Conveyor system XS

System information

Chain width 44 mm

Features
Chain permits transport of very small items which are otherwise difficult to handle. Compact and neat design.

Examples of application areas
Small ball bearings, perfume bottles, pharmaceutical bottles, sintered metal components.

Technical characteristics

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drive unit capacity limit</td>
<td>500 N</td>
</tr>
<tr>
<td>Chain tension limit</td>
<td>500 N</td>
</tr>
<tr>
<td>Beam width</td>
<td>45 mm</td>
</tr>
<tr>
<td>Chain width</td>
<td>44 mm</td>
</tr>
<tr>
<td>Chain pitch</td>
<td>25.4 mm</td>
</tr>
<tr>
<td>Item width</td>
<td>10–80 mm</td>
</tr>
<tr>
<td>Maximum item weight</td>
<td></td>
</tr>
<tr>
<td>Horizontal transport</td>
<td>2 kg</td>
</tr>
<tr>
<td>Vertical transport</td>
<td>1 kg</td>
</tr>
<tr>
<td>Maximum weight on conveyor</td>
<td>150 kg</td>
</tr>
<tr>
<td>Maximum conveyor length</td>
<td>30 m</td>
</tr>
<tr>
<td>Maximum permitted load per link</td>
<td>0.5 kg</td>
</tr>
</tbody>
</table>

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Chains XS

Plain chain
Plain chain
Length 5 m
Plain link kit
Plain chain (Ultra low wear)
Length 5 m
Plain link kit (Ultra low wear)
Note. Link kit contains 10 links, 10 pivot, 10 steel pins.

Plain chain
Length 5 m
Plain link kit
Plain chain (Ultra low wear)
Length 5 m
Plain link kit (Ultra low wear)
Note. Link kit contains 10 links, 10 pivot, 10 steel pins.

Cleated chain, Type D
Cleated chain Type D,
Length 5 m
h=3
h=5.5
h=9
h=27
Use the online configurator to specify and order.
Cleated link kit
h=3
h=5.5
h=9
h=27
Note. Link kit contains 10 links, 10 pivot, 10 steel pins.

Cleated chain (flat top cleats)
Cleated chain
Length 5 m
Cleated link kit
Note. Link kit contains 10 links, 10 pivot, 10 steel pins.

Other chains
See the Chain guide for selection of other chains.

Chain installation
See Appendix “D. Chain installation” on page 473.

Cleated, Type G
Cleated chain Type G
Length 5 m
h=3
h=5
h=9
Use the online configurator to specify and order.
Cleated link kits
h=3
h=5
h=9
Note. Link kit contains 10 links, 10 pivot, 10 steel pins.

Steel top chain
Steel top chain
Length 5 m
Steel top link kit
Note. Link kit contains 10 links, 10 pivot, 10 steel pins.
## Chain accessories XS

<table>
<thead>
<tr>
<th><strong>Plastic pivot for chain</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Plastic pivot kit XS</td>
<td><strong>5111489</strong></td>
</tr>
<tr>
<td>Plastic pivot kit, 25 pc</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Steel pin</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Steel pin kit XS</td>
<td><strong>5111492</strong></td>
</tr>
<tr>
<td>Steel pin kit, 25 pc</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Pin insertion tool for chain</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Pin insertion tool</td>
<td><strong>XLMJ 4</strong></td>
</tr>
<tr>
<td>Pin insertion tool, PRO version</td>
<td><strong>XLMJ 4 P</strong></td>
</tr>
</tbody>
</table>

This product is recommended for frequent users.
Beam XS

Conveyor beam

Beam
Length 3000 ±10/-0 mm
Length to order (30- 3000 mm)
Slide rail: see page 101

Beam accessories XS

Connecting strip with set screws

Connecting strip with set screws
h=20, a=30, b=50, L=130
Note. Must be ordered in multiples of 10

Cover strip for T-slot, PVC

Cover strip for T-slot, PVC
Length 25 m
For XS-XH

Beam spacer

Beam spacer
Aluminium, anodized
Length 3 m
For connection of two conveyor beams side to side. Use M8 screw and slot nut. Two holes must be drilled, one through the spacer (9 mm) and one through the beam, to allow insertion of the screw. The diameter of the second hole depends on the size of the screw head.
**Slide rails XS**

**Plastic slide rails for XS beam**
- XSCR 25
- XSCR 25 P
- XSCR 25 U
- XSCR 25 H

*Slide rail*
- Length 25 m
- HDPE (μ=0.1–0.25) (Black)
- PVDF (μ=0.15–0.35) (Natural white)
- UHMW-PE (μ=0.1–0.25) (White)
- PA-PE (μ=0.1–0.25) (Grey)

**Mounting tool for slide rail**
- Mounting tool for slide rail XS, X65
  - XLMR 140

**Aluminium rivets**
- XLAH 3x6

*Aluminium rivets 3 mm for XS conveyors*
*Extra slide rail in plain bends must be anchored using plastic screws due to lack of space for the rivet crimping tool. Note. Must be ordered in multiples of 250.*

**Drill fixture for slide rail**
- Drill fixture for XS slide rail
  - d=3.2

**Rivet crimping pliers**
- For 3 mm rivets

**Rivet crimping clamp**
- For 3 mm rivets
  - 3924770

**Cover strip**
- Length: 3 m
- Material: Plastic PA 12

*Cover the opening on the side between the chain and beam. Primarily for straight sections and the outer curves, but can also be mounted on inner curves. Apply using a double-sided tape, see mounting instruction 5497EN in Technical library.*

© FlexLink 2019 Slide rails XS 101
Drive and idler units – introduction

Drive unit types
The XS system includes several configurations, including direct driven units with suspended motor and transmission chain as well as drive units. Available motors include variable speed types (V) as well as fixed speed motors (F).

End drive units

<table>
<thead>
<tr>
<th>Size</th>
<th>Direct drive, slip clutch</th>
<th>Suspended motor, transmission chain, slip clutch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heavy</td>
<td>F, V</td>
<td>F</td>
</tr>
</tbody>
</table>

Wheel bend drive units

<table>
<thead>
<tr>
<th>Size</th>
<th>Suspended motor, transmission chain, slip clutch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heavy</td>
<td>F</td>
</tr>
</tbody>
</table>

Double drive units

<table>
<thead>
<tr>
<th>Size</th>
<th>Suspended motor, transmission chain, slip clutch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heavy</td>
<td>F</td>
</tr>
</tbody>
</table>

Motor specifications
Motors are available for 230/400 V, 50 Hz and 230/460 V or 330/575 V, 60 Hz. All motors except those for Compact drive units can be connected for delta or star configuration by means of jumpers.
Variable speed motors are SEW Movimot, 380–500 V. Note that variable speed motors include a control box that adds 93 mm to the width of the motor.

Ordering information
Drive units with motors must be specified using the web-based configurator. The configurator provides detailed information and step-by-step guidance in the specification process. A product code string is generated, containing the specification details. See next page for examples of code strings.
Drive units without motors can be ordered using the designations in the catalogue.

Dimension drawings in catalogue
Note that dimensions relating to drive unit motors depend on the motor specified during the configuration. In most cases, the motors shown in the catalogue drawings represent the largest size. If variable speed motors are used, some dimensions may increase, indicated by dimension values xxx (V: yyy). V represents the max dimension using variable speed motor.
End drive units XS

**End drive unit, suspended motor, slip clutch**

End drive unit, suspended motor, slip clutch
Fixed speed up to 60 m/min
Transmission on left side
Without motor (ISO)
Without motor (ANSI)

Maximum traction force: 500 N. See page 22.
Effective track length: 0.80 m

**End drive unit, suspended motor, slip clutch**

End drive unit, suspended motor, slip clutch
Fixed speed up to 60 m/min
Transmission on right side
Without motor (ISO)
Without motor (ANSI)

Maximum traction force: 500 N. See page 22.
Effective track length: 0.80 m

**End drive units XS, direct drive with slip clutch**

End drive unit, direct drive with slip clutch
Fixed speed up to 60 m/min
Variable speed: see Drive Unit Guide
Motor on left side
Fixed/variable speed
Without motor
Motor on right side
Fixed/variable speed
Without motor

Maximum traction force: 500 N. See page 22.
Effective track length: 0.80 m
Double drive units XS

Double drive unit, suspended
Fixed speed up to 60 m/min
Transmission on left side
A = 55 mm
Fixed speed
Without motor (ISO)
Without motor (ANSI)
A = 90–350 mm
Without motor (ISO)
Without motor (ANSI)
Maximum traction force: 500 N. See page 22.
Use online configurator when ordering.
Effective track length: 0.80 m

Double drive unit, suspended
Fixed speed up to 60 m/min
Transmission on right side
A = 55 mm
Fixed speed
Without motor (ISO)
Without motor (ANSI)
A = 90–350 mm
Without motor (ISO)
Without motor (ANSI)
Maximum traction force: 500 N. See page 22.
Use online configurator when ordering.
Effective track length: 0.80 m

Bend drive unit XS
Bend drive unit, suspended, 180°
Fixed speed up to 30 m/min
Fixed speed
Without motor (ISO)
Without motor (ANSI)
Maximum traction force: 200 N. See page 22.
Use online configurator when ordering.
Effective track length: 0.65 m

Idler end unit XS
Idler end unit
Effective track length: 0.50 m
Wheel bends XS

Wheel bend, 30°

Wheel bend, 45°

Plain bend, 30°

Plain bend, 45°

Plain bends XS

Effective track lengths:

Wheel bend, 30°

Wheel bend, 45°

Plain bend, 30° ± 1°

Plain bend, 45° ± 1°

Effectiveness track lengths:

Wheel bend, 90°

Wheel bend, 180°

Plain bend, 90°

Plain bend, 180°

Effectiveness track lengths:

Wheel bend, 90°

Wheel bend, 180°

Effective track length: 0,25 m 1-way (0,50 m 2-way)

Effective track length: 0,30 m 1-way (0,60 m 2-way)

Effective track length: 0,40 m 1-way (0,80 m 2-way)

Effective track length: 0,65 m 1-way (1,30 m 2-way)

Wheel bend, 30° ±1°

Wheel bend, 45° ±1°

Plain bend, 30° ±1°

Plain bend, 45° ±1°

R = 500 ± 10 mm
R = 700 ± 10 mm
R = 1000 ± 10 mm

R = 500 ± 10 mm
R = 700 ± 10 mm
R = 1000 ± 10 mm

R500: 0,70 m 1-way (1,40 m 2-way)
R700: 0,80 m 1-way (1,60 m 2-way)
R1000: 0,95 m 1-way (2,00 m 2-way)

R500: 0,80 m 1-way (1,60 m 2-way)
R700: 0,95 m 1-way (2,00 m 2-way)
R1000: 1,20 m 1-way (2,40 m 2-way)
Plain bends XS (continued)

Plain bend, 60°

- Plain bend, 60°±1°
  - R=500±10 mm
  - R=700±10 mm
  - R=1000±10 mm

- XSBP 60R500
- XSBP 60R700
- XSBP 60R1000

Effective track lengths:
- R500: 0,95 m 1-way (1,85 m 2-way)
- R700: 1,15 m 1-way (2,30 m 2-way)
- R1000: 1,45 m 1-way (2,90 m 2-way)

Plain bend, 90°

- Plain bend, 90°±1°
  - R=500±10 mm
  - R=700±10 mm
  - R=1000±10 mm

- XSBP 90R500
- XSBP 90R700
- XSBP 90R1000

Effective track lengths:
- R500: 1,20 m 1-way (2,40 m 2-way)
- R700: 1,50 m 1-way (3,00 m 2-way)
- R1000: 2,00 m 1-way (3,95 m 2-way)

Vertical bends XS

Vertical bend, 5°

- Vertical bend, 5°
  - XSBV 5R300

Effective track length: 0,20 m 1-way (0,40 m 2-way)

Vertical bend, 7°

- Vertical bend, 7°
  - XSBV 7R300

Effective track length: 0,22 m 1-way (0,44 m 2-way)

Vertical bend, 30°

- Vertical bend, 30°
  - XSBV 30R300

Effective track length: 0,35 m 1-way (0,65 m 2-way)

Vertical bend, 45°

- Vertical bend, 45°
  - XSBV 45R300

Effective track length: 0,45 m 1-way (0,80 m 2-way)
Vertical bends XS (continued)

**Vertical bend, 60°**

**XSBB 60R300**

Effective track length: 0.50 m 1-way (0.95 m 2-way)

**Vertical bend 90°**

**XSBB 90R300**

Effective track length: 0.70 m 1-way (1.30 m 2-way)

**Vertical bend, 5°–90°**

**XSBB ER300**

The bend is cut in the middle to the desired angle and assembled using connecting strips. The angle "E" must be specified when ordering.
Front piece XS

Front piece
Length 3 m  XSVF 3

Sliding strip for front piece
Sliding strip for front piece  XSVG 2
The sliding strip must be anchored to the front piece. Rivets and tools for anchoring: see page 101.

Front piece upper bend
Upper bend, 60°  XSVA 60R352
Includes connecting strip with screws

Linkage kit for front piece
Linkage kit  XLVK 33
W=110, D=33
W=160, D=58
Kit includes two support pairs and one locking device.

Bend support for front piece
Bend support  XLVS 33
D=33
XLVS 58
D=58

Front piece lower bend
Lower bend, 60°  XSVB 60R245
Includes connecting strip with screws