BELT CONVEYORS

EXAMPLES
The belt conveyor module in our MiniTec ICAD assembler construction software designs your belt conveyor automatically based on your requirements. Furthermore it calculates the deflection, suggests the number of supports and generates the parts list, all within a few minutes. Assembly can be completed quickly and easily as a result of our proven components.

**Motor arrangement**

**Plug-on motor**

- Cylinder Ø 50 mm or nosebar
- Belt driving cylinder Ø 50 mm

**Covered flanged motor**

- Cylinder Ø 50 mm or nosebar
- Belt driving cylinder Ø 50 mm

**Center drive (Direct drive)**
- Belt width max. 300 mm with nosebar
- Belt width max. 800 mm with cylinder Ø 50
**Belt Conveyors**

**Series 45**

**Center drive (Direct drive)**
- Belt width max. 800 mm

**Cylinder motor**
- Belt width min. 260 mm
- Belt width max. 500 mm
- Max. length 2000 mm
- Max. load 20 kg

**Subconstructions**
- Height adjustable
- Standard
- One foot
REQUEST STANDARD BELT CONVEYOR 45

Standard dimensions
Axial distance mm
Belt width L mm

Operating conditions
Goods to be conveyed
Unit weight kg
Total belt load kg
Temperature of goods °C

Subconstruction
Inlet height He mm
Discharge height Ha mm
Number of supports Pcs.
Supports height adjustable from mm to mm
Lateral guide one side two sides short long
Angle bracket for floor fastening part no. 21.1112/0
Floor anchor 12 part no. 21.1115/0
Wheels part no.
Feet part no.

Options
Belt part no.
Supporting sheet Aluminium Inox

Drive
Motor arrangement Plug-on motor Flanged motor
Cylinder motor Center drive (Direct drive)
Center drive 3-Wheels-System
Speed m/min.
Speed adjustable from m/min. to m/min.

Contact details
Company
Contact person
Phone no.
Fax no.
E-Mail
Please call me back
Please send me an offer
BELT CONVEYORS

REQUEST NOSEBAR CONVEYOR

**Standard dimensions**

Axial distance

Belt width L  mm (max. 300 mm)

**Type with nosebar**

Goods to be conveyed

Unit weight kg

Total belt load kg

Temperature of goods °C

**Subconstruction**

Inlet height He mm

Discharge height Ha mm

Number of supports Pcs.

Supports height adjustable from mm to mm

Lateral guide one side both sides short long

Angle bracket for floor fastening part no. 21.1112/0

Floor anchor 12 part no. 21.1115/0

Wheels part no.

Feet part no.

**Options**

Belt Part no.

Supporting sheet Aluminium Inox

**Drive**

**NOSEBAR (ONE SIDE) **

**NOSEBAR (TWO SIDES) **

Motor arrangement Plug-on motor Flanged motor

Cylinder motor Center drive 3-Wheels-System

Center drive (Direct drive)

Speed m/min.

Speed adjustable from m/min. to m/min.

**Contact details**

Company

Contact person

Phone no.

Fax no.

E-Mail

Please call me back

Please send me an offer
BELT CONVEYORS

BELT CONVEYOR – SERIES 90

The belt conveyor module in our MiniTec ICADassembler construction software designs your belt conveyor automatically based on your requirements. Furthermore it calculates the deflection, suggests the number of supports and generates the parts list, all within a few minutes. Assembly can be completed quickly and easily as a result of our proven components.

Motor arrangement

**Plug-on motor**

Cylinder Ø 95 mm

Belt driving cylinder Ø 95 mm

**Flanged motor**

Cylinder Ø 95 mm

Belt driving cylinder Ø 95 mm

Subconstruction

Height adjustable

Standard
REQUEST STANDARD BELT CONVEYOR 90

**Standard dimensions**
- Axial distance: [ ] mm
- Belt width L: [ ] mm

**Operating conditions**
- Goods to be conveyed: [ ]
- Unit weight: [ ] kg
- Total belt load: [ ] kg
- Temperature Goods: [ ] °C

**Subconstruction**
- Inlet height He: [ ] mm
- Discharge height Ha: [ ] mm
- Number of supports: [ ] Pcs.
- Supports height adjustable from [ ] mm to [ ] mm
- Lateral guide: [ ] one side [ ] two sides [ ] short [ ] long
- Angle bracket for floor fastening: Part no. 21.1112/0
- Floor anchor 12: Part no. 21.1115/0
- Wheels: Part no. [ ]
- Feet: Part no. [ ]

**Options**
- Belt: Part no. [ ]
- Supporting sheet: Aluminium [ ] Inox

**Drive**
- Motor arrangement: [ ] Plug-on motor [ ] Flanged motor
- Speed: [ ] m/min.
- Speed adjustable from [ ] m/min. to [ ] m/min.

**Contact details**
- Company: [ ]
- Contact person: [ ]
- Phone no.: [ ]
- Fax no.: [ ]
- E-Mail: [ ]

- Please call me back
- Please send me an offer
BELT CONVEYORS

LATERAL GUIDE

CONVEYOR 45 AND 90

SHORT

LONG

ROLLER CONVEYOR WITHOUT DRIVE

LOW

HIGH
## BELT CONVEYORS

### BELTS

<table>
<thead>
<tr>
<th>BELT</th>
<th>PART NO.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PVC, black, smooth, antistatic</td>
<td>29.5019/1</td>
</tr>
<tr>
<td>PVC, green, grip, antistatic</td>
<td>29.5019/2</td>
</tr>
<tr>
<td>PVC, green, checks, adhesive, antistatic</td>
<td>29.5019/3</td>
</tr>
<tr>
<td>PVC, green, smooth, antistatic</td>
<td>29.5019/4</td>
</tr>
<tr>
<td>PU, blue, smooth</td>
<td>29.5019/5</td>
</tr>
<tr>
<td>PU, white, smooth, antistatic</td>
<td>29.5019/6</td>
</tr>
<tr>
<td>PVC, white, smooth, antistatic</td>
<td>29.5019/7</td>
</tr>
<tr>
<td>PU, green, smooth, antistatic</td>
<td>29.5019/8</td>
</tr>
<tr>
<td>Mesh, white, antistatic</td>
<td>29.5019/9</td>
</tr>
<tr>
<td>Special belts on request</td>
<td>29.5019/0</td>
</tr>
</tbody>
</table>

**Calculation of endless length EL**

For cylinder 45: $EL = 2 \times A + 165$ mm

For cylinder 90: $EL = 2 \times A + 305$ mm

### EXAMPLES FOR SPECIAL BELTS

- **V-Ledge**
- **Welded on cams**
- **Corrugated edge**
ROLLER CONVEYOR

ROLLER CONVEYOR WITHOUT DRIVE

Transport roller with slide bearing

Profile

45 x 45

45 x 90

Transport roller

Bearing

Tube length

max. Tube length L

PVC tube 600 mm
AL tube 1000 mm
Steel tube 1000 mm
ROLLER CONVEYOR

ROLLER CONVEYOR WITHOUT DRIVE

Subconstruction

Height adjustable

Standard
REQUEST ROLLER CONVEYOR WITHOUT DRIVE

**Standard dimensions**
- Axial distance A: mm
- Roller distance: mm
- Roller width L: mm
- Profile: 45 x 45, 45 x 90

**Operating conditions**
- Goods to be conveyed:
- Unit weight: kg
- Total load: kg
- Temperature goods: °C

**Subconstruction**
- Inlet height He: mm
- Discharge height Ha: mm
- Distance A: mm
- Number of supports: Pcs.
- Supports height adjustable from mm to mm
- Lateral guide: one side, both sides
- Lateral guide 45 x 45: without, low, variable
- Lateral guide 45 x 90: without, high, variable

**Angle bracket for floor fastening**: part no. 21.1112/0
- Floor anchor 12: part no. 21.1115/0
- Wheels: part no.
- Feet: part no.

**Options**
- Roller material: PVC, AL, Steel
- Bearing: Slide bearing, Roller bearing

**Contact details**
- Company
- Contact person
- Phone no.
- Fax no.
- E-Mail

- Please call me back
- Please send me an offer
ROLLER CONVEYOR

ROLLER CONVEYOR WITH DRIVE

Motor arrangement

Plug-on motor
Motor inside
Motor outside, chain tensioner

Load capacity
max. 40 kg/roller
max. 300 kg/Drive

Tube length
max. Tube length L
PVC-Tube 600 mm
AL-Tube 1000 mm
Steel-Tube 1000 mm

Available roller types
fixed drive
friction drive
friction drive, adjustable

Lateral guide
without
variable

Subconstruction
Height adjustable
Standard
ROLLER CONVEYOR

REQUEST ROLLER CONVEYOR WITH DRIVE

**Standard dimensions**
- Axial distance A: __________ mm
- Roller distance: __________ mm
- Roller width L: __________ mm
- Profile: one side __________ both sides __________

**Operating conditions**
- Goods to be conveyed
- Unit weight: __________ kg
- Total load: __________ kg
- Temperature (Goods): __________ °C

**Subconstruction**
- Height H: __________ mm
- Distance A: __________ mm
- Number of supports: __________ Pcs.
- Supports height adjustable from: __________ mm to __________ mm
- Lateral guide: one side __________ both sides __________ lang
- Angle bracket for floor fastening: Part no. 21.1112/0
- Floor anchor 12: Part no. 21.1115/0
- Wheels: Part no. __________
- Feet: Part no. __________

**Drive**
- Motor arrangement: Plug-on motor with chain tensioner inside outside
- Speed: __________ m/min.
- Speed adjustable from: __________ m/min. to __________ m/min.

**Options**
- Roller material: PVC, blue AL Steel VA
- Accumulating rollers Fixed drive
(Rollers with fixed drive and accumulation can be mixed)

**Contact details**
- Company: __________
- Contact person: __________ Please call me back
- Phone no.: __________ Please send me an offer
- Fax no.: __________
- E-Mail: __________
Motor arrangement

Plug-on motor

Flanged motor

Central drive

Subconstruction

Height adjustable

Standard
TIMING BELT CONVEYOR

TIMING BELT CONVEYOR 32

EXAMPLES FOR TIMING BELT CONVEYORS

Single lane with variable strut

Four lanes with standard strut
REQUEST TIMING BELT CONVEYOR 32

**Standard dimensions**
- Axial distance A
- External distance timing belt L
  - Options: single lane, multi-track

**Operating conditions**
- Goods to be conveyed
- Unit weight
- Total belt load
- Temperature of goods

**Subconstruction**
- Inlet height H_e
- Discharge height H_a
- Distance A
- Number of supports
- Supports height adjustable from
  - Options: mm to mm
- Lateral guide
  - Options: one side, both sides, long
- Angle bracket for floor fastening
  - Options: part no. 21.1112/0
- Floor anchor 12
  - Options: part no. 21.1115/0
- Wheels
  - Options: part no.
- Feet
  - Options: part no.

**Drive**
- Motor arrangement
  - Options: Plug-on motor, Flanged motor, Central drive
- Speed
  - Options: m/min.
- Speed adjustable from
  - Options: m/min. to m/min.

**Options**
- Special coatings for timing belt

---

**Contact details**
- Company
- Contact person
- Phone no.
- Fax no.
- E-Mail
  - Options: Please call me back, Please send me an offer
MINITEC CLEAN ROOM CONVEYORS FOR PHOTOVOLTAICS

The versatile MiniTec conveyor technology program has been proven for many years, supplying matched solutions across all industry sectors. Building on these solutions, we have developed a clean room timing belt conveyor and had it tested by Fraunhofer IPA.

With our consistent approach to value and design, our standard timing belt conveyor technology can be used in clean rooms with DIN EN ISO 14644-1 air cleanliness classifications up to 6 with some simple changes. With recognised quality and great value, the conveyor assemblies maintain their versatility through the MiniTec modular range of profiles and components.

Technical Data
- Basic structure of profile 45 or 45 x 90 and 90 x 90
- Width of timing belt 32 mm or 60 mm
- Timing belt with 2 mm polyurethane coating for the transport of glass
- Clean room motor with Spiroplan gears
- Frequency converter to set the belt speed
- Axis offsets and belt width arbitrary
- Compensation for floor unevenness

Options
- Base frame of closed profiles
- Timing belt coating available in yellow or grey
# CLEAN ROOM CONVEYORS

## REQUEST TIMING BELT CONVEYOR CLEAN ROOM

### Standard dimension

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Unit (mm)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Axial distance A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>External distance timing belt L</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of lanes</td>
<td>piece</td>
<td>32 mm (basement of profile 45)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>60 mm (basement of profile 45x90 &amp; 90x90)</td>
</tr>
</tbody>
</table>

### Operating conditions

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Unit (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goods to be conveyed</td>
<td></td>
</tr>
<tr>
<td>Unit weight</td>
<td></td>
</tr>
<tr>
<td>Total belt load</td>
<td></td>
</tr>
</tbody>
</table>

### Subconstruction

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Unit (mm)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inlet height He</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discharge height Ha</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of supports</td>
<td>Pcs.</td>
<td></td>
</tr>
<tr>
<td>Angle bracket for floor fastening</td>
<td>part no. 21.1112/0</td>
<td></td>
</tr>
<tr>
<td>Floor anchor 12</td>
<td>part no. 21.1115/0</td>
<td></td>
</tr>
<tr>
<td>Feet</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Options

<table>
<thead>
<tr>
<th>Option</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour timing belt coating</td>
<td>yellow</td>
<td>grey</td>
</tr>
<tr>
<td>Profile closed t-slots</td>
<td>yes</td>
<td>no</td>
</tr>
</tbody>
</table>

### Drive

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Unit (m/min.)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motor arrangement</td>
<td>cleanroom motor spiroplan</td>
<td></td>
</tr>
<tr>
<td>Speed</td>
<td>m/min.</td>
<td></td>
</tr>
<tr>
<td>Frequency transformer</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>Speed adjustable from</td>
<td>m/min. to m/min.</td>
<td></td>
</tr>
</tbody>
</table>

### Contact details

<table>
<thead>
<tr>
<th>Field</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company</td>
<td>Please call me back</td>
</tr>
<tr>
<td>Contact person</td>
<td>Please send me an offer</td>
</tr>
<tr>
<td>Phone no.</td>
<td></td>
</tr>
<tr>
<td>Fax no.</td>
<td></td>
</tr>
<tr>
<td>E-Mail</td>
<td></td>
</tr>
</tbody>
</table>
The versatile MiniTec conveyor technology program has been successfully proven for many years, supplying numerous solutions across all industry sectors. Many jobs can be solved very economically and quickly with standard conveyors.

We can deliver selected types of standard conveyors within 48 hours.
A standard design and strict production schedule provides the best value and quality of conveyors available.

Technical Data
- Basic construction made of profile 45x45 F
- Cylinder ø 50 mm, steel, zinc plated
- Supporting Sheet: Aluminium, anodized, 2 mm
- Plug in motors with spiroplan gearbox can be configured in various gear reductions
- Underframes in standard design or height adjustable available

Options
- Lateral guides with adjustable holders
- Frequency converter to set the belt speed
1. Basic construction
- Standard dimensions: 150 / 200 / 300 / 400 mm
- Axial distance selectable from 500 to 6000 mm

2. Subconstruction
Without subconstruction or with standard or height-adjustable (± 100 mm).
- Number of bearings: up to axial distance 2 m – 2 piece
  from axial distance 2 m – 3 piece
  per 1 m extension + 1 piece

3. Belts
<table>
<thead>
<tr>
<th>GOODS TO BE CONVEYED</th>
<th>TEMPERATURE</th>
<th>PART NO.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PVC, black, smooth, antistatic</td>
<td>-10° to +90°</td>
<td>29.5019/1</td>
</tr>
<tr>
<td>PU, white, smooth, antistatic</td>
<td>-20° to +110°</td>
<td>29.5019/6</td>
</tr>
<tr>
<td>(Suitable for food products)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PU, green, smooth, antistatic</td>
<td>-20° to +110°</td>
<td>29.5019/8</td>
</tr>
<tr>
<td>Mesh, white, antistatic</td>
<td>-20° to +60°</td>
<td>29.5019/9</td>
</tr>
</tbody>
</table>

4. Lateral guides

Without | Standard | Height adjustable
CONVEYOR 48

OPTIONS

5. Motor arrangement

■ Spiro planetary gear motor

Motor selection table

<table>
<thead>
<tr>
<th>TYPE</th>
<th>PART NO</th>
<th>POWER [W]</th>
<th>OUTPUT SPEED</th>
<th>OUTPUT TORQUE</th>
<th>CONVEYING SPEED</th>
</tr>
</thead>
<tbody>
<tr>
<td>WA10 DT56 M4 - 17</td>
<td>33.0015/0</td>
<td>90</td>
<td>17 rpm</td>
<td>20 Nm</td>
<td>2,6 m/min</td>
</tr>
<tr>
<td>WA10 DT56 M4 - 22</td>
<td>33.0016/0</td>
<td>90</td>
<td>22 rpm</td>
<td>18 Nm</td>
<td>3,4 m/min</td>
</tr>
<tr>
<td>WA10 DT56 M4 - 33</td>
<td>33.0017/0</td>
<td>90</td>
<td>33 rpm</td>
<td>15 Nm</td>
<td>5,1 m/min</td>
</tr>
<tr>
<td>WA10 DT56 L4 - 67</td>
<td>33.0018/0</td>
<td>120</td>
<td>67 rpm</td>
<td>13 Nm</td>
<td>10,5 m/min</td>
</tr>
<tr>
<td>WA10 DT56 L4 - 79</td>
<td>33.0019/0</td>
<td>120</td>
<td>79 rpm</td>
<td>11 Nm</td>
<td>12,4 m/min</td>
</tr>
<tr>
<td>WA10 DT56 L4 - 127</td>
<td>33.0020/0</td>
<td>120</td>
<td>127 rpm</td>
<td>7,7 Nm</td>
<td>19,9 m/min</td>
</tr>
<tr>
<td>WA10 DT56 L4 - 159</td>
<td>33.0021/0</td>
<td>120</td>
<td>159 rpm</td>
<td>6,3 Nm</td>
<td>24,9 m/min</td>
</tr>
</tbody>
</table>

6. Frequency transformer FU 370 PP (Part no. 33.0126/0)

Technical Data

■ Built-in on / off switch
■ Mode 1Q (without brake - Chopper)
■ Powernet overvoltage and undervoltage monitoring
■ Motor load monitoring
■ Short-circuit monitoring phase / phase, phase / earth
■ Adjustable acceleration and deceleration ramp
■ Adjustable voltage boost at low output frequency
■ Power cord with safety plug 230 V and motor cable, ELPUR, 5m long orange safety plug, color
■ EMC filter, Class B
■ IP 66 / NEMA 4X enclosure
■ Equipped with a control unit, which allows operating the drives without additional devices by default.
■ Output power motor side max. Motor power 0.37 kW
■ Rated output current max. 2.3 A
■ Output voltage 3 x 0...230 V
■ 150% overload for 60 seconds
■ Input voltage powergrid side rated voltage 230V
■ Input current 6.7 A
■ Frequency 50 - 60 Hz
■ General data Ambient temperature -10° C to + 40° C
■ Heat loss at rated power 11 W
■ Dimensions H / W / D: 232 x 161 x 179 mm
CONVEYOR 48

REQUEST CONVEYOR 48

<table>
<thead>
<tr>
<th>Standard dimensions</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Axial distance</td>
<td>mm</td>
</tr>
<tr>
<td>Belt width L</td>
<td>150 mm</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Operating conditions</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Goods to be conveyed</td>
<td></td>
</tr>
<tr>
<td>Unit weight</td>
<td>kg</td>
</tr>
<tr>
<td>Total belt load</td>
<td>kg</td>
</tr>
<tr>
<td>Temperature Goods</td>
<td>°C</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Subconstruction</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Inlet height He</td>
<td>mm</td>
</tr>
<tr>
<td>Discharge height Ha</td>
<td>mm</td>
</tr>
<tr>
<td>Type</td>
<td>Without</td>
</tr>
<tr>
<td>Lateral guide</td>
<td>one side</td>
</tr>
<tr>
<td>Number of supports per side</td>
<td>Pcs.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Belt</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>PVC, black</td>
</tr>
<tr>
<td>Lateral guide</td>
<td>PU, white, suitable for food products</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Drive</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Motor arrangement (Plug-on motor)</td>
<td>right</td>
</tr>
<tr>
<td>Conveyor speed</td>
<td>2,6 m/min</td>
</tr>
<tr>
<td></td>
<td>10,5 m/min</td>
</tr>
<tr>
<td></td>
<td>24,9 m/min</td>
</tr>
<tr>
<td>Frequency transformer</td>
<td>yes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Contact details</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Company</td>
<td>Please call me back</td>
</tr>
<tr>
<td>Contact person</td>
<td>Please send me an offer</td>
</tr>
<tr>
<td>Phone no.</td>
<td></td>
</tr>
<tr>
<td>Fax no.</td>
<td></td>
</tr>
<tr>
<td>E-Mail</td>
<td></td>
</tr>
</tbody>
</table>
### CONVEYOR BEARING 45

**part no. 21.0993/0**

<table>
<thead>
<tr>
<th>TECHN. DATA / ITEMS SUPPLIED</th>
<th>APPLICATIONS</th>
<th>ASSEMBLY</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Aluminium GD, powder coated, grey</td>
<td>- Bearing for belt-tensioning cylinders</td>
<td>- Pretighten at the profile groove</td>
</tr>
<tr>
<td>- Self-aligning ball bearing with Ø 17 mm, both sides sealed</td>
<td></td>
<td>- If swivel plates <strong>part no. 29.5001/0</strong> for support fastening are used, they serve as counter bearing for tightening purpose; if not, use multiblock or angles</td>
</tr>
<tr>
<td>- Weight 0.275 kg</td>
<td></td>
<td>- Tighten the conveyor belt by unscrewing the set screw, if necessary reset the tool</td>
</tr>
<tr>
<td>- Version in aluminium GD, with stainless bearing and fastening kit, conveyor bearing 45 H, <strong>part no. 21.0993/5</strong></td>
<td></td>
<td>- Firmly tighten the conveyor bearing (Recommended locking torque: 25 Nm)</td>
</tr>
<tr>
<td>- Stainless version, conveyor bearing 45 VA, <strong>part no. 21.0979/0</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### CONVEYOR BEARING 45 WITH BORE

**part no. 21.0993/1**

<table>
<thead>
<tr>
<th>TECHN. DATA / ITEMS SUPPLIED</th>
<th>APPLICATIONS</th>
<th>ASSEMBLY</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Aluminium GD, powder coated, grey</td>
<td>- Bearing for belt-tensioning cylinders</td>
<td>- Pretighten at the profile groove</td>
</tr>
<tr>
<td>- With bore for drive spigot</td>
<td>- Attachment of plug-on motors or chain wheels on shaft; max. Ø 17 mm</td>
<td>- If swivel plates <strong>part no. 29.5001/0</strong> for support fastening are used, they serve as counter bearing for tightening purpose; if not, use multiblock or angles</td>
</tr>
<tr>
<td>- Self-aligning ball bearing with Ø 17 mm, both sides sealed</td>
<td></td>
<td>- Tighten the conveyor belt by unscrewing the set screw, if necessary reset the tool</td>
</tr>
<tr>
<td>- Weight 0.288 kg</td>
<td></td>
<td>- Firmly tighten the conveyor bearing (Recommended locking torque: 25 Nm)</td>
</tr>
<tr>
<td>- Version in aluminium GD, with stainless bearing and fastening kit, conveyor bearing 45 H, <strong>part no. 21.0993/6</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Stainless version, conveyor bearing 45 VA with bore, <strong>part no. 21.0980/0</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Weight 0.881 kg</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**CONVEYOR BEARING 45 FOR PLUG ON MOTOR**

**TECHN. DATA / ITEMS SUPPLIED**
- Aluminium GD, powder coated, grey
- Self-aligning ball bearing with Ø 17 mm, both sides sealed
- With thread M8 for torque support
- Fastening kit
- Weight 0.269 kg

**APPLICATIONS**
- MiniTec belt-conveyors with plug on motor (hollow shaft)

**ASSEMBLY**
- Fasten the torque support on thread M8
- Preassemble conveyor bearing at profile end
- If swivel plates part no. 29.5001/0 for floor fastening are used, they serve as counter bearing for tightening purpose; if not, use multiblock or angles
- Tighten the conveyor belt by unscrewing the set screw, if necessary reset the tool
- Firmly tighten the conveyor bearing (Recommended locking torque: 25 Nm)

**CONVEYOR BEARING 45 - 20**

**TECHN. DATA / ITEMS SUPPLIED**
- Aluminium, powder coated, grey
- Self-aligning bearing with bore diameter 20 mm, sealed on both sides
- Fastening kit
- Weight 0.574 kg

**APPLICATIONS**
- MiniTec belt conveyor for push-on motors with hollow shafts diameter 20 mm in connection with torque support part no. 29.0536/0 or 29.0537/0 and cylinder part no. 29.0524/0

**ASSEMBLY**
- First mount the conveyor bearing on the end of the profile
- Tighten the conveyor bearing (recommended torque: 25 Nm)
Belt Tensioning Cylinder 45 ST

**Techn. Data / Items Supplied**
- Steel, zinc plated
- Turned spherically
- Weight 14.8 kg/m
- Please specify dimension L (belt width)
- Attention: L is not the outer diameter of the conveyor Ø50

**Applications**
- Minitec belt conveyor system
- Use suitable conveyor bearing part no. 21.0993/0
- On demand we can deliver the conveyor with mounted ball-bearing. The ball-bearings are gentle and warm pressed on. Please order part no. 21.0901/0

**Assembly**
- Insert the axle in the conveyor bearing assembly bore
- The cylinder is fixed axially by the self-aligning ball bearings
- The self-aligning ball bearings compensate light misalignments

Belt Driving Cylinder 45

**Techn. Data / Items Supplied**
- Steel, zinc plated
- Turned spherically
- Journal max. Ø17
- Weight 15.3 kg/m
- Please indicate belt width L and dimensions A, B, C, D and E (if > Ø17 mm)
- Attention: L is not the outer diameter of the conveyor Ø50

**Applications**
- Minitec belt conveyor system
- Use suitable conveyor bearing part no. 21.0993/0
- On demand we can deliver the conveyor with mounted ball-bearing. The ball-bearings are gentle and warm pressed on. Please order part no. 21.0900/0

**Assembly**
- Insert belt driving cylinder in conveyor bearing with bore part no. 21.0993/1
- Mount the conveyor bearing part no. 21.0993/0 on the opposite side
- The self-aligning ball bearings compensate light misalignments
BELT DRIVING CYLINDER 45 ST FOR PLUG-ON MOTOR D14

**PART NO.** 29.5023/0

**TECHN. DATA / ITEMS SUPPLIED**
- Steel, zinc plated
- Turned spherically
- Axle Ø14, driving side suitable for fastening the plug-on motor
- Weight 15.3 kg/m
- Please specify dimension L (belt width)
- Attention: L is not the outer diameter of the conveyor Ø50

**APPLICATIONS**
- Minitec belt conveyor systems DSGM with torque support
- Suitable for Minitec plug-on motor with torque support
- On demand we can deliver the conveyor with mounted ball-bearing. The ball-bearings are gentle and warm pressed on. Please order part no. 21.0900/0

**ASSEMBLY**
- Insert the belt driving cylinder in the conveyor bearing for plug-on motor part no. 21.0993/0
- Mount the conveyor bearing part no. 21.0993/0 on the opposite side

---

BELT DRIVING CYLINDER 45 FOR PLUG-ON MOTOR D20

**PART NO.** 29.5042/0

**TECHN. DATA / ITEMS SUPPLIED**
- Steel, zinc plated
- Turned spherically
- Axle Ø20 mm, driving side suitable for fastening the plug-on motor
- Weight 15.3 kg/m
- Please specify dimension L (belt width)
- Attention: L is not the outer diameter of the conveyor Ø50

**APPLICATIONS**
- Minitec belt conveyor systems DSGM with torque support Wa 20 and WA 30
- Suitable for Minitec plug-on motor with torque support type 90
- On demand we can deliver the conveyor with mounted ball-bearing. The ball-bearings are gentle and warm pressed on. Please order part no. 21.0900/0

**ASSEMBLY**
- Insert the belt driving cylinder in the conveyor bearing for plug-on motor 45-20 part-N° 21.0917/0
- Mount the conveyor bearing part no. 21.0993/0 on the opposite side
**BELT DRIVING CYLINDER 45 ST FOR MOTOR KIT**

**part no. 29.5022/0**

**TECHN. DATA / ITEMS SUPPLIED**
- Steel, zinc plated
- Turned spherically
- Axle Ø17 mm, driving side suitable for fastening the chain wheel of motor fastening kit
- Weight 15.3 kg/m
- Please specify dimension L (belt width)
- Attention: L is not the outer diameter of the conveyor Ø50

**APPLICATIONS**
- Can only be used with the MiniTec belt conveyor kit 45
- On demand we can deliver the conveyor with mounted ball-bearing. The ball-bearings are gentle and warm pressed on. Please order part no. 21.0900/0

**ASSEMBLY**
- Insert the belt driving cylinder in the bearing housing on the motor side
- Mount the conveyor bearing part no. 21.0993/0 on the opposite side
- The self-aligning ball bearings compensate light misalignments

---

**MOTOR ATTACHMENT KIT 45 Ø 16 MM**

**part no. 29.5030/0**

**TECHN. DATA / ITEMS SUPPLIED**
- Motor plate and cover, steel, powder coated, grey
- Housing with self aligning
- Chain wheel bored for motor-shaft Ø16 mm
- 2 chain wheels with driving chain
- Fastening kit
- Weight 3.06 kg

**APPLICATIONS**
- Belt-conveyors made of MiniTec aluminium profiles
- Suitable for attachment of spur wheel back-gearred motors; flange Ø 120 mm
- Belt driving cylinder part no. 29.5022/0 and belt tensioning cylinder part no. 21.0994/0

**ASSEMBLY**
- Screw flange plate on basic frame; mount housing with bearing
- Insert belt driving cylinder; mount conveyor bearing part no. 21.0993/0 on the opposite side
- Mount motor and chain wheels and tension chain
- Mount cover
MOTOR ATTACHMENT KIT 45 Ø 20 MM

**TECHN. DATA / ITEMS SUPPLIED**
- Motor plate and cover, steel, powder coated, grey
- Housing with self aligning
- Chain wheel bored for motor-shaft Ø 20mm
- 2 chain wheels with driving chain
- Fastening kit
- Weight 3.06 kg

**APPLICATIONS**
- Belt-conveyors made of MiniTec aluminium profiles
- Suitable for attachment of spur wheel back-gearred motors; flange Ø 120 mm
- Belt driving cylinder part no. 29.5022/0 and belt tensioning cylinder part no. 21.0994/0

**ASSEMBLY**
- Screw flange plate on basic frame; mount housing with bearing
- Insert belt driving cylinder; on the opposite side use conveyor bearing part no. 21.0993/0
- Mount motor and chain wheels and tension chain part no. 21.0993/0
- Mount cover

CONVEYOR BEARING 90

**TECHN. DATA / ITEMS SUPPLIED**
- Aluminium GD, powder coated, grey
- Self-aligning ball bearing with Ø 25 mm, both sides sealed
- Weight 0.9 kg

**APPLICATIONS**
- Storage of bend- and drive pulley by belt conveyors

**ASSEMBLY**
- Preassemble conveyor bearing at profile end
- As counter bearing for tightening of connection plate 45 x 90
- Tighten the conveyor belt by unscrewing the set screw, if necessary reset the tool as often as needed
- Firmly tighten the conveyor bearing (Recommended locking torque: 25 Nm)
CONVEYOR BEARING 90 WITH BORE

<table>
<thead>
<tr>
<th>TECHN. DATA / ITEMS SUPPLIED</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Aluminium OD, powder coated, grey</td>
</tr>
<tr>
<td>- With bore for drive spigot</td>
</tr>
<tr>
<td>- Self-aligning ball bearing with Ø 25 mm, both sides sealed</td>
</tr>
<tr>
<td>- Weight 0.9 kg</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>APPLICATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Storage of bend- and drive pulley by belt conveyors</td>
</tr>
<tr>
<td>- Attachment of motors or chain wheels, or belt pulleys on shaft; max. Ø 25 mm</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ASSEMBLY</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Preassemble conveyor bearing at profile end</td>
</tr>
<tr>
<td>- As counter bearing for tightening of connection plate 32 x 90 or 45 x 90</td>
</tr>
<tr>
<td>- Tighten the conveyor belt by unscrewing the set screw, if necessary reset the tool as often as needed</td>
</tr>
<tr>
<td>- Firmly tighten the conveyor bearing (Recommended locking torque: 25 Nm)</td>
</tr>
</tbody>
</table>

BELT TENSIONING CYLINDER 90

<table>
<thead>
<tr>
<th>TECHN. DATA / ITEMS SUPPLIED</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Aluminium with shaft made of steel</td>
</tr>
<tr>
<td>- Turned spherically</td>
</tr>
<tr>
<td>- Axle Ø 25 mm</td>
</tr>
<tr>
<td>- Weight 15.8 kg/m</td>
</tr>
<tr>
<td>- Please specify dimension L (belt width)</td>
</tr>
<tr>
<td>- Attention: L is not the outer diameter of the conveyor Ø95</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>APPLICATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>- MiniTec belt conveyor system</td>
</tr>
<tr>
<td>- Use suitable conveyor bearing part no. 21.0985/0</td>
</tr>
<tr>
<td>- On demand we can deliver the conveyor with mounted ball-bearing. The ball-bearings are gentle and warm pressed on. Please order part no. 21.0903/0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ASSEMBLY</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Insert axes in the bore of the self-aligning bearings of the conveyor bearing</td>
</tr>
<tr>
<td>- The cylinder is fixed axially by the self-aligning ball bearings</td>
</tr>
<tr>
<td>- The self-aligning ball bearings compensate light misalignments</td>
</tr>
</tbody>
</table>
**BELT DRIVING CYLINDER 90**

**TECHN. DATA / ITEMS SUPPLIED**
- Aluminium with shaft made of steel
- Turned spherically
- Axle Ø 25 mm
- Weight 16.2 kg/m
- Please specify dimension L (belt width) as well as dimensions A, B, C, D and E (if > Ø 25 mm)
- Attention: L is not the outer diameter of the conveyor Ø95

**APPLICATIONS**
- MiniTec belt conveyor system
- Use suitable conveyor bearing part no. 21.0985/0 and part no. 21.0985/1
- On demand we can deliver the conveyor with mounted ball-bearing. The ball-bearings are gentle and warm pressed on. Please order part no. 21.0902/0
- Insert belt driving cylinder in conveyor bearing with bore part no. 21.0985/1
- Mount on opposite conveyor bearing part no. 21.0985/0
- The self-aligning ball bearings compensate light misalignments

**BELT DRIVING CYLINDER 90 FOR MOTOR KIT 90**

**TECHN. DATA / ITEMS SUPPLIED**
- Steel, zinc plated
- Turned spherically
- Axle Ø 20 mm
- Weight 15.3 kg/m
- Please specify dimension L (belt width)
- Attention: L is not the outer diameter of the conveyor Ø95

**APPLICATIONS**
- MiniTec belt conveyor system with motor kit 90 part no. 29.5031/0 and drum bearing part no. 21.0985/0
- On demand we can deliver the conveyor with mounted ball-bearing. The ball-bearings are gentle and warm pressed on. Please order part no. 21.0902/0
- Insert the belt driving cylinder in the bearing housing on the motor side
- Mount the conveyor bearing part no. 21.0985/0 on the opposite side
# MOTOR KIT 90

**TECHN. DATA / ITEMS SUPPLIED**
- Motor plate and cover, steel, powder coated, grey
- Housing with self aligning
- Belt driving cylinder Ø 20 mm
- Timing belt 32 AT 10
- Fastening kit
- Weight: 6.3 kg

**APPLICATIONS**
- Belt conveyors made of MiniTec aluminium profiles 90
- Suitable for attachment of spur wheel back-gearred motors; hollow shaft Ø 20 mm flange Ø 120 mm

**ASSEMBLY**
- Screw flange plate on basic frame; mount housing with bearing
- Mount motor and tension timing belt
- Insert belt driving cylinder; mount conveyor bearing part no. 21.0985/0 on the opposite side
- Mount cover

**TORQUE SUPPORT WA 20**

**TECHN. DATA / ITEMS SUPPLIED**
- Torque support steel, powder coated grey
- Fastening kit for type 90
- Weight: 0.432 kg

**APPLICATIONS**
- Minitec belt conveyors
- Attachment of plug-on motor DSGM 180 and DSGM 250 for MiniTec belt conveyors 45 and 90
- Type 90: Use suitable belt driving cylinder part no. 29.5035/0 and conveyor bearing part no. 21.0985/1
- Type 45: Use suitable belt driving cylinder part no. 29.5042/0 and conveyor bearing part no. 21.0917/0
- Type 45: Use screw M8 x 20 (not in scope of delivery)

**ASSEMBLY**
- Fasten torque support onto motor
- Attach motor on belt driving cylinder
- Fasten torque support
**TORQUE SUPPORT WA 30**

**PART NO.** 29.5037/0

**TECHN. DATA / ITEMS SUPPLIED**
- Torque support steel, powder coated grey
- Fastening kit for type 90
- Weight 0.516 kg

**APPLICATIONS**
- MiniTec belt conveyors
- Attachment of plug-on motor DSGM 370 and DSGM 550 for MiniTec belt conveyors 90
- Type 90: Use suitable belt driving cylinder part no. 29.5035/0 and conveyor bearing part no. 21.0985/1
- Type 45: Use suitable belt driving cylinder part no. 29.5042/0 and conveyor bearing part no. 21.0917/0

**ASSEMBLY**
- Fasten torque support onto motor
- Attach motor on belt driving cylinder
- Fasten torque support
- Type 45: use screw M8 x 20 (not in scope of delivery)

**DRUM BEARING LEFT KNIFE EDGE**

**PART NO.** 29.5312/0

**TECHN. DATA / ITEMS SUPPLIED**
- Applications
- Deep groove ball bearing with Ø 8 mm bore
- All transfer systems TSG
- Weight 0.375 kg/m

**APPLICATIONS**
- Knife edge return shaft bearing
- For small transport goods and light loads

**ASSEMBLY**
- Use fastening kit
- Align shaft exactly with angle to avoid offset for the bearing
DRUM BEARING RIGHT KNIFE EDGE

**TECHN. DATA / ITEMS SUPPLIED**
- Aluminium, natural anodized
- Deep groove ball bearing with Ø 8 mm bore
- Fastening kit
- Weight 0.375 kg/m

**APPLICATIONS**
- Knife edge return shaft bearing
- For small transport goods and light loads

**ASSEMBLY**
- Use fastening kit
- Align shaft exactly with angle to avoid offset for the bearing

RETURN SHAFT 16 KNIFE EDGE

**TECHN. DATA / ITEMS SUPPLIED**
- Steel
- Not spherical
- Shaft journal Ø 8 mm
- Weight 1.578 kg/m
- Please specify dimension L (belt width), max. 300 mm

**APPLICATIONS**
- Return shaft for knife edge belt
- For small transport goods and light loads

**ASSEMBLY**
- Align shaft exactly with bracket to avoid misalignment for the bearing
**CENTER DRIVE - 3 WHEELS SYSTEM**

**TECHN. DATA/ITEMS SUPPLIED**
- Weight: 0.820 kg/m
- Ball bearings on both sides
- With complete installation material, without motor

For part no. 29.5260/0:
- Weight with drive Ø 50 mm: 50.800 kg/m

For part no. 29.5261/0:
- Weight with drive Ø 70 mm: 70.566 kg/m

**APPLICATIONS**
- Space saving drive
- Motor below conveyor
- Suitable for nosebar on both ends

**ASSEMBLY**
- First install sheets
- Assemble driving drum, tensioning drive and bearing housing
- Assemble sprocked wheel, chain and motor. Adjust belt-tension after that

---

**SWIVEL PLATE**

**TECHN. DATA/ITEMS SUPPLIED**
- Steel, powder coated, grey
- Fastening kit
- Weight: 0.377 kg

For stainless version part no. 29.5012/0:
- Stainless version part no. 29.5012/0

**APPLICATIONS**
- Attachment of the sub-structure on MiniTec belt conveyor
- Also suitable for inclined belt conveyors
- The swivel plate is also used as a counterbearing to tighten the belt
- Range ± 35°

**ASSEMBLY**
- Fasten at the conveyor profiles at the subconstruction fastening kit using
SUPPORTING SHEET

part no. 29.5010/0

TECHN. DATA / ITEMS SUPPLIED
- Aluminium, anodized
- Thickness: 2 mm
- Bored, ready for use
- Weight 5.4 kg/m²
- Stainless version part no. 29.5010/1

APPLICATIONS
- Support for conveyor belts
- For MiniTec conveyor systems

ASSEMBLY
- Screw with counter sunk screws M5 x 16 and square nut M5 on profile

SUPPORT ROLLER KIT

part no. 29.5002/0

TECHN. DATA / ITEMS SUPPLIED
- Support roller kit, PVC
- Ball bearings on both sides
- 2 profile supports
- 2 mounting angles
- Fastening kit
- Weight 0.487 kg
- Please specify dimension L (belt width)

APPLICATIONS
- MiniTec belt conveyor system
- As a support for the lower side of long belt conveyors
- We recommend to install one support roller for each intermediate support on the belt conveyor
- Use this support roller kit only with belt width > 115 mm

ASSEMBLY
- Preassemble the profile roller support on the conveyor supports; use the angles
- Clip the support roller fastening kit
- Slide the roller in appropriate position and tighten the screws
## TRANSPORT ROLLER 50-25

<table>
<thead>
<tr>
<th>TECHN. DATA / ITEMS SUPPLIED</th>
<th>APPLICATIONS</th>
<th>ASSEMBLY</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Completely mounted transport roller</td>
<td>- Production of roller conveyors with or without drive</td>
<td>- Clip in roller support</td>
</tr>
<tr>
<td>optional PVC-tube or Alu-tube</td>
<td></td>
<td>- Use with roller support 25</td>
</tr>
<tr>
<td>- Please indicate dimension L</td>
<td></td>
<td>part no. 22.1196/0</td>
</tr>
<tr>
<td>- Transport roller PVC part no. 21.0890/0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Transport roller Al part no. 21.0892/0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## TRANSPORT ROLLER 50-36

<table>
<thead>
<tr>
<th>TECHN. DATA / ITEMS SUPPLIED</th>
<th>APPLICATIONS</th>
<th>ASSEMBLY</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Completely mounted transport roller</td>
<td>- Production of roller conveyors with or without drive</td>
<td>- Clip in roller support</td>
</tr>
<tr>
<td>optional PVC-tube or Alu-tube</td>
<td></td>
<td>- As roller support we recommend door catch</td>
</tr>
<tr>
<td>- Load max. (roller) 20 kg</td>
<td></td>
<td>part no. 21.1190/0</td>
</tr>
<tr>
<td>- Please specify dimension L</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Transport roller PVC part no. 21.1717/0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Transport roller Al part no. 21.1716/0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
TRANSPORT ROLLER S 50-25

TECHN. DATA / ITEMS SUPPLIED
- Completely mounted transport roller, optional PVC-tube or Alu-tube
- With ball bearings and shaft
- Please indicate dimension L
- Transport roller PVC part no. 21.0891/0
- Transport roller Al part no. 21.0895/0

APPLICATIONS
- Production of roller conveyors without drive

ASSEMBLY
- Clip in roller support
- Use with roller support 25 part no. 21.1196/0

TRANSPORT ROLLER S 50-36

TECHN. DATA / ITEMS SUPPLIED
- Completely mounted transport roller, PVC-tube
- With ball bearings and shaft
- Please indicate dimension L
- Transport roller PVC part no. 21.1790/0S
- Transport roller Al part no. 21.1718/0S

APPLICATIONS
- Production of roller conveyors without drive

ASSEMBLY
- Clip in roller support
- Use with roller support 36 part no. 22.1190/0
### BRAKE-ROLLER PVC 50

**Part no.** 21.2250/0

**Techn. Data / Items Supplied**
- PVC, blue
- Fastening kit
- Weight 0.295 kg
- Weight + 0.45 kg/m

**Applications**
- To decelerate transport boxes on sloped roller conveyors

**Assembly**
- Mount lateral support on frame of roller conveyor
- Clip brake-roller and adjust height with stud bolts
- The brake-roller can be adjusted in height + / - 5 mm

### TUBE AL 50 X 2

**Part no.** 20.1041/0

**Techn. Data / Items Supplied**
- AlMgSi 0.5 F22, natural
- Recommended tube length: max. 1000 mm
- Weight 0.820 kg/m
- Length 6 m
- Please indicate needed tube length

**Applications**
- Transport rollers at any length for driven or non-driven roller conveyors

**All Transfer Systems TSG**
- Use bearing assembly S bearing assembly for transport roller
**TUBE PVC 50 X 2**

**TECHN. DATA / ITEMS SUPPLIED**
- PVC, grey
- Recommended tube length: max. 1000 mm
- Weight 0.420 kg/m
- Length 3 m
- Please indicate needed tube length

**APPLICATIONS**
- Transport rollers at any length for driven or non-driven roller conveyors

**ASSEMBLY**
- Use bearing assembly 5 or bearing assembly for transport roller

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**BEARING ASSEMBLY FOR TRANSPORT ROLLERS 25**

**TECHN. DATA / ITEMS SUPPLIED**
- Bearing bush, PA 6
- Axle bolt, steel
- Roller support, PA 6
- Fastening kit
- For transport rollers of 60 - 1000 mm
- Weight 0.42 kg
- Load max. (roller) 20 kg

**APPLICATIONS**
- Roller conveyors at any length
- Drive via round belt Ø 5 mm possible
- The rollers can be replaced individually

**ASSEMBLY**
- Attachment of the roller support on all profiles possible
- Mount roller support
- Press bearing assembly into the tube
- Insert axle bolt
**BEARING ASSEMBLY FOR TRANSPORT ROLLERS 36**

*part no. 21.1056/0*

**TECHN. DATA / ITEMS SUPPLIED**
- Housing PA with slide-bearing
- Axle bolt, steel
- Roller support, PA 6
- Fastening kit
- For transport rollers of 60 - 1000 mm
- Weight 0.42 kg
- Load max. (roller) 20 kg

**APPLICATIONS**
- Roller conveyors at any length
- Drive via round belt Ø 5 mm possible
- The rollers can be replaced individually

**ASSEMBLY**
- Attachment of the roller support on all profiles possible
- Mount roller support
- Press bearing assembly into the tube
- Insert axle bolt

---

**BEARING ASSEMBLY S 25**

*part no. 21.0893/0*

**TECHN. DATA / ITEMS SUPPLIED**
- Housing steel with ball bearing
- Securing clip, steel
- Roller support, PA 6
- Fastening kit
- For transport rollers of 60 - 1000 mm
- Weight 0.42 kg
- Load max. (roller) max. 33 kg

**APPLICATIONS**
- Roller conveyors at any length
- The rollers can be replaced individually

**ASSEMBLY**
- Attachment of the roller support on all profiles possible
- Press bearing assembly into the tube
- Conduct spindle Ø 8 mm and clip on
- Clip in transport roller
**BEARING ASSEMBLY S 36**

**TECHN. DATA / ITEMS SUPPLIED**
- Housing steel with ball bearing
- Securing clip, steel
- Roller support, PA 6
- Fastening kit
- For transport rollers of 60 - 1000 mm
- Weight 0.42 kg
- Load max. (roller) max. 33 kg

**APPLICATIONS**
- Roller conveyors at any length
- The rollers can be replaced individually

**ASSEMBLY**
- Attachment of the roller support on all profiles possible
- Press bearing assembly into the tube
- Conduct spindle Ø8 mm and clip on
- Clip in transport roller

**PULLEY CARRIER 25**

**TECHN. DATA / ITEMS SUPPLIED**
- PP, grey
- Fastening kit steel, zinc-plated
- Weight 0.018 kg
- Load capacity 15 kg/Träger

**APPLICATIONS**
- To assemble roller conveyors with variable spacing of rollers
- Smallest possible roller Ø 25 mm
- Roller axis Ø 8 mm

**ASSEMBLY**
- Mount pulley carrier onto profile at desired distance
- Insert axle of transport roller into pulley carrier
- Press locking device for axis shut
### PULLEY CARRIER 36

**Techn. Data / Items Supplied**
- PP, grey
- Fastening kit steel, zinc-plated
- Weight: 0.018 kg
- Load capacity: 15 kg

**Applications**
- To assemble roller conveyors with variable spacing of rollers
- Smallest possible roller Ø 25 mm
- Roller axis Ø 8 mm

**Assembly**
- Mount pulley carrier onto profile at desired distance
- Insert axle of transport roller into pulley carrier
- Press locking device for axis shut

---

### LATERNAL GUIDE SUPPORT, SHORT

**Techn. Data / Items Supplied**
- ABS, grey
- Distance bolt, stainless steel
- With fastening material steel, zinc plated
- Weight: 0.097 kg

**Applications**
- Adjustable lateral guide for MiniTec roller conveyor, conveyor belt etc.
- We recommend approx. 300 mm distance between the supports

**Assembly**
- Slide square nut into base frame of conveyor and adjust the support
- Adjust height and distance
- Mount the lateral guide
**LATERAL GUIDE SUPPORT, LONG**

**APPLICATIONS**
- Adjustable lateral guide for MiniTec roller conveyors, belt conveyors etc.
- We recommend approx. 300 mm distance between the supports
- Larger adjustment range of lateral support part no. 29.5047/0

**ASSEMBLY**
- Slide square nut into base frame of conveyor and adjust the support
- Adjust height and distance
- Mount the lateral guide

**TECHN. DATA / ITEMS SUPPLIED**
- Abs, grey
- Distance bolt, stainless steel
- With fastening material steel, zinc plated
- Weight 0.104 kg

---

**LATERAL GUIDE SUPPORT U-SHAPED**

**APPLICATIONS**
- Adjustable lateral guide for MiniTec roller conveyors, belt conveyors etc.
- We recommend approx. 300 mm distance between the supports
- Lateral guide can be completely pushed down onto the roller conveyor or belt conveyor, for flat goods to be conveyed

**ASSEMBLY**
- Slide square nut into base frame of roller conveyor or belt conveyor and fasten lateral guide
- Adjust height and distance
- Mount the lateral guide

**TECHN. DATA / ITEMS SUPPLIED**
- Abs, grey
- Distance bolt, stainless steel
- With fastening material steel, zinc plated
- Weight 0.108 kg
### CLAMP SUPPORT 10

<table>
<thead>
<tr>
<th>TECHN. DATA / ITEMS SUPPLIED</th>
<th>APPLICATIONS</th>
<th>ASSEMBLY</th>
</tr>
</thead>
<tbody>
<tr>
<td>- 1.4301 / steel zinc plated</td>
<td>- Adjustable lateral guides for MiniTec belt conveyors</td>
<td>- Mount on profile groove</td>
</tr>
<tr>
<td>- Fastening kit</td>
<td>- Recommended distance between the lateral guides approx. 500 mm</td>
<td></td>
</tr>
<tr>
<td>- Weight 0,0431 kg</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### LATERAL GUIDE 70 SUPPORT

<table>
<thead>
<tr>
<th>TECHN. DATA / ITEMS SUPPLIED</th>
<th>APPLICATIONS</th>
<th>ASSEMBLY</th>
</tr>
</thead>
<tbody>
<tr>
<td>- PA, grey</td>
<td>- Adjustable lateral guides for MiniTec belt conveyors</td>
<td>- Set the height and tighten</td>
</tr>
<tr>
<td>- Distance bolt, stainless steel</td>
<td>- We recommend: approx. 500 mm distance between the supports</td>
<td>the screws</td>
</tr>
<tr>
<td>- With fastening material steel, zinc plated</td>
<td></td>
<td>- Mount the lateral guide</td>
</tr>
<tr>
<td>- Weight 0,288 kg</td>
<td></td>
<td>- Adjust lateral distance bolt</td>
</tr>
</tbody>
</table>

- Mount the lateral guide
- Adjust lateral distance bolt
### LATERAL GUIDE 140 SUPPORT

- **TECHN. DATA / ITEMS SUPPLIED**
  - PA, grey
  - Distance bolt, stainless steel
  - With fastening material steel, zinc plated
  - Weight: 0.350 kg

- **APPLICATIONS**
  - Adjustable lateral guides for MiniTec belt conveyors
  - Recommended distance between the supports: approx. 500 mm

- **ASSEMBLY**
  - Set the height and tighten the screws
  - Mount the lateral guide
  - Adjust lateral distance bolt

---

### LATERAL GUIDE 70 SUPPORT S

- **TECHN. DATA / ITEMS SUPPLIED**
  - PA, grey
  - Distance bolt: stainless steel
  - Fastening kit
  - Weight: 0.2883 kg

- **APPLICATIONS**
  - Adjustable lateral guide for MiniTec belt conveyors
  - Recommended distance between the lateral guides approx. 500 mm

- **ASSEMBLY**
  - Adjust height and tighten screws
  - Mount lateral guide
  - Adjust lateral distance bolt
LATERAL GUIDE 140 SUPPORT S

**TECHN. DATA / ITEMS SUPPLIED**
- PA, grey
- Distance bolt: stainless steel
- Fastening kit
- Weight 0.350 kg

**APPLICATIONS**
- Adjustable lateral guide for MiniTec belt conveyors
- Recommended distance between the lateral guides approx. 500 mm

**ASSEMBLY**
- Adjust height and tighten screws
- Mount lateral guide
- Adjust lateral distance bolt

---

LATERAL GUIDE

**TECHN. DATA / ITEMS SUPPLIED**
- Aluminium, E6/EV1
- Sliding profile PE
- Weight 0.551 kg/m
- Length 6 m

**APPLICATIONS**
- Adjustable lateral guide for conveyors
- Recommended length: axial distance A + 40 mm

**ASSEMBLY**
- Slide the M8 square nuts with position fixing into the groove
- Screw the lateral guide on the distance bolt
- suitable end cap part no. 22.1180/0
**LATERAL GUIDE F**

**Part no. 29.5049/0**

**Techn. Data / Items Supplied**
- Aluminium, E6/EV1
- Slide profile, PE, natural
- Weight 0.527 kg/m
- Length 6 m

**Applications**
- Adjustable lateral guidance for MiniTec chain conveyors, belt conveyors and roller conveyors

**Assembly**
- Slide square nut M08 (fastening kit) from lateral guide support into groove
- Mount support to lateral guide and adjust it
- Suitable end cap part no. 22.1180/0

---

**LATERAL 40 F GUIDE, WHITE**

**Part no. 29.5051/0**

**Techn. Data / Items Supplied**
- Aluminium, E6/EV1
- Slide profile, PE, natural
- 2 x slide PA, grey
- Weight 0.645 kg/m
- Length max. 6 m
- Other colours and designs on request, e.g. green, black, grey, black antistatic

**Applications**
- Adjustable lateral guidance for MiniTec chain conveyors, belt conveyors and roller conveyors

**Assembly**
- Slide square nut M08 (fastening kit) from Lateral guide support into groove
- Mount support to lateral guide and adjust it
**SPACER**

**TECHN. DATEN / ITEMS SUPPLIED**
- Spacer 39, PP black, part no. 22.1197/0
- Spacer 44, PP black, part no. 22.1198/0
- For shaft ø 8 mm
- Weight 0,002 kg

**APPLICATIONS**
- For manufacturing roller conveyors with equal pitch spacing
- Suitable for all system grooves
- Possible pitch 40 und 79

**ASSEMBLY**
- Push in groove, alternating spacer and conveyor roller
- Clamp the first and the last spacer

---

**DRIVING BELT NBR**

**TECHN. DATA / ITEMS SUPPLIED**
- NBR, black
- Ø = 5 mm
- A = 80 mm
- For other lengths see selection table on the right

**APPLICATIONS**
- Attachment of transport rollers at insufficient places via groove in bearing assembly from roller to roller

**ASSEMBLY**
- Insert belt in groove of the first roller and clip roller in the bearing
- Strip belt over second roller and clip in roller support
**DRIVING BELT PU**

**TECHN. DATA / ITEMS SUPPLIED**
- PU, green
- Ø = 5 mm
- Length 550 mm

**APPLICATIONS**
- Drive of transport rollers via groove in bearing assembly

**ASSEMBLY**
- Strip driving belt over driving shaft
- Lay driving belt in groove of transport
- Bind rollers at insufficient places with driving belt NBR part no. 21.1050/1 to part no. 21.1050/6

**SUPPORT BEARING 20**

**TECHN. DATA / ITEMS SUPPLIED**
- Housing, steel, zinc plated
- Fastening kit
- Bore Ø 20 mm
- stat. Co = 6350 N
- dyn. C = 13000 N
- Weight 0.19 kg

**APPLICATIONS**
- Driving of roller-conveyors with driving belts

**ASSEMBLY**
- With fastening kit
- Lead shaft trough bearing and secure with set screw
Flexibility in production is gaining more and more importance. Fast and easy adaptation to product development and changed market demands are a decisive factor for success. The TSG transfer system is in keeping with this trend. All the advantages of our construction kit system for machine construction and the precision of our linear system are used in this system. The TSG is completely compatible with the tried and tested MiniTec profile system with workstations, protective devices, conveyor systems, handling equipment, etc. Manual stations and complex automated processes can be achieved cost-effectively with the TSG transfer system.

The TSG consists of standardized modules that can be combined in any number of ways to create tailormade systems. Robust 25 TS timing belts with steel reinforcement allow continuous use without the need for re-tensioning. The TSG transfer systems can be supplied as modules for assembly by the customer or as ready-to-use systems including commissioning. We can also take care of the design and layout of the system in accordance with customer specifications. For simple requirements, the checklists in the appendix to this catalog can be used.

**Technical Data**

- **Speed:** 11 m/min
- **Motor nominal power:** 120 W
- **Nominal voltage**
  - (without Frequency transformer): 400 V/50 Hz
  - (with Frequency transformer): 230 V/50 Hz
- **Nominal current:** 0.29 A
- **Drive speed:** 64 1/min
- **Drive torque:** 13 Nm
- **Distributed load:** 1710 N
- **Ambient temperature:** 0° bis 50°C

Other speeds are available from 5.5 to 21 m/min. The maximum distributed load is 1710 N. At speeds greater than 11 m/min the maximum distributed load is reduced.
**TRANSFERSYSTEM TSG**

**SYSTEM CONCEPTS**

Vertical circuit

- Advantage: low space requirement

Basic loop 90°

- Advantage: low investment, simple assembly, minimal control requirements

Compact circuit 180°

- Advantage: low space requirement and investment, easy assembly

U-circuit with lifting station

- Advantage: very accessible, optimal use of surface area
### SYSTEM CONCEPTS

**Double-U circuit**

Advantage: optimal use of area, accessibility to entire conveyor line.

**Shunt**

Advantage: Diversion from main cycle, great flexibility for adaptation and capacity.

**Combination of different variants**

Advantage: optimal use of space, accessibility to entire conveyor line.
### BASIC LINE

**TECHN. DATA / ITEMS SUPPLIED**
- Profile 45 x 90 anodized, E6/EV1 with 4 integrated pneumatic lines
- Slide strip, PE, black, highly abrasion resistant, Lmax: 2 m
- Cover profile for belt with clip attachment
- Track width: 200 mm
- Line length according to specification
- \( I_x = 112,823 \text{ cm}^3 \)
- \( I_y = 28,526 \text{ cm}^3 \)
- Weight: 3,667 kg/m
- Line length min. 270 mm
- Line length max. 4000 mm

**APPLICATIONS**
- Use in all TSG transfer systems
- Max. line load depends on drive concept
- When exceeding the total load per section, please devide into several sections

**ASSEMBLY**
- Bolt basic line with supports
- After attachment of drive unit, diversions and timing belts, clip cover profile onto underside of profile
- Free profile grooves for attaching stoppers, sensors, switches, etc. With standard screws

### BASIC MODULE 200

**TECHN. DATA / ITEMS SUPPLIED**
- Drive unit with integrated belt tensioners comprising 2 belt drives with connecting shaft and 1 motor
- 4 timing belt reverse units for 25 T5 timing belt
- Track width 200 mm

**APPLICATIONS**
- All TSG transfer systems with 25 T5 timing belt

**ASSEMBLY**
- Remove drive unit cover
- Screw drive unit securely with attachment set centrally on the bottom of the basic line
- Remove covers from reverse units
- Attach reverse units with profile connectors to ends of the basic line
- Insert timing belt
- Install cover of drive units and reverse units
- Tighten timing belt
- Easy re-tightening of timing belt at drive unit, without prior disassembly, also during operation
### BASIC MODULE VARIABLE

**part no. 43.0011/0**

**TECHN. DATA / ITEMS SUPPLIED**
- Drive unit with integrated belt tensioners comprising 2 belt drives with connecting shaft and 1 motor
- 4 timing belt reverse units for 25 T5
- Please specify the desired track width

**APPLICATIONS**
- Transfer systems with deviant track width
- Width according to dimension L of basic line

**ASSEMBLY**
- Remove drive unit cover
- Screw drive unit securely with attachment set centrally on the bottom of the basic line
- Remove covers from reverse units
- Attach reverse units with profile connectors to ends of the basic line
- Insert timing belt
- Install cover of drive units and reverse units
- Tighten timing belt
- Easy re-tightening of timing belt at drive unit, without prior disassembly, also during operation
- Base frames, 90° units and workpiece tray on request

### BASIC BASEFRAME 200

**part no. 43.0030/0**

**TECHN. DATA / ITEMS SUPPLIED**
- Profile 45 x 45 F, completely assembled
- With fastening kit for connection with basic line
- 4 height-adjustable feet
- Create longer lines with additional addon supports
- Height 895 mm for standard working height of 950 mm
- Length 755 mm for line length of 1000 mm

**APPLICATIONS**
- Substructure for transfer systems with standard working height of 950 mm
- Suitable for track width 200

**ASSEMBLY**
- Assemble transverse profile with mounting angles at lower profile groove between basic line
- Secure to floor with angles and floor anchors
### EXTENSION BASEFRAME 200

**Part No.:** 43.0040/0

<table>
<thead>
<tr>
<th><strong>Technical Data / Items Supplied</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>- Profile 45 x 45 F, completely assembled</td>
</tr>
<tr>
<td>- With fastening kit for connection with basic line and base support</td>
</tr>
<tr>
<td>- 2 adjustable feet</td>
</tr>
<tr>
<td>- Height 895 mm for standard working height of 950 mm</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Applications</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>- Substructure for transfer systems with standard working height of 950 mm</td>
</tr>
<tr>
<td>- Suitable for track width 200</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Assembly</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>- Create lengthwise connection with base support</td>
</tr>
<tr>
<td>- Assemble transverse profile L = 120 mm with attachment angles at lower profile groove between basic line</td>
</tr>
<tr>
<td>- Secure to floor with angles and floor anchors</td>
</tr>
</tbody>
</table>

### CURVE 90° 200

**Part No.:** 43.0050/0

<table>
<thead>
<tr>
<th><strong>Technical Data / Items Supplied</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>- 1 Traverse</td>
</tr>
<tr>
<td>- Friction wheel with drive roller</td>
</tr>
<tr>
<td>- Curvilinear guide made of PE</td>
</tr>
<tr>
<td>- Cover, AL</td>
</tr>
<tr>
<td>- Fastening kit</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Applications</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>- No separation before the curve required</td>
</tr>
<tr>
<td>- Manufacture of compact transfer systems, shunts and combined system concepts</td>
</tr>
<tr>
<td>- Suitable for track width 200</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Assembly</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>- Install friction wheel at timing belt reverse unit (on the feed side in transport direction)</td>
</tr>
<tr>
<td>- Assemble corners with curvilinear guide</td>
</tr>
<tr>
<td>- Screw on cover</td>
</tr>
<tr>
<td>- Through appropriate assembly design 1, alternative design 2 can be produced</td>
</tr>
</tbody>
</table>
**CURVE 180° 200**

**TECHN. DATA / ITEMS SUPPLIED**
- 1 transverse line with drive module, motor assembled
- Corners 180 with curvilinear guide of PE
- 2-part cover
- Friction wheel drive roller
- Fastening kit

**APPLICATIONS**
- No separation before the curve required
- Manufacture of compact transfer systems, shunts and combined system concepts
- Suitable for track width 200

**ASSEMBLY**
- Install friction wheel at timing belt reverse unit (on the feed side in transport direction)
- Assemble corner 180 with curvilinear guide
- Install transverse line with assembled drive module
- Fasten on cover
- Through appropriate assembly design 1, alternative design 2 can be produced

---

**STOPPER**

**TECHN. DATA / ITEMS SUPPLIED**
- Pneumatically actuated
- PE housing, black
- Stop pins Ø 12 mm of tempered stainless steel
- Cylinder and valves integrated
- Prepared for connection to internal air supply
- Fastening kit

**APPLICATIONS**
- Separation of workpiece trays before infeed and discharge, lift or lift stations
- Control of priorities in WT flow

**ASSEMBLY**
- Screw onto inside of transport line at upper profile groove
- Make connection to air supply
- Position can be adjusted horizontally
- Separation of tray’s by combination of 2 stoppers
**PROXIMITY SWITCH**

**part no. 43.0090/0**

**TECHN. DATA / ITEMS SUPPLIED**
- Inductive proximity switch design PNP “closer”
- Switching distance 4 mm
- Cubic, plastic PBT
- Operating voltage (V) 36 DC
- Continuous current load 250 mA
- Protection degree IP 67
- Fastening kit

**APPLICATIONS**
- Switching operations
- Control of system states before lift stations and stoppers

**ASSEMBLY**
- Screw onto inside of transport line at upper profile groove
- Position can be adjusted horizontally

---

**SWITCH UNIT OUT 200**

**part no. 43.0073/0**

**TECHN. DATA / ITEMS SUPPLIED**
- Pneumatically actuated
- Carrier profile 45 x 45
- WT-guide 2 parts, PE
- Cover AL
- Friction wheel with drive roller
- 2 Pneumatic cylinders
- 4 corners 180
- Fastening kit

**APPLICATIONS**
- Divert Workpiece trays from basic circuit to secondary lines
- Separation of work procedures from machine cycle
- Inserting further processing stations
- Forming storage units
- When discharge is active, WT is diverted from the line by 90° into a transverse transport. The orientation of the WT is not changed
- If the chute is inactive, the WT remains in the basic circuit
- Status query of the chute via the sensor
- Suitable for track width 200

**ASSEMBLY**
- 1) Switch unit left part no. 43.0073/0
- 2) Switch unit right part no. 43.0072/0
- Install friction wheel on belt return unit (in transport direction, on the longer side of the line)
- Install pneumatic cylinder
- Attach curve guide
- Screw on cover
- Connect transverse transport with corners and aling
- Connect pneumatic cylinder to compressed air supply
## SWITCH UNIT IN 200

**Part no.** 43.0071/0

### TECHN. DATA / ITEMS SUPPLIED
- Pneumatically actuated
- Carrier profile 45 x 45
- W1-guide 2-piece, PE
- Cover PE
- Friction wheel with drive roller
- 2 Pneumatic cylinders
- 4 corners 180
- Fastening kit

### APPLICATIONS
- Feed WHs from secondary lines back into the basic circuit.
- Separation of work procedures from machine cycle
- Inserting further processing stations
- Forming storage units
- If infeed is active, the WH is diverted from the secondary line to the basic circuit.
- The orientation of the WH is not changed.
- Status query of the chute via the sensor
- Suitable for track width 200

### ASSEMBLY
- 1) Switch unit left **part no.** 43.0071/0
- 2) Switch unit right **part no.** 43.0070/0
- Install friction wheel on belt return unit (in transport direction, on the longer side of the line)
- Install pneumatic cylinder
- Attach curve guide
- Screw on cover
- Connect transverse transport with corners and aling
- Connect pneumatic cylinder to compressed air supply

## WORKPIECE TRAY 200

**Part no.** 43.1000/0

### TECHN. DATA / ITEMS SUPPLIED
- Carrier plate Al, progressed on all sides and anodized with centering hole 5H7
- 4 positioning pins, st
- Shoes of highly abrasion-resistant PE, with integrated stop for stopper
- 2 damping pins, st, for proximity
- Size 200 x 200 mm
- Load max. 100 N
- Weight 1 kg

### APPLICATIONS
- Holding workpieces, jigs, identification, and data storage systems

### ASSEMBLY
- Standard-WTs are delivered without holder holes
- Attachment holes for workpieces, mechanisms, and identification systems are created according to customer specifications
### POSITIONER 200

**Part no.** 43.0110/0

**Techn. Data / Items Supplied**
- Ready-for-use module with doubled-acting pneumatic cylinder and valve
- WT receptacle mounted
- 2 overhead grip strips, galvanized steel
- Load max.: 1000 N
- Positioning precision: ±0.03 mm
- Lift height belt: 5 mm

**Applications**
- Exact positioning of workpieces on the workpiece tray for processing or inspection

**Assembly**
- Attach lift unit to line profiles with included Fastening kit
- Screw overhead grip strips to outside of line, align exactly with positioner
- Make connection to internal compressed air supply
- Suitable stopper part no. 43.1510/0 and proximity switch part no. 43.0090/0

---

### LIFT STATION 200

**Part no.** 43.0100/0

**Techn. Data / Items Supplied**
- Ready-for-use module with doubled-acting pneumatic cylinder and valve
- WT receptacle mounted
- Lift height: Can be set from 5 mm to 180 mm above belt
- Load max.: 1000 N

**Applications**
- Positioning of workpieces on the workpiece tray for processing or inspection

**Assembly**
- Attach lift station to line profiles with included Fastening kit
- Make connection to internal compressed air supply
- Suitable stopper part no. 43.1510/0 and proximity switch part no. 43.0090/0
ELEVATOR STATION 200

TECHN. DATA / ITEMS SUPPLIED
- Ready-for-use assembled module according to customer specification
- Frame structure profiles 45 x 45
- Frame installation off construction profiles 45 x 45
- On skid mounted, powered dual track road
- Skid proceed with double-acting pneumatic cylinder
- Stable guidance of the skid with Ø 20 mm precision shafts and linear units LB series
- Lift height variable according to customer specification
- Load max. 480 N

APPLICATIONS
- Transport rollers at any length for driven or non-driven roller conveyors

ASSEMBLY
- Please indicate needed tube length
- Align lift station with transport levels

TIMING BELT

TECHN. DATA / ITEMS SUPPLIED
- Endless belt, reinforced with steel insert
- Covered with plastic fabric on both sides to improve sliding characteristics and reduce friction
- Colour: green
- Applications

APPLICATIONS
- All transfer systems TSG
- Calculation formula for timing belt length:
  \[ \text{Total} = (L - 70) \times 2 + 473 \text{ mm, round up 5 mm} \]

ASSEMBLY
- PVC, grey
- Remove lower belt cover (clip lock)
- Remove cover of drive unit and timing belt reverse units
- Insert belt
- Install cover and belt cover
- Tighten timing belt
TRANSFERSYSTEM TSG

REQUEST VERTICAL CIRCUIT TSG 200

<table>
<thead>
<tr>
<th>Dimension L</th>
<th>mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working height H</td>
<td>mm</td>
</tr>
<tr>
<td>(WT-Upper edge)</td>
<td></td>
</tr>
<tr>
<td>Number of stoppers</td>
<td>Pieces</td>
</tr>
<tr>
<td>Number of positioners</td>
<td>Pieces</td>
</tr>
<tr>
<td>Number of elevator stations</td>
<td>Pieces</td>
</tr>
<tr>
<td>Direction of transport</td>
<td>right</td>
</tr>
<tr>
<td></td>
<td>left</td>
</tr>
<tr>
<td>Speed</td>
<td>m/min</td>
</tr>
<tr>
<td>Frequency transformer</td>
<td>yes</td>
</tr>
<tr>
<td></td>
<td>no</td>
</tr>
<tr>
<td>Controller</td>
<td></td>
</tr>
<tr>
<td>Number of sensors</td>
<td>Pieces</td>
</tr>
</tbody>
</table>

Contact details

Company
Contact person
Phone no.
Fax no.
E-Mail

Please call me back
Please send me an offer
## TRANSFERSYSTEM TSG

### REQUEST BASIC CIRCUIT 90° TSG 200

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimension L x B</td>
<td>mm</td>
</tr>
<tr>
<td>Working height H (WT-Upper edge)</td>
<td>mm</td>
</tr>
<tr>
<td>Number of stoppers</td>
<td>Pieces</td>
</tr>
<tr>
<td>Number of positioners</td>
<td>Pieces</td>
</tr>
<tr>
<td>Number of elevator stations</td>
<td>Pieces</td>
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<tr>
<td>Direction of transport</td>
<td>right</td>
</tr>
<tr>
<td>Speed</td>
<td>m/min</td>
</tr>
<tr>
<td>Frequency transformer</td>
<td>yes</td>
</tr>
<tr>
<td>Controller</td>
<td></td>
</tr>
<tr>
<td>Number of sensors</td>
<td>Pieces</td>
</tr>
</tbody>
</table>

### Contact details

- **Company**
- **Contact person**
- **Phone no.**
- **Fax no.**
- **E-Mail**

- Please call me back
- Please send me an offer
REQUEST COMPACT CIRCUIT 180° TSG 200

- Dimension L x B: mm x mm
- Working height H (WT-Upper edge): mm
- Number of stoppers: Pieces
- Number of positioners: Pieces
- Number of elevator stations: Pieces
- Direction of transport: right / left
- Speed: m/min
- Frequency transformer: yes / no
- Controller
- Number of sensors: Pieces

Contact details
- Company
- Contact person
- Phone no.
- Fax no.
- E-Mail

[Options: Please call me back, Please send me an offer]
### TRANSFERSYSTEM TSG

**REQUEST U-CIRCUIT WITH ELEVATOR STATIONS TSG 200**

<table>
<thead>
<tr>
<th>Dimension L x B</th>
<th>mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working height H (WT-Upper edge)</td>
<td>mm</td>
</tr>
<tr>
<td>Number of stoppers</td>
<td>Pieces</td>
</tr>
<tr>
<td>Number of positioners</td>
<td>Pieces</td>
</tr>
<tr>
<td>Number of elevator stations</td>
<td>Pieces</td>
</tr>
<tr>
<td>Direction of transport</td>
<td>right</td>
</tr>
<tr>
<td>Speed</td>
<td>m/min</td>
</tr>
<tr>
<td>Frequency transformer</td>
<td>yes</td>
</tr>
<tr>
<td>Controller</td>
<td></td>
</tr>
<tr>
<td>Number of sensors</td>
<td>Pieces</td>
</tr>
</tbody>
</table>

---

#### Contact details
- **Company**: [Please call me back]
- **Contact person**: [Please send me an offer]
- **Phone no.**
- **Fax no.**
- **E-Mail**
TRANSFERSYSTEM TSG

REQUEST DOUBLE-U-CIRCUIT TSG 200

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimension L x B</td>
<td>mm</td>
</tr>
<tr>
<td>Working height H (WT-Upper edge)</td>
<td>mm</td>
</tr>
<tr>
<td>Number of stoppers</td>
<td>Pieces</td>
</tr>
<tr>
<td>Number of positioners</td>
<td>Pieces</td>
</tr>
<tr>
<td>Number of elevator stations</td>
<td>Pieces</td>
</tr>
<tr>
<td>Direction of transport right</td>
<td></td>
</tr>
<tr>
<td>Direction of transport left</td>
<td></td>
</tr>
<tr>
<td>Speed</td>
<td>m/min</td>
</tr>
<tr>
<td>Frequency transformer yes</td>
<td>yes</td>
</tr>
<tr>
<td>Frequency transformer no</td>
<td>no</td>
</tr>
<tr>
<td>Controller</td>
<td></td>
</tr>
<tr>
<td>Number of sensors</td>
<td>Pieces</td>
</tr>
</tbody>
</table>

Contact details

Company: [ ] Please call me back
Contact person: [ ] Please send me an offer
Phone no.: 
Fax no.: 
E-Mail:
4 CONVEYORS 4.7 TRANSFER SYSTEM TSG

REQUEST SHUNT TSG 200

| Dimension L x B | mm | mm |
| Working height H | mm |
| (WT-Upper edge) |
| Number of stoppers | Pieces |
| Number of positioners | Pieces |
| Number of elevator stations | Pieces |
| Direction of transport | right | left |
| Speed | m/min |
| Frequency transformer | yes | no |
| Controller |
| Number of sensors | Pieces |

Contact details
Company
Contact person
Phone no.
Fax no.
E-Mail

Please call me back
Please send me an offer
SEGMENTED CHAIN CONVEYOR GKF

FROM ICY TO HOT CONDITIONS

The GKF segmented chain conveyor has continually proved its reliability in numerous demanding applications. From the knowledge and experience gained, the range has been extended to incorporate more features with field-tested components. Great attention has been focussed on energy efficiency whilst maintaining the versatility of our tried-and-tested modular design.

As is the case for all MiniTec designs, the GKF range is based upon the tried-and-tested MiniTec profile system. The new track profile has been designed according to the same principles, meaning that the modular system has been retained without limitation. All components are suitable for expansions, add-ons or any protective devices which may be necessary. The new conveyor system can be optimally connected to the tried-and-tested MiniTec solutions in the areas of material handling, image processing, labelling, workstation design, etc.

The segmented chain made from plastic or low-corrosion stainless steel enables straight-line and curve-going horizontal and vertical motions.

The flexible track routing enables space-saving designs, with vertical curve routing or lift devices enabling use on multiple levels.

APPLICATION EXAMPLES FOR THE GKF SEGMENTED CHAIN CONVEYOR

Transport in inspection facilities. Connecting individual and repackaging facilities, labelling, shipping logistics, connecting workstations, assembly lines

CAR PARTS

Filters, gearwheels, fuel pumps, ball bearings, cast parts, lamps

COSMETICS + PHARMACEUTICALS

Pharmaceutical packaging, gauze bandages, paper rolls, spray cans, personal hygiene products, shampoo, toothpaste and toothbrushes, dental instruments.

FOOD

Trays with fruit, drink cans, food cans, packaged textiles, coffee cans, coffee packaging, plastic bottles, yoghurt, animal feed

ELECTRONICS

Electronic components, audiovisual equipment, accessories, batteries, mobile telephones, computer parts

PLEASE NOTE

Not suitable for bulk cargo!

SYSTEM SELECTION 90 TO 314 MM

The systems can be supplied with 8 different plastic chains made from modified acetal and 3 VA designs made from stainless steel 1.4016.

Chain bolt on all chains made from stainless steel 1.4305 Standardised chain separation: 38.1 mm

The practically gap-free surface enables also small components to be transported!

Product width 0-428 mm
Maximum weight of the conveyor goods in the case of horizontal transport 10 kg/m
Maximum weight of the conveyor goods in the case of vertical transport 2 kg/m
Maximum load on the conveyor 150 kg
Maximum straight section of the conveyor track 40 m

HOLISTIC PROBLEM SOLUTION

The system can be supplied in assemblies for self-assembly or also as a ready-for-operation system. Upon request, we can assume complete planning and assembly responsibility, as well as the onsite commissioning. Our services include ergonomic design for operators and material flow, supplying transfer stations and workstations to assist in productivity.
Depending upon the conveyor goods, track routing and chain, the system is suitable for high conveyor speeds up to 30 m / min. All motors in use are equipped with overload protection. Optionally, frequency converters are available for variable speeds.

- Temperature limits:
  - Plastic chain (dry) -40°C to +80°C
  - Plastic chain (wet) 0°C to +65°C
  - Stainless steel chain -40°C to 120°C

All chains are suitable for directly transporting the products or transporting the pallets.

To save energy and to reduce the maintenance frequency, we recommend that cam wheels are used instead of horizontal arches. Cam wheels are available with a minimum radius of 200 mm.

Sound level depends upon the conveyor speed, measured according to DIN 45 635 T1 on the motor side.

<table>
<thead>
<tr>
<th>Chain</th>
<th>m/min</th>
<th>dB-A</th>
</tr>
</thead>
<tbody>
<tr>
<td>VA chain</td>
<td>10</td>
<td>57,3</td>
</tr>
<tr>
<td></td>
<td>30</td>
<td>73,2</td>
</tr>
<tr>
<td>acetal chain</td>
<td>10</td>
<td>62,8</td>
</tr>
<tr>
<td></td>
<td>30</td>
<td>77,9</td>
</tr>
</tbody>
</table>
SEGMENTED CHAIN CONVEYOR GKF

SAMPLE APPLICATIONS

Coffee can transport below the roof

Transport and packing of sanitary products

Loading and unloading of automatic lathes

Surface inspection of car parts
### SEGMENTED CHAIN CONVEYOR GKF

#### REQUEST

##### Standard dimension
- Axial distance mm
- According to layout see Others attached

##### Operating conditions
- Goods to be conveyed
- Dimensions B x L x H mm
- Unit weight kg
- Total belt load kg
- Temperature of goods °C
- Accumulation point

##### Subconstruction
- Inlet height He mm
- Discharge height Ha mm
- Number of supports pcs.
- Supports height adjustable from mm to mm
- Lateral guide one side both sides
- Angle bracket for floor fastening part no. 21.1112/0
- Floor anchor 12 part no. 21.1115/0
- Feet part no.

##### Options
- Chain type part no.

##### Drive
- Motor arrangement right left
- Speed m/min.
- Speed adjustable from m/min. to m/min.

##### Others/Layout

#### Contact details
- Company
- Contact person
- Phone no.
- Fax no.
- E-Mail

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FLEXIBLE-ASSEMBLY-LINES FMS

FMS is a flexible assembly system with workpiece carriers which are transported on chain roller conveyors, special belts or chains. Standardised modules for exact positioning, lifting or turning enable the very fast implementation of complete assembly lines.

Numerous installations at well-known automobile suppliers have demonstrated for years the reliability and economy of this system. The patented switching technology reduces the control expense for the entire system to a minimum.
Modular assembly line professional team
- A complete transport and positioning system for "workpiece carriers", the fastest and most versatile form for process optimisation in series production manufacturing
- Thanks to the modular design and the structure, planning, assembly and commissioning based on extruded aluminium profiles, complete systems can be calculated in a very short time.

1. Workpiece carrier
- Precision milled carrier plate
- Accessible from all sides, even from the bottom
- Slide rails made of anti-static polyethylene
- Wheels in the corners reduce the side friction and improve guiding properties
- Exact position detection with centring bushes

2. Transverse transport
- Inclusion and exclusion, change of direction
- Very low space requirement
- Simple to integrate into the system

3. Turntable
- without control elements
- practically maintenance free
- Consistent orientation

4. Lifts upward/downward
- Vertical method with pneumatic or electrical drive
- Precise guiding with linear units

5. Belt and chain conveyors
- Variations: Double belt, chain drive or combination
- Suitable for accumulation mode
- Structure of aluminium profiles
- Simple to use and can be reused

6. Separator
- Separator: with or without damping from 3 to 220 kg
- Switch holder: Various holders for inductive proximity switch M12 ensure the absence and throughput control of the workpiece carrier

7. Lift and positioning equipment
- Exact positioning of the WPC for processing sequences
- max. loading 100 kg
- optionally with turning device for change of direction
FLEXIBLE-ASSEMBLY-LINES FMS

REQUEST

**Standard dimensions**
- Dimensions W x L x H: x x mm
- Goods to be conveyed W x L x H: x x mm
- Unit weight: kg
- Temperature of goods: °C
- Speed: m/min

**Balance point**
- centered
- Distance mm

**Workpiece pick-up**
- no
- yes

**WP-carrier L x W**
- x mm

**Number of workpiece carriers**
- pcs.

**Others/Layout**

**Ambient temperature**
- °C

**Surrounding conditions**

**Number of stoppers**
- pcs.

**Number of positioners**
- pcs.

**Number of sensor systems**
- pcs.

**Contact details**
- Company
- Contact person
- Phone no.
- Fax no.
- E-Mail
  - Please call me back
  - Please send me an offer
RMS is a pallet transfer system based on friction rollers and designed for very high loads. Among other things, transmissions, vehicle seats or engines are assembled on these systems.

The workpiece carriers are moved over highly precise accumulator rollers, which are driven by means of a continuous tangential steel chain. The RMS specific workpiece carriers are guided by side-attached guide rollers into the line.

Due to the special shape of the workpiece carrier in combination with the patented DELTA-offset, the direction changes are realised with a minimum of control and drive effort.

Special covers between the rollers make the transport system accessible for service work from the interior of the system.
System description
- Flexible modular concept
- Precise rollers with regulated friction
- Load per workpiece carrier: up to 250 kg
- Standard WPC widths: 400 and 500 mm
- Transport speeds: up to 15m/min
- Ingeniously simple and patented bypass
- Newly developed robust workpiece carriers
- Deflection system „Delta”

1. Bypass
- Powered switches for deflection of main and secondary lines

2. Rollers
- 3 mm steel pipe
- Nitrided surface
- Adjustable friction

3. Workpiece carrier
- Base frame made of aluminium profiles
- Sliding pieces made of anti-static polyethylene
- Plate carriers made to customer specifications

4. 90° deflection: WPC deflection without additional drive

5. Lift index unit: Load up to 300 kg

6. Drive unit
- Reversible drive direction
- Up to 9 m line per drive
- Automatic chain tension

7. Separator: Adjustable damping

8. Structure: Anodised aluminium profile

9. Deflection system
The „Delta“ deflection system is a standardised and universally installable system, that allows for all deflection variations in 3 designs:
- Delta 1 fixed for a simple 90° deflection
- Delta 2 spring loaded for inward transfer into a main or secondary line
- Delta 3 controllable and pneumatically activated for use on nodes with changing deflections

10. Hydraulic damped separator
- The specially developed separator allows the use of continuous rollers instead of stab support rollers
- High flexibility using simple changes in the installation position
# ROLLER CONVEYORS RMS

## REQUEST

### General

<table>
<thead>
<tr>
<th>Layout</th>
<th>Goods to be conveyed</th>
<th>Width</th>
<th>Roller distance</th>
<th>Working height</th>
<th>Speed</th>
<th>Balance point</th>
<th>Work piece pick-up</th>
<th>WP-carrier - Base L x W</th>
<th>Numbers of workpiece carriers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>x x mm</td>
<td>400 mm</td>
<td>120 mm</td>
<td></td>
<td></td>
<td>centered</td>
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<td>x x mm</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>500 mm</td>
<td>180 mm</td>
<td></td>
<td></td>
<td>Distance mm</td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>others</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Working height</th>
<th>Width</th>
<th>Roller distance</th>
<th>Speed</th>
<th>Balance point</th>
<th>Work piece pick-up</th>
<th>WP-carrier - Base L x W</th>
<th>Numbers of workpiece carriers</th>
</tr>
</thead>
<tbody>
<tr>
<td>mm</td>
<td>mm</td>
<td>mm</td>
<td>m/min</td>
<td>mm</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Surrounding conditions

<table>
<thead>
<tr>
<th>Ambient temperature</th>
<th>Numbers of stoppers</th>
<th>Numbers of positioners</th>
<th>Numbers of sensor systems</th>
</tr>
</thead>
<tbody>
<tr>
<td>°C</td>
<td>Pieces</td>
<td>Pieces</td>
<td>Pieces</td>
</tr>
</tbody>
</table>

### Others/Layout

- [ ] Please call me back
- [ ] Please send me an offer

### Contact details

- Company
- Contact person
- Phone no.
- Fax no.
- E-Mail