Conveyor system XK

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System information

Chain width 102 mm

Features
Suitable for larger items, especially if point of balance is somewhat offcenter. Higher capacity than other types. Includes components for pallet handling.

Examples of application areas
Ball and roller bearings, heavy boxes, gear wheels, motor parts on pallets, disk brakes, hydraulic pumps.

Technical characteristics
Drive unit capacity ........................................... 2500 N
Chain tension limit ............................................. 2500 N
Beam width ....................................................... 105 mm
Chain width ....................................................... 102 mm
Chain pitch ......................................................... 38.1 mm
Item width ......................................................... 50–300 mm
Maximum item weight
Horizontal transport ........................................... 30 kg
Vertical transport ............................................... 15 kg
Maximum weight on conveyor ......................... 800 kg
Maximum conveyor length ............................... 40 m
Maximum permitted load per link 5,0 kg
**Chains XK**

**Plain chain**

- Length 5 m: XKTP 5
- Plain link kit *: 5056639
- Plain chain (Ultra low wear): XKTP 5 C
- Plain link (Ultra low wear): n.a.

*Note. This chain must not be used in pallet applications. For this, please use closed top chain XKTP 5 K.*

*Link kit contains 10 links, 10 pivots, 10 steel pins*

**Universal chain**

- Length 5 m: XKTF 5 U
- Use the online configurator to specify and order.
- Universal link kit *: 5056642

*The link has a hole for an M6 screw. M6 nut will fit inside the link.*

*Link kit contains 10 links, 10 pivots, 10 steel pins*

**Steel top chain**

- Length 5 m: XKTP 5 TF
- Steel top link kit *: 5056644

*Link kit contains 10 links, 10 pivots, 10 steel pins*
Cleated chain, Type A

Cleated chain
Type A cleats
Length 5 m
h=15 mm  XKTF 5×15 A
h=20 mm  XKTF 5×20 A
h=30 mm  XKTF 5×30 A
h=40 mm  XKTF 5×40 A

Use the online configurator to specify and order.

Cleated link kit *
  h=15 mm  5056645
  h=20 mm  5056646
  h=30 mm  5056647
  h=40 mm  5056648

*Link kit contains 10 links, 10 pivots, 10 steel pins

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

Chain installation
See Appendix D, page 473, for installation instructions.
Chain accessories XK

Plastic pivot

Plastic pivot, kit (25 pcs) XK 5111497

Steel pin

Steel pin, kit (25 pcs) XK 5111498

Beams XK

Conveyor beam, standard

Beam, standard Length 3000 +10/-0 mm Length to order (30- 3000 mm) XKCB 3 XKCB L Slide rail: see page 237

Profile for split conveyor beam

Profile for split conveyor beam Length 3000 +10/-0 mm Length to order (30- 3000 mm) XKCB 3 H XKCB L H

Beam clip assembly

Beam clip assembly Including M8 screw and locking nut. Use minimum 5 clips per meter. Place clips 100 mm from each end. XKCE 55×30

Pin insertion tool for chain

Pin insertion tool XK XKMJ 8 P

Beam section for chain installation

Beam section for chain installation Including connecting strips and screws XKCC 200 A

Slide rail: see page 237
Beam accessories XK

**Connecting strip with set screws**

![Diagram of connecting strip with set screws]

Connecting strip with set screws  
$h=25$, $a=44$, $b=44$, $L=160$  
**XLCJ 6x160**

*Note. Must be ordered in multiples of 10*

**Cover strip for T-slot, PVC**

![Diagram of cover strip for T-slot, PVC]

Cover strip for T-slot  
Grey PVC  
Length 3 m  
**XCAC 3 P**

*Note! Can’t be used with bends*

**Cover strip for T-slot, PVC**

![Diagram of cover strip for T-slot, PVC]

Cover strip for T-slot  
Grey PVC  
Length 25 m  
**XCAC 25 P**

**Beam spacer**

![Diagram of beam spacer]

Beam spacer  
Aluminium, anodized  
Length 2 m  
**XLCD 3**

*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.*

**Plastic slide rails for XK beams**

![Diagram of plastic slide rails]

Slide rail  
Length 25 m  
PVDF ($\mu=0.15–0.35$) (Natural white)  
(t=2.5)  
**XWCR 25 P**

UHMW-PE ($\mu=0.1–0.25$) (White)  
(t=2.6)  
**XKCR 25 U**

PA-PE ($\mu=0.1–0.25$) (Grey)  
(t=2.45)  
**XKCR 25 H**

*See Appendix A, page 463 for selection guidelines and assembly instructions.*

**Mounting tool for slide rail**

![Diagram of mounting tool]

Mounting tool for slide rail  
**XKMR 200**

**Plastic screws for slide rail**

![Diagram of plastic screws]

Plastic screws 5 mm for XK beams  
**XWAG 5**

*Note. Must be ordered in multiples of 50*
Slide rails XK (continued)

Aluminium rivets

Aluminium rivets 4 mm for XK-X180/X300 conveyors, brown

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.

Rivet crimping clamp

Rivet crimping clamp for X65-X85-XH-XK-X180/X300
For 4 mm rivets
(Allen key not included)

Drill fixture for slide rail

Drill fixture for X65-X85-XH-XK-X180/X300 slide rail

d=4.2 mm

Cover strip

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.

Rivet crimping pliers

Rivet crimping pliers for X65-X85-XH-XK-X180/X300
For 4 mm rivets

25° Slide rails, hardened steel XK

Straight slide rails for XK beams – hardened steel

Slide rail, hardened steel
Length 3 m

With 9 predrilled holes. See Appendix B, page 471 for assembly instructions.

Slide rails for XK bends – hardened steel

Slide rail for bends, hardened steel
For 30° wheel bend
For 45° wheel bend
For 90° and 180° wheel bends
For 180° bends: use two 90° slide rails. See Appendix B, page 471 for assembly instructions.
Brass rivets

Brass rivets (100 pcs) 5056167

*Rivets for anchoring the slide rails*
*See Appendix B, page 471 for assembly instructions.*

Slide rail fixture

Slide rail fixture 5056186

*The fixture is used when anchoring the slide rail. Two fixtures are required.*
*See Appendix B, page 471 for assembly instructions.*
Drive and idler units – introduction

**Drive unit types**

The XK systems consist of several configurations, including direct driven units as well as driven units with suspended motor and transmission chain.

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>
<tr>
<td>Heavy</td>
<td>–</td>
<td>F</td>
</tr>
</tbody>
</table>

**Catenary 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>
<tr>
<td>Heavy</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, 60 Hz. Variable speed motors are SEW Movimot, 380–500 V. Note that variable speed motors include a control box that adds 120 mm to the width of the motor.

IP55 available with standard oil.
IP65 available with food grade oil.

**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**

Note that dimensions relating to drive unit motors depend on the motor specified during the configuration.

**Dimension limits – in-line transfer drive units (X-bends)**

The dimensions of an in-line drive unit impose restrictions with regard to conveyor geometry. The idler part of the drive unit may interfere with other parts of the conveyor. The figure shows a typical case, showing typical minimum dimensions.
End drive units XK

End drive unit, suspended motor, slip clutch

- Suspended motor
- Fixed speed up to 60 m/min
- Transmission on left side
- Fixed speed *
- Without motor (ISO)
- Without motor (ANSI)

Maximum traction force: 1250 N. See page 22.
*Use online configurator when ordering.
Effective track length: 0,85 m

End drive unit, high capacity

- Suspended motor
- Fixed speed up to 25 m/min
- Transmission on left side
- Fixed speed *
- Without motor (ISO)
- Without motor (ANSI)

Maximum traction force: 2500 N. See page 22.
Effective track length: 0,85 m
*Use online configurator when ordering.
Note! Only motors with brakes can be selected

End drive unit, suspended motor, slip clutch

- Suspended motor
- Fixed speed up to 60 m/min
- Transmission on right side
- Fixed speed *
- Without motor (ISO)
- Without motor (ANSI)

Maximum traction force: 1250 N. See page 22.
*Use online configurator when ordering.
Effective track length: 0,85 m

End drive unit, high capacity

- Suspended motor
- Fixed speed up to 25 m/min
- Transmission on right side
- Fixed speed *
- Without motor (ISO)
- Without motor (ANSI)

Maximum traction force: 2500 N. See page 22.
Effective track length: 0,85 m
*Use online configurator when ordering.
Note! Only motors with brakes can be selected

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End drive units XK

241
End drive units XK, direct drive with slip clutch

End drive unit, direct drive
Fixed speed up to 60 m/min
Variable speed: see Drive Unit Guide
Motor on left side
Fixed/variable speed *
Without motor
XKEB XKEB 0 LP

Maximum traction force: 1250 N. See page 22.
*Use online configurator when ordering.
Effective track length: 0,80 m

End drive unit, direct drive
Fixed speed up to 60 m/min
Variable speed: see Drive Unit Guide
Motor on right side
Fixed/variable speed *
Without motor
XKEB XKEB 0 RP

Maximum traction force: 1250 N. See page 22.
*Use online configurator when ordering.
Effective track length: 0,80 m

Double drive units XK

Double drive unit, suspended
Fixed speed up to 50 m/min
Suspended motor
Transmission on left side
A = 106 mm
Fixed speed *
Without motor (ISO)
Without motor (ANSI)
XKEB DD XKEB 0 LD106 XKEB 0 LAD106
A = 150–350 mm
Without motor (ISO)
Without motor (ANSI)
XKEB 0 LD– XKEB 0 LAD–

Maximum traction force: 1250 N. See page 22.
*Use online configurator when ordering.
Effective track length: 0,85 m

Double drive unit, suspended
Fixed speed up to 50 m/min
Suspended motor
Transmission on right side
A = 106 mm
Fixed speed *
Without motor (ISO)
Without motor (ANSI)
XKEB DD XKEB 0 RD106 XKEB 0 RAD106
A = 150–350 mm
Without motor (ISO)
Without motor (ANSI)
XKEB 0 RD– XKEB 0 RAD–

Maximum traction force: 1250 N. See page 22.
*Use online configurator when ordering.
Effective track length: 0,85 m
Catenary drive units XK

Catenary drive unit, suspended
Suspended motor
Fixed speed up to 30 m/min
Transmission on left side
Fixed speed*
Without motor (ISO)
Without motor (ANSI)

Maximum traction force: 1250 N. See page 22.
*Use online configurator when ordering.
Effective track length: 1,60 m

Catenary drive unit, high capacity
Suspended motor
Fixed speed up to 25 m/min
Transmission on left side
Fixed speed*
Without motor (ISO)
Without motor (ANSI)

Maximum traction force: 2500 N. See page 22.
*Use online configurator when ordering.
Effective track length: 1,60 m

Wheel bend drive unit XK

Wheel bend drive unit, 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: 0,85 m
X-Bends

X-bend for top chain
For optional mounting of Idler end unit or Drive unit at the end (A) or (B)

Effective track length: 3,3 m
Note! Special arrangement for connecting beam support brackets

XKCX 105 R

X-bend for return chain
For optional mounting of Idler end unit or Drive unit at the end (A) or (B)

Effective track length: 4,3 m
Note! Special arrangement for connecting beam support brackets

XKCX 105 D

X-Bends must have a special arrangement for connecting beam support brackets. See example in figure below.

Read more about beam support brackets on page 317.

Support components for X-bends
**Idler units XK**

**Idler end unit**

![Idler end unit](image)

*Effective track length: 0,85 m*

**Idler bend unit, 90°**

![Idler bend unit, 90°](image)

*Effective track length: 0,70 m*

*Note. Cannot be used with return chain*

**Protective cover for idler end unit**

![Protective cover for idler end unit](image)

**Wheel bends XK**

**Wheel bend, 30°**

![Wheel bend, 30°](image)

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

**Wheel bend, 90°**

![Wheel bend, 90°](image)

*Effective track length: 0,55 m 1-way (1,10 m 2-way)*

**Wheel bend, 180°**

![Wheel bend, 180°](image)

*Effective track length: 0,85 m 1-way (1,70 m 2-way)*

© FlexLink 2019  Idler units XK 245
Wheel cover for Wheel bend

Wheel cover for XK

Wheel cover for XK
(Including one pair of Wheel cover 5112247 and 2 tap screw ISO 7049 4,2x6,5-C-H-A2K)

Plain bends XK

Plain bend, 30°

Plain bend, 45°

Plain bend, 30°±1°
R=500±10 mm
R=700±10 mm
R=1000±10 mm

XKBP 30R500
XKBP 30R700
XKBP 30R1000

Plain bend, 45°±1°
R=500±10 mm
R=700±10 mm
R=1000±10 mm

XKBP 45R500
XKBP 45R700
XKBP 45R1000

Effective track lengths:
R500: 0,70 m 1-way (1,35 m 2-way)
R700: 0,80 m 1-way (1,55 m 2-way)
R1000: 0,95 m 1-way (1,85 m 2-way)
Plain bends XK (continued)

Plain bend, 60°
R=500±10 mm
R=700±10 mm
R=1000±10 mm
Eff. 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°
R=500±10 mm
R=700±10 mm
R=1000±10 mm
Eff. 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 XK

Vertical bend, 5°
Eff. track length: 0.25 m 1-way (0.50 m 2-way)

Vertical bend, 30°
Eff. track length: 0.60 m 1-way (1.15 m 2-way)

Vertical bend, 15°
Eff. track length: 0.40 m 1-way (0.75 m 2-way)

Vertical bend, 45°
Eff. track length: 0.80 m 1-way (1.55 m 2-way)
Vertical bends XK (continued)

**Vertical bend, 60°**

Vertical bend, 60°  
*XKBV 60R750*  
*Effective track length: 1.00 m 1-way (1.95 m 2-way)*

**Vertical bend, 90°**

Vertical bend, 90°  
*XKBV 90R750*  
*Effective track length: 1.40 m 1-way (2.70 m 2-way)*

**Vertical bend, 5°–90°**

Vertical bend, 5°–90°  
*XKBV ER750*  
*The bend is cut in the middle to the desired angle and assembled using connecting strips. The angle “E” must be specified when ordering.*

**Angle plates XK**

**Angle plate, straight**

Angle plate  
Length 3 m  
*XHRP 3*

**Angle plate bracket**

Angle plate bracket  
*3927082*
Front piece XK

Front piece
Length 3 m
Sliding strip for front piece
Length 2 m

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

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

Linkage kit for front piece

Linkage kit
W=190, D=43
W=290, D=93
Kit consists of two support pairs and one locking device.

Bend support for front piece

Bend support
D=43 mm
D=93 mm
Drip trays XK

Drip tray

Length 3 m

XKDT 3x147

Drip tray bracket

XLDB 21x100

Drip tray connector

With drip outlet

Including screw kit

XKDJ 147 A

Drip tray connector with drip catcher

XKDJ 147 AW

Connecting strip

Connecting strip with set screws

XLCJ 5x140

Note. Must be ordered in multiples of 10

End pan for drip tray

With drip outlet

Including screw kit

XKDE 147 A

End cap for drip tray

Including screw kit

XKDC 147 A
Drip catchers XK

Drip catcher 53 mm
Drip catcher 53 mm
Length 3 m
XHDS 3×53

Drip catcher 83 mm
Drip catcher 83 mm
Length 3 m
XHDS 3×83

Drip catchers XK

Drip pan for wheel bend 45°
Drip pan for wheel bend 45°
Including screw kit
XKDH 45×147 A

Drip pan for wheel bend 90°
Drip pan for wheel bend 90°
Including screw kit
XKDH 90×147 A

Drip pan for wheel bend 180°
Drip pan for wheel bend 180°
Including screw kit
XKDH 180×147 A

Drip pan, upper, for 90° vertical bend
Drip pan, upper, for 90° vertical bend
With drip outlet
Including screw kit
XKDV 90×147 A

End pan for idler end unit
End pan for idler end unit
With drip outlet
Including screw kit
XKDD 147 A

Drip pan 45° with drip catcher
Drip pan for wheel bend 45°
With integrated drip catcher
Including screw kit
XKDH 45×147 AW

© FlexLink 2019 Drip catchers XK
Drip pans XK (continued)

**Drip pan 90° with drip catcher**

Drip pan for wheel bend 90°
With integrated drip catcher

**XKDH 90x147 AW**

*Including screw kit*

**Drip pan 180° with drip catcher**

Drip pan for wheel bend 180°
With integrated drip catcher

**XKDH 180x147 AW**

*Including screw kit*

**End pan with drip catcher, for idler end unit**

End pan for idler end unit
With integrated drip catcher and drip outlet

**XKDD 147 AW**

*Including screw kit*