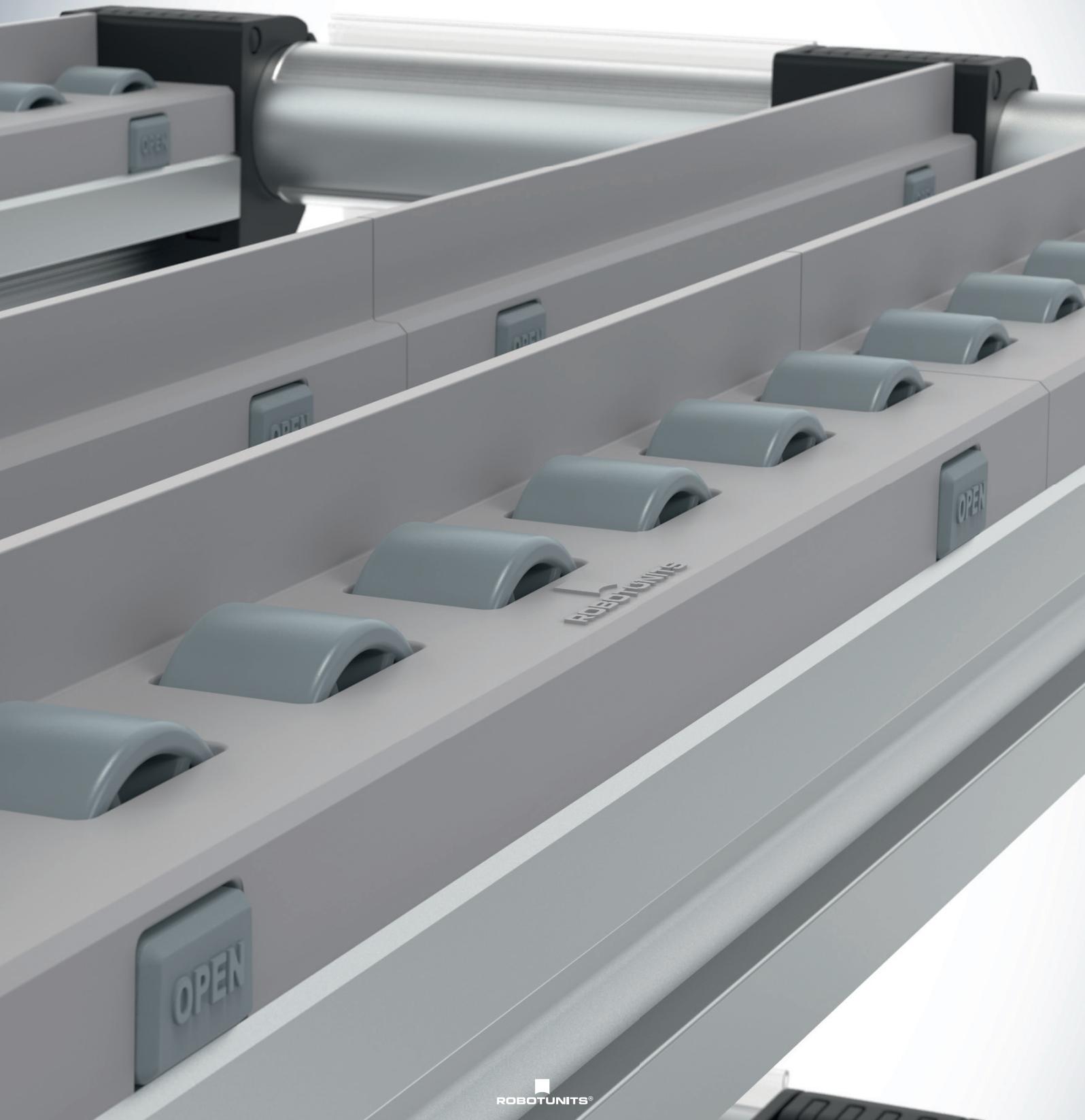




***THE VERSATILE***  
***MBS PICKSTAR***



Modern factories are geared towards high speed production. Time pressure increases constantly. Changeover time between production runs need to be shorter. Therefore product cycles and demanding customers require a new dimension in flexibility.

The solution is now available: Robotunits expands its Modular Automation System with a unique concept for material handling. Only 8 multifunctional components allow for a large range of applications.



#### Individual lengths and widths

- Lane length and width can be easily adjusted
- No tools needed to change lane width
- Additional tracks can be added if load requires



#### Adjustable angle

- Infinitely adjustable angle
- Track can be attached to the tube clamp in the front, or in the T-slot of the extrusion
- Brakes can be inserted anywhere on the track to control the speed of the box



#### Safe and rigid design

- Rigid system through Robotunits Fastening Technology
- Tight fitting track covers prevent contamination of roller tracks
- Low noise level due to special gliding bearings
- Entire construction available for ESD
- Anti-Reverse can be placed anywhere on the track
- Colored anti-reverse shows maximum fill level



#### High Flexibility

- Open T-slots can be used to install additional components
- Tracks can be inserted in any of the Robotunits extrusions
- Quick assembly without special tools
- System can be easily adjusted for new requirements



#### System compatible

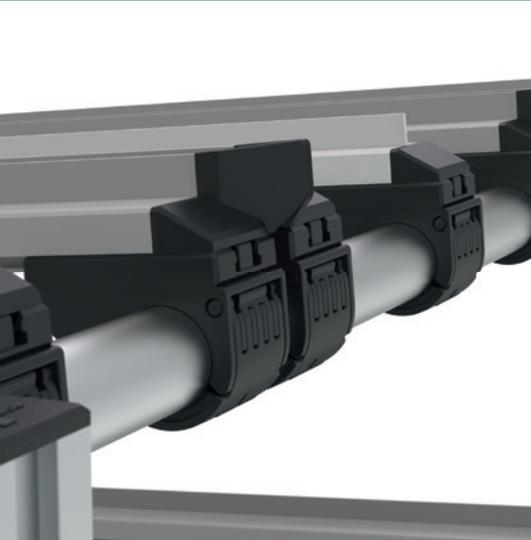
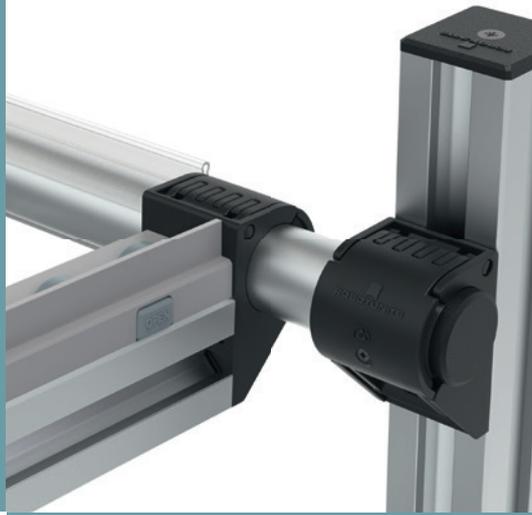
- All components fully compatible with the Robotunits Modular Automation System
- Multifunctional stop elements allow safe in-feed and removal of material
- Unlimited applications due to 14 mm T-slot
- Reduced inventory cost due to multifunctional parts



#### Save time, reduce cost

- Minimal design effort necessary
- Snap-in connections for quick assembly
- Minimal training required
- Individual adjustments possible





# The versatile MBS PickStar

## MBS PickStar Overview

Page 116

## MBS PickStar Rolling

Page 118

<p>RollerTrack MA_456_</p> <p>P. 120</p>	<p>RollerTrack With Side Guides MA_459_</p> <p>P. 121</p>	<p>Tube Clamp Front MAT 30_1</p> <p>P. 122</p>	<p>Front Part MAT 455_</p> <p>P. 123</p>	<p>Brake for RollerTrack MAT 4580</p> <p>P. 124</p>
<p>Anti-Reverse For RollerTrack MAT 4575</p> <p>P. 125</p>	<p>RoundTube 30x2 PIL 3002</p> <p>P. 132</p>	<p>Cover for Round Tube 30x2 CAP 3002</p> <p>P. 132</p>	<p>Label Holder 50 x 100 MAT 3050</p> <p>P. 133</p>	

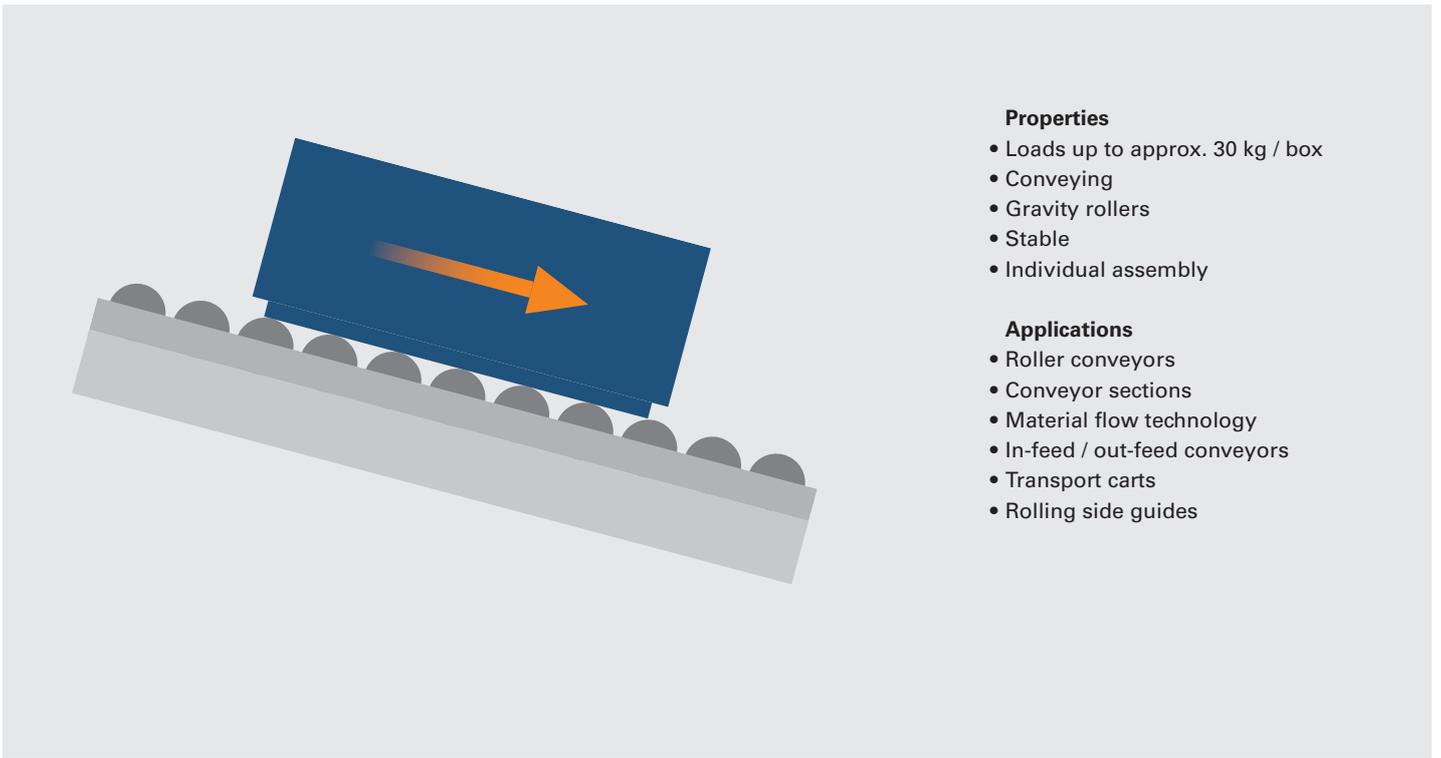
## MBS PickStar Sliding

Page 126

<p>Sliding Rail MAL 453_</p> <p>P. 128</p>	<p>Tube Adapter MAT 303_</p> <p>P. 129</p>	<p>Extrusion Adapter MAT 403_</p> <p>P. 130</p>	<p>Adapter MAT 903_</p> <p>P. 131</p>	<p>RoundTube 30x2 PIL 3002</p> <p>P. 132</p>
<p>Cover for Round Tube 30x2 CAP 3002</p> <p>P. 132</p>	<p>Label Holder 50x100 MAT 3050</p> <p>P. 133</p>			



## MBS PickStar Rolling



### Properties

- Loads up to approx. 30 kg / box
- Conveying
- Gravity rollers
- Stable
- Individual assembly

### Applications

- Roller conveyors
- Conveyor sections
- Material flow technology
- In-feed / out-feed conveyors
- Transport carts
- Rolling side guides

## Compact System Options



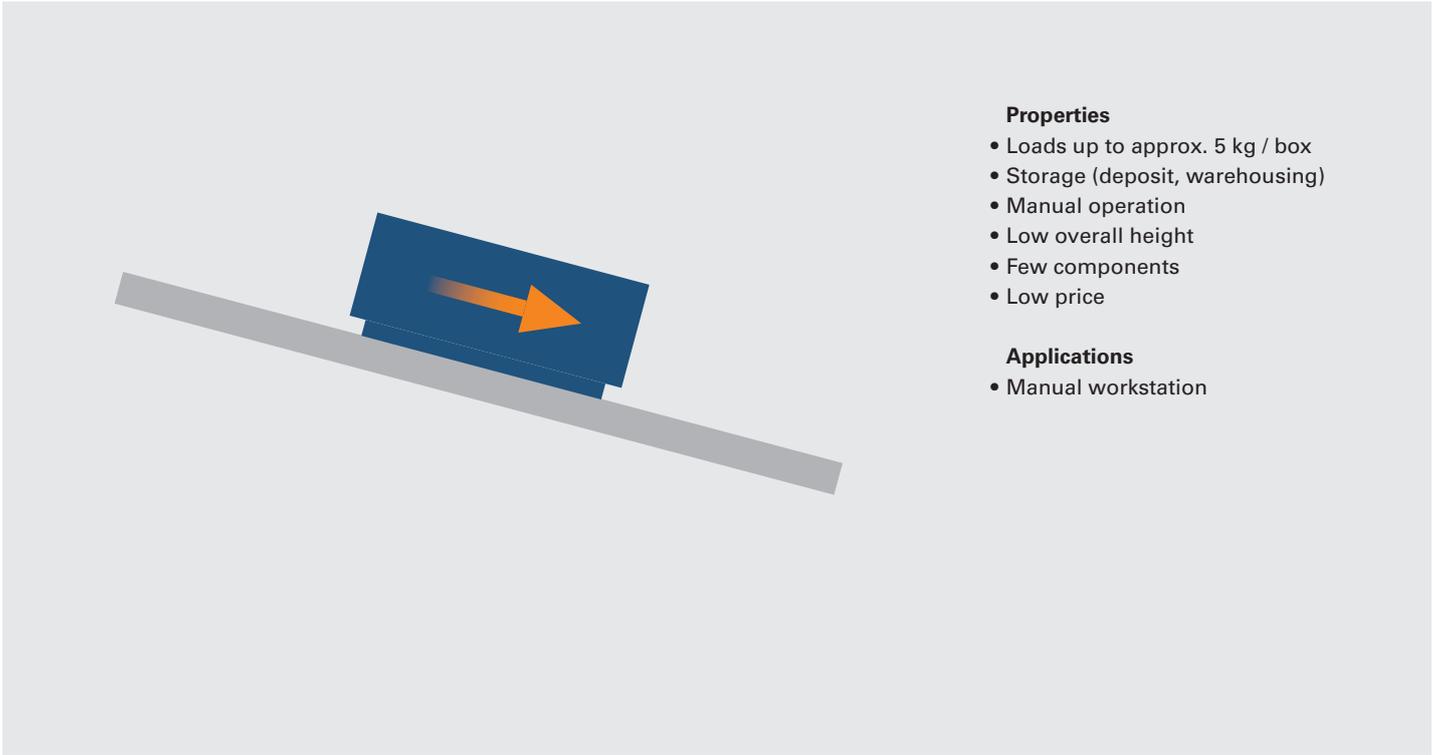
Page 118

## Ergonomic System Options



Page 119

# MBS PickStar Sliding



**Properties**

- Loads up to approx. 5 kg / box
- Storage (deposit, warehousing)
- Manual operation
- Low overall height
- Few components
- Low price

**Applications**

- Manual workstation

## Round System Options



## Square System Options



## MBS PickStar Rolling - Compact



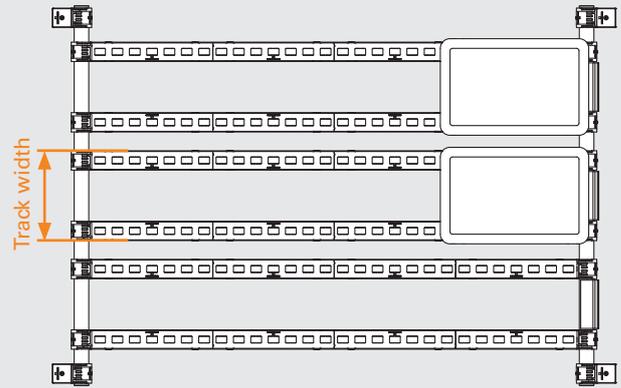
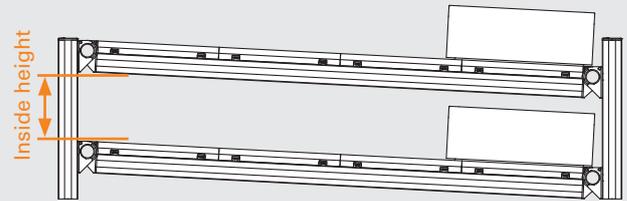
### Benefits

- Flexible track width, inside height
- Lower overall height
- Few components

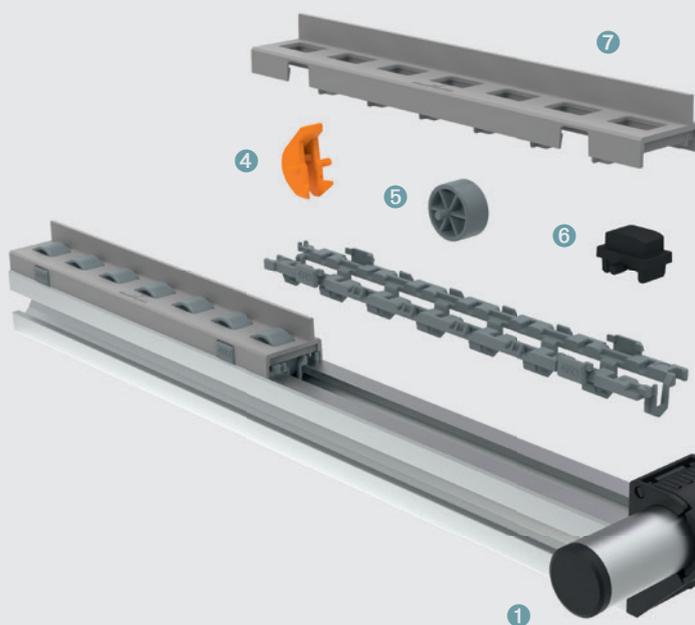
### Application

- KANBAN carts, workstations

Freely combinable system options



## Design MBS PickStar Rolling - Compact



- 1 Round Tube 30x2 PIL3002 (page 132)
- 2 Tube Clamp ESD Front Kit MAT3011 (page 122)
- 3 Label Holder MAT3050 (page 133)
- 4 Anti-Reverse For RollerTrack MAT 4575 (page 125)
- 5 Roller for RollerTrack
- 6 Brake for RollerTrack MAT4580 (as of page 124)
- 7 RollerTrack With Side Guides MAT4591 (as of page 121)

## MBS PickStar Rolling - Ergonomic



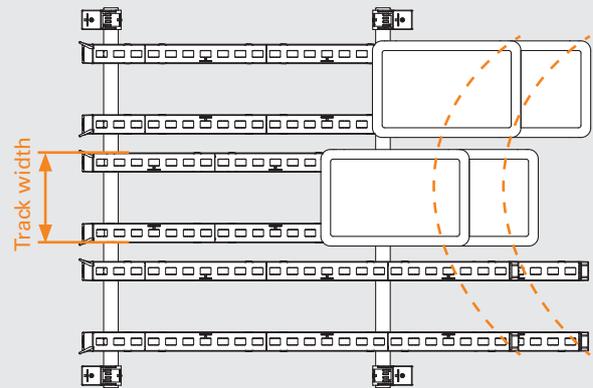
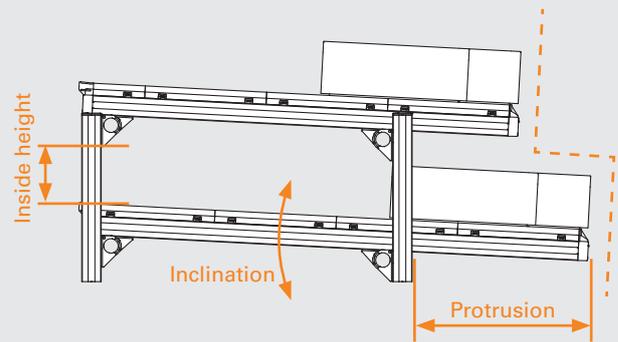
### Benefits

- Flexible adjustable inclination, track width, protrusion, inside height
- Staggered configuration
- Individual arrangement

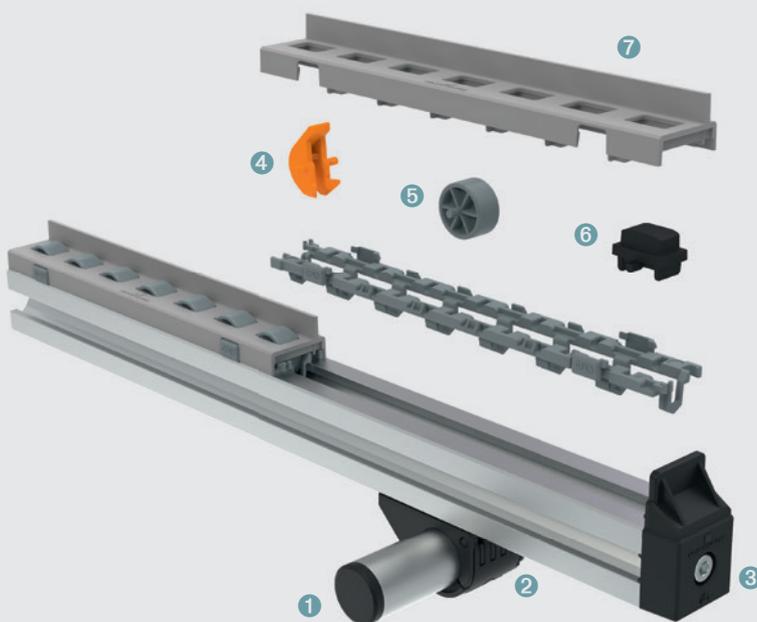
### Application

- Ergonomic (semi-circular) gripping chamber application

Freely combinable system options



## Design MBS PickStar Rolling - Ergonomic



- 1 RoundTube 30x2 PIL3002 (page 132)
- 2 Tube Adapter ESD Kit (page 129)
- 3 Front Part ESD Stop Kit (page 123)
- 4 Anti-Reverse For RollerTrack MAT 4575 (page 125)
- 5 Roller for RollerTrack
- 6 Brake for RollerTrack MAT4580 (as of page 124)
- 7 RollerTrack With Side Guides MAT4591 (as of page 121)

## MAT 4561



## MAT 4563



## Application

For roller conveyors, e.g. for:

- Material flow technology
- Manual workstations
- In- and out-feed conveyors
- Transport carts
- Rolling side guides

## Technical Data

Material: Base part and gray PP or black PP cover (ESD conductive)

Roller gray POM-C or black POM-C (ESD conductive)

Max. load per unit 15 kg

Inclination angle (depending on the product to be transported)

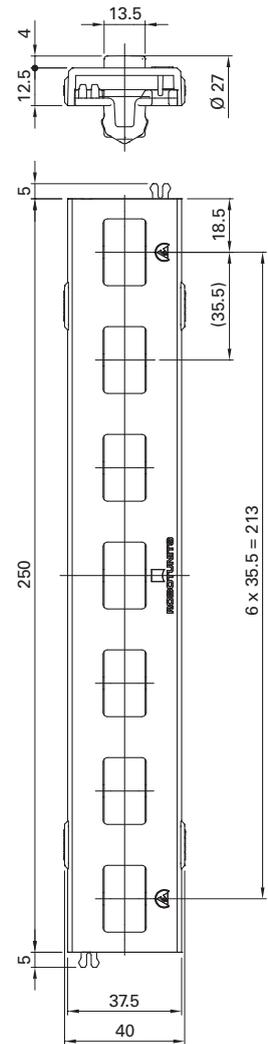
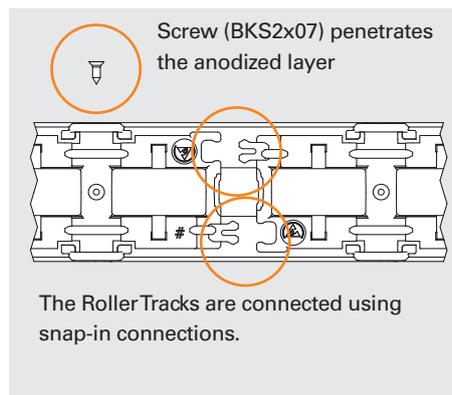
MAT 4561: 4° to 5°

MAT 4563: 5° to 6°

Surface resistance per Roller Track

$R_s < 35 \text{ M}\Omega$

## ESD Conductivity



## Order Code

Description	Scope of Delivery				Order Code <sup>1</sup>	Weight
	Base Part	Cover	Castors	BKS2x07		
RollerTrack Kit	1	1	7	-	MAT 4561	0.112 kg
RollerTrack Kit, cut to length	1	1	X <sup>2</sup>	-	MAL 4561 SNN ____ <sup>3</sup>	0.448 kg/m
RollerTrack ESD Kit	1	1	7	1	MAT 4563	0.114 kg
RollerTrack ESD Kit, cut to length	1	1	X <sup>2</sup>	1	MAL 4563 SNN ____ <sup>3</sup>	0.456 kg/m

1) Please complete the order code by adding the desired length.

2) Number of rollers depending on the length of the cut-to-length RollerTrack

3) Ideal pre-cut lengths in the roller series (35.5 mm)

Drawing dimensions in mm

# MA\_459\_ Roller Track With Side Guides

**MAT 4591**



**MAT 4593 T**



**Application**

- For roller conveyors, e.g. for:
- Material flow technology
  - Manual workstations
  - In- and out-feed conveyors
  - Transport carts

**Technical Data**

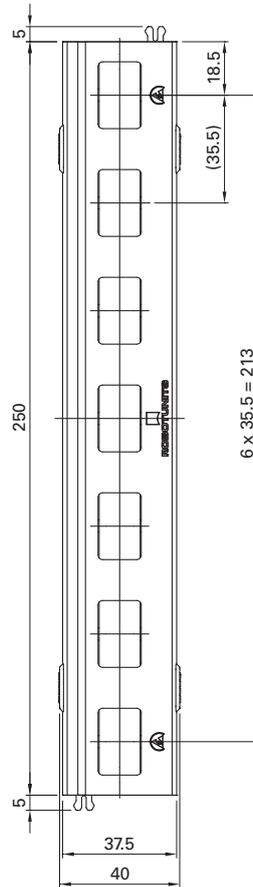
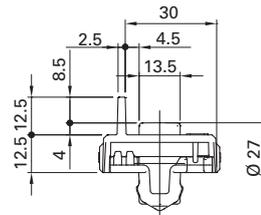
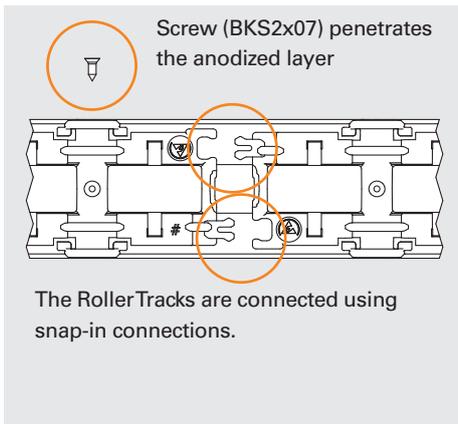
Material: Base part and gray PP or black PP cover (ESD conductive)  
 Roller gray POM-C or black POM-C (ESD conductive)

Max. load per unit 15 kg

Inclination angle (depending on the product to be transported)  
 MAT 4591: 4° to 5°  
 MAT 4593: 5° to 6°

Surface resistance per Roller Track  
 $R_s < 35 \text{ M}\Omega$

## ESD Conductivity



## Order Code

Description	Scope of Delivery				Order Code <sup>1</sup>	Weight
	Base Part	Cover	Castors	BKS2x07		
RollerTrack With Side Guide Kit	1	1	7	-	MAT 4591	0.122 kg
RollerTrack With Side Guide Kit, cut-to-length	1	1	X <sup>2</sup>	-	MAL 4591 SNN ___ <sup>3</sup>	0.488 kg/m
RollerTrack ESD With Side Guide Kit	1	1	7	1	MAT 4593	0.124 kg
RollerTrack ESD With Side Guide Kit, cut-to-length	1	1	X <sup>2</sup>	1	MAL 4593 SNN ___ <sup>3</sup>	0.496 kg/m

- 1) Please complete the order code by adding the desired length.
  - 2) Number of rollers depending on the length of the cut-to-length RollerTrack
  - 3) Ideal pre-cut lengths in the roller series (35.5 mm)
- Drawing dimensions in mm

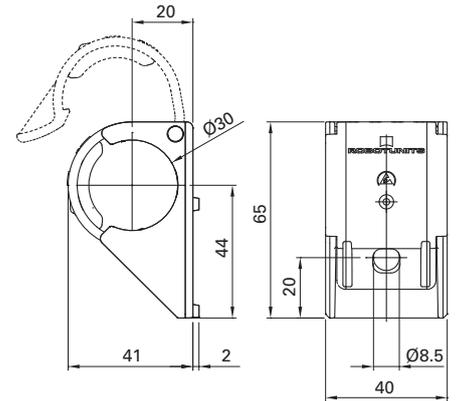
**Application**

Connector for fastening the Round Tube to the face or T-slot of the extrusion; Clamp can be opened without tools

**Technical Data**

Material: Base Part PA6, black (ESD conductive) Clamping Part PA6, black (ESD conductive) and TPV rubber, black  
Fastening material: galvanized steel

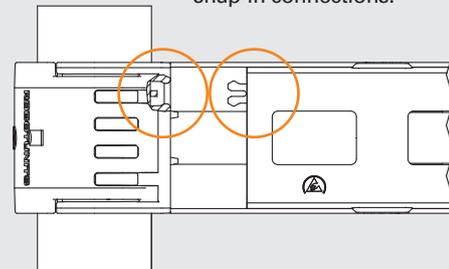
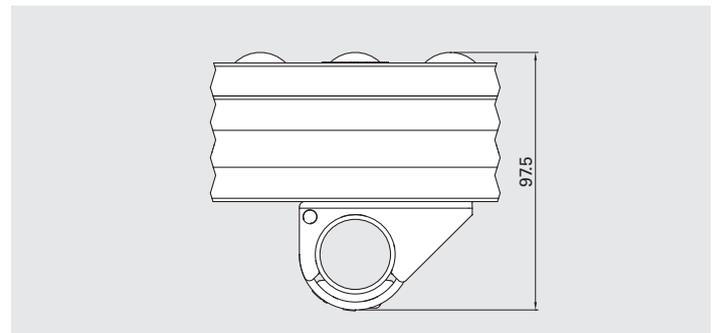
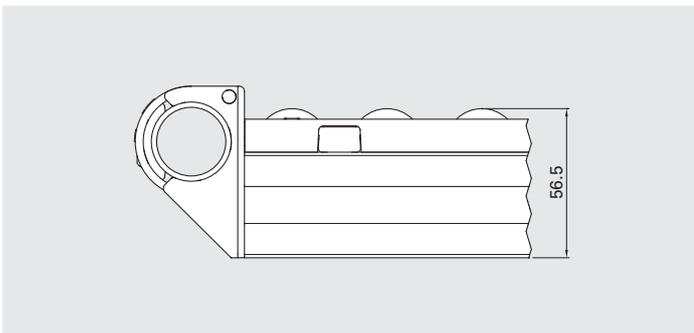
Surface resistance per Tube Clamp  
 $R_s < 35 \text{ M}\Omega$

**ESD Conductivity**

Screw (BKS2x07) penetrates the anodized layer



The RollerTracks are connected using snap-in connections.

**Compact Installed Height****Ergonomic Installed Height****Order Code**

Description	Scope of Delivery						Order Code	Weight
	Base Part	Clamping Part	IBS M08x018NIKO	BLS M008S02	BKS 2x07	TIN4598		
Tube Clamp ESD Front Kit	1	1	1	1	1	-	MAT 3011	0.052 kg
Tube Clamp ESD T-Slot Kit	1	1	1	1	1	1	MAT 3021	0.062 kg

Drawing dimensions in mm

# MAT 455\_

# Front Part

## MAT 4553

Stop Insert



IBS M08x025



Base Part

### Application

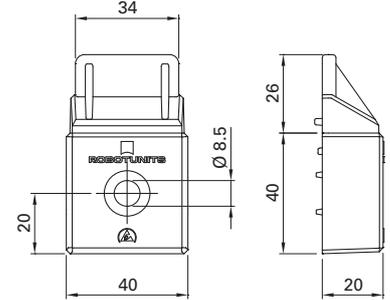
Material stop at the start or the end of the RollerTrack  
In-feed, removal or transfer support in combination with RollerTrack Without Side Guides

### Technical Data

Material: PA6, black (ESD conductive)  
Fastening material: galvanized steel

Surface resistance per Front Part  
 $R_s < 35 M\Omega$

## MAT 4553



## MAT 4555

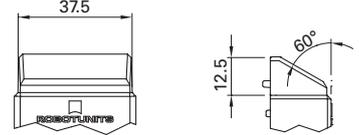
Flat Insert

IBS M08x025



Base Part

## MAT 4555



## MAT 4557

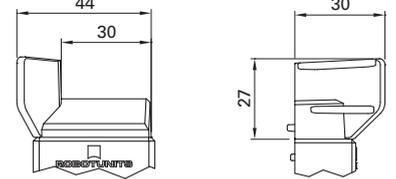
Left Insert

IBS M08x025



Base Part

## MAT 4557



## MAT 4559

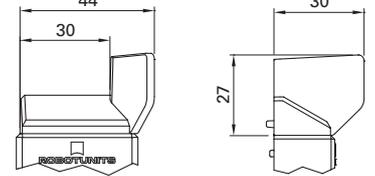
Right Insert

IBS M08x025

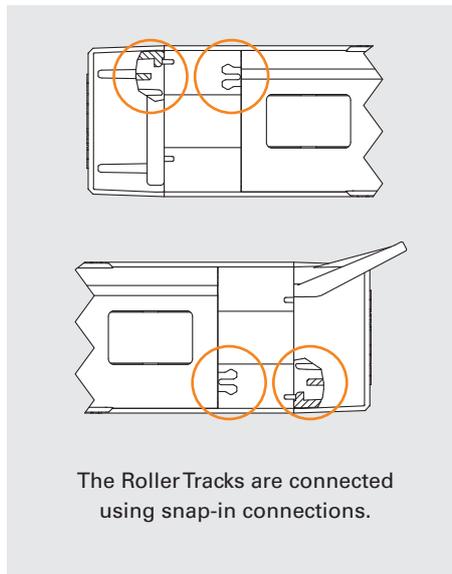


Base Part

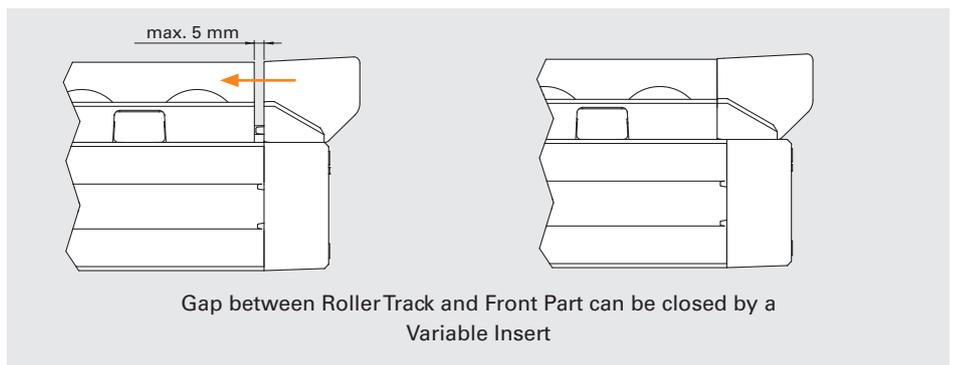
## MAT 4559



## ESD Conductivity



## Variable Inserts



## Order Code

Description	Scope of Delivery			Order Code	Weight
	Base Part	Insert	IBS M08x025		
Front Part ESD Stop Kit	1	1 (stop)	1	MAT 4553	0.036 kg
Front Part ESD Flat Kit	1	1 (flat)	1	MAT 4555	0.034 kg
Front Part ESD left Kit	1	1 (left)	1	MAT 4557	0.035 kg
Front Part ESD Right Kit	1	1 (right)	1	MAT 4559	0.035 kg

Drawing dimensions in mm

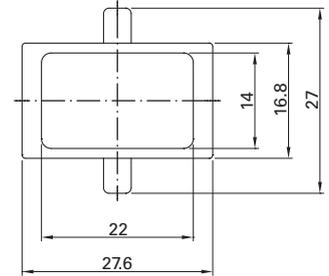
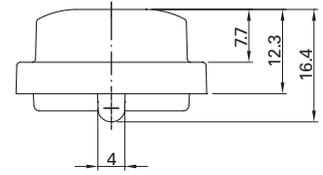
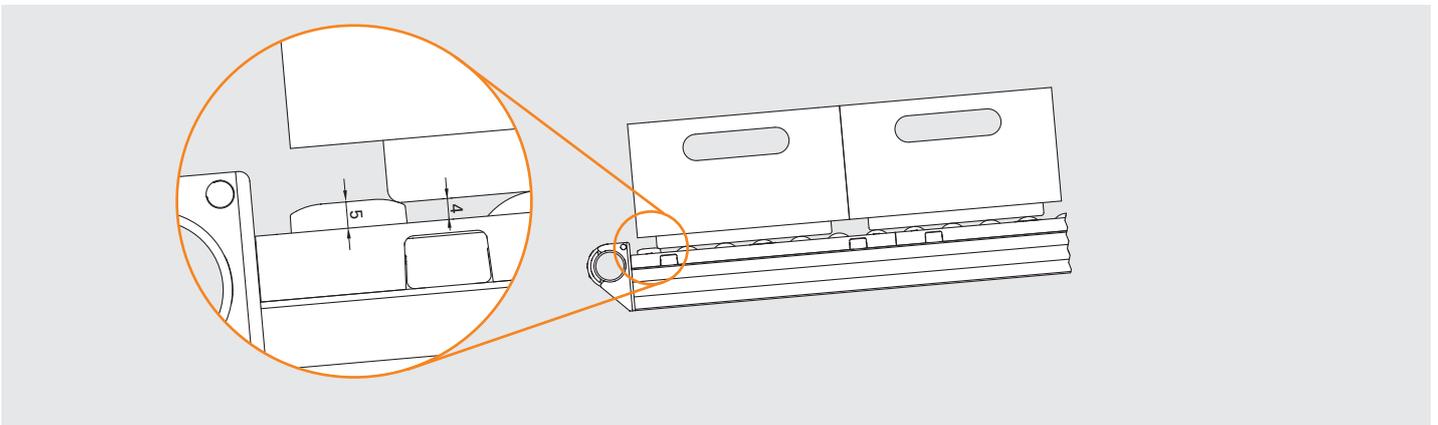
**Application**

Slowing down the transported product

**Technical Data**

Material: TPV rubber, black

Easy retrofitting possible.  
(Switch Roller with Brake)  
Depending on the product (weight,  
condition of bottom, etc.) several  
Brakes can be installed

**Function****Order Code**

Description	Order Code	Weight
Brake For RollerTrack	MAT 4580	0.003 kg

Drawing dimensions in mm

MAT 4575

## Anti-Reverse For Roller Track

**Application**

Material stop at the start or end of the RollerTrack

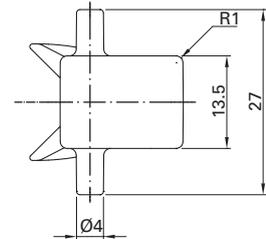
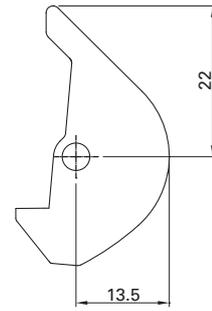
Prevents product at the back of the shelf from sliding down when product at the front is removed

Fill level indicator through signal color (visible = empty)

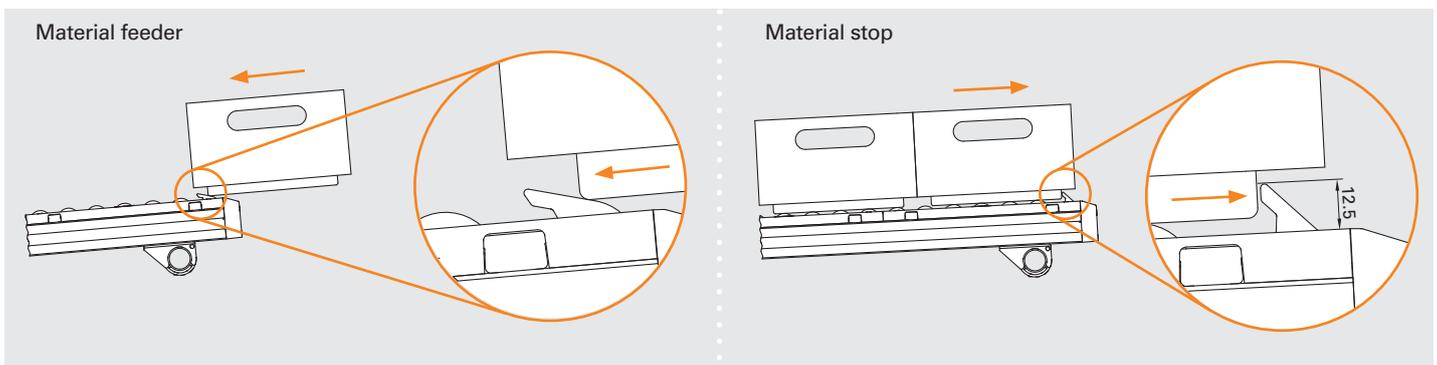
**Technical Data**

Material: POM-C orange

Easy retrofitting possible.  
(Switch Roller with Anti-Reverse for RollerTrack)



## Function



## Order Code

Description	Order Code	Weight
Anti-Reverse For RollerTrack Kit	MAT 4575	0.006 kg

Drawing dimensions in mm

## MBS PickStar Sliding - Round

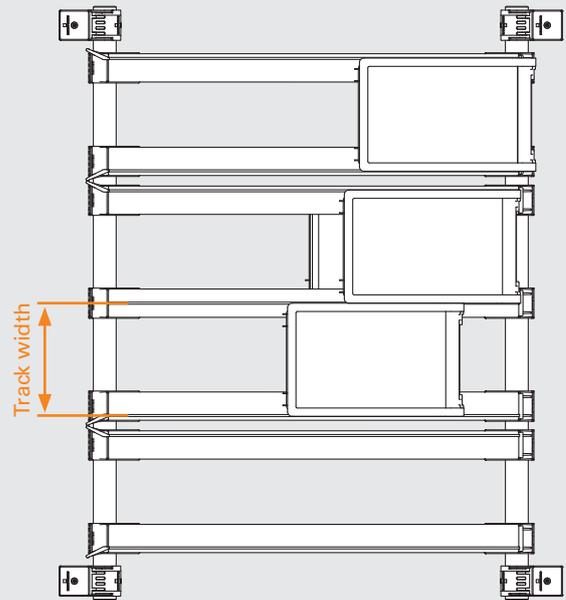
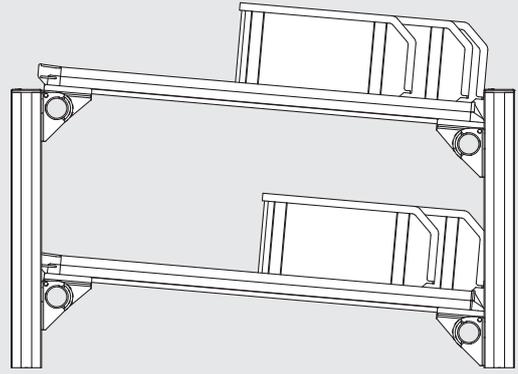


### Benefits

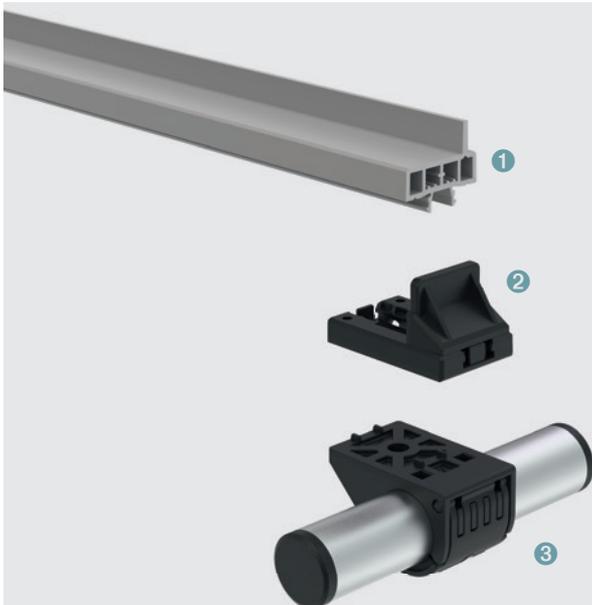
- Flexible adjustable track width
- Simpler assembly
- Freely adjustable incline

### Application

Workstation with short tracks



## Design MBS PickStar Sliding - Round

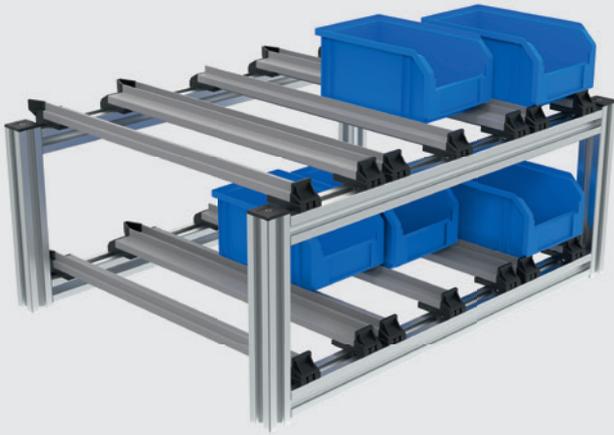


① Sliding Rail With Side Guide MAL4532 (page 118)

② Tube Adapter ESD Stop Kit MAT3033 (page 119)

③ Round Tube 30x2 PIL3002 (page 122)

## MBS PickStar Sliding - Square

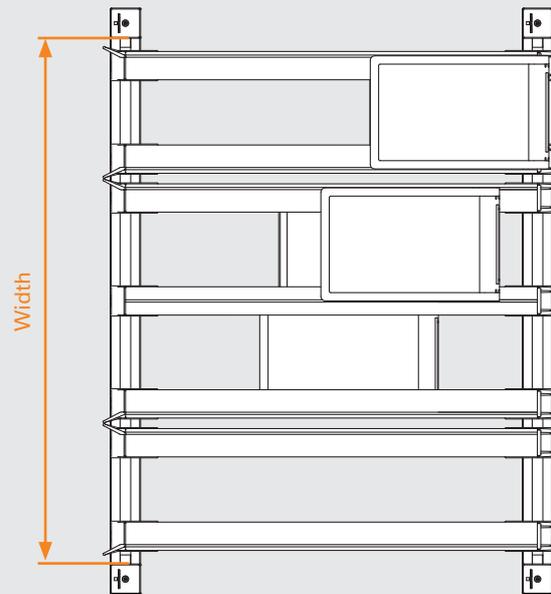
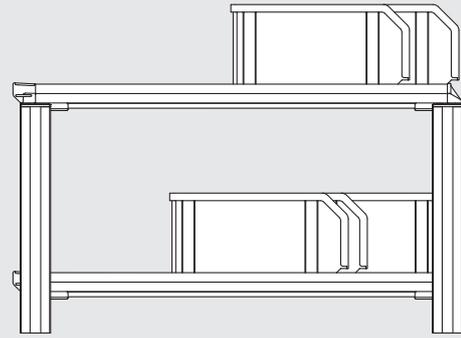


### Benefits

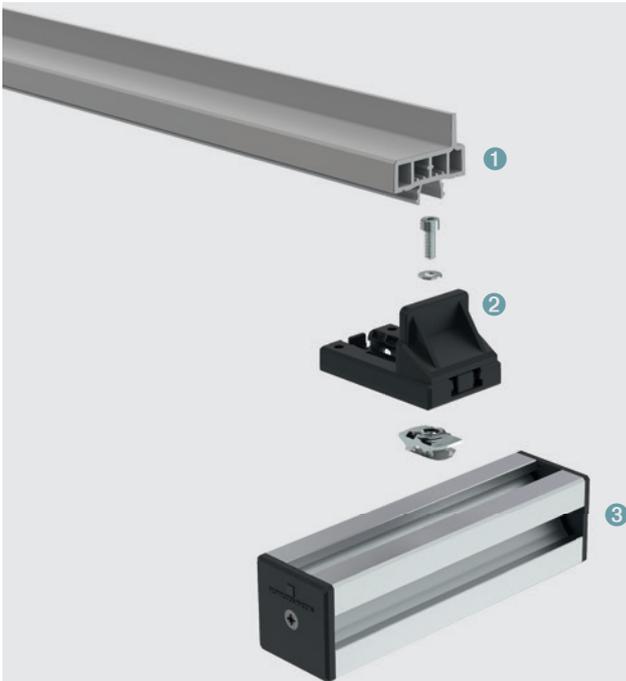
- Sturdy frame design
- Greater width
- Subsequent installation directly onto extrusions

### Application

Integration into existing extrusion frame

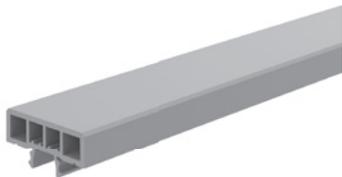


## Design MBS PickStar Sliding - Square



- 1 Sliding Rail With Side Guide MAL4532 (page 118)
- 2 Extrusion Adapter ESD Stop Kit MAT4033 (page 120)
- 3 Extrusion Technology (page 54)

## MAL 4530



## MAL 4532



## MAL 4534



## Application

- For sliding tracks, e.g. for:
- Manual workstations

## Technical Data of Sliding Rail (MAL 4530)

Material:	gray PVC-U (antistatic)
Modulus of elasticity E:	3000 N/mm <sup>2</sup>
Section modulus $W_x$ :	0.5 cm <sup>3</sup>
Section modulus $W_y$ :	1.6 cm <sup>3</sup>
Area moment of inertia $I_x$ :	0.6 cm <sup>4</sup>
Area moment of inertia $I_y$ :	2.9 cm <sup>4</sup>
Load m:	1.5 kg

## Technical Data of Sliding Rail With Side Guide (MAL 4532)

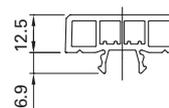
Material:	gray PVC-U (antistatic)
Modulus of elasticity E:	3000 N/mm <sup>2</sup>
Section modulus $W_x$ :	0.7 cm <sup>3</sup>
Section modulus $W_y$ :	1.7 cm <sup>3</sup>
Area moment of inertia $I_x$ :	1.2 cm <sup>4</sup>
Area moment of inertia $I_y$ :	3.4 cm <sup>4</sup>
Load m:	2.5 kg

## Technical Data of Sliding Rail With Center Guide (MAL 4534)

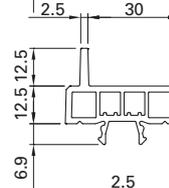
Material:	gray PVC-U (antistatic)
Modulus of elasticity E:	3000 N/mm <sup>2</sup>
Section modulus $W_x$ :	0.7 cm <sup>3</sup>
Section modulus $W_y$ :	1.6 cm <sup>3</sup>
Area moment of inertia $I_x$ :	1.2 cm <sup>4</sup>
Area moment of inertia $I_y$ :	2.9 cm <sup>4</sup>
Load m:	2.5 kg

Surface resistance per sliding rail  
 $R_s < 100 \text{ G}\Omega$

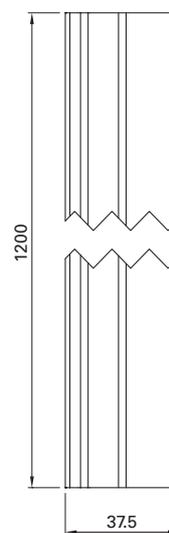
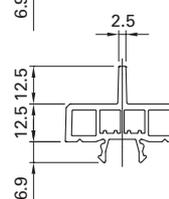
## MAL 4530



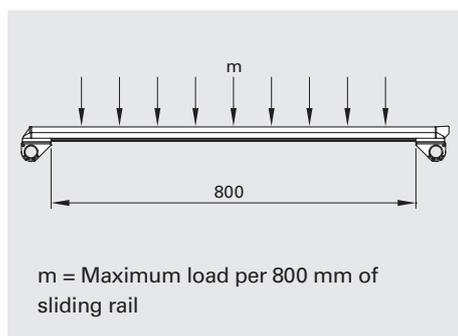
## MAL 4532



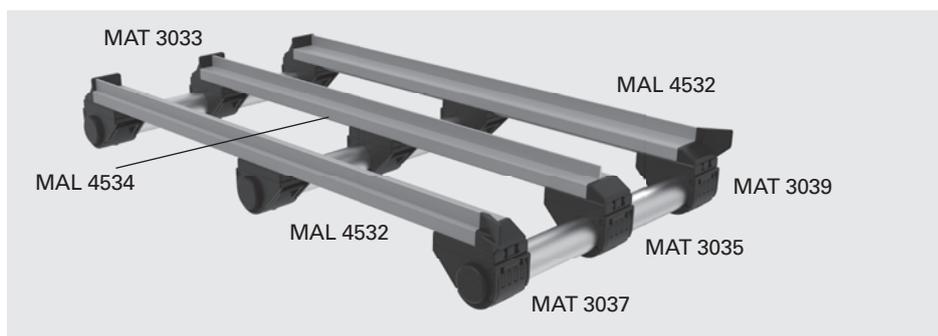
## MAL 4534



## Load



## Application



## Order Code

Description	Order Code <sup>1</sup>	
	Length	Weight/Meter
Sliding Rail, cut to length	MAL 4530 SNN ____	0.290 kg
Sliding Rail, stock length 1200 mm	MAL 4530 NNN 1200	0.290 kg
Sliding Rail With Side Guide, cut to length	MAL 4532 SNN ____	0.330 kg
Sliding Rail With Side Guide, stock length 1200 mm	MAL 4532 NNN 1200	0.330 kg
Sliding Rail With Center Guide, cut to length	MAL 4534 SNN ____	0.330 kg
Sliding Rail With Center Guide, stock length 1200 mm	MAL 4534 NNN 1200	0.330 kg

1) Please complete the order code by adding the desired length.

Drawing dimensions in mm

**MAT 303\_**

**Tube Adapter**

**MAT 3031**



**Application**

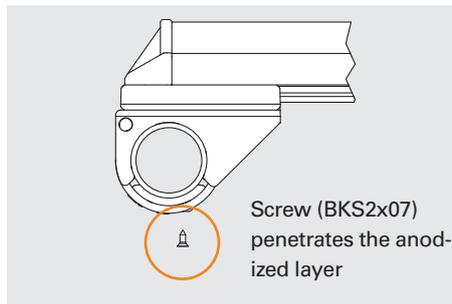
Adapter to connect the Round Tube to the Sliding Rail

**Technical Data**

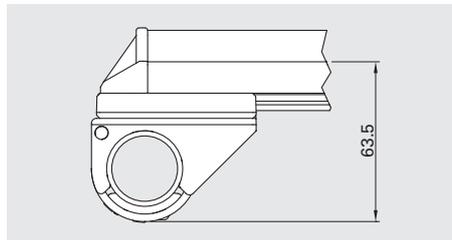
Material: Base part and adapter plate PA6, black (ESD conductive)  
 Clamping Part PA6, black (ESD conductive) and TPV rubber black  
 Inserts: PA6, black (ESD conductive)  
 Conductivity screw: galvanized steel

Surface resistance per Tube Adapter  
 $R_s < 35 M\Omega$

**ESD Conductivity**



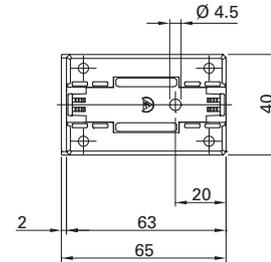
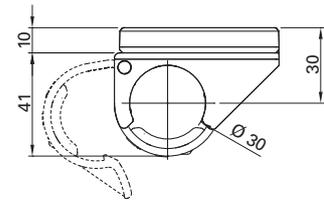
**Round Installed Height**



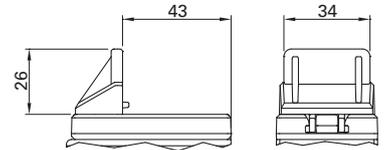
**Application**



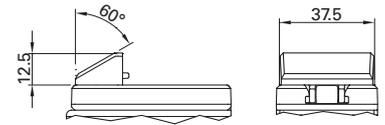
**MAT 3031**



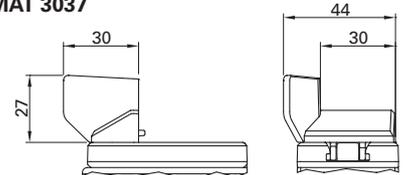
**MAT 3033**



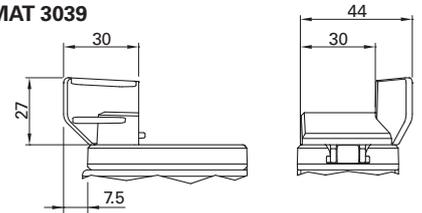
**MAT 3035**



**MAT 3037**



**MAT 3039**



**MAT 3033**



**MAT 3035**



**MAT 3037**



**MAT 3039**



**Order Code**

Description	Scope of Delivery					Order Code	Weight
	Base Part	Clamping Part	Adapter plate	Insert	BKS 2x07		
Tube Adapter ESD Kit	1	1	1	-	1	MAT 3031	0.054 kg
Tube Adapter ESD Stop Kit	1	1	1	1 (stop)	1	MAT 3033	0.061 kg
Tube Adapter ESD Flat Kit	1	1	1	1 (flat)	1	MAT 3035	0.059 kg
Tube Adapter ESD Left Kit	1	1	1	1 (left)	1	MAT 3037	0.060 kg
Tube Adapter ESD Right Kit	1	1	1	1 (right)	1	MAT 3039	0.060 kg

Drawing dimensions in mm

MAT 4031

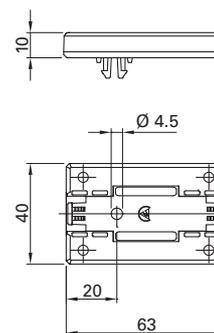
**Application**

Adapter to connect the extrusion to the Sliding Rail

**Technical Data**

Material: Adapter plate PA6, black (ESD conductive) Inserts: PA6, black (ESD conductive) Fastening material: galvanized steel

MAT 4031



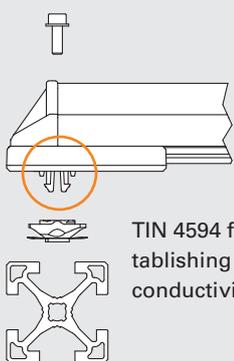
MAT 4033



Surface resistance per Extrusion Adapter  
 $R_s < 35 \text{ M}\Omega$

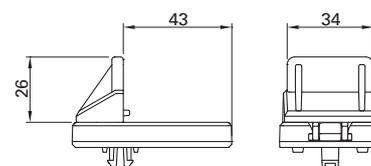
**ESD Conductivity**

To attach to the extrusion cut off tabs flush



TIN 4594 for establishing ESD conductivity

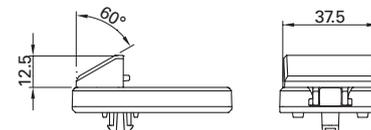
MAT 4033



MAT 4035



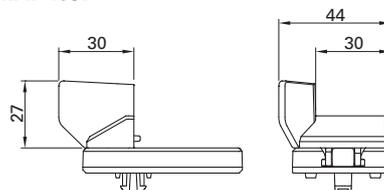
MAT 4035



MAT 4037



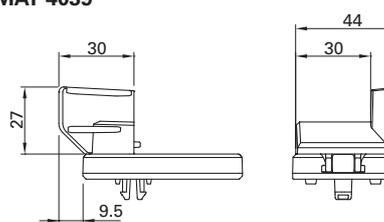
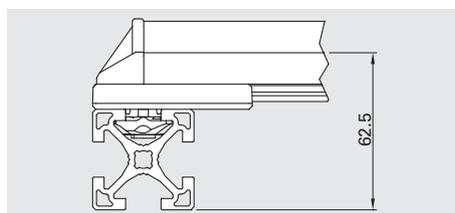
MAT 4037



MAT 4039



MAT 4039

**Round Installed Height****Application****Order Code**

Description	Scope of Delivery						Order Code	Weight
	Adapter plate	Insert	SKS M04x012	BLS M004	TIN 4594			
Extrusion Adapter ESD Kit	1	-	1	1	1	MAT 4031	0.027 kg	
Extrusion Adapter ESD Stop Kit	1	1 (stop)	1	1	1	MAT 4033	0.034 kg	
Extrusion Adapter ESD Flat Kit	1	1 (flat)	1	1	1	MAT 4035	0.032 kg	
Extrusion Adapter ESD Left Kit	1	1 (left)	1	1	1	MAT 4037	0.033 kg	
Extrusion Adapter ESD Right Kit	1	1 (right)	1	1	1	MAT 4039	0.033 kg	

Drawing dimensions in mm

# MAT 903\_

# Adapter

MAT 9031



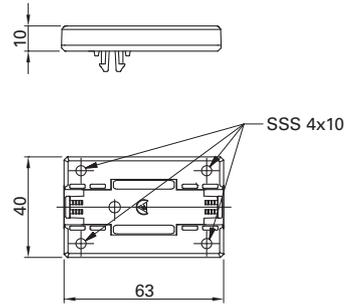
### Application

Connector for fastening the Sliding Rail for protruding sections or partitioned Sliding Rails

### Technical Data

Material: Adapter plate PA6, black (ESD conductive)  
 Inserts: PA6, black (ESD conductive)  
 Fastening material: galvanized steel

MAT 9031

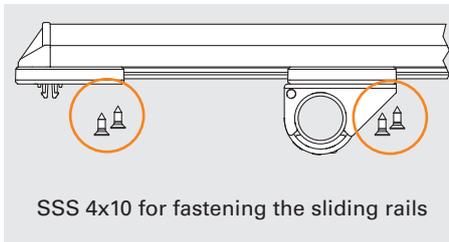


MAT 9033

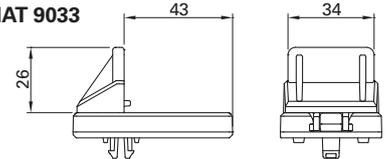


Surface resistance per Adapter  
 $R_s < 35 \text{ M}\Omega$

## Round Protrusion



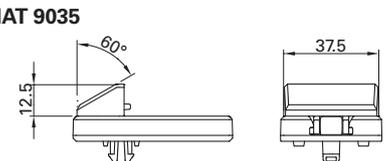
MAT 9033



MAT 9035



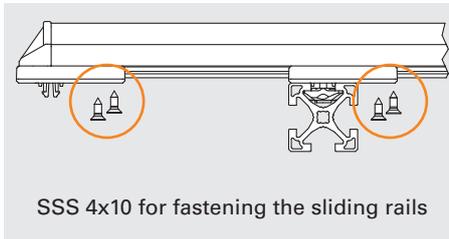
MAT 9035



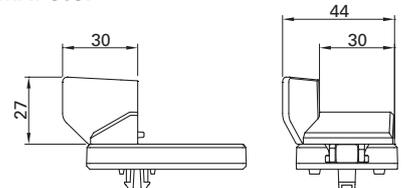
MAT 9037



## Square Protrusion



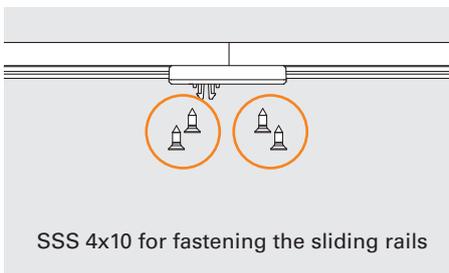
MAT 9037



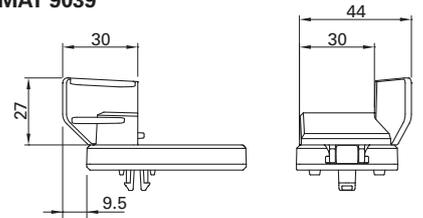
MAT 9039



## Partitioning



MAT 9039



## Order Code

Description	Scope of Delivery			Order Code	Weight
	Adapter plate	Insert	SSS 4x10		
Adapter ESD Kit	1	-	4	MAT 9031	0.017 kg
Adapter ESD Stop Kit	1	1 (stop)	4	MAT 9033	0.024 kg
Adapter ESD Flat Kit	1	1 (flat)	4	MAT 9035	0.022 kg
Adapter ESD Left Kit	1	1 (left)	4	MAT 9037	0.023 kg
Adapter ESD Right Kit	1	1 (right)	4	MAT 9039	0.023 kg

Drawing dimensions in mm

## PIL 3002

## Round Tube 30x2

**Application**

- Universally useful, e.g. as
- Material flow technology
  - Manual workstations
  - In- and out-feed conveyors
  - Signage and shelving
  - Transport carts
  - Table frames

**Technical Data**

Material: EN AW-6063-T66 clear anodized aluminum

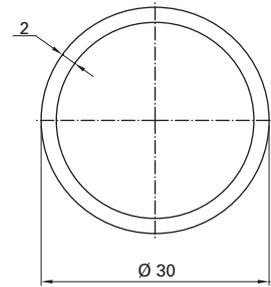
Section modulus  $W_x = W_y$ : 1.16 cm<sup>3</sup>

Area moment of inertia

against x + y  $I_x = I_y$ : 1.73 cm<sup>4</sup>

against torsion  $I_t$ : 3.47 cm<sup>4</sup>

Cross sectional area A: 175.9 mm<sup>2</sup>



## Order Code

Description	Order Code <sup>1</sup>	
	Length	Weight/Meter
Round Tube 30x2, cut to length	PIL 3002 SNN ____	0.475 kg
Round Tube 30x2, stock length 6050 mm (usable length 6000 mm)	PIL 3002 NNN 6050	0.475 kg
Round Tube 30x2, 175 units, stock length 6050 (usable length 6000 mm)	PIL 3002 PAC 0175	0.475 kg

## CAP 3002

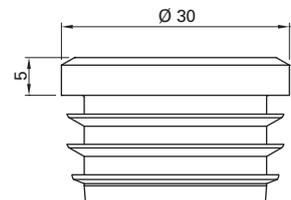
## End Cap For Round Tube 30x2

**Application**

End Cap for Round Tube

**Technical Data**

Material: PE, black



## Order Code

Description	Order Code	Weight
End Cap For Round Tube 30x2	CAP 3002	0.004 kg

1) Please complete the order code by adding the desired length.

Drawing dimensions in mm

**MAT 3050**

**Label Holder 50x100**



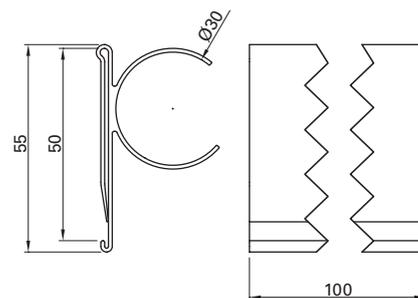
**Application**

Labels can be inserted into transparent Label Holder  
 Label Holder can be snapped on directly to RoundTube

**Technical Data**

Material: PVC transparent

Max. label size 50 x 100 mm



**Order Code**

Description	Order Code	Weight
Label Holder 50x100	MAT 3050	0.023 kg

Drawing dimensions in mm

