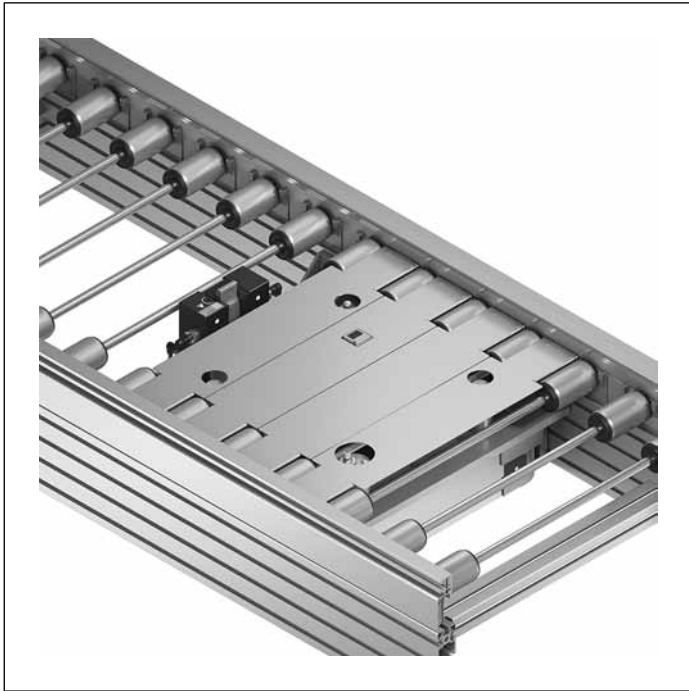


Positioning and orientation

Design	8-2
PE 5 positioning unit	8-3
PE 5/T positioning unit	8-7
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Protective sleeves for PE 5, PE 5/T, PE 5/L and PE 5/L-T	8-29
Cover of lateral guide for positioning units	8-31
Protective covers for PE 5/OC and PE 5/OC-T	8-32

Design

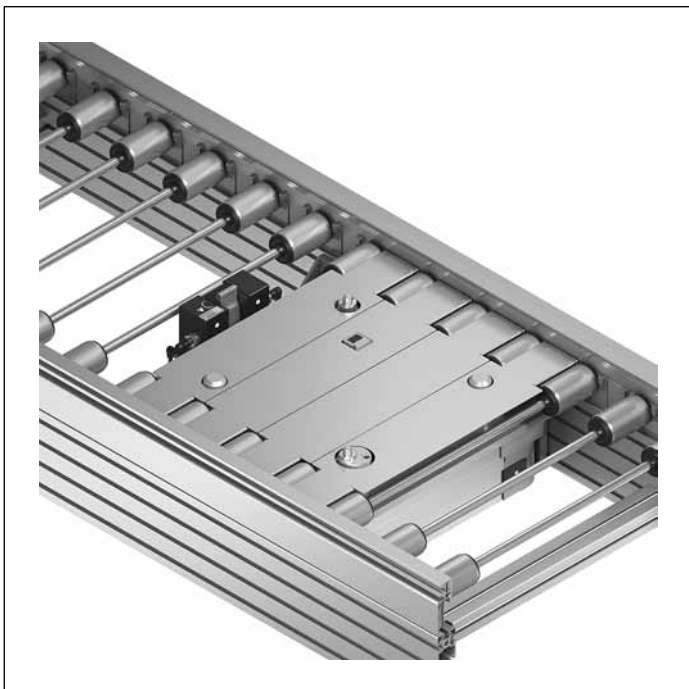


In order to process and maintain manufacturing tolerances, workpiece pallets must be stopped and positioned in the processing station.

In doing so, the workpiece pallets can be exactly positioned by up to ± 0.3 mm and the system can absorb vertical process forces of up to 4,000 N.

Applications:

- ▶ For exact positioning and to lift the workpiece pallet from the conveyor transport surface:
PE 5, see page 8-3
- ▶ A VE 5 stop gate, see page 9-3, is sufficient for use with a manual workplace that has low requirements for positioning accuracy and if no forces act upon the workpiece pallet



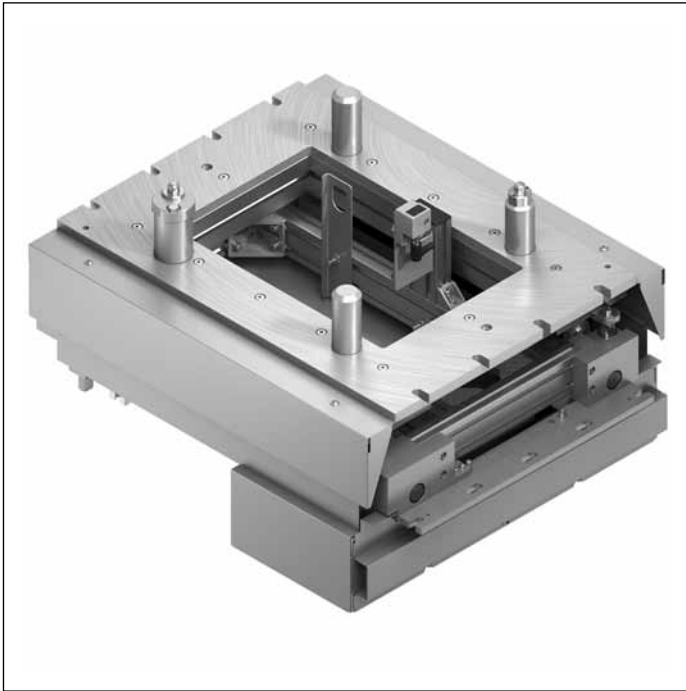
Figures:

PE 5 positioning unit with protective covers and sleeves, installed with an assembly kit in an ST 5/H section.

Top figure: top position

Bottom figure: bottom position

PE 5 positioning unit



Use:

- ▶ Positioning a workpiece pallet in a manual or automated processing station in the longitudinal conveyor with high positioning accuracy requirements (± 0.3 mm)

Version:

- ▶ Can be used with all WT 5 workpiece pallets
- ▶ Installation from above also possible
- ▶ Lift over transport level: 5 mm
- ▶ Positioning accuracy: ± 0.3 mm
- ▶ Permissible vertical process force with center load: up to 4,000 N^{2), 3)}
- ▶ Suitable for ST 5/H and ST 5/XH (not ST 5/H-FR or ST 5/XH-FR)
- ▶ Compressed air connection 5 ... 6 bar
- ▶ Pneumatic push-in fitting: 6 mm

²⁾ If assembling in a ST 5/H section place legs directly in front of and behind the PE 5.

³⁾ Permissible vertical process force if assembled in the section. Higher process forces of up to 15,000 N possible with direct support (on request).

Scope of delivery:

- ▶ Incl. fastening material for mounting the PE 5 in ST 5/XH conveyor sections

Required accessories:

- ▶ Assembly kit 3 842 996 185 is required for assembly in ST 5/H conveyor sections, see page 8-27
- ▶ Stop gate VE 5/D-1000, page 9-12, stop gate VE 5/D-300, page 9-6, VE 5/D-301, page 9-9 or stop gate VE 5/200, page 9-3
- ▶ SH 2/U-H 3 842 537 289 switch bracket, see page 9-18¹⁾
- ▶ SH 2/U-H 3 842 545 132 assembly kit, see page 9-20

¹⁾ Not for size b = 455 mm.

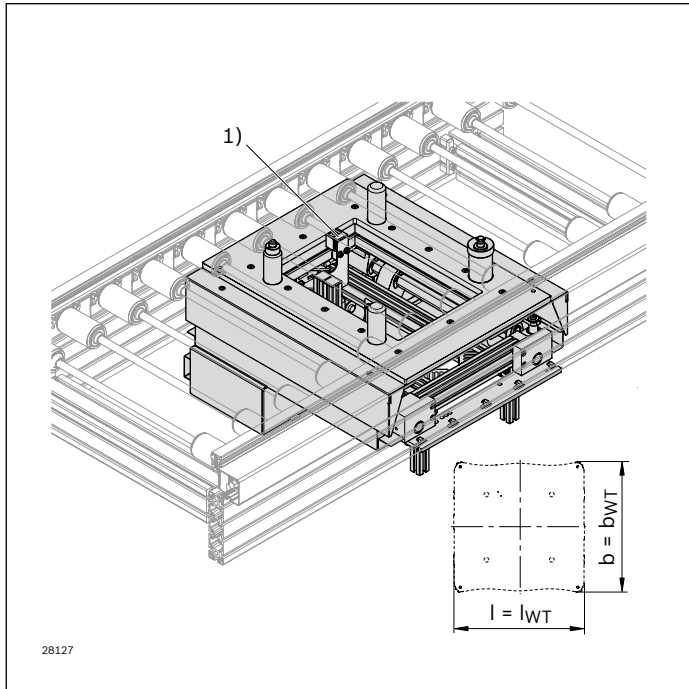
Condition on delivery:

- ▶ Fully assembled

Recommended accessories:

- ▶ Cover for the lateral guide, see page 8-31
- ▶ Protective sleeves, see page 8-29

Ordering information



PE 5 positioning unit

b (mm)	l_{WT} (mm)	SC	Material number
455	455	1; 2	3 842 998 786
455	650	1; 2	b = ... mm
650	650	1; 2	l _{WT} = ... mm
650	845	1; 2	SC = ...
845	845	1; 2	
845	1,040	1; 2	

SC = Housing element

1: without protective casing

2: with protective casing

b = Track width of the positioning unit in the direction of transport

l_{WT} = workpiece pallet length

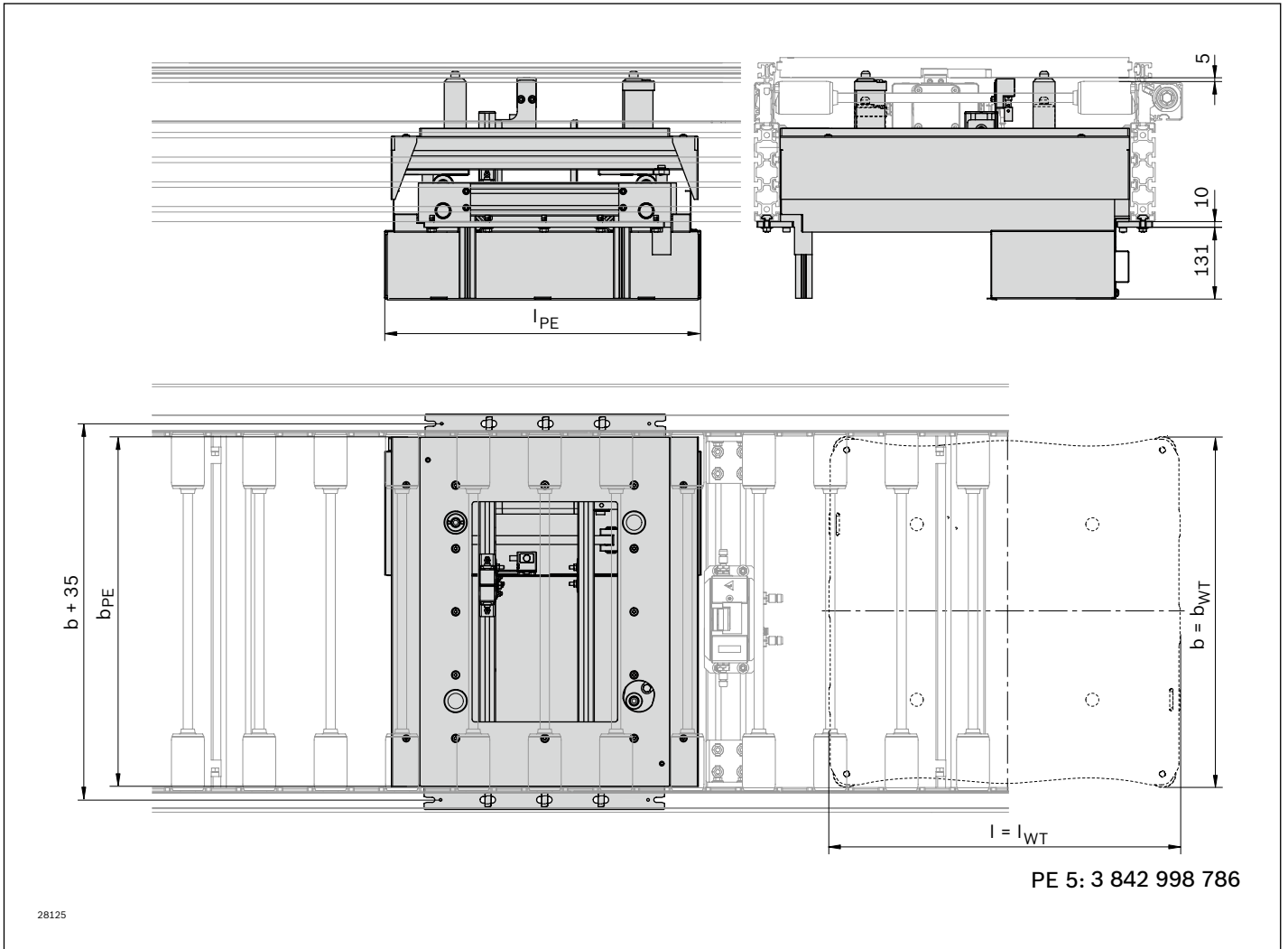
PE 5 (top/bottom) positioning unit position inquiry option on request

Description of further parameters, see page 0-3

¹⁾ Not for size b = 455 mm

Dimensions

PE 5 positioning unit



28125

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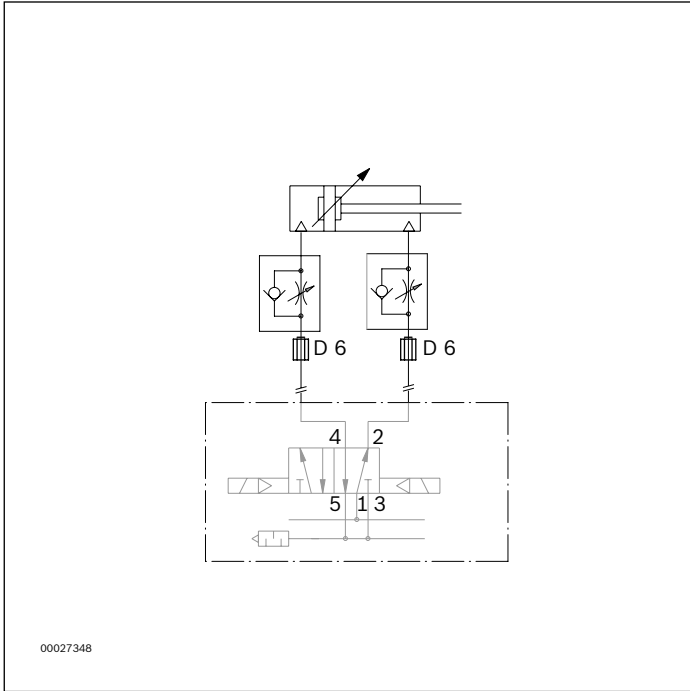
b_{WT} (mm)	l_{WT} (mm)	b_{PE} (mm)	l_{PE} (mm)
455	455	441	471
455	650	441	576
650	650	636	576
650	845	636	764
845	845	831	764
845	1,040	831	966

Assembly kit for installing the PE 5 in the ST 5/H: Material number 3 842 996 185, see page 8-27

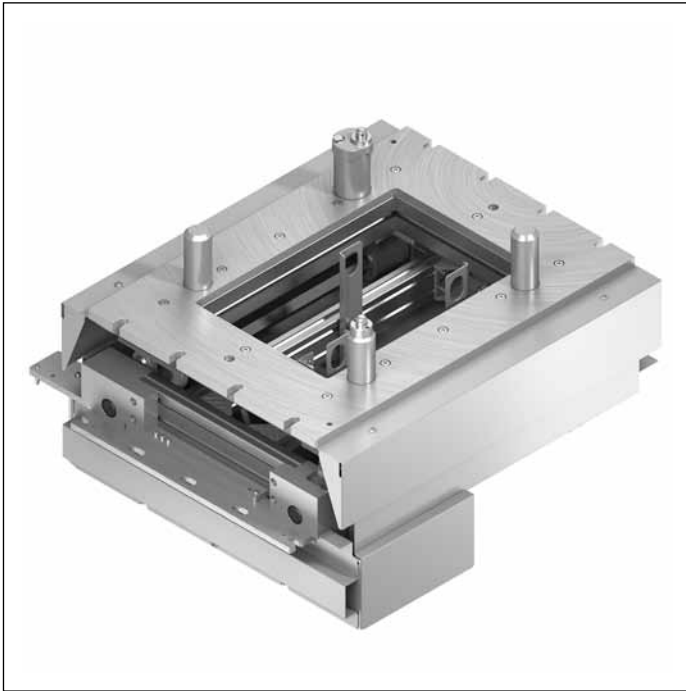
- b_{WT} = width of workpiece pallet
- l_{WT} = length of workpiece pallet
- b_{PE} = positioning unit width
- l_{PE} = positioning unit length

Circuit diagram

PE 5 positioning unit



PE 5/T positioning unit



Use:

- ▶ Positioning a workpiece pallet in a manual or automated processing station in the transverse conveyor with high positioning accuracy requirements (± 0.3 mm)

Version:

- ▶ Can be used with all WT 5 workpiece pallets
- ▶ Installation from above also possible
- ▶ Lift over transport level: 5 mm
- ▶ Positioning accuracy: ± 0.3 mm
- ▶ Permissible vertical process force with center load: up to 4,000 N^{2), 3)}
- ▶ Suitable for ST5/H and ST 5/XH (not ST 5/H-FR or ST 5/XH-FR)
- ▶ Compressed air connection 5 ... 6 bar
- ▶ Pneumatic push-in fitting: 6 mm

²⁾ If assembling in a ST 5/H section place legs directly in front of and behind the PE 5/T.

³⁾ Permissible vertical process force if assembled in the section. Higher process forces of up to 15,000 N possible with direct support (on request).

Scope of delivery:

- ▶ Incl. fastening material for mounting the PE 5/T in ST 5/XH conveyor sections, and stop kit for VE 5/D-300 and VE 5/D-1000.

Required accessories:

- ▶ Assembly kit 3 842 996 185 is required if assembling in ST 5/H conveyor sections, see page 8-27
- ▶ VE 5/D-300 stop gate, page 9-6, VE 5/D-301 stop gate, page 9-9, VE 5/D-1000 stop gate, page 9-12 or VE 5/200 stop gate, page 9-3¹⁾

¹⁾ A position inquiry for the workpiece pallet on the PE is only possible through use of a VE 5/D-300 or VE 5/D-1000 stop gate.

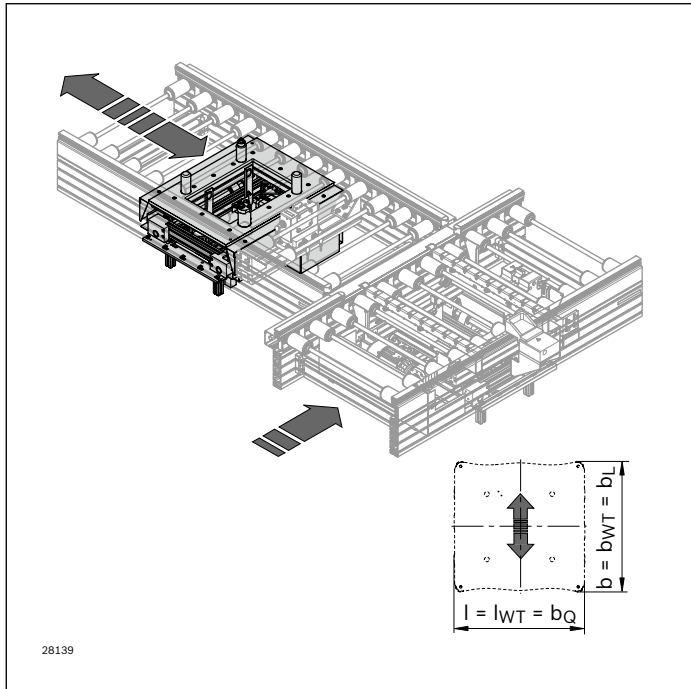
Condition on delivery:

- ▶ Fully assembled

Recommended accessories:

- ▶ Cover for the lateral guide, see page 8-31
- ▶ Protective sleeves, see page 8-29

Ordering information



PE 5/T positioning unit

b_L (mm)	b_Q (mm)	SC	Material number
455	455	1; 2	3 842 998 177
455	650	1; 2	$b_L = \dots$ mm
650	650	1; 2	$b_Q = \dots$ mm
650	845	1; 2	SC = ...
845	845	1; 2	
845	1,040	1; 2	

SC = Housing element

1: without protective casing

2: with protective casing

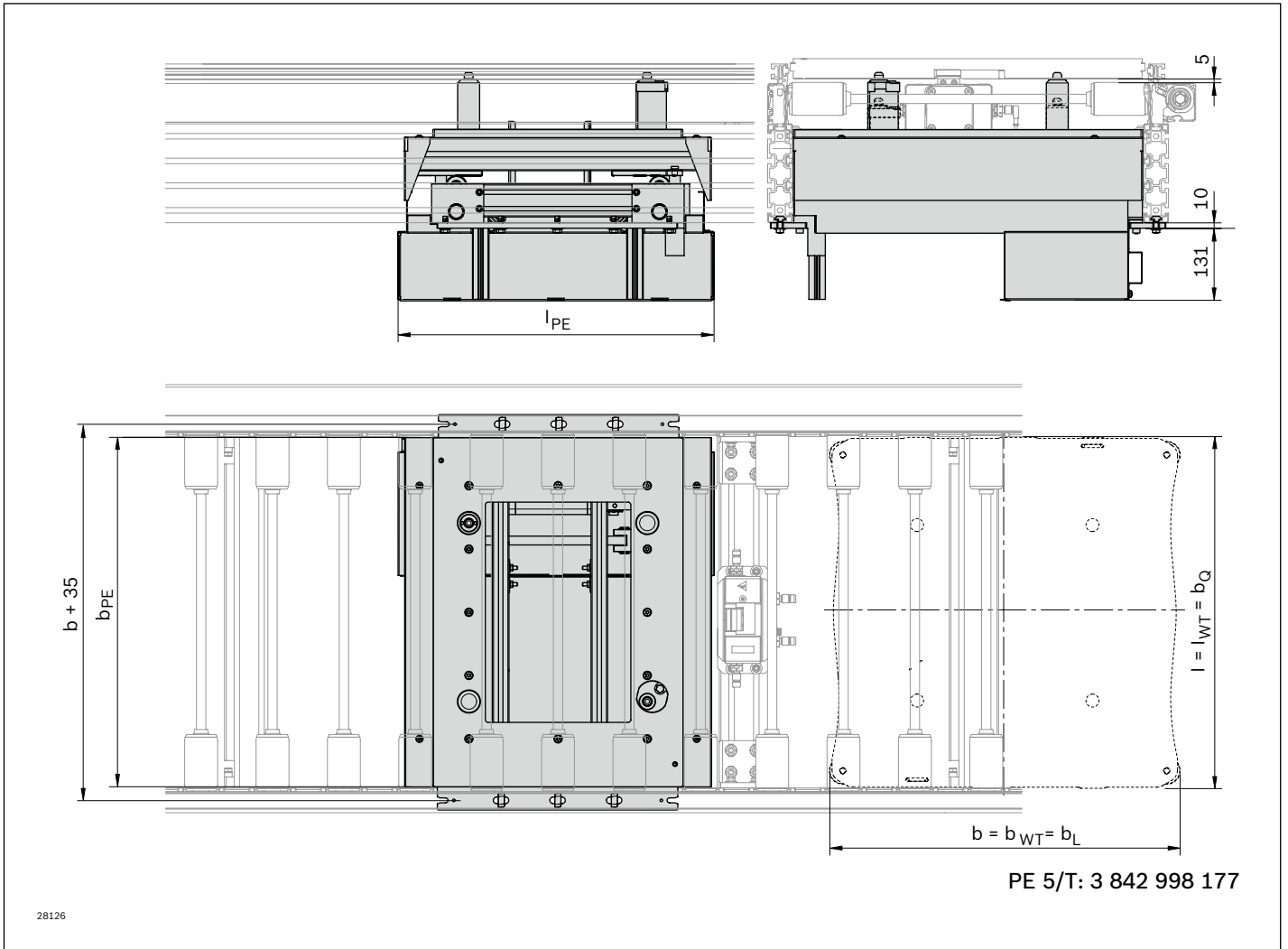
b_L = track width in direction of transport (longitudinal conveyor)

b_Q = track width in direction of transport (transverse conveyor)

PE 5/T (top/bottom) positioning unit position inquiry option on request

Description of further parameters, see page 0-3

Dimensions
PE 5/T positioning unit



28126

PE 5/T: 3 842 998 177

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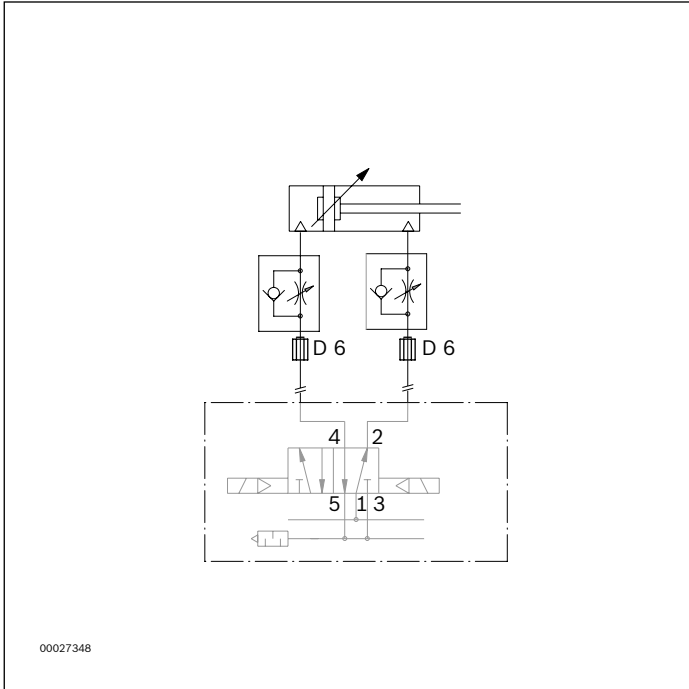
b_L (mm)	b_Q (mm)	b_{PE} (mm)	l_{PE} (mm)
455	455; 650	441	471
650	650	636	576
650	845	636	576
845	845	831	764
845	1,040	831	764

Assembly kit for installing the PE 5/T in the ST 5/H: Material number 3 842 996 185, see page 8-27

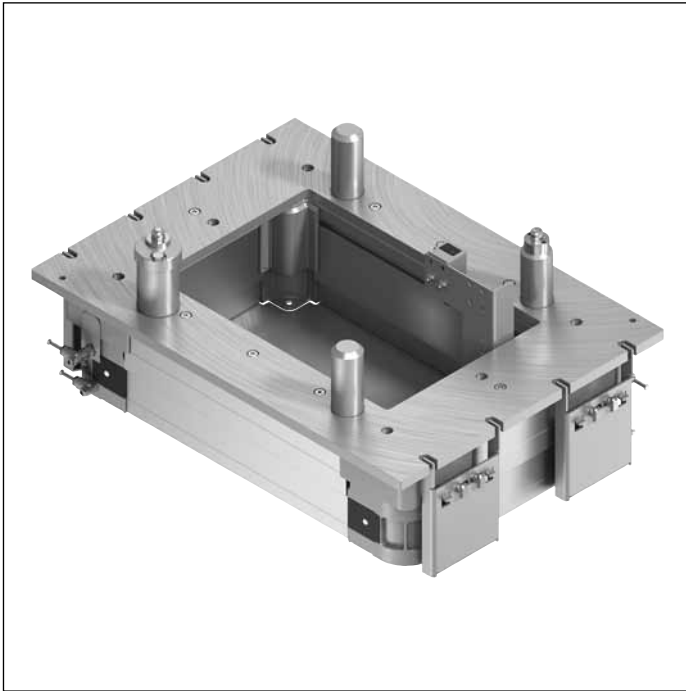
- b_L = track width in direction of transport (longitudinal conveyor)
- b_Q = track width in direction of transport (transverse conveyor)
- b_{PE} = positioning unit width
- l_{PE} = positioning unit length

Circuit diagram

PE 5/T positioning unit



PE 5/L positioning unit



Use:

- ▶ Positioning a workpiece pallet in a manual or automated processing station in the longitudinal conveyor with high positioning accuracy requirements (± 0.3 mm)

Version:

- ▶ Can be used with all WT 5 workpiece pallets
- ▶ Installation only possible from above
- ▶ Lift over transport level: 5 mm
- ▶ Positioning accuracy: ± 0.3 mm
- ▶ Permissible vertical process force with center load: up to 3,500 N²⁾, ³⁾ incl. WT
- ▶ Suitable for ST 5/H and ST 5/XH (not ST 5/H-FR or ST 5/XH-FR)
- ▶ Compressed air connection 5 ... 6 bar
- ▶ Pneumatic push-in fitting: 6 mm

²⁾ If assembling in a ST 5/H section place legs directly in front of and behind the PE 5/L.

³⁾ Permissible vertical process force if assembled in the section. Higher process forces of up to 15,000 N possible with direct support (on request).

Scope of delivery:

- ▶ Incl. fastening material for mounting the PE 5/L in ST 5/XH conveyor sections

Required accessories:

- ▶ Stop gate VE 5/D-1000, page 9-12, stop gate VE 5/D-300, page 9-6, VE 5/D-301, page 9-9 or stop gate VE 5/200, page 9-3
- ▶ SH 2/U-H 3 842 537 289 switch bracket, see page. 9-18

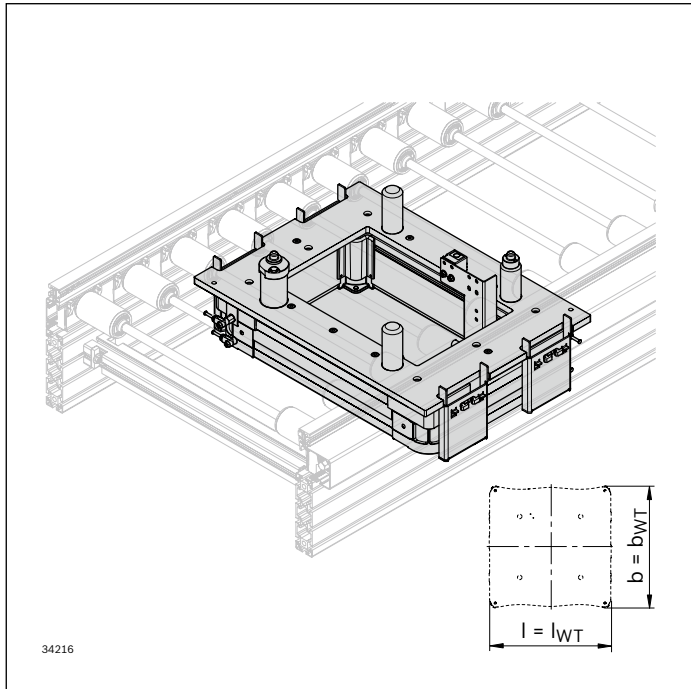
Condition on delivery:

- ▶ Fully assembled

Recommended accessories:

- ▶ Cover for the lateral guide, see page 8-31
- ▶ Protective sleeves, see page 8-29

Ordering information



PE 5/L positioning unit

b (mm)	l_{WT} (mm)	SC	Material number
455	455	1; 2	3 842 998 048
455	650	1; 2	b = ... mm
650	650	1; 2	l _{WT} = ... mm
650	845	1; 2	SC = ...
845	845	1; 2	
845	1,040	1; 2	

SC = Housing element

1: without protective casing

2: with protective casing

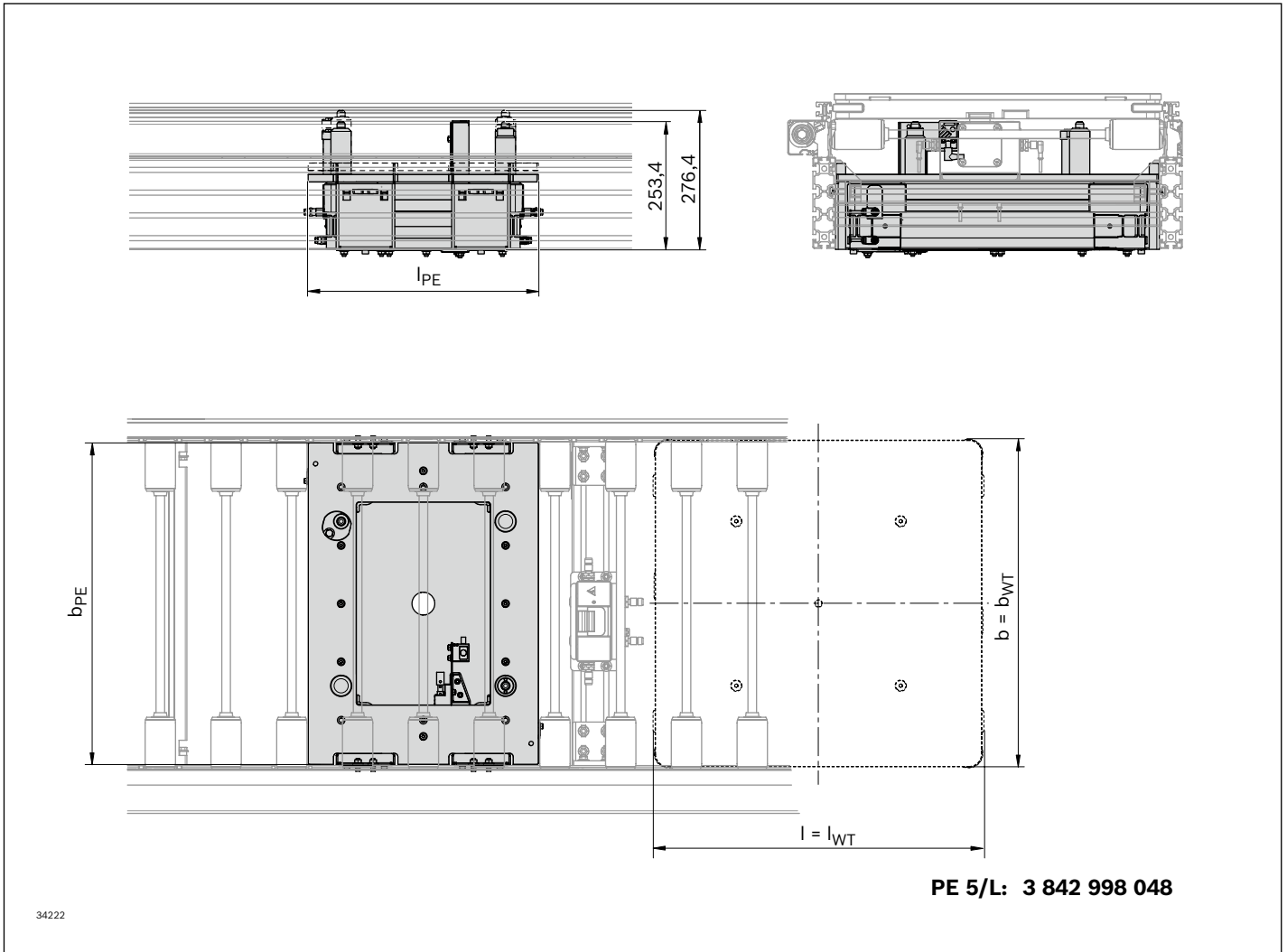
b = Track width of the positioning unit in the direction of transport

l_{WT} = workpiece pallet length

Description of further parameters, see page 0-3

Dimensions

PE 5/L positioning unit

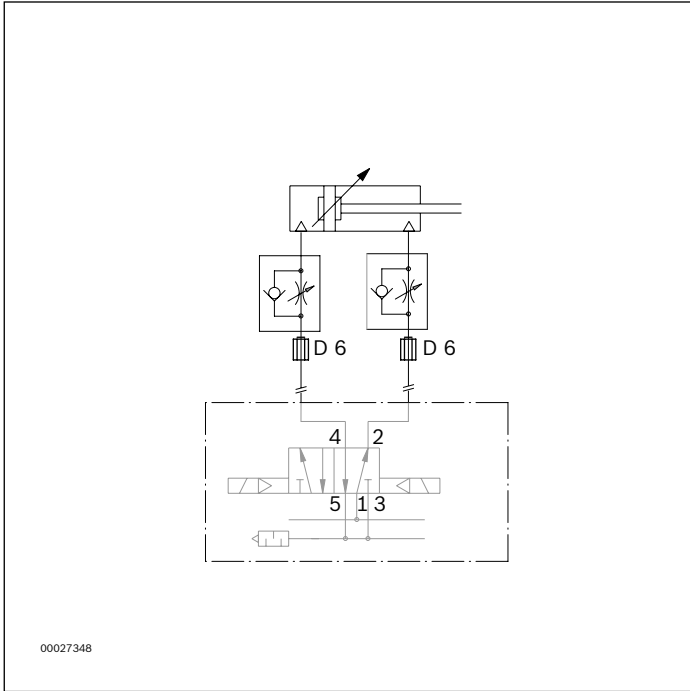


b_{WT} (mm)	l_{WT} (mm)	b_{PE} (mm)	l_{PE} (mm)
455	455	441	471
455	650	441	576
650	650	636	576
650	845	636	764
845	845	831	764
845	1,040	831	966

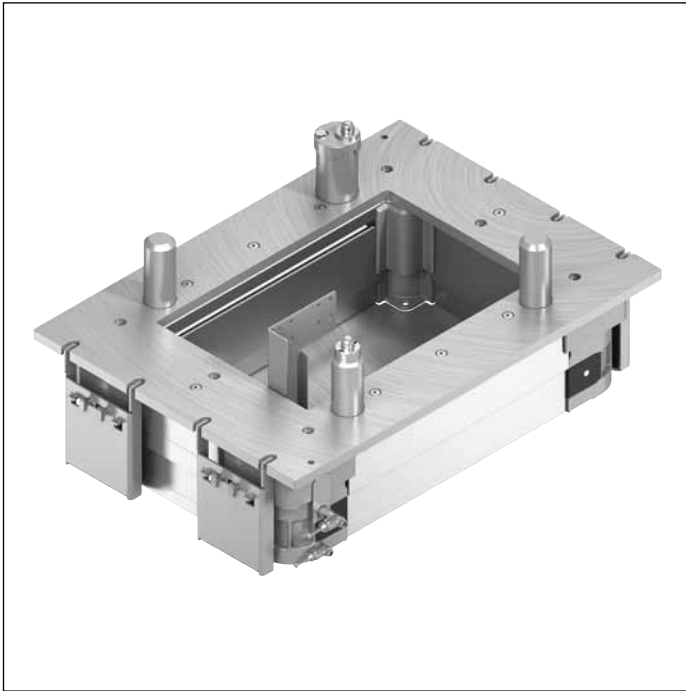
b_{WT} = width of workpiece pallet
 l_{WT} = length of workpiece pallet
 b_{PE} = positioning unit width
 l_{PE} = positioning unit length

Circuit diagram

PE 5/L positioning unit



PE 5/L-T positioning unit



Use:

- ▶ Positioning a workpiece pallet in a manual or automated processing station in the transverse conveyor with high positioning accuracy requirements (± 0.3 mm)

Version:

- ▶ Can be used with all WT 5 workpiece pallets
- ▶ Installation only possible from above
- ▶ Lift over transport level: 5 mm
- ▶ Positioning accuracy: ± 0.3 mm
- ▶ Permissible vertical process force with center load: up to 3,500 N^{2), 3)} incl. WT
- ▶ Suitable for ST5/H and ST 5/XH (not ST 5/H-FR or ST 5/XH-FR)
- ▶ Compressed air connection 5 ... 6 bar
- ▶ Pneumatic push-in fitting: 6 mm

²⁾ If assembling in a ST 5/H section place legs directly in front of and behind the PE 5/L-T.

³⁾ Permissible vertical process force if assembled in the section. Higher process forces of up to 15,000 N possible with direct support (on request).

Scope of delivery:

- ▶ Incl. fastening material for mounting the PE 5/L-T in ST 5/XH conveyor sections, and stop kit for VE 5/D-300 and VE 5/D-1000.

Required accessories:

- ▶ VE 5/D-300 stop gate, page 9-6, VE 5/D-301, page 9-9, VE 5/1000 stop gate, page 9-12 or VE 5/200, stop gate, page 9-3¹⁾
- ▶ SH 2/U-H 3 842 537 289 switch bracket, see page. 9-18

¹⁾ A position inquiry for the workpiece pallet on the PE is only possible through use of a VE 5/D-300 or VE 5/D-1000 stop gate.

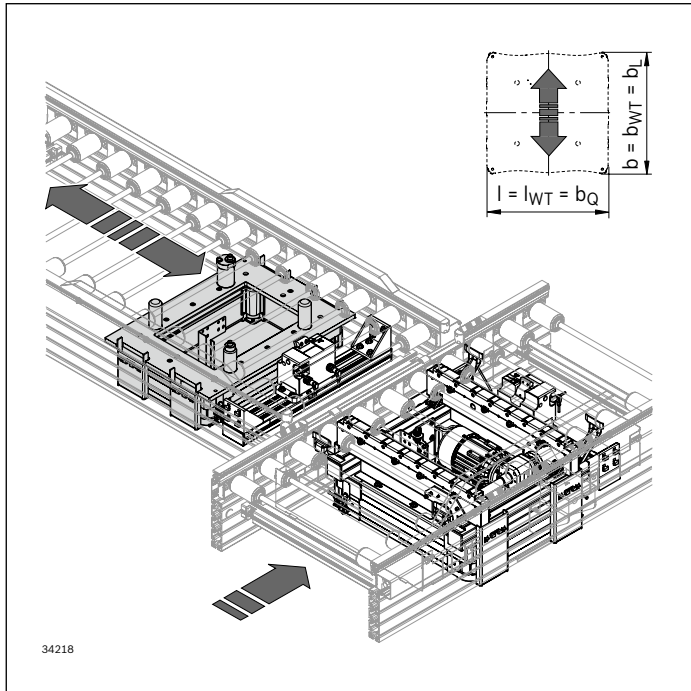
Condition on delivery:

- ▶ Fully assembled

Recommended accessories:

- ▶ Cover for the lateral guide, see page 8-31
- ▶ Protective sleeves, see page 8-29

Ordering information



PE 5/LT positioning unit

b_L (mm)	b_Q (mm)	SC	Material number
455	455	1; 2	3 842 998 049
455	650	1; 2	$b_L = \dots$ mm
650	650	1; 2	$b_Q = \dots$ mm
650	845	1; 2	SC = ...
845	845	1; 2	
845	1,040	1; 2	

SC = Housing element

1: without protective casing

2: with protective casing

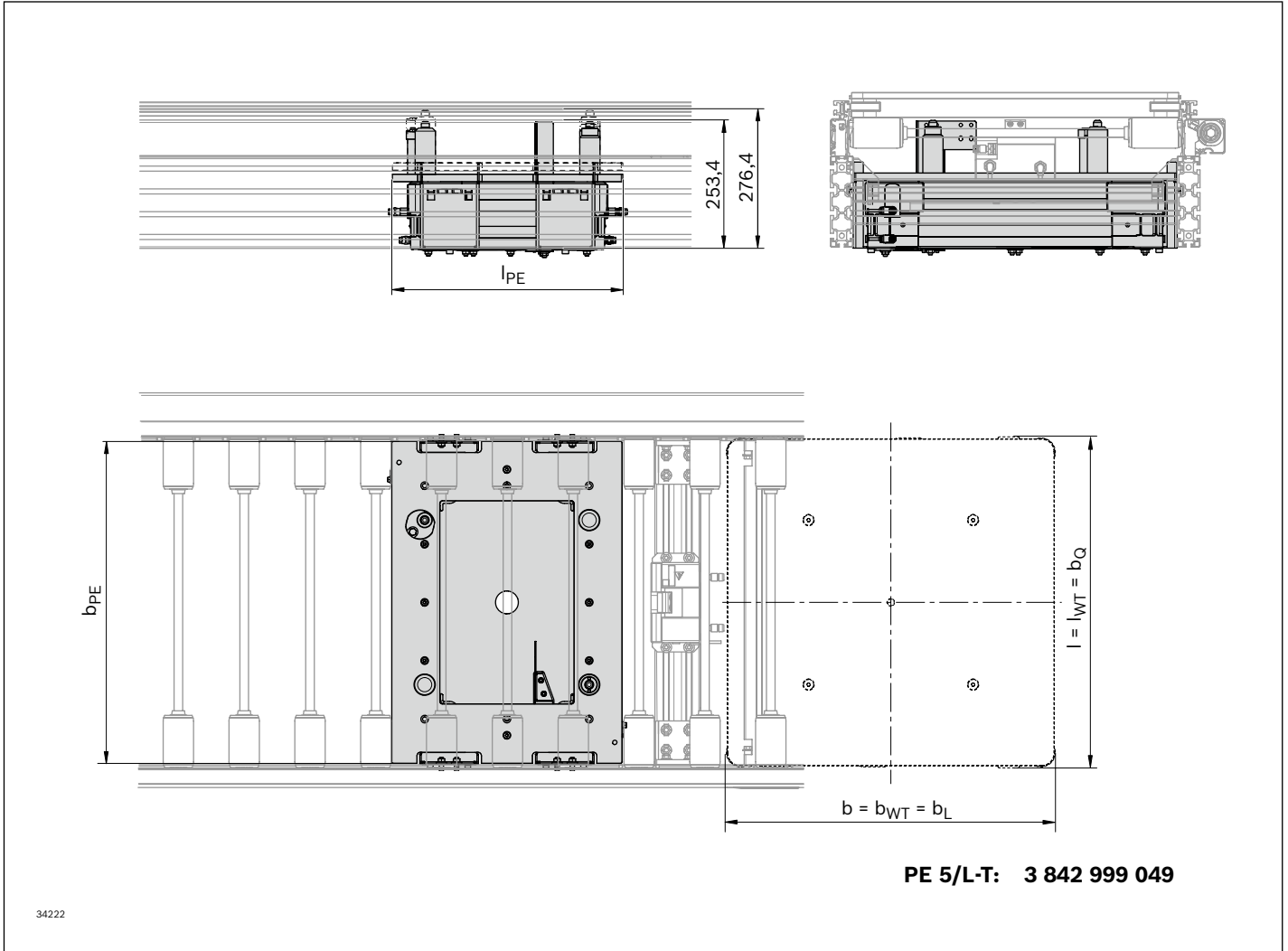
b_L = track width in direction of transport (longitudinal conveyor)

b_Q = track width in direction of transport (transverse conveyor)

Description of further parameters, see page 0-3

Dimensions

PE 5/L-T positioning unit



34222

8

b_L (mm)	b_Q (mm)	b_{PE} (mm)	l_{PE} (mm)
455	455; 650	441	471
650	650	636	576
650	845	636	576
845	845	831	764
845	1,040	831	764

b_L = track width in direction of transport (longitudinal conveyor)

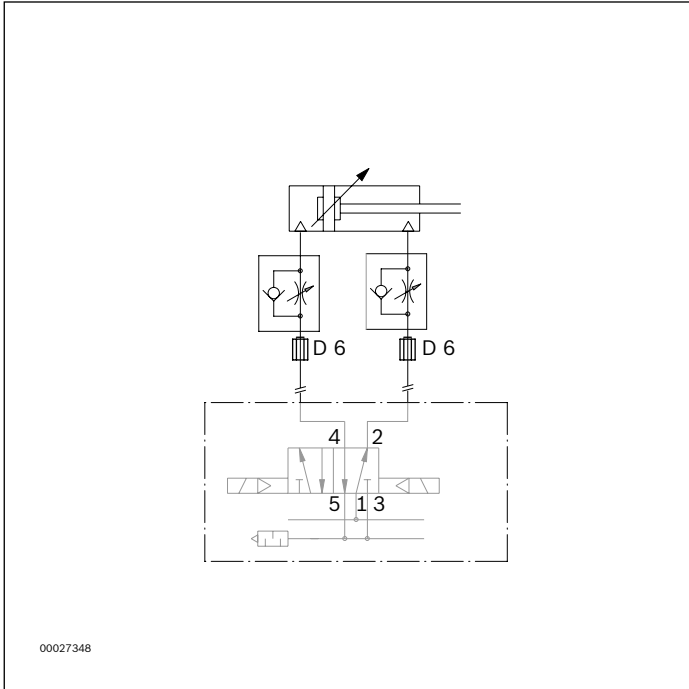
b_Q = track width in direction of transport (transverse conveyor)

b_{PE} = positioning unit width

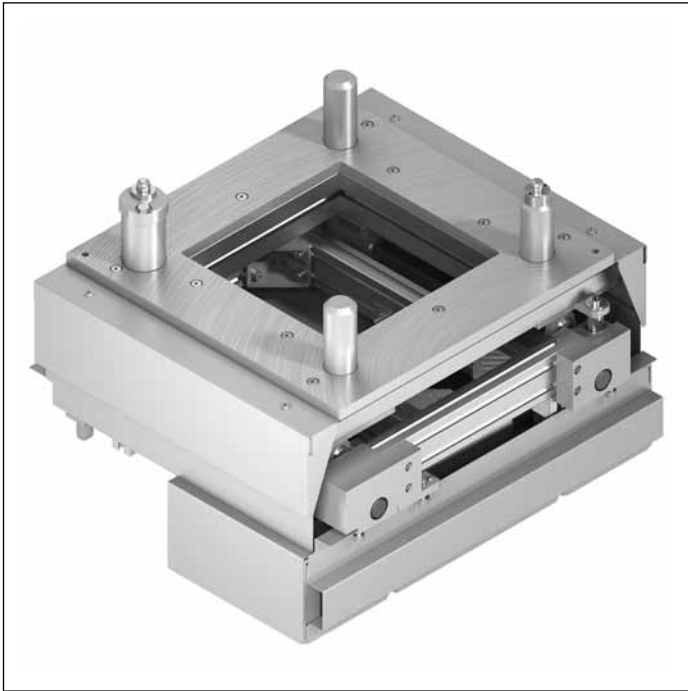
l_{PE} = positioning unit length

Circuit diagram

PE 5/LT positioning unit



PE 5/OC positioning unit



Use:

- ▶ Positioning a workpiece pallet in a manual or automated processing station in the longitudinal conveyor with high positioning accuracy requirements (± 0.3 mm)

Version:

- ▶ Can be used with all WT 5 workpiece pallets
- ▶ Installation from below
- ▶ Lift over transport level: 5 mm
- ▶ Positioning accuracy: ± 0.3 mm
- ▶ Permissible vertical process force with center load: up to 4,000 N¹⁾
- ▶ Suitable for ST 5/OC
- ▶ Compressed air connection 5 ... 6 bar
- ▶ Pneumatic push-in fitting: 6 mm

¹⁾ Permissible vertical process force if assembled in the section. Higher process forces of up to 15,000 N possible with direct support (on request).

Scope of delivery:

- ▶ Incl. fastening material for mounting the PE 5/OC in ST 5/OC conveyor sections

Required accessories:

- ▶ VE 5/OCD-1000 stop gate, P. 9-12, VE 5/OCD-300 stop gate, P. 9-6, VE 5/OCD-301 stop gate, P. 9-9, or VE 5/OC-200 stop gate, P. 9-3
- ▶ SH 2/U-H 3 842 537 289 switch bracket, see page. 9-18
- ▶ SH 2/U-H 3 842 545 132 assembly kit, see page 9-20
- ▶ Protective sleeves and protective cover, see pages 8-32

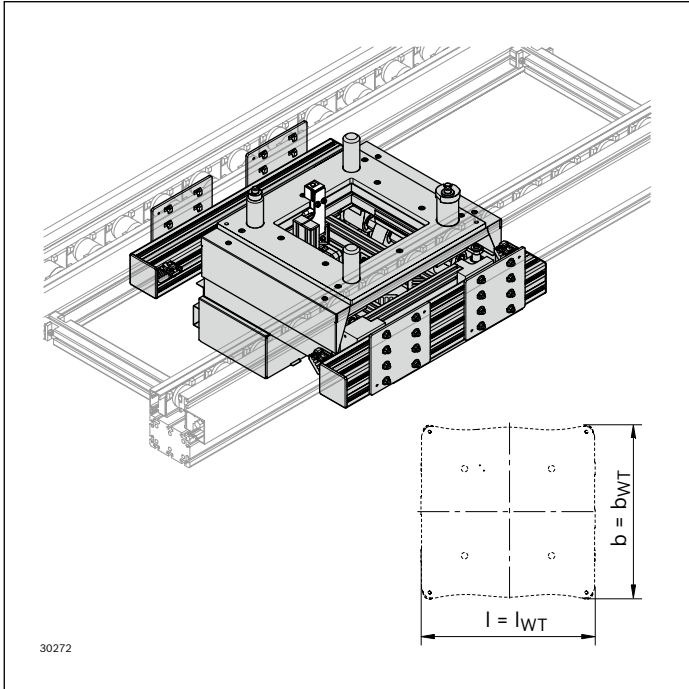
Condition on delivery:

- ▶ Fully assembled

Recommended accessories:

- ▶ Cover for the lateral guide, see page 8-31
- ▶ Protective cover, see page 8-32

Ordering information



PE 5/OC positioning unit

b (mm)	l_{WT} (mm)	SC	Material number
455	455	1; 2	3 842 998 178
455	650	1; 2	b = ... mm
650	650	1; 2	l _{WT} = ... mm
650	845	1; 2	SC = ...
845	845	1; 2	
845	1,040	1; 2	

SC = Housing element

1: without protective casing

2: with protective casing

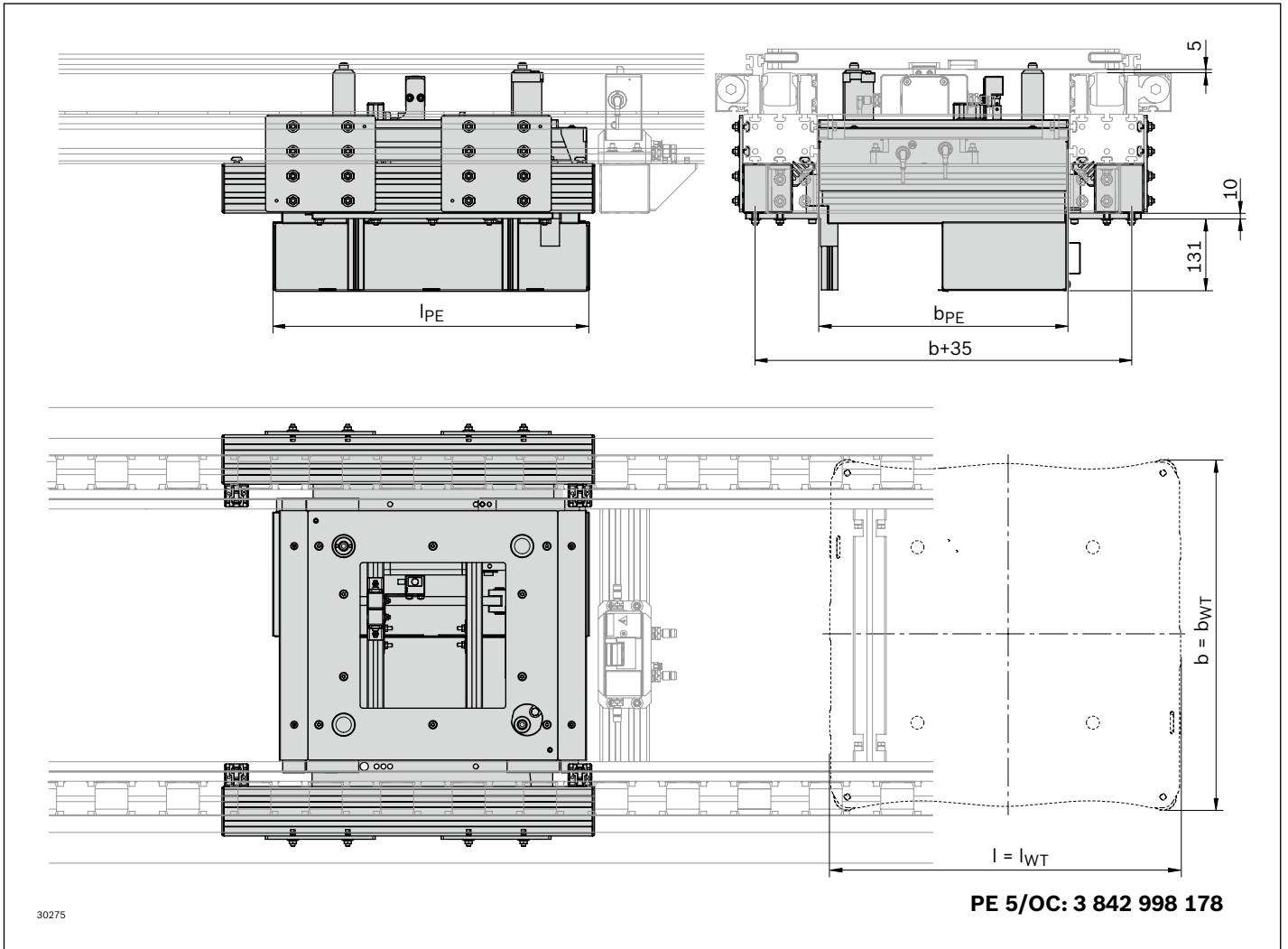
b = Track width of the positioning unit in the direction of transport

l_{WT} = workpiece pallet length

PE 5/OC (top/bottom) positioning unit position inquiry option on request

Description of further parameters, see page 0-3

Dimensions
PE 5/OC positioning unit



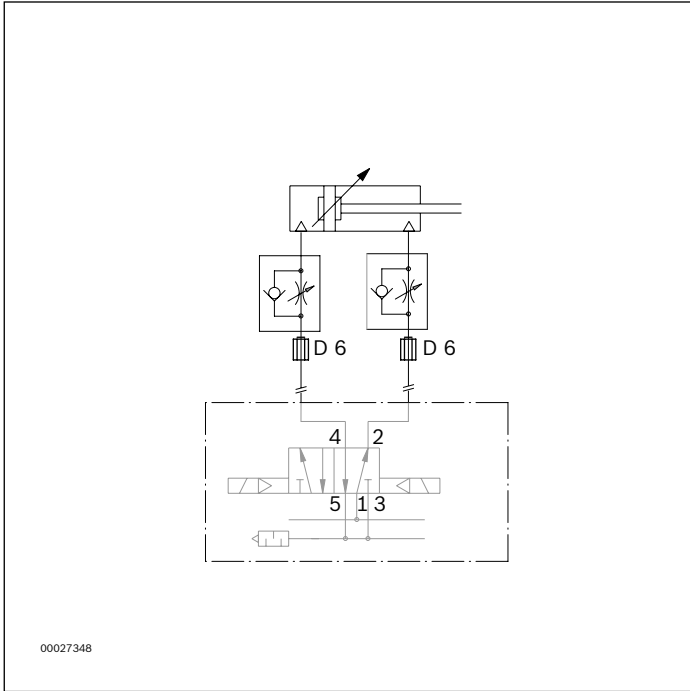
8

b (mm)	l_{WT} (mm)	b_{PE} (mm)	l_{PE} (mm)
455	455; 650	259	471; 576
650	650	454	576
650	845	454	764
845	845	649	764
845	1,040	649	996

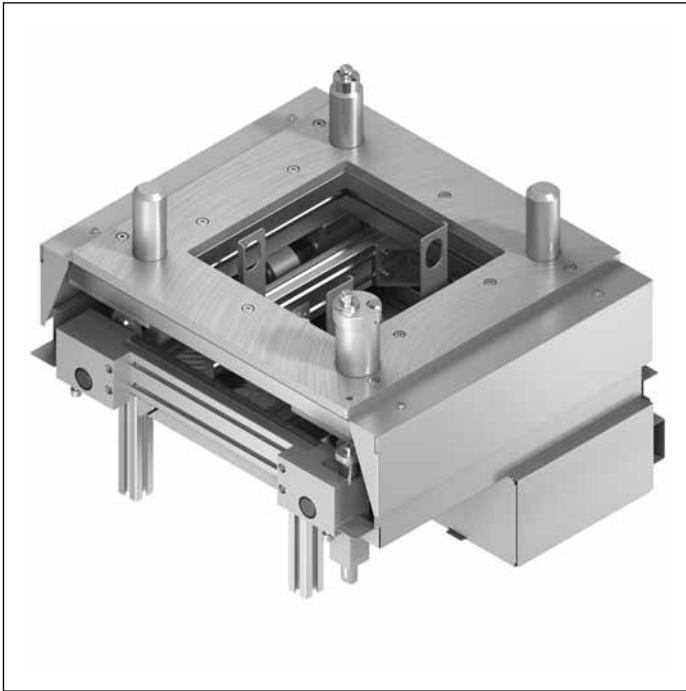
b_{WT} = width of workpiece pallet
l_{WT} = length of workpiece pallet
b_{PE} = positioning unit width
l_{PE} = positioning unit length

Circuit diagram

PE 5/OC positioning unit



PE 5/OC-T positioning unit



Use:

- ▶ Positioning a workpiece pallet in a manual or automated processing station in the transverse conveyor with high positioning accuracy requirements (± 0.3 mm)

Version:

- ▶ Can be used with all WT 5 workpiece pallets
- ▶ Installation from below
- ▶ Lift over transport level: 5 mm
- ▶ Positioning accuracy: ± 0.3 mm
- ▶ Permissible vertical process force with center load: up to 4,000 N²⁾
- ▶ Suitable for ST 5/OC
- ▶ Compressed air connection 5 ... 6 bar
- ▶ Pneumatic push-in fitting: 6 mm

²⁾ Permissible vertical process force if assembled in the section. Higher process forces of up to 15,000 N possible with direct support (on request).

Scope of delivery:

- ▶ Incl. fastening material for mounting the PE 5/OC-T in ST 5/OC conveyor sections, and stop kit for VE 5/OCD-300 and VE 5/OCD-1000

Required accessories:

- ▶ VE 5/OCD-1000 stop gate, P. 9-12, VE 5/OCD-300 stop gate, P. 9-6, VE 5/OCD-301 stop gate, P. 9-9, or VE 5/OC-200 stop gate, P. 9-3¹⁾
- ▶ Protective sleeves and protective cover, see page 8-32

¹⁾ A position inquiry for the workpiece pallet on the PE is only possible through use of a VE 5/OCD-300 or VE 5/OCD-1000 stop gate.

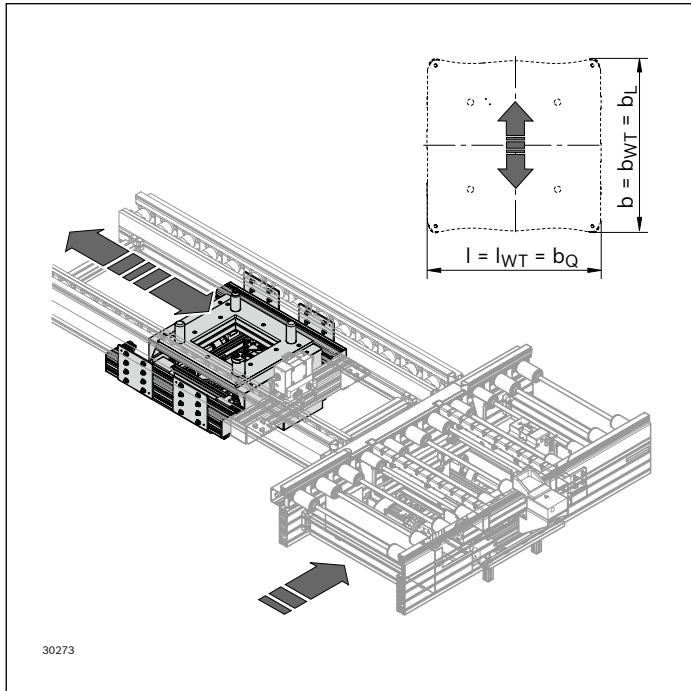
Condition on delivery:

- ▶ Fully assembled

Recommended accessories:

- ▶ Cover for the lateral guide, see page 8-31
- ▶ Protective cover, see page 8-32

Ordering information



PE 5/OC-T positioning unit

b_L (mm)	b_Q (mm)	SC	Material number
455	455	1; 2	3 842 998 804
455	650	1; 2	$b_L = \dots$ mm
650	650	1; 2	$b_Q = \dots$ mm
650	845	1; 2	SC = ... mm
845	845	1; 2	
845	1,040	1; 2	

SC = Housing element

1: without protective casing

2: with protective casing

b_L = track width in direction of transport (longitudinal conveyor)

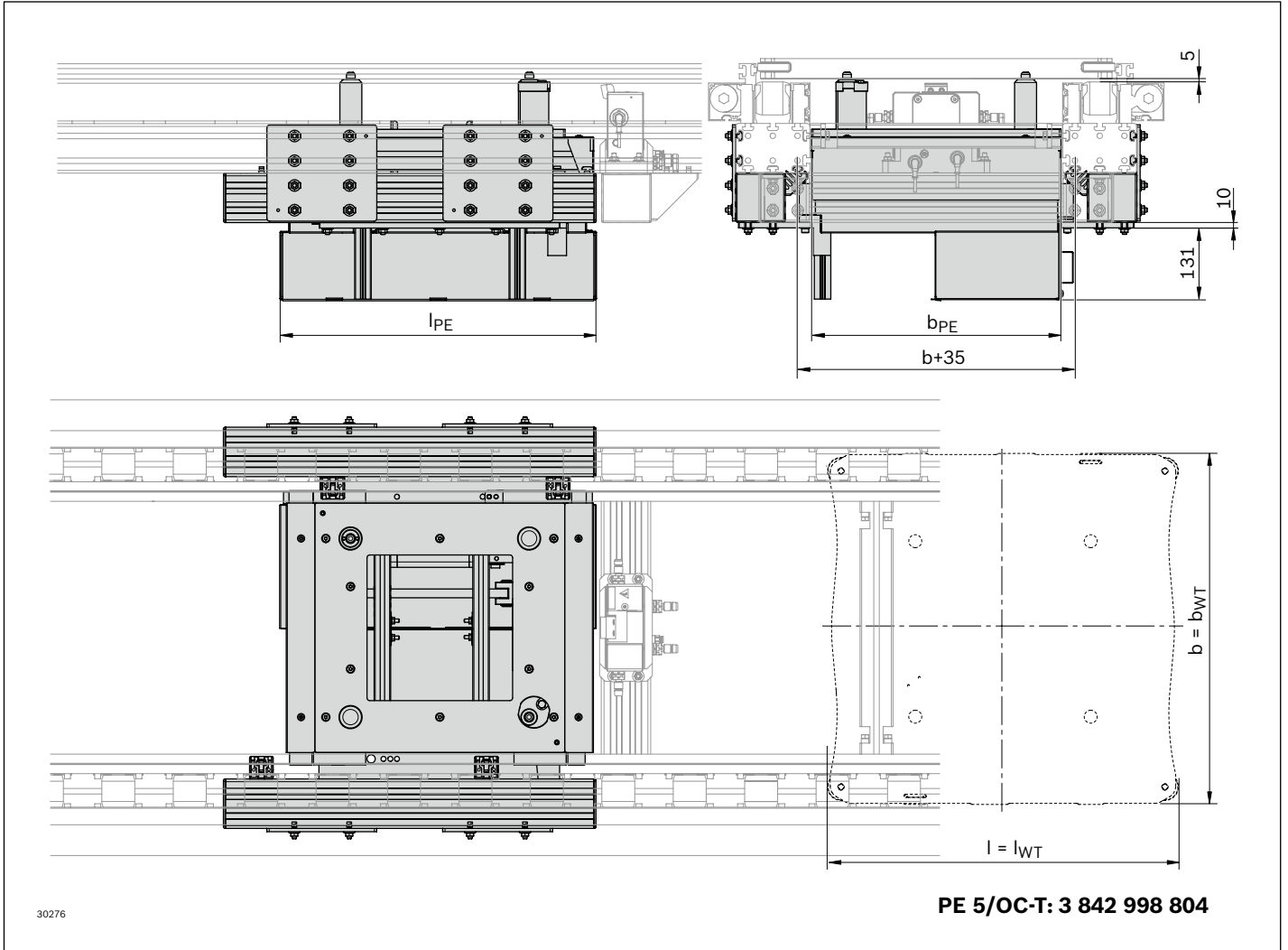
b_Q = track width in direction of transport (transverse conveyor)

PE 5/OC-T (top/bottom) positioning unit position inquiry option on request

Description of further parameters, see page 0-3

Dimensions

PE 5/OC-T positioning unit



30276

PE 5/OC-T: 3 842 998 804

b_L (mm)	b_O (mm)	b_{PE} (mm)	l_{PE} (mm)
455	455; 650	259; 454	471
650	650	454	576
650	845	649	576
845	845	649	764
845	1,040	844	764

b_L = track width in direction of transport (longitudinal conveyor)

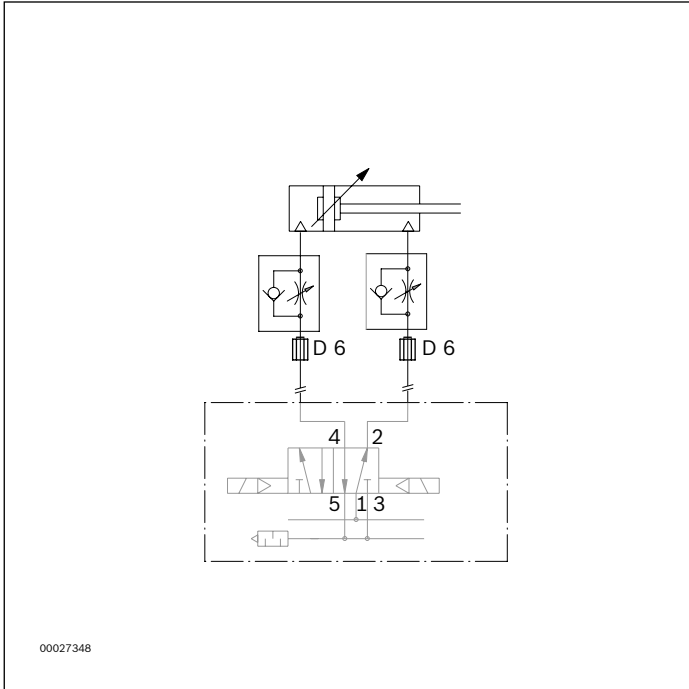
b_O = track width in direction of transport (transverse conveyor)

b_{PE} = positioning unit width

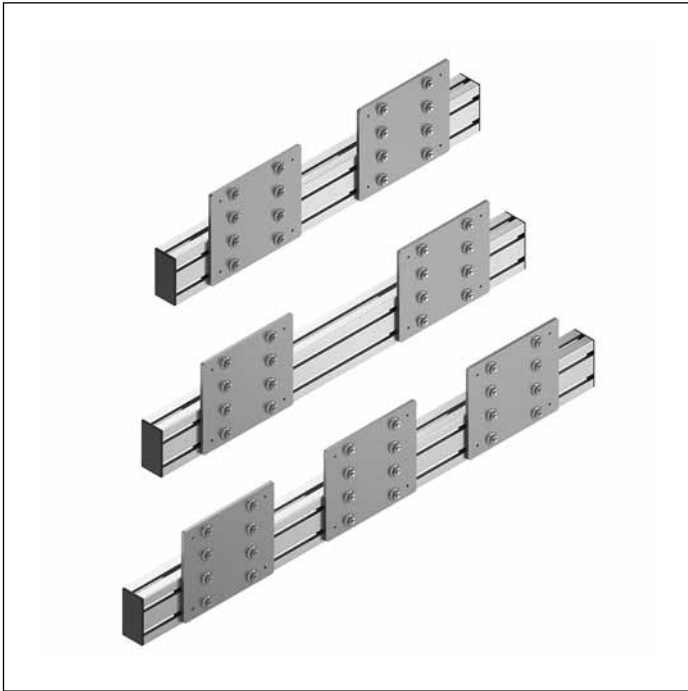
l_{PE} = positioning unit length

Circuit diagram

PE 5/OC-T positioning unit



Assembly kit for PE 5 and PE 5/T



Use:

- ▶ Mounting the PE 5 and PE 5/T positioning unit in the ST 5/H conveyor unit, see page 8-3

Version:

- ▶ Centering lugs for pre-positioning and fast assembly

Mounting location:

- ▶ on the section profile

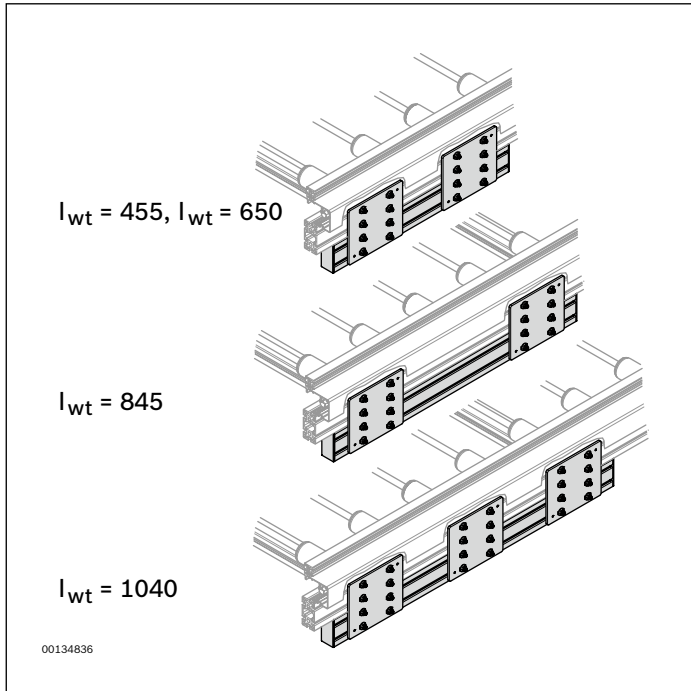
Scope of delivery:

- ▶ 2 profiles for height compensation
- ▶ Incl. cover caps and fastening material for assembly.

Condition on delivery:

- ▶ Not assembled

Ordering information

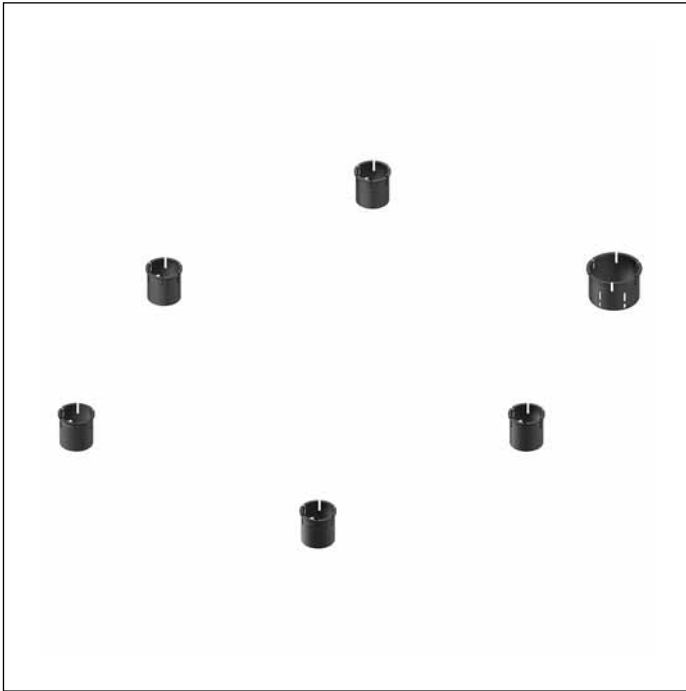


Assembly kit for PE 5 and PE 5/T

l_{wt}	Material number
455; 650; 845; 1,040	3 842 996 185
	$l_{wt} = \dots$ mm

l_{wt} = workpiece pallet length

Protective sleeves for PE 5, PE 5/T, PE 5/L and PE 5/L-T



Use:

- ▶ Trap guard to clip in the openings in the protective covers over the lifting plungers of the PE 5, PE 5/T, PE 5/L and PE 5/L-T. Refer to the assembly instructions for the installation dimensions.

Note:

Do not walk on the protective covers. Slots for add-on parts must be made by the customer; for details, see assembly instructions.

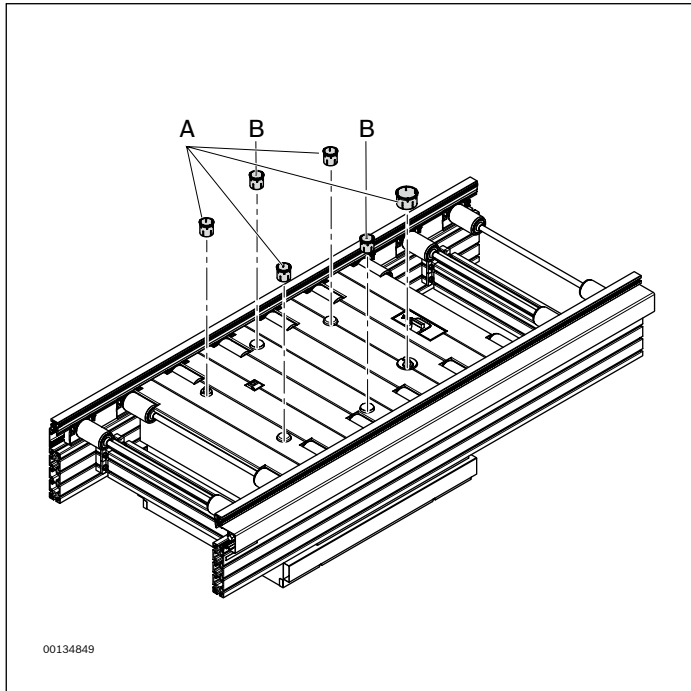
Required accessories:

- ▶ Protective covers for conveyor unit, see page 4-8

Material:

- ▶ PA

Ordering information



Required protective sleeve sets for PE 5, PE 5/T, PE 5/L and PE 5/L-T

b (mm)	l_{WT} (mm)	Material number A	Material number B for PE 5 and PE 5/L	Material number B for PE 5/T and PE 5/L-T
455	455	1x 3 842 545 965		
455	650	1x 3 842 545 965		
650	650	1x 3 842 545 965		
650	845	1x 3 842 545 965	+1x 3 842 545 966	+2x 3 842 545 966
845	845	1x 3 842 545 965	+3x 3 842 545 966	+3x 3 842 545 966
845	1,040	1x 3 842 545 965	+3x 3 842 545 966	+3x 3 842 545 966

b = track width of the positioning unit in the direction of transport

l_{WT} = length of workpiece pallet

Cover of lateral guide for positioning units



Use:

- ▶ The lateral guide covers are provided on both sides in the vicinity of the PE 5 (see page 8-3), PE 5/T (see page 8-7), PE 5/OC (see page 8-19) and PE 5/OC-T (see page 8-23) positioning unit to increase safety

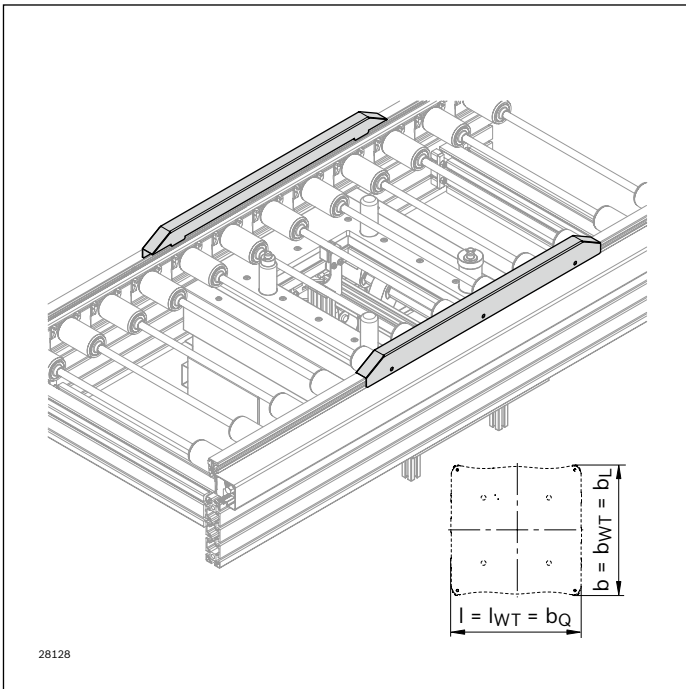
Note:

Do not walk on the protective covers.

Material:

- ▶ galvanized steel

Ordering information



28128

Covers of lateral guide for positioning units

PE 5, PE 5/OC	PE 5/T, PE 5/OC-T		Material number
b_0 (mm)	b_L (mm)		
455	455	1	3 842 552 662
650	650	1	3 842 552 663
845	845	1	3 842 552 664
1,040	1,040	1	3 842 552 665

b_0 = track width in direction of transport (transverse conveyor)
 b_L = track width in direction of transport (longitudinal conveyor)

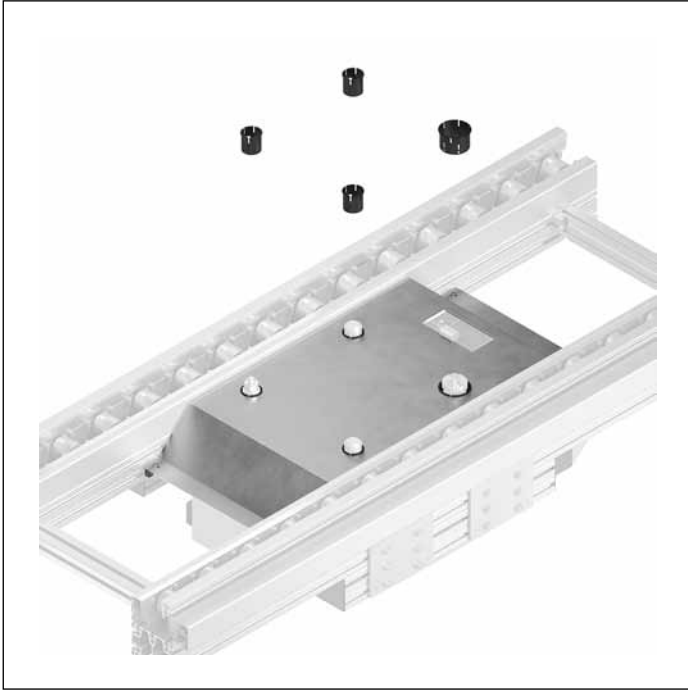
Required fastening materials:

T-bolt and flange nut

		Material number
C	100	3 842 345 081
D	100	3 842 528 718

Description of the T-bolt and flange nut, see page 7-10

Protective covers for PE 5/OC and PE 5/OC-T



Use:

- ▶ Safety guard above the lifting plungers for the PE 5/OC and PE 5/OC-T. Refer to the assembly instructions for the installation dimensions.

Note:

- Do not walk on the protective covers.

Scope of delivery:

- ▶ Incl. protective sleeves (**A** and **B**) and fastening material

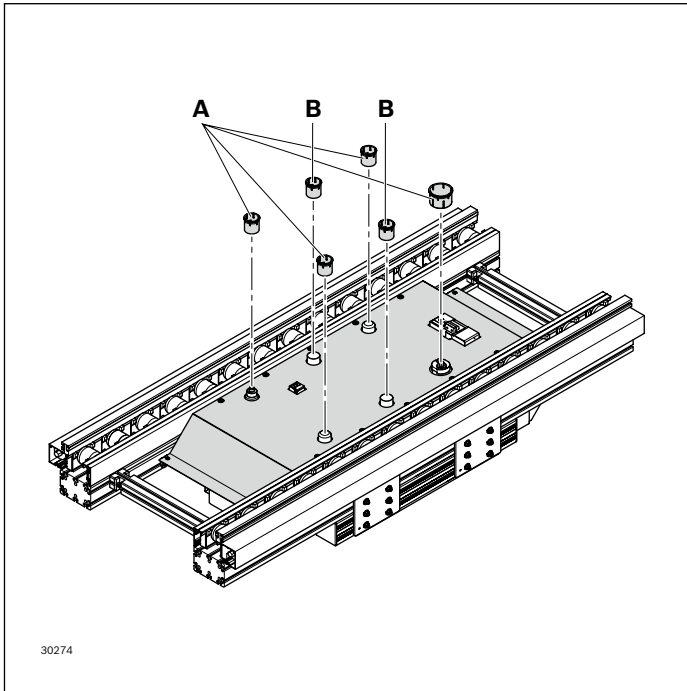
Condition on delivery:

- ▶ Not assembled

Material:

- ▶ Cover: aluminum
- ▶ Protective sleeves: PA

Ordering information



Necessary protective covers including protective sleeves (A and B) for PE 5/OC and PE 5/OC-T

b (mm)	l_{WT} (mm)	b_L (mm)	b_Q (mm)	PE 5/OC with VE 5/OC-200, VE 5/OCD-300, VE 5/OCD 301 or VE 5/OCD-1000	PE 5/OC-T with VE 5/OC-200, VE 5/OCD-300, VE 5/OCD 301 or VE 5/OCD-1000
455	455			3 842 554 557	
455	650			3 842 554 558	
650	650			3 842 554 559	
650	845			3 842 554 560	
845	845			3 842 554 561	
845	1,040			3 842 554 562	
		455	455		3 842 554 569
		455	650		3 842 554 570
		650	650		3 842 554 571
		650	845		3 842 554 572
		845	845		3 842 554 573
		845	1,040		3 842 554 574

b = track width of the positioning unit in the direction of transport

l_{WT} = workpiece pallet length

b_L = track width in direction of transport (longitudinal conveyor)

b_Q = track width in direction of transport (transverse conveyor)