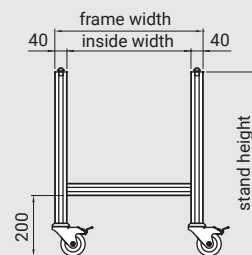
Conveying height = stand height + x:
x = 96 mm (integrated side guide)
x = 122 mm (without side guide)



R

Swivel Castors CAS3080
with brake

Conveying height = stand height + x:
x = 96 mm (integrated side guide)
x = 122 mm (without side guide)



Order code

| Description | Order code | | | |
|------------------------------------|-------------|------|--------|------------------|
| | Frame width | Type | Length | Conveying height |
| Stand for Straight Roller Conveyor | R5F | ---- | ---- | ---- |

R5K

Stand for Curved Conveyor

**Application**

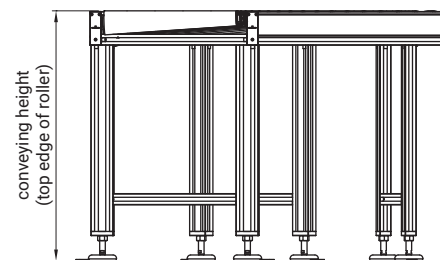
Stand for Powered Roller Conveyor Curved
45° and Curved 90°.

Technical data

Material: clear anodized aluminum, galva-
nized die-cast zinc, galvanized steel, PA 6
or rubber

Scope of delivery

Stand segment fully assembled

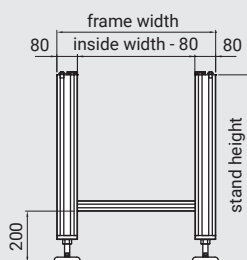


Standard conveyor stand types

S

Leveling Bases BAS1120
Height adjustment ± 30 mm

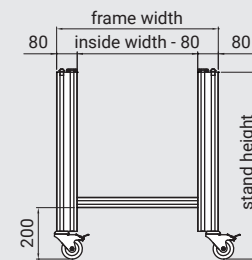
Conveying height = stand height + x:
x = 122 mm (without side guide)



R

Swivel Castors CAS3080
with brake

Conveying height = stand height + x:
x = 122 mm (without side guide)



Order code

| Description | Order code | | | |
|----------------------------------|-------------|------|-------------|------------------|
| | Frame width | Type | Curve angle | Conveying height |
| Stand for Curved Roller Conveyor | R5K | ---- | ---- | ---- |

Application

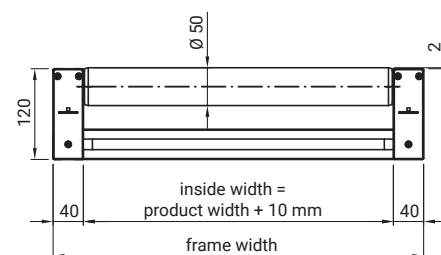
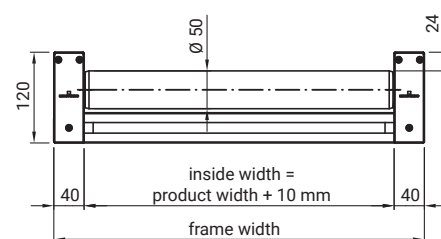
Gravity-assisted conveying of products in various sizes

Technical data

Frame material: clear anodized aluminum
 Roller material: galvanized steel
 Temperature range: from -20°C to +80°C
 Max. weight of conveyed material: 100 kg

Inside width min.: 90 mm

Inside width max.: 1210 mm

Option without side guides**Option with side guides**

Side Guide for Roller Conveyor
 See page 51

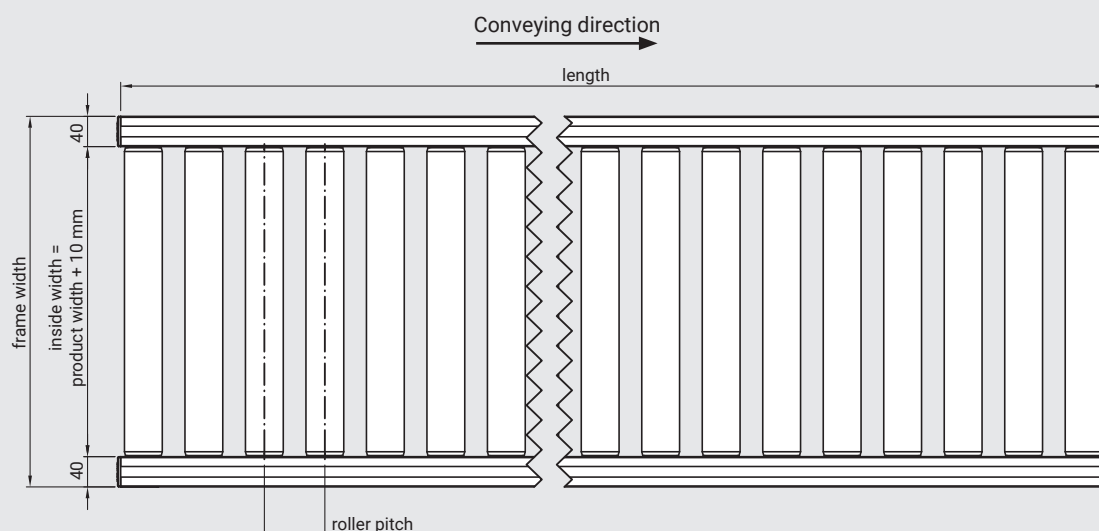
Roller options:

- Standard rollers with metal bearing (ESD)
- Low-friction rollers with plastic bearings (no ESD)



Optionally with end stop

Dimensions



Please use our request form at www.robotunits.com.

Drawings: dimensions in mm

R5Z

Stand for Inclined Conveyor

**Application**

Stand for Powered Roller Conveyor Straight and Gravity Roller Conveyor Straight

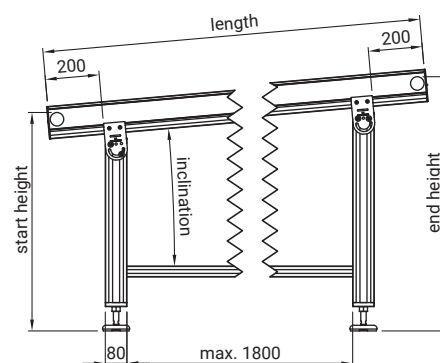
Technical data

Material: clear anodized aluminum, galvanized die-cast zinc, galvanized steel, PA 6 or rubber

Scope of delivery

Stand segment fully assembled

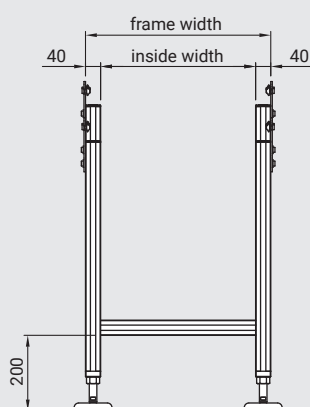
Wide conveyor stands (type H and G) offer additional stability for Powered Roller Conveyors with a stand height more than 3 times the frame width.



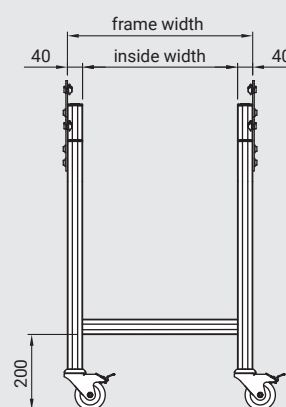
Standard conveyor stand types

S

Leveling Bases BAS1120
Height adjustment ± 30 mm

**R**

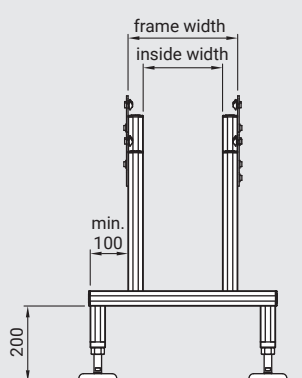
Swivel Castors CAS3080
with brake



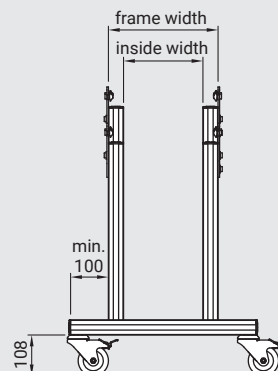
Wide conveyor stand types

H

Leveling Bases BAS1120
Height adjustment ± 30 mm

**G**

Swivel Castors CAS3080
with brake



Order code

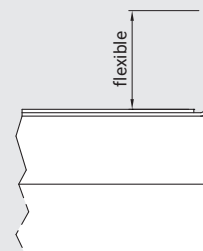
| Description | Order code | | | | |
|---------------------------|-------------|------|--------|--------------|------------|
| | Frame width | Type | Length | Start height | End height |
| Stand for Angled Conveyor | R5Z | --- | _ NN | --- | --- |

Side Guide System for Belt, Timing Belt and Modular Belt Conveyors

Belt Conveyor (integrated)



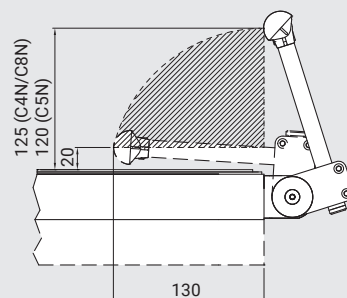
See catalog
page 16
(C4N)
page 18
(C5N)
page 20
(C8N)



Belt Conveyors



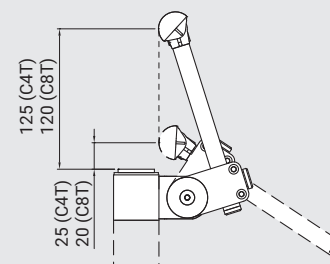
Guide range with
standard square
tube length
150 mm
(special length
possible)



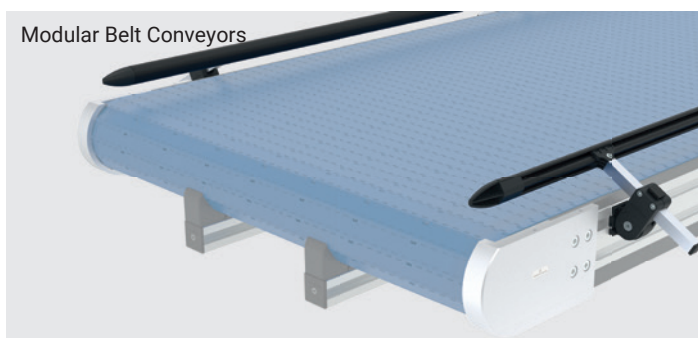
Timing Belt Conveyors



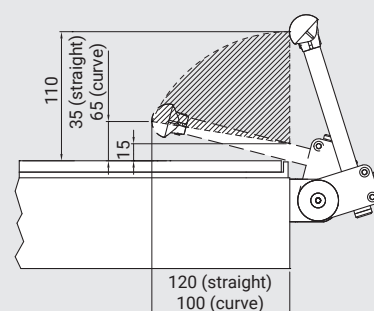
Guide range with
standard square
tube length
150 mm
(special length
possible)



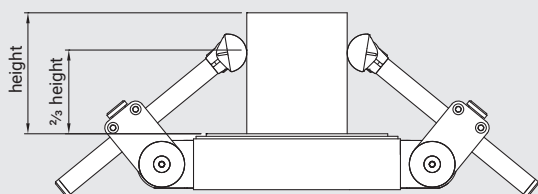
Modular Belt Conveyors



Guide range with
standard square
tube length
150 mm
(special length
possible)



Design note



Recommended height side guide



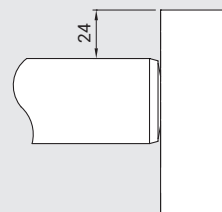
Adjustment range side guide

Side Guide for Roller Conveyor

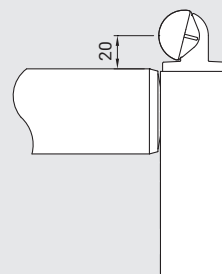
Integrated (only with Powered Roller Conveyor Straight)



See catalog page 38



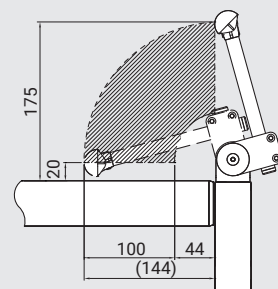
Rigid



Flexible, with overhang



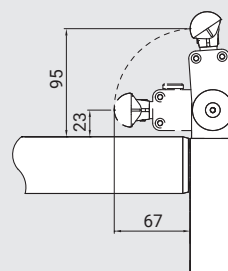
Guide range with standard square tube length 150 mm (special length possible)



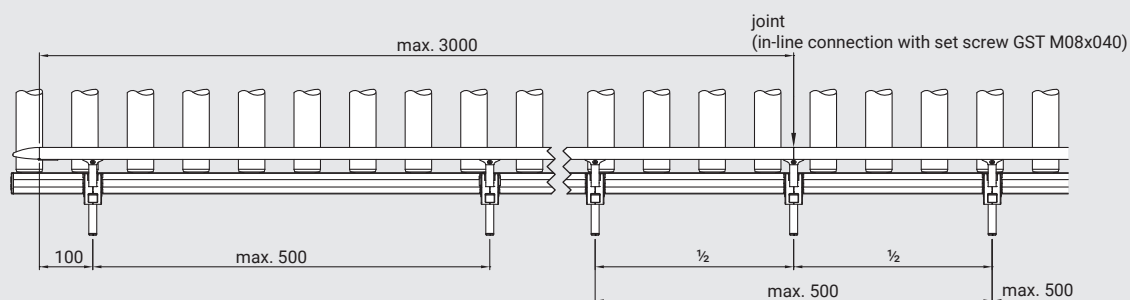
Flexible, without overhang



Guide range with minimum square tube length 30 mm (other lengths possible)



Assembly instructions



Distribute spacing of side guide bases or clips evenly.
IMPORTANT: Do not exceed maximum distances!

COP4561

Side Guide Base

Application

For individual positioning of side guides

Technical data

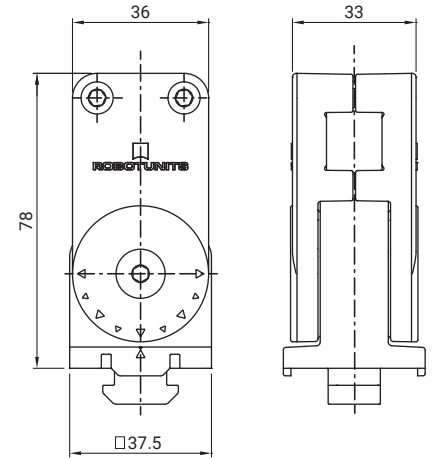
Material:
Base Part: PA6 black
Brackets: PA6 GF30 black
End Cap: 18x18 PE-LLD
Fastening material: galvanized steel

Scope of delivery

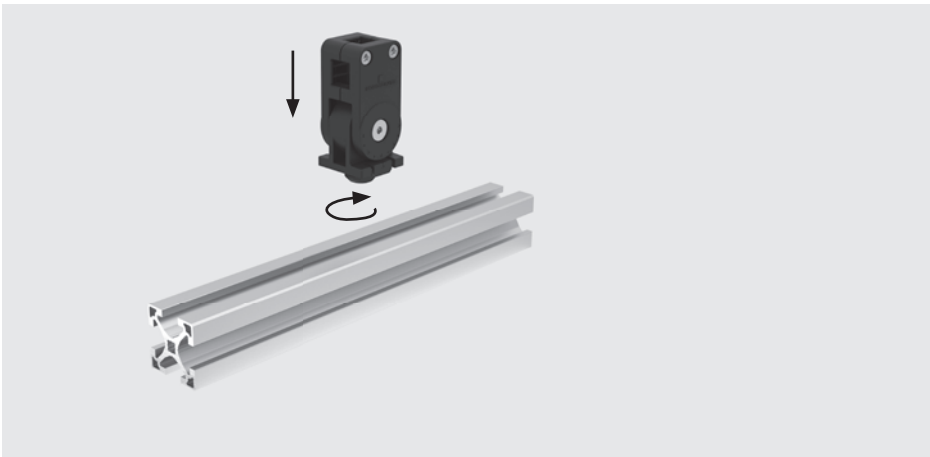
- 1 Side Guide Base Part
- 1 Side Guide bracket nut
- 1 Side Guide bracket screw
- 2 cap screws ISO 4762 M5x25
- 2 hexagon nuts ISO 4032 M5
- 1 cap screw, extra low head M8x30
- 1 lock washer 8.4x13x0.8
- 1 hexagon nut ISO 4032 M8
- 1 CAP1818 End Cap
- 2 shim washers 8x14x0.5 DIN988

Tightening torque

Cap screws ISO 4762 M5x25: 6 Nm
Cap screw, extra low head M8x30: 10 Nm

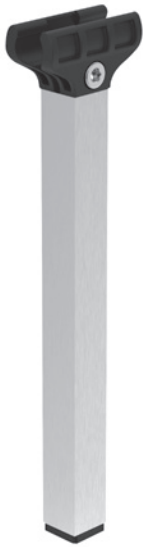


Assembly instructions



Order code

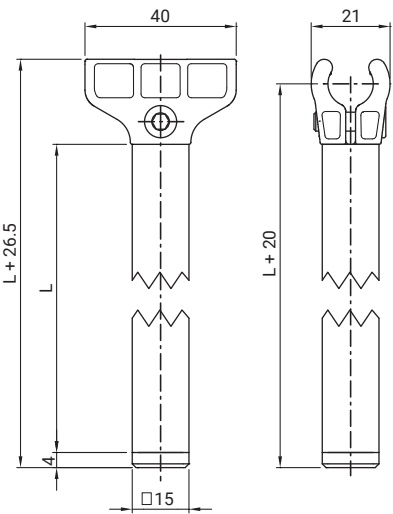
| Order code | Item | Description | Weight |
|------------|-----------------|----------------|----------|
| COP4561 | Side Guide Base | length 6050 mm | 0.095 kg |



Application
For individual positioning of side guides

Technical data
Material:
Clamping part: PA6.6 black
End Cap: 15x15 PE-LLD
Square tube: aluminum EN AW-6060-T66
Fastening material: galvanized steel

Scope of delivery
1 Side Guide Clamping Part
1 cap screw ISO 4762 M5x14
1 hexagon nut ISO 4032 M5
1 CAP1515 End Cap
1 square tube 15x15 length 150 mm or cut to length



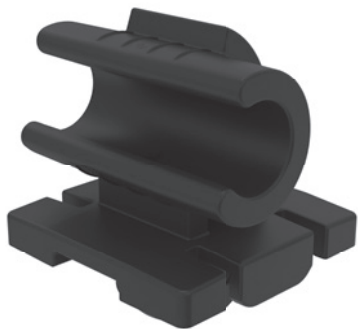
Order code

| Order code | Item | Description | Weight |
|------------|---------------------------|---------------|----------|
| COL9000SNN | Side Guide Clamp with Rod | cut to length | |
| COP9001 | Side Guide Clamp with Rod | length 150 mm | 0.045 kg |

1) Please complete the order code by adding the desired length.
Drawings: dimensions in mm

COP4570

Side Guide Clip



Application

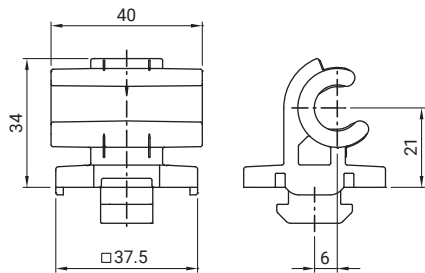
To accomodate side guides

Technical data

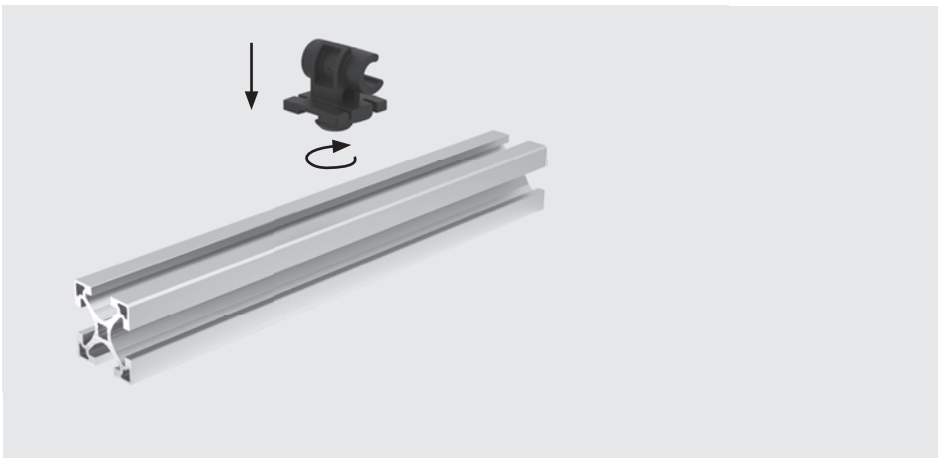
Material:
Black PA6

Scope of delivery

10 Side Guide Clips



Assembly instructions



Order code

| Order code | Item | Description | Weight/Piece |
|------------|-----------------|-----------------|--------------|
| COP4570 | Side Guide Clip | Pack of 10 pcs. | 0.020 kg |

COP4590

Side Guide End Piece



Application

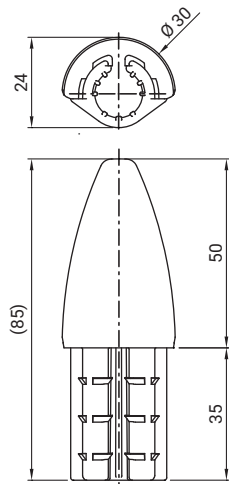
To cover the ends of side guides

Technical data

Material:
Black PP ESD

Scope of delivery

4 Side Guide End Pieces



Order code

| Order code | Item | Description | Weight/Piece |
|------------|----------------------|----------------|--------------|
| COP4590 | Side Guide End Piece | Pack of 4 pcs. | 0.010 kg |

COL4590

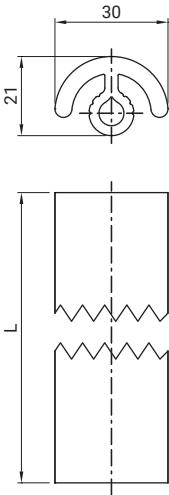
Side Guide Plastic



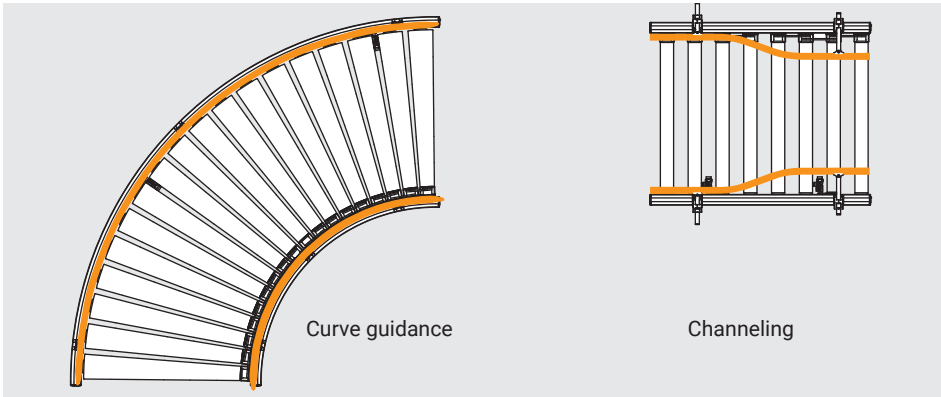
Applications
Plastic profile for the production of side guides

Technical data
Material:
PVC-U black

Plastic profile is thermoformable by using a heat gun (softening point 80°C)



Application



Order code

| Order code | Item | Description | Weight/Meter |
|------------|-----------------------------------|----------------|--------------|
| COL4590SNN | Side Guide Plastic, cut to length | | 0.340 kg |
| COL4590NNN | Side Guide Plastic, stock length | length 3000 mm | 0.340 kg |

Drawings: dimensions in mm