

Stretchline FS CS090SL



STRETCH_LINE

Version 2. July 2025



fs solutions

by hellomoov'



FS CS090SL Conveyor system

Introduction

STRETCH_LINE

FS Solutions brings STRETCH_LINE to the next level

From 01.01.2019 FS Solutions has taken over the STRETCH_LINE Transportsystem from MS Plus Automation/Schüco.

This proven transport system is an ideal addition to the modular transport systems of FS Solutions. Customers are ensured with a unique range and extensive application know-how for the STRETCH-LINE system.

FS Solutions is a provider of turnkey solutions, components as well as assembly kits for process automation and internal transport.

Since the start in 2005, FS Solutions has built up an impressive reference list in manufacturing high-end transportsystems and production automation for various industries, such as: Logistics, Food, Consumer goods (FMCG), Tobacco and Pharma.

Our motivated and enthusiastic team always strives to provide a fast and adequate response. As FS Solutions uses high-quality, modular elements, each system can be compiled to requirement. Our extensive service does not end on delivery.

“With over 20 years of experience and know-how, FS Solutions is guaranteed to find you a high-end solution.”

The contents of this publication are the copyright of the publishers and may not be reproduced (even extracts) unless permission is granted. Every care has been taken to ensure the accuracy of the information but no liability can be accepted for any errors or omissions. The right is reserved to make design modifications.

Patents
Parts of the FS Solutions product range are protected by patents and design regulations. Drawings are made to European standards.

© FS Solutions 2025

Icon overview

General



Note Caution



Packaging unit



Material



Colour



Surface



Weight



Tools



Cutting profile to length



Left-hand version LS/
right-hand version RS



Type/Version



Fabrication



Mounting



Energy Efficiency

System related



Chain Type



Maximum permissible
chain pulling force



Maximum conveying
speed



Maximum permissible
line length



Drive motor



Conveyor chain material



Profile series



Effective chain length



Effective chain length -
inside curve



Effective chain length -
outside curve

Dimensions



Sizes, dimensions



Width



Length



Thread



Idler radius



Idler angle

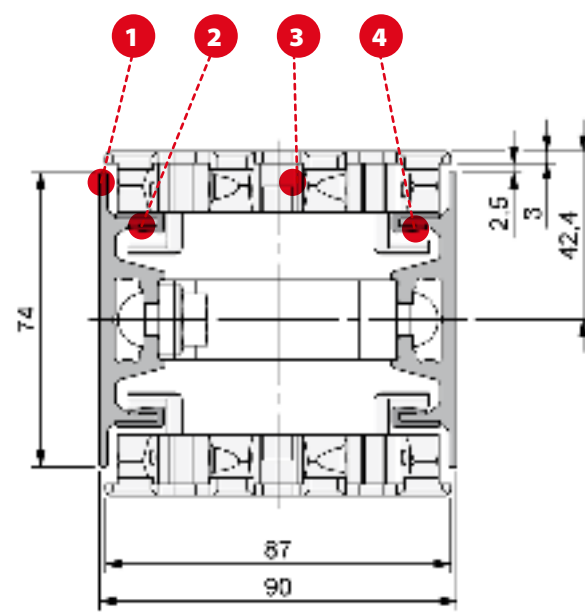
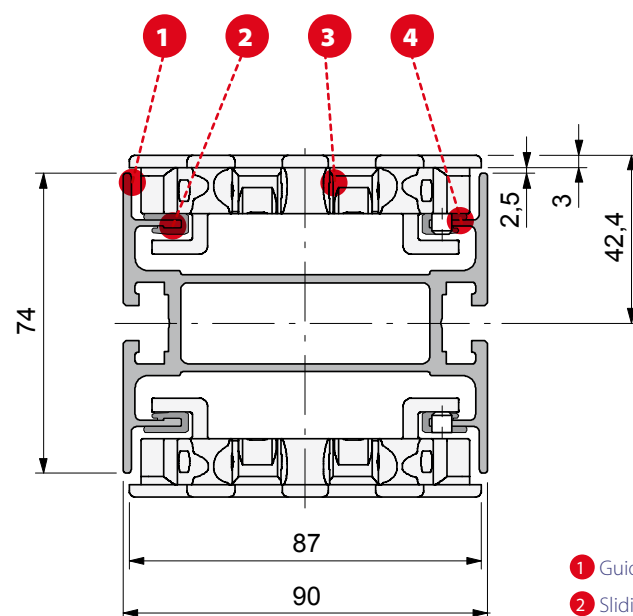


Drive pitch diameter

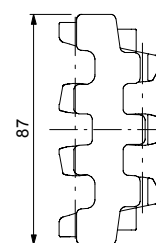
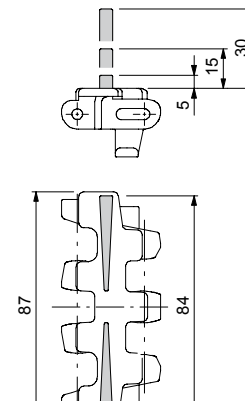
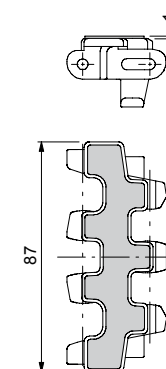


Feeding, filling, packaging individual items

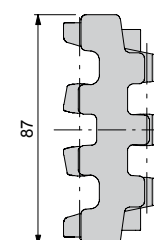
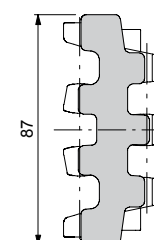
- Overall width 90 mm
 - Chain width 87 mm
 - Product width 20 - 200 mm
 - Max. product weight for conveying direction:
 - Horizontal 10 kg
 - Vertical 5 kg
 - Maximum load:
 - Conveyor system 150 kg
 - Chain link 1.5 kg
 - Max. conveying length 30 m (8 m for vertical clamp conveyors)
- Max. conveying speed 120 m/min
 - Available drives:
 - Vertical drives
 - Direct drives
 - Centre drives
 - Vertical centre drives
 - Direct centre drives
 - Compatible with railing system:
 - Variable guide width 20 - 250 mm
 - Variable guide height 15 - 350 mm
 - Available for open and closed system



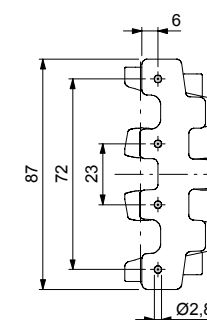
- ➊ Guide profile
- ➋ Sliding strip
- ➌ Conveyor chain
- ➍ Grub screw

FS CS090SL
Standard chainFS CS090SL Chain with
reinforced tabFS CS090SL Chain with
catch platesFS CS090SL chain with
friction lining

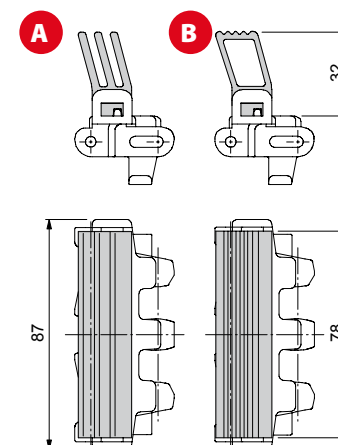
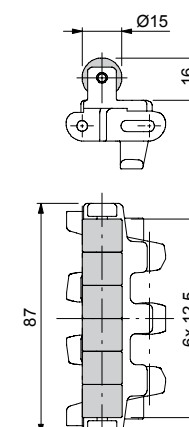
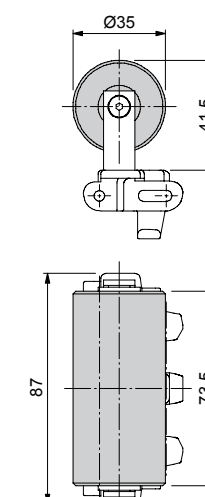
FS CS090SL antistatic chain

FS CS090SL chain with flocked
surface

FS CS090SL universal chain



FS CS090SL chain with gripper

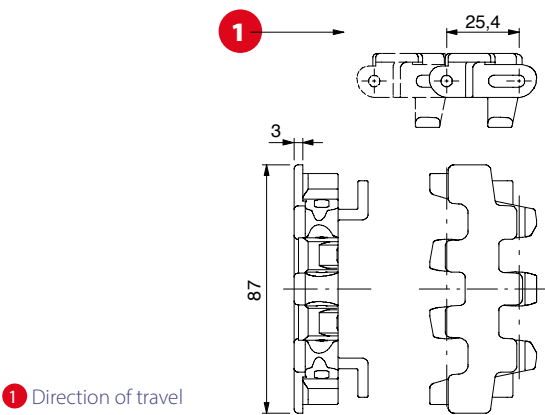
FS CS090SL chain with accumulating
rollersFS CS090SL chain with
catch roller

FS CS090SL
Line components

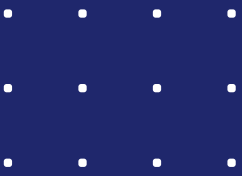


Chain FS CS090SL Standard

- Standard chain for horizontal conveyance.
- Suitable for accumulating conveyor mode.
- Pin-hinged chain links.



	PROD.NO.						
Chain CS090SL, standard	J534 068	4,0 m	POM	white	1,4 kg/m		1250 N
Chain CS090SL, standard blue	J534 068.101	4,0 m	POM	blue	1,4 kg/m		1250 N
Chain link, individual	J534 069	10	POM	white			1250 N
Chain pin, individual	J534 071	100	stainless steel	grey		J537 131 split-pin driver	



FS CS090SL
Line components



Chain FS CS090SL with reinforced tab

- Chain especially for abrasive environment
- Suitable for e.g. tobacco industry
- The tab has more thickness for longer lifetime



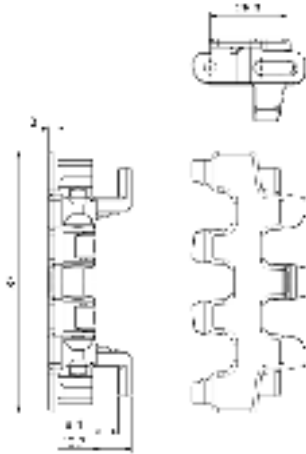
Note

This chain can only be used in combination with sliding strip J537 397



Note

Please be aware that if you want to use the reinforced chain and sliding strip; you have to order the special drive- and idler unit.



	PROD.NO.						
Chain CS090SL, with reinforced tab	J537398	4,0m	PBT	natural	1,4 kg/m		1250 N



Chain FS CS090SL with catch plates

- Chain for vertical conveyance.
- Chain links with catch plates are inserted in the standard chain at recurrent intervals.
- Catch plate heights of 5, 15 and 30 mm.

	PROD.NO.						
Chain link, individual, catch plate height 5 mm	J534 076	10	POM	white	1,5 kg/m		1250 N
Chain link, individual, catch plate height 15 mm	J534 078	10	POM	white	1,5 kg/m		1250 N
Chain link, individual, catch plate height 30 mm	J534 079	10	POM	white	1,5 kg/m		1250 N
Chain pin, individual	J534 071	100	stainless steel	grey		J537 131 split-pin driver	

FS CS090SL

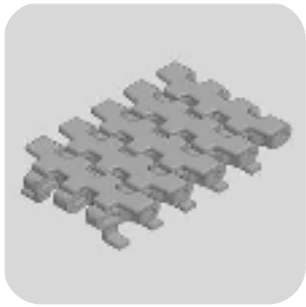
Line components



Chain FS CS090SL with friction lining

- Chain with anti-slip coating to increase adhesion on inclines.
- Well suited to conveying smooth-surfaced items.
- Friction lining in wear-resistant rubber.
- Not suitable for accumulating conveyor.

	PROD.NO.						
Chain CS090SL, with friction lining	J400 014	4,0 m	POM	white	1,4 kg/m		1250 N
Chain link, individual	J400 015	10	POM	white			1250 N
Chain pin, individual	J534 071	100	stainless steel	grey		J537 131 split-pin driver	



Chain FS CS090SL antistatic

- Standard chain with antistatic finish.
- For use only in conjunction with antistatic sliding strip and drive unit.

	PROD.NO.						
Chain CS090SL, antistatic	J534 072	4,0 m	POM	black	1,4 kg/m		950 N
Chain link, individual	J534 073	10	POM	black			950 N
Chain pin, individual	J534 071	100	stainless steel	grey		J537 131 split-pin driver	

FS CS090SL

Line components



Chain FS CS090SL with flocked surface

- Standard chain with grey flocked surface.
- The soft surface protects the items being conveyed.

	PROD.NO.						
Chain CS090SL, with flocked surface	J400 008	4,0 m	POM	white	1,4 kg/m		1250 N
Chain pin, individual	J534 071	100	stainless steel	grey		J537 131 split-pin driver	



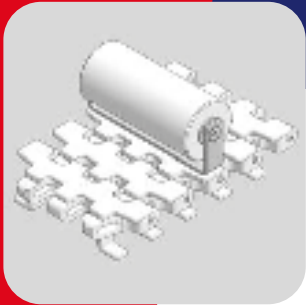
Chain FS CS090SL universal

- Universal chain links are inserted in the standard chain at recurrent intervals.
- Chain for universal application with drill holes in the base plate.
- Capability of fitting various conveyor components (e.g. catch plates, rollers) using Ø3.9 mm self-tapping bolts.

	PROD.NO.						
Chain link, individual	J534 088	10	POM	white	1,4 kg/m		1250 N
Chain pin, individual	J534 071	100	stainless steel	grey		J537 131 split-pin driver	

FS CS090SL

Line components



Chain FS CS090SL with catch rollers

- Chain links with catch rollers are inserted in the standard chain at recurrent intervals.
- At least one standard link must be inserted between two catch rollers.

	PROD.NO.						
Chain link, individual	J534 089	10	POM	white			1250 N
Chain pin, individual	J534 071	100	stainless steel	grey		J537 131 split-pin driver	



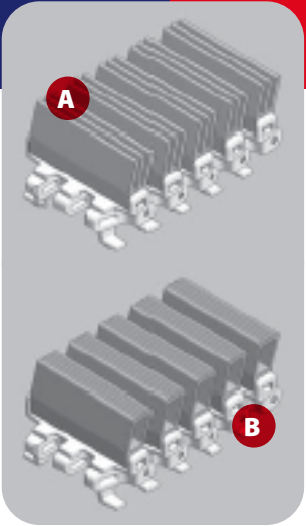
Chain FS CS090SL with accumulating rollers

- Chain with rollers to minimise friction in accumulating conveyors.

	PROD.NO.						
Chain CS090SL, with accumulating rollers	J534 085	2,0 m	POM	white	2,2 kg/m		1250 N
Chain link, individual	J534 086	10	POM	white			1250 N
Chain pin, individual	J534 071	100	stainless steel	grey		J537 131 split-pin driver	

FS CS090SL

Line components



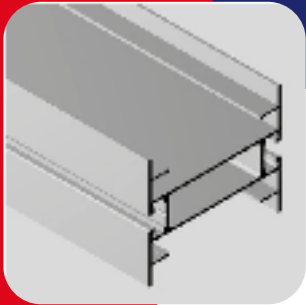
Chain FS CS090SL with gripper

- Chain with surface-mounted gripper element (flexible catches).
- Used in vertical clamp conveyors.
- Gripper element in EPDM.
- Use shape A:
 - small lightweight unit loads
 - products with irregular surface.
- Use shape B:
 - larger-type unit loads
 - item weight up to 10 kg.



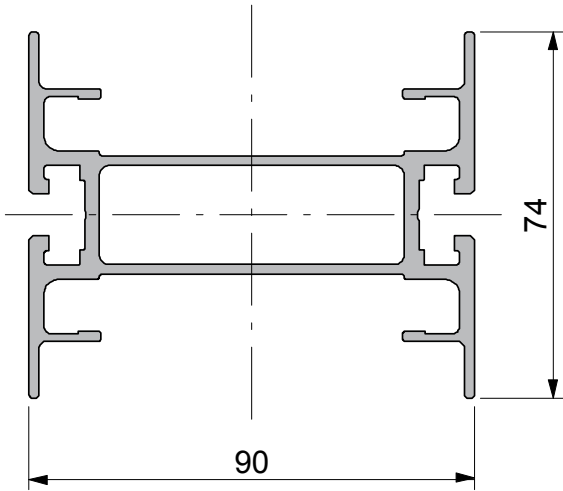
		PROD.NO.						
Chain CS090SL, with gripper	A	J534 590	2,0 m	POM	white	2,3 kg/m		750 N
	B	J534 081	2,0 m			2,2 kg/m		
Chain link, individual	A	J534 591	10	POM	white			750 N
	B	J534 082	10					
Gripper element, individual	A	J400 002	10	EPDM	grey			
	B	J534 083	10					
Chain pin, individual		J534 071	100	stainless steel	grey		J537 131 split-pin driver	

FS CS090SL
Line components

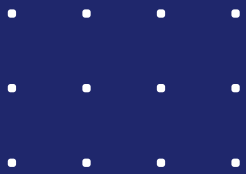


- Guide profile FS CS090SL
- Line lengths over 6000 mm can be produced by using joints.

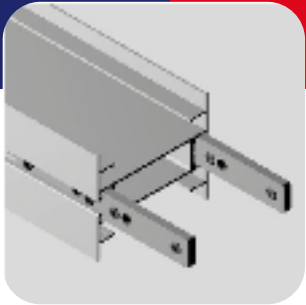
Crossed section



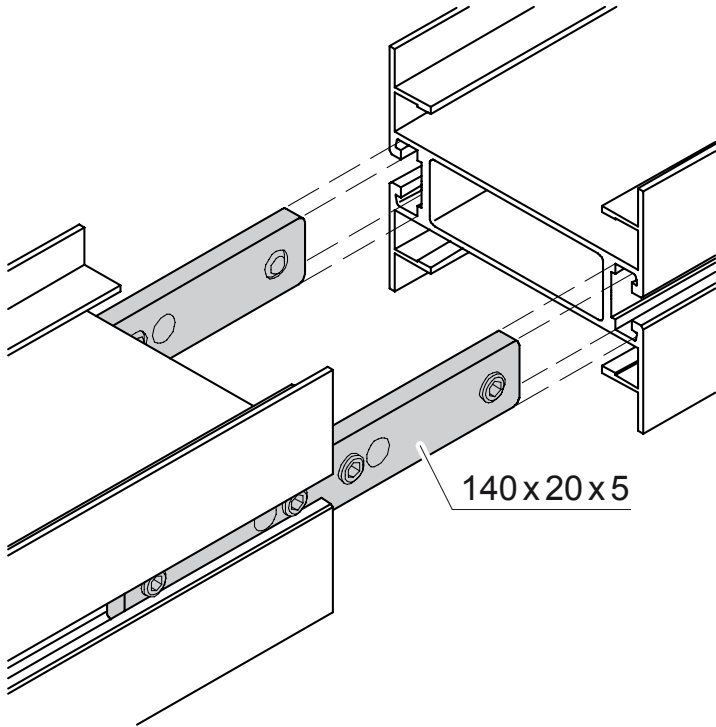
	PROD.NO.			
Guide profile CS090SL	J924 173	6,0 m	EN AW-6063 T66	E6/EV1 anodised finish
Cutting to length	J924 969	1		



FS CS090SL
Line components



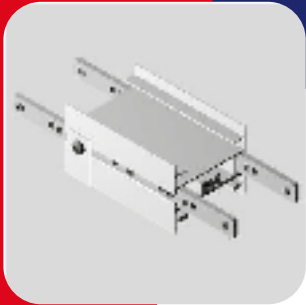
- Line joint CS SL
- Joints are pushed into the profile groove and fixed in place with the premounted grub screws.
 - No additional work to the profile is necessary.



	PROD.NO.			
Line joint	J927 803	2	steel	galvanised

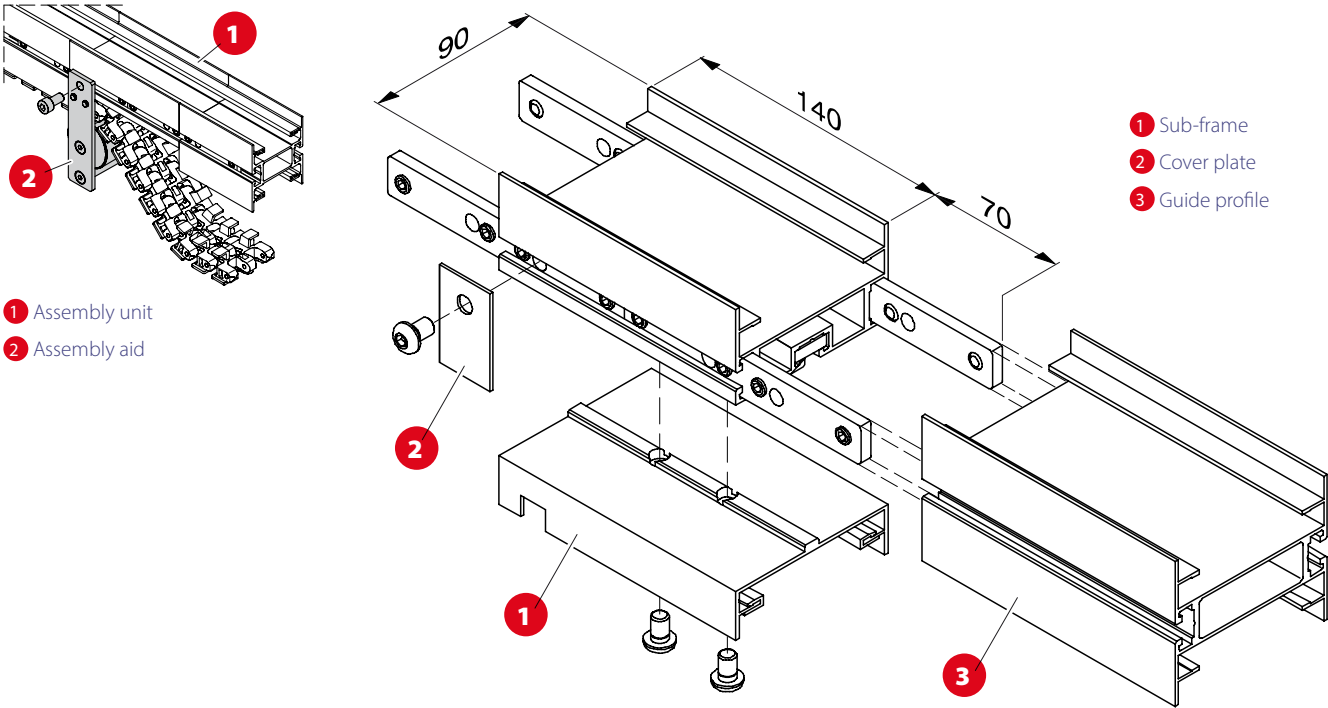
FS CS090SL LINE COMPONENTS

Chain assembly unit FS CS090SL



- The chain assembly unit allows you to feed the chain into the assembled line.
- Can be fitted at any point within the line.
- Line joints are included.
- The sub-frame must be removed for feeding the conveyor chain into the line.
- After fitting the chain pin, the opening in the sub-frame must be closed off with the cover plate.
- The optional chain assembly aid facilitates feeding the conveyor chain into the line. It is attached to the lower side of the assembly unit after removing cover plates and sub-frames.

Using the chain assembly aid



	PROD.NO.	
Chain assembly unit CS090SL	J927 768	1
Assembly aid	J927 824	1
Split-pin driver	J537 131	1

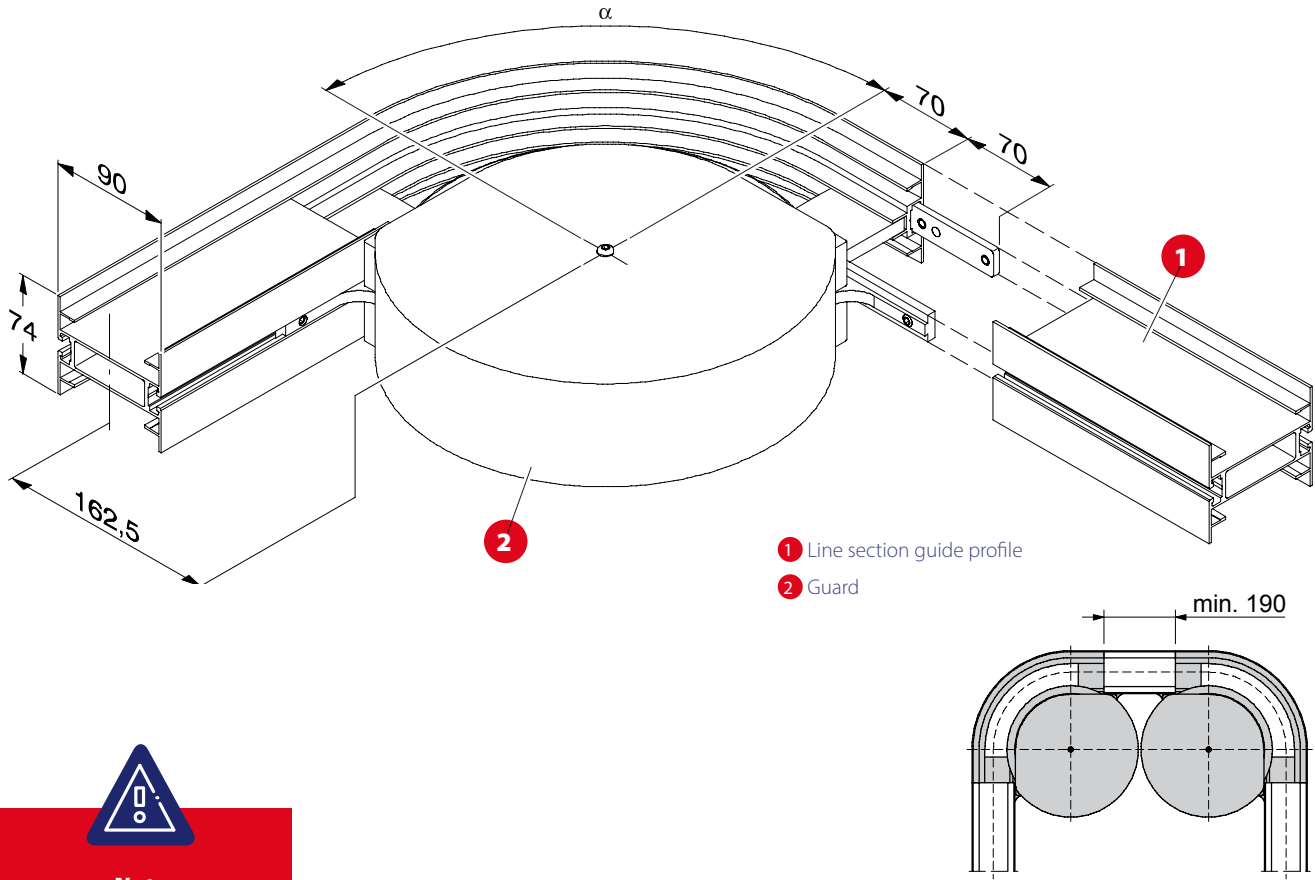
FS CS090SL LINE COMPONENTS

Horizontal curves with disk FS CS090SL



- Small idler radius: 162.5 mm.
- The idler radius is based on the line centre.
- It is installed in the conveyor line without the need for any work to the joints.
- Antistatic version on request.

Horizontal curve with disk FS CS090SL,
R162.5/90°



Note

When installing two horizontal curves with disk, they must be separated by a straight line section of at least 190 mm in length.

	PROD.NO.				
Horizontal curve with disk CS090SL	162,5 mm	45°	J927 770	1	2x 0,28 m
		60°	J927 771		2x 0,34 m
		90°	J927 751		2x 0,44 m
		180°	J927 752		2x 0,74 m

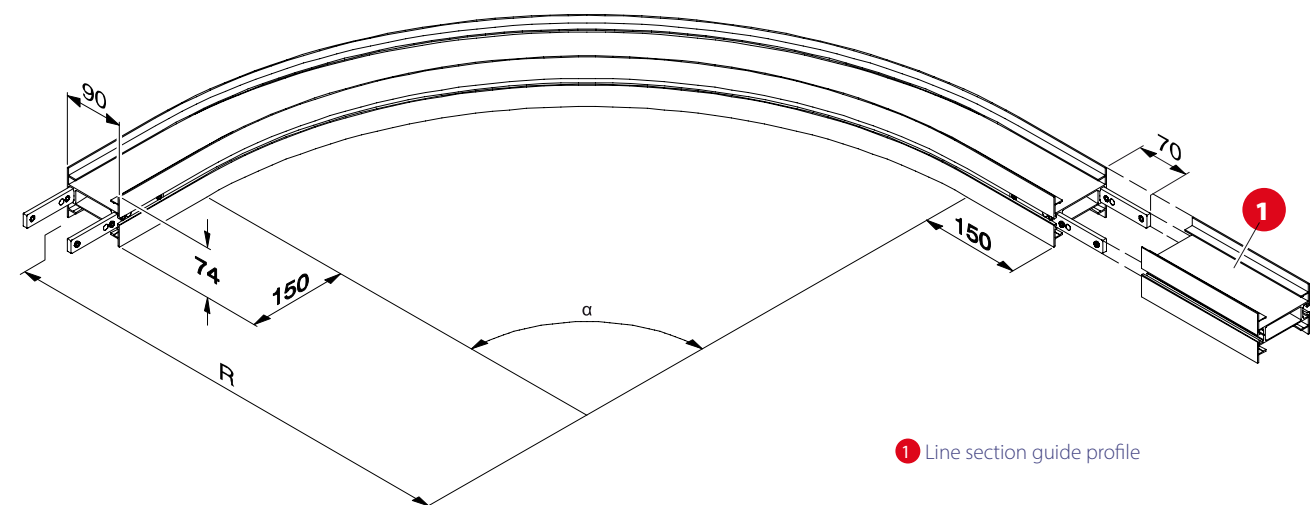
different angles on request

Horizontal sliding curves FS CS090SL



- Horizontal sliding curve.
- Various angles available. The radius specified is based on the line centre.
- Min. radius: 250 mm.

Horizontal sliding curve FS CS090SL,
R700/90°



1 Line section guide profile

			PROD.NO.		
Horizontal sliding curve	400 mm	15°	J927 818	1	2x 0,41 m
		30°	J927 809		2x 0,52 m
		45°	J927 810		2x 0,64 m
		60°	J927 811		2x 0,75 m
		90°	J927 812		2x 0,97 m
	700 mm	30°	J927 753	1	2x 0,68 m
		45°	J927 754		2x 0,87 m
		60°	J927 755		2x 1,06 m
		90°	J927 756		2x 1,44 m

different radius or angles on request

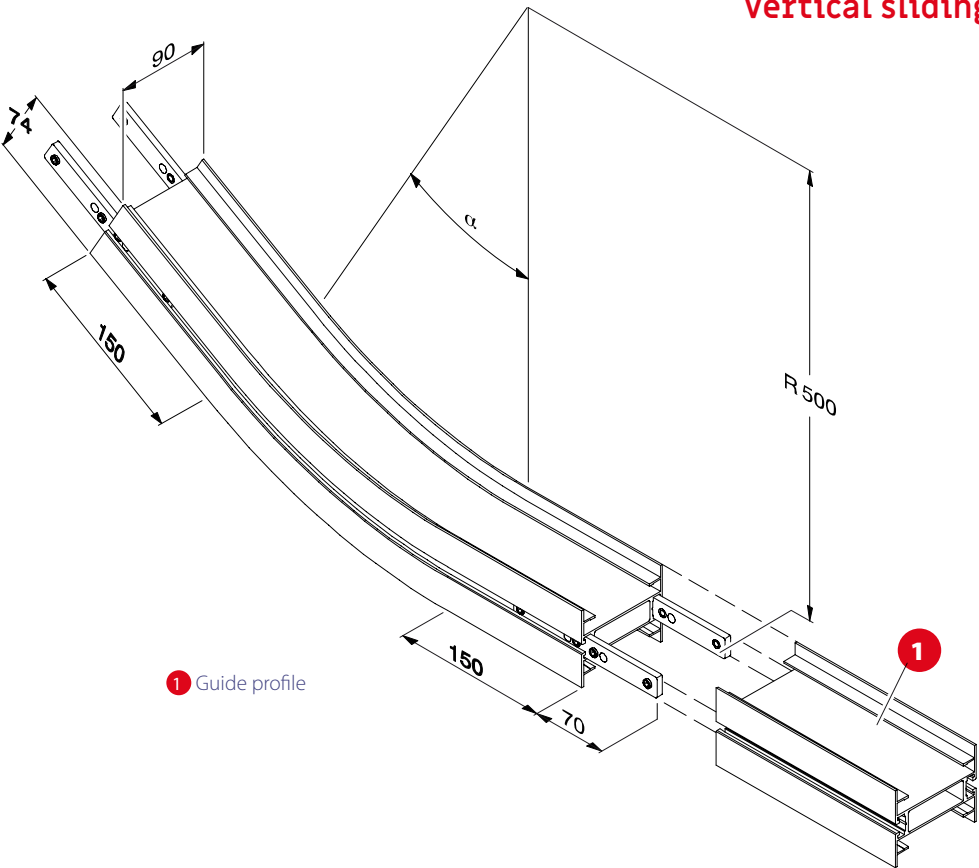
STRETCH_LINE

Vertical sliding curves FS CS090SL



- Vertical sliding curves for conveyor lines with inclines.
- Various angles available. The radius specified is based on the line centre.
- Min. radius: 500 mm.
- Can be used as outside and inside curve.

Vertical sliding curve FS CS090SL,
R500/30°



1 Guide profile

			PROD.NO.				
Vertical sliding curve	500 mm	5°	J927 757	1	0,34 m	0,35 m	0,69 m
		7°	J927 758		0,36 m	0,37 m	0,73 m
		10°	J927 759		0,38 m	0,39 m	0,77 m
		15°	J927 760		0,42 m	0,44 m	0,86 m
		20°	J927 761		0,46 m	0,49 m	0,95 m
		30°	J927 762		0,54 m	0,58 m	1,12 m
		45°	J927 763		0,67 m	0,72 m	1,39 m
		60°	J927 764		0,79 m	0,86 m	1,65 m
		90°	J927 765		1,03 m	1,14 m	2,17 m

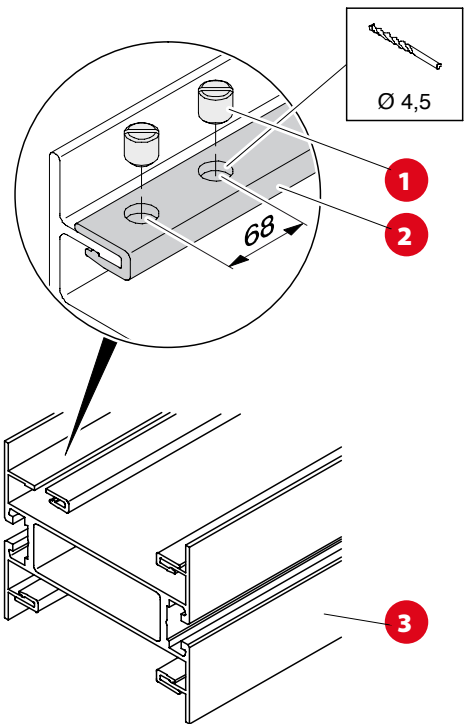
other radius or angles on request

STRETCH_LINE

Sliding strip CS SL



- Sliding strip for minimising friction between chain and profile.
- Properties:
 - Outstanding sliding behaviour
 - Extremely hard surface for minimum wear
 - Suitable for higher-type conveyor speeds.
- The sliding strip is clipped on and fixed in place after assembling the line. Joints in the guide profile should not coincide with joints in the sliding strip.
- Worn sliding strips are easy to remove and renew.



- 1 Grub screw
- 2 Sliding strip
- 3 Guide profile

	PROD.NO.			
Sliding strip, standard	J537 015	25,0 m	PA-modified	grey
Sliding strip, antistatic	J537 016	25,0 m	PE 500	black
Sliding strip, blue	J537017	25,0 m	PA-modified	blue
Sliding strip, ultra low friction	J537 020	25,0 m	LubX CV	naturel
Sliding strip, reinforced*	J537397	25,0 m	PA-modified	white
Grub screw m5 x 5	J535 380	25	POM	white
Drilling jig	J927 786	1		
Assembly mandrel	J537 146	1		

* this sliding strips can only be used in combination with chain J537398

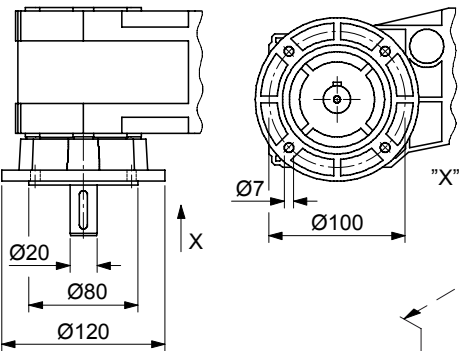
STRETCH_LINE

Vertical drives FS CS090SL



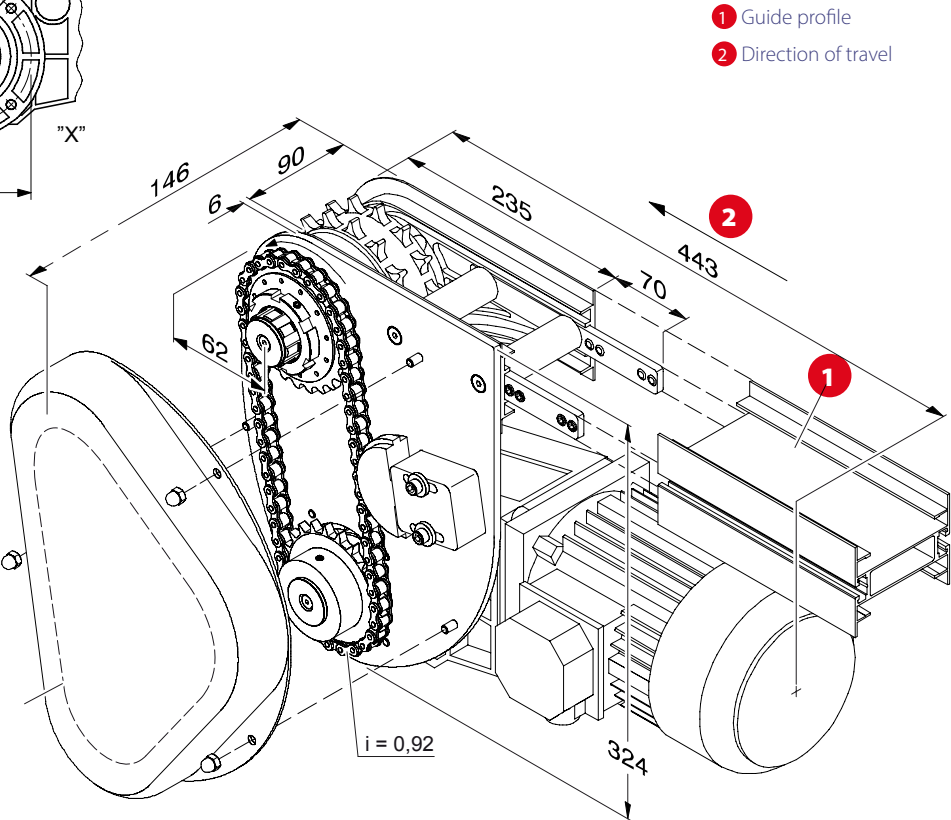
- The drive motor is suspended below the guide profile.
- Left-hand or right-hand version, either with or without motor.
- Slip clutch is included.
- Chain transmission ratio $i = 0.92$.
- Antistatic version on request.

Connecting dimensions for motor



Note
Observe rating and servicing details in "Basic technical information".

Vertical drive FS CS090SL, left-hand version



- 1 Guide profile
- 2 Direction of travel

				PROD.NO.					
			m/min			m	N	mm	m
Vertical drive	LS	○	60	J927 736	1	30	800	118,5	0,55
		●		■ on request					
	RS	○		J927 738					
		●		■ on request					

LS/RS left-hand/right-hand version ●/○ with/without motor ■ specify conveyor speed

STRETCH_LINE

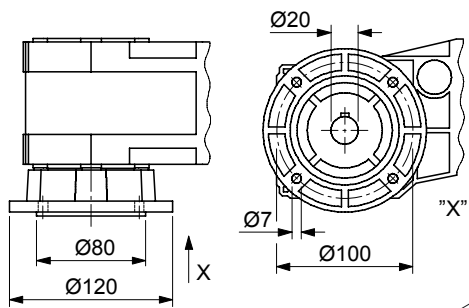
FS CS090SL DRIVES
FS CS090SL direct drives



- Compact design.
- The drive motor is positioned at the side of the guide profile - left or right.
- Either with or without motor.
- Antistatic version on request.

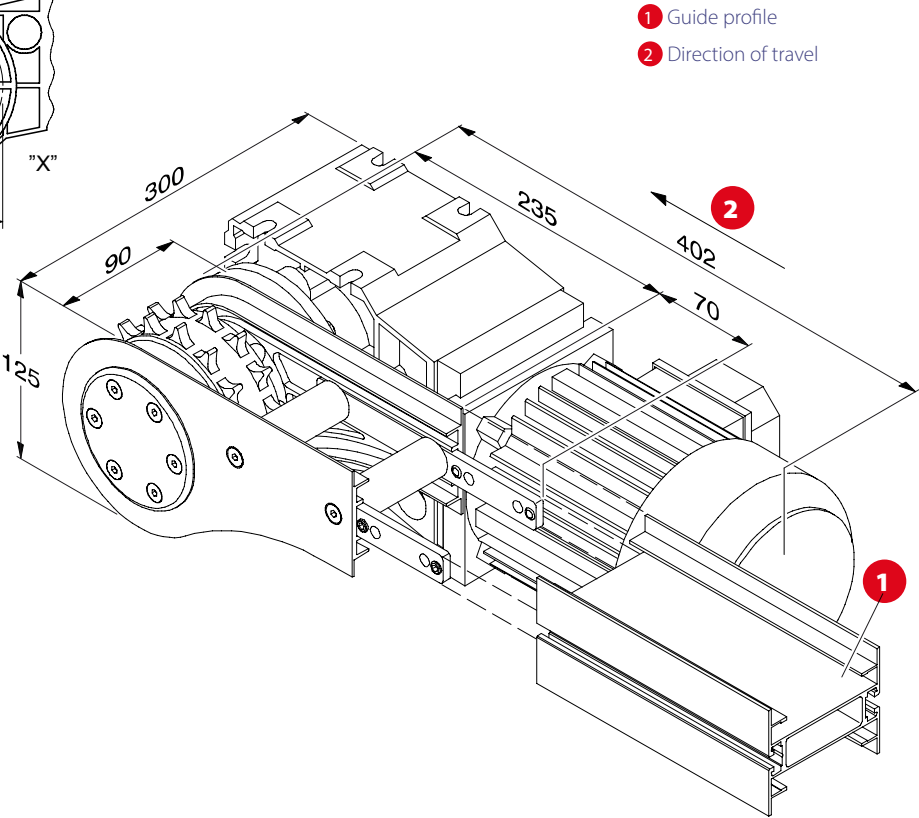


Connecting dimensions
for motor




Note
Observe rating and servicing details in "Basic technical information".

Direct drive FS CS090SL,
right-hand drive motor



			PROD.NO.		 m	 N	 m/min	 mm	 m
Direct drive	LS	○	J927 740	1	30	1250	80	118,5	0,55
		●	■ on request						
	RS	○	J927 743						
		●	■ on request						

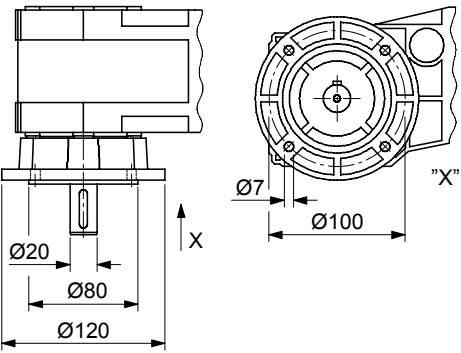
LS/RS left-hand/right-hand version ●/○ with/without motor ■ specify conveyor speed

FS CS090SL LINE COMPONENTS
Centre drives FS CS090SL
with chain transmisson



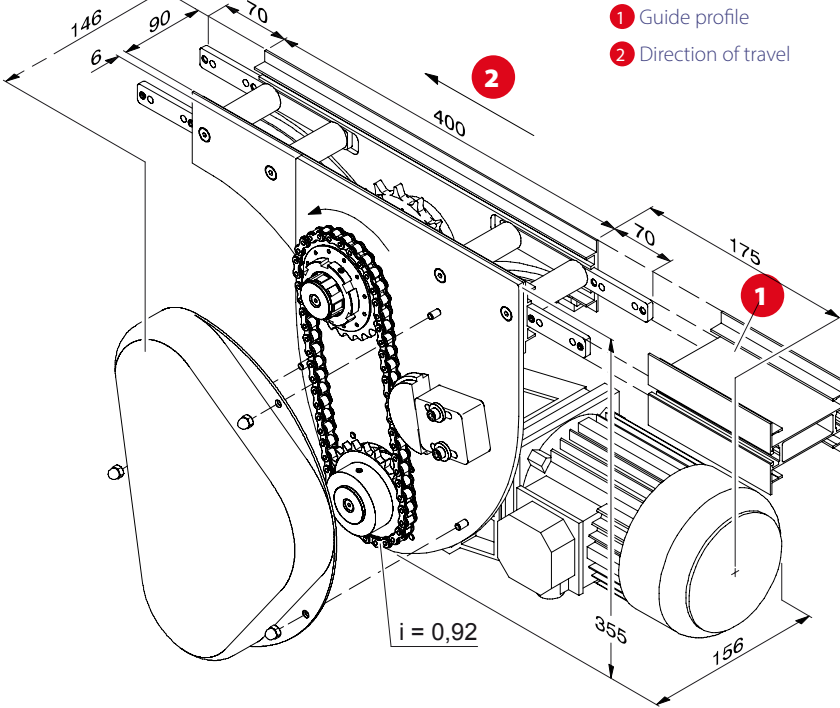
- The transmission gear assembly can be positioned on the left or right.
- Slip clutch is included.
- Either with or without motor.
- Chain-gear transmission ratio $i = 0.92$.
- For smooth chain circulation and minimum wear, the drive should be positioned as close as possible to the idler at the end of the line.
- Antistatic version on request.

Connecting dimensions
for motor




Note
Observe rating and servicing details in "Basic technical information".

Centre drive FS CS090SL,
left-hand version



			 m/min	PROD.NO.		 m	 N	 mm	 m
Direct drive	standard	LS	40	J929 015	1	10	400	118,5	0,83
		●		■ on request					
		○		J929 017					
	others	RS	40	■ on request	1	10	200	118,5	0,83
		○		J927 813					
		●		■ on request					

LS/RS left-hand/right-hand version ●/○ with/without motor ■ specify conveyor speed

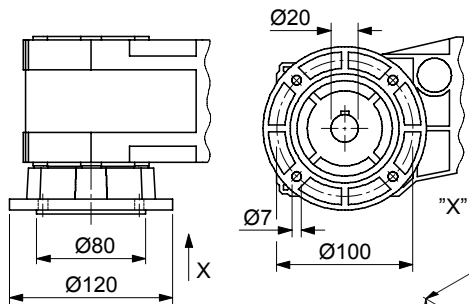
FS CS090SL DRIVES
Direct centre drives FS CS090SL



- Compact design.
- The drive motor is positioned at the side of the guide profile - left or right.
- For smooth chain circulation and minimum wear, the drive should be positioned as close as possible to the idler at the end of the line.
- Conveying direction can be reversed during operation.
- Antistatic version on request.

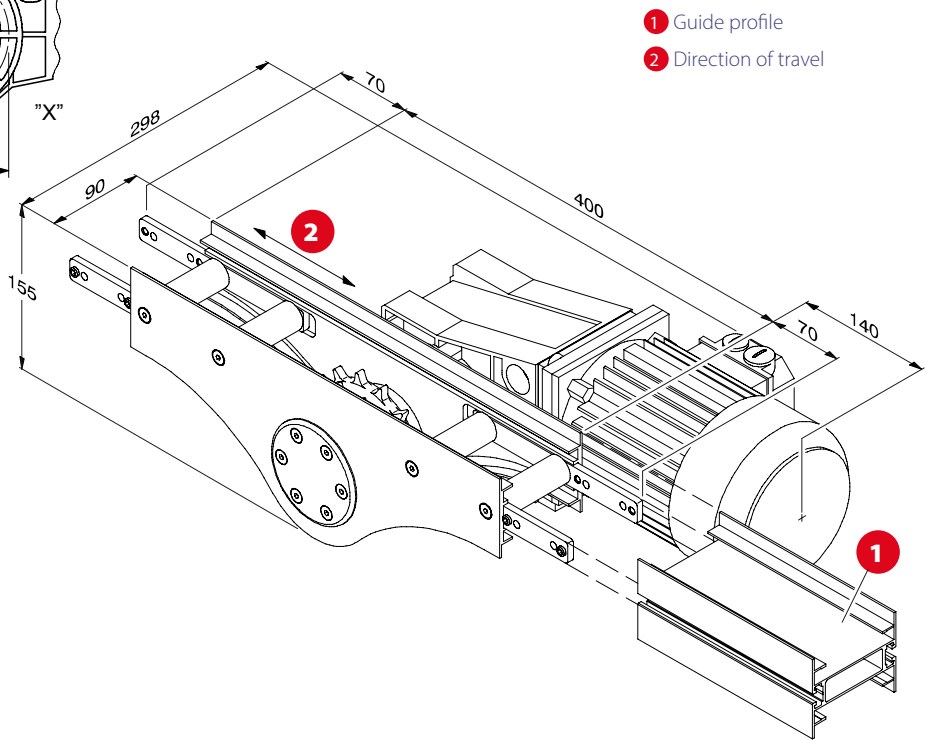


Connecting dimensions for
motor



Note
Observe rating and servicing details in "Basic technical information".
The unit can be used as a left-hand version by turning it in the line.

Direct centre drive FS CS090SL



					PROD.NO.					
Direct centre drive	standard	LS/RS	○	40	J929 019	1	10	400	118,5	0,83
			●	40	■ on request	1	10	400	118,5	0,83
	others	LS/RS	○	40	J927 819	1	10	200	118,5	0,83
			●	40	■ on request	1	10	200	118,5	0,83

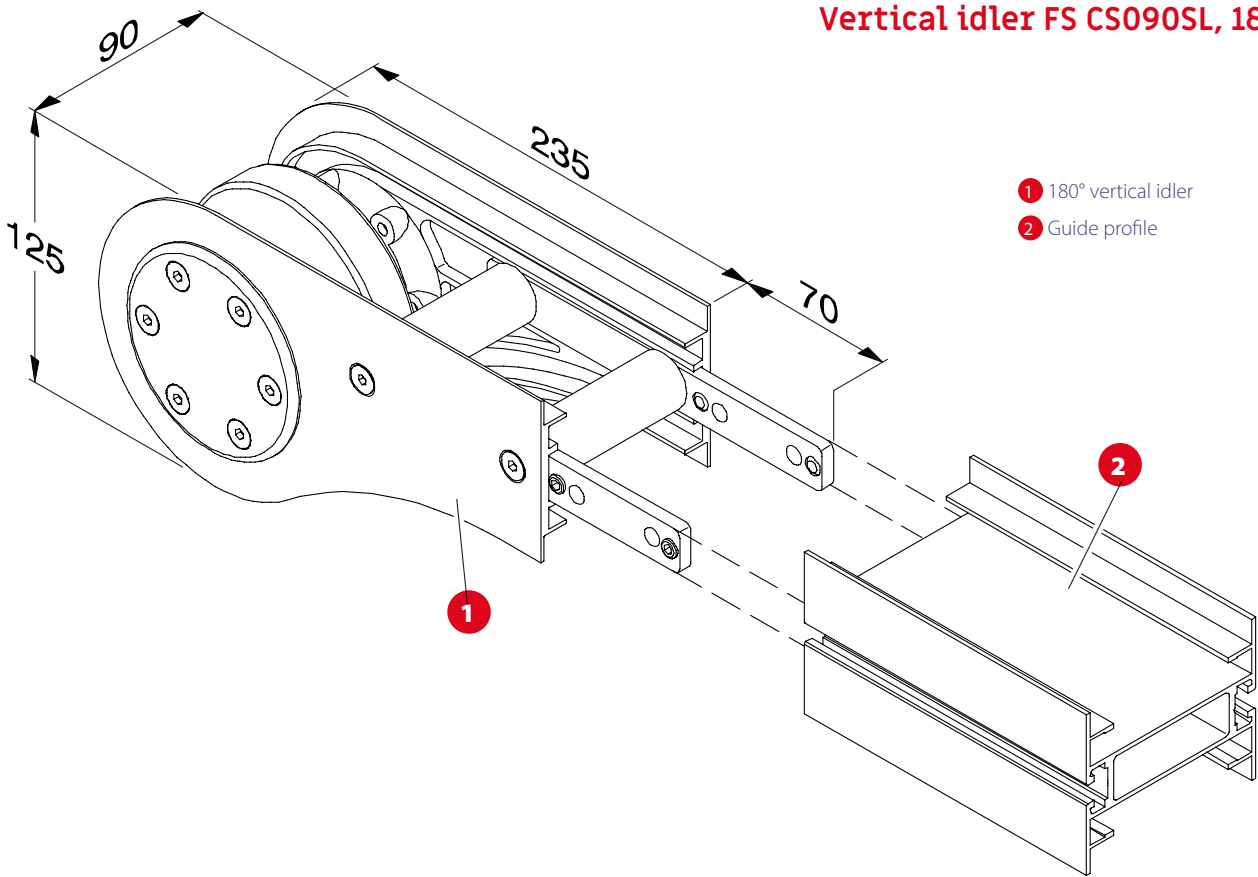
LS/RS left-hand/right-hand version ●/○ with/without motor ■ specify conveyor speed

FS CS090SL IDLERS
Vertical idler FS CS090SL



- 180° vertical idler is installed at the end of the conveyor line for return chain travel underneath the line.

Vertical idler FS CS090SL, 180°



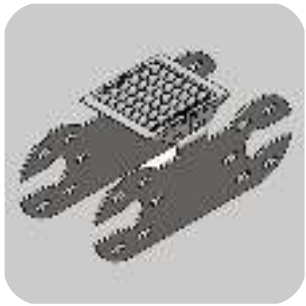
		PROD.NO.		
Vertical idler CS090SL, 180°	180°	J927 749	1	0,55m

FS CS090SL ACCESSORIES

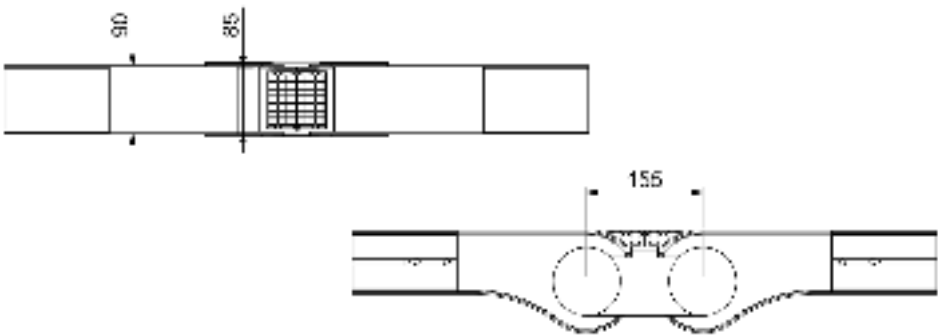
Non driven roll transfer CS SL



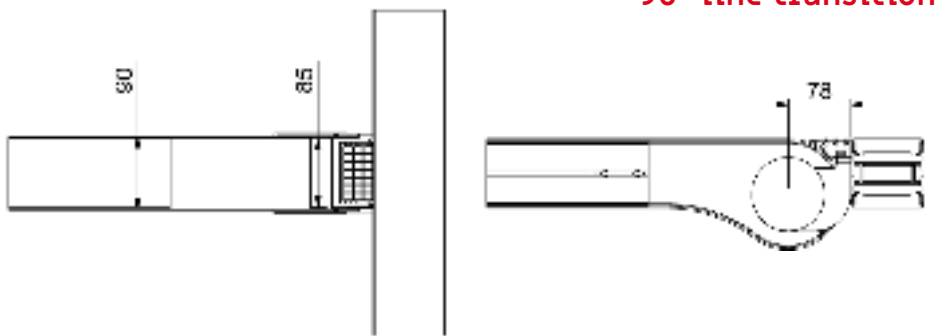
- Passive roll transfer
- Assembly accessories for 90° and 180° line transitions
- Not suitable for chains with catch plates, catch/accumulating rollers or grippers
- Ø11 mm Rollers at a 12,6mm pitch



180° line transition



90° line transition



Caution!

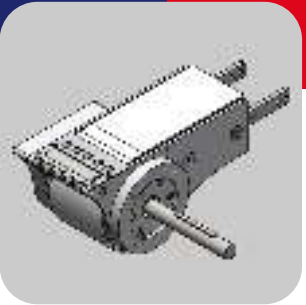
Short conveyed items can be left behind at the point of transfer

			PROD.NO.		
Non-driven roll transfer incl. assembly accessories	FS CS 090 SL	90 °	883610-900	1	stainless steel/plastic
		180 °	883610-910		

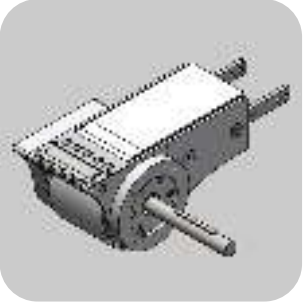
other non-driven roll transfer on request

FS CS090SL ACCESSORIES

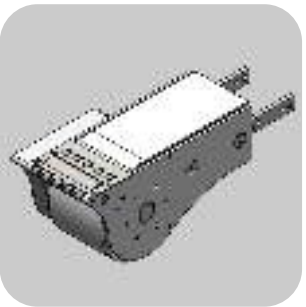
Driven roll transfer CS SL



- Driven roll transfer. Available as left and right hand version
- Including assembly accessories for 180° line transitions
- Not suitable for chains with catch plates, catch/accumulating rollers or grippers
- Transmission by multiple round belts to minimize maintenance and production stops

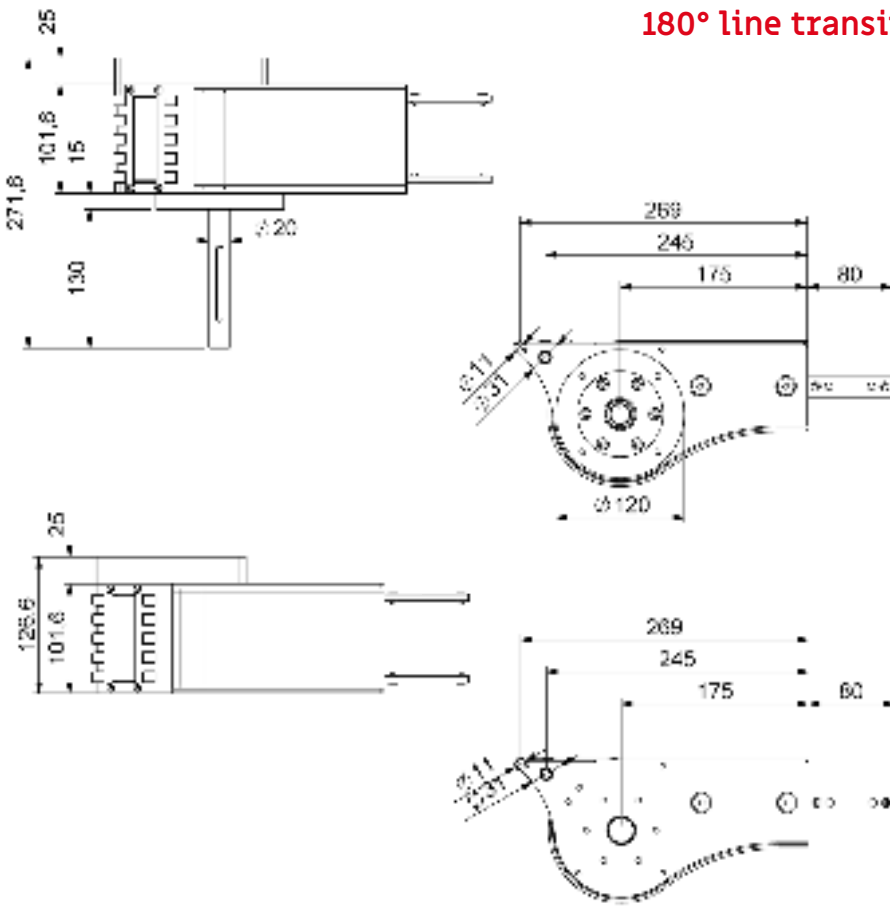


Drive section



Idler unit

180° line transition



			PROD.NO.			
Driven roll transfer - drive section	FS CS090SL	LS	880102-001	1	stainless steel/ aluminium	0,55m
		RS	880102-002			
Driven roll transfer - idler unit		LS	880102-003			
		RS	880102-004			

rubberized drive roller on request LS/RS left-hand/right-hand version

FS CS090SL
Tools

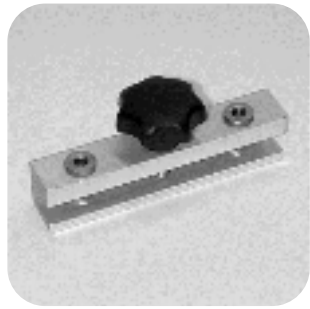
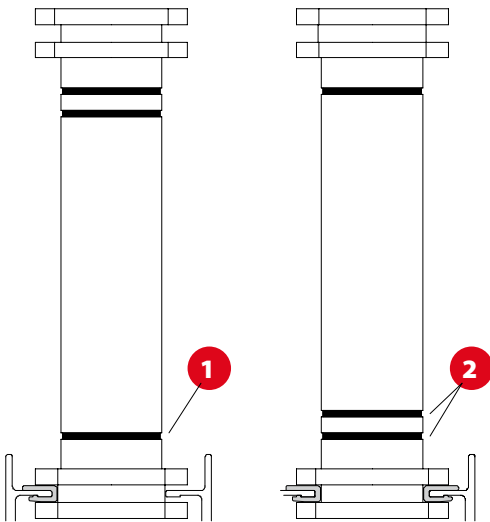


Assembly mandrel

- Assembly tool for clipping the sliding strip on.
- Installing 1st sliding strip: Use the side of assembly mandrel marked with one ring.
- Installing 2nd sliding strip: Use the side of assembly mandrel marked with two rings.

		PROD.NO.	
Assembly mandrel	FS CS090SL	J537 146	1

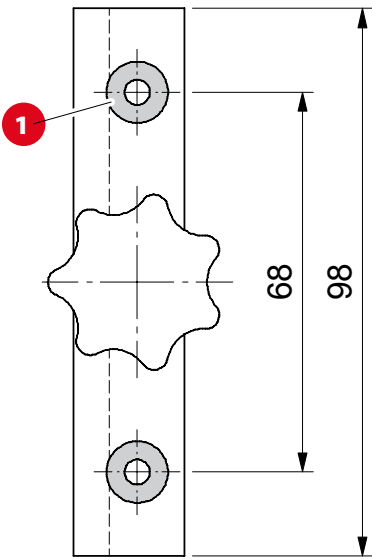
- ➊ Installing 1st sliding strip
- ➋ Installing 2nd sliding strip



Drilling jig

- The sliding strips are fixed to the guide profile with plastic grub screws to absorb axial displacement forces.
- The drilling jig serves as an aid for drilling the required holes.

	PROD.NO.	
Drilling jig	J927 786	1



- ➊ 4.5 mm dia. drilling bush

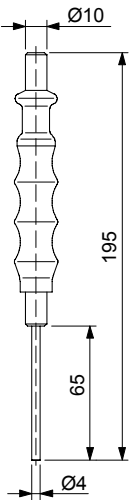
FS CS090SL
Tools



Split-pin driver, 4 mm dia.

- Tool for driving out the chain pen.
- Systems: FS CS065SL / FS CS090SL
- Cushioned safety grip.
- Material: hardened steel.

	PROD.NO.	
Split-pin driver	J537 131	1

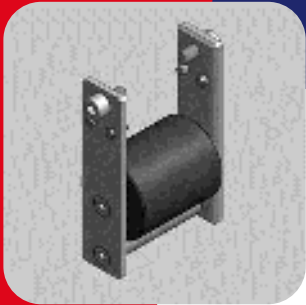


Cutting pliers

- For precise cutting of the sliding strips

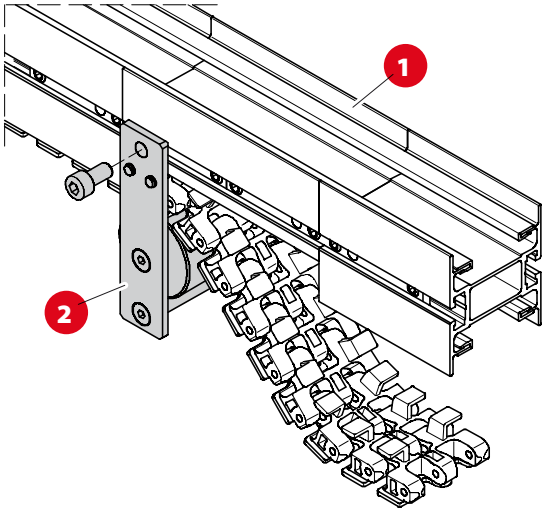
	PROD.NO.	
Cutting pliers	J537 130	1





Chain assembly aid

- Facilitates feeding the conveyor chain into the line.
- It is attached to the lower side of the chain assembly unit after removing the cover plate.
- Not suitable for chains with catch plates, catch/accumulating rollers or grippers.



- 1 Assembly unit
- 2 Assembly aid

		PROD.NO.	
Assembly aid	FS CS090SL	J927 824	1



Other FS Solutions conveyor systems
Including standard components,
application solutions and
aluminium profile systems



Mat-Top Conveyor aluminium or INOX, straight transport

- Chain widths from 160 up to 1200 mm
- Different designs: horizontal-, incline and/or decline Z-shaped
- Small chain pitch



Mat-Top Conveyor aluminium or INOX, straight and curved transport

- Chain widths from 232 up to 631 mm
- 3-dimensional transport
- Low maintenance



STRETCH_LINE Conveyor

- Chain widths from 65 up to 200 mm
- 3-dimensional transport
- Low maintenance



Belt Conveyor aluminium or INOX, straight transport

- Belt widths from 80 up to 1200 mm
- Direct or center drive
- Drum- or drive motor



Chain Conveyor CS VC INOX

- Chain width 82 and 114 mm
- Direct- or center drive
- Suited for high hygiene requirements



Heavy XLBP Mat-Top conveyor aluminium

- Chain widths from 255 up to 765 mm
- Very low friction between chain and product (less damage to products)
- Low tension in the chain ensures a clear energy saving



Mat-Top conveyor aluminium, straight transport Nose bar

- Chain widths from 152 up to 1066 mm
- Small nose transition
- Transition band: easy to deploy between 2 systems
- Chain pitch 8 mm



Standard components

- Pusher, cross-over, divider
- Transitions between conveyors
- Puck handling, shielding etc.



Application solutions

- Buffer tables
- Vertical transport systems, gripper systems
- Sorter systems, flow splitters etc.



Aluminium profile system

- Wide assortment
- Robust and corrosion resistant
- Simple and flexible assembly



The innovative solutions provided by CS Conveyor systems guarantee a rational flow of materials in production – also where high demands are placed on speed, noise emissions, servicing and maintenance.

Take advantage of our expertise that has grown over many years. We are your innovative developer and reliable supplier of standardised and customised applications.

Automotive industry, FS CS065SL



Food industry, FS CS090SL



Cosmetics industry, FS CS090SL



Automotive industry, FS CS200SL

Pharma industry, FS CS065SL



Food industry: Filling, FS CS065SL



FS Solutions BV
Klavermaten 63
7472 DD Goor
T +31 548 515 115
E info@fssolutions.nl
W www.fssolutions.eu

version 2025/7