## ENGINEERING MANUAL

Complex Configurations \& Tight Spaces

High Speed Performance - Up to 76 mpm

Reduces
Conveyor Footprint

Ideal for Curves,
Inclines \& Declines


# FlexMe言을 

High Performance, Aluminum, Flexible Chain Conveyors

TRANSFERS


WHEEL CORNERS
ELIMINATECORNERFRICTION ALLOWING MULTIPLE CORNER CONFIGURATIONS

VERTICAL BENDS
FOR SMOOTH ELEVATION CHANGESANDEFFICIENT USE OF VERTICAL 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.

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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.
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## 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

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.

## 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.

## IdIer End Unit



The function of the idler end is to change the direction of the moving chain. Available in both standard idler end unit $\left(180^{\circ}\right)$ and idler bend unit $\left(90^{\circ}\right)$. It comes with 2 pc connecting strips at the connection end.

- Idler End Unit (standard $180^{\circ}$ )

The moving chain is transferred $180^{\circ}$ from the bottom of the conveyor beam to the top through a flange guide with minimal friction.

- Idler Bend Unit ( $90^{\circ}$ )

The idler bend unit converts and changes the chain direction in $90^{\circ}$ 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 $30^{\circ}, 45^{\circ}, 60^{\circ}, 90^{\circ}$ and $180^{\circ}$ 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 $90^{\circ}$ vertical bends in one conveyor.

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

## TWIST 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 $3 \mathrm{~m}(10 \mathrm{ft})$ long
- Speeds Up to 55 mpm (180 fpm)


## HELIX CONVEYORS



- 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


## HELICAL CURVE 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 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



## 45 mm (1.7 in)

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



## 65 mm (2.5 in)

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


65 MM WIDTH

## 85 mm (3.4 in)

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


85 MM WIDTH

## 105 mm (4.1 in)

- Maximum load $=60 \mathrm{~kg} / \mathrm{m}(40 \mathrm{lbs} / \mathrm{ft})$
- Maximum total load $=272 \mathrm{~kg}$ ( 600 lbs ) non-accumulated
- Maximum length $=30 \mathrm{~m}(98 \mathrm{ft})$
- Maximum Speed $=58 \mathrm{mpm}(190 \mathrm{fpm})$
$\qquad$



## 150 mm (5.9 in)

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


150 MM WIDTH

## 180 mm (7.1 in)

- Maximum load $=65 \mathrm{~kg} / \mathrm{m}$ (44 lbs/ft)
- Maximum total load $=272 \mathrm{~kg}$ (600 lbs) non-accumulated
- Maximum length $=30 \mathrm{~m}$ (98 ft)
- Maximum Speed $=58 \mathrm{mpm}$ (190 fpm)


180 MM WIDTH

## 260 mm (10.2 in)

- Maximum load = $65 \mathrm{~kg} / \mathrm{m}(44 \mathrm{lbs} / \mathrm{ft})$
- Maximum total load = 272 kg (600 lbs) non-accumulated
- Maximum length = 30 m (98 ft)
- Maximum Speed = 58 mpm (190 fpm)


260 MM WIDTH

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


45 MM WIDTH

Connecting strip is used to connect two beams.
Connecting Strip: FACS-20x140

## Conveyor Beam FKCB-3



UOM: 3 Meter / Length

Conveyor Half Beam FKCB-3H


UOM: 3 Meter / Length

## Chain Connecting Module FKCC-160



UOM: pc
$\qquad$ DORIER

## Chain Common Data

Packaging: 5 m per box
Pitch: 25.4 mm
Width: 44 mm
Tensile Strength at $20^{\circ} \mathrm{C}: 4000 \mathrm{~N}$
Color: White \& Black (Conductive)
Material:
Chain: White Acetal / POM
Pivot: Polyamide
Pivot Pin: Stainless Steel
Insert (Wedge \& Friction): TPE Grey

Standard Plain Chain FKPC-5


UOM: 5 Meter / box
Application: Suitable for horizontal and slope $<5^{\circ}$ transport of products with accumulation.

## Conductive Chain FKPC-5CD



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.


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

Friction Top Chain FKFT-5


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

## Wedge Top Chain FKWT-5D



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

## Wedge Top Chain FKWT-5C



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.

FK Direct End Drive without Motor (LEFT)
FKDD-A45-XDY (See Chart)

FK Direct End Drive without Motor (RIGHT)
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 | - | X | D | Y |
|  |  | $0=20 \mathrm{~mm}$ | L $=$ Left | Blank $=$ No Aux Shaft |
|  |  | R $=$ Right | A $=20 \mathrm{~mm}$ Aux Shaft |  |
|  |  | $A=20 \mathrm{~mm}$ Aux Only |  |  |



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) <br> 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 | - | X | D | Y |
|  |  | $0=20 \mathrm{~mm}$ | L = Left | Blank $=$ No Aux Shaft |
|  |  | $\mathrm{E}=3 / 4 \mathrm{in}$ * |  |  |
|  |  | A $=20 \mathrm{~mm}$ Aux Only | $\mathrm{R}=$ Right | A $=20 \mathrm{~mm}$ Aux Shaft |

[^0]

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 Direct Drive Driven Transfer Bridge (LEFT)
FKDD-A45DB-A-0L
FK Direct Drive Driven Transfer Bridge (RIGHT)
FKDD-A45DB-A-0R


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


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

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0
6
6



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

## 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

UOM: pc


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 $=100 \mathrm{~mm}$
Transfer extends past conveyor only 27 mm

## 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

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

FK Suspended Intermediate Drive without Motor (LEFT)
FKID-SD-0L1

FK Suspended Intermediate Drive without Motor (RIGHT)
FKID-SD-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 200 N


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

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

## FlexMove




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 from overload
- Limits chain pull capacity to 200 N

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

FK Suspended Catenary Drive without Motor (LEFT)
FKCD-SD-0L

FK Suspended Catenary Drive without Motor (RIGHT)
FKCD-SD-OR



Max Traction Force: 500N
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

## FK Direct Wheel Drive without Motor



Max Traction Force: 200N
The Drive Wheel Drive Unit is without torque limiter. FKWD-DD-OM 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



## Max Traction Force: 200N

The Suspended Wheel Drive Unit is with torque limiter. FKWD-SD-OM 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


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

## FKEB-A45-200

End transfer bridge c/w roller for FKIE-200


UOM: pc


FK Wheel Bend $90^{\circ}$


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

## UOM: pc

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

```
FK Wheel Bend 60
```



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

FK Wheel Bend $45^{\circ}$
FKWB-45R150A


## UOM: pc

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


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

## FK Wheel Bend $5^{\circ}-180^{\circ}$



## Example for FK Wheel Bend Ordering

- Wheel bend, $\varnothing^{\circ} \pm 1^{\circ}$
- FKWB- $\varnothing^{\circ}$ R150A

If an angle of $65^{\circ}$ is needed for wheel bend, the ordering part number is
FKWB-65R150A

The outer bend is assembled using connecting strip (FACS-20x140). Angle of $\varnothing^{\circ}$ must be indicated when ordering.

## FK Horizontal Plain Bend $15^{\circ}$



Horizontal plain bend, $15^{\circ} \pm 1^{\circ}$

| $\mathrm{R}=300 \pm 10 \mathrm{~mm}$ | FKHB-15R300 |
| :--- | :--- |
| $\mathrm{R}=500 \pm 10 \mathrm{~mm}$ | FKHB-15R500 |
| $\mathrm{R}=700 \pm 10 \mathrm{~mm}$ | FKHB-15R700 |
| $\mathrm{R}=1000 \pm 10 \mathrm{~mm}$ | 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 $30^{\circ}$



Horizontal plain bend, $30^{\circ} \pm 1^{\circ}$
$\mathrm{R}=300 \pm 10 \mathrm{~mm} \quad$ FKHB-30R300
$R=500 \pm 10 \mathrm{~mm} \quad$ FKHB-30R500
$\mathrm{R}=700 \pm 10 \mathrm{~mm} \quad$ FKHB-30R700
$R=1000 \pm 10 \mathrm{~mm} \quad$ 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
$\qquad$

## FK Horizontal Plain Bend $45^{\circ}$



Horizontal plain bend, $45^{\circ} \pm 1^{\circ}$
$R=300 \pm 10 \mathrm{~mm} \quad$ FKHB-45R300
$R=500 \pm 10 \mathrm{~mm} \quad$ FKHB-45R500
$\mathrm{R}=700 \pm 10 \mathrm{~mm} \quad$ FKHB-45R700
$\mathrm{R}=1000 \pm 10 \mathrm{~mm} \quad$ FKHB-45R1000

## FK Horizontal Plain Bend $60^{\circ}$



Horizontal plain bend, $60^{\circ} \pm 1^{\circ}$
$R=300 \pm 10 \mathrm{~mm} \quad$ FKHB-60R300
$R=500 \pm 10 \mathrm{~mm} \quad$ FKHB-60R500
$R=700 \pm 10 \mathrm{~mm} \quad$ FKHB-60R700
$R=1000 \pm 10 \mathrm{~mm}$
FKHB-60R1000

## FK Horizontal Plain Bend $90^{\circ}$



Horizontal plain bend, $9 \mathbf{0}^{\circ} \pm 1^{\circ}$
$R=300 \pm 10 \mathrm{~mm} \quad$ FKHB-90R300
$R=500 \pm 10 \mathrm{~mm} \quad$ FKHB-90R500
$R=700 \pm 10 \mathrm{~mm} \quad$ FKHB-90R700
$R=1000 \pm 10 \mathrm{~mm} \quad$ 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

## FK Horizontal Plain Bend $180^{\circ}$



## FK Horizontal Plain Bend 5-180



## Example for FK Horizontal Plain Bend Ordering

Horizontal plain bend, $\boldsymbol{\theta}^{\circ} \pm 1^{\circ}$
$R=300 \pm 10 \mathrm{~mm}$ FKHB- $\boldsymbol{\sigma}^{\circ}$ R300
$R=500 \pm 10 \mathrm{~mm}$ FKHB- $\boldsymbol{\varnothing}^{\circ}$ R500
$R=700 \pm 10 \mathrm{~mm}$
FKHB- $\boldsymbol{\varnothing}^{\circ}$ R700
$R=1000 \pm 10 \mathrm{~mm}$
FKHB- $\boldsymbol{\sigma}^{\circ}$ R1000

If an angle of $120^{\circ}$ is needed for radius R 500 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 $5^{\circ}-90^{\circ}$



## Example for FK Vertical Bend Ordering

- Vertical bend, $\varnothing^{\circ} \pm 1^{\circ}$
- FKVB- $\varnothing^{\circ}$ R300

If an angle of $65^{\circ}$ is needed for vertical bend, the ordering part number is

FKVB-65R300

The outer bend is assembled using connecting strip (FACS-20×140). Angle of $\varnothing^{\circ}$ must be indicated when ordering.
$\qquad$


UOM: pc
Chain required 2-way: 0.4 meter
Slide rail required 2-way: 0.7 meter

## FK Vertical Bend $10^{\circ}$

FKVB-10R300


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

FK Vertical Bend $15^{\circ} \quad$ FKVB-15R300


## UOM: pc

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


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


## FK Vertical Bend $60^{\circ}$ <br> FKVB-60R300



UOM: pc
Chain required 2-way: 0.9 meter Slide rail required 2-way: 1.9 meter

## FK Vertical Bend $90^{\circ}$

## FKVB-90R300



UOM: pc
Chain required 2 -way: 1.3 meter Slide rail required 2-way: 2.5 meter

## FX 45 X In-Line Transfer Module



- 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 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

## Conveyor Beam FSCB-3



UOM: 3 Meter / Length

Chain Connecting Module FSCC-160


UOM: pc


65 MM WIDTH

$\qquad$

## Chain Common Data

Packaging: 5 m per box
Pitch: 25.4 mm
Width: 63 mm
Tensile Strength at $20^{\circ} \mathrm{C}: 4000 \mathrm{~N}$
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\#
\# = $\mathbf{1}$ 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


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

Standard Plain Chain FSPC-5


## UOM: 5 Meter / box

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

## Wedge Top Chain FSWT-5C



## UOM: 5 Meter / box

Application: Vertical Wedge transportation of products. (Heavy Duty).

## Universal Chain FSUC-5



## UOM: 5 Meter / box

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


## UOM: 5 Meter / box

Application: Vertical Wedge transportation of products.

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 $>5^{\circ}$ but $\leq 35^{\circ}$ 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

## Conductive Chain FSPC-5CD



UOM: $\mathbf{5}$ Meter / box
Application: Suitable for transport of static sensitive product.

## Flocked Chain FSFK-5



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

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.

Cleat Top Chain-C FSCT-5C


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

Cleat Top Chain-A FSCT-5A30-L\#
$\#=1,2,3,4,5 \ldots . .20$


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

Magnet Top Chain FSMT-5


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

Cleat Top Chain-B FSCT-5B


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

## Magnet Top Chain FSMT-5-L\#

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


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

Stainless Steel Top Chain FSST-5S


## UOM: 5 Meter / box

Application: Suitable to transport metal products in accumulation.

## Roller Cleat Chain FSRC-5A-L\# <br> Rolier Cleat Chain FSRC-5A-L\#



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


Roller Top Chain FSRT-5

## UOM: 5 Meter / box

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


FS Direct End Drive without Motor (LEFT)
FSDD-A65-XDY (See Chart)

## FS Direct End Drive without Motor (RIGHT)

FSDD-A65-XDY (See Chart)


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 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 | - | X | D | Y |
|  |  | $0=20 \mathrm{~mm}$ | $\mathrm{L}=\mathrm{Left}$ | Blank $=$ No Aux Shaft |
|  |  | $\mathrm{E}=3 / 4 \mathrm{in}$ * |  |  |
|  |  | A $=20 \mathrm{~mm}$ Aux Only | $\mathrm{R}=$ Right | A $=20 \mathrm{~mm}$ Aux Shaft |

[^1]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

FS Direct with Power Transfer Motor (LEFT)
FSDD-A65PT-XD (See Chart)

FS Direct with Power Transfer Motor (RIGHT)
FSDD-A65PT-XD (See Chart)


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 $=100 \mathrm{~mm}$
Maximum speed is $30 \mathrm{~m} / \mathrm{min}$ ( $100 \mathrm{ft} / \mathrm{min}$ )
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 | - | $X$ | $D$ |
|  |  | $0=20 \mathrm{~mm}$ | L = Left |
|  | $E=3 / 4 \mathrm{in}^{\star}$ | $R=$ Right |  |

## 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

[^2]FS Direct Drive Driven Transfer Bridge (LEFT)
FSDD-A65DB-A-0L

FS Direct Drive Driven Transfer Bridge (RIGHT)
FSDD-A65DB-A-0R


UOM: pc

20 mm Shaft only.
Minimum product length for inline transfer $=100 \mathrm{~mm}$
Transfer extends past conveyor only 27 mm

FS Direct Drive Free Roller Transfer Bridge


Roller transfer bridge is sold separately.

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



Roller transfer bridge is sold separately.


## FSIE-A65TB

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


## FSEB-A65

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


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 500 N .


Max Traction Force: 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)
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.

# FS Suspended Intermediate Drive without Motor (LEFT) 

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 200 N .



## FlexMove

FS Suspended Catenary Drive without Motor (LEFT)
FSCD-SD

## FS Suspended Catenary Drive without Motor (RIGHT) <br> FSCD-SD



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

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

## 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
- Used on conveyors over 12 M long


UOM: pc


## FS Weighted Take-up Tail Module

FS-WTU_065


- Provides controlled chain take-up for improved conveyor performance



## UOM: pc

Chain required 1.5 meter
Slide rail required 2.1 meter


- 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 catenary
- Attaches to direct end drive tail
- Compatable with power transfer and driven bridge

FS Top Running Drive Module
FSTRD-203



Max Traction Force: 200N
The Direct Wheel Drive Unit is without torque limiter. FSWD-DD-OM 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-OM 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
$\qquad$

## FS Idler End-65

FSIE-A65


UOM: pc
Chain required 2-way: 0.8 meter
Slide rail required 2 -way: 0.5 meter
FS Idler End with Power Transfer (LEFT)
FSIE-A65PT-L
FS Idler End with Power Transfer (LEFT)
FSIE-A65PT-R


UOM: pc
Minimum product length for inline transfer $=100 \mathrm{~mm}$
Provides extended transfer nose for interfacing with large rollers.


FS Idler End Free Roller Bridge


UOM: pc

## FSEB-A65

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


## FS Idler End-200

FSIE-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





UOM: pc
Chain required 1-way: 0.6 meter
Slide rail: 0 meter
Note: Cannot be used with return chain

```
FS Wheel Bend \(180^{\circ}\)
```


## FSWB-180R150A



## 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

```
FS Wheel Bend 60
```



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


## FS Wheel Bend $5^{\circ}-180^{\circ}$



## Example for FS Wheel Bend Ordering

- Wheel bend, $\varnothing^{\circ} \pm 1^{\circ}$
- FSWB- $\boldsymbol{\theta}^{\circ}$ R150A

If an angle of $65^{\circ}$ is needed for wheel bend,
the ordering part number is
FSWB-65R150A

The outer bend is assembled using connecting strip (FACS-25x140A). Angle of $\varnothing^{\circ}$ must be indicated when ordering.

## FS Horizontal Plain Bend $15^{\circ}$



Horizontal plain bend, $15^{\circ} \pm 1^{\circ}$

| $R=300 \pm 10 \mathrm{~mm}$ | FSHB-15R300 |
| :--- | :--- |
| $R=500 \pm 10 \mathrm{~mm}$ | FSHB-15R500 |
| $R=700 \pm 10 \mathrm{~mm}$ | FSHB-15R700 |
| $R=1000 \pm 10 \mathrm{~mm}$ | FSHB-15R1000 |

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

## FS Horizontal Plain Bend $30^{\circ}$



Horizontal plain bend, $30^{\circ} \pm 1^{\circ}$

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

UOM: pc
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

## FS Horizontal Plain Bend $45^{\circ}$



Horizontal plain bend, $45^{\circ} \pm 1^{\circ}$

| $\mathrm{R}=300 \pm 10 \mathrm{~mm}$ | FSHB-45R300 |
| :--- | :--- |
| $\mathrm{R}=500 \pm 10 \mathrm{~mm}$ | FSHB-45R500 |
| $\mathrm{R}=700 \pm 10 \mathrm{~mm}$ | FSHB-45R700 |
| $\mathrm{R}=1000 \pm 10 \mathrm{~mm}$ | FSHB-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

## FS Horizontal Plain Bend $60^{\circ}$



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

## FS Horizontal Plain Bend $90^{\circ}$

## Horizontal plain bend, $60^{\circ} \pm 1^{\circ}$

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



## FS Horizontal Plain Bend $180^{\circ}$



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 $5^{\circ}-180^{\circ}$



## Example for FS Horizontal Plain Bend Ordering

Horizontal plain bend, $\boldsymbol{\theta}^{\circ} \pm 1^{\circ}$

| $\mathrm{R}=\mathbf{3 0 0} \pm 10 \mathrm{~mm}$ | FSHB- $\boldsymbol{\varnothing}^{\circ} \mathbf{3 0 0}$ |
| :--- | :--- |
| $\mathrm{R}=500 \pm 10 \mathrm{~mm}$ | FSHB- $\boldsymbol{\varnothing}^{\circ} \mathbf{5 0 0}$ |
| $\mathrm{R}=700 \pm 10 \mathrm{~mm}$ | FSHB- $\boldsymbol{\varnothing}^{\circ} \mathbf{7 0 0}$ |
| $\mathrm{R}=1000 \pm 10 \mathrm{~mm}$ | FSHB- $\boldsymbol{\varnothing}^{\circ} \mathbf{1 0 0 0}$ |

If an angle of $120^{\circ}$ 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)

## FS Vertical Bend $5^{\circ} \quad$ FSVB-5R300



UOM: pc
Chain required 2-way: 0.4 meter
Slide rail required 2-way: 0.7 meter
$\qquad$

## FS Vertical Bend $10^{\circ}$



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

## FS Vertical Bend $15^{\circ}$ <br> FSVB-15R300



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


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

```
FS Vertical Bend 30
```



UOM: pc
Chain required 2-way: 0.6 meter Slide rail required 2-way: 1.3 meter


UOM: pc
Chain required 2-way: 0.8 meter Slide rail required 2-way: 1.6 meter

## FS Vertical Bend $60^{\circ} \quad$ FSVB-60R300



UOM: pc
Chain required 2-way: 0.9 meter Slide rail required 2 -way: 1.9 meter

FS Vertical Bend $90^{\circ} \quad$ FSVB-90R300


UOM: pc
Chain required 2-way: 1.3 meter Slide rail required 2-way: 2.5 meter

## FS Vertical Bend $5^{\circ}-90^{\circ}$



Example for FS Vertical Bend Ordering

- Vertical bend, $\varnothing^{\circ} \pm 1^{\circ}$
- FSVB- $\varnothing^{\circ}$ R300

If an angle of $65^{\circ}$ is needed for vertical bend, the ordering part number is

FSVB-65R300
The outer bend is assembled using connecting strip (FACS-25x140A). Angle of $\varnothing^{\circ}$ must be indicated when ordering.
$\qquad$

FS 45 Degree Twist Conveyor Beam (Clockwise)
FSTB-CW $45 \times 3000$
FSTB-CW45×3000


Chain required: 6 meter Slide rail required: 12 meter

## FS 90 Degree Twist Conveyor Beam (Clockwise)

FSTB-CW90x3000


Slide rail required: 12 meter

FS 45 Degree Twist Conveyor Beam (Counter-Clockwise)
FSTB-CCW45x3000


## FS 90 Degree Twist Conveyor Beam (Counter-Clockwise) <br> FSTB-CCW90x3000

CCW, $90^{\circ}$


FS Twist Conveyor Beam $15^{\circ}-90^{\circ}$
FSTB-AAABBx3000 Where AAA $=C W$ or CCW, BB $=$ Angle


Example for FS Twist Conveyor Beam Ordering

- Twist Conveyor Beam, $\varnothing^{\circ} \pm 5^{\circ}$

If an angle of $30^{\circ}$ is needed for twist beam, in clockwise direction and length 3.0 m , the ordering part number is

## FSTB-CW30x3000

Angle of $\emptyset^{\circ}$, twist direction, and length $L$, must be indicated when ordering.

## UOM: pc

Chain required: 6 meter
Slide rail required: 12 meter

## FS 65 In-Line Transfer Module

## F65ST-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 65 X In-Line Transfer Module

F65XT-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
- XIn-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.


85 MM WIDTH

Connecting Strip: FACS-25x140A

```
Conveyor Beam FMCB-3
```



UOM: 3 Meter / Length

```
Chain Connecting Module FMCC-160
```



UOM: pc


## Chain Common Data

Packaging: 5 m per box
Pitch: 33.5 mm
Width: 83 mm
Tensile Strength at $20^{\circ} \mathrm{C}: 6000 \mathrm{~N}$ 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

Twist Chain FMPC-5M


## UOM: 5 Meter / box

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

Standard Plain Chain FMPC-5


UOM: 5 Meter / box
Application: Suitable for horizontal and slope $<5^{\circ}$ 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: (Safety Chain) Suitable for transport product in slope $>5^{\circ}$ but $\leq 30^{\circ}$ without accumulation.


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


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

Friction Top Chain FMFT-5A


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

Wedge Top Chain FMWT-5C


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


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


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

Magnet Top Chain FMMT-5


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

Magnet Top Chain FMMT-5-L\#


## UOM: 5 Meter / box

Application: Suitable for conveying of ferromagnetic products in slope.

Flocked Chain FMFK-5


## UOM: 5 Meter / box

Application: Suitable to transport lightweight, fragile and scratch sensitive product.


## 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.

Roller Cleat Chain FMRC-5A-L\#

$$
\#=1,2,3,4,5 \ldots . .20
$$



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

Roller Cleat Chain FMRC-5B-L\#


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

Cleat Top Chain FMCT-5A17-L\#
\# = 1, 2, 3, 4, 5..... 20


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

## Cleat Top Chain FMCT-5A30-L\#

$\#=1,2,3,4,5 \ldots . . .20$


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

Safety Chain with rollers FMPC-5VR


UOM: 5 Meter / box
Application: Suitable for transport product in slope $>5^{\circ}$ but $<=30^{\circ}$ without accumulation. (Subject to product weight and Packing)


- 33.5 -

UOM: 5 Meter / box
Application: Suitable for horizontal and slope $<5^{\circ}$ transport of products with accumulation.


UOM: 5 Meter / box
Application: Suitable for transport product in slope $>5^{\circ}$ but $<=30^{\circ}$ without accumulation. (Subject to product weight and Packing)


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

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


| Part Number |  | Shaft Selection | Direction | Aux Shaft Selection |
| :---: | :---: | :---: | :---: | :---: |
| FMDD-A85 | - | X | D | Y |
|  |  | $0=20 \mathrm{~mm}$ | L = Left | Blank $=$ No Aux Shaft |
|  |  | $\mathrm{E}=3 / 4 \mathrm{in}$ * |  |  |
|  |  | A $=20 \mathrm{~mm}$ Aux Only | $\mathrm{R}=$ Right | A $=20 \mathrm{~mm}$ 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: 0.5 meter

[^3]

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

| Part Number |  | Shaft Selection | Direction | Aux Shaft Selection |
| :---: | :---: | :---: | :---: | :---: |
| FMDD-A85GP | - | X | D | Y |
|  |  | $0=20 \mathrm{~mm}$ | $\mathrm{L}=$ Left | Blank = No Aux Shaft |
|  |  | $\mathrm{E}=3 / 4 \mathrm{in}$ * |  |  |
|  |  | A $=20 \mathrm{~mm}$ Aux Only | $\mathrm{R}=$ Right | A $=20 \mathrm{~mm}$ Aux Shaft |

[^4]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

FM Direct with Power Transfer Motor (LeFT)
FMDD-A85PT-XD (See Chart)

FM Direct with Power Transfer Motor (RIGHT)
FMDD-A85PT-XD (See Chart)


Minimum product length for inline transfer $=100 \mathrm{~mm}$ Maximum speed is $30 \mathrm{~m} / \mathrm{min}$ ( $100 \mathrm{ft} / \mathrm{min}$ )


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.

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

## FM GP Direct with Power Transfer Motor (RIGHT)

FMDD-A85GPPT-XD (See Chart)


Minimum product length for inline transfer $=100 \mathrm{~mm}$
Maximum speed is $30 \mathrm{~m} / \mathrm{min}(100 \mathrm{ft} / \mathrm{min})$
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 |
| :---: | :---: | :---: | :---: |
| FMDD-A85GPPT |  | X | $D$ |
|  |  | $0=20 \mathrm{~mm}$ | L $=$ Left |
|  |  | $R=$ Right |  |

[^5]
## 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
$\qquad$


20 mm Shaft only.
Minimum product length for inline transfer $=100 \mathrm{~mm}$
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

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


## 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


UOM: pc

## FMEB-A85

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

UOM: pc


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)


- Locates gearmotor below conveyor for compact applications.
- Includes torque limiter protecting chain and motor from overload.
- Chain pull capacity at 1250 N for unit without torque limiter.
- Chain pull capacity at 840 N for unit with 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: 0.5 meter

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

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


- 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.


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

FM Suspended Intermediate Drive without Motor (LEFT)<br>FMID-SD-0L1

## FM Suspended Intermediate Drive without Motor (RIGHT) <br> FMID-SD-0R1



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


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

FM Combined Direct Drive \& Idler (LEFT)
FMCDI-DD-A85

## FM Combined Direct Drive \& Idler (RIGHT)

FMCDI-DD-A85


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

## FM SERIES: 85 mm Conveyor System

## FlexMove

$\qquad$


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




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

## FM SERIES: 85 mm Conveyor System



## FM Weighted Take-up Tail Module

## FM-WTU-085



- 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


UOM: pc
Chain required 1.5 meter Slide rail required 2.1 meter

## FlexMove



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



## FM Direct Wheel Drive without Motor

FMWD-DD-0M


## FM Suspended Wheel Drive without Motor

FMWD-SD-0M

## Max Traction Force: 200N

The Direct Wheel Drive Unit is without torque limiter. FMWD-DD-OM 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


## Max Traction Force: 200N

The Suspended Wheel Drive Unit is with torque limiter. FMWD-SD-OM 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
$\qquad$


FM Idler End with Power Transfer (LEFT)
FMIE-A85PT-L


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

## FM Idler End with Power Transfer (LEFT)

FMIE-A65PT-R


UOM: pc
Minimum product length for inline transfer $=100 \mathrm{~mm}$
Provides extended transfer nose for interfacing with large rollers.

## FM Idler End Driven Transfer Bridge (LEFT)

FMIE-A85DB-L


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


## FM Direct Drive Driven Transfer Bridge (RIGHT)

FMIE-A85DB-R


Minimum product length for inline transfer $=100 \mathrm{~mm}$ Transfer extends past conveyor only 27 mm

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

## FM Ider Free Roller Transfer Bridge




## FMTB-A85

Transfer bridge c/w roller for FMIE-A85, FMDD-A85-XDY and FMDD-A85GP-XDY


UOM: pc


## FlexMove

FM Idler End Free Roller Bridge


UOM: pc

FM Idler End-315



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

FMIB-300


UOM: pc
Chain required 1-way: 0.6 meter
Slide rail: 0 meter
Note: Cannot be used with return chain


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


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

## FM Wheel Bend $45^{\circ}$

FMWB-45R160A


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

## FM Wheel Bend $30^{\circ}$

FMWB-30R160A


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

FM Wheel Bend $5^{\circ}-180^{\circ}$


## Example for FM Wheel Bend Ordering

- Wheel bend, $\varnothing^{\circ} \pm 1^{\circ}$
- FMWB- $\varnothing^{\circ}$ R160A

If an angle of $65^{\circ}$ is needed for wheel bend, the ordering part number is
FMWB-65R160A
The outer bend is assembled using connecting strip (FACS-25x140A). Angle of $\varnothing^{\circ}$ must be indicated when ordering.

## FM Horizontal Plain Bend $15^{\circ}$



Horizontal plain bend, $15^{\circ} \pm 1^{\circ}$

| $R=300 \pm 10 \mathrm{~mm}$ | FMHB-15R300 |
| :--- | :--- |
| $R=500 \pm 10 \mathrm{~mm}$ | FMHB-15R500 |
| $R=700 \pm 10 \mathrm{~mm}$ | FMHB-15R700 |
| $R=1000 \pm 10 \mathrm{~mm}$ | FMHB-15R1000 |

UOM: pc
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 $30^{\circ}$



Horizontal plain bend, $30^{\circ} \pm 1^{\circ}$

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

UOM: pc
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

## FM Horizontal Plain Bend $45^{\circ}$



Horizontal plain bend, $45^{\circ} \pm 1^{\circ}$
$R=300 \pm 10 \mathrm{~mm} \quad$ FMHB-45R300
$R=500 \pm 10 \mathrm{~mm} \quad$ FMHB-45R500
$R=700 \pm 10 \mathrm{~mm} \quad$ FMHB-45R700
$R=1000 \pm 10 \mathrm{~mm} \quad$ FMHB-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, 2.9, 3.3, 3.9 meter

## FM Horizontal Plain Bend $60^{\circ}$



Horizontal plain bend, $60^{\circ} \pm 1^{\circ}$

| $\mathrm{R}=300 \pm 10 \mathrm{~mm}$ | FMHB-60R300 |
| :--- | :--- |
| $\mathrm{R}=500 \pm 10 \mathrm{~mm}$ | FMHB-60R500 |
| $\mathrm{R}=700 \pm 10 \mathrm{~mm}$ | FMHB-60R700 |
| $\mathrm{R}=1000 \pm 10 \mathrm{~mm}$ | 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 $90^{\circ}$


Horizontal plain bend, $90^{\circ} \pm 1^{\circ}$

| $\mathrm{R}=300 \pm 10 \mathrm{~mm}$ | FMHB-90R300 |
| :--- | :--- |
| $\mathrm{R}=500 \pm 10 \mathrm{~mm}$ | FMHB-90R500 |
| $\mathrm{R}=700 \pm 10 \mathrm{~mm}$ | FMHB-90R700 |
| $\mathrm{R}=1000 \pm 10 \mathrm{~mm}$ | 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 $180^{\circ}$

Horizontal plain bend, $180^{\circ} \pm 1^{\circ}$

| $R=300 \pm 10 \mathrm{~mm}$ | FMHB-180R300 |
| :--- | :--- |
| $R=500 \pm 10 \mathrm{~mm}$ | FMHB-180R500 |
| $R=700 \pm 10 \mathrm{~mm}$ | FMHB-180R700 |
| $R=1000 \pm 10 \mathrm{~mm}$ | 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 $5^{\circ}-180^{\circ}$



Example for FM Horizontal Plain Bend Ordering

Horizontal plain bend, $\boldsymbol{\theta}^{\circ} \pm 1^{\circ}$
$\mathrm{R}=300 \pm 10 \mathrm{~mm} \quad$ FMHB- $\boldsymbol{\varnothing}^{\circ} \mathrm{R} 300$
$R=500 \pm 10 \mathrm{~mm} \quad$ FMHB- $\boldsymbol{\varnothing}^{\circ} \mathbf{R} 500$
$\mathrm{R}=700 \pm 10 \mathrm{~mm} \quad$ FMHB- $\boldsymbol{\varnothing}^{\circ} \mathrm{R} 700$
$\mathrm{R}=1000 \pm 10 \mathrm{~mm} \quad$ FMHB- $\boldsymbol{\varnothing}^{\circ} \mathbf{R} \mathbf{1 0 0 0}$

If an angle of $120^{\circ}$ 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)

## FM Vertical Bend $5^{\circ} \quad$ FMVB-5R400



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

## FM Vertical Bend $10^{\circ} \quad$ FMVB-10R400



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

## FM Vertical Bend $15^{\circ}$

FMVB-15R400


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


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

FMVB-30R400


UOM: pc
Chain required 2-way: 0.7 meter Slide rail required 2-way: 1.5 meter

FM Vertical Bend $45^{\circ}$
FMVB-45R400



Chain required 2-way: 0.9 meter Slide rail required 2 -way: 1.9 meter

## FMVB-60R400



## FM Vertical Bend $90^{\circ}$

## FMVB-90R400

## UOM: pc

Chain required 2-way: 1.2 meter Slide rail required 2-way: 2.3 meter


UOM: pc
Chain required 2-way: 1.6 meter Slide rail required 2-way: 3.2 meter

## FM Vertical Bend $5^{\circ}-90^{\circ}$

## Example for FM Vertical Bend Ordering



- Vertical bend, $\varnothing^{\circ} \pm 1^{\circ}$
- FMVB- $\varnothing^{\circ}$ R400

If an angle of $65^{\circ}$ is needed for vertical bend, the ordering part number is
FMVB-65R400

[^6]

Example for FM Twist Conveyor Beam Ordering

- Twist Conveyor Beam, $\varnothing^{\circ} \pm 5^{\circ}$

If an angle of $30^{\circ}$ is needed for twist beam, in clockwise direction and length 3.0 m , the ordering part number is

## FMTB-CW30x3000

Angle of $\varnothing^{\circ}$, twist direction, and length L, must be indicated when ordering.

## UOM: pc

Chain required: 6 meter
Slide rail required: 12 meter

## FlexMove

## FS 85 In-Line Transfer Module

F85ST-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



## FX 85 X In-Line Transfer Module

## F85XT-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


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-25×140A


105 MM WIDTH


## Chain Common Data

Packaging: 5 m per box
Pitch: 35.5 mm
Width: 103 mm
Tensile Strength at $20^{\circ} \mathrm{C}: 6000 \mathrm{~N}$
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 $<5^{\circ}$ transport of products with accumulation.

Conductive Chain FCPC-5CD


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

## Cleat Top Chain FCCT-5A30-L\#

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

## 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.
$\qquad$

Roller Cleat Chain FCRC-5A-L\#


## UOM: 5 Meter / box

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

Friction Top Chain FCFT-5A


## UOM: 5 Meter / box

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

Roller Cleat Chain FCRC-5B-L\#


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

Friction Top Chain FCFT-5B


## UOM: 5 Meter / box

Application: Suitable for transport product in slope $>5^{\circ}$ but $\leq 40^{\circ}$ without accumulation.

Friction Top Chain FCFT-5


## UOM: 5 Meter / box

Application: Suitable for transport product in slope $>5^{\circ}$ but $\leq 30^{\circ}$ 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.

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.


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


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

```
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 |  | Shaft Selection | Direction | Aux Shaft Selection |
| :---: | :---: | :---: | :---: | :---: |
| FCDD-A105 | - | X | D | Y |
|  |  | $0=20 \mathrm{~mm}$ | L = Left | Blank $=$ No Aux Shaft |
|  |  | $\mathrm{E}=3 / 4 \mathrm{in}$ * |  |  |
|  |  | A $=20 \mathrm{~mm}$ Aux Only | $\mathrm{R}=$ Right | A $=20 \mathrm{~mm}$ 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: 0.5 meter
*3/4 inch shaft option available in North America only.

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

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


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

| Part Number |  | Shaft Selection | Direction | Aux Shaft Selection |
| :---: | :---: | :---: | :---: | :---: |
| FCDD-A105GP | - | X | D | Y |
|  |  | $0=20 \mathrm{~mm}$ | L = Left | Blank $=$ No Aux Shaft |
|  |  | $\mathrm{E}=3 / 4 \mathrm{in}$ * |  |  |
|  |  | A $=20 \mathrm{~mm}$ Aux Only | $\mathrm{R}=$ Right | A $=20 \mathrm{~mm}$ 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: 0.5 meter

[^7]
## FC Direct with Power Transfer Motor (RIGHT)

FCDD-A105PT-XD (See Chart)


Minimum product length for inline transfer $=100 \mathrm{~mm}$
Maximum speed is $30 \mathrm{~m} / \mathrm{min}$ ( $100 \mathrm{ft} / \mathrm{min}$ )
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 | - | $X$ | D |
|  |  | $0=20 \mathrm{~mm}$ | L $=$ Left |
|  |  | $\mathrm{R}=$ 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.


Minimum product length for inline transfer $=100 \mathrm{~mm}$
Maximum speed is $30 \mathrm{~m} / \mathrm{min}$ ( $100 \mathrm{ft} / \mathrm{min}$ )
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 | - | $X$ | $D$ |
|  |  | $0=20 \mathrm{~mm}$ | $\mathrm{~L}=$ Left |
|  | $\mathrm{E}=3 / 4 \mathrm{in}^{*}$ | $\mathrm{R}=$ Right |  |

## 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
$\qquad$


## FC Direct Drive End Free Roller Bridge (LEFT/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

## 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


UOM: pc


FC Suspended End Drive without Motor (RIGHT)
FCSD-A105-0R (with Torque Limiter)
FCSD-A105SPT-0R (without 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

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

FC Direct Intermediate Drive without Motor (LEFT)
FCID-DD-0L1

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


FC Direct Intermediate Drive without Motor (RIGHT)
FCID-DD-0R1


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


FC Suspended Intermediate Drive without Motor (RIGHT)
FCID-SD-0R1


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 Suspended Catenary Drive without Motor (RIGHT)
FCCD-SD-OR



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 $0.25 \mathrm{~kW}, 0.37 \mathrm{~kW}$ \& 0.55 kW . 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

## FC Weighted Take-up Module



- 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


Chain required 1.5 meter
Slide rail required 2.1 meter

## FC Weighted Take-up Tail Module

## FC-WTU-105



- 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 catenary
- Attaches to direct end drive tail
- Compatable with power transfer and driven bridge



UOM: pc
Chain required 1.5 meter Slide rail required 2.1 meter


## FlexMove

## FC Top Running Drive Module

FCTRD-203


FC Suspended Wheel Drive without Motor
FCWD-SD-0M


## Max Traction Force: 200N

The Suspended Wheel Drive Unit is with torque limiter. FCWD-SD-OM 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
$\qquad$



## FC Idler End-308

FMIE-308


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


UOM: pc
Chain required 2-way: 1.4 meter Slide rail required 2-way: 1.4 meter

```
FC Wheel Bend 90
```



UOM: pc
Chain required 2-way: 0.9 meter
Slide rail required 2-way: 0.9 meter

```
FC Wheel Bend 60
```


## FCWB-60R170A



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

```
FC Wheel Bend 45
```

FCWB-45R170A


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

```
FC Wheel Bend 30
```


## FCWB-30R170A



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

## FC Wheel Bend $5^{\circ}-180^{\circ}$



## Example for FC Wheel Bend Ordering

- Wheel bend, $\varnothing^{\circ} \pm 1^{\circ}$
- FCWB- $\varnothing^{\circ}$ R170A

If an angle of $65^{\circ}$ is needed for wheel bend, the ordering part number is

## FCWB-65R170A

The outer bend is assembled using connecting strip (FACS-25×140A). Angle of $\emptyset^{\circ}$ must be indicated when ordering.

## FC Horizontal Plain Bend $15^{\circ}$



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 $30^{\circ}$


Horizontal plain bend, $30^{\circ} \pm 1^{\circ}$

| $R=300 \pm 10 \mathrm{~mm}$ | FCHB-30R300 |
| :--- | :--- |
| $R=500 \pm 10 \mathrm{~mm}$ | FCHB-30R500 |
| $R=700 \pm 10 \mathrm{~mm}$ | FCHB-30R700 |
| $R=1000 \pm 10 \mathrm{~mm}$ | 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

## FC Horizontal Plain Bend $45^{\circ}$



Horizontal plain bend, $45^{\circ} \pm 1^{\circ}$

| $R=300 \pm 10 \mathrm{~mm}$ | FCHB-45R300 |
| :--- | :--- |
| $R=500 \pm 10 \mathrm{~mm}$ | FCHB-45R500 |
| $R=700 \pm 10 \mathrm{~mm}$ | FCHB-45R700 |
| $R=1000 \pm 10 \mathrm{~mm}$ | 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

## FC Horizontal Plain Bend $60^{\circ}$



Horizontal plain bend, $6 \mathbf{0}^{\circ} \pm 1^{\circ}$

| $R=300 \pm 10 \mathrm{~mm}$ | FCHB-60R300 |
| :--- | :--- |
| $R=500 \pm 10 \mathrm{~mm}$ | FCHB-60R500 |
| $R=700 \pm 10 \mathrm{~mm}$ | FCHB-60R700 |
| $R=1000 \pm 10 \mathrm{~mm}$ | 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

## FC Horizontal Plain Bend $90^{\circ}$



## Horizontal plain bend, $90^{\circ} \pm 1^{\circ}$

| $\mathrm{R}=300 \pm 10 \mathrm{~mm}$ | FCHB-90R300 |
| :--- | :--- |
| $\mathrm{R}=500 \pm 10 \mathrm{~mm}$ | FCHB-90R500 |
| $\mathrm{R}=700 \pm 10 \mathrm{~mm}$ | FCHB-90R700 |
| $\mathrm{R}=1000 \pm 10 \mathrm{~mm}$ | 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


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

Example for FC Horizontal Plain Bend Ordering


Horizontal plain bend, $\boldsymbol{\varnothing}^{\circ} \pm 1^{\circ}$
$\mathrm{R}=300 \pm 10 \mathrm{~mm} \quad$ FCHB- $\boldsymbol{\varnothing}^{\circ} \mathbf{R} \mathbf{3 0 0}$
$R=500 \pm 10 \mathrm{~mm} \quad$ FCHB- $\boldsymbol{\varnothing}^{\circ}$ R500
$R=700 \pm 10 \mathrm{~mm} \quad$ FCHB- $\boldsymbol{\varnothing}^{\circ}$ R700
$R=1000 \pm 10 \mathrm{~mm} \quad$ FCHB- $\boldsymbol{\varnothing}^{\circ} \mathbf{R} \mathbf{1 0 0 0}$

If an angle of $120^{\circ}$ 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)


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

## FC Vertical Bend $10^{\circ} \quad$ FCVB-10R400



UOM: pc
Chain required 2-way: 0.5 meter Slide rail required 2-way: 0.9 meter

## FC Vertical Bend $15^{\circ} \quad$ FCVB-15R400



## UOM: pc

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

## FC Vertical Bend $20^{\circ} \quad$ FCVB-20R400



## UOM: pc

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

## FC Vertical Bend $30^{\circ} \quad$ FCVB-30R400



UOM: pc
Chain required 2-way: 0.7 meter
Slide rail required 2-way: 1.5 meter

## FC Vertical Bend $45^{\circ} \quad$ FCVB-45R400



UOM: pc
Chain required 2-way: 0.9 meter Slide rail required 2-way: 1.9 meter

FC Vertical Bend $60^{\circ} \quad$ FCVB-60R400


## FC Vertical Bend $5^{\circ}-90^{\circ}$



Example for FC Vertical Bend Ordering

- Vertical bend, $\varnothing^{\circ} \pm 1^{\circ}$
- FCVB- $\varnothing^{\circ}$ R400

If an angle of $65^{\circ}$ is needed for vertical bend, the ordering part number is
FCVB-65R400

The outer bend is assembled using connecting strip (FACS-25x140A) .Angle of " $\varnothing^{\circ}$ " must be indicated when ordering.


Chain required: 6 meter Slide rail required: 12 meter


FC 45 Degree Twist Conveyor Beam (Counter-Clockwise)
FCTB-CCW45x3000

## FC 90 Degree Twist Conveyor Beam (Clockwise)

FCTB-CW90x3000



## FC Twist Conveyor Beam $15^{\circ}-90^{\circ}$

FCTB-AAABBx3000 Where AAA = CW or CCW, BB = Angle


Example for FC Twist Conveyor Beam Ordering

- Twist Conveyor Beam, $\varnothing^{\circ} \pm 5^{\circ}$

If an angle of $30^{\circ}$ is needed for twist beam, in clockwise direction and length 3.0 m , the ordering part number is

## FCTB-CW30x3000

Angle of $\varnothing^{\circ}$, twist direction, and length $L$, must be indicated when ordering.

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

## FlexMove

FS 105 In-Line Transfer Module
F105ST-105


- SIn-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 105 X In-Line Transfer Module

F105XT-105

- XIn-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
- XIn-Line transfers are compact in the length direction



## FL SERIES: 150 mm Conveyor System

FlexMcy줄

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-25×140A

## Conveyor Beam FLCB-3



UOM: 3 Meter / Length

Chain Connecting Module FLCC-160

UOM: pc



150 MM WIDTH

Upper, Slide Rail (4X)

Chain Common Data
Packaging: 5 m per box
Pitch: 35.5 mm
Width: 150 mm
Tensile Strength at $20^{\circ} \mathrm{C}: 6000 \mathrm{~N}$
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


Friction Top Chain FLFT-5


## UOM: 5 Meter / box

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


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

Cleat Top Chain FLCT-5A30-L\#
$\#=1,2,3,4,5 \ldots . .20$


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

Roller Cleat Chain FLRC-5A-L\#
$\#=1,2,3,4,5 \ldots . .20$


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.

Roller Cleat Chain FLRC-5B-L\#

$$
\#=1,2,3,4,5 \ldots . . .20
$$



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

Safety Chain Friction Top FLFT-5V


UOM: 5 Meter / box
Application: (Safety Chain) Suitable for transport product in slope $>5^{\circ}$ but $\leq 30^{\circ}$ without accumulation.

| FL Direct End Drive without Motor (LEFT) | FL Direct End Drive without Motor (RIGHT) |
| :--- | :--- | :--- | :--- |
| FLDD-A150-XDY (See Chart) | FLDD-A150-XDY (See Chart) |



| Part Number |  | Shaft Selection | Direction | Aux Shaft Selection |
| :---: | :---: | :---: | :---: | :---: |
| FLDD-A150 | - | X | D | Y |
|  |  | $0=20 \mathrm{~mm}$ | L = Left | Blank $=$ No Aux Shaft |
|  |  | $\mathrm{E}=3 / 4 \mathrm{in}$ * |  |  |
|  |  | A $=20 \mathrm{~mm}$ Aux Only | $\mathrm{R}=$ Right | A $=20 \mathrm{~mm}$ 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: 0.5 meter
*3/4 inch shaft option available in North America only.

FL Direct End Drive unit without Motor GP (LEFT)
FLDD-A150GP-XDY (See Chart)

## FL Direct End Drive unit without Motor GP (RIGHT) FLDD-A150GP-XDY (See Chart)



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

| Part Number |  | Shaft Selection | Direction | Aux Shaft Selection |
| :---: | :---: | :---: | :---: | :---: |
| FLDD-A150GP | - | X | D | Y |
|  |  | $0=20 \mathrm{~mm}$ | $\mathrm{L}=\mathrm{Left}$ | Blank $=$ No Aux Shaft |
|  |  | $\mathrm{E}=3 / 4 \mathrm{in}$ * |  |  |
|  |  | A $=20 \mathrm{~mm}$ Aux Only | $\mathrm{R}=$ Right | A $=20 \mathrm{~mm}$ Aux Shaft |

[^8]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

FL Direct with Power Transfer Motor (LEFT)
FLDD - A150PT-XD (See Chart)

## FL Direct with Power Transfer Motor (RIGHT)

FLDD - A1 50PT-XD (See Chart)


Minimum product length for inline transfer $=100 \mathrm{~mm}$
Maximum speed is $30 \mathrm{~m} / \mathrm{min}$ ( $100 \mathrm{ft} / \mathrm{min}$ )
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 |  | X | D |
|  |  | $0=20 \mathrm{~mm}$ | L $=$ Left |
|  |  | $\mathrm{R}=$ 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.

| FL GP Direct with Power Transfer Motor (LEFT) |
| :--- |
| FLDD-A150GPPT-XD (See Chart)$\quad$ FL GP Direct with Power Transfer Motor (RIGHT) |



Maximum speed is $30 \mathrm{~m} / \mathrm{min}$ ( $100 \mathrm{ft} / \mathrm{min}$ )
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 | X | D |  |
|  |  | $0=20 \mathrm{~mm}$ | L $=$ Left |
|  |  | $R=$ Right |  |

[^9]
## 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

FL Direct Drive Driven Transfer Bridge (LEFT)
FLDD-A150DB-A-0L

FL Direct Drive Driven Transfer Bridge (RIGHT)
FLDD-A150DB-A-0R


UOM: pc
20 mm Shaft only.
Minimum product length for inline transfer $=100 \mathrm{~mm}$
Transfer extends past conveyor only 27 mm

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


FL Idler End Free Roller Bridge


UOM: pc



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

## 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

UOM: pc

## 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


| FL Suspended End Drive without Motor (LEFT) |
| :--- |
| FLSD-A150-0L (with Torque Limiter) |
| FLSD-A150SPT-0L (without Torque Limiter) |




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


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

## FlexMove

## FL SERIES: 150 mm Conveyor System

## FL Combined Direct Drive \& Idler (LEFT)

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


- 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



## FL Weighted Take-up Tail Module

## FL-WTU-150



- 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



## FL Top Running Drive Module

## 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

## FlexMove





Minimum product length for inline transfer $=100 \mathrm{~mm}$ Transfer extends past conveyor only 27 mm

## UOM: pc

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


```
FL Idler End Free Transfer Bridge
```

```
FL Idler End Free Transfer Bridge
```

FL Direct Drive Driven Transfer Bridge (RIGHT)
FLIE-A150DB-R


## FLTB-A150

Transfer bridge c/w roller for FLIE-A150,


FLDD-A150-XDY and FLDD-A150GP-XDY

UOM: pc


FL Wheel Bend $180^{\circ}$
FLWB-180R210A


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


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

## FL Wheel Bend $60^{\circ}$



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


## UOM: pc

Chain required 2-way: 1.5 meter Slide rail required 2-way: 1.8 meter

## FLWB-30R210A



## UOM: pc

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

## FL Wheel Bend $5^{\circ}-180^{\circ}$



Example for FL Wheel Bend Ordering

- Wheel bend, $\varnothing^{\circ} \pm 1^{\circ}$
- FLWB- $\varnothing^{\circ}$ R210A

If an angle of $65^{\circ}$ is needed for wheel bend, the ordering part number is
FLWB-65R210A

The outer bend is assembled using connecting strip (FACS-25x140A). Angle of $\varnothing^{\circ}$ must be indicated when ordering.

## FL Horizontal Plain Bend $15^{\circ}$



## Horizontal plain bend, $15^{\circ} \pm 1^{\circ}$

| $\mathrm{R}=500 \pm 10 \mathrm{~mm}$ | FLHB-15R500 |
| :--- | :--- |
| $\mathrm{R}=700 \pm 10 \mathrm{~mm}$ | FLHB-15R700 |
| $\mathrm{R}=1000 \pm 10 \mathrm{~mm}$ | 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 $30^{\circ}$



Horizontal plain bend, $3 \mathbf{0}^{\circ} \pm \mathbf{1}^{\circ}$

| $\mathrm{R}=500 \pm 10 \mathrm{~mm}$ | FLHB-30R500 |
| :--- | :--- |
| $\mathrm{R}=700 \pm 10 \mathrm{~mm}$ | FLHB-30R700 |
| $\mathrm{R}=1000 \pm 10 \mathrm{~mm}$ | 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 $45^{\circ}$



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 $60^{\circ}$




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

FL SERIES: 150 mm Conveyor System

## FL Horizontal Plain Bend $90^{\circ}$



## Horizontal plain bend, $90^{\circ} \pm 1^{\circ}$

| $\mathrm{R}=500 \pm 10 \mathrm{~mm}$ | FLHB-90R500 |
| :--- | :--- |
| $\mathrm{R}=700 \pm 10 \mathrm{~mm}$ | FLHB-90R700 |
| $\mathrm{R}=1000 \pm 10 \mathrm{~mm}$ | FLHB-90R1000 |

$R=700 \pm 10 \mathrm{~mm}$
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 $180^{\circ}$



UOM: pc
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 $5^{\circ}-180^{\circ}$



## Example for FL Horizontal Plain Bend Ordering

Horizontal plain bend, $\boldsymbol{\varnothing}^{\circ} \pm 1^{\circ}$
$R=500 \pm 10 \mathrm{~mm} \quad$ FLHB- $\boldsymbol{\varnothing}^{\circ}$ R500
$R=700 \pm 10 \mathrm{~mm} \quad$ FLHB- $\boldsymbol{\varnothing}^{\circ}$ R700
$R=1000 \pm 10 \mathrm{~mm} \quad$ FLHB- $\boldsymbol{\theta}^{\circ} \mathbf{R} \mathbf{1 0 0 0}$

If an angle of $120^{\circ}$ 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)
$\qquad$


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

FL Vertical Bend $30^{\circ}$


UOM: pc
Chain required 2-way: 0.8 meter Slide rail required 2 -way: 1.7 meter

## FL Vertical Bend $45^{\circ}$

## FLVB-45R500



Chain required 2-way: 1.1 meter Slide rail required 2-way: 2.2 meter

## FL Vertical Bend $5^{\circ}-90^{\circ}$



Example for FL Vertical Bend Ordering

- Vertical bend, $\varnothing^{\circ} \pm 1^{\circ}$
- FLVB- $\varnothing^{\circ}$ R500

If an angle of $65^{\circ}$ is needed for vertical bend, the ordering part number is
FLVB-65R500

The outer bend is assembled using connecting strip (FACS-25x140A).Angle of " $\varnothing^{\circ}$ " must be indicated when ordering.

## FS 150 In-Line Transfer Module



- 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 150 X In-Line Transfer Module



- 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. 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

## Conveyor Beam FUCB-3



UOM: 3 Meter / Length


UOM: 3 Meter / Length

Chain Common Data
Packaging: 5 m per box
Pitch: 33.5 mm
Width: 175 mm
Tensile Strength at $20^{\circ} \mathrm{C}: 6000 \mathrm{~N}$
Color: White

## Material:

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

Plain Chain FUPC-5


UOM: 5 Meter / box
Application: Suitable for horizontal and slope $<5^{\circ}$ transport of products with accumulation.

Roller Plain Chain FUPC-5R


UOM: 5 Meter / box
Application: Suitable for horizontal and slope $<$ $5^{\circ}$ transport of products with accumulation.

## Note: Friction Reducing Roller Chain

 Recommended for high speed or high load plain bends
$\stackrel{n}{\sim}$


UOM: 5 Meter / box
Application: Suitable for horizontal and slope $\leq 30^{\circ}$ transport of products without accumulation.

Roller Friction Top Chain FUFT-B-5R

$\rightarrow 33.5$
UOM: 5 Meter / box
Application: Suitable for horizontal and slope
$\leq 30^{\circ}$ transport of products without accumulation.
Note: Friction Reducing Roller Chain Recommended for high speed or high load plain bends

## FlexMove

## FU SERIES: 180 mm Conveyor System



| Part Number |  | Shaft Selection | Direction | Aux Shaft Selection |
| :---: | :---: | :---: | :---: | :---: |
| FUDD-A180 | - | X | D | Y |
|  |  | $0=20 \mathrm{~mm}$ | $\mathrm{L}=\mathrm{Left}$ | Blank $=$ No Aux Shaft |
|  |  | $\mathrm{E}=3 / 4 \mathrm{in}$ * |  |  |
|  |  | A $=20 \mathrm{~mm}$ Aux Only | $\mathrm{R}=$ Right | A $=20 \mathrm{~mm}$ 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: 1.0 meter
*3/4 inch shaft option available in North America only.


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 |
|  |  | $0=20 \mathrm{~mm}$ | $\mathrm{L}=\mathrm{Left}$ | Blank $=$ No Aux Shaft |
|  |  | $\mathrm{E}=3 / 4 \mathrm{in}$ * |  |  |
|  |  | A $=20 \mathrm{~mm}$ Aux Only | $\mathrm{R}=$ Right | A $=20 \mathrm{~mm} \mathrm{Aux} \mathrm{Shaft}$ |

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: 1.0 meter

[^10]
## FU Direct with Power Transfer Motor (LEFT)

FUDD-A180PT-XD (See Chart)

FU Direct with Power Transfer Motor (RIGHT)
FUDD-A180PT-XD (See Chart)


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: 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 $=100 \mathrm{~mm}$ Maximum speed is $30 \mathrm{~m} / \mathrm{min}(100 \mathrm{ft} / \mathrm{min}$ )


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 |  | X | D |
|  |  | $0=20 \mathrm{~mm}$ | $\mathrm{~L}=$ Left |
|  |  | $R=$ 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

## FlexMove

## FU SERIES: 180 mm Conveyor System

FU Direct Drive Driven Transfer Bridge (LEFT)
FUDD-A180DB-A-OL


UOM: pc
20 mm Shaft only.
Minimum product length for inline transfer $=100 \mathrm{~mm}$
Transfer extends past conveyor only 27 mm


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

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



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


## FUTB-A180

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


## FUEB-A180

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


## FU Suspended Drive with Motor (LEFT)

FUSD-A180-0L (with Torque Limiter)
FUSD-A180SPT-OL (without Torque Limiter)

## FU Suspended Drive with Motor (RIGHT)

FUSD-A180-0R (with Torque Limiter)
FUSD-A180SPT-OR (without Torque Limiter)


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


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


- 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

## FU Weighted Take-up Tail Module

FU-WTU-180


## UOM: pc

Chain required 1.5 meter
Slide rail required 2.1 meter

- 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



## FlexMove

## FU SERIES: 180 mm Conveyor System



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


## FU Idler End Free Roller Bridge



## FUEB-A180

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


## FU Horizontal Plain Bend $30^{\circ}$



## FU Horizontal Plain Bend $45^{\circ}$



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 $60^{\circ}$



Horizontal plain bend, $60^{\circ} \pm 1^{\circ}$

| $\mathrm{R}=500 \pm 10 \mathrm{~mm}$ | FUHB-60R500 |
| :--- | :--- |
| $\mathrm{R}=700 \pm 10 \mathrm{~mm}$ | FUHB-60R700 |
| $\mathrm{R}=1000 \pm 10 \mathrm{~mm}$ | FUHB-60R1000 |



## Horizontal plain bend, $90^{\circ} \pm 1^{\circ}$

| $\mathrm{R}=500 \pm 10 \mathrm{~mm}$ | FUHB-90R500 |
| :--- | :--- |
| $\mathrm{R}=700 \pm 10 \mathrm{~mm}$ | FUHB-90R700 |
| $\mathrm{R}=1000 \pm 10 \mathrm{~mm}$ | 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 $5^{\circ}-180^{\circ}$



## Example for FU Horizontal Plain Bend Ordering

Horizontal plain bend, $\boldsymbol{\varnothing}^{\circ} \pm \mathbf{1}^{\circ}$

| $\mathrm{R}=500 \pm 10 \mathrm{~mm}$ | FUHB $-\boldsymbol{\varnothing}^{\circ} \mathbf{R} 500$ |
| :--- | :--- |
| $\mathrm{R}=700 \pm 10 \mathrm{~mm}$ | FUHB $-\boldsymbol{\varnothing}^{\circ} \mathbf{R} 700$ |
| $\mathrm{R}=1000 \pm 10 \mathrm{~mm}$ | FUHB $-\boldsymbol{\varnothing}^{\circ} \mathbf{R} \mathbf{1 0 0 0}$ |

If an angle of $120^{\circ}$ 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 $5^{\circ}$
FUVB-5R400


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


UOM: pc
Chain required 2-way: 0.5 meter Slide rail required 2-way: 1.4 meter


UOM: pc
Chain required 2-way: 0.5 meter Slide rail required 2-way: 1.6 meter



UOM: pc
Chain required 2-way: 0.6 meter Slide rail required 2-way: 1.8 meter
FU Vertical Bend $30^{\circ} \quad$ FUVB-30R400


UOM: pc
Chain required 2-way: 0.7 meter Slide rail required 2-way: 2.2 meter


UOM: pc
Chain required 2-way: 0.9 meter
Slide rail required 2-way: 2.8 meter

## FU Vertical Bend $60^{\circ} \quad$ FUVB-60R400



UOM: pc
Chain required 2-way: 1.2 meter
Slide rail required 2-way: 3.5 meter

## FU Vertical Bend $90^{\circ} \quad$ FUVB-90R400



UOM: pc


Chain required 2-way: 1.6 meter
Slide rail required 2-way: 4.7 meter

## FU Vertical Bend $5^{\circ}-90^{\circ}$



Example for FU Vertical Bend Ordering

- Vertical bend, $\varnothing^{\circ} \pm 1^{\circ}$
- FUVB- $\varnothing^{\circ}$ R400

If an angle of $65^{\circ}$ is needed for vertical bend, the ordering part number is
FUVB-65R400

[^11]$\qquad$


Example for FU Twist Conveyor Beam Ordering

- Twist Conveyor Beam, $\varnothing^{\circ} \pm 5^{\circ}$

If an angle of $30^{\circ}$ is needed for twist beam, in clockwise direction and length 3.0 m , the ordering part number is

## FUTB-CW30x3000

Angle of $\varnothing^{\circ}$, twist direction, and length $L$, must be indicated when ordering.

## UOM: pc

Chain required: 6 meter
Slide rail required: 12 meter

## FlexMove



- XIn-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. The maximum product width to be conveyed can be referred to guide rail assembly pages.

## FV Series Characteristic

Beam Width: 260 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-25×140A


UOM: 3 Meter / Length


## 260 MM WIDTH



## Chain Connecting Module FVCC-300



Beam section for chain installation.
UOM: pc

## Chain Common Data

Packaging: 5 m per box
Pitch: 33.5 mm
Width: 255 mm
Tensile Strength at $20^{\circ} \mathrm{C}$ : 6000 N
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 $\leq 30^{\circ}$ transport of products without accumulation.


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

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



UOM: 5 Meter / box
Application: Suitable for horizontal and slope $\leq 30^{\circ}$ transport of products without accumulation.

## Note: Friction Reducing Roller Chain

Recommended for high speed or high load plain bends

## Roller Plain Chain FVPC-5R



- 33.5 -

UOM: 5 Meter / box
Application: Suitable for horizontal and slope $<5^{\circ}$ transport of products with 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.


| Part Number |  | Shaft Selection | Direction | Aux Shaft Selection |
| :---: | :---: | :---: | :---: | :---: |
| FVDD-A260 | - | X | D | Y |
|  |  | $0=20 \mathrm{~mm}$ | $\mathrm{L}=$ Left | Blank $=$ No Aux Shaft |
|  |  | $\mathrm{E}=3 / 4 \mathrm{in}$ * |  |  |
|  |  | A $=20 \mathrm{~mm}$ Aux Only | $\mathrm{R}=$ Right | A $=20 \mathrm{~mm} \mathrm{Aux} \mathrm{Shaft}$ |

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 |
| :---: | :---: | :---: | :---: | :---: |
| FVDD-A260GP | - | X | D | Y |
|  |  | $0=20 \mathrm{~mm}$ | $\mathrm{L}=$ Left | Blank $=$ No Aux Shaft |
|  |  | $\mathrm{E}=3 / 4 \mathrm{in}$ * |  |  |
|  |  | A $=20 \mathrm{~mm}$ Aux Only | $\mathrm{R}=$ Right | A $=20 \mathrm{~mm}$ 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

[^12]

FV Direct with Power Transfer Motor (RIGHT)
FVDD-A260PT-XD (See Chart)


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.


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 | - | $X$ | $D$ |
|  |  | $0=20 \mathrm{~mm}$ | L $=$ Left |
|  |  | $R=$ 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
$\qquad$


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


UOM: pc

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



## FVTB-A260

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


## FVEB-A260

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


UOM: pc

SEW gearmotors are products of SEW Eurodrive

## 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)


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


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

## FV Weighted Take-up Module

## FV-WTU-700



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
- 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

$\qquad$


FV Idler End Free Roller Bridge


UOM: pc

## FVEB-A260

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


## FV Horizontal Plain Bend $30^{\circ}$



Horizontal plain bend, $3 \mathbf{0}^{\circ} \pm 1^{\circ}$
$\mathrm{R}=700 \pm 10 \mathrm{~mm} \quad$ FVHB-30R700
$R=1000 \pm 10 \mathrm{~mm} \quad$ FVHB-30R1000

UOM: pc
Chain required 2-way (700, 1000): 1.5, 1.8 meter Slide rail required 2-way ( 700,1000 ): 4.6, 5.5 meter

## FV Horizontal Plain Bend $45^{\circ}$



Horizontal plain bend, $\mathbf{4 5}^{\circ} \pm \mathbf{1}^{\circ}$
$R=700 \pm 10 \mathrm{~mm} \quad$ FVHB-45R700
$R=1000 \pm 10 \mathrm{~mm}$
FVHB-45R1000

## FV Horizontal Plain Bend $60^{\circ}$



Horizontal plain bend, $60^{\circ} \pm 1^{\circ}$
$R=700 \pm 10 \mathrm{~mm} \quad$ FVHB-60R700
$\mathrm{R}=1000 \pm 10 \mathrm{~mm} \quad$ FVHB-60R1000

## UOM: pc

Chain required 2-way $(700,1000)$ : 2.3, 2.9 meter Slide rail required 2-way (700, 1000): 6.8, 8.7 meter

## FV Horizontal Plain Bend $90^{\circ}$



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 $5^{\circ}-180^{\circ}$



## Example for FV Horizontal Plain Bend Ordering

Horizontal plain bend, $\boldsymbol{\varnothing}^{\circ} \pm 1^{\circ}$
$\mathrm{R}=700 \pm 10 \mathrm{~mm} \quad$ FVHB $-\boldsymbol{\varnothing}^{\circ} \mathrm{R} 700$
$R=1000 \pm 10 \mathrm{~mm} \quad$ FVHB - $\boldsymbol{\varnothing}^{\circ} \mathbf{R} \mathbf{1 0 0 0}$

If an angle of $120^{\circ}$ is needed for radius R 700 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 $5^{\circ}$

FVVB-5R400


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


UOM: pc
Chain required 2-way: 0.5 meter Slide rail required 2-way: 1.4 meter


UOM: pc
Chain required 2-way: 0.7 meter Slide rail required 2-way: 2.2 meter

## FV Vertical Bend $45^{\circ}$

FVVB-45R400


UOM: pc
Chain required 2 -way: 0.9 meter
Slide rail required 2 -way: 2.8 meter

## FV Vertical Bend $60^{\circ} \quad$ FVVB-60R400



UOM: pc
Chain required 2-way: 1.2 meter
Slide rail required 2-way: 3.5 meter

## FV Vertical Bend $90^{\circ} \quad$ FVVB-90R400



UOM: pc
Chain required 2-way: 1.6 meter
Slide rail required 2-way: 4.7 meter

## FV Vertical Bend $5^{\circ}-90^{\circ}$



Example for FV Vertical Bend Ordering

- Vertical bend, $\varnothing^{\circ} \pm 1^{\circ}$
- FVVB- $\varnothing^{\circ}$ R400

If an angle of $65^{\circ}$ is needed for vertical bend, the ordering part number is
FVVB-65R400

The outer bend is assembled using connecting strip (FACS-25×140A).
Angle of " $\varnothing$ " must be indicated when ordering.

FV 45 Degree Twist Conveyor Beam (Clockwise)
FVTB-CW45x3000


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

FV 45 Degree Twist Conveyor Beam (Counter-Clockwise)
FVTB-CCW45x3000


## FV Twist Conveyor Beam $15^{\circ}-45^{\circ}$



## Example for FV Twist Conveyor Beam Ordering

- Twist Conveyor Beam, $\varnothing^{\circ} \pm 5^{\circ}$

If an angle of $30^{\circ}$ is needed for twist beam, in clockwise direction and length 2.5 m , the ordering part number is

## FVTB-CW30x3000

Angle of $\varnothing^{\circ}$, twist direction, and length $L$, must be indicated when ordering.

## UOM: pc

Chain required: 6 meter
Slide rail required: 12 meter


- XIn-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



## Adjustable Width Wedge Conveyor Components




UOM: Unit
$\qquad$


UOM: Unit

## 807-3635

## $90^{\circ}$ Gearbox



UOM: Unit

## 807-3609

Couplin $3 / 8^{\prime \prime}$ to $3 / 8^{\prime \prime}$


UOM: Unit
75111766
Hand Wheel


UOM: Unit


UOM: Unit

## $75164386 \quad 90^{\circ}$ Gearbox Mount



UOM: Unit

## 807-3607 Coupling $3 / 8$ " to 10 mm



UOM: Unit

## $75148092 \quad$ Conveyor Gearbox Mount



UOM: Unit


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: $700 \mathrm{~mm}(\mathrm{~L}) \times 700 \mathrm{~mm}(\mathrm{H})$
- Minimum top of chain height: 750 mm (29.5 in)
- Maximum conveyor length: 4.5 m ( 14.8 ft )
- Maximum conveyor speed: $50 \mathrm{~m} / \mathrm{min}(164 \mathrm{ft} / \mathrm{min})$


## Dimensions and Operation Requirements Water Supply

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


## Air Supply

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


## Drying Vacuum

- Vacuum attachment: OD $\varnothing 38 \mathrm{~mm}$, ID $\varnothing 34 \mathrm{~mm}$ pipe.
- Vacuum airflow required: ~56 litre/s (120 CFM), typical commercial grade wet/dry vacuum is acceptable


## CCD-Fx*



## Dimensions and Operation Requirements Air Supply

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

Drying Vacuum

- Vacuum attachment: OD $\emptyset 38$ mm, ID $\emptyset 34$ mm pipe
- Vacuum airflow required: ~56 litre/s (120 CFM)
- Typical commercial grade vacuum is acceptable

[^13]
## FZTC-SA-Wxxx*



## 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


[^14]

## 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: $50 \mathrm{~m} / \mathrm{min}(164 \mathrm{ft} / \mathrm{min})$
- Produces gap of approximately one product length


Horizontal Squeeze
Part Number: 208161


## 208162



## 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 )


Part Number: 208162 for FM Series. Contact factory for other sizes.
Product dimensions shown for FM Series conveyors. Contact factory for other conveyor series.

## Clamping Module



## 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


## Fixed Width Option



Adjustable Width Option


## 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 60 kg .
- Maximum conveyor speed: up to $40 \mathrm{~m} / \mathrm{min}$.
- Available for conveyor width: $45 \mathrm{~mm}, 65 \mathrm{~mm}$, $85 \mathrm{~mm}, 105 \mathrm{~mm}, 150 \mathrm{~mm}, 180 \mathrm{~mm}$ \& 260 mm .
- 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: $0.5 \sim 0.6 \mathrm{MPa}$
- Air consumption: 0.01 m 3 per minute
(Calculation based on tubing length of 1.5 m \& Number of cycles of 180 times per hour)


DETAILA
SCALE 1 : 5

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

## 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


Patented Chain Design

## Chain Types

## Features

- Available on FlexMove Aluminum Conveyors: FS ( 65 mm ), FM ( 85 mm ), FC ( 105 mm ), FL ( 150 mm ), FU ( 180 mm ) and $\mathrm{FV}(260 \mathrm{~mm})$
- 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
- (2) Conveyor Chain types for maximum capability; Bearing Chain and Non-Bearing Chain

|  | Bearing Chain | Non-Bearing Chain |
| :--- | :--- | :--- |
| Conveyor Widths | $85,180,260 \mathrm{~mm}$ | $65,85,105,150,180$ 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 | $21.3 \mathrm{~m}(70 \mathrm{ft})$ | $12.2 \mathrm{~m}(40 \mathrm{ft})$ |
| Maximum speed | Up to $55 / \mathrm{min}(180 \mathrm{ft} / \mathrm{min})$ | Up to $55 \mathrm{~m} / \mathrm{min}(180 \mathrm{ft} / \mathrm{min})$ |
| Load Capacity | $136 \mathrm{~kg}(300 \mathrm{lbs})$ | $136 \mathrm{~kg}(300 \mathrm{lbs})$ |


(147)

## Helical Plain Bend Conveyors

## Curve Layout Options:



## Dimensions



| $W^{*}=65,85,105,150,180,260$ |
| :--- |
| $R=500,700,1000 \mathrm{~mm}$ |
| $A 1=45$ to 360 degrees |
| $A 2=3$ to 12 degrees |
| $H=$ Configuration dependent, contact factory |
| $L=$ Configuration dependent, contact factory |

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



## 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: $256 \mathrm{~mm} \times 690 \mathrm{~mm} \times 254 \mathrm{~mm}$ (W) $\mathrm{x}(\mathrm{L}) \times(\mathrm{H})$
- Weight: 28kg Material Compatibility: FGRR-10x20 and FGRR-15x20


UOM: pc
For 40 mm horizontal crossing support beam

Mounting: FATB-20(1),
FALN-M8(1), FAHB-M8 $\times 16$ (1),
FASN-M8(1) , FAFW-M8 (2)

## FAHBS-60

Horizontal beam support bracket - Aluminum


UOM: pc
For 64 mm horizontal crossing support beam

Mounting: FATB-20(2) ,
FALN-M8(2), FAHB-M8 $\times 16$ (1) ,
FASN-M8(1), FAFW-M8 (3)

## FAHBS-80

Horizontal beam support bracket - Aluminum


UOM: pc
For 80 mm horizontal crossing support beam

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

## FAVBS-60K

Vertical beam support bracket - Aluminum


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

Mounting: FATB-20(2),
FALN-M8(2), FAHB-M8 $\times 16$ (2),
FASN-M8(2), FAFW-M8 (4)


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

Mounting: FATB-20(2)
FALN-M8(2), FAHB-M8 $\times 16$ (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


## 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)


## FAVBS-80C



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

Mounting: FATB-20(2),
FALN-M8(2), FAHB-M8 $\times 16$ (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)

## FAVBS $-80 \mathrm{~V} \quad$ Vertical beam support bracket



## UOM: pc

For FV conveyor with 80 mm vertical beam support

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

## FAVBS-60KV

Vertical beam support bracket with slot - Aluminum


## UOM: pc

For FK conveyor with 64 mm vertical support beam

Mounting: FATB-20(2)
FALN-M8(2), FAHB-M8 $\times 16$ (2),
FASN-M8(2) , FAFW-M8 (4)

## FAVBS-60SV

Vertical beam support bracket with slot - Aluminum


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

Mounting: FATB-20(2),
FALN-M8(2), FAHB-M8 $\times 16$ (2) ,
FASN-M8(2), FAFW-M8 (4)

## FAVBS-80SV

Vertical beam support bracket with slot - 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-60MV Vertical beam support bracket with slot - Aluminum



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

Mounting: FATB-20(2) , FALN-M8(2), FAHB-M8 $\times 16(2)$, FASN-M8(2), FAFW-M8 (4)

## FAVBS-80MV

## Vertical beam support bracket with slot - Aluminum



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)

## FAVBS-60CV <br> Vertical beam support bracket with slot - 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-80LV

## Vertical beam support bracket - Aluminum



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



For FU conveyor with 80 mm vertical support beam

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

FAVBS-80VV 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)

## FAHBS $40 \times 135$

Horizontal beam support
bracket - Aluminum


For 40 mm horizontal crossing support beam

FAHBS-62×135
Horizontal beam support
bracket - Aluminum


UOM: pc
For 64 mm horizontal crossing support beam

## FAHBS-80×135

Horizontal beam support
bracket - Aluminum


UOM: pc
For 80 mm horizontal crossing support beam

## FlexMove



UOM: pc
For support of direct drive end to vertical beam support


## FAAL-6 4

Alpine beam support bracket - Aluminum


UOM: pc
For support of $180^{\circ}$ 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



Mounting: FAHB-M8 $\times 16$ (6) FASN-M8(6) , FAFW-M8 (6)
UOM: pc
For support of $180^{\circ}$ wheel bend with 80 mm vertical beam support

| FASR-25 |
| :--- |
| FASR-25U |
| FASR-25X |
| FASR-25T |
| FASR-25A |

HDPE slide rail - White
UHMW-PE slide rail - White
Special PE slide rail - Blue
PAPE slide rail - Grey
Conductive slide rail - Black


FASR-25

FASR-25U

FASR-25X
UOM: 25meter / roll



FASR-25T

FASR-25A


## FlexMove



UOM: 25meter / roll

## 807-4128 Nylon Socket screw for slide rail



UOM: kit



For Heavy Load SEW equivalent Gearmotor and 64 mm or 80 mm Support Beams



| FATB-20 |
| :--- |
| FATB-35 |
| FATB-53 |
| FATB-71 |

UOM: 50 pcs / pk
T-bolt, $L=20$ - Steel, zinc plated
T-bolt, $\quad \mathrm{L}=35-$ Steel, zinc plated

T-bolt, $L=53-$ Steel, zinc plated


T-bolt, $\quad L=71$ - Steel, zinc plated


## FASL-M8

Spring Leaf Nut M8 for $40 \times 40,64 \times 64,40 \times 80,80 \times 80$ Support Beam - Steel, zinc plated

UOM: 50 pcs / pk


FAFW-M8
M8 Flat washer - Steel, zinc plated


UOM: 50 pcs / pk

## FALN-M8 M8 Lock Nut - Steel, zinc plated



UOM: 50 pcs / pk

## FAHB- M8 x 16

Hex Bolt, M8 - Steel, zinc plated

## FAHB-M8 x 20

Hex bolt, $L=16$ - Steel, zinc plated
Hex bolt, L = 20 - Steel, zinc plated


UOM: 50 pcs / pk

FAFR-35 Free roller - POM


UOM: 10 pcs / pk

FAFR-18
Free roller - POM

$\varnothing 4.1$


UOM: 10 pcs / pk


UOM: 10 pcs / pk

## FASR-75×15

Sponge roller, Sponge rubber

UOM: 10 pcs / pk


FASR-75×19P
PVC Roller c/w POM core \& Screw


UOM: 10 pcs / pk


## FAEC-DS

End cap for drive shaft - Polyamide
FAEC-WH End cap for wheel - Polyamide


UOM: 10 pcs / pk
UOM: 10 pcs / pk

## 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.

## 203399



## Conveyor $90^{\circ}$ Transfer Bracket

- Provides mounting bracket and transfer plate for $90^{\circ}$ product transfers
- Provides solid conveyor alignment for trouble free transfers
- Compatible with all widths of FlexMove conveyors

Available in North America only.

## FACS $-25 \times 160 \quad$ Connecting strip - Steel, electro zinc plated



## 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 $305 \mathrm{~mm}(1 \mathrm{ft})$ increments from 305 mm ( 1 ft ) to $30,175 \mathrm{~mm}(99 \mathrm{ft})$


## Side Tables



## 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.

FlexMove FB SERIES: Conveyor Support Options

Single Support Structure with enclosure beam FK, FS, FM, FC


Single Support Structure
FL


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


## Alpine Support Structure

FK, FS, FM, FC, FL



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


Double Support Structure FK, FS, FM, FC


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



FBSB-64×64 Support Beam 64x64 - Aluminum Anodized


FBSB-64x64C Close slot Support Beam - Aluminum Anodized


$$
\text { FBSB-80x80 Support Beam } 80 \times 80 \text { - Aluminum Anodized }
$$




UOM: 3 meter / length


UOM: 3 meter / length

## FBEC-40×80



UOM: 10 pcs / pk

$\qquad$


Mounting hardware included: FAHB-M8 x16(4) , FBCS - 20x76 (2) , FAFW-M8 (4)

## FBFT-64A Foot For Support Beam $64 \times 64$ - Steel, Powder Coating



## FBFT-64B

Foot For Support Beam 64×64 - Aluminum


## FBCS-20×76 Connecting Strip For Foot - Steel, Electro Zinc Plated



UOM: 10pcs / pk

## FBCS-20×96

Connecting Strip For Foot $80 \times 80 \mathrm{~mm}$ - Steel, Electro Zinc Plated



Plastic Pad, screws and clamps included


## FBFT-64BP Bipod Foot For FBSB-64x64 - Polyamide, Glass Fiber reinforced




Plastic Pad, screws and clamps included


## FBFT-80B P Bipod Foot For FBSB-80x80 - Polyamide, Glass Fiber reinforced

Plastic Pad, screws and clamps included


UOM: pc

## FBFT-64xM8

End Plate for Support Beam 64×64- 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-64xM1 2
End Plate for Support Beam 64×64- 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
FBFT-64xM1 2 S

End Plate for Support Beam 64×64- Aluminum \& Adjustable stand - D=M10, L=75 - Stainless Steel End Plate for Support Beam 64x64-Aluminum \& Adjustable stand - D=M12, L=75 - Stainless Steel


## FBFT-170

Floor Attachment Bracket - Steel, Zinc Plated
FBFT-170S
Floor Attachment Bracket - Stainless Steel
 Foot For Support Beam 80×80 - Steel, Powder Coating

## FBFT-80A Foot For Support Beam 80x80 - Steel, Powder Coating



Mounting hardware included: FAHB-M8 x16(4) , FASN-M8 (4) , FAFW-M8 (4) , FAWP-M10 (4)

## FBFT-80B



UOM: pc

## FBFT-80D

Foot For Support Beam 80x80 - Steel, Powder Coating


Mounting: FAHB-M8 x16(8) , FBCS - $20 \times 96$ (4) , FAFW-M8 (8) , FAWP-M10 (4)

## FBCP-40T T Connecting Plate for Support Beam 40×40- Steel, Zinc Plated

UOM: pc


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

## FBCP-40L <br> L Connecting Plate for Support Beam 40x40-Steel, Zinc Plated



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

## FBCP-64T

T connecting Plate for Support Beam 64×64 - Steel, Zinc Plated

UOM: pc


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

## FBCP-64L

L Connecting Plate for Support Beam 64x64-Steel, Zinc Plated


## FBCP-80L

L Connecting Plate for Support Beam 80x80-Steel, Zinc Plated



Mounting: FAHB-M8 x16(8) , FASN-M8 (8) , FAFW-M8 (8)

## FlexMove

## FBCP-40V

$45^{\circ}$ connecting Plate for Support Beam $40 \times 40$ - Steel, Zinc Plated


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

## FBCP-64V

$45^{\circ}$ connecting Plate for Support Beam 64×64 - Steel, Zinc Plated


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

## FBRX-20A $90^{\circ}$ Inner Joint Strip - Steel, Zinc Plated



UOM: $\mathbf{1 0}$ pcs / pk

## FBRX-20B $\quad 90^{\circ}$ Outer Joint Strip - Steel, Zinc Plated



UOM: 10 pcs / pk

## FBRX-20C $90^{\circ}$ Inner Joint Strip - Steel, Zinc Plated



## FBAB-40x40 Angle Bracket for Support Beam 40x40-Aluminum




Mounting: FAHB-M8 x20(2), FASN-M8 (2) , FAFW-M8 (2)



Mounting: FAHB-M8 x20 (4) , FASN-M8 (4) , FAFW-M8 (4)


UOM: pc



Mounting: FAHB-M8 x 20 (4), FASN-M8 (4), FAFW-M8 (4) FBAB-40x40A Angle Bracket for Support Beam 40x40-Aluminum Die Cast


UOM: pc

FBAB-64x64A Angle Bracket for Support Beam 64×64-Aluminum Die Cast


Mounting: FAHB-M8 x20(2) , FASN-M8 (2), FAFW-M8 (2)


## UOM: pc



## FBEC-64×64A

End Cap for FBAB-64x64A angle bracket - Polyamide


UOM: pc

## FBEC-80×80A


FGRB-16x54

## FGRB-16x42 Fixed Guide Rail Assembly



> See page 203 for components

| Guide Rail <br> Bracket | Series | $\mathbf{D}(\mathrm{mm})$ | $\mathbf{H}(\mathrm{mm})$ | $\mathbf{W}(\mathrm{mm})$ <br> $\mathbf{B}=\mathbf{0}$ | $\mathbf{W}(\mathrm{mm})$ <br> $\mathbf{B = 6 . 3}$ | $\mathbf{W}(\mathrm{mm})$ <br> $\mathbf{B = 1 2 . 6}$ | $\mathbf{W}(\mathrm{mm})$ <br> $\mathbf{B}=\mathbf{1 8 . 9}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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 |



## FGRB-40x42 Fixed Guide Rail Assembly




B Spacer = FGRD-6
See page 204 for components

| Guide Rail <br> Bracket | Series | $\mathbf{D}(\mathbf{m m})$ | $\mathbf{H}(\mathbf{m m})$ | $\mathbf{W}(\mathbf{m m})$ <br> $\mathbf{B}=\mathbf{0}$ | $\mathbf{W}(\mathbf{m m})$ <br> $\mathbf{B}=\mathbf{6 . 3}$ | $\mathbf{W}(\mathbf{m m})$ <br> $\mathbf{B = 1 2 . 6}$ | $\mathbf{W}(\mathbf{m m})$ <br> $\mathbf{B = 1 8 . 9}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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 204 for components

| Guide Rail Bracket | Series | D (mm) | H (mm) | $\begin{gathered} W(\mathrm{~mm}) \\ B=0 \end{gathered}$ | $\begin{gathered} W(\mathrm{~mm}) \\ B=6.3 \end{gathered}$ | $\begin{aligned} & W(\mathrm{~mm}) \\ & B=12.6 \end{aligned}$ | $\begin{aligned} & W(\mathrm{~mm}) \\ & B=18.9 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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 |



## FGHS-30/FGHS-70 Fixed High Side Guide Assembly

FGHS-30/-70 Assembly



See page 218 for components

|  |  |  | $\begin{gathered} \text { FGHS- } 30 \\ \text { Rail } \\ \text { H (mm) } \end{gathered}$ | $\begin{aligned} & \text { FGHS-30 } \\ & \text { Rail } \\ & \text { H (mm) } \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Guide Rail Bracket | Series | D (mm) |  |  | $\begin{gathered} \mathrm{W}(\mathrm{~mm}) \\ \mathrm{B}=0 \end{gathered}$ |
| 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 |

FGRA-22HD Assembly


| Bracket <br> Assembly | Series | $\mathbf{D}(\mathrm{mm})$ | $H(\mathrm{~mm})$ <br> Min | $H(\mathrm{~mm})$ <br> Max | W (mm) <br> Min | W (mm) <br> 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


| Bracket <br> Assembly | Series | D (mm) | H(mm) <br> Min | H(mm) <br> Max | $\mathbf{W}(\mathbf{m m})$ <br> Min | W (mm) <br> 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 |



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 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | sembly |  |  |  |  | B Spacer = FGRD-6 <br> See page 202 for components |  |
| Guide Rail Bracket | Series | D (mm) | H (mm) | $\begin{gathered} \mathrm{W}(\mathrm{~mm}) \text { min } \\ \mathrm{B}=0 \end{gathered}$ | $\begin{gathered} \mathrm{W}(\mathrm{~mm})_{\text {max }} \\ \mathrm{B}=0 \end{gathered}$ | $\begin{gathered} \mathrm{W}(\mathrm{~mm}) \mathrm{min} \\ B=6.3 \end{gathered}$ | $\begin{gathered} \mathrm{W}(\mathrm{~mm})_{\text {max }} \mathrm{B}=6.3 \end{gathered}$ |
| 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) | $\begin{gathered} \mathrm{W}(\mathrm{~mm}) \text { min } \\ \mathrm{B}=12.6 \end{gathered}$ | $\begin{gathered} \mathrm{W}(\mathrm{~mm}) \text { max } \\ \mathrm{B}=12.6 \end{gathered}$ | $\begin{gathered} \mathrm{W}(\mathrm{~mm}) \text { min } \\ \mathrm{B}=1839 \end{gathered}$ | $\begin{gathered} \mathrm{W}(\mathrm{~mm})_{\text {max }} \mathrm{B}=18.9 \end{gathered}$ |
| FGRA-8×39×45 | 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-8×39x45 | FV | 260 | 11 | 261 | 265 | 261 | 277.6 |

## FGRA-26x39x45 Adjustable Guide Rail Assembly



FGRS-18 \& FGDT- \& FGRR- Guide Rail Assembly


See pages 201, 206 and 210 for components

| A (mm) | Series | D (mm) | $\begin{aligned} & \mathrm{H}(\mathrm{~mm}) \\ & \text { Min } \end{aligned}$ | $\begin{gathered} \mathrm{H}(\mathrm{~mm}) \\ \text { Max } \end{gathered}$ | B (mm) | Series | D (mm) | $\begin{aligned} & \mathrm{W}(\mathrm{~mm}) \\ & \mathrm{Min} \end{aligned}$ | $\begin{gathered} \text { W (mm) } \\ \text { Max } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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 |
|  |  |  |  |  |  |  |  |  |  |
| FGRR-150 | FK | 45 | 17 | 85 | FGDT-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 |
|  |  |  |  |  |  |  |  |  |  |
| FGRR-250 | FK | 45 | 17 | 185 | FGDT-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 |



| FGRL-18x110CA \& FGDT-70 |
| :--- | :--- | :--- |
| FGRL-18x110CA \& FGDT-100 | FGRL-18x110CA \& FGDT-150



| B (mm) | Series | D (mm) | $\begin{gathered} \mathrm{W}(\mathrm{~mm}) \\ \mathrm{Min} \end{gathered}$ | $\begin{gathered} \text { W (mm) } \\ \text { Max } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| 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 |
| FGDT-100 | FK | 45 | 0 | 128 |
| FGDT-100 | FS | 65 | 0 | 148 |
| FGDT-100 | FM | 85 | 0 | 168 |
| FGDT-100 | FC | 105 | 0 | 188 |
| FGDT-100 | FL | 150 | 0 | 233 |
| 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 |
| FGDT-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 |





## FGRF-42x62-A35 \& FGRK-18×80A



See pages 213 and 214 for components

| Guide Rail | Guide Rail | Series | $\begin{gathered} \mathrm{D} \\ (\mathrm{~mm}) \end{gathered}$ | W min $\mathbf{B}=0$ | W min $\mid B=18$ | W min $B=36$ | $\begin{gathered} W(\mathrm{~mm}) \\ \mathrm{B}=0 \end{gathered}$ | $\begin{gathered} W(\mathrm{~mm}) \\ B=18 \end{gathered}$ | $\begin{gathered} W(\mathrm{~mm}) \\ B=36 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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 |




FGRF-42x18V FGRS-18 \& FGDT-200 Guide Rail Assembly



See pages 212 and 212 for components

| Guide Rail | Guide Rail | Series | $\begin{gathered} \mathbf{A} \\ (\mathrm{mm}) \end{gathered}$ | $\begin{gathered} \mathrm{B} \\ (\mathrm{~mm}) \end{gathered}$ | $\underset{(\mathrm{mm})}{\mathrm{D}}$ | $\begin{gathered} \text { W (mm) } \\ \text { Min } \end{gathered}$ | $\begin{gathered} \mathrm{W}(\mathrm{~mm}) \\ \mathrm{Max} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FGRB-40x18 | FGRK-18x80 | FK | 80 | 0 | 45 | 0 | 55 |
| FGRB-40x18 | FGRK-18x80 | FS | 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









Width \& Height Adjustable Guide Rail Assembly
Pucks Handling


Pallet Assembly Line Guide Rail
Electronic Assembly Handling

$\qquad$


Box Handling


Packaging Box Handling


## Width \& Height Guide Rail Assembly

Paper Converting Handling



Twin Track Pallet Guide Rail Assembly

> Pallet Handling


## FGVG-3

Special V Guide - Aluminum

UOM: 3 meter / length



## FGRA-8×39×45

Adjustable Guide Rail Bracket - Aluminum


UOM: 10 pcs / pk


Mounting to beam : FATB-20 (1) , FALN-M8 (1) , FAFW-M8 (1)


FGRA-26x39x45 Adjustable Guide Rail Bracket - Aluminum

UOM: $\mathbf{1 0}$ pcs / pk


Mounting to beam : FATB-20 (1) , FALN-M8 (1) , FAFW-M8 (1)

## FGRA-26x9x45 Adjustable Guide Rail Bracket - Aluminum

UOM: 10 pcs / pk


Mounting to beam : FATB-20 (1) , FALN-M8 (1) , FAFW-M8 (1)

## FGRB-16x54

Fixed Guide Rail Bracket - Aluminum


## FGRB-28x42 Fixed Guide Rail Bracket - Aluminum



Mounting to beam : FATB-20 (1) , FALN-M8 (1) , FAFW-M8 (1)

## FGRB-40×42

## Fixed Guide Rail Bracket - Aluminum




UOM: 10 pcs / pk
Mounting to beam : FATB-20 (1) , FALN-M8 (1) , FAFW-M8 (1)

## FGRB-53x42 Fixed Guide Rail Bracket - Aluminum

UOM: 10 pcs / pk


Mounting to beam : FATB-20 (1) , FALN-M8 (1) , FAFW-M8 (1)


## FGRD-6 Guide Rail Bracket Spacer - Aluminum

UOM: 10 pcs / pk


## FGRD-6B Spacer for FGRB-40x \#\# - Polyamide (\#\# = Diameter in mm)



For use with guide rail bracket support: FGRB $-40 \times 18 / 20$ FGRB $-40 \times 15 \times 20$

## FGRC-20 Guide Rail Support - Aluminum




Mounting: FAHB-M8 x 12 (1) , FASN-M8 (1) , FAFW-M8 (1)

## FGRC-20A



UOM: 10 pcs / pk


FGRB-16x42C Guide Rail Bracket - Polyamide

UOM: 10pcs / pk


UORnER
FGRB-16x52C Guide Rail Bracket - Polyamide



## FGRR-15 $\times 20 \quad$ Guide Rail Rectangular, $15 \mathrm{~mm} \times 20 \mathrm{~mm}$ - Aluminum

UOM: 3 meter / length


FGRR-10×20 Guide Rail Rectangular, $10 \mathrm{~mm} \times 20 \mathrm{~mm}$ - Aluminum

UOM: 3 meter / length


FGRR-10×20F
Guide Rail Rectangular, $10 \mathrm{~mm} \times 20 \mathrm{~mm}$ Type F - Aluminum


## FGRR-15X20P Guide Rail Rectangular, $15 \mathrm{~mm} \times 20 \mathrm{~mm}$ - HDPE

UOM: 3 meter / length

## FGRT-3×23 <br> FGRT-3×23A



Guide Rail Cover - HDPE
Guide Rail Cover - HDPE ( Conductive )


FGRT-3×33

## Guide Rail Cover - HDPE



FGRT-3×50

## Guide Rail Cover - HDPE





FGEC-15×40 End Cap for FGRR-15×40 - Polyamide

UOM: 10pcs / pk


## FGRA-22HD Guide Rail Support Assembly, Heavy Duty

## UOM: pc



Mounting to Beam: Included


## FGRA-2 2 HDT

## Guide Rail Support Assembly, Toolless, Heavy Duty



Mounting to Beam: Included

$\qquad$

UOM: 10pcs / pk


UOM: 10pcs / pk

$$
\begin{aligned}
& \text { Rail Connecting - Aluminum } L=100 \mathrm{~mm}, B=50 \mathrm{~mm} \\
& \text { Rail Connecting - Aluminum } \quad L=60 \mathrm{~mm}, \quad B=30 \mathrm{~mm}
\end{aligned}
$$

## FGEC-10x20 End Cap for FGRR-10x20 \& FGRR10x20F - Polyamide

## UOM: 10pcs / pk



## FGRJ-15x20

## Connecting Plug for FGRR-15x20 - Polyamide





## FGRC-18x110C Double Guide Rail Support, $L=110 \mathrm{~mm}$ - Polyamide

FGRC-18x160C Double Guide Rail Support, $L=160 \mathrm{~mm}$ - Polyamide

UOM: 10pcs / pk


Note:
Plastic guide supports used for light products.

Suitable for use with cross connector FGRB-18 $\times 18$ and a crossing 18 mm aluminum tube above the double track.


UOM: 10pcs / pk

## Guide Rail Support, L $=40 \mathrm{~mm}$ - Polyamide



Suitable for use with cross connector FGRB-18 $\times 18$ and FGRF $-42 \times 18 \mathrm{~V}$

## FGRL-18×110CA

FGRL-18x160CA

Guide Rail Support, L=110 mm - Polyamide
Guide Rail Support, L=160 mm - Polyamide


Note:
Plastic guide supports used for light products.

Suitable for use with cross connector FGRK $18 \times 80 / 130 / 40 \mathrm{~A} / 60 \mathrm{~A} / 80 \mathrm{~A} / 130 \mathrm{~A}$

## FGRF-42x18V Guide Rail Bracket - Polyamide



To be used with :
UOM: 10pcs / pk

- FGGR - 18 x* 100


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


FGRD-18A

Spacer for FGRF-42x18V - Polyamide


UOM: 10pcs / pk


Spacer for FGRF-42x18V - Polyamide


UOM: 10pcs / pk


Spacer for FGRF-42×18V - Polyamide


UOM: 10pcs / pk

## FGRF-A35



UOM: 10pcs / pk
To be used with guide rail support. For 1-2 guide rail levels.

## FGRF-A110 Guide Rail Bracket A110 - Polyamide



UOM: 10pcs / pk
To be used with guide rail support. For 1-4 guide rail levels.

## FGRF-DP



UOM: 10pcs / pk




UOM: 10pcs / pk




UOM: 10pcs / pk


For use with guide rail bracket support: FGRB - $40 \times 18 / 20$ FGRB $-40 \times 15 \times 20$


$$
\text { Guide Rail Bracket, } \varnothing A=18 \mathrm{~mm}, \varnothing \mathrm{~B}=18 \mathrm{~mm} \text { - Polyamide }
$$

## FGRB-18×20

FGRB-20x20
Guide Rail Bracket, $\varnothing A=20 \mathrm{~mm}, \varnothing B=20 \mathrm{~mm}$ - Polyamide


UOM: 10pcs / pk


UOM: 10pcs / pk


For use with :
FGGR - $18 \times 100 / 150 / 200 / 250 / 300$
FGDT - 70 / $80 / 100 / 150 / 200 / 250$

| FGRX-18×18 | $90^{\circ}$ Corner Connector, $\varnothing A=18 \mathrm{~mm}, \varnothing B=18 \mathrm{~mm}-$ Polyamide |
| :--- | :--- |
| FGRX-20×20 | $90^{\circ}$ Corner Connector, $\varnothing A=20 \mathrm{~mm}, \varnothing B=20 \mathrm{~mm}$ - Polyamide |


$90^{\circ}$ Corner Connector - Polyamide

For use with :
FGGR - $18 \times 100 / 150 / 200 / 250 / 300$ FGDT - $70 / 80 / 100 / 150 / 200 / 250$


For use with: F GRR - $15 \times 20 / 20$ P

## FGSP-DT

Distance Tube Spacer - POM



```
FGRB-PG Pallet Guide Mounting Clip Assembly
```



Mounting to Beam: FATB-20(1)
FALN-M8(1)
FAFW-M8(1)

## FGPG-A Pallet Guide Backing Rail - Aluminum



UOM: 3 meter/length
Available in North America only.

```
FGPG-U Pallet Guide UHMW Guide
```



## UOM: 3 meter/length

Available in North America only.

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

## Chart $6 \quad 90^{\circ}$ eDrive NEMA C-Face

- Sealed gearmotors
- NEMA 56 C face
- Totally enclosed, fan cooled
- 115V 1 phase includes switch, cord and overload protection
- 208-230/460V 3 phase wiring by others

- 60 Hz

- Order 3 phase starter separately, see page 226

| Part Number | Belt Speed |  |  |  |  |  | RPM | 1 Phase |  |  | 3 Phase |  |  | $\begin{aligned} & \text { in.- } \\ & \text { lbs. } \end{aligned}$ | Nm | Starter Chart |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 65 mm |  | 85 mm |  | $\begin{aligned} & 105 \mathrm{and} \\ & 150 \mathrm{~mm} \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |  |
|  | $\begin{aligned} & \mathrm{Ft} / \\ & \mathrm{min} \end{aligned}$ | M/min | $\begin{aligned} & \mathrm{Ft} / \\ & \mathrm{min} \end{aligned}$ | M/min | $\begin{aligned} & \mathrm{Ft} / \\ & \mathrm{min} \end{aligned}$ | M/min |  | Hp | kW | FLA | Hp | kW | FLA |  |  |  |
| 32M060ES4(vp)FN | 39 | 12 | 39 | 12 | 41 | 12 | 29 | 0.5 | 0.37 | 7.4 | 0.5 | 0.37 | 2.1-2 / 1.0 | 226 | 25.5 | M |
| 32M040ES4(vp)FN | 57 | 17 | 57 | 17 | 60 | 18 | 43 | 0.5 | 0.37 | 7.4 | 0.5 | 0.37 | 2.1-2 / 1.0 | 247 | 27.9 | M |
| 32M020ES4(vp)FN | 115 | 35 | 115 | 35 | 120 | 37 | 86 | 0.5 | 0.37 | 7.4 | 0.5 | 0.37 | 2.1-2 / 1.0 | 248 | 27.9 | M |

$(v p)=$ Voltage and Phase $11=115 \mathrm{~V}$, 1 phase $23=208-230 / 460 \mathrm{~V}, 3$ phase

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

## Chart $10 \quad 90^{\circ}$ eDrive ${ }^{\circ}$ NEMA C-Face VFD Rated

- Variable frequency drive, 6-60 Hz
- Sealed gearmotor
- NEMA 56 C Face
- Totally enclosed, fan cooled
- 230/460 Volts, 3 Phase
- Order controller separately, see page 226


Regulatory Approvals
( $\mathcal{C}$ ? RoHS (6.1

| Part Number | Belt Speed |  |  |  |  |  | RPM* | 3 Phase |  |  | $\begin{aligned} & \text { in.- } \\ & \text { lbs.* } \end{aligned}$ | Nm* | VariSpeed Control Chart |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 65 mm |  | 85 mm |  | 105 and 150 mm |  |  |  |  |  |  |  |  |
|  | Ft/min | M/min | Ft/min | M/min | Ft/min | M/min |  | Hp | kW | FLA |  |  |  |
| 32M060ES423EN | 9-39 | 2.9-121.6 | 9.6-38 | 2.9-12 | 10-41 | 3.1-12 | 29 | 0.75** | 0.55 | $2.6 / 1.3$ | 226 | 25.5 | D |
| 32M040ES423EN | 14-57 | 4.4-17 | 14-57 | 4.3-17 | 15-60 | 4.6-18 | 43 | 0.75** | 0.55 | 2.6 / 1.3 | 247 | 27.9 | D |
| 32M020ES423EN | 92-115 | 8.7-35 | 28-113 | 8.6-35 | 30-120 | 9.2-37 | 86 | 0.75** | 0.55 | $2.6 / 1.3$ | 248 | 27.9 | D |
| 32M010ES423EN | 58-231 | 18-70 | 57-228 | 17-70 | 60-242 | 18-74 | 173 | 0.75** | 0.55 | $2.6 / 1.3$ | 156 | 17.6 | D |

* $=$ At $60 \mathrm{~Hz} \quad * *=$ Motor is de-rated to $0.5 \mathrm{Hp}(2.2 / 1.1 \mathrm{amp})$ for full torque throughout the speed range. $\quad$ Available in North America only. own on/off switch and motor overload protection to comply with the CE Safety Directive.

FLA = Full Load Amperes Some motors and gear reducers may normally operate hot to the touch. Consult factory for specific operating temperatures. Note: Dimensions $=\mathrm{mm}$ (in)

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

| 230/460 V 60 Hz |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - Sealed Gearmotor <br> - SEW SA37 Size gearmotor <br> - Totally enclosed fan cooled <br> - 230/460 V 3 Phase <br> - 60 Hz <br> - Wiring by others |  | $\begin{gathered} \substack{161 \\ (6.33) \\ \hline \\ \hline} \\ \hline \end{gathered}$ |  | Left Hand Shown |  |  |  |  |  | Regulatory Approvals C 71 (1) |  |
| Chain Speed |  |  |  |  | RPM | Hp | kW | Amps | $\begin{aligned} & \text { in.- } \\ & \text { lbs. } \end{aligned}$ | Nm | Starter Chart |
| Part Number | FK, FS, FM, FU, FV |  | FC, FL |  |  |  |  |  |  |  |  |
|  | Ft/min | M/min | $\mathrm{Ft} /$ min | M/min |  |  |  |  |  |  |  |
| FMM129(X)DS423EN | 17.1 | 5.2 | 18 | 5.5 | 13 | 0.25 | 0.18 | 1.1/0.56 | 837 | 95 | D |
| FMM067(X)DS423EN | 32.8 | 10 | 34.8 | 10.6 | 25 | 0.5 | 0.37 | 1.9/0.95 | 699 | 79 | D |
| 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 | 48.3 | 114 | 1 | 0.75 | 3.1/1.57 | 444 | 50 | D |
| 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 $(\mathrm{X})$ is L or R for Right Hand or Left Hand Gearmotor matching RH or LH Drive

| 230/400 V 50 Hz |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - Sealed Gearmotor <br> - SEW SA37 Size gearmotor <br> - Totally enclosed fan cooled <br> - 230/400 V 3 Phase <br> - 50 Hz <br> - Wiring by others |  | $\stackrel{\substack{161 \\(6.33)}}{\stackrel{1}{4}}$ |  | $\begin{aligned} & 112 \\ & (4.40) \end{aligned}$ | $1$ |  |  |  | $\prod_{\substack{158 \\(6.21)}}^{1}$ |  | latory rovals $\epsilon$ |
| Chain Speed |  |  |  |  | RPM | Hp | kW | Amps | $\begin{aligned} & \text { in.- } \\ & \text { Ibs. } \end{aligned}$ | Nm | Starter Chart |
| Part Number | FK, FS, FM, FU, FV |  | FC, FL |  |  |  |  |  |  |  |  |
|  | Ft/min | M/min | Ft/min | M/min |  |  |  |  |  |  |  |
| FMZ099(X)DS423EN | 17.1 | 5.2 | 18 | 5.5 | 13 | 0.33 | 0.25 | 1.3/0.76 | 628 | 71 | B |
| FMZ060(X)DS423EN | 30.2 | 9.2 | 31.8 | 9.7 | 23 | 0.5 | 0.37 | 1.9/1.09 | 717 | 81 | B |
| FMZ029(X)DS423EN | 63.3 | 19.3 | 66.6 | 20.3 | 48 | 0.75 | 0.55 | 2.6/1.52 | 478 | 54 | B |
| FMZ013(X)DS423EN | 137.1 | 41.8 | 144.7 | 44.1 | 104 | 1 | 0.75 | 3.1/1.79 | 363 | 41 | B |
| FMZ009(X)DS423EN | 205.7 | 62.7 | 213.9 | 66.1 | 156 | 1.5 | 1.1 | 4.1/2.38 | 336 | 38 | B |
| FMZ007(X)DS423EN | 284.8 | 86.8 | 300.5 | 91.60 | 216 | 2 | 1.5 | 5.6/3.23 | 372 | 42 | B |

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

FLA = Full Load Amperes Some motors and gear reducers may normally operate hot to the touch. Consult factory for specific operating temperatures. Note: Dimensions $=\mathrm{mm}$ (in)

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

| $230 / 460$ V 60 Hz |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - Sealed Gearmotor <br> - SEW SA37 Size gearmotor <br> - Totally enclosed fan cooled <br> - 230/460 V 3 Phase <br> - 60 Hz <br> - Wiring by others |  |  | 205 (8.09) <br> -57 (2.24) |  | Left Hand Shown |  |  |  |  | Regulatory Approvals C 71 (1) |  |
| Part Number | Chain Speed |  |  |  | RPM | Hp | kW | Amps | $\begin{aligned} & \text { in.- } \\ & \text { lbs. } \end{aligned}$ | Nm | Starter Chart |
|  | FK, FS, FM, FU, FV |  | FC, FL |  |  |  |  |  |  |  |  |
|  | Ft/min | M/min | Ft/min | M/min |  |  |  |  |  |  |  |
| FMM129(X)DS423EN | 2.9-17.1 | 0.9-5.2 | 3-18 | 0.9-5.5 | 13 | 0.25 | 0.18 | 1.1/0.56 | 837 | 95 | D |
| FMM067(X)DS423EN | 5.5-32.8 | 1.7-10 | 5.8-34.8 | 1.8-10.6 | 25 | 0.5 | 0.37 | 1.9/0.95 | 699 | 79 | D |
| FMM032(X)DS423EN | 11.7-69.9 | 3.6-21.3 | 12.3-73.8 | 3.8-22.5 | 53 | 0.75 | 0.55 | 2.7/1.35 | 653 | 74 | D |
| FMM015(X)DS423EN | 25.1-150.3 | 7.6-45.8 | 26.4-158.5 | 8.1-48.3 | 114 | 0.75 | 0.55 | 2.7/1.35 | 341 | 39 | D |
| FMM013(X)DS423EN | 28.6-171.3 | 8.7-52.2 | 30.1-180.8 | 9.2-55.1 | 130 | 1 | 0.75 | 3.1/1.57 | 425 | 48 | D |
| FMM010(X)DS423EN | 37.6-225.4 | 11.5-68.7 | 39.7-237.9 | 12.1-72.5 | 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


Where $(\mathrm{X})$ is L or R for Right Hand or Left Hand Gearmotor matching RH or LH Drive
( $\epsilon_{\text {Note: }}$ 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.

FLA = Full Load Amperes Some motors and gear reducers may normally operate hot to the touch. Consult factory for specific operating temperatures. Note: Dimensions $=\mathrm{mm}$ (in)

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

| 230/460 V 60 Hz |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - Sealed Gearmotor <br> - SEW SA37 Size gearmotor <br> - Totally enclosed fan cooled <br> - 230/460 V 3 Phase <br> - 60 Hz <br> - Wiring by others |  |  |  |  |  |  |  |  |  | Regulatory Approvals <br> C 7 (6) |  |
| Part Number | Chain Speed |  |  |  | RPM | Hp | kW | Amps | $\begin{aligned} & \text { in.- } \\ & \text { lbs. } \end{aligned}$ | Nm | Starte Chart |
|  | FK, FS, FM, FU, FV |  | FC, FL |  |  |  |  |  |  |  |  |
|  | Ft/min | M/min | Ft/min | M/min |  |  |  |  |  |  |  |
| FMM129(X)SS423EN | 17.1 | 5.2 | 18 | 5.5 | 13 | 0.25 | 0.18 | 1.1/0.56 | 837 | 95 | D |
| FMM067(X)SS423EN | 32.8 | 10 | 34.8 | 10.6 | 25 | 0.5 | 0.37 | 1.9/0.95 | 699 | 79 | D |
| FMM032 (X)SS423EN | 69.9 | 21.3 | 73.8 | 22.5 | 53 | 0.75 | 0.55 | 2.7/1.35 | 653 | 74 | D |
| FMM015(X)SS423EN | 150.3 | 45.8 | 158.5 | 48.3 | 114 | 0.75 | 0.55 | 2.7/1.35 | 341 | 39 | D |
| FMm013(X)SS423EN | 171.3 | 52.2 | 180.8 | 55.1 | 130 | 1 | 0.75 | 3.1/1.57 | 425 | 48 | D |
| FMM010(X)SS423EN | 225.4 | 68.7 | 237.9 | 72.5 | 171 | 1.5 | 1.1 | 4.2/2.1 | 490 | 56 | D |

Where $(\mathrm{X})$ is L or R for Right Hand or Left Hand Gearmotor matching RH or LH Drive

| 230/400 V 50 Hz |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - Sealed Gearmotor <br> - SEW SA37 Size gearmotor <br> - Totally enclosed fan cooled <br> - 230/400 V 3 Phase <br> - 50 Hz <br> - Wiring by others |  |  |  |  |  |  |  |  | Regulatory Approvals C 7 © |  |
| Part Number | Chain Speed |  |  |  | Hp | kW | Amps | $\begin{aligned} & \text { in.- } \\ & \text { lbs. } \end{aligned}$ | Nm | Starter Chart |
|  | FK, FS, FM, FU, FV |  | FC, FL |  |  |  |  |  |  |  |
|  | $\mathrm{Ft} / \mathrm{min}$ | M/min | Ft/min | M/min |  |  |  |  |  |  |
| FMZ099(X)SS423EN | 17.1 | 5.2 | 18 | 5.5 | 0.33 | 0.25 | 1.3/0.76 | 628 | 71 | B |
| FMZ060(X)SS423EN | 30.2 | 9.2 | 31.8 | 9.7 | 0.5 | 0.37 | 1.9/1.09 | 717 | 81 | B |
| FMZ029(X)SS423EN | 63.3 | 19.3 | 66.6 | 20.3 | 0.75 | 0.55 | 2.6/1.52 | 478 | 54 | B |
| FMZ013(X)SS423EN | 137.1 | 41.8 | 144.7 | 44.1 | 1 | 0.75 | 3.1/1.79 | 363 | 41 | B |
| FMZ009(X)SS423EN | 205.7 | 62.7 | 213.9 | 66.1 | 1.5 | 1.1 | 4.1/2.38 | 336 | 38 | B |
| FMZ007(X)SS423EN | 284.8 | 86.8 | 300.5 | 91.60 |  | 1.5 | 5.6/3.23 | 372 | 42 | B |

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

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

| 230/460 V 60 Hz |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - Sealed Gearmotor <br> - SEW SA37 Size gearmotor <br> - Totally enclosed fan cooled <br> - 230/460 V 3 Phase <br> - 60 Hz <br> - Wiring by others |  |  |  |  |  |  |  |  |  | Regulatory Approvals C 7 |  |
| Chain Speed |  |  |  |  | RPM | Hp | kW | Amps | $\begin{aligned} & \text { in.- } \\ & \text { lbs. } \end{aligned}$ | Nm | Starter Chart |
| Part Number | FK, FS, FM, FU, FV |  | FC, FL |  |  |  |  |  |  |  |  |
|  | Ft/min | M/min | Ft/min | M/min |  |  |  |  |  |  |  |
| FMM129(X)SS423EN | 2.9-17.1 | 0.9-5.2 | 3-18 | 0.9-5.5 | 13 | 0.25 | 0.18 | 1.1/0.56 | 837 | 95 | D |
| FMM067(X)SS423EN | 5.5-32.8 | 1.7-10 | 5.8-34.8 | 1.8-10.6 | 25 | 0.5 | 0.37 | 1.9/0.95 | 699 | 79 | D |
| FMM032(X)SS423EN | 11.7-69.9 | 3.6-21.3 | 12.3-73.8 | 3.8-22.5 | 53 | 0.75 | 0.55 | 2.7/1.35 | 653 | 74 | D |
| FMM015(X)SS423EN | 25.1-150.3 | 7.6-45.8 | 26.4-158.5 | 8.1-48.3 | 114 | 0.75 | 0.55 | 2.7/1.35 | 341 | 39 | D |
| FMM013(X)SS423EN | 28.6-171.3 | 8.7-52.2 | 30.1-180.8 | 9.2-55.1 | 130 | 1 | 0.75 | 3.1/1.57 | 425 | 48 | D |
| FMM010(X)SS423EN | 37.6-225.4 | 11.5-68.7 | 39.7-237.9 | 12.1-72.5 | 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


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

FLA = Full Load Amperes Some motors and gear reducers may normally operate hot to the touch. Consult factory for specific operating temperatures. Note: Dimensions = mm (in)

## Variable Speed Controllers

| Chart D |  |  | ler |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - Full feature VFD control <br> - IP65 plastic enclosure <br> - Digital display <br> - Keypad with Start/Stop, Forward/Reverse and speed variations <br> - Includes cord to motor <br> - Power to controller by others <br> - Mounting hardware |  |  |  |  |  |  |  | ulatory provals <br> ( <br> (11) us |
| Part Number | Input Volts | Input Phase | Input Hz | Output Volts | Output Phase | Max Hp | Output Amps* | Reversing |
| 32MVA1122(0) | 115 | 1 | 60 | 230 | 3 | 0.5 | 2.3 | Yes |
| 32MVA2122(0) | 230 | 1 | 60 | 230 | 3 | 0.5 | 2.3 | Yes |
| 32MVA1121(0) | 115 | 1 | 60 | 230 | 3 | 1.0 | 4.3 | Yes |
| 32MVA2121(0) | 230 | 1 | 60 | 230 | 3 | 1.0 | 4.3 | Yes |
| 32MVA2127(0) | 230 | 1 | 60 | 230 | 3 | 2.0 | 7.0 | Yes |
| 32MVA2322(0) | 230 | 3 | 60 | 230 | 3 | 0.5 | 4.3 | Yes |
| 32MVA2321(0) | 230 | 3 | 60 | 230 | 3 | 1.0 | 2.3 | Yes |
| 32MVA2327(0) | 230 | 3 | 60 | 230 | 3 | 2.0 | 7.0 | Yes |
| 32MVA4342(0) | 460 | 3 | 60 | 460 | 3 | 0.5 | 1.2 | Yes |
| 32MVA4341(0) | 460 | 3 | 60 | 460 | 3 | 1.0 | 2.2 | Yes |
| 32MVA4347(0) | 460 | 3 | 60 | 460 | 3 | 2.0 | 4.1 | Yes |
| 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 $\quad$ No Option $=$ No Accessory Port $\quad \mathrm{E}=\mathrm{M} 12$ 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

| Part Number | $75 \mathrm{M}-\mathrm{JG}-1$ |
| :---: | :---: |

Not compatible with Brushless DC Controllers


Horizontal Mount

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.

FLA $=$ Full Load Amperes Some motors and gear reducers may normally operate hot to the touch. Consult factory for specific operating temperatures. Note: Dimensions = mm (in)

## 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.

| - IP 55 Enclosure <br> - Push button Start / Stop <br> - Includes mounting hardwar <br> Regulatory Approvals |  |  | Illustration A |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | $178 \text { (7.0) }$ |  |  |  |
| Chart I | 230/400V 50Hz to 2.5 amp |  |  |  | Chart J | 230/400V 50 Hz to 4 amp |  |  |  |
| - 230 Volts, 1 phase includes cord, plug and starter <br> - 230/400 Volts, 3 phase wiring to starter by others <br> - Wiring between motor and starter provided when ordered together <br> - 50 Hz |  |  |  |  | - 230 Volts, 1 phase includes cord, plug and starter <br> - 230/400V, 3 phase wiring to starter by others <br> - Wiring between motor and starter provided when ordered together <br> - 50 Hz |  |  |  |  |
| Part Number | In Volts | In Phase | Amp Range | Illustration | Part Number | In Volts | In Phase | Amp Range | Illustration |
| $\begin{aligned} & \text { 62(c)M21T } \\ & \text { 62(c)M23T } \\ & 62(\mathrm{c}) \mathrm{M} 43 \mathrm{~T} \end{aligned}$ | $\begin{aligned} & 230 \\ & 230 \\ & 400 \end{aligned}$ | $\begin{aligned} & 1 \\ & 3 \\ & 3 \end{aligned}$ | $\begin{array}{r} 1.6-2.5 \\ 1.0-1.6 \\ 0.63-1.0 \end{array}$ | $\begin{aligned} & \text { A } \\ & \text { B } \\ & \text { B } \end{aligned}$ | $\begin{aligned} & \text { 62(c)M21J } \\ & \text { 62(c)M23J } \\ & \text { 62(c)M43J } \end{aligned}$ | $\begin{aligned} & 230 \\ & 230 \\ & 400 \end{aligned}$ | $\begin{aligned} & 1 \\ & 3 \\ & 3 \end{aligned}$ | $\begin{aligned} & 2.5-4.0 \\ & 1.6-2.5 \\ & 1.0-1.6 \end{aligned}$ | $\begin{aligned} & A \\ & B \\ & B \end{aligned}$ |
| Chart L | $230 / 460 \mathrm{~V} 60 \mathrm{~Hz}$ to 1.6 amp |  |  |  | Chart M | $230 / 460 \mathrm{~V} 60 \mathrm{~Hz}$ to 2.5 amp |  |  |  |
| - 230/460 Volts, 3 phase wiring to starter by others <br> - Wiring between motor and starter provided when ordered together <br> - 60 Hz |  |  |  |  | - 230/460 Volts, 3 phase wiring to starter by others <br> - Wiring between motor and starter provided when ordered together <br> - 60 Hz |  |  |  |  |
| Part Number | In Volts | In Phase | Amp Range | Illustration | Part Number | In Volts | In Phase | Amp Range | Illustration |
| 62MM23L <br> 62MM43L | $\begin{aligned} & 230 \\ & 460 \end{aligned}$ | $\begin{aligned} & 3 \\ & 3 \end{aligned}$ | $\begin{aligned} & 1.0-1.6 \\ & 0.4-.63 \end{aligned}$ | $\begin{aligned} & \mathrm{B} \\ & \mathrm{~B} \end{aligned}$ | 62MM23M 62MM43M | $\begin{gathered} 208-230 \\ 460 \end{gathered}$ | $\begin{aligned} & 3 \\ & 3 \end{aligned}$ | $\begin{aligned} & 1.6-2.5 \\ & 1.0-1.6 \end{aligned}$ | $\begin{aligned} & \text { B } \\ & \text { B } \end{aligned}$ |
| Chart P | $230 / 460 \mathrm{~V} 60 \mathrm{~Hz}$ to 4 amp |  |  |  | Chart Q | $230 / 460 \mathrm{~V} 60 \mathrm{~Hz}$ to 6.3 amp |  |  |  |
| - 230/460 Volts, 3 phase wiring to starter by others <br> - Wiring between motor and starter provided when ordered together <br> - 60 Hz |  |  |  |  | - 230/460 Volts, 3 phase wiring to starter by others <br> - Wiring between motor and starter provided when ordered together <br> - 60 Hz |  |  |  |  |
| Part Number | In Volts | In Phase | Amp Range | Illustration | Part Number | In Volts | In Phase | Amp Range | Illustration |
| 62MM23U <br> 62MM43P | $\begin{gathered} 208-230 \\ 460 \end{gathered}$ | $\begin{aligned} & 3 \\ & 3 \end{aligned}$ | $\begin{aligned} & 2.5-4.0 \\ & 1.6-2.5 \end{aligned}$ | $\begin{aligned} & B \\ & B \end{aligned}$ | 62MM23Q <br> 62MM43Q | $\begin{gathered} 208-230 \\ 460 \end{gathered}$ | $\begin{aligned} & 3 \\ & 3 \end{aligned}$ | $\begin{aligned} & 4.0-6.3 \\ & 2.5-4.0 \end{aligned}$ | $\begin{aligned} & B \\ & B \end{aligned}$ |

[^15](c) = Electrical Configuration
G = CE German $\mathbf{F}=$ CE French $\quad \mathbf{U}=$ CE Great Britain Note: Dimensions $=m m$ (in)


## Pallets

- Pallet Sizes: 105 mm Conveyor

|  | Length |  |  |
| :---: | :---: | :---: | :---: |
| 180 mm wide | 100 | 150 | 200 |

- Recessed hardened stop plates provide complete access to full top plate for part tooling
- Maximum weight per pallet $=9 \mathrm{~kg}(20 \mathrm{lbs})$
- 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

| Stops |  |
| :---: | :---: |
| $22 \mathrm{SF}$ |  |



## Cushioned



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 $6.35 \mathrm{~mm}(.25 \mathrm{in})$ air line
- See page 163 for pallet sensor brackets
- Available in North America only.


## Speed vs. Load Characteristics

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

*Note: Pallet bumpers are recommended.


Cushioned Pneumatic Schematic


## 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


Divert Module with Sensors

- 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


Divert/Merge Orientations


P45


90


P90


Parallel

## Diverts


-Pallet Photoeye Brackets:
$\mathbf{1}=$ No Pallet Photoeye Brackets $\mathbf{2}=$ Includes Pallet Photoeye Brackets - Divert Arm Sensors: N = No Reed Switches R = Reed Switches Included Stop Type: C Cushioned $\mathbf{F}=$ Non cushioned $\mathbf{N}=$ No Stops Included - Divert Type: 2 = Divert only, 2 Position 3 = Divert and Merge, 3 Position

- Angle: $\mathbf{0 4 5}=45^{\circ} \quad \mathbf{0 9 0}=90^{\circ} \quad \mathbf{0 0 0}=$ Parallel P45 $=$ Parallel $45 \quad$ P90 $=$ Parallel 90 - Width Reference: $105=105 \mathrm{~mm}$

Documentation Language: $M=U S$

- D = Divert and Merge


## Fixed Merge




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 $90.7 \mathrm{~kg}(200 \mathrm{lbs})$ of vertical holding force
- Lifts pneumatic operated
- Rated for pressures up to 100 psi.
- Repeatable accuracy of $\pm .1 \mathrm{~mm}$ ( 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 $6.35 \mathrm{~mm}(.25 \mathrm{in})$ air line
- Available in North America only.



Pallet in Locked Location


## 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 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).

## 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. | $\begin{aligned} & \text { FASR-25 } \\ & \text { FASR-25K } \end{aligned}$ | 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 $60^{\circ} \mathrm{C}$ | -20 to $60^{\circ} \mathrm{C}$ | -20 to $60^{\circ} \mathrm{C}$ | -40 to $1250^{\circ} \mathrm{C}$ | -20 to $60^{\circ} \mathrm{C}$ | -20 to $60^{\circ} \mathrm{C}$ |
| MaximumSpeed | $50 \mathrm{M} / \mathrm{min}$ | $60 \mathrm{M} / \mathrm{min}$ | $50 \mathrm{M} / \mathrm{min}$ | $120 \mathrm{M} / \mathrm{min}$ | $60 \mathrm{M} / \mathrm{min}$ | $50 \mathrm{M} / \mathrm{min}$ |
| 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 sensitive 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 |

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 $20^{\circ} \mathrm{C}$ (N) | 3600 N | 3400 N | 4800 N | 4800 N | 4800 N | 4800 N | 4800 N |
| Tensile strength at $68^{\circ} \mathrm{F}$ (lbf) | 810 lbf | 764 lbf | 1079 lbf | 1079 lbf | 1079 lbf | 1079 lbf | 1079 lbf |
| Max. working tensile at $20^{\circ} \mathrm{C}$ (N) | 500 N | 500 N | 1250 N | 1250 N | 1250 N | 1250 N | 1250 N |
| Max. working tensile at $68^{\circ} \mathrm{F}$ (lbf) | 112 lbf | 112 lbf | 281 lbf | 281 lbf | 281 lbf | 281 lbf | 281 lbf |
| Working temperature ( ${ }^{\circ} \mathrm{C}$ ) | $-20-60^{\circ} \mathrm{C}$ | $-20-60^{\circ} \mathrm{C}$ | $-20-60^{\circ} \mathrm{C}$ | $-20-60^{\circ} \mathrm{C}$ | $-20-60^{\circ} \mathrm{C}$ | $-20-60^{\circ} \mathrm{C}$ | $-20-60^{\circ} \mathrm{C}$ |
| Working temperature ( ${ }^{\circ} \mathrm{F}$ ) | $-4-140^{\circ} \mathrm{F}$ | $-4-140^{\circ} \mathrm{F}$ | $-4-140^{\circ} \mathrm{F}$ | $-4-140^{\circ} \mathrm{F}$ | $-4-140^{\circ} \mathrm{F}$ | $-4-140^{\circ} \mathrm{F}$ | $-4-140^{\circ} \mathrm{F}$ |
| Maximum conveyor speed (m/min) | $50 \mathrm{~m} / \mathrm{min}$ | $58 \mathrm{~m} / \mathrm{min}$ | $58 \mathrm{~m} / \mathrm{min}$ | $58 \mathrm{~m} / \mathrm{min}$ | $58 \mathrm{~m} / \mathrm{min}$ | $58 \mathrm{~m} / \mathrm{min}$ | $58 \mathrm{~m} / \mathrm{min}$ |
| Maximum conveyor speed (ft/min) | $165 \mathrm{ft} / \mathrm{min}$ | $190 \mathrm{ft} / \mathrm{min}$ | $190 \mathrm{ft} / \mathrm{min}$ | $190 \mathrm{ft} / \mathrm{min}$ | $190 \mathrm{ft} / \mathrm{min}$ | $190 \mathrm{ft} / \mathrm{min}$ | $190 \mathrm{ft} / \mathrm{min}$ |
| Max. conveyor length (m) | 30 m | 30 m | 30 m | 30 m | 30 m | 30 m | 30 m |
| Max. conveyor length (ft) | 100 ft | 100 ft | 100 ft | 100 ft | 100 ft | 100 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) | $0.63 \mathrm{~kg} / \mathrm{m}$ | $0.75 \mathrm{~kg} / \mathrm{m}$ | 1.20 kg/m | 1.67 kg/m | $1.87 \mathrm{~kg} / \mathrm{m}$ | 2.0 kg/m | $2.43 \mathrm{~kg} / \mathrm{m}$ |
| Chain weight (plain) (lb/ft) | $0.43 \mathrm{lb} / \mathrm{ft}$ | $0.50 \mathrm{lb} / \mathrm{ft}$ | $0.81 \mathrm{lb} / \mathrm{ft}$ | $1.12 \mathrm{lb} / \mathrm{ft}$ | $1.26 \mathrm{lb} / \mathrm{ft}$ | $1.344 \mathrm{lb} / \mathrm{ft}$ | $1.633 \mathrm{lb} / \mathrm{ft}$ |
| Max. weight on conveyor (kg/m) | $30 \mathrm{~kg} / \mathrm{m}$ | $30 \mathrm{~kg} / \mathrm{m}$ | $60 \mathrm{~kg} / \mathrm{m}$ | $60 \mathrm{~kg} / \mathrm{m}$ | $60 \mathrm{~kg} / \mathrm{m}$ | $65 \mathrm{~kg} / \mathrm{m}$ | $65 \mathrm{~kg} / \mathrm{m}$ |
| Max. weight on conveyor (lb/ft) | $20 \mathrm{lb} / \mathrm{ft}$ | $20 \mathrm{lb} / \mathrm{ft}$ | $40 \mathrm{lb} / \mathrm{ft}$ | $40 \mathrm{lb} / \mathrm{ft}$ | $40 \mathrm{lb} / \mathrm{ft}$ | $44 \mathrm{lb} / \mathrm{ft}$ | $44 \mathrm{lb} / \mathrm{ft}$ |
| Item width (mm) | $15-100 \mathrm{~mm}$ | $15-140 \mathrm{~mm}$ | 20-200 mm | $25-300 \mathrm{~mm}$ | $50-400 \mathrm{~mm}$ | $50-400 \mathrm{~mm}$ | $80-500 \mathrm{~mm}$ |
| 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 | $\begin{aligned} & \text { FKPC } \\ & \text {-SCD } \end{aligned}$ | $\begin{aligned} & \text { FSPC } \\ & \text {-SCD } \end{aligned}$ | $\begin{aligned} & \text { FMPC } \\ & \text {-SCD } \end{aligned}$ | $\begin{aligned} & \text { FCPC } \\ & \text {-SCD } \end{aligned}$ | $\begin{aligned} & \text { FLPC } \\ & \text {-SCD } \end{aligned}$ | $\begin{aligned} & \text { FUPC } \\ & \text {-SCD } \end{aligned}$ | $\begin{aligned} & \text { FVPC } \\ & \text {-SCD } \end{aligned}$ |
| Tensile strength at $20^{\circ} \mathrm{C}(\mathrm{N})^{*}$ | 1440 N | 1360 N | 1920 N | 1920 N | 1920 N | 1920 N | 1920 N |
| Tensile strength at $68^{\circ} \mathrm{F}$ (Ifb)* | 324 lbf | 306 lbf | 432 lbf | 432 lbf | 432 lbf | 432 lbf | 432 lbf |
| Max working tensile at $20^{\circ} \mathrm{C}(\mathrm{N})^{*}$ | 200 N | 200 N | 500 N | 500 N | 500 N | 500 N | 500 N |
| Max working tensile at $68^{\circ} \mathrm{C}$ (lfb)* | 45 lbf | 45 lbf | 112 lbf | 112 lbf | 112 lbf | 112 lbf | 112 lbf |

*Stregnth of conductive chain is $40 \%$ of standard chain.
DORntir

## 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:

$1=914 \mathrm{~mm}$ (36 in)
$2=3048 \mathrm{~mm}(10 \mathrm{ft})^{*}$

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

Note: Additional support required on $180^{\circ}$ curve modules.


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

## Conveyor Drive Shaft Tolerances:

OPTIONAL AUXILARY SHAFT


Note: Dimensions = mm (in)

## 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
- Number of starts and stops per hour
- Application temperature
- Maximum Drive Unit Output

Located online at www.dornerconveyors.com 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 www. 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.
3. Nominal Maximum Load $(\mathrm{kg})=$ (Tension Limit / Chain Coefficient of Friction) - (Conveyor length) (2) (Chain weight)

Nominal Maximum Load (lbs) = (Nominal Maximum Load (kg)) (2.2)
See following pages forChain Coefficient ofFriction. Nominal Maximum load may also be limited by available gearmotors. Conformation of gearmotor torque is required. See pages 28-37 for gearmotors available. Nominal Maximum load cannot exceed overall conveyor load limit of $300 \mathrm{lbs}(136 \mathrm{~kg})$ for 65 mm wide and $600 \mathrm{lbs}(273 \mathrm{~kg})$ 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 $40^{\circ} \mathrm{C}$ environment. Continuous running.

- Basic Tension Limit - Tension vs. Speed $=1050 \mathrm{~N}$
- Basic Tension Limit - Tension vs. Length $=1100 \mathrm{~N}$
- Therefore Basic Tension Limit = 1050N
- Tension Limit = (Basic Tension Limit) (Temperature Factor) (Start/Stop Factor) (Accumulation Factor) (0.7)
- Tension Limit $=(1050)(0.9)(1.0)(0.5)(0.7)=330 \mathrm{~N}$
- Nominal Maximum Load (kg) = (Tension Limit / Chain Coefficient of Friction) - (Conveyor length) (2) (Chain weight)
- Nominal Maximum Load $(\mathrm{kg})=(330 / 0.3)-(20)(2)(16.4)=1100-984=116 \mathrm{~kg}$
- Nominal Maximum Load (lbs) $=116 * 2.2=256 \mathrm{lbs}$

| Temperature Factor |  |  |
| :---: | :---: | :---: |
| Ambient temperature can negatively affect the tension |  |  |
| capacity of the conveyor chain. |  |  |
| Temperature ( ${ }^{\circ}$ F) | Temperature ( ${ }^{\circ}$ 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 / Stop Factor |
| :---: | :---: |
| 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. <br> Product accumulation may only be done with the plain chain. <br> Based on the product being accumulated apply the below <br> Accumulation Factor in determining your Nominal Maximum Load. <br> All factors below are assuming dry conditions. |  |  |
| Product Being <br> Accumulated | Typical Coefficient <br> of Friction | Accumulation <br> 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, $\mathbf{P}(\mathbf{W})$ requirement depend on:

- Traction force F (N) - Chain speed V ( $\mathrm{m} / \mathrm{min}$ )

To calculate power, the equation is $P=1 / 60(F \times V)$
There are several drive unit designs, the maximum permissible traction force on each type of drive unit as below:

| Drive unit type | Maximum traction force in Newton (N) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 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 |

## 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 $a$ in radians and friction coefficient $\mu$ between chain and slide rails. In application when conveyor is dry and clean, the friction coefficient $\mu$ 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 $180^{\circ}$, unless it is for a very short and light application.

| Bend type, horizontal or vertical plain bend | Bend factor |
| :---: | :---: |
| $30^{\circ} 1$ | .2 |
| $45^{\circ}$ | 1.3 |
| $60^{\circ} 1$ | .4 |
| $90^{\circ} 1$ | .6 |

$8^{\circ}$ inclined is the maximum a product could convey for plain chain whereas friction top chain could take up to $30^{\circ}$

## 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 <br> 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 <br> 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 |

## Resistance to chemical

FlexMove ${ }^{\circledR}$ 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 good

$$
3=\text { Moderate resistance }
$$

$4=$ Not recommended

$$
\begin{aligned}
& 2=\text { Good } \\
& 5=\text { No data available }
\end{aligned}
$$



## 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 $60^{\circ} \mathrm{C}$ 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 $\left(20^{\circ} \mathrm{C}\right.$ and humidity $\left.60 \%\right)$ without load, the static electricity build up should be around the following figures:

| Above the drive unit | $1800-2500 \mathrm{~V}$ |
| :--- | :---: |
| Idler end | $400-500 \mathrm{~V}$ |
| Above the wheel bend | $400-500 \mathrm{~V}$ |
| Above the straight section | $250-350 \mathrm{~V}$ |

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.


100


## 200

## Pneumatic Specifications - FlexMove Pallet Modules

| Device | Action | Bore Diameter |  | Stroke Length |  | Return Type | Sensor Compatible | Force |  | Fitting |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 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 | 35 mm | 1.39 in | 9 mm | 0.35 in | Spring | No | N/A | N/A | M5 | 1/4 in |
| Non-cushion Stop | Stop retract | 35 mm | 1.39 in | 9 mm | 0.35 in | Spring | No | N/A | N/A | M5 | 1/4 in |

## PRODUCT SUMMARY

## FlexMcye

FlexMove ${ }^{\circledR}$ Conveyors are best for:

- Part Handling
- Elevation Changes
- Complex Configurations
- Transfers
- Accumulation
- Tight Spaces
- Buffering
- Long Lengths
- Curves, Jogs,

Incline, Decline

## Sizes \& Measurements

- $45 \mathrm{~mm}, 65 \mathrm{~mm}, 85 \mathrm{~mm}, 100 \mathrm{~mm}, 150 \mathrm{~mm}, 180 \mathrm{~mm}$ \& $260 \mathrm{~mm}(1.7,2.5,3,4,6,7$ and 10 in$)$ widths
- 0.6 m to $29.8 \mathrm{~m}(2$ to 98 ft$)$ lengths


## Loads \& Speeds

- Up to 272 kgs (600 lbs)
- Up to 76 meters (250 feet) per minute


## Plastic Chain Types

- Standard: Low Friction \& Friction Insert
- Specialty
- Conductive
- Cleated
- Roller Top
- Magnet Top
- And Many More



Cleated


Friction Top


Roller Top

## Modules



Drive


Curve
from $\mathbf{1 5}^{\circ}$ to $\mathbf{1 8 0}^{\circ}$


Idler


Incline/Decline from $5^{\circ}$ to $90^{\circ}$


## Guiding

- Fully Adjustable Single Rail
- Fully Adjustable Double Rail
- Other Options Available



## Support Stands

- Single, Double and Multi Lane Structures Available




## TRANSFORMING CONVEYOR AUTOMATION

## Contact Dormer

## United States

+1-262-367-7600
Germany
+49 (0) 2461/93767-0

## Canada

+1-289-208-7306
France
+33 (0)1 84732427

Mexico
+52.33.30037400

## Malaysia

+604-626-2948


By Columbus McKinnon
DORNERCONVEYORS.COM

MAGNETEK montnate?


[^0]:    *3/4 inch shaft option available in North America only.

[^1]:    *3/4 inch shaft option available in North America only.

[^2]:    *3/4 inch shaft option available in North America only.

[^3]:    *3/4 inch shaft option available in North America only.

[^4]:    *3/4 inch shaft option available in North America only.

[^5]:    *3/4 inch shaft option available in North America only.

[^6]:    The outer bend is assembled using connecting strip (FACS-25x140A). Angle of " $\varnothing^{\circ}$ " must be indicated when ordering.

[^7]:    *3/4 inch shaft option available in North America only.

[^8]:    *3/4 inch shaft option available in North America only.

[^9]:    *3/4 inch shaft option available in North America only.

[^10]:    *3/4 inch shaft option available in North America only.

[^11]:    The outer bend is assembled using connecting strip (FACS-25x140A).
    Angle of " $\varnothing^{\circ}$ " must be indicated when ordering.

[^12]:    *3/4 inch shaft option available in North America only.

[^13]:    *Where Fx $=$ Conveyor series (limit to FS,FM,FC,FL,FU \&FV)

[^14]:    *Where $\mathrm{xxx}=$ total width of merge area

[^15]:    C $\in$ 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 NEC and CE safety directive.

