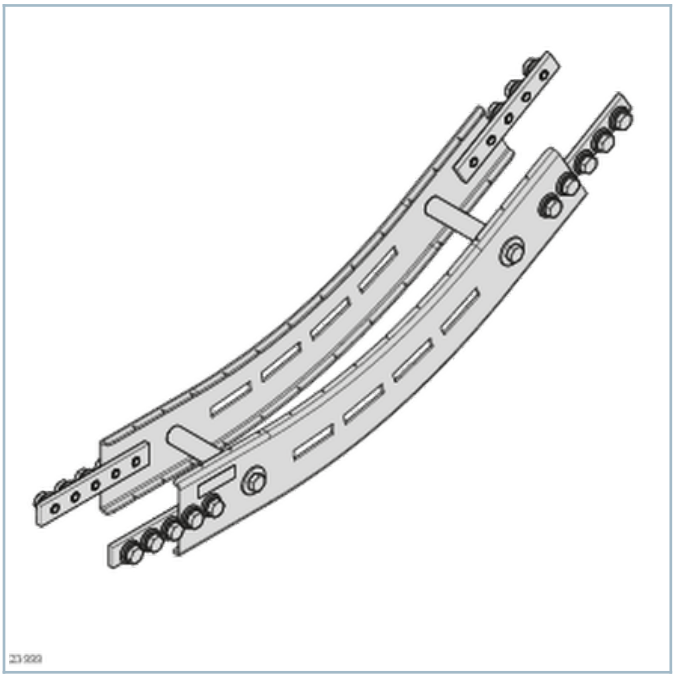
Vertical curve STS



Product description

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.

- Size: all
- Deflection angles and radii, other deflection angles and radii on request
- Suitable chain types: all
- Version with open section profiles
- Requires the use of the “Advanced” or “Premium” slide rails

Technical data

	Material
Vertical curve STS VFplus 65 5°	Profile: Non-rusting steel 1.4301 Connector: Non-rusting steel 1.4301
Vertical curve STS VFplus 65 15°	
Vertical curve STS VFplus 65 30°	
Vertical curve STS VFplus 65 45°	
Vertical curve STS VFplus 90 5°	
Vertical curve STS VFplus 90 15°	
Vertical curve STS VFplus 90 30°	
Vertical curve STS VFplus 90 45°	
Vertical curve STS VFplus 120 5°	
Vertical curve STS VFplus 120 15°	
Vertical curve STS VFplus 120 30°	

	Material
Vertical curve STS VFplus 120 45°	Profile: Non-rusting steel 1.4301 Connector: Non-rusting steel 1.4301
Vertical curve STS VFplus 160 5°	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 VFplus 160 15°	
Vertical curve STS VFplus 160 30°	
Vertical curve STS VFplus 160 45°	
Vertical curve STS VFplus 240 5°	
Vertical curve STS VFplus 240 15°	
Vertical curve STS VFplus 240 30°	
Vertical curve STS VFplus 320 5°	
Vertical curve STS VFplus 320 15°	
Vertical curve STS VFplus 320 30°	

Combination matrix

		Straight			Curves			Drives			Return Unit
		Section profile STS open	Section profile STS Clean	Assembly module	Curve wheel	Roller curve*	Vertical curve	Head drive	Connection drive	Center drive**	Basic unit
Straight	Section profile STS open	J									
	Section profile STS Clean	L[6)]	L[6)]								

		Straight			Curves			Drives			Return Unit
		Section profile STS open	Section profile STS Clean	Assembly module	Curve wheel	Roller curve*	Vertical curve	Head drive	Connection drive	Center drive**	Basic unit
Straight	Assembly module	J	L[6)]	N							
Curves	Curve wheel	J	L[6)]	J	L[2, 7)]						
	Roller curve*	J	N	J	N	L[1)]					
	Vertical curve	J	L[6)]	J	L[1)]	L[1)]	L[1)]				
Drives	Head drive	J	L[6)]	J	L[1)]	L[1, 4)]	L[1, 4)]	N			
	Connection drive	J	L[6)]	J	L[1)]	N	L[1)]	N	N		
	Center drive**	J	L[6)]	J	L[1)]	N	L[1)]	N	N	N	
Return Unit	Basic unit	J	L[6)]	J	L[1)]	L[1, 4)]	L[1, 4)]	L[1)]	L[1)]	L[1, 3)]	L[1, 3)]
	90° **	J	L[6)]	J	L[1)]	N	L[1)]	L[1)]	L[1)]	N	N

J possible without restrictions

L possible with restrictions

N not possible

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

** AL-STS adapter included in the scope of delivery.

Retur n Unit

90° **

Retur
n Unit

90° **

L[1)]

*
Supp
ort

** AL-
STS
adapt

1) Profile connector not required
2) Use of a profile piece (L_{min} = 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

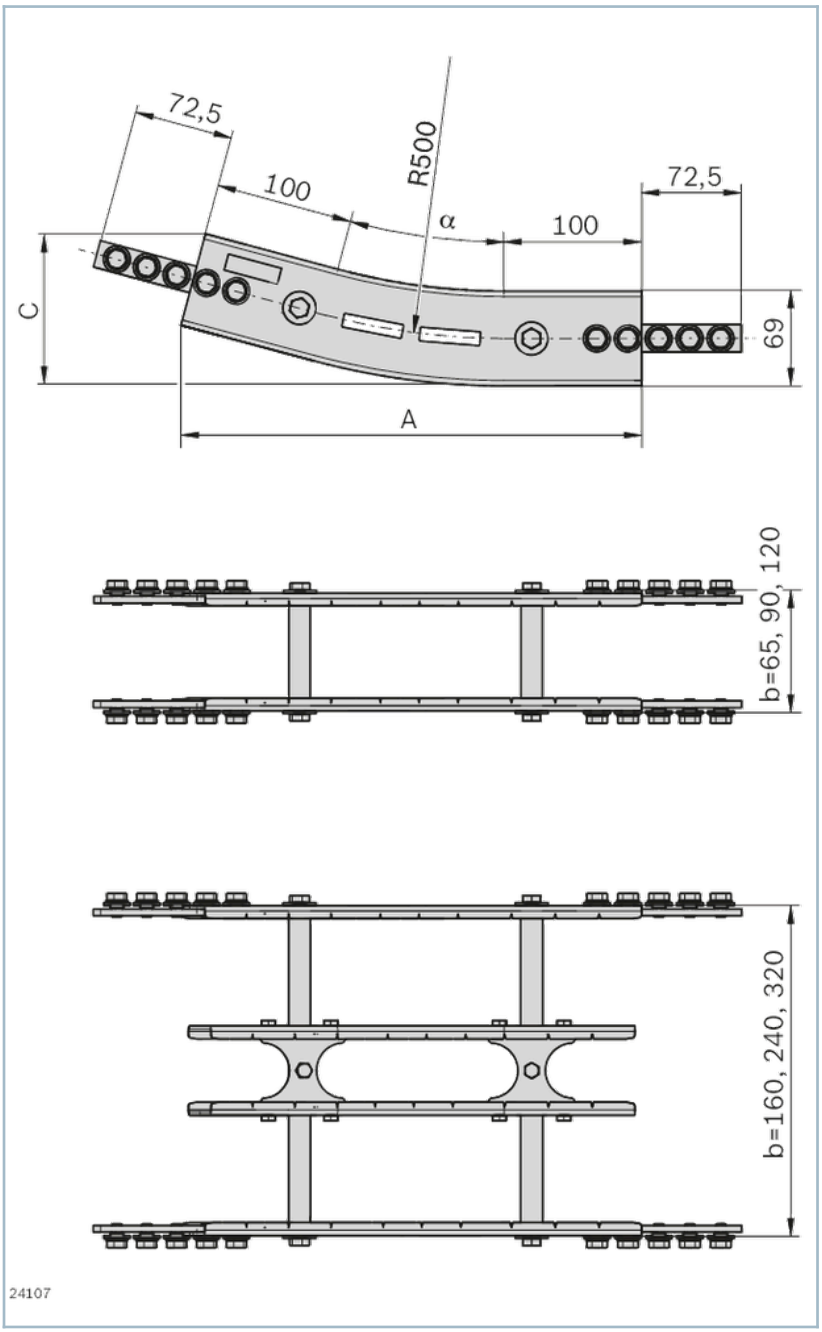
		Actual chain length	Effective sliding rail length
		m	m
Vertical curve STS VFplus 65 5°	3842547135	2x 0,24	4x 0,24
Vertical curve STS VFplus 65 15°	3842547136	2x 0,33	4x 0,33
Vertical curve STS VFplus 65 30°	3842547137	2x 0,46	4x 0,46
Vertical curve STS VFplus 65 45°	3842547138	2x 0,59	4x 0,59
Vertical curve STS VFplus 90 5°	3842547139	2x 0,24	4x 0,24
Vertical curve STS VFplus 90 15°	3842547140	2x 0,33	4x 0,33
Vertical curve STS VFplus 90 30°	3842547141	2x 0,46	4x 0,46
Vertical curve STS VFplus 90 45°	3842547142	2x 0,59	4x 0,59
Vertical curve STS VFplus 120 5°	3842547143	2x 0,24	4x 0,24
Vertical curve STS VFplus 120 15°	3842547144	2x 0,33	
Vertical curve STS VFplus 120 30°	3842547145	2x 0,46	
Vertical curve STS VFplus 120 45°	3842547146	2x 0,59	
Vertical curve STS VFplus 160 5°	3842547147	2x 0,24	8x 0,24 [1)]
Vertical curve STS VFplus 160 15°	3842547148	2x 0,33	8x 0,33 [1)]

		Actual chain length	Effective sliding rail length
		m	m
Vertical curve STS VFplus 160 30°	3842547149	2x 0,46	8x 0,46 [1)]
Vertical curve STS VFplus 160 45°	3842547150	2x 0,59	8x 0,59 [1)]
Vertical curve STS VFplus 240 5°	3842547151	2x 0,24	8x 0,24 [1)]
Vertical curve STS VFplus 240 15°	3842547152	2x 0,33	8x 0,33 [1)]
Vertical curve STS VFplus 240 30°	3842547153	2x 0,46	8x 0,46 [1)]
Vertical curve STS VFplus 320 5°	3842547154	2x 0,24	8x 0,24 [1)]
Vertical curve STS VFplus 320 15°	3842547155	2x 0,33	8x 0,33 [1)]
Vertical curve STS VFplus 320 30°	3842547156	2x 0,46	8x 0,46 [1)]

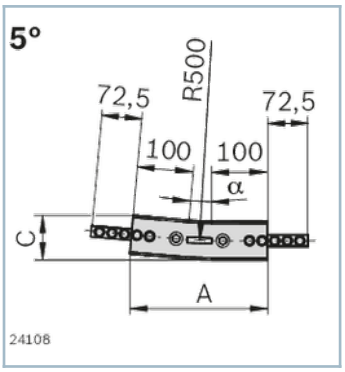
1) With support profile

Dimensions

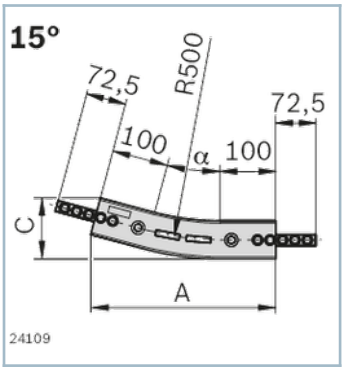
Vertical curve STS



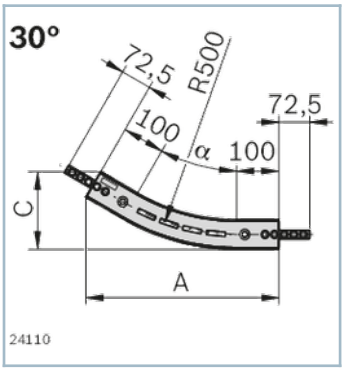
Vertical curve STS VFplus 5°



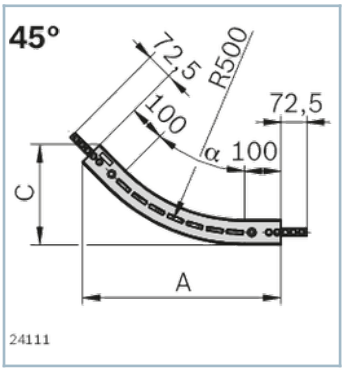
Vertical curve STS VFplus 15°



Vertical curve STS VFplus 30°



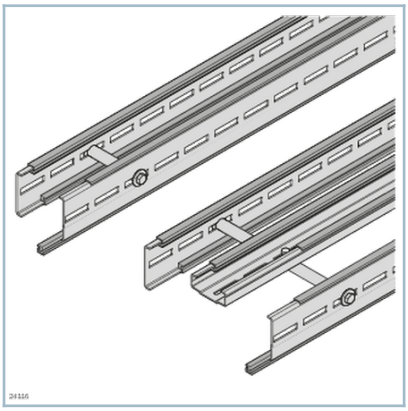
Vertical curve STS VFplus 45°



Deflection angles and radii

b	α	A	C	R
mm	°	mm	mm	mm
65	5	246.2	79.5	500
	15	334.9	110.7	500
	30	453.9	181.4	500
	45	548.7	276.1	500
90	5	246.2	79.5	500
	15	334.9	110.7	500
	30	453.9	181.4	500
	45	548.7	276.1	500
120	5	246.2	79.5	500
	15	334.9	110.7	500
	30	453.9	181.4	500
	45	548.7	276.1	500
160	5	246.2	79.5	500
	15	334.9	110.7	500
	30	453.9	181.4	500
	45	548.7	276.1	500
240	5	246.2	79.5	500
	15	334.9	110.7	500
	30	453.9	181.4	500
320	5	246.2	79.5	500
	15	334.9	110.7	500
	30	453.9	181.4	500

Accessories



Slide rail

- Easy assembly - simply clip onto the section profile
- Secured against axial shifting due to lateral bolting

Ordering codes

	α	R	No.
	°	mm	
Vertical curve STS VFplus 65 5°	5	500	3842547135
Vertical curve STS VFplus 65 15°	15	500	3842547136
Vertical curve STS VFplus 65 30°	30	500	3842547137
Vertical curve STS VFplus 65 45°	45	500	3842547138
Vertical curve STS VFplus 90 5°	5	500	3842547139
Vertical curve STS VFplus 90 15°	15	500	3842547140
Vertical curve STS VFplus 90 30°	30	500	3842547141
Vertical curve STS VFplus 90 45°	45	500	3842547142
Vertical curve STS VFplus 120 5°	5	500	3842547143
Vertical curve STS VFplus 120 15°	15	500	3842547144
Vertical curve STS VFplus 120 30°	30	500	3842547145
Vertical curve STS VFplus 120 45°	45	500	3842547146
Vertical curve STS VFplus 160 5°	5	500	3842547147
Vertical curve STS VFplus 160 15°	15	500	3842547148
Vertical curve STS VFplus 160 30°	30	500	3842547149
Vertical curve STS VFplus 160 45°	45	500	3842547150
Vertical curve STS VFplus 240 5°	5	500	3842547151
Vertical curve STS VFplus 240 15°	15	500	3842547152
Vertical curve STS VFplus 240 30°	30	500	3842547153
Vertical curve STS VFplus 320 5°	5	500	3842547154
Vertical curve STS VFplus 320 15°	15	500	3842547155
Vertical curve STS VFplus 320 30°	30	500	3842547156