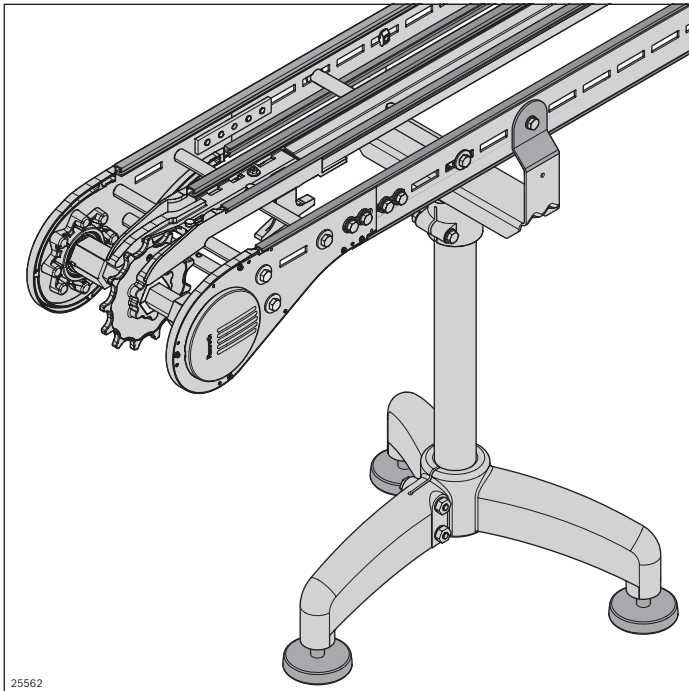


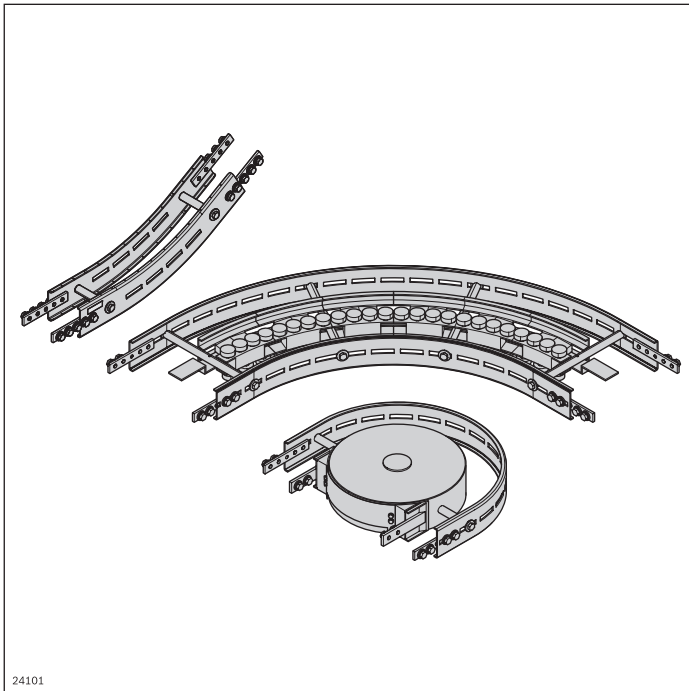
# Stainless steel system (STS)

## VarioFlow *plus*




- ▶ FDA-compliant materials and easy-to-clean surfaces fulfill the high standards in the areas of the food & packaging and health & care industries where hygiene is crucial
- ▶ Mounting of sliding rails without rivets or the need to machine the track bearing surfaces
- ▶ Minimal sliding rail interruptions
- ▶ FDA-compliant, low-friction materials for components subject to constant friction
- ▶ Standardized components that can be used universally
- ▶ Continuous product range in the sizes 65, 90, 120, 160, 240, 320

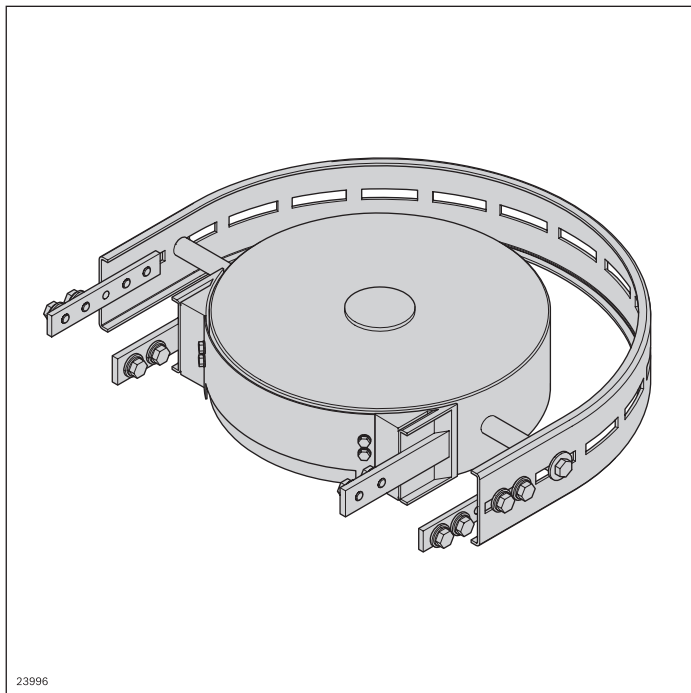
## Curves STS



- ▶ Longer service life and reduced downtimes thanks to low-friction curve technology
- ▶ Components subject to constant friction feature FDA-compliant materials
- ▶ Easy to clean thanks to ample draining surfaces
- ▶ Capable of accumulation
- ▶ Reduced friction on curve wheels and patented roller curves to minimize wear to thereby realize longer sections
- ▶ Ball bearings sealed on both sides of non-rusting steel (1.4301) with FDA-compliant special grease in curve wheels and patented roller curves

	<b>Curve wheel STS</b>	<b>142</b>
	<b>Sliding curve horizontal STS</b>	<b>144</b>
	<b>Roller curve horizontal STS</b>	<b>146</b>
	<b>Vertical curve STS</b>	<b>148</b>

## Curve wheel STS



The curve wheel provides a horizontal direction change for the chain. It enables low-friction direction changes with very small radii.

For attachment options, see the matrix on page 313

- Size: 65, 90, 120
- For deflection angles, see table
- Other deflection angles on request
- Suitable chain types: All

### Notice:

- High-pressure cleaning of the ball bearing areas is not permitted
- In combination with the connection drive STS, the lower branch must be covered by the customer

- ▶ Easy-to-clean design
- ▶ Ball bearing made of non-rusting steel (1.4301), with seal on both sides and FDA-compliant grease filling
- ▶ Surfaces in contact with chain made of FDA-compliant materials

- ▶ No interfering contours above chain plate height
- ▶ Can be used horizontally and vertically (for wedge conveyors)

### Scope of delivery:

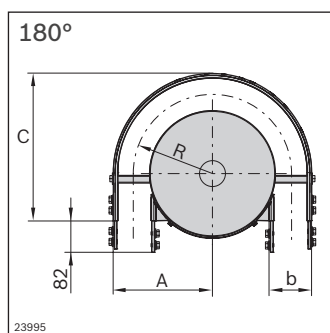
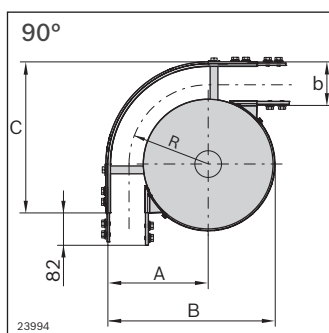
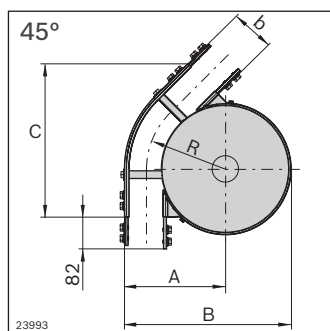
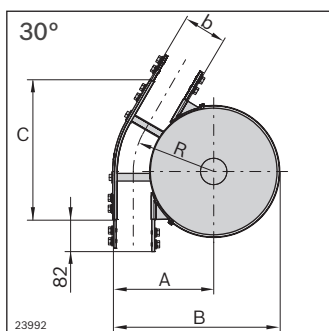
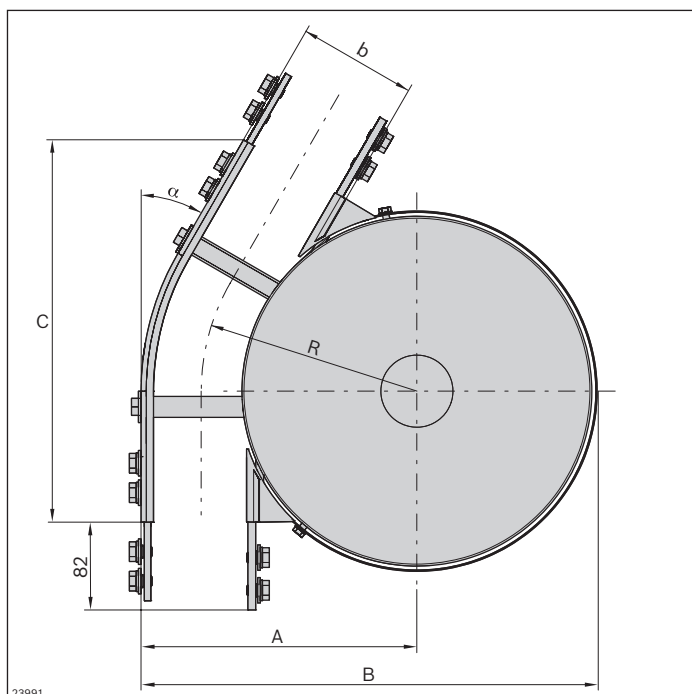
- Including fastening material for mounting to section profiles STS

### Condition on delivery:

- Assembled

### Material:

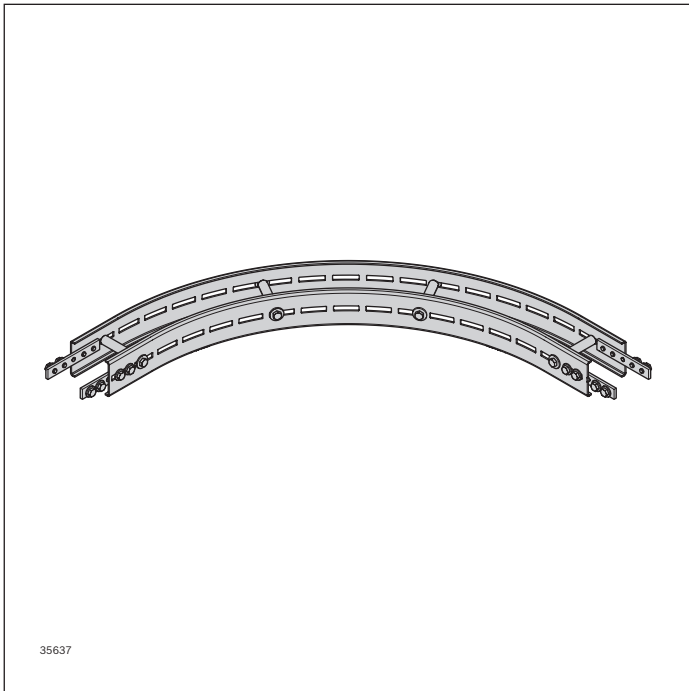
- Housing: Non-rusting steel 1.4301
- Chain wheel: PA; white
- Ball bearing: Non-rusting steel 1.4301/FDA



Curve wheel STS	$\alpha$ (°)	No.
VFplus 65	30	<b>3 842 547 111</b>
	45	<b>3 842 547 112</b>
	90	<b>3 842 547 113</b>
	180	<b>3 842 547 114</b>
VFplus 90	30	<b>3 842 547 115</b>
	45	<b>3 842 547 116</b>
	90	<b>3 842 547 117</b>
	180	<b>3 842 547 118</b>
VFplus 120	30	<b>3 842 547 119</b>
	45	<b>3 842 547 120</b>
	90	<b>3 842 547 121</b>
	180	<b>3 842 547 122</b>

b (mm)	$\alpha$ (°)	R (mm)	A (mm)	B (mm)	C (mm)
65	30	153.0	185.5	322.5	279.4
	45	153.0	185.5	322.5	301.9
	90	153.0	185.5	322.5	285.5
	180	153.0	185.5	–	287.5
90	30	165.5	210.5	347.5	291.9
	45	165.5	210.5	347.5	319.6
	90	165.5	210.5	347.5	310.5
	180	165.5	210.5	–	310.5
120	30	180.5	240.5	377.5	306.9
	45	180.5	240.5	377.5	340.8
	90	180.5	240.5	377.5	340.5
	180	180.5	240.5	–	340.5

## Sliding curve horizontal STS



The sliding curve provides a horizontal change in direction for the chain, for when there is not enough space for a curve wheel or the speeds or product dimensions do not permit conveying over a curve wheel. The sliding curve is used to reduce noise at high speeds or when transporting long products in wedge conveyors. The chain tensile force is increased through the ensuing friction.

For attachment options, see the matrix on page 313

- Size: 65, 90, 120
- Deflection angles and radii see table on p. 145, other deflection angles and radii on request
- Suitable chain types: All
- Version with open section profiles
- Requires the use of the sliding rails "Advanced" or "Premium"
- Use in abrasive environments is not permissible

### Required accessories:

- Sliding rail: Length calculation, see p. 302

### Scope of delivery:

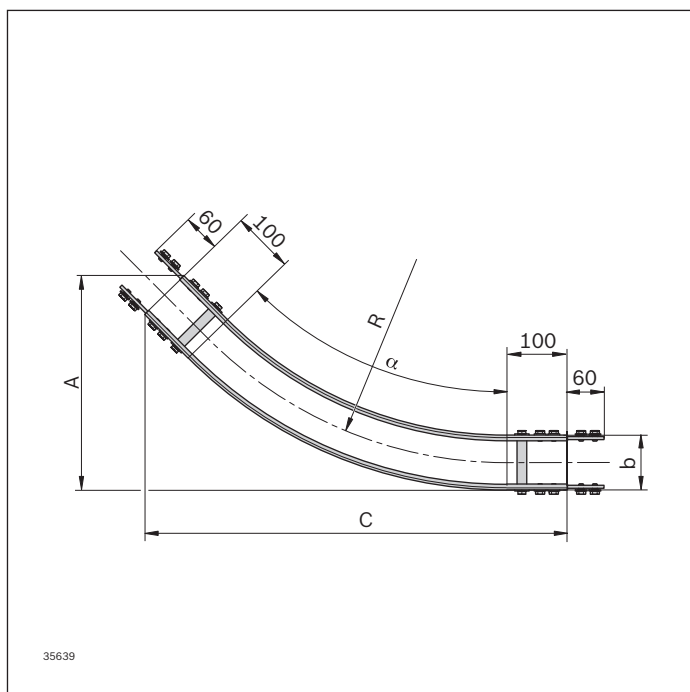
- Including fastening material for mounting to STS section profiles

### Condition on delivery:

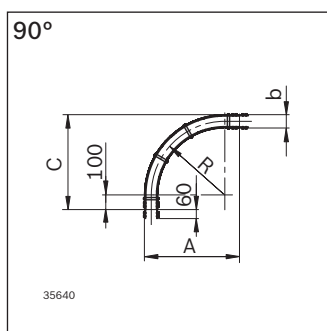
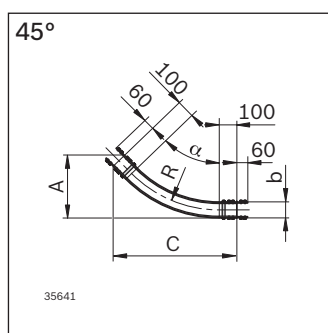
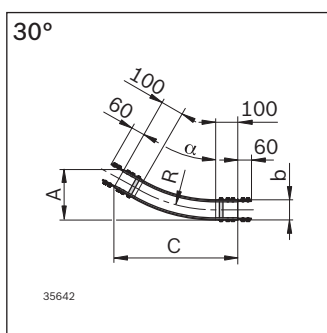
- Assembled

### Material:

- Non-rusting steel 1.4301

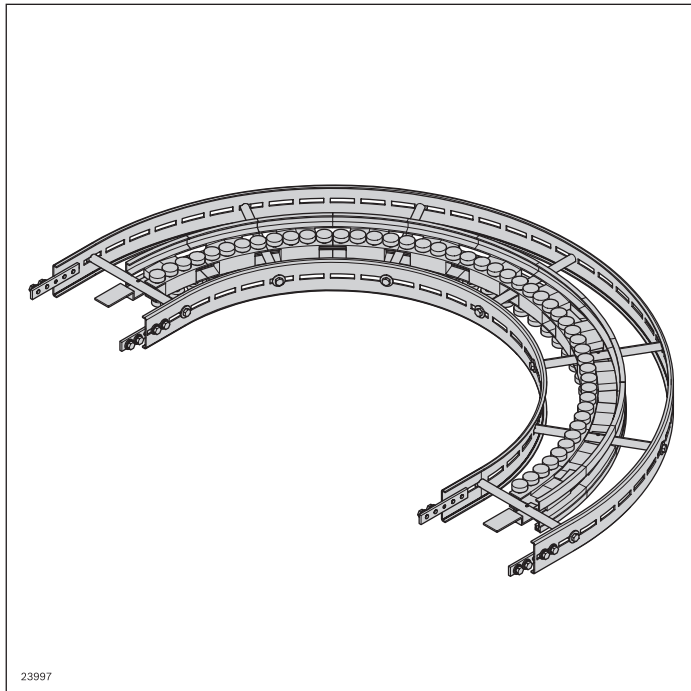


Sliding curve horizontal AL	$\alpha$ (°)	R (mm)	No.
VFplus 65	30	700	<b>3 842 557 051</b>
	45	700	<b>3 842 557 052</b>
	90	700	<b>3 842 557 053</b>
VFplus 90	45	500	<b>3 842 557 054</b>
	90	500	<b>3 842 557 055</b>
	30	700	<b>3 842 557 056</b>
	45	700	<b>3 842 557 057</b>
	90	700	<b>3 842 557 058</b>
VFplus 120	30	700	<b>3 842 557 059</b>
	45	700	<b>3 842 557 060</b>
	90	700	<b>3 842 557 061</b>



b (mm)	$\alpha$ (°)	R (mm)	A (mm)	C (mm)
65	30	700	204.4	552.9
	45	700	331.2	688.7
	90	700	832.5	832.5
90	45	500	294.0	556.1
	90	500	645.0	645.0
	30	700	227.8	559.1
	45	700	352.6	697.5
	90	700	845.0	845.0
120	30	700	255.7	566.6
	45	700	378.2	708.1
	90	700	860.0	860.0

## Roller curve horizontal STS



The low-friction roller curve provides a horizontal change in direction for the chain. Plastic-coated roller elements with ball bearings enable longer conveyor sections. The service life of the chain is increased and system costs reduced. For attachment options and length determination of the support profile, see matrix on page 313

- Size: 160, 240, 320
- See table for the deflection angles, more deflection angles available on request
- Deflection radius: R500
- Suitable chain types: All
- Version with open section profiles

**Notice:** High-pressure cleaning of the ball bearing areas is not permitted.

- ▶ Patented roller elements for low-friction, quieter changes in chain direction
- ▶ Easy-to-clean design
- ▶ Ball bearing made of non-rusting steel (1.4301), with seal on both sides and FDA-compliant grease filling

- ▶ Surfaces in contact with chain made of FDA-compliant materials

Required accessories:

- Sliding rail: Length calculation, see p. 302

Scope of delivery:

- Including fastening material for mounting to section profiles STS

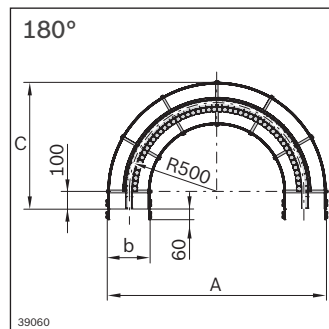
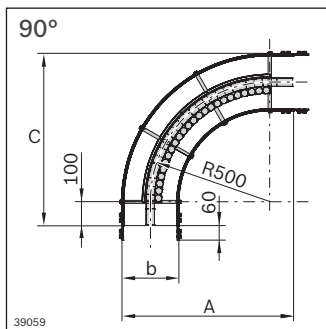
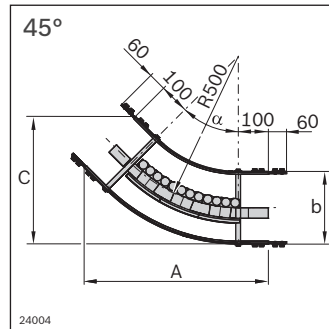
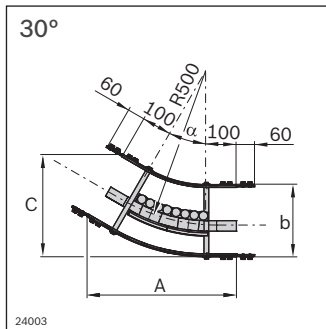
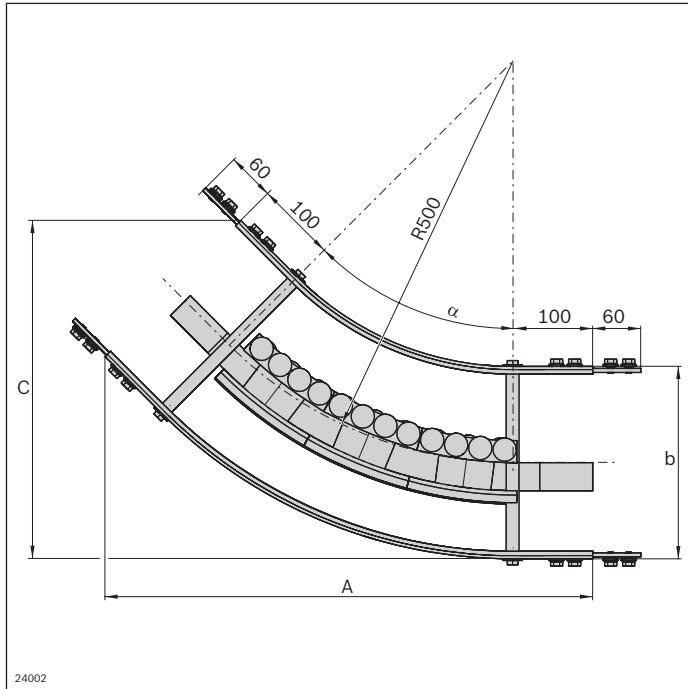
Condition on delivery:

- Assembled

Material:

- Profile: Non-rusting steel 1.4301
- Roller carrier: PA66
- Ball bearing: Non-rusting steel 1.4301/FDA
- Connector: Non-rusting steel 1.4301
- Rollers: PA

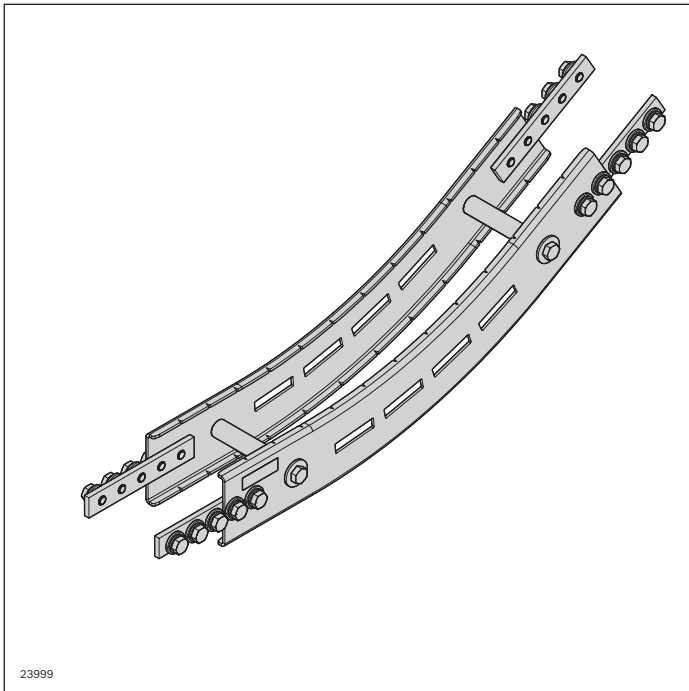




Roller curve STS	$\alpha$ (°)	No.
VFplus 160	30	<b>3 842 547 123</b>
	45	<b>3 842 547 124</b>
	90	<b>3 842 547 125</b>
	180	<b>3 842 547 126</b>
VFplus 240	30	<b>3 842 547 127</b>
	45	<b>3 842 547 128</b>
	90	<b>3 842 547 129</b>
	180	<b>3 842 547 130</b>
VFplus 320	30	<b>3 842 547 131</b>
	45	<b>3 842 547 132</b>
	90	<b>3 842 547 133</b>
	180	<b>3 842 547 134</b>

b (mm)	$\alpha$ (°)	A (mm)	C (mm)
160	30	476.6	266.3
	45	580.8	353.7
	90	680.0	680.0
	180	1160.0	680.0
240	30	496.6	340.9
	45	609.1	422.0
	90	720.0	720.0
	180	1240.0	720.0
320	30	516.6	415.6
	45	637.4	490.3
	90	760.0	760.0
	180	1320.0	760.0

## Vertical curve STS



The vertical curve is used for the transition from a horizontal conveyor section to an ascending section and vice versa. The chain tensile force is increased through the ensuing friction.

A vertical curve of 5° is recommended for the infeed and outfeed on the wedge conveyor, especially with small products.

For attachment options, see the matrix on page 313

- Size: All
- Deflection angles and radii see table, other deflection angles and radii on request
- Suitable chain types: All
- Version with open section profiles
- Requires the use of the sliding rails "Advanced" or "Premium"

### Required accessories:

- Sliding rail: Length calculation, see p. 302

### Scope of delivery:

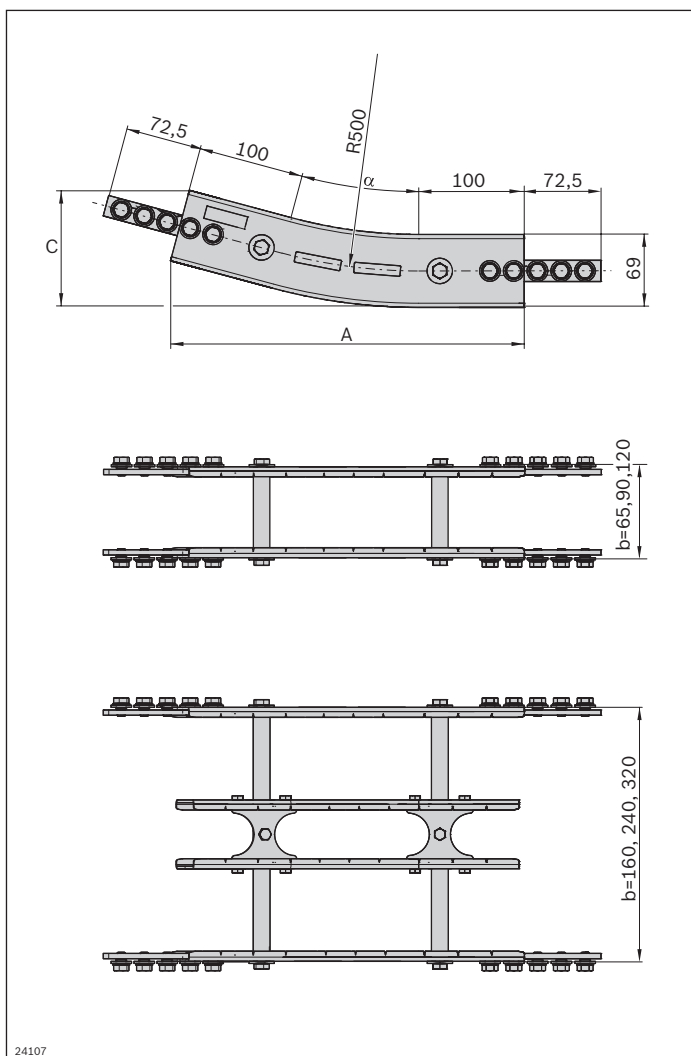
- Including fastening material for mounting to STS section profiles

### Condition on delivery:

- Assembled

### Material:

- Profile: Non-rusting steel 1.4301
- Connector: Non-rusting steel 1.4301
- Support profile from size 160: Non-rusting steel 1.4301



Vertical curve STS	$\alpha$ (°)	No.
VFplus 65	5	3 842 547 135
	15	3 842 547 136
	30	3 842 547 137
	45	3 842 547 138
VFplus 90	5	3 842 547 139
	15	3 842 547 140
	30	3 842 547 141
	45	3 842 547 142
VFplus 120	5	3 842 547 143
	15	3 842 547 144
	30	3 842 547 145
	45	3 842 547 146
VFplus 160	5	3 842 547 147
	15	3 842 547 148
	30	3 842 547 149
	45	3 842 547 150
VFplus 240	5	3 842 547 151
	15	3 842 547 152
	30	3 842 547 153
VFplus 320	5	3 842 547 154
	15	3 842 547 155
	30	3 842 547 156

b (mm)	$\alpha$ (°)	R (mm)	A (mm)	C (mm)
65-320	5	500	246.2	79.5
	15	500	334.9	110.7
	30	500	453.9	181.4
65-160	45	500	548.7	276.1

