

## Flat top chain conveyor medium



The flat top chain conveys primarily medium and large-sized workpiece pallets in environments with low to moderate production emissions.

The arcing capacity of the plastic flat top chain permits continuous drive combinations with curve arcs (see p. 4-32).

PA wear pads on the workpiece pallets are recommended in the combination with the plastic flat top chain. This permits in the standard design with plastic glide profiles in the section profile surface loads of up to 1 kg/cm, whereas the optionally available version with steel glide profiles can tolerate surface loads of up to 1.5 kg/cm.

A particularly robust combination can be created from the HD profiles in combination with steel glide profiles and steel guide profile.

Reversible operation is not permitted with the flat top chain conveyor medium.

If flat top chains are used, the LU2 automatic lubrication unit is highly recommended.

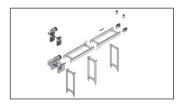


Single-track CS/C section, BS 2/C belt sections



3-52





Parts for AS 2/..., UM 2/..., ST 2... conveyor units



3-66



Connection kits 3-236

## Single-track CS/C section





- Motor connection: optionally with cable/plug or terminal box
- Motor mounting right or left
- Conveyor medium: plastic flat top chain (with KA = A suitable for use in an EPA)
- Special models on request
- Reversible operation is possible for I ≤ 2000 mm and environments without small parts

The single-track CS/C section is a conveyor section that is ready for operation with own drive for the transportation of small parts for mounting and assembly workstations.

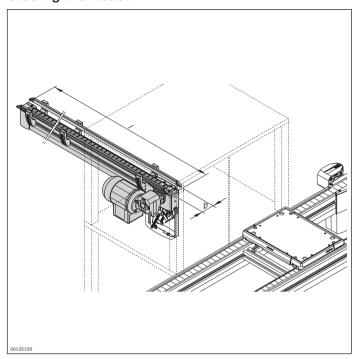
#### Accessories

#### **Recommended accessories**

- ► Connection kits, see page 3-236
- SZ 2 leg sets, see page 6-2
- LU 2 automatic lubrication unit, see p. 3-84

## **Delivery notes**

#### **Condition on delivery**

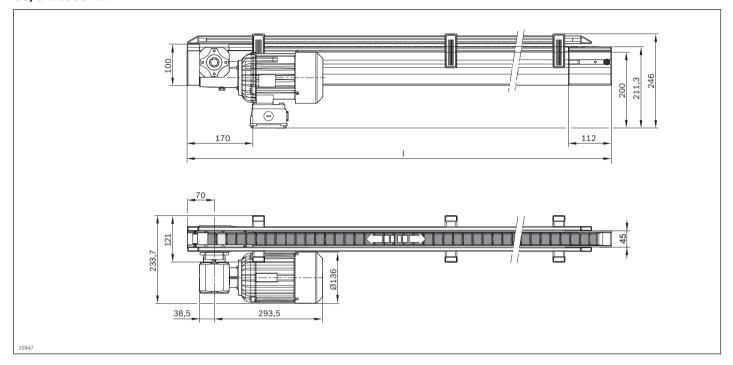


Material number		3842998277
b (mm)	Track width in direction of transport	42; 52; 62; 72
l (mm)	Length	350 6000
v <sub>N</sub> (m/min)	Nominal speed	0; 6; 9; 12; 15; 18
U (V)	Voltage	See motor data, p. 11-24ff
f (Hz)	Frequency	See motor data, p. 11-24ff
AT	Motor connection S = cable/plug K = terminal box	S; K
MA	Motor mounting R = right L = left	R; L
KA	Chain version Chain in standard version (KA = N) Chain suitable for use in an EPA (KA = A)	N; A

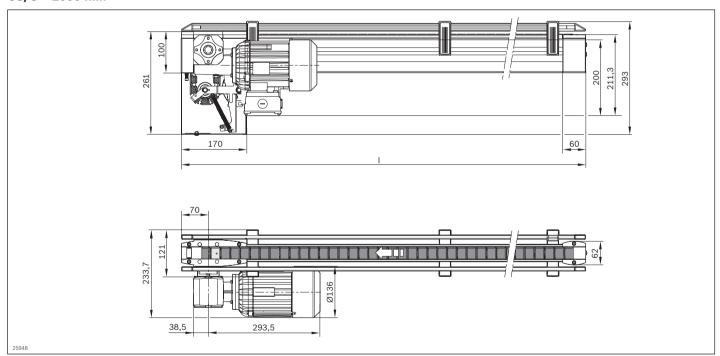
Material number				3842998277
Load				
Max. section load in			at I = 2001 6000 mm	at I = 350 2000 mm
accumulation operation		kg	100	70
Features		,		
ESD				yes, with KA = A*
Max. operating temperature	Т	°C		+40
Dimensions				
Length	I	mm		350 6000

<sup>\*</sup> Chain suitable for use in an EPA (KA = A)

## CS/C ≤ 2000 mm



## CS/C > 2000 mm



## BS 2/C-100 belt section





- ► Functional operation conveyor complete with drive
- ► Longitudinal conveying of the workpiece pallet on conveyor sections of up to 6000 mm
- ► Transverse conveyor between parallel conveyor sections
- ► Conveyor medium: plastic flat top chain (with KA = A suitable for use in an EPA)
- ► Right, left or central motor mounting (central from track width of 240 mm)
- ► Motor connection: optionally with cable/plug or terminal
- Special models on request
- ► Reversible operation not permitted
- Use with medium accumulation loads
- ► The LU 2 automatic lubrication unit is highly recommended

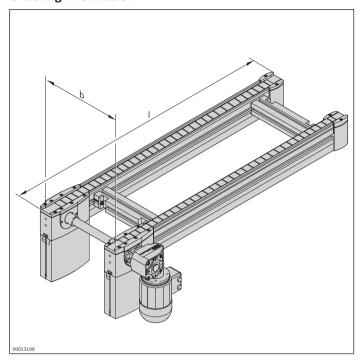
The belt section is a ready for operation conveyor section with own drive for the transportation of workpiece pallets in the longitudinal direction or for the transverse conveying of the workpiece pallet between parallel conveyor sections in connection with two HQ 2 lift transverse units.

#### **Accessories**

## **Recommended accessories**

- Connection kits, see page 3-236
- SZ 2 leg sets, see page 6-2
- ▶ LU 2 automatic lubrication unit, see p. 3-84

## **Delivery notes Condition on delivery**



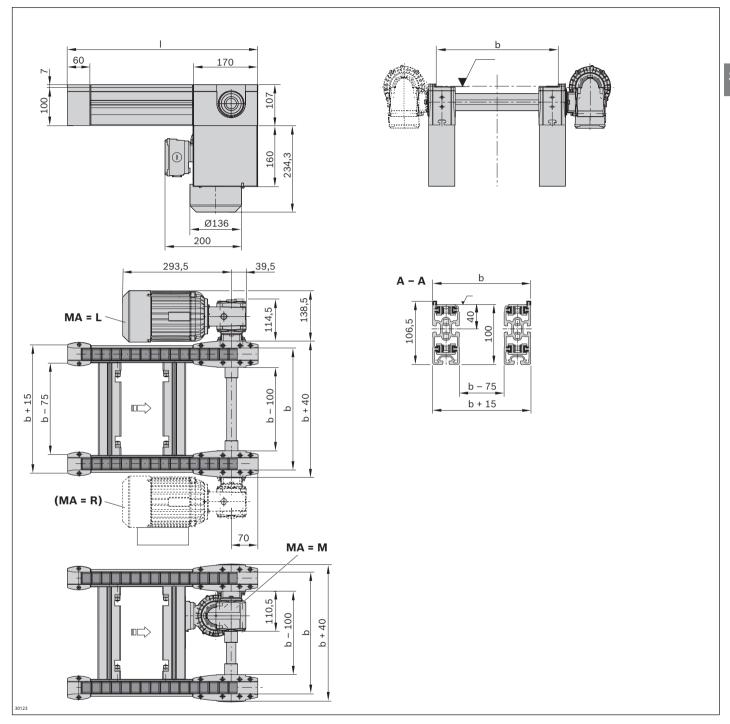
Material number		3842999917
b (mm)	Track width in direction of transport	160; 240; 320; 400; 480; 640; 800; 1040; 1200
		160 1200¹
l (mm)	Length	300 6000
$v_N$ (m/min)	Nominal speed	0 <sup>2</sup> ; 6; 9; 12; 15; 18
U (V)	Voltage	See motor data, p. 11-24ff
f (Hz)	Frequency	See motor data, p. 11-24ff
AT	Motor connection S = cable/plug K = terminal box	S; K
MA	Motor mounting R = right L = left M = center	R; L; M <sup>3</sup>
KA	Chain version Chain in standard version (KA = N) Chain suitable for use in an EPA (KA = A)	N; A

<sup>1)</sup> Individual width variants available

Material number			3842999917
Load			
Max. section load in accumulation	on	kg	100
Features			
ESD			yes, with KA = A*
Material specification			Section profile: Aluminum, natural; anodized Guide profile: Polyamide Glide profile: Polyamide
Max. operating temperature	T	°C	+40
Dimensions			
Length	1	mm	300 6000

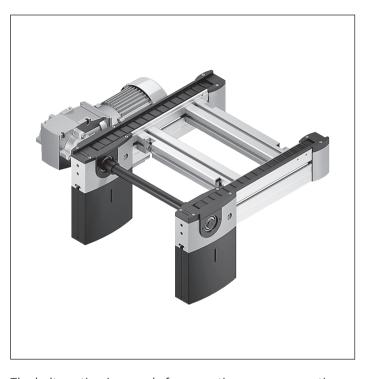
<sup>\*)</sup> Chain suitable for use in an EPA (KA = A)

 $<sup>^{2)}</sup>$   $v_N = 0$ : without motor or gear  $^{3)}$  MA = M only for b  $\geq$  240 mm



## BS 2/C-250 belt section





- Functional operation conveyor complete with drive
- Longitudinal conveying of the workpiece pallet on conveyor sections of up to 6000 mm
- Transverse conveying between parallel conveyor sections in conjunction with lift transverse units
- Conveyor medium: plastic flat top chain (with KA = A suitable for use in an EPA)
- Motor mounting right or left
- Motor connection: optionally with cable/plug or terminal box
- Special models on request
- Reversible operation not permitted
- Use with medium accumulation loads
- The LU 2 automatic lubrication unit is highly recommended

The belt section is a ready for operation conveyor section with own drive for the transportation of workpiece pallets in the longitudinal direction or for the transverse conveying

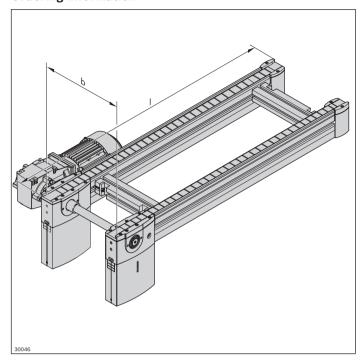
of the workpiece pallet between parallel conveyor sections in connection with two HQ 2 lift transverse units.

#### Accessories

#### **Recommended accessories**

- Connection kits, see page 3-236
- SZ 2 leg sets, see page 6-2
- LU 2 automatic lubrication unit, see p. 3-84

## **Delivery notes Condition on delivery**

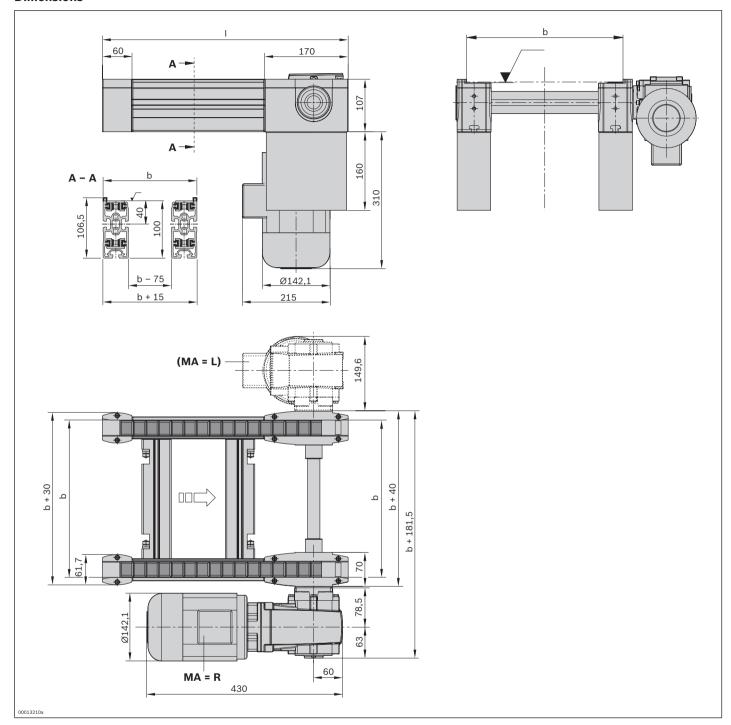


Material number		3842999985
b (mm)	Track width in direction of transport	160; 240; 320; 400; 480; 640; 800; 1040; 1200
l (mm)	Length	300 6000
v <sub>N</sub> (m/min)	Nominal speed	0¹; 6; 9; 12; 15; 18
U (V)	Voltage	See motor data, p. 11-24ff
f (Hz)	Frequency	See motor data, p. 11-24ff
AT	Motor connection S = cable/plug K = terminal box	S; K
МА	Motor mounting <sup>2</sup> R = right L = left	R; L
КА	Chain version Chain in standard version (KA = N) Chain suitable for use in an EPA (KA = A)	N; A

Material number		3842999985	
Load			
Max. section load in accumulati operation	ion	kg	250
Features	,		
ESD			yes, with KA = A*
Material specification			Section profile: Aluminum, natural; anodized Guide profile: Polyamide Glide profile: Polyamide
Max. operating temperature	T	°C	+40
Dimensions			
Length	I	mm	300 6000

Chain suitable for use in an EPA (KA = A)

 $<sup>^{1)}</sup>$   $v_N$  = 0: without motor or gear  $^{2)}$  Geometry does not permit MA = M



## BS 2/C-H belt section





The belt section is a ready for operation conveyor section with own drive for the transportation of workpiece pallets in the longitudinal direction or for the transverse conveying of the workpiece pallet between parallel conveyor sections in connection with two HQ 2 lift transverse units.

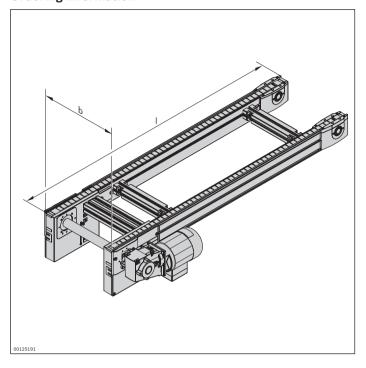
#### **Accessories**

#### **Recommended accessories**

- Connection kits, see page 3-236
- SZ 2/...-H leg sets, see p. 6-2
- ▶ LU 2 automatic lubrication unit, see p. 3-84

## **Delivery notes Condition on delivery**

- Functional operation conveyor complete with drive
- Sturdy design for especially heavy-duty systems
- ► Longitudinal conveying of the workpiece pallet on conveyor sections of 6000 mm
- ► Transverse conveying between parallel conveyor sections in conjunction with lift transverse units
- ► Conveyor medium: plastic flat top chain (with KA = A suitable for use in an EPA)
- ▶ Motor mounting right, left or central
- ▶ Motor connection: optionally with cable/plug or terminal box
- Special models on request
- ► Stainless steel workpiece pallet lateral guide
- ► Reversible operation not permitted
- ▶ Profile width: 50 mm
- ▶ Use with high accumulation loads
- ► The LU 2 automatic lubrication unit is highly recommended

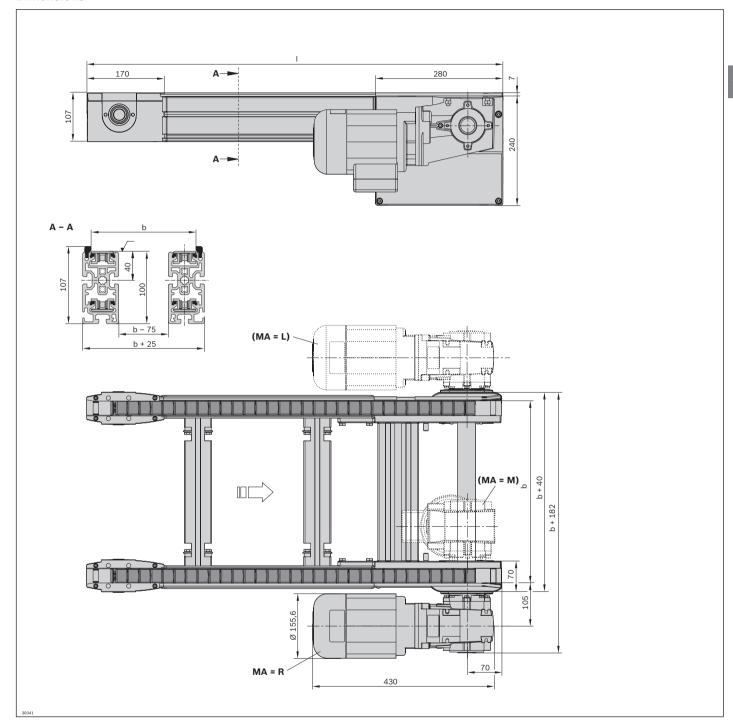


Matarial	Matarial number 29/2009220				
Material number		3842998239			
b (mm)	Track width in direction of transport	400 1200			
l (mm)	Length	650 6000			
$v_N$ (m/min)	Nominal speed	0 <sup>1)</sup> ; 6; 9; 12; 15; 18 <sup>2)</sup>			
U (V)	Voltage	See motor data, p. 11-24ff			
f (Hz)	Frequency	See motor data, p. 11-24ff			
AT	Motor connection S = cable/plug K = terminal box	S; K			
MA	Motor mounting R = right L = left M = center	R; L; M			
KA	Chain version Chain in standard version (KA = N) Chain suitable for use in an EPA (KA = A)	N; A			
GP	Glide profile Corrosion-resistant steel (GP = 1) Plastic (GP = 0)	0; 1			

 $<sup>^{1)}</sup>$   $v_N$  = 0: without motor or gear  $^{2)}$  Not possible if f = 60 Hz

Material number		3842998239
Load		
Max. section load in accumulation operation	kg	400
Features		
ESD		yes, with KA = A*
Material specification		Section profile: Aluminum, natural; anodized Lateral guide: Stainless steel glide profile: Steel/plastic; corrosion- resistant
Dimensions		
Length	l mm	650 6000

 $<sup>^{*}</sup>$  Chain suitable for use in an EPA (KA = A)



## BS 2/C+R connection belt





► Conveyor medium: Toothed belt (suitable for use in an EPA)

The head-to-head connection of the drive and return heads results in short, non-driven sections. The connection belt is used to bridge these > 180 mm conveyor trenches by using short  $I_{WT}$  < 320 mm workpiece pallets.

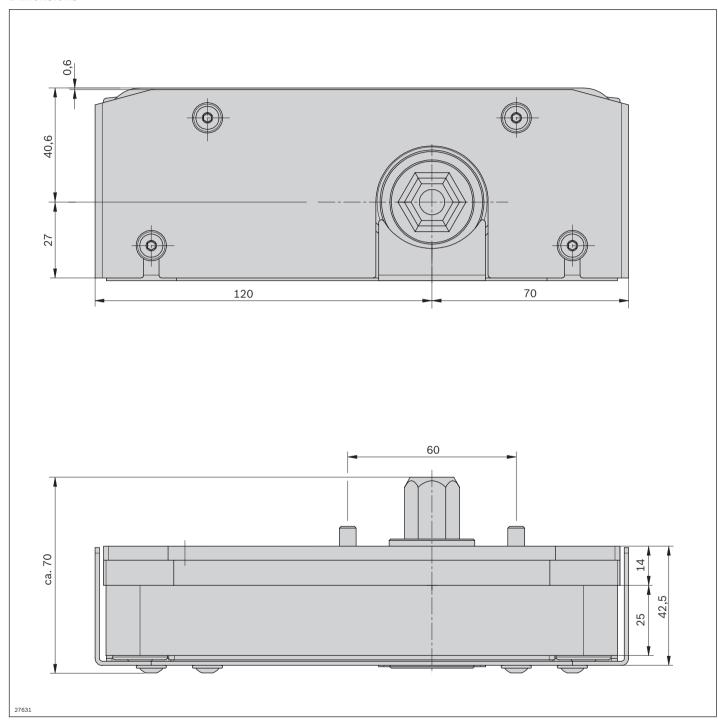
## **Delivery notes Condition on delivery**

▶ Fully assembled

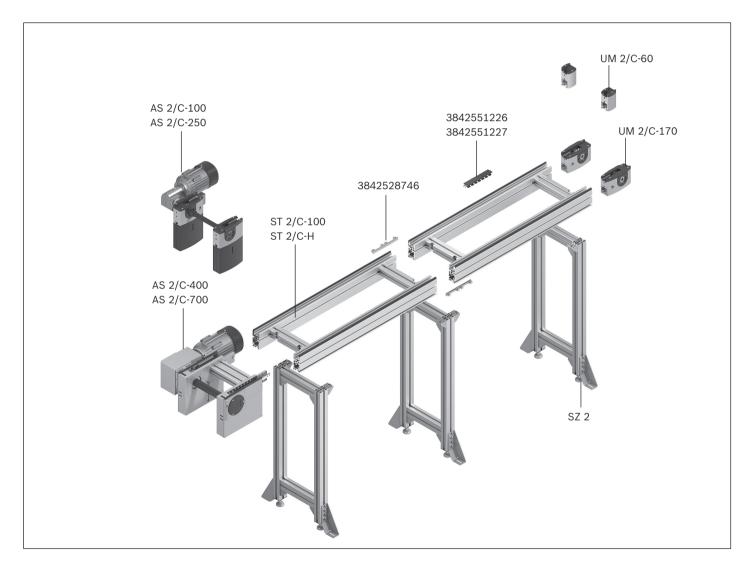
#### **Ordering information**

Product designation	Material number
Connection belt, left	3842528480
Connection belt, right	3842539096

Material number	3842528480	3842539096
Features		
ESD	Yes	Yes



# Conveyor units Parts for flat top chain conveyor medium

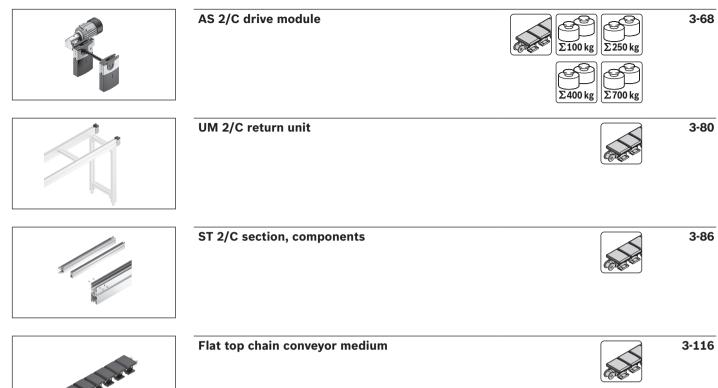


A conveyor unit is a complete unit used for linear conveying of workpiece pallets. It consists of:

- AS 2/C drive module, see p. 3-68
- UM 2/C return unit, see p. 3-80
- ST 2/... section, see p. 3-86
- SZ 2/... leg sets, see p. 6-2
- QV 2 cross connector, see p. 3-108
- Flat top chain, see p. 3-116

The UM 2/C and AS 2/C-... may be set up right next to each other, which allows for conveyor unit combinations.

Drive modules for loads up to m<sub>g</sub> = 100 kg; 250 kg; 400 kg; or up to  $m_G = 700 \text{ kg per conveyor unit.}$ 



## AS 2/C-100 drive module





- ▶ Drive for conveyor unit self-assembly
- ► Conveyor medium: flat top chain (with KA = A suitable for use in an EPA)
- ▶ Right, left or central motor mounting (central from track width of 240 mm)
- ► Motor connection: optionally with cable/plug or terminal box
- ► Special models on request
- ► Reversible operation not permitted
- Use with medium accumulation loads
- ▶ The LU 2 automatic lubrication unit is highly recommended

The AS 2/C-... drive module drives the flat top chain conveyor medium in self-built conveyor section elements with section, return unit and flat top chain.

#### Accessories

## **Recommended accessories**

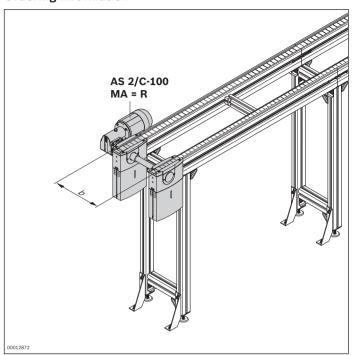
- ► Connection kits, see page 3-236
- LU 2 automatic lubrication unit, see p. 3-84

#### **Delivery notes**

#### Scope of delivery

▶ Includes fastening material to mount on the ST 2 conveyor section, as well as to mount on an adjacent return unit.

### **Condition on delivery**



Material number		3842998053	
b (mm)	Track width in direction of transport	160; 240; 320; 400; 480; 640; 800; 1040; 1200	
		160 1200¹	
v <sub>N</sub> (m/min)	Nominal speed	0²; 6; 9; 12; 15; 18	
U (V)	Voltage	See motor data, p. 11-24ff	
f (Hz)	Frequency	See motor data, p. 11-24ff	
AT	Motor connection S = cable/plug K = terminal box	S; K	
MA	Motor mounting R = right L = left M = center	R; L; M <sup>3)</sup>	

<sup>1)</sup> Individual width variants available

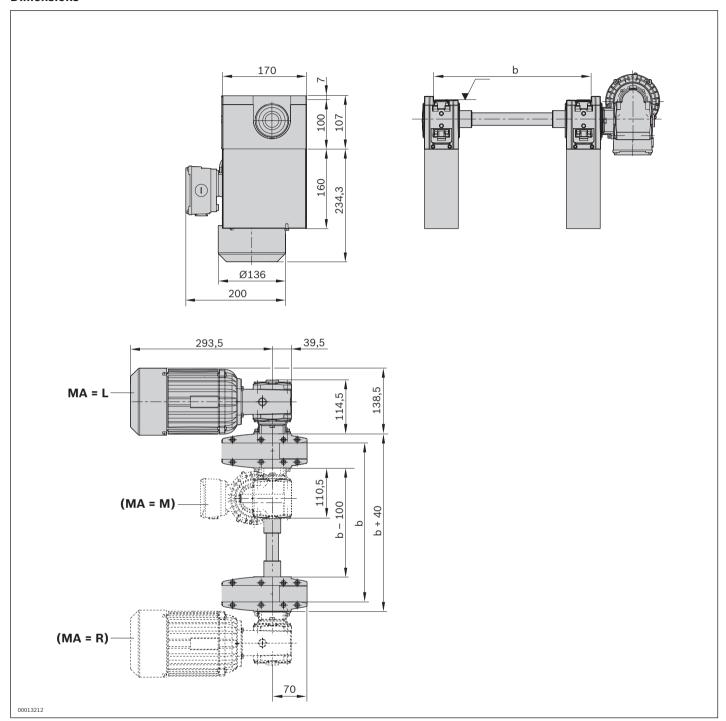
Material number		3842998053
Load		
Max. section load in accumulation operation	kg	100
Features		
ESD		yes, with KA = A*
Additional information		
Required conveyor media length I <sub>AS</sub>	mm	475

<sup>\*</sup> Chain suitable for use in an EPA (KA = A)

 $<sup>^{2)}</sup>$   $v_N$  = 0: without motor or gear

<sup>&</sup>lt;sup>3)</sup> MA = M only when  $b \ge 240 \text{ mm}$ 

 $<sup>\</sup>overline{\phantom{a}}^*$  Formula for calculating the conveyor medium, see p. 3-117



## AS 2/C-250 drive module





- ▶ Drive for conveyor unit self-assembly
- ► Conveyor medium: flat top chain (with KA = A suitable for use in an EPA)
- ► Motor mounting right or left
- ► Motor connection: optionally with cable/plug or terminal box
- ► Special models on request
- ► Reversible operation not permitted
- ▶ Use with medium accumulation loads
- ► The LU 2 automatic lubrication unit is highly recommended

The AS 2/C-... drive module drives the flat top chain conveyor medium in self-built conveyor section elements

with section, return unit and flat top chain.

#### Accessories

## **Recommended accessories**

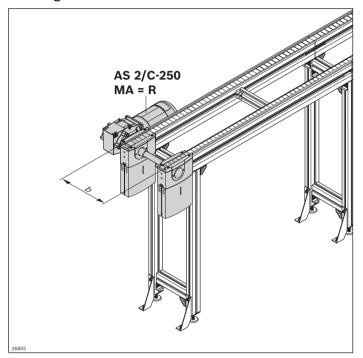
- ► Connection kits, see page 3-236
- LU 2 automatic lubrication unit, see p. 3-84

#### **Delivery notes**

#### Scope of delivery

▶ Includes fastening material to mount on the ST 2 conveyor section, as well as to mount on an adjacent return unit.

#### **Condition on delivery**



Material nur	nber	3842998087	
b (mm)	Track width in direction of transport	160; 240; 320; 400; 480; 640; 800; 1040; 1200	
		160 1200¹	
$v_N$ (m/min)	Nominal speed	0 <sup>2</sup> ; 6; 9; 12; 15; 18	
U (V)	Voltage	See motor data, p. 11-24ff	
f (Hz)	Frequency	See motor data, p. 11-24ff	
AT	Motor connection S = cable/plug K = terminal box	S; K	
MA	Motor mounting R = right L = left	R; L	

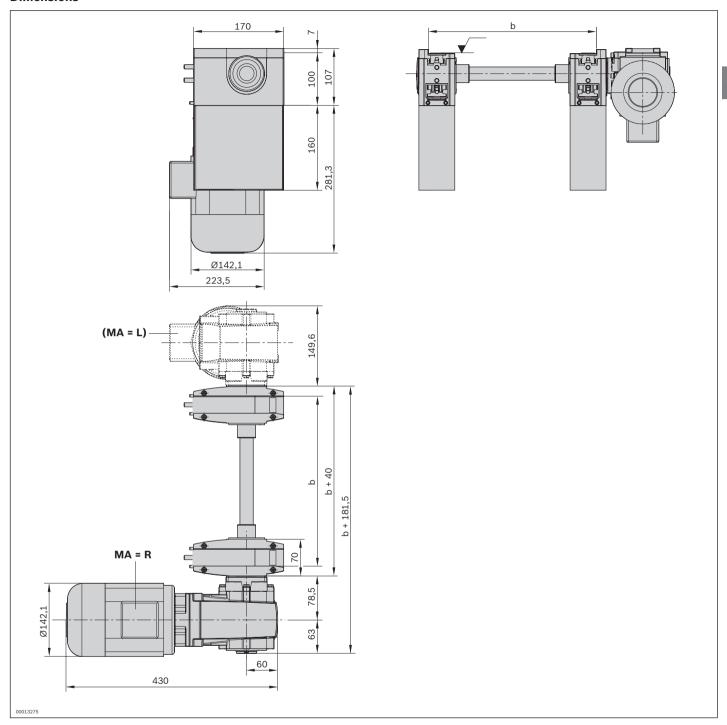
<sup>1)</sup> Individual width variants available

		3842998087
	kg	250
		yes, with KA = A*
I <sub>AS</sub>	mm	475
	I <sub>AS</sub>	

<sup>\*</sup> Chain suitable for use in an EPA (KA = A)

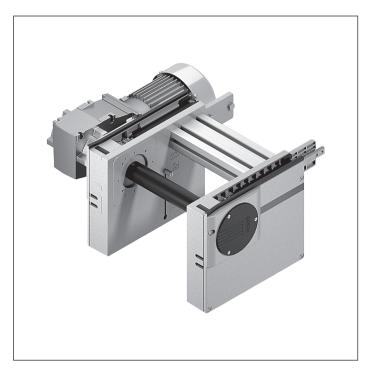
 $<sup>^{2)}</sup>$   $v_N$  = 0: without motor or gear

 $<sup>^{**}</sup>$  Formula for calculating the conveyor medium, see p. 3-117



# AS 2/C-400 drive module





- ▶ Drive for conveyor unit self-assembly
- ► Conveyor medium: flat top chain (with KA = A suitable for use in an EPA)
- ► Right, left or central motor mounting (central from track width of 240 mm)
- Motor connection: optionally with cable/plug or terminal box
- ► Special models on request
- ► Reversible operation not permitted
- ▶ Use with medium accumulation loads
- The LU 2 automatic lubrication unit is highly recommended

The AS 2/C-... drive module drives the flat top chain conveyor medium in self-built conveyor section elements

with section, return unit and flat top chain.

#### Accessories

## **Recommended accessories**

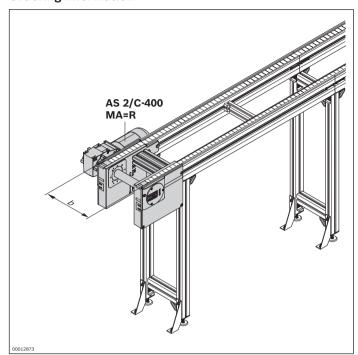
- ► Connection kits, see page 3-236
- ▶ LU 2 automatic lubrication unit, see p. 3-84

#### **Delivery notes**

#### Scope of delivery

► Incl. all fastening material to mount on ST 2 conveyor section

### **Condition on delivery**



Material nun	nber	3842998038
b (mm)	Track width in direction of transport	160; 240; 320; 400; 480; 640; 800; 1040; 1200
		160 1200¹
v <sub>N</sub> (m/min)	Nominal speed	0 <sup>2</sup> ; 6; 9; 12; 15; 18 <sup>3</sup>
U (V)	Voltage	See motor data, p. 11-24ff
f (Hz)	Frequency	See motor data, p. 11-24ff
AT	Motor connection S = cable/plug K = terminal box	S; K
MA	Motor mounting R = right L = left M = center	R; L; M <sup>4</sup>

<sup>1)</sup> Individual width variants available

Material number			3842998038
Load			
Max. section load in accumulation	on	kg	400
Features			
ESD			yes, with KA = A*
Additional information			
Required conveyor medium length**	I <sub>AS</sub>	mm	625

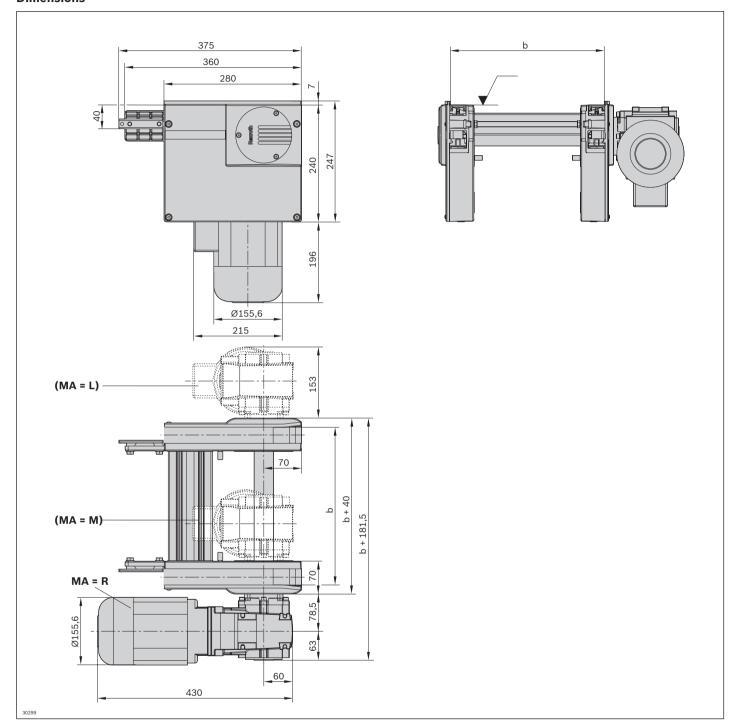
<sup>\*</sup> Chain suitable for use in an EPA (KA = A)

 $<sup>^{2)}</sup>$   $v_N$  = 0: without motor or gear

<sup>3)</sup> Not possible if f = 60 Hz

<sup>&</sup>lt;sup>4)</sup> MA = M only when  $b \ge 240 \text{ mm}$ 

 $<sup>\</sup>overline{\phantom{a}}^*$  Formula for calculating the conveyor medium, see p. 3-117



## AS 2/C-700 drive module





- ▶ Drive for conveyor unit self-assembly
- ► Conveyor medium: flat top chain (with KA = A suitable for use in an EPA)
- ▶ Right, left or central motor mounting (central from track width of 240 mm)
- ▶ Motor connection: optionally with cable/plug or terminal box
- ► Special models on request
- ► Reversible operation not permitted
- ► Use with high accumulation loads
- ► The LU 2 automatic lubrication unit is highly recommended

The AS 2/C-... drive module drives the flat top chain conveyor medium in self-built conveyor section elements

with section, return unit and flat top chain.

#### Accessories

## **Recommended accessories**

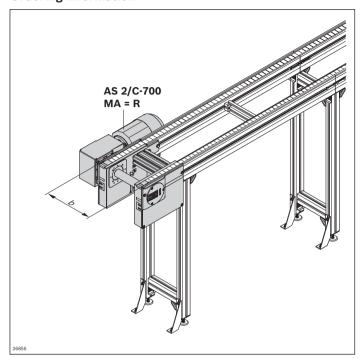
- ► Connection kits, see page 3-236
- LU 2 automatic lubrication unit, see p. 3-84

#### **Delivery notes**

#### Scope of delivery

▶ Incl. all fastening material to mount on ST 2 conveyor section

#### **Condition on delivery**



Material nur	nber	3842998039	
b (mm)	Track width in direction of transport	160; 240; 320; 400; 480; 640; 800; 1040; 1200	
		160 1200¹	
$v_N$ (m/min)	Nominal speed	0 <sup>2</sup> ; 6; 9; 12; 15; 18 <sup>3</sup>	
U (V)	Voltage	See motor data, p. 11-24ff	
f (Hz)	Frequency	See motor data, p. 11-24ff	
AT	Motor connection S = cable/plug K = terminal box	S; K	
MA	Motor mounting R = right L = left M = center	R; L; M <sup>4</sup>	

<sup>1)</sup> Individual width variants available

Material number			3842998039
Load			
Max. section load in accumulation	on	kg	700
Features			
ESD			yes, with KA = A*
Additional information			
Required conveyor medium length**	I <sub>AS</sub>	mm	625

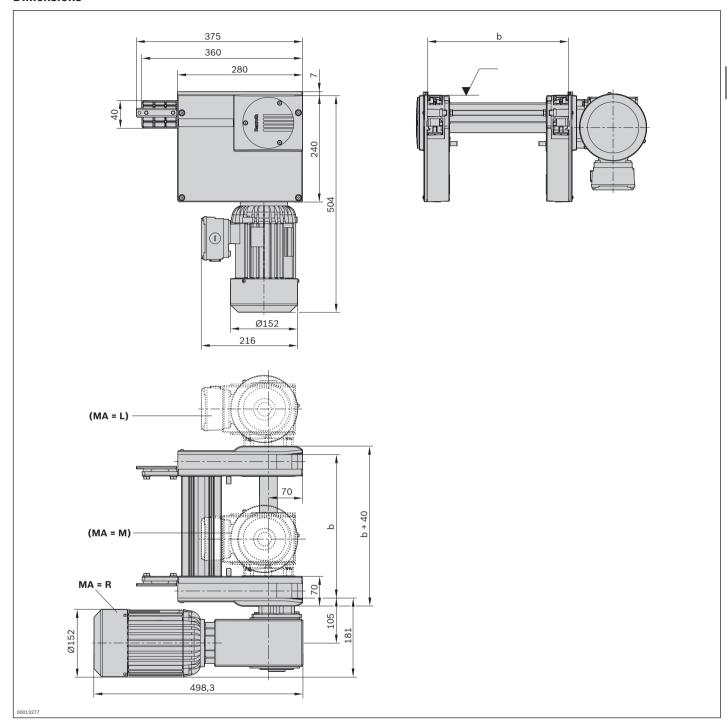
<sup>\*</sup> Chain suitable for use in an EPA (KA = A)

 $<sup>^{2)}</sup>$   $v_N$  = 0: without motor or gear

<sup>&</sup>lt;sup>3)</sup> Reduced load to 600 kg

<sup>&</sup>lt;sup>4)</sup> MA = M only when  $b \ge 240 \text{ mm}$ 

 $<sup>^{\</sup>star\star}$  Formula for calculating the conveyor medium, see p. 3-117



## UM 2/C-60 return unit





- ► Conveyor medium: flat top chain (suitable for use in an
- ► For use with all AS 2/C drive modules
- ► Version with sliding piece for return unit
- ► Recommended for sections up to I = 6000 mm

The return unit is used for constructing conveyor units. It guides the conveyor medium at the end of the conveyor unit back to the drive module.

#### Accessories

#### **Required accessories**

► Connection kits, see page 3-236

#### **Delivery notes**

#### Scope of delivery

- ► One pair of return heads
- ▶ Incl. all fastening material to mount on ST 2 conveyor section

## **Condition on delivery**

► Fully assembled

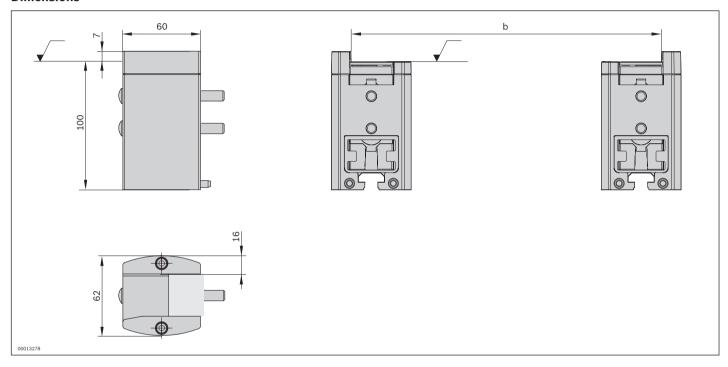
### **Ordering information**

Product designation	Material number
UM 2/C-60 return unit	3842528802

## **Technical data**

Material number			3842528802	
Features	'			
ESD			Yes	
Additional information				
Required conveyor medium length*	I <sub>um</sub>	mm	150	

<sup>\*</sup>Formula for calculating the conveyor medium, see p. 3-117



## UM 2/C-170 return unit





- ► Conveyor medium: flat top chain (suitable for use in an EPA)
- For use with all AS 2/C drive modules
- ► Version with pinion for return unit
- Recommended for sections of I > 6000 mm

The return unit is used for constructing conveyor units. It guides the conveyor medium at the end of the conveyor unit back to the drive module.

## Accessories

#### **Required accessories**

► Connection kits, see page 3-236

#### **Delivery notes**

#### Scope of delivery

- ► One pair of return heads
- ▶ Incl. all fastening material to mount on ST 2 conveyor section

## **Condition on delivery**

► Fully assembled

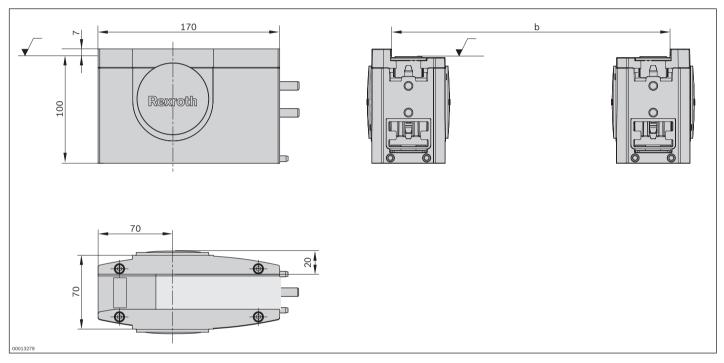
### **Ordering information**

Product designation	Material number
UM 2/C-170 return unit	3842528806

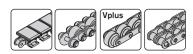
#### **Technical data**

Material number			3842528806
Features			
ESD			Yes
Additional information	,	·	
Required conveyor medium length*	I <sub>UM</sub>	mm	310

<sup>\*</sup>Formula for calculating the conveyor medium, see p. 3-117



## LU2 automatic lubrication unit





- ▶ Modular design consisting of LU 2 automatic lubrication unit, LC 2 oil container and adapter set
- ► LU 2 automatic lubrication unit with drive, compressed air connection to drive module and fastening material
- ▶ LC 2 lubricant container with Structovis GHD from Klüber; contains: 0.25 I (must be ordered separately)
- ▶ Specific adapter sets with compatible lubrication pins for different drive modules
- ▶ Adjustment of lubrication amount to be distributed per metering process on the LU 2 automatic lubrication unit. The metering process is actuated by an external PLC.
- ▶ Designed for lubricating one belt section or conveyor unit respectively
- ▶ Use of the LU 2 automatic lubrication unit is highly recommended for flat top chains

Increasing the system service life through continuous and maintenance-free lubrication of flat top chains, accumulation roller chains, and duplex chains during operation.

For preventing dry running.

#### Accessories

#### Required accessories

- ▶ LC 2 lubricant container, see p. 3-85
- ► Adapter set, see p. 3-85

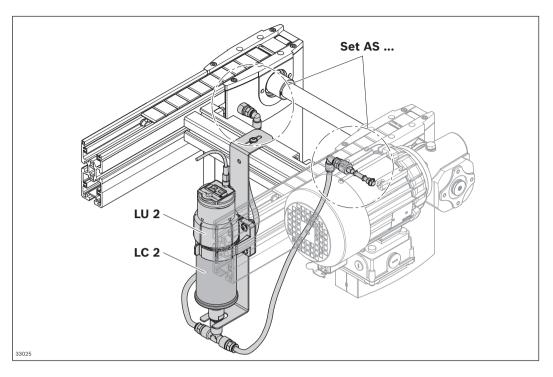
#### **Delivery notes**

## **Condition on delivery**

- ▶ Not assembled, fastening material enclosed
- ▶ LC 2 lubricant container and adapter set as ordered

Suitable for use with all belt sections and conveyor units; lubrication unit on the drive module.

Reduction of lubricant consumption thanks to exact metering and pinpoint application to the chain links.



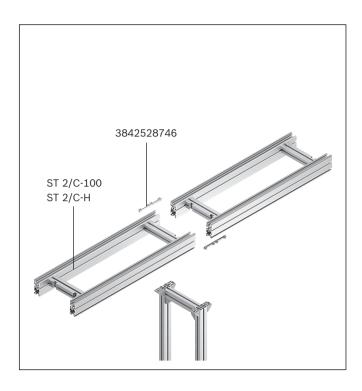
Product designation	Packaging unit	Material number
LU 2 automatic lubrication unit	1	3842543482
LC 2 lubricant container	4	3842543469

Product designation Packaging unit			
Adapter set for	AS 2/C-100	1	3842543483
	AS 2/C-250		
	BS 2/C		
Adapter set for	AS 2/C-400 (assembly on UM2/C-170 when b = 160 mm)	1	3842543484
	AS 2/C-700 (assembly on UM2/C-170 when b = 160 mm)		
	BS 2/C-H (assembly on UM2/C-170, UM 2/R-170 when b = 160 mm)		
Adapter set for	AS 2/R-300	1	3842543485
	AS 2/R-700		
	BS 2/R		
	BS 2/R-H with RV = 1*		
Adapter set for	AS 2/R-1200 (assembly on UM2/R-170 when b = 160 mm)	1	3842543486
	AS 2/R-2200 (assembly on UM2/R-170 when b = 160 mm)		
	BS $2/R$ -H with RV = 0 (assembly on UM2/C-170, UM $2/R$ -170 when b = 160 mm)		
Adapter set for	AS 2/R-V-1200 (assembly on UM2/R-170 when b = 160 mm)	1	3842543487
	AS 2/R-V-2200 (assembly on UM2/R-170 when b = 160 mm)		
	BS 2/R-V-1200 (assembly on UM2/R-170 when b = 160 mm)		
Adapter set for	HQ 2/U-H	1	3842548578

<sup>\*</sup> Assembly on UM return unit

Material number			3842543482
Features			
ESD			Yes
Max. operating temperature	Т	°C	+40

### Section, section profiles



Sections can be individually configured for special requirements by selecting various section, glide, and guide profiles.

Depending on the load spectrum of the conveyor medium, stainless steel or plastic glide profiles can be inserted in the section profile. Use of steel glide profiles increases resistance to wear and temperature. This opens up new areas of application for the TS 2plus.

The proven SP 2/C-100 profiles are primarily suitable for medium loads in simple system layouts.

Especially suited for high strains and loads, the new, sturdy SP 2/C-H section profiles have been developed for flat top chains. In addition to a more robust profile cross section and improvements to details (integrated cable duct), the use of stainless steel in the guide profile enhances the system. An adapter plate not only enables visually attractive mounting of the SP 2/C-H section profiles on the drive modules in the TS 2plus, it also securely keeps the glide profiles (sliding guides) from shifting.

### ST 2/C-100 section





- ► For conveyor unit self-assembly
- ► For use in conjunction with all AS 2/C drive modules and UM 2/C return units
- ► Conveyor medium: plastic flat top chain
- GP 2 plastic glide profile
- ▶ Pre-assembled unit for quick setup

The section is used to construct conveyor units with plastic flat top chains in connection with the AS 2/C drive modules and UM 2/C return units

### Accessories

### Required accessories

► Cross connector, see p. 3-108

### **Delivery notes** Scope of delivery

- ▶ 2x SP 2/C section profiles with assembled FP 2 and GP 2 guide profiles and glide profiles
- ▶ 8x blocking bolts

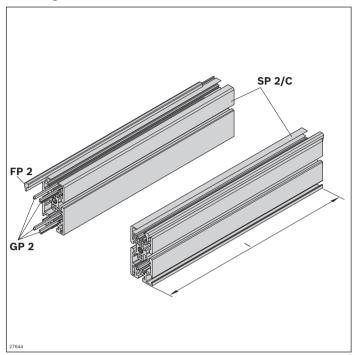
### **Recommended accessories**

- ▶ SZ 2 leg sets, see page 6-2
- ▶ Profile connector, see p. 3-107
- ► Cross connector, see p. 3-108

### **Condition on delivery**

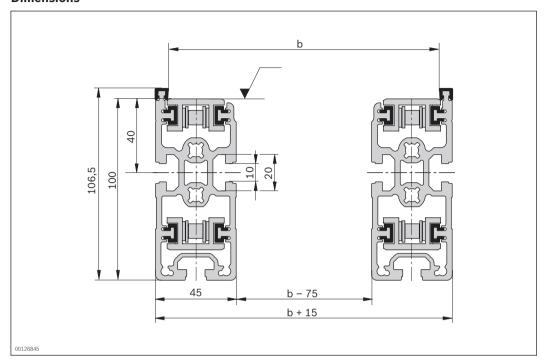
► Fully assembled

### **Ordering information**



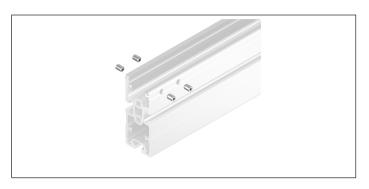
Material number		3842994890	
l (mm)	Length	60 6000	

Material number			3842994890
Features			
Material specification			Section profile: Aluminum; anodized FP 2 guide profile: polyamide GP 2 glide profile: polyamide
Max. operating temperature	T	°C	+40
Dimensions			
Length	1	mm	60 6000



### Blocking bolts





- To prevent the plastic glide profiles from moving in a longitudinal direction
- ▶ Installation at the beginning of the section in the conveying direction
- Included in delivery of all ST 2/C sections

**Note:** Not required for all ST 2/C-H sections.

Blocking bolts prevent the plastic glide profiles from moving in a longitudinal direction.

### **Accessories**

### **Recommended accessories**

Drilling template (3842538972, see p.) 3-118

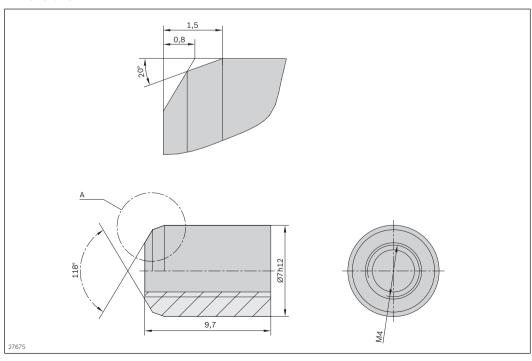
### **Delivery notes**

### Scope of delivery

► Set consisting of 8x blocking bolts

### **Ordering information**

Product designation	Packaging unit	Material number
Blocking bolts	Set	3842537353



### ST 2/C-H section





- ► For conveyor unit self-assembly
- ► For use with all AS 2/C drive modules and UM 2/C return units
- ► Section profile (50 mm wide) in especially sturdy design for section loads of up to 30% higher
- Conveyor medium: plastic flat top chain
- ▶ Optional steel or plastic GP 2 glide profiles

The section is used to construct heavy-duty conveyor units with plastic flat top chains in connection with the AS 2/C

drive modules and UM 2/C return units

#### Accessories

### Required accessories

- ► ST 2/C-H adapter plate kit, see p. 3-102
- ► If GP = 0, then adapter plates are to be fitted between each section joint.

### **Delivery notes**

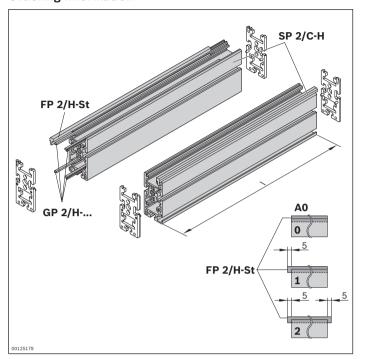
### Scope of delivery

▶ 2x SP 2/C-H section profiles with assembled FP 2/H-St and GP 2/H guide profiles and glide profiles

### **Recommended accessories**

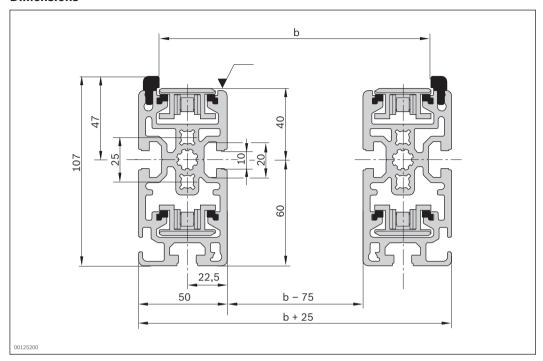
- ▶ SZ 2/... leg sets, see page 6-2
- ▶ Profile connector, see p. 3-107
- ► Cross connector, see p. 3-108
- ► Cover rail for cable duct, see p. 3-94

### **Ordering information**



Material	number	3842994973	
I (mm)	Length	200 6000	
AO	Installation location Plastic glide profile AO = 2 Steel glide profile AO = 0; 1; 2	0; 1; 2	
GP	Glide profile Corrosion-resistant steel (GP = 1) Plastic (GP = 0)	0; 1	

Material number			3842994973
Features			
Material specification			Section profile: Aluminum; anodized Guide profile: Steel; corrosion-resistant Glide profile: Plastic or steel; corrosion-resistant
Max. operating temperature	Т	°C	+40
Dimensions			
Length	[	mm	200 6000



### Cover rail for cable duct



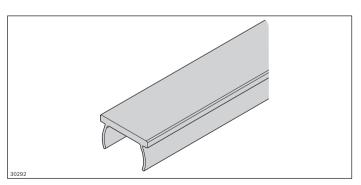


- ► To prevent dirt from entering the profile slot
- For fixing cables in position
- Flush with profile

### **Ordering information**

Product designation	Packaging unit	Material number
Cover rail for cable duct	10	3842523258

Material number			3842523258
Features			
Material specification	1		Aluminum, natural; anodized
Dimensions			
Length	I	mm	2000



### SP 2/C-100 section profile







- ► For conveyor unit self-assembly for profile construction heights of 100 mm
- ► For use in conjunction with all AS 2/C drive modules, UM 2/C return units, FP 2 guide profiles and GP 2 glide
- Longitudinal grooves for easy mounting
- ► For conveyor units with a height to conveying level of 100 mm

The section profile is used to set up conveyor units with the flat top chain conveyor medium. Additional blocking bolts

prevent the glide profiles from moving in a longitudinal direction.

### Accessories

### **Required accessories**

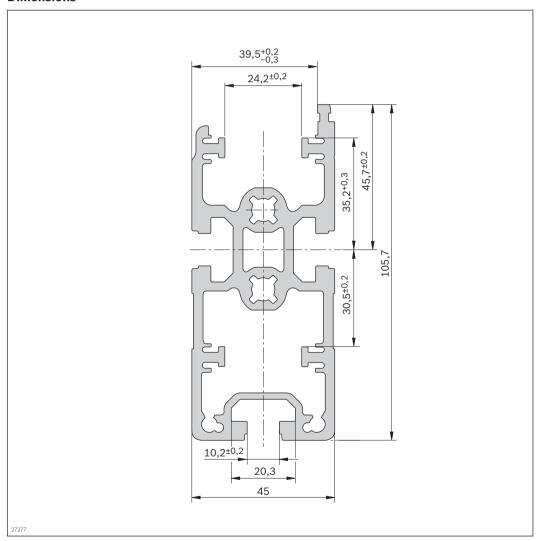
- ▶ GP 2 glide profile, see p. 3-97
- FP 2 guide profile, see p. 3-97
- Blocking bolts, see p. 3-90

### **Ordering information**

Product designation	l (mm)	Delivery unit	Material number
SP 2/C-100 16 x 6070 mm section profile	6070	16	3842532609

### **Technical data**

Material number			3842532609
Load			
Moment of inertia	I <sub>x</sub>	cm <sup>4</sup>	128.0
	l <sub>y</sub>	cm <sup>4</sup>	37.0
Moment of resistance	W <sub>x</sub>	cm³	24.6
	$W_y$	cm <sup>3</sup>	16.4
Features			
Material specification			Aluminum; anodized
Mass	m	kg/m	4.0
Dimensions			
Length	I	mm	6070
Profile surface	A	cm <sup>2</sup>	15.0



### FP 2 guide profile set, GP 2 glide profile





- ► For conveyor unit self-assembly
- ▶ Used in conjunction with ST 2/C section profiles, AS 2/C drive modules and UM 2 /C return units
- ► FP 2 guide profile for laterally guiding the workpiece pallet; slid onto the SP 2/C-100 section profile
- ▶ GP 2 glide profile for guiding the top flat chain; slid onto the SP 2/C-100 section profile

The guide profile is used for lateral guidance of the workpiece pallet. The glide profile is used to guide the flat top chain. Both profiles are pushed onto the section profile. Additional blocking bolts prevent the glide profiles from moving in a longitudinal direction.

### Accessories

### Required accessories

▶ Blocking bolts, see p. 3-90

### **Delivery notes** Scope of delivery

- ► 16x FP 2 guide profile (L = 6000 mm)
- ► 64x GP 2 glide profiles (L = 6000 mm)

### **Ordering information**

Product designation	l (mm)	Material number
FP 2 guide profile set, GP 2 glide profile	6000	3842529933

Material number			3842529933
Features			
ESD			Yes
Material specification			Guide profile: Plastic; PA (suitable for use in an EPA) Glide profile: Plastic; PA (suitable for use in an EPA)
Max. operating temperature	Т	°C	+40
Dimensions			
FP 2 length	I	mm	6000
GP 2 length	1	mm	6000

### Blocking bolts



Blocking bolts prevent the plastic glide profiles from moving in a longitudinal direction.

- To prevent the plastic glide profiles from moving in a longitudinal direction
- ▶ Installation at the beginning of the section in the conveying direction
- Included in delivery of all ST 2/C-100 sections

**Note:** Not required for all ST 2/C-H sections.

### **Accessories**

### **Recommended accessories**

Drilling template (3842538972, see p. ) 3-118

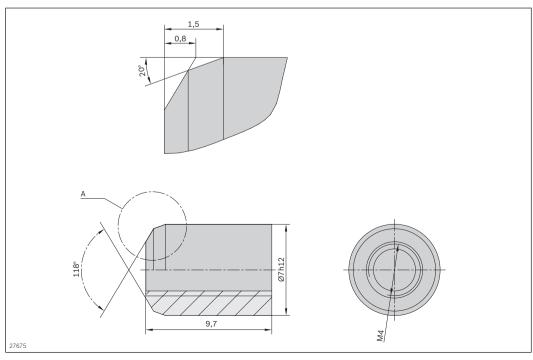
### **Delivery notes**

### Scope of delivery

► Set consisting of 8x blocking bolts

### **Ordering information**

Product designation	Packaging unit	Material number
Blocking bolts	Set	3842537353



### SP 2/C-H section profile







- ► For conveyor unit self-assembly
- ▶ In especially sturdy design for particularly heavy-duty sections
- ► For use with all AS 2/C drive modules, FP 2/H guide profiles and GP 2/H glide profiles
- Longitudinal grooves for easy mounting
- ► For conveyor units with a height to conveying level of 100 mm
- For heavy-duty conveyor unit assembly
- ▶ Profile width: 50 mm

The section profile is used to set up conveyor units with the flat top chain conveyor medium.

### Accessories

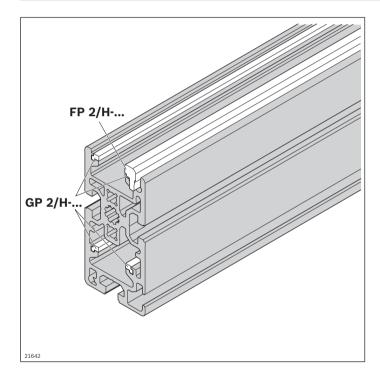
### **Required accessories**

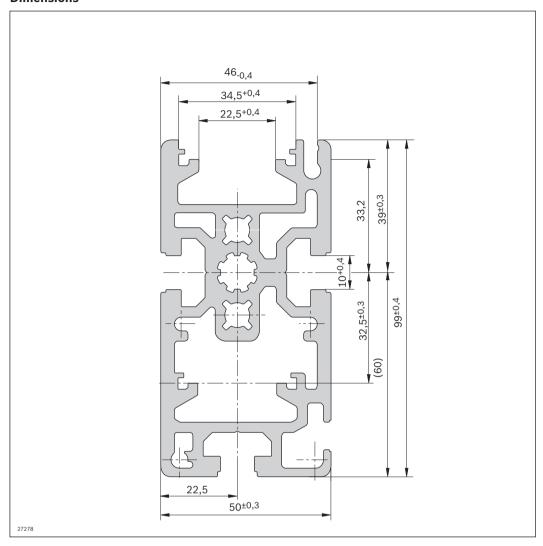
- ► FP 2/H-St guide profile, see p. 3-104
- GP 2/H-St glide profile, see p. 3-105
- GP 2/H-Kst glide profile, see p. 3-106
- ST 2/C-H adapter plate kit, see p. 3-102
- Cover rail for cable duct, see p. 3-164

### **Ordering information**

Product designation	l (mm)	Material number
SP 2/C-H 12 x 6000 mm section profile	6070	3842536793

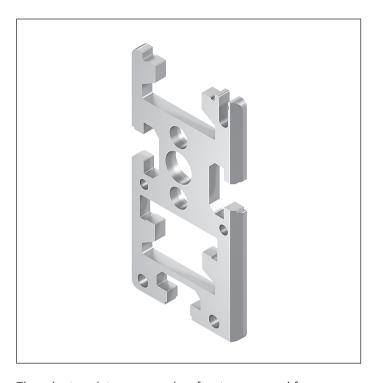
Material number			3842536793
Load			
Moment of inertia	l <sub>x</sub>	cm <sup>4</sup>	156.8
	l <sub>y</sub>	cm <sup>4</sup>	54.9
Moment of resistance	W <sub>x</sub>	cm <sup>3</sup>	31.9
	$W_{y}$	cm <sup>3</sup>	21.4
Features			
Material specification			Aluminum; anodized
Mass	m	kg/m	5.3
Dimensions			
Length	1	mm	6070
Profile surface	A	cm <sup>2</sup>	19.3





# ST 2/C-H adapter plate kit





- Front end plate
- For connecting SP 2/C-H section profiles and AS 2/C drive modules;

for connecting SP 2/C-H profiles and UM 2/C return

and between section profiles if GP 2 plastic glide profiles are used

The adapter plates are used as front covers and for connecting section profiles and drive modules, or between section profiles and return units.

The adapter plates are also suitable for use between section profiles where GP 2 plastic glide profiles are used.

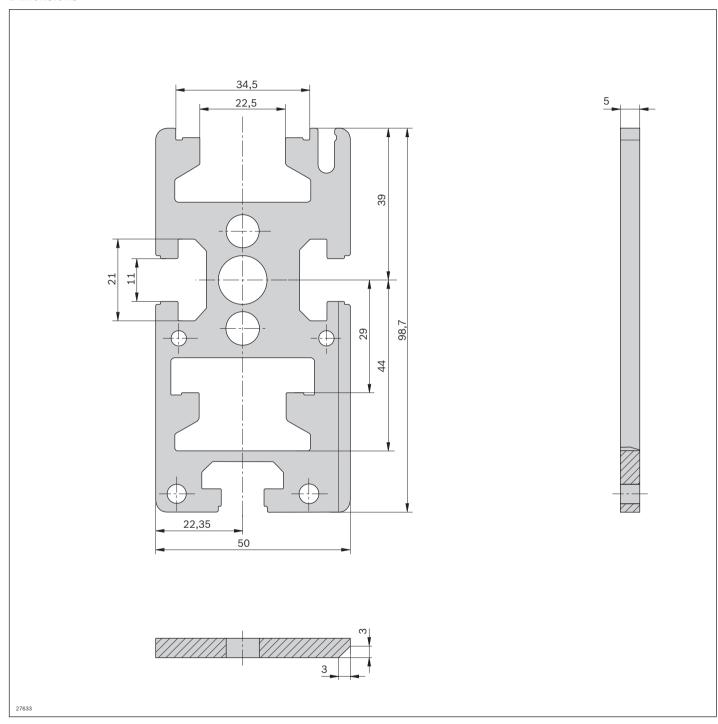
### **Delivery notes** Scope of delivery

- 2x left adapter plate
- 2x right adapter plate

### **Ordering information**

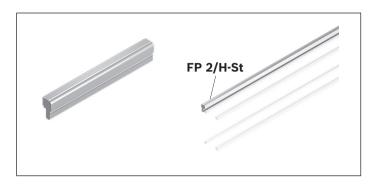
Product designation	Packaging unit	Material number
ST 2/C-H adapter plate kit	4	3842536801

Material number	3842536801
Features	
Material specification	Steel; corrosion-resistant



## FP 2/H-St guide profile





- ► For lateral guidance of the workpiece pallet
- ► For conveyor unit self-assembly
- ► For sliding onto SP 2/C-H or SP 2/R-H section profiles
- ► Robust version in corrosion-resistant steel

### Accessories

### **Required accessories**

► SP 2/C-H section profile, see p. 3-99, or SP 2/R-H, see p. 3-169

### **Delivery notes**

### Scope of delivery

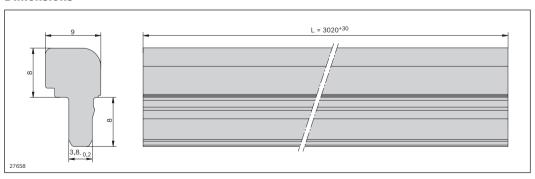
► 24x rods (I = 3000 mm)

### **Ordering information**

Product designation	l (mm)	Delivery unit	Material number
FP 2/H-St guide profile	3000	24	3842537890

### **Technical data**

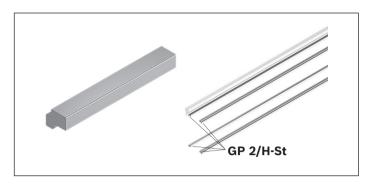
Material number			3842537890
Features	,		
ESD	,		Yes
Material specification			Steel; corrosion-resistant
Dimensions	'		
Length	1	mm	3000



### 3

### GP 2/H-St glide profile





- ► For conveyor unit self-assembly
- ► For guiding the flat top chain or accumulation roller chain
- ► In especially sturdy design with corrosion-resistant steel for particularly heavy-duty sections
- ► For sliding onto SP 2/C-H or SP 2/R-H section profiles
- ► For use with all AS 2/C drive modules, UM 2/C return units and SP 2/C section profiles

#### Accessories

### Required accessories

► SP 2/C-H section profile, see p. 3-99, or SP 2/R-H, see p. 3-169

# Delivery notes Scope of delivery

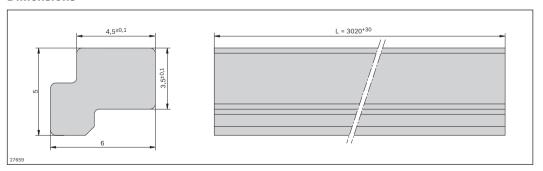
► 48x rods (I = 3000 mm)

### **Ordering information**

Product designation	l (mm)	Delivery unit	Material number
GP 2/H-St glide profile	3000	48	3842537888

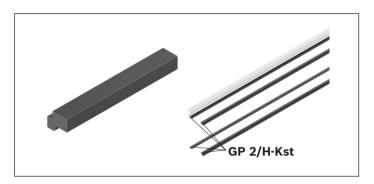
### **Technical data**

Material number		3842537888	
Features			
ESD			Yes
Material specification			Steel; corrosion-resistant
Dimensions			
Length	I	mm	3000



## GP 2/H-Kst glide profile





- ► For conveyor unit self-assembly
- ► For guiding the flat top chain or the accumulation roller chain
- ► For sliding onto SP 2/C-H or SP 2/R-H section profiles
- ► For use with all AS 2/C drive modules, UM 2/C return units and SP 2/C section profiles

### **Accessories**

### **Required accessories**

► SP 2/C-H section profile, see p. 3-99, or SP 2/R-H, see p. 3-169

### **Delivery notes**

### Scope of delivery

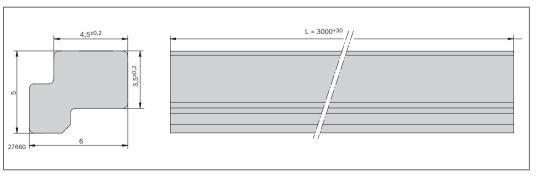
► 48x rods (I = 3000 mm)

### **Ordering information**

Product designation	l (mm)	Delivery unit	Material number
GP 2/H-Kst glide profile	3000	48	3842537889

### **Technical data**

Material number			3842537889
Features		,	
ESD			Yes
Material specification			Plastic; PA (suitable for use in an EPA)
Dimensions			
Length	1	mm	3000



### Profile connector



- ► For connecting two SP 2 profiles end to end Two profile connectors are recommended for each profile joint
- ► For conveyor unit self-assembly
- ► For use with all AS 2/C drive modules, UM 2/C return units and SP 2/C section profiles

# Delivery notes Scope of delivery

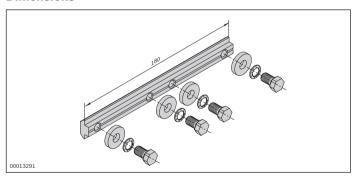
▶ Profile connector, screws

### **Ordering information**

Product designation	Material number
Profile connector	3842528746

### **Technical data**

Material number	3842528746
Features	
Material specification	Steel; galvanized



### QV 2 cross connector



- ► For conveyor unit self-assembly
- ► For connecting section profiles and defining the track width
- ► Can be combined with all SP 2 section profiles.

Formula for calculating the number of cross connectors needed

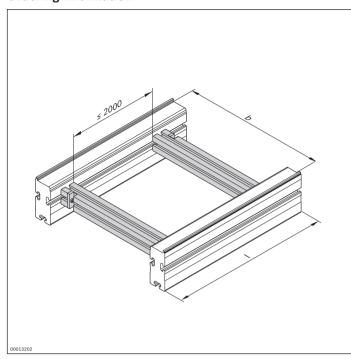
$$A_{QV} = (I/2000 \text{ mm}) + 1$$

A<sub>QV</sub> = number of cross connectors I = section length

# Delivery notes Scope of delivery

- ▶ 45x60 strut profile, finished
- ▶ 2x fastening material to mount on an ST 2 section

### **Ordering information**

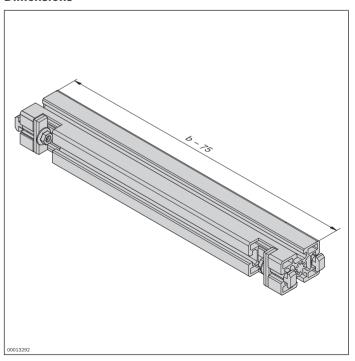


Material number		3842994635	
b (mm)	Track width in direction of transport	160; 240; 320; 400; 480: 640; 800; 1040; 1200	
		160 1200¹	

<sup>&</sup>lt;sup>1</sup> Individual width variants available

### **Technical data**

Material number	3842994635
Features	
Material specification	Aluminum, natural; anodized



### QV 2-H cross connector



QV 2-H cross connectors are particularly suitable for connections between section profiles in heavy-duty systems.

Formula for calculating the number of cross connectors needed

$$A_{QV} = (I/2000 \text{ mm}) + 1$$

A<sub>QV</sub> = number of cross connectors I = section length

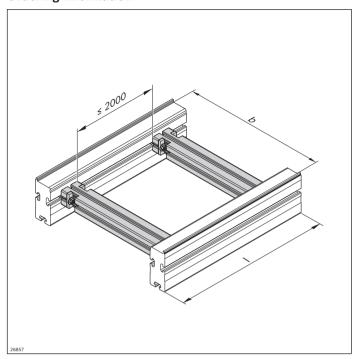
### **Delivery notes**

### Scope of delivery

- ▶ 45x60 strut profile, finished
- ▶ 4x fastening material to mount on an ST 2 section

- ► For heavy-duty conveyor unit self-assembly
- For connecting section profiles and defining the track width
- ► Can be combined with all SP 2 section profiles

### **Ordering information**

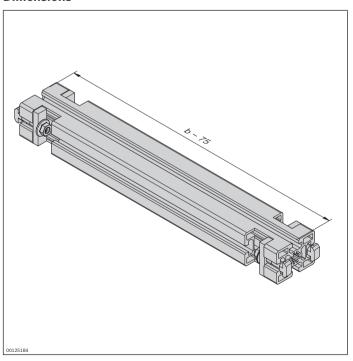


Material number		3842993052	
b (mm)	Track width in direction of transport	160; 240; 320; 400; 480: 640; 800; 1040; 1200	
		160 1200¹	

<sup>&</sup>lt;sup>1</sup> Individual width variants available

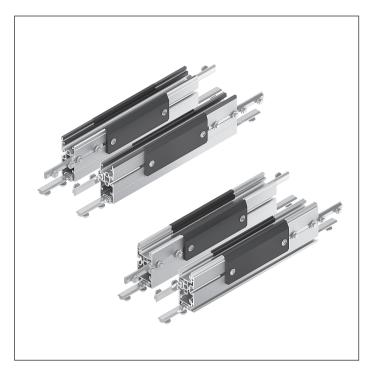
### **Technical data**

Material number	3842993052
Features	
Material specification	Aluminum, natural; anodized



### ST 2/...-W maintenance section





- ► For maintenance use (assembly, disassembly or lubrication)
- Two removable side covers each
- Suitable for flat top chains

The maintenance section is a section element with removable caps. It is used for maintenance (assembly,

disassembly, lubrication) of the flat top chain conveyor medium.

### **Delivery notes**

### Scope of delivery

- ▶ 2x maintenance section elements, 400 mm long
- ▶ Incl. 8x profile connectors

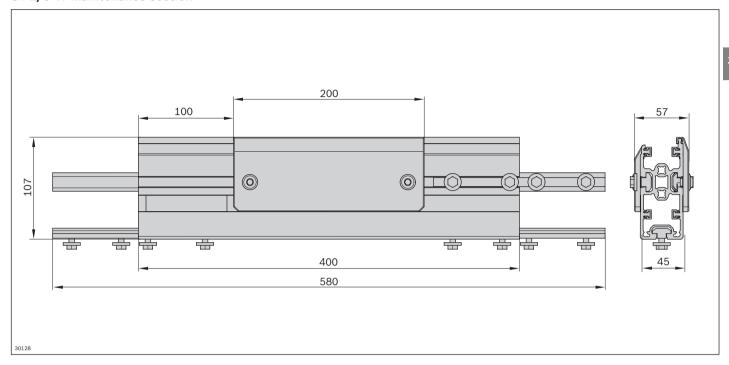
### **Ordering information**

Product designation	Material number	
ST 2/C-W maintenance section	3842532777	
ST 2/C-H-W maintenance section	3842537310	

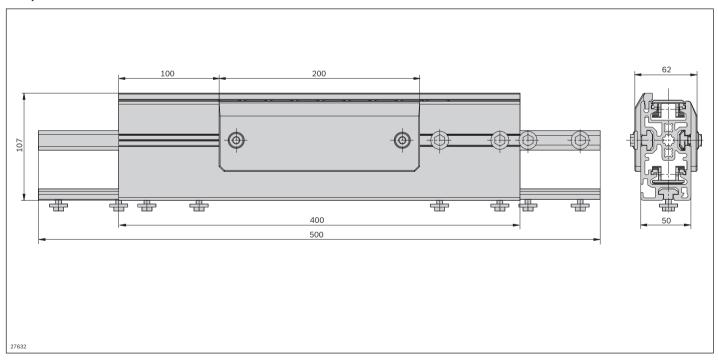
Material number		3842532777	3842537310	
Features				
ESD			Yes	Yes
Material specification		Section profile: Aluminum, natural; anodized Side cover: PE	Section profile: Aluminum, natural; anodized Side cover: PE	
Dimensions	,			
Length	1	mm	400	400

### **Dimensions**

### ST 2/C-W maintenance section



### ST 2/C-H-W maintenance section



### Scraper









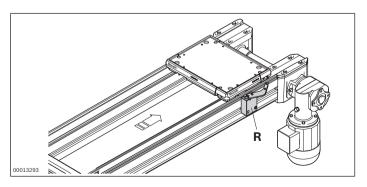
- ► To scrape small parts from the conveyor medium
- ► For use with workpiece pallets with a minimum weight of 3 kg
- ► Conveyor media: Belt, toothed belt and flat top chain
- ► May be mounted on the right side (R) or left side (L)
- ► Reversible operation is not possible on sections with scrapers

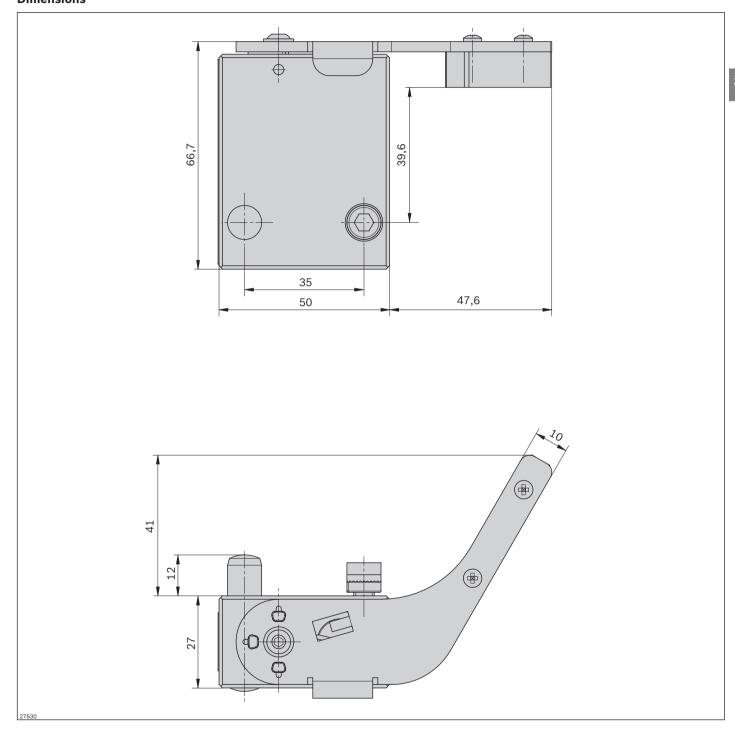
# Delivery notes Scope of delivery

▶ 1x scraper, right or left, including fastening material

### **Ordering information**

Product designation	Material number
Scraper, right	3842532679
Scraper, left	3842532680





### Plastic flat top chain Master link





Conveyor medium for the workpiece pallets in the TS 2*plus* system in conjunction with ST 2/C and ST 2/C-H conveyor sections.

### Accessories

#### **Recommended accessories**

- ▶ Additional master link, 3842551234
- ► Tool for flat top chain, see p. 3-118

### **Delivery notes**

### Scope of delivery

- ► Plastic flat top chain (I = 12000 mm; black), incl. 1x master link
- ► ESD plastic flat top chain (I = 12000 mm; gray), incl. 1x master link
- ► Master link, incl. 1x ESD flat top (gray) with hole

# Ordering information

Product designation	Material number	
Plastic flat top chain	3842551226	
ESD plastic flat top chain	3842551227	
Master link*	3842551234	

<sup>\*</sup> Can be used on both plastic flat top chains

- Conveyor medium for use with conveyor unit selfassembly
- ► For use with ST 2/C sections and ST 2/C-H sections
- ▶ Delivered in units of up to 12000 mm. Lengths of I > 12000 mm can be produced by connecting several flat top chains using a master link
- ► Nickel-plated steel base chain version
- Steel chain with PA66 polyamide support caps

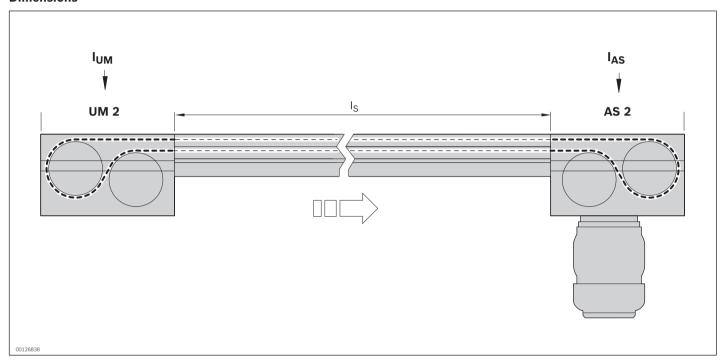
#### Note:

- ► The plastic flat top chain, which is also suitable for use in an EPA, cannot be used in curves and curve arcs
- Accumulation operation with workpiece pallets fitted with PE wear pads not recommended as this increases wear
- ► The plastic flat top chain is not permitted for use with steel GP glide profiles

### **Technical data**

Material number			3842551226	3842551227	3842551234
Features	'	'			
ESD			No	Yes	Yes
Material specification			Base chain: Steel; nickel-plated Flat chain: PA66	Base chain: Steel; nickel-plated Flat chain: PA66 (suitable for use in an EPA)	Steel; nickel- plated
Dimensions					
Length	I	mm	12000	12000	

### **Dimensions**



The required chain length is determined using the following formula.

$$I_C = 2 \times I_S + I_{AS} + I_{UM}$$

 $I_{C}$  = length of flat top chain

 $I_s$  = length of the section profile

 $\ensuremath{I_{\text{AS}}}$  = length of the conveyor medium in the drive module

 $I_{\text{UM}}$  = length of the conveyor medium at the return unit

### Length of the conveyor medium for flat top chain

 $I_{UM\ 2/C-170} = 310 \text{ mm}$ 

 $I_{UM\ 2/C-60} = 150 \text{ mm}$ 

 $I_{AS} = 625 \text{ mm}$ 

# Chain breaker





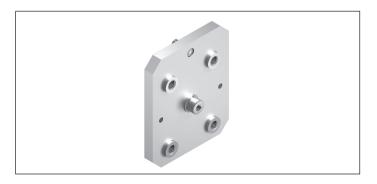
► For disassembling plastic flat top chains

### **Ordering information**

Product designation	Material number
Chain breaker for plastic flat top chain	8981010510

# Drilling template for blocking bolts





### **Ordering information**

Product designation	Material number	
Drilling template for blocking bolts	3842538972	