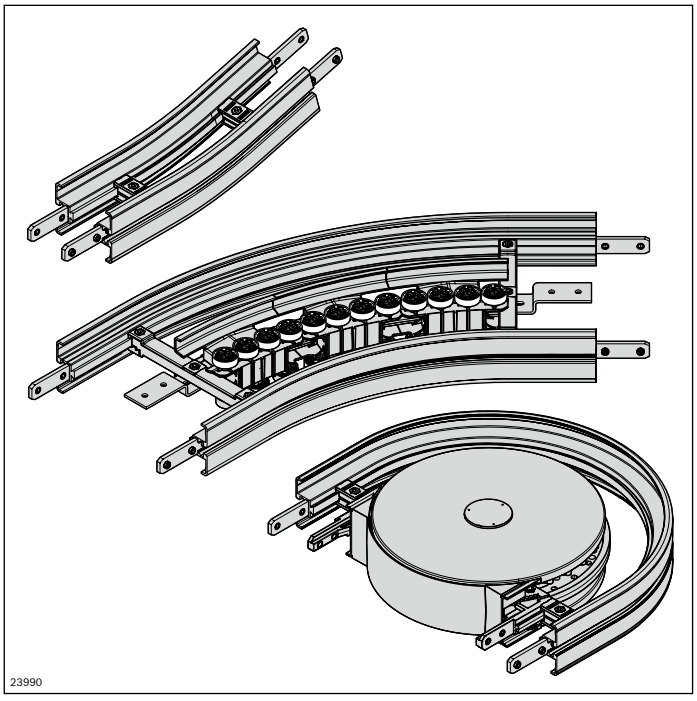
AL curves

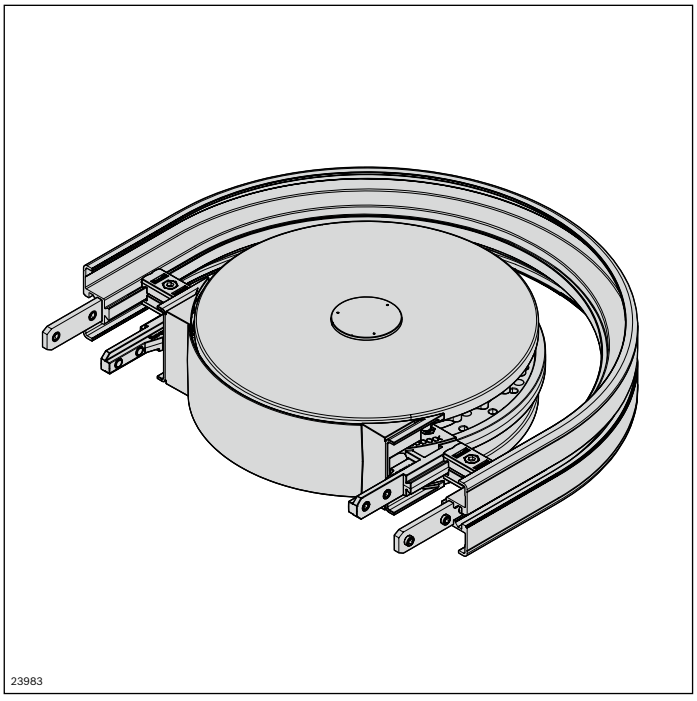


- Reduced friction on curve wheels and patented roller curves to minimize wear, meaning longer sections
- Components subject to constant friction feature FDA-compliant materials
- Easy to clean thanks to ample draining surfaces
- Capable of accumulation
- Stainless steel ball bearings sealed on both sides with FDA-compliant special grease in curve wheels and patented roller curves
- Extension of the curve wheel to a curve wheel drive or alpine conveyor

Longer service life and reduced downtimes thanks
to low-friction curve technology

	**Curve wheel AL** **AL protective cover for the curve wheel**	**68**
	**Roller curve horizontal AL**	**70**
	**Sliding curve horizontal AL**	**72**
	**Vertical curve AL**	**74**

Curve wheel AL



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 289
- Size: 65, 90, 120
- Deflection angles see table on page 69, other deflection angles on request
- Suitable chain types: all
- For circuit systems without chain return in bottom run (using a curve wheel or connection drive), the appropriate cover must be used for personal safety reasons

Note: High-pressure cleaning of the ball bearings is not permitted.

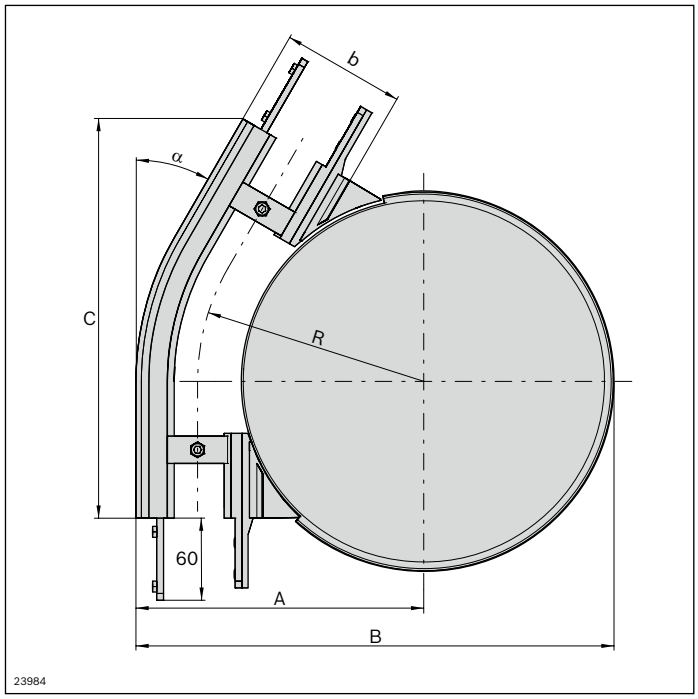
See also Curve wheel AL ESD, page 180.

- Construction of inexpensive alpine conveyors by using an alpine conveyor connection kit
- Stainless steel ball bearings, with sealing on both sides and FDA-compliant lubrication
- Surfaces in contact with chain made of FDA-compliant material
- No interfering contours above chain plate height
- Can be used horizontally and vertically (for wedge conveyors)

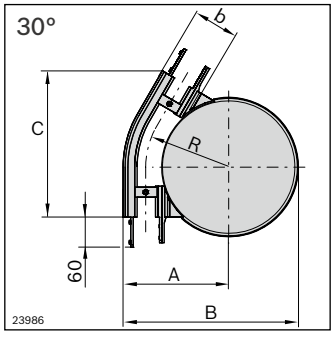
Scope of delivery:
Incl. fastening material for mounting to AL section profiles

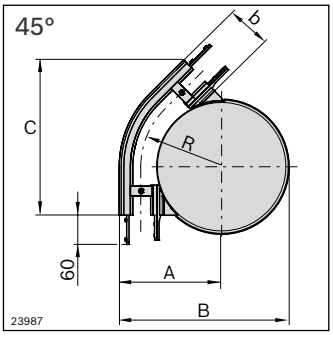
Condition on delivery:
Fully assembled

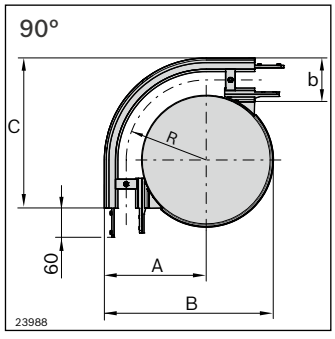
Material:
- Housing: Aluminum, die-cast
- Chain wheel: PA; white
- Ball bearings: Stainless steel/ FDA

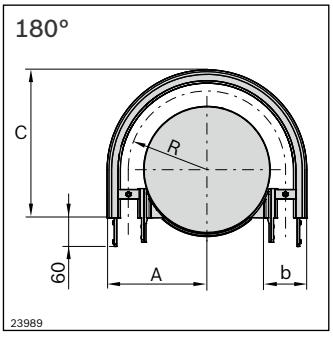


AL curve wheel	α (°)	No.
VF*plus* 65	30	**3 842 547 048**
	45	**3 842 547 049**
	90	**3 842 547 050**
	180	**3 842 547 051**
VF*plus* 90	30	**3 842 547 052**
	45	**3 842 547 053**
	90	**3 842 547 054**
	180	**3 842 547 055**
VF*plus* 120	30	**3 842 547 056**
	45	**3 842 547 057**
	90	**3 842 547 058**
	180	**3 842 547 059**

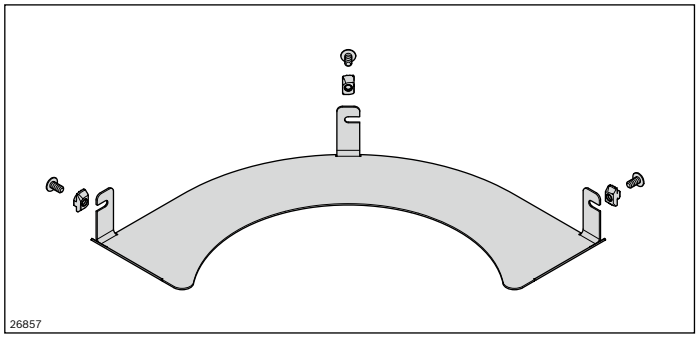






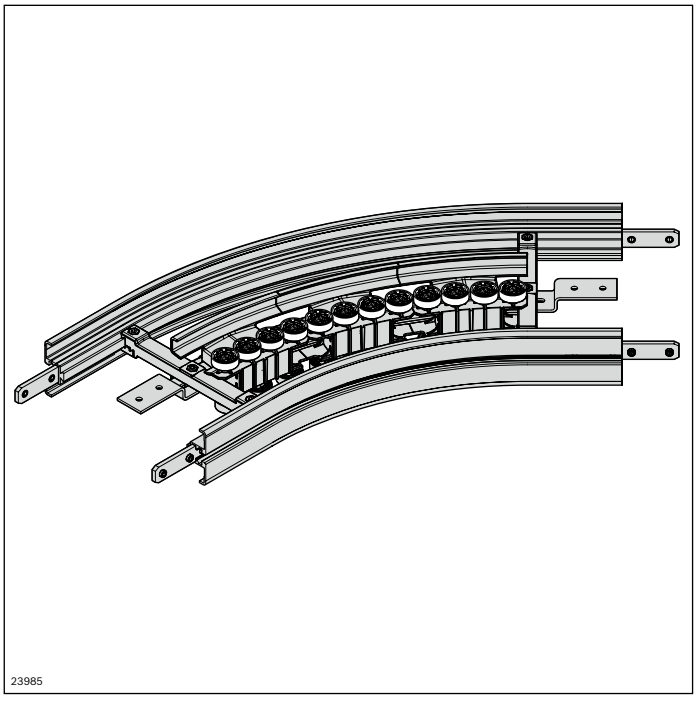


b (mm)	α (°)	R (mm)	A (mm)	B (mm)	C (mm)
65	30	153.0	185.5	324.5	279.4
	45	153.0	185.5	324.5	301.9
	90	153.0	185.5	324.5	285.5
	180	153.0	185.5	–	285.5
90	30	165.5	210.5	349.5	291.9
	45	165.5	210.5	349.5	319.6
	90	165.5	210.5	349.5	310.5
	180	165.5	210.5	–	310.5
120	30	180.5	240.5	379.5	306.9
	45	180.5	240.5	379.5	340.8
	90	180.5	240.5	379.5	340.5
	180	180.5	240.5	–	340.5



Protective cover AL	α (°)	No.
VF*plus* 65	30°	**3 842 551 545**
	45°	**3 842 551 546**
	90°	**3 842 551 547**
	180°	**3 842 551 548**
VF*plus* 90	30°	**3 842 551 549**
	45°	**3 842 551 550**
	90°	**3 842 551 551**
	180°	**3 842 551 552**

Roller curve horizontal AL



The low-friction roller curve provides a horizontal change in direction for the chain. 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 289
- Size: 160, 240, 320
- Deflection angles, see table on p. 71
- Other deflection angles on request
- Suitable chain types: all
- Version with open section profiles

Note: High-pressure cleaning of the ball bearings is not permitted.

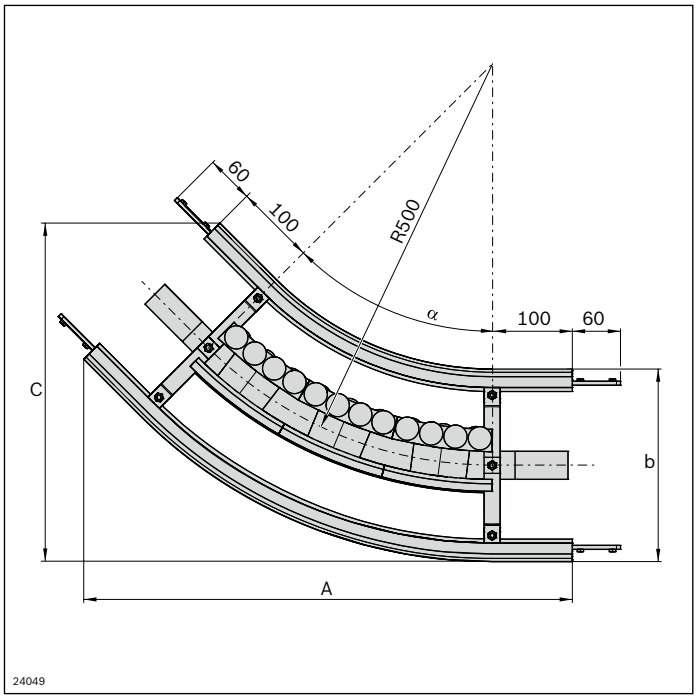
- Patented roller elements for low-friction, quieter changes in chain direction
- Stainless steel ball bearings, with sealing on both sides and FDA-compliant lubrication
- Surfaces in contact with chain made of FDA-compliant materials

Required accessories:
Slide rail: Length calculation, see page 278

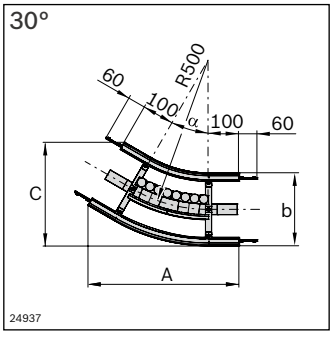
Scope of delivery:
Incl. fastening material for mounting to the AL section profile

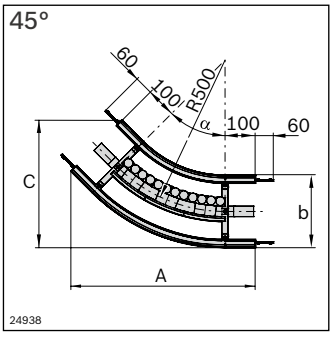
Condition on delivery:
Fully assembled

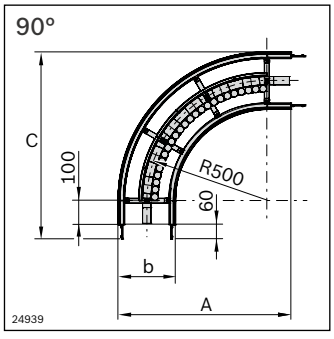
Material:
- Profile: aluminum, anodized
- Roller carrier: PA66
- Ball bearings: Stainless steel/ FDA
- Connector: steel; galvanized
- Rollers: PA

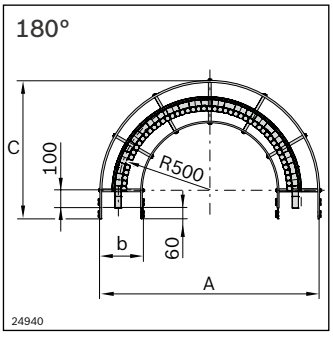


Roller curve AL	α (°)	No.
VF*plus* 160	30	**3 842 547 060**
	45	**3 842 547 061**
	90	**3 842 547 062**
	180	**3 842 547 063**
VF*plus* 240	30	**3 842 547 064**
	45	**3 842 547 065**
	90	**3 842 547 066**
	180	**3 842 547 067**
VF*plus* 320	30	**3 842 547 068**
	45	**3 842 547 069**
	90	**3 842 547 070**
	180	**3 842 547 071**



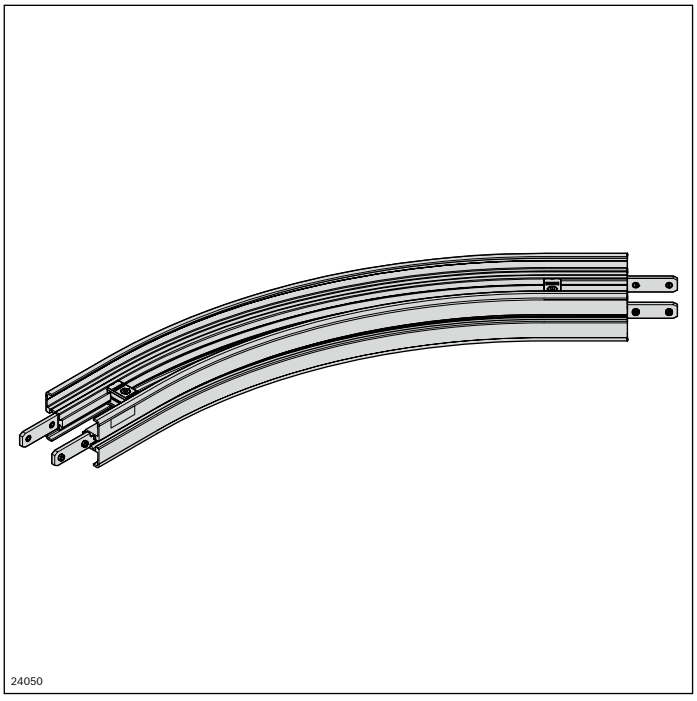






b (mm)	α (°)	**A** (mm)	**C** (mm)
160	30	476.6	266.3
	45	580.8	353.7
	90	680.0	680.0
	180	1160.0	680.0
240	30	496.6	340.9
	45	609.1	422.0
	90	720.0	720.0
	180	1240.0	720.0
320	30	516.6	415.6
	45	637.4	490.3
	90	760.0	760.0
	180	1320.0	760.0

Sliding curve horizontal AL



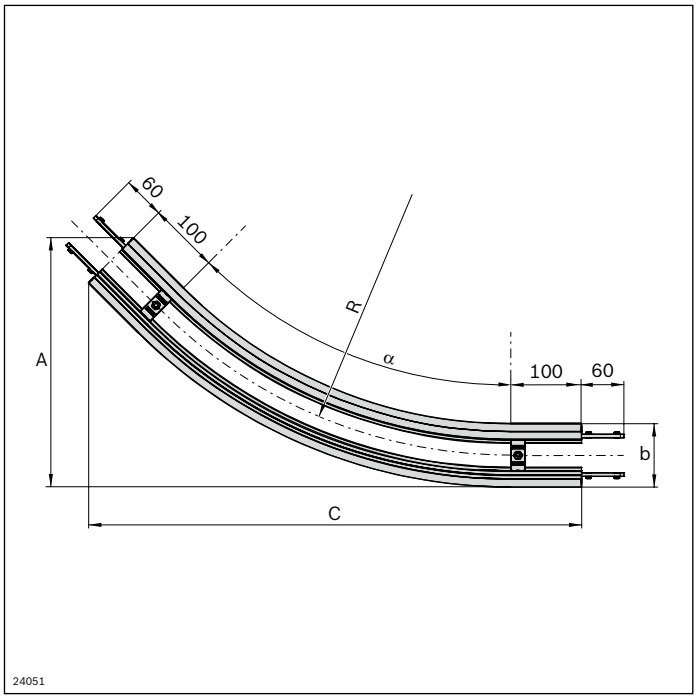
The sliding curve provides a horizontal change in direction for the chain, for when there is not enough space for a curve wheel or the speeds or product dimensions do not permit conveying over a curve wheel. The sliding curve is used to reduce noise at high speeds or when transporting long products in wedge conveyors. The chain tensile force is increased through the ensuing friction.
For attachment options, see the matrix on page 289
- Size: 65, 90, 120
- Deflection angles and radii see table on p. 73, 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

Required accessories:
Slide rail: Length calculation, see page 278

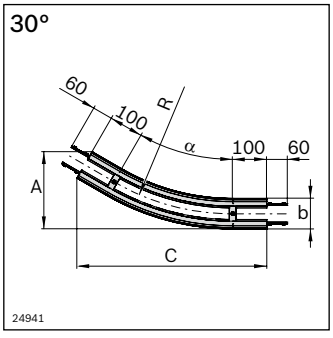
Scope of delivery:
Incl. fastening material for mounting to AL section profiles

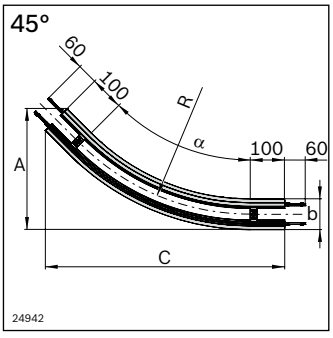
Condition on delivery:
Fully assembled

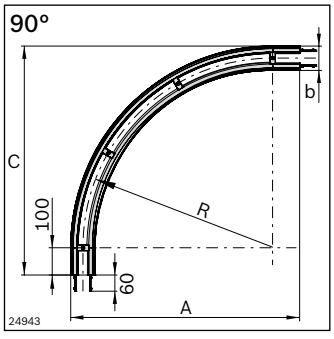
Material:
- Profile: aluminum, anodized
- Profile connector: steel; galvanized
- Cross connector: Aluminum, die-cast



Sliding curve horizontal AL	α (°)	R (mm)	No.
VF*plus* 65	30	700	**3 842 547 072**
	45	700	**3 842 547 073**
	90	700	**3 842 547 074**
VF*plus* 90	45	500	**3 842 547 075**
	90	500	**3 842 547 076**
	30	700	**3 842 547 077**
	45	700	**3 842 547 078**
	90	700	**3 842 547 079**
VF*plus* 120	30	700	**3 842 547 080**
	45	700	**3 842 547 081**
	90	700	**3 842 547 082**

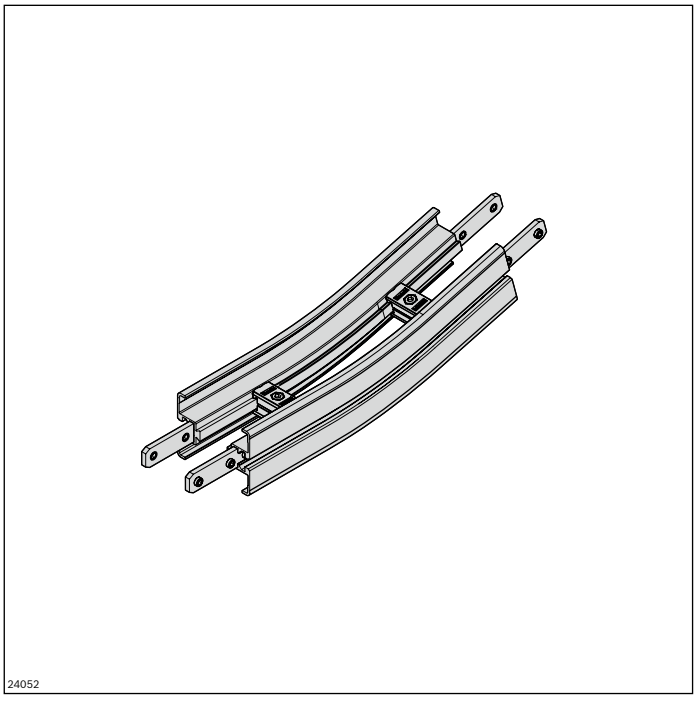






b (mm)	α (°)	R (mm)	A (mm)	C (mm)
65	30°	700	204.4	552.9
	45°	700	331.2	688.7
	90°	700	832.5	832.5
90	45°	500	294.0	556.1
	90°	500	645.0	645.0
	30°	700	227.8	559.1
	45°	700	352.6	697.5
	90°	700	845.0	845.0
120	30°	700	255.7	566.6
	45°	700	378.2	708.1
	90°	700	860.0	860.0

Vertical curve AL



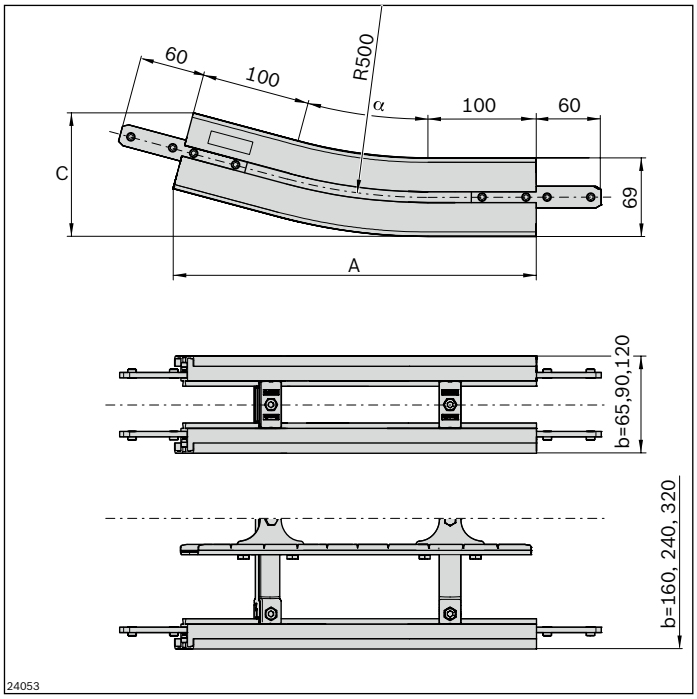
The vertical curve is used for the transition from a horizontal conveyor section to an ascending section and vice versa. The chain tensile force is increased through the ensuing friction.
A vertical curve of 5° is recommended for the infeed and outfeed on the wedge conveyor, especially with small products.
For attachment options, see the matrix on page 289
- Size: all track widths
- Deflection angles and radii see table on page 75, 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

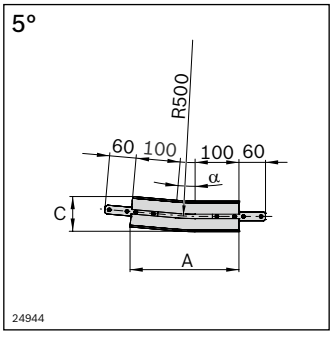
Required accessories:
Slide rail: Length calculation, see page 278

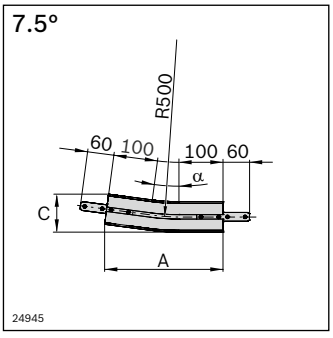
Scope of delivery:
Incl. fastening material for mounting to AL section profiles

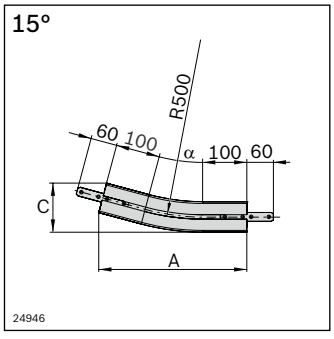
Condition on delivery:
Fully assembled

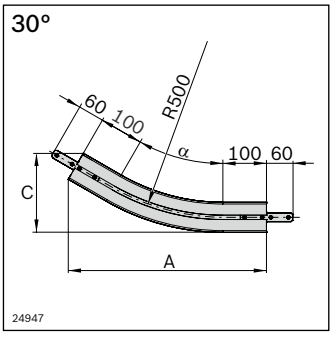
Material:
- Profile: aluminum, anodized
- Profile connector: steel; galvanized
- Cross connector: Aluminum, die-cast
- Support profile from size 160: Stainless steel, 1.4301

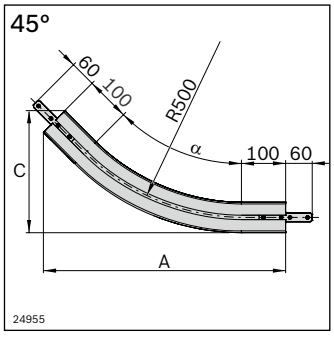












Vertical curve AL	**α** (°)	**No.**
VF*plus* 65	5	**3 842 547 083**
	7.5	**3 842 547 084**
	15	**3 842 547 085**
	30	**3 842 547 086**
	45	**3 842 547 087**
VF*plus* 90	5	**3 842 547 088**
	7.5	**3 842 547 089**
	15	**3 842 547 090**
	30	**3 842 547 091**
	45	**3 842 547 092**
VF*plus* 120	5	**3 842 547 093**
	7.5	**3 842 547 094**
	15	**3 842 547 095**
	30	**3 842 547 096**
	45	**3 842 547 097**
VF*plus* 160	5	**3 842 547 098**
	7.5	**3 842 547 099**
	15	**3 842 547 100**
	30	**3 842 547 101**
	45	**3 842 547 102**
VF*plus* 240	5	**3 842 547 103**
	7.5	**3 842 547 104**
	15	**3 842 547 105**
	30	**3 842 547 106**
VF*plus* 320	5	**3 842 547 107**
	7.5	**3 842 547 108**
	15	**3 842 547 109**
	30	**3 842 547 110**

b (mm)	**α** (°)	**R** (mm)	**A** (mm)	**C** (mm)
65-320	5	500	246.2	79.5
	7.5	500	268.9	86
	15	500	334.9	110.7
	30	500	453.9	181.4
65-160	45	500	548.7	276.1