

Three-way diverter DI 5/XH-3W, DI 5/H-3W



- Reversible operation possible
- Accumulation operation not permitted
- Support profile made of anodized aluminum
- Lateral guide profile made of steel, polymer, or aluminum in an anodized aluminum support
- Driven via king shaft with bevel gears made of sintered metal
- Roller spacing $p = 130$
- Full rollers
- m_G Up to 300 kg (at $v = 9$ m/min)
- Pneumatic push-in fitting: 6 mm
- Direct position sensing on the diverter arm and the bolt upon request

- The three-way diverter is a ready-for-operation module for branching off workpiece pallets in two directions or combining from two directions.
- The king shaft installation for the main or secondary section can be installed on either side
- The diverter is controlled as an active element via a pneumatic cylinder ($p = 5 - 6$ bar)
- **Note:** The three-way diverter is not suitable for accumulation operation. For permissible loads, see [table \(under order details\)](#).



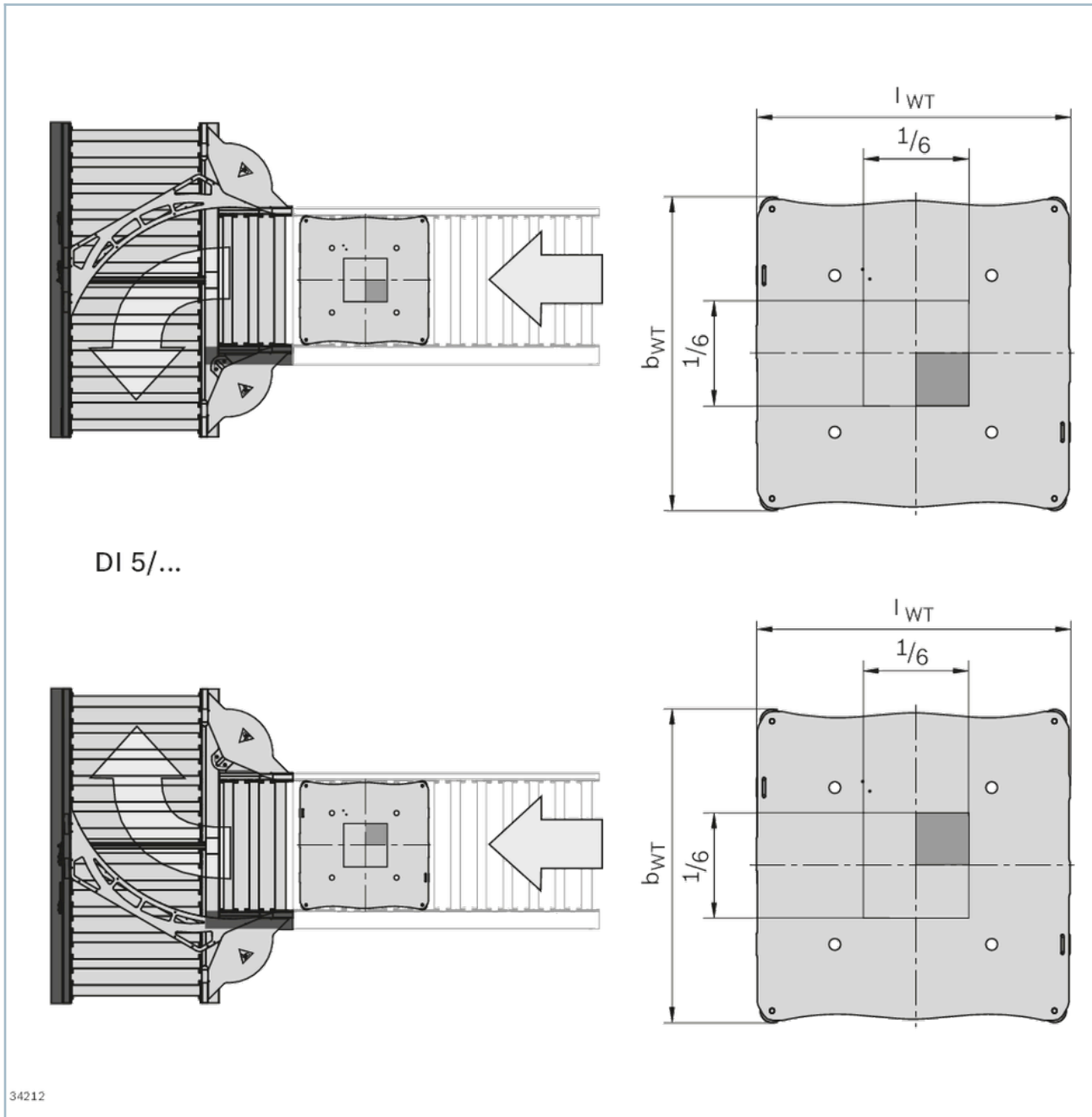
Product description

With the illustrated gravity center position transport problems may occur at the transition from the secondary section to the main section.

Note:

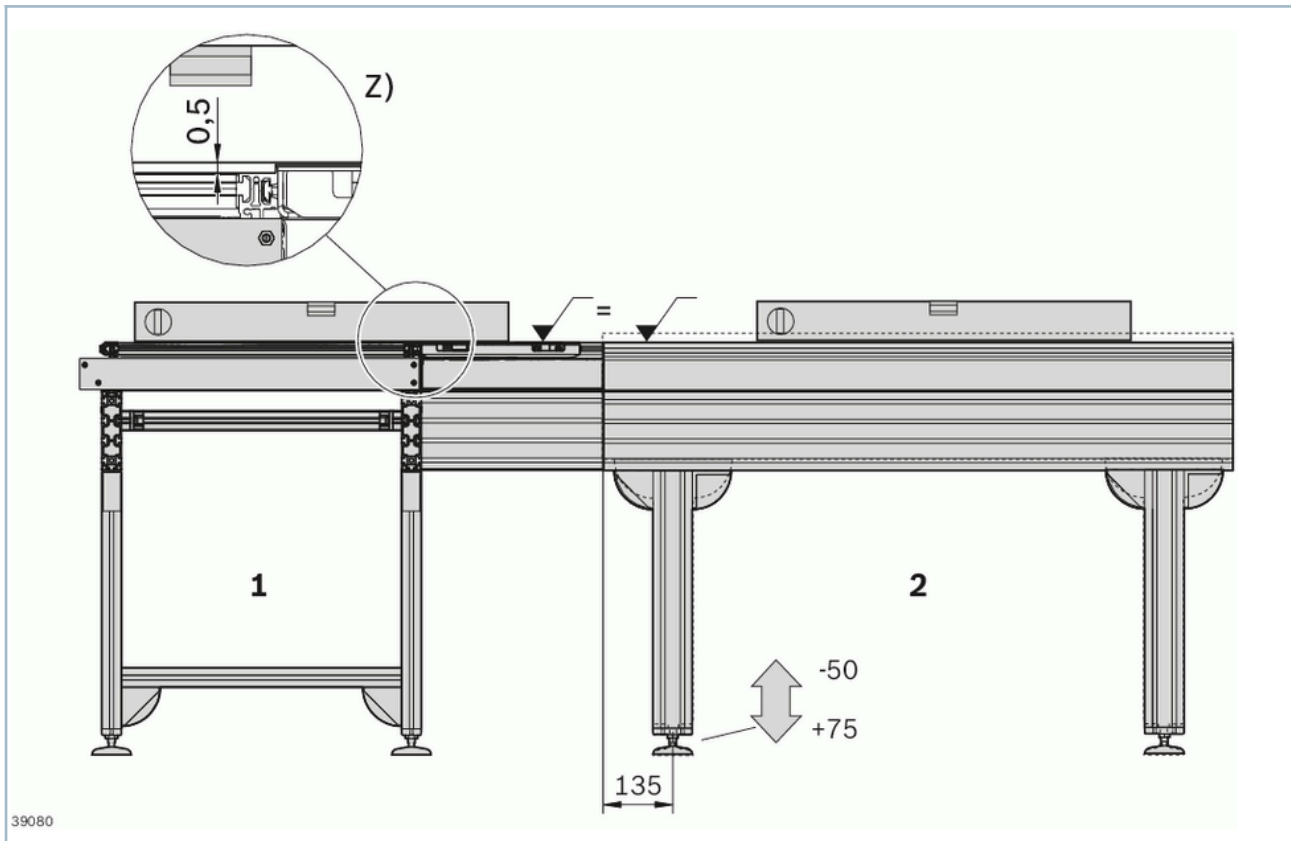
For $b_{WT} = 650$ mm and gravity center position $1/6$, eccentric, $m_G = \text{max. } 200$ kg

Limits for the permissible gravity center position for the three-way diverter



Sensor application matrix

Technical data

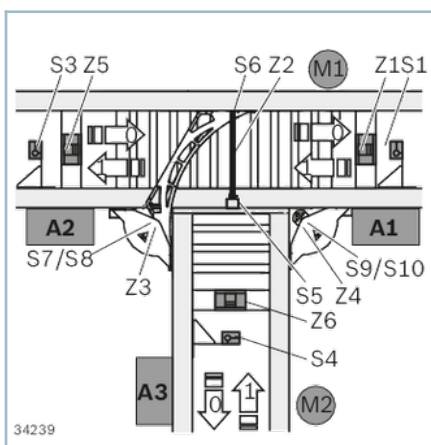


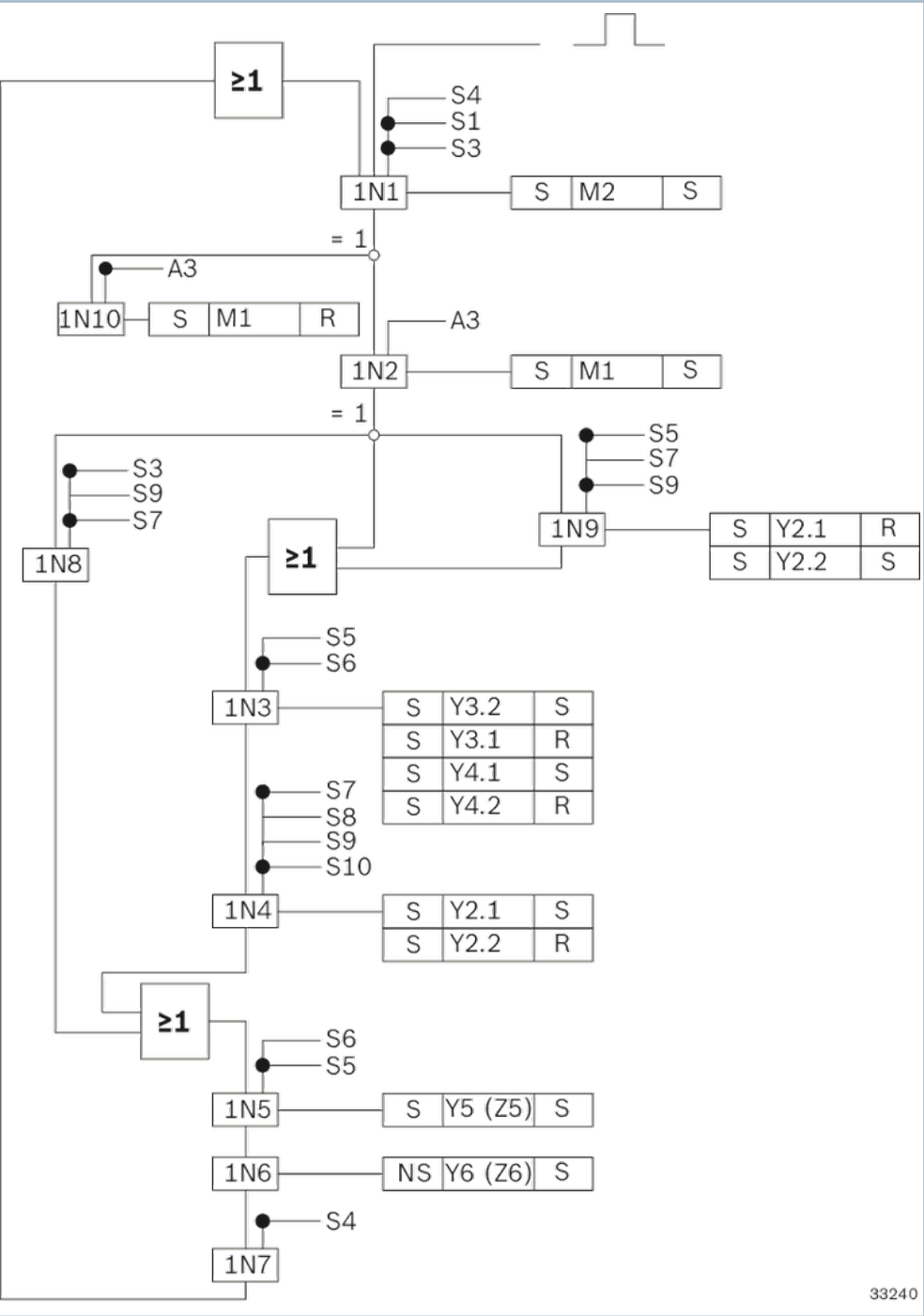
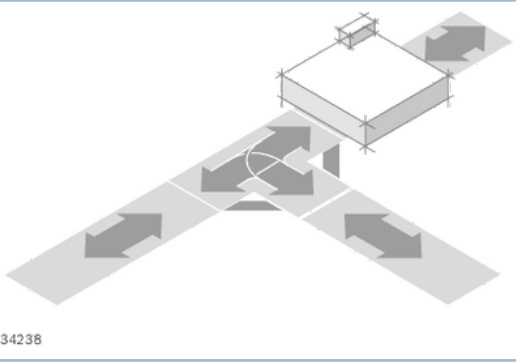
1 Main section

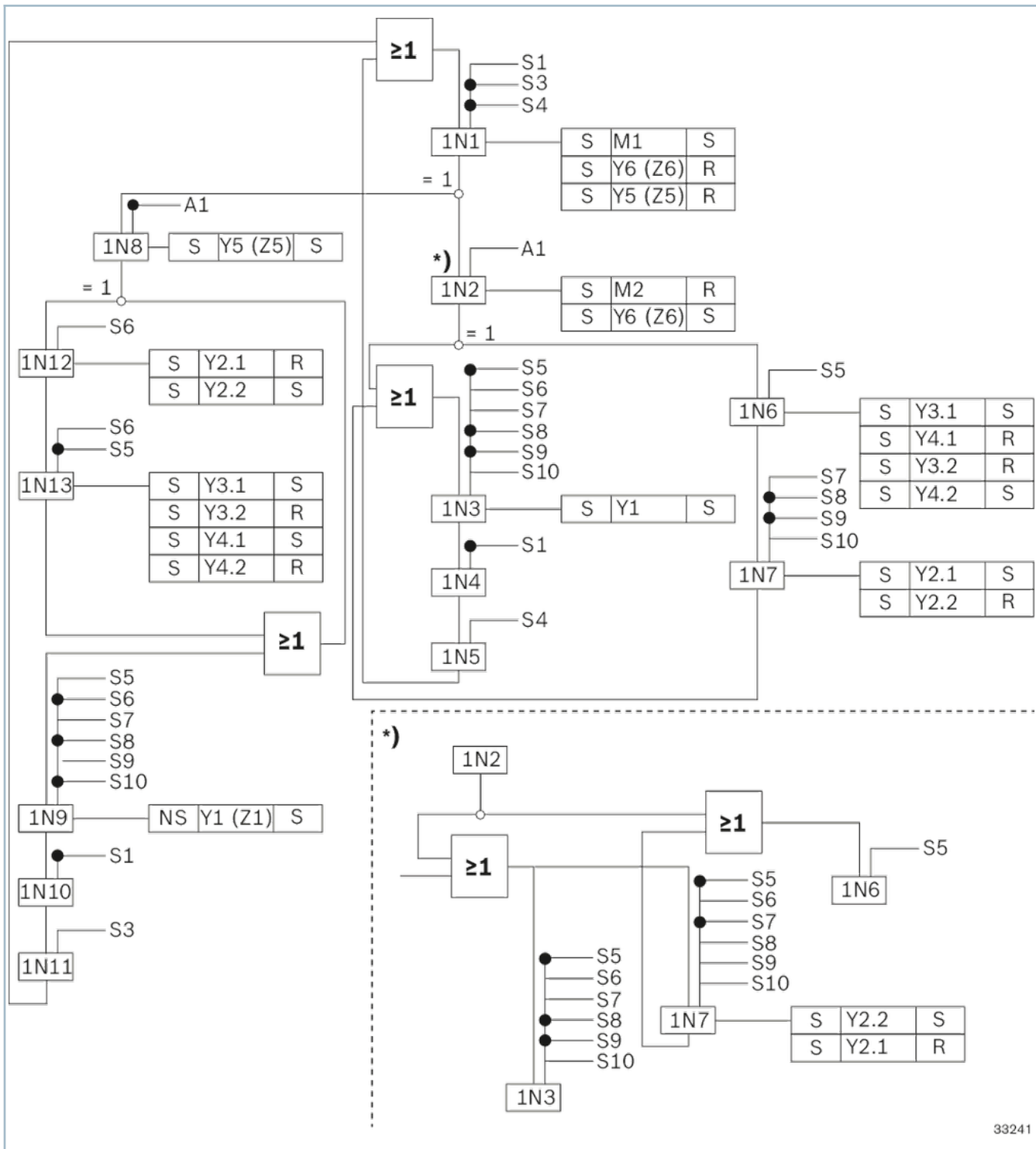
2Secondary section

ZTransportation height difference

Symbols/Circuit diagrams





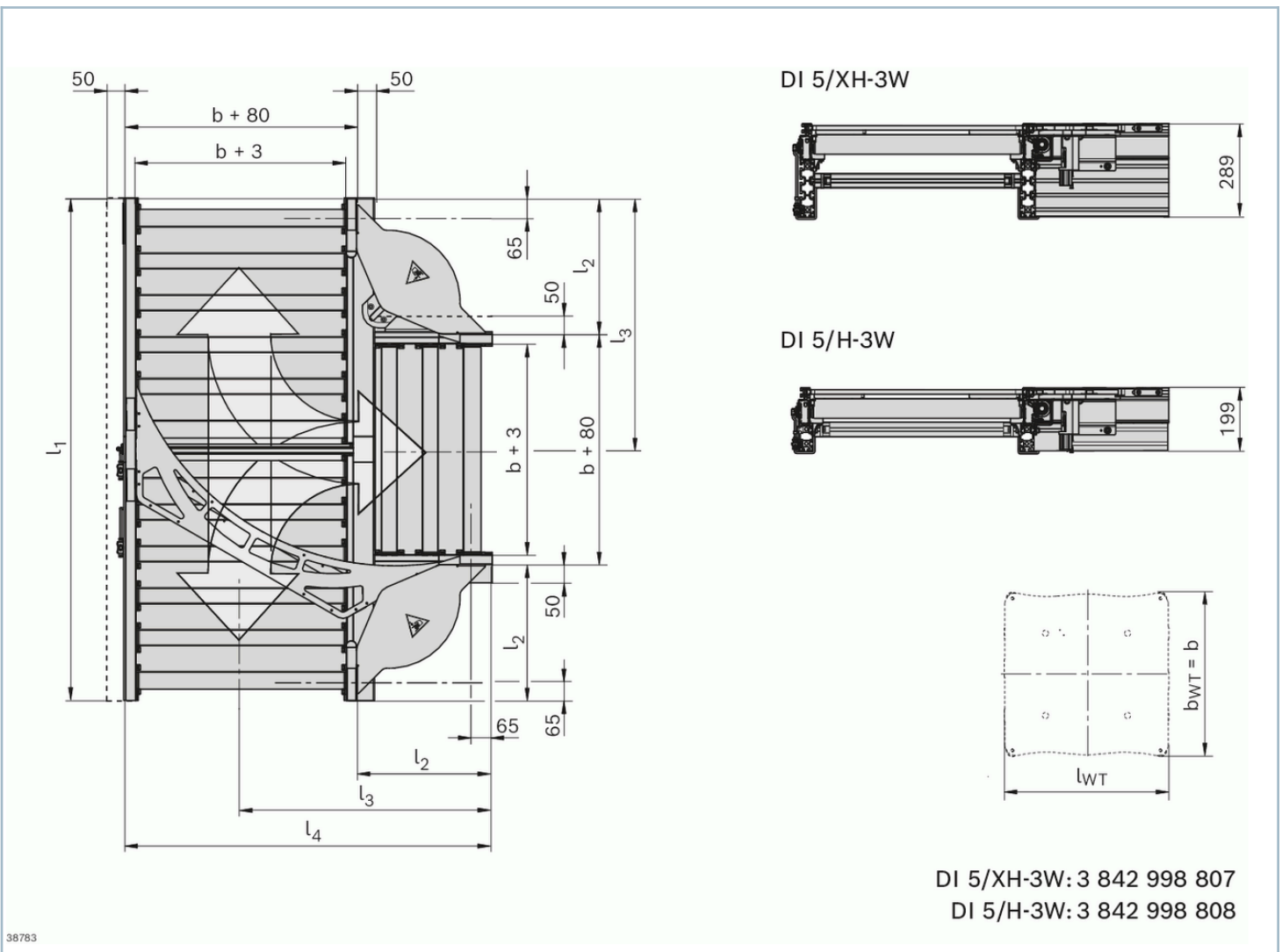


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- S5 = Diverter closed
 S6 = Diverter open
 S7 = Top
 S8 = Bottom
 S9 = Top
 S10 = Bottom
 A1/A2 = 0 = branch off
 1 = straight ahead
 A3 = 0 = right
 1 = left
 Y1, Y5, Y6 = Stop gate (Z1, Z5, Z6)

Y2.1	=	Open
Y2.2	=	Closed
Y3.1	=	Top
Y3.2	=	Bottom
Y4.1	=	Top
Y4.2	=	Bottom
M1	=	0 = right 1 = left
M2	=	0 = down 1 = up

Dimensions



b = track width

l_{WT} = workpiece pallet length (in direction of transport)

N = Number of rollers, multiplier for length ($l = p \times N$), pricing factor in the price list

l_1 = length of the main section

l_2 = length of the secondary section

l_3 = length of secondary section up to center of main section

l_4 = length of secondary section and width of main section

b ¹⁾	l_{WT} ²⁾	l_T ²⁾	N ³⁾	l_1 ⁴⁾	l_2 ⁵⁾	l_3 ⁶⁾	l_4 ⁷⁾
mm	mm	mm		mm	mm	mm	mm
455	455; 650	455; 650	13	1300	382.5	650	917.5
650	650; 845	650; 845	15	1560	415	780	1145
845	845; 1040	845; 1040	17	1820	447	910	1372.5

- 1) b = track width
- 2) l_{WT} = workpiece pallet length (in direction of transport)
- 3) N = Number of rollers
- 4) l_1 = length of the main section
- 5) l_2 = length of the secondary section
- 6) l_3 = length of secondary section up to center of main section
- 7) l_4 = length of secondary section and width of main section

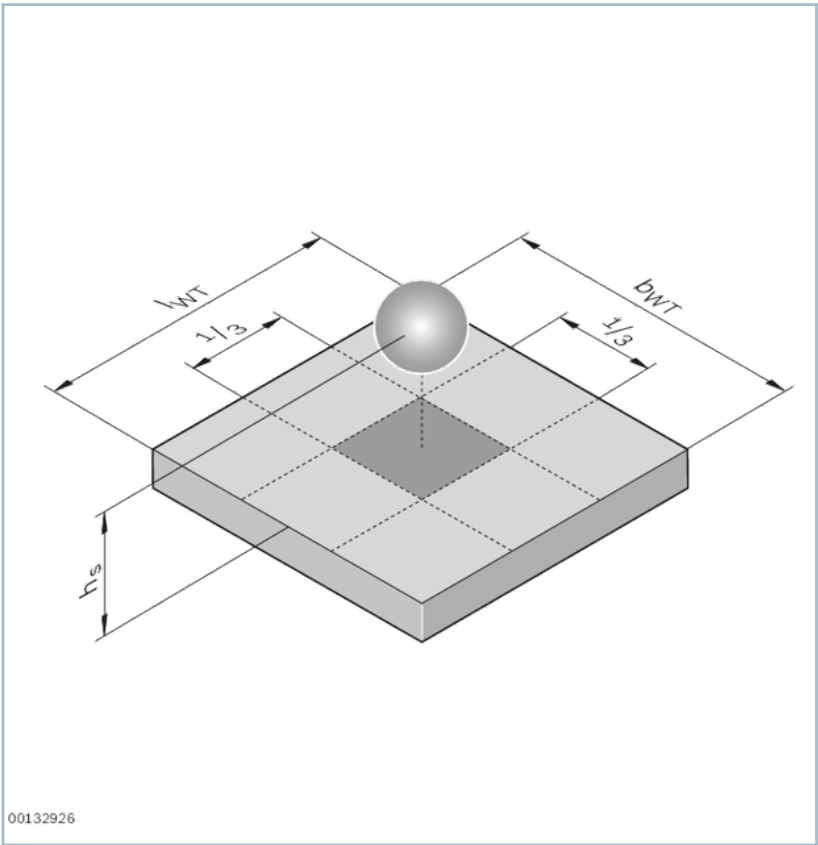
Information

Permissible gravity center position

In order to absorb acceleration forces without any problems when separating and changing the direction of the pallets (in curves, when changing to transverse conveyors), the location of the load center position on the workpiece pallet must be noted.

Generally we recommend that:

- 1 the load should be positioned in the center of the workpiece pallet
- 2 the load center position_s should not exceed $1/3 b_{WT}$ (with $b_{WT} \leq l_{WT}$) in height



Accessories

Required accessories

Limit switch for linear cylinder

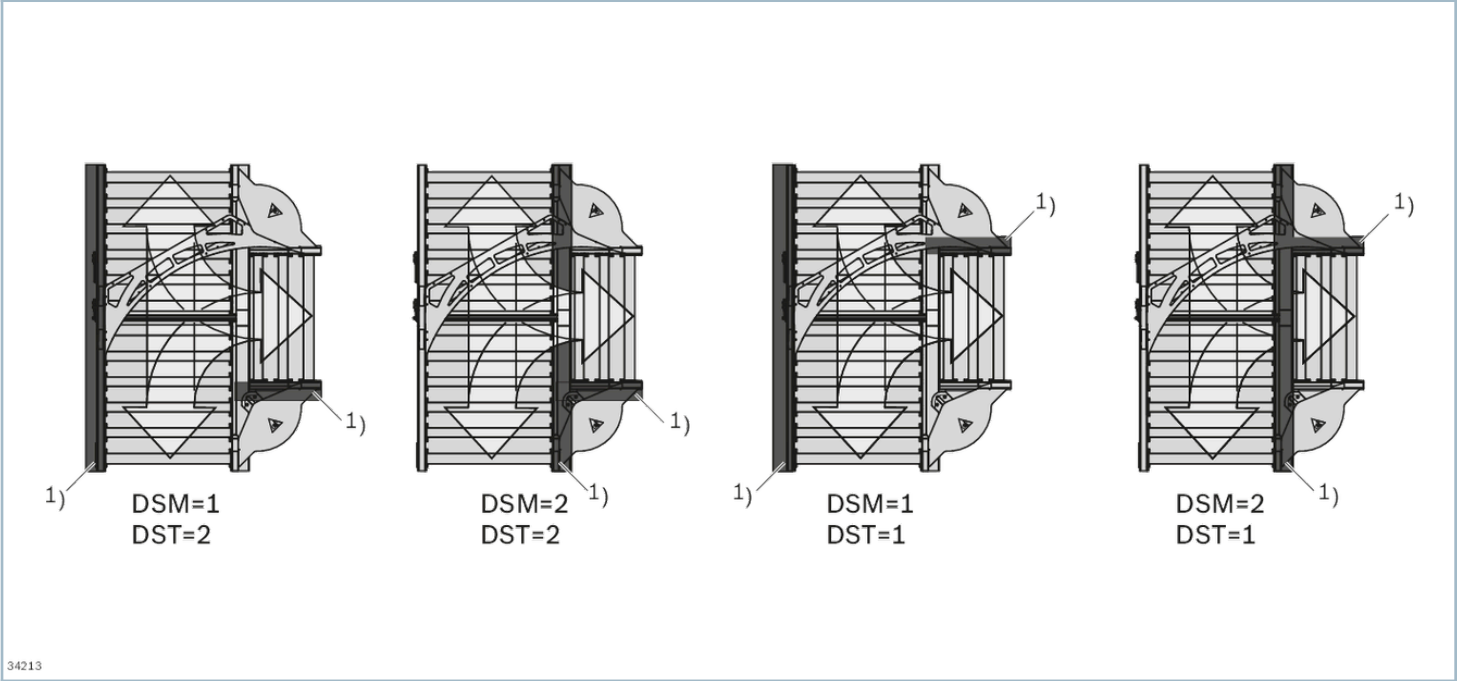
Delivery notes

Condition of Delivery

Three-way diverter DI 5/XH-3W	Ready-to-install	Optional: Protective covers mounted (protective covers cannot be ordered separately)
Three-way diverter DI 5/H-3W		

Ordering codes

Order examples



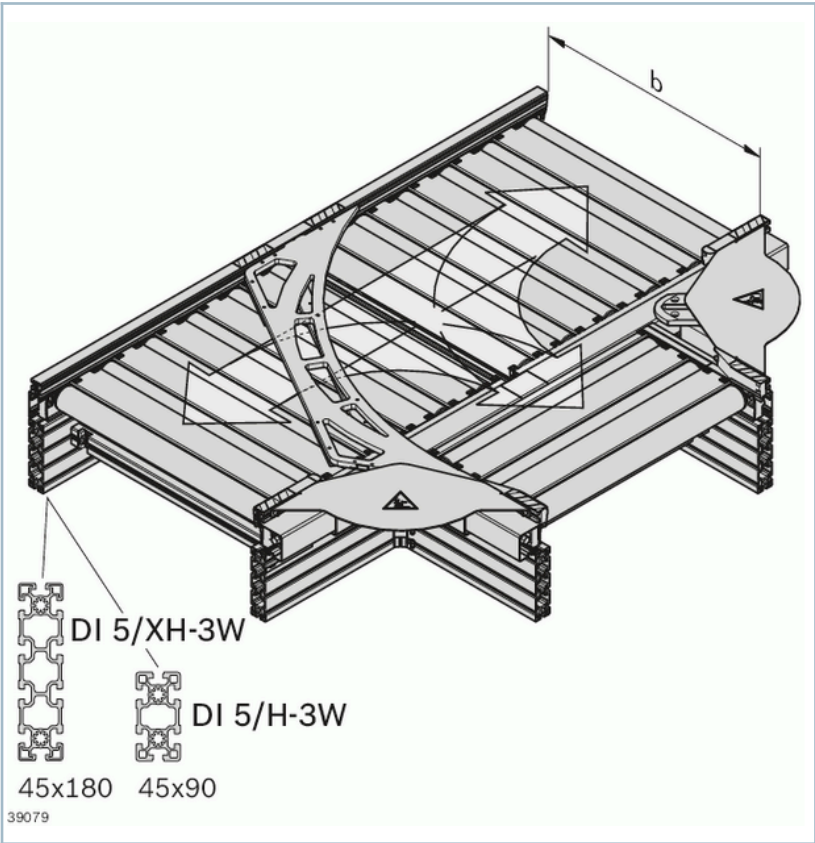
1) Drive side

Permissible loads

$m_G^{1)}$ (kg)	v_N (m/min)
Max. 260	12
Max. 300	9

Higher weights available on request
Can be adapted to different conveyance speeds.
Diverter arm position inquiry on request

1) $m_G^{1)}$ = overall mass of workpiece pallet



Order Parameter

b	Track width	455; 650; 845
I_{WT}	Length of workpiece pallet	455; 650; 845; 1040
N	Number of rollers in color 1	13; 15; 17
LG	Lateral guide material 1: Steel 2: Plastic 3: Aluminum	1; 2; 3
DSM	King shaft installation on main section 1: Left 2: Right	1; 2
DST	King shaft installation on secondary section 1: Left 2: Right	1; 2
TR	Roller material 1: Steel, galvanized 2: Steel, nitrocarburized	1; 2

SC	Protective cover 1: Without protective covers 2: With protective covers	1; 2
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	No.
Three-way diverter DI 5/XH-3W	3842998807
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