Modular pallet conveyor system XT

Contents
Introduction .................................................................331
The modular concept ......................................................332
System overview ..........................................................333
Definition of parameters.................................................335
General information .......................................................336
Technical information .....................................................338
XT Compact conveyor module .......................................340
XT conveyor modules ....................................................340
Conveyor module configuration examples ........................342
XT support modules .......................................................343
Support module configuration examples ..........................344
XT transfer modules .......................................................345
Transfer module configuration examples ..........................348
XT function modules ......................................................349
Function module configuration examples ..........................352
Pallets ............................................................................353
Pallet stop devices ..........................................................355
Dampers ........................................................................358
Sensor brackets ...............................................................359
Pneumatic transfer units ..................................................360
Pallet locating station .......................................................363
Lift-and-locate unit ..........................................................364
Lift-and-rotate unit ..........................................................365
Support brackets .............................................................365
Roller kits .......................................................................366
Connecting kits ..............................................................366
Chain products ...............................................................368
Conveyor beam products ...............................................369
Tools and accessories, 44×44 beam ..................................371
Tools and accessories, 30×30 beam .................................371
Slide rails .......................................................................372
Slide rail tools ................................................................372
End drive units ...............................................................373
End drive units, centre drive ............................................374
Catenary drive units ..........................................................375
Idler end unit ..................................................................376
Cover strip ......................................................................376
Wheel bends ..................................................................376
Wheel cover for Wheel bend ............................................377
Vertical bends ................................................................377
Guide rail components ....................................................378

Introduction

System description
The XT conveyor is a twin-track, flexible plastic chain pallet conveyor. The system is especially well suited for manual and automatic assembly and test systems in the automotive and electrical/electronics industries. The modular concept allows simplified engineering and ordering, as well as fast configuration together with plug and play capabilities for improved productivity.

Examples of application areas

Module concept
The standard modules can be split into six groups – conveyors, transfers, stops, locates, lift-and-rotates and supports. Each module is quickly adaptable and reusable for future demands and can easily be integrated with FlexLink’s large range of single strand pallet conveyor systems.

Pallets
FlexLink’s standard chains and integrated guide rails systems allow for accumulation through the entire system, including bends, as well as easy and straightforward integration of stops, locate stations as well as transfer units with a minimum of controls.
introduction (continued)

system data

- 25 m maximum conveyor length
- 20 m/min maximum conveyor speed
- Standard pallet sizes from 240×240 mm up to 640×640 mm, including rectangular sizes
- 30 kg maximum pallet weight (8 kg pallet weight/100 mm conveyor)
- 250 kg maximum accumulated weight at 5 m/min.
- Maximum permitted load per link 0.5 Kg (XT-Compact)
- Maximum permitted load per link 1.0 Kg

the modular concept

introduction

the modular concept includes six groups of modules that have been defined to suit the various industrial demands.

most of the conveyor modules can be connected back to back by a connecting kit to form the desired conveyor layout. other modules such as the transfer module or the locating function module can be incorporated as required.

the module groups are:

- conveyor modules
- support modules
- transfer modules
- stop function module
- locating function modules
- lift-and-rotate modules

each module is explained in more detail later on in this section of the catalogue.

accessories and spare parts

accessories and spare parts for the XT modules can also be ordered. those products are listed after the module descriptions. see page 353 to 379.

ordering process

every XT module has its own unique order code which can be found in each module description. the various options available for each module are shown in the order code and all the parameters have to be specified when ordering.

it is important to know that by ordering for example a conveyor module, you do not automatically get a support module. this has to be ordered separately.

product configurator

the easiest way to order XT modules is by using the online product configurator.

typical noise levels

during normal conditions a noise level below 65 dB(A) can be obtained in an XT conveyor system, including transfers, stops, etc. however, be aware that the pneumatic components (valves, etc.) very much affect the noise level if they are not enclosed correctly. also, throttle valves must be adjusted correctly at transfers, stops, etc. the following table shows typical noise levels.

<table>
<thead>
<tr>
<th>Speed m/min.</th>
<th>5</th>
<th>10</th>
<th>15</th>
<th>20</th>
<th>30*</th>
</tr>
</thead>
<tbody>
<tr>
<td>dB(A)</td>
<td>56</td>
<td>58</td>
<td>61</td>
<td>65</td>
<td>70</td>
</tr>
</tbody>
</table>

*No standard speed

you can find this webbased configurator at the FlexLink website http://www.flexlink.com.

shipment

modules are normally delivered in flat boxes with a maximum length of approximately 3 m. see photo below. conveyor modules will be delivered in sections of maximum 3 m which are easy to reassemble. more detailed information regarding each module is provided in the section describing the modules. an assembly manual is available describing how to assemble and connect the modules. maintenance and spare parts manuals are also available.
System overview

Typical XT conveyor layout

The figure below shows a typical conveyor layout, built by connecting various XT modules. Note that support modules are not shown in this overview. For each conveyor-and-transfer module, a support module has to be ordered separately, see page 343, “XT support modules”.

Pallet flow in a highway

Characteristic for a highway is a continuous circulation of pallets, waiting for calling from a transfer operation into a parallel flow, for instance a workstation. In order to minimize the noise level and not disturbing the pallet more than necessary in a highway, the FlexLink philosophy is that by default most stop functions attached to a highway are not activated. The stop function will only be activated if a pallet has to be transferred out from or into the highway.

Exception

A Stop function module or a Locating function module attached directly to a highway will be seen as a serial workstation and the stop function of these are therefore always activated by default, i.e. all single pallets will be stopped. This philosophy applies to all XT standard modules.
System overview (continued)

Available XT modules

Below is an overview of the various modules presented. The conveyor modules can be connected back to back to form the desired conveyor layout. Transfer and locating modules can be incorporated as required.

For more information about the modules, please see the detailed information under each module section later on in this document.
Definition of parameters

Pallet width (PW) x pallet length (PL)
Pallet width and pallet length. PL is basically the pallet dimension in the direction of pallet movement in the main flow. In some modules the pallet moves “sideways”, for example when transferred from one line to another. See the module descriptions for PL/PW definitions in each specific case. The figure below shows an example.

Length (L1, L2 and L3)
The length of each conveyor section as defined by each module drawing.

Length (A)
Length A is the distance between the two inner beams (outer edges).

Height (H1)
H1 is equivalent to the chain height.

Height (H2)
H2 is equivalent to the chain height of a second, lower, conveyor, if applicable.

Standard/Conductive (AS)
- Standard version (AS0)
- Conductive version (AS2). See “Static electricity” on page 339.
- Dissipative version (AS3). Only for XT Compact.

Motor speed (V)
Equivalent to conveyor chain speed in m/min.

Slide rail configuration
The following figures show the four different slide rail options applicable to XT conveyors.

G0: No pallet side guides

G2: Pallet side guides

G4: No pallet side guides, protection of return chain

G6: Pallet side guides, protection of return chain
Definition of parameters (continued)

Motor type (MT)
The motor unit can be mounted on the:
- Left side of the conveyor
- Right side of the conveyor
- Below the conveyor (mid-mounted)
Left/Right refers to the location of the motor in relation to the direction of chain travel. See figure.

Queue stop (Q)
Queue stop is used for queue accumulation
- Queue stop Q01
- No queue stop Q00

Pallet damping (D)
This parameter determines if a non-shock absorbing or shock absorbing stopper is needed.
- No damping of pallet, max queue 200 kg (D00)
- Max damping of pallet, max queue 35 kg (D01)
- Max damping of pallet, max queue 100 kg (D02).

Function (F)
- Use of F depends on module. Currently used with support modules XTUF and modules XTUL P11 A and XTUL P12.

Electric control (E)
Options: E00–E02
- Without sensors
- With PNP sensors
- With NPN sensors
Currently used with modules XTUL P12 and XTUR P11. See module descriptions for details.

General information

Support modules
Note that the conveyors and transfers are not delivered with support modules. They must be ordered separately (see page 343).

Standard or conductive
The conveyors and transfers can be delivered in standard and conductive versions, see “Ordering information”. See also “Static electricity” on page 339.

Note on energy consumption
Since friction build-up is maximum in the bends, keep conveyor sections which are separated from the drive unit by bends as short as possible, to minimize energy consumption.

Components and accessories
For detailed component information, see page 353–378.

Minimum clearance distance
When two conveyors meet end to end, they must be separated by a minimum clearance distance. See the figure. The dimensions shown in the product drawings (L1/L’/...) include this clearance distance.

Maximum load on conveyors
See “Chain tension calculations” software, and “Technical information” on page 338.

More information
For logic flowchart and pneumatic diagram: see separate document XT logic flowcharts.
General dimensions

* Minimum length of conveyor beam section.

**Note**

Attachment of a support module normally requires more space in this section than 180 mm.

Near a drive unit** or idler end unit** (Fig. A), or a wheel bend*** (Fig. B), the T-slots are occupied by connecting strips.
**Technical information**

**Chain tension calculations**

**Chain tension limit, XT conveyor**

See diagrams 1 and 2. See also chain tension calculation software.

(AS0 = standard chain; AS2 = conductive chain)

<table>
<thead>
<tr>
<th>Tension</th>
<th>1800</th>
<th>1600</th>
<th>1400</th>
<th>1200</th>
<th>1000</th>
<th>800</th>
<th>600</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>5</td>
<td>10</td>
<td>15</td>
<td>20</td>
<td>25 m</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Diagram 1. Maximum chain tension vs. conveyor length**

**Chain tension limit, XT Compact conveyor**

Use chain calculation software.

<table>
<thead>
<tr>
<th>Motor Type</th>
<th>V05</th>
<th>V10</th>
<th>V15</th>
<th>V20</th>
</tr>
</thead>
<tbody>
<tr>
<td>H + AS0</td>
<td>360</td>
<td>350</td>
<td>220</td>
<td>190</td>
</tr>
</tbody>
</table>

50 Hz motor

<table>
<thead>
<tr>
<th>Speed (m/min)</th>
<th>50 Hz motor</th>
<th>60 Hz motor</th>
</tr>
</thead>
<tbody>
<tr>
<td>V05</td>
<td>360</td>
<td>360</td>
</tr>
<tr>
<td>V10</td>
<td>350</td>
<td>280</td>
</tr>
<tr>
<td>V15</td>
<td>220</td>
<td>170</td>
</tr>
<tr>
<td>V20</td>
<td>190</td>
<td></td>
</tr>
</tbody>
</table>

**Diagram 2. Maximum chain tension vs. conveyor speed**

**Chain tension limit per track**

**XT conveyor**

<table>
<thead>
<tr>
<th>Chain type</th>
<th>AS0</th>
<th>AS2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fmax (N)</td>
<td>900</td>
<td>360</td>
</tr>
</tbody>
</table>

**XT Compact conveyor**

<table>
<thead>
<tr>
<th>Chain type</th>
<th>AS0</th>
<th>AS1</th>
<th>AS2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fmax (N)</td>
<td>180</td>
<td>180</td>
<td>180</td>
</tr>
</tbody>
</table>

(AS0 = standard chain; AS1 = ISD chain; AS2 = conductive chain)

**Technical data**

**Drive units**

<table>
<thead>
<tr>
<th>Drive unit</th>
<th>Maximum traction force, N</th>
</tr>
</thead>
<tbody>
<tr>
<td>End drive unit</td>
<td>1250</td>
</tr>
<tr>
<td>End drive unit, Type H</td>
<td>1800</td>
</tr>
<tr>
<td>Catenary drive unit</td>
<td>1250</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Parameter</th>
<th>XT</th>
<th>XT Compact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight (plain chain) kg/m</td>
<td>0,62</td>
<td>0,28</td>
</tr>
<tr>
<td>Tensile strength at 20 °C</td>
<td>900 (conductive)</td>
<td>360 (conductive)</td>
</tr>
<tr>
<td>Hardness H&lt;sub&gt;RB&lt;/sub&gt;</td>
<td>120</td>
<td>120</td>
</tr>
<tr>
<td>Water absorption after 24 h at 20 °C</td>
<td>0,2 %</td>
<td>0,2 %</td>
</tr>
</tbody>
</table>

**Chains, general specifications**

<table>
<thead>
<tr>
<th>Temperature °C</th>
<th>–20</th>
<th>0</th>
<th>20</th>
<th>40</th>
<th>60</th>
<th>80</th>
<th>100</th>
<th>120</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tensile strength factor</td>
<td>1,2</td>
<td>1,1</td>
<td>1,0</td>
<td>0,9</td>
<td>0,8</td>
<td>0,8</td>
<td>0,5</td>
<td>0,3</td>
</tr>
<tr>
<td>Linear expansion %</td>
<td>–0,4</td>
<td>–0,2</td>
<td>0</td>
<td>0,2</td>
<td>0,5</td>
<td>0,8</td>
<td>1,0</td>
<td>1,3</td>
</tr>
</tbody>
</table>

**Fricition between chain and slide rail**

XTCR 25 U/ XTCR 3 UB

(UHMW-PE, white)................................. 0,15–0,3

The coefficient of friction is normally the lower value at the startup of a new conveyor. It will increase as the contact surfaces wear in. Lubrication will reduce the coefficient of friction.
Technical information (continued)

Friction between chain and pallet
In most cases, the coefficient of friction for contact between plain chain and pallet is between 0.1 and 0.35.

Temperature limits
A conveyor can operate continuously at environment temperatures from –20 °C to +60 °C. Temperatures up to +100 °C can be tolerated for short periods (cleaning, rinsing).

Maximum conveyor length
The maximum length of a conveyor depends on the tension in the chain, the speed, and the capacity of the drive unit.

It is important to calculate and compare the maximum chain tension and the capacity of the drive unit in the following situations:

- Heavy load
- Accumulation
- High speed
- Long conveyor
- Frequent starts and stops (high service factor).

Static electricity
The standard plastic materials used for conveyors all have low electrical conductivity. This means that static electricity can build up on the conveyor. If the chain runs on plastic slide rails, no inherent discharge path exists for the static electricity.

When a conveyor is running under normal operating conditions but without pallets, the following static build-up can be measured:

- At the drive unit .......................... 2000–2500 V
- At the idler end unit ...................... 400–500 V
- At a wheel bend ............................ 400–500 V
- At a straight section...................... 300–400 V

A pallet running on the conveyor can also build up static electricity. The worst case is with accumulated pallets. Discharge is normally taking place when the pallets are transferred to or from the conveyor. In static sensitive applications, a number of measures can be taken to reduce the risk of excessive static charges.

1 Ensure that the relative humidity is minimum 40%.
2 Install static discharge wipers immediately before sensitive points on the conveyor.

Components for static sensitive environments
Some of FlexLink’s chains and slide rails can be ordered in carbon loaded versions. The carbon loaded material has high conductivity.

Contact your FlexLink Systems representative for additional information.
XT Compact conveyor module

Conveyor module S11 Compact

**Straight conveyor, Compact**

XT Compact products use standard 1-phase motors, 240 V 50 Hz or 115 V 60 Hz. For use as stand-alone unit, as perpendicular link between two XT conveyor modules, or in-line with another conveyor module. Reversible operation is possible. The module is delivered fully assembled.

Configuration: see page 342.

The Compact series modules use a different type of conveyor beam and chain as compared to other modules. Type XTUC S11 ... is the only stand-alone Compact conveyor module, but Compact conveyors are used in Transfer modules.

**XT conveyor modules**

Conveyor module S51

**Straight conveyor**

Straight conveyor module **XTUC S51 ...**

For use as a stand alone unit, in-line with or perpendicular to another module. Reversible operation is not possible.

Configuration: see page 342.

XT conveyor modules (continued)

Conveyor module J51/J52

**Conveyor J**

Conveyor module type J51 **XTUC J51 ...**

Conveyor module type J52 **XTUC J52 ...**

For use as a stand alone unit, in-line with or perpendicular to another module. Reversible operation is not possible.

Configuration: see page 342.

Conveyor module L51/L52

**Conveyor L**

Conveyor module type L51 **XTUC L51 ...**

Conveyor module type L52 **XTUC L52 ...**

For use as a stand alone unit, in-line with or perpendicular to another module. Reversible operation is not possible.

Configuration: see page 342.
**Conveyor module Q51/Q52**

This type of module uses a catenary drive unit, which means that the chain runs on the top side only. For use as a stand alone unit or as a transfer module to another module. Reversible operation is not possible.

Configuration: see page 342.

---

**Conveyor module U51/U52**

For use as a stand alone unit, in-line with or perpendicular to another module. Reversible operation is not possible.

Configuration: see page 342.

---

**Conveyor module Z51/Z52**

For use as a stand alone unit, in-line with or perpendicular to another module. Reversible operation is not possible.

Configuration: see page 342.

---

**Conveyor module F51/F52**

For use as a stand alone unit, in-line with or perpendicular to another module. Reversible operation is not possible.

Configuration: see page 342.
Conveyor module configuration examples

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Pallet width x Pallet length (mm)</th>
<th>Lengths (mm)</th>
<th>Standard/Conductive/ Dissipative</th>
<th>Slide rail configuration</th>
<th>Motor speed (m/min)</th>
<th>Motor type</th>
<th>50 Hz/60 Hz motor</th>
</tr>
</thead>
<tbody>
<tr>
<td>PW x PL</td>
<td>L1-L2-L3</td>
<td>AS</td>
<td>G</td>
<td>V</td>
<td>MT</td>
<td>Hz</td>
<td></td>
</tr>
<tr>
<td>Options</td>
<td>240 x 240 240 x 320 320 x 240</td>
<td>Dimension</td>
<td>Standard version</td>
<td>50 Hz</td>
<td>60 Hz</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>320 x 400 400 x 320 320 x 400</td>
<td>ranges: see</td>
<td>AS 1 Standard version</td>
<td>* V20 not available for MT=HM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>400 x 400 400 x 480 480 x 400</td>
<td>module</td>
<td>AS 2 Conductive version</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>480 x 400 480 x 480 480 x 640</td>
<td>drawings</td>
<td>AS 3 Dissipative version</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>640 x 480 640 x 640</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>XTUC S11</td>
<td>PW L1 AS G V</td>
<td>MT Hz</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>XTUC S11</td>
<td>240 1834 AS 0 G2 V1 M E1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>XTUC S51</td>
<td>PW L1 AS G V</td>
<td>MT Hz</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>XTUC S51</td>
<td>240 12350 AS 2 G0 V0 L A1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>XTUC J51</td>
<td>PW x PL L1-L2 AS G V</td>
<td>MT Hz</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>XTUC J51</td>
<td>240 x 240 2350-4750 AS 2 G4 V1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>XTUC Q51</td>
<td>PW x PL L1-L2 AS G V</td>
<td>MT Hz</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>XTUC Q51</td>
<td>400 x 480 900-3000 AS 0 G2 V1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>XTUC U51</td>
<td>PW x PL L1-L2-L3 AS G V</td>
<td>MT Hz</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>XTUC U51</td>
<td>240 x 320 1200-1350-1550 AS 0 V0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Parameters: see page 335.
**XT support modules**

Support modules S01A/S02A/S03A/S04

### Support module for single conveyor module

**XTUF S01A ...**

Including beam support brackets and floor attachment brackets XCFA 170 S.

### Support module for two parallel conveyor modules

**XTUF S02A ...**

Including beam support brackets and floor attachment brackets XCFA 170 S.

### Support module for conveyor modules at two levels

**XTUF S03A ...**

Including beam support brackets and floor attachment brackets XCFA 170 S.

### Support module for wheel bends

**XTUF S04 ...**

Including beam support brackets and floor attachment brackets XCFA 170 S.

**Note.**

Two types of beam support brackets are used in the modules: type 5052899 for standard XT, and type 5052621 for XT Compact. The brackets are also available separately. See page 365.
**XT support modules (continued)**

**Distance A**

If two parallel conveyor modules are joined by a wheel bend, the distance between conveyors is fixed. In this case "distance A" in the designation code is always 251 mm. See figure.

![Distance A in a wheel bend is always 251 mm](image)

**Delivery**

The modules will be delivered fully assembled including beam support brackets and feet, and the screws and nuts required for connecting to an XT or XT Compact conveyor. Fasteners for connecting the support modules to the floor are not included. See also page 332, "The modular concept/ Shipment".

**Application usage**

Recommended distance between two support modules is maximum 2 m.

![Application usage](image)

**Ordering information**

See configuration examples below. The parameter F is used to ensure that the support module is delivered with the correct beam support brackets. It indicates the type of XT conveyor supported by the module (XT or XT Compact, or a combination of both).

- Bracket type (F)

(Definitions of P1 and P2: see figures on page 343.)

<table>
<thead>
<tr>
<th>Type XTUF...</th>
<th>F</th>
<th>P1</th>
<th>P2</th>
</tr>
</thead>
<tbody>
<tr>
<td>S01A</td>
<td>01</td>
<td>XT</td>
<td></td>
</tr>
<tr>
<td></td>
<td>02</td>
<td>XT Compact</td>
<td></td>
</tr>
<tr>
<td>S02A</td>
<td>01</td>
<td>XT</td>
<td>XT</td>
</tr>
<tr>
<td></td>
<td>02</td>
<td>XT Compact</td>
<td>XT Compact</td>
</tr>
<tr>
<td></td>
<td>03</td>
<td>XT</td>
<td>XT Compact</td>
</tr>
<tr>
<td>S03A</td>
<td>01</td>
<td>XT</td>
<td>XT</td>
</tr>
<tr>
<td></td>
<td>02</td>
<td>XT Compact</td>
<td>XT Compact</td>
</tr>
<tr>
<td></td>
<td>03</td>
<td>XT</td>
<td>XT Compact</td>
</tr>
<tr>
<td></td>
<td>04</td>
<td>XT Compact</td>
<td>XT</td>
</tr>
</tbody>
</table>

**Support module configuration examples**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Pallet width (mm)</th>
<th>Distance A (mm)</th>
<th>Height 1 (mm)</th>
<th>Height 2 (mm)</th>
<th>Bracket type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Options</td>
<td>PW</td>
<td>A</td>
<td>H1</td>
<td>H2</td>
<td>F</td>
</tr>
<tr>
<td></td>
<td>240</td>
<td>320</td>
<td>400</td>
<td>480</td>
<td>640</td>
</tr>
<tr>
<td></td>
<td>Dimension ranges: see module drawings. Parameter descriptions, see table above</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>XTUF S01 A</td>
<td>PW</td>
<td>---</td>
<td>1225</td>
<td>---</td>
<td>01</td>
</tr>
<tr>
<td>XTUF S01 A</td>
<td></td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>XTUF S02 A</td>
<td>PW</td>
<td>A</td>
<td>H1</td>
<td>---</td>
<td>02</td>
</tr>
<tr>
<td>XTUF S02 A</td>
<td></td>
<td>240</td>
<td>95</td>
<td>1375</td>
<td>---</td>
</tr>
<tr>
<td>XTUF S03 A</td>
<td>PW</td>
<td>H1</td>
<td>H2</td>
<td>---</td>
<td>02</td>
</tr>
<tr>
<td>XTUF S03 A</td>
<td></td>
<td>240</td>
<td>---</td>
<td>850</td>
<td>550</td>
</tr>
<tr>
<td>XTUF S04</td>
<td>---</td>
<td>---</td>
<td>H1</td>
<td>---</td>
<td>02</td>
</tr>
<tr>
<td>XTUF S04</td>
<td></td>
<td>---</td>
<td>1250</td>
<td>---</td>
<td>---</td>
</tr>
</tbody>
</table>

Parameters: see page 335.
Transfer module S10 A

Transfer module S – main to cross

Transfer module S10

XTUT S10 A ...

For transfer of pallets/products away from a conveyor. Maximum lifting payload: 30 kg at 6 bar. Configuration: see page 348.

Transfer module S11 A

Transfer module S – cross to end main

Transfer module S11

XTUT S11 A ...

For receiving of pallets/products to a conveyor without oncoming traffic. Maximum lifting payload: 30 kg at 6 bar. Configuration: see page 348.

Transfer module S12 A

Transfer module S – cross to mid main

Transfer module S12

XTUT S12 A ...

For receiving of pallets/products to a conveyor with oncoming traffic. Maximum lifting payload: 30 kg at 6 bar. Configuration: see page 348.

Motor

The transfer units are delivered with 15 m/min (E1) or 18 m/min (A1) motor.

Included in the delivery:

- One pneumatic transfer unit including the necessary proximity sensors.
- The necessary mounting hardware required for attachment to an XT or XT Compact conveyor.
- The required number of stoppers, dampers and sensor brackets based on the options selected.
Transfer module R11 A

**XT R11 A**

For transfer of pallets/products from one conveyor to a parallel conveyor without oncoming traffic. Maximum lifting payload: 30 kg at 6 bar. Configuration: see page 348.

Motor

The transfer units are delivered with 15 m/min (E1) or 18 m/min (A1) motor.

**Included in the delivery:**

- Two pneumatic transfer units including the necessary proximity sensors.
- The necessary mounting hardware required for attachment to an XT or XT Compact conveyor.
- 2 roller kits, distance A.
- The required number of stoppers, dampers and sensor brackets based on the options selected.

Transfer module R12 A

**XT R12 A**

For transfer of pallets/products from one conveyor to a parallel conveyor with oncoming traffic. Maximum lifting payload: 30 kg at 6 bar. Configuration: see page 348.
Transfer module M11 A

Transfer module M – cross to end main

D=D00

\[240 \leq L1 \leq 3020\]

D=D01

\[240 \leq L1 \leq 3020\]

Transfer module M11

For transfer of pallets/products from the main conveyor to a parallel conveyor via an XT Compact conveyor, without oncoming traffic.

Maximum lifting payload: 30 kg at 6 bar.

If \(L1 \leq 210 + PW\) it is not possible to use queue stop in the traverse conveyor, i.e. only \(Q=Q00\) is possible

Configuration: see page 348.

Transfer module M12 A

Transfer module M – cross to mid main

D=D00

\[240 \leq L1 \leq 3020\]

D=D01

\[240 \leq L1 \leq 3020\]

Transfer module M12

For transfer of pallets/products from one conveyor to a parallel conveyor, via an XT Compact conveyor, with oncoming traffic.

Maximum lifting payload: 30 kg at 6 bar.

If \(L1 \leq 210 + PW\) it is not possible to use queue stop in the traverse conveyor, i.e. only \(Q=Q00\) is possible

Configuration: see page 348.

Motor

The transfer units are delivered with 15 m/min (E1) or 18 m/min (A1) motor

Included in the delivery:

- Two pneumatic transfer units including the necessary proximity sensors.
- One XT Compact conveyor, length \(L1\), with mounting brackets.
- The necessary mounting hardware required for attachment to an XT or XT Compact conveyor.
- The required number of stoppers, dampers and sensor brackets based on the options selected.
## Transfer module configuration examples

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Pallet width × Pallet length (mm)</th>
<th>Lengths (mm)</th>
<th>Standard/Conductive/Dissipative</th>
<th>Motor speed (m/min)</th>
<th>Motor type</th>
<th>Queue stop</th>
<th>Pallet damping</th>
</tr>
</thead>
<tbody>
<tr>
<td>PW×PL L1</td>
<td>Standard version</td>
<td>V</td>
<td>MT</td>
<td>Hz</td>
<td>D</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Options</td>
<td>Dimension ranges: see module drawings</td>
<td>&quot;V10 speed XT Compact conveyor&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>XTUT S10 A</td>
<td>PW×PL</td>
<td>AS</td>
<td>V</td>
<td>MT</td>
<td>Hz</td>
<td>D</td>
<td></td>
</tr>
<tr>
<td>XTUT S11 A</td>
<td>PW×PL</td>
<td>AS</td>
<td>V</td>
<td>MT</td>
<td>Hz</td>
<td>D</td>
<td></td>
</tr>
<tr>
<td>XTUT S12 A</td>
<td>PW×PL</td>
<td>AS</td>
<td>V</td>
<td>MT</td>
<td>Hz</td>
<td>D</td>
<td></td>
</tr>
<tr>
<td>XTUT R11 A</td>
<td>PW×PL</td>
<td>AS</td>
<td>V</td>
<td>MT</td>
<td>Hz</td>
<td>D</td>
<td></td>
</tr>
<tr>
<td>XTUT R12 A</td>
<td>PW×PL</td>
<td>AS</td>
<td>V</td>
<td>MT</td>
<td>Hz</td>
<td>D</td>
<td></td>
</tr>
<tr>
<td>XTUT M11 A</td>
<td>PW×PL</td>
<td>AS</td>
<td>V</td>
<td>MT</td>
<td>Hz</td>
<td>D</td>
<td></td>
</tr>
<tr>
<td>XTUT M12 A</td>
<td>PW×PL</td>
<td>AS</td>
<td>V</td>
<td>MT</td>
<td>Hz</td>
<td>D</td>
<td></td>
</tr>
</tbody>
</table>

Parameters: see page 335.
Locating function module P11 A F00

Locating function module (option F00)

Singulates to stop and locates one pallet at a time along the conveyor with a repeatability in x and y directions of ±0,05 mm.

Two diagonal lift units with guide pins. Only for PW or PL ≤ 400 mm

Configuration: see page 352.

Included in the delivery:

- One locating station, including non-return throttle valves.
- The necessary number of stoppers and sensor brackets, based on the option selected.
- The necessary mounting hardware required for attachment to an XT or XT Compact conveyor.

Locating function module P11 A F01

Locating function module (option F01)

Singulates to stop and locates one pallet at a time along the conveyor with a repeatability in x and y directions of ±0,05 mm.

Four lift units: two diagonal lift units with guide pins and two without guide pins.

Configuration: see page 352.
Stop function module P11

**Stop function**

Singulates and stops one pallet at a time along the conveyor line with a repeatability of ±1 mm. The stop units can be mounted on the opposite side of the beam to facilitate pallet stopping at the front end of the pallet. Configuration: see page 352.

*Included in the delivery:*

- The necessary number of stoppers and sensor brackets, based on the option selected.
- The necessary mounting hardware required for attachment to an XT or XT Compact conveyor.

Lift-and-locate function module XTUL P12

The lift-and-locate function is used when a product needs to be located at a specific height prior to a machine operation. The device can be mounted in three ways (options F00–F02).

**Lift-and-locate module (option F00)**

*Option F=00: Module is attached to horizontal surface. Configuration: see page 352.*
Lift-and-locate function module XTUL P12 (option F01)
Option F=01: Module is attached to conveyor.
Other dimensions: see XTUL P12 ... F00 ...
Configuration: see page 352.

Lift-and-locate function module XTUL P12 ... F02 ...
Option F=02: Module is attached to support frame.
Other dimensions: see XTUL P12 ... F00 ...
Configuration: see page 352.

Delivery
- One lift-and-locate module, including non-return throttle valves.
- The necessary number of stoppers and sensor brackets, based on the option selected.
- The necessary mounting hardware required for attachment to an XT or XT Compact conveyor, depending on the F01 or F02 option.

Lift-and-rotate function module XTUR P11
The lift-and-rotate module can turn the pallet 180°. It can be useful in systems with a mix of bends and transfers, or in a process where the pallet needs to be rotated prior to a machine operation.

Note
To protect persons from the clamp risk, the unit must be covered.

Delivery
- One lift-and-rotate station, including non-return throttle valves
- The necessary number of stoppers and sensor brackets, based on the options selected
- The necessary mounting hardware required for connection to an XT or XT Compact conveyor.
Function module configuration examples

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Pallet width × Pallet length (mm)</th>
<th>Height 1 (mm)</th>
<th>Pallet damping</th>
<th>Function</th>
<th>Electric control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Options</td>
<td>240×240</td>
<td></td>
<td></td>
<td>D06</td>
<td>D01 D02</td>
</tr>
<tr>
<td></td>
<td>240×320</td>
<td></td>
<td></td>
<td>D06</td>
<td>D01 D02</td>
</tr>
<tr>
<td></td>
<td>320×240</td>
<td></td>
<td></td>
<td>D06</td>
<td>D01 D02</td>
</tr>
<tr>
<td></td>
<td>320×320</td>
<td></td>
<td></td>
<td>D06</td>
<td>D01 D02</td>
</tr>
<tr>
<td></td>
<td>320×400</td>
<td></td>
<td></td>
<td>D06</td>
<td>D01 D02</td>
</tr>
<tr>
<td></td>
<td>400×320</td>
<td></td>
<td></td>
<td>D06</td>
<td>D01 D02</td>
</tr>
<tr>
<td></td>
<td>400×400</td>
<td></td>
<td></td>
<td>D06</td>
<td>D01 D02</td>
</tr>
<tr>
<td></td>
<td>*400×480</td>
<td></td>
<td></td>
<td>D06</td>
<td>D01 D02</td>
</tr>
<tr>
<td></td>
<td>*400×640</td>
<td></td>
<td></td>
<td>D06</td>
<td>D01 D02</td>
</tr>
<tr>
<td></td>
<td>*480×400</td>
<td></td>
<td></td>
<td>D06</td>
<td>D01 D02</td>
</tr>
<tr>
<td></td>
<td>*480×640</td>
<td></td>
<td></td>
<td>D06</td>
<td>D01 D02</td>
</tr>
<tr>
<td></td>
<td>*640×480</td>
<td></td>
<td></td>
<td>D06</td>
<td>D01 D02</td>
</tr>
<tr>
<td></td>
<td>*640×640</td>
<td></td>
<td></td>
<td>D06</td>
<td>D01 D02</td>
</tr>
<tr>
<td></td>
<td>*Not for XTUR P11</td>
<td></td>
<td></td>
<td>D06</td>
<td>D01 D02</td>
</tr>
</tbody>
</table>

Parameters: see page 335.
Introduction

Ten pallet sizes are available:
- 240 × 240 mm
- 240 × 320 mm
- 320 × 320 mm
- 320 × 400 mm
- 400 × 400 mm
- 400 × 480 mm
- 400 × 640 mm
- 480 × 480 mm
- 480 × 640 mm
- 640 × 640 mm

For non-standard pallet dimensions, or for other pallet plate materials than steel, frame section kits and bushing kits can be ordered. See next page.

Technical specifications

- Maximum load on the pallet is 80 N per 100 mm of pallet length (PL).
- Friction between pallet and chain, \( \mu_p = 0.3 \) (under normal conditions).
- The table below shows maximum pallet load for each pallet size.

<table>
<thead>
<tr>
<th>Size (PW × PL)</th>
<th>Pallet weight (kg)</th>
<th>Max load on pallet (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>240 × 240 mm</td>
<td>2.8</td>
<td>17</td>
</tr>
<tr>
<td>240 × 320 mm</td>
<td>3.5</td>
<td>22</td>
</tr>
<tr>
<td>320 × 240 mm</td>
<td>3.5</td>
<td>16</td>
</tr>
<tr>
<td>320 × 320 mm</td>
<td>4.4</td>
<td>22</td>
</tr>
<tr>
<td>320 × 400 mm</td>
<td>5.5</td>
<td>24</td>
</tr>
<tr>
<td>400 × 320 mm</td>
<td>5.5</td>
<td>20</td>
</tr>
<tr>
<td>400 × 400 mm</td>
<td>6.8</td>
<td>23</td>
</tr>
<tr>
<td>400 × 480 mm</td>
<td>8.2</td>
<td>22</td>
</tr>
<tr>
<td>400 × 640 mm</td>
<td>10.8</td>
<td>19</td>
</tr>
<tr>
<td>480 × 400 mm</td>
<td>8.2</td>
<td>22</td>
</tr>
<tr>
<td>480 × 480 mm</td>
<td>9.8</td>
<td>20</td>
</tr>
<tr>
<td>480 × 640 mm</td>
<td>13.0</td>
<td>17</td>
</tr>
<tr>
<td>640 × 400 mm</td>
<td>10.8</td>
<td>19</td>
</tr>
<tr>
<td>640 × 480 mm</td>
<td>13.0</td>
<td>17</td>
</tr>
<tr>
<td>640 × 640 mm</td>
<td>17.4</td>
<td>13</td>
</tr>
</tbody>
</table>

Material specifications

- Pallet plate .................... 5 mm ±0.1 steel plate
- Frame .......................... Electrically conductive UHMW-PE

Note!

In order to get a good transition between two conveyors or in a transfer station, max. displacement of point of gravity should not exceed ±PL/10.
When ordering, insert the pallet width and the pallet length instead of PW×PL in the designation.

Frame section kit
- Frame section kit 240 mm 5056945
- Frame section kit 320 mm 5056950
- Frame section kit 400 mm 5056938
- Frame section kit 480 mm 5056940
- Frame section kit 640 mm 5056952

Each kit contains two frame pieces, six bushings and four initiation plates with screws. The frames and bushings are suitable for screws type MC6S M6×16 (not included). Two kits are required for each pallet. For use as spare parts and for building non-standard pallets in combination with customer supplied pallet plates.

Bushing kit
- Four bushings 5056944

For building non-standard pallets in combination with customer supplied pallet plates. The bushings are designed for plate thickness 5 mm and should be press-fitted into Ø16 mm holes.
Pallet stop devices

Pallet stop device U200

Pneumatic stopper, 0–200 kg

**XTPD U200**

Pressure range: Treated compressed air: 4–8 bar

Air connection: 6 mm outside diameter tubing

Separating function:


Mounting hardware is included.

To reduce the noise level, the stopper includes an integrated throttle valve. The throttle setting can be adjusted by means of a screwdriver.

The diagram shows the maximum permissible weight of a group of pallets (product weight + pallet weight), which the stop device is capable of stopping, as a function of the conveyor speed.

Pallet stop device UR

**XTPD UR**

Used in combination with pallet stop devices XTPD U200, D35 or D100.

Stop XTPD UR prevents the pallet from sliding backwards.

The necessary mounting hardware for attachment to an XT or XT Compact conveyor is included in the delivery.
Pallet stop devices (continued)

**Side support for pallet stop**

The side support is used with pallet sizes larger than 400 mm x 400 mm to minimize the transverse force on the side guide. Hardware for attachment to the conveyor is included in the delivery.

**Pallet stop device, damped**

Damped stopper, 0–35 kg  
XTPD D35  
Pressure range: Treated compressed air: 4–8 bar  
Air connection: 6 mm outside diameter tubing  
Separating function: Open: pneumatically. Close: spring-loaded  
Mounting hardware is included.

To reduce the noise level, throttle valves should be used (M5). These are not included. The diagram shows the maximum permissible weight of a group of pallets (product weight + pallet weight), which the stop device is capable of stopping, as a function of the conveyor speed.
Pallet stop devices (continued)

Pallet stop device, damped

Damped stopper, 0–100 kg  **XTPD D100**

Pressure range: Treated compressed air: 4–8 bar
Air connection: 6 mm outside diameter tubing
Separating function:
Open: pneumatically. Close: spring-loaded
Mounting hardware is included.

To reduce the noise level, throttle valves should be used (M5). These are not included. The diagram shows the maximum permissible weight of a group of pallets (product weight + pallet weight), which the stop device is capable of stopping, as a function of the conveyor speed.
The diagram shows the maximum permissible weight of a group of pallets (product weight + pallet weight), which the damper is capable of stopping, as a function of the conveyor speed.

The pneumatic damper XTPA CM35 is used when pallets up to 30 kg have to be damped and transferred from a parallel conveyor to the main conveyor.

Mounting hardware is included in the delivery.

Pressure range: Treated compressed air, 4–8 bar

Air connection: 6 mm outside diameter tubing

Damping function:

Stop in initial position: pneumatically

The damper is easily influenced by pressure from other pneumatic equipment. To avoid this interference the damper must be connected to a separate pneumatic valve.

Mounting hardware is included in the delivery.
Sensor brackets

Sensor bracket Type V001

Vertical sensor bracket  XTPB V001
The sensor bracket holds a Ø12 mm vertical sensor and can be mounted on the stopper XTPD U200 and the damped stopper XTPD D35. Mounting hardware is included in the delivery. Proximity switch not included.

Sensor bracket Type V002

Vertical sensor bracket  XTPB V002
The sensor bracket holds a Ø12 mm vertical sensor and is mounted on the inside of the beam. Mounting hardware is included in the delivery. Proximity switch not included.

Sensor bracket Type V003

Vertical position sensor bracket  XTPB V003
The position sensor has an increased range and is mounted on the outside of the beam of an XT or XT Compact conveyor. It is intended for use with a Ø12 mm proximity switch. Mounting hardware is included in the delivery. Proximity switch not included.

Sensor bracket Type H001

Horizontal sensor bracket  XTPB H001
The sensor bracket holds a Ø12 mm horizontal proximity switch and is mounted on the outside of the beam of an XT or XT Compact conveyor. Mounting hardware is included in the delivery. Proximity sensor is not included.

The horizontal proximity sensor (Ø12 mm) must have a minimum effective sensing distance of 5 mm to the steel initiator plate in the pallet. Example: The effective sensing distance for SICK (IM12 sensing range 8 mm) is 6.48 mm. This is calculated as follows: $8 \text{ mm} \times 0.81^*$. Useful sensing range = $0.81 \times \text{nominal sensing range}$. 

*Note: The effective sensing distance is calculated by multiplying the nominal sensing range by the proportion of the sensor's sensitivity to light. This proportion is often denoted as an asterisk (*) symbol in the context of sensor specifications. The value $0.81$ is a typical example of such a proportion for a proximity sensor.
Pneumatic transfer units

Pneumatic transfer Type M1

The diagram shows the maximum permissible weight of a pallet (product weight + pallet weight), which the transfer is capable of stopping, as a function of the conveyor speed. This diagram applies to transfers type M1, M2 and L.

<table>
<thead>
<tr>
<th>Transfer unit</th>
<th>Type</th>
<th>240 V 50 Hz motor</th>
<th>115 V 60 Hz motor</th>
</tr>
</thead>
<tbody>
<tr>
<td>XTPT 240x240—...</td>
<td>M1</td>
<td>S8R25GX-T1</td>
<td>S8R25GE-T1</td>
</tr>
<tr>
<td>XTPT 240x320—...</td>
<td>M1</td>
<td>S8R25GX-T1</td>
<td>S8R25GE-T1</td>
</tr>
<tr>
<td>XTPT 320x240—...</td>
<td>M1</td>
<td>S8R25GX-T1</td>
<td>S8R25GE-T1</td>
</tr>
</tbody>
</table>

Motor cable connector

The connector for motor cable is a male 3-pole insert with a housing for the insert. To connect, a female 3-pole insert with a hood for the insert and a screw cap for the hood are required (not supplied by FlexLink). Suitable types are Weidmüller 1498200000 (insert), 1788520000 (hood), and 13-08080521 (M20 screw cap), or equivalent.

Pneumatic transfer Type M1*

Standard chain, 50 Hz  | XTPT PWxPL-01
Standard chain, 60 Hz  | XTPT PWxPL-02
Conductive chain, 50 Hz | XTPT PWxPL-03
Conductive chain, 60 Hz | XTPT PWxPL-04

When ordering, insert the pallet size instead of PWxPL in the designation.

*For the following pallet sizes (PWxPL):
240x240: C-C=210, W=169, L=259
240x320: C-C=290, W=169, L=339
320x240: C-C=210, W=249, L=259

Connectors for proximity switches M8 (2x)
Connector for motor cable (1-phase)
Pneumatic connections 6 mm (2x)
Scope of delivery
5/3 valve Mid position pressurized
Throttle valves (2x)

The scope of delivery includes:
- 5/3 valve
- Mid position pressurized
- Throttle valves (2x)
- Connectors for proximity switches M8 (2x)
- Connector for motor cable (1-phase)
- Pneumatic connections 6 mm (2x)

The diagram shows the maximum permissible weight of a pallet (product weight + pallet weight), which the transfer is capable of stopping, as a function of the conveyor speed. This diagram applies to transfers type M1, M2 and L.
Pneumatic transfer units (continued)

Pneumatic transfer Type M2

Transfer unit | Type | 240 V 50 Hz motor | 115 V 60 Hz motor
---|---|---|---
XTPT 320×320—... | M2 | S9R40GXH-T | S9R40GEH-T
XTPT 320×400—... | M2 | S9R40GXH-T | S9R40GEH-T
XTPT 400×320—... | M2 | S9R40GXH-T | S9R40GEH-T
XTPT 400×400—... | M2 | S9R40GXH-T | S9R40GEH-T
XTPT 400×480—... | M2 | S9R40GXH-T | S9R40GEH-T
XTPT 400×640—... | M2 | S9R40GXH-T | S9R40GEH-T

Motor cable connector

The connector for motor cable is a male 3-pole insert with a housing for the insert. To connect, a female 3-pole insert with a hood for the insert and a screw cap for the hood are required (not supplied by FlexLink). Suitable types are Weidmüller 1498200000 (insert), 1788520000 (hood), and 13-08080521 (M20 screw cap), or equivalent.

When ordering, insert the pallet size instead of PW×PL in the designation.

*For the following pallet sizes (PW×PL):
- 320×320: C-C=290, W=249, L=339
- 320×400: C-C=370, W=249, L=419
- 400×320: C-C=290, W=329, L=339
- 400×400: C-C=370, W=329, L=419
- 400×480: C-C=450, W=329, L=499
- 400×640: C-C=610, W=329, L=659
Pneumatic transfer Type L

Motor cable connector

The connector for motor cable is a male 3-pole insert with a housing for the insert. To connect, a female 3-pole insert with a hood for the insert and a screw cap for the hood are required (not supplied by FlexLink). Suitable types are Weidmüller 1488200000 (insert), 1788520000 (hood), and 13-08080521 (M20 screw cap), or equivalent.

Connectors for proximity switches M8 (4x)

Throttle valves (4x)

Pneumatic connections (Ø 6 mm (4x))

Scope of delivery

Motor cable connector

The connector for motor cable is a male 3-pole insert with a housing for the insert. To connect, a female 3-pole insert with a hood for the insert and a screw cap for the hood are required (not supplied by FlexLink). Suitable types are Weidmüller 1488200000 (insert), 1788520000 (hood), and 13-08080521 (M20 screw cap), or equivalent.

Connectors for proximity switches M8 (4x)

Throttle valves (4x)

Pneumatic connections (Ø 6 mm (4x))

Scope of delivery

Motor cable connector

The connector for motor cable is a male 3-pole insert with a housing for the insert. To connect, a female 3-pole insert with a hood for the insert and a screw cap for the hood are required (not supplied by FlexLink). Suitable types are Weidmüller 1488200000 (insert), 1788520000 (hood), and 13-08080521 (M20 screw cap), or equivalent.

Connectors for proximity switches M8 (4x)

Throttle valves (4x)

Pneumatic connections (Ø 6 mm (4x))

Scope of delivery

Motor cable connector

The connector for motor cable is a male 3-pole insert with a housing for the insert. To connect, a female 3-pole insert with a hood for the insert and a screw cap for the hood are required (not supplied by FlexLink). Suitable types are Weidmüller 1488200000 (insert), 1788520000 (hood), and 13-08080521 (M20 screw cap), or equivalent.

Connectors for proximity switches M8 (4x)

Throttle valves (4x)

Pneumatic connections (Ø 6 mm (4x))

Scope of delivery

Motor cable connector

The connector for motor cable is a male 3-pole insert with a housing for the insert. To connect, a female 3-pole insert with a hood for the insert and a screw cap for the hood are required (not supplied by FlexLink). Suitable types are Weidmüller 1488200000 (insert), 1788520000 (hood), and 13-08080521 (M20 screw cap), or equivalent.

Connectors for proximity switches M8 (4x)

Throttle valves (4x)

Pneumatic connections (Ø 6 mm (4x))

Scope of delivery

Motor cable connector

The connector for motor cable is a male 3-pole insert with a housing for the insert. To connect, a female 3-pole insert with a hood for the insert and a screw cap for the hood are required (not supplied by FlexLink). Suitable types are Weidmüller 1488200000 (insert), 1788520000 (hood), and 13-08080521 (M20 screw cap), or equivalent.

Connectors for proximity switches M8 (4x)

Throttle valves (4x)

Pneumatic connections (Ø 6 mm (4x))

Scope of delivery

Motor cable connector

The connector for motor cable is a male 3-pole insert with a housing for the insert. To connect, a female 3-pole insert with a hood for the insert and a screw cap for the hood are required (not supplied by FlexLink). Suitable types are Weidmüller 1488200000 (insert), 1788520000 (hood), and 13-08080521 (M20 screw cap), or equivalent.
The locating station consists of locating cylinders including pins and brackets. Larger pallets may require additional lifting force. A lift unit kit 5055802 is available which contains two lift units without guide pins. Pressure range, treated compressed air: 4–8 bar Air connection: 2x6 mm outside diameter tubing Pallet lifting height: 1,5 mm Maximum vertical force per cylinder at 0.6 MPa: 544 N Throttle valves and the necessary mounting hardware for attachment to an XT or XT Compact conveyor are included.

Locating station XTPX P11 A

See chapter “Locating function module P11 A”, page 349, for information about the locating function module.

Lift unit kit 5055802

Kit consists of two lift units without guide pins. To be used for large pallets (PW or PL >400 mm). Suitable sensors: SICK, MZT1-03VPS-KR0 magnetic cylinder sensor, DC 3-wire.
The lift-and-locate unit consists of a plate which can be elevated by a pneumatic cylinder. The plate has two locating pins. The unit can be delivered with top plates adapted for the 15 standard pallet sizes.

Maximum lift force at centre (0,6 MPa): 1177 N

Lift height: 0–225 mm (adjustable)

Locating repeatability in x and y directions: ±0,05 mm

Note (applies to option F01). In order to avoid influence from conveyor movements, attach the conveyor to a reference support.

It is recommended to enclose the unit to protect persons from the clamp risk.

When ordering, insert the pallet size instead of PW×PL in the designation. Example: XTPX P12 320×320.

This product is available for all XT pallet sizes.

For more information, see “Lift-and-locate function module” on page 351.

Two types of support frame are available, S20 and S21, for different mounting options.

When ordering, insert the pallet width instead of PW in the designation. Example: XTUF S21 320.

When ordering, insert chain surface height above floor level instead of H1 in the designation. Example: XTUF S20 570.
The lift-and-rotate unit consists of a plate which can be elevated and rotated 180°. The plate has two locating pins. The unit is mounted in the T-slots on the inner side of the conveyor beams.

The lift-and-rotate unit is available with top plate adapted for seven standard pallet sizes up to 400 mm × 400 mm.

Maximum centered lift force (0.6 MPa): 340 N.

Maximum mass-moment of inertia: 0.55 kgm².

Rotate angle: 180°.

Lift height: 17 mm.

Weight: 13.2 kg.

When ordering, insert the pallet size instead of PW×PL in the designation.

Example: XTPR 320×320.

This product is available for PW and PL dimensions up to and including 400 mm.

For more information, see “Lift-and-rotate function module” on page 351.

Support brackets

Beam support bracket for XT

Beam support bracket, XT 5052899

Mounting: MC6S 8×14 (4), XCAN 8 (4)

Beam support bracket for XT Compact

Beam support bracket, XT Compact 5052621

Mounting: ISO 4762 M6x 10 St 8.8 (2), XFAN 6 (2), MC6S 8×14 (2), XCAN 8 (2)

Floor attachment bracket

Floor attachment bracket Stainless steel XCFA 170 S

The bracket is delivered with the hardware necessary for attachment to the conveyor support. Fasteners for connection to the floor are not supplied with the brackets.
Roller kits

Roller kit 45 mm
Kit consists of two roller bridges and the necessary mounting hardware.

Roller kit 65 mm
Kit consists of two roller bridges and the necessary mounting hardware.

Connecting kits

Connecting kit, end-to-end
For in-line transfer from drive unit with side-mounted motor (left/right).
XTUC 51 .../XTUC 52 ...:
Note! Connecting kit is not supplied with the module.

Connecting kit, one pair
5049594
For in-line transfer from drive unit with mid-mounted motor.
XTUC 51 .../XTUC 52 ...:
Note! Connecting kit is not supplied with the module.

Connecting kit, end-to-end
For in-line transfer from drive unit with mid-mounted motor.
XTUC 51 .../XTUC 52 ...:
Note! Connecting kit is not supplied with the module.

Connecting kit, one pair
5050564
For in-line transfer from drive unit with side-mounted motor.
XTUC 51 .../XTUC 52 ...:
Note! Connecting kit is not supplied with the module.

XT to XT (Not for use with XT Compact)
Connecting kits (continued)

Connecting kit, end-to-side/side-to-end

Connecting kit (four brackets)  5050034
Including mounting hardware.

XT to XT Compact  XT Compact to XT
XT Compact to XT  XT Compact to XT Compact

Connecting kit, end-to-side/end-to-end

Connecting kit, one pair  5053201
For in-line or perpendicular transfer from drive unit with mid-mounted motor. Including brackets for both alternatives.

XT to XT  XT to XT Compact

Roller bridge (pair)

Roller bridge, one pair  5054947
Each of the two bridges (5053729) contains four rows of rollers. Roller bridges are included in the connecting kits.
Chain products

Plain chain, XT

Plain chain, length 5 m
Pitch 25.4 mm
- Standard chain (POM B): XTPP 5
- Standard link kit **: 5056659
- Conductive chain (POM B COND): XTPP 5 EC
- Conductive link kit **: 5056660

*Use with conductive slide rail.
**Link kit contains 10 links, 10 pivots, 10 steel pins

Plain chain, XT Compact

Plain chain, XT Compact
Pitch 12.7 mm. Only for straight-running conveyor (XT Compact).
Length 3 m
- Standard chain (POM B): 5045028
- Standard link kit **: 5056662
- Conductive chain (POM B COND)*: 5051585
- Conductive link kit **: 5056664
- ISD chain (POM B ISD NAT)*: 5046328
- ISD link kit **: 5056663

*Use with conductive slide rail.
**Link kit contains 10 links, 10 pivots, 10 steel pins

Pin insertion tool for chain

Pin insertion tool
- XS-X65-XT
- XS-X65-XT, PRO version* XLMJ 4
- XLMJ 4 P

For FlexLink’s XT chains XTPP 5, XTPP 5 EC and 6045771.
*This product is recommended for frequent users.
Conveyor beam products

Connect the compact conveyor beam to other beams by means of a connecting strip kit. The kit contains two connecting strips and M8 screws. Load rating: 200 kg. For XT Compact beam.

**Connecting strip kit**

Steel, electro-zinc-plated

Kit with two connecting strips. Including M8 set screws. Not for XT Compact beam

**Conveyor beam, XT Compact**

Beam, XT Compact

Length 3 m

**Conveyor beam**

Beam

Length 3 m (3030 ±5 mm)

Length to order (30-3000 mm)

**Conveyor beam products**
Conveyor beam products (continued)

Conveyor beam section 240 mm

Beam section (assembled) for pallets 240 mm wide
Length 3 m ±1,5 mm
Length to order (0,18–3 m)

XTCB 3D210
XTCB LD210

Conveyor beam section 320 mm

Beam section (assembled) for pallets 320 mm wide
Length 3 m ±1,5 mm
Length to order (0,18–3 m)

XTCB 3D290
XTCB LD290

Conveyor beam section 400 mm

Beam section (assembled) for pallets 400 mm wide
Length 3 m ±1,5 mm
Length to order (0,18–3 m)

XTCB 3D370
XTCB LD370

Conveyor beam section 480 mm

Beam section (assembled) for pallets 480 mm wide
Length 3 m ±1,5 mm
Length to order (0,18–3 m)

XTCB 3D450
XTCB LD450

Conveyor beam section 640 mm

Beam section (assembled) for pallets 640 mm wide
Length 3 m ±1,5 mm
Length to order (0,18–3 m)

XTCB 3D610
XTCB LD610
Tools and accessories, 44×44 beam

Beam 44 mm × 44 mm with three T-slots
Aluminium, anodized
Length 3 m (3030 ±5 mm)
Length to order (30-3000 mm)

Drill fixture for T-slot connector
Drill fixture Ø10/18, 25 mm
Drill insert Ø12, 2 mm (for T-slot connector)
To be used when drilling a 12 mm hole for T-slot connector XCEC 12, located 22 mm from the beam end.
Remove the 10 mm drill insert delivered with the drill fixture and install the 12, 2 mm drill insert.

T-slot connector for 44×44 beam

Tools and accessories, 30×30 beam

Beam 30 mm × 30 mm
Aluminium, anodized
Length 3 m (3030 ±5 mm)
Length to order (30-3000 mm)

Used for XT Compact

Drill fixture for fastener yokes
Drill fixture Ø12, 2 mm (Ø12, 2 mm)
To be used when drilling a 12 mm hole for fastener yoke XFAF 30, located 20 mm from the beam end.

Fastener yoke for 30×30 beam

Fastener yoke assembly
Length 30 mm
Slide rails

Slide rail (A)

- Length 25 m
- PA-PE (Grey)
- UHMW-PE (White)
- UHMW-PE + carbon (conductive) (Black)

Slide rail (A)

- XTCR 25 H
- XTCR 25 U
- XTCR 25 E

Slide/guide rail (B)

- Length 3 m
- PA-PE (Grey)
- UHMW-PE (White)
- UHMW-PE + carbon (conductive) (Black)

Slide/guide rail (B)

- XTCR 3 HB
- XTCR 3 UB
- XTCR 3 EB

Aluminium rivets 3 mm

- XLAH 3×6

Note. Must be ordered in multiples of 250

For more information about slide rails, see separate document “XT slide rail instruction”.

Slide rail tools

Drill fixture for slide rail

- 3923584

Rivet tool

- 3923563

Mounting tool for slide rail

- XTMR 160 A
End drive units

End drive unit LNPD

End drive unit, left
50 Hz 230/400 V
60 Hz 230/460 V

For PW 240, 320, 400, 480, 640 mm.
Insert desired C-C value instead of % in the designation. C-C=PW–30.
Insert desired speed instead of # in the designation:
50 Hz: 5-10-15-20 m/min.
60 Hz: 6-10-16-20 m/min.
Connecting strips are included.
Maximum traction force: 1250 N at 5 m/min.
Designation example: XTEB 15 LNPD370 is a 50 Hz drive unit for 400 mm wide pallets running at 15 m/min.

End drive unit RNPD

End drive unit, right
50 Hz 230/400 V
60 Hz 230/460 V

For PW 240, 320, 400, 480, 640 mm.
Insert desired C-C value instead of % in the designation. C-C=PW–30.
Insert desired speed instead of # in the designation:
50 Hz: 5-10-15-20 m/min.
60 Hz: 6-10-16-20 m/min.
Connecting strips are included.
Maximum traction force: 1250 N at 5 m/min.
Designation example: XTEB 20 RNPD450 is a 60 Hz drive unit for 480 mm wide pallets running at 20 m/min.

Torque arm kit

Torque arm kit for end drive unit 5050028
Including Torque arm, Screw, Washer, Thin parallel key and Sleeve
End drive units, centre drive

**End drive unit, centre drive**

50 Hz 230/400 V
60 Hz 230/460 V

For PW 240, 320, 400, 480, 640 mm.
Insert desired C-C value instead of % in the designation. C-C=PW–30.
Insert desired speed instead of # in the designation:
50 Hz: 5-10-15-20 m/min.
60 Hz: 6-10-16-20 m/min.
Connecting strips are included.
Maximum traction force: 1250 N at 5 m/min.
Designation example: XTEB 10 MNPD290 is a 50 Hz drive unit for 320 mm wide pallets running at 10 m/min.

**End drive unit, centre drive, heavy**

50 Hz 230/400 V
60 Hz 230/460 V

For PW 240, 320, 400, 480, 640 mm.
Insert desired C-C value instead of % in the designation. C-C=PW–30.
Insert desired speed instead of # in the designation:
50 Hz: 5-10-15 m/min.
60 Hz: 6-10-16 m/min.
Connecting strips are included.
Maximum traction force: 1800 N at 5 m/min.
Designation example: XTEB 6 HMNAPD210 is a 60 Hz drive unit for 240 mm wide pallets running at 6 m/min.

**Torque arm kit**

Torque arm kit for end drive unit, centre drive

5050380

Torque arm kit for end drive unit, centre drive, heavy

5050459
Catenary drive units

Catenary drive unit LNPD

Catenary drive unit, left
50 Hz 230/400 V
60 Hz 230/460 V

XTEC # LNPD%
XTEC # LNAPD%

For PW 240, 320, 400, 480, 640 mm.
Insert desired C-C value instead of % in the designation. C-C=PW−30.
Insert desired speed instead of # in the designation:
50 Hz: 5-10-15-20 m/min.
60 Hz: 6-10-16-20 m/min.
Connecting strips are included.
Maximum traction force: 1250 N at 5 m/min.
Designation example: XTEC 6 LNAPD610 is a 60 Hz drive unit for 640 mm wide pallets running at 6 m/min.

Catenary drive unit RNPD

Catenary drive unit, right
50 Hz 230/400 V
60 Hz 230/460 V

XTEC # RNPD%
XTEC # RNAPD%

For PW 240, 320, 400, 480, 640 mm.
Insert desired C-C value instead of % in the designation. C-C=PW−30.
Insert desired speed instead of # in the designation:
50 Hz: 5-10-15-20 m/min.
60 Hz: 6-10-16-20 m/min.
Connecting strips are included.
Maximum traction force: 1250 N at 5 m/min.
Designation example: XTEC 5 RNPD370 is a 50 Hz drive unit for 400 mm wide pallets running at 5 m/min.

Torque arm kit

Torque arm kit for catenary drive unit 5050685
Including Torque arm, Screw, Washer, Sleeve, Thin parallel key, Screw and Washer M8x40
Idler end unit

Idler end unit

Idler end unit (single)
Length 320 mm

XTEJ 320

Two idler units must be ordered for a conveyor with return chain. Connecting strips are included.

Cover strip

Cover strip

Length 25 m
Length to order

XTSB 25
XTSB L

Wheel bends

Wheel bend, 90°

XTBH 90R150D%

Wheel bend, 90°
For PW 240, 320, 400, 480, 640 mm.
Insert desired C-C value instead of % in the designation. C-C=PW–30.
Connecting strips are included.
Designation example: XTBH 90R150D450 is a 90° wheel bend for 480 mm wide pallets.

Wheel bend, 180°

XTBH180R150D%

Wheel bend, 180°
For PW 240, 320, 400, 480, 640 mm.
Insert desired C-C value instead of % in the designation. C-C=PW–30.
Connecting strips are included.
Designation example: XTBH 180R150D210 is a 180° wheel bend for 240 mm wide pallets.
Wheel cover for Wheel bend

Wheel cover for X65/XL, XT, X85, XH

Wheel cover for X65/XL, XT, X85, XH (Including one pair of Wheel cover 5112244 and 2 tap screw ISO 7049 4,2x6,5-C-H-A2K)

Markers for cutting and adjustment to specific conveyor system.

Example: To fit the wheel cover to a X85 system, cut the part marked XH (see figure A). To fit the wheel cover to a XT system, cut the parts marked X85 and XH.

Vertical bends

Vertical bend, 5°

Connecting strips are included.
Guide rail components

Fixed guide rail bracket

Mounting to beam: XLAT 17, XLAN 8, BRB 8,4×16

End plug, 15 mm

Must be ordered in multiples of 10

Outer guide rail for 90° bend

Outer guide rail for 180° bend

End plug, 15 mm

XLRE 15

Must be ordered in multiples of 10
Inner guide rail for 90° bend

For PWxPL=240x240, A=180  5055552
For PWxPL=240x320, A=182  5055557
For PWxPL=320x240, A=180  5055552
For PWxPL=320x320, A=183  5055559
For PWxPL=400x320, A=187  5055559
For PWxPL=400x400, A=282  5055610
For PWxPL=400x640, A=432  5055564
For PWxPL=480x400, A=257  5055566
For PWxPL=480x480, A=243  5055562
For PWxPL=480x640, A=468  5055608
For PWxPL=640x400, A=183  5055559
For PWxPL=640x480, A=257  5055610
For PWxPL=640x640, A=390  5055568

Use attachment kit 5055684.

Inner guide rail for 180° bend

For PWxPL=240x240, A=180  5055556
For PWxPL=240x320, A=182  5055558
For PWxPL=320x240, A=180  5055556
For PWxPL=320x320, A=183  5055560
For PWxPL=400x320, A=187  5055560
For PWxPL=400x400, A=257  5055611
For PWxPL=400x640, A=432  5055567
For PWxPL=480x480, A=257  5055611
For PWxPL=480x640, A=468  5055609
For PWxPL=640x400, A=183  5055560
For PWxPL=640x480, A=257  5055611
For PWxPL=640x640, A=390  5055569

Use attachment kit 5055684.

Attachment kit for guide rails

Attachment kit for guide rails  5055684

Kit consists of two attachment bracket combinations and the necessary mounting hardware. One kit is needed for each inner guide rail.