



FlexLink®

Divert module

XBUT 45 DR, 90 DR, 45 DL and 90 DL

5970580-02

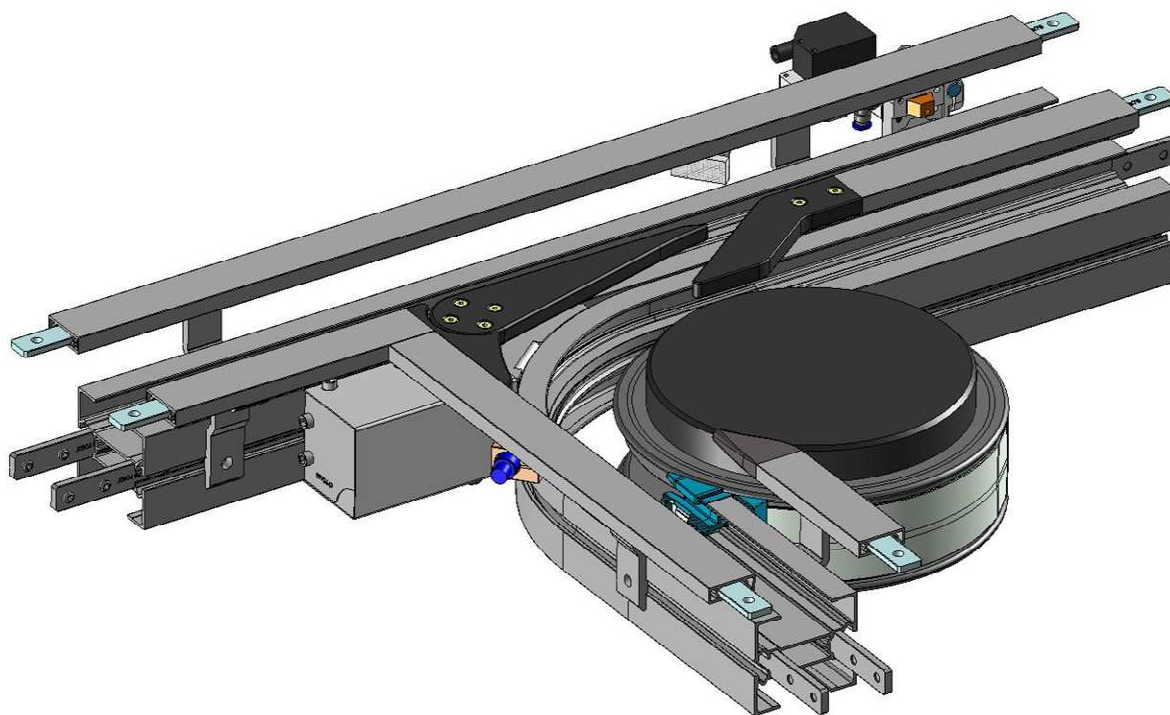
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User documentation ver 1.0

Divert module XBUT 45 DR, 90 DR, 45 DL and 90 DL



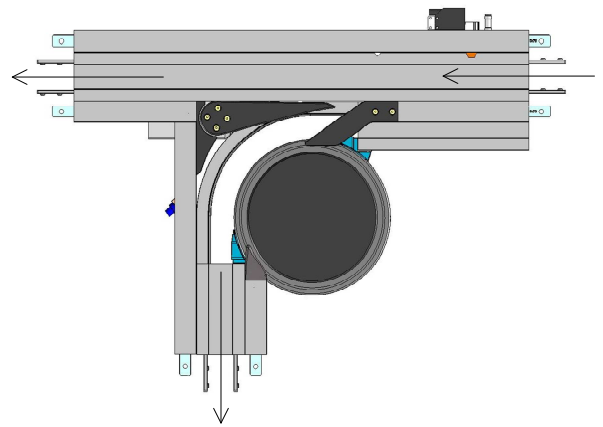
Divert module XBUT 45 DR, 90 DR, 45 DL and 90 DL

Function description

The Divert module gives the opportunity to split one flow of pallets in a fully controlled way.

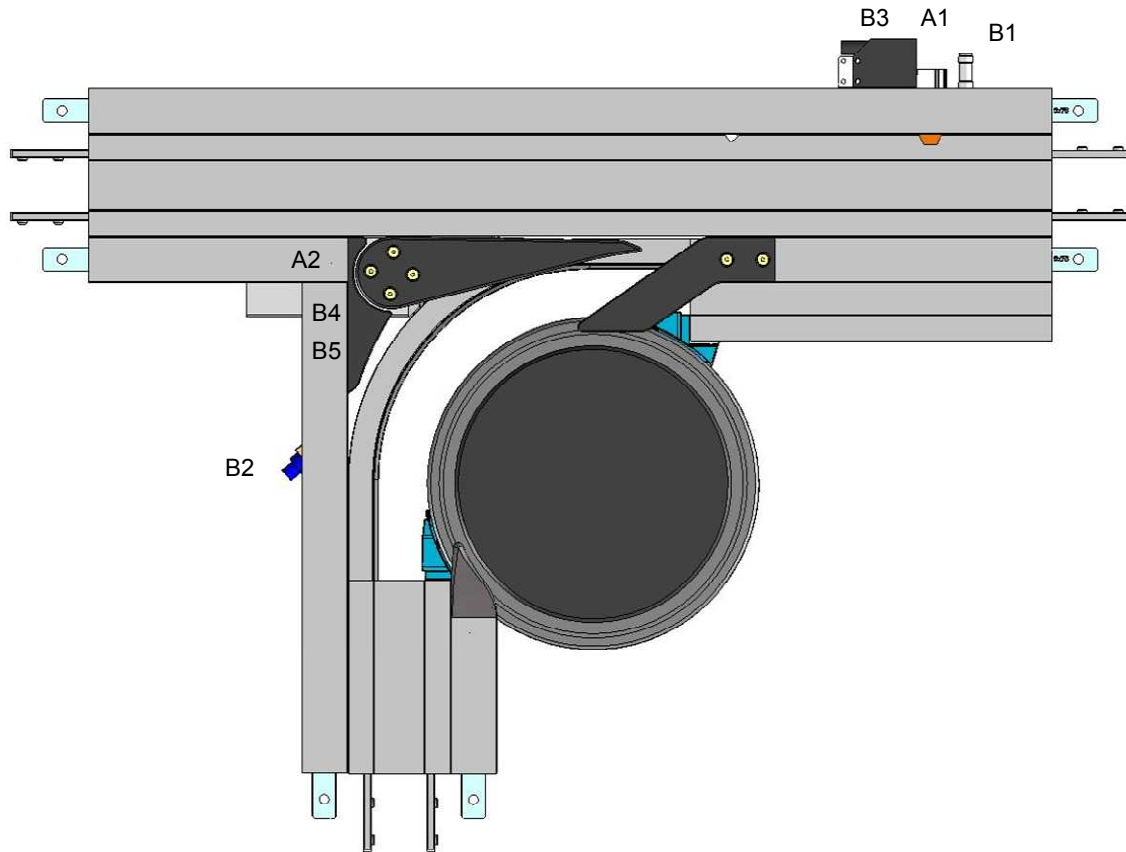
Stop positions

The function is equipped with a stop in order to avoid collisions.



Divert module XBUT 45 DR, 90 DR, 45 DL and 90 DL

Initiators and actuators



Initiators

B1 Pre-stop highway
B2 Sensing pallet route
B3 RFID reader
B4 Straight flow
B5 Short-cut flow

Actuators

A1 Pre-stop. Single acting.
A2 Arm. Double acting.

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Interfaces

Initiators

B1: M12-connector, 3-pin
B2: M12-connector, 3-pin
B3: M12-connector, 4-pin (Asi)
B4: M12-connector, 3-pin
B5: M12-connector, 3-pin

Actuators

Pneumatic cylinders
A1: 6 mm
A2: 6 mm

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Spare parts

Standard name	Des.	Manufacturer	Type	External order no	FlexLink order no
Sensor	B1	SICK	IM12-08NPS-ZC1	7900045	XBPB 12 H
Sensor bracket		FlexLink			
Sensor	B2	SICK	MHL 15-P3336	1026129	
Reflector		SICK	PL 21A	1015172	5110840
RFID reader/w riter	B3	IFM	DTA100		
RFID bracket		FlexLink			
Sensor	B4	SICK	MZT1-03VPS-KP0	1016910	
Sensor	B5	SICK	MZT1-03VPS-KP0	1016910	

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Cylinder details

Cylinder A1 "Pre-stop"

Type: Single acting with two ports.

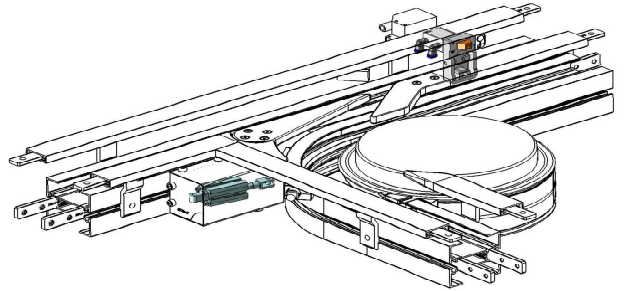
Function:

- Pressurized: Releases the pallet flow
- No pressure: Blocks the pallet flow

For safety reasons, the pallet stop is blocking the flow in case of a pressure drop, preventing pallets from travelling uncontrolled along the conveyor.

The stop should not re-block the flow while a pallet puck is in a position where it could be clamped.

It is recommended to re-block the flow after each pallet.



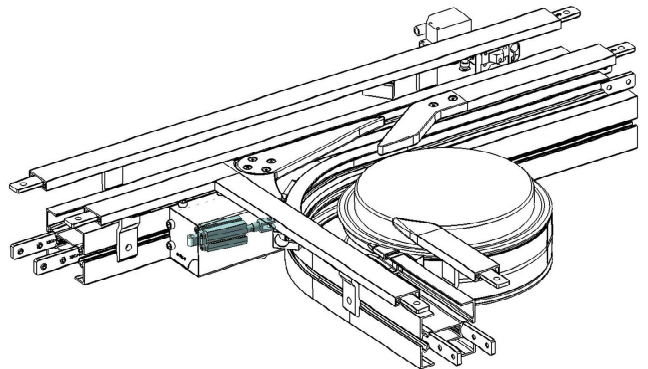
Cylinder A1

Cylinder A2 "Arm"

Type: Double acting

Function: Change the flow through the module.

Note 1: It is recommended that flow control valves are used, for example Festo GR-QS-6 (193969).



Cylinder A2

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Sensor details

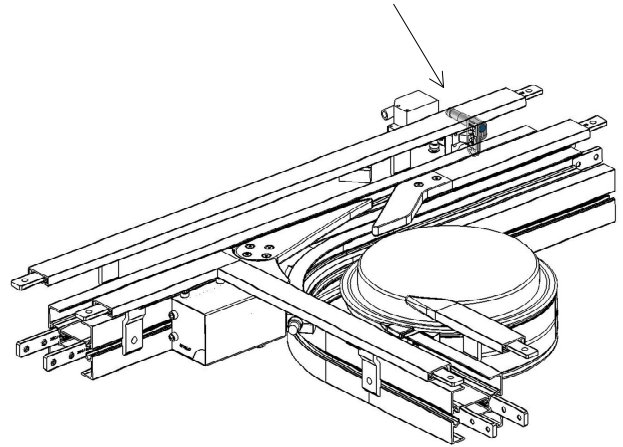
Sensor B1 "Pre-stop"

Type: Proximity switch, inductive

Position: Placed together with Pre-stop.

Function: Detects the initiator plate of the pallet before the pallet is stopped and stays active until the pallet leaves the stop.

The reason why the pallet is detected by the sensor before the pallet hits the stop, is to enhance the efficiency of the pallet flow. As the pallet is detected in advance, the controller has time to take a decision whether or not the pallet should be stopped. If it should pass, the stop changes state to "Release flow" before the pallet reaches it.

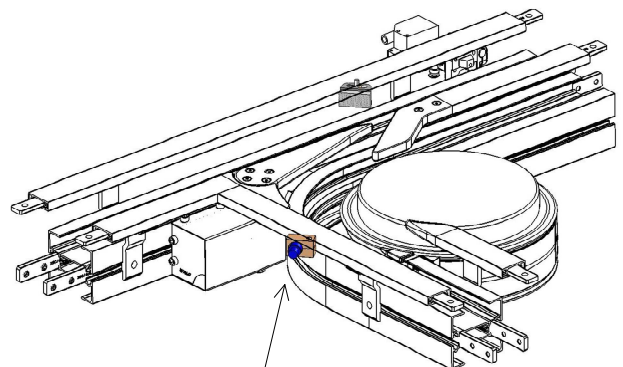


Sensor B1

Sensor B2 "Sensing pallet route"

Type: Photo eye.

Function: Detects if there is a pallet in the merging area. A new pallet must not be released from any of the stop positions before the merging area is clear.



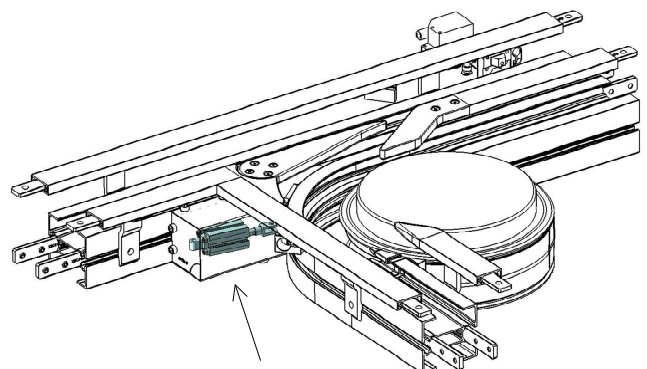
Sensor B2

Sensor B4 and B5 "Arm"

Type: Cylinder sensor

Position: Placed on the arm cylinder.

Function: Detects the arm position



Sensor B4 and B5

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Pneumatic drawing

XBUT 45 DR, 90 DR, 45 DL and 90 DL

