ENGINEERING MANUAL

Complex Configurations & Tight Spaces High Speed Performance - Up to 76 mpm Reduces Conveyor Footprint Ideal for Curves, Inclines & Declines





FlexMcve

High Performance, Aluminum, Flexible Chain Conveyors



TRANSFERS

FOR SMOOTH IN-LINE

TRANSFER OF PRODUCT

CONVEYOR FEATURES

VERTICAL BENDS

FOR SMOOTH ELEVATION

CHANGES AND EFFICIENT

USE OF VERTICAL SPACE

T-SLOT FRAMEWORK FOR EASE OF MOUNTING ACCESSORIES

SUPPORT POST

WHEEL CORNERS

ELIMINATE CORNER FRICTION ALLOWING MULTIPLE CORNER CONFIGURATIONS

PROVIDE ADJUSTABLE HEIGHT WHILE OPTIMIZING THE USE OF FLOOR SPACE

Purchasing a FlexMove Conveyor

Dorner offers two solutions for purchasing a FlexMove Conveyor.

- The first solution is to order all the necessary parts and components to build your FlexMove Conveyor on site. This will require the proper tools for cutting, bending and installing the conveyor. Consult our installation guide for FlexMove Conveyors for more details.
- The second solution is to have a complete conveyor provided through our FlexMove Solutions. With FlexMove Solutions, you can have the conveyor built in our facility, tested, broken down into shippable sections and shipped to the end site for installation.

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

Essential parts of the FlexMove product range are protected by patents and design regulations. Drawings are made to European standards. April 2025

MODULAR FRAMING FOR FUTURE ADD ON CAPABILITY AND PRODUCTION LINE CHANGES

TABLE OF CONTENTS

Product Ov	verview & Introduction	4 – 9
FK	45mm Conveyor System	10 – 25
FS	65mm Conveyor System	26 – 48
FM	85mm Conveyor System	49 – 72
FC	105mm Conveyor System	73 – 94
FL	150 mm Conveyor System	95 - 111
FU	180 mm Conveyor System1	12 - 124
FV	260 mm Conveyor System1	25 – 137
FZ	Function Modules1	36 - 152
FA	Conveyor Accessories1	53 - 166
FB	Conveyor Support Options	167 – 176
FB	Conveyor Support Components1	177 – 183
FG	Conveyor Guide Options1	84 - 204
FG	Conveyor Guide Components2	205 – 222
Gearmotor	rs2	223 – 227
Controllers	s2	28 – 229
Pallet Syste	ems	230 – 233
Technical D	Data & Calculations	234 - 245

Dorner reserves the right to make alteration without prior notication. Every care has been taken to ensure the accuracy of the information contained in this Catalog but no liability can be accepted for any error or omissions.



PRODUCT OVERVIEW



Basic System Selection

We provide a wide selection of chain sizes to cover a wide variety of product sizes and shapes. In order to select the right chain size to use in your application, consider the following selection criteria:

Product Dimensions

A product can be two or three times wider than the conveyor chain as long as the center of gravity of the product falls within the chain width. Extra supporting guide rails are required and testing is recommended.

Product Weight

Product weight is important in chain selection as each chain has its maximum traction force. Traction force calculation is required when there are several heavy products to be conveyed, and it will increase further if the products are accumulated on the conveyor.

• Conveyor Functions Available

Most of the conveyor functions are available in all conveyor series, however there are differences with regards to the chain types, drive unit and idler unit variants. Selection of drive type is important as different drives have different traction forces.

Technical Calculation

It is important to calculate total load on conveyor based on product weight, distance between products, accumulation and length of the system. The frequency of start /stop, chain tension and service factor are important. If the calculated capacity is higher than the selected drive and chain series, the conveyor should be shortened or select a system with higher capacity.

Small Footprint

Straightforward layout and compact design maximizes valuable floor space while minimizing noise, maintenance and footprint.

Intermediate Drive Unit

An intermediate drive is best utilized when space restriction prohibits the placement of the end drive unit. It requires idler end units at each end. The gearmotor can be coupled directly or suspended underneath the drive unit at both right and left orientation. Adjustable torque limiter can be added to protect the conveyor system. The traction force is lower than end drive units due to less engagement between drive sprocket and chain.

Catenary Drive Unit

4

Catenary Drives are designed to accommodate top-running chains and are commonly used in application of single loop or alpine conveyor system. Additional idler end unit is not required. Only suspended version is available.



PRODUCT OVERVIEW

<u>FlexMove</u>

Basic System Selection continued

Combined Drive and Idler Unit

A combined drive and idler consist of one end drive and one idler end unit mounted in a single assembly with a transfer bridge for smooth transfer of products. It has a smaller footprint compared to side transfer design. Available in both direct and suspended drive versions, the gear motor can be coupled at both left and right orientation. Adjustable torque limiter can be added to protect the conveyor system.

Wheel Drive Unit

Wheel drives are used for applications using single loop or alpine conveyor system without return chain. Both direct and suspended drive versions are available with the gearmotor mounted underneath. The traction force is lower than other end drive units as the gear wheel engages the side of the chain.

Weight Take-Up

To eliminate catenary sag, FlexMove conveyors come with a weighted take-up module.

The weighted take-up module automatically adjusts for chain stretch. The module provides smoother and quieter chain running and can also be positioned in various locations along the conveyor.



Idler End Unit

The function of the idler end is to change the direction of the moving chain. Available in both standard idler end unit (180°) and idler bend unit (90°). It comes with 2pc connecting strips at the connection end.

• Idler End Unit (standard 180°)

The moving chain is transferred 180° from the bottom of the conveyor beam to the top through a flange guide with minimal friction.

• Idler Bend Unit (90°)

The idler bend unit converts and changes the chain direction in 90° perpendicular to incoming chain direction.

Bends

Bends are used to change the direction of chain movement in conveyors. There are 3 types of bends available:

Wheel bends

Designed with top and bottom wheels that rotate freely with the chain and are supported by a dual sealed ball bearing, providing the lowest friction, minimum bend force and smallest turning radius compared to other types of bends. Besides standard 30°, 45°, 60°, 90° and 180° configurations, special angles are also available upon request. Select a horizontal wheel bend whenever possible.

Horizontal Bends

An alternative to wheel bends, horizontal bends are useful in conditions requiring large space, long products with large turning radius and twin – track bend applications. It has higher friction compared to wheel bends. Larger radius is recommended for lower friction and less stress on slide rail.

Vertical Bends

A vertical bend provides vertical change of the conveyors moving direction. It can be used either as a convex or concave bend. Vertical bends increase the chain tension and cause higher stress on the slide rail. Avoid using more than four 90° vertical bends in one conveyor.



FlexMcve

FLEXIBLE CHAIN SOLUTIONS

ALPINE CONVEYORS



The Alpine Conveyor is a compact spiral configuration commonly used as an accumulation or buffer zone in between machines or as a process step for cooling or drying. It is also used for line balancing and for repair and maintenance purposes.

It can be configured as an elevating/lowering system with a single or double serpentine configuration and used as an in-line accumulator with entry and exit at different levels, or an in-line or off-line accumulator with entry and exit at the same level.

The Alpine conveyor maximizes vertical space and ensures the efficient utilization of machines with different speeds and provides storage for pucks.



WEDGE CONVEYORS

Our wedge conveyors are used to take products from production floor level to a higher level or vice versa. Products are wedged between opposing conveyors lined vertically or horizontally and are moved swiftly but securely.

Wedge Conveyors are easy to construct, lightweight and have compact footprints. Its rapid transfer rate makes it ideal for use in continuous, high capacity operations such as packaging lines. Built with Aluminum and stainless steel, it meets the stringent hygiene standard required for medical and cosmetic packaging.

Wedge Conveyors can be configured differently for a variety of uses, such as a transition between different travel orientations, de-pucking operations, inverted rinse operations and even for creating a passage way on the production floor.

Wedge Conveyors are not suitable for wet products, heavy products or products that cannot withstand side pressure.



C-Wedge

N-Wedge

S-Wedge



INTRODUCTION

FlexMcve

TWIST CONVEYORS



HELIX CONVEYORS

· Positively control the product during rotation

- · Provides product rotation for access to multiple sides of packages
- No change over -can handle multiple package sizes at the same time
- No product guiding required
- Products do not need to be gapped or spaced
- Available Widths: 65, 85, 105 and 180 mm (2.5, 3, 4 and 7 in)
- Requires 2 independent FlexMove conveyors
- Helical twists up to 90 degrees per conveyor pair
- 90 degree twist is approximately 3 m (10 ft) long
- Speeds Up to 55 mpm (180 fpm)



HELICAL CURVE CONVEYORS

minimum

- Unique, flexible design provides greater flexibility in layout
 - · Infeed and outfeed may be positioned at any height or angle
 - Custom infeed and outfeed lengths allow the conveyor to extend beyond spiral, reducing the number of conveyors required
- Small foot print maximizes valuable floor space
- Patented side roller chain reduces corner friction allowing for faster speeds and smooth product handling
- Applications include accumulation, buffering, cooling product between processes or machines, and more
- Available in 85, 180 and 260 mm



- Allows incline or decline through corners and straights
- · Patented side roller chain reduces corner friction
- · Provides capability for product accumulation in the corners
- · Simple, low cost spiral for small parts handling
- Available in 85, 180 and 260 mm

TOP RUNNING LOOP CONVEYORS



- Top running module create a continuous loop of conveyance
- Used for pallet systems, puck handling, and small manufacturing cells
- · Conveyor chain runs on the top side of the frame only
- Available with top running drive module or wheel corner drives

DORNER

7

FlexMcve

FRAME WIDTHS



45 mm (1.7 in)

- Maximum load = 30 kg/m (20 lbs/ft)
- Maximum total load = 136 kg (300 lbs) non-accumulated
- Maximum length = 30 m (98 ft)
- Maximum Speed = 50 mpm (165 fpm)





65 mm (2.5 in)

- Maximum load = 30 kg/m (20 lbs/ft)
- Maximum total load = 136 kg (300 lbs) non-accumulated
- Maximum length = 30 m (98 ft)
- Maximum Speed = 58 mpm (190 fpm)



65 MM WIDTH



85 mm (3.4 in)

- Maximum load = 60 kg/m (40 lbs/ft)
- Maximum total load = 272 kg (600 lbs) non-accumulated
- Maximum length = 30 m (98 ft)
- Maximum Speed = 58 mpm (190 fpm)





105 mm (4.1 in)

- Maximum load = 60 kg/m (40 lbs/ft)
- Maximum total load = 272 kg (600 lbs) non-accumulated
- Maximum length = 30 m (98 ft)
- Maximum Speed = 58 mpm (190 fpm)

85 MM WIDTH



105 MM WIDTH

Note: Conveyor modules may be made up of several length of conveyor beam. Maximum length piece beam is 3,000 mm (118 in). Note: Dimensions = mm (in)



FRAME WIDTHS



150 mm (5.9 in)

- Maximum load = 60 kg/m (40 lbs/ft)
- Maximum total load = 272 kg (600 lbs) non-accumulated
- Maximum length = 30 m (98 ft)
- Maximum Speed = 58 mpm (190 fpm)



FlexMove

150 MM WIDTH





180 mm (7.1 in)

- Maximum load = 65 kg/m (44 lbs/ft)
- Maximum total load = 272 kg (600 lbs) non-accumulated
- Maximum length = 30 m (98 ft)

260 mm (10.2 in) • Maximum load =

65 kg/m (44 lbs/ft)

• Maximum total load = 272 kg (600 lbs) non-accumulated

• Maximum length =

• Maximum Speed =

58 mpm (190 fpm)

30 m (98 ft)

• Maximum Speed = 58 mpm (190 fpm)

44 (1.72) 179 (7.05) 175 (6.89) BELT WIDTH 88 (3.45) 179 (7.05) AT T-SLOTS

180 MM WIDTH



Note: Conveyor modules may be made up of several length of conveyor beam. Maximum length piece beam is 3,000 mm (118 in). Note: Dimensions = mm (in)





FK Series is a compact and neat design for small items and fast transportation.

It is also used for twin track application for pallet assembly lines.

FK Series Characteristic

Beam Width: 45 mm

Product Width: Refer to Guide Rail Assembly

Accessories Needed

Slide Rail Required: FASR-25K OR FASR-25KU

Slide Rail Color: White or Natural Color

Slide Rail Material: HDPE OR UHMW-PE

Slide Rail Rivet: FASLS-M3

Connecting strip is used to connect two beams.

Connecting Strip: FACS-20x140



45 MM WIDTH

Conveyor Beam FKCB-3



UOM: 3 Meter / Length

Conveyor Half Beam FKCB-3H



UOM: 3 Meter / Length



Chain Connecting Module FKCC-160



UOM: pc





FlexMove.

Chain Common Data

Packaging: 5 m per box Pitch: 25.4 mm Width: 44 mm Tensile Strength at 20° C: 4000N Color: White & Black (Conductive)

Material:

Chain: White Acetal / POM Pivot: Polyamide Pivot Pin: Stainless Steel Insert (Wedge & Friction): TPE Grey



Conductive Chain FKPC-5CD





UOM: 5 Meter / box

Application: Suitable for horizontal and slope < 5° transport of products with accumulation.





UOM: 5 Meter / box Application: Suitable for transport of static

sensitive product.

Wedge Top Chain Right **FKWT-5PR**



UOM: 5 Meter / box Application: Suitable for PET bottle transport.

Wedge Top Chain Left FKWT-5PL



UOM: 5 Meter / box Application: Suitable for PET bottle transport.



FK SERIES: 45 mm Conveyor System

Friction Top Chain FKFT-5





UOM: 5 Meter / box

Application: Suitable for transport product in slope $> 5^{\circ}$ but $\le 30^{\circ}$ without accumulation.

Wedge Top Chain FKWT-5C





UOM: 5 Meter / box Application: Vertical Wedge transportation of products.

Wedge Top Chain FKWT-5D



UOM: 5 Meter / box

Application: Vertical Wedge transportation of products.

Flocked Chain FKFK-5





UOM: 5 Meter / box Application: Suitable to transport lightweight, fragile and scratch sensitive product.



FlexMove

FK Direct End Drive without Motor (LEFT)

FK Direct End Drive without Motor (RIGHT)

FKDD-A45-XDY (See Chart)



FKDD-A45-XDY (See Chart)





Note: Drive Module is 12 mm wider than conveyor frame.

Part Number		Shaft Selection	Direction	Aux Shaft Selection
FKDD-A45	_	Х	D	Y
		0 = 20 mm	L = Left	Blank = No Aux Shaft
		E = 3/4 in*		
		A = 20 mm Aux Only	R = Right	A = 20 mm Aux Shaft

Max Traction Force: 500N The Direct End Drive Unit is

without torque limiter.

UOM: pc Chain required 2-way: 0.8 meter Slide rail required 2-way: 0.5 meter

*3/4 inch shaft option available in North America only.

FK Direct End Drive without Motor GP (LEFT) FKDD-A45GP-XDY (See Chart)



FK Direct End Drive without Motor GP (RIGHT)

FKDD-A45GP-XDY (See Chart)

Note: Drive Module is 12 mm wider than conveyor frame.

Part Number		Shaft Selection	Direction	Aux Shaft Selection
FKDD-A45GP	_	Х	D	Y
		0 = 20 mm	L = Left	Blank = No Aux Shaft
		E = 3/4 in*		
		A = 20 mm Aux Only	R = Right	A = 20 mm Aux Shaft

*3/4 inch shaft option available in North America only.

Max Traction Force: 500N

The Direct End Drive Unit GP is without torque limiter.

UOM: pc

Chain required 2-way: 0.55 meter Slide rail required 2-way: 0 meter



FK SERIES: 45 mm Conveyor System

FK Direct Drive Driven Transfer Bridge (RIGHT)

FKDD-A45DB-A-0R

FK Direct Drive Driven Transfer Bridge (LEFT)

FKDD-A45DB-A-0L









Max Traction Force: 500N The Direct End Drive Unit is without torque limiter.

UOM: pc Chain required 2-way: 0.55 meter Slide rail required 2-way: 0 meter

FK Direct Drive Free Roller Transfer Bridge (LEFT/ RIGHT)



FKTB-A45

Transfer bridge c/w roller for FSIE-A45 Transfer bridge c/w roller for FSDD-A45-0L Transfer bridge c/w roller for FSDD-A45-0R





(14)

FlexMove

FK Suspended End Drive without Motor (LEFT)

FKSD-A45-0L (with Torque Limiter) FKSD-A45SPT-0L (without Torque Limiter)

FK Suspended End Drive without Motor (RIGHT)

FKSD-A45-0R (with Torque Limiter) FKSD-A45SPT-0R (without Torque Limiter)



20 mm Shaft only. Minimum product length for inline transfer = 100 mm Transfer extends past conveyor only 27 mm

Note: Drive Module is 12 mm wider than conveyor frame.



Max Traction Force: 500N The Suspended End Drive Unit is available with or without torque limiter.

UOM: pc Chain required 2-way: 0.8 meter Slide rail required 2-way: 0.5 meter



Chain required 2-way: 1.2 meter Slide rail required 2-way: 1.1 meter

• Located in middle of conveyor to free up drive end.

- Includes torque limiter protecting chain and motor from overload
- Limits chain pull capacity to 200N

Note: Drive Module is 12 mm wider than conveyor frame.





FK SERIES: 45 mm Conveyor System

FK Direct Intermediate Drive without Motor (LEFT)

FKID-DD-0L1

FK Direct Intermediate Drive without Motor (RIGHT)

FKID-0R1



- Located in middle of conveyor to free up drive end.
- Includes torque limiter protecting chain and motor
- from overload
- Limits chain pull capacity to 200N

Note: Drive Module is 12 mm wider than conveyor frame.



Max Traction Force: 200N The Direct Intermediate Drive Unit is without torque limiter.

UOM: pc

Chain required 2-way: 1.2 meter Slide rail required 2-way: 1.1 meter



SEW gearmotors are products of SEW Eurodrive



FlexMove

FK Direct Wheel Drive without Motor

FKWD-DD-0M



Max Traction Force: 200N

The Drive Wheel Drive Unit is without torque limiter. FKWD-DD-0M represents direct drive without gear motor. Maximum traction force for FKWD-DD is lower than FKDD and FKSD.

UOM: pc

Chain required 1-way: 0.7 meter Slide rail required 1-way: 0.7 meter

FK Suspended Wheel Drive without Motor

FKWD-SD-0M





Max Traction Force: 200N

The Suspended Wheel Drive Unit is with torque limiter. FKWD-SD-0M represents direct drive without gear motor. Maximum traction force for FKWD-SD is lower than FKDD and FKSD.

UOM: pc

Chain required 1-way: 0.7 meter Slide rail required 1-way: 0.7 meter



FK SERIES: 45 mm Conveyor System

FK Idler End-45

FKIE-A45



UOM: pc

Chain required 2-way: 0.8 meter Slide rail required 2-way: 0.5 meter

Note: Tail is 12 mm wider than conveyor frame.

FK Idler End-200

FKIE-200



UOM: pc Chain required 2-way: 0.7 meter Slide rail required 2-way: 0

FK Idler-200 End Free Roller Bridge

FKIE-A45EB-200



FKEB-A45-200

End transfer bridge c/w roller for FKIE-200





FlexMove.



FKWB-180R150A

FKWB-90R150A





UOM: pc Chain required 2-way: 1.3 meter Slide rail required 2-way: 1.3 meter





UOM: pc Chain required 2-way: 0.8 meter Slide rail required 2-way: 0.8 meter

FK Wheel Bend 60°

FK Wheel Bend 90°

FKWB-60R150A





UOM: pc Chain required 2-way: 0.6 meter Slide rail required 2-way: 0.6 meter

FK Wheel Bend 45°

FKWB-45R150A



UOM: pc Chain required 2-way: 0.6 meter Slide rail required 2-way: 0.6 meter



FK SERIES: 45 mm Conveyor System

FK Wheel Bend 30°

FKWB-30R150A



UOM: pc Chain required 2-way: 0.5 meter Slide rail required 2-way: 0.5 meter

FK Wheel Bend 5° - 180°



FK Horizontal Plain Bend 15°

Example for FK Wheel Bend Ordering

- Wheel bend, ذ ± 1°
- FKWB-ذR150A

If an angle of 65° is needed for wheel bend, the ordering part number is **FKWB-65R150A**

The outer bend is assembled using connecting strip (FACS-20x140). Angle of ذ must be indicated when ordering.



Horizontal plain bend, 15° ± 1°

$R = 300 \pm 10 \text{ mm}$	FKHB-15R300
$R = 500 \pm 10 \text{ mm}$	FKHB-15R500
$R = 700 \pm 10 \text{ mm}$	FKHB-15R700
$R = 1000 \pm 10 \text{ mm}$	FKHB-15R1000

Chain required 2-way (300, 500, 700, 1000): 1, 1.1, 1.2, 1.3 meter Slide rail required 2-way (300, 500, 700, 1000): 1.9, 2.1, 2.3, 2.6 meter

FK Horizontal Plain Bend 30°





Horizontal plain bend, 30° ± 1°

$R = 300 \pm 10 \text{ mm}$	FKHB-30R300
$R = 500 \pm 10 \text{ mm}$	FKHB-30R500
$R = 700 \pm 10 \text{ mm}$	FKHB-30R700
$R = 1000 \pm 10 \text{ mm}$	FKHB-30R1000

Chain required 2-way (300, 500, 700, 1000): 1.1, 1.3, 1.5, 1.8 meter Slide rail required 2-way (300, 500, 700, 1000): 2.2, 2.6, 3.1, 3.7 meter



FlexMove.

FK Horizontal Plain Bend 45°



Horizontal plain bend, 45° ± 1°

$R = 300 \pm 10 \text{ mm}$	FKHB-45R300
$R = 500 \pm 10 \text{ mm}$	FKHB-45R500
$R = 700 \pm 10 \text{ mm}$	FKHB-45R700
$R=1000\pm10~\text{mm}$	FKHB-45R1000

UOM: pc

Chain required 2-way (300, 500, 700, 1000): 1.3, 1.6, 1.9, 2.4 meter Slide rail required 2-way (300, 500, 700, 1000): 2.5, 3.2, 3.8, 4.7 meter

FK Horizontal Plain Bend 60°



Horizontal plain bend, 60° ± 1°

$R = 300 \pm 10 \text{ mm}$	FKHB-60R300
$R = 500 \pm 10 \text{ mm}$	FKHB-60R500
$R = 700 \pm 10 \text{ mm}$	FKHB-60R700
$R=1000\pm10~\text{mm}$	FKHB-60R1000

UOM: pc

Chain required 2-way (300, 500, 700, 1000): 1.4, 1.8, 2.3, 2.9 meter Slide rail required 2-way (300, 500, 700, 1000): 2.9, 3.7, 4.5, 5.8 meter

FK Horizontal Plain Bend 90°



Horizontal plain bend, 90° ± 1°

$R = 300 \pm 10 \text{ mm}$	FKHB-90R300
$R = 500 \pm 10 \text{ mm}$	FKHB-90R500
$R = 700 \pm 10 \text{ mm}$	FKHB-90R700
$R = 1000 \pm 10 \text{ mm}$	FKHB-90R1000

UOM: pc

Chain required 2-way (300, 500, 700, 1000): 1, 1.1, 1.2, 1.3 meter Slide rail required 2-way (300, 500, 700, 1000): 1.9, 2.1, 2.3, 2.6 meter



FlexMcve

FK Horizontal Plain Bend 180°



Horizontal plain bend, 180° ± 1°

$R = 300 \pm 10 \text{ mm}$	FKHB-180R300
$R = 500 \pm 10 \text{ mm}$	FKHB-180R500
$R = 700 \pm 10 \text{ mm}$	FKHB-180R700
$R = 1000 \pm 10 \text{ mm}$	FKHB-180R1000

UOM: pc

Chain required 2-way (300, 500, 700, 1000): 2.7, 3.9, 5.2, 7.1 meter Slide rail required 2-way (300, 500, 700, 1000): 5.4, 7.9, 10.4, 14.2 meter

FK Horizontal Plain Bend 5-180°



Example for FK Horizontal Plain Bend Ordering

Horizontal plain bend, ذ ± 1°

$R = 300 \pm 10 \text{ mm}$	FKHB- ذR300
$R = 500 \pm 10 \text{ mm}$	FKHB- ذR500
$R = 700 \pm 10 \text{ mm}$	FKHB- ذR700
$R = 1000 \pm 10 \text{ mm}$	FKHB- ذR1000

If an angle of 120° is needed for radius R500 horizontal plain bend, the ordering part number is

FKHB-120R500

UOM: pc

Chain required 2-way (300, 500, 700, 1000): meter (Variable to angle) Slide rail required 2-way (300, 500, 700, 1000): meter (Variable to angle)

FK Vertical Bend 5° - 90°



Example for FK Vertical Bend Ordering

- Vertical bend, ذ ± 1°
- FKVB-ذR300

If an angle of 65° is needed for vertical bend, the ordering part number is

FKVB-65R300

The outer bend is assembled using connecting strip (FACS-20x140). Angle of Ø^o must be indicated when ordering.



FlexMove



UOM: pc Chain required 2-way: 0.5 meter Slide rail required 2-way: 1.1 meter

DORNER

FK SERIES: 45 mm Conveyor System



24

FlexMove





FlexMcve

FS SERIES: 65 mm Conveyor System

Variety of chain types suitable for wide range of applications either horizontal or vertical product transportation. The maximum product width to be conveyed can be referred to guide rail assembly pages.

FS Series Characteristic

Beam Width: 65 mm Product Width: Refer to Guide Rail Assembly

Accessories Needed

Slide Rail Required: FASR-25 OR FASR-25U
Slide Rail Color: White or Natural Color
Slide Rail Material: HDPE OR UHMW-PE
Slide Rail Rivet & Screw: FASLR-4X6 or FASLS-M5
Connecting strip is used to connect two beams.
Connecting Strip: FACS-25x140A



65 MM WIDTH

Conveyor Beam FSCB-3



UOM: 3 Meter / Length

Chain Connecting Module FSCC-160



UOM: pc





FlexMcve

Chain Common Data

Packaging: 5 m per box Pitch: 25.4 mm Width: 63 mm Tensile Strength at 20°C: 4000N Color: White & Black (Conductive)

Material:

Chain: White Acetal / POM Pivot: Polyamide Pivot Pin: Stainless Steel Insert (Wedge & Friction): TPE Grey

Example for FSCT-5A17-L#

= 1 cleated top chain with alternate
of # link of plain chain



The above chain is FSCT-5A17-L1, 1 link cleated top chain with alternate of 1 link of plain chain. Note: # = 1, 2, 3, 4, 5.....20

Standard Plain Chain **FSPC-5**







UOM: 5 Meter / box

Application: Suitable for horizontal and slope < 5° transport of products with accumulation.

Universal Chain FSUC-5



UOM: 5 Meter / box

Application: Universal Link with M3 Nut, Suitable for attached customer cleat or fixture

Wedge Top Chain FSWT-5A



UOM: 5 Meter / box Application: Vertical Wedge transportation of products.

Wedge Top Chain FSWT-5C







UOM: 5 Meter / box Application: Vertical Wedge transportation of products. (Heavy Duty).

Wedge Top Chain FSWT-5D



UOM: 5 Meter / box Application: Vertical Wedge transportation of products.



FlexMcve

FS SERIES: 65 mm Conveyor System

Friction Top Chain FSFT-5





UOM: 5 Meter / box

Application: Suitable for transport product in slope $> 5^{\circ}$ but $\leq 30^{\circ}$ without accumulation.



Friction Top Chain FSFT-5C





UOM: 5 Meter / box

Application: Suitable for transport product in slope > 5° but \leq 35° without accumulation. Subject to product weight and packing



Twist Chain FSPC-5M





UOM: 5 Meter / box

Application: Suitable twist conveyor beam; horizontal and slope $<5^\circ$ transport of products with accumulation

Flocked Chain FSFK-5



UOM: 5 Meter / box Application: Suitable for transport of static sensitive product.





UOM: 5 Meter / box Application: Suitable to transport lightweight, fragile and scratch sensitive product.



FlexMove

Cleat Top Chain-A FSCT-5A17-L#

= 1, 2, 3, 4, 5.....20



UOM: 5 Meter / box Application: Suitable for vertical transport of product with no accumulation.



= 1, 2, 3, 4, 5.....20

30

0

UOM: 5 Meter / box

product with no accumulation.

0

25.4

Application: Suitable for vertical transport of

0

Cleat Top Chain-B FSCT-5B







UOM: 5 Meter / box Application: Suitable Cigarette transport.

Cleat Top Chain-C FSCT-5C



UOM: 5 Meter / box Application: Suitable for Cigarette transport.

Magnet Top Chain FSMT-5





UOM: 5 Meter / box Application: Suitable for conveying ferromagnetic products in slope.



UOM: 5 Meter / box Application: Suitable for conveying ferromagnetic products in slope.



FS SERIES: 65 mm Conveyor System

Stainless Steel Top Chain FSST-5S





UOM: 5 Meter / box Application: Suitable to transport metal products in accumulation.

Roller Top Chain FSRT-5





UOM: 5 Meter / box

Application: Suitable for accumulation of product with low friction and pressure.



UOM: 5 Meter / box Application: Suitable for vertical transportation, of product in slope with no accumulation.



FlexMcve

FS Direct End Drive without Motor (LEFT)

FSDD-A65-XDY (See Chart)

FS Direct End Drive without Motor (RIGHT)

FSDD-A65-XDY (See Chart)



Part Number

FSDD-A65



Aux Shaft Selection

Υ

Blank = No Aux Shaft

A = 20 mm Aux Shaft

Direction

D

L = Left

R = Right



Max Traction Force: 500N The Drive End Drive Unit is without torque limiter.

UOM: pc

Chain required 2-way: 0.8 meter Slide rail required 2-way: 0.5 meter

*3/4 inch shaft option available in North America only.

Shaft Selection

Х

0 = 20 mm

 $E = 3/4 in^*$

A = 20 mm Aux Only

FS Direct End Drive without Motor GP (LEFT) FSDD-A65GP-XDY (See Chart)





FS Direct End Drive without Motor GP (**RIGHT**) FSDD-A65GP-XDY (See Chart)



Requires the use of connecting or weighted take-up module for chain maintenance.

Part Number		Shaft Selection	Direction	Aux Shaft Selection
FSDD-A65GP	_	Х	D	Y
		0 = 20 mm	L = Left	Blank = No Aux Shaft
		E = 3/4 in*		
		A = 20 mm Aux Only	R = Right	A = 20 mm Aux Shaft

Max Traction Force: 500N

The Direct End Drive Unit GP is without torque limiter.

UOM: pc

Chain required 2-way: 0.8 meter Slide rail required 2-way: 0.5 meter

*3/4 inch shaft option available in North America only.

SEW gearmotors are products of SEW Eurodrive





FS SERIES: 65 mm Conveyor System

FS Direct with Power Transfer Motor (LEFT)

FSDD-A65PT-XD (See Chart)

FS Direct with Power Transfer Motor (RIGHT)

FSDD-A65PT-XD (See Chart)







Minimum product length for inline transfer = 100 mm Maximum speed is 30 m/min (100 ft/min)

Only one power transfer needed on either infeed or discharge trail required for end to end transer. Provides extended transfer nose for interfacing with large rollers.

Part Number		Shaft Selection	Direction
FSDD-A65PT	_	Х	D
		0 = 20 mm	L = Left
		E = 3/4 in*	R = Right

Max Traction Force: 500N

The Drive End Drive Unit is without torque limiter.

UOM: pc

Chain required 2-way: 0.8 meter Slide rail required 2-way: 0.5 meter

*3/4 inch shaft option available in North America only.

FS GP Direct with Power Transfer Motor (LEFT)

FSDD-A65GPPT-XD (See Chart)



FS GP Direct with Power Transfer Motor (**RIGHT**)

FSDD-A65GPPT-XD (See Chart)



Minimum product length for inline transfer = 100 mm Maximum speed is 30 m/min (100 ft/min)

Only one power transfer needed on either infeed or discharge trail required for end to end transer.

Provides extended transfer nose for interfacing with large rollers.

Requires the use of connecting or weighted take-up module for chain maintenance.

Part Number		Shaft Selection	Direction
FSDD-A65GPPT	_	Х	D
		0 = 20 mm	L = Left
		E = 3/4 in*	R = Right

*3/4 inch shaft option available in North America only.

Max Traction Force: 500N

The Direct End Drive Unit GP is without torque limiter.

UOM: pc

Chain required 2-way: 0.8 meter Slide rail required 2-way: 0.5 meter

SEW gearmotors are products of SEW Eurodrive



FlexMove



FS Direct Drive Driven Transfer Bridge (RIGHT)

FSDD-A65DB-A-0R



UOM: pc

20 mm Shaft only.

Minimum product length for inline transfer = 100 mm Transfer extends past conveyor only 27 mm

FS Direct Drive Free Roller Transfer Bridge



FS Direct Drive End Free Roller Bridge (LEFT/RIGHT)

348

Roller transfer bridge is sold separately.

End transfer bridge c/w roller for FSIE-A65, FSDD-A65-XDY and FSDD-A65GP-XDY



SEW gearmotors are products of SEW Eurodrive



DORNER

FSEB-A65



FSTB-A65

Transfer bridge c/w roller for FSIE-A65, FSDD-A65-XDY and FSDD-A65GP-XDY-

torque limiter.

UOM: pc

347

Max Traction Force: 500N The Drive End Drive Unit is without

Chain required 2-way: 0.8 meter Slide rail required 2-way: 0.5 meter





FS SERIES: 65 mm Conveyor System

FS Suspended End Drive without Motor (LEFT)

FSSD-A65-0L (with Torque Limiter) FSSD-A65SPT-0L (without Torque Limiter)

FS Suspended End Drive without Motor (RIGHT)

FSSD-A65-0R (with Torque Limiter) FSSD-A65SPT-0R (without Torque Limiter)



- · Locates gearmotor below conveyor for compact applications.
- Includes torque limiter protecting chain and motor from overload.
- Maintains chain pull capacity at 500N.

The Suspended End Drive Unit is available with and without torque limiter.

UOM: pc

Chain required 2-way: 0.8 meter Slide rail required 2-way: 0.5 meter

FS Direct Intermediate Drive without Motor (LEFT) FSID-DD-0L1

FS Direct Intermediate Drive without Motor (**RIGHT**) FSID-DD-0R1



Located in middle section of conveyor to free up drive end.

Max Traction Force: 200N The Direct Intermediate Drive Unit is without torque limiter.



FlexMove

FS Suspended Intermediate Drive without Motor (LEFT)

FSID-SD-0L1

FS Suspended Intermediate Drive without Motor (**RIGHT**)

FSID-SD-0R1



Max Traction Force: 200N The Suspended Intermediate Drive Unit is with torque limiter.

UOM: pc

Chain required 2-way: 1.2 meter Slide rail required 2-way: 1.1 meter

- Located in middle of conveyor to free up drive end.
- Includes torque limiter protecting chain and motor from overload.
- Limits chain pull capacity at 200N.





FS SERIES: 65 mm Conveyor System

FS Suspended Catenary Drive without Motor (LEFT)

FSCD-SD

FS Suspended Catenary Drive without Motor (**RIGHT**)

FSCD-SD



295

UOM: pc

Chain required 1-way: 1.4 meter Slide rail required 1-way: 1.0 meter

FS Combined Direct Drive & Idler (LEFT) FSCDI-DD-A65

FS Combined Direct Drive & Idler (**RIGHT**) FSCDI-DD-A65



Max Traction Force: 500N The Combine Direct End Drive Unit is without torque limiter.

UOM: pc Chain required 2-way: 1.6 meter Slide rail required 2-way: 1.0 meter

SEW gearmotors are products of SEW Eurodrive


FlexMove

37

FS Weighted Take-up Module

FS-WTU-700





· Provides automatic chain stretch take-up • Reduces noise caused from catenary tail • Must be used with GP Drive End, sold separately





589

Chain required 1.5 meter Slide rail required 2.1 meter

FS Weighted Take-up Tail Module

FS-WTU-065



FS SERIES: 65 mm Conveyor System

FS Top Running Drive Module

FSTRD-203



- For top running chain only
- 9M long conveyor length maximum
- 32 Kg load maximum
- Compatible with 3/4 inch shaft gearmotors only









UOM: pc Chain required 0.2 meter

FS Direct Wheel Drive with Motor

FSWD-DD-0M





Max Traction Force: 200N

The Direct Wheel Drive Unit is without torque limiter. FSWD-DD-0M represents direct drive without gear motor. Maximum traction force for FSWD-DD is lower than FSDD and FSSD.

UOM: pc Chain required 1-way: 0.7 meter Slide rail required 1-way: 0.7 meter

FS Suspended Wheel Drive without Motor

FSWD-SD-0M





Max Traction Force: 200N

The Suspended Wheel Drive Unit is with torque limiter. FSWD-SD-0M represents direct drive without gear motor. Maximum traction force for FSWD-SD is lower than FSDD and FSSD.

UOM: pc

Chain required 1-way: 0.7 meter Slide rail required 1-way: 0.7 meter



FlexMove



DORNUR

FS SERIES: 65 mm Conveyor System

FS Idler End Free Roller Bridge

FSEB-A65

65

End transfer bridge c/w roller for FSIE-A65, FSDD-A65-XDY and FSDD-A65GP-XDY





UOM: pc

FS Idler End-200





UOM: pc Chain required 2-way: 0.7 meter Slide rail required 2-way: 0

FS Idler-200 End Free Roller Bridge

Roller transfer bridge is sold separately.

FSEB-A65-200

End transfer bridge c/w roller for FSIE-200











DORNER

FS SERIES: 65 mm Conveyor System



The outer bend is assembled using connecting strip (FACS-25x140A). Angle of ذ must be indicated when ordering.



2

150

Chain required 2-way (300, 500, 700, 1000): 1, 1.1, 1.2, 1.3 meter Slide rail required 2-way (300, 500, 700, 1000): 1.9, 2.1, 2.3, 2.6 meter



FlexMove

FS Horizontal Plain Bend 30°





Horizontal plain bend, 30° ± 1°

$R = 300 \pm 10 \text{ mm}$	FSHB-30R300
$R = 500 \pm 10 \text{ mm}$	FSHB-30R500
$R = 700 \pm 10 \text{ mm}$	FSHB-30R700
$R = 1000 \pm 10 \text{ mm}$	FSHB-30R1000

Chain required 2-way (300, 500, 700, 1000): 1.1, 1.3, 1.5, 1.8 meter Slide rail required 2-way (300, 500, 700, 1000): 2.2, 2.6, 3.1, 3.7 meter







Horizontal plain bend, 45° ± 1°

$R = 300 \pm 10 \text{ mm}$	FSHB-45R300
$R = 500 \pm 10 \text{ mm}$	FSHB-45R500
$R = 700 \pm 10 \text{ mm}$	FSHB-45R700
$R = 1000 \pm 10 \text{ mm}$	FSHB-45R1000

Chain required 2-way (300, 500, 700, 1000): 1.3, 1.6, 1.9, 2.4 meter Slide rail required 2-way (300, 500, 700, 1000): 2.5, 3.2, 3.8, 4.7 meter

FS Horizontal Plain Bend 60°

FS Horizontal Plain Bend 90°



Horizontal plain bend, 60° ± 1°

$R = 300 \pm 10 \text{ mm}$	FSHB-60R300
$R = 500 \pm 10 \text{ mm}$	FSHB-60R500
$R = 700 \pm 10 \text{ mm}$	FSHB-60R700
$R = 1000 \pm 10 \text{ mm}$	FSHB-60R1000

UOM: pc

Chain required 2-way (300, 500, 700, 1000): 1.4, 1.8, 2.3, 2.9 meter Slide rail required 2-way (300, 500, 700, 1000): 2.9, 3.7, 4.5, 5.8 meter

200 DORNER

Horizontal plain bend, 90° ± 1°

$R = 300 \pm 10 \text{ mm}$	FSHB-90R300
$R = 500 \pm 10 \text{ mm}$	FSHB-90R500
$R = 700 \pm 10 \text{ mm}$	FSHB-90R700
$R = 1000 \pm 10 \text{ mm}$	FSHB-90R1000

UOM: pc

Chain required 2-way (300, 500, 700, 1000): 1.7, 2.4, 3.0, 3.9 meter Slide rail required 2-way (300, 500, 700, 1000): 3.5, 4.7, 6.0, 7.9 meter

FS Horizontal Plain Bend 180°



Horizontal plain bend, 180° ± 1°

$R = 300 \pm 10 \text{ mm}$	FSHB-180R300
$R = 500 \pm 10 \text{ mm}$	FSHB-180R500
$R = 700 \pm 10 \text{ mm}$	FSHB-180R700
$R = 1000 \pm 10 \text{ mm}$	FSHB-180R1000

UOM: pc

Chain required 2-way (300, 500, 700, 1000): 2.7, 3.9, 5.2, 7.1 meter Slide rail required 2-way (300, 500, 700, 1000): 5.4, 7.9, 10.4, 14.2 meter

FS Horizontal Plain Bend 5° - 180°



Example for FS Horizontal Plain Bend Ordering

Horizontal plain bend, ذ ± 1°

$R = 300 \pm 10 \text{ mm}$	FSHB- ذ300
$R = 500 \pm 10 \text{ mm}$	FSHB- ذ500
$R = 700 \pm 10 \text{ mm}$	FSHB- ذ700
$R = 1000 \pm 10 \text{ mm}$	FSHB- ذ1000

If an angle of 120° is needed for radius R500 horizontal plain bend, the ordering part number is

FSHB-120R500

UOM: pc

Chain required 2-way (300, 500, 700, 1000): meter (Variable to angle) Slide rail required 2-way (300, 500, 700, 1000): meter (Variable to angle)





FlexMove



FS SERIES: 65 mm Conveyor System



The outer bend is assembled using connecting strip (FACS-25x140A). Angle of \emptyset° must be indicated when ordering.



FlexMove



DORNER

FS SERIES: 65 mm Conveyor System

FS X In-Line Transfer Module

FSST-065



- S In-Line Modules provide a standard, compact way to side transfer product from conveyor to conveyor.
- Straight guiding is placed across the transfer module for smooth In-Line product flow
- Conveyors are mounted together to provide a smooth transfer even for small products
- S In-Line transfers are compact in the width dimension



FX S X In-Line Transfer Module

FSXT-065



- X In-Line Modules provide a standard, compact way to side transfer product from conveyor to conveyor.
- Straight guiding is placed across the transfer module for smooth In-Line product flow
- Conveyors are mounted together to provide a smooth transfer even for small products
- X In-Line transfers are compact in the length direction







Variety of chain type suitable for wide range of applications either horizontal or vertical product transportation. Higher capacity than FK and FS. The maximum product width to be conveyed can be referred to guide rail assembly pages.

FM Series Characteristic

Beam Width: 85 mm Product Width: Refer to Guide Rail Assembly

Accessories Needed

Slide Rail Required: FASR-25 OR FASR-25U Slide Rail Color: White or Natural Color Slide Rail Material: HDPE OR UHMW-PE Slide Rail Rivet & Screw: FASLR-4X6 or FASLS-M5 Connecting strip is used to connect two beams. Connecting Strip: FACS-25x140A



85 MM WIDTH

Conveyor Beam FMCB-3



UOM: 3 Meter / Length

Chain Connecting Module FMCC-160



UOM: pc





FM SERIES: 85 mm Conveyor System

Chain Common Data

Packaging: 5 m per box Pitch: 33.5 mm Width: 83 mm Tensile Strength at 20°C: 6000N Color: White & Black (Conductive)

Material:

Chain: White Acetal / POM Pivot: Polyamide Pivot Pin: Stainless Steel Insert (Wedge & Friction): TPE Grey

Example for FMCT-5A17-L#

= 1 cleated top chain with alternate
of # link of plain chain



The above chain is FMCT-5A17-L1, 1 link cleated top chain with alternate of 1 link of plain chain. Note: # = 1, 2, 3, 4, 5.....20

Standard Plain Chain FMPC-5





UOM: 5 Meter / box Application: Suitable for horizontal and slope

Application: Suitable for horizontal and slope < 5° transport of products with accumulation.

Conductive Chain FMPC-5CD





UOM: 5 Meter / box Application: Suitable for transport of static sensitive product.







UOM: 5 Meter / box

Application: Suitable twist conveyor beam; horizontal and slope $<5^\circ$ transport of products with accumulation

Safety Chain FMPC-5V





UOM: 5 Meter / box

Application: (Safety Chain) Suitable for horizontal and slope $<5^{\circ}$ transport of products with accumulation



FlexMove

Friction Top Chain FMFT-5





UOM: 5 Meter / box

Application: Suitable for transport product in slope > 5° but \leq 30° without accumulation.









UOM: 5 Meter / box Application: Vertical Wedge transportation of products.

Wedge Top Chain FMWT-5B



UOM: 5 Meter / box Application: Vertical Wedge transportation of products (Heavy Duty)

Wedge Top Chain **FMWT-5C**

33.5

Application: Suitable for transport product in

slope $> 5^{\circ}$ but $\leq 30^{\circ}$ without accumulation.

UOM: 5 Meter / box





UOM: 5 Meter / box Application: Vertical Wedge transportation of products (Heavy Duty)

Wedge Top Chain FMWT-5D





UOM: 5 Meter / box Application: Vertical Wedge transportation of products.



FM SERIES: 85 mm Conveyor System

Magnet Top Chain FMMT-5

Magnet Top Chain FMMT-5-L#

Flocked Chain FMFK-5







UOM: 5 Meter / box Application: Suitable for conveying of ferromagnetic products in slope.







UOM: 5 Meter / box Application: Suitable for conveying of ferromagnetic products in slope.





UOM: 5 Meter / box Application: Suitable to transport lightweight, fragile and scratch sensitive product.

Stainless Steel Top Chain FMST-5S





UOM: 5 Meter / box Application: Suitable to transport metal products in accumulation.

Universal Chain FMUC-5





UOM: 5 Meter / box Application: Universal Link with M6 Nut, Suitable for attached customer cleat or fixture.



FlexMove

Roller Top Chain FMRT-5





UOM: 5 Meter / box

Application: Suitable for accumulation of product with low friction and pressure.



= 1, 2, 3, 4, 5....20



UOM: 5 Meter / box Application: Suitable for vertical transportation of product in slope with no accumulation.

Roller Cleat Chain FMRC-5B-L#

= 1, 2, 3, 4, 5.....20



UOM: 5 Meter / box Application: Suitable for vertical transportation of product in slope with no accumulation.



UOM: 5 Meter / box Application: Suitable for vertical transport of product with no accumulation.



UOM: 5 Meter / box Application: Suitable for vertical transport of product with no accumulation.



FM SERIES: 85 mm Conveyor System

Safety Chain with rollers FMPC-5VR





UOM: 5 Meter / box

Application: Suitable for transport product in slope > 5° but <= 30° without accumulation. (Subject to product weight and Packing)

Plain Chain with rollers FMPC-5R



UOM: 5 Meter / box Application: Suitable for horizontal and slope < 5° transport of products with accumulation.

Friction Top Chain FMFT-5C



UOM: 5 Meter / box

Application: Suitable for transport product in slope $> 5^{\circ}$ but $<= 35^{\circ}$ without accumulation. (Subject to product weight and Packing)



FlexMcve

FM Direct End Drive without Motor (LEFT) FMDD-A85-XDY (See Chart)

FM Direct End Drive without Motor (RIGHT)

FMDD-A85-XDY (See Chart)



Part Number

FMDD-A85



Direction

D

L = Left

R = Right

Aux Shaft Selection

Y

Blank = No Aux Shaft

A = 20 mm Aux Shaft



Max Traction Force: 1250N The Direct End Drive Unit is without torgue limiter.

UOM: pc

Chain required 2-way: 0.8 meter Slide rail required 2-way: 0.5 meter

*3/4 inch shaft option available in North America only.

Shaft Selection

Х

0 = 20 mm

 $E = 3/4 \text{ in}^*$

A = 20 mm Aux Only

FM Direct End Drive without Motor GP (LEFT)

FMDD-A85GP-XDY (See Chart)





Requires the use of connecting or weighted take-up module for chain maintenance.

Part Number		Shaft Selection	Direction	Aux Shaft Selection
FMDD-A85GP –	Х	D	Y	
		0 = 20 mm	L = Left	Blank = No Aux Shaft
	E = 3/4 in*			
		A = 20 mm Aux Only	R = Right	A = 20 mm Aux Shaft

*3/4 inch shaft option available in North America only.

FM Direct End Drive without Motor GP (RIGHT)

FMDD-A85GP-XDY (See Chart)



Max Traction Force: 1250N

The Direct End Drive Unit GP is without torque limiter.

UOM: pc

Chain required 2-way: 0.8 meter Slide rail required 2-way: 0.5 meter

SEW gearmotors are products of SEW Eurodrive



FM SERIES: 85 mm Conveyor System

FM Direct with Power Transfer Motor (LEFT)

FMDD-A85PT-XD (See Chart)

FM Direct with Power Transfer Motor (RIGHT)

FMDD-A85PT-XD (See Chart)







Max Traction Force: 1250N

Chain required 2-way: 0.8 meter Slide rail required 2-way: 0.5 meter

The Direct End Drive Unit is without

Minimum product length for inline transfer = 100 mm Maximum speed is 30 m/min (100 ft/min)

Only one power transfer needed on either infeed or discharge trail required for end to end transer.

Provides extended transfer nose for interfacing with large rollers.

Part Number		Shaft Selection	Direction
		Х	D
FMDD-A85PT -	0 = 20 mm	L = Left	
		E = 3/4 in*	R = Right

*3/4 inch shaft option available in North America only.

FM GP Direct with Power Transfer Motor (LEFT)

FMDD-A85GPPT-XD (See Chart)





torque limiter.

UOM: pc

FM GP Direct with Power Transfer Motor (**RIGHT**) FMDD-A85GPPT-XD (See Chart)



Minimum product length for inline transfer = 100 mm Maximum speed is 30 m/min (100 ft/min)

Only one power transfer needed on either infeed or discharge trail required for end to end transer. Provides extended transfer nose for interfacing with large rollers. Requires the use of connecting or weighted take-up module for chain maintenance.

Part Number		Shaft Selection	Direction
	Х	D	
FMDD-A85GPPT	-	0 = 20 mm	L = Left
	E = 3/4 in*	R = Right	

*3/4 inch shaft option available in North America only.

Max Traction Force: 1250N

The Direct End Drive Unit GP is without torque limiter.

UOM: pc

Chain required 2-way: 0.8 meter Slide rail required 2-way: 0.5 meter

SEW gearmotors are products of SEW Eurodrive



FlexMcve



FM Direct Drive Driven Transfer Bridge (RIGHT)

FSIE-A65DB-A-R





20 mm Shaft only. Minimum product length for inline transfer = 100 mm Transfer extends past conveyor only 27 mm



UOM: Unit Chain required 2-way: 0.8 meter Slide rail required 2-way: 0.5 meter



UOM: pc

DORNER

FM Direct Drive End Free Roller Bridge (LEFT/ RIGHT)



FMEB-A85

UOM: pc

End transfer bridge c/w roller for FMIE-A85 End transfer bridge c/w roller for FMDD-A85-0L End transfer bridge c/w roller for FMDD-A85-0R



FMTB-A85

Transfer bridge c/w roller for FMIE-A85 Transfer bridge c/w roller for FMDD-A85-0L Transfer bridge c/w roller for FMDD-A85-0R



FM SERIES: 85 mm Conveyor System

FM Suspended End Drive without Motor (LEFT)

FMSD-A85-0L (with Torque Limiter) FMSD-A85SPT-0L (without Torque Limiter)

FM Suspended End Drive without Motor (RIGHT)

FMSD-A85-OR (with Torque Limiter) FMSD-A85SPT-OR (without Torque Limiter)



- Includes torque limiter protecting chain and motor from overload.
- Chain pull capacity at 1250N for unit without torque limiter.
- Chain pull capacity at 840N for unit with torque limiter.



UOM: pc Chain required 2-way: 0.8 meter Slide rail required 2-way: 0.5 meter

FM Direct Intermediate Drive without Motor (LEFT) FMID-DD-0L1



FM Direct Intermediate Drive without Motor (RIGHT) FMID-DD-0R1



Max Traction Force: 200N The Direct Intermediate Drive Unit is without torque limiter.

UOM: pc

Chain required 2-way: 1.2 meter Slide rail required 2-way: 1.1 meter

• Located in middle of conveyor to free up drive end.

- Includes torque limiter protecting chain and motor form overload.
- · Limits chain pull capacity at 200N.



FlexMove

FM Suspended Intermediate Drive without Motor (LEFT)

FMID-SD-0L1

FM Suspended Intermediate Drive without Motor (RIGHT)

FMID-SD-0R1





Max Traction Force: 200N The Suspended Intermediate Drive Unit is with torque limiter.

UOM: pc Chain required 2-way: 1.2 meter Slide rail required 2-way: 1.1 meter

- Located in middle of conveyor to free up drive end.
- Includes torque limiter protecting chain and motor form overload.
- Limits chain pull capacity at 200N.



Chain required 2-way: 1.6 meter Slide rail required 2-way: 1.0 meter

UOM: pc

SEW gearmotors are products of SEW Eurodrive



FM SERIES: 85 mm Conveyor System

FM Combined Suspended Drive & Idler (LEFT)

FMCDI-SD-A85







FM Combined Suspended Drive & Idler (RIGHT)

FMCDI-SD-A85



Max Traction Force: 840N

The Combine Suspended End Drive Unit is with torque limiter.

UOM: pc

Chain required 2-way: 1.6 meter Slide rail required 2-way: 1.0 meter

FM Suspended Catenary Drive without Motor (LEFT) FMCD-SD

FM Suspended Catenary Drive without Motor (**RIGHT**) FMCD-SD

560





Max Traction Force: 840N The Suspended Catenary Drive Unit is with torque limiter.

UOM: pc

Chain required 1-way: 1.4 meter Slide rail required 1-way: 1.0 meter



FlexMove

FM Weighted Take-up Module

FM-WTU-700





Provides automatic chain stretch take-up
Reduces noise caused from catenary tail





UOM: pc Chain required 1.5 meter

Slide rail required 2.1 meter

FM Weighted Take-up Tail Module

FM-WTU-085



FM SERIES: 85 mm Conveyor System

FM Top Running Drive Module

FMTRD-203



- For top running chain only
- 9M long conveyor length maximum
- 32 Kg load maximum
- Compatible with 3/4 inch shaft gearmotors only



368

203

0

166

۰





UOM: pc Chain required 0.2 meter

FM Direct Wheel Drive without Motor

FMWD-DD-0M





Max Traction Force: 200N

The Direct Wheel Drive Unit is without torque limiter. FMWD-DD-0M represents wheel drive without gear motor. Maximum traction force for FMWD-DD is lower than FMDD and FMSD.

UOM: pc Chain required 1-way: 0.7 meter Slide rail required 1-way: 0.7 meter

FM Suspended Wheel Drive without Motor

FMWD-SD-0M





Max Traction Force: 200N

The Suspended Wheel Drive Unit is with torque limiter. FMWD-SD-0M represents wheel drive without gear motor. Maximum traction force for FMWD-SD is lower than FMDD and FMSD.

UOM: pc

Chain required 1-way: 0.7 meter Slide rail required 1-way: 0.7 meter

SEW gearmotors are products of SEW Eurodrive



FlexMove



FM SERIES: 85 mm Conveyor System





FlexMove



FM SERIES: 85 mm Conveyor System

FM Wheel Bend 5° - 180°



Example for FM Wheel Bend Ordering

- Wheel bend, ذ ± 1°
- FMWB-ذR160A

If an angle of 65° is needed for wheel bend, the ordering part number is

FMWB-65R160A

The outer bend is assembled using connecting strip (FACS-25x140A). Angle of ذ must be indicated when ordering.



FM Horizontal Plain Bend 15°



Horizontal plain bend, 15° ± 1°		
$R = 300 \pm 10 \text{ mm}$	FMHB-15R300	
$R = 500 \pm 10 \text{ mm}$	FMHB-15R500	
$R = 700 \pm 10 \text{ mm}$	FMHB-15R700	
$R = 1000 \pm 10 \text{ mm}$	FMHB-15R1000	

Chain required 2-way (300, 500, 700, 1000): 1, 1.1, 1.2, 1.4 meter Slide rail required 2-way (300, 500, 700, 1000): 2, 2.2, 2.4, 2.8 meter

FM Horizontal Plain Bend 30°





Horizontal plain bend, 30° ± 1°

$R = 300 \pm 10 \text{ mm}$	FMHB-30R300
$R = 500 \pm 10 \text{ mm}$	FMHB-30R500
$R = 700 \pm 10 \text{ mm}$	FMHB-30R700
$R = 1000 \pm 10 \text{ mm}$	FMHB-30R1000

Chain required 2-way (300, 500, 700, 1000): 1.2, 1.4, 1.6, 1.9 meter Slide rail required 2-way (300, 500, 700, 1000): 2.4, 2.8, 3.2, 3.8 meter



Chain required 2-way (300, 500, 700, 1000): 1.3, 1.6, 1.9, 2.4 meter Slide rail required 2-way (300, 500, 700, 1000): 2.5, 2.9, 3.3, 3.9 meter

UORNER

FlexMove

FM Horizontal Plain Bend 60°



Horizontal plain bend, 60° ± 1°

$R = 300 \pm 10 \text{ mm}$	FMHB-60R300
$R = 500 \pm 10 \text{ mm}$	FMHB-60R500
$R = 700 \pm 10 \text{ mm}$	FMHB-60R700
$R = 1000 \pm 10 \text{ mm}$	FMHB-60R1000

UOM: pc

Chain required 2-way (300, 500, 700, 1000): 1.5, 1.9, 2.3, 2.9 meter Slide rail required 2-way (300, 500, 700, 1000): 2.9, 3.7, 4.6, 5.8 meter

FM Horizontal Plain Bend 90° 70



Horizontal plain bend, 90° ± 1°

$R = 300 \pm 10 \text{ mm}$	FMHB-90R300
$R = 500 \pm 10 \text{ mm}$	FMHB-90R500
$R = 700 \pm 10 \text{ mm}$	FMHB-90R700
$R = 1000 \pm 10 \text{ mm}$	FMHB-90R1000

UOM: pc

Chain required 2-way (300, 500, 700, 1000): 1.8, 2.4, 3.0, 4.0 meter Slide rail required 2-way (300, 500, 700, 1000): 3.5, 4.8, 6.0, 8.0 meter

FM Horizontal Plain Bend 180°



Horizontal plain bend, 180° ± 1°

$R = 300 \pm 10 \text{ mm}$	FMHB-180R300
$R = 500 \pm 10 \text{ mm}$	FMHB-180R500
$R = 700 \pm 10 \text{ mm}$	FMHB-180R700
$R = 1000 \pm 10 \text{ mm}$	FMHB-180R1000

UOM: pc

Chain required 2-way (300, 500, 700, 1000): 2.7, 4.0, 5.2, 7.1 meter Slide rail required 2-way (300, 500, 700, 1000): 5.4, 7.9, 1.1, 14.2 meter



FM Horizontal Plain Bend 5° - 180°



Example for FM Horizontal Plain Bend Ordering

Horizontal plain bend, ذ ± 1°

$R = 300 \pm 10 \text{ mm}$	FMHB- ذR300
$R = 500 \pm 10 \text{ mm}$	FMHB- ذR500
$R = 700 \pm 10 \text{ mm}$	FMHB- ذR700
$R = 1000 \pm 10 \text{ mm}$	FMHB- ذR1000

If an angle of 120° is needed for radius R500 horizontal plain bend, the ordering part number is

FMHB-120R500

UOM: pc

Chain required 2-way (300, 500, 700, 1000): meter (Variable to angle) Slide rail required 2-way (300, 500, 700, 1000): meter (Variable to angle)





FlexMove



DORNER

FM SERIES: 85 mm Conveyor System





Example for FM Vertical Bend Ordering

- Vertical bend, $\emptyset^{\circ} \pm 1^{\circ}$
- FMVB-ذR400

If an angle of 65° is needed for vertical bend, the ordering part number is

FMVB-65R400

The outer bend is assembled using connecting strip (FACS-25x140A). Angle of "ذ" must be indicated when ordering.



(70)

FlexMcve



DORNER

FM SERIES: 85 mm Conveyor System

FM S In-Line Transfer Module FMST-085 • S In-Line Modules provide a standard, compact way to side transfer product from conveyor to conveyor. • Straight guiding is placed across the transfer module for smooth In-Line product flow • Conveyors are mounted together to provide a smooth transfer even for small products • S In-Line transfers are compact in the width dimension - 85 [3.35] 109 175 [6.87] 85 [3.35] 1024 [40.32] FM X In-Line Transfer Module FMXT-085 • X In-Line Modules provide a standard, compact way to side transfer product from conveyor to conveyor. Straight guiding is placed across the transfer module for smooth In-Line product flow · Conveyors are mounted together to provide a smooth transfer even for small products • X In-Line transfers are compact in the length direction 750 [29.52] 85 [3.35] 390 [15.34] 85 [3.35]


FlexMove

Variety of chain type suitable for wide range of applications either horizontal or vertical product transportation. Capacity higher than FK, FS, FM. The maximum product width to be conveyed can be referred to guide rail assembly pages.

FC Series Characteristic

Beam Width: 105 mm Product Width: Refer to Guide Rail Assembly

Accessories Needed

Slide Rail Required: FASR-25 OR FASR-25U Slide Rail Color: White or Natural Color Slide Rail Material: HDPE OR UHMW-PE Slide Rail Rivet & Screw: FASLR-4X6 or FASLS-M5 Connecting strip is used to connect two beams. Connecting Strip: FACS-25x140A



105 MM WIDTH

Conveyor Beam FCCB-3



UOM: 3 Meter / Length

Chain Connecting Module FCCC-160







DORNER

Chain Common Data

Packaging: 5 m per box Pitch: 35.5 mm Width: 103 mm Tensile Strength at 20°C: 6000N Color: White & Black (Conductive)

Material:

Chain: White Acetal / POM Pivot: Polyamide Pivot Pin: Stainless Steel Insert (Wedge & Friction): TPE Grey

Example for FCCT-5A17-L#

= 1 cleated top chain with alternate
of # link of plain chain



The above chain is FCCT-5A17-L1, 1 link cleated top chain with alternate of 1 link of plain chain. Note: # = 1, 2, 3, 4, 5....20

Cleat Top Chain FCCT-5A17-L#

= 1, 2, 3, 4, 5.....20



UOM: 5 Meter / box Application: Suitable for vertical transport of product with no accumulation.

Standard Plain Chain FCPC-5





UOM: 5 Meter / box Application: Suitable for horizontal and slope < 5° transport of products with accumulation.

Cleat Top Chain FCCT-5A30-L#

Conductive Chain FCPC-5CD

FC SERIES: 105 mm Conveyor System





UOM: 5 Meter / box Application: Suitable for transport of static sensitive product.





UOM: 5 Meter / box Application: Suitable for vertical transport of product with no accumulation.

Roller Top Chain FCRT-5





UOM: 5 Meter / box Application: Suitable for accumulation of product with low friction and pressure.



FlexMove

Roller Cleat Chain FCRC-5A-L#

Roller Cleat Chain FCRC-5B-L#

Friction Top Chain FCFT-5





UOM: 5 Meter / box Application: Suitable for vertical transportation of product in slope with no accumulation.



UOM: 5 Meter / box Application: Suitable for vertical transportation of product in slope with no accumulation.



UOM: 5 Meter / box

Application: Suitable for transport product in slope $> 5^{\circ}$ but $\leq 30^{\circ}$ without accumulation.

Friction Top Chain FCFT-5A



UOM: 5 Meter / box Application: Suitable for transport product in of slope > 5 ° but ≤ 30 ° without accumulation.

Friction Top Chain FCFT-5B





UOM: 5 Meter / box Application: Suitable for transport product in slope > 5 ° but < 40 ° without accumulation.

Friction Top Chain FCFT-5C





UOM: 5 Meter / box Application: Suitable for transport product in of slope $> 5^{\circ}$ but $\leq 35^{\circ}$ without accumulation.



FlexMcve.

FC SERIES: 105 mm Conveyor System

S/steel Top Chain FCST-5S





UOM: 5 Meter / box Application: Suitable to transport metal products in accumulation.

Flocked Chain FCFK-5





UOM: 5 Meter / box Application: Suitable to transport lightweight, fragile and scratch sensitive product.

Twist Chain FCPC-5M







UOM: 5 Meter / box Application: Suitable twist conveyor beam; horizontal and slope < 5° transport of products with accumulation







UOM: 5 Meter / box Application: (Safety Chain) Suitable for horizontal and slope < 5° transport of products with accumulation.



FlexMove

FC Direct End Drive without Motor (LEFT)

FCDD-A105-XDY (See Chart)

FC Direct End Drive without Motor (RIGHT)

FCDD-A105-XDY (See Chart)



Part Number

FCDD-A105



Direction

D

L = Left

R = Right



Max Traction Force: 1250N The Direct End Drive Unit is without torque limiter.

UOM: pc

Chain required 2-way: 0.8 meter Slide rail required 2-way: 0.5 meter

*3/4 inch shaft option available in North America only.

_

Shaft Selection

Х

0 = 20 mm

 $E = 3/4 in^*$

A = 20 mm Aux Only

Requires the use of connecting or weighted take-up module for chain maintenance.

Shaft Selection

Х

0 = 20 mm

 $E = 3/4 in^*$

A = 20 mm Aux Only

FC Direct End Drive unit without Motor GP (LEFT) FCDD-A105GP-XDY (See Chart)





Direction

D

L = Left

R = Right

FC Direct End Drive unit without Motor GP (**RIGHT**) FCDD-A105GP-XDY (See Chart)



Max Traction Force: 1250N

The Direct End Drive Unit GP is without torque limiter.

UOM: pc

Chain required 2-way: 0.8 meter Slide rail required 2-way: 0.5 meter

*3/4 inch shaft option available in North America only.

SEW gearmotors are products of SEW Eurodrive



Part Number

FCDD-A105GP



Aux Shaft Selection

Y

Blank = No Aux Shaft

A = 20 mm Aux Shaft

Aux Shaft Selection

Y

Blank = No Aux Shaft

A = 20 mm Aux Shaft

FC SERIES: 105 mm Conveyor System

FC Direct with Power Transfer Motor (RIGHT)

FC Direct with Power Transfer Motor (LEFT)

FCDD-A105PT-XD (See Chart)

FCDD-A105PT-XD (See Chart)

Minimum product length for inline transfer = 100 mm Maximum speed is 30 m/min (100 ft/min)

Only one power transfer needed on either infeed or discharge trail required for end to end transer. Provides extended transfer nose for interfacing with large rollers.

Part Number		Shaft Selection	Direction
FCDD-A105PT -		Х	D
	-	0 = 20 mm	L = Left
		E = 3/4 in*	R = Right

Max Traction Force: 1250N The Direct End Drive Unit is without

torque limiter.

UOM: pc

Chain required 2-way: 0.8 meter Slide rail required 2-way: 0.5 meter

FC GP Direct with Power Transfer Motor (LEFT) FCDD-A105GPPT-XD (See Chart)

*3/4 inch shaft option available in North America only.





FC GP Direct with Power Transfer Motor (**RIGHT**) FCDD-A105GPPT-XD (See Chart)



Minimum product length for inline transfer = 100 mm Maximum speed is 30 m/min (100 ft/min)

Only one power transfer needed on either infeed or discharge trail required for end to end transer. Provides extended transfer nose for interfacing with large rollers. Requires the use of connecting or weighted take-up module for chain maintenance.

Part Number		Shaft Selection	Direction
FCDD-A105GPPT -		Х	D
	-	0 = 20 mm	L = Left
		E = 3/4 in*	R = Right

*3/4 inch shaft option available in North America only.

Max Traction Force: 1250N

The Direct End Drive Unit GP is without torque limiter.

UOM: pc

Chain required 2-way: 0.8 meter Slide rail required 2-way: 0.5 meter

SEW gearmotors are products of SEW Eurodrive



FlexMcve

FC Direct Drive Driven Transfer Bridge (LEFT) FCDD-A105DB-A-0L

FC Direct Drive Driven Transfer Bridge (RIGHT)

FCDD-A105DB-A-0F







Max Traction Force: 1250N The Direct End Drive Unit is without torque limiter.

UOM: pc

Chain required 2-way: 0.8 meter Slide rail required 2-way: 0.5 meter

FC Direct Drive Free Roller Transfer Bridge (LEFT/RIGHT)



FC Direct Drive End Free Roller Bridge (LEFT/RIGHT)



FCTB-A105

Transfer bridge c/w roller for FCIE-A105, FCDD-A105-XDY and FCDD-A105GP-XDY



FCEB-A105

End transfer bridge c/w roller for FCIE-A105, FCDD-A105-XDY and FCDD-A105GP-XDY



SEW gearmotors are products of SEW Eurodrive

DORNER



FC SERIES: 105 mm Conveyor System

FC Suspended End Drive without Motor (LEFT)

FCSD-A105-0L (with Torque Limiter) FCSD-A105SPT-0L (without Torque Limiter)



FCSD-A105-0R (with Torque Limiter) FCSD-A105SPT-0R (without Torque Limiter)





- Locates gearmotor below conveyor for compact applications.
- Includes torque limiter protecting chain and motor from overload.
- Chain pull capacity at 1250N for unit without torque limiter.
- Chain pull capacity at 840N for unit with torque limiter.



Max Traction Force: 1250N (without limiter) 800N (with limiter)

UOM: pc Chain required 2-way: 0.8 meter Slide rail required 2-way: 0.5 meter



• Located in middle section of conveyor to free up drive end.

FC Direct Intermediate Drive without Motor (**RIGHT**)



Max Traction Force: 200N The Direct Intermediate Drive Unit is without torque limiter.

UOM: pc Chain required 2-way: 0.8 meter Slide rail required 2-way: 0.5 meter



FlexMove

FC Suspended Intermediate Drive without Motor (LEFT) FCID-SD -0L1

- Located in middle of conveyor to free up drive end.
- Includes torque limiter protecting chain and motor form overload.
- Limits chain pull capacity at 200N.



FC Suspended Intermediate Drive without Motor (RIGHT)

Max Traction Force: 200N The Suspended Intermediate Drive Unit is with torque limiter.

UOM: pc

Chain required 2-way: 0.8 meter Slide rail required 2-way: 0.5 meter

FC Combined Suspended Drive & Idler (LEFT) FCCDI-SD-A105-0L

FC Combined Suspended Drive & Idler (**RIGHT**) FCCDI-SD-A105-0R





Max Traction Force: 800N The Combine Suspended End Drive Unit is with torque limiter.

UOM: pc Chain required 2-way: 1.6 meter Slide rail required 2-way: 1.0 meter



FC SERIES: 105 mm Conveyor System

FC Suspended Catenary Drive without Motor (LEFT)

FCCD-SD-0L

FC Suspended Catenary Drive without Motor (**RIGHT**) FCCD-SD-0R



210

285

680



Max Traction Force: 800N The Suspended Catenary Drive Unit is with torque limiter.

UOM: pc Chain required 1-way: 1.4 meter Slide rail required 1-way: 1.0 meter

FC Combined Direct Drive & Idler (LEFT)

FCCDI-DD-A105-0L



FC Combined Direct Drive & Idler (RIGHT)

FCCDI-DD-A105-0R

Max Traction Force: 1250N

The Combine Direct End Drive Unit is without torque limiter. Standard attached gearmotors are with SEW motor size 0.25kW, 0.37kW & 0.55kW. FCCDI-DD-A105-0L represents direct drive without gear motor.

UOM: pc

Chain required 2-way: 1.6 meter Slide rail required 2-way: 1.0 meter





FlexMove

FC Weighted Take-up Module

FC-WTU-700





- Must be used with GP Drive End, sold separately
- Used on conveyors over 12 M long





700 4

<u>م</u>

105mm [4.13in]



UOM: pc

Chain required 1.5 meter Slide rail required 2.1 meter

FC Weighted Take-up Tail Module





UORNER

UOM: pc

Chain required 1.5 meter Slide rail required 2.1 meter

FlexMcve

FC SERIES: 105 mm Conveyor System

FC Top Running Drive Module

FCTRD-203



- For top running chain only
- 9M long conveyor length maximum
- 32 Kg load maximum
- Compatible with 3/4 inch shaft gearmotors only









UOM: pc Chain required 0.2 meter

FC Direct Wheel Drive without Motor

FCWD-DD-0M





Max Traction Force: 200N

The Direct Wheel Drive Unit is without torque limiter. FCWD-DD-0M represents wheel drive without gear motor. Maximum traction force for FCWD-DD is lower than FCDD and FCSD.

UOM: pc

Chain required 1-way: 0.7 meter Slide rail required 1-way: 0.7 meter

FC Suspended Wheel Drive without Motor

FCWD-SD-0M





Max Traction Force: 200N

The Suspended Wheel Drive Unit is with torque limiter. FCWD-SD-0M represents wheel drive without motor. Maximum traction force for FCWD-SD is lower than FCDD and FCSD.

UOM: pc

Chain required 1-way: 0.7 meter Slide rail required 1-way: 0.7 meter

SEW gearmotors are products of SEW Eurodrive



FlexMove



85

FlexMcve

FC SERIES: 105 mm Conveyor System





FlexMove



DORNER

FC SERIES: 105 mm Conveyor System

FC Wheel Bend 5° - 180°



FC Horizontal Plain Bend 15°

Example for FC Wheel Bend Ordering

- Wheel bend, $\emptyset^{\circ} \pm 1^{\circ}$
- FCWB-ذR170A

If an angle of 65° is needed for wheel bend, the ordering part number is

FCWB-65R170A

The outer bend is assembled using connecting strip (FACS-25x140A). Angle of ذ must be indicated when ordering.





Horizontal plain bend, 15° ± 1°

R = 300 ± 10 mm	FCHB-15R300
$R = 500 \pm 10 \text{ mm}$	FCHB-15R500
R = 700 ± 10 mm	FCHB-15R700
$R = 1000 \pm 10 \text{ mm}$	FCHB-15R1000

Chain required 2-way (300, 500, 700, 1000): 1, 1.1, 1.2, 1.3 meter Slide rail required 2-way (300, 500, 700, 1000): 1.9, 2.1, 2.3, 2.6 meter

FC Horizontal Plain Bend 30°



FC Horizontal Plain Bend 45°



Horizontal plain bend, 30° ± 1°

= 300 ± 10 mm	FCHB-30R300
= 500 ± 10 mm	FCHB-30R500
= 700 ± 10 mm	FCHB-30R700
= 1000 ± 10 mm	FCHB-30R1000

Chain required 2-way (300, 500, 700, 1000): 1.1, 1.3, 1.5, 1.8 meter Slide rail required 2-way (300, 500, 700, 1000): 2.2, 2.6, 3.1, 3.7 meter

R R

R R



Horizontal plain bend, 45° ± 1°

$R = 300 \pm 10 \text{ mm}$	FCHB-45R300
$R = 500 \pm 10 \text{ mm}$	FCHB-45R500
$R = 700 \pm 10 \text{ mm}$	FCHB-45R700
$R = 1000 \pm 10 \text{ mm}$	FCHB-45R1000

UOM: pc

Chain required 2-way (300, 500, 700, 1000): 1.3, 1.6, 1.9, 2.4 meter Slide rail required 2-way (300, 500, 700, 1000): 2.5, 3.2, 3.8, 4.7 meter

SEW gearmotors are products of SEW Eurodrive



FlexMove

FC Horizontal Plain Bend 60°



Horizontal plain bend, 60° ± 1°

$R = 300 \pm 10 \text{ mm}$	FCHB-60R300
$R = 500 \pm 10 \text{ mm}$	FCHB-60R500
$R = 700 \pm 10 \text{ mm}$	FCHB-60R700
$R = 1000 \pm 10 \text{ mm}$	FCHB-60R1000

UOM: pc

Chain required 2-way (300, 500, 700, 1000): 1.4, 1.8, 2.3, 2.9 meter Slide rail required 2-way (300, 500, 700, 1000): 2.9, 3.7, 4.5, 5.8 meter

SEW gearmotors are products of SEW Eurodrive



Horizontal plain bend, 90° ± 1°

$R = 300 \pm 10 \text{ mm}$	FCHB-90R300
$R = 500 \pm 10 \text{ mm}$	FCHB-90R500
$R = 700 \pm 10 \text{ mm}$	FCHB-90R700
$R = 1000 \pm 10 \text{ mm}$	FCHB-90R1000

UOM: pc

Chain required 2-way (300, 500, 700, 1000): 1.7, 2.4, 3.0, 3.9 meter Slide rail required 2-way (300, 500, 700, 1000): 3.5, 4.7, 6.0, 7.9 meter

 FC Horizontal Plain Bend 180°

 Prizontal plain bend, 180° ± 1°

 R = 300 ± 10 mm
 FCHB-180R300

 R = 500 ± 10 mm
 FCHB-180R500

 R = 700 ± 10 mm
 FCHB-180R700

 R = 1000 ± 10 mm
 FCHB-180R1000

UOM: pc

Chain required 2-way (300, 500, 700, 1000) : 2.7, 4.0, 5.2, 7.1 meter Slide rail required 2-way(300, 500, 700, 1000): 5.4, 7.9, 1.1, 14.2 meter



FC Vertical Bend 5°

FC SERIES: 105 mm Conveyor System

FC Horizontal Plain Bend 5° - 180°



Example for FC Horizontal Plain Bend Ordering

Horizontal plain bend, ذ ± 1°

$R = 300 \pm 10 \text{ mm}$	FCHB- ذR300
$R=500\pm10~mm$	FCHB- ذR500
$R=700\pm10\;mm$	FCHB- ذR700
$R = 1000 \pm 10 \text{ mm}$	FCHB- ذR1000

If an angle of 120° is needed for radius R500 horizontal plain bend, the ordering part number is

FCHB-120R500

UOM: pc

Chain required 2-way (300, 500, 700, 1000) : meter (variable to angle) Slide rail required 2-way(300, 500, 700, 1000): meter (variable to angle)



FCVB-5R400

UOM: pc Chain required 2-way: 0.4 meter Slide rail required 2-way: 0.8 meter

FC Vertical Bend 10° FCVB-10R400



90

FlexMove



91

FC SERIES: 105 mm Conveyor System



FC Vertical Bend 5° - 90°

Example for FC Vertical Bend Ordering

- Vertical bend, $\emptyset^{\circ} \pm 1^{\circ}$
- FCVB-ذR400

If an angle of 65° is needed for vertical bend, the ordering part number is

FCVB-65R400

The outer bend is assembled using connecting strip (FACS-25x140A) .Angle of "ذ" must be indicated when ordering.

FlexMcve

93

FlexMcve

FC SERIES: 105 mm Conveyor System

FlexMove

Variety of chain type suitable for wide range of applications either horizontal or vertical product transportation. Capacity higher than FK, FS, FM. The maximum product width to be conveyed can be referred to guide rail assembly pages.

FL Series Characteristic

Beam Width: 150 mm Product Width: Refer to Guide Rail Assembly

Accessories Needed

Slide Rail Required: FASR-25 OR FASR-25U Slide Rail Color: White or Natural Color Slide Rail Material: HDPE OR UHMW Slide Rail Rivet & Screw: FASLR-4X6 or FASLS-M5 Connecting strip is used to connect two beams. Connecting Strip: FACS-25x140A

Conveyor Beam FLCB-3

UOM: 3 Meter / Length

Chain Connecting Module FLCC-160

UOM: pc

FlexMcve

Chain Common Data

Packaging: 5 m per box Pitch: 35.5 mm Width: 150 mm Tensile Strength at 20°C: 6000N Color: White & Black (Conductive)

Material:

Chain: White Acetal / POM Pivot: Polyamide Pivot Pin: Stainless Steel Insert (Wedge & Friction): TPE Grey

Example for FLRC-5B-L#

= 1 cleated top chain with alternate of # link of plain chain

The above chain is FLRC-5B-L1, 1 link cleated top chain with alternate of 1 link of plain chain. Note: **#** = 1, 2, 3, 4, 5.....20

FL SERIES: 150 mm Conveyor System

UOM: 5 Meter / box Application: Suitable for horizontal and slope < 5° transport of products with accumulation.

FLPC-5CD

Conductive Chain

UOM: 5 Meter / box Application: Suitable for transport of static sensitive product.

Friction Top Chain FLFT-5

UOM: 5 Meter / box Application: Suitable for transport product in slope > 5 ° but ≤ 30 ° without accumulation.

FlexMove

Roller Top Chain FLRT-5V

UOM: 5 Meter / box

Application: Suitable for accumulation of product with low friction and pressure.

= 1, 2, 3, 4, 5.....20

UOM: 5 Meter / box Application: Suitable for vertical transportation of product in slope with no accumulation.

Roller Cleat Chain FLRC-5B-L#

= 1, 2, 3, 4, 5.....20

UOM: 5 Meter / box Application: Suitable for vertical transportation of product in slope with no accumulation.

UOM: 5 Meter / box

Application: Suitable for vertical transportation of product in slope with no accumulation.

Safety Chain-V FLPC-5V

UOM: 5 Meter / box

Application: (Safety Chain) Suitable for horizontal and slope $< 5^{\circ}$ transport of products with accumulation.

Safety Chain Friction Top **FLFT-5V**

UOM: 5 Meter / box

Application: (Safety Chain) Suitable for transport product in slope > 5 ° but \leq 30 ° without accumulation.

SEW gearmotors are products of SEW Eurodrive

FlexMcve

FL SERIES: 150 mm Conveyor System

FL Direct End Drive without Motor (LEFT)

FLDD-A150-XDY (See Chart)

FL Direct End Drive without Motor (RIGHT)

FLDD-A150-XDY (See Chart)

Part Number

FLDD-A150

Aux Shaft Selection

Y

Blank = No Aux Shaft

A = 20 mm Aux Shaft

Direction

D

L = Left

R = Right

Max Traction Force: 1250N The Direct End Drive Unit is without torque limiter.

UOM: pc

Chain required 2-way: 0.8 meter Slide rail required 2-way: 0.5 meter

*3/4 inch shaft option available in North America only.

Shaft Selection

Х

0 = 20 mm

 $E = 3/4 in^*$

A = 20 mm Aux Only

Requires the use of connecting or weighted take-up module for chain maintenance.

Part Number		Shaft Selection	Direction	Aux Shaft Selection
FLDD-A150GP -	Х	D	Y	
	0 = 20 mm	L = Left	Blank = No Aux Shaft	
	E = 3/4 in*			
		A = 20 mm Aux Only	R = Right	A = 20 mm Aux Shaft

*3/4 inch shaft option available in North America only.

FL Direct End Drive unit without Motor GP (RIGHT)

FLDD-A150GP-XDY (See Chart)

Max Traction Force: 1250N

The Direct End Drive Unit GP is without torque limiter.

UOM: pc

Chain required 2-way: 0.8 meter Slide rail required 2-way: 0.5 meter

SEW gearmotors are products of SEW Eurodrive

(98)

FlexMove

- ST

FL Direct with Power Transfer Motor (LEFT)

FLDD - A150PT-XD (See Chart)

437

Minimum product length for inline transfer = 100 mm Maximum speed is 30 m/min (100 ft/min)

Only one power transfer needed on either infeed or discharge trail required for end to end transer. Provides extended transfer nose for interfacing with large rollers.

Part Number		Shaft Selection	Direction
FLDD-A150PT -	Х	D	
	_	0 = 20 mm	L = Left
		E = 3/4 in*	R = Right

Max Traction Force: 1250N

The Direct End Drive Unit is without torque limiter.

UOM: pc

FL Direct with Power Transfer Motor (RIGHT)

FLDD - A150PT-XD (See Chart)

Chain required 2-way: 0.8 meter Slide rail required 2-way: 0.5 meter

*3/4 inch shaft option available in North America only.

FL GP Direct with Power Transfer Motor (LEFT)

FLDD-A150GPPT-XD (See Chart)

Minimum product length for inline transfer = 100 mm Maximum speed is 30 m/min (100 ft/min)

Only one power transfer needed on either infeed or discharge trail required for end to end transer. Provides extended transfer nose for interfacing with large rollers. Requires the use of connecting or weighted take-up module for chain maintenance.

Part Number		Shaft Selection	Direction
FLDD-A150GPPT -	Х	D	
	_	0 = 20 mm	L = Left
		E = 3/4 in*	R = Right

*3/4 inch shaft option available in North America only.

Max Traction Force: 1250N

The Direct End Drive Unit GP is without torque limiter.

UOM: pc

Chain required 2-way: 0.8 meter Slide rail required 2-way: 0.5 meter

SEW gearmotors are products of SEW Eurodrive

FL GP Direct with Power Transfer Motor (RIGHT)

FLDD-A150GPPT-XD (See Chart)

FL SERIES: 150 mm Conveyor System

FL Direct Drive Driven Transfer Bridge (LEFT)

FLDD-A150DB-A-0L

UOM: pc

20 mm Shaft only. Minimum product length for inline transfer = 100 mm Transfer extends past conveyor only 27 mm

FL Direct Drive Driven Transfer Bridge (RIGHT)

FLDD-A150DB-A-0R

Max Traction Force: 1250N The Direct End Drive Unit is without torque limiter.

UOM: pc Chain required 2-way: 0.8 meter

Slide rail required 2-way: 0.5 meter

FL Direct Drive Free Roller Transfer Bridge (LEFT/RIGHT)

FL Idler End Free Roller Bridge

FLTB-A150

Transfer bridge c/w roller for FLIE-A150 Transfer bridge c/w roller for FLDD-A150-0L Transfer bridge c/w roller for FLDD-A150-0R

FLEB-A150

End transfer bridge c/w roller for FLIE-A150 End transfer bridge c/w roller for FLDD-A150-0L End transfer bridge c/w roller for FLDD-A150-0R

SEW gearmotors are products of SEW Eurodrive

FlexMove

FL Suspended End Drive without Motor (LEFT)

FLSD-A150-0L (with Torque Limiter) FLSD-A150SPT-0L (without Torque Limiter)

FL Suspended End Drive without Motor (RIGHT)

FLSD-A150-0R (with Torque Limiter) FLSD-A150SPT-0R (without Torque Limiter)

- Locates gearmotor below conveyor for compact applications.
- Includes torque limiter protecting chain and motor from overload.
- Chain pull capacity at 1250N for unit without torque limiter.
- Chain pull capacity at 840N for unit with torque limiter.

Max Traction Force: 1250N (without limiter) 800N (with limiter)

UOM: pc Chain required 2-way: 0.8 meter Slide rail required 2-way: 0.5 meter

FL Combined Suspended Drive & Idler (LEFT) FLCDI-SD-A150-0L FL Combined Suspended Drive & Idler (RIGHT) FLCDI-SD-A150-0R FLCDI-SD-A150-0R Image: Comparison of the stress of th

FL SERIES: 150 mm Conveyor System

FL Combined Direct Drive & Idler (LEFT)

210

FLCDI-DD-A150-0L

FL Combined Direct Drive & Idler (RIGHT)

FLCDI-DD-A150-0R

Max Traction Force: 1250N

The Combine Direct End Drive Unit is without torque limiter.

UOM: pc

Chain required 2-way: 1.6 meter Slide rail required 2-way: 1.0 meter

FL Weighted Take-up Module

FL-WTU-700

285

680

Slide rail required 3.5 meter

- Provides automatic chain stretch take-up
- Reduces noise caused from catenary tail
- Must be used with GP Drive End, sold separately
- Used on conveyors over 12 M long

SEW gearmotors are products of SEW Eurodrive

FlexMcve

FL Weighted Take-up Tail Module

FL-WTU-150

FLTRD-203

- For top running chain only
- 9M long conveyor length maximum
- 32 Kg load maximum
- Compatible with 3/4 inch shaft gearmotors only

UOM: pc Chain required 0.2 meter

FlexMcve

FL SERIES: 150 mm Conveyor System

DORNER

FLWB-180R210A

FLWB-90R210A

FlexMcve.

UOM: pc Chain required 2-way: 2.5 meter Slide rail required 2-way: 2.8 meter

FL Wheel Bend 90°

FL Wheel Bend 180°

FL Wheel Bend 60°

UOM: pc Chain required 2-way: 1.9 meter Slide rail required 2-way: 2.2 meter

UOM: pc

Chain required 2-way: 1.6 meter Slide rail required 2-way: 2.0 meter

FL SERIES: 150 mm Conveyor System

FL Wheel Bend 45° FLWB-45R210A 45° \$378 300 UOM: pc Chain required 2-way: 1.5 meter Slide rail required 2-way: 1.8 meter 210 20 FL Wheel Bend 30° FLWB-30R210A 30° 318 300

Chain required 2-way: 1.4 meter Slide rail required 2-way: 1.7 meter

FL Wheel Bend 5° - 180°

Example for FL Wheel Bend Ordering

UOM: pc

- Wheel bend, $\emptyset^{\circ} \pm 1^{\circ}$
- FLWB-ذR210A

70

210

If an angle of 65° is needed for wheel bend, the ordering part number is

FLWB-65R210A

The outer bend is assembled using connecting strip (FACS-25x140A). Angle of ذ must be indicated when ordering.

FlexMove

FL Horizontal Plain Bend 15°

Horizontal plain bend, 15° ± 1°

$R = 500 \pm 10 \text{ mm}$	FLHB-15R500
$R = 700 \pm 10 \text{ mm}$	FLHB-15R700
$R = 1000 \pm 10 \text{ mm}$	FLHB-15R1000

Chain required 2-way (300, 500, 700, 1000): 1, 1.1, 1.2, 1.3 meter Slide rail required 2-way (300, 500, 700, 1000): 1.9, 2.1, 2.3, 2.6 meter

FL Horizontal Plain Bend 30°

Horizontal plain bend, 30° ± 1°

$R = 500 \pm 10 \text{ mm}$	FLHB-30R500
$R = 700 \pm 10 \text{ mm}$	FLHB-30R700
$R=1000\pm10~\text{mm}$	FLHB-30R1000

Chain required 2-way (300, 500, 700, 1000): 1.1, 1.3, 1.5, 1.8 meter Slide rail required 2-way (300, 500, 700, 1000): 2.2, 2.6, 3.1, 3.7 meter

FL Horizontal Plain Bend 45°

Horizontal plain bend, 45° ± 1°

Chain required 2-way (300, 500, 700, 1000): 1.3, 1.6, 1.9, 2.4 meter Slide rail required 2-way (300, 500, 700, 1000): 2.5, 3.2, 3.8, 4.7 meter

FL Horizontal Plain Bend 60°

Horizontal plain bend, 60° ± 1°

$R = 500 \pm 10 \text{ mm}$	FLHB-60R500
$R = 700 \pm 10 \text{ mm}$	FLHB-60R700
$R = 1000 \pm 10 \text{ mm}$	FLHB-60R1000

107

Chain required 2-way (300, 500, 700, 1000): 1.4, 1.8, 2.3, 2.9 meter Slide rail required 2-way (300, 500, 700, 1000): 2.9, 3.7, 4.5, 5.8 meter

FL SERIES: 150 mm Conveyor System

FL Horizontal Plain Bend 90°

Horizontal plain bend, 90° ± 1°

$R = 500 \pm 10 \text{ mm}$	FLHB-90R500
$R = 700 \pm 10 \text{ mm}$	FLHB-90R700
$R = 1000 \pm 10 \text{ mm}$	FLHB-90R1000

UOM: pc

Chain required 2-way (300, 500, 700, 1000): 1.7, 2.4, 3.0, 3.9 meter Slide rail required 2-way (300, 500, 700, 1000): 3.5, 4.7, 6.0, 7.9 meter

FL Horizontal Plain Bend 180°

Horizontal plain bend, 180° ± 1°

n	FLHB-180R500
n	FLHB-180R700
ım	FLHB-180R1000

Chain required 2-way (500, 700, 1000) : 4.0, 5.2, 7.1 meter Slide rail required 2-way (500, 700, 1000): 7.9, 1.1, 14.2 meter

FL Horizontal Plain Bend 5° - 180°

Example for FL Horizontal Plain Bend Ordering

Horizontal plain bend, ذ ± 1°

$R = 500 \pm 10 \text{ mm}$	FLHB- ذR500
$R = 700 \pm 10 \text{ mm}$	FLHB- ذR700
$R = 1000 \pm 10 \text{ mm}$	FLHB- ذR1000

If an angle of 120° is needed for radius R500 horizontal plain bend, the ordering part number is

FLHB-120R500

UOM: pc

Chain required 2-way (500, 700, 1000) : meter (variable to angle) Slide rail required 2-way (500, 700, 1000): meter (variable to angle)

FL SERIES: 150 mm Conveyor System

FlexMove



UOM: pc

Chain required 2-way: 0.4 meter Slide rail required 2-way: 0.8 meter

FL Vertical Bend 10°





0,0

R500

0

15°

UOM: pc Chain required 2-way: 0.5 meter Slide rail required 2-way: 1.0 meter

UOM: pc Chain required 2-way: 0.6 meter Slide rail required 2-way: 1.2 meter

FL Vertical Bend 20°

DORNER

FL Vertical Bend 15°

FLVB-20R500

FLVB-15R500



UOM: pc Chain required 2-way: 0.7 meter Slide rail required 2-way: 1.3 meter

FL SERIES: 150 mm Conveyor System



FL Vertical Bend 5°-90°



Example for FL Vertical Bend Ordering

- Vertical bend, ذ ± 1°
- FLVB-ذR500

If an angle of 65° is needed for vertical bend, the ordering part number is

FLVB-65R500

The outer bend is assembled using connecting strip (FACS-25x140A) .Angle of "ذ" must be indicated when ordering.



FL SERIES: 150 mm Conveyor System

FlexMove





FU SERIES: 180 mm Conveyor System

Variety of chain type suitable for wide range of applications either horizontal or vertical product transportation. The maximum product width to be conveyed can be referred to guide rail assembly pages.

FU180 Series Characteristic

Beam Width: 179 mm Product Width: Refer to Guide Rail Assembly

Accessories Needed

Slide Rail Required: FASR-25, FASR-25U, FASR-25X Slide Rail Color: White or Natural Color Slide Rail Material: HDPE, UHMW OR SPECIAL PE Slide Rail Rivet & Screw: FASLR-4X6 or FASLS-M5 Connecting strip is used to connect two beams. Connecting Strip: FACS-25x140A



180 MM WIDTH

Conveyor Beam FUCB-3



UOM: 3 Meter / Length

Chain Connecting Module FUCC-300



UOM: 3 Meter / Length





(112)

FU SERIES: 180 mm Conveyor System

FlexMove

Chain Common Data

Packaging: 5 m per box Pitch: 33.5 mm Width: 175 mm Tensile Strength at 20°C: 6000N Color: White

Material:

Chain: White Acetal / POM Pivot: Polyamide Pivot Pin: Stainless Steel Insert (Wedge & Friction): TPE Grey



UOM: 5 Meter / box Application: Suitable for horizontal and slope < 5° transport of products with accumulation.

Roller Friction Top Chain FUFT-B-5R

Roller Plain Chain FUPC-5R



UOM: 5 Meter / box

Application: Suitable for horizontal and slope \leq 5° transport of products with accumulation.

Note: Friction Reducing Roller Chain Recommended for high speed or high load plain bends

Friction Top Chain FUFT-B-5



UOM: 5 Meter / box

Application: Suitable for horizontal and slope ≤ 30° transport of products without accumulation.

112



UOM: 5 Meter / box

Application: Suitable for horizontal and slope < 30° transport of products without accumulation.

Note: Friction Reducing Roller Chain Recommended for high speed or high load plain bends









UOM: 5 Meter / box

Application: Suitable twist conveyor beam; horizontal and slope $<5^\circ$ transport of products with accumulation.



FU SERIES: 180 mm Conveyor System

FU Direct End Drive with Motor (LEFT)

FUDD-A180-XDY (See Chart)

FU Direct End Drive with Motor (**RIGHT**) FUDD-A180-XDY (See Chart)



Part Number

FUDD-A180



Aux Shaft Selection

Y

Blank = No Aux Shaft

A = 20 mm Aux Shaft

Direction

D

L = Left

R = Right



Мах	Traction	Force	: 1250N
The D	irect End [Drive Unit	is without
torque	e limiter.		

UOM: pc

Chain required 2-way: 0.8 meter Slide rail required 2-way: 1.0 meter

*3/4 inch shaft option available in North America only.

FU Direct End Drive unit without Motor GP (LEFT)

Shaft Selection

Х

0 = 20 mm

 $E = 3/4 in^*$

A = 20 mm Aux Only

FUDD-A180GP-XDY (See Chart)





FU Direct End Drive unit without Motor GP (**RIGHT**)

FUDD-A180GP-XDY (See Chart)



Requires the use of connecting or weighted take-up module for chain maintenance.

Part Number		Shaft Selection	Direction	Aux Shaft Selection
FUDD-A180GP -	X D		Y	
	0 = 20 mm	L = Left	Blank = No Aux Shaft	
	E = 3/4 in*			
	A = 20 mm Aux Only	R = Right	A = 20 mm Aux Shaft	

*3/4 inch shaft option available in North America only.

Max Traction Force: 1250N

The Direct End Drive Unit $\ensuremath{\mathsf{GP}}$ is without torque limiter.

UOM: pc

Chain required 2-way: 0.8 meter Slide rail required 2-way: 1.0 meter

SEW gearmotors are products of SEW Eurodrive



FU SERIES: 180 mm Conveyor System

FlexMove

FU Direct with Power Transfer Motor (LEFT)

FUDD-A180PT-XD (See Chart)

FUDD-A180PT-XD (See Chart)



Minimum product length for inline transfer = 100 mm Maximum speed is 30 m/min (100 ft/min)

Only one power transfer needed on either infeed or discharge trail required for end to end transer. Provides extended transfer nose for interfacing with large rollers.

Part Number		Shaft Selection	Direction
FUDD-A180PT -	Х	D	
	-	0 = 20 mm	L = Left
		E = 3/4 in*	R = Right

Max Traction Force: 1250N

The Direct End Drive Unit is without torque limiter.

UOM: pc

FU Direct with Power Transfer Motor (**RIGHT**)

Chain required 2-way: 0.8 meter Slide rail required 2-way: 1.0 meter

*3/4 inch shaft option available in North America only.

FU GP Direct with Power Transfer Motor (LEFT)

FUDD-A180GPPT-XD (See Chart)





FU GP Direct with Power Transfer Motor (RIGHT)

FUDD-A180GPPT-XD (See Chart)



Minimum product length for inline transfer = 100 mm Maximum speed is 30 m/min (100 ft/min)

Only one power transfer needed on either infeed or discharge trail required for end to end transer. Provides extended transfer nose for interfacing with large rollers. Requires the use of connecting or weighted take-up module for chain maintenance.

Part Number		Shaft Selection	Direction
FUDD-A180GPPT	-	Х	D
		0 = 20 mm	L = Left
		E = 3/4 in*	R = Right

*3/4 inch shaft option available in North America only.



Max Traction Force: 1250N

The Direct End Drive Unit GP is without torque limiter.

UOM: pc

Chain required 2-way: 0.8 meter Slide rail required 2-way: 1.0 meter

SEW gearmotors are products of SEW Eurodrive



FU SERIES: 180 mm Conveyor System

FU Direct Drive Driven Transfer Bridge (RIGHT)

FU Direct Drive Driven Transfer Bridge (LEFT)

UOM: pc

20 mm Shaft only.

343

Transfer extends past conveyor only 27 mm





Max Traction Force: 1250N The Direct End Drive Unit is without torque limiter.

UOM: pc Minimum product length for inline transfer = 100 mm Chain required 2-way: 0.8 meter Slide rail required 2-way: 0 meter

FU Direct Drive Free Roller Transfer Bridge (LEFT/ RIGHT)



FUTB-A180

Transfer bridge c/w roller for FUIE-A180, FUDD-A180-XDY and FUDD-A180GP-XDY



FU Direct Drive End Free Roller Bridge (LEFT/ RIGHT)



FUEB-A180

End transfer bridge c/w roller for FUIE-A180, FUDD-A180-XDY and FUDD-A180GP-XDY





FU SERIES: 180 mm Conveyor System

FlexMcve



• Chain pull capacity at 840N for unit with torque limiter.

UOM: pc Chain required 2-way: 0.8 meter Slide rail required 2-way: 1.0 meter

FU Weighted Take-up Module

FU-WTU-700



FU Weighted Take-up Tail Module

FU-WTU-180



UOM: pc

Chain required 1.5 meter Slide rail required 2.1 meter

- · Provides automatic chain stretch take-up
- Reduces noise caused from catenary tail
- Must be used with GP Drive End, sold separately
- Used on conveyors over 12 M long



UOM: pc Chain required 1.5 meter Slide rail required 3.5 meter

(117)

- Provides controlled chain take-up for improved conveyor performance
- Compact design fits in similar space as standard direct drive modules
- Smooths conveyor chain movement by helping to eliminate micro-surging
- Suggested for conveyors over 12.2 M (40 ft) in length
- Capable of inclined and declined arrangement up to 30 degrees
- Improves operator safety by enclosing chain catenar
- Attaches to direct end drive tail
- Compatable with power transfer and driven bridge





FU SERIES: 180 mm Conveyor System



UOM: pc



FU SERIES: 180 mm Conveyor System

FlexMove



FUEB-A180

End transfer bridge c/w roller for FUIE-A180, FUDD-A180-XDY and FUDD-A180GP-XDY



FU Horizontal Plain Bend 30°



FU Horizontal Plain Bend 45°





Horizontal plain bend, 45° ± 1°

 $R = 500 \pm 10 \text{ mm}$ FUHB-45R500 $R = 700 \pm 10 \text{ mm}$ **FUHB-45R700** R = 1000 ± 10 mm FUHB-45R1000

UOM: pc

Chain required 2-way (500, 700, 1000): 1.6, 1.9, 2.4 meter Slide rail required 2-way (500, 700, 1000): 4.8, 5.7, 7.1 meter

FU Horizontal Plain Bend 60°



Horizontal plain bend, 60° ± 1°

$R = 500 \pm 10 \text{ mm}$	FUHB-60R500
$R = 700 \pm 10 \text{ mm}$	FUHB-60R700
$R = 1000 \pm 10 \text{ mm}$	FUHB-60R1000

UOM: pc Chain required 2-way (500, 700, 1000): 1.8, 2.3, 2.9 meter Slide rail required 2-way (500, 700, 1000): 5.5, 6.8, 8.7 meter



119

FU SERIES: 180 mm Conveyor System

FU Horizontal Plain Bend 90° FUVB-10R400



Horizontal plain bend, 90° ± 1°

$R = 500 \pm 10 \text{ mm}$	FUHB-90R500
$R = 700 \pm 10 \text{ mm}$	FUHB-90R700
$R = 1000 \pm 10 \text{ mm}$	FUHB-90R1000

Chain required 2-way (500, 700, 1000): 2.4, 3.0, 3.9 meter Slide rail required 2-way (500, 700, 1000): 7.1, 9.0, 11.8 meter

FU Horizontal Plain Bend 5° - 180°



Example for FU Horizontal Plain Bend Ordering

Horizontal plain bend, ذ ± 1°

$R = 500 \pm 10 \text{ mm}$	FUHB - ذR500
R = 700 ± 10 mm	FUHB - ذR700
$R = 1000 \pm 10 \text{ mm}$	FUHB - ذR1000

If an angle of 120° is needed for radius R500 horizontal plain bend, the ordering part number is

FUHB-120R500

UOM: pc

Chain required 2-way (500, 700, 1000) : meter (variable to angle) Slide rail required 2-way (500, 700, 1000): meter (variable to angle)

FU Vertical Bend 5°

FUVB-5R400



UOM: pc

Chain required 2-way: 0.4 meter Slide rail required 2-way: 1.2 meter



FU SERIES: 180 mm Conveyor System

FlexMove



(121)

FU SERIES: 180 mm Conveyor System



The outer bend is assembled using connecting strip (FACS-25x140A). Angle of "ذ" must be indicated when ordering.



FU SERIES: 180 mm Conveyor System

FlexMove



[123]

FU SERIES: 180 mm Conveyor System





Variety of chain type suitable for wide range of applications either horizontal or vertical product transportation. The maximum product width to be conveyed can be referred to guide rail assembly pages.

52

70

0

0

FV Series Characteristic

Beam Width: 260 mm Product Width: Refer to Guide Rail Assembly

Accessories Needed

Conveyor Beam FVCB-3

UOM: 3 Meter / Length

Slide Rail Required: FASR-25, FASR-25U, FASR-25X Slide Rail Color: White or Natural Color Slide Rail Material: HDPE, UHMW OR SPECIAL PE Slide Rail Rivet & Screw: FASLR-4X6 or FASLS-M5 Connecting strip is used to connect two beams. Connecting Strip: FACS-25x140A

260



Beam section for chain installation.

260

UOM: pc

Chain Connecting Module FVCC-300



FV SERIES: 260 mm Conveyor System

Chain Common Data

Packaging: 5 m per box Pitch: 33.5 mm Width: 255 mm Tensile Strength at 20°C: 6000N Color: White

Material:

Chain: White Acetal / POM Pivot: Polyamide Pivot Pin: Stainless Steel Insert (Wedge & Friction): TPE Grey





UOM: 5 Meter / box Application: Suitable for horizontal and slope < 5° transport of products with accumulation.





UOM: 5 Meter / box

Application: Suitable for horizontal and slope < 5° transport of products with accumulation.

Note: Friction Reducing Roller Chain Recommended for high speed or high load plain bends

Friction Top Chain FVFT-B-5



UOM: 5 Meter / box

Application: Suitable for horizontal and slope ≤ 30° transport of products without accumulation.

Roller Friction Top Chain **FVFT-B-5R**



UOM: 5 Meter / box

Application: Suitable for horizontal and slope ≤ 30° transport of products without accumulation.

Note: Friction Reducing Roller Chain Recommended for high speed or high load plain bends

Twist Chain FVPC-5M





UOM: 5 Meter / box

Application: Suitable twist conveyor beam; horizontal and slope $<5^{\circ}$ transport of products with accumulation.



FV SERIES: 260 mm Conveyor System

FlexMove

FV Direct End Drive with Motor (LEFT) FVDD-A260-XDY (See Chart)

FV Suspended Drive with Motor (RIGHT)

FVDD-A260-XDY (See Chart)







Part Number		Shaft Selection	Direction	Aux Shaft Selection		
	Х	D	Y			
	0 = 20 mm	L = Left	Blank = No Aux Shaft			
FVDD-A260	- 1	-	-	E = 3/4 in*		
	A = 20 mm Aux Only	R = Right	A = 20 mm Aux Shaft			

Max Traction Force: 1250N The Direct End Drive Unit is without

torque limiter.

UOM: pc Chain required 2-way: 0.8 meter Slide rail required 2-way: 0 meter

*3/4 inch shaft option available in North America only.

FV Direct End Drive unit without Motor GP (LEFT) FVDD-A260GP-XDY (See Chart)





FV Direct End Drive unit without Motor GP (RIGHT)

FVDD-A260GP-XDY (See Chart)

Requires the use of connecting or weighted take-up module for chain maintenance.

Part Number		Shaft Selection	Direction	Aux Shaft Selection
		Х	D	Y
	0 = 20 mm	L = Left	Blank = No Aux Shaft	
FVDD-A260GP	_	E = 3/4 in*		
		A = 20 mm Aux Only	R = Right	A = 20 mm Aux Shaft

Max Traction Force: 1250N

The Direct End Drive Unit GP is without torque limiter.

UOM: pc

Chain required 2-way: 0.8 meter Slide rail required 2-way: 0 meter

*3/4 inch shaft option available in North America only.





FV SERIES: 260 mm Conveyor System

FV Direct with Power Transfer Motor (RIGHT)

FV Direct with Power Transfer Motor (LEFT)

FVDD-A260PT-XD (See Chart)







Minimum product length for inline transfer = 100 mm Maximum speed is 30 m/min (100 ft/min)

Only one power transfer needed on either infeed or discharge trail required for end to end transer. Provides extended transfer nose for interfacing with large rollers.

Part Number		Shaft Selection	Direction
FVDD-A260PT -	Х	D	
	_	0 = 20 mm	L = Left
		E = 3/4 in*	R = Right

*3/4 inch shaft option available in North America only.

Max Traction Force: 1250N

The Direct End Drive Unit is without torque limiter.

UOM: pc

Chain required 2-way: 0.8 meter Slide rail required 2-way: 0 meter

FV GP Direct with Power Transfer Motor (LEFT)

FVDD-A260GPPT-XD (See Chart)





FV GP Direct with Power Transfer Motor (**RIGHT**) <u>FVDD-A260GPPT-XD</u> (See Chart)



Minimum product length for inline transfer = 100 mm Maximum speed is 30 m/min (100 ft/min)

Only one power transfer needed on either infeed or discharge trail required for end to end transer. Provides extended transfer nose for interfacing with large rollers. Requires the use of connecting or weighted take-up module for chain maintenance.

Part Number		Shaft Selection	Direction
FVDD-A260GPPT -		Х	D
	_	0 = 20 mm	L = Left
		E = 3/4 in*	R = Right

*3/4 inch shaft option available in North America only.

Max Traction Force: 1250N

The Direct End Drive Unit GP is without torque limiter.

UOM: pc

Chain required 2-way: 0.8 meter Slide rail required 2-way: 0 meter

SEW gearmotors are products of SEW Eurodrive



FV SERIES: 260 mm Conveyor System

FlexMove

FV Direct Drive Driven Transfer Bridge (RIGHT)

FV Direct Drive Driven Transfer Bridge (LEFT)

FVDD-A260DB-A-0L



Max Traction Force: 1250N The Direct End Drive Unit is without torque limiter.

FVDD-A260DB-A-0R



20 mm Shaft only.

UOM: pc

Minimum product length for inline transfer = 100 mm Transfer extends past conveyor only 27 mm **UOM: pc** Chain required 2-way: 0.8 meter

Slide rail required 2-way: 0 meter

FV Direct Drive Free Roller Transfer Bridge (LEFT/ RIGHT)



FVTB-A260

FVEB-A260

UOM: pc

Transfer bridge c/w roller for FVIE-A260, FVDD-A260-XDY and FVDD-A260GP-XDY



End transfer bridge c/w roller for FVIE-A260, FVDD-A260-XDY and FVDD-A260GP-XDY

SEW gearmotors are products of SEW Eurodrive

UOM: pc

FV Direct Drive End Free Roller Bridge (LEFT/ RIGHT)



UOM: pc



FV SERIES: 260 mm Conveyor System

FV Suspended End Drive with Motor (LEFT)

FVSD-A260-0L (with Torque Limiter) FVSD-A260SPT-0L (without Torque Limiter)

FV Suspended End Drive with Motor (RIGHT)

FVSD-A260-0R (with Torque Limiter) FVSD-A260SPT-0R (without Torque Limiter)







Max Traction Force: 1250N (without limiter) 840N (with limiter)

UOM: pc Chain required 2-way: 0.8 meter Slide rail required 2-way: 0 meter

- Locates gearmotor below conveyor for compact applications.
- Includes torque limiter protecting chain and motor from overload.
- Chain pull capacity at 1250N for unit without torque limiter.
- Chain pull capacity at 840N for unit with torque limiter.

FV Weighted Take-up Module

FV-WTU-700



589

UOM: pc Chain required 1.5 meter Slide rail required 3.5 meter

FT Weighted Take-up Tail Module

FT-WTU-260



UOM: pc Chain required 1.5 meter Slide rail required 2.1 meter • Provides controlled chain take-up for improved conveyor performance

Provides automatic chain stretch take-up
Reduces noise caused from catenary tail
Must be used with GP Drive End, sold separately

Used on conveyors over 12 M long

- Compact design fits in similar space as standard direct drive modules
- Smooths conveyor chain movement by helping to eliminate micro-surging
- Suggested for conveyors over 12.2 M (40 ft) in length
- Capable of inclined and declined arrangement up to 30 degrees
- Improves operator safety by enclosing chain catenar
- Attaches to direct end drive tail
- Compatable with power transfer and driven bridge





FV SERIES: 260 mm Conveyor System

FlexMove



(131)

FV SERIES: 260 mm Conveyor System





FV SERIES: 260 mm Conveyor System

FlexMove

FV Horizontal Plain Bend 90°



Horizontal plain bend, 90° ± 1°

$R = 700 \pm 10 \text{ mm}$	FVHB-90R700
$R = 1000 \pm 10 \text{ mm}$	FVHB-90R1000

UOM: pc Chain required 2-way (700, 1000): 3.0, 3.9 meter

Slide rail required 2-way (700, 1000): 9.0, 11.8 meter

FV Horizontal Plain Bend 5° - 180°



Example for FV Horizontal Plain Bend Ordering

Horizontal plain bend, ذ ± 1°

$R = 700 \pm 10 \text{ mm}$	FVHB -	ذR700
$R = 1000 \pm 10 \text{ mm}$	FVHB -	ذR1000

If an angle of 120° is needed for radius R700 horizontal plain bend, the ordering part number is

FVHB -120R700

UOM: pc

Chain required 2-way (700, 1000): meter (variable to angle) Slide rail required 2-way (700, 1000): meter (variable to angle)

FV Vertical Bend 5°

FVVB-5R400



UOM: pc

Chain required 2-way: 0.4 meter Slide rail required 2-way: 1.2 meter

FV SERIES: 260 mm Conveyor System





FV SERIES: 260 mm Conveyor System

FlexMove





FV SERIES: 260 mm Conveyor System



If an angle of 30° is needed for twist beam, in clockwise direction and length 2.5 m, the ordering part number is

FVTB-CW30x3000

Angle of \emptyset° , twist direction, and length L, must be indicated when ordering.

UOM: pc Chain required: 6 meter Slide rail required: 12 meter



FV SERIES: 260 mm Conveyor System

FlexMove



DORNER



Adjustable Width Wedge Conveyor Components





UORNER

UOM: Unit

FZ SERIES: Function Modules

FlexMcve



DORNER

CCDW-Sx*









Note: Drive unit and idler selection to be consult upon ordering. Dorner reserves the right to make alteration without prior notification. Every care has been taken to ensure the accuracy of the information contained in this catalogue, but no liability can be accepted for any error or omissions

Wet Cleaning Module

- Wet Cleaning Module provides continuous cleaning of conveyor chain for applications with liquid or product overfill or package breakage
- · Water jets spray outside and inside of the conveyors chain
- · Series Driven Brush scrubs top and bottom surface of chain
- · Air knifes blow off water from chain
- · Vacuum draws away excess water
- · Designed to run continuously in production line
- Allows for longer, cleaner production runs with less overall maintenance
- Clean design with minimal area for dirt and debris to accumulate
- Fully encased components with cover designed for worker safety
- Completely mechanical, does not require electrical components, programming or secondary motor

Features

- Available on FlexMove Stainless Steel Conveyors, SS (65 mm) and SM (85 mm)
- Size Requirement: 700 mm (L) x 700 mm (H)
- Minimum top of chain height: 750 mm (29.5 in)
- Maximum conveyor length: 4.5 m (14.8 ft)
- Maximum conveyor speed: 50 m/min (164 ft/min)

Dimensions and Operation Requirements Water Supply

- Connection 3/8 in NPT
- Normal operating pressure 0.98MPa. (140 psi)
- Flow rate required: ~13 litre/min (0.5 CFM)

Air Supply

- Connection: 8 mm tubing
- Air pressure required: 0.69 MPa (100 PSI)

Drying Vacuum

- Vacuum attachment: OD Ø38 mm, ID Ø34 mm pipe.
- Vacuum airflow required: ~56 litre/s (120 CFM), typical commercial grade wet/dry vacuum is acceptable

*Where Sx = Conveyor series (limit to SS & SM)



FZ SERIES: Function Modules

FlexMove

CCD-Fx*









Dry Cleaning Module

- Dry Cleaning Module provides continuous cleaning of conveyor chain for dry applications with powder, dust or other dry contaminates
- Series Driven Rotary Brush scrubs chain surface, compressed air blows off particles, and vacuum extracts dust
- · Designed to run continuously in production line
- Allows for longer, cleaner production runs with less overall maintenance
- · Clean design with minimal area for dirt and debris to accumulate
- Fully encased components with cover designed for worker safety
- Completely mechanical, does not require electrical components, programming or secondary motor

Features

- Available on FlexMove Aluminum Conveyors, FS (65 mm), FM (85 mm) and FC (150 mm)
- Size Requirement: 700 mm (L) x 300 mm (H)
- Minimum top of chain height: 250 mm (13.8 in)
- Maximum conveyor length: 4.5 m (14.8 ft)
- Maximum conveyor speed: 50 m/min (164 ft/min)

Dimensions and Operation Requirements Air Supply

- Incoming tubing size: M8
- Normal operating pressure 0.69 MPa (100 PSI)

Drying Vacuum

- Vacuum attachment: OD Ø38 mm, ID Ø34 mm pipe
- Vacuum airflow required: ~56 litre/s (120 CFM)
- Typical commercial grade vacuum is acceptable

*Where Fx = Conveyor series (limit to FS, FM, FC & FU)



FZTC-SA-Wxxx*







*Where xxx = total width of merge area

Side Acting Merge Module

- Two-to-one lane merging without the need for control logic
- First in, first out style merge
- Opposite lane will proceed once the first lane exits or large product gap exists
- · Activate arm is adjustable in both height and length
- Completely mechanical design, does not require electrical components, programming or air
- Easily modify the force required to activate the divert arm
- · Designed for operator safety, no guarding required

Features

- Available on FlexMove Aluminium Conveyors, FS (65 mm), FM (85 mm), FC (105 mm), FL (150 mm), FU (180 mm) and FV (260 mm)
- · Product must be able to withstand some back pressure
- Side Acting Merger is not suitable for high speed applications
- Min. Single Product Weight: 0.5 kg
- Max. Single Product Weight: 15 kg
- Max. Product Accumulation Weight: Up to 45 kg





FZ SERIES: Function Modules

FlexMove

208161 & 208169



Puck Stop Module

- Pneumatic stop for pacing pucks or packages
- Two Models:
 - · Vertical Blade Stop; used in pairs as an alternating escapement for pacing round or rounded edge rectangular pucks
 - Horizontal Squeeze Stop; used in combination with Vertical Blade Stop for pacing product without rounded edges. Product must be able to withstand side squeeze pressure
- · Compatible with round or rectangular bottles, containers or pucks
- · UHMW face for non-marking contact surface
- · Includes flow controls with push-in air line connection
- · Requires photo sensors, pneumatic solenoid valves, wiring and programming
- Rate depends on product size. Contact factory for details

Features

- · Available on FlexMove Aluminum Conveyors, FS (65 mm), FM (85 mm), FC (105 mm),
 - FL (150 mm), FU (180 mm), and FV (260 mm)
- Max. single product weight: 2.3 kg (5 lbs)
- Max. product accumulation weight: 13.6 kg (30 lbs)
- Max. conveyor speed: 50 m/min (164 ft/min)
- Produces gap of approximately one product length

141 mm

[5.54 in]

Vertical Blade

Part Number: 208169











Puck/Package Divert Module

- Pneumatic one-to-two lane diverter
- · Compatible with round or rectangular packages or pucks
- Product can run back to back or paced for individual product divert
- UHMW divert arms for non-marking divert surface
- · Includes flow controls with push-in air line connection
- Requires photo sensors, pneumatic solenoid valves, wiring and programming
- Rate depends on product size and desired flow. Contact factory for details.

Features

- Available on FlexMove Aluminium Conveyors, FS (65 mm), FM (85 mm), FC (105 mm), FL (150 mm), FU (180 mm) and FV (260 mm)
- · Product must be able to stand unsupported
- Min. single product weight: 0.2 kg (0.45 lbs)
- Max. single product weight: 5 kg (11 lbs)
- Max. product height: 150 mm (5.9 in)
- Max. product width: chain width (example: FM 85 mm)



400 mm [15.75in]

W+48 mm [1.89 in]

Part Number: 208162 for FM Series. Contact factory for other sizes.

6

Product dimensions shown for FM Series conveyors. Contact factory for other conveyor series.

w


FlexMcve

Clamping Module



Fixed Width Option



Clamping Module

- Pneumatic clamping actuator, mounted on both sides of the conveyor, holds back and paces product
- · Ability to pace products back to back
- Ideal for totes, boxes, bottles and square, round, and rectangular containers
- Product must be able to withstand some back pressure and squeezing force
- Requires photo sensors, pneumatic solenoid valves, wiring, and programming
- · Rate depends on product size. Contact factory for details

Features

- Available on FlexMove Aluminum Conveyors, FS (65 mm), FM (85 mm), FC (105 mm), FL (150 mm), FU (180 mm), and FV (260 mm)
- Max. single product weight: 2.3 Kg (5 lbs.)
- Max. product accumulation weight: 13.6 Kg (30 lbs.)
- · Specify product width at time of ordering
- Specify centerline of clamping actuator above conveyor chain at time of ordering
- Max. conveyor speed: 50 m/min (164 ft/min)
- Produces gap of approximately one product length
- Includes mounting for photo sensor with 18 mm barrel

Adjustable Width Option





Specify at time of order:

- W = conveyor width
- P = product width
- H = centerline of clamping actuator above conveyor chain



FlexMcve

PUS-xx*





Popup Stop Module

• The wide pop-up stopper unit are developed to stop product movement which is wider than conveyor width.

Features

- Supported accumulation load: Up to 60kg.
- Maximum conveyor speed: up to 40m/min.
- Available for conveyor width: 45mm, 65mm, 85mm,105mm,150mm,180mm & 260mm.
- · Best work with FlexMove plain chain.
- Using pneumatic system.
- · Can be used as product spacer.
- · Can be operate without sensor.
- · Low maintenance.

Specification

- Ø6mm tubing speed controller
- Operating air pressure range: 0.5~0.6MPa
- Air consumption: 0.01m3 per minute

(Calculation based on tubing length of 1.5m & Number of cycles of 180 times per hour)



*Where xx = conveyor series (limit to FK, FS,FM,FC,FL,FU & FV) Note: Solenoid valve optional.



(146)

FZ SERIES: Function Modules

FlexMcve

Helical Plain Bend Conveyors



Helical Plain Bend Conveyors

- Reduces conveyor footprint saving valuable floor space
- · Allows incline or decline through corners and straights
- · Patented side roller chain reduces corner friction
- · Provides capability for product buffering in corners
- Ideal for incline or decline in tight spaces

Features

- Available on FlexMove Aluminum Conveyors: FS (65 mm), FM (85 mm), FC (105 mm), FL (150 mm), FU (180 mm) and FV (260 mm)
- · Minimum 500 mm radius helical bend corner
- Corner Angles: 45, 90, 135, 180, 225, 270 and 360 degrees
- Incline and decline angles up to 12 degrees
 - Plain chain is capable of incline / decline angles up to 7 degrees
 - · Friction top chain is recommended for angles of 7 to 12 degrees



Patented Chain Design

(2) Conveyor Chain types for maximum capability; Bearing Chain and Non-Bearing Chain •

	Bearing Chain	Non-Bearing Chain
Conveyor Widths	85,180, 260 mm	65, 85, 105, 150, 180 and 260 mm
Maximum curves	Up to 4 curves	Up to 2 curves
Maximum angle	A total of 720 degrees	A total of 360 degrees
Maximum length	21.3 m (70 ft)	12.2 m (40 ft)
Maximum speed	Up to 55/min (180 ft/min)	Up to 55 m/min (180 ft/min)
Load Capacity	136 kg (300 lbs)	136 kg (300 lbs)



Chain Types

(147)

FlexMcve.

Helical Plain Bend Conveyors

Curve Layout Options:



Dimensions



W* = 65, 85, 105, 150, 180, 260	
R = 500, 700, 1000 mm	
A1 = 45 to 360 degrees	
A2 = 3 to 12 degrees	
H = Configuration dependent, contact factory	
L = Configuration dependent, contact factory	

* Bearing chain in 85, 180, and 260 mm widths only



FZ SERIES: Function Modules

FlexMove

Retractable Conveyor



Part Number

FZRCXX-HYYYY-ZZ

Where

XX = Conveyor series (FS: 65mm, FM: 85mm, FC: 105mm)

YYYY = Conveyor height (Min 800mm, Max 1200mm)

ZZ = Transfer Unit (01: End transfer, 02: Side transfer, 03: Side transfer FX)

Retractable Conveyor

Retractable conveyors are an excellent solution for production floors with limited space, as they can provide up to 1 meter of clearance when retracted. This design maximizes efficiency by creating temporary open areas for workers or equipment to pass through without compromising the overall conveyor system layout. Their flexibility makes them ideal for optimizing workflows in compact production environments.

Features & Specification

- Available in FlexMove Aluminum Conveyors: FS (65 mm), FM (85mm), FC (105mm)
- Retractable conveyor length (extended position): 3200 mm
- Width (W): 400 mm
- Minimum conveyor height (H): 800 mm
- · Conveyor retracting length (L): 1000mm
- · Conveyor running speed: Up to 50 m/min
- Maximum product width: Conveyor width +50 mm
- Recommended total conveyor length: up to 10 m



Note: Side guide and conveyor chain are not included. Only plain chain is suitable for the conveyor. The conveyor requires at least 8 meters of chain to fill the whole track. The conveyor is not recommended for product accumulation.



Example: FZRCFM-H0900-02

FlexMcve.

FZ SERIES: Function Modules

Retractable Conveyor

Transfer Unit

End Transfer (Valid only for conveyors within the same series)







Retractable Conveyor

Transfer Unit

Side Transfer (Transfer with FK, FS, FM, FC, FL, FU, FV series conveyor)



Side Transfer FX (Transfer with FX series conveyor)



Note: For side transfer, opening section is estimated to reduce about 200mm. The actual reduced length is subjected to side transfer guide design. Dimension shown above for FM series.



Manual Side Guide Bending Unit FY-MSBU





Manual Side Guide Bending Unit

Introducing the go-to companion for on-site installation and modification tasks – our Manual Side Guide Bending Unit. Engineered for the convenience of professionals on the move, this compact tool is designed to make your bending tasks easier and more efficient during on-site projects.

Features

- Portability: A compact and lightweight design ensures effortless transport to any worksite, saving time and effort.
- On-Site Flexibility: Tailored for on-site side guide installation and modification tasks, eliminating the need for costly off-site bending.
- Approximate Angle Bending: Designed for quick and convenient angle without the need for precision tools.
- User-Friendly Operation: Intuitive controls and ergonomic design make bending rail angles a breeze for all skill levels.
- Time-Efficient: Reduces downtime during installation and maintenance, increasing overall project efficiency.

Specifications & Dimension

- Operating Mechanism: Manual hand crank
- Sizes: 256 mm x 690 mm x 254 mm (W)x(L)x(H)
- Weight: 28kg Material Compatibility: FGRR-10x20 and FGRR-15x20



FA SERIES: Conveyor Accessories

FlexMove

FAHBS-40

DORNER

Horizontal beam support bracket - Aluminum



26

15.

⊕ 60

(153)

FlexMcve

FA SERIES: Conveyor Accessories

FAVBS-60S

Vertical beam support bracket - Aluminum





UOM: pc For FS conveyor with 64 mm vertical beam support

Mounting: FATB-20(2) , FALN-M8(2) , FAHB-M8 x16(2) , FASN-M8(2) , FAFW-M8 (4)

FAVBS-80S



Vertical beam support bracket - Aluminum



UOM: pc For FS conveyor with 80 mm vertical beam support

Mounting: FATB-20(2) , FALN-M8(2) , FAHB-M8 x16(2) , FASN-M8(2) , FAFW-M8 (4)

FAVBS-60M

Vertical beam support bracket - Aluminum





UOM: pc For FM conveyor with 64 mm vertical support beam

Mounting: FATB-20(2) , FALN-M8(2) , FAHB-M8 x16(2) , FASN-M8(2) , FAFW-M8 (4)

FAVBS-80M

Vertical beam support bracket - Aluminum







26

36.5

UOM: pc For FM conveyor with 80 mm vertical beam support

Mounting: FATB-20(2) , FALN-M8(2) , FAHB-M8 x16(2) , FASN-M8(2) , FAFW-M8 (4)



FA SERIES: Conveyor Accessories

FlexMove

FAVBS-60C

Vertical beam support bracket - Aluminum







UOM: pc For FC conveyor with 64 mm vertical beam support

Mounting: FATB-20(2) , FALN-M8(2) , FAHB-M8 x16(2) , FASN-M8(2) , FAFW-M8 (4)

FAVBS-80C

Vertical beam support bracket - Aluminum





UOM: pc For FC conveyor with 80 mm vertical beam support

Mounting: FATB-20(2) , FALN-M8(2) , FAHB-M8 x16(2) , FASN-M8(2) , FAFW-M8 (4)

FAVBS-80L

Vertical beam support bracket - Aluminum





UOM: pc For FL conveyor with 80 mm vertical beam support

Mounting: FATB-20(2) , FALN-M8(2) , FAHB-M8 x16(2) , FASN-M8(2) , FAFW-M8 (4)

FAVBS-80U

Vertical beam support bracket







UOM: pc For FU conveyor with 80 mm vertical beam support

Mounting: FATB-20(2) , FALN-M8(2) , FAFW-M8 (2)



FA SERIES: Conveyor Accessories





FA SERIES: Conveyor Accessories

FlexMove



(157)

FA SERIES: Conveyor Accessories



FA SERIES: Conveyor Accessories

FlexMove.



FADBS-WWXV



Drive End Support Bracket



		1		
Part Number		Beam	Conveyor	Adjustable
FADBS	_	WW	Х	
		$60 = 64 \times 64$	K = 45 mm	V
			S = 65 mm	
			M = 85 mm	
		80 = 80 x 80	C = 105 mm	
			L = 150 mm	
			U = 180 mm	
			V = 260 mm	

20



FAAL-64

Alpine beam support bracket - Aluminum



UOM: pc

For support of 180° wheel bend with 64 mm vertical beam support

Mounting: FAHB-M8 x16(4) , FASN-M8(4) , FAFW-M8 (4)

FAAL-80

Alpine beam support bracket - Aluminum



UOM: pc

For support of 180° wheel bend with 80 mm vertical beam support

Mounting: FAHB-M8 x16(6) , FASN-M8(6) , FAFW-M8 (6)

(159)

FA SERIES: Conveyor Accessories





(160)

FA SERIES: Conveyor Accessories

FlexMove



UOM: 25meter / roll



(161)

FA SERIES: Conveyor Accessories





FA SERIES: Conveyor Accessories

FlexMove



- (163)

FA SERIES: Conveyor Accessories



FA SERIES: Conveyor Accessories

FlexMove



UORNER

FlexMcve

203395-WWW WWW = Conveyor Width: 065, 085, 105, 150 Adjustable Stop Product End stop at any location on conveyor rail For accumulating product Not compatible with Friction Insert Chain Available in North America only.



Conveyor 90° Transfer Bracket

- Provides mounting bracket and transfer plate for 90° product transfers
- · Provides solid conveyor alignment for trouble free transfers
- · Compatible with all widths of FlexMove conveyors

Available in North America only.

FACS-25x160

Connecting strip - Steel, electro zinc plated

LL.LL

LL.LL + 25 (1.00)

Side Tables

- Provides a 152 mm (6 in) or 305 mm (12 in) wide working surface
- · Adjusts in/out and up/down for product transfer on/off conveyor belts
- · Can be positioned anywhere along the conveyor
- · Anodized aluminum work surface
- Max load: 6 kg/m (5 lbs/ft), use Adjustable Tie Brackets for added capacity
- Available in 305 mm (1 ft) increments from 305 mm (1 ft) to 30,175 mm (99 ft)

Side Table	s
27MSF _	1 - W W LLLL - Table Length in LLLL Feet (ex. 0250 = 2.5 feet) - Table Width: 06 = 6° 12 = 12° - Number of Sides: 1 = one side 2 = both sides

Available in North America only.

204398



Pallet Sensor Bracket

- · Provides mounting bracket for proximity sensor of pallet
- Compatible with 12 mm diameter proximity sensors
- Proximity sensor faces upward
- Adjustable, mounts along conveyor T-slot
- Top of bracket to pallet locating block: 28 mm (1.09 in)

Available in North America only.

Note: Due to the wide variety of conveyor set ups and applications, point of installation guarding is the responsibility of the end user. Note: Dimensions = mm (in)



FB SERIES: Conveyor Support Options

FlexMcve





DORNER

FlexMcve

FB SERIES: Conveyor Support Options

Double Support Structure FK, FS, FM, FC



Multi Lane Support Structure FK, FS, FM, FC, FL



Double Support Structure FK, FS, FM, FC





FB SERIES: Conveyor Support Options

FlexMove

Multi Lane Double Layer Support Structure FK, FS, FM, FC, FL





Ceiling Hanger Support Structure FK, FS, FM, FC, FL



Wall Mount Support Structure FK, FS, FM, FC







FB SERIES: Conveyor Support Options



FB SERIES: Conveyor Support Options

FlexMove



FB SERIES: Conveyor Support Options



DORNER

FB SERIES: Conveyor Support Options

FlexMove





FB SERIES: Conveyor Support Options



FB SERIES: Conveyor Support Options

FlexMove.

Bipod Foot For FBSB-80x80 - Polyamide , Glass Fiber reinforced



UOM: pc

FBFT-64xM8	End Plate for Support Beam 64x64- Aluminum & Adjustable stand - D=M8, L=50 - Zinc Plated
FBFT-64xM10	End Plate for Support Beam 64x64- Aluminum & Adjustable stand - D=M10, L=75 - Zinc Plated
FBFT-64xM12	End Plate for Support Beam 64x64- Aluminum & Adjustable stand - D=M12, L=75 - Zinc Plated
FBFT-64xM8S	End Plate for Support Beam 64x64- Aluminum & Adjustable stand - D=M8, L=50 - Stainless Steel
FBFT-64xM10S	End Plate for Support Beam 64x64- Aluminum & Adjustable stand - D=M10, L=75 - Stainless Steel
FBFT-64xM12S	End Plate for Support Beam 64x64- Aluminum & Adjustable stand - D=M12, L=75 - Stainless Steel
FBFT-64xM8S FBFT-64xM10S FBFT-64xM12S	End Plate for Support Beam 64x64- Aluminum & Adjustable stand - D=M12, L=75 - Zinc Plated End Plate for Support Beam 64x64- Aluminum & Adjustable stand - D=M8, L=50 - Stainless Steel End Plate for Support Beam 64x64- Aluminum & Adjustable stand - D=M10, L=75 - Stainless Steel End Plate for Support Beam 64x64- Aluminum & Adjustable stand - D=M12, L=75 - Stainless Steel



UOM: pc



FBFT-80BP

(176)

FB SERIES: Conveyor Support Components





FB SERIES: Conveyor Support Components

FBFT-80D Foot For Support Beam 80x80 - Steel, Powder Coating 260 • 4 + 204 260 8 Ø12 Mounting: FAHB-M8 x16(8) , FBCS - 20 x 96 (4) , FAFW-M8 (8) , FAWP-M10 (4) UOM: pc FBCP-40T T Connecting Plate for Support Beam 40x40- Steel, Zinc Plated 120 86 0 130 55 Mounting: FAHB-M8 x16(4) , FASN-M8 (4) , FAFW-M8 (4) UOM: pc FBCP-40L L Connecting Plate for Support Beam 40x40- Steel, Zinc Plated 130 60 0 130 60 Mounting: FAHB-M8 x16(4) , FASN-M8 (4) , FAFW-M8 (4) UOM: pc FBCP-64T T connecting Plate for Support Beam 64x64 – Steel, Zinc Plated 150 110 Ċ 180 26 0 UOM: pc Mounting: FAHB-M8 x16(4), FASN-M8 (4), FAFW-M8 (4)

DORNUR

(177)

FlexMove

FlexMcve

FB SERIES: Conveyor Support Components





FB SERIES: Conveyor Support Components

FlexMove



(179)

FlexMcve

FB SERIES: Conveyor Support Components





(180)
FB SERIES: Conveyor Support Components





FlexMcve

FB SERIES: Conveyor Support Components



DORNER

(182)

FB SERIES: Conveyor Support Components





FG SERIES: Conveyor Guide Options



Guide Rail Bracket	Series	D (mm)	H (mm)	W (mm) B = 0	W (mm) B = 6.3	W (mm) B = 12.6	W (mm) B = 18.9
FGRB-16X54	FK	45	26	41.7	54.3	66.9	79.5
FGRB-16X54	FS	65	26	61.7	74.3	86.9	99.5
FGRB-16X54	FM	85	20	81.7	94.3	106.9	119.5
FGRB-16X54	FC	105	20	101.7	114.3	126.9	139.5
FGRB-16X54	FL	150	20	146.7	159.3	171.9	184.5
FGRB-16X54	FU	179	20	175.7	188.3	200.9	213.5
FGRB-16X54	FV	260	20	256.7	269.3	281.9	294.5

FGRB-16x42

Fixed Guide Rail Assembly





B Spacer = FGRD-6

See page 206 for components

Guide Rail Bracket	Series	D (mm)	H (mm)	W (mm) B = 0	W (mm) B = 6.3	W (mm) B = 12.6	W (mm) B = 18.9
FGRB-16X42	FK	45	14	41.7	54.3	66.9	79.5
FGRB-16X42	FS	65	14	61.7	74.3	86.9	99.5
FGRB-16X42	FM	85	8	-	94.3	106.9	119.5
FGRB-16X42	FC	105	8	-	114.3	126.9	139.5
FGRB-16X42	FL	150	8	-	159.3	171.9	184.5
FGRB-16X42	FU	179	8	-	188.3	200.9	213.5
FGRB-16X42	FV	260	8	-	269.3	281.9	294.5



FlexMcve.

FGRB-28x42

Fixed Guide Rail Assembly





B Spacer = FGRD-6

See page 206 for components

Guide Rail Bracket	Series	D (mm)	H (mm)	W (mm) B = 0	W (mm) B = 6.3	W (mm) B = 12.6	W (mm) B = 18.9
FGRB-28X42	FK	45	14	65.8	78.4	91	103.6
FGRB-28X42	FS	65	14	85.8	98.4	111	123.6
FGRB-28X42	FM	85	8	105.8	118.4	131	143.6
FGRB-28X42	FC	105	8	125.8	138.4	151	163.6
FGRB-28X42	FL	150	8	170.8	183.4	196	208.6
FGRB-28X42	FU	179	8	199.8	212.4	225	237.6
FGRB-28X42	FV	260	8	280.8	293.4	306	318.6

FGRB-40x42

Fixed Guide Rail Assembly

2





B Spacer = FGRD-6

See page 206 for components

Guide Rail Bracket	Series	D (mm)	H (mm)	W (mm) B = 0	W (mm) B = 6.3	W (mm) B = 12.6	W (mm) B = 18.9
FGRB-40X42	FK	45	14	90.6	103.2	115.8	128.4
FGRB-40X42	FS	65	14	110.6	123.2	135.8	148.4
FGRB-40X42	FM	85	8	130.6	143.2	155.8	168.4
FGRB-40X42	FC	105	8	150.6	163.2	175.8	188.4
FGRB-40X42	FL	150	8	195.6	163.2	220.8	233.4
FGRB-40X42	FU	179	8	224.6	237.2	249.8	262.4
FGRB-40X42	FV	260	8	305.6	318.2	330.8	343.4



FGRB-49x42

Fixed Guide Rail Assembly





B Spacer = FGRD-6

See page 207 for components

Guide Rail Bracket	Series	D (mm)	H (mm)	W (mm) B = 0	W (mm) B = 6.3	W (mm) B = 12.6	W (mm) B = 18.9
FGRB-49X42	FK	45	14	107.8	120.4	133	145.6
FGRB-49X42	FS	65	14	127.8	140.4	153	165.6
FGRB-49X42	FM	85	8	147.8	160.4	173	185.6
FGRB-49X42	FC	105	8	167.8	180.4	193	205.6
FGRB-49X42	FL	150	8	212.8	225.4	238	250.6
FGRB-49X42	FU	179	8	241.8	254.4	267	279.6
FGRB-49X42	FV	260	8	322.8	335.4	348	360.6

FGRB-53x42

Fixed Guide Rail Assembly



B Spacer = FGRD-6

See page 207 for components

Guide Rail Bracket	Series	D (mm)	H (mm)	W (mm) B = 0	W (mm) B = 6.3	W (mm) B = 12.6	W (mm) B = 18.9
GRB-53X42	FK	45	14	115.7	128.3	140.9	153.5
FGRB-53X42	FS	65	14	135.7	148.3	160.9	173.5
FGRB-53X42	FM	85	8	155.7	168.3	180.9	193.5
FGRB-53X42	FC	105	8	175.7	188.3	200.9	213.5
FGRB-53X42	FL	150	8	220.7	233.3	245.9	258.5
FGRB-53X42	FU	179	8	249.7	262.3	274.9	287.5
FGRB-53X42	FV	260	8	330.7	343.3	355.9	368.5



FlexMove.

FGRB-90x42

Fixed Guide Rail Assembly



Guide Rail Bracket	Series	D (mm)	H (mm)	W (mm) B = 0	W (mm) B = 6.3	W (mm) B = 12.6	W (mm) B = 18.9
FGRB-90X42	FK	45	14	190.3	202.9	215.5	228.1
FGRB-90X42	FS	65	14	210.3	222.9	235.5	248.1
FGRB-90X42	FM	85	8	230.3	242.9	255.5	268.1
FGRB-90X42	FC	105	8	250.3	262.9	275.5	288.1
FGRB-90X42	FL	150	8	295.3	307.9	320.5	333.1
FGRB-90X42	FU	179	8	324.3	336.9	349.5	362.1
FGRB-90X42	FV	260	8	405.3	417.9	430.5	443.1

FGHS-30/FGHS-70

Fixed High Side Guide Assembly





See page 221 for components

			FGHS-30 Rail	FGHS-70 Rail	
Guide Rail Bracket	Series	D (mm)	H (mm)	H (mm)	W (mm) B = 0
FGRD-HS	FK	45	37	75	49
FGRD-HS	FS	65	31	70	69
FGRD-HS	FM	85	31	70	89
FGRD-HS	FC	105	31	70	109
FGRD-HS	FL	150	31	70	159
FGRD-HS	FU	179	31	70	183
FGRD-HS	FV	260	31	70	264



FG SERIES: Conveyor Guide Options

```
FGRA-22HD
```

Heavy Duty Fully Adjustable Guide Assembly

FGRA-22HD Ass	sembly	>	H				See page 211 for components
Bracket Assembly	Series	D (mm)	H (mm) Min	H (mm) Max	W (mm) Min	W (mm) Max	
FGRA-22HD	FK	45	17	82	0	39	
FGRA-22HD	FS	65	17	76	0	59	
FGRA-22HD	FM	85	17	76	0	79	
FGRA-22HD	FC	105	17	76	0	99	
FGRA-22HD	FL	150	17	76	0	144	
FGRA-22HD	FU	179	17	76	0	170	
FGRA-22HD	FV	260	17	76	30	254	

FGRA-22HDT

Heavy Duty Tool-less Fully Adjustable Guide Assembly





See page 211 for components

Bracket Assembly	Series	D (mm)	H (mm) Min	H (mm) Max	W (mm) Min	W (mm) Max
FGRA-22HDT	FK	45	17	82	0	39
FGRA-22HDT	FS	65	17	76	0	59
FGRA-22HDT	FM	85	17	76	0	79
FGRA-22HDT	FC	105	17	76	0	99
FGRA-22HDT	FL	150	17	76	0	144
FGRA-22HDT	FU	179	17	76	0	170
FGRA-22HDT	FV	260	17	76	30	254



FlexMove

FGPG-A/FGPG-U

Pallet/Puck Guide Assembly





See page 222 for components

Bracket	Series	D (mm)	H (mm)	W (mm) B = 0
FGRB-PG	FK	45	24	48
FGRB-PG	FS	65	18	68
FGRB-PG	FM	85	18	88
FGRB-PG	FC	105	18	108
FGRB-PG	FL	150	18	153
FGRB-PG	FU	179	18	182
FGRB-PG	FV	260	18	263

Note:

- Available in North America Only
- Pallets available for FC Series Only
- H can be lowered by 9.5 mm for pallet transfer



FGRA-8x39x45

Adjustable Guide Rail Assembly





B Spacer = FGRD-6

See page 205 for components

Guide Rail Bracket	Series	D (mm)	H (mm)	W (mm) min B = 0	W (mm) max B = 0	W (mm) min B = 6.3	W (mm) max B = 6.3
FGRA-8x39x45	FK	45	17	0	24.8	0	37.4
FGRA-8x39x45	FS	65	17	0	44.8	0	57.4
Guide Rail Bracket	Series	D (mm)	H (mm)	W (mm) min B = 12.6	W (mm) max B = 12.6	W (mm) min B = 1839	W (mm) max B = 18.9
FGRA-8x39x45	FM	85	11	86	90	86	102.6
FGRA-8x39x45	FC	105	11	106	110	106	122.6
FGRA-8x39x45	FL	150	11	156	160	156	172.6
FGRA-8x39x45	FU	179	11	180	184	180	196.6
FGRA-8x39x45	FV	260	11	261	265	261	277.6

FGRA-26x39x45

Adjustable Guide Rail Assembly



Guide Rail Bracket	Series	D (mm)	H (mm)	W (mm) min B = 0	W (mm) max B = 0	W (mm) min B = 6.3	W (mm) max B = 6.3
FGRA-26x39x45	FK	45	24	28.8	100.8	41.4	113.4
FGRA-26x39x45	FS	65	24	48.8	120.8	61.4	133.4
FGRA-26x39x45	FM	85	18	68.8	140.8	81.4	153.4
FGRA-26x39x45	FC	105	18	88.8	160.8	101.4	173.4
FGRA-26x39x45	FL	150	18	133.8	205.8	146.4	218.4
FGRA-26x39x45	FU	179	18	162.8	234.8	175.4	251.4
FGRA-8x39x45	FV	260	18	243.8	315.8	256.4	328.4



FlexMcve.

FGRS-18 & FGDT- & FGRR-

Guide Rail Assembly



See pages 204, 209 and 213 for components

A (mm)	Series	D (mm)	H (mm) Min	H (mm) Max	B (mm)	Series	D (mm)	W (mm) Min	W (mm) Max
FGRR-100	FK	45	17	35	FGDT-70	FK	45	0	65
FGRR-100	FS	65	17	35	FGDT-70	FS	65	0	85
FGRR-100	FM	85	17	35	FGDT-70	FM	85	16	105
FGRR-100	FC	105	17	30	FGDT-70	FC	105	36	125
FGRR-100	FL	150	17	30	FGDT-70	FL	150	81	170
FGRR-100	FU	179	17	35	FGDT-70	FU	179	110	199
FGRR-100	FV	260	17	35	FGDT-70	FV	260	191	280
	FIC	15	15	0.5	FORT	FIC	15		105
FGRR-150	FK	45	17	85	FGDI-100	FK	45	0	125
FGRR-150	FS	65	17	85	FGDT-100	FS	65	0	145
FGRR-150	FM	85	17	80	FGDT-100	FM	85	16	165
FGRR-150	FC	105	17	80	FGDT-100	FC	105	36	185
FGRR-150	FL	150	17	80	FGDT-100	FL	150	81	230
FGRR-150	FU	179	17	80	FGDT-100	FU	179	110	259
FGRR-150	FV	260	17	80	FGDT-100	FV	260	191	340
FGRR-200	FK	45	17	135	FGDT-150	FK	45	0	225
FGRR-200	FS	65	17	135	FGDT-150	FS	65	0	245
FGRR-200	FM	85	17	130	FGDT-150	FM	85	16	265
FGRR-200	FC	105	17	130	FGDT-150	FC	105	36	285
FGRR-200	FL	150	17	130	FGDT-150	FL	150	81	330
FGRR-200	FU	179	17	130	FGDT-150	FU	179	110	359
FGRR-200	FV	260	17	130	FGDT-150	FV	260	191	440
FORDATA	FIZ	45	45	4.05	FORTAGO	FIZ	45	0	005
FGRR-250	FK	45	17	185	FGDI-200	FK	45	0	325
FGRR-250	FS	65	17	185	FGDT-200	FS	65	0	345
FGRR-250	FM	85	17	180	FGDT-200	FM	85	16	365
FGRR-250	FC	105	17	180	FGDT-200	FC	105	36	385
FGRR-250	FL	150	17	180	FGDT-200	FL	150	81	430
FGRR-250	FU	179	17	180	FGDT-200	FU	179	110	459
FGRR-250	FV	260	17	180	FGDT-200	FV	260	191	540



FG SERIES: Conveyor Guide Options

FGRL-18x110C & FGDT-70
FGRL-18x110C & FGDT-100
FGRL-18x110C & FGDT-150
FGRL-18x110C & FGDT-200
FGRL-T0XT00C & FGDT-70
FGRL-18x160C & FGDT-100
FGRL-18x160C & FGDT-150



Note: Plastic guide supports used for light products.

Guide Rail Assembly

See pages 204 and 214 for components

A (mm)	Series	D (mm)	H (mm) Min	H (mm) Max
FGRL-18x110C	FK	45	14	70
FGRL-18x110C	FS	65	14	70
FGRL-18x110C	FM	85	14	65
FGRL-18x110C	FC	105	14	65
FGRL-18x110C	FL	150	14	65
FGRL-18x110C	FU	179	14	65
FGRL-18x110C	FV	260	14	65
FGRL-18x160C	FK	45	14	120
FGRL-18x160C	FS	65	14	120
FGRL-18x160C	FM	85	14	115
FGRL-18x160C	FC	105	14	115
FGRL-18x160C	FL	150	14	115
FGRL-18x160C	FU	179	14	115
FGRL-18x160C	FV	260	14	115

B (mm)	Series	D (mm)	W (mm) Min	W (mm) Max
FGDT-70	FK	45	23	110
FGDT-70	FS	65	43	130
FGDT-70	FM	85	63	150
FGDT-70	FC	105	83	170
FGDT-70	FL	150	128	215
FGDT-70	FU	179	157	244
FGDT-70	FV	260	238	325
EGDT-100	FK	45	23	170
FGDT-100	FS	65	43	190
FGDT-100	FM	85	63	210
FGDT-100	FC	105	83	230
FGDT-100	FI	150	128	275
FGDT-100	FU	179	157	304
FGDT-100	FV	260	238	385
FGDT-150	FK	45	23	270
FGDT-150	FS	65	43	290
FGDT-150	FM	85	63	310
FGDT-150	FC	105	83	330
FGDT-150	FL	150	128	375
FGDT-150	FU	179	157	404
FGDT-150	FV	260	238	485
EGDT 200	EV	45	0.2	270
FGDT-200	FS	65	43	300
FGDT-200	EM	85	63	410
FGDT-200	FC	105	83	410
FGDT-200	EI	150	100	430
ECDT 200	EU	170	157	504
ECDT 000	EV	060	020	505
FGD1-200	ΓV	200	230	000





FlexMove

FGRL-18x110CA & FGDT-70	80
FGRL-18x110CA & FGDT-100	
FGRL-18x110CA & FGDT-150	
FGRL-18x110CA & FGDT-200	
FGRL-18x160CA & FGDT-70	
FGRL-18x160CA & FGDT-100	
FGRL-18x160CA & FGDT-150	Guide Rail Assen
FGRL-18x160CA & FGDT-200	



See pages 204 and 214 for components

A (mm)	Series	D (mm)	H (mm) Min	H (mm) Max
FGRL-18x110CA	FK	45	14	70
FGRL-18x110CA	FS	65	14	70
FGRL-18x110CA	FM	85	14	65
FGRL-18x110CA	FC	105	14	65
FGRL-18x110CA	FL	150	14	65
FGRL-18x110CA	FU	179	14	65
FGRL-18x110CA	FV	260	14	65
FGRL-18x160CA	FK	45	14	120
FGRL-18x160CA	FS	65	14	120
FGRL-18x160CA	FM	85	14	115
FGRL-18x160CA	FC	105	14	115
FGRL-18x160CA	FL	150	14	115
FGRL-18x160CA	FU	179	14	115
FGRL-18x160CA	FV	260	14	115

B (mm)	Series	D (mm)	W (mm) Min	W (mm) Max
FGDT-70	FK	45	0	68
FGDT-70	FS	65	0	88
FGDT-70	FM	85	0	108
FGDT-70	FC	105	0	128
FGDT-70	FL	150	0	173
FGDT-70	FU	179	0	202
FGDT-70	FV	260	65	283
FORTION	FV	45	0	100
FGDI-100	FK	45	0	128
FGDI-100	FS	65	0	148
FGDT-100	FM	85	0	168
FGDT-100	FC	105	0	188
FGDT-100	FL	150	150 0	
FGDT-100	FU	179	0	262
FGDT-100	FV	260	65	343
FGDT-150	FK	45	0	228
FGDT-150	FS	65	0	248
FGDT-150	FM	85	0	268
FGDT-150	FC	105	0	288
FGDT-150	FL	150	0	333
FGDT-150	FU	179	0	362
FGDT-150	FV	260	65	443
FORTAGE	FIG		0	
FGDI-200	FK	45	0	328
FGDT-200	FS	65	0	348
FGDT-200	FM	85	0	368
FGDT-200	FC	105	0	388
FGDT-200	FL	150	0	433
FGDT-200	FU	179	0	462
FGDT-200	FV	260	65	543



FG SERIES: Conveyor Guide Options

FGRL-18x110C & FGRF-42x18V

Guide Rail Assembly



Note: Plastic guide supports used for light products.

See pages 214 and 216 for components

B Spacer = FGRD-18A

Guide Rail	Guide Rail	Series	D (mm)	A (mm)	H (mm) Min	H (mm) Max	W (mm) B = 0	W (mm) B = 18	W (mm) B = 36
FGRL-18x110C	FGRF-42x18V	FK	45	110	3	75	71	107	143
FGRL-18x110C	FGRF-42x18V	FS	65	110	3	75	91	127	163
FGRL-18x110C	FGRF-42x18V	FM	85	110	3	70	111	147	183
FGRL-18x110C	FGRF-42x18V	FC	105	110	3	70	131	167	203
FGRL-18x110C	FGRF-42x18V	FL	150	110	3	70	176	212	248
FGRL-18x110C	FGRF-42x18V	FU	179	110	3	70	205	241	277
FGRL-18x110C	FGRF-42x18V	FV	260	110	3	70	286	322	358

FGRL-18x160C & FGRF-42x18V

B Spacer = FGRD-18A



Note: Plastic guide supports used for light products.

See pages 214 and 216 for components

Guide Rail	Guide Rail	Series	D (mm)	A (mm)	H (mm) Max	H (mm) Min	W (mm) B = 0	W (mm) B = 18	W (mm) B = 36
FGRL-18x160C	FGRF-42x18V	FK	45	160	3	135	71	107	143
FGRL-18x160C	FGRF-42x18V	FS	65	160	3	135	91	127	163
FGRL-18x160C	FGRF-42x18V	FM	85	160	3	130	111	147	183
FGRL-18x160C	FGRF-42x18V	FC	105	160	3	130	131	167	203
FGRL-18x160C	FGRF-42x18V	FL	150	160	3	130	176	212	248
FGRL-18x160C	FGRF-42x18V	FU	179	160	3	130	205	241	277
FGRL-18x160C	FGRF-42x18V	FV	260	160	3	130	286	322	358



FlexMove.

FGRF-42x62-A110 & FGRK-18x80A

Guide Rail Assembly



See pages 216 and 217 for components

B Spacer = FGRD-18A

Guide Rail	Guide Rail	Series	D (mm)	W min B = 0	W min B = 18	W min B = 36	W (mm) B = 0	W (mm) B = 18	W (mm) B = 36
FGRF-42x62-A110	FGRK-18x80A	FK	45	0	3	39	61	97	133
FGRF-42x62-A110	FGRK-18x80A	FS	65	0	23	59	81	117	153
FGRF-42x62-A110	FGRK-18x80A	FM	85	7	43	79	101	137	173
FGRF-42x62-A110	FGRK-18x80A	FC	105	27	63	99	121	157	193
FGRF-42x62-A110	FGRK-18x80A	FL	150	72	108	144	166	202	238
FGRF-42x62-A110	FGRK-18x80A	FU	179	101	137	173	195	231	267
FGRF-42x62-A110	FGRK-18x80A	FV	260	182	218	254	276	312	348

FGRF-42x62-A35 & FGRK-18x80A

Guide Rail Assembly



See pages 216 and 217 for components

_	_					
в	S	oacer	· =	FG	RD	-18A

Guide Rail	Guide Rail	Series	D (mm)	W min B = 0	W min B = 18	W min B = 36	W (mm) B = 0	W (mm) B = 18	W (mm) B = 36
FGRF-42x62-A35	FGRK-18x80A	FK	45	0	3	39	61	97	133
FGRF-42x62-A35	FGRK-18x80A	FS	65	0	23	59	81	117	153
FGRF-42x62-A35	FGRK-18x80A	FM	85	7	43	79	101	137	173
FGRF-42x62-A35	FGRK-18x80A	FC	105	27	63	99	121	157	193
FGRF-42x62-A35	FGRK-18x80A	FL	150	72	108	144	166	202	238
FGRF-42x62-A35	FGRK-18x80A	FU	179	101	137	173	195	231	267
FGRF-42x62-A35	FGRK-18x80A	FV	260	182	218	254	276	312	348



FG SERIES: Conveyor Guide Options

FGRF-42x18V & FGRK-18x80A & FGRL18x110CA

FGRF-42x18V & FGRK-18x80A & FGRL18x160CA

B Spacer = FGRD-18A



Note: Plastic guide supports used for light products.

See pages 215 and 216 for components

Guide Rail	Series	D (mm)	A = 110 H (mm) Min	A = 110 H (mm) Max	A = 160 H (mm) Min	A = 160 H (mm) Max	B (mm)	W (mm) Min	W (mm) Max
FGRL-18x110CA	FK	45	3	83	3	138	0	0	30
FGRL-18x110CA	FS	65	3	83	3	138	0	0	50
FGRL-18x110CA	FM	85	3	83	3	133	0	0	70
FGRL-18x110CA	FC	105	3	83	3	133	0	0	90
FGRL-18x110CA	FL	150	3	83	3	133	0	25	135
FGRL-18x110CA	FU	179	3	83	3	133	0	54	164
FGRL-18x110CA	FV	260	3	83	3	133	0	135	245
FGRL-18x110CA	FK	45	3	83	3	138	18	0	78
FGRL-18x110CA	FS	65	3	83	3	138	18	0	86
FGRL-18x110CA	FM	85	3	83	3	133	18	0	106
FGRL-18x110CA	FC	105	3	83	3	133	18	16	126
FGRL-18x110CA	FL	150	3	83	3	133	18	61	171
FGRL-18x110CA	FU	179	3	83	3	133	18	90	200
FGRL-18x110CA	FV	260	3	83	3	133	18	271	381
FGRL-18x110CA	FK	45	3	83	3	138	36	0	112
FGRL-18x110CA	FS	65	3	83	3	138	36	12	132
FGRL-18x110CA	FM	85	3	83	3	133	36	32	152
FGRL-18x110CA	FC	105	3	83	3	133	36	52	172
FGRL-18x110CA	FL	150	3	83	3	133	36	97	217
FGRL-18x110CA	FU	179	3	83	3	133	36	126	246
FGRL-18x110CA	FV	260	3	83	3	133	36	207	327
FGRL-18x110CA	FK	45	3	83	3	138	54	28	148
FGRL-18x110CA	FS	65	3	83	3	138	54	48	168
FGRL-18x110CA	FM	85	3	83	3	133	54	68	188
FGRL-18x110CA	FC	105	3	83	З	133	54	88	208
FGRL-18x110CA	FL	150	3	83	3	133	54	133	243
FGRL-18x110CA	FU	179	3	83	3	133	54	162	272
FGRL-18x110CA	FV	260	3	83	3	133	54	243	353



FGRF-42x18V FGRS-18 & FGDT-150

Guide Rail Assembly



B Spacer = FGRD-18A

See pages 204, 213 and 216 for components

FlexMove.

Guide Rail	Guide Rail	Series	D (mm)	A (mm)	H (mm) Min	H (mm) Max	W (mm) B = 0	W (mm) B = 18	W (mm) B = 36
FGRS-18	FGDT-150	FK	45	150	3	90	24	60	96
FGRS-18	FGDT-150	FS	65	150	3	90	44	80	116
FGRS-18	FGDT-150	FM	85	150	3	85	64	100	136
FGRS-18	FGDT-150	FC	105	150	3	85	84	120	156
FGRS-18	FGDT-150	FL	150	150	3	85	129	165	201
FGRS-18	FGDT-150	FU	179	150	3	85	158	194	230
FGRS-18	FGDT-150	FV	260	150	3	85	239	275	311

FGRF-42x18V FGRS-18 & FGDT-200

Guide Rail Assembly



B Spacer = FGRD-18A

See pages 204, 213 and 216 for components

Guide Rail	Guide Rail	Series	D (mm)	A (mm)	H (mm) Min	H (mm) Max	W (mm) B = 0	W (mm) B = 18	W (mm) B = 36
FGRS-18	FGDT-200	FK	45	200	3	140	24	60	96
FGRS-18	FGDT-200	FS	65	200	3	140	44	80	116
FGRS-18	FGDT-200	FM	85	200	3	135	64	100	136
FGRS-18	FGDT-200	FC	105	200	3	135	84	120	156
FGRS-18	FGDT-200	FL	150	200	3	135	129	165	201
FGRS-18	FGDT-200	FU	179	200	3	135	158	194	230
FGRS-18	FGDT-200	FV	260	200	3	135	239	275	311



FGRB-40x18 & FGRK-18x80

Guide Rail Assembly



B Spacer = FGRD-6B

Guide Rail	Guide Rail	Series	A (mm)	B	D (mm)	W (mm)	W (mm)
ECDR 40v19	ECDK 19y90	EV	(1111)	()	(1111)		55
FGRB-40x10			00	0	40	0	55
FGRB-40x18	FGRK-18x80	F5	80	0	65	0	75
FGRB-40x18	FGRK-18x80	FM	80	0	85	0	95
FGRB-40x18	FGRK-18x80	FC	80	0	105	15	115
FGRB-40x18	FGRK-18x80	FL	80	0	150	60	160
FGRB-40x18	FGRK-18x80	FU	80	0	179	89	189
FGRB-40x18	FGRK-18x80	FV	80	0	260	170	270
FGRB-40x18	FGRK-18x80	FK	45	6	45	0	67
FGRB-40x18	FGRK-18x80	FS	65	6	65	0	87
FGRB-40x18	FGRK-18x80	FM	85	6	85	7	107
FGRB-40x18	FGRK-18x80	FC	105	6	105	27	127
FGRB-40x18	FGRK-18x80	FL	150	6	150	72	172
FGRB-40x18	FGRK-18x80	FU	179	6	179	101	201
FGRB-40x18	FGRK-18x80	FV	260	6	260	182	282
FGRB-40x18	FGRK-18x80	FK	45	12	45	0	79
FGRB-40x18	FGRK-18x80	FS	65	12	65	0	99
FGRB-40x18	FGRK-18x80	FM	85	12	85	19	119
FGRB-40x18	FGRK-18x80	FC	105	12	105	39	139
FGRB-40x18	FGRK-18x80	FL	150	12	150	84	184
FGRB-40x18	FGRK-18x80	FU	179	12	179	113	213
FGRB-40x18	FGRK-18x80	FV	260	12	260	194	294
FGRB-40x18	FGRK-18x80	FK	45	18	45	1	91
FGRB-40x18	FGRK-18x80	FS	65	18	65	21	111
FGRB-40x18	FGRK-18x80	FM	85	18	85	31	131
FGRB-40x18	FGRK-18x80	FC	105	18	105	51	151
FGRB-40x18	FGRK-18x80	FL	150	18	150	96	196
FGRB-40x18	FGRK-18x80	FU	179	18	179	125	225
FGRB-40x18	FGRK-18x80	FV	260	18	260	206	306



FlexMove.



Double Track Guide Rail Assembly

Cans Handling





Box Handling





FG SERIES: Conveyor Guide Options

Extra Bottom Guide Rail Assembly

Carton Box Handling





Width Adjustment Guide Rail Assembly

Packaging Box Handling



Width Adjustment Guide Rail Assembly

Container Handling







FG SERIES: Conveyor Guide Options



Disc Drive Cassette Handling







Width & Height Adjustable Guide Rail Assembly

Ji,

Packaging Box Handling



Width & Height Guide Rail Assembly





DORNER

FlexMove

Small Box Guide Rail Assembly

Small Box Handling



Twin Track Pallet Guide Rail Assembly



FGRA-6x9x45

FGVG-3

Special V Guide - Aluminum



UOM: 3 meter / length



FG SERIES: Conveyor Guide Components



FG SERIES: Conveyor Guide Components

FlexMcve



(205)

(206)

FG SERIES: Conveyor Guide Components





FG SERIES: Conveyor Guide Components

FlexMove



207

FG SERIES: Conveyor Guide Components

UNRNER



FG SERIES: Conveyor Guide Components





FG SERIES: Conveyor Guide Components





FG SERIES: Conveyor Guide Components

FlexMove



(213)

FG SERIES: Conveyor Guide Components





FG SERIES: Conveyor Guide Components

FlexMove

FGRK-18x40A	Guide Rail Support, L = 40 mm - Polyamide								
FGRK-18x60A	Guide Rail Support, L = 60 mm - Polyamide								
FGRK-18x80A	Guide Rail Support, L = 80 mm - Polyamide								
FGRK-18x130A	Guide Rail Support, L = 130 mm - Polyamide								
have									
IIOM: 10pcs / pk	Suitable for use with cross connector EGRB-18 v18 and EGRE – 42×18								

UOM: 10pcs / pk



FGRF-42x18V

Guide Rail Bracket - Polyamide









57.8

UOM: 10pcs / pk

To be used with : - FGGR - 18 x * 100

- FGRL - 18 x 110C / 160C

- FGRC - 18 x 110C / 160C





For use with guide rail bracket support FGRF -42 x 18V

FGRD-18A

Spacer for FGRF-42x18V - Polyamide



UOM: 10pcs / pk

FGRD-6A

Spacer for FGRF-42x18V - Polyamide



UOM: 10pcs / pk

FGRD-6C

Spacer for FGRF-42x18V - Polyamide



UOM: 10pcs / pk



(216)
FG SERIES: Conveyor Guide Components

FlexMove



UOM: 10pcs / pk

To be used with guide rail support. For 1-2 guide rail levels.

FGRF-A110

Guide Rail Bracket A110 - Polyamide





To be used with guide rail support. For 1-4 guide rail levels.





FG SERIES: Conveyor Guide Components



FG SERIES: Conveyor Guide Components

FlexMcve



UOM: 10pcs / pk



(220)



FG SERIES: Conveyor Guide Components

FlexMcve



Available in North America only.



FlexMcve

FG SERIES: Conveyor Guide Components



UOM: 3 meter/length

Available in North America only.

Direct Drive, Standard Load, Fixed Speed - 3/4 inch Shaft



(vp) = Voltage and Phase 11 = 115V, 1 phase 23 = 208 - 230 / 460V, 3 phase

Available in North America only.

Direct Drive, Standard Load, Variable Speed - 3/4 inch Shaft



* = At 60 Hz

** = Motor is de-rated to 0.5 Hp (2.2 / 1.1 amp) for full torque throughout the speed range.

Available in North America only.

C Note: When buying a gearmotor only without the starter, the customer must supply their own on/off switch and motor overload protection to comply with the CE Safety Directive.

Direct Mount, SEW Equivalent, Fixed Speed - 20 mm Shaft

230/460 V 60 Hz 410 (16.13)-Regulatory 143 (5.63) **Approvals** 205 (8.09) Sealed Gearmotor 63 (2.48) CE SEW SA37 Size gearmotor *BI* · Totally enclosed fan cooled 49 (1.93) 112 (4.40) 158 (6.21) 161 (6.33) 131 (5.16) · 230/460 V 3 Phase ł SP-• 60 Hz • Wiring by others - 57 (2.24) Left Hand Shown Chain Speed FK, FS, FM, FU, FV FC, FL in.-Starter RPM Part Number Ft/min M/min Ft/min M/min Нр kW Amps Nm Chart lbs. 0.25 FMM129(X)DS423EN 5.5 1.1/0.56 17.1 5.2 18 0.18 13 837 95 D FMM067(X)DS423EN 34.8 10.6 25 0.37 1.9/0.95 699 79 D 32.8 10 0.5 FMM032(X)DS423EN 69.9 21.3 73.8 22.5 53 0.75 0.55 2.7/1.35 653 74 D FMM015(X)DS423EN 150.3 45.8 158.5 114 50 48.3 0.75 3.1/1.57 444 D 1 FMM013(X)DS423EN 171.3 52.2 180.8 55.1 130 1 0.75 3.1/1.57 425 48 D FMM010(X)DS423EN 225.4 68.7 237.9 72.5 171 1.5 1.1 4.2/2.1 490 56 D

Where (X) is L or R for Right Hand or Left Hand Gearmotor matching RH or LH Drive

230/400 V 50 Hz

(224)

Regulatory 410 (16.13) **Approvals** - 143 (5.63) — 205 (8.09) Sealed Gearmotor Œ 63 (2.48) SEW SA37 Size gearmotor *BI* 49 (1.93) · Totally enclosed fan cooled 112 158 (6.21) 161 (6.33) 131 (5.16) (4.40)1 SP-· 230/400 V 3 Phase • 50 Hz - 57 (2.24) · Wiring by others Left Hand Shown Chain Speed

	FK, FS, F	M, FU, FV	FC,	FL					in -		Starter
Part Number	Ft/min	M/min	Ft/min	M/min	RPM	Hp	kW	Amps	lbs.	Nm	Chart
FMZ099(X)DS423EN	17.1	5.2	18	5.5	13	0.33	0.25	1.3/0.76	628	71	В
FMZ060(X)DS423EN	30.2	9.2	31.8	9.7	23	0.5	0.37	1.9/1.09	717	81	В
FMZ029(X)DS423EN	63.3	19.3	66.6	20.3	48	0.75	0.55	2.6/1.52	478	54	В
FMZ013(X)DS423EN	137.1	41.8	144.7	44.1	104	1	0.75	3.1/1.79	363	41	В
FMZ009(X)DS423EN	205.7	62.7	213.9	66.1	156	1.5	1.1	4.1/2.38	336	38	В
FMZ007(X)DS423EN	284.8	86.8	300.5	91.60	216	2	1.5	5.6/3.23	372	42	В

Where (X) is L or R for Right Hand or Left Hand Gearmotor matching RH or LH Drive

SEW gearmotors are products of SEW Eurodrive

C Note: When buying a gearmotor only without the starter, the customer must supply their own on/off switch and motor overload protection to comply with the CE Safety Directive.



Direct Mount, SEW Equivalent, Variable Speed - 20 mm Shaft



Where (X) is L or R for Right Hand or Left Hand Gearmotor matching RH or LH Drive

230/400 V 50 Hz

- Sealed Gearmotor
- SEW SA37 Size gearmotor
- Totally enclosed fan cooled
- 230/400 V 3 Phase
- 50 Hz
- Wiring by others



	Chain Speed										
	FK, FS, F	M, FU, FV	FC,	, FL					in		Startor
Part Number	Ft/min	M/min	Ft/min	M/min	RPM	Hp	kW	Amps	lbs.	Nm	Chart
FMZ099(X)DS423EN	3.4 - 17.1	1 - 5.2	3.6 - 18	1.1 - 5.5	13	0.33	0.25	1.3/0.76	628	71	В
FMZ060(X)DS423EN	6 - 30.2	1.8 - 9.2	6.4 - 31.8	1.9 - 9.7	23	0.5	0.37	1.9/1.09	717	81	В
FMZ029(X)DS423EN	12.7 - 63.3	3.9 - 19.3	13.3 - 66.6	4.1 - 20.3	48	0.75	0.55	2.6/1.52	478	54	В
FMZ013(X)DS423EN	27.4 - 137.1	8.4 - 41.8	28.9 - 144.7	8.8 - 44.1	104	1	0.75	3.1/1.79	363	41	В
FMZ009(X)DS423EN	41.1 - 205.7	12.5 - 62.7	43.4 - 213.9	13.2 - 66.1	156	1.5	1.1	4.1/2.38	336	38	В
FMZ007(X)DS423EN	57 - 284.8	17.4 - 86.8	60.1 - 300.5	18.3 - 91.60	216	2	1.5	5.6/3.23	372	42	В

Where (X) is L or R for Right Hand or Left Hand Gearmotor matching RH or LH Drive

SEW gearmotors are products of SEW Eurodrive

CE Note: When buying a gearmotor only without the starter, the customer must supply their own on/off switch and motor overload protection to comply with the CE Safety Directive.



Suspended Mount, SEW Equivalent, Fixed Speed - 20 mm Shaft



Where (X) is L or R for Right Hand or Left Hand Gearmotor matching RH or LH Drive



Where (X) is L or R for Right Hand or Left Hand Gearmotor matching RH or LH Drive

SEW gearmotors are products of SEW Eurodrive

CE Note: When buying a gearmotor only without the starter, the customer must supply their own on/off switch and motor overload protection to comply with the CE Safety Directive.



Suspended Mount, SEW Equivalent, Variable Speed - 20 mm Shaft



Where (X) is L or R for Right Hand or Left Hand Gearmotor matching RH or LH Drive



Where (X) is L or R for Right Hand or Left Hand Gearmotor matching RH or LH Drive

SEW gearmotors are products of SEW Eurodrive

CE Note: When buying a gearmotor only without the starter, the customer must supply their own on/off switch and motor overload protection to comply with the CE Safety Directive.





Variable Speed Controllers



In order for this drive to meet full CE requirements for European application a separate CE approve RFI filter must be installed. Product shown in chart B above have this filter pre-installed and are recommended for use in the European Union.

(0) = Optional M12 Accessory Port No Option = No Accessory Port E = M12 Port wired for End Stop Photo Eye Application I = M12 port wired for Index Photo Eye Application Note: E or I options will work with Dorner Control Stop or Jog Button Accessories

Jog Push Button Kit



Specifications

- Momentary contact
 push button
- Plastic Nema 12 enclosure
- Quick disconnect receptacle
- Mounting for 2200/3200
 and Support Stands
- · Horizontal or vertical mount







Not compatible with Brushless DC Controllers

Horizontal Mount

SEW gearmotors are products of SEW Eurodrive

CE Note: When buying a gearmotor only without the starter, the customer must supply their own on/off switch and motor overload protection to comply with the CE Safety Directive.



Manual Motor Starters

Manual motor starts are manual electronic disconnects that provide motor overload protection and are required by the National Electric Code (NEC) for safe motor operation.



Chart I 230/400V 50Hz to 2.5 amp

• 230 Volts, 1 phase includes cord, plug and starter

· 230/400 Volts, 3 phase wiring to starter by others

Wiring between motor and starter provided when ordered together
 50 Hz

Part Number	In Volts	In Phase	Amp Range	Illustration
62(c)M21T	230	1	1.6 - 2.5	A
62(c)M23T	230	3	1.0 - 1.6	B
62(c)M43T	400	3	0.63 - 1.0	B

Chart L 230/460V 60 Hz to 1.6 amp

• 230/460 Volts, 3 phase wiring to starter by others

• Wiring between motor and starter provided when ordered together

•	60	Н	Z

Part Number	In Volts	In Phase	Amp Range	Illustration
62MM23L	230	3	1.0 - 1.6	B
62MM43L	460	3	0.463	B

Chart P 230/460V 60Hz to 4 amp

· 230/460 Volts, 3 phase wiring to starter by others

• Wiring between motor and starter provided when ordered together • 60 Hz

Part Number	In Volts	In Phase	Amp Range	Illustration
62MM23U	208-230	3	2.5 - 4.0	B
62MM43P	460	3	1.6 - 2.5	B

Chart J 230/400V 50 Hz to 4 amp

· 230 Volts, 1 phase includes cord, plug and starter

• 230/400V, 3 phase wiring to starter by others

• Wiring between motor and starter provided when ordered together • 50 Hz

Part Number	In Volts	In Phase	Amp Range	Illustration
62(c)M21J	230	1	2.5 - 4.0	A
62(c)M23J	230	3	1.6 - 2.5	B
62(c)M43J	400	3	1.0 - 1.6	B

Chart M	230/460V 60Hz to 2.5 amp
	,,,

• 230/460 Volts, 3 phase wiring to starter by others

· Wiring between motor and starter provided when ordered together

• 60 Hz

Part Number	In Volts	In Phase	Amp Range	Illustration
62MM23M	208-230	3	1.6 - 2.5	B
62MM43M	460	3	1.0 - 1.6	B

Chart Q 230/460V 60Hz to 6.3 amp

• 230/460 Volts, 3 phase wiring to starter by others

Wiring between motor and starter provided when ordered together
 60 Hz

Part Number	In Volts	In Phase	Amp Range	Illustration
62MM23Q	208-230	3	4.0 - 6.3	B
62MM43Q	460	3	2.5 - 4.0	B

CENOTE: When buying a gearmotor only without the starter, the customer must supply their own on/off switch and motor overload protection to comply with NEC and CE safety directive.











Pallets

• Pallet Sizes: 105 mm Conveyor

			Length	
180 m	ım wide	100	150	200

- Recessed hardened stop plates provide complete access to full top plate for part tooling
- Maximum weight per pallet = 9 kg (20 lbs)
- Base Pucks
 - 19.05 mm (.75 in) thick molded static dissipative nylon
 - · Round shape to match conveyor guides
 - Optional cusioning bumper can be added to base pucks to reduce noise and impacts
- Pallet is 12.7 mm (.5 in) thick tool plate anodized aluminum
- Contains pin tracking system to guide pallet on conveyor and divert modules
- Pallets can be purchased as assembled units or as kits containing all components except for aluminum top plate
- See page 163 for pallet sensor brackets
- Available in North America only.







Cushioned



Non-Cushioned





Cushioned



70 [2.76]

Note: Dimensions = mm (in)

Non-Cushioned

Pallet Stops

- All stops are pneumatic single acting with spring return, double acting available
- Stops can be cushioned or non-cushioned for use with pallets
- Stops can be added to either side of the conveyor without guide modification
- · Optional sensor mounts for pallet
- Sensor mounts are for standard 12 mm diameter proximity switch
- Pallet assembly includes stop, mounting bracket, hardware and pneumatic push in fittings for 6.35 mm (.25 in) air line
- See page 163 for pallet sensor brackets
- Available in North America only.

Speed vs. Load Characteristics

Belt Speed M/min (ft./min)	Max. Allowed Accumulated Load Kg (lbs.)		
Cush	ioned Stops		
6.1 (20)	54 (120)		
9.1 (30)	36 (80)		
12.2 (40)	32 (70)		
18.3 (60)	27 (60)		
23 (75)	23 (50)		
31 (100)	16 (35)		

Belt Speed M/min (ft./min)	Max. Allowed Accumulated Load Kg (lbs.)				
Non-Cushioned Stops*					
6.1 (20)	68 (150)				
9.1 (30)	68 (150)				
12.2 (40)	68 (150)				
18.3 (60)	64 (140)				
23 (75)	55 (120)				
31 (100)	45 (100)				

FlexMove

*Note: Pallet bumpers are recommended.



Cushioned Pneumatic Schematic



Non-Cushioned Pneumatic Schematic

DORNER

FlexMcve



Divert Module with Sensors



Divert Module Only

Diverts and Merges

All merge and divert kits require pallet stops to be used for product traffic control. Stops are not included in the kit and should be ordered separately. Available in North America only.

Divert Models

- Pneumatic diverter position is adjustable in both positions
- Height of the divert arm is adjustable
- The assembly/kit is a combination of parts
- Requires the conveyor to have #18 guiding
- Cutting and fitting of the guiding is required
- Kit includes:
 - Divert assembly including pneumatic push in fittings for 6.35 mm (.25 in) air line
 - Turning wheel guide ring
 - Guide lead-in parts
 - Transition guiding and mounting clips
- Optional sensor mounts for diverter
- Sensor mounts are for air cylinder reed switch.
- Optional sensor mount for pallet
- Sensor mounts are for standard Dorner 18 mm barrel type photoeyes

Merge Models

- · This kit is for merge only and does not include a diverter
- · Requires the conveyor to have #18 guiding
- Cutting and fitting of the guiding is required
- Kit includes:
- Fixed merge guide
- Turning wheel guide ring
- (4) Guide lead-in parts
- Optional sensor mount for pallet
- Sensor mounts are for standard Dorner 18 mm barrel type photoeyes





(232)

PALLET SYSTEMS





Lift and Locate Module with Pallet in Located Position



Lift and Locate Module Only

Lift and Locates:

- Conveyor width: 105 mm
- Lifts from outside of conveyor provides 90.7 kg (200 lbs) of vertical holding force
- · Lifts pneumatic operated
- Rated for pressures up to 100 psi.
- Repeatable accuracy of ± .1 mm (0.004 in)
- · Includes (1) Cushioned or Non-Cushioned pallet stop
- · Includes sensor mounts for lift cylinder and pallet
- · Sensor mounts are for standard 12 mm diameter proximity switch
- Can be supported by conveyor or have SmartFlex support post added for additional support
- Includes push-in pneumatic push in fittings for 6.35 mm (.25 in) air line
- Available in North America only.





Pallet in Locked Location







Note: Dimensions = mm (in)



Regulatory Approvals:

Conveyors:

All Dorner FlexMove Series standard conveyors (not including gearmotors and controllers) are CE approved. CE approval follows the provisions of the following directives; Machine Directive 2006/42/EC, EU Low Voltage Directive 2006/95/EC, and EMC Directive 2004/108/EC. All conveyors are marked with the CE symbol on the Dorner serial number tag located on the conveyor frame. Contact the factory for the CE Declaration of Conformity.

All Dorner FlexMove Series standard conveyors (not including gearmotors and controllers) are designed and manufactured in accordance with the restrictions defined in the "Restriction of Hazardous Substances" directive, citation 2011/65/EU, commonly known as RoHS. All conveyors are marked with the RoHS symbols on the Dorner serial number tag located on the conveyor frame.

Gearmotors and Controllers:

All Dorner FlexMove Series gearmotors and controllers carry one or more of the following approvals. Products are not covered by each approval. Please see the appropriate part number on the Gearmotor and controller charts located in this manual. In addition, regulatory symbols are located on the product information tags located on the product.

CE	CE Marking on a product is a manufacturer's declaration that the product complies with the essential requirements of the relevant European health, safety and environmental protection legislation, in practice by the Product Directives. CE Marking on a product ensures the free movement of the product within the European Union (EU).
RoHS	This directive restricts (with exceptions) the use of six hazardous materials in the manu- facture of various types of electronic and electrical equipment. It is closely linked with the Waste Electrical and Electronic Equipment Directive (WEEE) 2002/96/EC which sets collec- tion, recycling and recovery targets for electrical goods and is part of a legislative initiative to solve the problem of huge amounts of toxic e-waste.
9 1	The UL Recognized Component mark is for products intended to be installed in another device, system or end product. This Recognized Component Mark is for the United States only. When a complete product or system containing UL Recognized Components is evaluated, the end-product evaluation process can be streamlined.
c FN us	The UL Recognized Component mark is for products intended to be installed in another device, system or end product. This Recognized Component Mark is for the United States and Canada. When a complete product or system containing UL Recognized Components is evaluated, the end-product evaluation process can be streamlined.
S ₽®®	CSA International (Canadian Standards Association), is a provider of product testing and certification services for electrical, mechanical, plumbing, gas and a variety of other products. Recognized in the U.S., Canada and around the world, CSA certification marks indicate that a product, process or service has been tested to a Canadian or U.S. standard and it meets the requirements of an applicable CSA standard or another recognized document used as a basis for certification.
cULus	The UL Listing Mark means UL found that representative product samples met UL's safety requirements. These requirements are primarily based on UL's own published standards for safety. The C-UL-US Mark indicates compliance with both Canadian and U.S. requirements. The products with this type of Mark have been evaluated to Canadian safety requirements and U.S. safety requirements.



Clean Room Certifications:

FlexMove Conveyors are often used in clean room applications where the generation of particulates from the conveyor are a concern. In these applications the correct installation and application of the conveyor is critical to the proper running of the conveyor and minimizing the dust generated by the conveyor belt or modular belt. The end user must ensure that the conveyor belts are properly tracked and product accumulation is minimized to providing minimal dust generation.

All of the FlexMove products are designed and constructed to be used in clean room environments. The following FlexMove Series products have gone through third party testing and certification and are certified for use in ISO Standard 14644-1 Class 5 and Federal Standard 209 Class 100 Clean Room applications.

FlexMove Series Flexible Chain Conveyor

Contact the factory for copy of the certification.



Slide Rail Specifications / Application Data

Part No.	FASR-25 FASR-25K	FASR-25U	FASR-25CD	FASR-25T	FASR-25X	FASR-3E
Material	HDPE	UHMW	Antistatic HDPE	PAPE/Superfric	Impregnated UHMW	HDPE
Color	White	White	Black	Grey	Blue	White
FDA approved	Yes	Yes	No	No	Yes	Yes
Coefficient of Friction	0.3	0.25	0.25 0.22		0.2	0.3
Temp Range	-20 to 60° C	-20 to 60° C	-20 to 60° C	-40 to 1250° C	-20 to 60° C	-20 to 60° C
Maximum Speed	50 M/min	60 M/min	50 M/min	120 M/min	60 M/min	50 M/min
Heavy Loads	Poor	Good	Poor	Excellent	Good	Poor
Elongation / wear resistance	Poor	Good	Poor	Excellent	Good	Poor
Chemical Resistance	Good, poor to petroleum based solvents	Good	Good, poor to petroleum based solvents	Good, not used with wet solvents	Good	Good, poor to petroleum based solvents
Application	General conveyance, lowest cost	High speed, moderate loads, low dust generation	Environments sensi- tive to static electricity	High speed, high load, dry applications only, abrasive particles	High speed, moderate loads, low dust generation	General conveyance, additional safety for FX series



TECHNICAL DATA AND CALCULATIONS

Chains

Series	FK	FS	FM	FC	FL	FU	FV
Chain width (mm)	44 mm	63 mm	83 mm	103 mm	150 mm	175 mm	255 mm
Chain width (inch)	1.73"	2.48"	3.27"	4.06"	5.91"	6.890"	10.039"
Tensile strength at 20°C (N)	3600 N	3400 N	4800 N				
Tensile strength at 68°F (lbf)	810 lbf	764 lbf	1079 lbf	1079 lbf	1079 lbf	1079 lbf	1079 lbf
Max. working tensile at 20°C (N)	500 N	500 N	1250 N	1250 N	1250 N	1250 N	1250 N
Max. working tensile at 68°F (lbf)	112 lbf	112 lbf	281 lbf				
Working temperature (°C)	-20 – 60°C						
Working temperature (°F)	-4 – 140°F						
Maximum conveyor speed (m/min)	50 m/min	58 m/min					
Maximum conveyor speed (ft/min)	165 ft/min	190 ft/min					
Max. conveyor length (m)	30 m						
Max. conveyor length (ft)	100 ft						
Min. turning radius (mm)	150 mm	150 mm	160 mm	170 mm	210 mm	500 mm	700 mm
Min. turning radius (inch)	5.91"	5.91"	6.30"	6.70"	7.87"	19.7"	27.6"
Link spacing (mm)	25.4 mm	25.4 mm	33.5 mm	35.5 mm	35.5 mm	33.5 mm	33.5 mm
Link spacing (inch)	1.0"	1.0"	1.32"	1.40"	1.40"	1.32"	1.32"
Chain weight (plain) (kg/m)	0.63 kg/m	0.75 kg/m	1.20 kg/m	1.67 kg/m	1.87 kg/m	2.0 kg/m	2.43 kg/m
Chain weight (plain) (lb/ft)	0.43 lb/ft	0.50 lb/ft	0.81 lb/ft	1.12 lb/ft	1.26 lb/ft	1.344 lb/ft	1.633 lb/ft
Max. weight on conveyor (kg/m)	30 kg/m	30 kg/m	60 kg/m	60 kg/m	60 kg/m	65 kg/m	65 kg/m
Max. weight on conveyor (lb/ft)	20 lb/ft	20 lb/ft	40 lb/ft	40 lb/ft	40 lb/ft	44 lb/ft	44 lb/ft
Item width (mm)	15 - 100 mm	15-140 mm	20-200 mm	25-300 mm	50-400 mm	50-400 mm	80 – 500 mm
Item width (inch)	0.6 - 4.0"	0.6 - 5.5"	0.8-7.9"	1.0-11.8"	2.0-15.7"	2.0 - 15.4"	3.2 - 19.7"
Series	FKPC -5CD	FSPC -5CD	FMPC -5CD	FCPC -5CD	FLPC -5CD	FUPC -5CD	FVPC -5CD
Tensile strength at 20°C (N)*	1440 N	1360 N	1920 N				
Tensile strength at 68°F (lfb)*	324 lbf	306 lbf	432 lbf				
Max working tensile at 20°C (N)*	200 N	200 N	500 N				
Max working tensile at 68°C (Ifb)*	45 lbf	45 lbf	112 lbf	112 lbf	112 lbf	112 lbf	112 lbf

*Stregnth of conductive chain is 40% of standard chain.



Drive Unit Specifications

Direct Drive unit

	FK	FS	FM	FC	FL	FU	FV
Number of Teeth on sprocket	16	16	12	12	12	12	12
Chain Pitch (mm)	25.4	25.4	33.5	35.5	35.5	33.5	33.5
Max. Traction force (N)	500	500	1250	1250	1250	1250	1250
Sprocket Diameter (mm)	128	128	128	135	135	135	135

Suspended Drive unit

	FK	FS	FM	FC	FL	FU	FV
Number of Teeth on sprocket	16	16	12	12	12	12	12
Chain Pitch (mm)	25.4	25.4	33.5	35.5	35.5	33.5	33.5
Max. Traction force (N)	500	500	1250	1250	1250	1250	1250
Sprocket Diameter (mm)	128	128	128	135	135	135	135

Catenary Drive unit

	FK	FS	FM	FC	FL	FU	FV
Number of Teeth on sprocket	N/A	16	12	12	N/A	N/A	N/A
Chain Pitch (mm)	N/A	25.4	33.5	35.5	N/A	N/A	N/A
Max. Traction force (N)	N/A	500	1250	1250	N/A	N/A	N/A
Sprocket Diameter (mm)	128	128	128	135	N/A	N/A	N/A

Intermediate Drive unit

	FK	FS	FM	FC	FL	FU	FV
Number of Teeth on sprocket	N/A	11	9	9	N/A	N/A	N/A
Chain Pitch (mm)	N/A	25.4	33.5	35.5	N/A	N/A	N/A
Max. Traction force (N)	N/A	200	200	200	N/A	N/A	N/A
Sprocket Diameter (mm)	88	88	98	101	101	N/A	N/A

Wheel Drive unit

	FK	FS	FM	FC	FL	FU	FV
Number of Teeth on sprocket	300	300	320	340	N/A	N/A	N/A
Chain Pitch (mm)	25.4	25.4	33.5	35.5	N/A	N/A	N/A
Max. Traction force (N)	200	200	200	200	N/A	N/A	N/A
Sprocket Diameter (mm)	273	273	277	272	N/A	N/A	N/A



Stand Location

Maximum Distances:

1 = 914 mm (36 in) 2 = 3048 mm (10 ft)*

(238)

* For conveyors longer than 3048 mm (10 ft), install support at joint.

Note: Additional support required on 180° curve modules.



Support must be provided directly at drive end. See accessories for Direct Mount and Suspended Mount support options.

Conveyor Drive Shaft Tolerances:



DORNER

Conveyor Load Capacity

There are several factors that effect the overall conveyor load of the FlexMove conveyor. These include:

- Conveyor size and configuration
- Product accumulation

- Conveyor speed
- Application temperature
- Number of starts and stops per hour
- Maximum Drive Unit Output

Located online at <u>www.dornerconveyors.com</u> is the Dorner conveyor configuration tool, DTools. This tool allows you to configure your conveyor layout and determine the maximum load capacity for the conveyor. It is suggested that this program be used to calculate the conveyor load as the calculation is quite complicated. This configuration program however does not take into account temperature, dirty conditions, and conveyor starts and stops. If these conditions are part of your application, please use the load reducing factors as shown below.

Maximum Load = (Load from DTools) (Temperature Factor) (Start/Stop Factor) *See following pages for factors.*

Nominal Maximum Load

A Nominal Maximum Load may be calculated without the use of DTools to determine if the conveyor can generally carry the application load. The following process can be used to calculate Nominal Maximum Load. It **does not** take into account the conveyor configuration. Please confirm your maximum load per application with the Dorner DTools program at <u>www.</u> dornerconveyors.com.





To calculate the Nominal Maximum Load:

Note: This does not include conveyor configuration. Please confirm load with Dorner online DTools configurator.

- 1. Determine your Basic Tension Limit from the above two graphs. The Basic Tension Limit is the lesser number of the two. Compare your tension limit to drive unit output. Your tension limit is the smaller.
- 2. Tension Limit = (Basic Tension Limit) (Temperature Factor) (Start/Stop Factor) (Accumulation Factor) (0.7) *See following pages for factors.*
- Nominal Maximum Load (kg) = (Tension Limit / Chain Coefficient of Friction) - (Conveyor length) (2) (Chain weight)

Nominal Maximum Load (lbs) = (Nominal Maximum Load (kg)) (2.2)

See following pages for Chain Coefficient of Friction. Nominal Maximum load may also be limited by available gearmotors. Conformation of gearmotor torque is required. See pages 28-31 for gearmotors available. Nominal Maximum load cannot exceed overall conveyor load limit of 300 lbs (136kg) for 65 mm wide and 600 lbs (273kg) for 105 mm and 150 mm wide.



Nominal Maximum Load (continued)

Example:

105 mm FlexMove by 20 meters total length running at 15 Meters/min. Accumulated load with dry metal parts running in a 40°C environment. Continuous running.

- Basic Tension Limit Tension vs. Speed = 1050N
- Basic Tension Limit Tension vs. Length = 1100N
- Therefore Basic Tension Limit = 1050N
- Tension Limit = (Basic Tension Limit) (Temperature Factor) (Start/Stop Factor) (Accumulation Factor) (0.7)
- Tension Limit = (1050) (0.9) (1.0) (0.5) (0.7) = 330N
- Nominal Maximum Load (kg) = (Tension Limit / Chain Coefficient of Friction) (Conveyor length) (2) (Chain weight)
- Nominal Maximum Load (kg) = (330 / 0.3) (20) (2) (16.4) = 1100 984 = 116 kg
- Nominal Maximum Load (lbs) = 116*2.2 = 256 lbs

Temperature Factor

Ambient temperature can negatively affect the tension capacity of the conveyor chain.							
Temperature (°F)	Temperature (°C)	Temperature Factor					
-4	-20	1.0					
32	0	1.0					
68	20	1.0					
104	40	0.9					
140	60	0.8					

Start / Stop Factor

Frequent Start / Stops of the conveyor can negatively affect the tension capacity of the conveyor chain. All start / stop applications must use a soft start mechanism such as a Frequency Inverter with a 1 second acceleration cycle.

Application Condition	Start / Ston Factor
Application contaction	
Continuous Run or 1 start/stop per hour	1.00
Maximum 10 starts/stop per hour	0.83
Maximum 30 starts/stop per hour	0.70
Greater than 30 starts/stop per hour	0.62

Accumulation Factor

Product accumulation greatly reduces the conveyor load capacity. Product accumulation may only be done with the plain chain. Based on the product being accumulated apply the below Accumulation Factor in determining your Nominal Maximum Load. All factors below are assuming dry conditions.

Product Being Accumulated	Typical Coefficient of Friction	Accumulation Factor
Steel	0.25	0.50
Glass	0.20	0.60
Aluminum	0.25	0.50
Plastic	0.25	0.50
Wood	0.30	0.40
Paper and Cardboard	0.30	0.40

Chain Coefficient of Friction

The following table provides the coefficient of friction between the standard UHMW wearstrips and the Acetal chain. Coefficient of friction as shown may be reduced by addition of a lubricant.

Application Condition	Coefficient of Friction
Dry	0.30
Water Lubrication	0.27
Coolant Lubrication	0.20
Oil Lubrication	0.20

Drive Unit Output Capacity, P(W) requirement depend on:

• Traction force F (N) • Chain speed V (m/min)

To calculate power, the equation is P = 1/60 (F x V)

There are several drive unit designs, the maximum permissible traction force on each type of drive unit as below:

	Maximum traction force in Newton (N)								
Drive unit type	FK	FS	FM	FC	FL	FU	FV		
End	500	500	1250	1250	1250	1250	1250		
Intermediate	200	200	200	200	200	N/A	N/A		
Catenary	500	500	1250	1250	1250	N/A	N/A		



TECHNICAL DATA AND CALCULATIONS

FlexMove

Conveyor Noise Level

The actual noise level generated by the conveyor depends on several factors; the installation configuration, the product running on the conveyor, the surrounding equipment, the conveyor options and chain speed. The noise level generated by the conveyor is typically less than the general noise level of factory equipment.

Generally a higher speed chain will result in a higher noise level. In addition, 65 mm conveyors will run slightly quieter, and power transfer tails will add a few decibel points as well. The following charts provide basic decibel ratings for typical conveyor arrangements, such as wheeled and plain bend corners, and power transfers.



Decibel ratings are taken approximately 3 feet away from the conveyor modules.



Bend Factors

Bend factors must be considered and calculated at every plain chain. It depends on the angle of the bend α in radians and friction coefficient μ between chain and slide rails. In application when conveyor is dry and clean, the friction coefficient μ is close to 0.1.

The bend factor is important to calculate since the frictional force of a plain bend depends not only on the weight of chain and product but also the actual the tension throughout the bend. The result an additional pressure force of the chain towards the conveyor beam directed toward the center of the bend. Since the chain tension varies throughout the conveyor, calculation of this additional pressure force is complicated. The highest values are present at the pulling side of the drive unit and virtually zero at the chain inlet. Using bend factor is the easiest way of including added friction in the plain bend for both horizontal and vertical into the calculation. Always use wheel bend unless for exceptional cases. If using plain bend is a must, the combined plain bends angle should not more than 180°, unless it is for a very short and light application.

Bend type, horizontal or vertical plain bend	Bend factor
30°1	.2
45°	1.3
60°1	.4
90°1	.6

8° inclined is the maximum a product could convey for plain chain whereas friction top chain could take up to 30°

Material

Material	FlexMove Parts
POM (PolyOxyMethylene)	Conveyor Chain, rollers
POM Conductive (PolyOxyMethylene)	Conductive chain
Aluminum, extruded & anodized	Angle bracket, beam support bracket, conveyor beam, support beam, guide rail, distance tube, fixed and adjustable side guide bracket, spacer
Steel, electro-zinc plated	Bolts and nuts, connecting strips, foot connecting strip
Steel, powder coated	Foot, connecting plate
PA, Polyamide	Chain pivot, side guide bracket, side guide support, drive and idler steering guide, end caps, wheel guide
Polyamide PA + Glass fiber	Drive sprocket, idler wheel
PVC, Polyvinyl Chloride	T-slot cover
HDPE, High Density Polyethylene	Slide rail, guide rail
UHMW-PE, Ultra High Molecular Weight Polyethylene	Slide Rail, drive and idler steering guides
PVDF, Polyvinylidene fluoride	Slide Rail
TPE, Thermoplastic Elastomer	Chain insert for friction top and wedge top



TECHNICAL DATA AND CALCULATIONS

FlexMove

Resistance to chemical

FlexMove® components can withstand continuous contact with most chemicals. However, it is recommended to avoid:

• Acids with pH less than 4 • Bases with pH higher than 9

The following table specifies the resistance of several material used in the conveyor on selected chemicals

Legend

1 = Very good2 = Good4 = Not recommended5 = No data available

3 = Moderate resistance

Material	Acetal POM	Polyamide PA	High-density Polyethylene HDPE	Thermoplastic Elastomer TPE	Aluminum AL
Acids:					
Acetic acid	3	4	3	-	2
Benzoic acid	3	4	1	-	4
Citric acid	3	2	2	-	2
Chromic acid	4	4	1	-	3
Hydrofluoric acid	4	4	1	-	4
Hydrochloric acid	4	4	1	-	3
Hydro cyanic acid	4	4	2	-	1
Nitric acid	4	4	4	-	3
Phosphoric acid	4	4	1	-	3
Sulphuric acid	4	4	2	1	3
Tartaric acid	3	2	1	-	1
Basic compounds:					
Ammonia	1	2	1	-	2
Calcium hydroxide	1	2	1	-	4
Caustic soda	1	2	1	1	3
Potassium hydroxide	1	2	1	-	4
Salts:					
Potassium bicarbonate	2	2	2	-	1
Potassium permanganate	2	4	2	-	1
Sodium cyanic	2	2	2	-	4
Sodium hydrochloride	3	4	1		4
Acid salt	2	3	1	-	-
Basic salt	1	2	1	-	-
Neutral salt	1	2	1	-	-

Chains

Material	Acetal POM	Polyamide PA	High-density Polyethylene HDPE	Thermoplastic Elastomer TPE	Aluminum AL
Organic compounds and solvents:					
Acetone	1	1	4	3	1
Benzene	1	1	4	3	1
Butyl alcohol	2	2	2	-	1
Carbon disulphide	1	1	3	-	1
Chloroform	1	1	4	-	-
Ethyl acetate	1	1	2	-	1
Ethyl alcohol	1	1	1	-	1
Heptane	2	2	2	-	-
Methyl alcohol	1	1	1	-	2
Methyl ethyl ketone	1	1	4	4	2
Nitrobenzene	2	2	3	-	1
Phenol	3	3	2	-	1
Gasses:					
Carbon dioxide	3	1	1	-	1
Carbon monoxide	2	1	1	-	1
Chlorine	2	4	3	-	1
Hydrogen sulphide	3	1	2	-	1
Sulphur dioxide	2	3	2	-	1
Others					
Beer	1	2	2	-	1
Fruit juices	1	2	3	-	2
Gasoline	1	2	2	-	- 1
Milk	1	- 1	2	-	. 1
Oil	1	1	2	-	1
Vinegar	1	2	3	-	1

Note: the table above is valid for temperature range up to 60°C and it is to be considered as guideline only. Furthermore, precautions should be taken when using cleaning agents. If you are in doubt on the material to withstand your special environment, you should go for chemical testing or contact our local distributor.

Static Electricity

The standard plastic materials used for conveyors have low electrical conductivity so staticelectricity can build up in the conveyor. When a conveyor is running under normal environment (20°C and humidity 60%) without load, the static electricity build up should be around the following figures:

Above the drive unit	1800-2500V
Idler end	400-500V
Above the wheel bend	400-500V
Above the straight section	250-350V

With the introduction of anti-static material for slide rail and chain, it shall meet the requirement for electronic industry.



Pallet Plate Details Dimensions

The following details are for standard pallets only. For other size pallets contact Dorner.



Pneumatic Specifications - FlexMove Pallet Modules

				Stroke Length		Beturn	Sensor	Force		Fitting	
Device	Action	Bore D	iameter			Туре	Compatible	per Bar	per Psi	Tap Size	Tube Size
Lift and Locate	2 lift cylinders	32mm	1.26 in	31 mm	1.22 in	Pneumatic	No	81 N	1.25 lb	R1/8-28	1/4 in
Divert 2 Position	divert cylinder	27 mm	1.06 in	35 mm	1.375 in	Pneumatic	Yes	58 N	0.88 lb	1/8 NPT	1/4 in
Divert 3 Position	extend cylinder	27 mm	1.06 in	33 mm	1.32 in	Pneumatic	Yes	58 N	0.88 lb	1/8 NPT	1/4 in
	middle position	27 mm	1.06 in	13 mm	0.51 in	Pneumatic	Yes	58 N	0.88 lb	1/8 NPT	1/4 in
Cushion Stop	Stop retract	35mm	1.39 in	9 mm	0.35 in	Spring	No	N/A	N/A	M5	1/4 in
Non-cushion Stop	Stop retract	35mm	1.39 in	9 mm	0.35 in	Spring	No	N/A	N/A	M5	1/4 in







PRODUCT SUMMARY

FlexMove

• Curves, Jogs,

Incline, Decline

FlexMove[®] Conveyors are best for:

- Part Handling
- Transfers
- Tight Spaces
- Elevation Changes
- Accumulation
 - Buffering

Sizes & Measurements

- 45 mm, 65 mm, 85 mm, 100 mm, 150 mm, 180 mm & 260 mm (1.7, 2.5, 3, 4, 6, 7 and 10 in) widths
- 0.6 m to 29.8 m (2 to 98 ft) lengths

Loads & Speeds

Long Lengths

- Up to 272 kgs (600 lbs)
- Up to 76 meters (250 feet) per minute

Complex Configurations

Plastic Chain Types

- Standard: Low Friction & Friction Insert
- Specialty

Modules

Drive

- Conductive
- Cleated
- Roller Top
- Magnet Top
- And Many More

Curve

from 15° to 180°

Flat

Idler

Incline/Decline

from 5° to 90°



Guiding

- Fully Adjustable Single Rail
- Other Options Available



Support Stands

· Single, Double and Multi Lane Structures Available





- **Roller Top**
- Cleated







Industrial



Pallet Systems



Flexible Chain



Sanitary Stainless Steel



Engineered Solutions Group

Custom engineered solutions for almost any application.



CAD Configurator Tool

Industry leading tool! Configure your own custom conveyor in minutes.

TRANSFORMING CONVEYOR AUTOMATION

Contact Dorner

United States +1-262-367-7600

Canada +1-289-208-7306

Malay

+52.33.30037400 Malaysia

Mexico

Malaysia +604-626-2948



DORNERCONVEYORS.COM

Germany +49 (0) 2461/93767-0 France +33 (0)1 84 73 24 27

-626-2948







MAGNETEK

CONVEYANCE SOLUTIONS

montratec

© Dorner Mfg. Corp. 2024. All Rights Reserved.