Product catalog

Conveyor TB30

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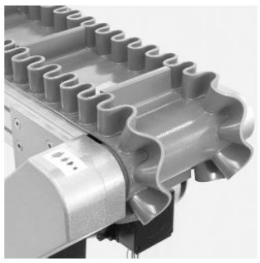
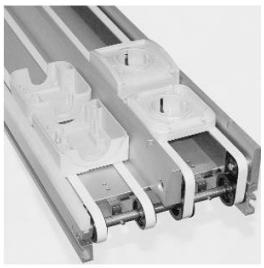
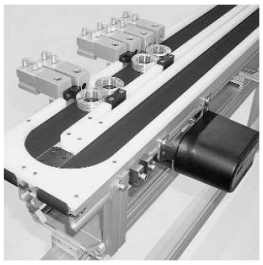
CUSTOMIZED SOLUTIONS

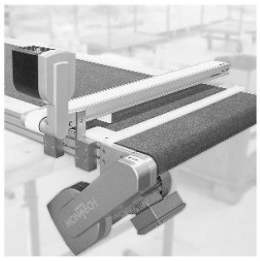
Assembly


Watch industry


Electronics industry


Construction industry

Mechanical engineering


Plastic industry

Printing industry

Automotive suppliers

Automotive

Medical industry

Automotive suppliers

Solar industry

Medical industry

Automotive supplier

Mechanical engineering

Airport industry

Airport industry

Automotive

Electronics industry

CONVEYOR TB30

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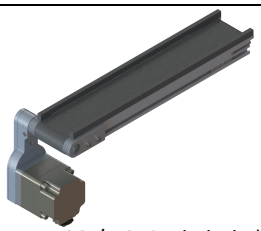
Modifications may be made without notice.

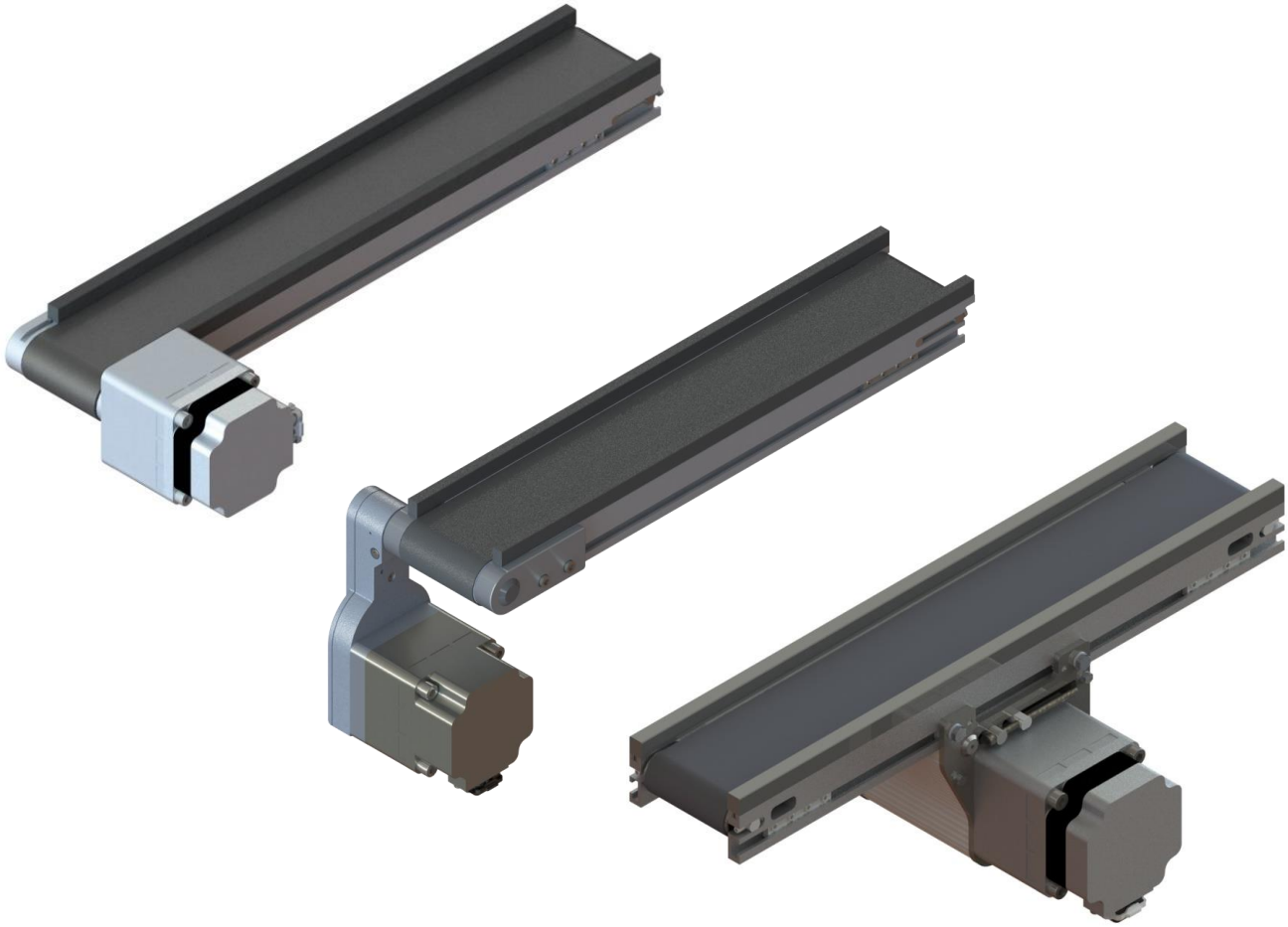
CONVEYOR TB30

The conveyors are either as single belt or as dual belt versions available.
For transporting larger pallets and other dimensionally stable products, it is possible to use the tandem conveyor: here, two conveyors are connected by means of a vibration-reducing, clearance-free elastomer coupling and driven by only one motor (other versions on request).
The drive unit can easily and freely be positioned on the chassis, whereby a position close to the belt exit is recommended. The tensioning systems enable a precise adjustment of the initial belt tension and belt tracking. A number of different belt materials and transport speeds are available. Significant to the user is the low energy consumption and the low noise level. The accessories can be mounted easily and quickly, without any machining even after construction has been completed.

OVERVIEW CONVEYOR TB30

Brushless DC-Motor (variable conveying speed)	Center drive	 TB30 / M single belt 1x200-240V/3x200-240V, 50/60Hz or 1x100-120V, 50/60Hz	 TB30 / M dual belt 1x200-240V/3x200-240V, 50/60Hz or 1x100-120V, 50/60Hz	 TB30 / M tandem 1x200-240V/3x200-240V, 50/60Hz or 1x100-120V, 50/60Hz
	End drive (Motor available on right or left side)	 TB30 / K single belt * 1x200-240V/3x200-240V, 50/60Hz or 1x100-120V, 50/60Hz	 TB30 / K dual belt 1x200-240V/3x200-240V, 50/60Hz or 1x100-120V, 50/60Hz	 TB30 / K tandem 1x200-240V/3x200-240V, 50/60Hz or 1x100-120V, 50/60Hz
	End drive pivotable	 TB30 / KS single belt * 1x200-240V/3x200-240V, 50/60Hz or 1x100-120V, 50/60Hz	 TB30 / KS dual belt 1x200-240V/3x200-240V, 50/60Hz or 1x100-120V, 50/60Hz	Legend: M= Center drive KR= End drive, right version KL = End drive, left version KSR = End drive pivotable, right version KSL = End drive pivotable, left version *also available with cleated belts
Three-phase motor (fixed conveying speed)	Center drive	 TB30 / M single belt 3x380-420 V, 50 Hz 3x440-480 V, 60 Hz	 TB30 / M dual belt 3x380-420 V, 50 Hz 3x440-480 V, 60 Hz	 TB30 / M tandem 3x380-420 V, 50 Hz 3x440-480 V, 60 Hz
	End drive (Motor available on right or left side)	 TB30 / K single belt * 3x380-420 V, 50 Hz 3x440-480 V, 60 Hz	 TB30 / K dual belt 3x380-420 V, 50 Hz 3x440-480 V, 60 Hz	 TB30 / K tandem 3x380-420 V, 50 Hz 3x440-480 V, 60 Hz

PRODUCT DESCRIPTION CONVEYOR TB30 SINGLE BELT



Different standard lengths are available, while the length can be defined in one-millimeter steps according to specific customer requirements. The drive system transmits the power at low loss and without slipping to the belt. For heavy loads, especially in buffering mode, all belts can be provided with a gliding plate integrated in the chassis (from chassis width 60 on upwards).
For the drive you have the choice between a brushless DC motor for variable speeds and a three-phase motor for fixed speeds.

PRODUCT DESCRIPTION CONVEYOR TB30 DUAL BELT

The conveyor TB30 dual-belt is suitable for standard applications as well as specific uses, including:
– operations from the bottom side (for instance, visual inspection or manipulation)
– conveying sensitive products (the support measures 2x16 mm only).

With a powerful drive, strong belts and modular components, this type of conveyor is ideal for many applications. Different standard widths are available, while the length can be defined in one-millimeter steps according to specific customer requirements. The distance between the belts can also be adjusted to the client's requirements. For this purpose please contact our project management team. The drive system transmits the power at low loss and without slipping to the belt. In case of a dual belt conveyor we always recommend an integrated gliding plate. In buffering mode, the gliding plate is mandatory.

PRODUCT DESCRIPTION CONVEYOR TB30 TANDEM

The conveyor TB30 tandem is particularly suitable to carry large pallets and other cumbersome items with stable shape. The solution consists of two belts connected by means of an elastomer coupling, thus driven cost-efficiently by one single motor. The gap between the two belts can be defined as required, up to 1,000 mm. With modular components, this type of conveyor is ideal for many applications. Different standard widths are available, while the length can be defined in one-millimeter steps according to specific customer requirements. The drive system transmits the power at low loss and without slipping to the belt. For heavy loads, especially in buffering mode, all belts can be provided with a gliding plate integrated in the chassis.

TECHNICAL DATA CONVEYOR TB30

Ambient temperature		+10 to +40 °C
Rel. humidity		< 85% (without condensation)
Air purity		normal workshop atmosphere
Noise level		< 60 dBA
Drives		
Brushless DC-Motor		
	Connection	by external controller
	Voltage/frequency	1x200-240V/3x200-240V, 50/60 Hz or 1x100-120V, 50/60 Hz
	Nominal rating	120 W
	Rated current	0.78 A
	Category of protection	motor IP65 / controller IP20
	Gear reduction ratio	10, 15, 30
	Conveying speed	variable (refer to p. 10)
	Start-Stop	8 cycles per minute
Three-phase motor*		
	Voltage/frequency	3x380-420V, 50 Hz or 3x440-480V, 60 Hz
	Nominal rating	90 W
	Rated current	0.33 A / 0.29 A
	Category of protection	IP44
	Gear reduction ratio	10.18, 15, 25.42, 40, 60.83, 120
	Conveying speed	fix* (refer to p. 10)
	Start-Stop	8 cycles per minute
Drive designs	End drive	front and rear drive
	End drive pivotable	front and rear drive
	Center drive	
Material	Chassis	aluminum, anodized natural
	Gliding plate	stainless steal
	Deflection rollers	stainless steel, synthetic material
	Drive roller	rubber-coated aluminum PU, steel
	Drive unit	stainless steel, aluminum, anodized natural
	Gear motor	aluminum, steel, plastic
Warranty		3 years Motors and gears 1 year Conveyor belts are wear parts and thus excluded from the warranty.

* Not intended for operation with frequency converter and not for end drive pivotable

Conveying speed brushless DC-motor 50 Hz

Typ		i=10 Ref.No. 66686	i=15 Ref.No. 66687	i=30 Ref.No. 66688
Center drive	[m/min]	1.5 – 38.3	1.0 – 25.5	0.5 – 12.7
	[m/min]	1.5 – 57.4	1.0 – 38.3	0.5 – 19.1
	[m/min]	1.5 – 76.6	1.0 – 51.1	0.5 – 25.5

Typ		i=10 Ref.No. 66689	i=15 Ref.No. 66690	i=30 Ref.No. 66691
End drive	[m/min]	1.0 – 25.7	0.6 – 17.1	0.4 – 8.5
	[m/min]	1.0 – 38.6	0.6 – 25.7	0.4 – 12.8
	[m/min]	1.0 – 51.5	0.6 – 34.3	0.4 – 17.1

Typ		i=10 Ref.No. 66689	i=15 Ref.No. 66690	i=30 Ref.No. 66691
End drive piovotable	[m/min]	1.0 – 25.7	0.7 – 17.1	0.4 – 8.5
	[m/min]	1.0 – 38.6	0.7 – 25.7	0.4 – 12.8
	[m/min]	1.0 – 51.5	0.7 – 34.3	0.4 – 17.1

Conveying speed Three-phase motor

Typ		i=10.18 Ref.No. 66692 66349	i=15 Ref.No. 66693 66350	i=25.42 Ref.No. 66694 66351	i=40 Ref.No. 66695 66352	i=60.83 Ref.No. 66696 66353	i=120 Ref.No. 66697 66354
Center drive (3x380-420 V / 50 Hz)	[m/min]	27.3	18.2	10.9	6.8	4.6	2.3
Center drive (3x440-480 V / 60 Hz)	[m/min]	31.6	21.4	12.6	8.0	5.3	2.6

Typ		i=10.18 Ref.No. 66692 66349	i=15 Ref.No. 66693 66350	i=25.42 Ref.No. 66694 66351	i=40 Ref.No. 66695 66352	i=60.83 Ref.No. 66696 66353	i=120 Ref.No. 66697 66354
End drive (3x380-420 V / 50 Hz)	[m/min]	18.6	12.4	7.4	4.6	3.1	1.6
End drive (3x440-480 V / 60 Hz)	[m/min]	21.2	14.4	8.5	5.4	3.6	1.8

Weight conveyor TB30

Version with brushless DC motor

Weight Base length L = 1000 mm		Center drive [kg]	End drive [kg]	End drive piovotable [kg]	Extension per meter [kg]	with gliding plate Center drive [kg]	End drive [kg]	End drive piovotable [kg]	Extension per meter [kg]
Single belt	TB30-45	5.5	5.5	6.3	2.1	-	-	-	-
	TB30-60	6.7	6.7	7.5	2.3	7.4	7.4	8.2	2.5
	TB30-80	7.2	7.2	8.0	2.6	7.9	7.9	8.7	2.8
	TB30-105	7.6	7.6	8.4	3.1	8.3	8.3	9.1	3.8
	TB30-140	8.3	8.3	9.1	3.7	9.0	9.0	9.8	4.6
	TB30-185	9.2	9.2	10.0	4.4	9.9	9.9	10.7	5.7
	TB30-250	10.8	10.8	11.6	5.8	11.4	11.4	12.2	7.6
Dual belt	TB30-105	7.6	7.6	8.4	3.1	8.3	8.3	9.1	3.8
	TB30-140	8.3	8.3	9.1	3.7	9.0	9.0	9.8	4.6
	TB30-185	9.2	9.2	10.0	4.4	9.9	9.9	10.7	5.7
	TB30-250	10.8	10.8	11.6	5.8	11.4	11.4	12.2	7.6
Tandem	TB30-60	21.4	21.4	-	9.9	21.8	21.8	-	10.3
	TB30-80	23.0	23.0	-	10.5	23.4	23.4	-	10.9
	TB30-105	24.8	24.8	-	11.5	26.2	26.2	-	12.9
	TB30-140	27.4	27.4	-	12.7	29.2	29.2	-	14.5
	TB30-185	29.6	29.6	-	14.1	32.2	32.2	-	16.7
	TB30-250	36.4	36.4	-	19.9	40.0	40.0	-	20.5

Version with three-phase motor

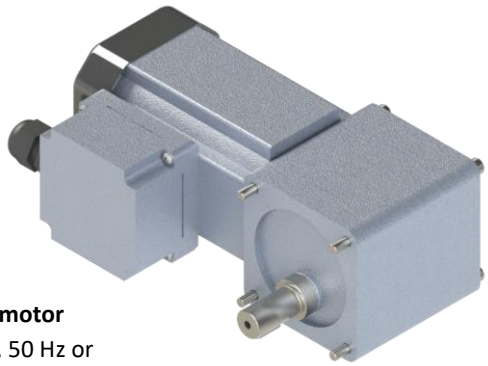
Weight Base length L = 1000 mm		Center drive [kg]	End drive [kg]	Extension per meter [kg]	with gliding plate Center drive [kg]	End drive [kg]	Extension per meter [kg]
Single belt	TB30-45	8.1	8.1	2.1	-	-	-
	TB30-60	9.3	9.3	2.3	10.0	10	2.5
	TB30-80	9.8	9.8	2.6	10.5	10.5	2.8
	TB30-105	10.2	10.2	3.1	10.9	10.9	3.8
	TB30-140	10.9	10.9	3.7	11.6	11.6	4.6
	TB30-185	11.8	11.8	4.4	12.5	12.5	5.7
	TB30-250	13.4	13.4	5.8	14.0	14.0	7.6
Dual belt	TB30-105	10.2	10.2	3.1	10.9	10.9	3.8
	TB30-140	10.9	10.9	3.7	11.6	11.6	4.6
	TB30-185	11.8	11.8	4.4	12.5	125.	5.7
	TB30-250	13.4	13.4	5.8	14.0	14.0	7.6
Tandem	TB30-60	24.0	24.0	9.9	24.4	24.4	10.3
	TB30-80	25.6	25.6	10.5	26.0	26.0	10.9
	TB30-105	27.4	27.4	11.5	28.8	28.8	12.9
	TB30-140	30.0	30.0	12.7	31.8	31.8	14.5
	TB30-185	32.2	32.2	14.1	34.8	34.8	16.7
	TB30-250	39.0	39.0	19.9	42.6	42.6	20.5

DRIVE OPTIONS

Brushless DC-Motor with external controller
1 x 200-240V / 3 x 200-240V, 50/60 Hz or
1 x 100-120 V, 50/60 Hz

Controller
- variable speed when operating manually (stepless)
- predefining of up to four different speeds when operating over I/O's
- simple switching of direction of rotation
- configurable acceleration ramp
- ON-OFF function

Connecting cable motor <-> controller
Available in lengths 1, 5 and 10 m



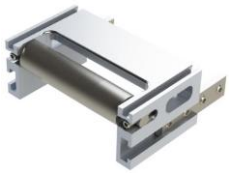
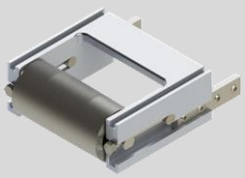
Three-phase motor
3 x 380-420V, 50 Hz or
3 x 440-480V, 60 Hz
for constant conveying speeds

In our standard product range, we have two different motors available for the drive. When variable speed is needed, we recommend the brushless DC-Motor. It has a high protection class and is, with the external controller included, available to a market compliant price. Via controller the motor is controllable manually or digitally over I/O's. Depending on the required protection class the external controller can be mounted directly on the conveyor or alternatively placed in a control cabinet.

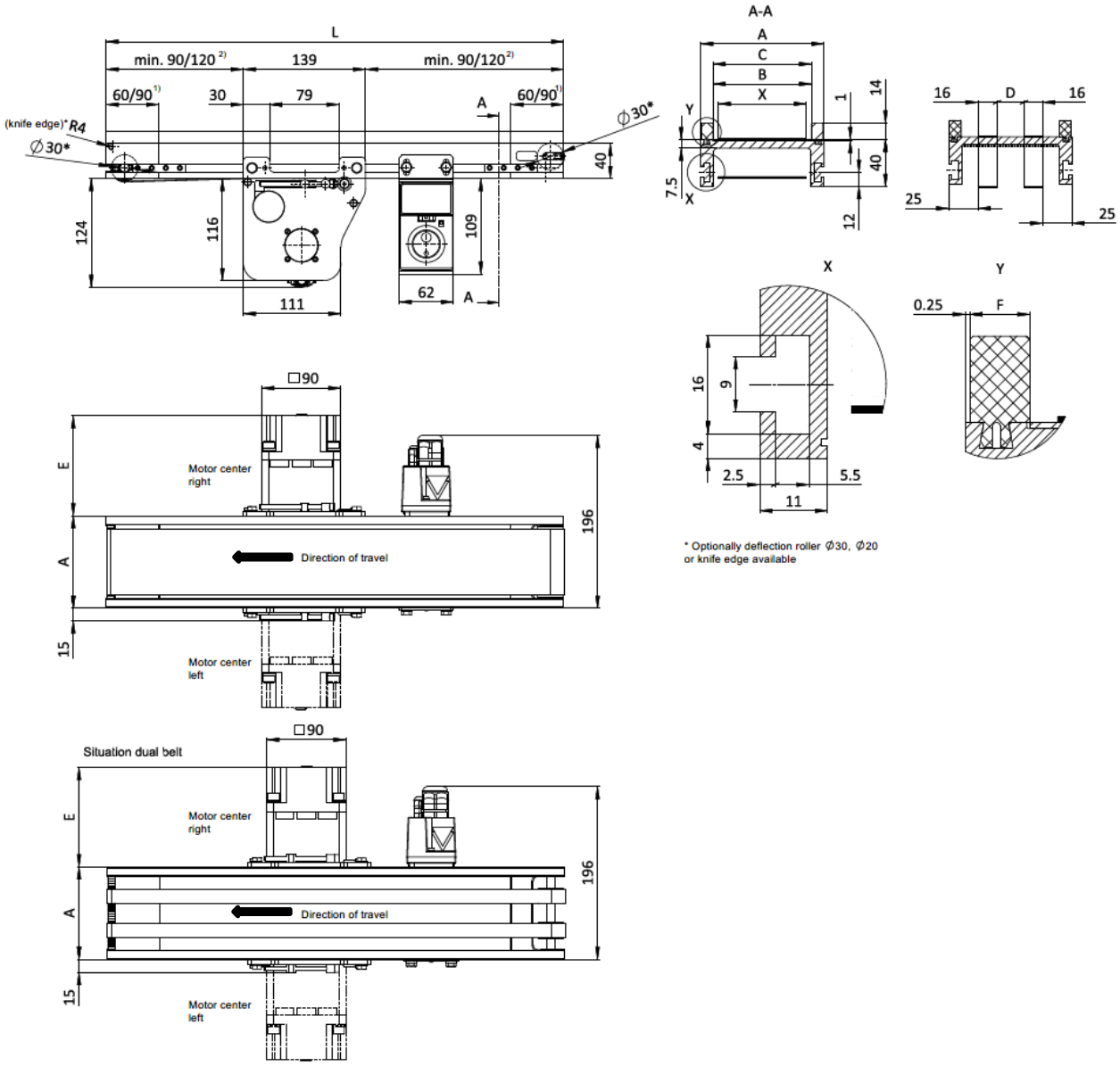
In case the client prefers a connecting voltage of 3x380-420 V / 50 Hz (3x440-480 V, 60 Hz) and the working process includes solely a constant conveying speed, we recommend the Three-phase motor. Different gear reduction ratios are available here.

END SECTIONS

Different end sections are available for selection.
Depending on the application, the diameter of the deflection rollers can vary – ø20, ø30 or ø40 mm. For a smooth and safe transport of small parts - especially when transferring from parts from one conveyor to the next - a end section with a knife edge with radius R4 mm can be selected.
The dimensions of the end selections can be found on pages 14 – 21.

End section	Center drive	End drive
End section with deflection roller Ø 30 mm, single belt		
End section with deflection roller Ø 30 mm, dual belt		
End section with deflection roller Ø 20 mm, single belt		
End section with knife edge R4 mm, single belt		
End section with knife edge R4 mm, dual belt		
End section with tension roller Ø 30 mm, single belt Center drive: more tension path		
End section with tension roller Ø 30 mm, dual belt Center drive: more tension path		
End section with tension roller Ø 40 mm, single belt For conveyors with cleated belt		

DIMENSION DRAWING CONVEYOR TB30/M SINGLE BELT/DUAL BELT BRUSHLESS DC-MOTOR

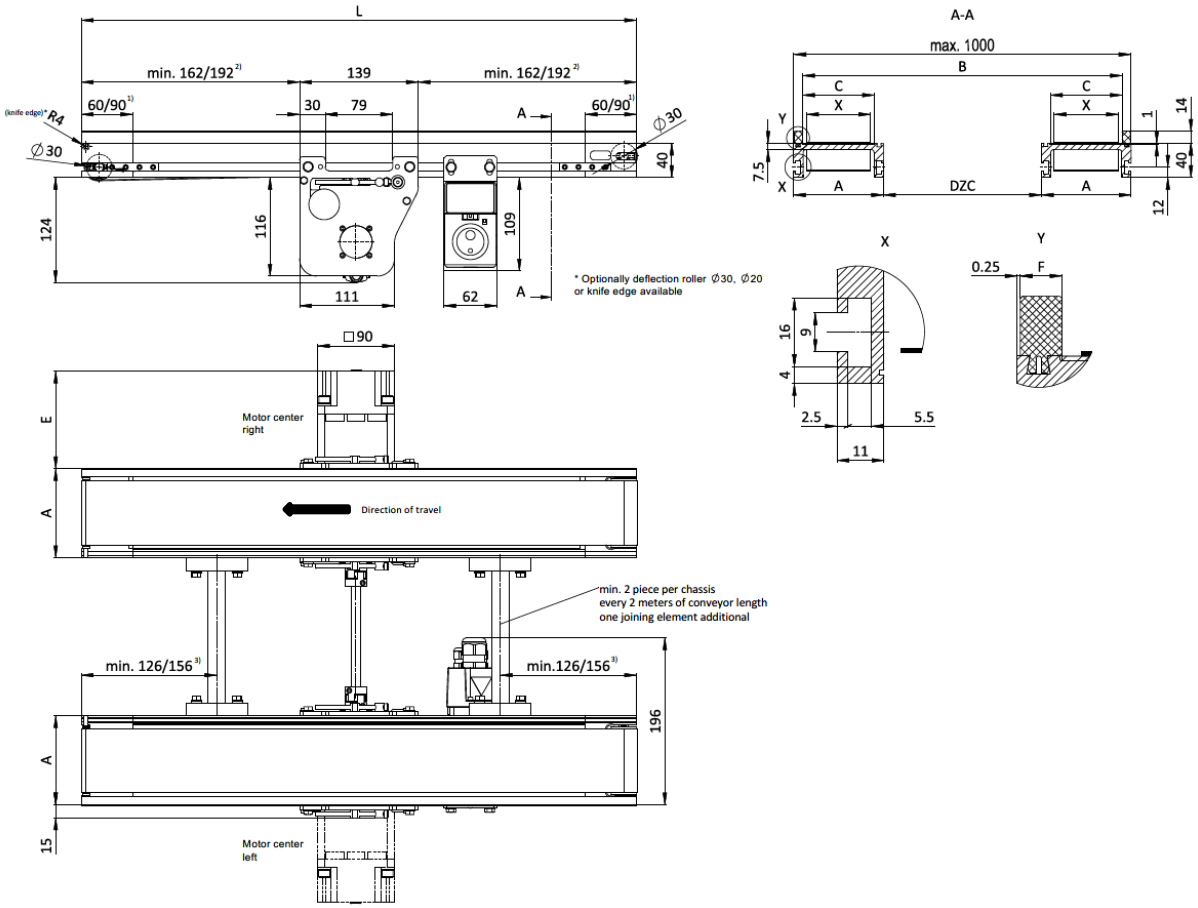


1) 60 mm for end section with deflection roller or knife edge / 90 mm for end section with tension roller (more tension path)
2) 90 mm for end section with deflection roller or knife edge / 120 mm for end section with tension roller (more tension path)

Typ		TB30-45	TB30-60	TB30-80	TB30-105	TB30-140	TB30-185	TB30-250
A chassis	[mm]	45	60	80	105	140	185	250
B conveying width ±0.5 i)	[mm]	0-23	0-38	8-58	33-83	68-118	113-163	178-228
C gliding plate	[mm]	-	39	59	84	119	164	229
D belt distance	[mm]				23	58	103	168
X belt width ii)	[mm]	15	30	50	75	110	155	220
E motor	[mm]	gear reduction ratio 10/15: 30:				101 114		
F lateral guide width	[mm]	depends on conveying width B						
L total length iii)	[mm]	L_{min}=385/325 with/without external controller; with lateral guide adjustable L_{min}+40 L_{max}=10'000						

i) Conveying width for conveyors with lateral guide fixed. Information about conveying width with lateral guide adjustable on page 23.
ii) Only for single belt. Belt width for dual belt version is always 2x 16 mm
iii) The total length is reduced depending on load, type of belt or conveying mode

DIMENSION DRAWING CONVEYOR TB30/M TANDEM BRUSHLESS DC-MOTOR

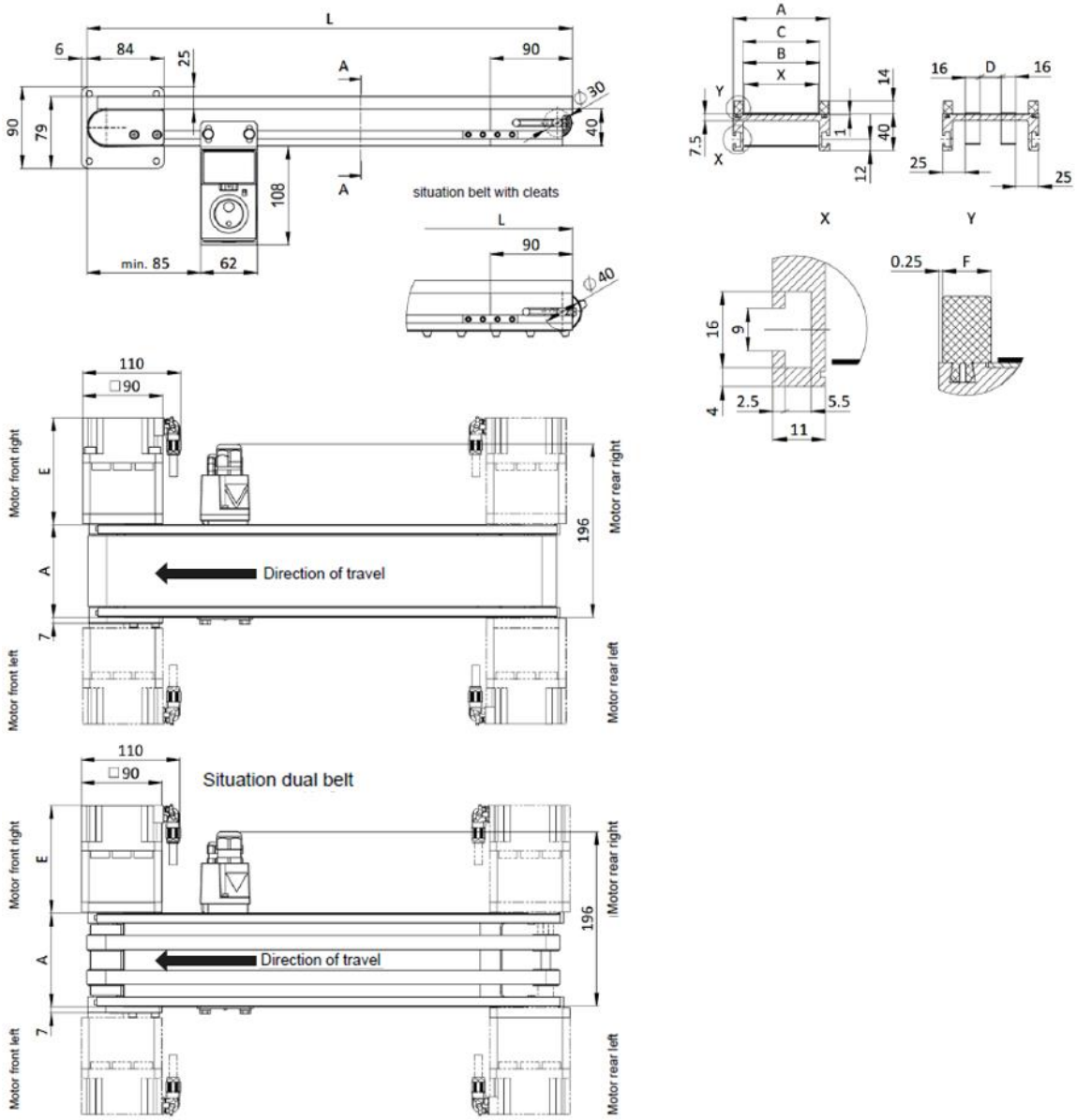


1) 60 mm for end section with deflection roller or knife edge / 90 mm for end section with tension roller (more tension path)
2) 162 mm for end section with deflection roller or knife edge / 192 mm for end section with tension roller (more tension path)
3) 126 mm for end section with deflection roller or knife edge / 156 mm for end section with tension roller (more tension path)

Typ		TB30-60	TB30-80	TB30-105	TB30-140	TB30-185	TB30-250
A chassis	[mm]	60	80	105	140	185	250
B conveying width ±0.5 i)	[mm]	178-978	218-978	268-978	338-978	428-978	558-978
C gliding plate	[mm]	39	59	84	119	164	229
X belt width	[mm]	30	50	75	110	155	220
E motor	[mm]	gear reduction ratio 10/15: 101 30: 114					
F lateral guide width	[mm]	by default 10.75 (lateral guide fixed)					
DZC chassis distance	[mm]	minimal distance 80 lateral guide fixed B-2xA+22 lateral guide adjustable Typ A B-2xA+3 lateral guide adjustable Typ B B-2xA+10 lateral guide adjustable Typ C B-2xA+8					
L total length ii)	[mm]	L_{min}=469 with/without external controller; with lateral guide adjustable L_{min}+40 L_{max}=10‘000					

i) Conveying width for conveyors with lateral guide fixed. Information about conveying width with lateral guide adjustable on page 23.
ii) The total length is reduced depending on load, type of belt or conveying mode.

DIMENSION DRAWING CONVEYOR TB30/K SINGLE BELT/DUAL BELT BRUSHLESS DC-MOTOR

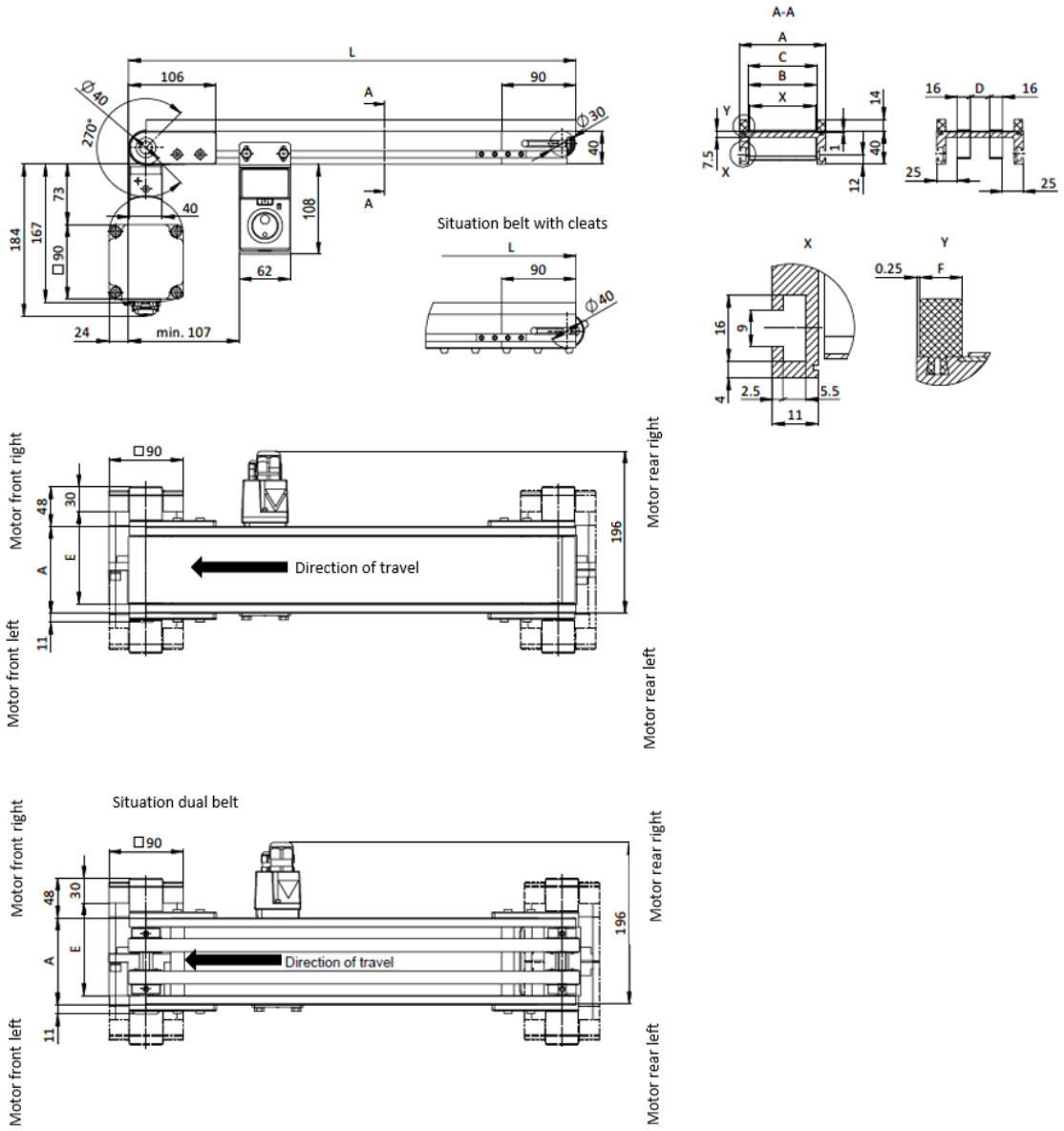


Conveyor TB30 with end drive is available as version front right, front left, rear right or rear left as well as single or dual belt conveyor (from the size 105)

Typ		TB30-45	TB30-60	TB30-80	TB30-105	TB30-140	TB30-185	TB30-250
A chassis	[mm]	45	60	80	105	140	185	250
B conveying width ±0.5 [i)]	[mm]	0-23	0-38	8-58	33-83	68-118	113-163	178-228
C gliding plate	[mm]	-	39	59	84	119	164	229
D belt distance	[mm]				23	58	103	168
X belt width [ii)]	[mm]	15	30	50	75	110	155	220
E motor	[mm]	gear reduction ratio 10/15: 30:				108 121		
F lateral guide width	[mm]	depends on conveying width B						
L total length [iii)]	[mm]	L_{min}=300; with lateral guide adjustable L_{min}+40 L_{max}=7 ‘000						

[i)] Conveying width for conveyors with lateral guide fixed. Information about conveying width with lateral guide adjustable on page 23.
[ii)] Only for single belt. Belt width for dual belt version is always 2x 16 mm
[iii)] The total length is reduced depending on load, type of belt or conveying mode.

DIMENSION DRAWING CONVEYOR TB30/KS SINGLE BELT/DUAL BELT BRUSHLESS DC-MOTOR

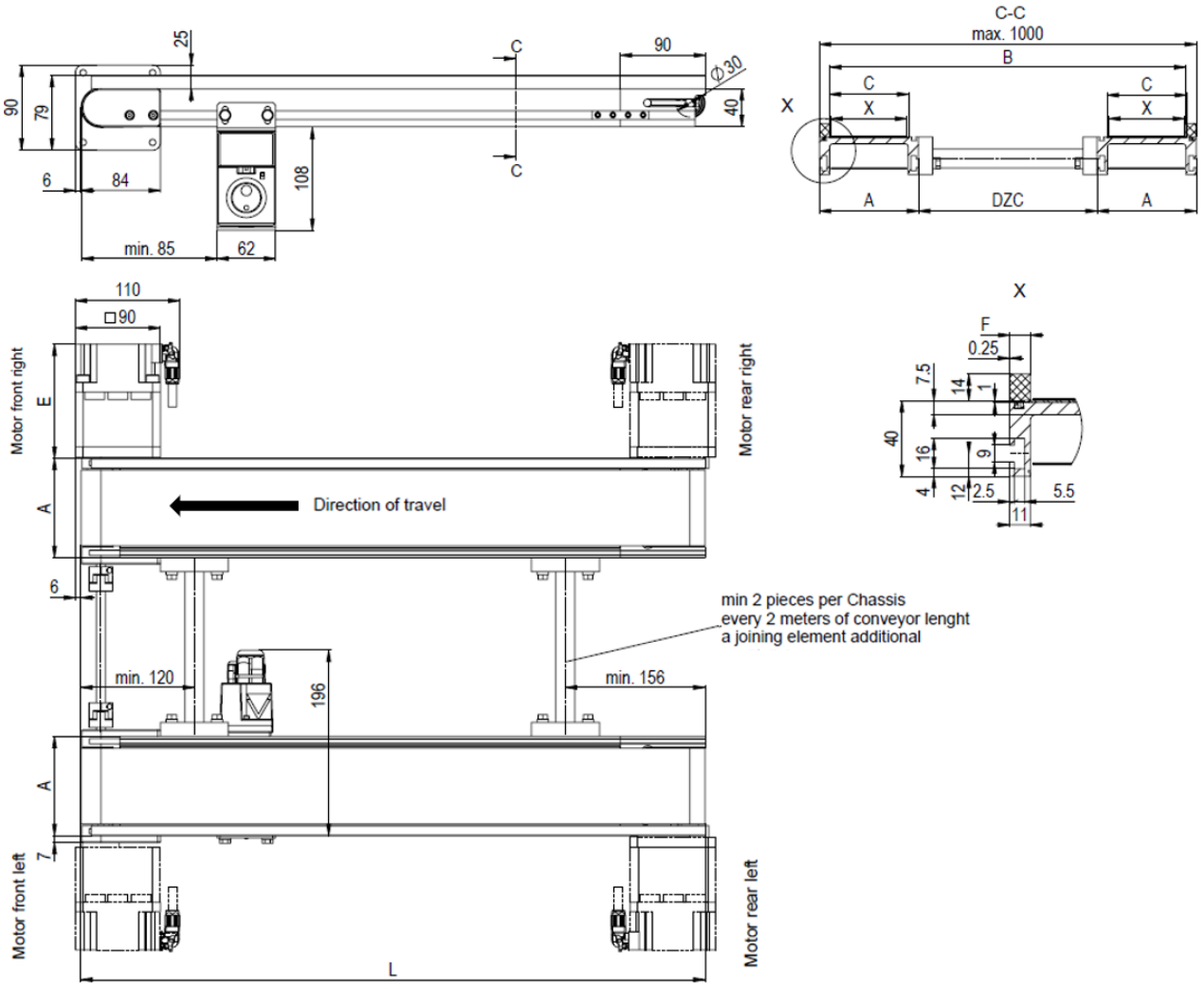


Conveyor TB30 with end drive pivotable is available as version front right, front left, rear right or rear left as well as single or dual belt conveyor (from the size 105)

Typ		TB30-45	TB30-60	TB30-80	TB30-105	TB30-140	TB30-185	TB30-250
A chassis	[mm]	45	60	80	105	140	185	250
B conveying width ±0.5 [i]	[mm]	0-23	0-38	8-58	33-83	68-118	113-163	178-228
C gliding plate	[mm]	-	39	59	84	119	164	229
D belt distance	[mm]				23	58	103	168
X belt width [ii]	[mm]	15	30	50	75	110	155	220
E motor	[mm]	gear reduction ratio 10/15: 30:				112 125		
F lateral guide width	[mm]	depends on conveying width B						
L total length [iii]	[mm]	L_{min}=300; with lateral guide adjustable L_{min}+40 L_{max}=7 ‘000						

[i] Conveying width for conveyors with lateral guide fixed. Information about conveying width with lateral guide adjustable on page 23.
[ii] Only for single belt. Belt width for dual belt version is always 2x 16 mm
[iii] The total length is reduced depending on load, type of belt or conveying mode.

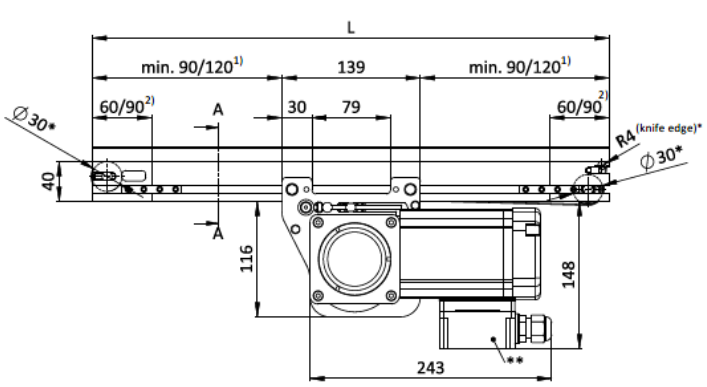
DIMENSION DRAWING CONVEYOR TB30/K TANDEM BRUSHLESS DC-MOTOR

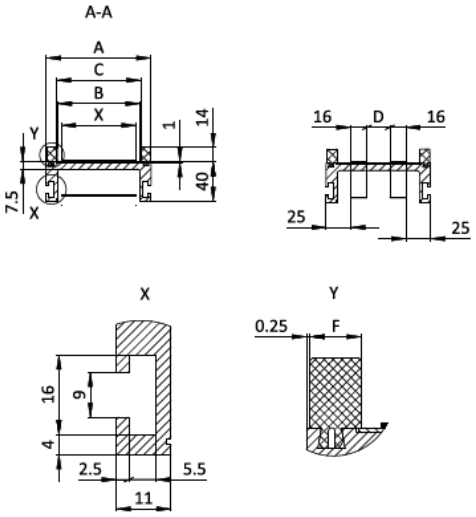


Typ		TB30-60	TB30-80	TB30-105	TB30-140	TB30-185	TB30-250
A chassis	[mm]	60	80	105	140	185	250
B conveying width ±0.5 [i]	[mm]	178-978	218-978	268-978	338-978	428-978	558-978
C gliding plate	[mm]	39	59	84	119	164	229
X belt width	[mm]	30	50	75	110	155	220
E motor	[mm]	gear reduction ratio 10/15: 108 30: 121					
F lateral guide width	[mm]	by default 10.75 (lateral guide fixed)					
DZC chassis distance	[mm]	minimal distance 80 lateral guide fixed B-2xA+22 lateral guide adjustable Typ A B-2xA+3 lateral guide adjustable Typ B B-2xA+10 lateral guide adjustable Typ C B-2xA+8					
L total length [ii]	[mm]	L_{min}=353; with lateral guide adjustable L_{min}+40 L_{max}=7'000					

[i] Conveying width for conveyors with lateral guide fixed. Information about conveying width with lateral guide adjustable on page 23.
[ii] The total length is reduced depending on load, type of belt or conveying mode.

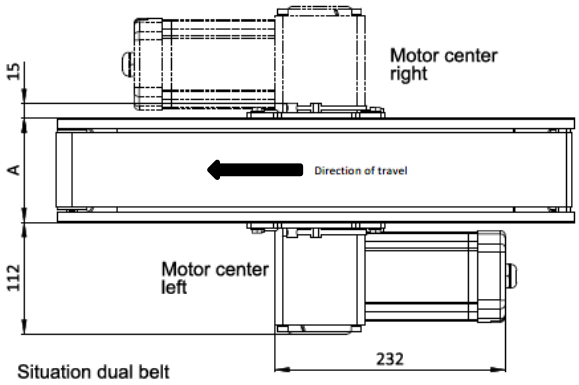
DIMENSION DRAWING CONVEYOR TB30/M SINGLE BELT/DUAL BELT THREE-PHASE MOTOR



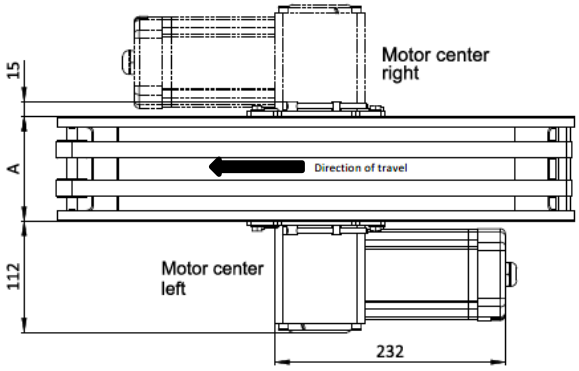


*Optionally delection roller Ø30, Ø20 or knife edge available

** Position of terminal box depens on motor selection see catalog



Situation dual belt



[1)] 60 mm for end section with deflection roller or knife edge / 90 mm for end section with tension roller (more tension path)

[2)] 90 mm for end section with deflection roller or knife edge / 120 mm for end section with tension roller (more tension path)

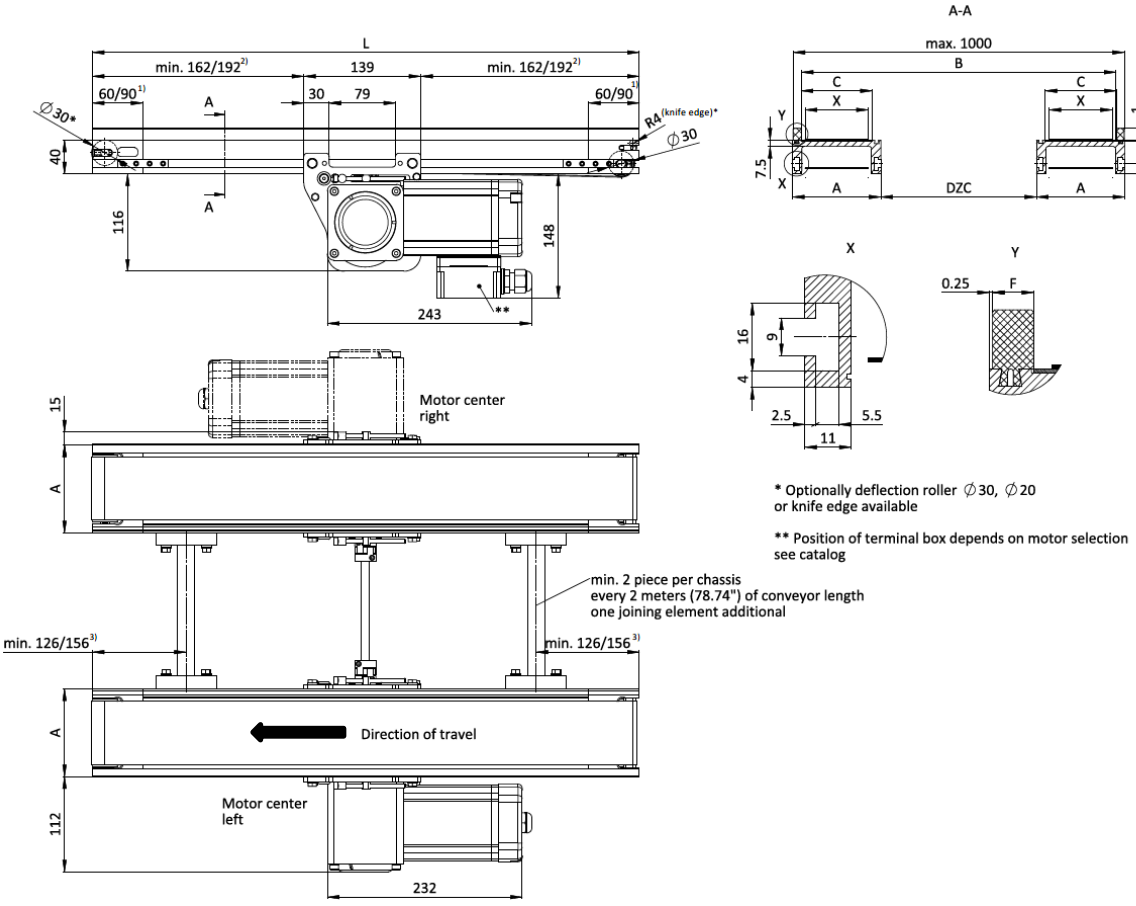
Typ		TB30-45	TB30-60	TB30-80	TB30-105	TB30-140	TB30-185	TB30-250
A chassis	[mm]	45	60	80	105	140	185	250
B conveying width ±0.5 [i)]	[mm]	0-23	0-38	8-58	33-83	68-118	113-163	178-228
C gliding plate	[mm]	-	39	59	84	119	164	229
X belt width [ii)]	[mm]	15	30	50	75	110	155	220
D belt distance	[mm]				23	58	103	168
F lateral guide width	[mm]	depends on conveying width B						
L total length [iii)]	[mm]	L_{min}=368; L_{max}=10‘000						

[i)] Conveying width for conveyors with lateral guide fixed. Information about conveying width with lateral guide adjustable on page 23.

[ii)] Only for single belt. Belt width for dual belt version is always 2x 16 mm

[iii)] The total length is reduced depending on load, type of belt or conveying mode.

DIMENSION DRAWING CONVEYOR TB30/M TANDEM THREE-PHASE MOTOR

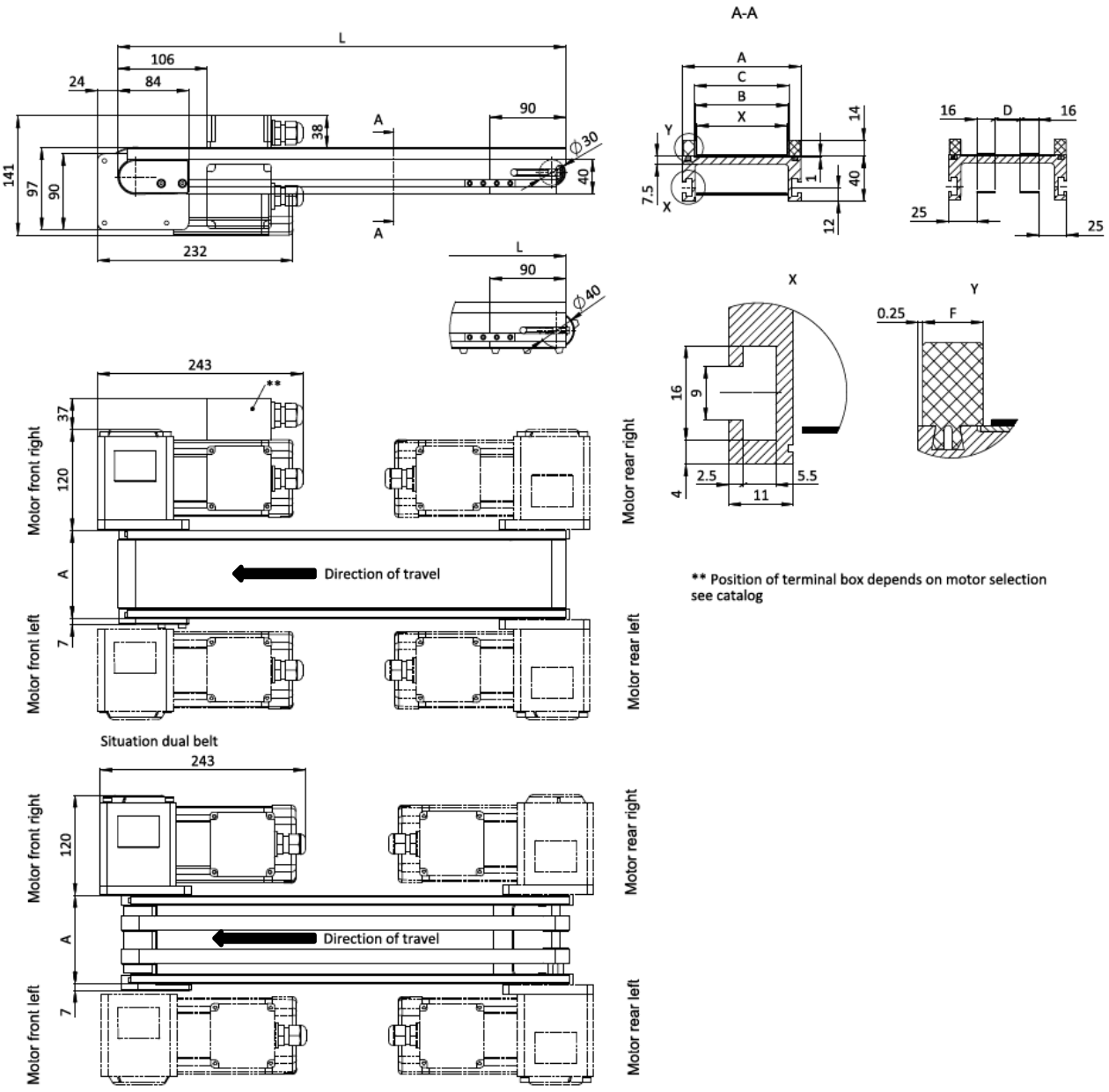


[1] 60 mm for end section with deflection roller or knife edge / 90 mm for end section with tension roller (more tension path)
[2] 162 mm for end section with deflection roller or knife edge / 192 mm for end section with tension roller (more tension path)
[3] 126 mm for end section with deflection roller or knife edge / 156 mm for end section with tension roller (more tension path)

Typ		TB30-60	TB30-80	TB30-105	TB30-140	TB30-185	TB30-250
A chassis	[mm]	60	80	105	140	185	250
B conveying width ±0.5 [i]	[mm]	178-978	218-978	268-978	338-978	428-978	558-978
C gliding plate	[mm]	39	59	84	119	164	229
X belt width	[mm]	30	50	75	110	155	220
F lateral guide width	[mm]	by default 10.75 (lateral guide fixed)					
DZC chassis distance	[mm]	minimal distance lateral guide fixed lateral guide adjustable Typ A lateral guide adjustable Typ B lateral guide adjustable Typ C			80 B-2xA+22 B-2xA+3 B-2xA+10 B-2xA+8		
L total length [ii]	[mm]	L_{min}=469; with lateral guide adjustable L_{min}+40 L_{max}=10‘000					

[i] Conveying width for conveyors with lateral guide fixed. Information about conveying width with lateral guide adjustable on page 23.
[ii] The total length is reduced depending on load, type of belt or conveying mode.

DIMENSION DRAWING CONVEYOR TB30/K SINGLE BELT/DUAL BELT THREE-PHASE MOTOR

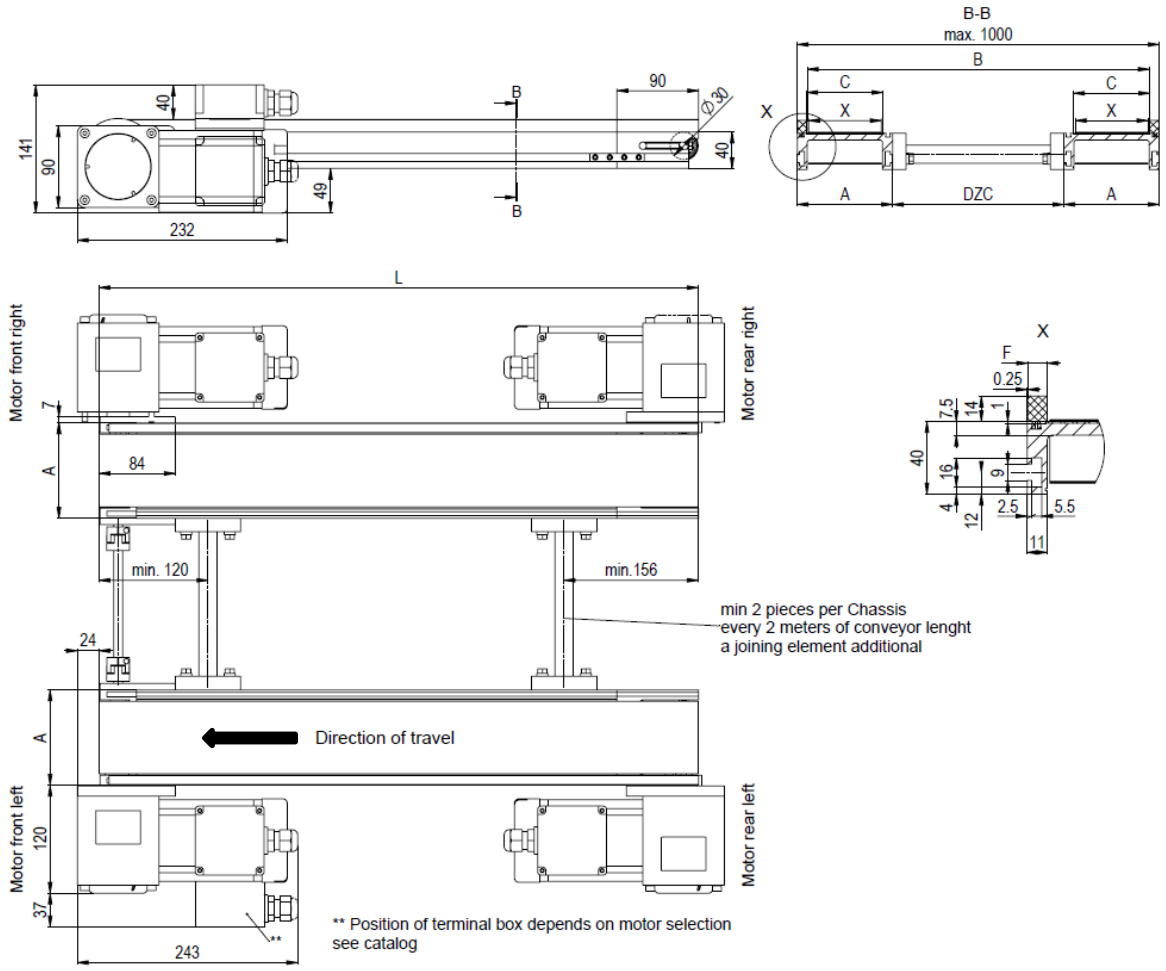


Conveyor TB30 with end drive is available as version front right, front left, rear right or rear left as well as single or dual belt conveyor (from the size TB30-105)

Typ		TB30-45	TB30-60	TB30-80	TB30-105	TB30-140	TB30-185	TB30-250
A chassis	[mm]	45	60	80	105	140	185	250
B conveying width ±0.5 [i)]	[mm]	0-23	0-38	8-58	33-83	68-118	113-163	178-228
C gliding plate	[mm]	-	39	59	84	119	164	229
X belt width [ii)]	[mm]	15	30	50	75	110	155	220
D belt distance	[mm]				23	58	103	168
F lateral guide width	[mm]	depends on conveying width B						
L total length [iii)]	[mm]	L_{min}=300; L_{max}=7'000						

[i)] Conveying width for conveyors with lateral guide fixed. Information about conveying width with lateral guide adjustable on page 23.
[ii)] Only for single belt. Belt width for dual belt version is always 2x 16 mm
[iii)] The total length is reduced depending on load, type of belt or conveying mode

DIMENSION DRAWING CONVEYOR TB30/K TANDEM THREE-PHASE MOTOR

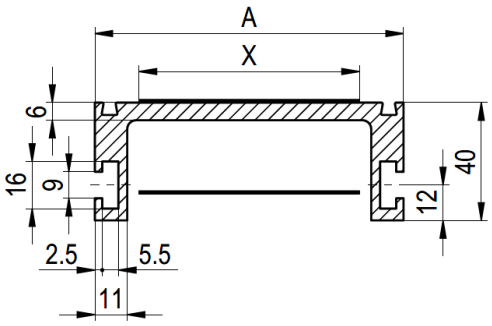


Typ		TB30-60	TB30-80	TB30-105	TB30-140	TB30-185	TB30-250
A chassis	[mm]	60	80	105	140	185	250
B conveying width ±0.5 [i]	[mm]	178-978	218-978	268-978	338-978	428-978	558-978
C gliding plate	[mm]	39	59	84	119	164	229
X belt width	[mm]	30	50	75	110	155	220
F lateral guide width	[mm]	by default 10.75 (lateral guide fixed)					
DZC chassis distance	[mm]	minimal distance lateral guide fixed lateral guide adjustable Typ A lateral guide adjustable Typ B lateral guide adjustable Typ C			80 B-2xA+22 B-2xA+3 B-2xA+10 B-2xA+8		
L total length [ii]	[mm]	L_{min}=353; with lateral guide adjustable L_{min}+40 L_{max}=7'000					

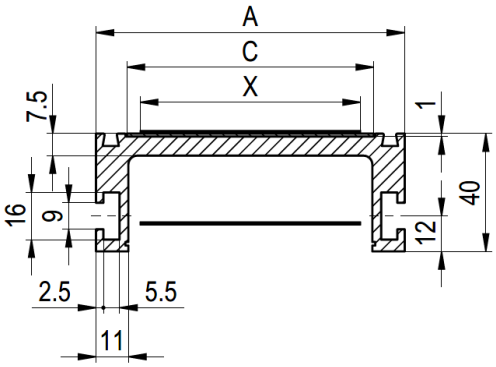
[i] Conveying width for conveyors with lateral guide fixed. Information about conveying width with lateral guide adjustable on page 23.
[ii] The total length is reduced depending on load, type of belt or conveying mode.

BUILDUP / CROSS SECTION CONVEYOR TB30

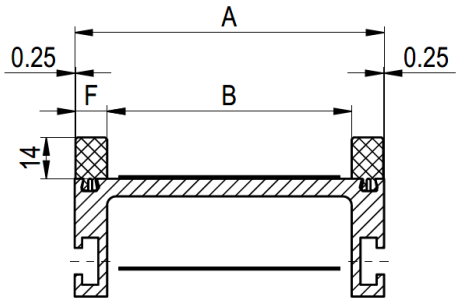
chassis without gliding plate



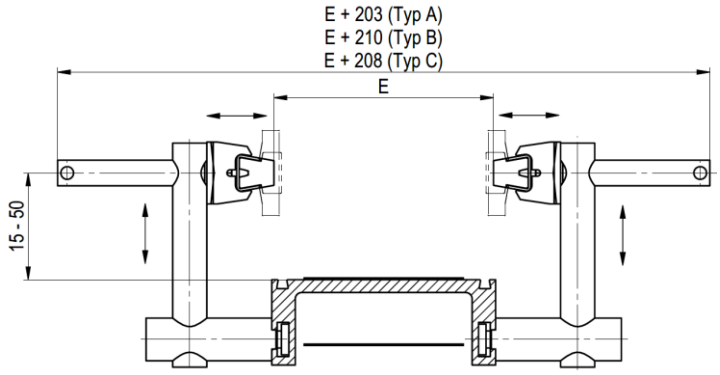
chassis with gliding plate



Lateral guide fixed (width is adjusted to the product)



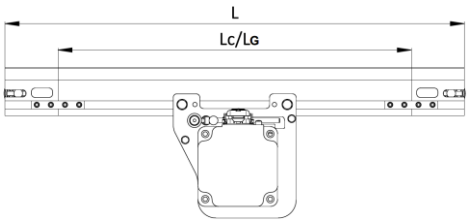
Lateral guide adjustable
(different versions selectable)



Type		TB30-45	TB30-60	TB30-80	TB30-105	TB30-140	TB30-185	TB30-250
A Chassis width	[mm]	45	60	80	105	140	185	250
B Conveyor width ± 0.5 (Lateral guide fixed)	[mm]	0-23	0-38	0-58	17-83	52-118	97-163	162-228
C gliding plate	[mm]	-	39	59	84	119	164	229
X Belt width	[mm]	15	30	50	75	110	155	220
F lateral guide width	[mm]	depends on conveying width B						
E Conveyor width (Adjustable lateral guides type A)	[mm]	0 – 42	0 - 57	0 – 77	12 – 102	47 - 137	92 - 182	157 - 247
E Conveyor width (Adjustable lateral guides type B)	[mm]	0 - 35	0 – 50	0 – 70	5 - 95	40 - 130	85 – 175	150 - 240
E Conveyor width (Adjustable lateral guides type C)	[mm]	0 – 37	0 – 52	0 – 72	7 – 97	42 – 132	87 - 177	152 - 242

CALCULATIONS

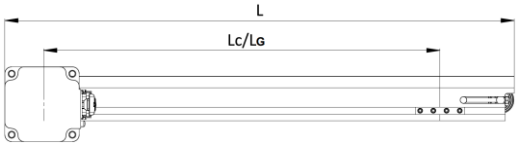
CONVEYOR TB30/M

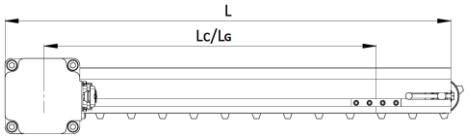


Chassis length	2 End sections with deflection roller Ø30 / Ø20	L_C=L-120
	2 End sections with tension roller Ø30	L_C=L-180
	1 End section with deflection roller Ø30 / Ø20 and 1 End section with tension roller Ø30	L_C=L-150
	2 End sections with knife edge R4	L_C=L-120
	1 End section with knife edge R4 and 1 End section with deflection roller Ø30 / Ø20	L_C=L-120
	1 End section with knife edge R4 and 1 End section with tension roller Ø30	L_C=L-150
Gliding plate length		L_G=L_C-1

CONVEYOR TB30/K

with cleated belt

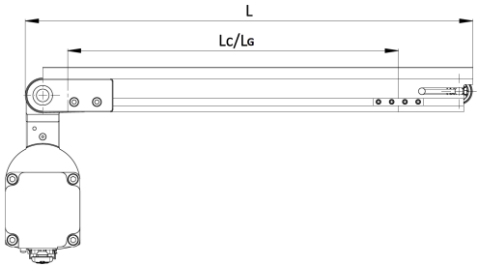


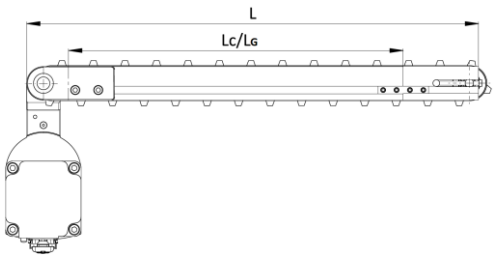


Chassis length	End section with tension roller Ø30 (without cleats)	L_C=L-131
	End section with tension roller Ø40 (with cleats)	L_C=L-138
Gliding plate length		L_G=L_C-1

CONVEYOR TB30/KS

with cleated belt





Chassis length	End section with tension roller Ø30 (without cleats)	L_C=L-141
	End section with tension roller Ø40 (with cleats)	L_C=L-141
Gliding plate length		L_G=L_C-1

BELT TYPES

PRICE CLASS 0: BEST PRICE

Manufacturer's designation			F-2EXWT 05 possible alternative for FAB-2E	F-5ENWT 09 possible alternative for FNB-5E	FNI-5EMWT-W2 possible alternative for FNI-5EIWH-P1	WVT-118 possible alternative for ENI-5EE
Belt-code			63	62	64	68
Thickness		[mm]	0.7	1.8	1.1	0.95
Mass		[kg/m²]	0.75	1.9	1.0	1.0
Min. drum diameter		[mm]	15	25	15	25
Edge radius		[mm]	R2	R7	R2	R12
$k_{1\%}$ after relaxation		[N/mm]	3	6	5	5
$k_{perm.}$		[N/mm]	7.5	15	13	8
Operating temp., cont.		[°C]	-30/80	-20/80	-10/90	-20/80
Field of use			L	L	L	Mo
Method of transportation	horizontal		yes	yes	yes	yes
	buffering		no	yes	yes	yes
	rejection of goods		no	no	yes	yes
	inclined		yes	yes	yes	yes
Surface of conveying side			smooth	smooth	impregnated fabric	impregnated fabric
Color of conveying side			white	white	white	light gray
Antistatic			yes	yes	yes	yes
Suitable for food			EU/FDA	EU/FDA	EU/FDA	no
Suitable for knife edge			yes	no	yes	no
Suitable for cleats			no	yes	no	no

COEFFICIENT OF FRICTION

Coefficient of friction workpiece on belt (transport surface) (The values listed below serve as guideline values)					
		F-2EXWT 05	F-5ENWT 09	FNI-5EMWT-W2	WVT-118
Workpiece of steel	[μ_G]	0.75	0.6	0.4	0.4

Legend:

$k_{1\%}$	Required force for 1% elongation
$k_{perm.}$	Maximum permissible force
L	Food
Ch	Chemistry
Ho	High-performance belt, heat-resistant, high mechanical and chemical resistance
Mo	Mounting systems, general
El	Electronics industry (electrically conductive)
Ph	Pharmaceuticals
Oe	Effect of oil and grease
EU	Complies with European food regulations*
FDA	Complies with US-American food regulations (Food and Drug Administration)*

* For detailed information refer to the belt's data sheet.

PRICE CLASS 0: BEST PRICE

Manufacturer's designation			H-5EFGT 14 possible alternative for HNB-5E	H-6EHDT possible alternative for HAT-5E 15	FAB-2E
Belt-code			65	67	11
Thickness		[mm]	1.2	1.7	0.7
Mass		[kg/m²]	1.4	1.7	0.7
Min. drum diameter		[mm]	15	25	15
Edge radius		[mm]	R4	-	R4
$k_{1\%}$ after relaxation		[N/mm]	6.5	4.4	2.4
$k_{perm.}$		[N/mm]	15	11	6
Operating temp., cont.		[°C]	-30/90	-30/80	-30/80
Field of use			L	Ho, Mo, Oe	L
Method of transportation	horizontal		yes	yes	yes
	buffering		no	no	no
	rejection of goods		no	yes	no
	inclined		yes	yes	yes
Surface of conveying side			smooth	smooth	smooth
Color of conveying side			green	dark green	white
Antistatic			yes	yes	yes
Suitable for food			EU/FDA	no	EU/FDA
Suitable for knife edge			yes	no	yes
Suitable for cleats			yes	yes	no

COEFFICIENT OF FRICTION

Coefficient of friction workpiece on belt (transport surface) (the values listed below serve as guideline values)				
		H-5EFGT 14	H-6EHDT	FAB-2E
Workpiece of steel	[μ_G]	0.75	2	0.75

Legend:

$k_{1\%}$	Required force for 1% elongation
$k_{perm.}$	Maximum permissible force
L	Food
Ch	Chemistry
Ho	High-performance belt, heat-resistant, high mechanical and chemical resistance
Mo	Mounting systems, general
El	Electronics industry (electrically conductive)
Ph	Pharmaceuticals
Oe	Effect of oil and grease
EU	Complies with European food regulations*
FDA	Complies with US-American food regulations (Food and Drug Administration)*

* For detailed information refer to the belt's data sheet.

PRICE CLASS 1: STANDARD

Manufacturer's designation			FNB-5E	FNI-5EIWH-P1	HNB-5E 14
Belt-code			10	12	20
Thickness		[mm]	1.3	0.95	1.3
Mass		[kg/m²]	1.5	0.85	1.5
Min. drum diameter		[mm]	15	15	15
Edge radius		[mm]	R4	R4	R4
$k_{1\%}$ after relaxation		[N/mm]	4.6	4.6	4.8
$k_{perm.}$		[N/mm]	11	11	11
Operating temp., cont.		[°C]	-15/80	-40/110	-20/90
Field of use			L, Ch, Ph	L	L, Ch, Ph, Mo, Oe
Method of transportation	horizontal		yes	yes	yes
	buffering		yes	yes	yes
	rejection of goods		yes	yes	yes
	inclined		no	no	yes
Surface of conveying side			smooth	impregnated fabric	smooth
Color of conveying side			white	white	green
Antistatic			yes	yes	yes
Suitable for food			EU/FDA	EU/FDA	EU/FDA
Suitable for knife edge			yes	yes	yes
Suitable for cleats			yes	no	yes

COEFFICIENT OF FRICTION

Coefficient of friction workpiece on belt (transport surface) (The values listed below serve as guideline values)				
		FNB-5E	FNI-5EIWH-P1	HNB-5E 14
Workpiece of steel	[μ_G]	0.35	0.25	0.45

Legend:

$k_{1\%}$	Required force for 1% elongation
$k_{perm.}$	Maximum permissible force
L	Food
Ch	Chemistry
Ho	High-performance belt, heat-resistant, high mechanical and chemical resistance
Mo	Mounting systems, general
El	Electronics industry (electrically conductive)
Ph	Pharmaceuticals
Oe	Effect of oil and grease
EU	Complies with European food regulations*
FDA	Complies with US-American food regulations (Food and Drug Administration)*

* For detailed information refer to the belt's data sheet.

PRICE CLASS 2: HIGH CLASS

Manufacturer's designation			ENI-5EE	HAT-5E 15	HRVT-101 TF-NRN [1]
Belt-code			15	21	52
Thickness		[mm]	1.2	1.5	0.35
Mass		[kg/m²]	1.2	1.8	0.68
Min. drum diameter		[mm]	20	25	30
Edge radius		[mm]	R4	-	-
$k_{1\%}$ after relaxation		[N/mm]	4.2	4.8	5
$k_{perm.}$		[N/mm]	11	12	5
Operating temp., cont.		[°C]	-30/80	0/80	-200/260
Field of use			Mo, El	Ho	HT
Method of transportation	horizontal		yes	yes	yes
	buffering		yes	no	no
	rejection of goods		yes	no	no
	inclined		yes[2]	yes[3]	no
Surface of conveying side			impregnated fabric	structured	smooth
Color of conveying side			black	green	brown
Antistatic			yes	yes	no
Suitable for food			no	no	EU
Suitable for knife edge			yes	no	no
Suitable for cleats			no	no	no

[1] Not to be used for conveyor widths 185 and 250

[2] up to 8°, product-specific

[3] up to 30°, product-specific

COEFFICIENT OF FRICTION

Coefficient of friction workpiece on belt (transport surface) (The values listed below serve as guideline values)				
		ENI-5EE	HAT-5E 15	HRVT-101 TF-NRN
Workpiece of steel	[μ_G]	0.25	1	0.75

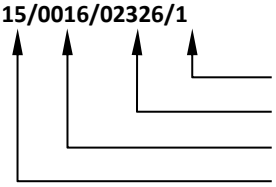
Legend:

$k_{1\%}$	Required force for 1% elongation
$k_{perm.}$	Maximum permissible force
L	Food
Ch	Chemistry
Ho	High-performance belt, heat-resistant, high mechanical and chemical resistance
Mo	Mounting systems, general
El	Electronics industry (electrically conductive)
Ph	Pharmaceuticals
Oe	Effect of oil and grease
EU	Complies with European food regulations*
FDA	Complies with US-American food regulations (Food and Drug Administration)*

* For detailed information refer to the belt's data sheet.

LIST OF BELT CODES

Structure of our code: **15/0016/02326/1**



Connection code (see list below)
Belt length (always 5-digit)
Belt width (always 4-digit)
Belt number (see list below)

No.	Belt designation	Connection code
10	FNB-5E	1 / 2 / 3 / 4
11	FAB-2E	1 / 2 / 3 / 4
12	FNI-5EIWH-P1	1 / 2 / 3 / 4
15	ENI-5EE	1 / 3 / 4
52	HRVT-101TF-NRN	1 / 4
20	HNB-5E 14	1 / 3 / 4
21	HAT-5E 15	1 / 3 / 4
62	F-5ENWT 09	1 / 4
63	F-2EXWT 05	1 / 4
64	FNI-5EMWT-W2	1 / 4
65	H-5EFGT 14	1 / 4
67	H-6EHDT	1 / 4
68	WVT-118	1 / 4

Connection code 1 = endless flexproof
Connection code 2 = endless thermofix
Connection code 3 = open beveled
Connection code 4 = cut square

Prefer connection code 1 to 2!

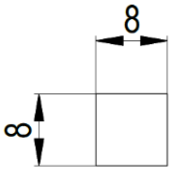
For replacement belts you find the needed information on the identification plate of the Conveyor TB30 (Type of belt, width and length).

CLEATED BELTS

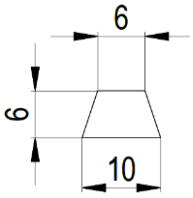
Conveyors with end drive can optionally be equipped with cleated belts. The cleats can be chosen in different widths, adapted to the customer's needs. Different shapes are available to the client. The number of cleats on the conveyor belt can be chosen freely respecting the minimal distance between the cleats. Refer to page 31 for further details.

CLEATS FOR CONVEYOR TB30[1)]

Manufacturers designation		E-PQ08-FW	E-PQ08-FG
Color		white	green
Suitable for belt type		F-5ENWT 09 FNB-5E H-5EFGT 14 H-6EHDT HNB-5E 14	
Min. cleat spacing A	[mm]	40	



Manufacturers designation		E-PV10-FW	E-PV10-FG
Color		white	green
Suitable for belt type		F-5ENWT 09 FNB-5E H-5EFGT 14 H-6EHDT HNB-5E 14	
Min. cleat spacing A	[mm]	40	

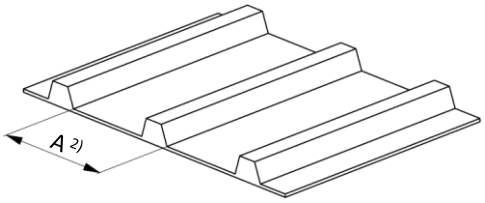


NOTE!
For cleated belt conveyors min. deflection roller Ø40mm.

Cleat spacing

$$\text{Cleat spacing A} = \frac{2 \times \text{Length}^{3)}\ \text{L [mm]} + 48}{\text{Number of cleats}}$$

$$\text{Number of cleats} = \frac{2 \times \text{Length}^{3)}\ \text{L [mm]} + 48}{\text{Cleat spacing A}}$$



NOTE!
If not noted otherwise on the order we assume the following:
Cleat width = Belt width

[1)] Cleated belts require at least two weeks delivery time
[2)] The tolerance of the cleat spacing A is ± 2 mm
[3)] Length L see dimension drawings pages 16 / 18 resp. 21 / 22

LOAD LIMITS

To ensure that the chosen conveyor optimally fulfills the specific conditions of use, all influencing factors must be taken into account. The maximum permissible loading of a conveyor is limited by two elements:

1) Permissible belt loading ($m_{G\ perm.}$ see below)

2) Load limit of the drive. **The limits are shown in the configurator.**

1. Load limit of the belt m_G

Determination of the permissible belt load $\mathbf{m}_{G\ perm.}$ on the basis of the criterias: Type of belt, belt width X (in mm), operating mode.

Conveying mode	F-2EXWT 05	F-5ENWT 09	FNI-5EMWT-W2	WVT-118	H-5EFGT 14	H-6EHDT	FNB-5E	FAB-2E	FNI-5EIWH-P1	HNB-5E 14	ENI-5EE	HAT-5E 15	HRVT-101 TF-NRN
Belt width [mm]	Load $m_{G\ perm.}$ [kg] depending on the type of belt												
15	18	37	16	27	37	37	37	18	30	37	37	37	16
2x16 (Dual belt)	39	79	36	57	79	79	79	39	65	79	79	79	36
30	37	74	33	54	74	74	74	37	61	74	74	74	33
50	62	124	56	90	124	124	124	62	101	124	124	124	56
75	93	186	84	135	186	186	186	93	152	186	186	186	84
110	137	274	124	199	274	274	274	137	224	274	274	274	124
155	193	386	175	280	386	386	386	193	316	386	386	386	-
220	274	548	249	398	548	548	548	274	448	548	548	548	-

Buffering mode	F-2EXWT 05	F-5ENWT 09	FNI-5EMWT-W2	WVT-118	H-5EFGT 14	H-6EHDT	FNB-5E	FAB-2E	FNI-5EIWH-P1	HNB-5E 14	ENI-5EE	HAT-5E 15	HRVT-101 TF-NRN
Belt width [mm]	Load $m_{G\ perm.}$ [kg] depending on the type of belt												
15	-	13	8	10	-	-	13	-	13	13	13	-	-
2x16 (Dual belt)	-	28	18	22		-	28	-	28	28	28	-	-
30	-	26	16	20	-	-	26	-	26	26	26	-	-
50	-	44	28	34	-	-	44	-	44	44	44	-	-
75	-	66	42	52	-	-	66	-	66	66	66	-	-
110	-	97	62	76	-	-	97	-	97	97	97	-	-
155	-	137	87	108	-	-	137	-	137	137	137	-	-
220	-	195	124	153	-	-	195	-	195	195	195	-	-

Limitations:

When using a knife edge, the load limits are reduced depending on the size and application. The limits are shown in the configurator.

MONTECH

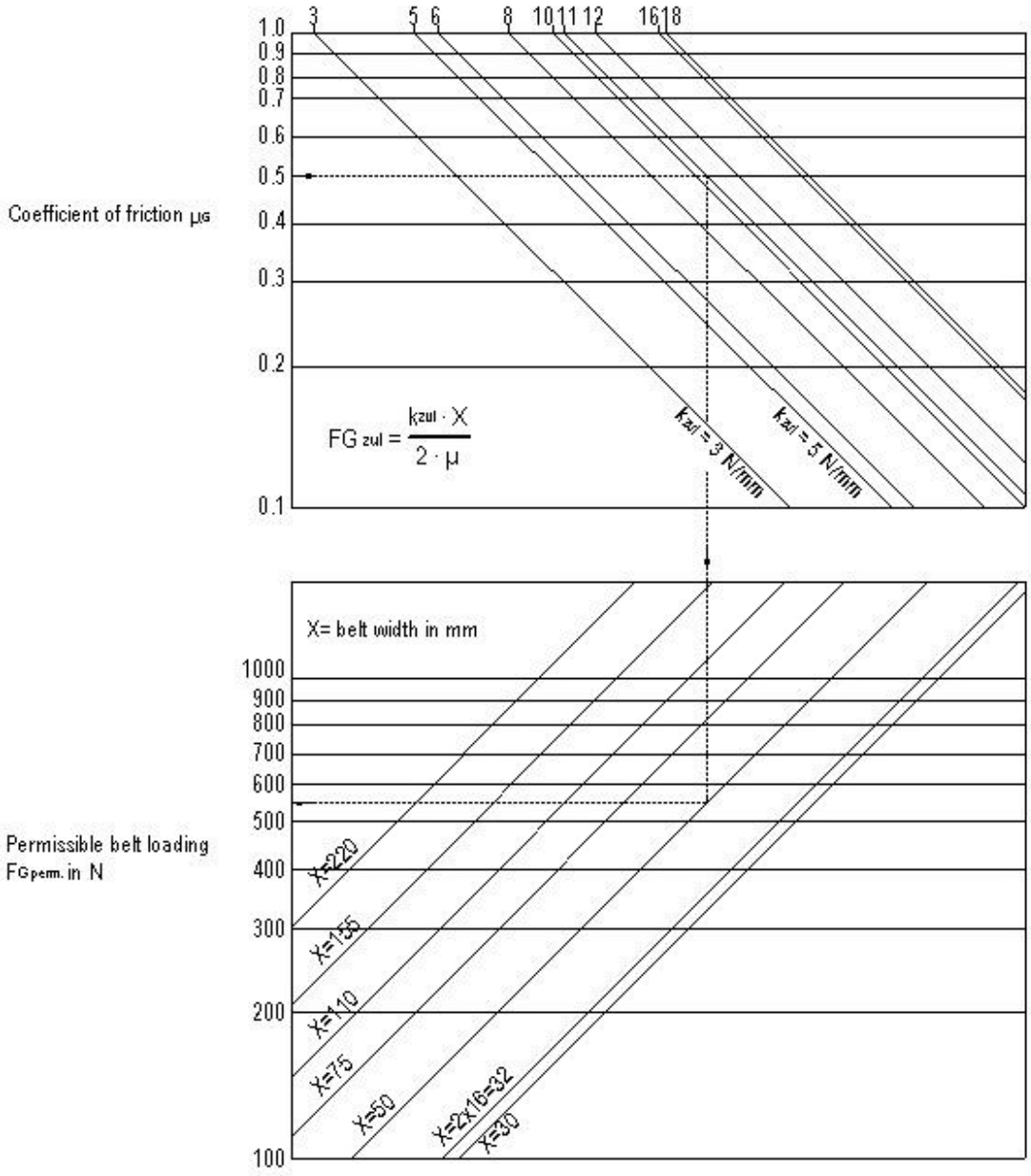
PERMISSIBLE BELT LOADING

Determination of the permissible belt loading $F_{G\,perm.}$ [N] on the basis of the three criterias: Type of belt ($k_{perm.}$ in N/mm), coefficient of friction (μ_G) and belt width X (mm).

Calculation example:

The permissible loading for belt type ENI-5EE ($k_{perm.}$ =11 N/mm) with a belt width of 50 mm in buffering mode is:

a) From the table on pages 25 to 28 read the coefficient of friction of the corresponding belt in buffering mode = 0.5
b) From the table on pages 25 to 28 read $k_{perm.}$ for the corresponding belt
c) In the diagram below under coefficient of friction 0.5, follow the dashed line. This results in an approximate value of ca. 550 N.

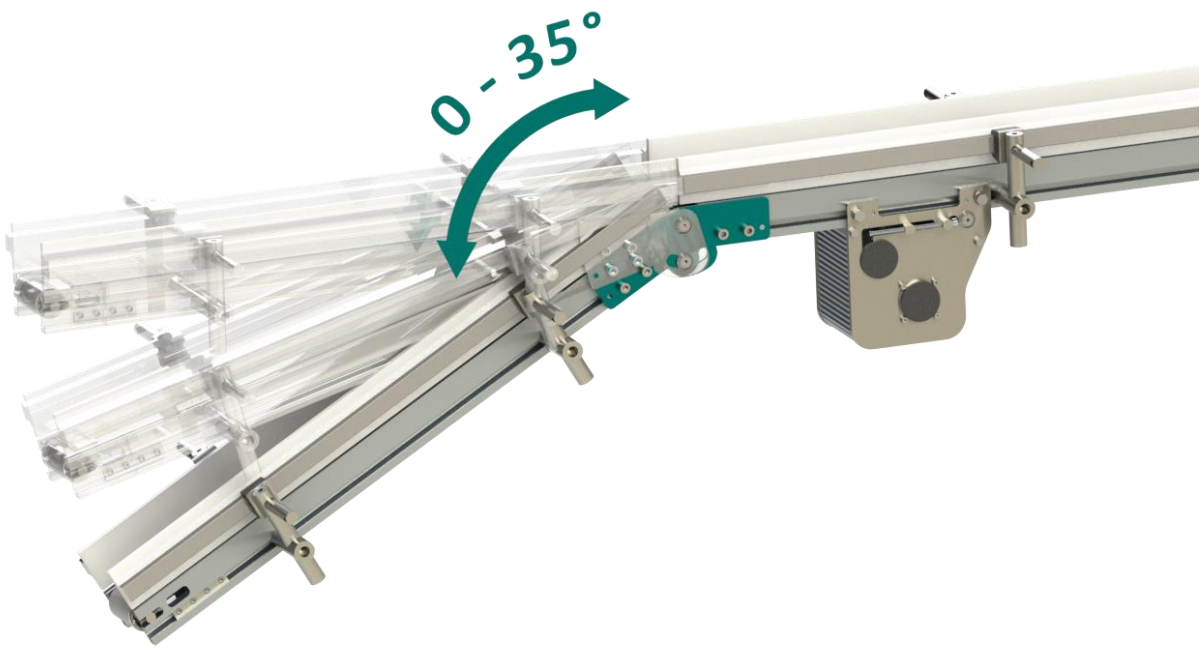


2. Load limit of the drive

	conveying speed	max. conveying load	
	v (m/min)	conveying mode (kg)	buffering mode (kg)
Center drive	-*	max. 100 kg*	max. 50 kg*
End drive	-*	max. 100 kg*	max. 50 kg*
End drive pivotable			
Gear motor i=10	1 – 25.7	36	9
	1 – 38.6	27	7
	1 – 51.5	11	3
Gear motor i=15	0.6 – 17.1	43	11
	0.6 – 25.7	36	9
	0.6 – 34.3	33	8
Gear motor i=30	0.4 – 8.5	63	16
	0.4 – 12.8	50	13
	0.4 – 17.1	43	11

* For detailed information please use our conveyor configurator www.montech.com
Link to the configurator:

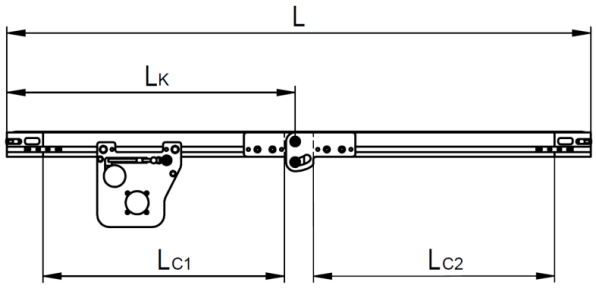
ANGLED JOINT CONVEYOR TB30



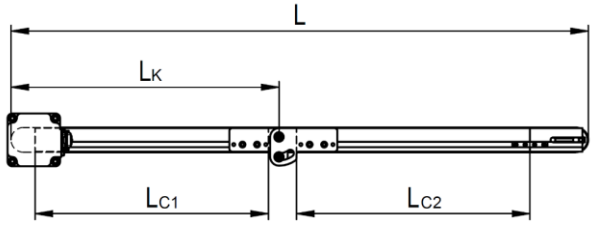
Optionally the conveyor TB30 can be equipped with an angled joint, which allows infeed and outfeed performing an inclined or declined transport. An angle up to 35° between horizontal and inclined conveyor section is possible. The angled joint is available for single belt as well as for dual belt and tandem conveyors.

ANGLED JOINT CONVEYOR TB30

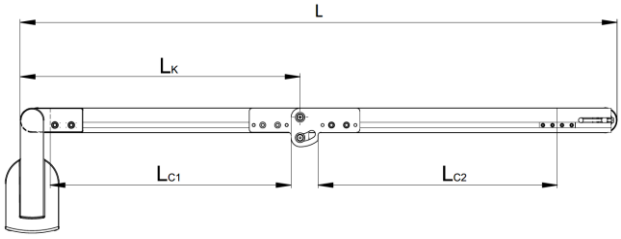
Center drive:



End drive:



End drive pivotable:



L = Length of conveyor

L_K = Position of angled joint (Always measured from the belt exit)

L_{C1} = Length of chassis of conveyor section 1

L_{C2} = Length of chassis of conveyor section 2

G = Length of belt

Calculation of chassis lengths

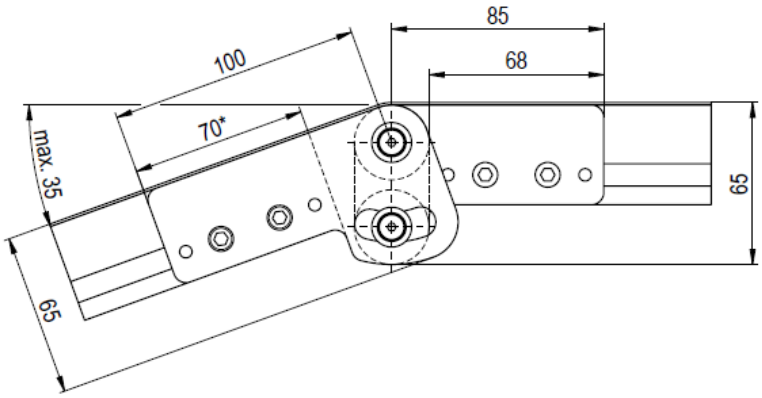
Center drive	$L_{C1} = L_K - 78$ mm	End drive	$L_{C1} = L_K - 59$ mm
	$L_{C2} = L - L_k - 90$ mm		$L_{C2} = L - L_k - 127$ mm
End drive pivotable	$L_{C1} = L_K - 65$ mm		
	$L_{C2} = L - L_k - 130$ mm		

Calculation of the gliding plates

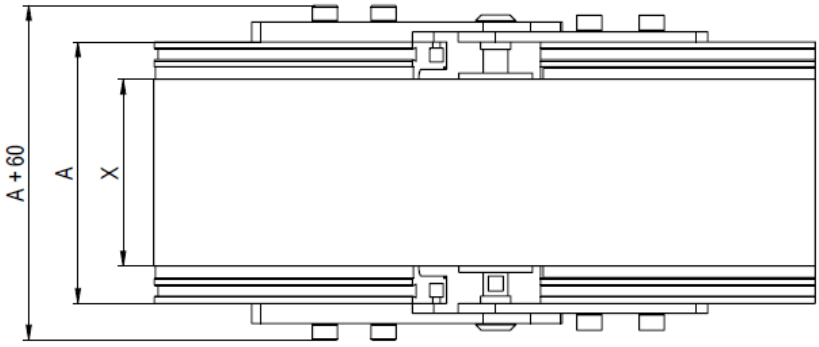
$L_{G1} = L_{C1} - 1$ mm

$L_{G2} = L_{C2} - 1$ mm

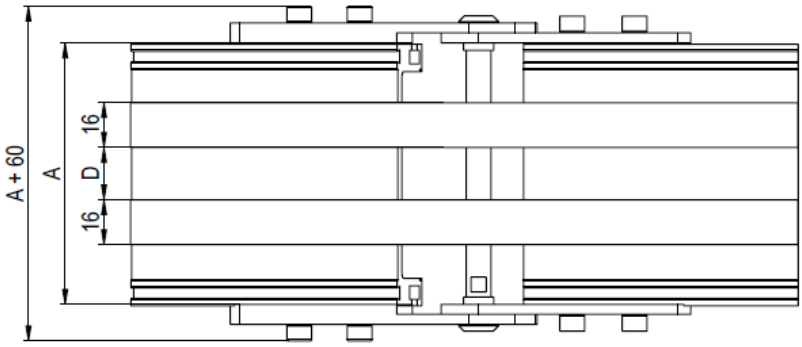
DIMENSION DRAWING ANGLED JOINT



Single belt



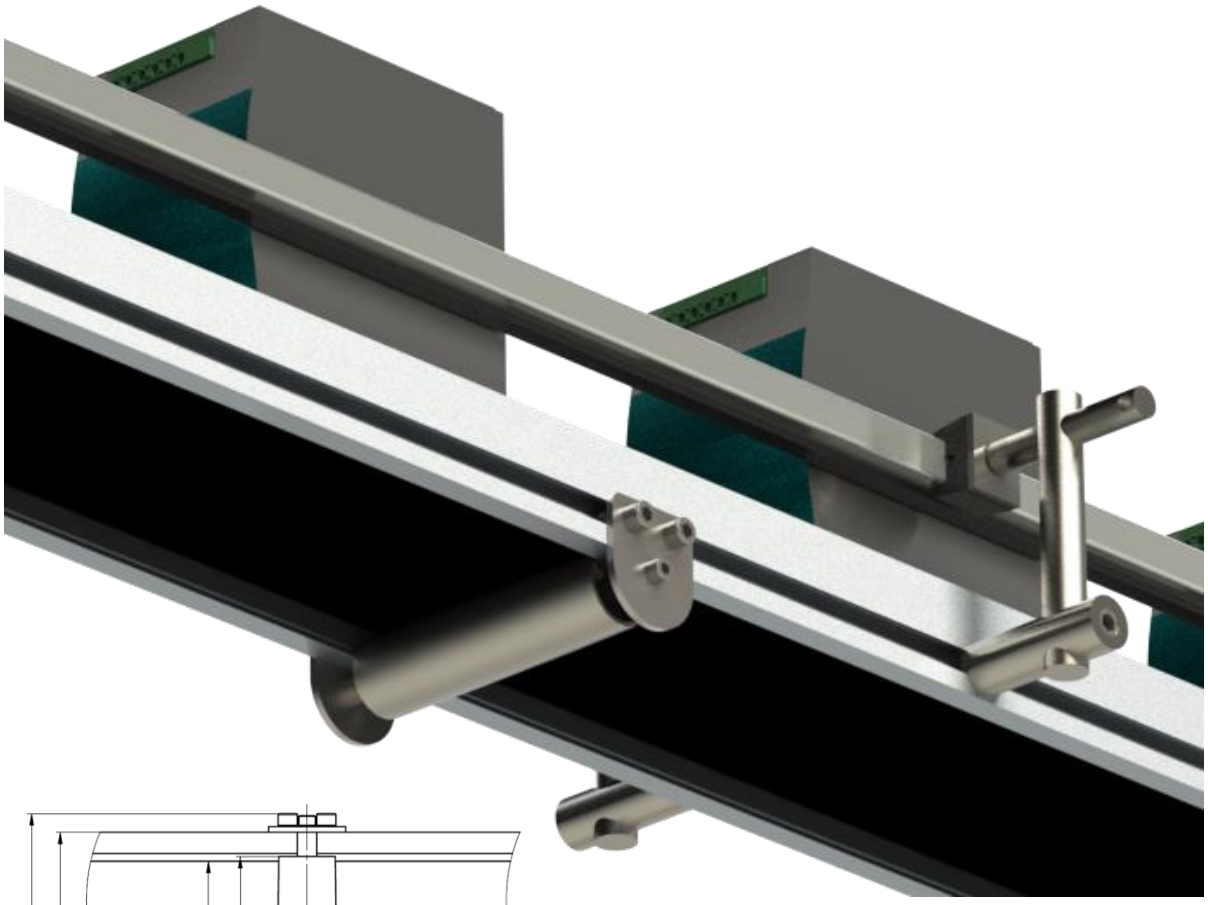
Dual belt

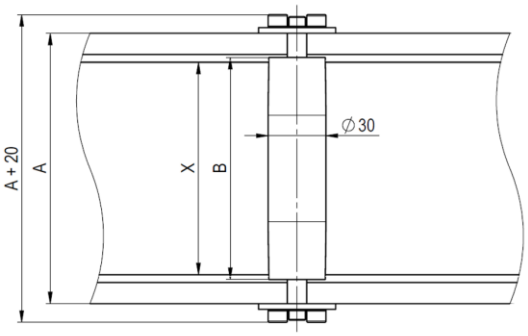


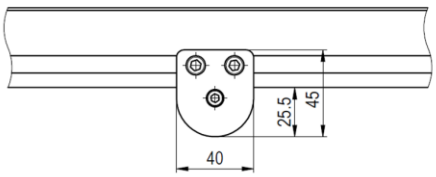
Type		TB30-45	TB30-60	TB30-80	TB30-105	TB30-140	TB30-185	TB30-250
A chassis width	[mm]	45	60	80	105	140	185	250
X belt width	[mm]	15	30	50	75	110	155	220
D belt distance	[mm]	-	-	-	23	58	103	168

BELT SUPPORT

Long conveyor often mean hanging conveyor belts. The belt support provides a remedy. It consists of a roller mounted with ball bearings for minimum friction and side plates for fastening. The unit is supplied ready-to-use with the necessary T-slot nuts and screws so that the support can easily be retrofitted to an already installed conveyor. Use as a recommendation from a conveyor length of about 7 meters.



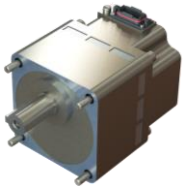




Type		TB30-45	TB30-60	TB30-80	TB30-105	TB30-140	TB30-185	TB30-250
A chassis width	[mm]	45	60	80	105	140	185	250
X belt width	[mm]	15	30	50	75	110	155	220
B roller width	[mm]	20	35	55	80	115	160	225

COMPONENTS CONVEYOR TB30 BRUSHLESS DC-MOTOR

Brushless DC-Motor center drive	Ref. No.
Gear motor 1:10 center drive	66686
Gear motor 1:15 center drive	66687
Gear motor 1:30 center drive	66688



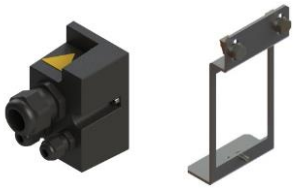
Brushless DC-Motor end drive	Ref. No.
Gear motor 1:10 end drive	66689
Gear motor 1:15 end drive	66690
Gear motor 1:30 end drive	66691

Brushless DC-Motor end drive	Ref. No.
Gear motor 1:10 end drive	66689
Gear motor 1:15 end drive	66690
Gear motor 1:30 end drive	66691

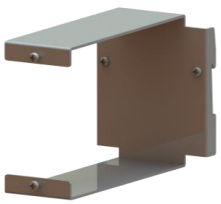
Controller for brushless DC-Motor	Ref. No.
1x200-240V, 50/60 Hz	522033
1x100-120V, 50/60 Hz	522034

Connecting cable for brushless DC-Motor	Ref. No.
Connecting cable motor <-> controller, L=1 m	522068
Connecting cable motor <-> controller, L=5 m	522070
Connecting cable motor <-> controller, L=10 m	522071

Assembly kit for controller 522033/522034	Ref. No.
for installing the controller on the chassis	66996



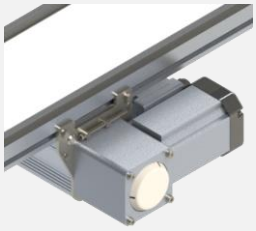
Mounting bracket (DIN rail) for controller	Ref. No.
for mounting in the control box	522129



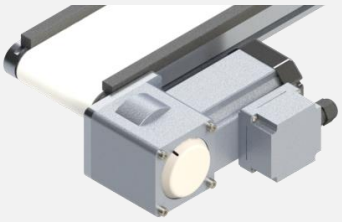
COMPONENTS CONVEYOR TB30 THREE-PHASE MOTOR

Position of the terminal box model A
(See also dimension drawings p. 14 - 22)

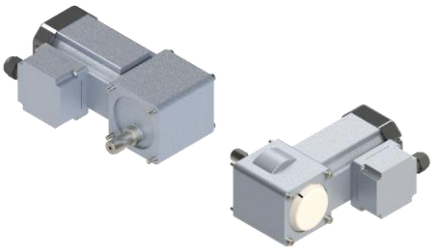
center drive



end drive



Three-phase motor 3x380-420 V / 50 Hz model A*		
conveyor speed		Ref. No.
center drive	end drive	
27.3 m/min	18.6 m/min	**66692**
18.2 m/min	12.4 m/min	**66693**
10.9 m/min	7.4 m/min	**66694**
6.8 m/min	4.6 m/min	**66695**
4.6 m/min	3.1 m/min	**66696**
2.3 m/min	1.6 m/min	**66697**



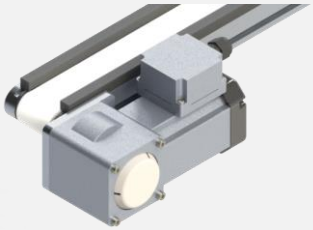
Three-phase motor 3x440-480 V / 60 Hz model A*		
conveyor speed		Ref. No.
center drive	end drive	
31.6 m/min	21.2 m/min	**66692**
21.4 m/min	14.4 m/min	**66693**
12.6 m/min	8.5 m/min	**66694**
8.0 m/min	5.4 m/min	**66695**
5.3 m/min	3.6 m/min	**66696**
2.6 m/min	1.8 m/min	**66697**

*Model A is not compatible with conveyors with end drive left.

Position of the terminal box model B
(See also dimension drawings p. 14 - 22)

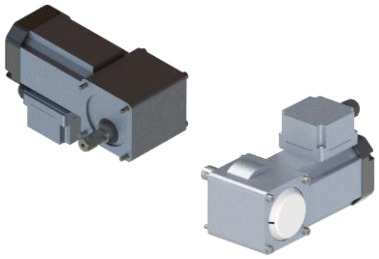
center drive

end drive



Three-phase motor 3x380-420 V / 50 Hz model B

conveyor speed		Ref. No.
center drive	end drive	
27.3 m/min	18.6 m/min	**66349**
18.2 m/min	12.4 m/min	**66350**
10.9 m/min	7.4 m/min	**66351**
6.8 m/min	4.6 m/min	**66352**
4.6 m/min	3.1 m/min	**66353**
2.3 m/min	1.6 m/min	**66354**

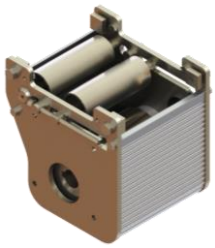


Three-phase motor 3x440-480 V / 60 Hz model B

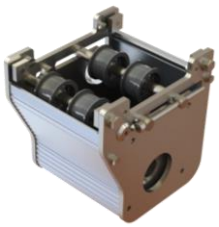
conveyor speed		Ref. No.
center drive	end drive	
31.6 m/min	21.2 m/min	**66349**
21.4 m/min	14.4 m/min	**66350**
12.6 m/min	8.5 m/min	**66351**
8 m/min	5.4 m/min	**66352**
5.3 m/min	3.6 m/min	**66353**
2.6 m/min	1.8 m/min	**66354**

COMPONENTS CONVEYOR TB30 DRIVE UNIT CENTER DRIVE

Drive unit center drive, single belt	Ref. No.
TB30-45/M	**65674**
TB30-60/M	**65675**
TB30-80/M	**65676**
TB30-105/M	**65677**
TB30-140/M	**65678**
TB30-185/M	**65679**
TB30-250/M	**65680**



Drive unit center drive, dual belt	Ref. No.
TB30-105/M	**65691**
TB30-140/M	**65692**
TB30-185/M	**65693**
TB30-250/M	**65694**



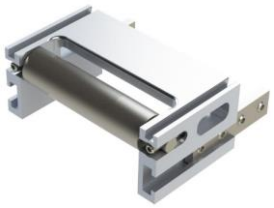
Drive unit center drive, tandem	Ref. No.
TB30-60/M	**65969**
TB30-80/M	**65970**
TB30-105/M	**65971**
TB30-140/M	**65972**
TB30-185/M	**65973**
TB30-250/M	**65974**

Joining element TB30 tandem	Ref. No.
	55312

COMPONENTS CONVEYOR TB30 END SECTION CENTER DRIVE

End section with deflection roller Ø 30, single belt	Ref. No.
TB30-45/M	56987
TB30-60/M	56988
TB30-80/M	56989
TB30-105/M	56990
TB30-140/M	63694
TB30-185/M	63695
TB30-250/M	63696
End section with deflection roller Ø 30, dual belt	**Ref. No.**
TB30-105/M	56994
TB30-140/M	64079
TB30-185/M	64080
TB30-250/M	64081

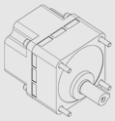
End section with deflection roller Ø20, single belt	Ref. No.
TB30-45/M	63664
TB30-60/M	63665
TB30-80/M	63666
TB30-105/M	63203
TB30-140/M	63667
TB30-185/M	63668
TB30-250/M	63669



End section with knife edge R4, single belt	Ref. No.
TB30-45/M	68315
TB30-60/M	68316
TB30-80/M	68317
TB30-105/M	68318
TB30-140/M	68319
TB30-185/M	68320
TB30-250/M	68321
End section with knife edge R4, dual belt	**Ref. No.**
TB30-105/M	68322
TB30-140/M	68323
TB30-185/M	68324
TB30-250/M	68325

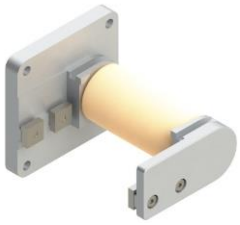
End section with tension roller Ø 30, single belt	Ref. No.
TB30-45/M/K/KS	66758
TB30-60/M/K/KS	66759
TB30-80/M/K/KS	66760
TB30-105/M/K/KS	66761
TB30-140/M/K/KS	66740
TB30-185/M/K/KS	66762
TB30-250/M/K/KS	66763
End section with tension roller Ø 30, dual belt	**Ref. No.**
TB30-105/M/K/KS	66764
TB30-140/M/K/KS	66742
TB30-185/M/K/KS	66765
TB30-250/M/K/KS	66766

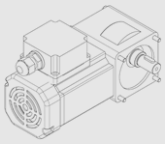
COMPONENTS CONVEYOR TB30 DRIVE UNIT END DRIVE SINGLE BELT



Brushless DC-Motor

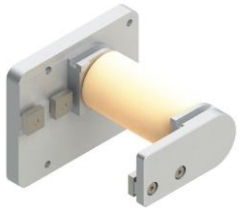
Drive unit end drive right, single belt	Ref. No.
TB30-45/KR	65876
TB30-60/KR	65877
TB30-80/KR	65882
TB30-105/KR	65892
TB30-140/KR	65894
TB30-185/KR	65904
TB30-250/KR	65906
Drive unit end drive left, single belt	**Ref. No.**
TB30-45/KL	65873
TB30-60/KL	65874
TB30-80/KL	65891
TB30-105/KL	65893
TB30-140/KL	65895
TB30-185/KL	65905
TB30-250/KL	65907



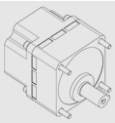


Three-phase motor

Drive unit end drive right, single belt	Ref. No.
TB30-45/KR	66602
TB30-60/KR	66603
TB30-80/KR	66604
TB30-105/KR	66605
TB30-140/KR	66606
TB30-185/KR	66607
TB30-250/KR	66608
Drive unit end drive left, single belt	**Ref. No.**
TB30-45/KL	66609
TB30-60/KL	66610
TB30-80/KL	66611
TB30-105/KL	66612
TB30-140/KL	66613
TB30-185/KL	66614
TB30-250/KL	66615

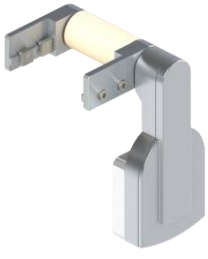


COMPONENTS CONVEYOR TB30DRIVE UNIT END DRIVE PIVOTABLE SINGLE BELT

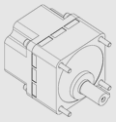


Brushless DC-Motor

Drive unit end drive pivotable right, single belt	Ref. No.
TB30-45/KSR	69253
TB30-60/KSR	69254
TB30-80/KSR	69255
TB30-105/KSR	69256
TB30-140/KSR	69257
TB30-185/KSR	69258
TB30-250/KSR	69259
Drive unit end drive pivotable left, single belt	**Ref. No.**
TB30-45/KSL	69260
TB30-60/KSL	69261
TB30-80/KSL	69262
TB30-105/KSL	69263
TB30-140/KSL	69264
TB30-185/KSL	69265
TB30-250/KSL	69266

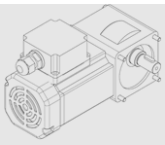


COMPONENTS CONVEYOR TB30 DRIVE UNIT END DRIVE DUAL BELT



Brushless DC-Motor

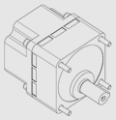
Drive unit end drive right, dual belt	Ref. No.
TB30-105/KR	65917
TB30-140/KR	65919
TB30-185/KR	65921
TB30-250/KR	65923
Drive unit end drive left, dual belt	**Ref. No.**
TB30-105/KL	65918
TB30-140/KL	65920
TB30-185/KL	65922
TB30-250/KL	65924



Three-phase motor

Drive unit end drive right, dual belt	Ref. No.
TB30-105/KR	66620
TB30-140/KR	66621
TB30-185/KR	66622
TB30-250/KR	66623
Drive unit end drive left, dual belt	**Ref. No.**
TB30-105/KL	66624
TB30-140/KL	66625
TB30-185/KL	66626
TB30-250/KL	66627

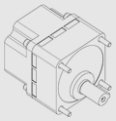
COMPONENTS CONVEYOR TB30 DRIVE UNIT END DRIVE PIVOTABLE DUAL BELT



Brushless DC-Motor

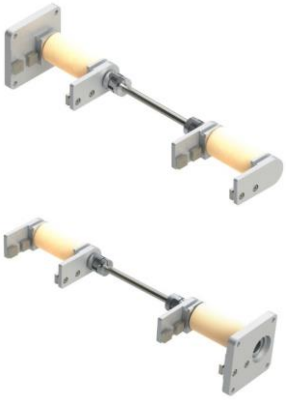
Drive unit end drive pivotable right, dual belt	Ref. No.
TB30-105/KSR	69267
TB30-140/KSR	69268
TB30-185/KSR	69269
TB30-250/KSR	69270
Drive unit end drive pivotable left, dual belt	**Ref. No.**
TB30-105/KSL	69271
TB30-140/KSL	69272
TB30-185/KSL	69273
TB30-250/KSL	69274

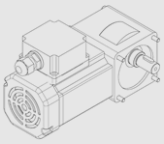
COMPONENTS CONVEYOR TB30 DRIVE UNIT END DRIVE TANDEM



Brushless DC-Motor

Drive unit end drive right tandem	Ref. No.
TB30-60/KR	66405
TB30-80/KR	66406
TB30-105/KR	66407
TB30-140/KR	66408
TB30-185/KR	66409
TB30-250/KR	66410
Drive unit end drive left tandem	**Ref. No.**
TB30-60/KL	66412
TB30-80/KL	66413
TB30-105/KL	66414
TB30-140/KL	66415
TB30-185/KL	66416
TB30-250/KL	66417





Three-phase motor

Drive unit end drive right tandem	Ref. No.
TB30-60/KR	66628
TB30-80/KR	66629
TB30-105/KR	66630
TB30-140/KR	66631
TB30-185/KR	66632
TB30-250/KR	66633
Drive unit end drive left tandem	**Ref. No.**
TB30-60/KL	66634
TB30-80/KL	66635
TB30-105/KL	66636
TB30-140/KL	66637
TB30-185/KL	66638
TB30-250/KL	66639

COMPONENTS CONVEYOR TB30 END SECTION END DRIVE / END DRIVE PIVOTABLE

End section with tension roller Ø 40, single belt	Ref. No.
TB30-45/K/KS	**57972**
TB30-60/K/KS	**57973**
TB30-80/K/KS	**57974**
TB30-105/K/KS	**54874**
TB30-140/K/KS	**65755**
TB30-185/K/KS	**65761**
TB30-250/K/KS	**65763**

End section with tension roller Ø 30, single belt	Ref. No.
TB30-45/M/K/KS	**66758**
TB30-60/M/K/KS	**66759**
TB30-80/M/K/KS	**66760**
TB30-105/M/K/KS	**66761**
TB30-140/M/K/KS	**66740**
TB30-185/M/K/KS	**66762**
TB30-250/M/K/KS	**66763**
End section with tension roller Ø 30, dual belt	**Ref. No.**
TB30-105/M/K/KS	**66764**
TB30-140/M/K/KS	**66742**
TB30-185/M/K/KS	**66765**
TB30-250/M/K/KS	**66766**

COMPONENTS CONVEYOR TB30 ANGLED JOINT CENTER, END DRIVE AND END DRIVE PIVOTABLE

Angled joint single belt	Ref. No.
TB30-45/M/K/KS	**66699**
TB30-60/M/K/KS	**49145**
TB30-80/M/K/KS	**49146**
TB30-105/M/K/KS	**49147**
TB30-140/M/K/KS	**66659**
TB30-185/M/K/KS	**66662**
TB30-250/M/K/KS	**66665**

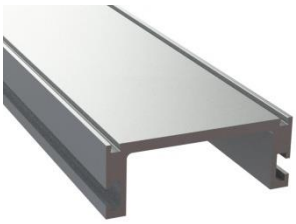
Angled joint dual belt	Ref. No.
TB30-105/M/K/KS	**54216**
TB30-140/M/K/KS	**54217**
TB30-185/M/K/KS	**54218**
TB30-250/M/K/KS	**54219**

Belt support TB/TB30	Ref. No.
TB30-45/M/K/KS	**55195**
TB30-60/M/K/KS	**55196**
TB30-80/M/K/KS	**55197**
TB30-105/M/K/KS	**55198**
TB30-140/M/K/KS	**68600**
TB30-185/M/K/KS	**68601**
TB30-250/M/K/KS	**68602**

COMPONENTS CONVEYOR TB30 CENTER, END DRIVE AND END DRIVE PIVOTABLE

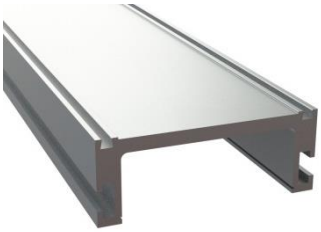
Chassis	Ref. No.
TB30-45 L = ….*	**48396/….***
TB30-60 L = ….*	**23584/….***
TB30-80 L = ….*	**23583/….***
TB30-105 L = ….*	**26330/….***
TB30-140 L = ….*	**21476/….***
TB30-185 L = ….*	**26331/….***
TB30-250 L = ….*	**37435/….***

*customer specific in mm, max 3000mm



Chassis for gliding plate	Ref. No.
TB30-60 L = ….*	**58652/….***
TB30-80 L = ….*	**58653/….***
TB30-105 L = ….*	**58787/….***
TB30-140 L = ….*	**58788/….***
TB30-185 L = ….*	**58789/….***
TB30-250 L = ….*	**58790/….***

*customer specific in mm, max. 3000 mm



Gliding plate stainless	Ref. No.
TB30-60 L = ….(up to max. 1500 mm)*	**58791/0039/….***
TB30-80 L = ….(up to max. 1500 mm)*	**58791/0059/….***
TB30-105 L = ….(up to max. 1500 mm)*	**58791/0084/….***
TB30-140 L = ….(up to max. 1500 mm)*	**58791/0119/….***
TB30-185 L = ….(up to max. 1500 mm)*	**58791/0164/….***
TB30-250 L = ….(up to max. 2000 mm)*	**58791/0229/….***

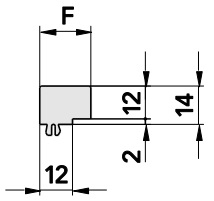
*customer specific in mm, several plates possible

When ordering chassis for gliding plate and gliding plate without assembly, the gliding plate is attached to the chassis **only per customer's request**.

NOTE!
Long conveyors with multiple chassis parts must be supported in addition at the separation points.

ACCESSORIES CONVEYORS TB30

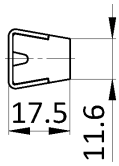
Lateral guide fixed L = 2000 mm	Ref. No.	
	white	black (antistatic)
F = 10.75	28187	28187S
F = 15.75	33652	33652S
F = 20.75	28186	28186S
F = 26.75	32071	32071S
F = 35.75	28188	28188S
F = 43.75	67425	67425S



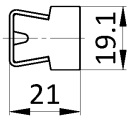
In the assembly of the conveyor, we adapt the measure F on the desired conveyor width.
In addition to the standard widths, project-specific lateral guides are also available.

Lateral guide		Ref.No.	
		white	black (antistatic)
type A	type A	504985/1000	522622/1000
		504985/2000	522622/2000
		504985/3000	522622/3000
type B	type B	504986/1000	522623/1000
		504986/2000	522623/2000
		504986/3000	522623/3000
type C	type C	504987/1000	522624/1000
		504987/2000	522624/2000
		504987/3000	522624/3000

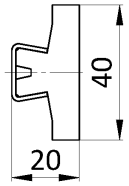
type A



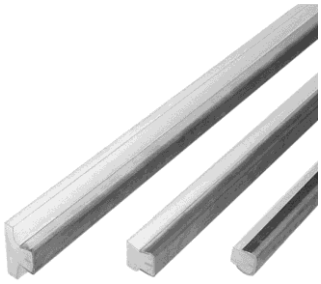
type B



type C

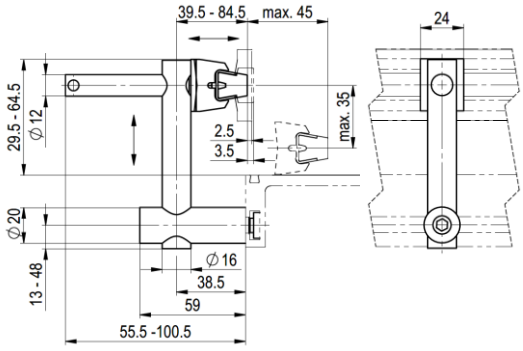


Note: A minimum length for the conveyor of 500 mm is required for the attachment of the lateral guides.



Holder adjustable for lateral guide typ A/B/C	Ref. No.
	43968

For A, B and C



0 – 1400 mm = 2 Holder
1400 mm – 2400 mm = 3 Holder
2400 mm – 3000 mm = 4 Holder

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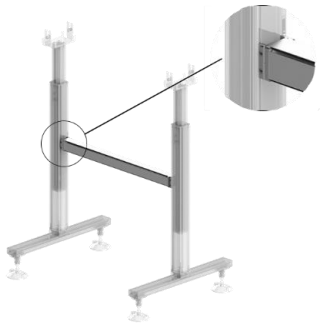
Conventions for item numbers and names/abbreviations

As a rule, all items have a 5-digit item number. The item number is completed with the width, height, joint, length or variant of the feet.

Product	Designation code	Item number	Explanation
Floor stands telescopic	**BS30-T-□□□-052x052-□-□□**	**69317/□□□/□/□□**	
		69317/□□□/□/□□	Basic article number (basic structure)
	BS30-T-□□□-052x052-□-□□		Short name for floor stands for conveyor TB30
	BS30-T-□□□-052x052-□-□□		Adjustable height (telescopic)
	BS30-T-□□□-052x052-□-□□	69317/□□□/□/□□	Sizes Conveyor
	BS30-T-□□□-052x052-□-□□		Largest profile cross-section in mm
	BS30-T-□□□-052x052-□-□□	69317/□□□/□/□□	Interface to conveyor G = Basic design V = Separation point
	BS30-T-□□□-052x052-□-□□	69317/□□□/□/□□	Interface to foundation SF = adjustable feet LR = swivel castors BR = castors fixed
	BS30-T-105-052x052-G-SF	*69317/105/G/SF*	*Example for floor stand*
Traverse	**TE-4000-040x040/052x052, L=0000mm**	**69394/□□□□**	
		69394/□□□□	Basic article number (basic structure)
	TE-4000-040x040/052x052, L=0000mm		Short name for traverse single
	TE-4000-040x040/052x052, L=0000mm		Profile group
	TE-4000-040x040/052x052, L=0000mm		Profile cross-section of traverse in mm
	TE-4000-040x040/052x052, L=0000mm		Profile cross-section floor stand in mm (connection point)
	TE-4000-040x040/052x052, L=0000mm	69394/□□□□	Center distance floor stand to floor stand in mm
	TE-4000-040x040/052x052, L=1250mm	*69394/1250*	*Example for traverse single*

Product	Designation code	Item number	Explanation
Table stand	**TS30-□□□ H=0000mm**	□□□□□/□□□□	
		□□□□□/□□□□	Basic article number (basic structure)
	TS30-□□□ H=0000mm		Short name for table stands for conveyor TB30
	TS30-□□□ H=0000mm		Sizes Conveyor
	TS30-□□□ H=0000mm	□□□□□/□□□□	Working height in mm (upper edge of conveyor)
	TS30-105 H=0150mm	*69427/0150*	*Example for table stand*
Table stand to aluminum framing system	**TS30-□□□-H224-050**	□□□□□	
	TS30-□□□-H224-050		Short name for table stands for conveyor TB30
	TS30-□□□-H224-050		Sizes Conveyor
	TS30-□□□-H224-050		Working height in mm (upper edge of conveyor)
	TS30-□□□- H224-050		Profile size in mm (connection point)
	TS30-140-H224-050	*69441*	*Example for table stand*
	TS30-□□□-□□□-90°	□□□□□	
	TS30-□□□-□□□-90°		Short name for table stands for conveyor TB30
	TS30-□□□-□□□-90°		Working height in mm (upper edge of conveyor)
	TS30-□□□-□□□-90°		Profile size in mm (connection point)
	TS30-□□□-□□□-90°		Fastening angle of the profile
	TS30-H58-050-90°	*69480*	*Example for table stand*
	TS30-□□□-□□□	□□□□□	
	TS30-□□□-□□□		Short name for table stands for conveyor TB30
	TS30-□□□-□□□		Working height in mm (upper edge of conveyor)
	TS30-□□□-□□□		Profile size in mm (connection point)
	TS30-H58-050	*69480*	*Example for table stand*

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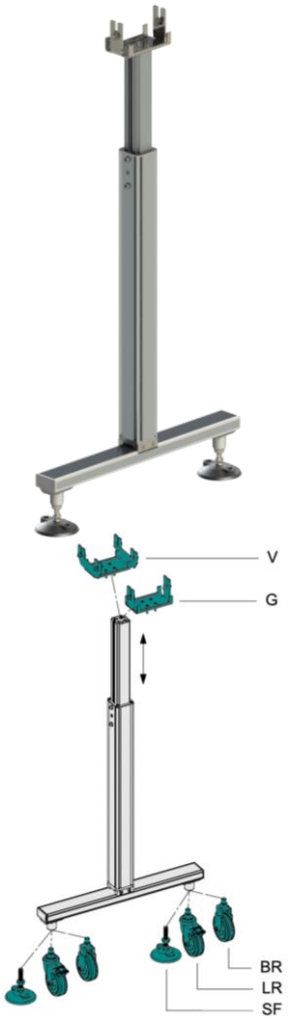
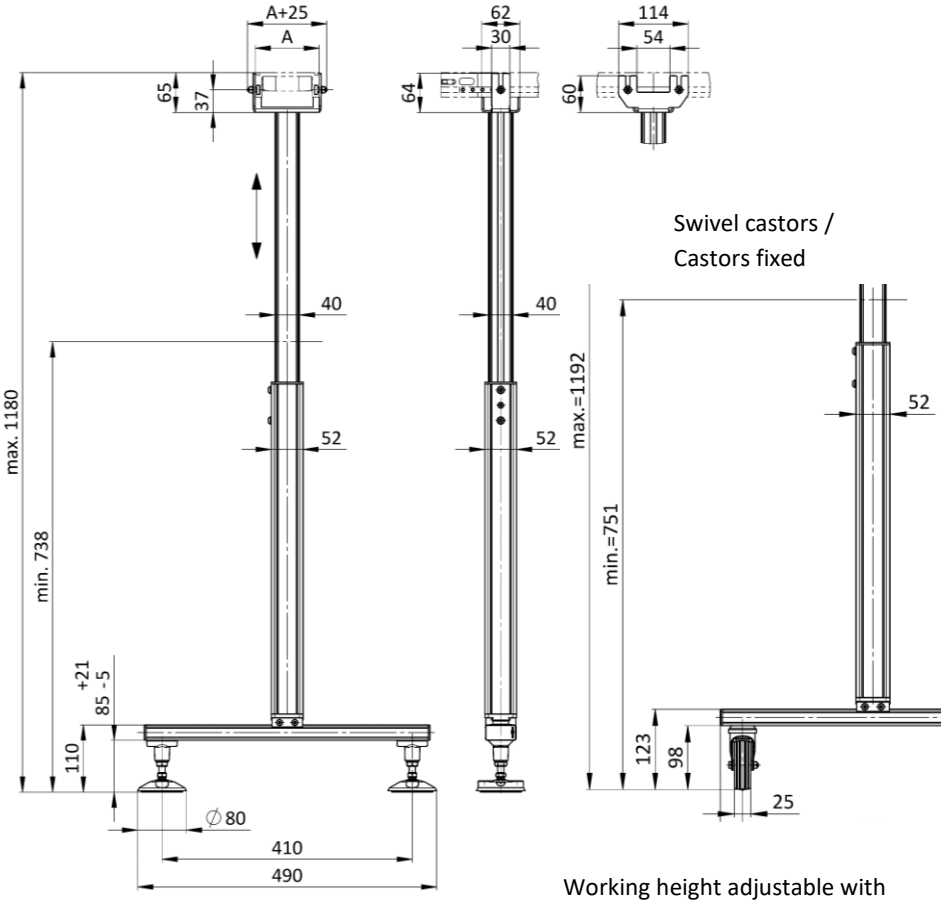
Floor stand telescopic 052x052	Ref. no.
BS30-T-…-052x052-…-…	**69317/…/…/…**

Valid for the following conveyor sizes
45, 60, 80, 105, 140, 185, 250

Example:
BS30-T-105-052x052-G-SF 69317/105/G/SF

The exact key can be found on page 511.



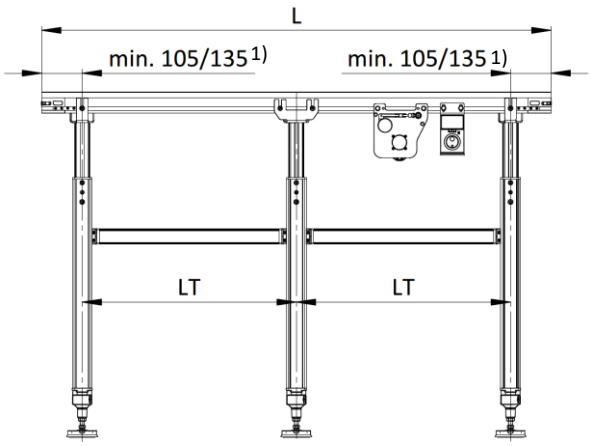


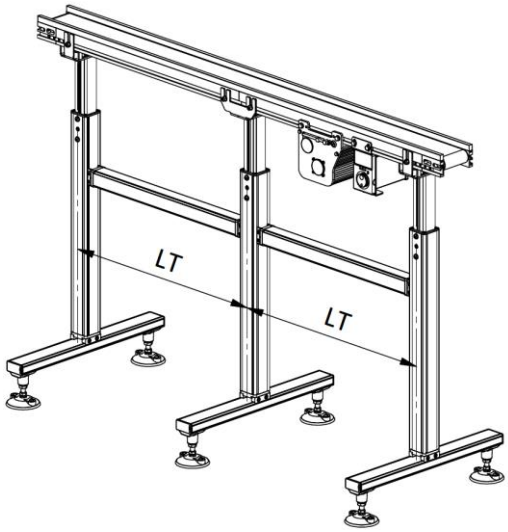
Working height adjustable with
Adjustable feet ST H = 738 – 1180 mm
Swivel castors LR H = 751 – 1192 mm
Castors fixed BR H = 751 – 1192 mm
(Working height = Belt surface)

compatible traverse for floor stands telescopic 052x052	Ref. no.
TE-4000-040x040/052x052 L=0000mm	**69394/….**

POSITIONING OF THE FLOOR STANDS

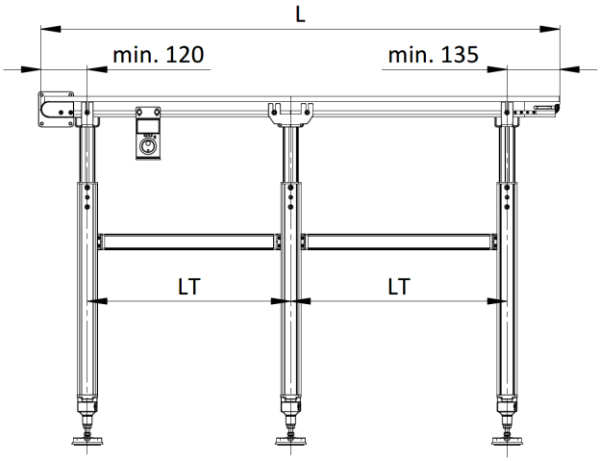
Center drive

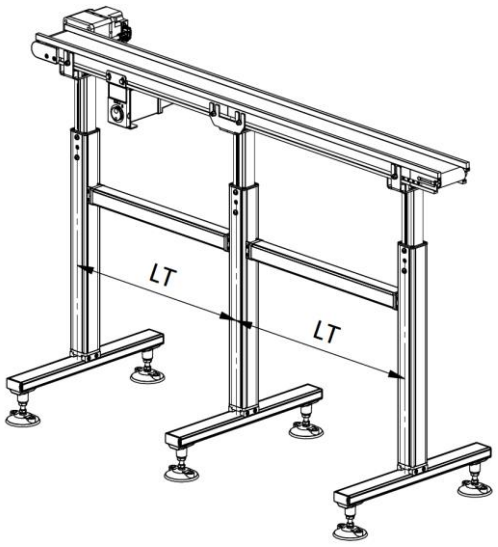




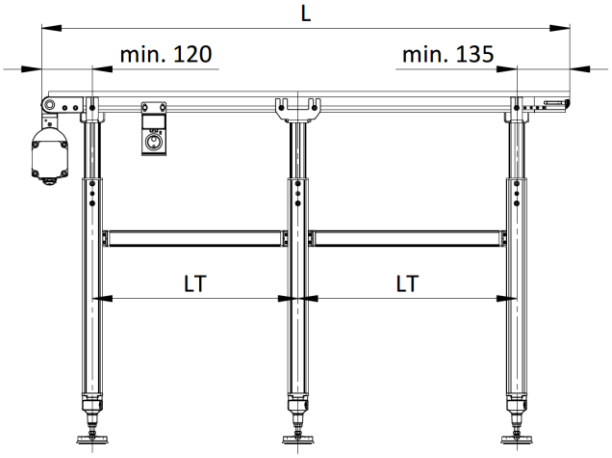
1) 90 mm for end section with deflection roller or knife edge / 120 mm for end section with tension roller (more tension path)

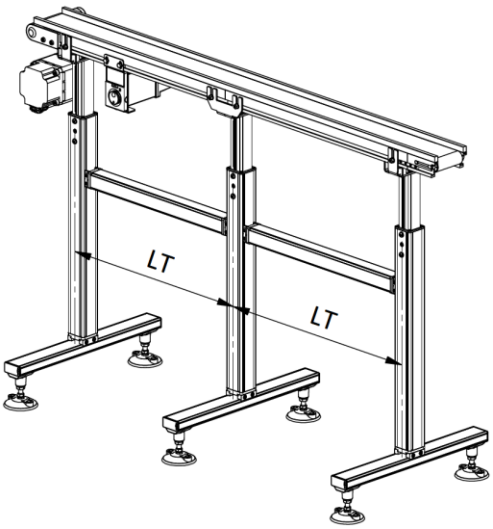
End drive





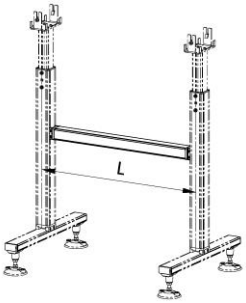
End drive pivotable





TRAVERSE

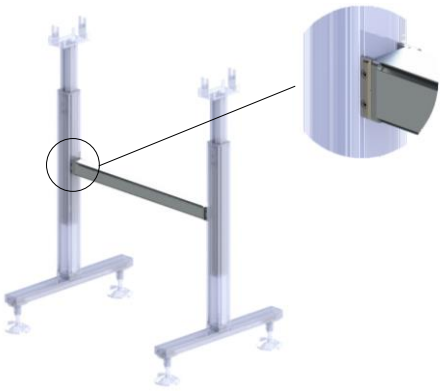
Traverse for floor stand	Ref. no.
TE-4000-040x040/052x052 L=0000mm	**69394/….**



Length L corresponds to the center distance of two floor stands.
min. 500 mm
max. 2500 mm

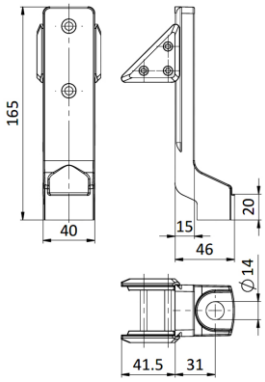
Example:
TE-4000-040x040/052x052 LT=1250mm
Ref.no. 69394/1250

The exact key can be found on page 51.



ACCESSORIES FLOOR STAND BS30

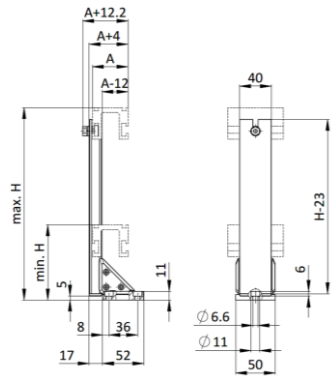
L-based foot WSF-50-S-WV	Ref. no.
	69936
Segment anchor M12x100	**510230**



As an accessory to the BS30 floor stand for anchoring in the fundament.

TABLE STAND TB30

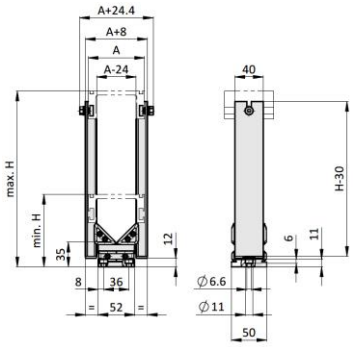
Table stand to TB30-045 / TB30-060	A	Ref. no.
TS30-045	45	**69419/….**
TS30-060	60	**69419/….**



The table stands are cut to the desired height
(min. 95 – max. 500 mm)

Example:
TS30-080 H=0150 69419/0150
The exact key can be found on page 52.

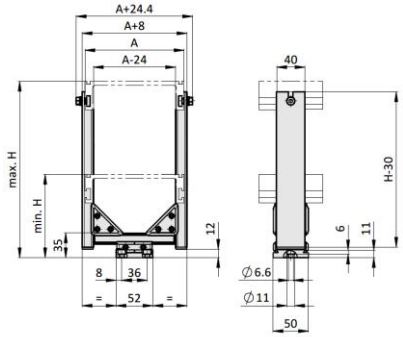
Table stand to TB30-80 / TB30-105	A	Ref. no.
TS30-080	80	**69424/….**
TS30-105	105	**69427/….**



The table stands are cut to the desired height
(min. 103 – max. 500 mm)

Example:
TS30-080 H=0150 69424/0150
The exact key can be found on page 52.

Table stand to TB30-140/TB30-185/ TB30-250	A	Ref. no.
TS30-140	140	**69422/….**
TS30-185	185	**69430/….**
TS30-250	250	**69432/….**



The table stands are cut to the desired height
(min. 118 – max. 500 mm)

Example:
TS30-0185 H=0150 69430/0150
The exact key can be found on page 52.

TABLE STAND TO ALUMINUM FRAMING SYSTEM

Table stand TS30		A	Ref. no.
TS30-080/105 TS30-140/185/250	TS30-080-H224-050	80	**69414**
	TS30-105-H224-050	105	**69437**
	TS30-140-H224-050	140	**69441**
	TS30-185-H224-050	185	**69444**
	TS30-250-H224-050	250	**69445**

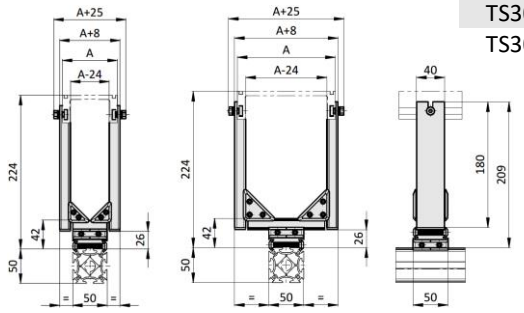
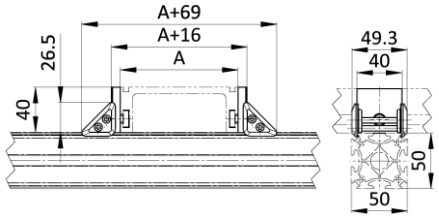


Table stand TS30-H40-050-90°, pair	Ref. no.
	69417



Valid for the following conveyor sizes
A = 45, 60, 80, 105, 140, 185, 250

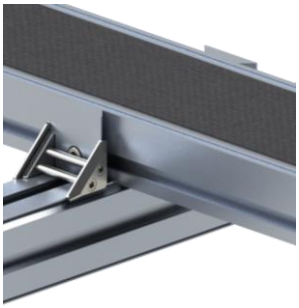
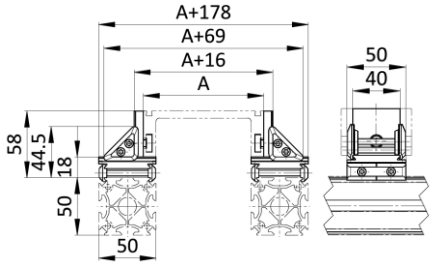
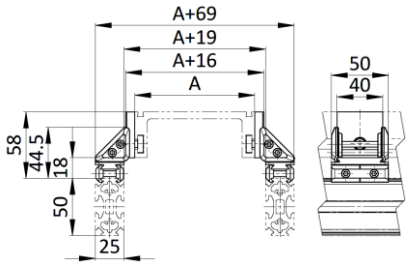


Table stand TS30-H58-050, pair	Ref. no.
	69480



Valid for the following conveyor sizes
A = 45, 60, 80, 105, 140, 185, 250

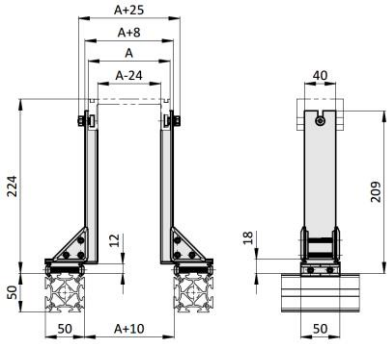
Table stand TS30-H58-025, pair	Ref. no.
	69528



Valid for the following conveyor sizes
A = 45, 60, 80, 105, 140, 185, 250

Table stand TS30-H224-050, pair

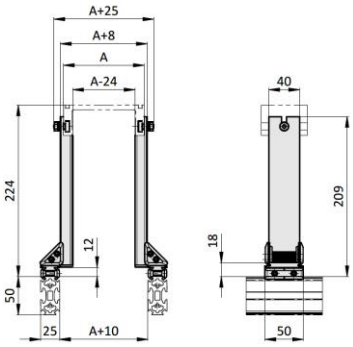
Ref. no. 69416



Valid for the following conveyor sizes
A = 45, 60, 80, 105, 140, 185, 250

Table stand TS30-H224-025, pair

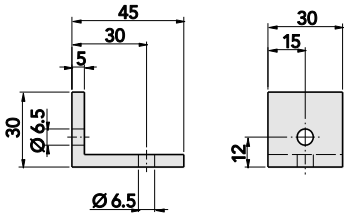
Ref. no. 69498

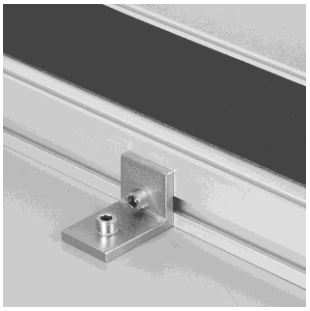


Valid for the following conveyor sizes
A = 45, 60, 80, 105, 140, 185, 250

Bracket T-slot to table-top

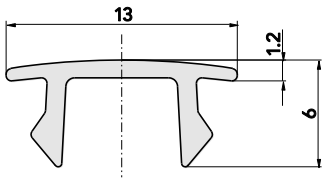
Ref. No. 45469





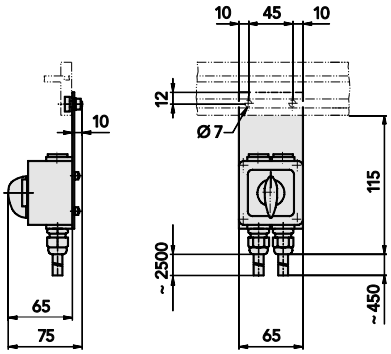
ACCESSORIES TB30

T-slot cover	Ref. No.
per meter	**48143**

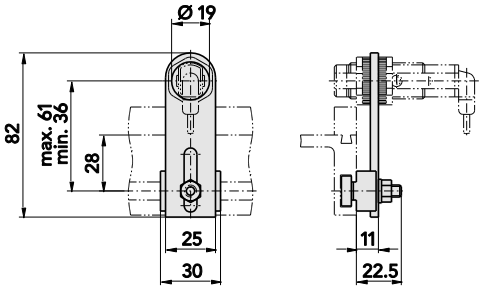


The cover profile serves for closing the open T-slot in the chassis, for example: in applications in the food industry or in clean-room applications.
Material ABS (uncolored)

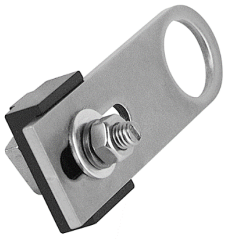
Motor switch with mounting plate (For Three-phase motor only)	Ref. No.
	50092



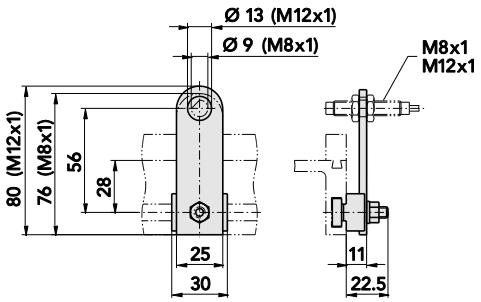
Holder for reflection light barrier	Ref. No.
M 18x1	**34957**



(Scope of delivery without reflection light barrier)



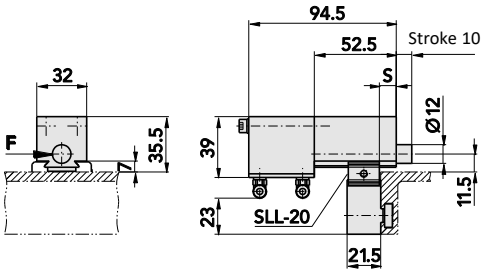
Holder for proximity switch	Ref. No.
M 8x1	**36491**
M 12x1	**42142**



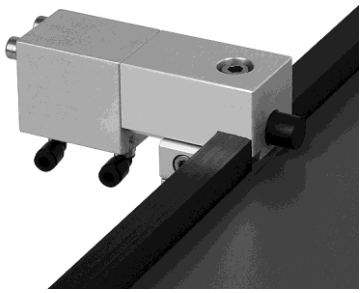
(Scope of delivery without proximity switch)

Stopper

Ref. No.
51590

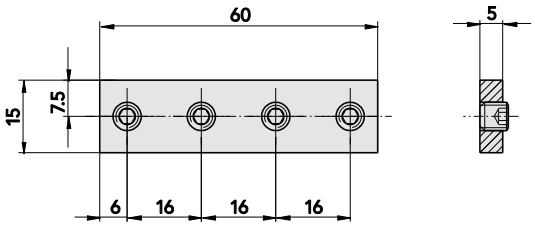


adjustable range S = 0-32 mm
max. transverse force F = 210 N at 5 bar



Joining element chassis-chassis

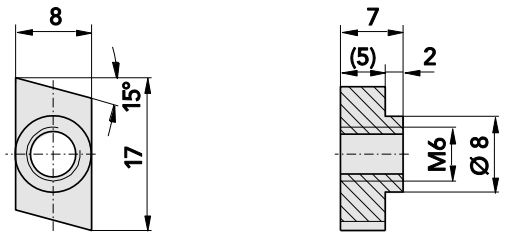
	Ref. No.
pair	36546



The TB30 is shipped in units of max. 3 m length. Conveyor belts over 3 m length are composed of several chassis. For each connecting point a pair of joining element chassis-chassis is needed. Support is required on both sides of a separation.

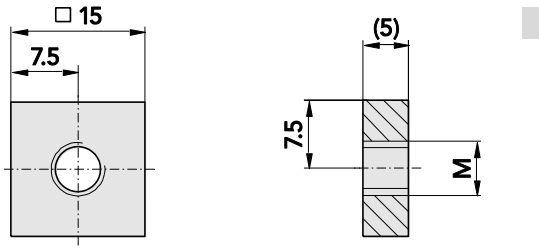
Slotted nut M6

Ref. No.
36551

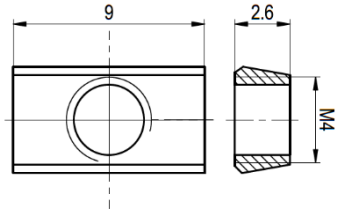


Slot inser

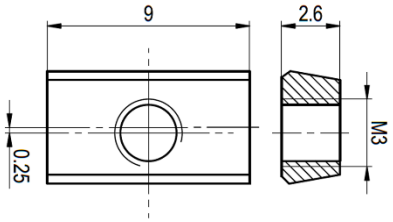
	Ref. No.
M5	45089
M6	21913
M8	45091



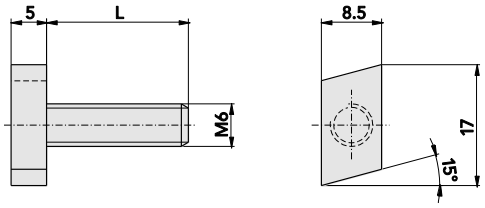
Slot insert M4 for lateral guide	Ref. No.
	63104



Slot insert eccentric M3 for lateral guide	Ref. No.
	63117



Hammer-head screw	Ref. No.
L = 15 mm	40829
L = 20 mm	40830
L = 25 mm	40831



K-100001 EN 1123

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