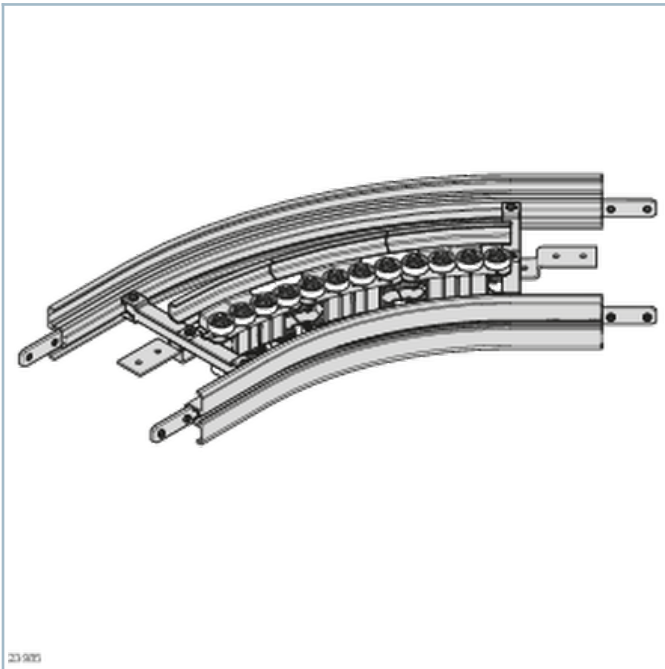


Roller curve horizontal AL



- Patented roller elements for low-friction, quieter changes in chain direction
- 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

Product description

The low-friction roller curve is used for the horizontal change in direction of the chain. Roller elements with ball bearings enable longer conveyor sections. The service life of the chain is increased and system costs are reduced.

- Size: 160, 240, 320
- Deflection angles
- Other deflection angles on request
- Suitable chain types: all
- Version with open section profiles

Technical data

	Material
Roller curve horizontal AL VFplus 160 30°	Profile: Aluminum; anodized Roller carrier: PA 66 Ball bearing: Non-rusting steel 1.4301/FDA Connector: Steel; zinc-plated Rollers: PA
Roller curve horizontal AL VFplus 160 45°	
Roller curve horizontal AL VFplus 160 90°	
Roller curve horizontal AL VFplus 160 180°	
Roller curve horizontal AL VFplus 240 30°	
Roller curve horizontal AL VFplus 240 45°	
Roller curve horizontal AL VFplus 240 90°	

	Material
Roller curve horizontal AL VFplus 240 180°	Profile: Aluminum; anodized Roller carrier: PA 66 Ball bearing: Non-rusting steel 1.4301/FDA Connector: Steel; zinc-plated Rollers: PA
Roller curve horizontal AL VFplus 320 30°	
Roller curve horizontal AL VFplus 320 45°	
Roller curve horizontal AL VFplus 320 90°	
Roller curve horizontal AL VFplus 320 180°	

Combination matrix

		Straight			Curves			Drives		
		Section profile AL open	Section profile AL closed	Assembly module	Curve wheel	Roller curve*	Horizontal sliding curve	Vertical curve	Head drive	Curve wheel drive
Straight	Section profile AL open	J								
	Section profile AL closed	J	J							
	Assembly module	J	J	N						
Curves	Curve wheel	J	J	L ²⁾	L ²⁾					
	Roller curve*	J	N	J	N	L ¹⁾				

		Straight			Curves				Drives	
		Section profile AL open	Section profile AL closed	Assembly module	Curve wheel	Roller curve*	Horizontal sliding curve	Vertical curve	Head drive	Curve wheel drive
Curves	Horizontal sliding curve	J	J	J	J	N	L ¹⁾			
	Vertical curve	J	J	J	J	L ¹⁾	L ¹⁾	L ¹⁾		
Drives	Head drive	J	J	L ²⁾	L ²⁾	L ^{1, 4)}	L ¹⁾	L ^{1, 4)}	N	
	Curve wheel drive	J	J	L ²⁾	L ²⁾	N	L ¹⁾	L ¹⁾	N	N
	Connection drive	J	J	L ²⁾	L ²⁾	N	L ¹⁾	L ¹⁾	N	N
	Center drive (STS)**	L ⁵⁾	L ⁵⁾	L ^{2, 5)}	L ^{2, 5)}	N	L ^{1, 5)}	L ^{1, 5)}	N	N
Return Unit	Basic unit	J	J	L ²⁾	L ²⁾	L ^{1, 4)}	L ¹⁾	L ^{1, 4)}	L ²⁾	N
	90° (STS)**	L ⁵⁾	L ⁵⁾	L ^{2, 5)}	L ^{2, 5)}	N	L ^{1, 5)}	L ^{1, 5)}	N	N
	Transmission kit	N	N	N	N	N	N	N	J	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

Drives		Return Unit		
--------	--	-------------	--	--

Connection drive

Center drive (STS)**

Basic unit

90° (STS)**

Transmission kit

Drives		Return Unit		
Connection drive	Center drive (STS)**	Basic unit	90° (STS)**	Transmission kit
N				
N	N			
N	L ^{2, 3)}	L ^{2, 3)}		
L ^{2, 5)}	N	N	L ²⁾	
J	N	J	N	N

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

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

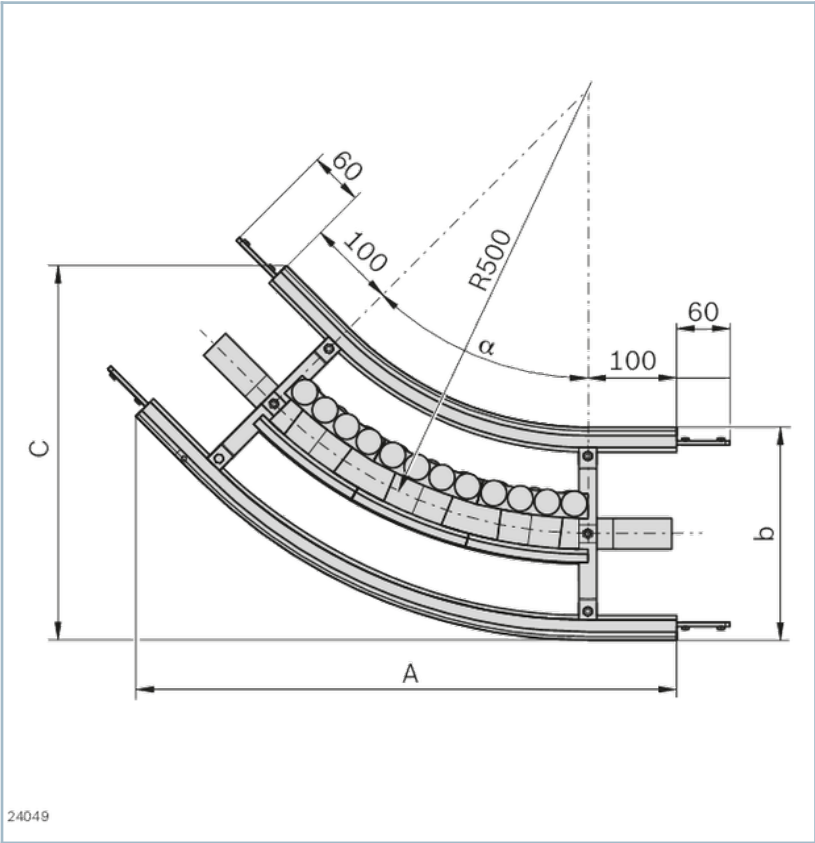
- 1) Profile connector not required
- 2) Use of a profile piece ($L_{min} = 120\text{ mm}$)
- 3) Assembly module required
- 4) For sizes 160-320: shorten the support rail on the dotted line
- 5) Use of the AL-STS adapter

Actual chain and sliding rail lengths of the components

		Actual chain length	Effective sliding rail length
		m	m
Roller curve horizontal AL VFplus 160 30°	3842547060	2x 0,46	5x 0,46
Roller curve horizontal AL VFplus 160 45°	3842547061	2x 0,59	5x 0,59
Roller curve horizontal AL VFplus 160 90°	3842547062	2x 0,98	5x 0,98
Roller curve horizontal AL VFplus 160 180°	3842547063	2x 1,77	5x 1,77
Roller curve horizontal AL VFplus 240 30°	3842547064	2x 0,46	5x 0,46
Roller curve horizontal AL VFplus 240 45°	3842547065	2x 0,59	5x 0,59
Roller curve horizontal AL VFplus 240 90°	3842547066	2x 0,98	5x 0,98
Roller curve horizontal AL VFplus 240 180°	3842547067	2x 1,77	5x 1,77
Roller curve horizontal AL VFplus 320 30°	3842547068	2x 0,46	5x 0,46
Roller curve horizontal AL VFplus 320 45°	3842547069	2x 0,59	5x 0,59
Roller curve horizontal AL VFplus 320 90°	3842547070	2x 0,98	5x 0,98
Roller curve horizontal AL VFplus 320 180°	3842547071	2x 1,77	5x 1,77

Dimensions

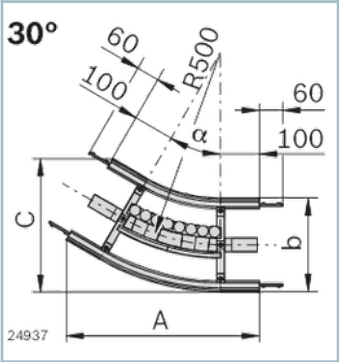
Roller curve AL



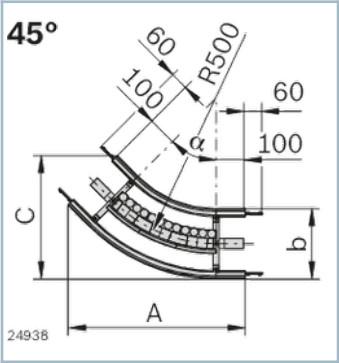
Deflection angles and radii

b	α	A	C
mm	°	mm	mm
160	30	476.6	266.3
	45	580.8	353.7
	90	680	680
	180	1160	680
240	30	496.6	340.9
	45	609.1	422
	90	720	720
	180	1240	720
320	30	516.6	415.6
	45	637.4	490.3
	90	760	760
	180	1320	760

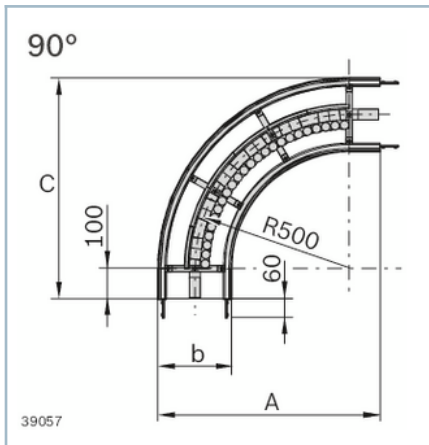
Roller curve AL VFplus 30°



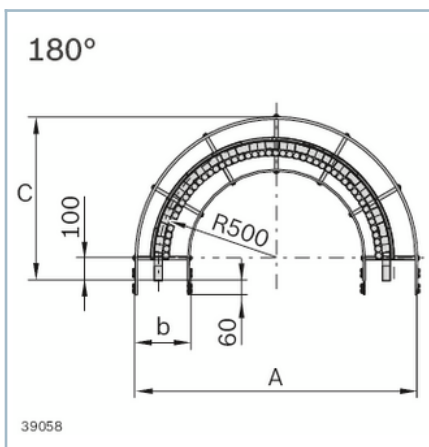
Roller curve AL VFplus 45°



Roller curve AL VFplus 90°



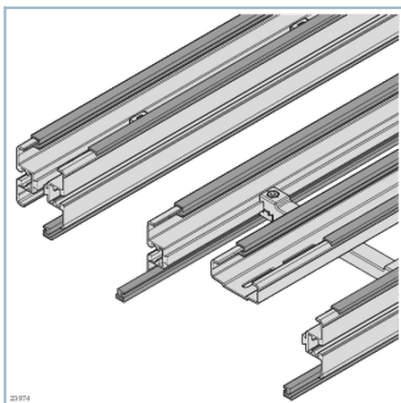
Roller curve AL VFplus 180°



Information

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

Accessories



Slide rail

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

Ordering codes

	α	No.
	°	
Roller curve horizontal AL VFplus 160 30°	30	3842547060
Roller curve horizontal AL VFplus 160 45°	45	3842547061
Roller curve horizontal AL VFplus 160 90°	90	3842547062
Roller curve horizontal AL VFplus 160 180°	180	3842547063
Roller curve horizontal AL VFplus 240 30°	30	3842547064
Roller curve horizontal AL VFplus 240 45°	45	3842547065
Roller curve horizontal AL VFplus 240 90°	90	3842547066
Roller curve horizontal AL VFplus 240 180°	180	3842547067
Roller curve horizontal AL VFplus 320 30°	30	3842547068
Roller curve horizontal AL VFplus 320 45°	45	3842547069
Roller curve horizontal AL VFplus 320 90°	90	3842547070
Roller curve horizontal AL VFplus 320 180°	180	3842547071