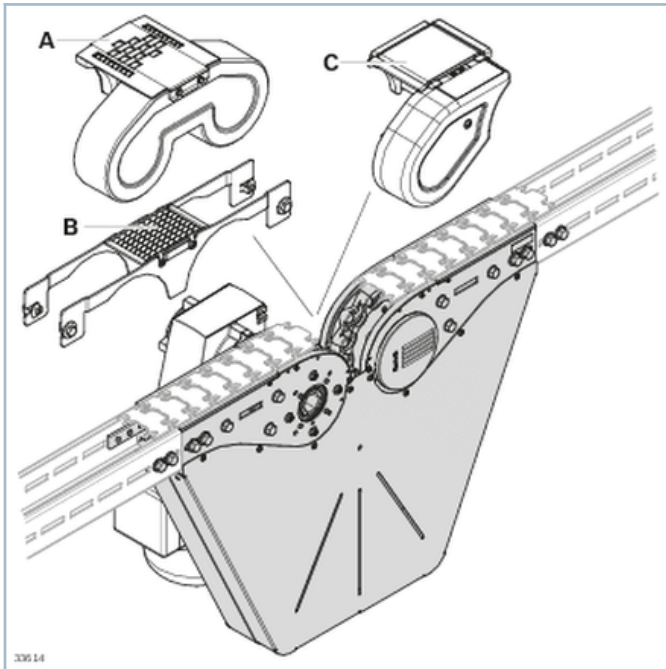


## STS basic unit connection drive



- Drive of a parallel conveyor section or bridge using a hexagonal hollow shaft integrated as standard
- Ball bearing made of non-rusting steel (1.4301), with seal on both sides and FDA-compliant grease filling
- Side elements with slot to attach holders for lateral guides, or similar

- Base unit connection drive + drive kit + active or passive bridge = a complete connection drive
- Reduced noise emission due to slide rails guided in the connection drive
- Installation of the drive kit possible on the right/left (motor, coupling, flange)

# Product description

The connection drive is used for driving the conveyor chain in circuit systems with a top-running chain. The basic unit is quickly turned into a connection drive with variable mounting position by adding a drive kit.

An active (A, C) or passive bridge (B) must be added for transferring the material being transported. The active bridge (A, C) is driven by a transmission from the connection drive

- Size: 65, 90
- Suitable chain types: Flat conveyor chain, static friction chain
- Permissible chain tensile force:  $F_{max} = 1250\text{ N}$
- Section length:  $L \leq 30\text{ m}$
- Conveying speed:  $v_N = 2 \dots 25\text{ m/min}$ , other speeds available on request
- Chain bag to compensate for chain elongation during service life
- Recommendation: No accumulation operation up to 1500 mm after the connection drive
- When using the section profile STS (open) in conveyor systems without a returning chain, a cover must be placed over the lower run by the customer to ensure personal safety.
- Not suitable for reversible operation
- Use in applications ESD with accompanying adapter kit and closed section profiles AL (bridges not conductive!)

## Conveyor noise level

# Technical data

|                                                         | Material                                                                                                                                           |
|---------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| STS basic unit<br>connection<br>drive VF <i>plus</i> 65 | Housing: Non-rusting steel 1.4301<br>Chain wheel: PA<br>Chain guide: PA                                                                            |
| STS basic unit<br>connection<br>drive VF <i>plus</i> 90 | Connector: Non-rusting steel 1.4301<br>Hexagonal shaft: PA<br>Ball bearing: Non-rusting steel 1.4301/FDA<br>Chain fender: Non-rusting steel 1.4301 |

## Combination matrix

|             |                              | Straight                    |                              |                 | Curves              |                     |                     | Drives           |                  |                     | Return Unit         |
|-------------|------------------------------|-----------------------------|------------------------------|-----------------|---------------------|---------------------|---------------------|------------------|------------------|---------------------|---------------------|
|             |                              | Section profile<br>STS open | Section profile<br>STS Clean | Assembly module | Curve wheel         | Roller curve*       | Vertical curve      | Head drive       | Connection drive | Center drive**      | Basic unit          |
| Straight    | Section profile<br>STS open  | J                           |                              |                 |                     |                     |                     |                  |                  |                     |                     |
|             | Section profile<br>STS Clean | L <sup>(6)</sup>            | L <sup>(6)</sup>             |                 |                     |                     |                     |                  |                  |                     |                     |
|             | Assembly module              | J                           | L <sup>(6)</sup>             | N               |                     |                     |                     |                  |                  |                     |                     |
| Curves      | Curve wheel                  | J                           | L <sup>(6)</sup>             | J               | L <sup>(2, 7)</sup> |                     |                     |                  |                  |                     |                     |
|             | Roller curve*                | J                           | N                            | J               | N                   | L <sup>(1)</sup>    |                     |                  |                  |                     |                     |
|             | Vertical curve               | J                           | L <sup>(6)</sup>             | J               | L <sup>(1)</sup>    | L <sup>(1)</sup>    | L <sup>(1)</sup>    |                  |                  |                     |                     |
| Drives      | Head drive                   | J                           | L <sup>(6)</sup>             | J               | L <sup>(1)</sup>    | L <sup>(1, 4)</sup> | L <sup>(1, 4)</sup> | N                |                  |                     |                     |
|             | Connection drive             | J                           | L <sup>(6)</sup>             | J               | L <sup>(1)</sup>    | N                   | L <sup>(1)</sup>    | N                | N                |                     |                     |
|             | Center drive**               | J                           | L <sup>(6)</sup>             | J               | L <sup>(1)</sup>    | N                   | L <sup>(1)</sup>    | N                | N                | N                   |                     |
| Return Unit | Basic unit                   | J                           | L <sup>(6)</sup>             | J               | L <sup>(1)</sup>    | L <sup>(1, 4)</sup> | L <sup>(1, 4)</sup> | L <sup>(1)</sup> | L <sup>(1)</sup> | L <sup>(1, 3)</sup> | L <sup>(1, 3)</sup> |
|             | 90° **                       | J                           | L <sup>(6)</sup>             | J               | L <sup>(1)</sup>    | N                   | L <sup>(1)</sup>    | L <sup>(1)</sup> | L <sup>(1)</sup> | N                   | N                   |

J

possible without restrictions

\* Support profile must project 76+2 mm into the roller curve.

L

possible with restrictions

\*\* AL-STs adapter included in the scope of delivery.

N

not possible

Return Unit

90° \*\*



Retur  
n Unit

90° \*\*

L<sup>1)</sup>

\*  
Supp  
ort

\*\* AL-  
STS  
adapt

- 1) Profile connector not required
- 2) Use of a profile piece (L<sub>min</sub> = 224 mm)
- 3) Assembly module required
- 4) For sizes 160-320: shorten the support rail on the dotted line
- 5) Use of the AL-STS adapter
- 6) Replace the standard profile connector with STS Clean Section profile connector
- 7) Directly possible with left-right change (one profile connector is no longer required)

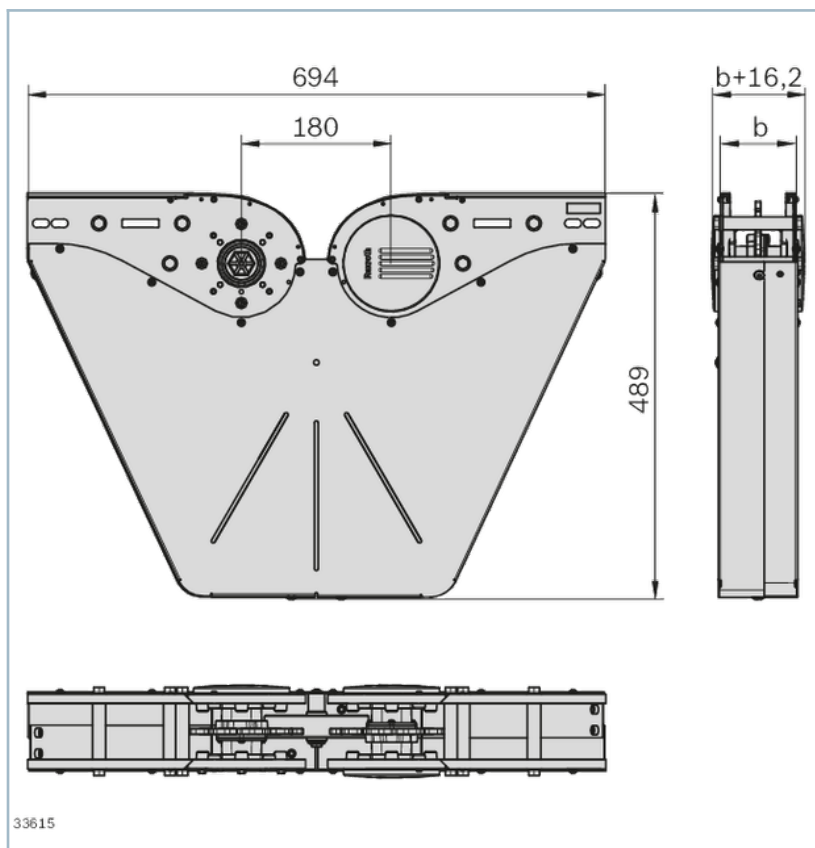
Actual chain and sliding rail lengths of the components

|                                                   |            | Actual chain length | Effective sliding rail length |
|---------------------------------------------------|------------|---------------------|-------------------------------|
|                                                   |            | m                   | m                             |
| STS basic unit connection drive VF <i>plus</i> 65 | 3842553914 | 1,51                | 4x 0,2                        |
| STS basic unit connection drive VF <i>plus</i> 90 | 3842553915 |                     |                               |

-  
Transport and nominal speed vN

## Dimensions

### STS basic unit connection drive

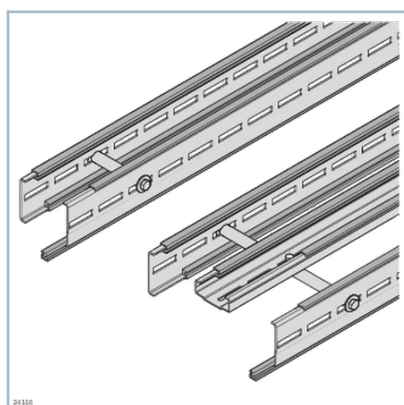


## Information

**Note:** When using the section profile STS Clean with the basic units (head drive, return unit, connection drive) the enclosed profile connector (H = 20 mm) must be replaced with the profile connector STS Clean Section (H = 17 mm) 3842 552 927.

**Note:** The selection of the parameter SP = STS for the drive kit 3 842 998 291 is imperative

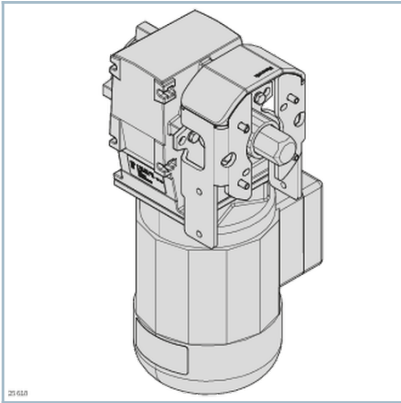
## Accessories



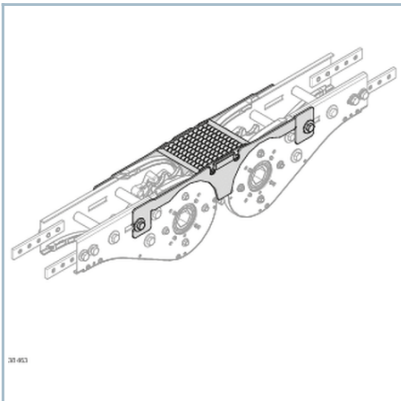
Slide rail

- Easy assembly - simply clip onto the section profile

- Secured against axial shifting due to lateral bolting

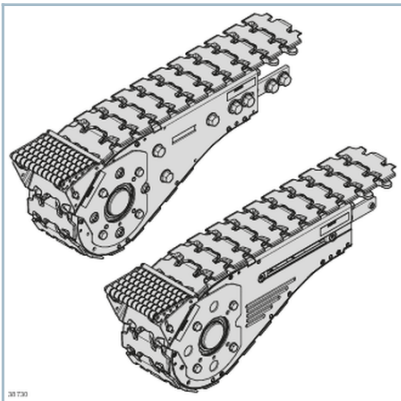


Drive kit



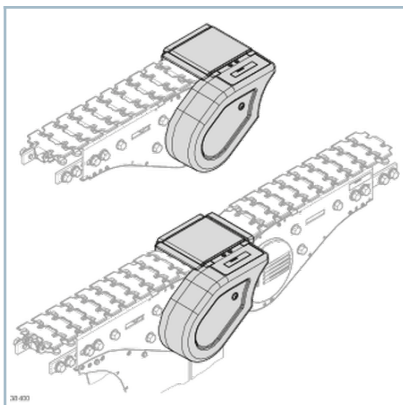
Passive bridge connection kit

- The passive bridge is used as a transfer unit between the basic unit and return unit or with the connection drive to bridge the conveyor trench



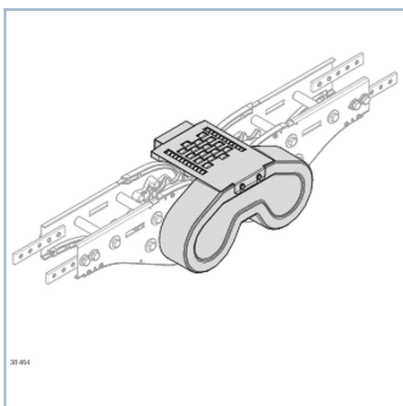
Connection kit short passive bridge

- The short passive bridge is used as a transfer unit between the basic unit or return unit and a third-party conveyor to bridge the conveyor trench



## Connection kit active belt bridge

- The active belt bridge is used as a transfer unit for bridging the conveyor trench
  - between the basic unit and return unit
  - between the start or end of a conveyor section and a third-party conveyor
- Size: 65 and 90
- Only for flat conveyor chain and static friction chain



## Connection kit active roller bridge

- The active roller bridge is used as a transfer unit between the basic unit and return unit or with the connection drive to bridge the conveyor trench.
- The active roller bridge is driven by a transmission (on the drive or return unit side)

## Delivery notes

### Scope of delivery

Incl. fastening material

### Condition of Delivery

Fully assembled

## Ordering codes

|                                                   | No.        |
|---------------------------------------------------|------------|
| STS basic unit connection drive VF <i>plus</i> 65 | 3842553914 |
| STS basic unit connection drive VF <i>plus</i> 90 | 3842553915 |