High Performance, Stainless Steel, Flexible Chain Conveyors
CONVEYOR FEATURES

WHEEL CORNERS
ELIMINATE CORNER
FRICTION ALLOWING
MULTIPLE CORNER
CONFIGURATIONS

VERTICAL BENDS
FOR SMOOTH ELEVATION
CHANGES AND EFFICIENT
USE OF VERTICAL SPACE

STAINLESS STEEL
FRAMEWORK
FOR CORROSION
RESISTANT APPLICATIONS

TRANSFERS
FOR SMOOTH IN-LINE
TRANSFER OF PRODUCT

SUPPORT POST
PROVIDE ADJUSTABLE
HEIGHT WHILE
OPTIMIZING THE USE
OF FLOOR SPACE

MODULAR FRAMING
FOR FUTURE ADD-ON
CAPABILITY AND
PRODUCTION LINE CHANGES

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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.

February 2020
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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.

• **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.

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

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

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

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

Slide Rail
A slide rail provides low friction and wear resistant track for the chain to slide on. It is mounted to a conveyor frame using screws or rivets. Various types of slide rails are available to meet different requirements like normal operation, high speed, high load, conductive and accumulation applications.

Conveyor Frames
Conveyor frames are made of Stainless Steel provided in cut to length sizes to match the application. The conveyor side frame is provided with mounting locations for guides and support stands.

Guide Rail Assembly System
Guide rail components are used to guide and contain products throughout the conveyor system and prevent them from falling off the conveyor. We provide a comprehensive range of Stainless Steel guide rails, and brackets either fixed or adjustable to cover many specialized product sizes and shapes.

Structural System
Our Stainless Steel structural support system consists of Stainless support stands cut to the height of the application. Each support includes a tripod base for fine height adjustments.

Conveyor Accessories
We offer a wide selection of conveyor accessories from special bolt & nuts, brackets, connecting strips, rivets, rollers, and washers for inter-connection between modules and components.

HOW TO PURCHASE

Purchasing a FlexMove Conveyor
Dorner offers three solutions for purchasing a FlexMove Conveyor.

• The first solution is to order all the necessary parts and components to build your FlexMove Conveyor on site. This will require the proper tools for cutting, bending and installing the conveyor. Consult our installation guide for FlexMove Conveyors for more details.

• The second solution is to have a complete conveyor provided through our FlexMove Solutions. With FlexMove Solutions, you can have the conveyor built in our facility, tested, broken down into shippable sections and shipped to the end site for installation.

• The third solution is to work with Dorner to have your FlexMove Conveyor assembled at the final site. The Conveyor will be purchased similar to option 2, but will be shipped as pre-cut and sized components. The Dorner installation team will then assemble and test the equipment at your location. Contact a Dorner representative for a quote on this service.
**65 mm (2.5 in)**
- Maximum load = 30 kg/m (20 lbs/ft)
- Maximum total load = 136 kg (300 lbs) non-accumulated
- Maximum length = 30 m (98 ft)
- Maximum Speed = 58 mpm (190 fpm)

**85 mm (3.4 in)**
- Maximum load = 60 kg/m (40 lbs/ft)
- Maximum total load = 272 kg (600 lbs) non-accumulated
- Maximum length = 30 m (98 ft)
- Maximum Speed = 58 mpm (190 fpm)

**105 mm (4.1 in)**
- Maximum load = 60 kg/m (40 lbs/ft)
- Maximum total load = 272 kg (600 lbs) non-accumulated
- Maximum length = 30 m (98 ft)
- Maximum Speed = 58 mpm (190 fpm)

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

*Note:* Dimensions = mm (in)
180 mm (7.1 in)
- Maximum load = 65 kg/m (44 lbs/ft)
- Maximum total load = 272 kg (600 lbs) non-accumulated
- Maximum length = 30 m (98 ft)
- Maximum Speed = 58 mpm (190 fpm)

260 mm (10.2 in)
- Maximum load = 65 kg/m (44 lbs/ft)
- Maximum total load = 272 kg (600 lbs) non-accumulated
- Maximum length = 30 m (98 ft)
- Maximum Speed = 58 mpm (190 fpm)

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

Note: Dimensions = mm (in)
SS Series:

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
Slide Rail Rivet: FASLS-M5

Connecting strip is used to connect 2 beams.
Connecting Strip: SACS-50x70

Conveyor Beam  SSCB-LXXXX

Where:
XXXX = Length (mm)

UOM: each

Chain Connecting Module  SSCC-160

UOM: 3 Meter / Length

Connecting Strip – Stainless Steel  SACS-50x70

UOM: pc
SS SERIES: 65 mm

FlexMove STAINLESS SERIES

Idler End
Direct Drive
Horizontal Beam Support
Tripod Structure
### Chain Common Data

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

### Material:

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

### Example for FSCT-5A17-L#

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

The above chain is FSCT-5A17-L1, 1 link cleated top chain with alternate of 1 link of plain chain.

**Note:** # = 1, 2, 3, 4, 5.....20

### Standard Plain Chain FSPC-5

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

### Universal Chain FSUC-5

- **UOM:** 5 Meter / box
- **Application:** Universal Link with M3 Nut, Suitable for attached customer cleat or fixture

### Wedge Top Chain FSWT-5A

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

### Wedge Top Chain FSWT-5C

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

### Wedge Top Chain FSWT-5D

- **UOM:** 5 Meter / box
- **Application:** Vertical Wedge transportation of products.
SS SERIES: 65 mm

**Friction Top Chain**  **FSFT-5**

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

**Friction Top Chain**  **FSFT-5C**

- UOM: 5 Meter / box
- Application: Suitable for transport product in slope > 5° but ≤ 35° without accumulation. Subject to product weight and packing.

**Twist Chain**  **FSPC-5M**

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

---

**Conductive Chain**  **FSPC-5CD**

- UOM: 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.
FlexMove STAINLESS SERIES

SS SERIES: 65 mm

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-A FSCT-5A30-L#
# = 1, 2, 3, 4, 5.....20
UOM: 5 Meter / box
Application: Suitable for vertical transport of product with no accumulation.

Cleat Top Chain-B FSCT-5B
# = 1, 2, 3, 4, 5.....20
UOM: 5 Meter / box
Application: Suitable for Cigarette transport.

Cleat Top Chain-C FSCT-5C
UOM: 5 Meter / box
Application: Suitable for Cigarette transport.

Magnet Top Chain FSMT-5
UOM: 5 Meter / box
Application: Suitable for conveying ferromagnetic products in slope.

Magnet Top Chain FSMT-5-L#
# = 1, 2, 3, 4, 5.....20
UOM: 5 Meter / box
Application: Suitable for conveying ferromagnetic products in slope.
**SS SERIES: 65 mm**

**Hardened Steel Top Chain**  **FSST-5**

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

**Stainless Steel Top Chain**  **FSST-5S**

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

**Roller Top Chain**  **FSRT-5**

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

**Roller Cleat Chain**  **FSRC-5A-L#**

UOM: 5 Meter / box
Application: Suitable for vertical transportation, of! product in slope with no accumulation.
**Max Traction Force: 500N**

The standard Direct End Drive Unit is without torque limiter. See page 66-67 for Gearmotor options.

**UOM: pc**

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

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**Max Traction Force: 500N**

The Direct End Drive GP is used for vertical wedge conveyor. See page 66-67 for Gearmotor options.

**UOM: pc**

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

SEW gearmotors are products of SEW Eurodrive
### SS SERIES: 65 mm

<table>
<thead>
<tr>
<th>Component</th>
<th>Model</th>
<th>UOM</th>
<th>Chain req'd 2-way</th>
<th>Slide rail req'd 2-way</th>
</tr>
</thead>
<tbody>
<tr>
<td>SS Idler End-A65</td>
<td>SSIE-A65</td>
<td>pc</td>
<td>0.8 meter</td>
<td>0.5 meter</td>
</tr>
<tr>
<td>SS Wheel Bend 180°</td>
<td>SSWB-180R150A</td>
<td>pc</td>
<td>1.4 meter</td>
<td>2.8 meter</td>
</tr>
<tr>
<td>SS Wheel Bend 90°</td>
<td>SSWB-90R150A</td>
<td>pc</td>
<td>0.9 meter</td>
<td>1.7 meter</td>
</tr>
<tr>
<td>SS Wheel Bend 45°</td>
<td>SSWB-45R150A</td>
<td>pc</td>
<td>0.6 meter</td>
<td>1.2 meter</td>
</tr>
</tbody>
</table>
Example for SS Wheel Bend Ordering
- Wheel bend, $\theta^\circ \pm 1^\circ$

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

**SSWB-65R150**

The outer bend is assembled using connecting strip (SACS-50x75). Angle of $\theta^\circ$ must be indicated when ordering.

### SS Horizontal Plain Bend 30°

**Horizontal plain bend, $30^\circ \pm 1^\circ$**
- $R = 500 \pm 10$ mm  
  SSHB-30R500
- $R = 700 \pm 10$ mm  
  SSHB-30R700

**UOM: pc**
- Chain required 2-way (500, 700): 1.4, 1.6 meter
- Slide rail required 2-way (500, 700): 2.8, 3.2 meter

### SS Horizontal Plain Bend 45°

**Horizontal plain bend, $45^\circ \pm 1^\circ$**
- $R = 500 \pm 10$ mm  
  SSHB-45R500
- $R = 700 \pm 10$ mm  
  SSHB-45R700

**UOM: pc**
- Chain required 2-way (500, 700): 1.6, 1.9 meter
- Slide rail required 2-way (500, 700): 2.9, 3.3 meter

### SS Horizontal Plain Bend 90°

**Horizontal plain bend, $90^\circ \pm 1^\circ$**
- $R = 500 \pm 10$ mm  
  SSHB-90R500
- $R = 700 \pm 10$ mm  
  SSHB-90R700

**UOM: pc**
- Chain required 2-way (500, 700): 2.4, 3.0 meter
- Slide rail required 2-way (500, 700): 4.8, 6.0 meter
SS Horizontal Plain Bend 5-180°

Example for SS Horizontal Plain Bend Ordering

**Horizontal plain bend, **$\theta^\circ \pm 1^\circ$**

- $R = 500 \pm 10$ mm  \( \text{SSH}- \theta^\circ R50 \)
- $R = 700 \pm 10$ mm  \( \text{SSH}- \theta^\circ R700 \)

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

**SSH-120R500**

**UOM:** pc
- Chain required 2-way (500, 700): meter (Variable to angle)
- Slide rail required 2-way (500, 700): meter (Variable to angle)

SS Vertical Bend 5°  SSVB-5R300

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

SS Vertical Bend 15°  SSVB-15R300

**UOM:** pc
- Chain required 2-way: 0.6 meter
- Slide rail required 2-way: 1.1 meter

SS Vertical Bend 30°  SSVB-30R300

**UOM:** pc
- Chain required 2-way: 0.8 meter
- Slide rail required 2-way: 1.5 meter
SS Vertical Bend 5° - 90°

Example for SS Vertical Bend Ordering
- Vertical bend, Ø° ± 1°

If an angle of 25° is needed for vertical bend, the ordering part number is

SSVB-25R300

The outer bend is assembled using connecting strip (SACS-50x75). Angle of Ø° must be indicated when ordering.

SS Horizontal Beam Support Bracket – Stainless Steel

SS Adjustable Angle Beam Support Bracket

SS Horizontal Tripod Support

SS Adjustable Angle Tripod Support

Includes Beam Support Bracket

UOM: pc
SM Series: 85 mm

SM Series:
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
Slide Rail Rivet & Screw: FASLS-M5
Connecting strip is used to connect two beams.
Connecting Strip: SACS-50x70

Conveyor Beam  SMCB-LXXXX

Where:
XXXX = Length (mm)

UOM: each

Chain Connecting Module  SMCC-160

SACS-50x70

Connecting Strip – Stainless Steel

UOM: pc
FlexMove STAINLESS SERIES

SM SERIES: 85 mm

1. Direct Drive
2. Idler End
3. Horizontal Beam Support
4. Tripod Structure
SM SERIES: 85 mm

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

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

Example for FMCT-5A17-L#
# = 1 cleated top chain with alternate of # link of plain chain

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

Standard Plain Chain FMPC-5
Application: Suitable for horizontal and slope < 5° transport of products with accumulation.

Conductive Chain FMPC-5CD
Application: Suitable for transport of static sensitive product.

Safety Chain FMPC-5V
Application: Suitable for horizontal and slope < 5° transport of products with accumulation.

Safety Chain Friction Top FMFT-5V-A
Application: Suitable for transport of static sensitive product.

Twist Chain FMPC-5M
Application: Suitable twist conveyor beam; horizontal and slope < 5° transport of products with accumulation.

UOM: 5 Meter / box

Application: Suitable twist conveyor beam; horizontal and slope < 5° transport of products with accumulation.

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

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

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

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

SM SERIES: 85 mm

- **Friction Top Chain** FMFT-5
  - **UOM:** 5 Meter / box
  - Application: Suitable for transport product in slope > 5° but ≤ 30° without accumulation.

- **Friction Top Chain** FMFT-5A
  - **UOM:** 5 Meter / box
  - Application: Suitable for transport product in slope > 5° but ≤ 30° without accumulation.

- **Wedge Top Chain** FMWT-5A
  - **UOM:** 5 Meter / box
  - Application: Vertical Wedge transportation of products.

- **Wedge Top Chain** FMWT-5B
  - **UOM:** 5 Meter / box
  - Application: Vertical Wedge transportation of products (Heavy Duty)

- **Wedge Top Chain** FMWT-5C
  - **UOM:** 5 Meter / box
  - Application: Vertical Wedge transportation of products (Heavy Duty)

- **Wedge Top Chain** FMWT-5D
  - **UOM:** 5 Meter / box
  - Application: Vertical Wedge transportation of products.
SM SERIES: 85 mm

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.

Hardened Steel Top Chain FMST-5
UOM: 5 Meter / box
Application: Suitable to transport metal products in accumulation.

Stainless Steel Top Chain FMST-5S
UOM: 5 Meter / box
Application: Suitable to transport metal products in accumulation.

Universal Chain FMUC-5
UOM: 5 Meter / box
Application: Universal Link with M6 Nut, Suitable for attached customer cleat or fixture.
Roller Top Chain **FMRT-5**

Application: Suitable for vertical transport of product with no accumulation.

UOM: 5 Meter / box

Roller Cleat Chain **FMRC-5A-L#**

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

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

UOM: 5 Meter / box

Roller Cleat Chain **FMRC-5B-L#**

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

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

UOM: 5 Meter / box

Cleat Top Chain **FMCT-5A17-L#**

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

Application: Suitable for vertical transport of product with no accumulation.

UOM: 5 Meter / box

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

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

Application: Suitable for vertical transport of product with no accumulation.

UOM: 5 Meter / box
### SM SERIES: 85 mm

<table>
<thead>
<tr>
<th>SM Direct End Drive without Motor (LEFT)</th>
<th>SM Direct End Drive without Motor (RIGHT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMDD-A85-0L</td>
<td>SMDD-A85-0R</td>
</tr>
</tbody>
</table>

**Max Traction Force: 1250N**

The Direct End Drive Unit is without torque limiter. See page 66-67 for Gearmotor options.

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

<table>
<thead>
<tr>
<th>SM Direct End Drive GP without Motor (LEFT)</th>
<th>SM Direct End Drive GP without Motor (RIGHT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMDD-A85GP-0L</td>
<td>SMDD-A85GP-0R</td>
</tr>
</tbody>
</table>

**Max Traction Force: 1250N**

The Direct End Drive Unit is without torque limiter. See page 66-67 for Gearmotor options.

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

*SEW gearmotors are products of SEW Eurodrive*
SM SERIES: 85 mm

**SM Idler End-A85**

**SMIE-A85**

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

**SM Wheel Bend 180°**

**SMWB-180R160A**

- UOM: pc
- Chain required 2-way: 1.4 meter
- Slide rail required 2-way: 2.8 meter

**SM Wheel Bend 90°**

**SMWB-90R160A**

- UOM: pc
- Chain required 2-way: 0.9 meter
- Slide rail required 2-way: 1.7 meter

**SM Wheel Bend 45°**

**SMWB-45R160A**

- UOM: pc
- Chain required 2-way: 0.6 meter
- Slide rail required 2-way: 1.2 meter
SM SERIES: 85 mm

SM Wheel Bend 5° - 180°

Example for SM Wheel Bend Ordering
- Wheel bend, $\theta^\circ \pm 1^\circ$

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

**SMWB-65R160**

*The outer bend is assembled using connecting strip (SACS-50x75). Angle of $\theta^\circ$ must be indicated when ordering.*

SM Horizontal Plain Bend 30°

**Horizontal plain bend, 30° ± 1°**
- $R = 500 \pm 10$ mm
- $R = 700 \pm 10$ mm

**UOM: pc**
- Chain required 2-way (500, 700): 1.4, 1.6 meter
- Slide rail required 2-way (500, 700): 2.8, 3.2 meter

SM Horizontal Plain Bend 45°

**Horizontal plain bend, 45° ± 1°**
- $R = 500 \pm 10$ mm
- $R = 700 \pm 10$ mm

**UOM: pc**
- Chain required 2-way (500, 700): 1.6, 1.9 meter
- Slide rail required 2-way (500, 700): 2.9, 3.3 meter

SM Horizontal Plain Bend 90°

**Horizontal plain bend, 90° ± 1°**
- $R = 500 \pm 10$ mm
- $R = 700 \pm 10$ mm

**UOM: pc**
- Chain required 2-way (500, 700): 2.4, 3.0 meter
- Slide rail required 2-way (500, 700): 4.8, 6.0 meter
Example for SM Horizontal Plain Bend Ordering

**Horizontal plain bend, $\theta \pm 1^\circ$**

R = 500 ± 10 mm  \( \text{SMHB-ØR500} \)
R = 700 ± 10 mm  \( \text{SMHB-ØR700} \)

If an angle of 70° is needed for radius R500 horizontal plain bend, the ordering part number is

**SMHB-70R500**

*UOM: pc*

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

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**SM Vertical Bend 5°**  \( \text{SMVB-5R400} \)

*UOM: pc*

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

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**SM Vertical Bend 15°**  \( \text{SMVB-15R400} \)

*UOM: pc*

Chain required 2-way: 0.6 meter
Slide rail required 2-way: 1.1 meter

---

**SM Vertical Bend 30°**  \( \text{SMVB-30R400} \)

*UOM: pc*

Chain required 2-way: 0.8 meter
Slide rail required 2-way: 1.5 meter
SM SERIES: 85 mm

SM Vertical Bend 5° - 90°

Example for SM Vertical Bend Ordering
- Vertical bend, Ø° ± 1°

If an angle of 25° is needed for vertical bend, the ordering part number is **SMVB-25R400**

_The outer bend is assembled using connecting strip (SACS-50x75). Angle of Ø° must be indicated when ordering._

SM Horizontal beam support bracket – Stainless Steel **SAHBS-90M**

SM Adjustable Angle Beam Support Bracket **SAHBS-90M-A35**

SM Horizontal Tripod Support **SBSM-HXXXX**, where XXXX = H Height (mm)

SM Adjustable Angle Tripod Support **SBSM-A-HXXXX**, where XXXX = H Height (mm)

UOM: pc

Includes Beam Support Bracket
SC Series

**SC Series:**
- **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
- **Slide Rail Rivet:** FASLS-M5

Connecting strip is used to connect 2 beams.

**Connecting Strip:** SACS-50x70

**Conveyor Beam** SCCB-LXXXX

Where:
- XXXX = Length (mm)

**Chain Connecting Module** SCCC-160

**Connecting Strip – Stainless Steel** SACS-50x70
Chain Common Data

**Packaging:** 5 m per box

**Pitch:** 35.5 mm

**Width:** 103 mm

Tensile Strength at 20°C: 6000N

**Color:** White & Black (Conductive)

**Material:**

**Chain:** White Acetal / POM

**Pivot:** Polyamide

**Pivot Pin:** Stainless Steel

**Insert (Wedge & Friction):** TPE Grey

**Example for FCCT-5A17-L#**

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

The above chain is FCCT-5A17-L1, 1 link cleated top chain with alternate of 1 link of plain chain.

**Note:** # = 1, 2, 3, 4, 5…..20

**Standard Plain Chain FCPC-5**

**Conductive Chain FCPC-5CD**

**UOM:** 5 Meter / box

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

**Application:** Suitable for transport of static sensitive product.

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

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

**Cleat Top Chain FCCT-5A17-L#**

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

**Roller Top Chain FCRT-5**

**UOM:** 5 Meter / box

Application: Suitable for vertical transport of product with no accumulation.

**Application:** Suitable for vertical transport of product with no accumulation.

**Application:** Suitable for accumulation of product with low friction and pressure.
SC SERIES: 105 mm

Roller Cleat Chain FCRC-5A-L#
Application: Suitable for vertical transportation of product in slope with no accumulation.
UOM: 5 Meter / box

Roller Cleat Chain FCRC-5B-L#
Application: Suitable for vertical transportation of product in slope with no accumulation.
UOM: 5 Meter / box

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

Friction Top Chain FCFT-5A
Application: Suitable for transport product in slope > 5° but ≤ 40° without accumulation.
UOM: 5 Meter / box

Friction Top Chain FCFT-5B
Application: Suitable for transport product in slope > 5° but ≤ 35° without accumulation.
UOM: 5 Meter / box

Friction Top Chain FCFT-5C
Hardened Steel Top Chain FCST-5

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

Stainless 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.

Safety Chain FCPC-5V

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

Twist Chain FCPC-5M

- **UOM:** 5 Meter / box
- Application: Suitable twist conveyor beam; horizontal and slope < 5° transport of products with accumulation.
Max Traction Force: 1250N
The Direct End Drive Unit is without torque limiter. See page 66-67 for Gearmotor options.

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

UOM: pc
Chain required 2-way: 0.8 meter  Slide rail required 2-way: 0.5 meter
SC Wheel Bend 180°

SCW-180R170A

UOM: pc
Chain required 2-way: 1.4 meter
Slide rail required 2-way: 2.8 meter

SC Wheel Bend 90°

SCW-90R170A

UOM: pc
Chain required 2-way: 0.9 meter
Slide rail required 2-way: 1.7 meter

SC Wheel Bend 45°

SCW-45R170A

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

SC Wheel Bend 5° - 180°

Example for SC Wheel Bend Ordering

- Wheel bend, $0^\circ \pm 1^\circ$

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

SCW-65R170

The outer bend is assembled using connecting strip (SACS-50x75). Angle of $0^\circ$ must be indicated when ordering.
SC SERIES: 105 mm

**SC Horizontal Plain Bend 30°**

*Horizontal plain bend, 30° ± 1°*

- \( R = 500 \pm 10 \text{ mm} \)  \( \text{SCHB-30R500} \)
- \( R = 700 \pm 10 \text{ mm} \)  \( \text{SCHB-30R700} \)

*UOM: pc*

Chain required 2-way (500, 700): 1.4, 1.6 meter
Slide rail required 2-way (500, 700): 2.8, 3.2 meter

**SC Horizontal Plain Bend 45°**

*Horizontal plain bend, 45° ± 1°*

- \( R = 500 \pm 10 \text{ mm} \)  \( \text{SCHB-45R500} \)
- \( R = 700 \pm 10 \text{ mm} \)  \( \text{SCHB-45R700} \)

*UOM: pc*

Chain required 2-way (500, 700): 1.6, 1.9 meter
Slide rail required 2-way (500, 700): 2.9, 3.3 meter

**SC Horizontal Plain Bend 90°**

*Horizontal plain bend, 90° ± 1°*

- \( R = 500 \pm 10 \text{ mm} \)  \( \text{SCHB-90R500} \)
- \( R = 700 \pm 10 \text{ mm} \)  \( \text{SCHB-90R700} \)

*UOM: pc*

Chain required 2-way (500, 700): 2.4, 3.0 meter
Slide rail required 2-way (500, 700): 4.8, 6.0 meter

**SC Horizontal Plain Bend 5-180°**

Example for SC Horizontal Plain Bend Ordering

*Horizontal plain bend, \( \theta \° \) ± 1°*

- \( R = 500 \pm 10 \text{ mm} \)  \( \text{SCHB-ØR500} \)
- \( R = 700 \pm 10 \text{ mm} \)  \( \text{SCHB-ØR700} \)

If an angle of 70° is needed for radius R500 horizontal plain bend, the ordering part number is

**SCHB-70R500**

*UOM: pc*

Chain required 2-way (500, 700): meter (Variable to angle)
Slide rail required 2-way (500, 700): meter (Variable to angle)
SC Vertical Bend 5°

SCVB-5R400

Example for SC Vertical Bend Ordering

- Vertical bend, $\theta^\circ \pm 1^\circ$

If an angle of 25° is needed for vertical bend, the ordering part number is

**SCVB-25R400**

*The outer bend is assembled using connecting strip (SACS-50x75). Angle of $\theta^\circ$ must be indicated when ordering.*
SC SERIES: 105 mm

SC Horizontal beam support bracket – Stainless Steel
SAHBS-90C

SC Adjustable Angle Beam Support Bracket
SAHBS-90C-A35

SC Adjustable Angle Tripod Support
SBSC-HXXXX, where XXXX = H Height (mm)

SC Horizontal Tripod Support
SBSC-A-HXXXX, where XXXX = H Height (mm)

Includes Beam Support Bracket

UOM: pc
SU Series

**SU Series:**
- 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, UHMWPE or Special PE
- Slide Rail Rivet: FASLS-M5
- Connecting strip is used to connect two beams.
- Connecting Strip: SACS-50x70

**Conveyor Beam SUCB-LXXXX**
- UOM: each
- Where: XXXX = Length (mm)

**Chain Connecting Module SUCC-300**
- UOM: pc

**Connecting Strip – Stainless Steel SACS-50x70**
- UOM: pc
SU SERIES: 180 mm

1. Direct Drive
2. Idler End
3. Horizontal Beam Support
4. Tripod Structure
**Chain Common Data**

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

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

---

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

---

**Roller Plain Chain FUPC-5R**  
**UOM:** 5 Meter / box  
Application: Suitable for horizontal and slope < 5° transport of products with accumulation.  
**Note:** Friction Reducing Roller Chain recommended for high speed or high load plain bends

---

**Friction Top Chain FUFT-5**  
**UOM:** 5 Meter / box  
Application: Suitable twist conveyor beam; horizontal and slope < 5° transport of products with accumulation.

---

**Roller Friction Top Chain FUFT-5R**  
**UOM:** 5 Meter / box  
Application: Suitable for horizontal and slope ≤ 30° transport of products without accumulation.  
**Note:** Friction Reducing Roller Chain recommended for high speed or high load plain bends

---

**Twist Chain FUPC-5M**  
**UOM:** 5 Meter / box  
Application: Suitable twist conveyor beam; horizontal and slope < 5° transport of products with accumulation.
Max Traction Force: 1250N
The Direct End Drive Unit is without torque limiter. See page 66-67 for Gearmotor options.

UOM: pc
Chain required 2-way: 0.8 meter    Slide rail required 2-way: 0.9 meter

SU Idler End-A180
SUIE-A180

UOM: pc
Chain required 2-way: 0.8 meter    Slide rail required 2-way: 0.9 meter

SEW gearmotors are products of SEW Eurodrive
SU SERIES: 180 mm

**SU Horizontal Plain Bend 30°**

*Horizontal plain bend, 30° ± 1°*

- **R = 500 ± 10 mm** SUHB-30R500
- **R = 700 ± 10 mm** SUHB-30R700
- **R = 1000 ± 10 mm** SUHB-30R1000

UOM: pc

Chain required 2-way (500, 700, 1000): 1.4, 1.6, 1.9 meter
Slide rail required 2-way (500, 700, 1000): 4.0, 4.7, 5.6 meter

**SU Horizontal Plain Bend 45°**

*Horizontal plain bend, 45° ± 1°*

- **R = 500 ± 10 mm** SUHB-45R500
- **R = 700 ± 10 mm** SUHB-45R700
- **R = 1000 ± 10 mm** SUHB-45R1000

UOM: pc

Chain required 2-way (500, 700, 1000): 1.6, 2.0, 2.4 meter
Slide rail required 2-way (500, 700, 1000): 4.8, 5.8, 7.2 meter

**SU Horizontal Plain Bend 90°**

*Horizontal plain bend, 90° ± 1°*

- **R = 500 ± 10 mm** SUHB-90R500
- **R = 700 ± 10 mm** SUHB-90R700
- **R = 1000 ± 10 mm** SUHB-90R1000

UOM: pc

Chain required 2-way (500, 700, 1000): 2.4, 3.1, 4.0 meter
Slide rail required 2-way (500, 700, 1000): 7.2, 9.1, 12.0 meter
SU SERIES: 180 mm

**SU Horizontal Plain Bend 5-180°**

Example for SU Horizontal Plain Bend Ordering

*Horizontal plain bend, $\theta^\circ \pm 1^\circ$*

- $R = 500 \pm 10$ mm  
  SUHB-ØR500
- $R = 700 \pm 10$ mm  
  SUHB-ØR700
- $R = 1000 \pm 10$ mm 
  SUHB-ØR1000

If an angle of 120° is needed for radius R500 horizontal plain bend, the ordering part number is **SUHB-70R500**

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)

**SU Vertical Bend 5°**  
**SUVB-5R400**

UOM: pc

Chain required 2-way: 0.4 meter
Slide rail required 2-way: 1.6 meter

**SU Vertical Bend 15°**  
**SUVB-15R400**

UOM: pc

Chain required 2-way: 0.6 meter
Slide rail required 2-way: 2.2 meter

**SU Vertical Bend 30°**  
**SUVB-30R400**

UOM: pc

Chain required 2-way: 0.8 meter
Slide rail required 2-way: 3.0 meter
SU Vertical Bend 5° - 90°

Example for SU Vertical Bend Ordering
- Vertical bend, $\Theta^\circ \pm 1^\circ$

If an angle of 25° is needed for vertical bend, the ordering part number is

**SUVB-25R400**

*The outer bend is assembled using connecting strip (SACS-50x75). Angle of $\Theta^\circ$ must be indicated when ordering.*

SU Horizontal beam support bracket – Stainless Steel

**SAHBS-90**

**SU Horizontal Tripod Support**

SBSU-HXXXX, where XXXX = H Height (mm)

**SU Adjustable Angle Tripod Support**

SBSU-A-HXXXX, where XXXX = H Height (mm)

**UOM: pc**

Includes Beam Support Brackets
SV Series

**SV Series:**
- **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, UHMWPE or Special PE
- **Slide Rail Rivet:** FASLS-M5
- Connecting strip is used to connect two beams.
- **Connecting Strip:** SACS-50x70

**Conveyor Beam** SVCB-LXXXX

Where:

- XXXX = Length (mm)

**Chain Connecting Module** SVCC-300

**Connecting Strip – Stainless Steel** SACS-50x70

UOM: each
Chain Common Data

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

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

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

Roller Plain Chain FVPC-5R
UOM: 5 Meter / box
Application: Suitable for horizontal and slope < 5° transport of products with accumulation.

Friction Top Chain FVFT-5
UOM: 5 Meter / box
Application: Suitable for horizontal and slope ≤ 30° transport of products without accumulation.

Roller Friction Top Chain FVFT-5R
UOM: 5 Meter / box
Application: Suitable for horizontal and slope ≤ 30° transport of products without accumulation.

Twist Chain FVPC-5M
UOM: 5 Meter / box
Application: Suitable twist conveyor beam; horizontal and slope < 5° transport of products with accumulation.

Note: Friction Reducing Roller Chain recommended for high speed or high load plain bends
Max Traction Force: 1250N
The Direct End Drive Unit is without torque limiter. See page 66-67 for Gearmotor options.

UOM: pc
Chain required 2-way: 0.8 meter  Slide rail required 2-way: 0.9 meter

UOM: pc
Chain required 2-way: 0.8 meter  Slide rail required 2-way: 0.9 meter
SV SERIES: 260 mm

SV Horizontal Plain Bend 30°

Horizontal plain bend, 30° ± 1°
- R = 700 ± 10 mm  SVHB-30R700
- R = 1000 ± 10 mm  SVHB-30R1000

UOM: pc
- Chain required 2-way (700, 1000): 1.6, 1.9 meter
- Slide rail required 2-way (500, 700, 1000): 4.7, 5.6 meter

SV Horizontal Plain Bend 45°

Horizontal plain bend, 45° ± 1°
- R = 700 ± 10 mm  SVHB-45R700
- R = 1000 ± 10 mm  SVHB-45R1000

UOM: pc
- Chain required 2-way (700, 1000): 2.0, 2.4 meter
- Slide rail required 2-way (700, 1000): 5.8, 7.2 meter

SV Horizontal Plain Bend 90°

Horizontal plain bend, 90° ± 1°
- R = 700 ± 10 mm  SVHB-90R700
- R = 1000 ± 10 mm  SVHB-90R1000

UOM: pc
- Chain required 2-way (700, 1000): 3.1, 4.0 meter
- Slide rail required 2-way (700, 1000): 9.1, 12.0 meter
Example for SV Horizontal Plain Bend Ordering

**Horizontal plain bend, Ø° ± 1°**

- \( R = 700 \pm 10 \text{ mm} \)  \( \text{SVHB-ØR700} \)
- \( R = 1000 \pm 10 \text{ mm} \)  \( \text{SVHB-ØR1000} \)

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

**SVHB-120R500**

**UOM: pc**

Chain required 2-way (700, 1000): meter (Variable to angle)

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

---

**SV Vertical Bend 5°**  \( \text{SVVB-5R400} \)

**UOM: pc**

Chain required 2-way: 0.4 meter

Slide rail required 2-way: 1.6 meter

---

**SV Vertical Bend 15°**  \( \text{SVVB-15R400} \)

**UOM: pc**

Chain required 2-way: 0.6 meter

Slide rail required 2-way: 2.2 meter

---

**SV Vertical Bend 30°**  \( \text{SVVB-30R400} \)

**UOM: pc**

Chain required 2-way: 0.8 meter

Slide rail required 2-way: 3.0 meter
SV SERIES: 260 mm

SU Vertical Bend 5° - 90°

Example for SV Vertical Bend Ordering
- Vertical bend, $\theta^\circ \pm 1^\circ$

If an angle of 25° is needed for vertical bend, the ordering part number is
**SVVB-25R400**

The outer bend is assembled using connecting strip (SACS-50x75). Angle of $\theta^\circ$ must be indicated when ordering.

SV Horizontal beam support bracket – Stainless Steel

**SAHBS-90**

SV Horizontal Tripod Support

**SBSV-HXXXX, where XXXX = H Height (mm)**

SV Adjustable Angle Tripod Support

**SBSV-A-HXXXX, where XXXX = H Height (mm)**

Includes Beam Support Brackets
SA SERIES: CONVEYOR ACCESSORIES

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
<th>Application Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>FASR-25</td>
<td>HDPE Slide Rail - White</td>
<td>“Normal Application”</td>
</tr>
<tr>
<td>FASR-25U</td>
<td>UHMW-PE Slide Rail - White</td>
<td>“Low Friction, suitable for accumulation”</td>
</tr>
<tr>
<td>FASR-25X</td>
<td>Special PE Slide Rail - Blue</td>
<td>“Lowest Friction, suitable for accumulation”</td>
</tr>
<tr>
<td>FASR-25T</td>
<td>PAPE Slide Rail - Grey</td>
<td>“High abrasive and High load”</td>
</tr>
<tr>
<td>FASR-25CD</td>
<td>Conductive Slide Rail - Black</td>
<td>“Static conductive”</td>
</tr>
<tr>
<td>FASR-25P</td>
<td>PVDF Slide Rail - White</td>
<td>“For Abrasive application”</td>
</tr>
</tbody>
</table>

See page 70 for detail slide rail information

- **FASR-25**
- **FASR-25U**
- **FASR-25X**
- **FASR-25T**
- **FASR-25CD**
- **FASR-25P**

**FASLR-4x6** Aluminum Rivet for Slide Rail

- **UOM:** 25 meter / roll

**FASLS-M5** Nylon Set Screw for Slide Rail

- **UOM:** 50 pcs / pk
SA SERIES: CONVEYOR ACCESSORIES

**SASHN-1M8**  
M8 Single Nut, Non-Rotating

UOM: 10 pcs / pk

**SASHN-2M8**  
M8 Double Nut, Non-Rotating

UOM: 10 pcs / pk

**SAFW-M8**  
M8 Flat Washer – Stainless Steel

UOM: 50 pcs / pk

**SALN-M8**  
M8 Lock Nut – Stainless Steel

UOM: 50 pcs / pk

**SAHB-M8xXX**  
Hex Bolt, M8 – Stainless Steel. Where XX = L = Length (= 12, 16, 25, 45, 100 mm)

UOM: 50 pcs / pk
SA SERIES: CONVEYOR ACCESSORIES

SADBS-WW-HHHH  Direct Drive Tripod Support
Where WW = Width (SS = 65; SM = 85; SC = 105; SU = 180; SV = 260)
HHHH = Height = Top of Chain Height

SABS-38x4  Beam Spacer, Stainless Steel
UOM: 10 pcs / pk

FAFR-35  Free Roller – POM
UOM: 10 pcs / pk

FAFR-18  Free Roller – POM
UOM: 10 pcs / pk
SA SERIES: CONVEYOR ACCESSORIES

FAFR-11  
**Free Roller - POM**

UOM: 10 pcs / pk

---

FASR-75x15  
**Sponge Roller, Sponge Rubber**

UOM: 10 pcs / pk

---

FASR-75x19P  
**PVC Roller c/w POM Core & Screw**

UOM: 10 pcs / pk
## SG SERIES: CONVEYOR GUIDE EXAMPLES

### SG Guide Assembly

**12/18 mm Rail, Fully Adjustable**

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<th>Component</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>SGRK-12X80A</td>
<td>12/18 mm Rail, Fully Adjustable</td>
</tr>
<tr>
<td>SGR-3x12</td>
<td></td>
</tr>
<tr>
<td>SGGR-3x19</td>
<td></td>
</tr>
<tr>
<td>SGRK-18X80A</td>
<td></td>
</tr>
</tbody>
</table>

### SG Guide Assembly

**12/18 mm Rail, Adjustable Width/Height**

<table>
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<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SGRS-18</td>
<td>12/18 mm Rail, Adjustable Width/Height</td>
</tr>
<tr>
<td>SGR-3x19</td>
<td></td>
</tr>
<tr>
<td>SGRK-18X80A</td>
<td></td>
</tr>
</tbody>
</table>

### SG Guide Assembly

**12/18 mm Rail, Twin Rail**

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SGRK-12X80A</td>
<td>12/18 mm Rail, Twin Rail</td>
</tr>
<tr>
<td>SGR-3x12</td>
<td></td>
</tr>
<tr>
<td>SGGR-3x19</td>
<td></td>
</tr>
<tr>
<td>SGRK-18X80A</td>
<td></td>
</tr>
</tbody>
</table>

### SG Guide Assembly

**18 mm Rail, Overhead Guide**

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SGR-3x19</td>
<td>18 mm Rail, Overhead Guide</td>
</tr>
<tr>
<td>SGR-3x19</td>
<td></td>
</tr>
<tr>
<td>SGR-3x19</td>
<td></td>
</tr>
</tbody>
</table>
### SG SERIES: CONVEYOR GUIDE COMPONENTS

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>UOM:</th>
<th>Details</th>
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<tr>
<td>FGRR-15X20P</td>
<td>Guide Rail Rectangular, 15 mm x 20 mm</td>
<td>3 meter / length</td>
<td>HDPE</td>
</tr>
<tr>
<td>SGGR-3x19</td>
<td>Guide Rail Tube – Stainless Steel</td>
<td>3 meter / length</td>
<td>D = 19 mm</td>
</tr>
<tr>
<td>SGGR-3x12</td>
<td>Guide Rail Solid Round – Stainless Steel</td>
<td>3 meter / length</td>
<td>D = 12 mm</td>
</tr>
<tr>
<td>SGDT-18x150</td>
<td>Distance Tube – Stainless Steel</td>
<td>10 pcs / pk</td>
<td>D = 19mm, L = 150</td>
</tr>
<tr>
<td>SGDT-18x200</td>
<td>Distance Tube – Stainless Steel</td>
<td>10 pcs / pk</td>
<td>D = 19mm, L = 200</td>
</tr>
</tbody>
</table>

**UOM:** units of measure

**FGRR-15X20P**
- Guide Rail Rectangular, 15 mm x 20 mm
- UOM: 3 meter / length

**SGGR-3x19**
- Guide Rail Tube – Stainless Steel
- UOM: 3 meter / length
- D = 19 mm

**SGGR-3x12**
- Guide Rail Solid Round – Stainless Steel
- UOM: 3 meter / length
- D = 12 mm

**SGDT-18x150**
- Distance Tube – Stainless Steel
- UOM: 10 pcs / pk
- D = 19 mm, L = 150

**SGDT-18x200**
- Distance Tube – Stainless Steel
- UOM: 10 pcs / pk
- D = 19 mm, L = 200
### SG SERIES: CONVEYOR GUIDE COMPONENTS

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>UOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>SGRS-18</td>
<td>Guide Rail Support - Polyamide</td>
<td>10 pcs / pk</td>
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<tr>
<td>SGRL-18x110C</td>
<td>Guide Rail Support, L = 110mm - Polyamide</td>
<td>10 pcs / pk</td>
</tr>
<tr>
<td>SGRL-18x160C</td>
<td>Guide Rail Support, L = 160mm - Polyamide</td>
<td>10 pcs / pk</td>
</tr>
<tr>
<td>SGRD-12x80</td>
<td>Guide Rail Clamp Rod, L = 80mm – S/Steel</td>
<td>10 pcs / pk</td>
</tr>
<tr>
<td>SGRD-12x130</td>
<td>Guide Rail Clamp Rod, L = 130mm – S/Steel</td>
<td>10 pcs / pk</td>
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</tbody>
</table>

Stainless Steel Screw and Nuts
### SG SERIES: CONVEYOR GUIDE COMPONENTS

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Material</th>
<th>UOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>SGRK-12</td>
<td>Guide Rail Clamp - Polyamide</td>
<td>Stainless Steel Screw and Nuts</td>
<td>10 pcs / pk</td>
</tr>
<tr>
<td>SGRK-12x80A</td>
<td>Guide Rail Support, L = 80mm - Polyamide</td>
<td>Stainless Steel Screw and Nuts</td>
<td>10 pcs / pk</td>
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<tr>
<td>SGRK-12x130A</td>
<td>Guide Rail Support, L = 130mm - Polyamide</td>
<td>Stainless Steel Screw and Nuts</td>
<td>10 pcs / pk</td>
</tr>
<tr>
<td>SGRK-18x40A</td>
<td>Guide Rail Support, L = 40mm - Polyamide</td>
<td>Stainless Steel Screw and Nuts</td>
<td>10 pcs / pk</td>
</tr>
<tr>
<td>SGRK-18x60A</td>
<td>Guide Rail Support, L = 60mm - Polyamide</td>
<td>Stainless Steel Screw and Nuts</td>
<td>10 pcs / pk</td>
</tr>
<tr>
<td>SGRK-18x80A</td>
<td>Guide Rail Support, L = 80mm - Polyamide</td>
<td>Stainless Steel Screw and Nuts</td>
<td>10 pcs / pk</td>
</tr>
<tr>
<td>SGRK-18x130A</td>
<td>Guide Rail Support, L = 130mm - Polyamide</td>
<td>Stainless Steel Screw and Nuts</td>
<td>10 pcs / pk</td>
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</table>
### SG SERIES: CONVEYOR GUIDE COMPONENTS

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>UOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>SGRC-18x110C</td>
<td>Double Guide Rail Support, L = 110mm - Polyamide</td>
<td>10 pcs / pk</td>
</tr>
<tr>
<td>SGRC-18x160C</td>
<td>Double Guide Rail Support, L = 160mm - Polyamide</td>
<td>10 pcs / pk</td>
</tr>
<tr>
<td>FGEC-18</td>
<td>End cap. 18 mm Tube - Polyamide</td>
<td>10 pcs / pk</td>
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<td>SGRF-A35</td>
<td>Guide Rail Bracket Support A35 – Polyamide</td>
<td>10 pcs / pk</td>
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</tbody>
</table>

Stainless Steel Screw and Nuts

---

**SGR SERIES: CONVEYOR GUIDE COMPONENTS**
SG SERIES: CONVEYOR GUIDE COMPONENTS

**SGRF-A110**  Guide Rail Bracket Support A110 – Polyamide

Stainless Steel Screw and Nuts

![Diagram of SGRF-A110](image)

UOM: 10 pcs / pk

**FGRF-DP**  FGRF Dummy Plug

![Diagram of FGRF-DP](image)

UOM: 10 pcs / pk

**SGRL-18x110CA**  Guide Rail Support, L = 110mm - Polyamide

Stainless Steel Screw and Nuts

![Diagram of SGRL-18x110CA](image)

UOM: 10 pcs / pk

**SGRL-18x160CA**  Guide Rail Support, L = 160mm - Polyamide

![Diagram of SGRL-18x160CA](image)

UOM: 10 pcs / pk
SG SERIES: CONVEYOR GUIDE COMPONENTS

SGRF-42x18V  Guide Rail Bracket – Polyamide

Stainless Steel Screw and Nuts

UOM: 10 pcs / pk

FGRD-18A  Spacer for SGRF-42x18V - Polyamide

UOM: 10 pcs / pk

SGRB-40x18  Guide Rail Bracket, D = 18mm - Polyamide

Stainless Steel Screw and Nuts

UOM: 10 pcs / pk
**FGRD-6B**
Spacer for SGRB-40x18, SGRB-40x20 - Polyamide

UOM: 10 pcs / pk

**SGRB-18x18**
Guide Rail Bracket, ØA = 18mm, ØB = 18mm - Polyamide

Stainless Steel Screw and Nuts

UOM: 10 pcs / pk

**SGRX-18X20**
90° Corner Connector - Polyamide

Stainless Steel Screw and Nuts

UOM: 10 pcs / pk
Direct Mount, SEW Equivalent, Fixed Speed - 20 mm Shaft

230/460V 60 Hz

- Sealed Gearmotor
- SEW SA37 Size gearmotor
- Totally enclosed fan cooled
- 230/460V 3 Phase
- 60 Hz
- Wiring by others

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Chain Speed</th>
<th>SS, SM, SU, SC</th>
<th>FPM</th>
<th>RPM</th>
<th>HP</th>
<th>kW</th>
<th>Amps</th>
<th>in.-lbs</th>
<th>Nm</th>
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<tbody>
<tr>
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<td>18</td>
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<td>13</td>
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<td>FMM067(X)DS423EN</td>
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<td>34.8</td>
<td>10.6</td>
<td>25</td>
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<td>0.37</td>
<td>1.9/0.95</td>
<td>699</td>
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<tr>
<td>FMM032(X)DS423EN</td>
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<td>21.3</td>
<td>73.8</td>
<td>22.5</td>
<td>53</td>
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<td>0.55</td>
<td>2.7/1.35</td>
<td>653</td>
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<tr>
<td>FMM015(X)DS423EN</td>
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<td>45.8</td>
<td>158.5</td>
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<td>114</td>
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<td>0.55</td>
<td>2.7/1.35</td>
<td>341</td>
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<tr>
<td>FMM013(X)DS423EN</td>
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<td>180.8</td>
<td>55.1</td>
<td>130</td>
<td>1</td>
<td>0.75</td>
<td>3.1/1.57</td>
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<tr>
<td>FMM010(X)DS423EN</td>
<td>225.4</td>
<td>68.7</td>
<td>237.9</td>
<td>72.5</td>
<td>171</td>
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<td>1.1</td>
<td>4.2/2.1</td>
<td>490</td>
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</tbody>
</table>

230/400V 50 Hz

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

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Chain Speed</th>
<th>SS, SM, SU, SC</th>
<th>FPM</th>
<th>RPM</th>
<th>HP</th>
<th>kW</th>
<th>Amps</th>
<th>in.-lbs</th>
<th>Nm</th>
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<tbody>
<tr>
<td>FMZ099(X)DS423EN</td>
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<td>18</td>
<td>5.5</td>
<td>13</td>
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<td>0.25</td>
<td>1.3/0.76</td>
<td>628</td>
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<td>FMZ060(X)DS423EN</td>
<td>30.2</td>
<td>9.2</td>
<td>31.8</td>
<td>9.7</td>
<td>23</td>
<td>0.5</td>
<td>0.37</td>
<td>1.9/1.09</td>
<td>717</td>
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<tr>
<td>FMZ029(X)DS423EN</td>
<td>63.3</td>
<td>19.3</td>
<td>66.6</td>
<td>20.3</td>
<td>48</td>
<td>0.75</td>
<td>0.55</td>
<td>2.6/1.52</td>
<td>478</td>
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<tr>
<td>FMZ013(X)DS423EN</td>
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<td>144.7</td>
<td>44.1</td>
<td>104</td>
<td>1</td>
<td>0.75</td>
<td>3.1/1.79</td>
<td>363</td>
</tr>
<tr>
<td>FMZ009(X)DS423EN</td>
<td>205.7</td>
<td>62.7</td>
<td>213.9</td>
<td>66.1</td>
<td>156</td>
<td>1.5</td>
<td>1.1</td>
<td>4.1/2.38</td>
<td>336</td>
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<tr>
<td>FMZ007(X)DS423EN</td>
<td>284.8</td>
<td>86.8</td>
<td>300.5</td>
<td>91.6</td>
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<td>2</td>
<td>1.5</td>
<td>5.6/3.23</td>
<td>372</td>
</tr>
</tbody>
</table>

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

Regulatory Approvals

SEW gearmotors are products of SEW Eurodrive

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)
GEARMOTORS

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

230/460V 60 Hz

- Sealed Gearmotor
- SEW SA37 Size gearmotor
- Totally enclosed fan cooled
- 230/460V 3 Phase
- 60 Hz
- Wiring by others

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Chain Speed</th>
<th>SS, SM, SU, SV</th>
<th>SC</th>
<th>RPM</th>
<th>Hp</th>
<th>kW</th>
<th>Amps</th>
<th>in.- lbs.</th>
<th>Nm</th>
<th>VFD Chart Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMM129(X)DS423EN</td>
<td>2.9 - 17.1</td>
<td>0.9 - 5.2</td>
<td>3 - 18</td>
<td>0.9 - 5.5</td>
<td>13</td>
<td>0.25</td>
<td>0.18</td>
<td>1.1/0.56</td>
<td>837</td>
<td>95 D</td>
</tr>
<tr>
<td>FMM067(X)DS423EN</td>
<td>5.5 - 32.8</td>
<td>1.7 - 10</td>
<td>5.8 - 34.8</td>
<td>1.8 - 10.6</td>
<td>25</td>
<td>0.5</td>
<td>0.37</td>
<td>1.9/0.95</td>
<td>699</td>
<td>79 D</td>
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<tr>
<td>FMM032(X)DS423EN</td>
<td>11.7 - 69.9</td>
<td>3.6 - 21.3</td>
<td>12.3 - 73.8</td>
<td>3.8 - 22.5</td>
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<td>0.55</td>
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<td>FMM015(X)DS423EN</td>
<td>25.1 - 150.3</td>
<td>7.6 - 45.8</td>
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<td>0.55</td>
<td>2.7/1.35</td>
<td>341</td>
<td>39 D</td>
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<tr>
<td>FMM013(X)DS423EN</td>
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<td>0.75</td>
<td>3.1/1.57</td>
<td>425</td>
<td>48 D</td>
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<tr>
<td>FMM010(X)DS423EN</td>
<td>37.6 - 225.4</td>
<td>11.5 - 68.7</td>
<td>39.7 - 237.9</td>
<td>12.1 - 72.5</td>
<td>171</td>
<td>1.5</td>
<td>1.1</td>
<td>4.2/2.1</td>
<td>490</td>
<td>56 D</td>
</tr>
</tbody>
</table>

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

230/400V 50 Hz

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

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Chain Speed</th>
<th>SS, SM, SU, SV</th>
<th>SC</th>
<th>RPM</th>
<th>Hp</th>
<th>kW</th>
<th>Amps</th>
<th>in.- lbs.</th>
<th>Nm</th>
<th>VFD Chart Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMZ099(X)DS423EN</td>
<td>3.4 - 17.1</td>
<td>1 - 5.2</td>
<td>3.6 - 18</td>
<td>1.1 - 5.5</td>
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<td>0.25</td>
<td>1.3/0.76</td>
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<td>71 B</td>
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<tr>
<td>FMZ060(X)DS423EN</td>
<td>6 - 30.2</td>
<td>1.8 - 9.2</td>
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<td>1.9 - 9.7</td>
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<td>0.37</td>
<td>1.9/1.09</td>
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<td>FMZ013(X)DS423EN</td>
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<td>FMZ009(X)DS423EN</td>
<td>41.1 - 205.7</td>
<td>12.5 - 62.7</td>
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<td>4.1/2.38</td>
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<td>38 B</td>
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<tr>
<td>FMZ007(X)DS423EN</td>
<td>57 - 284.8</td>
<td>17.4 - 86.8</td>
<td>60.1 - 300.5</td>
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<td>1.5</td>
<td>5.6/3.23</td>
<td>372</td>
<td>42 B</td>
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</table>

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.

SEW gearmotors are products of SEW Eurodrive

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

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 B  VFD Controller, Full CE Compliance, 50 Hz

- VFD control
- IP 65 enclosure
- EMC filter
- Variable speed
- Mounting hardware
- Line cord and motor cord
- Motor cord only on 460V

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Input Volts</th>
<th>Input Phase</th>
<th>Input Hz</th>
<th>Output Volts</th>
<th>Output Phase</th>
<th>Max Kw</th>
<th>Max Amps</th>
<th>Reversing</th>
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<tr>
<td>62UV2121</td>
<td>230</td>
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<td>50</td>
<td>230</td>
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<td>4.2</td>
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<td>62UV4341</td>
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<td>50</td>
<td>400</td>
<td>3</td>
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<td>1.50</td>
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</tbody>
</table>

Regulatory Approvals

CE

Chart D  VFD Controller, 60 Hz

- Full feature VFD control
- NEMA 4 enclosure
- Digital display
- Keypad with Start/Stop, Forward/Reverse and speed variations
- Includes cord to motor
- Power to controller by others
- 62MV1122 includes line cord to controller
- Mounting hardware

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Input Volts</th>
<th>Input Phase</th>
<th>Input Hz</th>
<th>Output Volts</th>
<th>Output Phase</th>
<th>Max Hp</th>
<th>Output Amps</th>
<th>Reversing</th>
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<td>32MV1122</td>
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<td>32MV2122</td>
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<td>32MV1121</td>
<td>115</td>
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<td>230</td>
<td>3</td>
<td>1.0</td>
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<td>32MV2121</td>
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<td>230</td>
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<td>32MV2327</td>
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<td>32MV4341</td>
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<td>3</td>
<td>60</td>
<td>460</td>
<td>3</td>
<td>1.0</td>
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<td>32MV4347</td>
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<td>460</td>
<td>3</td>
<td>2.0</td>
<td>3.4</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Regulatory Approvals

CE

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.

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.

SEW gearmotors are products of SEW Eurodrive

Note: Dimensions = mm (in)

FLA = Full Load Amperes
Some motors and gear reducers may normally operate hot to the touch. Consult factory for specific operating temperatures.

Notes:
- Dimensions = mm (in)
- FLA = Full Load Amperes
**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
- Push button Start / Stop
- Includes mounting hardware

### Chart I

**230/400V 50 Hz to 2.5 amp**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>In Volts</th>
<th>In Phase</th>
<th>Amp Range</th>
<th>Illustration</th>
</tr>
</thead>
<tbody>
<tr>
<td>62(c)M21T</td>
<td>230</td>
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<td>1.6 - 2.5</td>
<td>A</td>
</tr>
<tr>
<td>62(c)M23T</td>
<td>230</td>
<td>3</td>
<td>1.0 - 1.6</td>
<td>B</td>
</tr>
<tr>
<td>62(c)M43T</td>
<td>400</td>
<td>3</td>
<td>0.63 - 1.0</td>
<td>B</td>
</tr>
</tbody>
</table>

### Chart J

**230/400V 50 Hz to 4 amp**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>In Volts</th>
<th>In Phase</th>
<th>Amp Range</th>
<th>Illustration</th>
</tr>
</thead>
<tbody>
<tr>
<td>62(c)M21J</td>
<td>230</td>
<td>1</td>
<td>2.5 - 4.0</td>
<td>A</td>
</tr>
<tr>
<td>62(c)M23J</td>
<td>230</td>
<td>3</td>
<td>1.6 - 2.5</td>
<td>B</td>
</tr>
<tr>
<td>62(c)M43J</td>
<td>400</td>
<td>3</td>
<td>1.0 - 1.6</td>
<td>B</td>
</tr>
</tbody>
</table>

### Chart L

**230/460V 60 Hz to 1.6 amp**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>In Volts</th>
<th>In Phase</th>
<th>Amp Range</th>
<th>Illustration</th>
</tr>
</thead>
<tbody>
<tr>
<td>62MM23L</td>
<td>230</td>
<td>3</td>
<td>1.0 - 1.6</td>
<td>B</td>
</tr>
<tr>
<td>62MM43L</td>
<td>460</td>
<td>3</td>
<td>0.4 - 0.63</td>
<td>B</td>
</tr>
</tbody>
</table>

### Chart M

**230/460V 60 Hz to 2.5 amp**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>In Volts</th>
<th>In Phase</th>
<th>Amp Range</th>
<th>Illustration</th>
</tr>
</thead>
<tbody>
<tr>
<td>62MM23M</td>
<td>208-230</td>
<td>3</td>
<td>1.6 - 2.5</td>
<td>B</td>
</tr>
<tr>
<td>62MM43M</td>
<td>460</td>
<td>3</td>
<td>1.0 - 1.6</td>
<td>B</td>
</tr>
</tbody>
</table>

### Chart P

**230/460V 60 Hz to 4 amp**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>In Volts</th>
<th>In Phase</th>
<th>Amp Range</th>
<th>Illustration</th>
</tr>
</thead>
<tbody>
<tr>
<td>62MM23U</td>
<td>208-230</td>
<td>3</td>
<td>2.5 - 4.0</td>
<td>B</td>
</tr>
<tr>
<td>62MM43P</td>
<td>460</td>
<td>3</td>
<td>1.6 - 2.5</td>
<td>B</td>
</tr>
</tbody>
</table>

### Chart Q

**230/460V 60 Hz to 6.3 amp**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>In Volts</th>
<th>In Phase</th>
<th>Amp Range</th>
<th>Illustration</th>
</tr>
</thead>
<tbody>
<tr>
<td>62MM23Q</td>
<td>208-230</td>
<td>3</td>
<td>4.0 - 6.3</td>
<td>B</td>
</tr>
<tr>
<td>62MM43Q</td>
<td>460</td>
<td>3</td>
<td>2.5 - 4.0</td>
<td>B</td>
</tr>
</tbody>
</table>

---

**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.

(c) = Electrical Configuration

F = CE French

G = CE German

Note: Dimensions = mm (in)

---
### Regulatory Approvals:

**Conveyors:**

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

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

**Gearmotors and Controllers:**

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

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="CE Symbol" /></td>
<td>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).</td>
</tr>
<tr>
<td><img src="image" alt="RoHS Symbol" /></td>
<td>This directive restricts (with exceptions) the use of six hazardous materials in the manufacture of various types of electronic and electrical equipment. It is closely linked with the Waste Electrical and Electronic Equipment Directive (WEEE) 2002/96/EC which sets collection, recycling and recovery targets for electrical goods and is part of a legislative initiative to solve the problem of huge amounts of toxic e-waste.</td>
</tr>
<tr>
<td><img src="image" alt="UL Symbol" /></td>
<td>The UL Recognized Component mark is for products intended to be installed in another device, system or end product. This Recognized Component Mark is for the United States only. When a complete product or system containing UL Recognized Components is evaluated, the end-product evaluation process can be streamlined.</td>
</tr>
<tr>
<td><img src="image" alt="C-UL-US Symbol" /></td>
<td>The UL Recognized Component mark is for products intended to be installed in another device, system or end product. This Recognized Component Mark is for the United States and Canada. When a complete product or system containing UL Recognized Components is evaluated, the end-product evaluation process can be streamlined.</td>
</tr>
<tr>
<td><img src="image" alt="CSA Symbol" /></td>
<td>CSA International (Canadian Standards Association), is a provider of product testing and certification services for electrical, mechanical, plumbing, gas and a variety of other products. Recognized in the U.S., Canada and around the world, CSA certification marks indicate that a product, process or service has been tested to a Canadian or U.S. standard and it meets the requirements of an applicable CSA standard or another recognized document used as a basis for certification.</td>
</tr>
<tr>
<td><img src="image" alt="UL Listing Mark" /></td>
<td>The UL Listing Mark means UL found that representative product samples met UL’s safety requirements. These requirements are primarily based on UL’s own published standards for safety. The C-UL-US Mark indicates compliance with both Canadian and U.S. requirements. The products with this type of Mark have been evaluated to Canadian safety requirements and U.S. safety requirements.</td>
</tr>
</tbody>
</table>
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.

1100 Series Belted Conveyor
FlexMove Series Flexible Chain Conveyor
FlexMove Stainless Series Conveyor
2200 Series Modular Belted Conveyor
2200 Series Belted Conveyor
2200 Series Precision Move Conveyor
3200 Series Belted Conveyor
3200 Series Modular Belted Conveyor
3200 Series Precision Move Conveyor

Contact the factory for copy of the certification.
### Slide Rail Specifications / Application Data

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Material</td>
<td>HDPE</td>
<td>UHMW</td>
<td>Antistatic HDPE</td>
<td>PAPE</td>
<td>PVDF</td>
<td>Impregnated UHMW</td>
</tr>
<tr>
<td>Color</td>
<td>white</td>
<td>white</td>
<td>black</td>
<td>Grey</td>
<td>White</td>
<td>Blue</td>
</tr>
<tr>
<td>FDA approved</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Coefficient of Friction</td>
<td>0.25</td>
<td>0.25</td>
<td>0.25</td>
<td>0.3</td>
<td>0.35</td>
<td>0.25</td>
</tr>
<tr>
<td>Temp Range</td>
<td>-20 to 60 C</td>
<td>-20 to 60 C</td>
<td>-20 to 60 C</td>
<td>-20 to 80 C</td>
<td>-20 to 100 C</td>
<td>-20 to 60 C</td>
</tr>
<tr>
<td>Maximum Speed</td>
<td>50 M/min</td>
<td>60 M/min</td>
<td>50 M/min</td>
<td>60 M/min</td>
<td>60 M/min</td>
<td>60 M/min</td>
</tr>
<tr>
<td>Heavy Loads</td>
<td>poor</td>
<td>good</td>
<td>poor</td>
<td>excellent</td>
<td>excellent</td>
<td>good</td>
</tr>
<tr>
<td>Elongation / wear resistance</td>
<td>poor</td>
<td>good</td>
<td>poor</td>
<td>excellent</td>
<td>excellent</td>
<td>good</td>
</tr>
<tr>
<td>Chemical Resistance</td>
<td>Good, poor to petroleum based solvents</td>
<td>Good</td>
<td>Good, poor to petroleum based solvents</td>
<td>Good, not used with wet solvents</td>
<td>Excellent</td>
<td>Good</td>
</tr>
<tr>
<td>Application</td>
<td>General conveyance, lowest cost</td>
<td>High speed, moderate loads, low dust generation</td>
<td>Environments sensitive to static electricity</td>
<td>High speed, high load, dry applications only, abrasive particles</td>
<td>High speed, high load, abrasive particles</td>
<td>High speed, moderate loads, low dust generation</td>
</tr>
</tbody>
</table>
### Chains

<table>
<thead>
<tr>
<th>Series</th>
<th>SS</th>
<th>SM</th>
<th>SC</th>
<th>SU</th>
<th>SV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chain width (mm)</td>
<td>63 mm</td>
<td>83 mm</td>
<td>103 mm</td>
<td>175 mm</td>
<td>255 mm</td>
</tr>
<tr>
<td>Chain width (inch)</td>
<td>2.48&quot;</td>
<td>3.27&quot;</td>
<td>4.06&quot;</td>
<td>6.890&quot;</td>
<td>10.039&quot;</td>
</tr>
<tr>
<td>Tensile strength at 20°C (N)</td>
<td>3400 N</td>
<td>4800 N</td>
<td>4800 N</td>
<td>4800 N</td>
<td>4800 N</td>
</tr>
<tr>
<td>Tensile strength at 68°F (lbf)</td>
<td>764 lbf</td>
<td>1079 lbf</td>
<td>1079 lbf</td>
<td>1079 lbf</td>
<td>1079 lbf</td>
</tr>
<tr>
<td>Max. working tensile at 20°C (N)</td>
<td>500 N</td>
<td>1250 N</td>
<td>1250 N</td>
<td>1250 N</td>
<td>1250 N</td>
</tr>
<tr>
<td>Max. working tensile at 68°F (lbf)</td>
<td>112 lbf</td>
<td>281 lbf</td>
<td>281 lbf</td>
<td>281 lbf</td>
<td>281 lbf</td>
</tr>
<tr>
<td>Working temperature (°C)</td>
<td>-20 – 60°C</td>
<td>-20 – 60°C</td>
<td>-20 – 60°C</td>
<td>-20 – 60°C</td>
<td>-20 – 60°C</td>
</tr>
<tr>
<td>Working temperature (°F)</td>
<td>-4 – 140°F</td>
<td>-4 – 140°F</td>
<td>-4 – 140°F</td>
<td>-4 – 140°F</td>
<td>-4 – 140°F</td>
</tr>
<tr>
<td>Maximum conveyor speed (m/min)</td>
<td>58 m/min</td>
<td>58 m/min</td>
<td>58 m/min</td>
<td>58 m/min</td>
<td>58 m/min</td>
</tr>
<tr>
<td>Maximum conveyor speed (ft/min)</td>
<td>190 ft/min</td>
<td>190 ft/min</td>
<td>190 ft/min</td>
<td>190 ft/min</td>
<td>190 ft/min</td>
</tr>
<tr>
<td>Max. conveyor length (m)</td>
<td>30 m</td>
<td>30 m</td>
<td>30 m</td>
<td>30 m</td>
<td>30 m</td>
</tr>
<tr>
<td>Max. conveyor length (ft)</td>
<td>100 ft</td>
<td>100 ft</td>
<td>100 ft</td>
<td>100 ft</td>
<td>100 ft</td>
</tr>
<tr>
<td>Min. turning radius (mm)</td>
<td>150 mm</td>
<td>160 mm</td>
<td>170 mm</td>
<td>500 mm</td>
<td>700 mm</td>
</tr>
<tr>
<td>Min. turning radius (inch)</td>
<td>5.91&quot;</td>
<td>6.30&quot;</td>
<td>6.70&quot;</td>
<td>19.7&quot;</td>
<td>27.6&quot;</td>
</tr>
<tr>
<td>Link spacing (mm)</td>
<td>25.4 mm</td>
<td>33.5 mm</td>
<td>35.5 mm</td>
<td>33.5 mm</td>
<td>33.5 mm</td>
</tr>
<tr>
<td>Link spacing (inch)</td>
<td>1.0&quot;</td>
<td>1.32&quot;</td>
<td>1.40&quot;</td>
<td>1.32&quot;</td>
<td>1.32&quot;</td>
</tr>
<tr>
<td>Chain weight (plain) (kg/m)</td>
<td>0.75 kg/m</td>
<td>1.20 kg/m</td>
<td>1.67 kg/m</td>
<td>2.0 kg/m</td>
<td>2.43 kg/m</td>
</tr>
<tr>
<td>Chain weight (plain) (lb/ft)</td>
<td>0.50 lb/ft</td>
<td>0.81 lb/ft</td>
<td>1.12 lb/ft</td>
<td>1.344 lb/ft</td>
<td>1.633 lb/ft</td>
</tr>
<tr>
<td>Max. weight on conveyor (kg/m)</td>
<td>30 kg/m</td>
<td>60 kg/m</td>
<td>60 kg/m</td>
<td>65 kg/m</td>
<td>65 kg/m</td>
</tr>
<tr>
<td>Max. weight on conveyor (lb/ft)</td>
<td>20 lb/ft</td>
<td>40 lb/ft</td>
<td>40 lb/ft</td>
<td>44 lb/ft</td>
<td>44 lb/ft</td>
</tr>
<tr>
<td>Item width (mm)</td>
<td>15-140 mm</td>
<td>20-200 mm</td>
<td>25-300 mm</td>
<td>50-400 mm</td>
<td>80 – 500 mm</td>
</tr>
<tr>
<td>Item width (inch)</td>
<td>0.6 – 5.5&quot;</td>
<td>0.8-7.9&quot;</td>
<td>1.0-11.8&quot;</td>
<td>2.0 – 15.4&quot;</td>
<td>3.2 – 19.7&quot;</td>
</tr>
</tbody>
</table>

### Drive Unit Specifications

#### Direct Drive unit

<table>
<thead>
<tr>
<th></th>
<th>SS</th>
<th>SM</th>
<th>SC</th>
<th>SU</th>
<th>SV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Teeth on sprocket</td>
<td>16</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Chain Pitch (mm)</td>
<td>25.4</td>
<td>33.5</td>
<td>35.5</td>
<td>33.5</td>
<td>33.5</td>
</tr>
<tr>
<td>Max. Traction force (N)</td>
<td>500</td>
<td>1250</td>
<td>1250</td>
<td>1250</td>
<td>1250</td>
</tr>
<tr>
<td>Sprocket Diameter (mm)</td>
<td>128</td>
<td>128</td>
<td>135</td>
<td>128</td>
<td>128</td>
</tr>
</tbody>
</table>
Stand Location

Maximum Distances:
1 = 914 mm (36 in)
2 = Should be between 1800-2400 mm
(6-7.8 ft)*

* For conveyors longer than 3000 mm (10 ft), install support at joint.
Note: Additional support required on 180° curve modules.

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

Conveyor Drive Shaft Tolerances:

Optional Auxiliary Shaft

20 mm Shaft

Dimensions in millimeters.
Conveyor Load Capacity

There are several factors that affect the overall conveyor load of the FlexMove conveyor. These include:

- Conveyor size and configuration
- Conveyor speed
- Application temperature
- Product accumulation
- Number of starts and stops per hour
- Maximum Drive Unit Output

Located online at [www.dornerconveyors.com](http://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](http://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 (kg) = (Tension Limit / Chain Coefficient of Friction) - (Conveyor length) (2) (Chain weight)

   Nominal Maximum Load (lbs) = (Nominal Maximum Load (kg)) (2.2)

See following pages for Chain Coefficient of Friction. Nominal Maximum load may also be limited by available gearmotors. Conformation of gearmotor torque is required. See pages 66-67 for gearmotors available. Nominal Maximum load cannot exceed overall conveyor load limit of 300 lbs (136kg) for 65 mm wide and 600 lbs (273kg) for 105 mm and 150 mm wide.
Nominal Maximum Load (continued)

Example:
105 mm FlexMove by 20 meters total length running at 15 Meters/min. Accumulated load with dry metal parts running in a 40°C environment. Continuous running.

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

Temperature Factor
Ambient temperature can negatively affect the tension capacity of the conveyor chain.

<table>
<thead>
<tr>
<th>Temperature (°F)</th>
<th>Temperature (°C)</th>
<th>Temperature Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>-4</td>
<td>-20</td>
<td>1.0</td>
</tr>
<tr>
<td>32</td>
<td>0</td>
<td>1.0</td>
</tr>
<tr>
<td>68</td>
<td>20</td>
<td>1.0</td>
</tr>
<tr>
<td>104</td>
<td>40</td>
<td>0.9</td>
</tr>
<tr>
<td>140</td>
<td>60</td>
<td>0.8</td>
</tr>
</tbody>
</table>

Accumulation Factor
Product accumulation greatly reduces the conveyor load capacity. Product accumulation may only be done with the plain chain. Based on the product being accumulated apply the below Accumulation Factor in determining your Nominal Maximum Load. All factors below are assuming dry conditions.

<table>
<thead>
<tr>
<th>Product Being Accumulated</th>
<th>Typical Coefficient of Friction</th>
<th>Accumulation Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steel</td>
<td>0.25</td>
<td>0.50</td>
</tr>
<tr>
<td>Glass</td>
<td>0.20</td>
<td>0.60</td>
</tr>
<tr>
<td>Aluminum</td>
<td>0.25</td>
<td>0.50</td>
</tr>
<tr>
<td>Plastic</td>
<td>0.25</td>
<td>0.50</td>
</tr>
<tr>
<td>Wood</td>
<td>0.30</td>
<td>0.40</td>
</tr>
<tr>
<td>Paper and Cardboard</td>
<td>0.30</td>
<td>0.40</td>
</tr>
</tbody>
</table>

Start / Stop Factor
Frequent Start / Stops of the conveyor chain 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.

<table>
<thead>
<tr>
<th>Application Condition</th>
<th>Start / Stop Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuous Run or 1 start/stop per hour</td>
<td>1.00</td>
</tr>
<tr>
<td>Maximum 10 starts/stop per hour</td>
<td>0.83</td>
</tr>
<tr>
<td>Maximum 30 starts/stop per hour</td>
<td>0.70</td>
</tr>
<tr>
<td>Greater than 30 starts/stop per hour</td>
<td>0.62</td>
</tr>
</tbody>
</table>

Drive Unit Output Capacity, P(W) requirement depend on:
- Traction force F (N)
- Chain speed V (m/min)

To calculate power, the equation is \( P = \frac{1}{60} (F \times V) \)

There are several drive unit designs, the maximum permissible traction force on each type of drive unit as below:

<table>
<thead>
<tr>
<th>Drive unit type</th>
<th>Maximum traction force in Newton (N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SS</td>
<td>500</td>
</tr>
<tr>
<td>SM</td>
<td>1250</td>
</tr>
<tr>
<td>SC</td>
<td>1250</td>
</tr>
<tr>
<td>SU</td>
<td>1250</td>
</tr>
<tr>
<td>SV</td>
<td>1250</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>Application Condition</th>
<th>Coefficient of Friction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dry</td>
<td>0.30</td>
</tr>
<tr>
<td>Water Lubrication</td>
<td>0.27</td>
</tr>
<tr>
<td>Coolant Lubrication</td>
<td>0.20</td>
</tr>
<tr>
<td>Oil Lubrication</td>
<td>0.20</td>
</tr>
</tbody>
</table>
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 $\alpha$ 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°, unless it is for a very short and light application.

<table>
<thead>
<tr>
<th>Bend type, horizontal or vertical plain bend</th>
<th>Bend factor $\alpha$</th>
</tr>
</thead>
<tbody>
<tr>
<td>30°1</td>
<td>.2</td>
</tr>
<tr>
<td>45°</td>
<td>1.3</td>
</tr>
<tr>
<td>60°1</td>
<td>.4</td>
</tr>
<tr>
<td>90°1</td>
<td>.6</td>
</tr>
</tbody>
</table>

8° inclined is the maximum a product could convey for plain chain whereas friction top chain could take up to 30°

**Material**

<table>
<thead>
<tr>
<th>Material</th>
<th>FlexMove Parts</th>
</tr>
</thead>
<tbody>
<tr>
<td>POM (PolyOxyMethylene)</td>
<td>Conveyor Chain, rollers</td>
</tr>
<tr>
<td>POM Conductive (PolyOxyMethylene)</td>
<td>Conductive chain</td>
</tr>
<tr>
<td>Aluminum, extruded &amp; anodized</td>
<td>Angle bracket, beam support bracket, conveyor beam, support beam, guide rail, distance tube, fixed and adjustable side guide bracket, spacer</td>
</tr>
<tr>
<td>Steel, electro-zinc plated</td>
<td>Bolts and nuts, connecting strips, foot connecting strip</td>
</tr>
<tr>
<td>Steel, powder coated</td>
<td>Foot, connecting plate</td>
</tr>
<tr>
<td>PA, Polyamide</td>
<td>Chain pivot, side guide bracket, side guide support, drive and idler steering guide, end caps, wheel guide</td>
</tr>
<tr>
<td>Polyamide PA + Glass fiber</td>
<td>Drive sprocket, idler wheel</td>
</tr>
<tr>
<td>PVC, Polyvinyl Chloride</td>
<td>T-slot cover</td>
</tr>
<tr>
<td>HDPE, High Density Polyethylene</td>
<td>Slide rail, guide rail</td>
</tr>
<tr>
<td>UHMW-PE, Ultra High Molecular Weight Polyethylene</td>
<td>Slide Rail, drive and idler steering guides</td>
</tr>
<tr>
<td>PVDF, Polyvinylidene fluoride</td>
<td>Slide Rail</td>
</tr>
<tr>
<td>TPE, Thermoplastic Elastomer</td>
<td>Chain insert for friction top and wedge top</td>
</tr>
</tbody>
</table>
Resistance to Chemical

FlexMove® components can withstand continuous contact with most chemicals. However, it is recommended to avoid:

- Acids with pH less than 4
- Bases with pH higher than 9

The following table specifies the resistance of several materials used in the conveyor on selected chemicals.

**Legend**

1 = Very good  
2 = Good  
3 = Moderate resistance  
4 = Not recommended  
5 = No data available

<table>
<thead>
<tr>
<th>Material</th>
<th>Acetal POM</th>
<th>Polyamide PA</th>
<th>High-density Polyethylene HDPE</th>
<th>Thermoplastic Elastomer TPE</th>
<th>Aluminum AL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acids</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acetic acid</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>Benzoic acid</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>Citric acid</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>Chromic acid</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>Hydrofluoric acid</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>Hydrochloric acid</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>Hydro cyanic acid</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Nitric acid</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>Phosphoric acid</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>Sulphuric acid</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Tartaric acid</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Basic compounds</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ammonia</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>Calcium hydroxide</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>Caustic soda</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Potassium hydroxide</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>Salts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potassium bicarbonate</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Potassium permanganate</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Sodium cyanic</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>Sodium hydrochloride</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>Acid salt</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Basic salt</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Neutral salt</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
## Chains

<table>
<thead>
<tr>
<th>Material</th>
<th>Acetal POM</th>
<th>Polyamide PA</th>
<th>High-density Polyethylene HDPE</th>
<th>Thermoplastic Elastomer TPE</th>
<th>Aluminum AL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Organic compounds and solvents:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acetone</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Benzene</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Butyl alcohol</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Carbon disulphide</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Chloroform</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Ethyl acetate</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Ethyl alcohol</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Heptane</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Methyl alcohol</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>Methyl ethyl ketone</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Nitrobenzene</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Phenol</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td><strong>Gasses:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carbon dioxide</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Carbon monoxide</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Chlorine</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Hydrogen sulphide</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Sulphur dioxide</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td><strong>Others:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beer</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Fruit juices</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>Gasoline</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Milk</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Oil</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Vinegar</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>-</td>
<td>1</td>
</tr>
</tbody>
</table>

Note: the table above is valid for temperature range up to 60°C and it is to be considered as guideline only. Furthermore, precautions should be taken when using cleaning agents. If you are in doubt on the material to withstand your special environment, you should go for chemical testing or contact our local distributor.

### Static Electricity

The standard plastic materials used for conveyors have low electrical conductivity so static electricity can build up in the conveyor. When a conveyor is running under normal environment (20°C and humidity 60%) without load, the static electricity build up should be around the following figures:

<table>
<thead>
<tr>
<th>Location</th>
<th>Voltage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above the drive unit</td>
<td>1800-2500V</td>
</tr>
<tr>
<td>Idler end</td>
<td>400-500V</td>
</tr>
<tr>
<td>Above the wheel bend</td>
<td>400-500V</td>
</tr>
<tr>
<td>Above the straight section</td>
<td>250-350V</td>
</tr>
</tbody>
</table>

With the introduction of anti-static material for slide rail and chain, it shall meet the requirement for electronic industry.
**PRODUCT SUMMARY**

**FlexMove® Stainless Steel Conveyors are best for:**

- Part Handling
- Tight Spaces
- Buffering
- Elevation Changes
- Accumulation
- Long Lengths
- Complex Configurations
- Caustic & Corrosive Environments
- Curves, Jogs, Inclines, Declines

**Sizes & Measurements**

- Widths: 65 mm, 85 mm, 105 mm, 180 mm and 260 mm
- Lengths: up to 30 m (98 ft)

**Loads & Speeds**

- Loads up to 65 kg/m (44 lbs/ft)
- Speeds: up to 58 mpm (190 fpm)

**Plastic Chain Types**

- Standard: Low Friction & Friction Top Inserts
- Specialty
  - Conductive
  - Cleated
  - Hardened Steel Top
  - Roller Top
  - Magnet Top
  - And Many More

**Modules**

- Drive Tail
- Idler Tail
- Curves from 15° to 180°
- Inclines/Declines from 5° to 90°

**Support Stands**

- Tripod Supports
- Horizontal & Adjustable Angle Supports also available

**Guiding**

- Fully Adjustable
- Adjustable Width/Height
- Twin Rail
- Overhead Guide