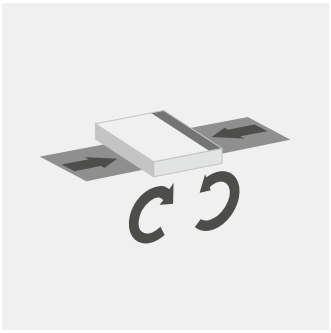
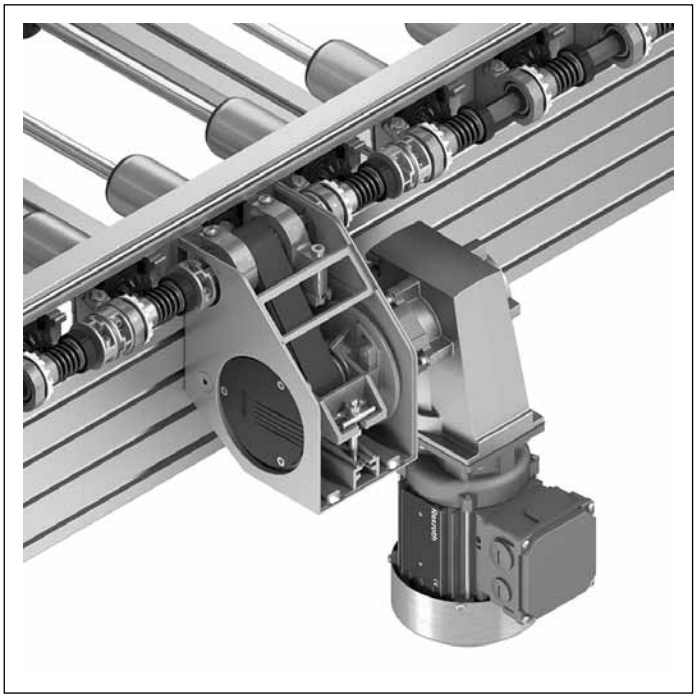
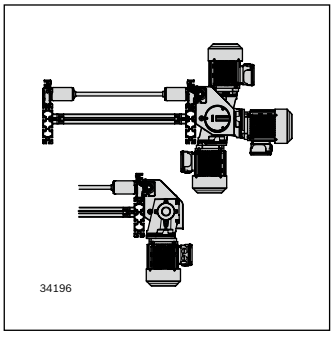


Drive unit

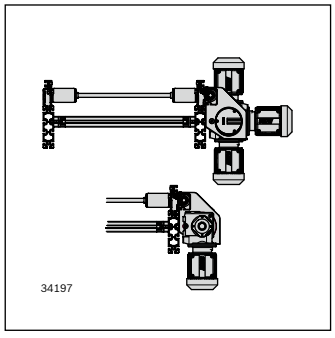
Design



Attachment options for the gear motor



Standard



Customer-specific motor

Drive units

Ready-for-operation module to drive conveyor units, curves, diverters, and junctions in 4 system widths and 2 load classes. Versions available with split rollers (standard) or full rollers.
The rollers in the conveyor section are driven by a king shaft in the drive unit.
The king shaft is located behind a protective cover below the transport level; the workpiece pallet can pass over the king shaft.

The length of the driven conveyor section depends on the roller spacing. A drive torque of up to 45 Nm (in reversible operation: 20 Nm) is enough to drive a section of up to 10 m with 2 curves/diverters, or a straight section of up to 21 m, with roller spacing of 195 mm and 80% of the section in accumulation operation.

Required accessories:

- SZ 5/... leg sets, see page 7-1
- Connection kit, see page 4-25

Note:
The AB 5 drive kit (see page 3-20) is available for implementing a face-side drive.

Drive layout

When laying out the system, make sure that there is enough driving power for the entire conveyor section.

The rollers are driven by the drive unit or by the drive kit via a king shaft. A friction clutch on each roller prevents blocking of the drive.
The maximum transferable total torque results from the torque present briefly before an individual clutch slides, multiplied by the total number of rollers in the section.

Example layout:

Drive torque 45 Nm, each roller loads the drive with 0.5 Nm (with a sliding clutch). Each curve, diverter, or junction loads the drive with 12 Nm.

Note:
Install the motor as close as possible to the center of the section.
The driven rollers of the drive module itself are included in the calculation (if p = 130 one drive module roller is not being driven).

Example A:
Section, b = 650 mm, with roller pitch p = 130 mm and a curve; 100% of the section in accumulation operation
Question: If one drive unit is used, how long may the straight section be?
Calculation:
45 Nm – 12 Nm (for curve) = 33 Nm remaining for the straight section 33 Nm ÷ 0.5 Nm = 66 (driven rollers)

66 x 130 mm = 8580 mm straight section.

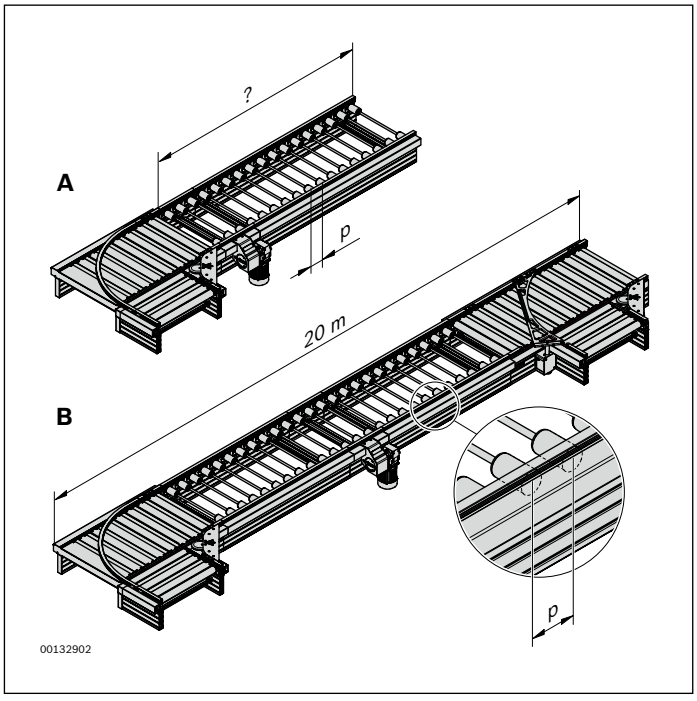
Note:
If a section is not operated completely in accumulation operation, the section length can be multiplied by a corresponding factor. For example, with 50% accumulation operation in the case of example A the section length is doubled to 17160 mm (2 x 66 x 130 mm).

Example B:
Section, b = 650 mm, length 20 m, p = 130, includes 1 diverter and 1 curve; 100% of the section in accumulation operation
Question: Will one drive unit be sufficient?
Calculation:
45 Nm – 12 Nm (diverter) – 12 Nm (curve) = 21 Nm remaining for the straight section

20000 mm – 1560 mm (diverter) – 1149 mm (curve) = 17291 mm straight section
Values taken from the following tables:
Diverter, page 5-8 and curve, page 5-4

17291 mm ÷ 130 mm = 133 rollers
133 x 0.5 Nm = 66.5 Nm
66.5 Nm > 21 Nm, 2 drives are therefore needed in order to attain the torque to be transferred.

Note:
If a section is not operated completely in accumulation operation, the section length can be multiplied by a corresponding factor. For example, with 30% accumulation operation in the case of example B the required torque is reduced to: 66.5 Nm x 30% = 19.95 Nm < 21 Nm. In this case, only one drive would be needed.



AS 5/XH, AS 5/H drive units (with split rollers)

Condition on delivery:

- Ready-to-install, gear motor enclosed separately
- Mounting option for the gear motor on the right/left possible, see page 3-2

Use:

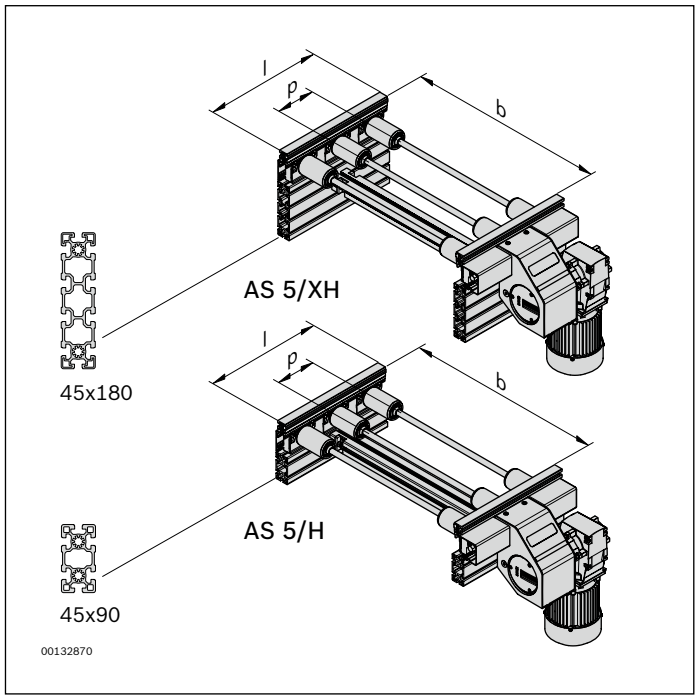
To drive

- ST 5/... conveyor units
- CU 5/... curves
- DI 5/... diverters
- JU 5/... junctions
- HQ 5/... lift transverse unit

Version:

- Reversible operation possible
- Accumulation operation possible
- Motor connection with cable/plug (AT = S) or terminal box (AT = K)
- Freely selectable motor position and length
- Gear motor can be mounted on both sides on the transmission drive (MA = R and MA = L)
- Viewing window for checking the toothed belt
- Due to the simple and space-saving disassembly of the cover, adjacent components/machines can be positioned at a distance of 20 mm from the AS 5
- Frequency converter, optional, see page 3-25

Ordering information



AS 5/XH, AS 5/H drive units

b (mm)	l_{WT} (mm)	p (mm)	l (mm)	N	LG	BG	GM	TR	DP	AT	MA	Material number
455	455; 650	130	390 ... 4160	3; 4; 5 ... 32	1; 2; 3	1; 2	0; 1; 2	1; 2	1; 2; 3 ... 31	K; S	R; L	**3 842 998 837 (AS 5/XH)**
455	650	195	585 ... 4095	3; 4; 5 ... 21	1; 2; 3	1; 2	0; 1; 2	1; 2	1; 2; 3 ... 20	K; S	R; L	**3 842 998 838 (AS 5/H)**
650	650; 845	130	390 ... 4160	3; 4; 5 ... 32	1; 2; 3	1; 2	0; 1; 2	1; 2	1; 2; 3 ... 31	K; S	R; L	b = ... mm
650	650; 845	195	585 ... 4095	3; 4; 5 ... 21	1; 2; 3	1; 2	0; 1; 2	1; 2	1; 2; 3 ... 20	K; S	R; L	p = ... mm, see page 3-8
650	845	260	780 ... 4160	3; 4; 5 ... 16	1; 2; 3	1; 2	0; 1; 2	1; 2	1; 2; 3 ... 15	K; S	R; L	l = ... mm
845	845; 1040	130	390 ... 4160	3; 4; 5 ... 32	1; 2; 3	1; 2	0; 1; 2	1; 2	1; 2; 3 ... 31	K; S	R; L	LG = ...
845	845; 1040	195	585 ... 4095	3; 4; 5 ... 21	1; 2; 3	1; 2	0; 1; 2	1; 2	1; 2; 3 ... 20	K; S	R; L	BG = ...
845	845; 1040	260	780 ... 4160	3; 4; 5 ... 16	1; 2; 3	1; 2	0; 1; 2	1; 2	1; 2; 3 ... 15	K; S	R; L	TR = ...
845	1040	325	975 ... 3900	3; 4; 5 ... 12	1; 2; 3	1; 2	0; 1; 2	1; 2	1; 2; 3 ... 11	K; S	R; L	DP = ..., see page 3-8
1040	845	130	390 ... 4160	3; 4; 5 ... 32	1; 2; 3	1; 2	0; 1; 2	1; 2	1; 2; 3 ... 31	K; S	R; L	v_N = ... m/min, see page 13-8
1040	845	195	585 ... 4095	3; 4; 5 ... 21	1; 2; 3	1; 2	0; 1; 2	1; 2	1; 2; 3 ... 20	K; S	R; L	U = ... V, see page 13-9
1040	845	260	780 ... 4160	3; 4; 5 ... 16	1; 2; 3	1; 2	0; 1; 2	1; 2	1; 2; 3 ... 15	K; S	R; L	f = ... Hz, see page 13-9
												AT = ...
												MA = ...

b = width (track width in direction of transport)

l_{WT} = Length of workpiece pallet

p = Roller spacing (pitch)

l = Length graduated according to the roller dimensions (l = p × N)

N = number of rollers, multiplier for length (l = p × N), pricing factor in the price list.

LG = Lateral guide material
1: steel
2: plastic
3: aluminum

BG = Bevel wheel material
1: plastic
2: sintered metal

GM = Gear motor
0: without (SW27 interface)
1: with SW27 gear motor
2: without (interface to SEW connection, round shaft Ø 20)

TR = Roller material
1: steel, galvanized
2: steel, nitrocarburized

DP = Drive position

v_N = nominal speed (m/min);
2*; 4; 6; 9; 12; 15; 18
= 0 (without gear motor)

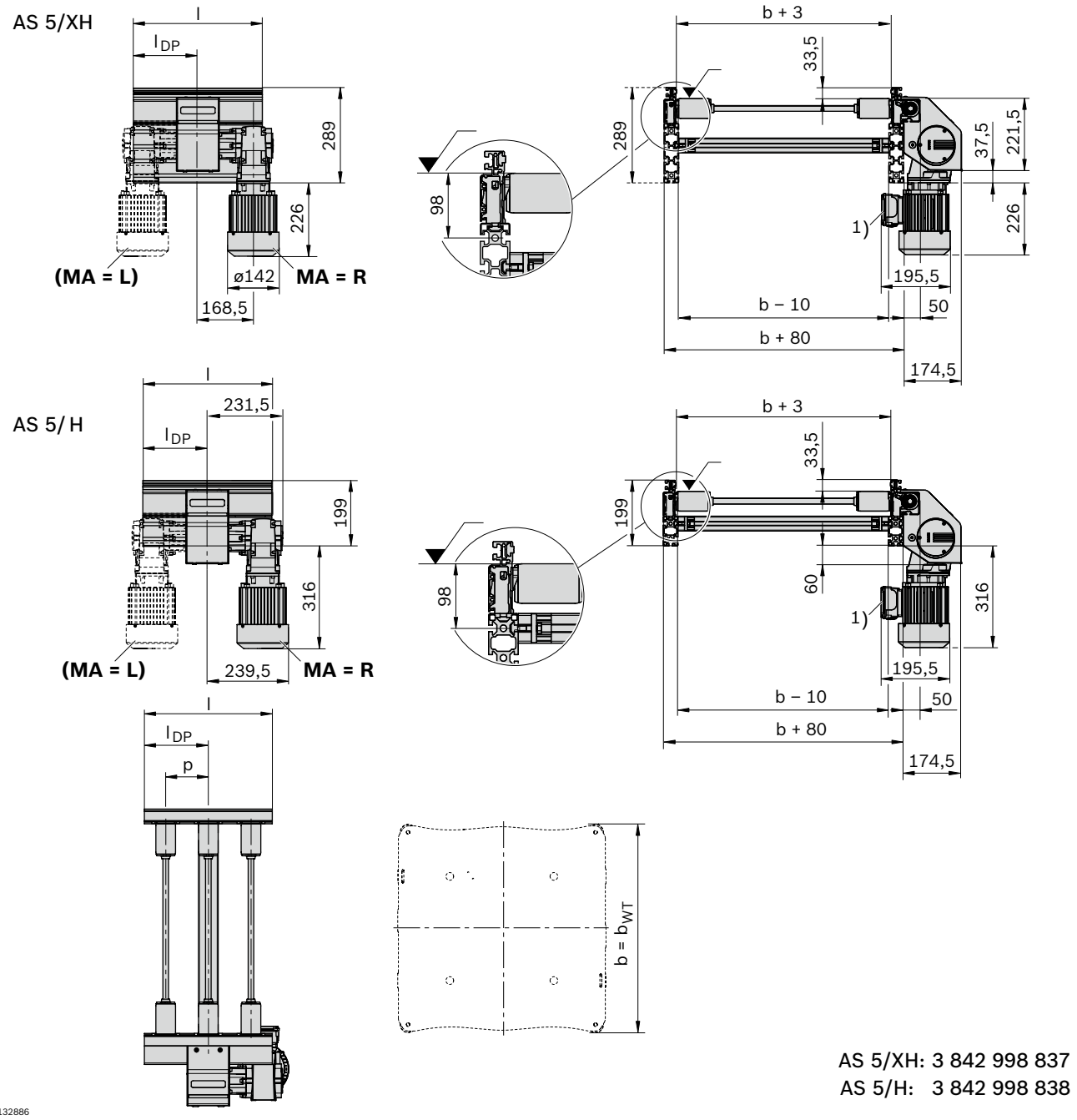
AT = Motor connection
K: with terminal box
S: with cable/plug

MA = Motor mounting
R: Right
L: Left

* Additional measures may be necessary

Dimensions

Drive module AS 5/XH, AS 5/H, pitch p = 130 mm



AS 5/XH: 3 842 998 837
AS 5/H: 3 842 998 838

1) Note: In this depiction, the terminal box can collide with the leg sets. It protrudes into the section.

l = p x n

l_{DP} = DP x p – p/2

p = roller spacing (pitch)

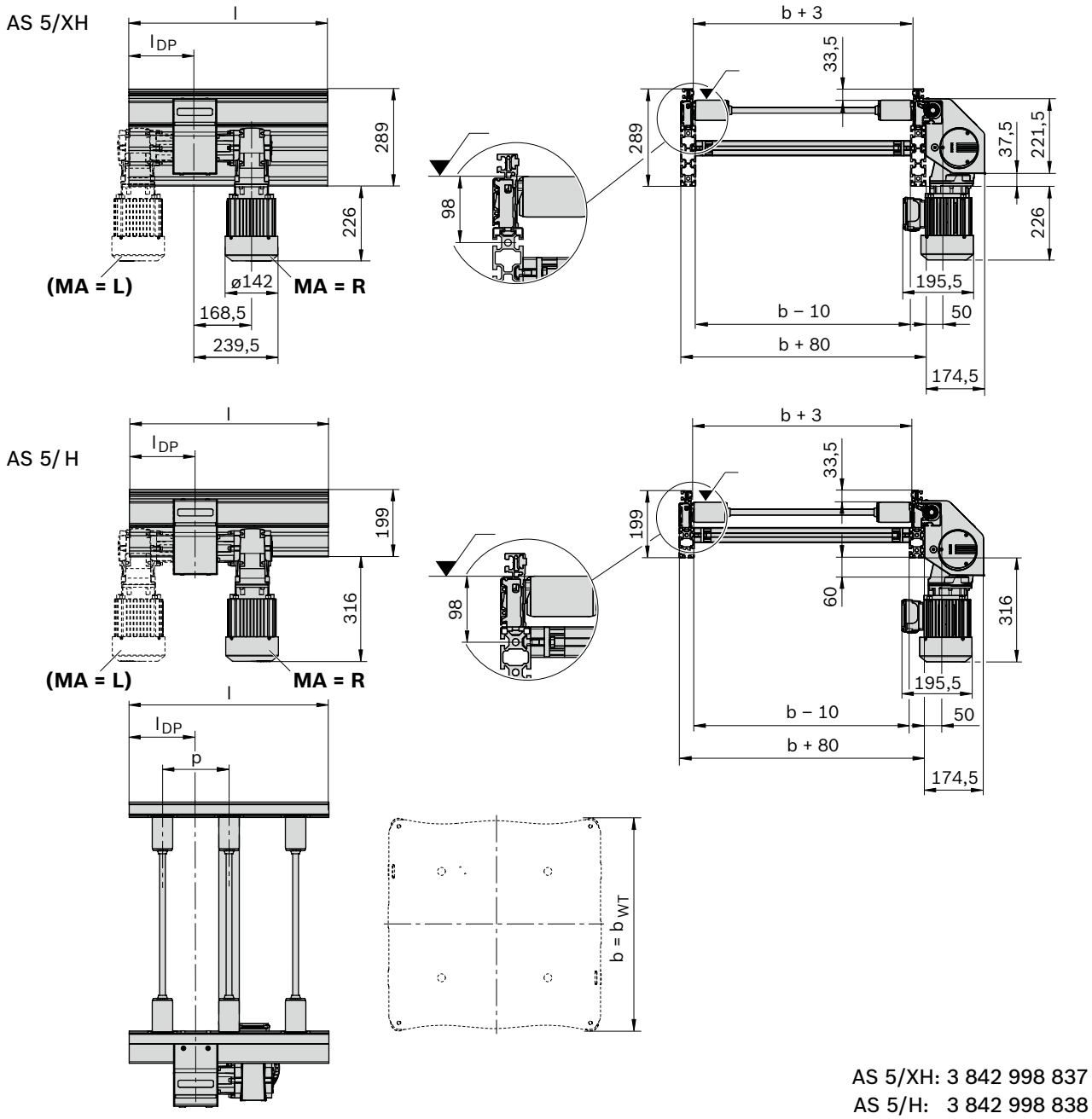
n = number of rollers

DP = drive position

Description of parameters, see page 3-5

Dimensions

Drive module AS 5/XH, AS 5/H, pitch p = 195 mm; p = 260 mm; p = 325 mm



AS 5/XH: 3 842 998 837
AS 5/H: 3 842 998 838

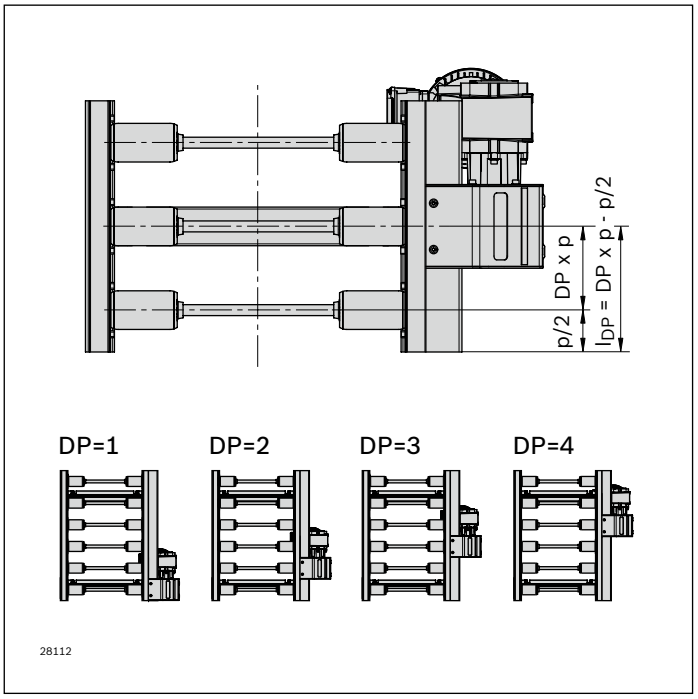
l = p x n
l_{DP} = DP x p

p = roller spacing (pitch)
n = number of rollers
DP = drive position

Description of parameters, see page 3-5

Pitch p and drive position DP

p = 130 mm
DP is the roller to which the transmission drive is fitted.
This roller is not driven.



Example: DP = 2

Possible drive positions DP with pitch p

p (mm)	MA	DP
130	R; L	1 ... 31

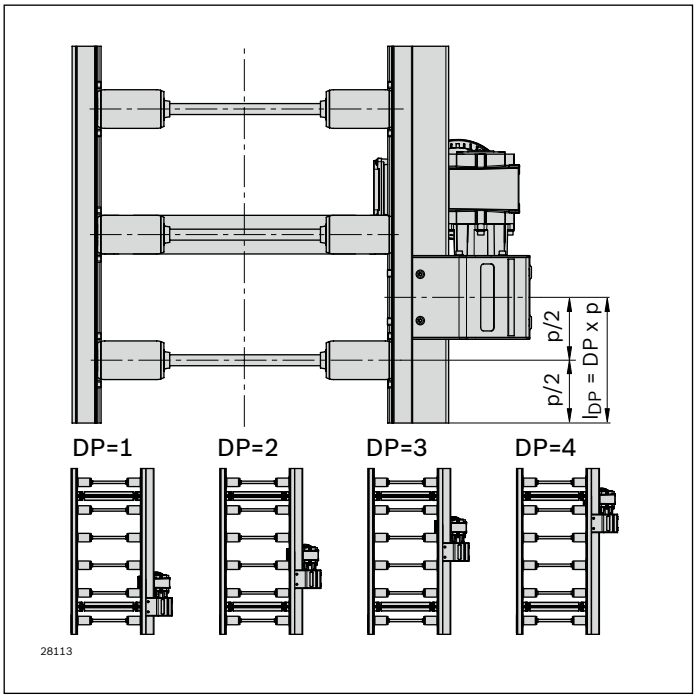
Note:
Only if p = 130 mm: Roller corresponding to DP is not driven.
Gear motor can be mounted on both sides.

Permissible position l_{DP} (mm) after start of section:
l_{DP} = DP x p – p/2

Example for p = 130 mm and DP = 10:
l_{DP} = 10 x 130 mm – 65 mm = 1235 mm

Description of further parameters, see page 3-5

p = 195 mm; p = 260 mm; p = 325 mm
DP is the space between two rollers in which the transmission drive is fitted.



Example: DP = 1

Possible drive positions DP with pitch p

p (mm)	MA	DP
195	R; L	1 ... 20
260	R; L	1 ... 15
325	R; L	1 ... 11

Permissible position l_{DP} (mm) after start of section:
l_{DP} = DP x p

Example for p = 260 mm and DP = 5:
l_{DP} = 5 x 260 mm = 1300 mm

AS 5/XH-FR, AS 5/H-FR drive units (with full rollers)

Condition on delivery:

- Ready-to-install, gear motor enclosed separately
- Mounting option for the gear motor on the right/left possible, see page 3-2

Use:

To drive

- ST 5/...-FR conveyor units
- CU 5/...-FR curves
- DI 5/...-FR diverters
- JU 5/...-FR junctions
- HQ 5/... lift transverse unit

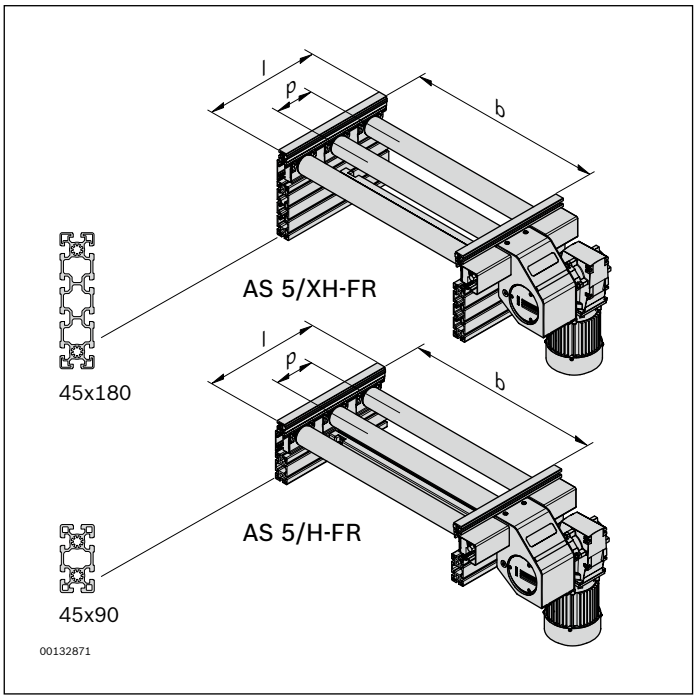
Version:

- Reversible operation possible
- Accumulation operation possible
- Motor connection with cable/plug (AT = S) or terminal box (AT = K)
- Freely selectable motor position and length
- Gear motor can be mounted on both sides on the transmission drive (MA = R and MA = L)
- Viewing window for checking the toothed belt
- Due to the simple and space-saving disassembly of the cover, adjacent components/machines can be positioned at a distance of 20 mm from the AS 5
- Frequency converter, optional, see page 3-25

Note:

To transport workpieces without workpiece pallets.
Use plastic lateral guides to ensure the workpiece is not damaged!

Ordering information



AS 5/XH-FR, AS 5/H-FR drive units

b (mm)	l_{WT} (mm)	p (mm)	l (mm)	N	LG	BG	GM	TR	DP	AT	MA	Material number
455	455; 650	130	390 ... 4160	3; 4; 5 ... 32	1; 2; 3	1; 2	0; 1; 2	1; 2	1; 2; 3 ... 31	K; S	R; L	**3 842 998 839 (AS 5/XH-FR)**
455	650	195	585 ... 4095	3; 4; 5 ... 21	1; 2; 3	1; 2	0; 1; 2	1; 2	1; 2; 3 ... 20	K; S	R; L	**3 842 998 840 (AS 5/H-FR)**
650	650; 845	130	390 ... 4160	3; 4; 5 ... 32	1; 2; 3	1; 2	0; 1; 2	1; 2	1; 2; 3 ... 31	K; S	R; L	b = ... mm
650	650; 845	195	585 ... 4095	3; 4; 5 ... 21	1; 2; 3	1; 2	0; 1; 2	1; 2	1; 2; 3 ... 20	K; S	R; L	p = ... mm, see page 3-13
650	845	260	780 ... 4160	3; 4; 5 ... 16	1; 2; 3	1; 2	0; 1; 2	1; 2	1; 2; 3 ... 15	K; S	R; L	l = ... mm
845	845; 1040	130	390 ... 4160	3; 4; 5 ... 32	1; 2; 3	1; 2	0; 1; 2	1; 2	1; 2; 3 ... 31	K; S	R; L	LG = ...
845	845; 1040	195	585 ... 4095	3; 4; 5 ... 21	1; 2; 3	1; 2	0; 1; 2	1; 2	1; 2; 3 ... 20	K; S	R; L	BG = ...
845	845; 1040	260	780 ... 4160	3; 4; 5 ... 16	1; 2; 3	1; 2	0; 1; 2	1; 2	1; 2; 3 ... 15	K; S	R; L	TR = ...
845	1040	325	975 ... 3900	3; 4; 5 ... 12	1; 2; 3	1; 2	0; 1; 2	1; 2	1; 2; 3 ... 11	K; S	R; L	DP = ..., see page 3-13
1040	845	130	390 ... 4160	3; 4; 5 ... 32	1; 2; 3	1; 2	0; 1; 2	1; 2	1; 2; 3 ... 31	K; S	R; L	v_N = ... m/min, see page 13-8
1040	845	195	585 ... 4095	3; 4; 5 ... 21	1; 2; 3	1; 2	0; 1; 2	1; 2	1; 2; 3 ... 20	K; S	R; L	U = ... V, see page 13-9
1040	845	260	780 ... 4160	3; 4; 5 ... 16	1; 2; 3	1; 2	0; 1; 2	1; 2	1; 2; 3 ... 15	K; S	R; L	f = ... Hz, see page 13-9
												AT = ...
												MA = ...

b = width (track width in direction of transport)
l_{WT} = Length of workpiece pallet
p = Roller spacing (pitch)
l = Length graduated according to the roller dimensions (l = p × N)
N = number of rollers, multiplier for length (l = p × N), pricing factor in the price list.
LG = Lateral guide material
1: steel
2: plastic
3: aluminum

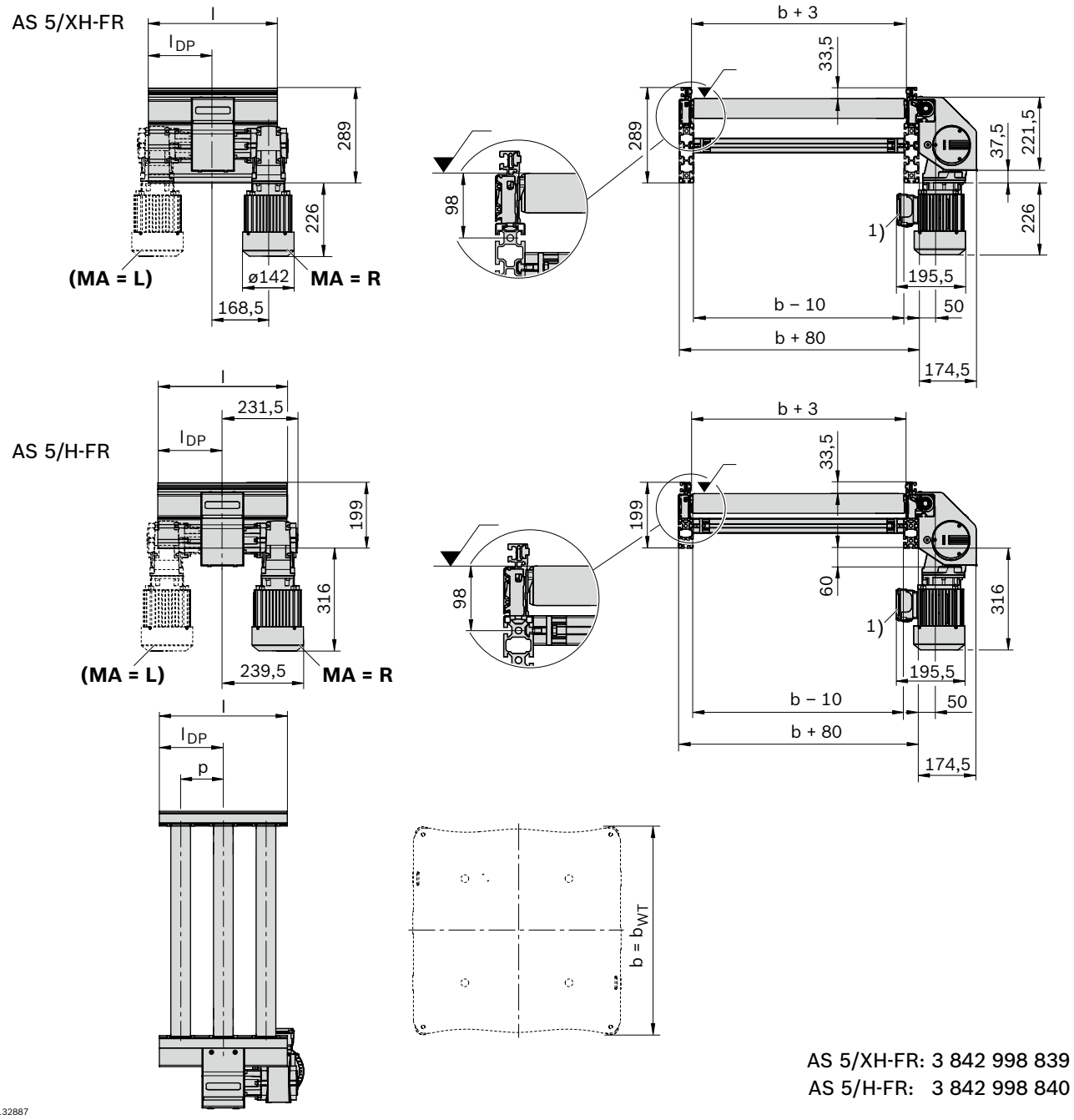
BG = Bevel wheel material
1: plastic
2: sintered metal
GM = Gear motor
0: without (SW27 interface)
1: with SW27 gear motor
2: without (interface to SEW connection, round shaft Ø 20)
TR = Roller material
1: steel, galvanized
2: steel, nitrocarburized
DP = Drive position

v_N = nominal speed (m/min);
2*; 4; 6; 9; 12; 15; 18
= 0 (without gear motor)
AT = Motor connection
K: with terminal box
S: with cable/plug
MA = Motor mounting
R: Right
L: Left

* Additional measures may be necessary

Dimensions

Drive module AS 5/XH-FR, AS 5/H-FR, pitch p = 130 mm



1) Note: In this depiction, the terminal box can collide with the leg sets. It protrudes into the section.

l = p x n

l_{DP} = DP x p – p/2

p = roller spacing (pitch)

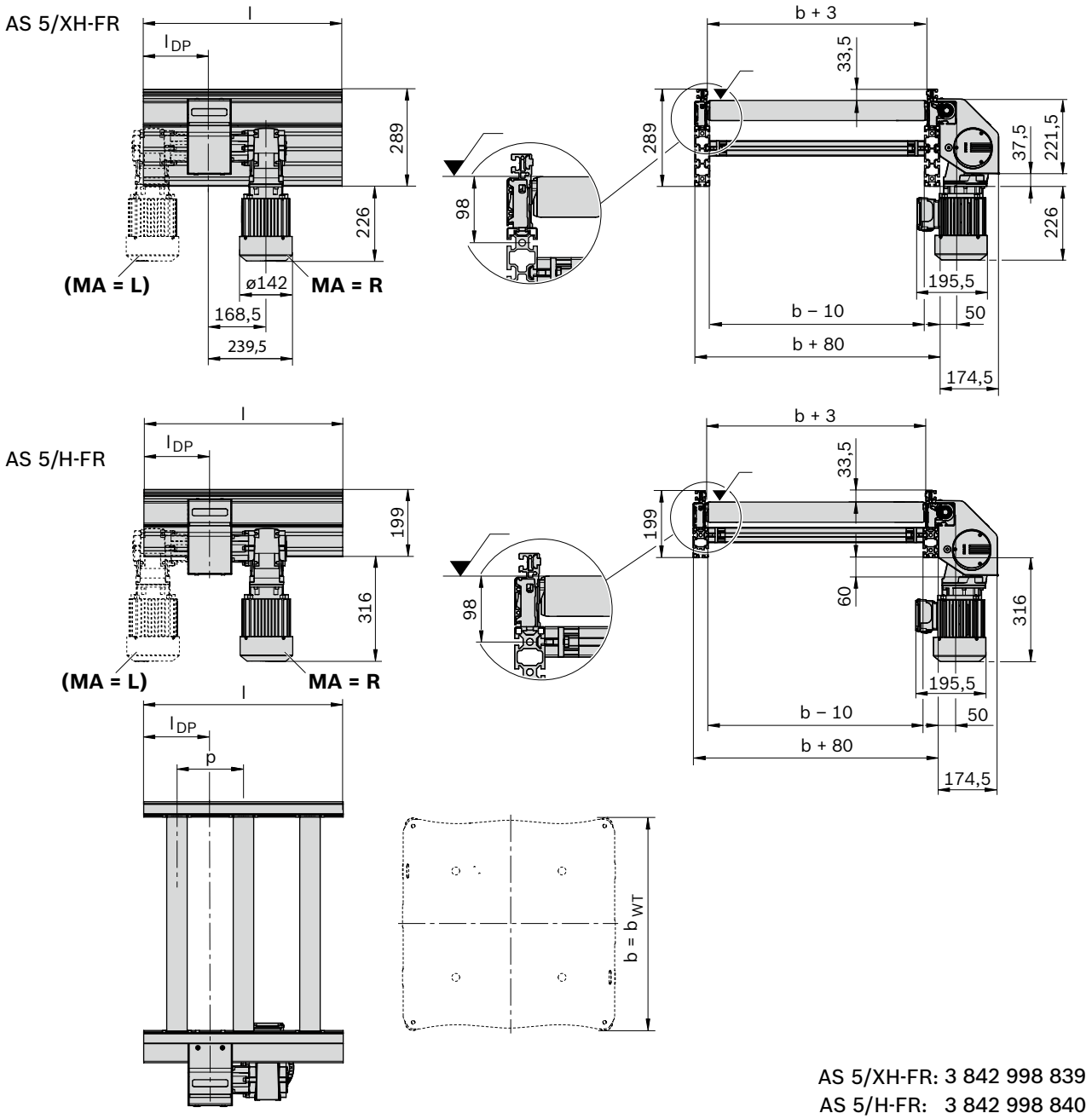
n = number of rollers

DP = drive position

Description of parameters, see page 3-5

Dimensions

Drive module AS 5/XH-FR, AS 5/H-FR, pitch p = 195 mm; p = 260 mm; p = 325 mm



l = p x n

l_{DP} = DP x p

p = roller spacing (pitch)

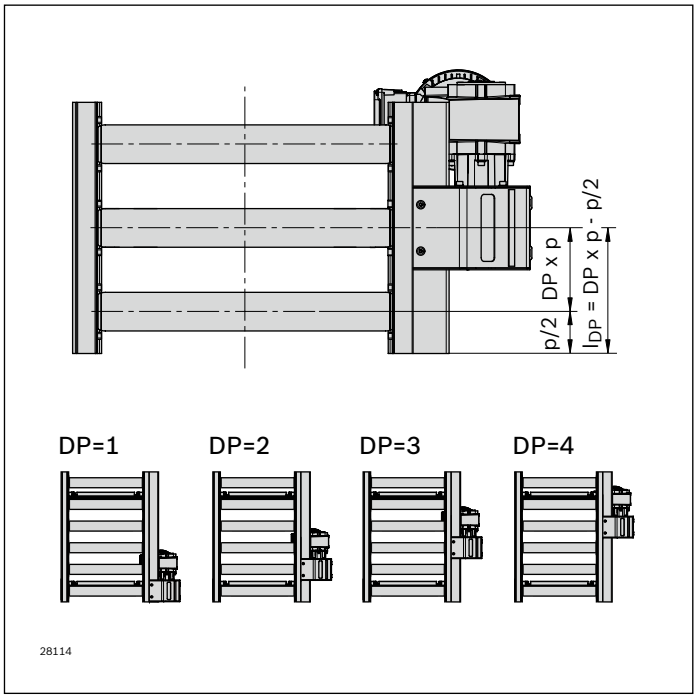
n = number of rollers

DP = drive position

Description of parameters, see page 3-5

Pitch p and drive position DP

p = 130 mm
DP is the roller to which the transmission drive is fitted. This roller is not driven.



Example: DP = 2

Possible drive positions DP with pitch p

p (mm)	MA	DP
130	R; L	1 ... 31

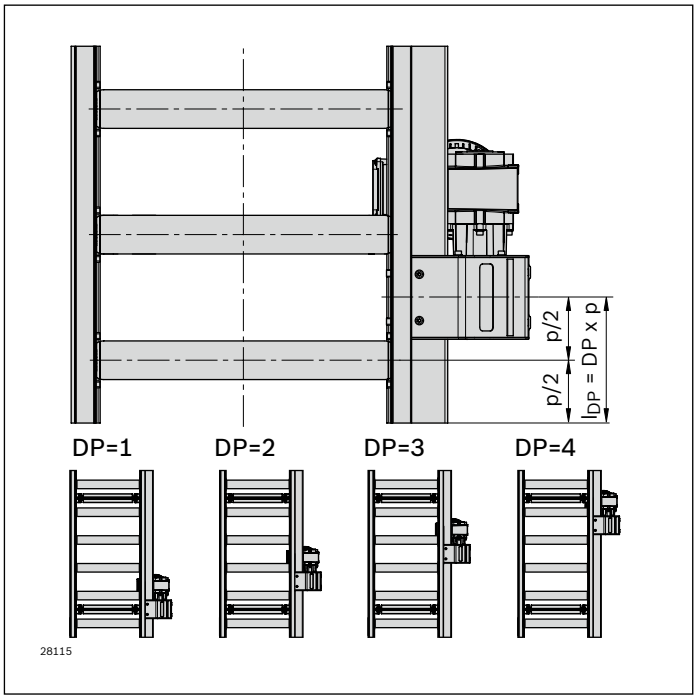
Note:
Only if p = 130 mm: Roller corresponding to DP is not driven.
Gear motor can be mounted on both sides.

Permissible position l_{DP} (mm) after start of section:
l_{DP} = DP x p – p/2

Example for p = 130 mm and DP = 10:
l_{DP} = 10 x 130 mm – 65 mm = 1235 mm

Description of further parameters, see page 3-10

p = 195 mm; p = 260 mm; p = 325 mm
DP is the space between two rollers in which the transmission drive is fitted.



Example: DP = 1

Possible drive positions DP with pitch p

p (mm)	MA	DP
195	R; L	1 ... 20
260	R; L	1 ... 15
325	R; L	1 ... 11

Permissible position l_{DP} (mm) after start of section:
l_{DP} = DP x p

Example for p = 260 mm and DP = 5:
l_{DP} = 5 x 260 mm = 1300 mm

Drive units AS 5/OC (Open Center)

Condition on delivery:

- Ready-to-install, gear motor enclosed separately
- Mounting option for the gear motor on the right/left possible, see page 3-2

Use:

To drive

- ST 5/OC... conveyor units

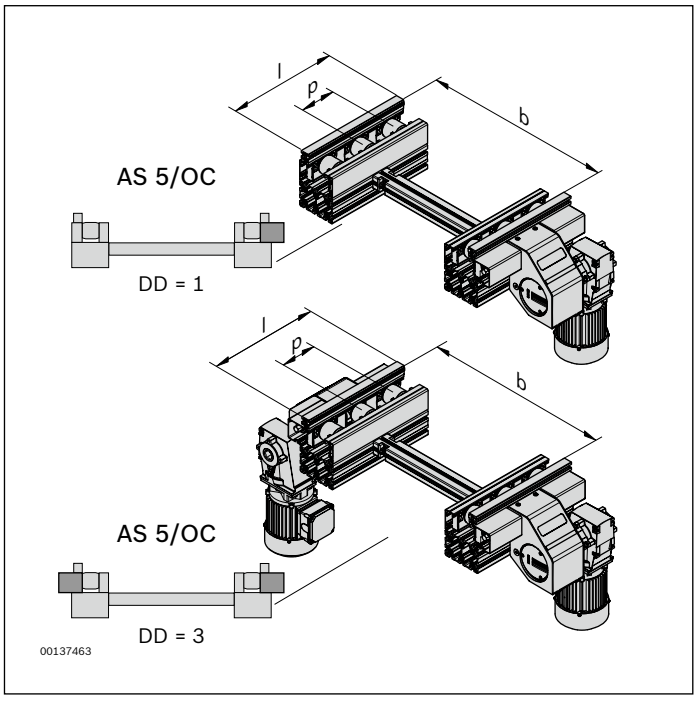
Version:

- Reversible operation possible
- Accumulation operation possible
- Motor connection with cable/plug (AT = S) or terminal box (AT = K)
- Freely selectable motor position and length
- Gear motor can be mounted on both sides on the transmission drive (MA = R and MA = L)
- Viewing window for checking the toothed belt
- Due to the simple and space-saving disassembly of the cover, adjacent components/machines can be positioned at a distance of 20 mm from the AS 5
- Frequency converter, optional, see page 3-25

Note:

Please take account of the load center of gravity when selecting the drive, see page 3-19

Ordering information



AS 5/OC drive units

b (mm)	l_{WT} (mm)	p (mm)	l (mm)	N	LG	BG	GM	DD	TR	DP_r/DP_l	AT	MA	Material number
455	455; 650	130	390 ... 4160	3; 4; 5 ... 32	1; 2; 3	1; 2	0; 1; 2	1; 2; 3	1; 2	1; 2; 3 ... 31	K; S	R; L	**3 842 998 841**
455	650	195	585 ... 4095	3; 4; 5 ... 21	1; 2; 3	1; 2	0; 1; 2	1; 2; 3	1; 2	1; 2; 3 ... 20	K; S	R; L	b = ... mm
650	650; 845	130	390 ... 4160	3; 4; 5 ... 32	1; 2; 3	1; 2	0; 1; 2	1; 2; 3	1; 2	1; 2; 3 ... 31	K; S	R; L	p = ... mm, see page 3-18
650	650; 845	195	585 ... 4095	3; 4; 5 ... 21	1; 2; 3	1; 2	0; 1; 2	1; 2; 3	1; 2	1; 2; 3 ... 20	K; S	R; L	l = ... mm
650	845	260	780 ... 4160	3; 4; 5 ... 16	1; 2; 3	1; 2	0; 1; 2	1; 2; 3	1; 2	1; 2; 3 ... 15	K; S	R; L	LG = ...
845	845; 1040	130	390 ... 4160	3; 4; 5 ... 32	1; 2; 3	1; 2	0; 1; 2	1; 2; 3	1; 2	1; 2; 3 ... 31	K; S	R; L	BG = ...
845	845; 1040	195	585 ... 4095	3; 4; 5 ... 21	1; 2; 3	1; 2	0; 1; 2	1; 2; 3	1; 2	1; 2; 3 ... 20	K; S	R; L	TR = ...
845	845; 1040	260	780 ... 4160	3; 4; 5 ... 16	1; 2; 3	1; 2	0; 1; 2	1; 2; 3	1; 2	1; 2; 3 ... 15	K; S	R; L	DP_r/DP_l = ..., see page 3-18
845	1040	325	975 ... 3900	3; 4; 5 ... 12	1; 2; 3	1; 2	0; 1; 2	1; 2; 3	1; 2	1; 2; 3 ... 11	K; S	R; L	v_N = ... m/min, see page 13-8
1040	845	130	390 ... 4160	3; 4; 5 ... 32	1; 2; 3	1; 2	0; 1; 2	1; 2; 3	1; 2	1; 2; 3 ... 31	K; S	R; L	U = ... V, see page 13-9
1040	845	195	585 ... 4095	3; 4; 5 ... 21	1; 2; 3	1; 2	0; 1; 2	1; 2; 3	1; 2	1; 2; 3 ... 20	K; S	R; L	f = ... Hz, see page 13-9
1040	845	260	780 ... 4160	3; 4; 5 ... 16	1; 2; 3	1; 2	0; 1; 2	1; 2; 3	1; 2	1; 2; 3 ... 15	K; S	R; L	AT = ...
													MA = ...

b = width (track width in direction of transport)

l_{WT} = Length of workpiece pallet

p = Roller spacing (pitch)

l = Length graduated according to the roller dimensions (l = p × N)

N = number of rollers, multiplier for length (l = p × N), pricing factor in the price list.

LG = Lateral guide material
1: steel
2: plastic
3: aluminum

BG = Bevel wheel material
1: plastic
2: sintered metal

GM = Gear motor
0: without (SW27 interface)
1: with SW27 gear motor
2: without (interface to SEW connection, round shaft Ø 20)

DD = King shaft
1: on one side with 1 gear motor
2: on two sides with 1 gear motor
3: on two sides with 2 gear motors

TR = Roller material
1: steel, galvanized
2: steel, nitrocarburized

DP_r/DP_l = Drive position

v_N = nominal speed (m/min);
2*; 4; 6; 9; 12; 15; 18
= 0 (without gear motor)

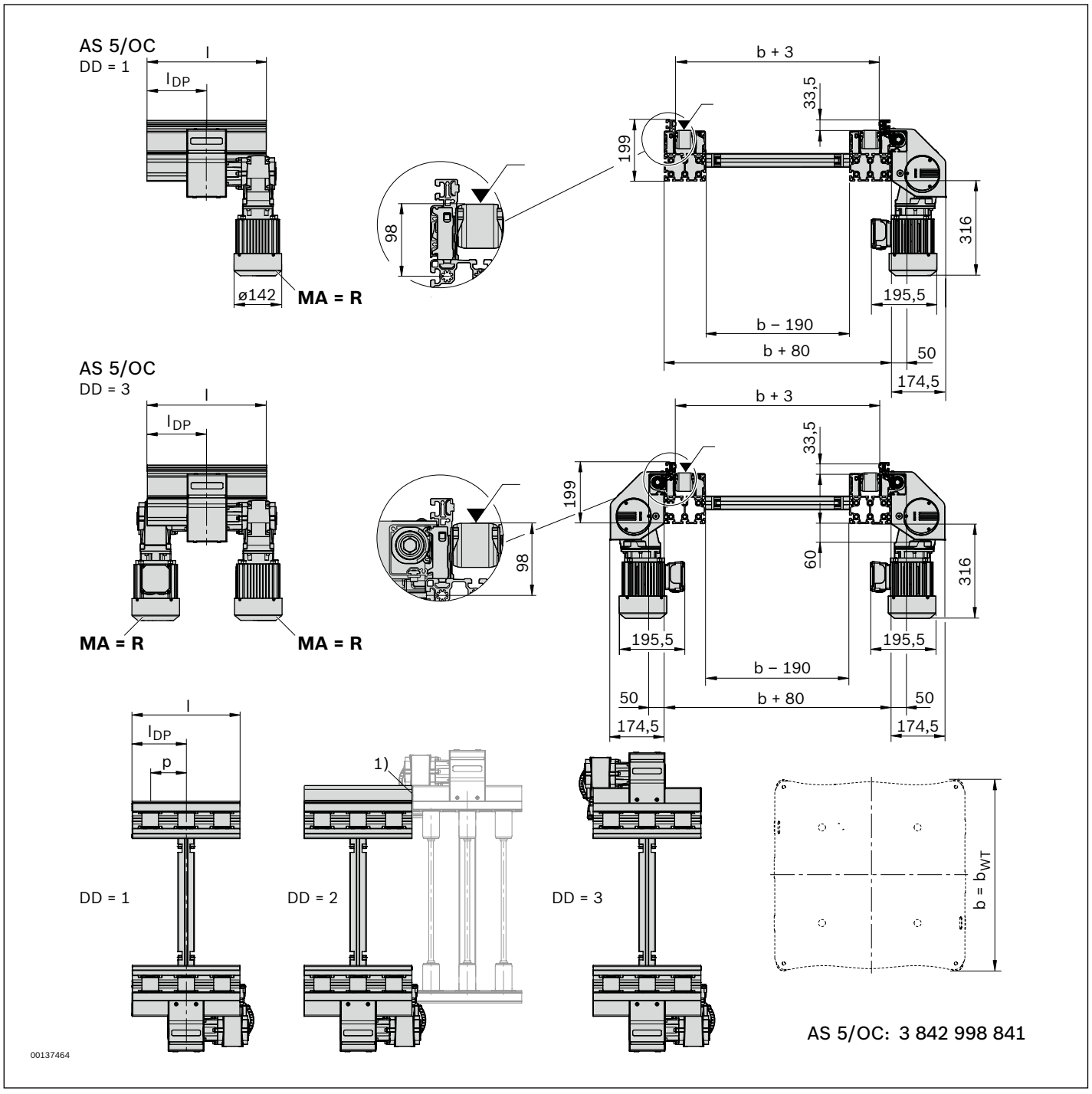
AT = Motor connection
K: with terminal box
S: with cable/plug

MA = Motor mounting
R: Right
L: Left

* Additional measures may be necessary

Dimensions

Drive module AS 5/OC (Open Center), pitch p = 130 mm



1) DD = 2: Join the drive side without the gear motor to a gear-driven section.

l = p x n

l_{DP} = DP x p – p/2

p = roller spacing (pitch)

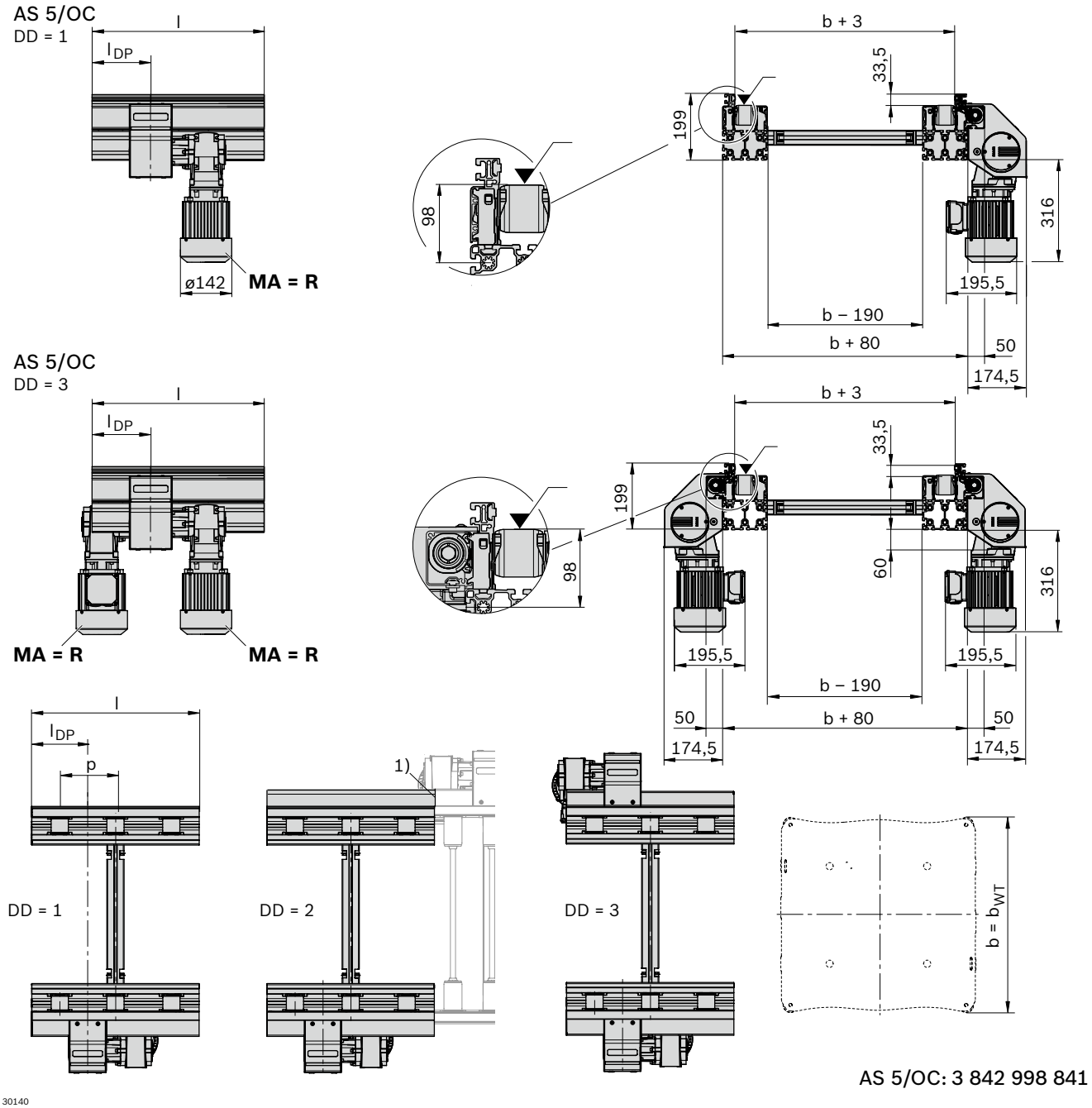
n = number of rollers

DP = drive position

Description of parameters, see page 3-15

Dimensions

Drive module AS 5/OC (Open Center), pitch p = 195 mm; p = 260 mm; p = 325 mm



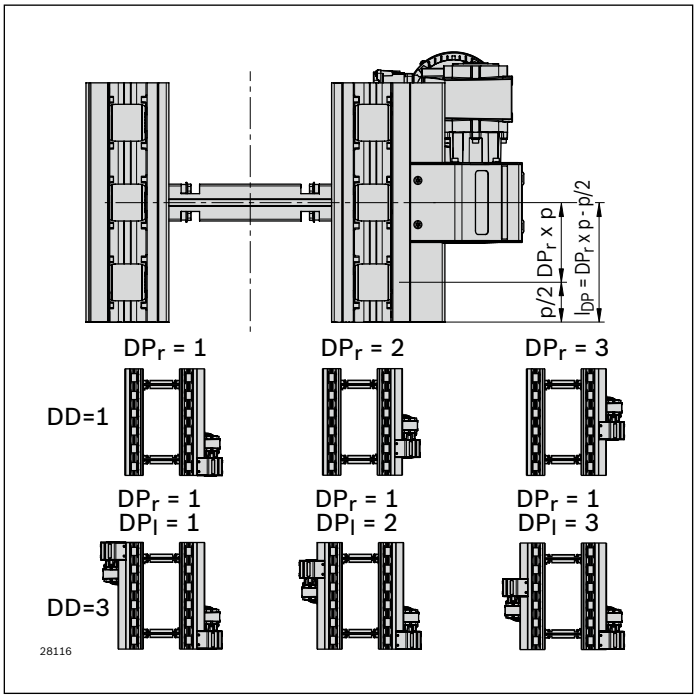
[1] DD = 2: Join the drive side without the gear motor to a gear-driven section.

l	= p x n	p	= roller spacing (pitch)
l_{DP}	= DP x p	n	= number of rollers
		DP	= drive position

Description of parameters, see page 3-15

Pitch p and drive position DP

p = 130 mm
DP is the roller to which the transmission drive is fitted. This roller is not driven.



Example: DP = 2

Possible drive positions DP with pitch p

p (mm)	MA	DP
130	R; L	1 ... 31

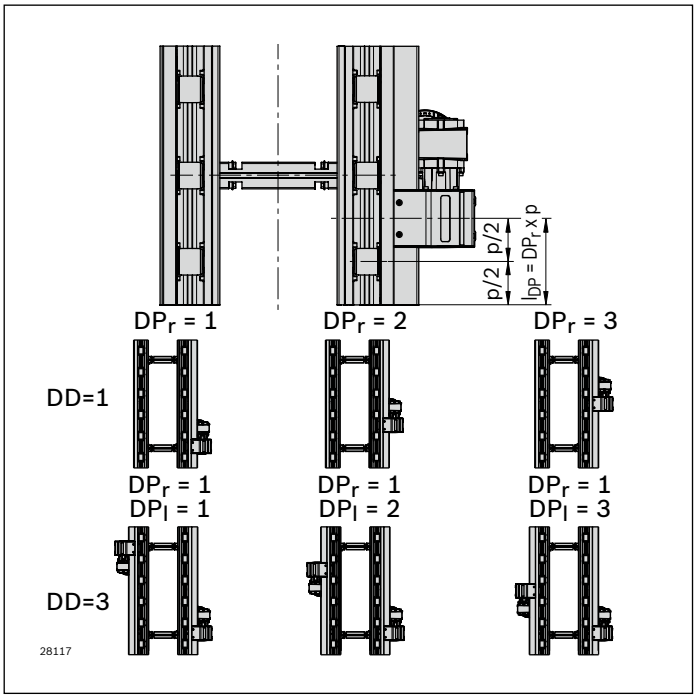
Note:
Only if p = 130 mm: Roller corresponding to DP is not driven.
Gear motor can be mounted on both sides.

Permissible position l_{DP} (mm) after start of section:
l_{DP} = DP x p – p/2

Example for p = 130 mm and DP = 10:
l_{DP} = 10 x 130 mm – 65 mm = 1235 mm

Description of further parameters, see page 3-15

p = 195 mm; p = 260 mm; p = 325 mm
DP is the space between two rollers in which the transmission drive is fitted.



Example: DP = 1

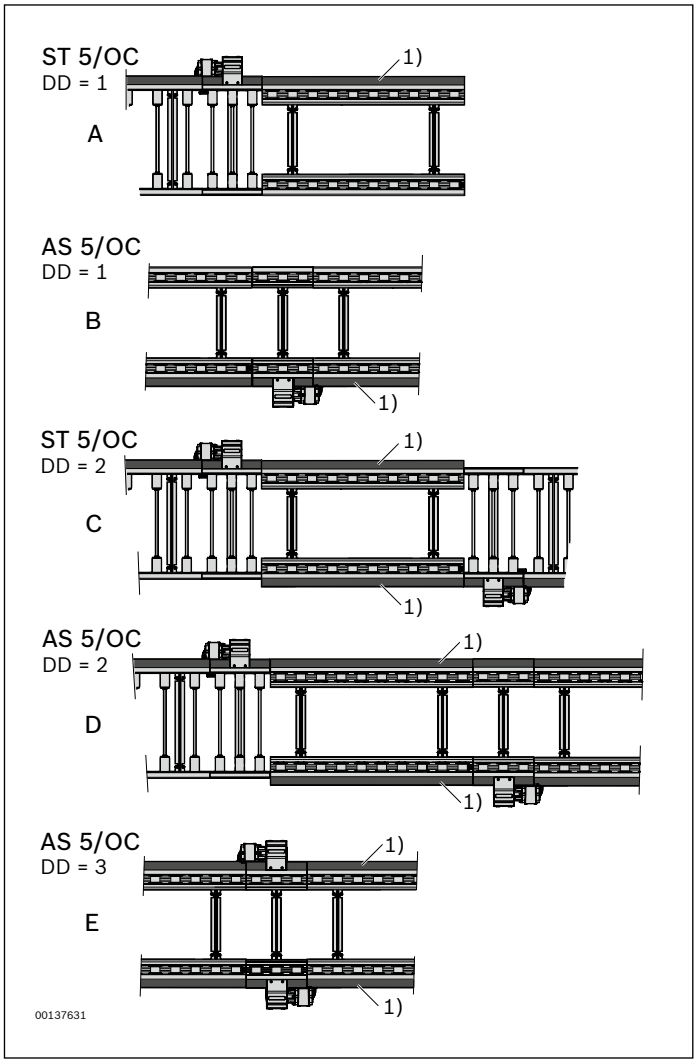
Possible drive positions DP with pitch p

p (mm)	MA	DP
195	R; L	1 ... 20
260	R; L	1 ... 15
325	R; L	1 ... 11

Permissible position l_{DP} (mm) after start of section:
l_{DP} = DP x p

Example for p = 260 mm and DP = 5:
l_{DP} = 5 x 260 mm = 1300 mm

Drive options for an Open Center section



[1] Drive side
A, B: Drive on one side
C, D, E: Drive on both sides

The TS 5 drive concept enables one- or two-sided drive of an Open Center section connected to adjacent sections. Depending on the loading situation, a separate AS 5/OC drive may not be required.

Load position centered on WT

b_{WT} x l_{WT} (mm)	m_{WTmax} (kg)	DD =
455 x 455	150	1[2]
455 x 650	250	1[2]
650 x 650	250	1[2]
650 x 845	300	1[2]
845 x 845	300	1[2]
845 x 1040	300	1[2]

Load position off-center and within the permissible load area

b_{WT} x l_{WT} (mm)	m_{WTmax} (kg)	DD =	m_{WTmax} (kg)	DD =
455 x 455	100	1[2]	150	x[3]
455 x 650	160	1[2]	250	x[3]
650 x 650	160	1[2]	250	x[3]
650 x 845	200	1[2]	300	x[3]
845 x 845	200	1[2]	300	x[3]
845 x 1040	200	1[2]	300	x[3]

[2] drive on one side sufficient (DD = 1)
[3] drive on both sides required (DD = 2 or DD = 3)

AB 5 drive kit

Material:

- Flange (Lenze): aluminum
- Flange (SEW): steel
- Bracket: aluminum
- Motor flange: die-cast aluminum
- Shaft: brass
- Coupling: cast steel; brass

Condition on delivery:

- Not assembled, incl. fastening material and flange
- Mounting option for the gear motor at the top/horizontally/bottom possible, see page. 3-2

Use:

For face-side driving of

- ST 5/... conveyor units
- Adaptation of the sheet metal parts is required, adapter may be required for hexagonal shaft

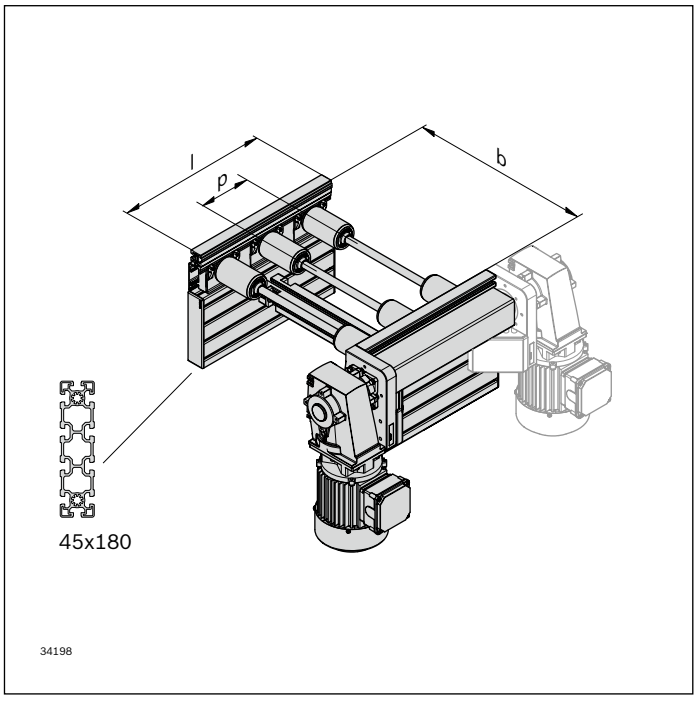
Version:

- Suitable for reversible operation (max. 20 Nm)
- With a Lenze gear motor (GM = 1) or with interface for installing a SEW gear motor (GM = 2)
- Motor connection with cable/plug (AT = S) or terminal box (AT = K)
- Frequency converter, optional, see page 3-25

Note:

- Maximum length of the driven total section at p = 130 and 45 Nm motor output = 19.5 m (longer sections on request)
- Suitable for driving two connected curves
- Assembly in curves, diverters, junctions and lift transverse units on request

Ordering information



AB 5 drive kit

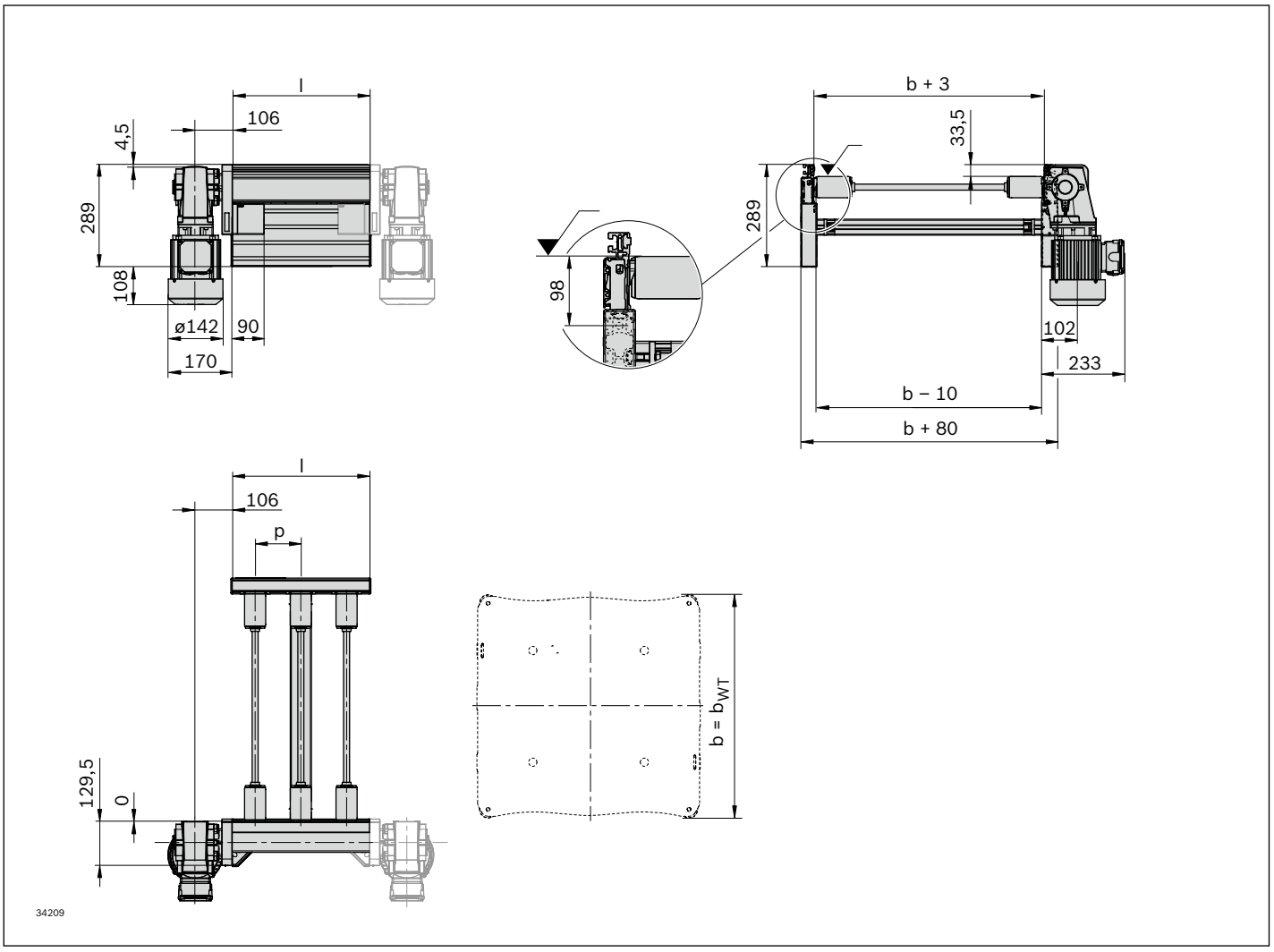
Material number		**3 842 998 842**
v_N (m/min)	Nominal speed	2*; 4; 6; 9; 12; 15; 18 0: without gear motor
U (V)	Voltage	see motor data, p. 13-9
f (Hz)	Frequency	see motor data, p. 13-9
GM	Gear motor 0: without (SW27 interface) 1: with SW27 gear motor 2: without (interface to SEW connection, round shaft Ø 20)	0; 1; 2
AT	Motor connection K: with terminal box S: with cable/plug	K; S
p (mm)	Roller spacing (pitch)	130; 195; 260; 325
MA	Motor mounting R: Right L: Left	R; L

* Additional measures may be necessary

Description of further parameters, see page 0-3

Dimensions

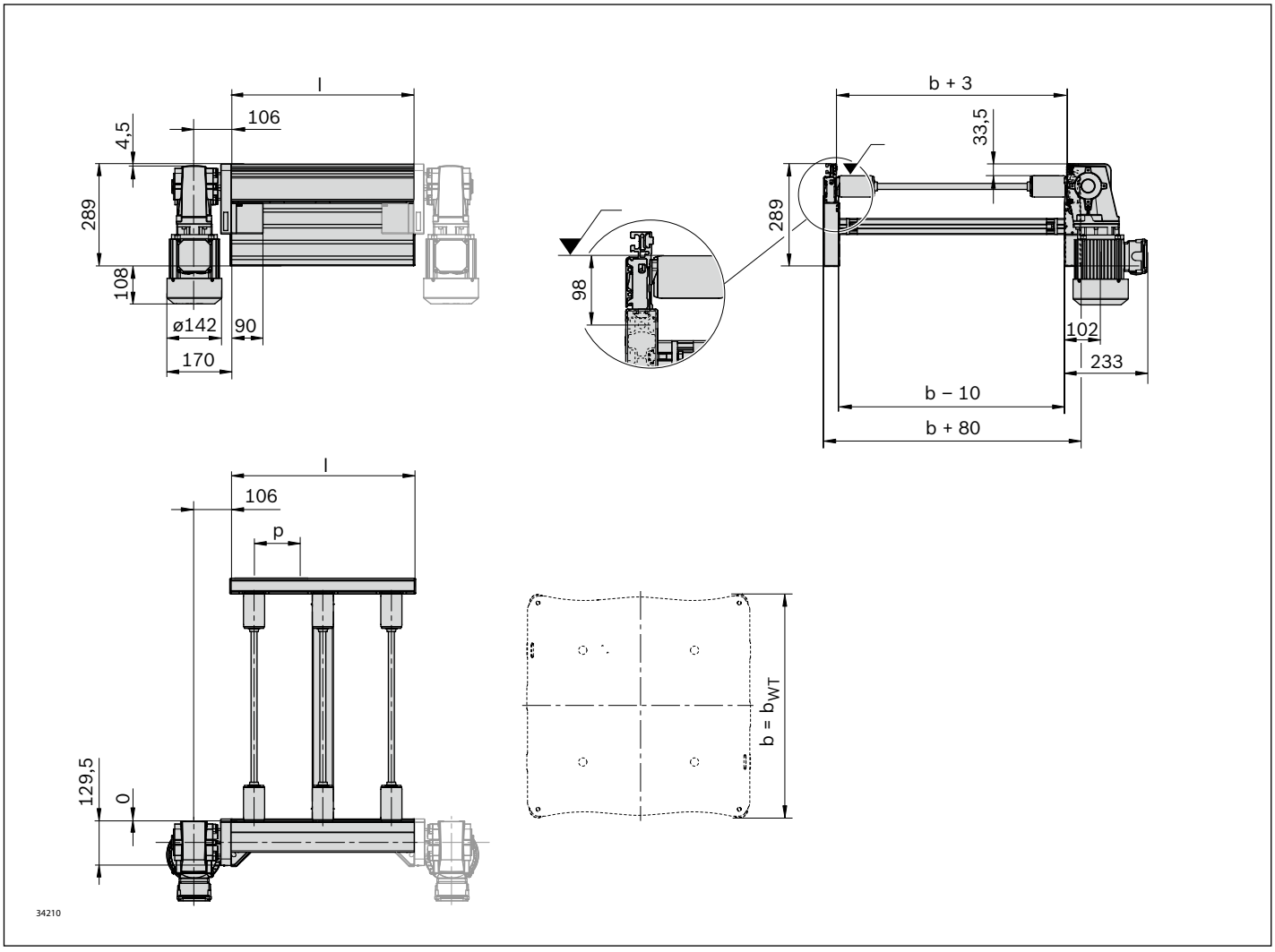
AB 5 drive kit



l = p x n
p = roller spacing (pitch)
n = number of rollers

Description of parameters, see page 3-21

Dimensions
AB 5 drive kit

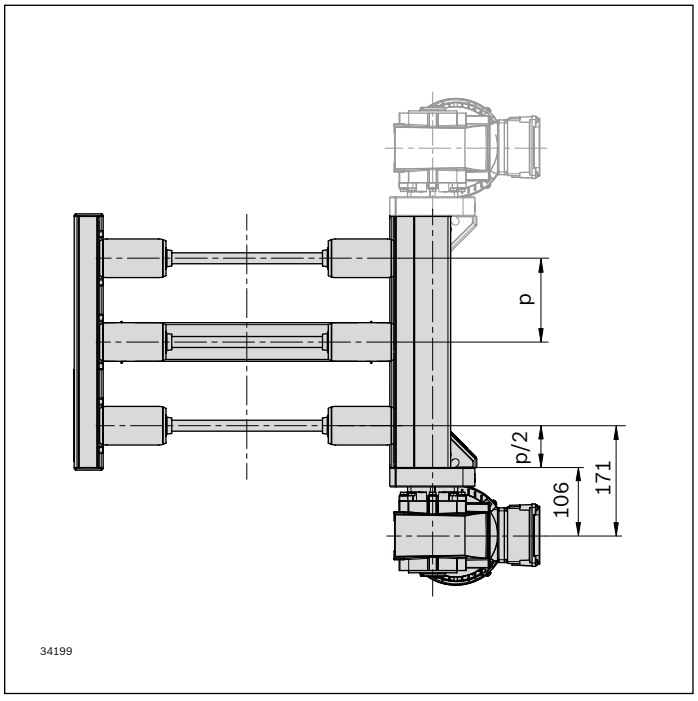


l = p x n
p = roller spacing (pitch)
n = number of rollers

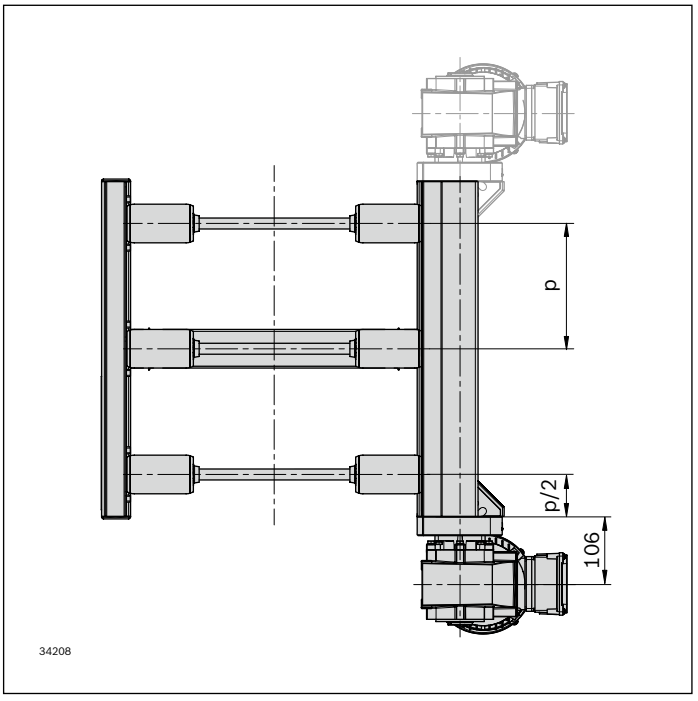
Description of parameters, see page 3-21

Roller spacing (pitch)

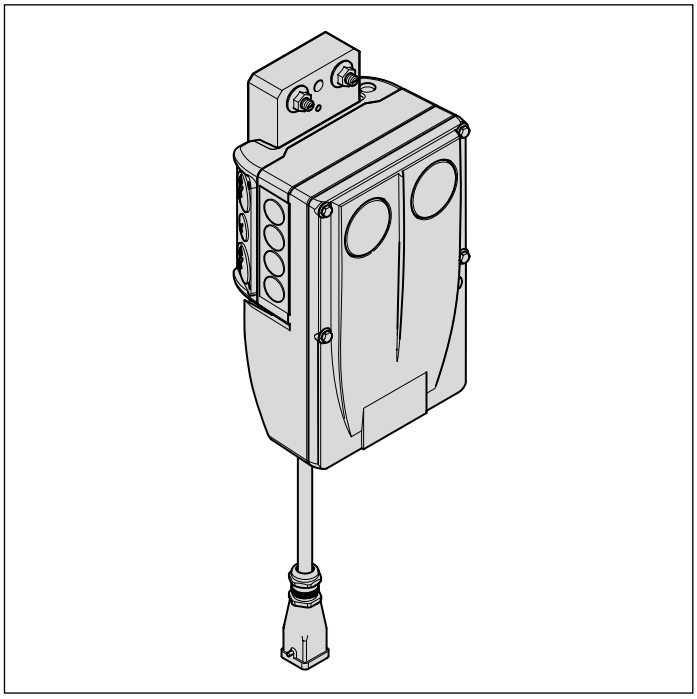
p = 130 mm



p = 195 mm; p = 260 mm; p = 325 mm



Frequency converter (FU)



Required accessories:

- ▶ Manual control unit, see page 3-29
- ▶ Switch/potentiometer unit, see page 3-29

In order to operate a gear motor with adjustable speed, the motor needs to be retrofitted with a frequency converter (FU). The frequency converter has a modular design so that it can be easily mounted on a leg set and connected to the motor by cable.

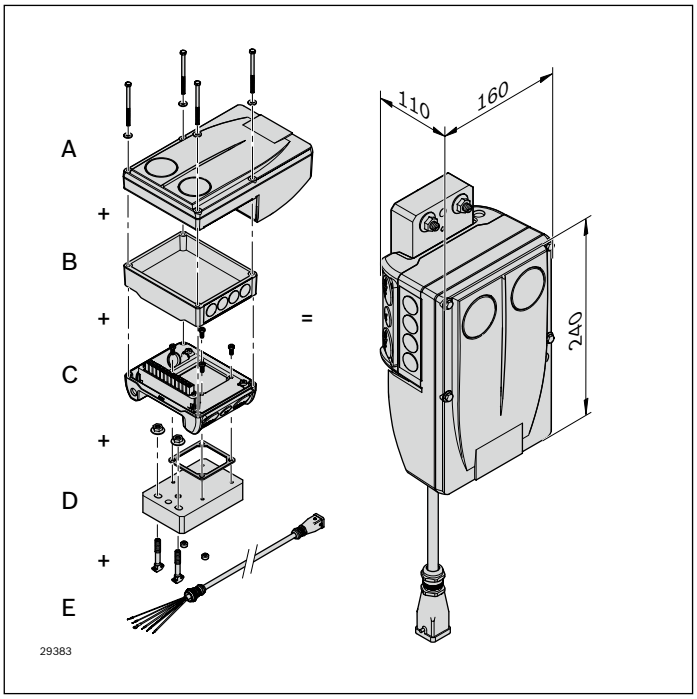
- Connection power: 0.55 kW (connection voltage: 400 V ±10% ... 460 V/480 V ±10%)
- Speed (v_N) depending on the base speed of the gear motor used

Permissible speed range: 2 ... 21 m/min

Complete frequency converter (FU) consisting of the modules

- Frequency converter power unit
- Communication module
- Connection unit
- Attachment kit
- Optional: Connection cable for the plug-in connection to the gear motor (AT = S)

The individual modules can be ordered separately and are easy to connect using the supplied screws. For the internal and external voltage supply, the modules must be wired by the user.

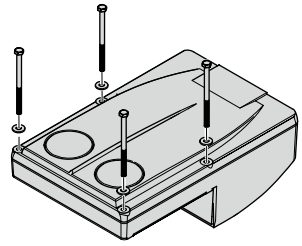


Complete frequency converter consisting of the modules

- Frequency converter power unit (**A**)
- Communication module (**B**)
- Connection unit (**C**)
- Attachment kit (**D**)
- Optional: Connection cable (**E**) for the plug-in connection to the gear motor (AT = S)

The individual modules can be ordered separately and are easy to connect using the supplied screws. For the internal and external voltage supply, the modules must be wired by the user (see terminal assignment plan, see page 13-12).

A



29384

Motor base speed (m/min) **at 50 Hz**	**Min** (m/min)	**Max** (m/min)	**Max** (m/min) **at max. 80% torque**
4	2*	4.5	6
6	2*	6	8
9	3.5	10	13
12	4	13	17
15	5	15	20
18	6	18.5	25

* Additional measures may be necessary

Frequency converter (A)

Power unit: 0.55 kW

(400 V ±10% ... 460 V/480 V ±10%)

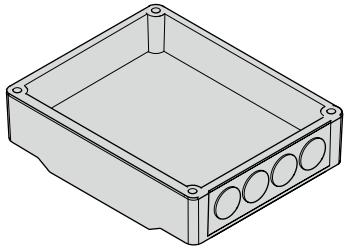
- Easy commissioning via hand-held terminal
- Easy to replace memory module
- Large LED as status display

Product designation	**Material number**
Power element 0.55 kW	**3 842 553 447**

The speed range of the frequency converter is based on the base speed of the motor[1]:

[1] By accepting a resulting loss of power, a higher bandwidth can be covered (see page 13-11)

B



29385

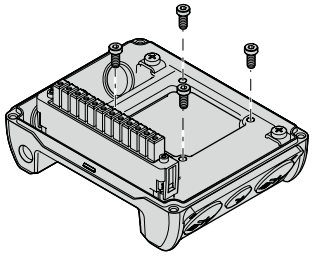
Communication module (B)

- To control the frequency converter
- Cable connection options

Depending on their function, the individual communication modules are provided with the corresponding connections.

Product designation	**Material number**
Standard I/O	**3 842 553 449**
AS-i	**3 842 553 453**
CANopen	**3 842 553 454**
EtherNet/IP	**3 842 553 451**
EtherCAT	**3 842 553 459**
PROFIBUS	**3 842 553 452**
PROFINET	**3 842 553 450**

C



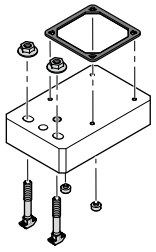
29386

Connection unit (C)

- Power grid connection options

Product designation	Material number
Connection unit	**3 842 553 445**

D



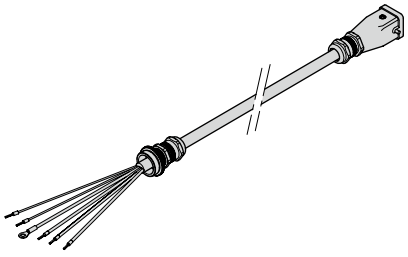
29387

Attachment kit (D)

- For the simple attachment of the frequency converter to the AL leg set (slot/s of a 60 or 80 strut profile)

Product designation	Material number
Attachment kit	**3 842 553 457**

E



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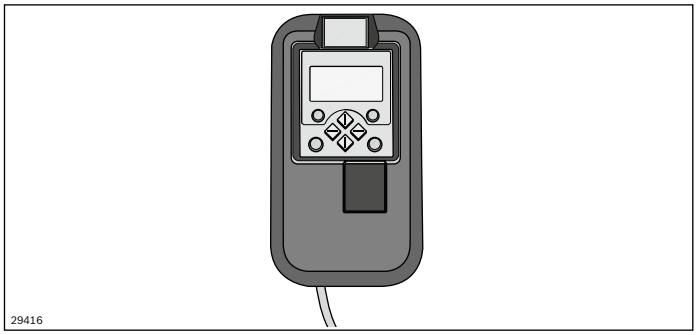
Connection cable (E)

- For connecting the gear motor with the frequency converter (length: 1 m)

Product designation	Material number
Connection cable	**3 842 553 512**

Frequency converter (FU) accessories



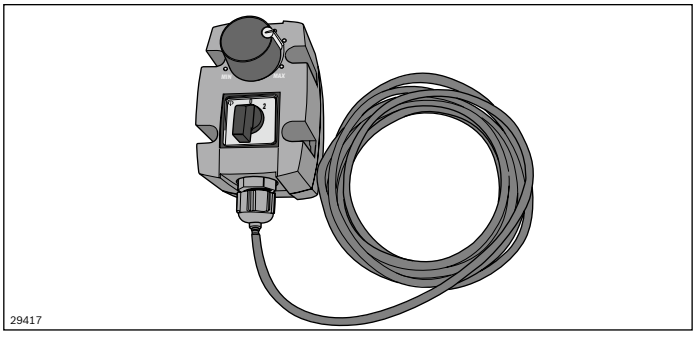
Manual control unit (A)

The manual control unit is required for the parameterization of drives with frequency converters.

In addition, you can:

- Control (e.g. block and release)
- Display operating data
- Steplessly regulate the transport speed
- Transfer parameter sets to other basic devices

Product designation	Material number
Manual control unit	**3 842 552 821**



Switch/potentiometer unit (B)

The switch/potentiometer unit is used to fine tune the transport speed within a range that has been preset with the manual control unit. The switch/potentiometer unit is connected to the frequency converter by a cable.

The drive can be started or stopped with the rotary switch.

Note: It is imperative that the direction in which the roller conveyor is running is checked prior to commissioning.

Product designation	Material number
Switch/potentiometer unit	**3 842 553 184**

Scope of delivery:

A, B: Incl. 2.5 m connection cable