The Just-In-Time
Belt Conveyor System

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.

An important contributor to this is the fact that the Belt Conveyor System is seamlessly integrated into the 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. Special designs are available upon request.

Impressive delivery times
- production time for your individual Belt Conveyor: 1 week
- Just-In-Time delivery

Custom-made sizes
- 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 legs as an option
- fast adjustments to meet your individual requirements

Flexibility in drive options and positions
- choose drive option and position of motor
- maintenance-free timing belt drive
- space saving direct drive

Speed
- standard speed ranges from 2.6 m/min to 58 m/min
- higher speeds available upon request
- Speed Controller optional

Idler options
- roller diameters of 40 mm, 50 mm or 80 mm
- nose bar (16 mm diameter) for transfer of small parts

Wide variety of belts
- accumulation belt
- low & high friction belts
- high durability belts for abrasive and corrosive use

Fully integrated conveyor system
- compatible with all our extrusion sizes
- frame built with standard extrusion system
- accessible T-slot on 3 sides of the conveyor frame
- this makes it quick and easy to attach accessories or structural elements (i.e. stops) to the machine frame

Save time, cut cost
- shortest lead time
- quick configuration of your custom conveyor
- every Belt Conveyor comes fully assembled and tested
- outstanding price/performance ratio

Safety
- self-adjusting safety guard between the Belt Conveyor roll and the slider bed
- timing belt guard with window for visual inspection
- complete documentation meeting the latest Machinery Directive

The Just-In-Time Belt Conveyor System

C4N Belt Conveyor Drive Options

1. Front end timing belt drive (page 14)
2. Front end direct drive (page 15)
3. Center drive with timing belt (page 15)
4. Nose bar (page 14/15)

C5N Belt Conveyor Drive Options

1. Front end timing belt drive (page 16)
2. Front end direct drive (page 17)
3. Center drive with timing belt (page 17)
4. Nose bar (page 16/17)

C8N Belt Conveyor Drive Options

1. Front end timing belt drive (page 18)
2. Front end direct drive (page 19)
3. Center drive with timing belt (page 19)
4. Nose bar (page 18/19)

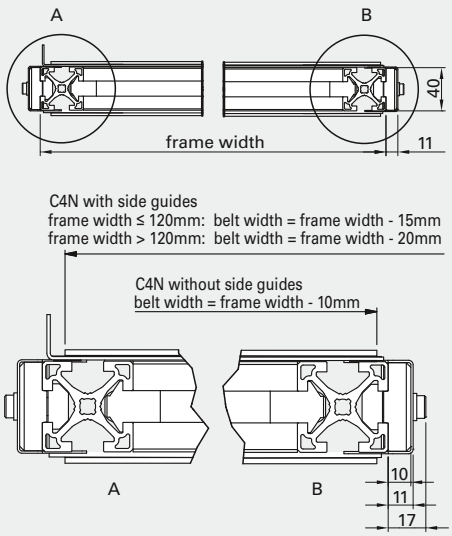
C4N Belt Conveyor

Application
Used for a wide variety of conveying applications

Technical Data
- Belt speed for belt drive ranges from 2.6 m/min to 55 m/min
- Belt speed for direct drive ranges from 2.6 m/min to 30 m/min

Drive power depending on belt speed and load ranging from 0.12 kW to 0.37 kW (230/400V; 50/60Hz; IP55)
Max. total load of material to be conveyed Fmax. 300 N - 2400 N

Belt Type
low friction, high friction, accumulation, food grade, cut & oil resistant, cleated for incline transport, integrated belt side guides, etc.



Drive Options[1)]

Front End Timing Belt Drive

- A — Front end timing belt drive, left
- B — Front end timing belt drive, right
- C — Front end timing belt drive, left, tail end nose bar
- D — Front end timing belt drive, right, tail end nose bar

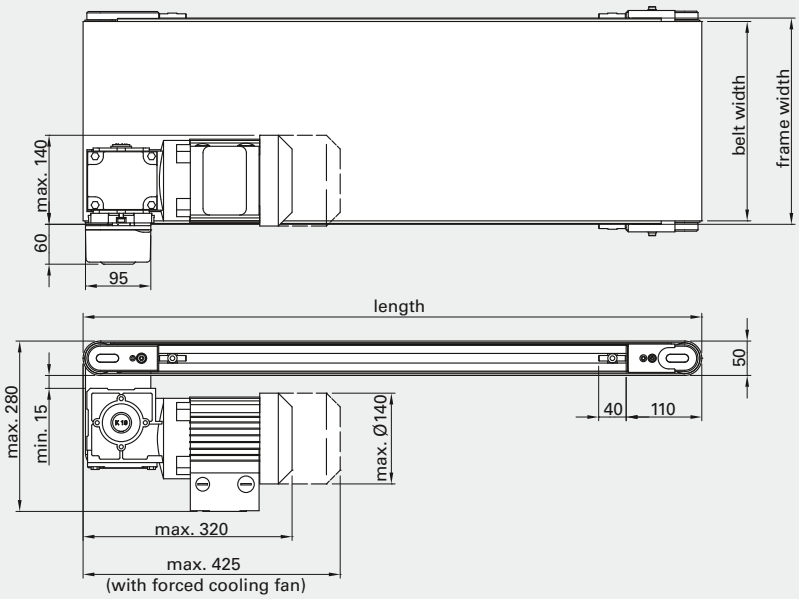
Front End Direct Drive

- E — Front end direct drive, left
- F — Front end direct drive, right
- G — Front end direct drive, left, with tail end nose bar
- H — Front end direct drive, right, with tail end nose bar

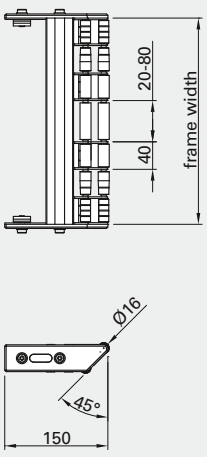
Center Drive With Timing Belt[2)]

- K — Center drive with timing belt
- L — Center drive with timing belt and tail end nose bar
- N — Center drive with timing belt and tail end nose bar
- Q — Center drive with timing belt and nose bar on both ends

Front End Timing Belt Drive



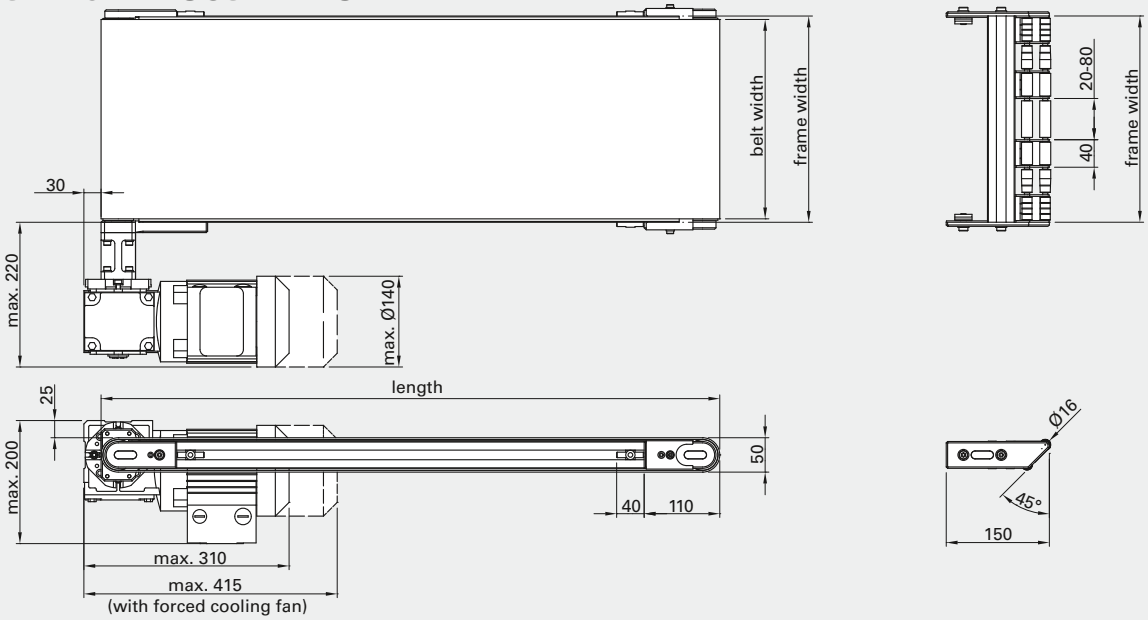
Optional: nose bar



1) Standard direction is pulling
2) Simply reverse the polarity to change the running direction of any center drive

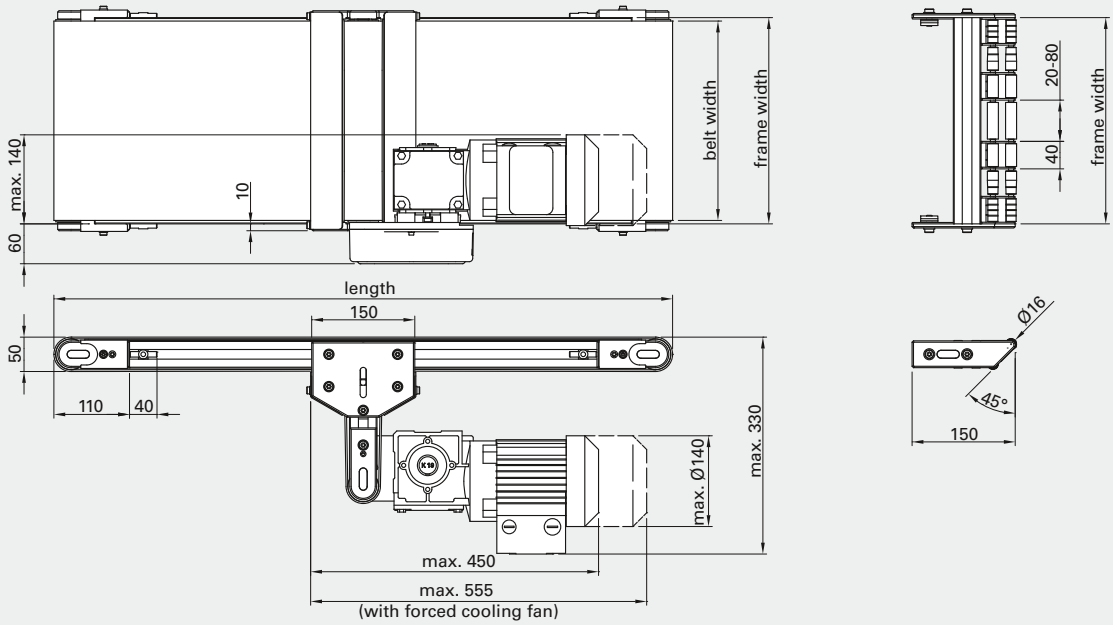
Front End Direct Drive

Optional: nose bar



Center Drive With Timing Belt

Optional: nose bar



Standard Widths And Lengths

Description	Frame Width	F max.[3)]
Belt Conveyor 40	40 mm	300 N
Belt Conveyor 40	80 mm	700 N
Belt Conveyor 40	120 mm	1100 N
Belt Conveyor 40	160 mm	1500 N
Belt Conveyor 40	200 mm	1900 N
Belt Conveyor 40	240 mm	2300 N
Belt Conveyor 40	300 mm	2400 N
Belt Conveyor 40	400 mm	2400 N

Design Options

side view

Standard lengths up to 12000 mm, special widths and special lengths are available upon request.
Please note the minimum length to width ratio of 1.5:1.

Order Placement

To place an order please use the Conveyor Request Form (page 37) or visit the online Belt Conveyor Configuration Tool at www.robotunits.com

3) Approximate value: F max may vary depending on the application

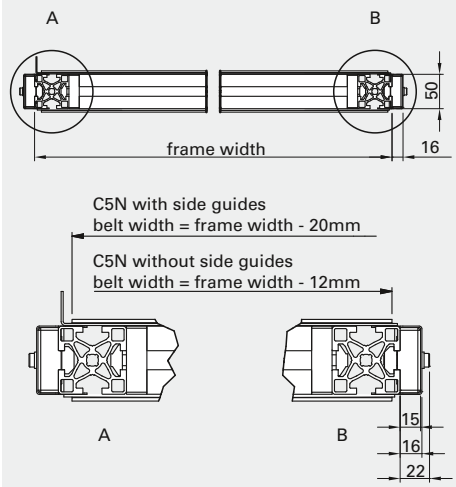
C5N Belt Conveyor

Application
Used for a wide variety of conveying applications

Technical Data
- Belt speed for belt drive ranges from 3.2 m/min to 66 m/min
- Belt speed for direct drive ranges from 3 m/min to 37 m/min

Drive power depending on belt speed and load ranging from 0.12 kW to 0.37 kW (230/400V; 50/60Hz; IP55)
Max. total load of material to be conveyed Fmax. 3000 N - 3400 N

Belt Type
low friction, high friction, accumulation, food grade, cut & oil resistant, cleated for incline transport, integrated belt side guides, etc.



Drive Options[1)]

Front End Timing Belt Drive

- A — Front end timing belt drive, left
- B — Front end timing belt drive, right
- C — Front end timing belt drive, left, tail end nose bar
- D — Front end timing belt drive, right, tail end nose bar

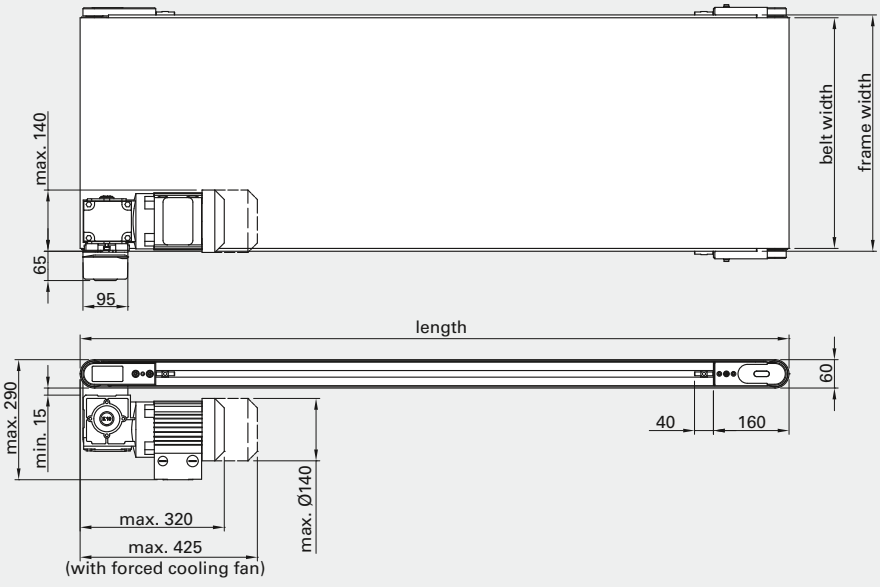
Front End Direct Drive

- E — Front end direct drive, left
- F — Front end direct drive, right
- G — Front end direct drive, left, with tail end nose bar
- H — Front end direct drive, right, with tail end nose bar

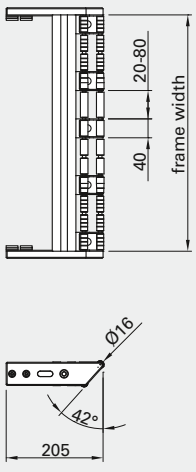
Center Drive With Timing Belt[2)]

- K — Center drive with timing belt
- L — Center drive with timing belt and tail end nose bar
- N — Center drive with timing belt and tail end nose bar
- Q — Center drive with timing belt and nose bar on both ends

Front End Timing Belt Drive



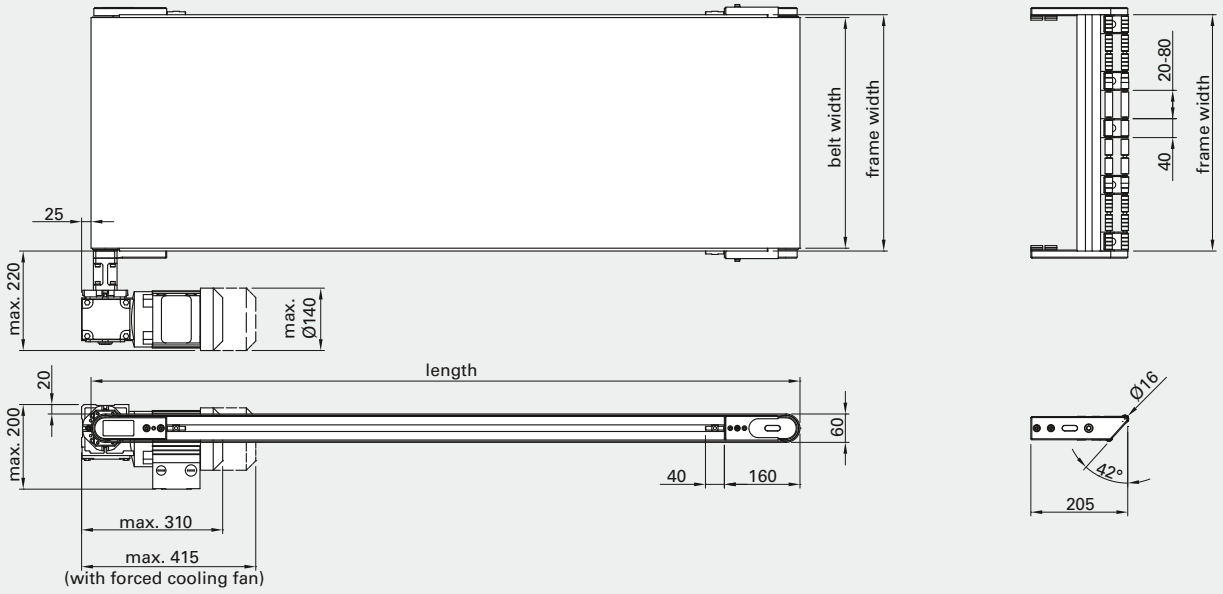
Optional: nose bar



1) Standard direction is pulling
2) Simply reverse the polarity to change the running direction of any center drive

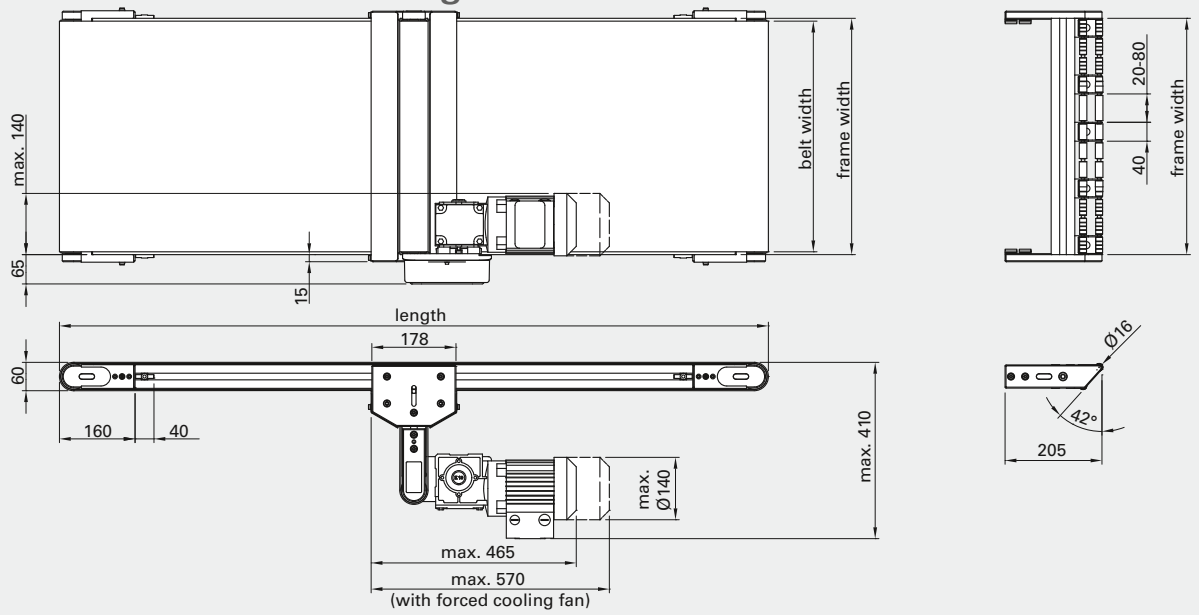
Front End Direct Drive

Optional: nose bar



Center Drive With Timing Belt

Optional: nose bar



Standard Widths And Lengths

Description	Frame Width	F max.[3)]
Belt conveyor 50	400 mm	3000 N
Belt conveyor 50	500 mm	3400 N
Belt conveyor 50	600 mm	3000 N

Design Options

Side view

Standard lengths up to 12000 mm, special widths and special lengths are available upon request.
Please note the minimum length to width ratio of 1.5:1.

Order Placement

To place an order please use the Conveyor Request Form (page 37) or visit the online Belt Conveyor Configuration Tool at www.robotunits.com

3) Approximate value: F max may vary depending on the application
Diagram dimensions in mm

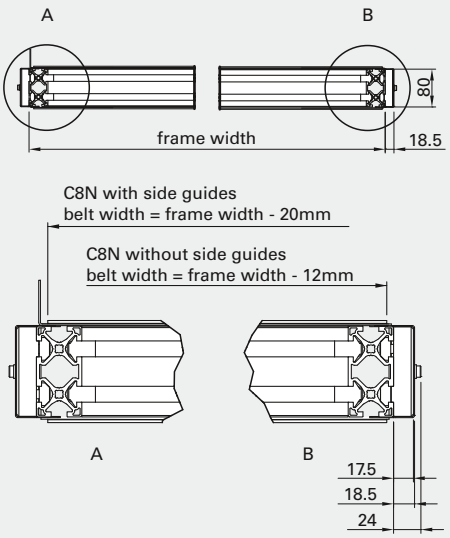
C8N Belt Conveyor

Application
Used for a wide variety of conveying applications

Technical Data
- Belt speed for belt drive ranges from 5 m/min to 67 m/min
- Belt speed for direct drive ranges from 4.7 m/min to 56 m/min

Drive power depending on belt speed and load ranging from 0.25 kW to 0.55 kW (230/400V; 50/60Hz; IP55)
Max. total load of material to be conveyed Fmax. 3600 N - 8000 N

Belt Type
low friction, high friction, accumulation, food grade, cut & oil resistant, cleated for incline transport, integrated belt side guides, etc.



Drive Options[1)]

Front End Timing Belt Drive

- A — Front end timing belt drive, left
- B — Front end timing belt drive, right
- C — Front end timing belt drive, left, tail end nose bar
- D — Front end timing belt drive, right, tail end nose bar

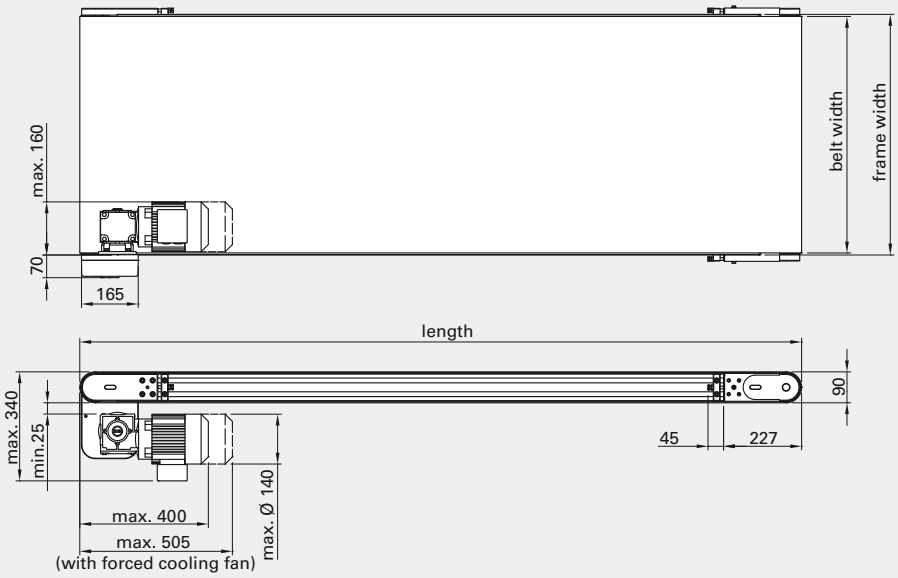
Front End Direct Drive

- E — Front end direct drive, left
- F — Front end direct drive, right
- G — Front end direct drive, left, tail end nose bar
- H — Front end direct drive, right, tail end nose bar

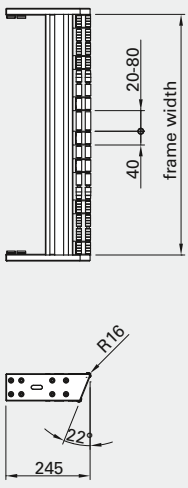
Center Drive With Timing Belt[2)]

- K — Center drive with timing belt
- L — Center drive with timing belt and tail end nose bar
- N — Center drive with timing belt and tail end nose bar
- Q — Center drive with timing belt and nose bar on both ends

Front End Timing Belt Drive



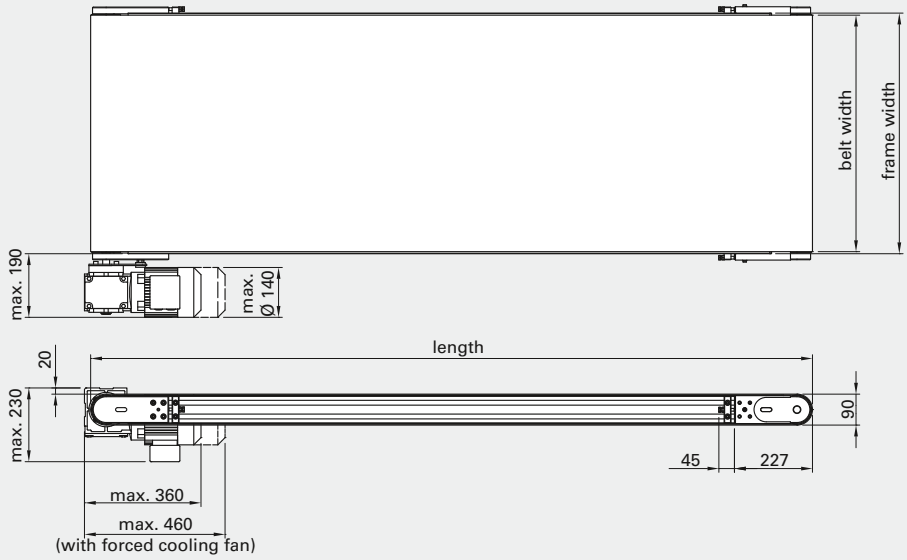
Optional: nose bar

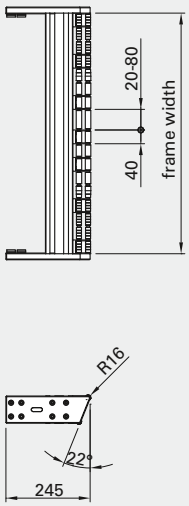


1) Standard direction is pulling
2) Simply reverse the polarity to change the running direction of any center drive

Front End Direct Drive

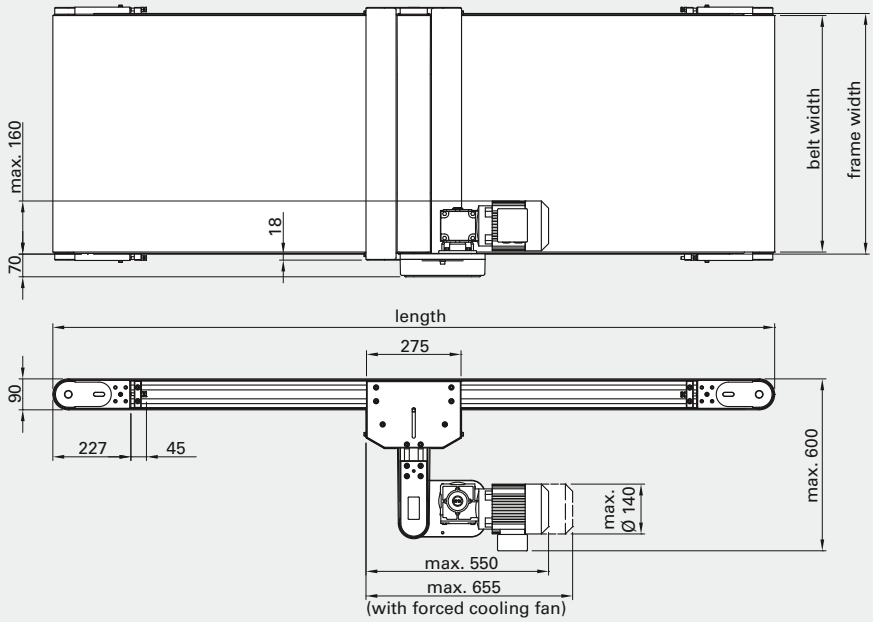
Optional: nose bar

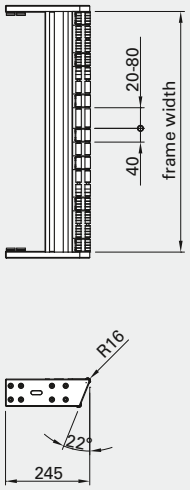




Center Drive With Timing Belt

Optional: nose bar





Standard Widths And Lengths

Description	Frame Width	F max.[3]
Belt Conveyor 80	600 mm	6000 N
Belt Conveyor 80	700 mm	7000 N
Belt Conveyor 80	800 mm	8000 N
Belt Conveyor 80	1000 mm	5000 N
Belt Conveyor 80	1200 mm	3600 N

Design Options

Side view

Standard lengths up to 12000 mm, special widths and special lengths are available upon request.
Please note the minimum length to width ratio of 1.5:1.

Order Placement

To place an order please use the Conveyor Request Form (page 37) or visit the online Belt Conveyor Configuration Tool at www.robotunits.com

3) Approximate value: F max may vary depending on the application
Diagram dimensions in mm

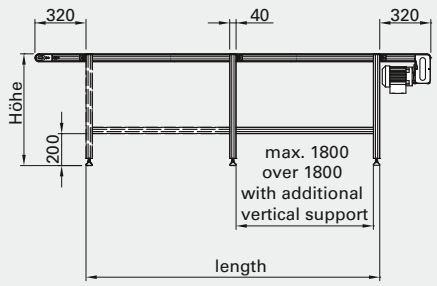
C4F Conveyor Stand

Application
Stand for C4N and C5N

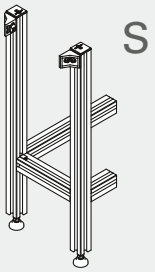
Technical Data
Material: EN AW-6063-T66 clear anodized aluminum; galvanized GD-Zn; galvanized steel; PA 6 composite or rubber

Scope of Delivery
Conveyor stand, completely assembled

Support distance

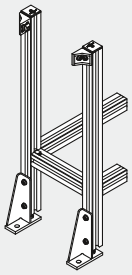


Standard Conveyor Stands



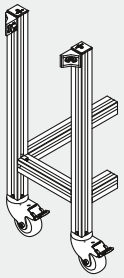
S

Leveling Bases
BAS 4008
Height adjustment
- 10 / + 20 mm



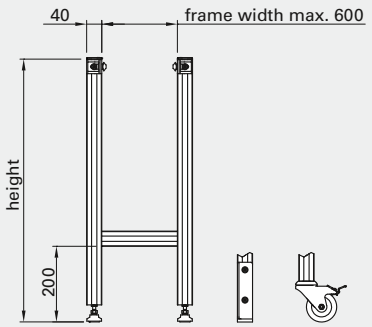
I

Floor Brackets for anchoring BAP 2051
Height adjustment
- 20 / + 5 mm

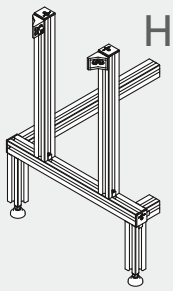


R

Swivel Castors with brakes
CAS 3080

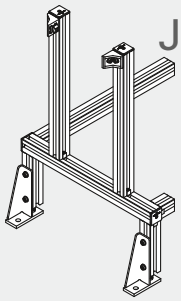


Wide Conveyor Stands



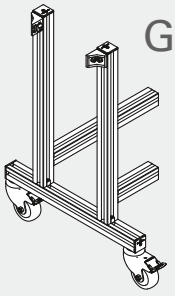
H

Leveling Bases
BAS 4008
Height adjustment
- 10 / + 20 mm



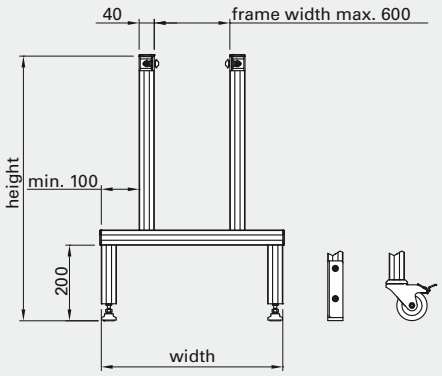
J

Floor Brackets for anchoring BAP 2051
Height adjustment
- 20 / + 5 mm



G

Swivel Castors with brakes
CAS 3080



Wide conveyor stand offers additional stability when conveyor height exceed 3 times the frame width.

Order Code

Description	Order Code[1]			
	Frame Width	Type	Length	Height
Conveyor Stand	C4F ____	_ NN	____	____

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

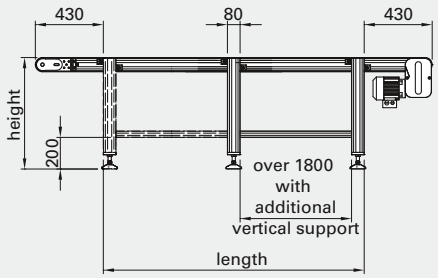
C8F Conveyor Stand

Application
Stand for C8N and C8M

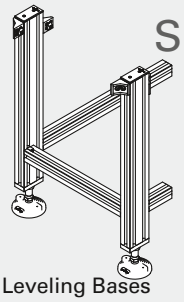
Technical Data
Material: EN AW-6063-T66 clear anodized aluminum; galvanized GD-Zn; galvanized steel; PA 6 composite or rubber

Scope of Delivery
Conveyor stand, completely assembled

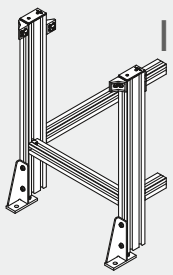
Support distance



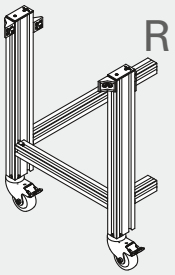
Standard Conveyor Stands



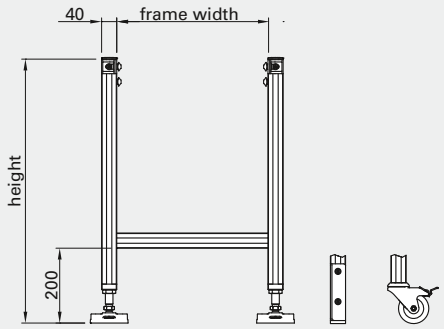
Leveling Bases
BAS 1020
Height adjustment
- 30 / + 20 mm



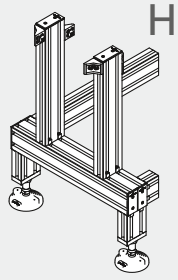
Floor Brackets for anchoring BAP 2051
Height adjustment
- 20 / + 5 mm



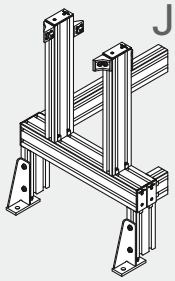
Swivel Castors with brakes
CAS 3080



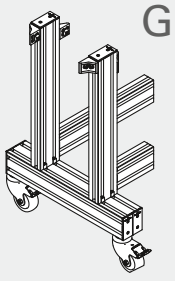
Wide Conveyor Stands



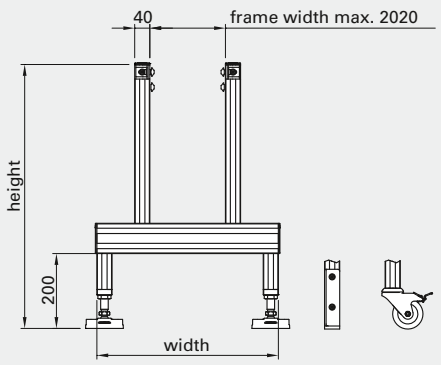
Leveling Bases
BAS 1020
Height adjustment
- 30 / + 20 mm



Floor Brackets for anchoring BAP 2051
Height adjustment
- 20 / + 5 mm



Swivel Castors with brakes
CAS 3080



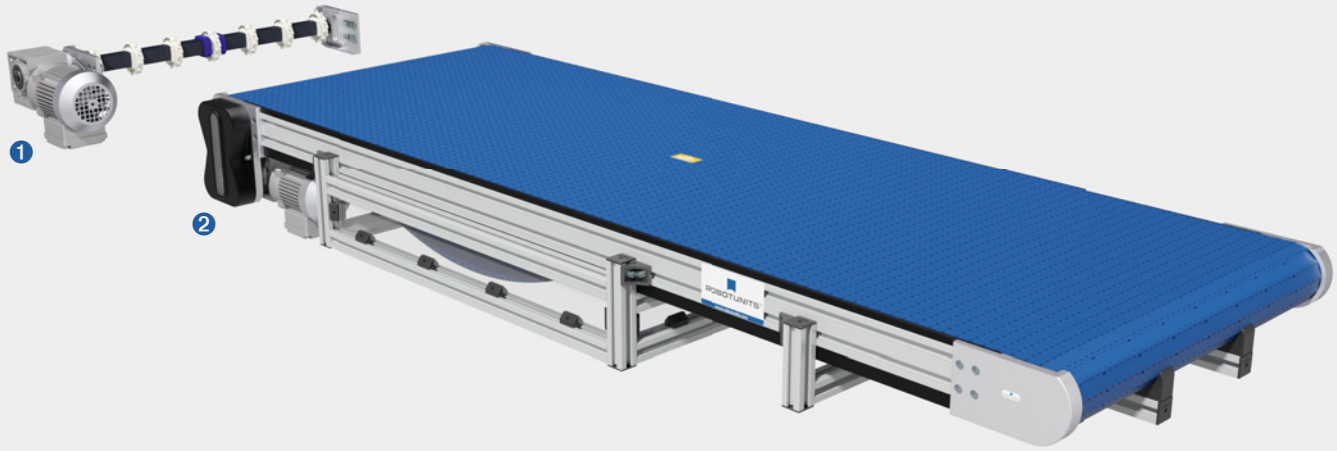
Wide conveyor stand offers additional stability when conveyor height exceed 3 times the frame width.

Order Code

Description	Order Code[1]			
	Frame Width	Type	Length	Height
Conveyor Stand	C8F ____	_ NN	____	____

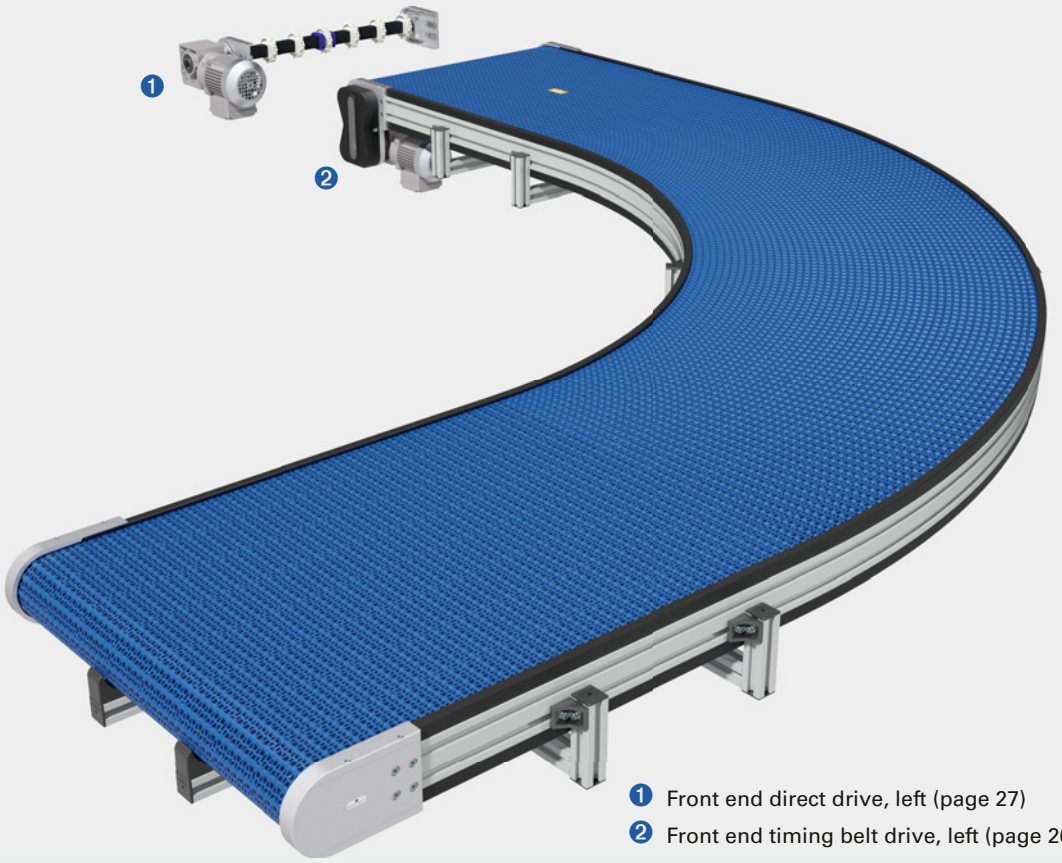
1) Please complete the order code by adding the corresponding parameters for order processing
Drawing dimensions in mm

C8M Modular Belt Conveyor Drive Options



1. Front end direct drive, left (page 25)
2. Front end timing belt drive, left (page 24)

C8M Curved Modular Belt Conveyor Drive Options



1. Front end direct drive, left (page 27)
2. Front end timing belt drive, left (page 26)

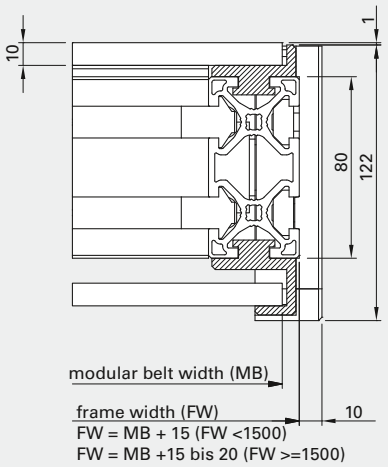
C8M Modular Belt Conveyor

Application
Used for a wide variety of conveying applications

Technical Data
- Belt speed for belt drive ranges from 6 m/min to 50 m/min
- Belt speed for direct drive ranges from 6 m/min to 50 m/min

Drive power depending on belt speed and load ranging from 0.25 kW to 0.55 kW (230/400V; 50/60Hz; IP55)
Maximum load to be conveyed: 8000 N
Modular belt pitch: 1 inch

Modular belt design
Modular belt open
Modular belt closed



Drive Options[1)]

Front End Timing Belt Drive

A — Front end timing belt drive, left

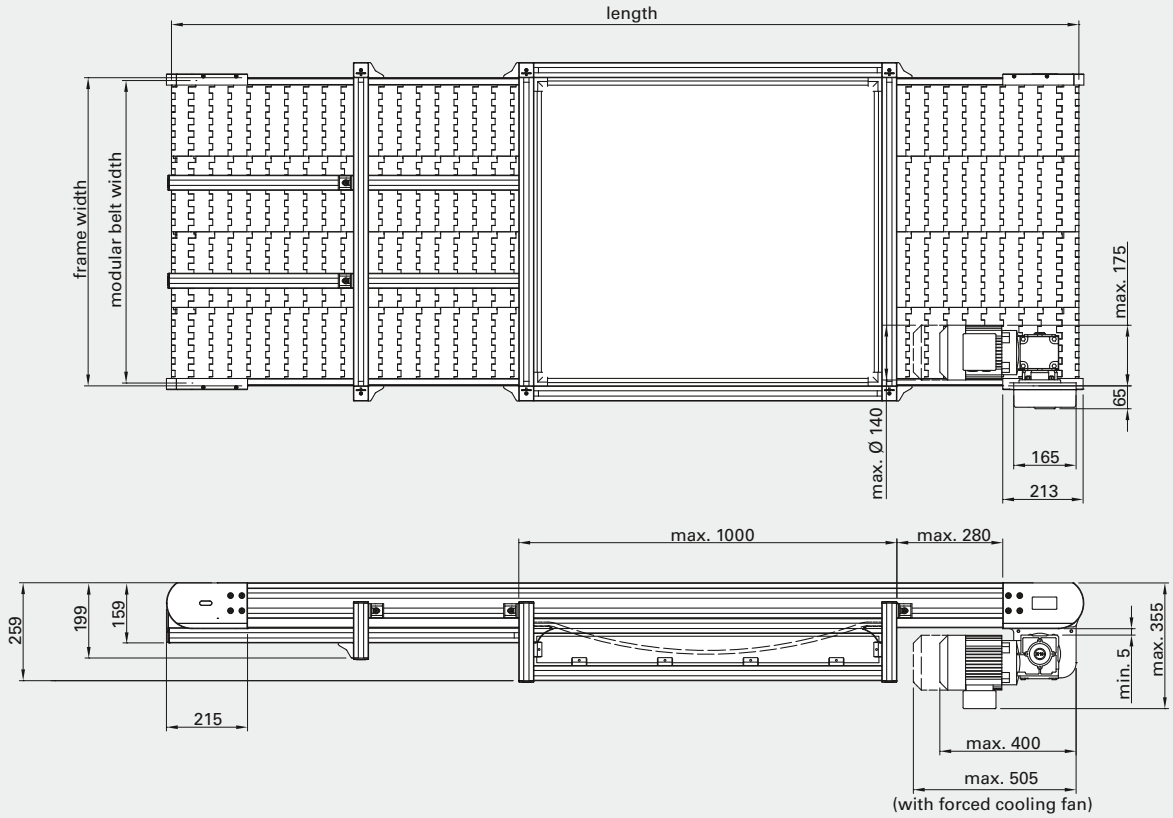
B — Front end timing belt drive, right

Front End Direct Drive

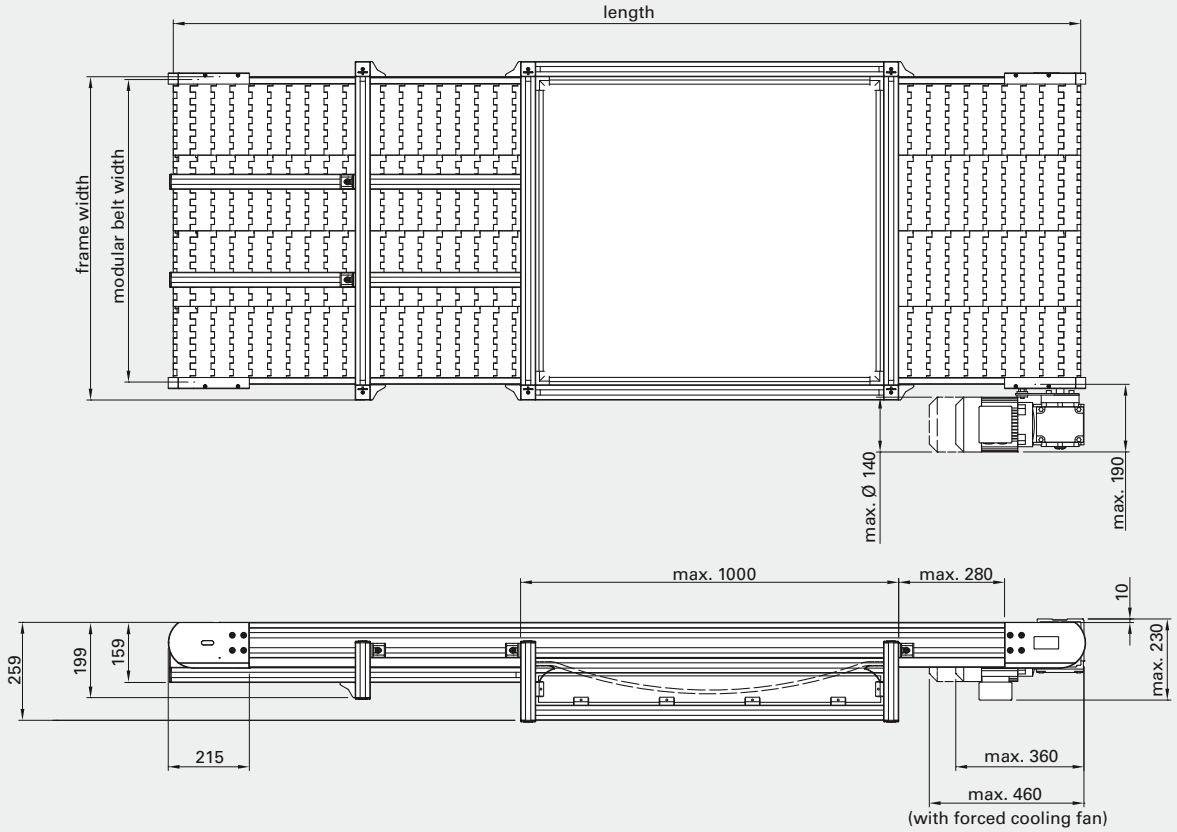
E — Front end direct drive, left

F — Front end direct drive, right

Front End Timing Belt Drive



Front End Direct Drive



Design Options[2)]

Side view

Length And Frame Width

Description	Min. length[3)]	Max. length[3)]	Min. modular belt width[4)]	Max. modular belt width[4)]
C8M Front end timing belt drive	1500 mm	12000 mm	150 mm	2000 mm
C8M Front end direct drive	1500 mm	12000 mm	150 mm	2000 mm

Order Placement

To place an order please use the Conveyor Request Form (page 37) or visit the online Belt Conveyor Configuration Tool at www.robotunits.com

1) Standard direction is pulling
2) Optional designs upon request
3) Special lengths are available upon request
4) Modular band widths can be ordered ranging from min. 150 mm to max. 2000 mm in steps of 50 mm.

Diagram dimensions in mm

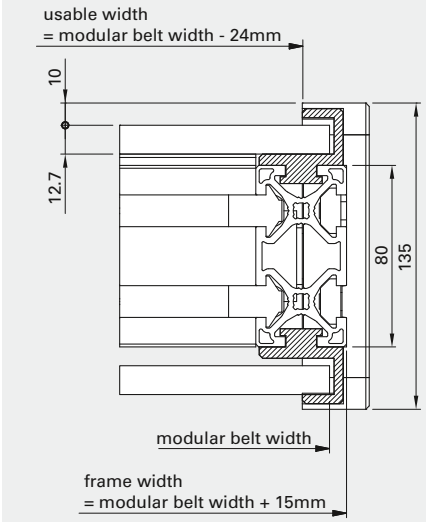
C8M Curved Modular Belt Conveyors

Application
Used for a wide variety of conveying applications

Technical Data
- Belt speed for belt drive ranges from 6 m/min to 30 m/min
- Belt speed for direct drive ranges from 6 m/min to 30 m/min

Drive power depending on belt speed and load ranging from 0.25 kW to 0.55 kW (230/400V; 50/60Hz; IP55)
Maximum load to be conveyed: on request
Modular belt pitch: 1 inch

Modular belt design
Modular belt open



Drive Options[1)]

Front End Timing Belt Drive

A — Front end timing belt drive, left

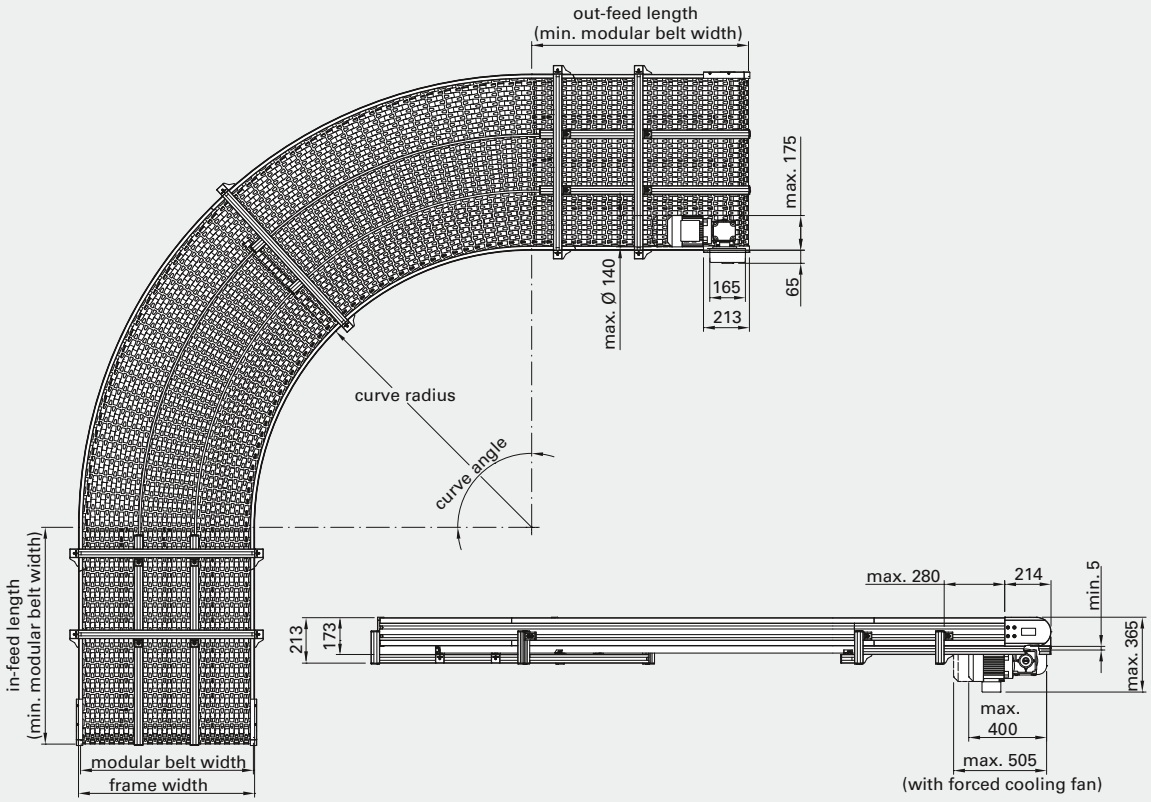
B — Front end timing belt drive, right

Front End Direct Drive

E — Front end direct drive, left

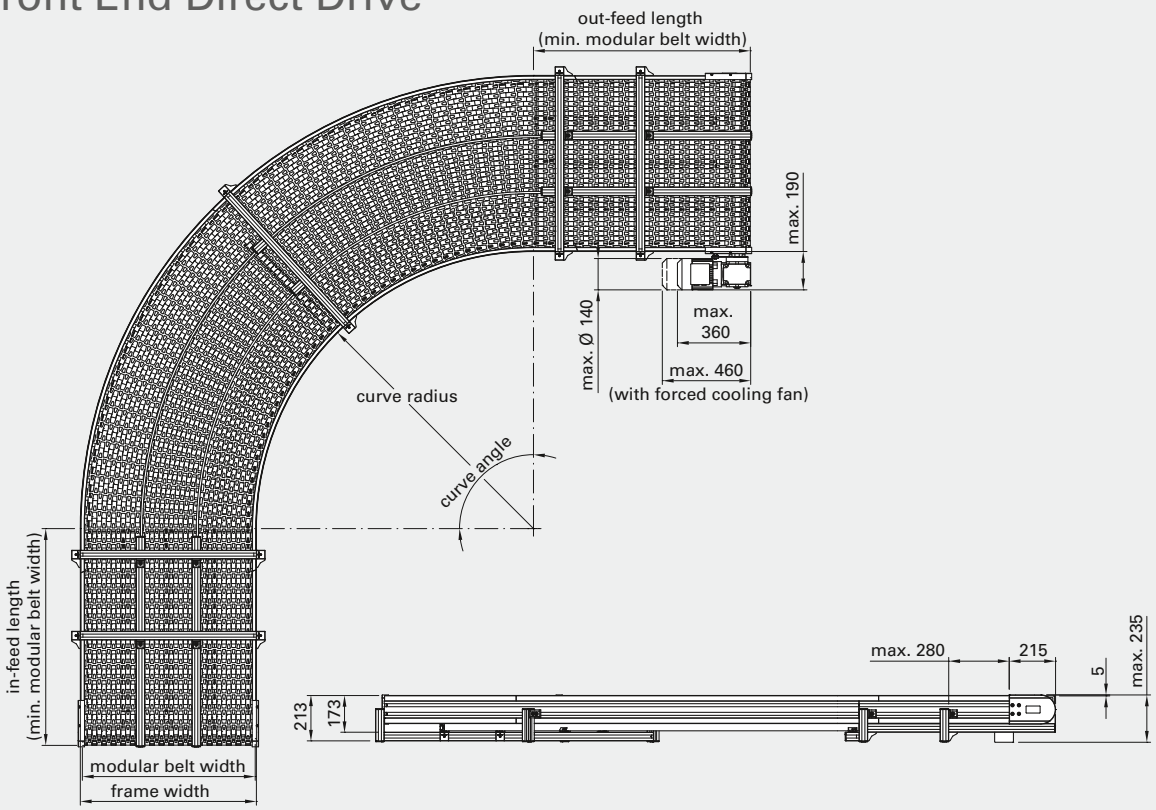
F — Front end direct drive, right

Front End Timing Belt Drive



1) Standard direction is pulling

Front End Direct Drive



Design Options[2)]

Side view

Top view

Frame Width

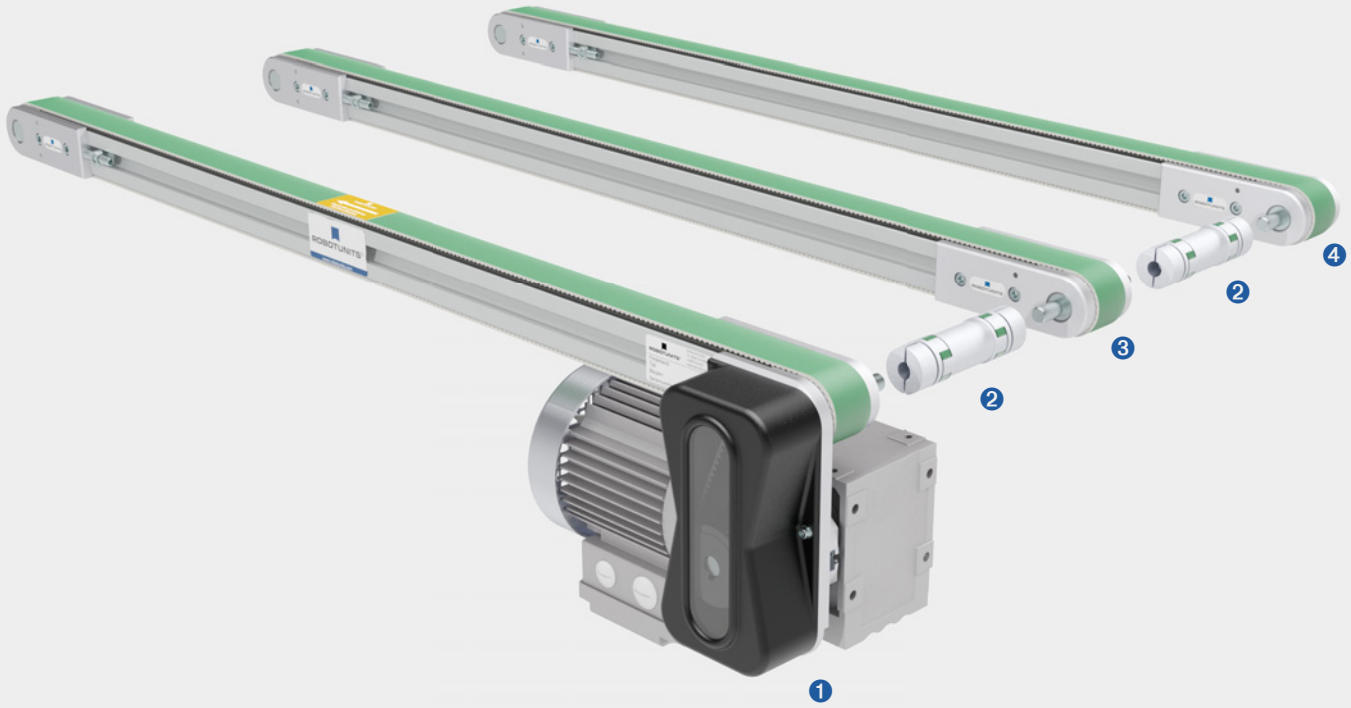
Description	Frame width min.[3)]	Frame width max.[3)]
C8M Front end timing belt drive	215 mm	1215 mm
C8M Front end direct drive	215 mm	1215 mm

Order Placement

To place an order please use the Conveyor Request Form (page 37) or visit the online Belt Conveyor Configuration Tool at www.robotunits.com

2) Optional designs upon request
3) Frame widths can be ordered ranging from min. 215 mm to max. 1215 mm in steps of 50 mm.
Diagram dimensions in mm

C4T Timing Belt Conveyor Drive And Connection Options



1. Front end timing belt drive, right, with output shaft (page 30)
2. Connection shaft with coupling COL 5220 (page 157)
3. Timing belt lane without motor, output shaft, right (page 30)
4. Timing belt lane without motor, with output shaft, right (page 30)

C8T Timing Belt Conveyor Drive And Connection Options

1. Front end direct drive, right, with output shaft (page 32)
2. Front end timing belt drive, right, with output shaft (page 32)
3. Connection shaft with coupling COL 5240 (page 157)
4. Timing belt lane without motor, with output shaft on both sides (page 32)
5. Connection Hub COP 4501 (page 125)
6. Splined Shaft COL 8500 (page 125)
7. Timing belt lane without motor, with splined shaft hub (page 32)

C4T Timing Belt Conveyor

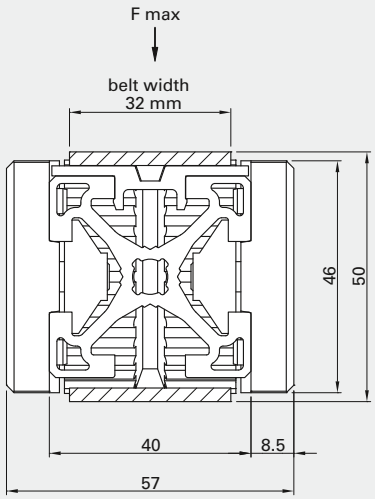
Application
Used for a wide variety of conveying applications

Technical Data
- Speeds of 2.75 m/min to 56 m/min

Drive power depending on belt speed and load
ranging from 0.12 kW to 0.37 kW (230/400V; 50/60Hz; IP55)
Max. total load of material to be conveyed Fmax. 1600 N

Pulley
Number of teeth per pulley = 30
Pitch circle diameter = 47.75 mm

Belt Type
Standard application, cleated for incline transport, accumulation, etc.



Drive Options[1)]

Front End Timing Belt Drive

- A — Front end timing belt drive, left
- B — Front end timing belt drive, right
- O — Front end timing belt drive, left and output shaft
- P — Front end timing belt drive, right and output shaft

Timing Belt Lane Without Motor

- T — Timing belt lane with output shaft on both sides
- U — Timing belt lane with output shaft, left
- V — Timing belt lane with output shaft, right

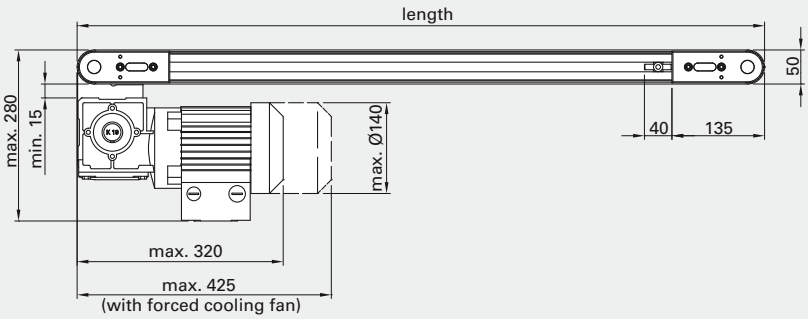
Front End Timing Belt Drive, Double Lane

- O 2 — Front end timing belt drive, left, double lane
- P 2 — Front end timing belt drive, right, double lane

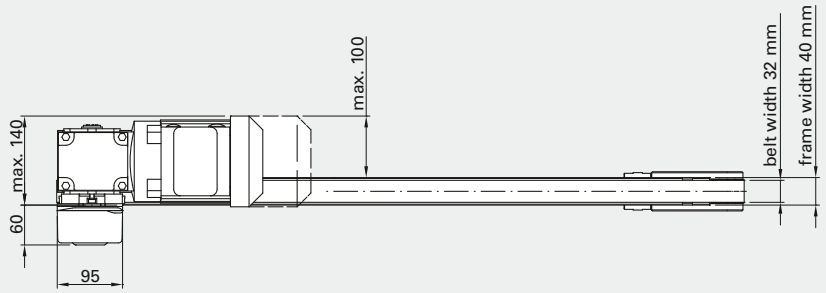
Front End Timing Belt Drive, Triple Lane

- O 3 — Front end timing belt drive, left, triple lane
- P 3 — Front end timing belt drive, right, triple lane

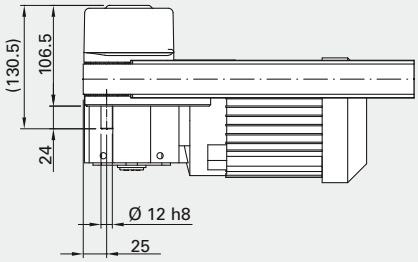
Front End Timing Belt Drive



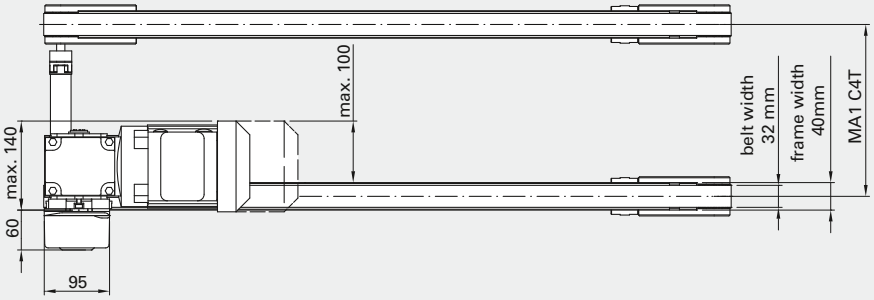
Front End Timing Belt Drive



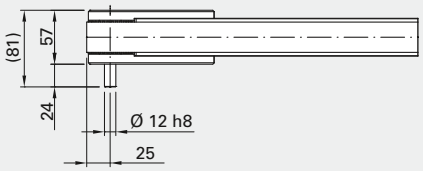
O/P



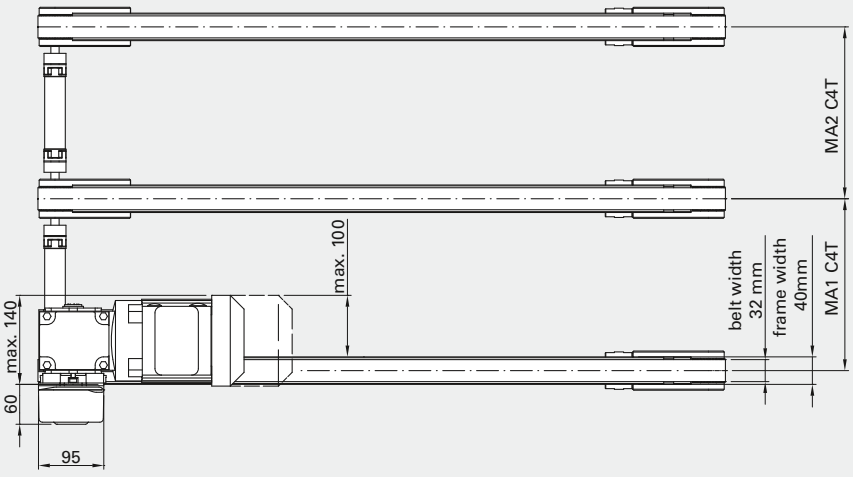
Front End Timing Belt Drive, Double Lane



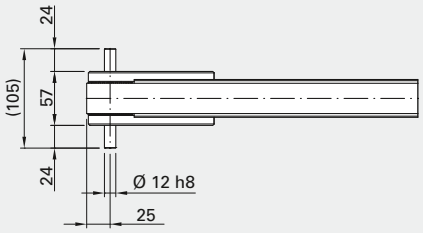
U/V



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

To place an order please use the Conveyor Request Form (page 37) or visit the online Belt Conveyor Configuration Tool at www.robotunits.com

1) Standard direction is pulling
Diagram dimensions in mm

C8T Timing Belt Conveyor

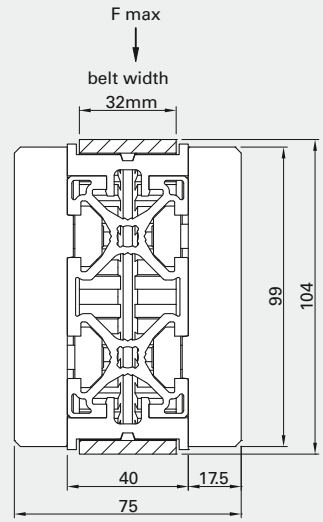
Application
Used for a wide variety of conveying applications

Technical Data
- Speeds of 6 m/min to 63 m/min

Drive power depending on belt speed and load ranging from 0.25 kW to 0.37 kW
(230/400V; 50/60Hz; IP55)
Max. total load of material to be conveyed Fmax. 4000 N or 6000 N, depending on type of drive

Pulley
Number of teeth per pulley = 32
Pitch circle diameter = 101.85 mm

Belt Type
Standard application, cleated for incline transport, accumulation, etc.



Drive Options[1)]

Front End Timing Belt Drive, Fmax 4000 N

- A — Front end timing belt drive, left
- B — Front end timing belt drive, right
- O — Front end timing belt drive, left and output shaft
- P — Front end timing belt drive, right and output shaft

Front End Direct Drive, Fmax 6000 N

- E — Front end direct drive, left
- F — Front end direct drive, right
- R — Front end direct drive, left and output shaft
- S — Front end direct drive, right and output shaft

Front End Drive, Double Lane

- O 2 — Front end timing belt drive, left, double lane
- P 2 — Front end timing belt drive, right, double lane
- R 2 — Front end direct drive, left, double lane
- S 2 — Front end direct drive, right, double lane

Front End Drive, Triple Lane

- O 3 — Front end timing belt drive, left, triple lane
- P 3 — Front end timing belt drive, right, triple lane
- R 3 — Front end direct drive, left, triple lane
- S 3 — Front end direct drive, right, triple lane

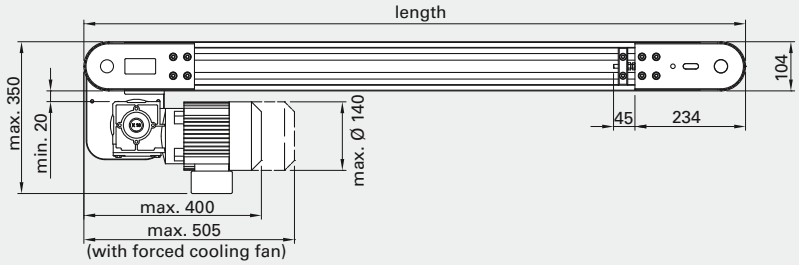
Timing Belt Lane Without Motor

- T — Timing belt lane with output shaft on both sides
- U — Timing belt lane with output shaft, left
- V — Timing belt lane with output shaft, right

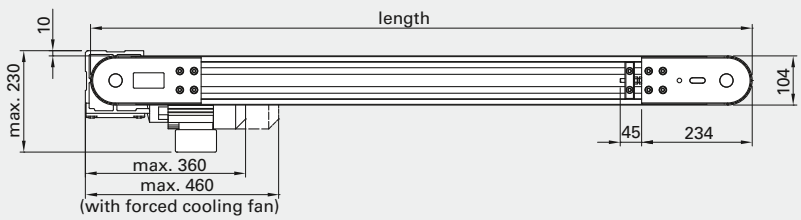
Timing Belt Lane Without Motor, Adjustable

- W — Timing belt lane with splined shaft hub

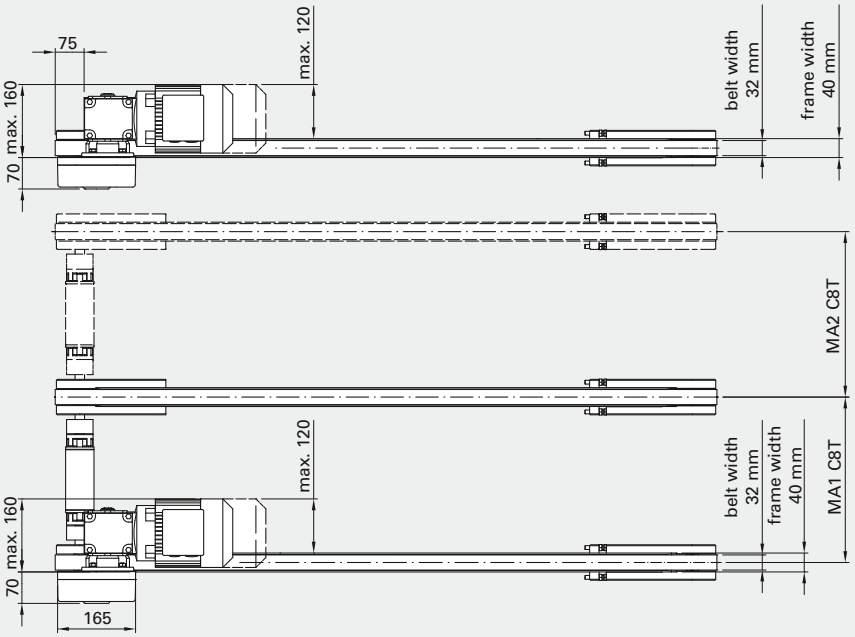
Front End Timing Belt Drive



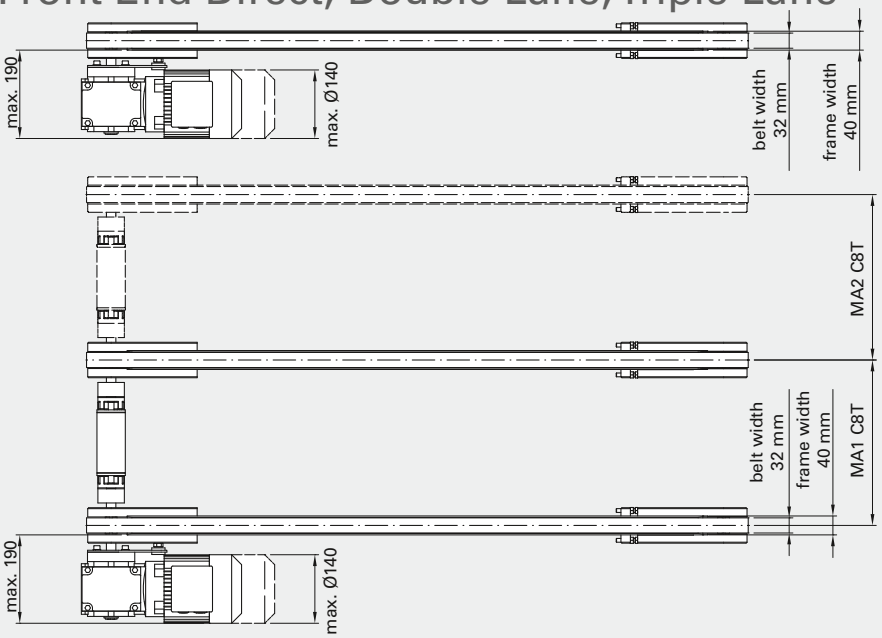
Front End Direct Drive



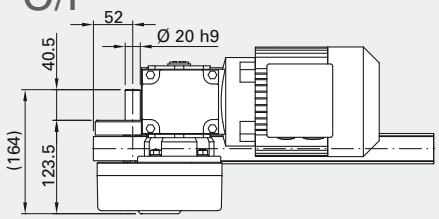
Front End Timing Belt Drive, Double-, Triple Lane



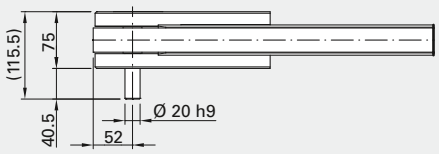
Front End Direct, Double Lane, Triple Lane



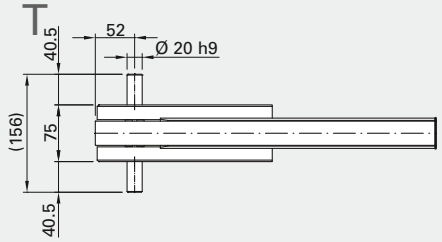
O/P



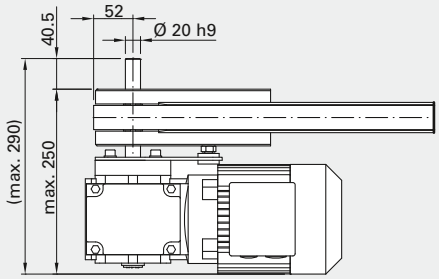
U/V



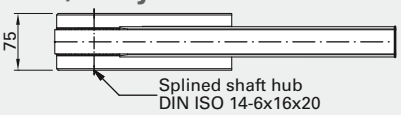
T



R/S



W, adjustable



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

To place an order please use the Conveyor Request Form (page 37) or visit the online Belt Conveyor Configuration Tool at www.robotunits.com

1) Standard direction is pulling, Diagram dimensions in mm

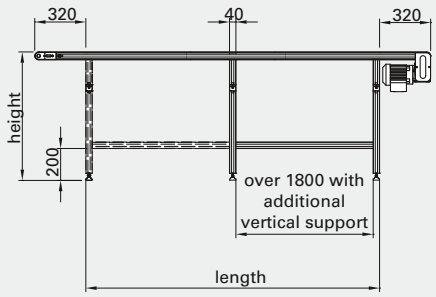
C4G Conveyor Stand

Application
Stand for C4T

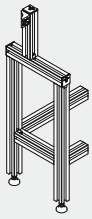
Technical Data
Material: EN AW-6063-T66 clear anodized aluminum; galvanized GD-Zn; galvanized steel; PA 6 composite or rubber

Scope of Delivery
Conveyor stand, completely assembled

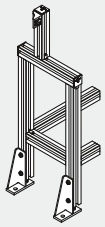
Support distance



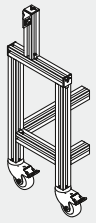
Stand Types: Single Lane



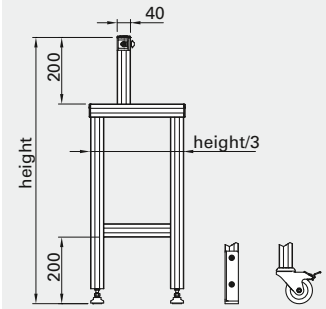
S
Leveling Bases BAS 4008
Height adjustment - 10 / + 20 mm



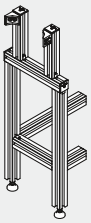
I
Safety Fence Floor Brackets for anchoring BAP 2051
Height adjustment - 20 / + 5 mm



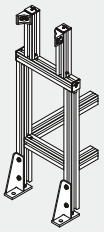
R
Swivel Castors with brakes CAS 3080



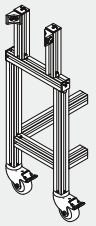
Stand Types: Double Lane



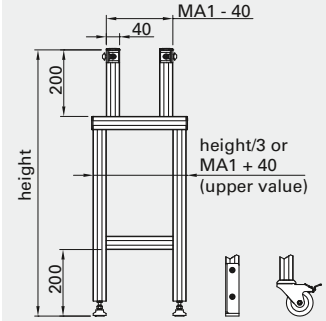
H
Leveling Bases BAS 4008
Height adjustment - 10 / + 20 mm



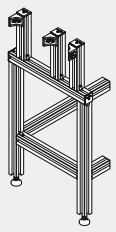
J
Safety Fence Floor Brackets for anchoring BAP 2051
Height adjustment - 20 / + 5 mm



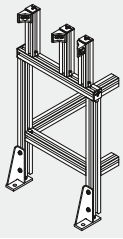
G
Swivel Castors with brakes CAS 3080



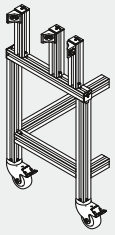
Stand Types: Triple Lane



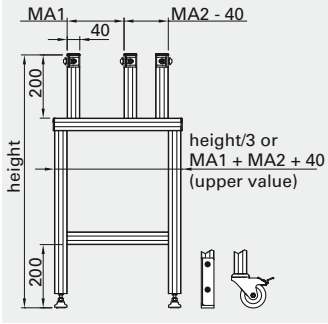
K
Leveling Bases BAS 4008
Height adjustment - 10 / + 20 mm



L
Safety Fence Floor Brackets for anchoring BAP 2051
Height adjustment - 20 / + 5 mm



M
Swivel Castors with brakes CAS 3080



Order Code

Description	Order Code[1]			
	Width	Type	Length	Height
Conveyor Stand	C4G _ _ _ _	_ NN	_ _ _ _	_ _ _ _

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

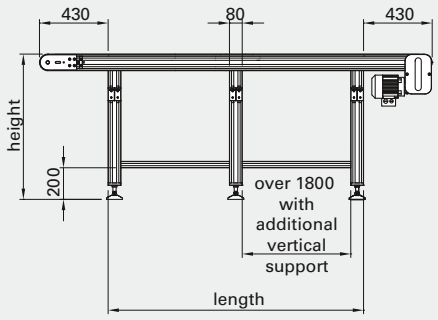
C8G Conveyor Stand

Application
Stand for C8T

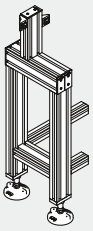
Technical Data
Material: EN AW-6063-T66 clear anodized aluminum; galvanized GD-Zn; galvanized steel; PA 6 composite or rubber

Scope of Delivery
Conveyor stand, completely assembled

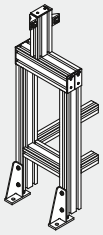
Support distance



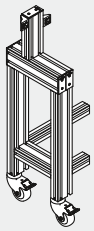
Stand Types: Single Lane



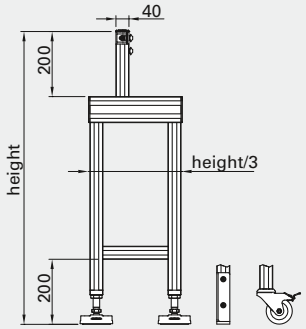
S
Leveling Bases
BAS 1020
Height adjustment
- 30 / + 20 mm



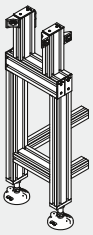
I
Safety Fence Floor Brackets for anchoring BAP 2051
Height adjustment
- 20 / + 5 mm



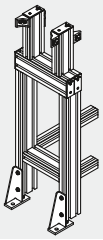
R
Swivel Castors with brakes
CAS 3080



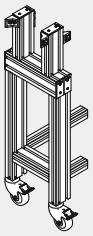
Stand Types: Double Lane



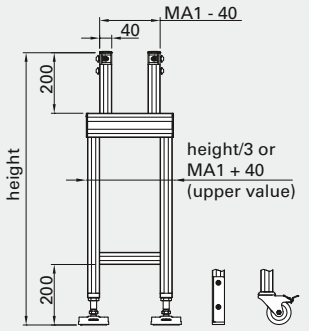
H
Leveling Bases
BAS 1020
Height adjustment
- 30 / + 20 mm



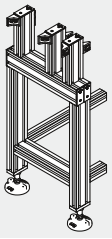
J
Safety Fence Floor Brackets for anchoring BAP 2051
Height adjustment
- 20 / + 5 mm



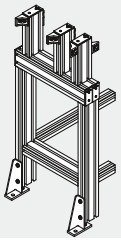
G
Swivel Castors with brakes
CAS 3080



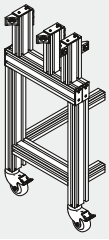
Stand Types: Triple Lane



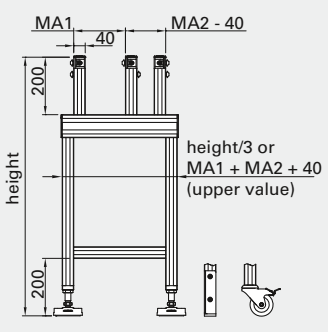
K
Leveling Bases
BAS 1020
Height adjustment
- 30 / + 20 mm



L
Safety Fence Floor Brackets for anchoring BAP 2051
Height adjustment
- 20 / + 5 mm



M
Swivel Castors with brakes
CAS 3080



Order Code

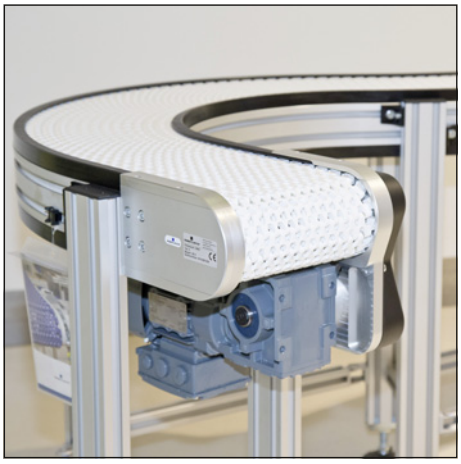
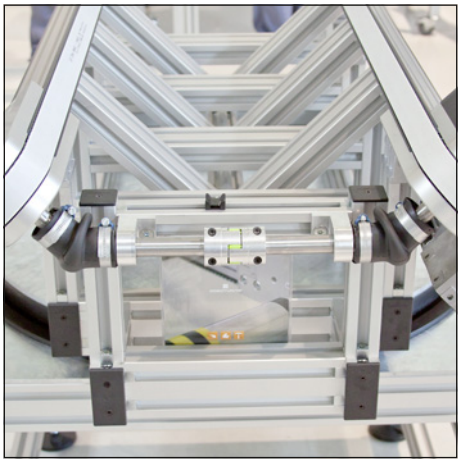
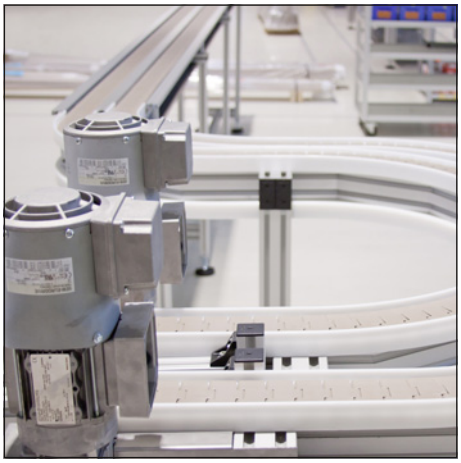
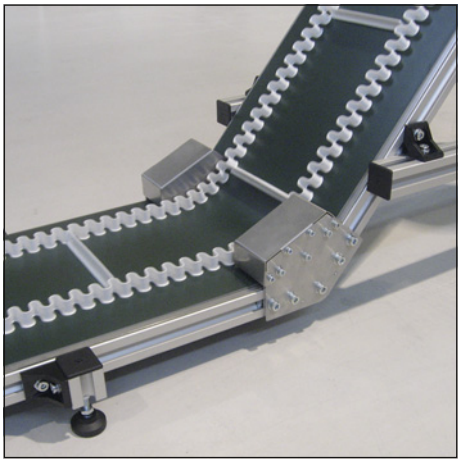
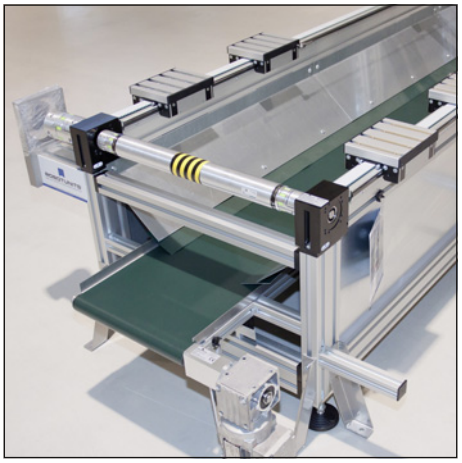
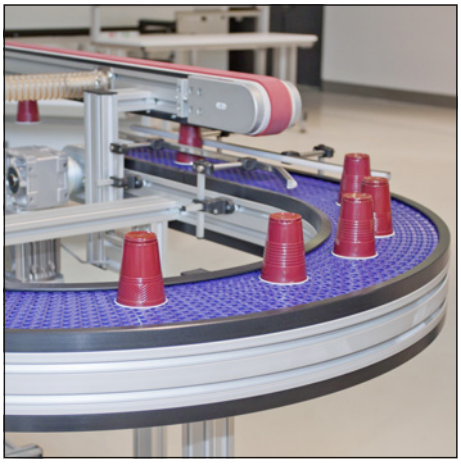
Description	Order Code[1]			
	Width	Type	Length	Height
Conveyor Stand	C8G _ _ _ _	_ NN	_ _ _ _	_ _ _ _

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

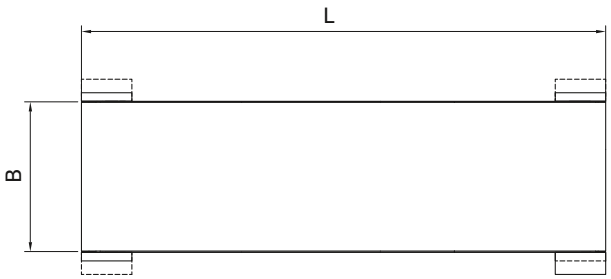
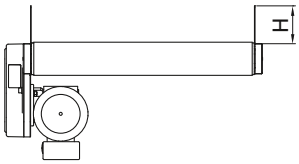
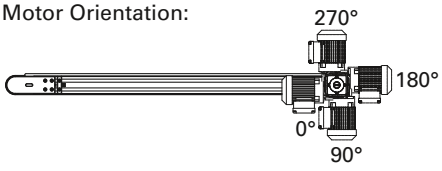
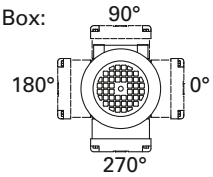
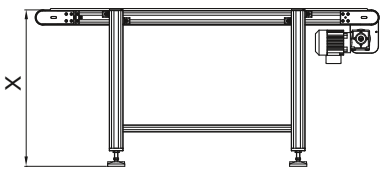
Belt Conveyor Application Examples





Conveyor Request Form

Company:	Contact Person:	Date: Telephone: Fax:
 A layout diagram is required for curved conveyors.		Quantity: ..... piece(s) Width: ..... mm Length: ..... mm Drive Options: See Catalog Pages 14 to 32 (enter letter) .....
Side Guides: 		H = ... mm
Belt Speed: V = ... m/min	Variable Speed: Yes ☐ No ☐	..... to ..... m/min
Frequency Converter: Yes ☐ No ☐		
Power Supply: Standard 230/400V, 50/60 Hz Yes ☐ No ☐		
Power Supply: Special Voltage Required Yes ☐ No ☐		..... V, ... Hz
Normal Operation ☐	Accumulation ☐	Cycle Mode ☐
Installation Orientation: horizontal ☐	Installation Orientation: inclined .....°	Installation Orientation: downhill .....°
Special Belt Requirements:	Weight Per Unit: ..... kg Total Belt Load: ..... kg	Temperature Of Parts: ..... °C Part Material: .....
Parts To Be Conveyed (Layout Sketch):		
Motor Orientation:  ..... °	Location Of Terminal Box:  ..... °	
Base Frame: 		X = ... mm
Max. Approved Belt Sag: 		X = ... mm