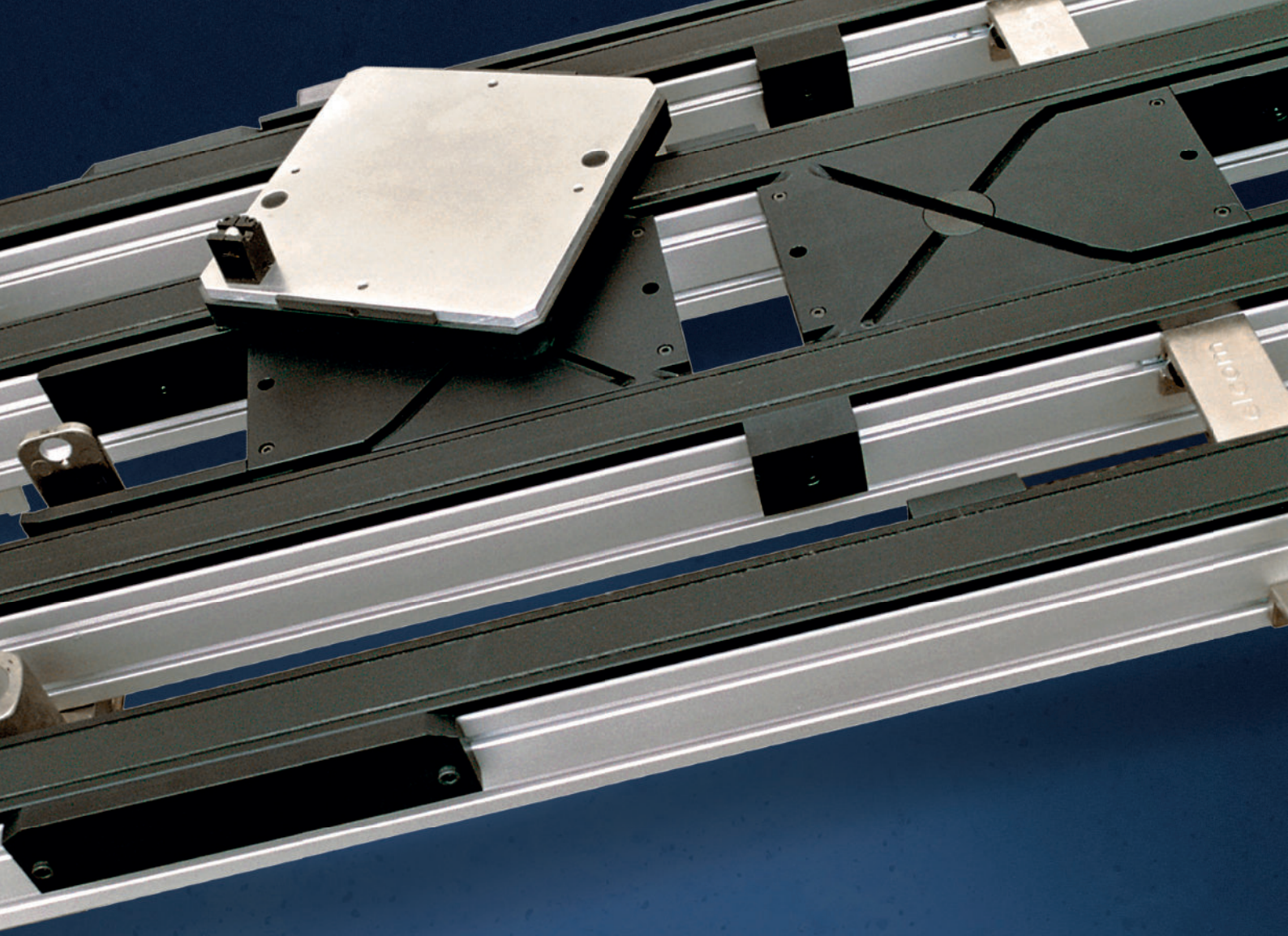
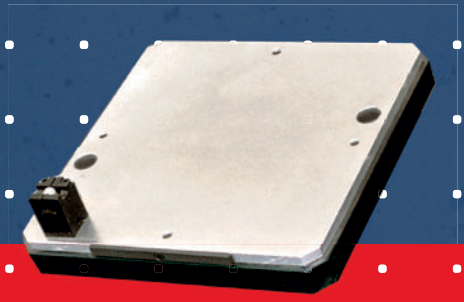


Technical sheet
Pallet transfer system TLM 2000



elcom
by hellomoov'

Conveying unit 24 V
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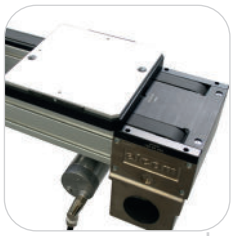

Conveying unit
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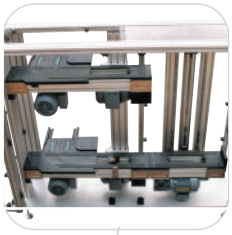

Workpiece carrier
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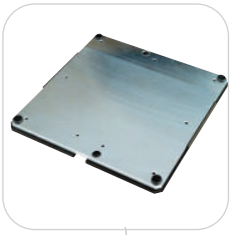

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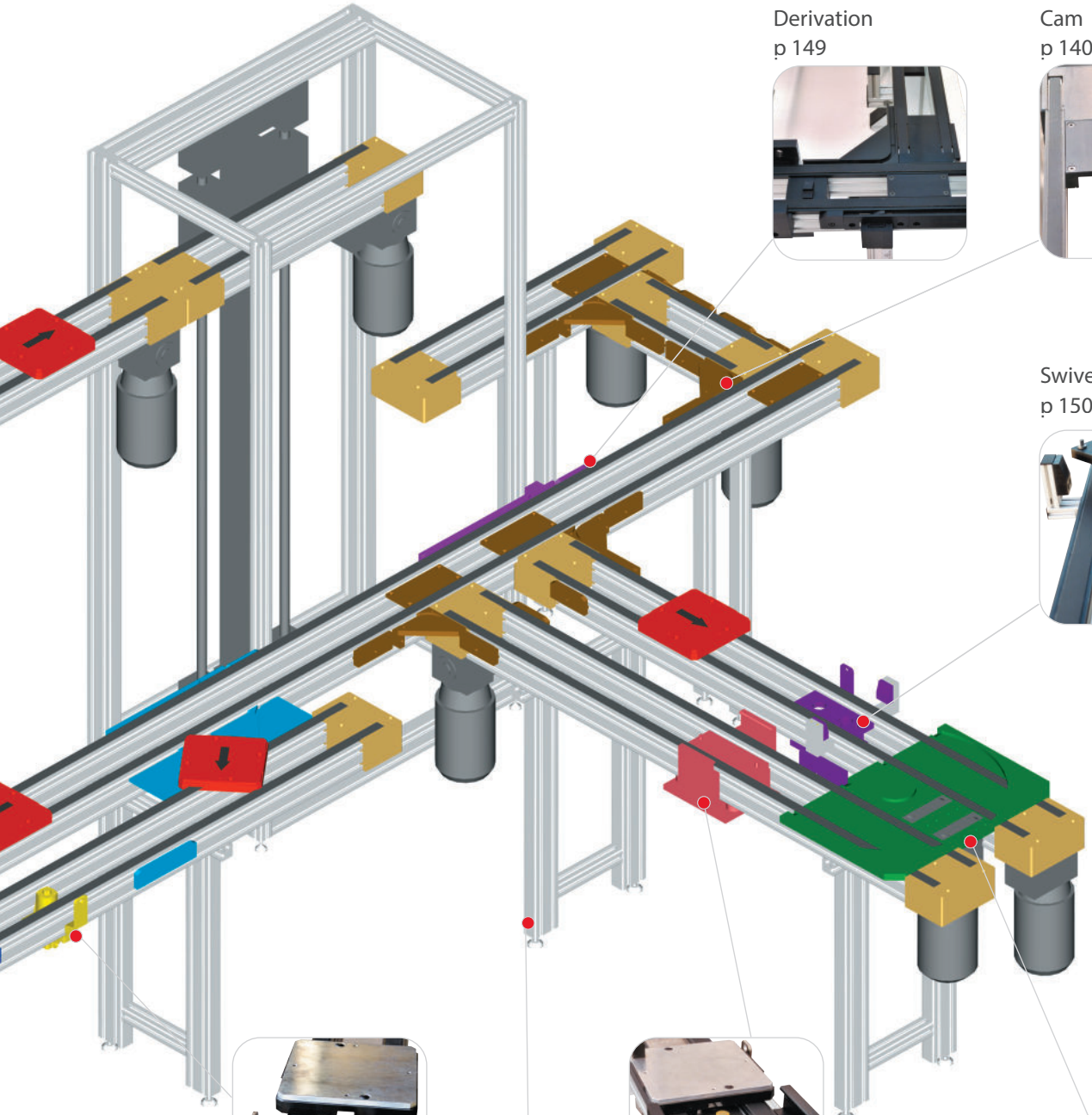

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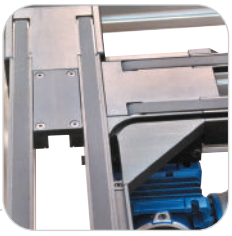

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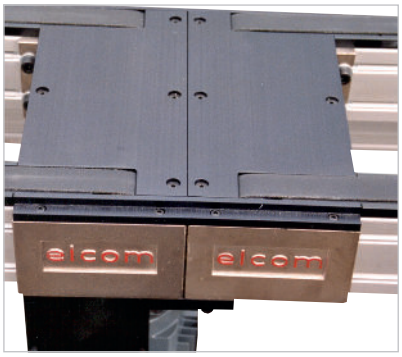
Tip

Download all CAD 3D files

Data

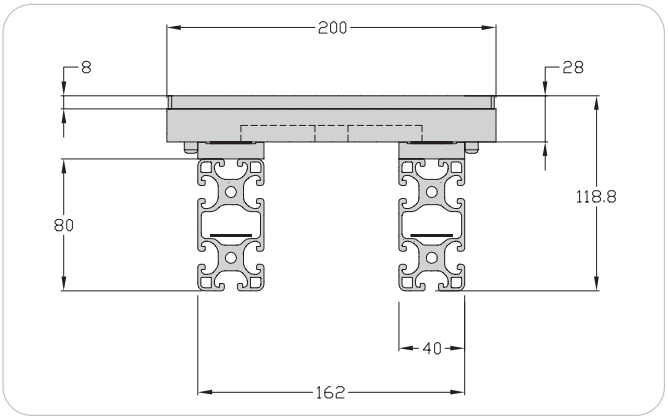
	TLM 2000			TLM 2000 direct			TLM 2000 timing belt 60 kg			TLM 2000 timing belt 150 kg		
Workpiece carriers (mm)	200x200 200x250 200x300 300x300 300x400 400x400			200x200 200x250 200x300 300x300 300x400 400x400			200x200 200x250 200x300			200x200 200x250 200x300		
Load / workpiece carriers (daN)	10			10			10			10		
Speed (m/min)	9 - 15 - 19			9 - 15 - 19			9 - 15 - 19			14		
Length of conveying unit Mini Maxi	 500 6250			 500 6250			 500 6160			 500 6250		
Maxi accumulation load per motor (daN)	100			60			60			150		
Motor power (380 V three-phase)	Speed m/min	KW	A	Speed m/min	KW	A	Speed m/min	KW	A	Speed m/min	KW	A
	9 15 19	0,25 0,37 0,55	0,7 1,2 1,4	9 15 19	0,25 0,37 0,55	0,7 1,2 1,4	9 15 19	0,25 0,37 0,55	0,7 1,2 1,4	14	0,55	1,6

The maximum lengths of the conveying units are respectively:
* 6250 mm for TLM 2000
* 6160 mm for TLM 2000 timing belt light motorization

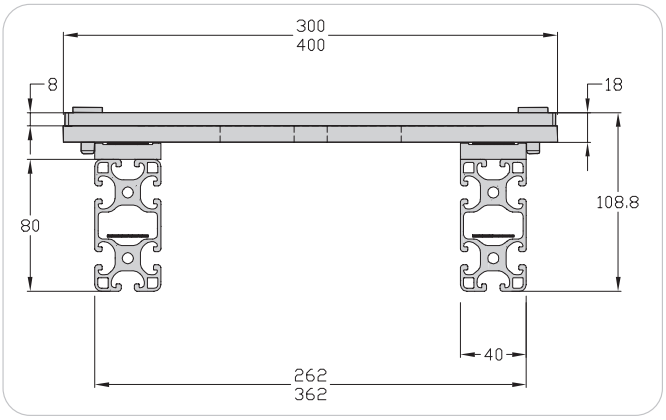


For long spans, several elements can be joined end to end.
For important accumulations, the length of the conveying units is adapted to the load.
It is recommended to place sensors in order to control accumulation of the load.
Pneumatic cylinders must be equipped with flow rate controllers.
It is possible for long spans to be cut in order to facilitate the dismantling of the machines.

TLM 2000 Width 200



TLM 2000 Widths 300 and 400



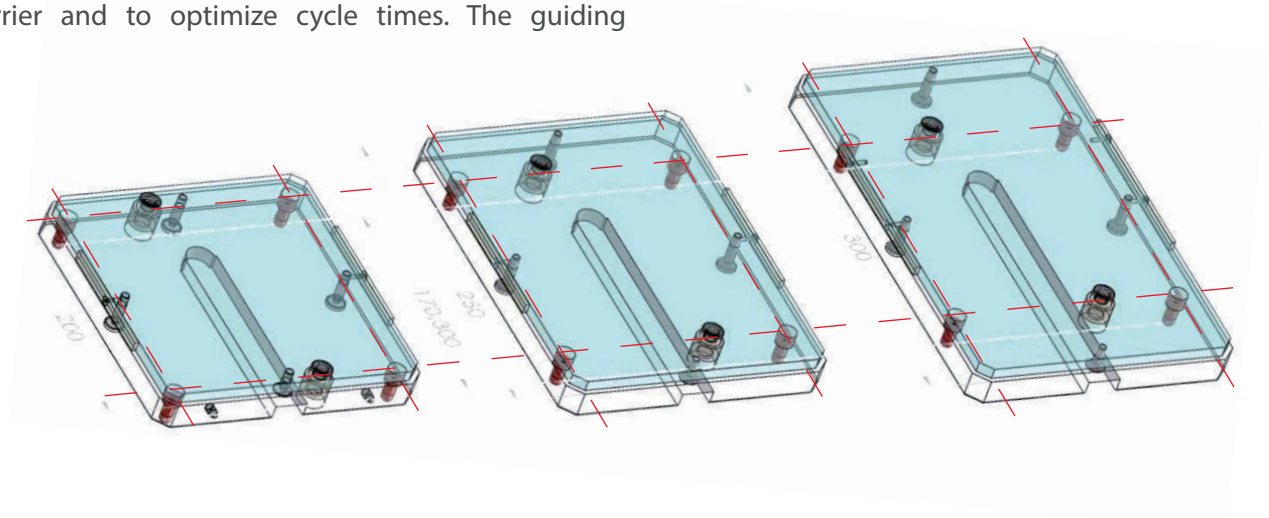
Workpiece carriers

Applications

The workpiece carriers allow the mounting of holders which ensure an accurate positioning of the assembly during the process.
The workpiece carriers consists of two plates.
The upper aluminium plate allows the fastening of workpieces, ensures the geometrical behaviour of workpiece carrier as well as the positioning accuracy. Machining (drillings and tappings) can be made according to the customer's wish.
Stainless steel bushes located in the aluminium plate guarantee resistance to wear and a perfect accuracy. The PA base has an extremely low friction coefficent and lays on the conveying belts. This base hosts 4 guiding pins (specific to **elcom**) and has the necessary shape to ensure stoppers proper functioning.
Metalic bars are located on each side of the workpiece carrier in order to detect them at several workstations. The characteristics of stoppers, guiding pins with springs can be found in the next pages.

Variable length of elcom's workpiece carriers and specific workpiece carriers

Standard workpiece carriers are available to install the workpieces that will be conveyed. In many cases, the surface area workpiece carrier is not sufficient. Specific workpiece carriers can be supplied. The use of 4 guiding pins makes it possible to vary the length of workpiece carrier and to optimize cycle times. The guiding pins remain in the position of the nearest standard workpiece carrier. So, all the standard elements such as cams are usable without modification. The following variants for a TLM 2000 system clearly show the possibilities:



Standard square dimensions:
200 x 200 mm
300 x 300 mm
400 x 400 mm

Standard rectangle dimensions:
200 x 250 mm
200 x 300 mm
300 x 400 mm

Customized customer's dimensions:
200 x XXX mm
300 x XXX mm
400 x XXX mm
XXX = Dimension defined by the user

The lay-out of guide pins is identical in width. However, in the length direction, the guide pins of a 400x400 workpiece carrier have a larger gap than the 200x200 workpiece carriers. In case of use of workpiece carriers of several dimensions on the same transfer unit, lay-out of the guiding pins must be alike.

Workpiece carriers

Workpiece carriers and specific adjustments

Standard workpiece carriers are available to install the customers' workpiece. In many cases, the surface area of workpiece carrier is not sufficient. Specific workpiece carriers must be provided. These must be mostly defined by our customer and be applied to our standard workpiece carriers.

Our standard workpiece carriers and the specific adjustments form together the basis of a secure workpiece conveying. Furthermore this allows an optimum supply of the workpiece carriers at the workbenches. Depending on use, the workpiece carrier will be positioned with an accuracy of 30 µm.

In addition to the positioning, pressure forces are discharged by the workpiece carriers. Our standard modules offer here a derivation of the force up to 40 kN (4 tons).

Workpiece carriers U and M

Workpiece carriers are used to support and position the components during the process.

The upper plate (made of aluminium) is used to fix the components and perform an accurate positioning of the workpiece carrier.

The PA base (which has a very low friction coefficient) is used to shelter the pins and to stop the workpiece carrier on the stopper.

Steel bushes assure perfect accuracy and resistance against deterioration.

On each side of workpiece carrier, small metallic bars allow detection of workpiece carriers at different positions.

Workpiece carriers U

Unidirectional workpiece carriers (U)

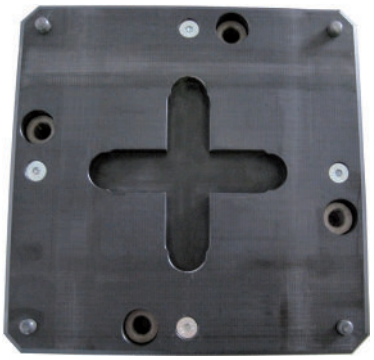
They are perfectly compatible with a 180° swivelling.

Possibility of adding shock absorbers to limit the shock between the workpiece carriers and to reduce the noise (T).

Multidirectional workpiece carriers (M)

For square workpiece carriers only.

They are perfectly compatible with 90°, 180° and 270° swivellings, delivered with 2 bushes and 2 additional detection bars.



Workpiece carriers M

Workpiece carriers U shock absorbers (T)

The aluminum plate is provided with two drills on the side in the direction of motion. Shock absorbers are inserted in these drills. These damp the impact against the plate and therefore reduce noise pollution.
The workpiece carrier with shock absorber T corresponds to the standard U-type workpiece carrier.

⚠ **The use of the workpiece carrier with shock absorbers require the installation of a stopper before each positioning unit. This avoids the shearing of shock absorbers.**

Workpiece carrier with shock absorber

/ NOTES

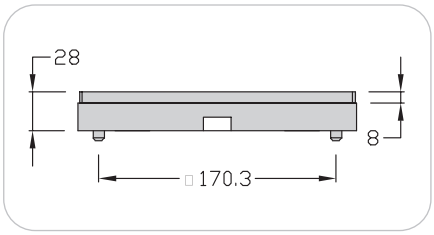
Workpiece carriers U Widths 200

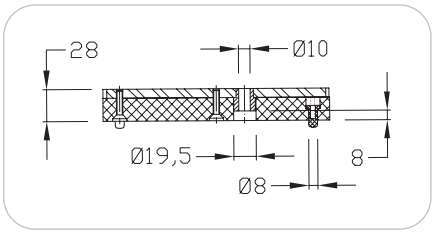
Technical data
- x Plate Al
- x Base, PA black
- x 2 steel bushes
- x 4 pins PA
- x 4 springs
- x 3 countersunk screws M6x25
- x 1 countersunk screw M6x16
- x 2 detection bars
- x 2 plugs

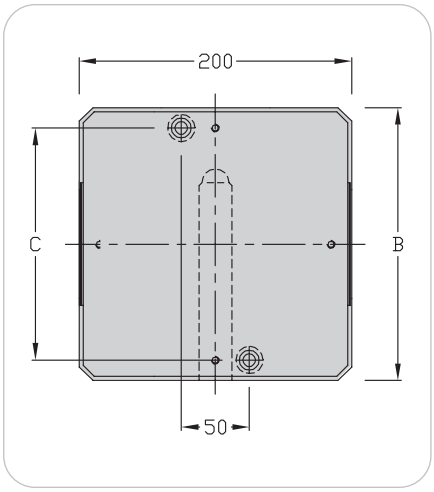
B = 200 C = 170
B = 250 C = 170
B = 300 C = 170

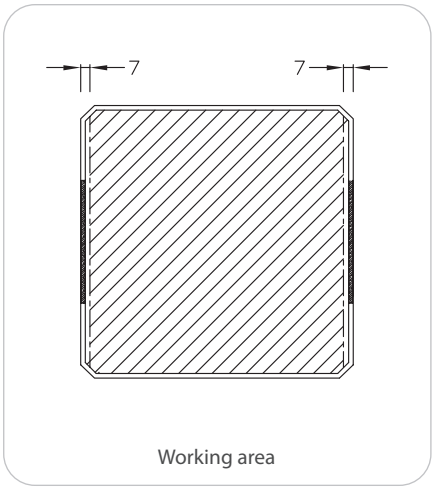
Maximum load: 10 daN

Weight: 200x200: 1,75 kg
200x250: 2,20 kg
200x300: 2,63 kg









Working area

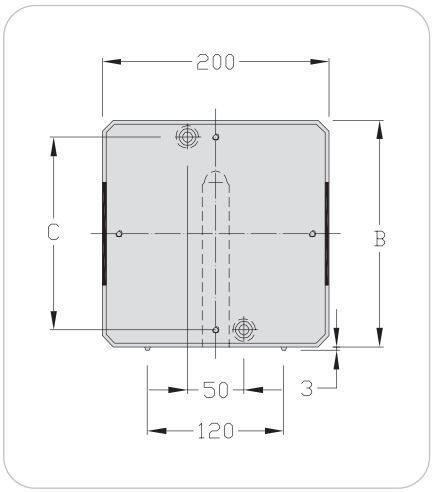
Designation / Dimensions	Order unit	Reference
Workpiece carrier U 200x200	1 pce	120.61.000
Workpiece carrier U 200x250	1 pce	125.62.000
Workpiece carrier U 200x300	1 pce	123.62.000

Workpiece carriers U shock absorbers (T) Width 200

Applications

The use of workpiece carriers with shock absorbers (workpiece carriers T) limits the shock between the workpiece carriers and reduces the noise.
For unidirectional workpiece carriers only.
Set up a stopper before each positioning unit.

Weight: 200x200 : 1,75 kg
200x250 : 2,20 kg
200x300 : 2,63 kg



Designation / Dimensions	Order unit	Reference
Workpiece carrier U 200x200 T	1 pce	120.61.000.T
Workpiece carrier U 200x250 T	1 pce	125.62.000.T
Workpiece carrier U 200x300 T	1 pce	123.62.000.T

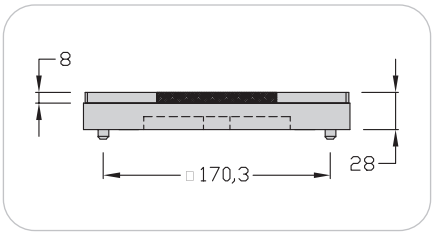
Workpiece carriers M Widths 200

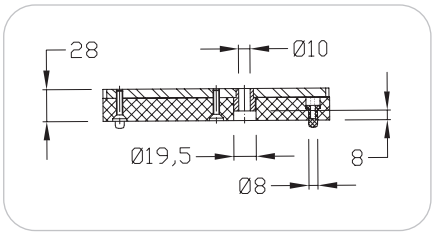
Technical data
- x Plate Al
- x Base, PA black
- x 2 steel bushes
- x 4 pins PA
- x 4 springs
- x 4 countersunk screws M6x25
- x 2 detection bars
- x 2 plugs

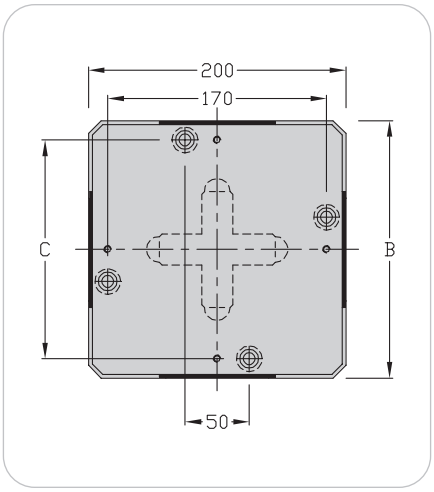
B = 200 C = 170
B = 250 C = 170
B = 300 C = 170

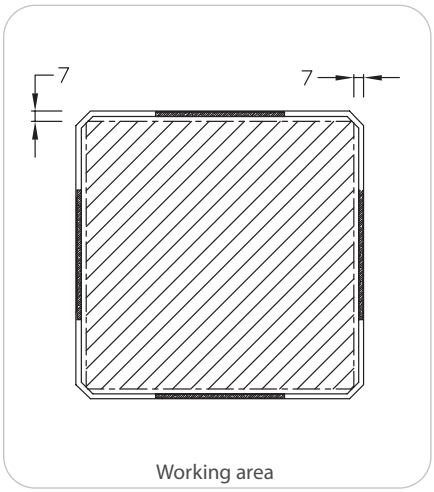
⚠ **Maximum load: 10 daN**

Weight: 200x200: 1,75 kg
200x250: 2,20 kg
200x300: 2,63 kg



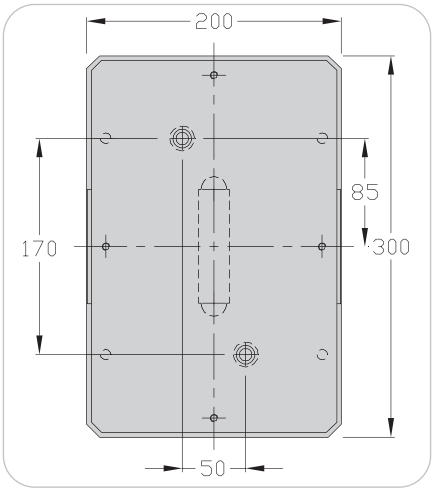


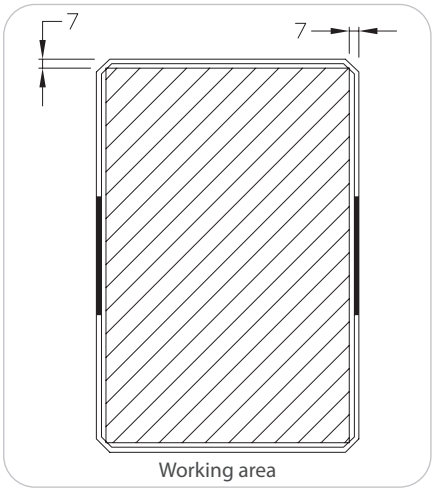




Option : set 90°

Technical data
- x 2 detection bars
- x 2 steel bushes
- x 2 plugs





Designation / Dimensions	Order unit	Reference
Workpiece carrier M 200x200	1 pce	120.63.000
Workpiece carrier M 200x250	1 pce	125.73.000
Workpiece carrier M 200x300	1 pce	123.73.000
Set 90° 200x200	1 pce	900.00.001

Workpiece carriers U Widths 300 - 400

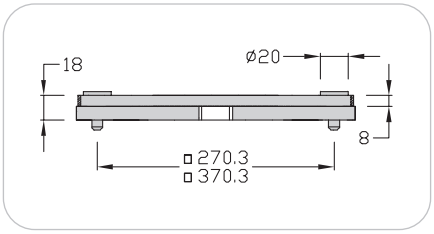
Technical data

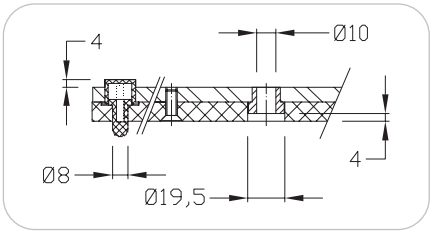
- x Plate Al
- x Base, PA black
- x 2 steel bushes
- x 4 pins PA
- x 4 springs
- x 9 countersunk screws M6x16
- x 2 detection bars
- x 2 plugs

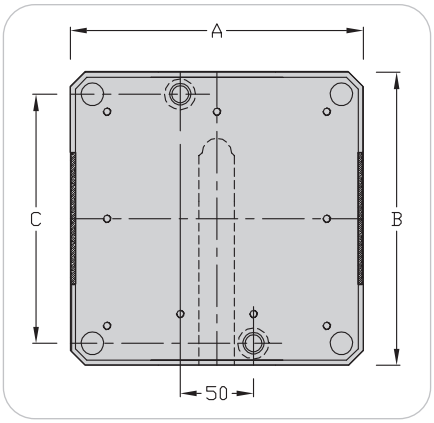
A = 300 B = 300 C = 270
A = 300 B = 400 C = 370
A = 400 B = 400 C = 370

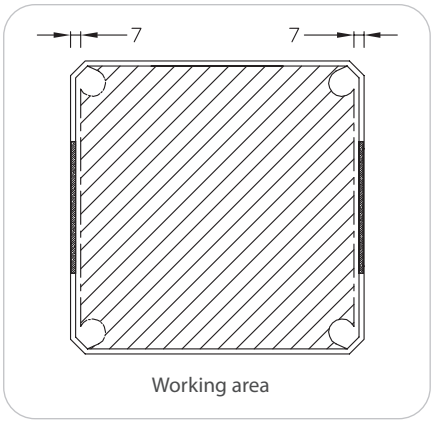
Maximum load: 10 daN

Weight: 300x300: 3,10 kg
300x400: 4,10 kg
400x400: 5,40 kg









Designation / Dimensions	Order unit	Reference
Workpiece carrier U 300x300	1 pce	130.61.000
Workpiece carrier U 300x400	1 pce	134.62.000
Workpiece carrier U 400x400	1 pce	140.61.000

Workpiece carriers U shock absorbers (T) Widths 300 - 400

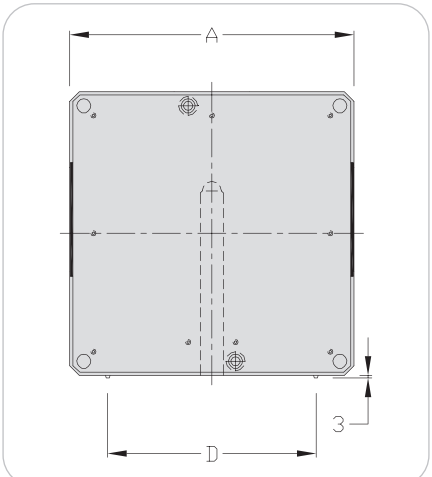
Applications

The use of workpiece carriers with shock absorbers (workpiece carriers T) limits the shock between the workpiece carriers and reduces the noise.
For unidirectional workpiece carriers only.

Set up a stopper before each positioning unit.

A = 300 D = 220 A = 400 D = 320

Weight: 300x300: 3,10 kg
300x400: 4,10 kg
400x400: 5,40 kg



Designation / Dimensions	Order unit	Reference
Workpiece carrier U 300x300 T	1 pce	130.61.000.T
Workpiece carrier U 300x400 T	1 pce	134.62.000.T
Workpiece carrier U 400x400 T	1 pce	140.61.000.T

Workpiece carriers M Widths 300 - 400

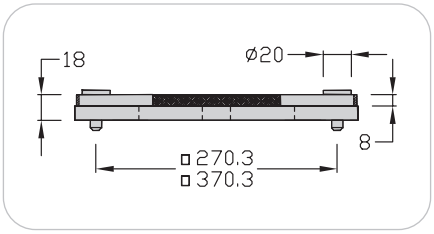
Technical data

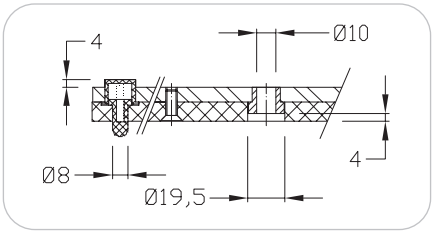
- x Plate Al
- x Base, PA black
- x 2 steel bushes
- x 4 pins PA
- x 4 springs
- x 8 countersunk screws M6x16
- x 2 detection bars
- x 2 plugs

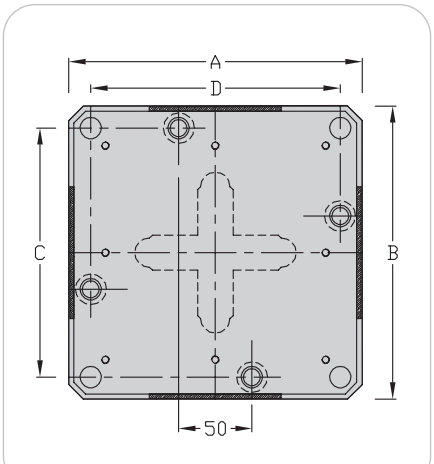
A = 300 B = 300 C = 270 D = 270
A = 300 B = 400 C = 370
A = 400 B = 400 C = 370 D = 370

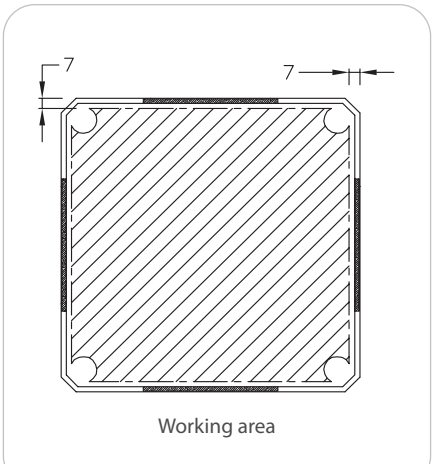
⚠ Maximum load: 10 daN

Weight: 300x300: 3,10 kg
300x400: 4,10 kg
400x400: 5,40 kg









Working area

Option : set 90°

Technical data

- x 2 detection bars
- x 2 steel bushes
- x 2 plugs

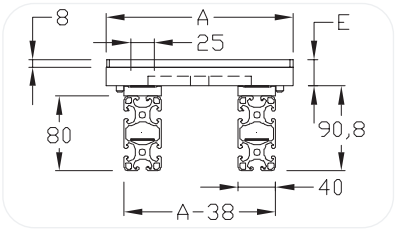
Designation / Dimensions	Order unit	Reference
Workpiece carrier M 300x300	1 pce	130.63.000
Workpiece carrier M 300x400	1 pce	134.73.000
Workpiece carrier M 400x400	1 pce	140.63.000
Set 90° 300 and 400	1 pce	900.00.003

Conveying units flat belt

Moving and accumulating of workpiece carriers.
The motor can be fitted either vertically or horizontally, on the right or left side.

According to the load, longer spans can be joined end to end by a straight joining.
The cutting of the conveyors allows division of the length, making transport and installation of the lines easier.
They also allow to make important lengths for reduced loads.

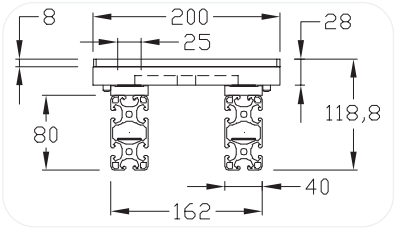
Provide a spacer every meter.



Conveying units direct

Moving and accumulating of workpiece carriers.
The motor can be fitted either vertically or horizontally, on the right or left side.
Perfectly compatible with the other conveying units.
The use of a new antistatic timing belt enables «Flex-proof» weldings.
Timing belts' change is highly reduced.

Provide a spacer every meter.



Antistatic set (option)

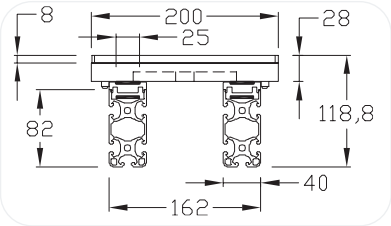
The antistatic set will divert through metal rollers the frame's static charge caused by the belt's friction.
The charge will be dissipated by the frame's grounding.

Conveying units light timing belt

Moving and accumulating of workpiece carriers.
The motor can be fitted either vertically or horizontally, on the right or left side.
Perfectly compatible with the other conveying units.
The use of antistatic timing belts width 25 mm facilitates the maintenance when changing belts.

Belt guides are pressed into aluminium profile housings.

Provide a spacer every meter and every extremity.

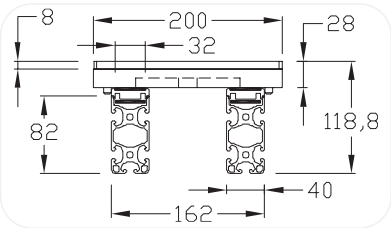


Conveying units heavy timing belt

Moving and accumulating of workpiece carriers.
The motor can be fitted either vertically or horizontally, on the right or left side.
Perfectly compatible with the other conveying units.
The use of antistatic timing belts width 32 mm enables to convey important loads and facilitates maintenance when changing belts.

Belt guides are pressed into aluminium profile housings.

Provide a spacer every meter and every extremity.



Conveying units direct 24 V Widths 200 - 300 - 400

Applications

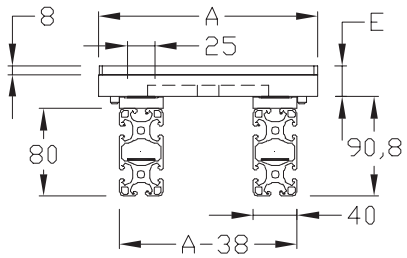
Moving and accumulating of workpiece carriers widths 200, 300 and 400 mm.
According to the load, longer spans can be joined end to end by straight joinings.
The cuttings of conveyors allow division of the lengths, making transport and installation lines easier.
The Flexproof type welding belt greatly reduces the change of belts.
Spacers have to be fitted between the profiles every meter to ensure a perfect parallelism of the two profiles.
This conveying unit is supplied with a Brushless motor factory-programmed according to your speed and acceleration ramp requirements. The use of a Brushless gear motor facilitates the wiring.

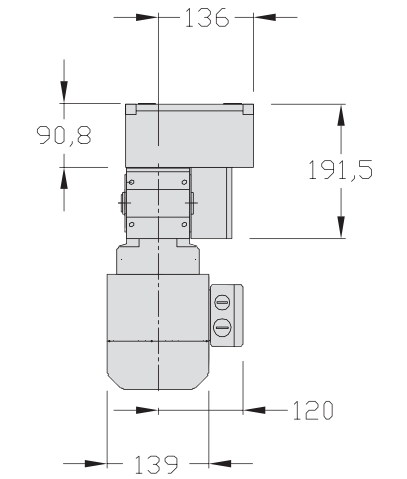
elcom ITS 24 V

Conveying units pushing motor flat belt

Applications

Moving and accumulating of workpiece carriers 200x200 and 400x400 on a flat belt unit with pushing motor.
The motor can be fitted either vertically or horizontally, on the right or left side.
According to the load, longer spans can be joined end to end by straight joinings.
The cuttings of conveyors allow division of the lengths, making transport and installation of the lines easier.
Spacers have to be fitted between the profiles every 1 meter to ensure a perfect parallelism of the profiles.





Conveying units flat belt Widths 200 - 300 - 400

Technical data

Length mini L = 500 mm
Length maxi L = 6 250 mm

For longer spans and according to the load, use several conveying units.

Unit transport

x 1 idling unit
x 1 driving unit
speeds: 9, 15 or 19 m/min
(other speeds on request)
x 1 motor 230/400 V three-phase
0,25 KW (9 m/min) I : 0,7 A
0,37 KW (15 m/min) I : 1,2 A
0,55 KW (19 m/min) I : 1,4 A

Conveyor length

x 2 profiles 8 80x40, Al anodized
x 2 belt guides, PA black
x 2 belts width 25 mm
thickness 1,6 mm, welded

Maximum load /6 m: 200 daN
Maximum accumulation load /6 m: 100 daN

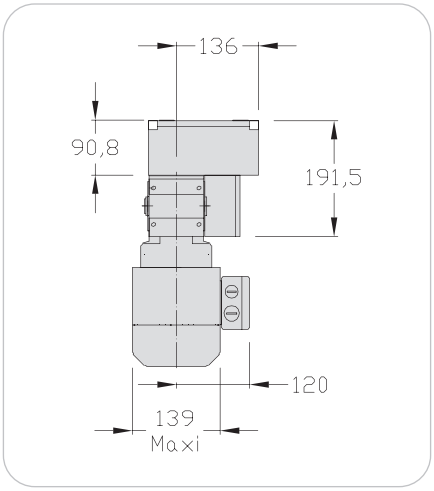
Belt length in mm

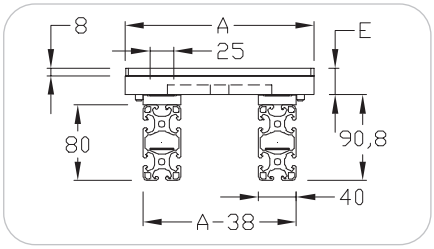
L welded = [(L-100) x 2 + 173] x 0,98

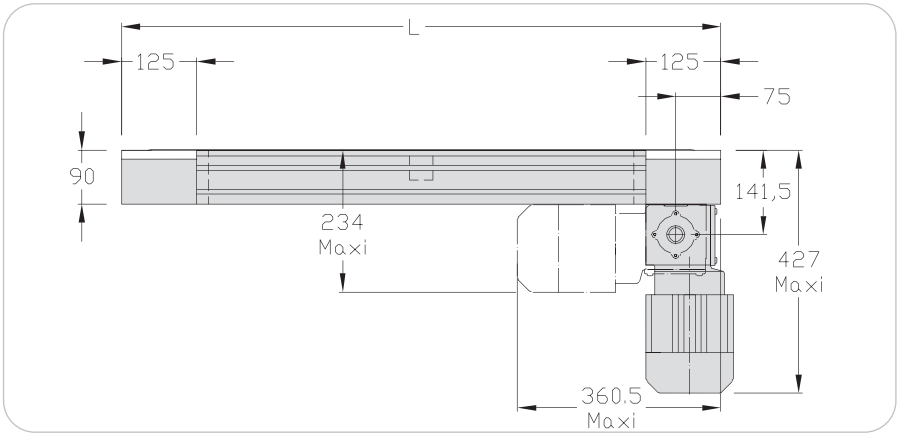
Weight: 200: 15,7 kg +/m: 6,7 kg
300: 18,5 kg +/m: 6,7 kg
400: 21,1 kg +/m: 6,7 kg

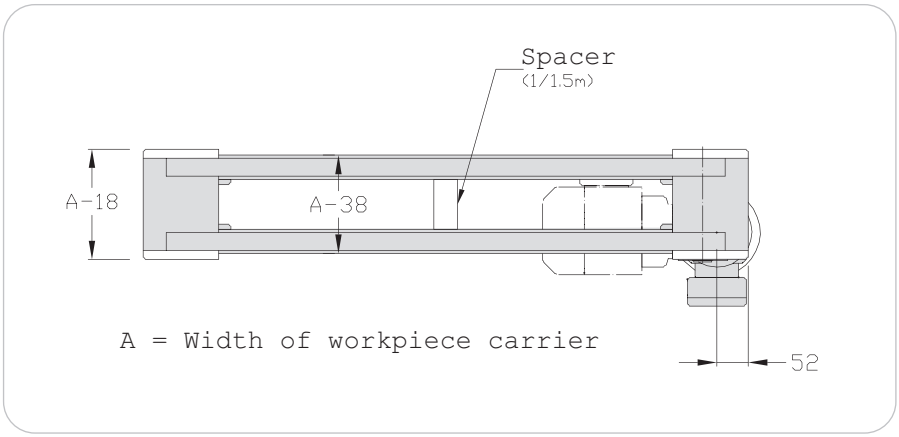
Antistatic option:

To be ordered with the initial assembling:
• 2 shouldered screws
• 2 steel rollers









Designation / Dimensions	Order unit	Reference
Conveying unit 200 flat belt	1 pce	120.02.000.**
Conveying unit 300 flat belt	1 pce	130.02.000.**
Conveying unit 400 flat belt	1 pce	140.02.000.**
Conveying length	m	120.02.000.A
Antistatic set	1 pce	120.02.000.C

(** = speed of motor m/min: 9, 15 or 19 eg: 120.02.000.09)

Conveying unit light timing belt Width 200

Technical data

Length mini L = 500 mm
Length maxi L = 6 160 mm

For longer spans and according to the load, use several conveying units.

Conveying unit

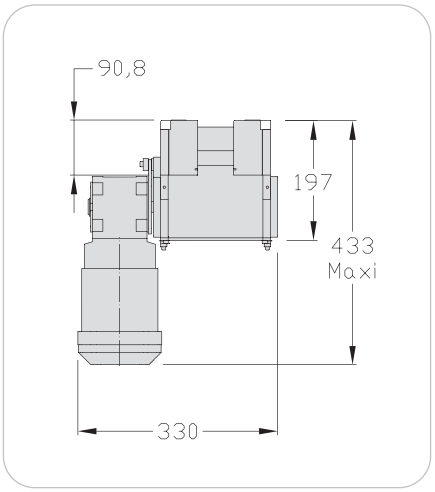
- x 1 idling unit
- x 1 driving unit
  speed: 9, 15 or 19 m/min
- x 1 motor 240/400 V three-phase
  0,25 KW (9 m/min) I : 0,7 A
  0,37 KW (15m/min) I : 1,2 A
  0,55 KW (19m/min) I : 1,4 A

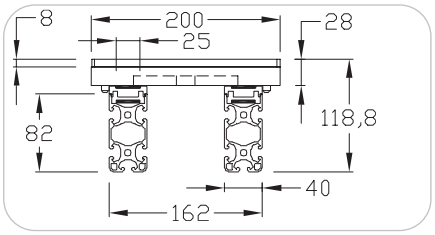
Conveyor length

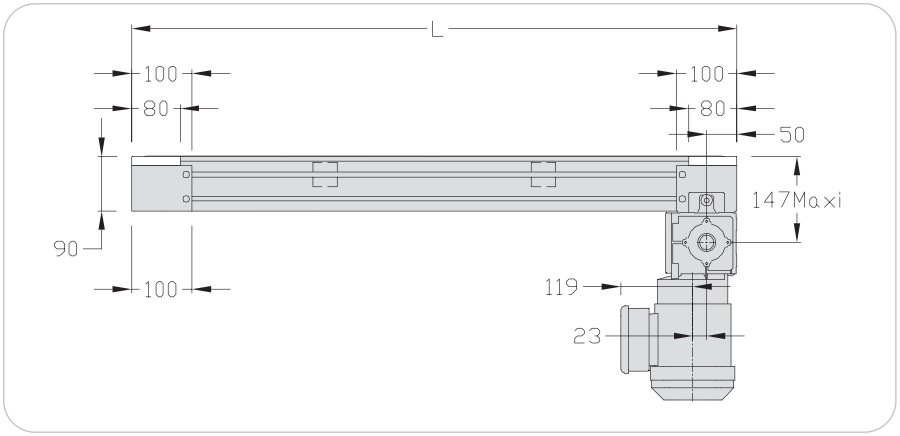
- x 2 profiles 8 82x40, Al anodized
- x 2 belt guides, PA black
- x 2 antistatic belts
  width 25 mm, 5 mm step

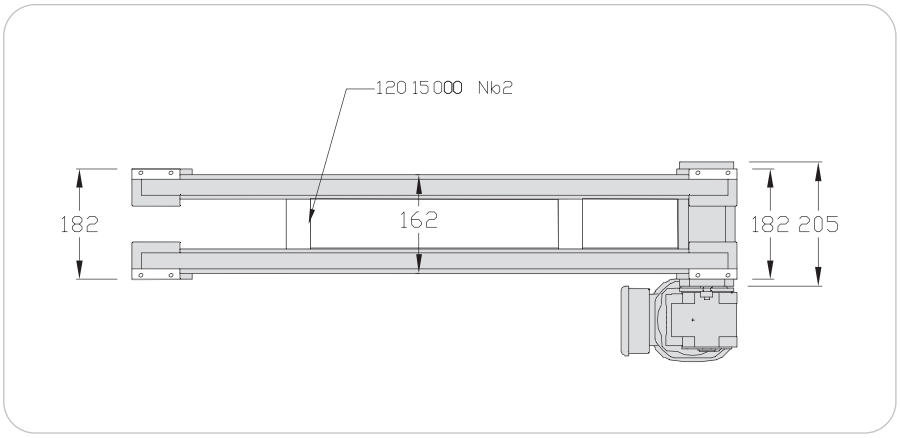
⚠ **Maximum load /6 m: 120 daN**
Maximum accumulation load /6 m: 60 daN

Weight: 16,7 kg + 6,8 kg/m









Designation / Dimensions	Order unit	Reference
Conveying unit 200 light timing belt	1 pce	120.87.000.**
Conveying length	m	120.87.000.A

(** = speed of motor m/min: 9, 15 or 19 eg: 120.87.000.09)

Conveying unit heavy timing belt Width 200

Technical data

Length mini L = 500 mm
Length maxi L = 6 250 mm

For longer spans and according to the load, use several conveying units.

Conveying unit

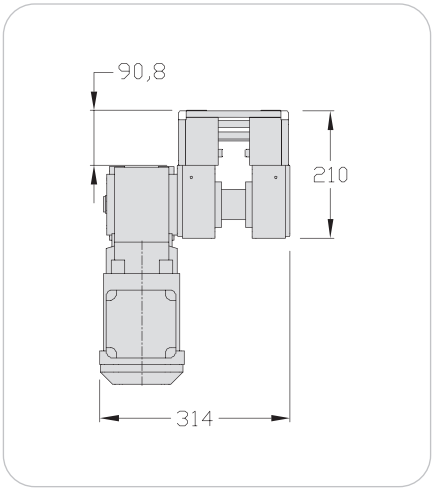
- x 1 idling unit
- x 1 driving unit
  speed : 14 m/min
- x 1 motor 240/400 V three-phase
  0,55 KW (14m/min) I : 1,6 A

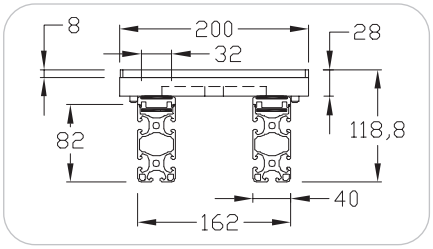
Conveyor length

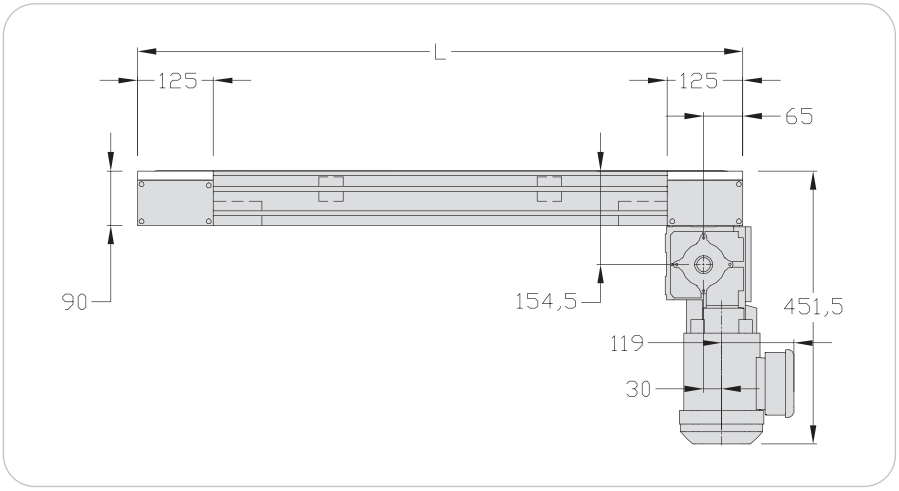
- x 2 profiles 8 82x40, Al anodized
- x 2 belt guides, PA black
- x 2 antistatic belts
  width 32 mm, 5 mm step

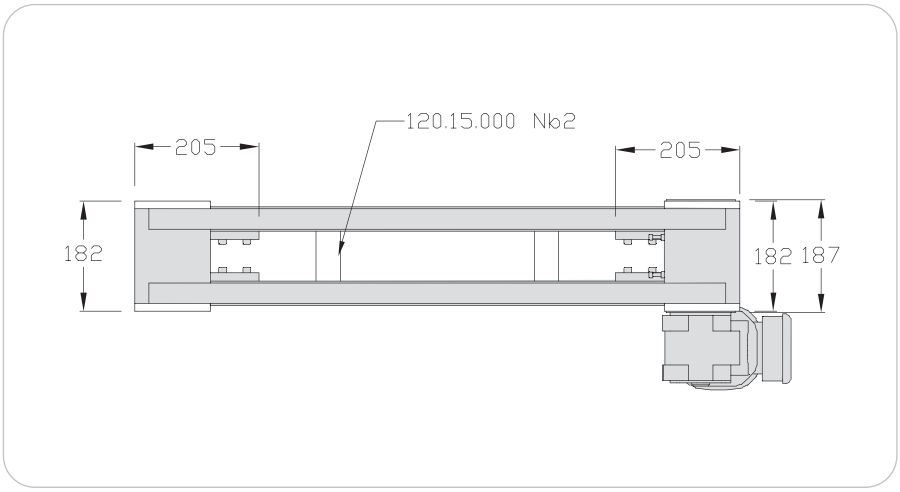
⚠ **Maximum load /6 m: 300 daN**
Maximum accumulation load /6 m: 150 daN

Weight: 21,2 kg + 6,9 kg/m









Designation / Dimensions	Order unit	Reference
Conveying unit 200 heavy timing belt	1 pce	120.80.000.14
Conveying length	m	120.80.000.A

Conveying unit 24 V direct flat belt Widths 200 - 300 - 400

Technical data

Length mini L = 500 mm
Length maxi L = 6 250 mm

For longer spans and according to the load, use several conveying units.

Conveying unit

- x 1 idling unit
- x 1 driving unit
  speed: 9 to 19 m/min,
  factory-programmed.
  Possible stop in case of accumulation.
- x 1 motor 24 V
  0,15 KW
  I: minimum supply voltage 10 A

Conveyor length

- x 2 profiles 8 80x40, Al anodized
- x 2 guide-bandes, PA black
- x 2 belts width 25 mm,
  thickness 1,8 mm, welded

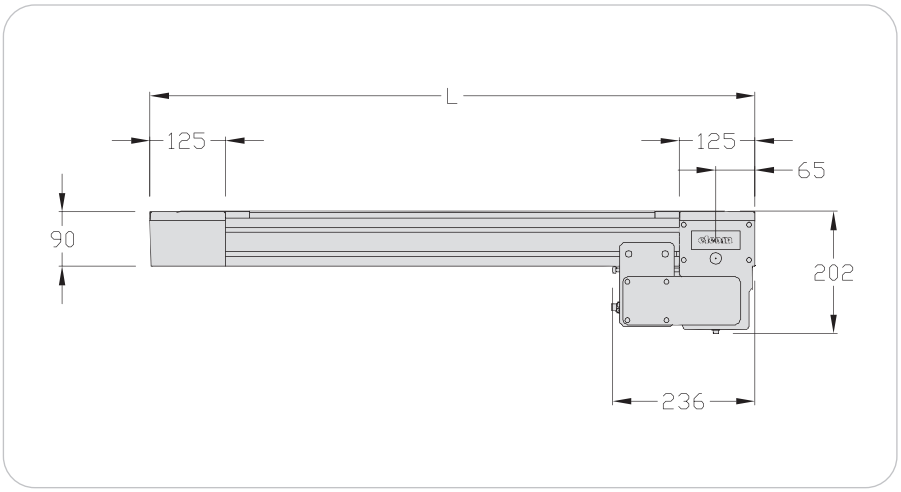
Maximum load / 6 m: 120 daN
Maximum accumulation load / 6 m: 60 daN

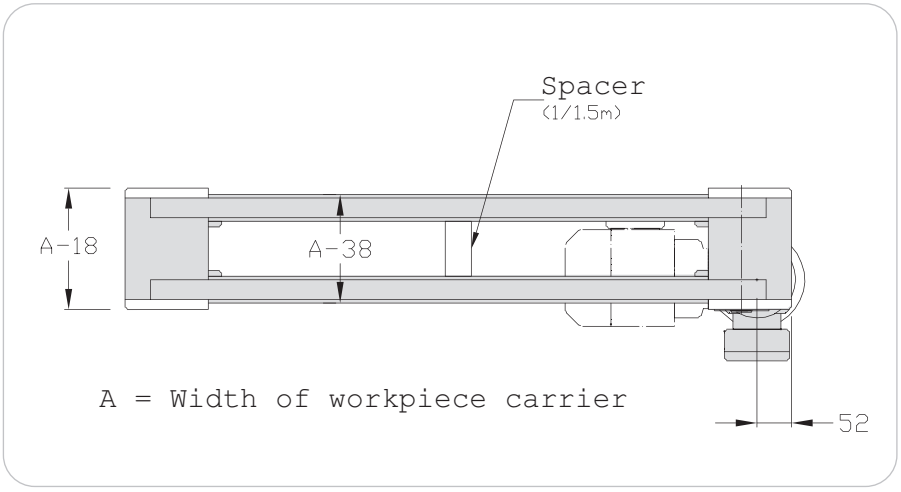
Belt length (in mm) :

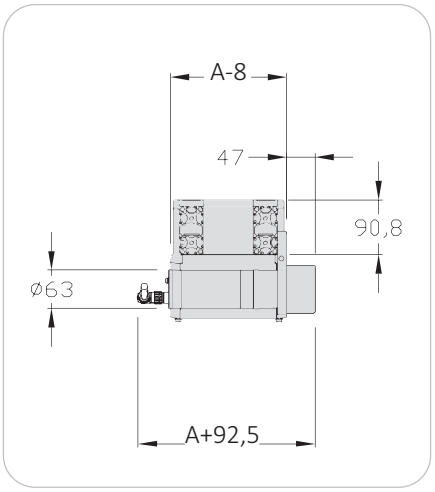
Lc = [(L-250) x 2 + 733] x 0,98

Power supply:24 VDC
Supply current: 8,5 A
Control voltage: 24 VDC
Control current: 10 mA
2 control outputs, 2 status inputs.

Weight:
200: 11,0 kg + 6,7 kg /m
300: 13,8 kg + 6,7 kg /m
400: 16,5 kg + 6,7 kg /m







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Designation / Dimensions	Order unit	Reference
Conveying unit 24 V 200 direct flat belt	1 pce	120.11.000.E
Conveying unit 24 V 300 direct flat belt	1 pce	130.11.000.E
Conveying unit 24 V 400 direct flat belt	1 pce	140.11.000.E
Conveying length	m	120.11.000.A

Conveying units pushing motor Widths 200 - 300 - 400

Technical data

Length mini L = 500 mm
Length maxi L = 6 250 mm

For longer spans and according to the load, use several conveying units.

Unit transport
- x 1 idling unit
- x 1 driving unit :
  speeds: 9, 15 or 19 m/min
  (other speeds on request)
- x 1 motor : 230/400 V three-phase
  0,25 KW (9 m/min) I : 0,7 A
  0,37 KW (15 m/min) I : 1,2 A
  0,55 KW (19 m/min) I : 1,4 A

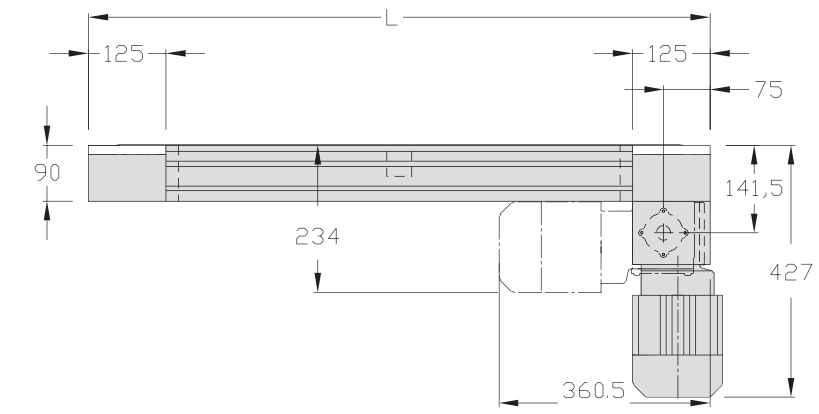
Conveyor length
- x 2 profiles 8 80x40, Al anodized
- x 2 belt guides, PA black
- x 2 belts width 25 mm

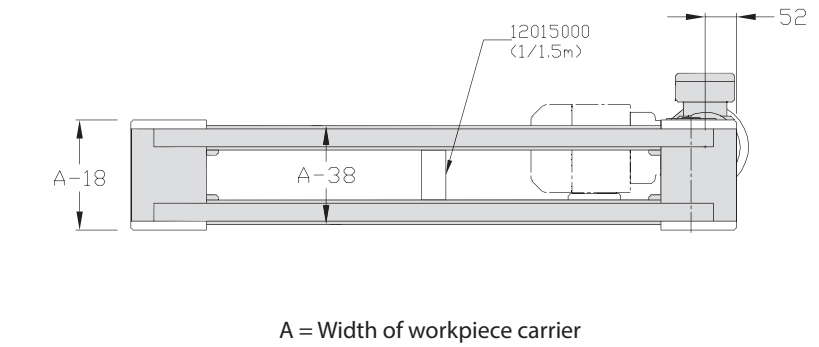
⚠ **Maximum load /6 m: 100 daN**
Maximum accumulation load /6 m: 50 daN

Belt length in mm
L welded = [(L-100) x 2 + 173] x 0,98

Weight:
200: 15,7 kg + 6,7 kg /m
300: 18,5 kg + 6,7 kg /m
400: 21,1 kg + 6,7 kg /m

Antistatic option
To be ordered with the initial assembling:
- 2 shouldered screws
- 2 steel rollers





A = Width of workpiece carrier

Designation / Dimensions	Order unit	Reference
Conveying unit 200 pushing motor	1 pce	120.02.000.P.**
Conveying unit 300 pushing motor	1 pce	130.02.000.P.**
Conveying unit 400 pushing motor	1 pce	140.02.000.P.**
Conveying length	m	120.02.000.A
Antistatic set	1 kit	120.02.000.C

(** = speed of motor m/min: 9 - 15 or 19 eg: 120.02.000.P.09)

Conveying unit direct Widths 200 - 300 - 400

Technical data

Length mini L = 500 mm
Length maxi L = 6 250 mm

For longer spans and according to the load, use several conveying units.

Conveying unit

- x 1 idling unit
- x 1 driving unit
  speeds: 9, 15 or 19 m/min
- x 1 motor 230/400 V three-phase
  0,25 KW (9 m/min) I : 0,7 A
  0,37 KW (15 m/min) I : 1,2 A
  0,55 KW (19 m/min) I : 1,4 A

Conveyor length

- x 2 profiles 8 80x40, Al anodized
- x 2 belt guides, PA black
- x 2 belts width 25 mm
  thickness 1,8 mm, welded

Maximum load /6 m: 120 daN
Maximum accumulation load /6 m: 60 daN

Belt length in mm

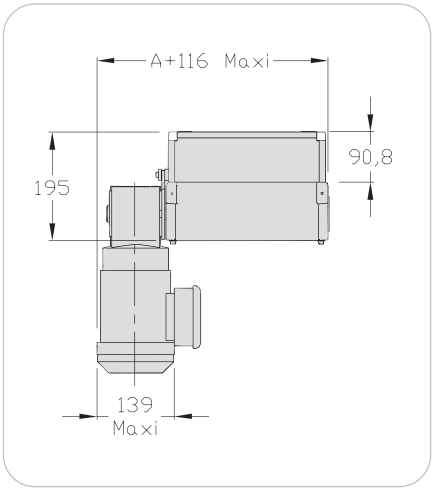
L welded = [(L-250) x 2 + 733] x 0,98

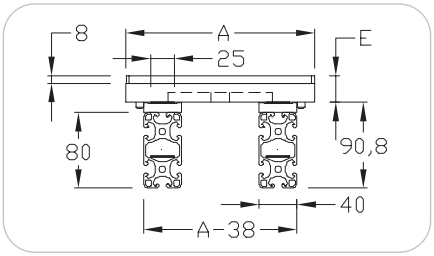
Weight:
200 : 16,5 kg + 6,7 kg/m
300 : 19,3 kg + 6,7 kg/m
400 : 22,0 kg + 6,7 kg/m

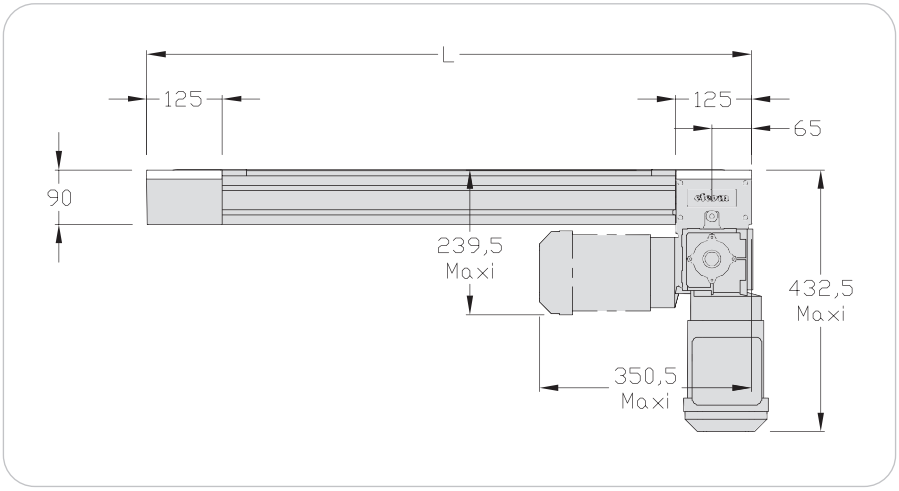
Antistatic option

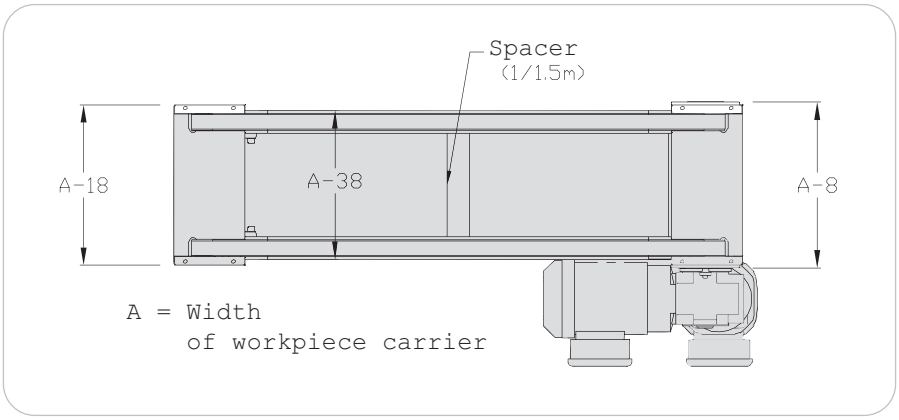
To be ordered with the initial assembling:

- 2 shouldered screws
- 2 steel rollers









Designation / Dimensions	Order unit	Reference
Conveying unit 200 direct	1 pce	120.11.000.**
Conveying unit 300 direct	1 pce	130.11.000.**
Conveying unit 400 direct	1 pce	140.11.000.**
Conveying length	m	120.11.000.A
Antistatic set	1 kit	120.11.000.C

(** = speed of motor m/min: 9, 15 or 19 eg: 120.11.000.09)

Height reductions Widths 200 - 300 - 400

Applications

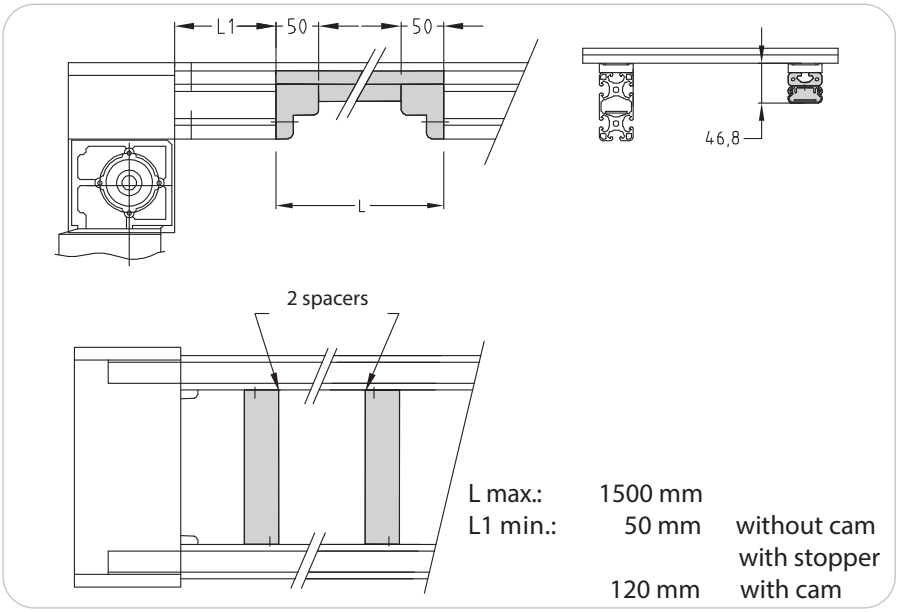
For ergonomic manual stations (from a seated position). Enable reduction of the height of the conveyor in front of the worker.

Technical data

Including:

x 2 spacers
x 2 reducings PA
x 1 profile 40x16
x 1 conduit profile 40x20

For flat belt only.



L max.: 1500 mm
L1 min.: 50 mm without cam
with stopper
120 mm with cam

Designation / Dimensions	Order unit	Reference
Height reduction 200	1 pce	120.98.000
Height reduction 300	1 pce	130.98.000
Height reduction 400	1 pce	140.98.000

Coupe convoyeur

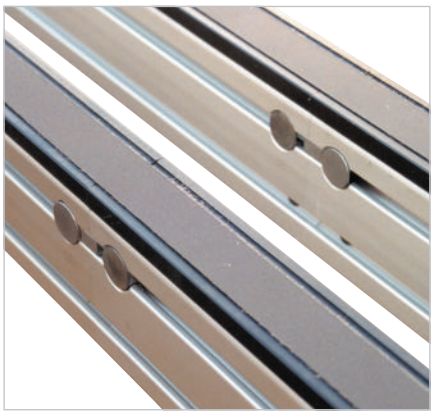
Applications

The cut allows division of the conveyor lengths to make the transport and installation easier.

It also enables the making of important lengths when the load is limited.

Technical data

x Maximum length: 12 m
x 6 double universal fastenings 8



Lengths	Loads	
	Maximum daN	Accumulation maximum daN
TLM 2000		
7 m	180	90
8 m	160	80
9 m	140	70
10 m	120	60
11 m	100	50
12 m	80	40

Designation / Dimensions	Order unit	Reference
Conveyor cut 200 - 300 - 400	1 cpe	120.02.000B

Cap 200

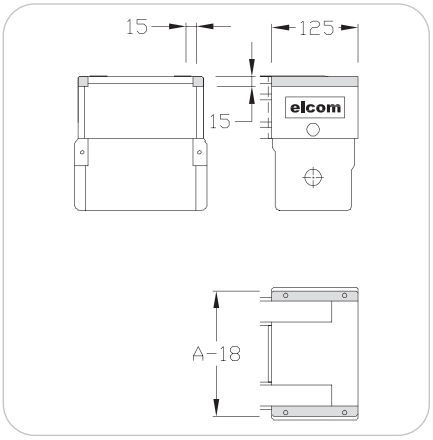
Applications

Allows to protect the direct driving unit and the idling unit.
When using cam, the opposite cap is delivered with the cam set.
Also used for motorization 120.02.000.

Technical data

- 2 parts, PA black

Weight: 0,07 kg



Designation / Dimensions	Order unit	Reference
Cap 200	1 kit	120.11.100

Straight joining for driving unit flat belt

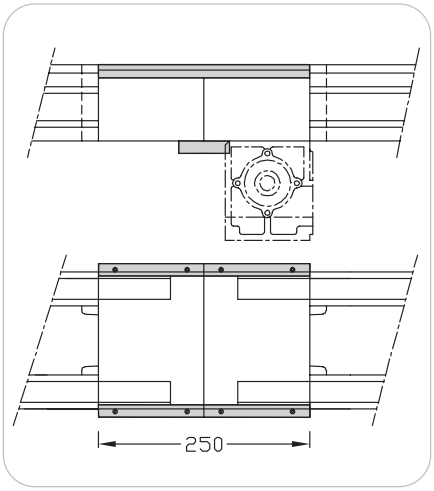
Applications

Allows to join end to end two conveying units.

Technical data

- x Guide PA black
- x Joining set alu

Weight: 0,18 kg



Straight joining for direct driving unit

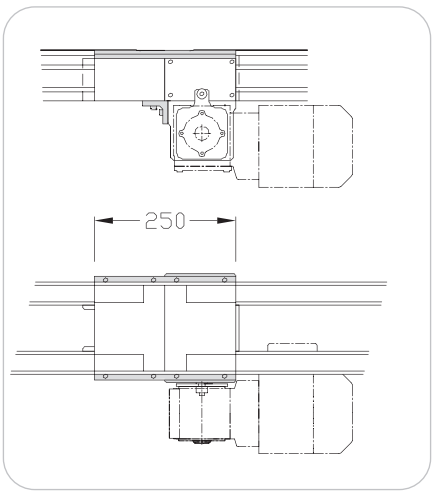
Applications

Allows to join end to end two conveying units.

Technical data

- x Guide PA black
- x Joining set alu

Weight: 0,2 kg



Designation / Dimensions	Order unit	Reference
Straight joining 200 - 300 - 400	1 set	120.18.000
Straight joining for direct driving unit	1 set	120.18.000.SC

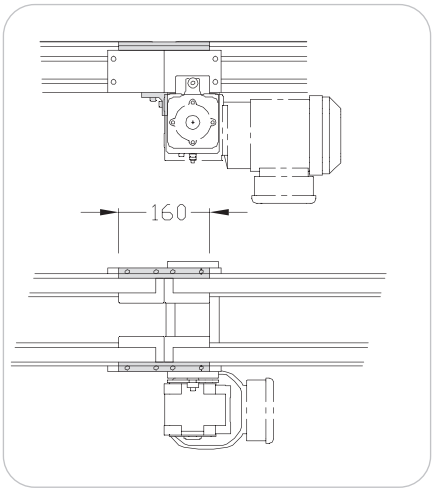
Straight joining for motorization light timing belt

Applications

Allows to join end to end two conveying units.

Technical data
- x Guide PA black
- x Joining set alu

Weight: 0,18 kg



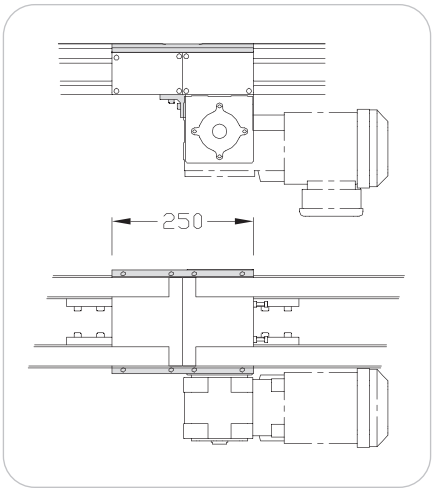
Straight joining for heavy motorization timing belt

Applications

Allows to join end to end two conveying units.

Technical data
- x Guide PA black
- x Joining set alu

Weight: 0,2 kg



Designation / Dimensions	Order unit	Reference
Straight joining for motorization light timing belt	1 set	120.89.000
Straight joining for heavy motorization timing belt	1 set	120.82.000

Spacers Widths 200 - 300 - 400

Applications

⚠ **If the length of the conveying unit is >1,5 m, spacers have to be fitted between the profiles 8 80x40.**
(1 spacer /1,5 m).

Technical data

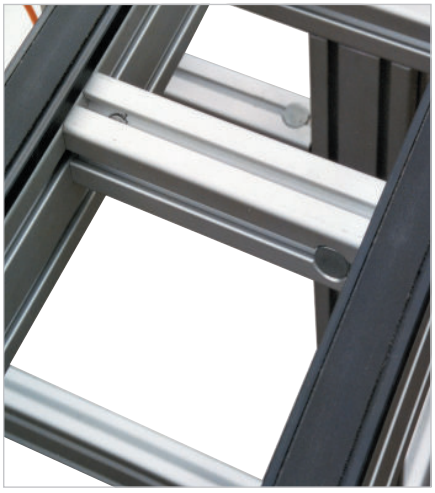
Width 200
- x Cast aluminium
- x 2 universal fastenings

Widths 300 and 400
- x Profile 8 40x40 light
- x 2 universal fastenings

Weight: 200: 0,18 kg
300: 0,40 kg
400: 0,55 kg

200

300 - 400



Designation / Dimensions	Order unit	Reference
Spacer 200	1 pce	120.15.000
Spacer 300	1 pce	130.15.000
Spacer 400	1 pce	140.15.000

Half junctions flat belt Widths 200 - 300 - 400

Applications

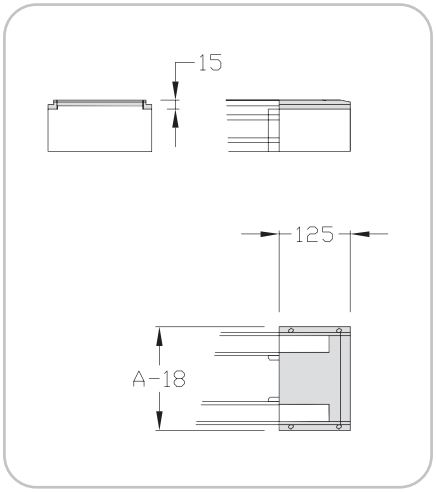
For TLM 2000, widths 200 , 300 and 400, flat belt.

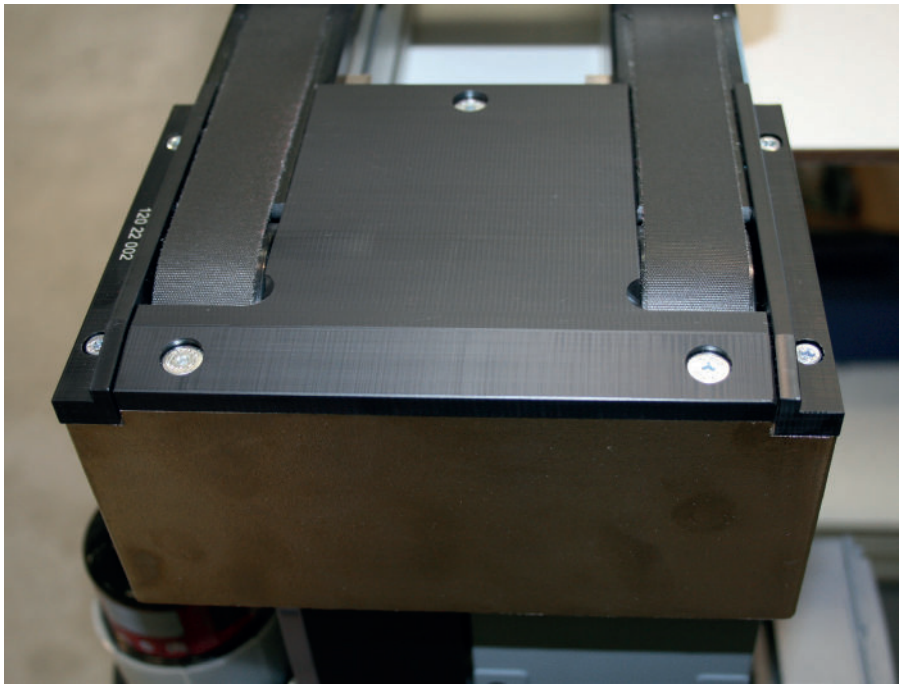
Half junctions allow a workpiece carrier to go out at the end of the line either on the driving or the idling side.

Technical data

- x 2 parts, PA black
- x Fastening parts
- x Chain cover with slope

Weight: 200: 0,3 kg
300: 0,4 kg
400: 0,5 kg





Designation / Dimensions	Order unit	Reference
Half junction flat belt 200	1 set	120.22.000
Half junction flat belt 300	1 set	130.22.000
Half junction flat belt 400	1 set	140.22.000

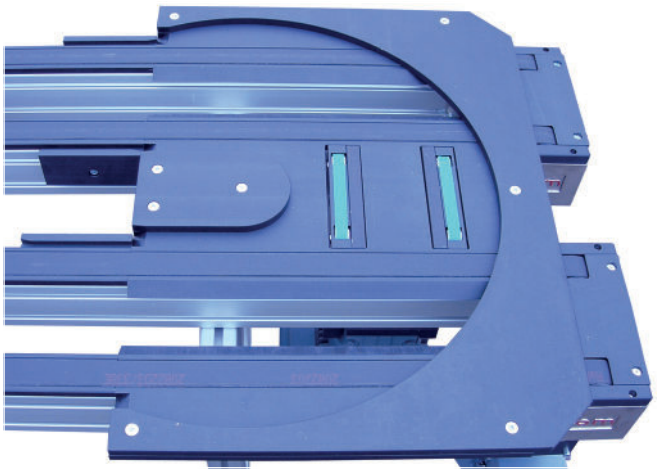
Returns 180°

Applications

Allows the return of the workpiece carrier on a parallel conveyor with a reduced space between the two conveyors. The workpiece carrier is conveyed always keeping the same side towards the outside of the line.

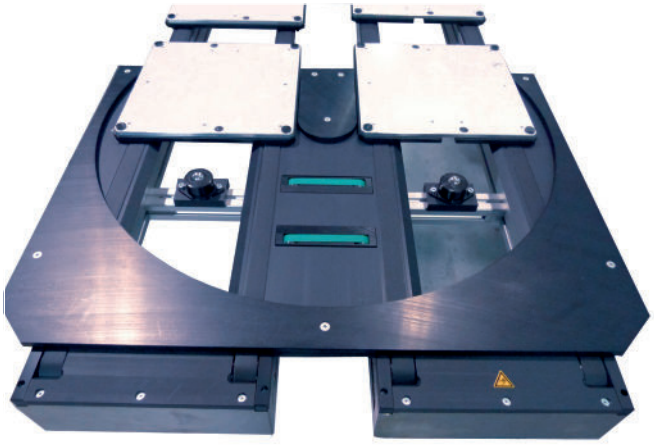
To facilitate the maintenance, the gear motor is identical to the driving units motors.

Do not accumulate workpiece carriers in the returns.



Return 180° Width 200

Return 180° Width 300



Return 180° Width 300

Returns 180° Widths 200 - 300

Technical data

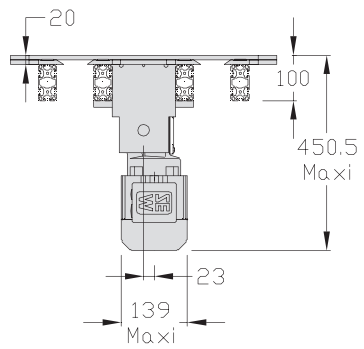
- x Motor plates, Al black
- x 2 parallel belts driven by a gear motor
- x Plates and lateral guide supports, PA black
- x Screws and bolts

Just for rectangular workpiece carriers 200 and 300.

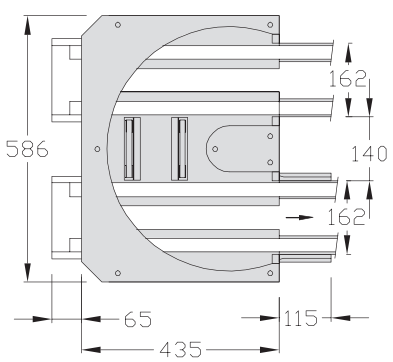
⚠ **Do not accumulate workpiece carriers in the returns.**

Weight: 200: 16 kg
300: 18,2 kg

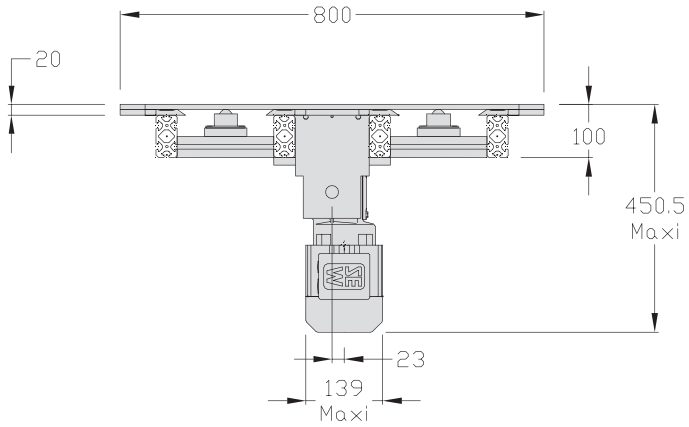
300



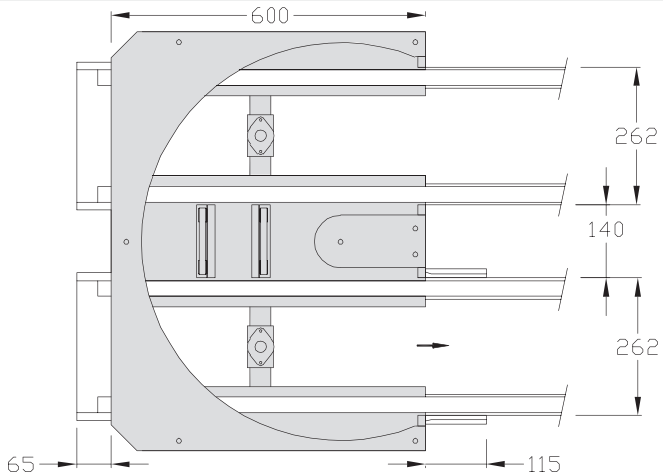
200



200



300



Designation / Dimensions	Order unit	Reference
Return 180° - 200	1 pce	120.34.000.**
Return 180° - 300	1 pce	130.34.000.**

(** = speed of motor m/min: 9, 15 or 19 eg: 120.34.000.09)

Return 180° Width 200 Length 250

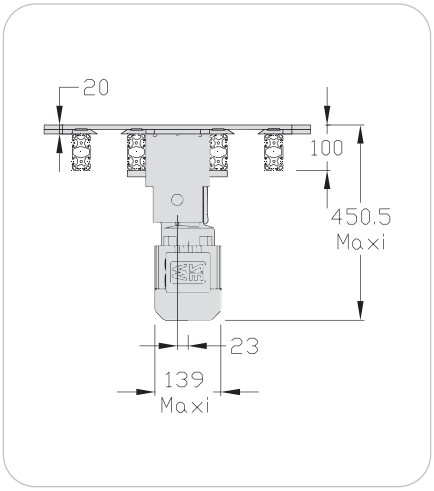
Technical data

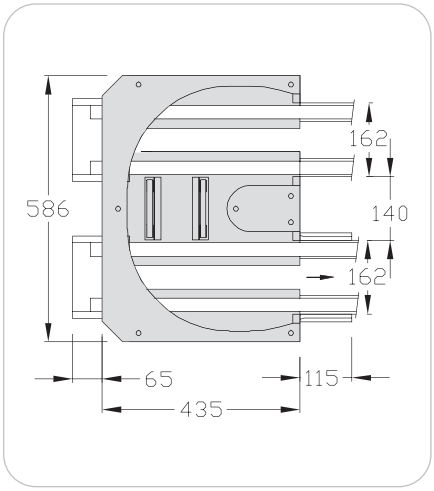
- x Motor plates, Al black
- x 2 parallel belts driven by a gear motor on a conveyor unit
- x Plate and lateral guide, PA black
- x Screws

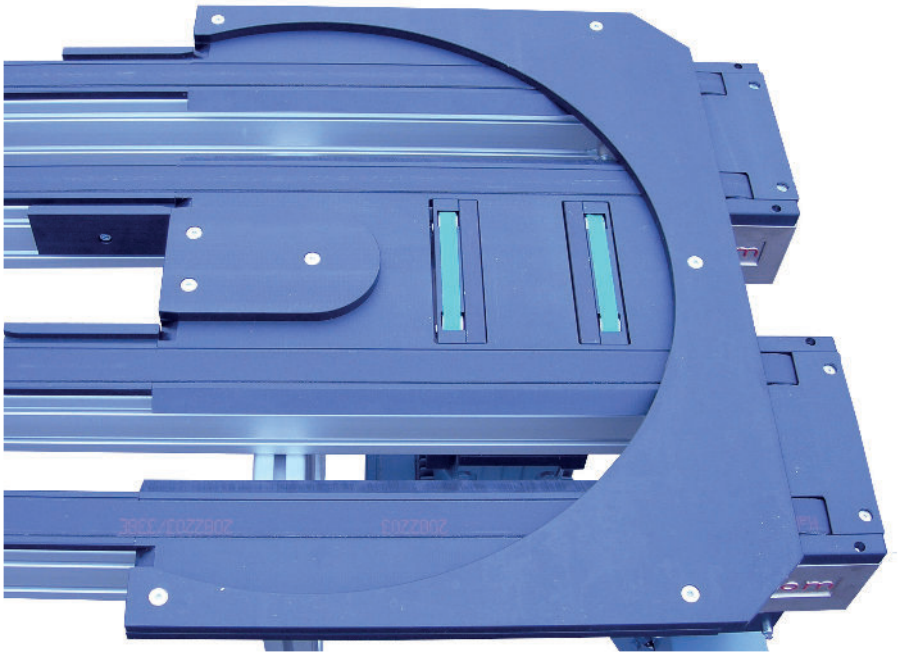
For rectangular workpiece carriers 400x400 only.

⚠ **Do not accumulate workpiece carriers in the returns.**

Weight: 16 kg







Designation / Dimensions	Order unit	Reference
Return 180° 200x250	1 pce	125.34.000.**

(** = speed of motor m/min: 9 - 15 or 19 eg: 125.34.000.09)

Return 180° Width 400

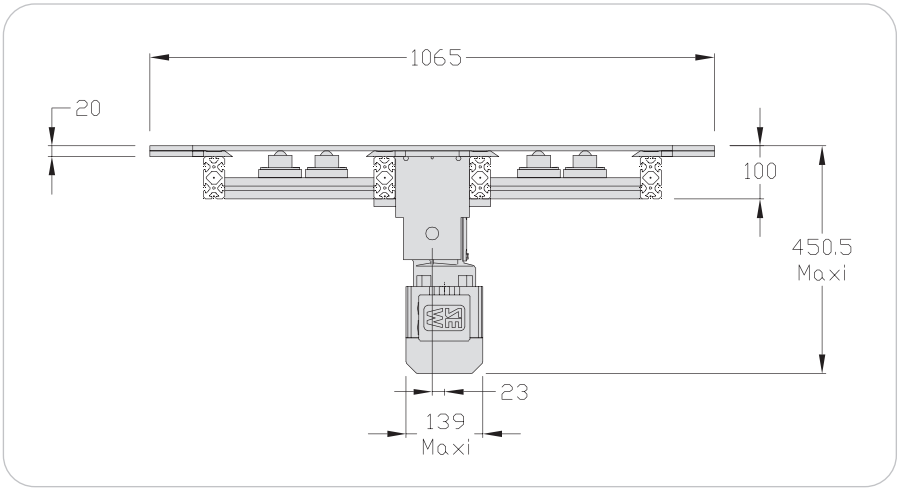
Technical data

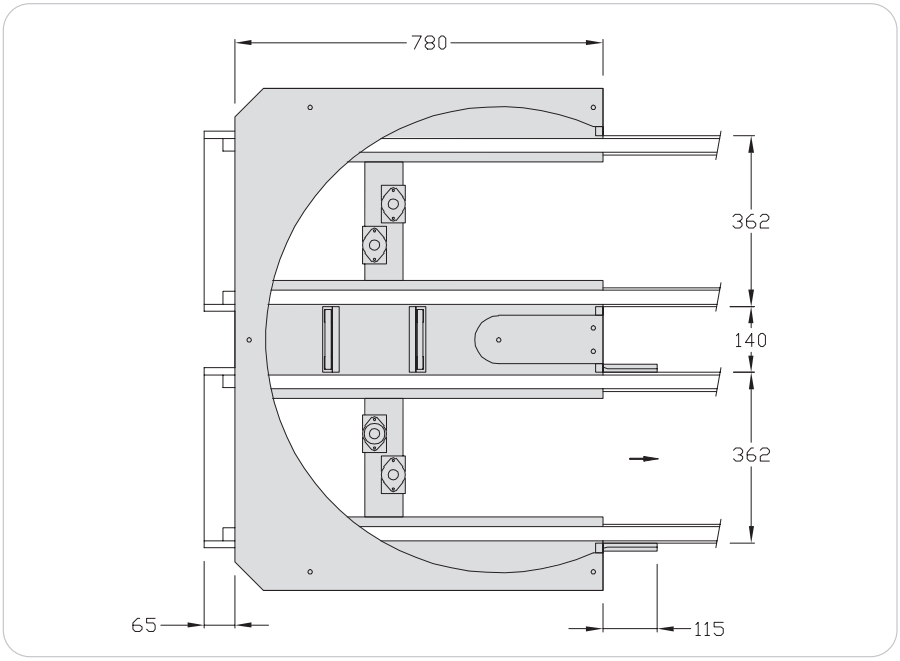
- x Motor plates, Al black
- x 2 parallel belts driven by a gear motor
- x Plates and lateral guide supports, PA black.
- x Screws and bolts

For square workpiece carriers 400x400 only.

⚠ **Do not accumulate workpiece carriers in the returns.**

Weight: 20 kg





Designation / Dimensions	Order unit	Reference
Return 180° 400	1 pce	140.34.000.**

(** = speed of motor m/min: 9, 15 or 19 eg: 140.34.000.09)

Chain lubricating sets

Applications

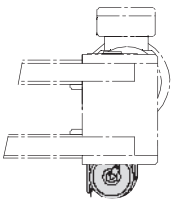
Allow the automatic chain lubrication of the driving chain of the conveying unit TLM 2000 pushing motor (120.02.000P – 130.02.000.P – 140.02.000P) for 12 months.

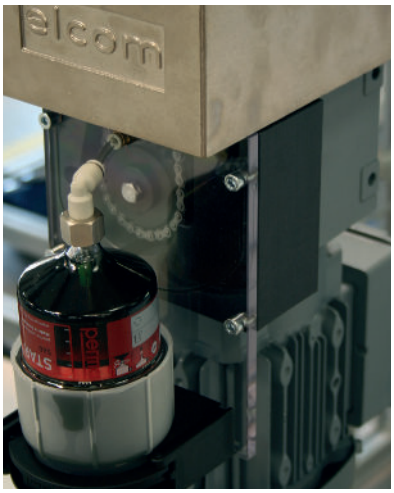
Technical data

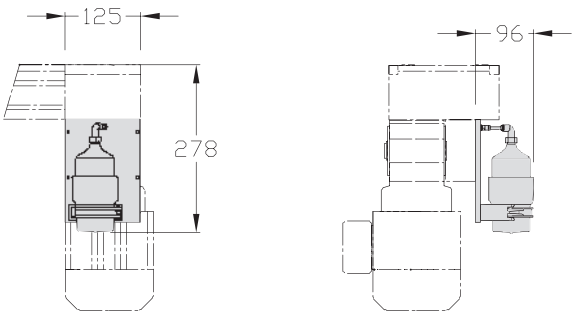
- Oil cartridge ref. 900.00.106
- Batteries (to be changed every 12 months) ref. 900.00.108
- Oil for chain SO14

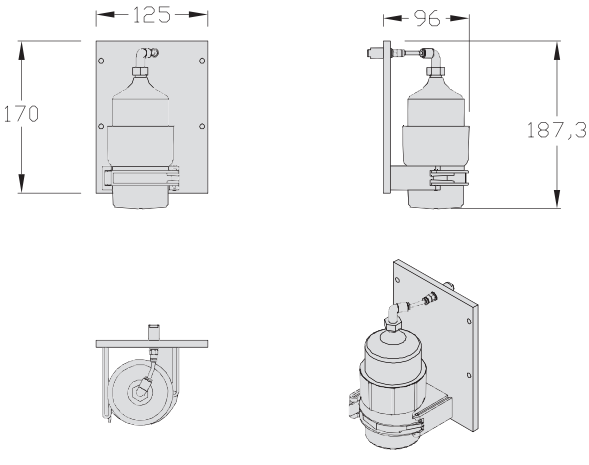
0,13 cm^3 by injection

Weight: 1,2 kg









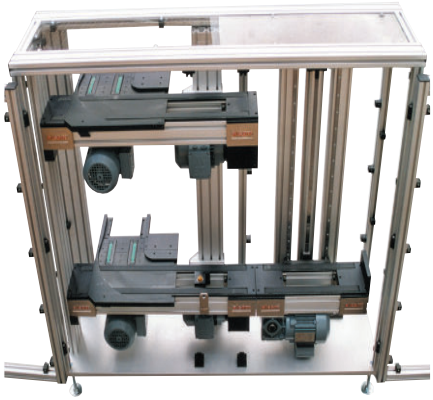
Designation / Dimensions	Order unit	Reference
Chain lubricating set	1 kit	900.00.100
Chain lubricating set pushing motor	1 kit	900.00.100.P

Lifts

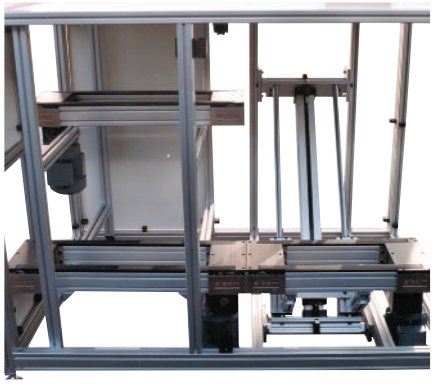
Bridge built from two transfer systems

Lift for two transfer system units
(from 1000 mm to 3000 mm)

Inclined transfersystem lift-upper or basement type



Angle transfer system-upper or basement type (pneumatic cylinder model)



Inclined transfersystem lift-upper or basement type (with pneumatic cylinder)

Lifts Widths 200 - 300 - 400

Applications

Allow the return of workpiece carriers above or below a line or the distribution of workpiece carriers on several levels.
Manufactured from standard elements,each lift is adapted to the size of the workpiece carriers, the strokes and other line-specific parameters.

Technical data

x Frame
x Guides + lifting cylinder
x Waiting area for conveyors

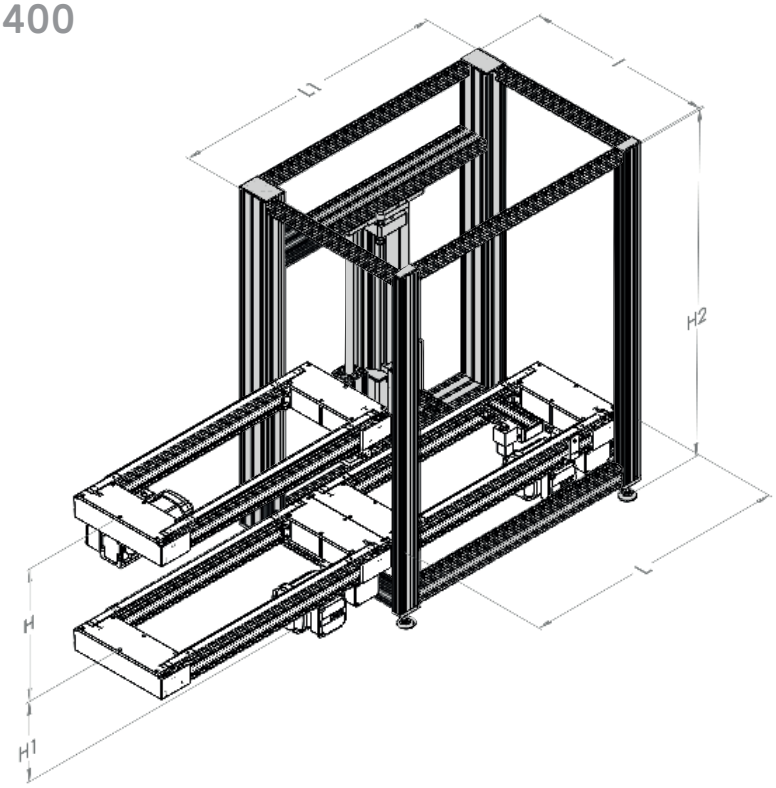
Dimensions

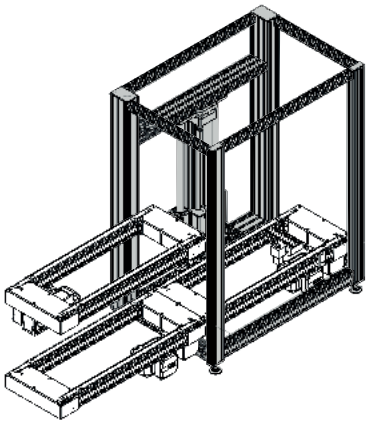
H = Lifting height
L = Length of moving conveyor
H1 = Minimum height of conveyor 300 mm
H2 = (if workpiece carrier height < 280 mm) H1+H+280
H2 = (if workpiece carrier height > 280 mm) H1+H
L1 = Total length of lift (L = L+40 mm)
I = Depth of lift (Conveyor width + 360 mm)

Lift type (workpiece carrier entry/ exit)
EG-SG (left entry/left exit)
ED-SD (right entry/right exit)
EG-SD (left entry/right exit)
ED-SG (right entry/left exit)

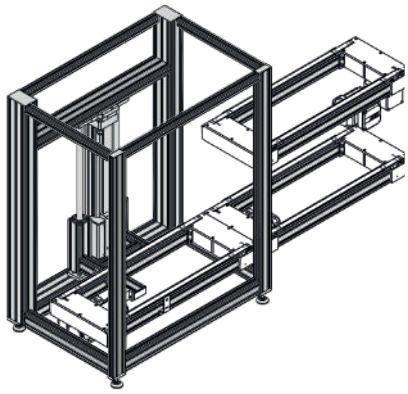
Maximum load: 20 kg
Speed of cylinder stroke: 1m/s

The protective housings for conveyors are not included in the delivery.

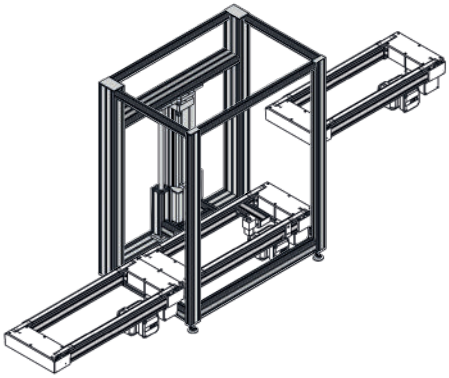




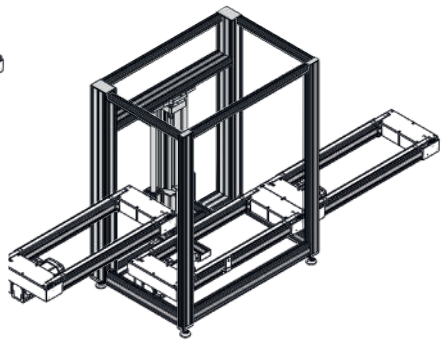
Type EG-SG



Type ED-SD

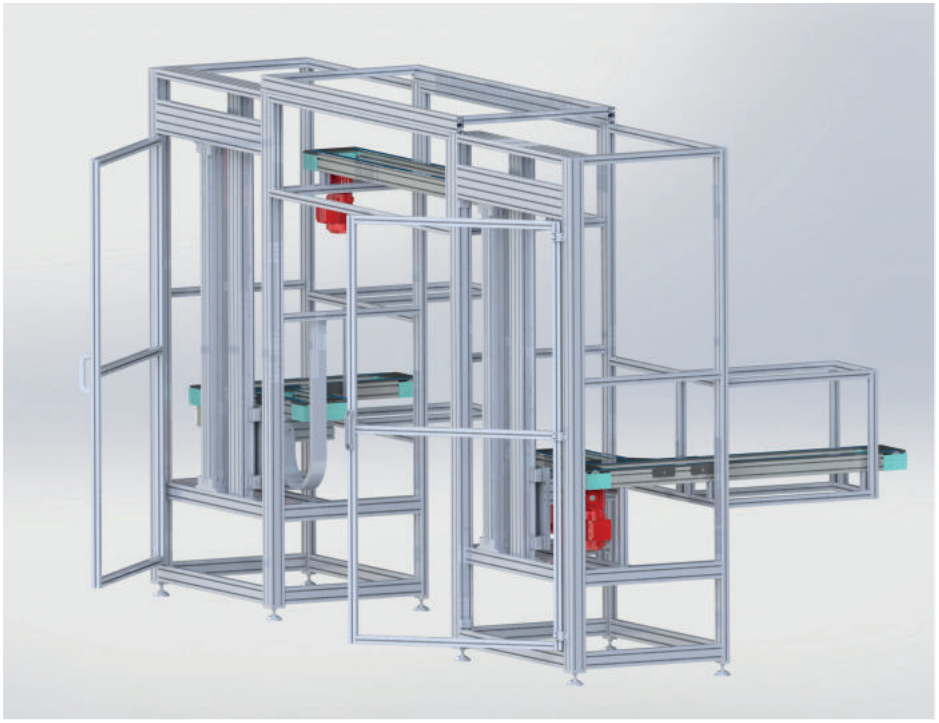


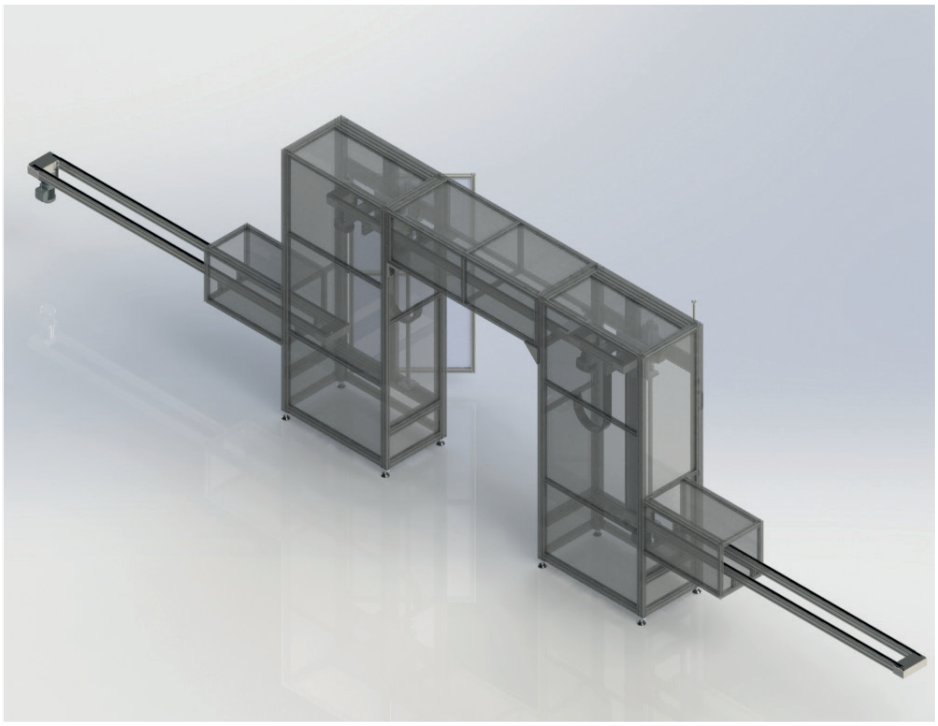
Type EG-SD



Type ED-SG

On request: timing belt drive or ball-and -screw drive.
Asynchronous or brushless motorization.





Electrical version of the ballscrew on request.

Designation / Dimensions	Order unit	Reference
Lift width 200	1 pce	120.57.000
Lift width 300	1 pce	130.57.000
Lift width 400	1 pce	140.57.000

Cams 90°

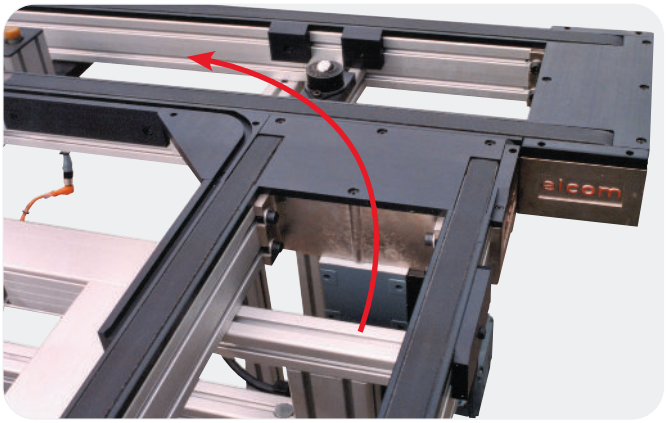
Applications

Cams ED, EG, SD, SG for conveying units flat belt.
They allow a perpendicular transfer of workpiece carriers from one conveying unit to the other.
The workpiece carrier is guided by the two inside pins, the outside pins are retracted.
Can also be used for derivations.

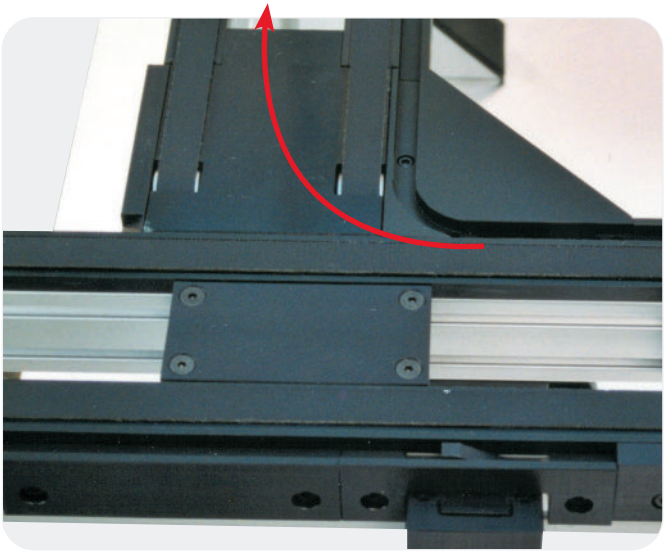
Cams ED, EG, SD, SG for conveying units timing belt.
They allow a perpendicular transfer of workpiece carriers from one conveying unit to the other.
The workpiece carrier is guided by the two inside pins, the outside pins are retracted.
No automatism is required.

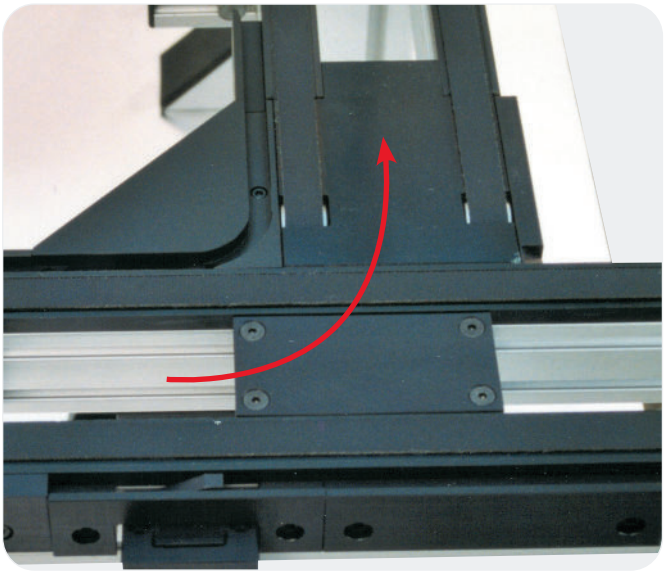
If a selection is necessary (derivation or not), add the derivation set.

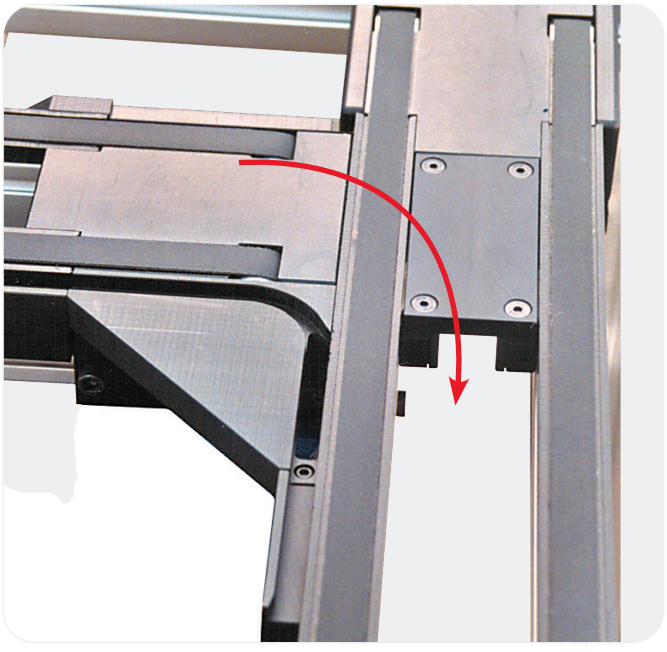
⚠ **Do not accumulate workpiece carriers in cams.**



Cam 90° EG


Cam 90° SD


Cam 90° SG


Cam 90° ED

Cams 90° Widths 200 - 300 - 400

Technical data

- x Guiding cam, PA black
- x Pin retracting plates, PA black
- x Fastening parts
- x Joining parts
- x Caps

Different cams according to the dimensions of the workpiece carriers.

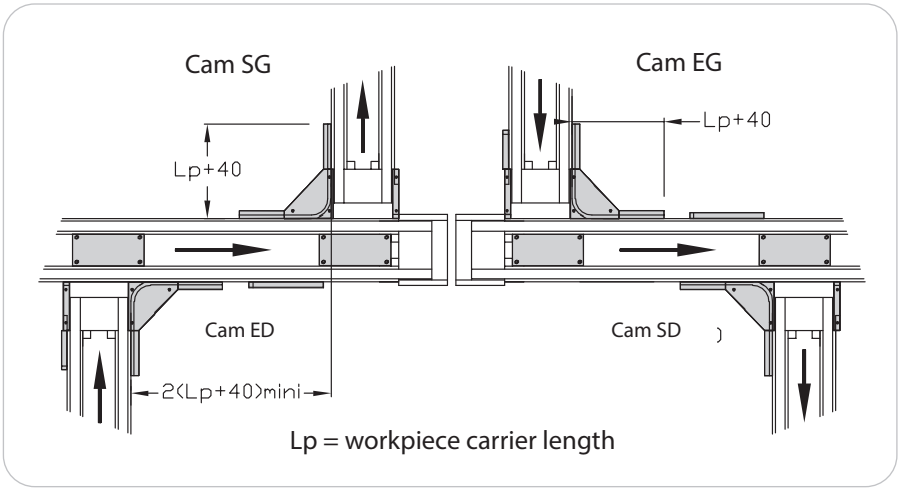
The cams 200 allow also the use of workpiece carriers 200x250 and 200x300.

The cams 300 allow also the use of workpiece carriers 300x400.

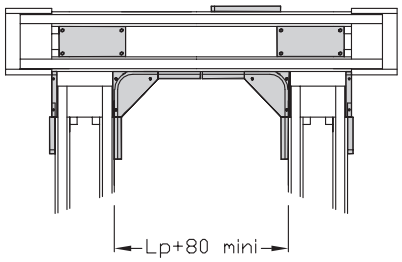
If a selection is necessary (derivation or not), add the derivation set

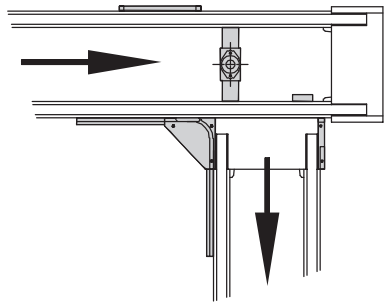
⚠ **Do not accumulate workpiece carriers in cams.**

Weight: 200: 0,91 kg
300: 1,5 kg
400: 1,9 kg



Lp = workpiece carrier length




Cams 300 and 400

Cam ED
Right inlet
on main line

Cam SD
Right outlet
on main line

Cam EG
Left inlet
on main line

Cam SG
Left oulet
on main line

Designation / Dimensions	Order unit	Reference
Cam 90° ED 200	1 kit	120.06.000
Cam 90° EG 200	1 kit	120.16.000
Cam 90° SD 200	1 kit	120.26.000
Cam 90° SG 200	1 kit	120.36.000
Cam 90° ED 200 direct	1 kit	120.06.000.SC
Cam 90° EG 200 direct	1 kit	120.16.000.SC
Cam 90° ED 300	1 kit	130.06.000
Cam 90° EG 300	1 kit	130.16.000
Cam 90° SD 300	1 kit	130.26.000
Cam 90° SG 300	1 kit	130.36.000
Cam 90° ED 300 direct	1 kit	130.06.000.SC
Cam 90° EG 300 direct	1 kit	130.16.000.SC
Cam 90° ED 400	1 kit	140.06.000
Cam 90° EG 400	1 kit	140.16.000
Cam 90° SD 400	1 kit	140.26.000
Cam 90° SG 400	1 kit	140.36.000
Cam 90° ED 400 direct	1 kit	140.06.000.SC
Cam 90° EG 400 direct	1 kit	140.16.000.SC

Cams 90° timing belt, light motorization Width 200

Technical data

Complete set including:

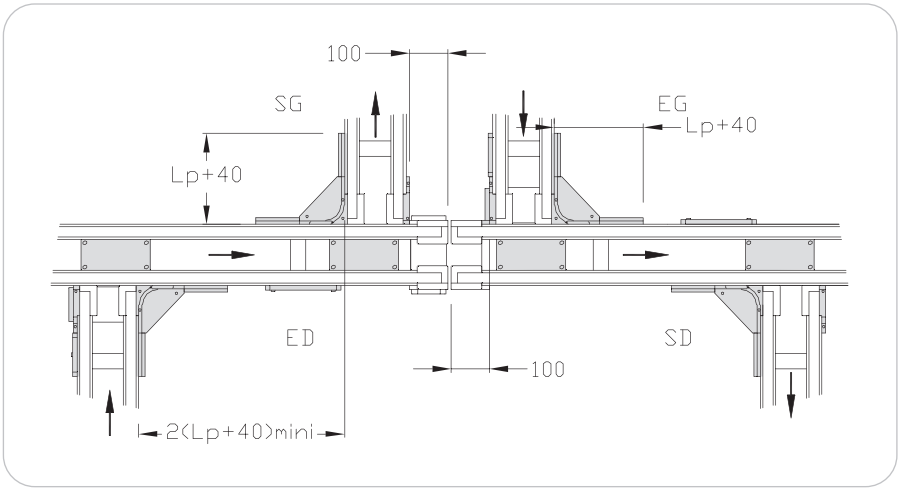
- x Guiding cam and pin retracting plates, PA black
- x Fastening parts
- x Joining parts
- x Caps

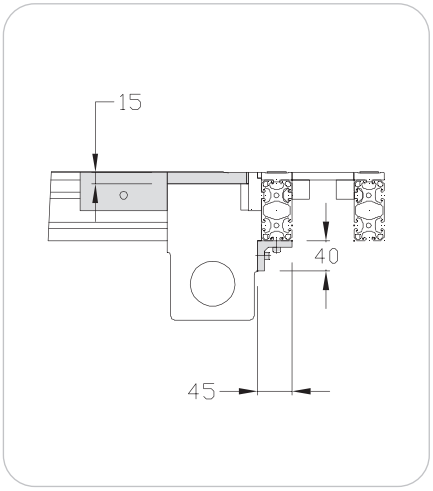
The cams 200 allow also the use of workpiece carriers 200x250 and 200x300.

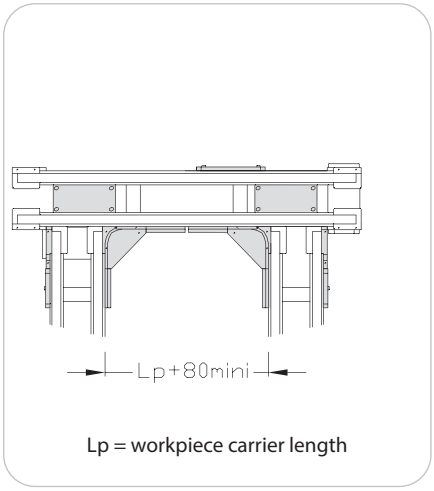
If a selection is necessary (derivation or not), add the derivation set.

⚠ **Do not accumulate workpiece carriers in cams.**

Weight: 1 kg







Lp = workpiece carrier length

Designation / Dimensions	Order unit	Reference
Cam 90° ED 200 timing belt light motorization	1 pce	120.90.100
Cam 90° EG 200 timing belt light motorization	1 pce	120.90.200
Cam 90° SD 200 timing belt light motorization	1 pce	120.90.300
Cam 90° SG 200 timing belt light motorization	1 pce	120.90.400

Cams 90° timing belt, heavy motorization Width 200

Technical data

Complete set including:

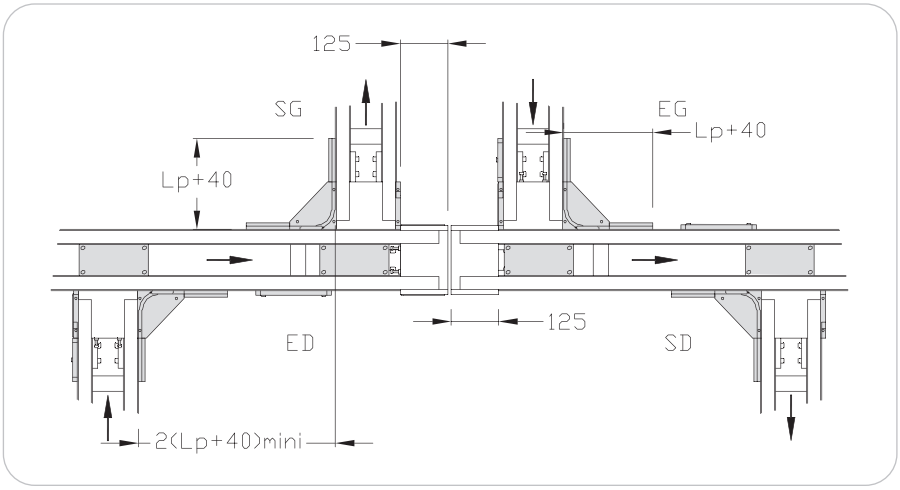
- x Guiding cam and pin retracting plates, PA black
- x Fastening parts
- x Joining parts
- x Caps

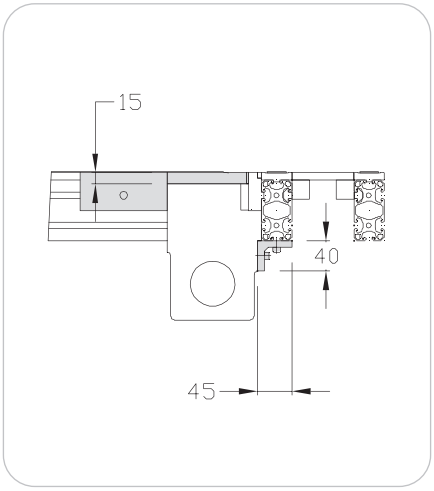
The cams 200 allow also the use of workpiece carriers 200x250 and 200x300.

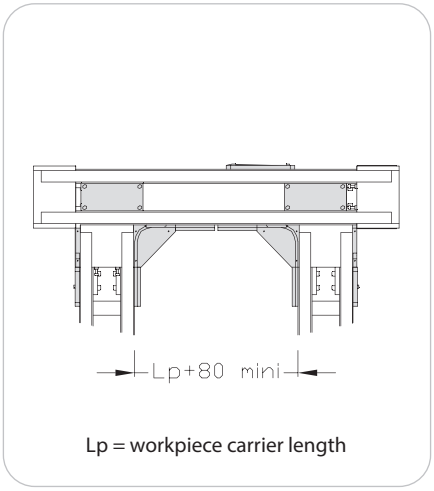
If a selection is necessary (derivation or not), add the derivation set.

⚠ **Do not accumulate workpiece carriers in cams.**

Weight: 1 kg







Lp = workpiece carrier length

Designation / Dimensions	Order unit	Reference
Cam 90° ED 200 timing belt heavy motorization	1 pce	120.83.100
Cam 90° EG 200 timing belt heavy motorization	1 pce	120.83.200
Cam 90° SD 200 timing belt heavy motorization	1 pce	120.83.300
Cam 90° SG 200 timing belt heavy motorization	1 pce	120.83.400

Cams short - cams double

Applications

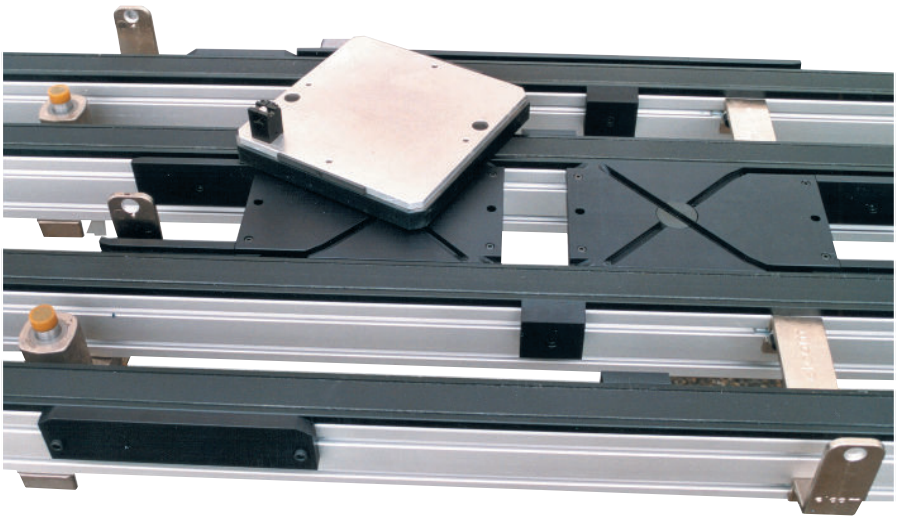
Short cams SD-EG SG-ED - Double cams

The short cams and double cams allow deviation of workpiece carriers from a main line to a secondary line without additional motorization.

Economical, compact and very easily managed, they are ideal to set up work stations in derivation.

⚠ **Do not accumulate workpiece carriers in cams.**

Cam short 200



Cam double 200

Cams short SD-EG/SG-ED Width 200

Technical data

Complete set including:

- x Cams and guides, PA black
- x Fastening parts
- x Screw and nut St M6

(1 set SD-EG + 1 set SG-ED are necessary to make a complete derivation)

They allow also the use of workpiece carriers 200x250 and 200x300.

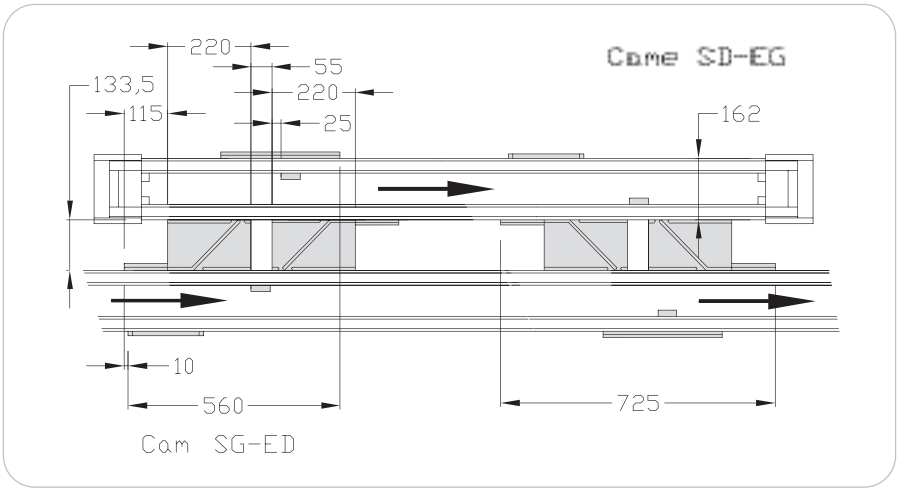
If a selection is necessary (derivation or not), add the derivation set

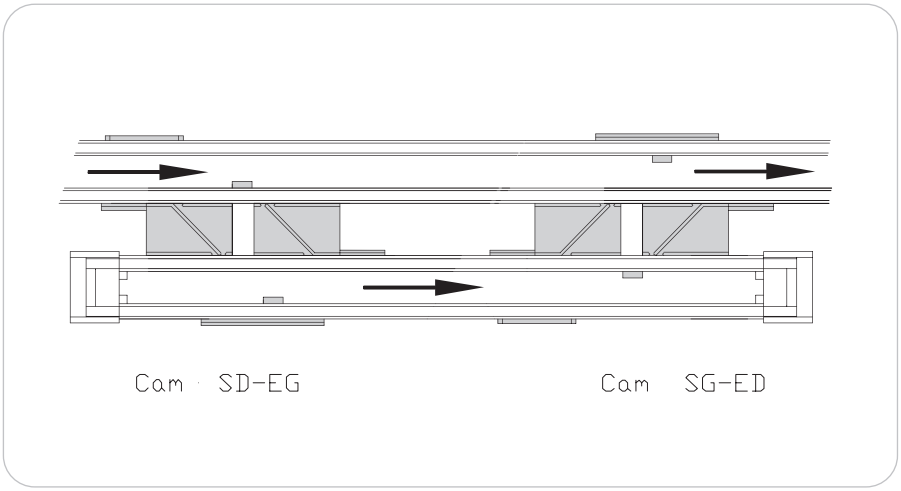
Minimum load on workpiece carrier: 2 daN

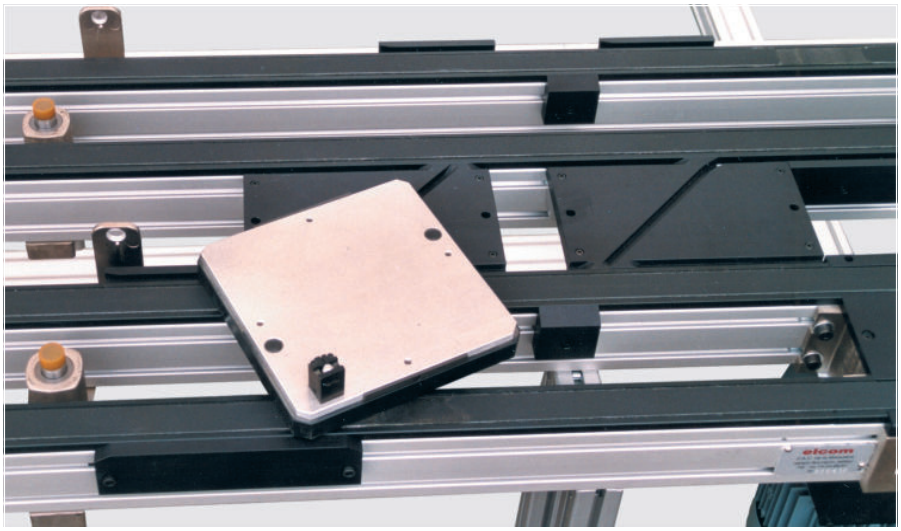
⚠ **Do not accumulate workpiece carriers in cams.**

⚠ **Minimum load on workpiece carrier: 2 daN**

Weight: 2,2 kg







Designation / Dimensions	Order unit	Reference
Cam short 200 SD-EG	1 kit	120.46.000
Cam short 200 SG-ED	1 kit	120.17.000

Cams short SD-EG/SG-ED Widths 300 - 400

Technical data

Complete set including:

- x Cam and guides, PA black
- x Fastening parts
- x Screw and nut St M6

(1 set SD-EG + 1 set SG-ED are necessary to make a complete derivation)

The short cam 300 allow also the use of workpiece carriers 300x400.

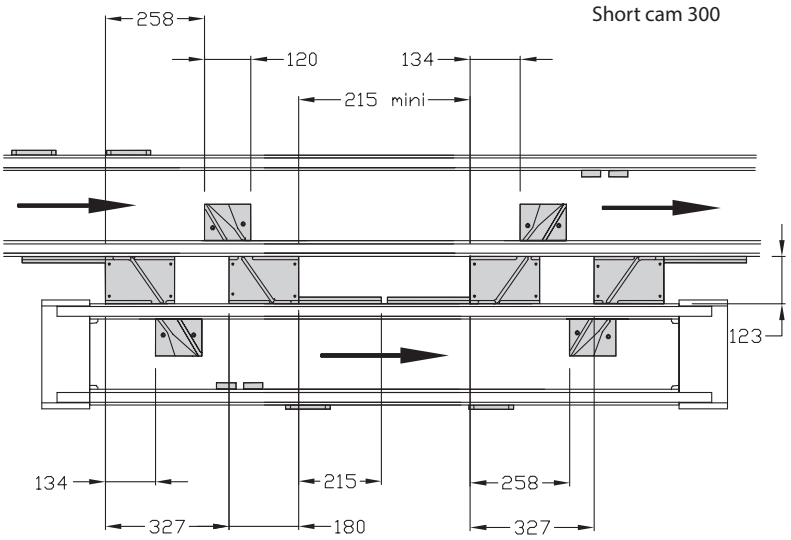
If a selection is necessary (derivation or not) add the derivation set.

Do not accumulate workpiece carriers in cams.

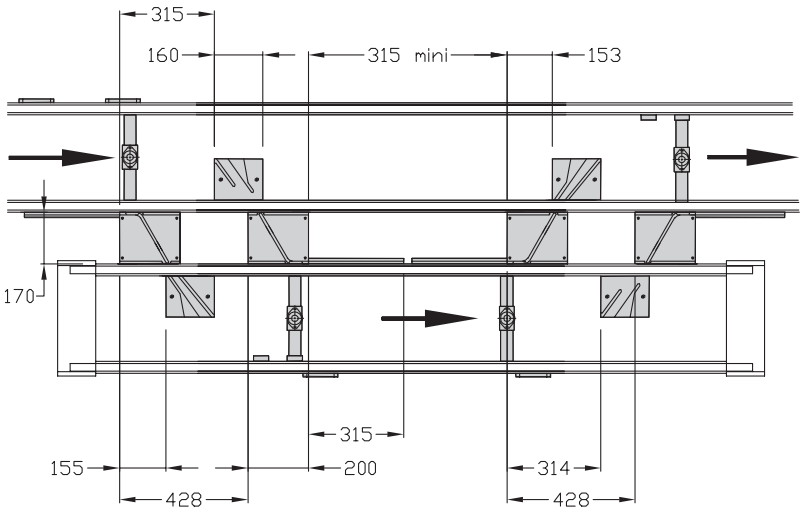
Minimum load on workpiece carrier: 2 daN

Weight: Short cam 300: 6,1 kg
Short cam 400: 13,2 kg

Short cam 300



Short cam 400



Designation / Dimensions	Order unit	Reference
Cam short 300 SD-EG	1 kit	130.46.000
Cam short 300 SG-ED	1 kit	130.17.000
Cam short 400 SD-EG	1 kit	140.46.000
Cam short 400 SG-ED	1 kit	140.17.000

Cam double Width 200

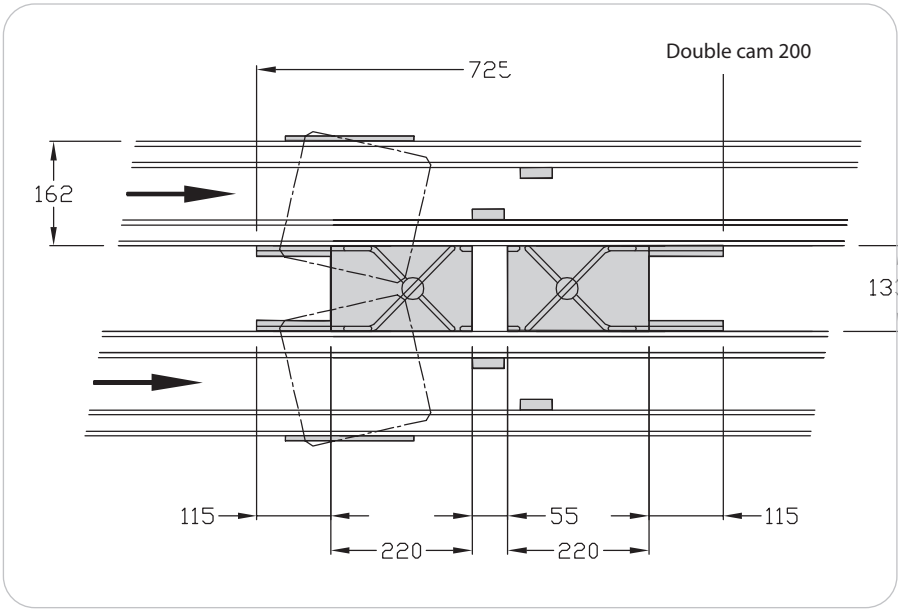
Technical data

Complete set including:

- x Cam, selectors, ramps and guides, PA black
- x 2 rotative cylinders, (M5)
- x Fastening parts
- x Screw and nut St M6

They allow also the use of workpiece carriers 200x250 and 200x300.

If a selection is necessary (derivation or not) add the derivation set.



Do not accumulate workpiece carriers in cams.

Minimum load on workpiece carrier: 2 daN

Weight: 3,6 kg

Designation / Dimensions	Order unit	Reference
Cam double 200	1 kit	120.21.000

Cams double Widths 300 - 400

Technical data

Complete set including:

- x Cam, selectors, ramps and guides, PA black
- x 2 rotative cylinders, (M5)
- x Fastening parts
- x Screw and nut St M6

The double cams 300 allow also the use of workpiece carriers 300x400.

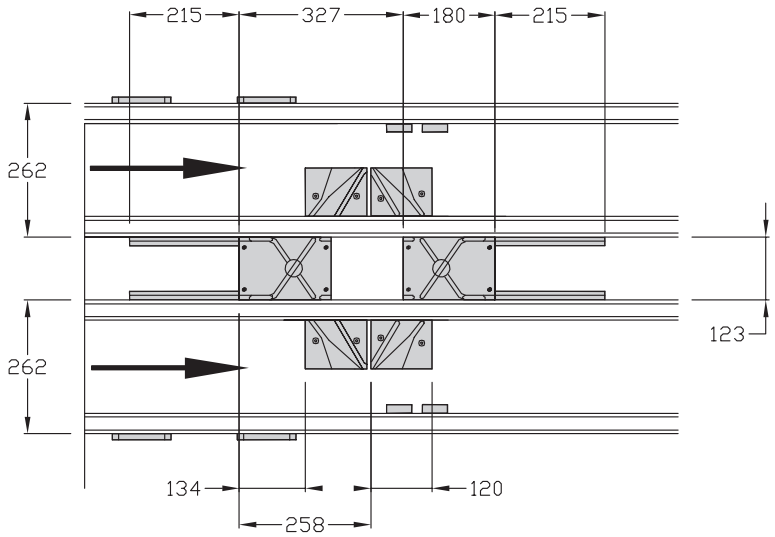
If a selection is necessary (derivation or not), add the derivation set.

Do not accumulate workpiece carriers in cams.

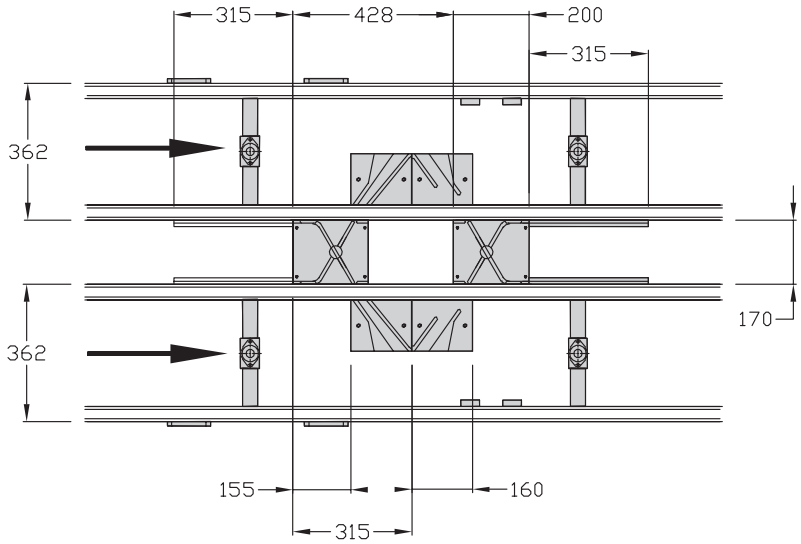
Minimum load on workpiece carrier: 2 daN

Weight: Cam double 300: 5,4 kg
Cam double 400: 12,2 kg

Double cam 300



Double cam 400



Designation / Dimensions	Order unit	Reference
Cam double 300	1 kit	130.21.000
Cam double 400	1 kit	140.21.000

Derivations Widths 200 - 300 - 400

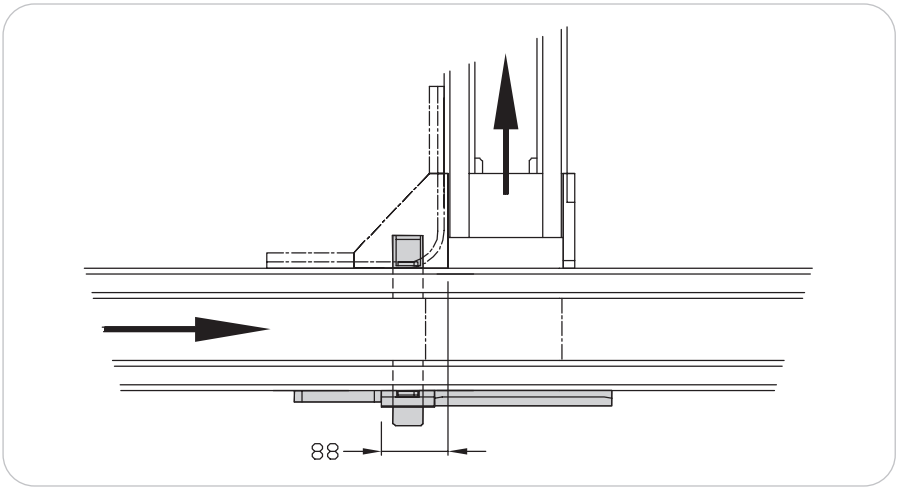
Technical data

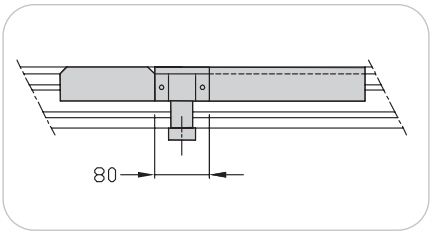
Complete set including:

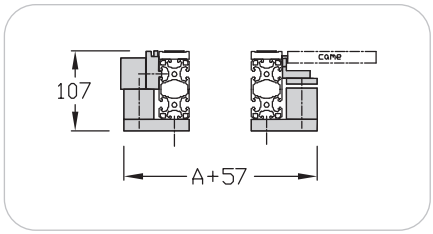
- x 2 plates Al
- x 2 nuts St M6
- x 2 screws M6x20
- x Body, levers, guides PA and screws and bolts
- x 2 cylinders ø 20-10 (M5), detectable positions
- x 1 protection Ac black

⚠ **Cams are not included (to be ordered separately).**

Weight: Derivation 200: 1,4 kg
Derivation 300: 1,5 kg
Derivation 400: 1,5 kg







Designation / Dimensions	Order unit	Reference
Derivation 200	1 kit	120.07.000
Derivation 300	1 kit	130.07.000
Derivation 400	1 kit	140.07.000

Swivellings 90° Widths 200 - 300 - 400

Technical data

Complete set including:

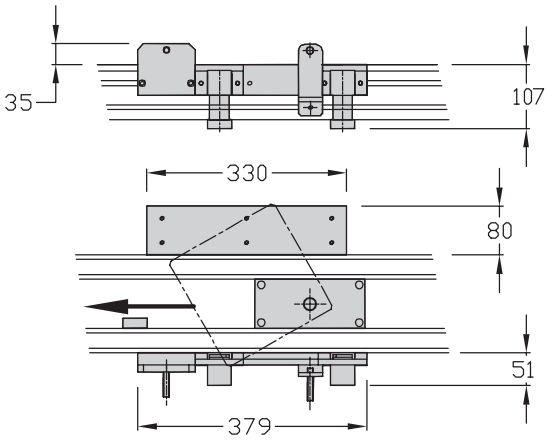
- x Plates and lateral guide supports, PA black
- x 3 cylinders ø 20-10 (M5)
- x 1 stopper
- x 2 brackets for shielded mounting sensor M12x100

A stopper located before the swivelling unit is generally necessary to avoid the arrival of another workpiece carrier during swivelling.

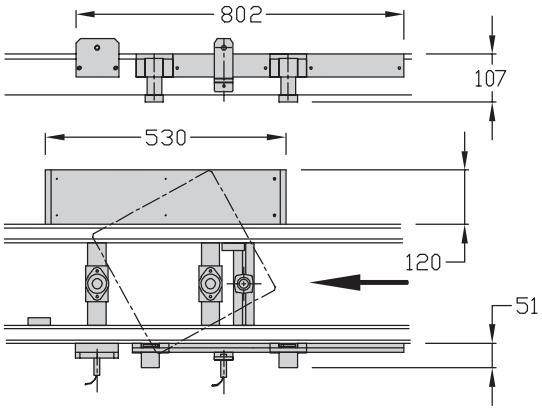
⚠ **Minimum load on workpiece carrier: 2 daN**

Weight: Swivelling 90° 200: 3,8 kg
Swivelling 90° 300: 5,8 kg
Swivelling 90° 400: 6,9 kg

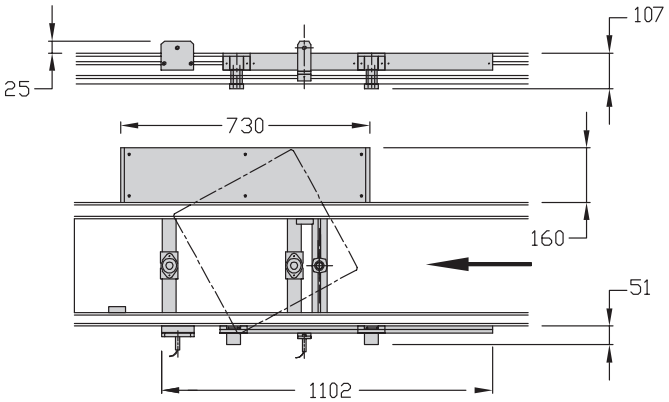
Swivelling 90°
200x200



Swivelling 90°
300x300



Swivelling 90°
400x400



Designation / Dimensions	Order unit	Reference
Swivelling 90° 200	1 kit	120.27.000
Swivelling 90° 300	1 kit	130.27.000
Swivelling 90° 400	1 kit	140.27.000

Specify (R) for spring stopper e.g. 130.27.000 (R)

Swivellings 180° Widths 200 - 300 - 400

Technical data

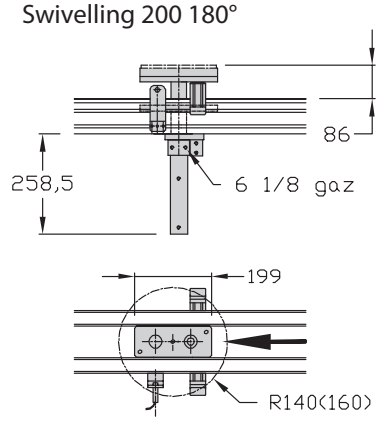
- x Stopper
- x Linear rotating cylinder
- x Sensor bracket

A stopper located before the swivelling unit is generally necessary to avoid the arrival of another workpiece carrier during the swivelling.

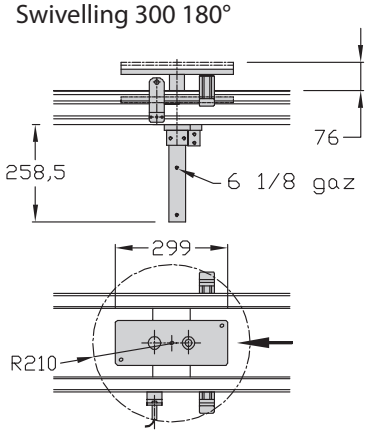
⚠ **Flow rate controllers should be adadpted.**

Weight: Swivelling 180° 200: 5,6 kg
Swivelling 180° 300: 6,7 kg
Swivelling 180° 400: 7,6 kg

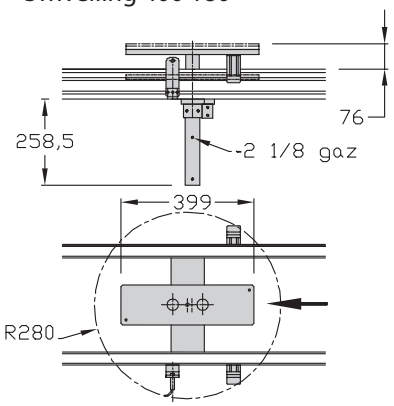
Swivelling 200 180°



Swivelling 300 180°



Swivelling 400 180°



Designation / Dimensions	Order unit	Reference
Swivelling 180° 200	1 kit	120.28.000
Swivelling 180° 300	1 kit	130.28.000
Swivelling 180° 400	1 kit	140.28.000
Shock absorber kit	1 kit	120.28.200

Specify (R) for spring stopper e.g. 130.28.000 (R)

Rotation damper kit

Applications

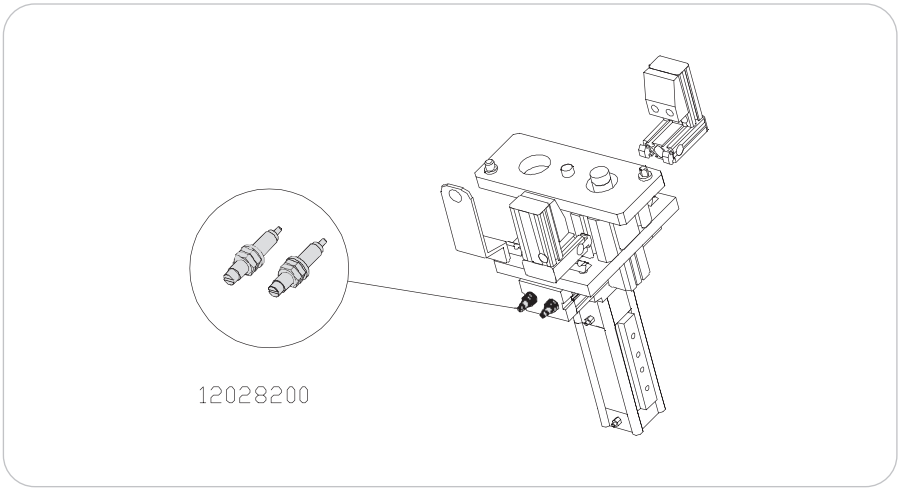
Allows dumping at the end of the stroke on a 180° return.

Technical data

x 2 dampers M8x100

To be mounted on 180° return, references:
120.28.000
130.28.000
140.28.000

Weight: 0,23 kg

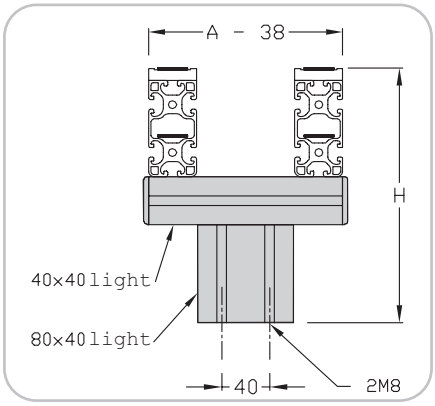


Designation / Dimensions	Order unit	Reference
Rotation damper kit	1 kit	120.28.200

Conveying unit stands

Applications

Support to fit conveying units on table or frame.
With profile 40x40 and 80x40, it is compatible with full range of profiles and modular elements of **elcom**.

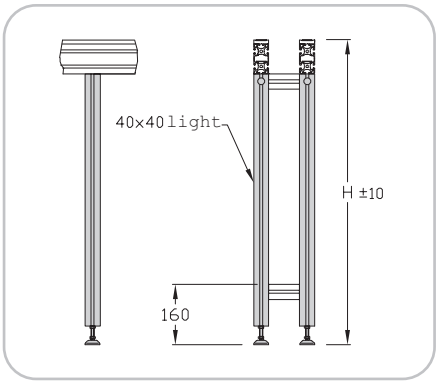


Designation / Dimensions	Order unit	Reference
Conveying unit stand 200	1 kit	120.20.000
Conveying unit stand 300	1 kit	130.20.000
Conveying unit stand 400	1 kit	140.20.000

Simple stands

Applications

Support for one conveying unit.
With profile 40x40 and 80x40, it is compatible with full range of profiles and modular elements of **elcom**.

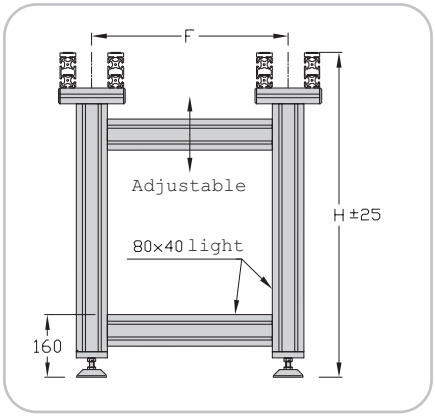


Designation / Dimensions	Order unit	Reference
Simple stand 200	1 kit	120.12.000
Simple stand 300	1 kit	130.12.000
Simple stand 400	1 kit	140.12.000

Double stands

Applications

Support for two parallel conveying units.
With profile 40x40 and 80x40, they are compatible with full range of profiles and modular elements of **elcom**.



Designation / Dimensions	Order unit	Reference
Double stand 200	1 kit	120.19.000
Double stand 300	1 kit	130.19.000
Double stand 400	1 kit	140.19.000

Stoppers

Applications

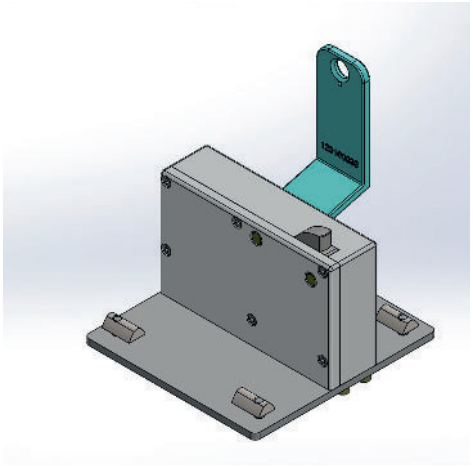
Stopping workpiece carriers during processing requiring no accuracy. They are perfectly adapted for manual work stations.
Workpiece carriers are stopped to respect conveying priorities at the end of the derivation.
Stoppers can be supplied with a spring to make the stopper rod pop out in case of an emergency stop.
Supplied with sensor bracket for detection of workpiece carriers.

Stopper 24 V

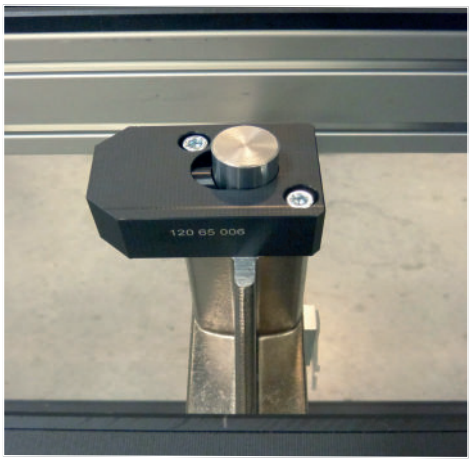
elcom ITS 24 V

Applications

Stopping workpiece carriers during processing requiring no accuracy. They are perfectly adapted for manual work stations.
Workpiece carriers are stopped to respect conveying priorities at the end of the derivation.
Supplied with sensor bracket for detection of workpiece carriers.



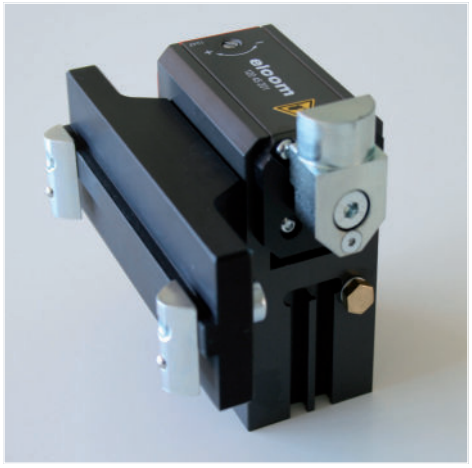
Stoppers damped



Applications

They allow to reduce the shock of the workpiece carrier on the stoppers or on positioning unit stoppers.
Stopper rod moves in contact with the workpiece carrier and a shock absorber neutralizes the kinetic energy of workpiece carrier.
The stop position depends on the load on the workpiece carrier or the number of workpiece carriers.
The maximum load on a stopper for an optimum damping is 20 kg.
All stoppers have springs which enable to maintain stopper rod in high position in case of emergency stop.
Use preferably workpiece carriers with shock absorbers.

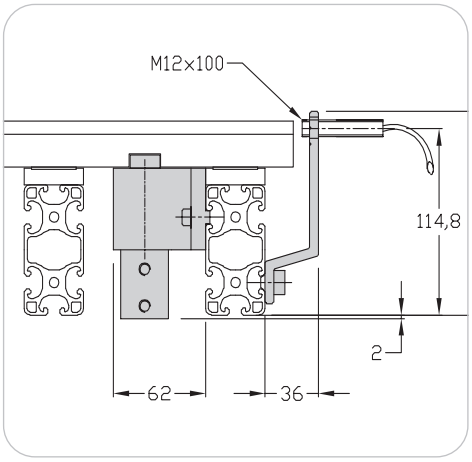
Stopper damped, pneumatic



Applications

Stopping workpiece carriers during process requiring no accuracy. Perfectly adapted for manual operations.
Workpiece carriers are stopped to respect conveying priorities at the end of derivation.
The stopper 200, damped, pneumatic is used to reduce the shock between the workpiece carrier and the stopper thanks to the adjustable damped function. The damped is adjusted in an optimum way for a workpiece carrier but can be different according to the weight of each workpiece carrier.
The sensor bracket is provided.

Stoppers short



Applications

Thanks to the combination of small size and reduced height, the short stopper allows construction of ergonomic workstations along the line.
Reduced accumulated load.

Stoppers Widths 200 - 300 - 400

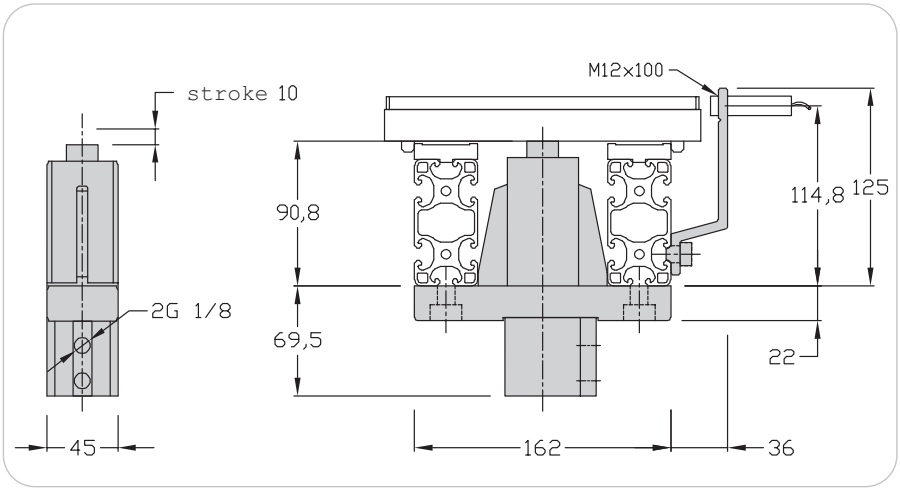
Technical data

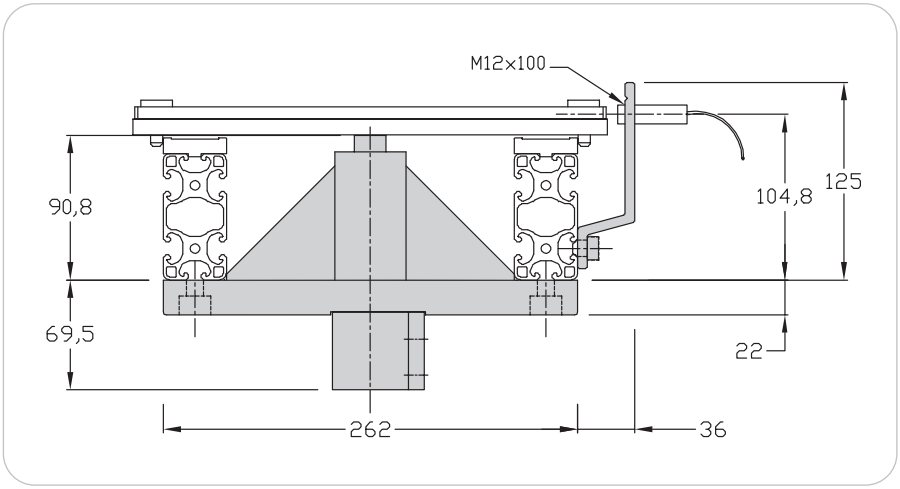
- x Stopper rod (polyurethane coated)
- x Complete set with double effect cylinder ø32 mm, detectable positions
- x Bracket for shielded mounting sensor M12x100
- x Detection range: 4 mm

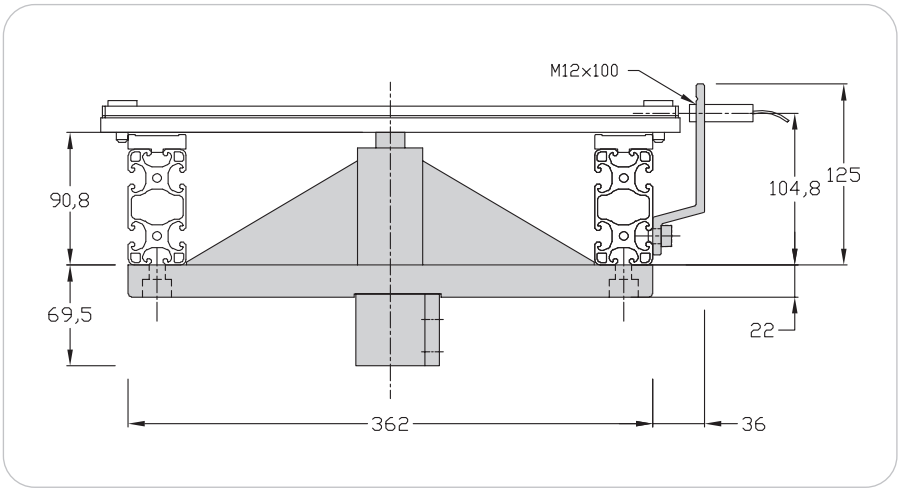
Maximum load: 50 daN
(in accumulation)

⚠ **Flow rate controllers G 1/8 should be adadpted.**

Weight: 200: 1,3 kg
300: 1,7 kg
400: 2 kg







Designation / Dimensions	Order unit	Reference
Stopper 200	1 pce	120.65.000
Stopper 300	1 pce	130.65.000
Stopper 400	1 pce	140.65.000

Specify (R) for spring stopper e.g. 120.65.000 (R)

Stoppers 24 V Widths 200 - 300 - 400

Technical data

- x Plate, stainless steel
- x Body and stopper PA
- x Nuts 8 St M6 + screws
- x Hole for shielded sensor M12x100
- x Detection range: 4 mm

Supply voltage of of the control box:
24 VDC +/- 15%
Power supply: 0.9 A maxi
Control voltage: 24 VDC +/- 10 %
Control current: 5 mA maxi

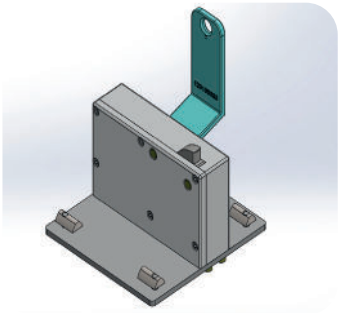
A Brushless gear motor controlled by a control box ensures the change in position.

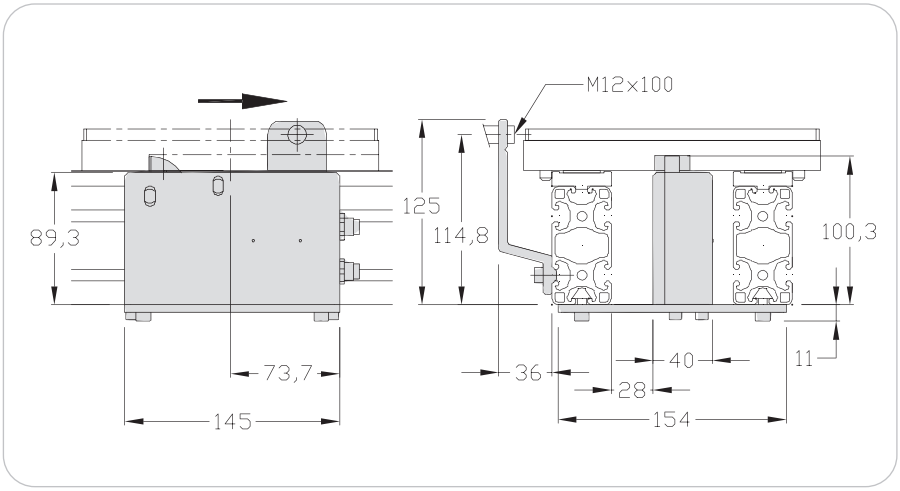
Control module 24v output: automation, bus module, splitter,…

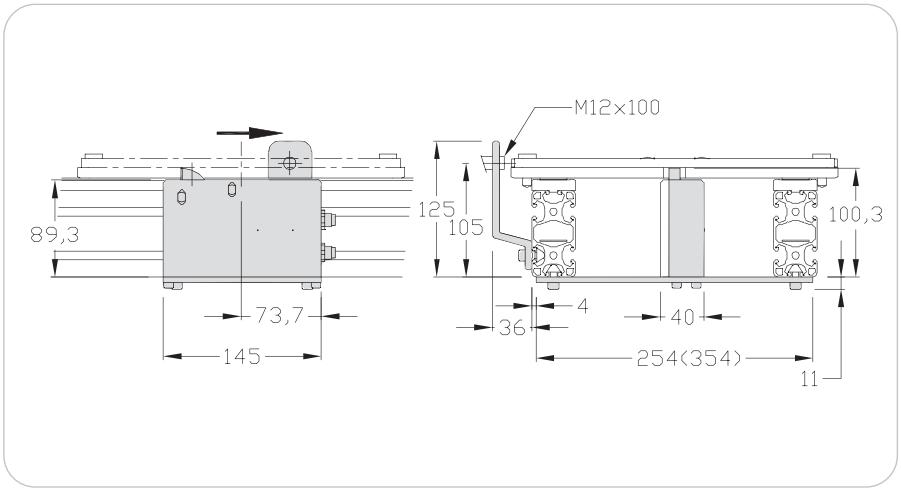
Standard connectors M12.

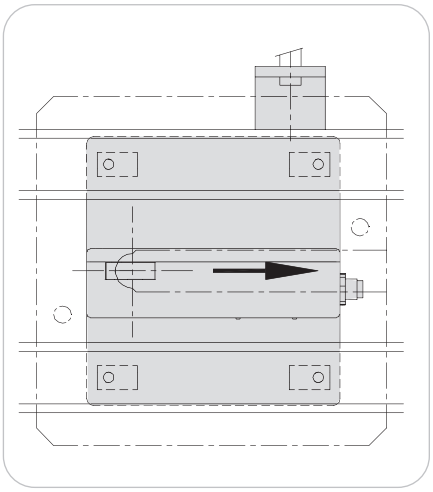
Maximum load: 50 daN
(in accumulation)

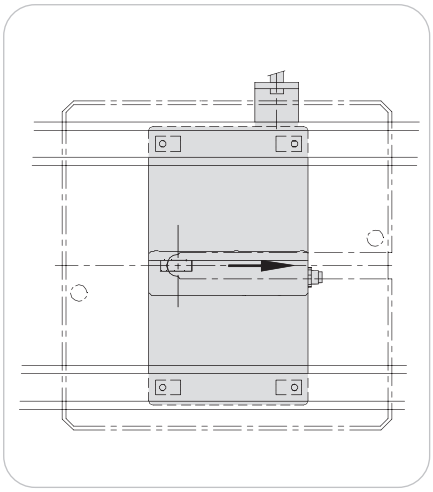
Weight: 200: 1,7 kg
300: 2.2 kg
400: 2.8 kg











Designation / Dimensions	Order unit	Reference
Stopper 24 V 200	1 pce	120.65.000.E
Stopper 24 V 300	1 pce	130.65.000.E
Stopper 24 V 400	1 pce	140.65.000.E

Stoppers damped Widths 200 - 300 - 400

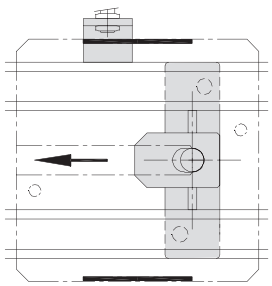
Technical data

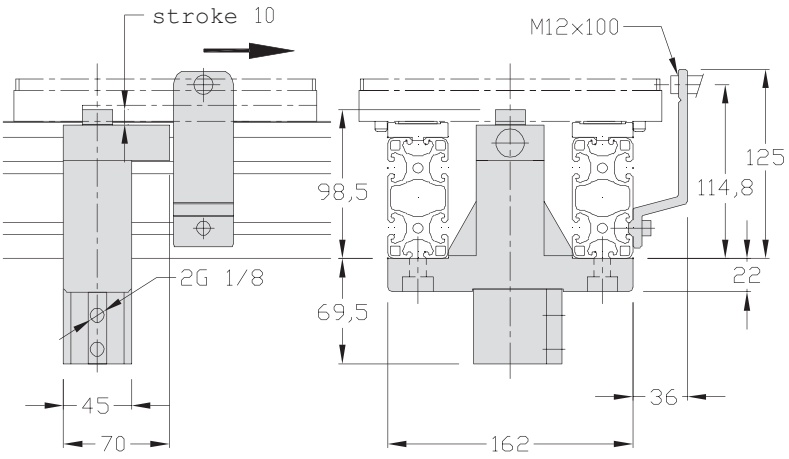
- x Stopper rod, steel
- x Complete set with double effect cylinder ø 32, detectable positions.
- x Bracket for shielded mounting sensor M12x100.
- x Detection range: 4 mm

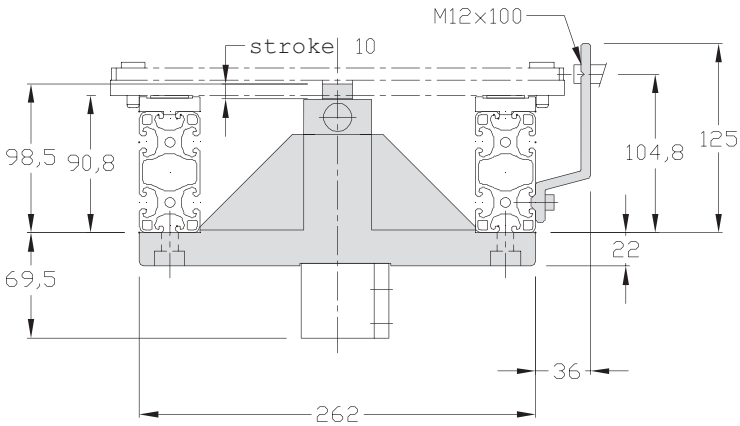
Maximum load: 20 daN

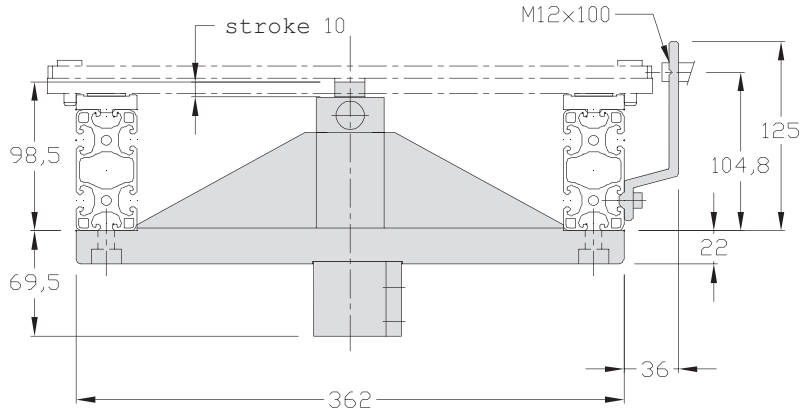
⚠ **Flow rate controllers G 1/8 should be adapted**

Weight: 200: 1,4 kg
300: 1,8 kg
400: 2,1 kg









Designation / Dimensions	Order unit	Reference
Stopper 200 damped	1 pce	120.65.000.RA
Stopper 300 damped	1 pce	130.65.000.RA
Stopper 400 damped	1 pce	140.65.000.RA

R = for spring stopper A = damped

Stopper damped, pneumatic Width 200

Technical data

- x Stopper
- x Stopper bracket
- x Sensor bracket
- x Screws and nuts

Maximum load:

9m/min	1,7-60 daN
15m/min	1,7-50 daN
19m/min	1,7-43 daN

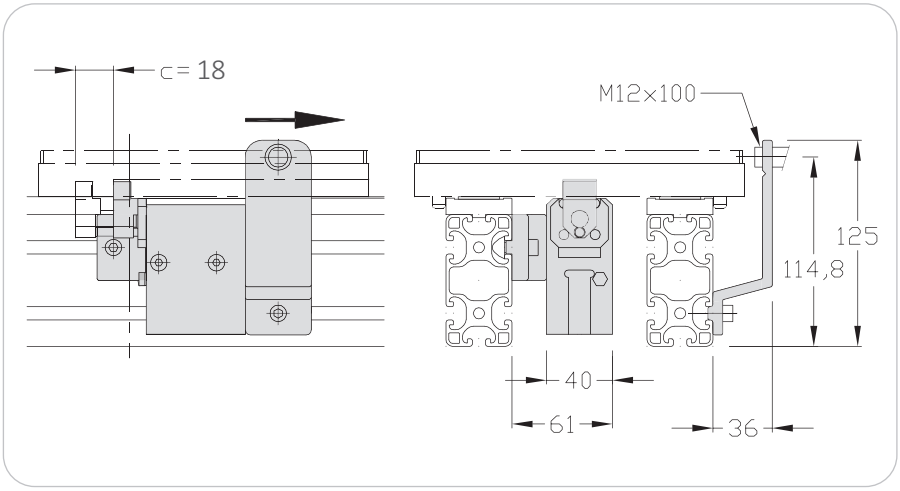
Air consumption: 0,11 l for a pressure of 6 bars.

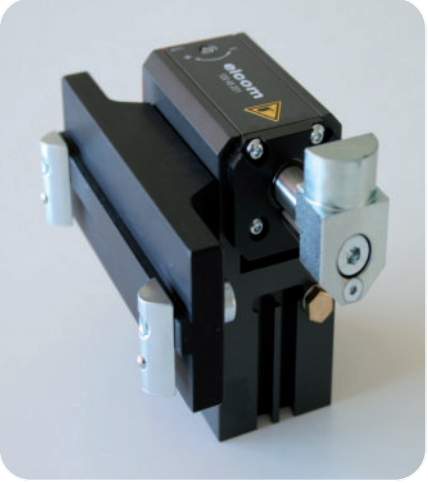
Pressure on use: 4 to 8 bars.
Connection M5 not included.

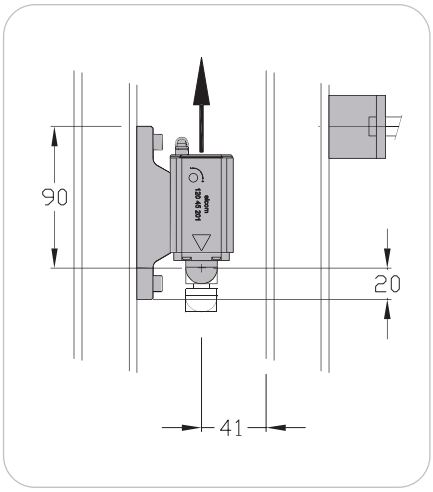
Restoring force: 115 N.

Longitudinal damping stroke: 23 mm.

Weight: 0,95 kg







Designation / Dimensions	Order unit	Reference
Stopper 200 damped, pneumatic	1 pce	120.45.000 RAP

Stoppers short Widths 200 - 300 - 400

Technical data

- x Stopper rod (polyurethane coated)
- x Complete set with double effect cylinder ø 20 mm, detectable positions.
- x Bracket for shielded mounting sensor M12x100.
- x Detection range: 4 mm

Stoppers 300-400:

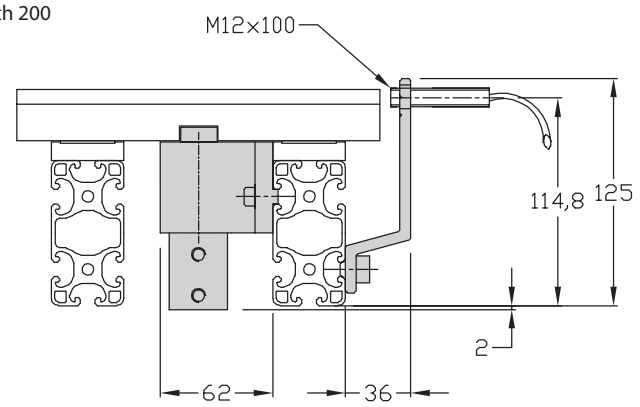
- x 1 profile Al 80x40 light
- x 2 universal fastenings 8

Maximum load : 15 daN
(in accumulation)

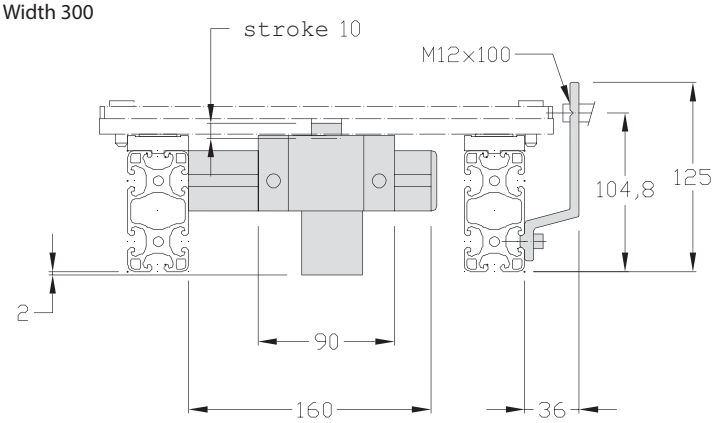
⚠ **Flow rate controllers G 1/8 should be adadpted**

Weight: Stopper, short 200: 0,9 kg
Stopper, short 300: 1,4 kg
Stopper, short 400: 1,8 kg

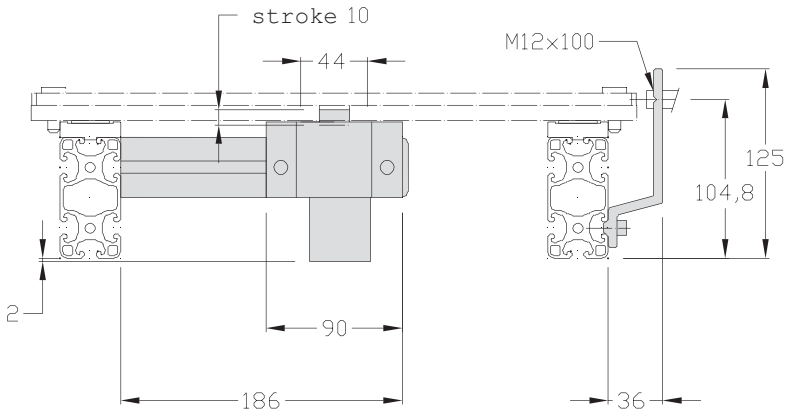
Width 200



Width 300



Width 400



Designation / Dimensions	Order unit	Reference
Stopper short 200	1 pce	120.32.000
Stopper short 300	1 pce	130.32.000
Stopper short 400	1 pce	140.32.000

Specify (R) for spring stopper e.g. 120.32.000 (R)

Brush unit

Applications

Allows the cleaning of the transfer units of conveying belts.

The brushes sweep any potential deposits on the belts and avoid the accumulation of foreign materials in mechanical parts.

Two articulated arms with fixed brushes installed in the belt conveying direction allow continuous mechanical cleaning of the conveyor belts.

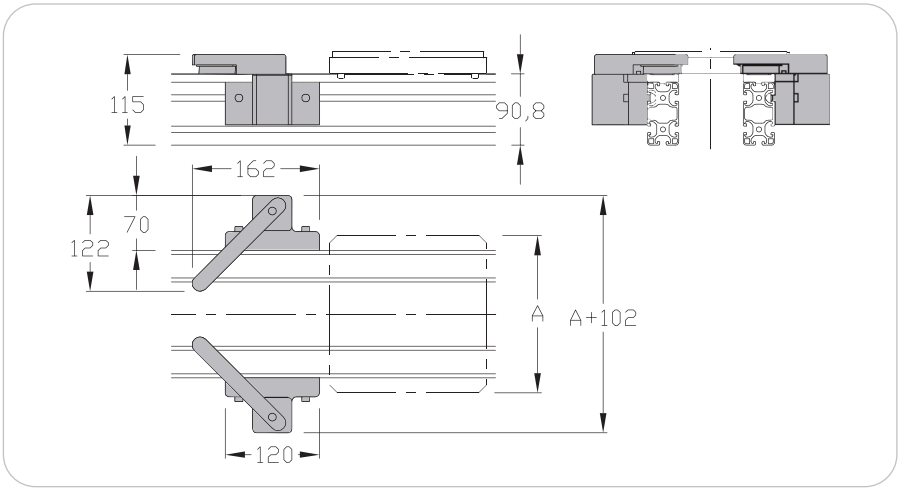
The arms retracts automatically during the traffic of workpiece carriers.

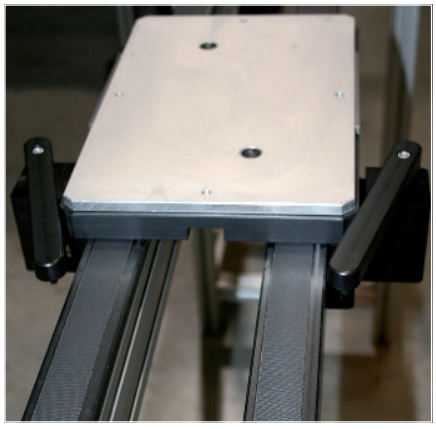
Technical data

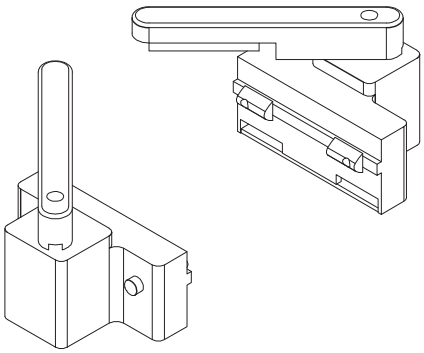
Complete set including:

- x 2 brushes
- x 2 brackets
- x Screws and nuts

Weight: 0,86 kg







Designation / Dimensions	Order unit	Reference
Brush unit	1 pce	120.49.000

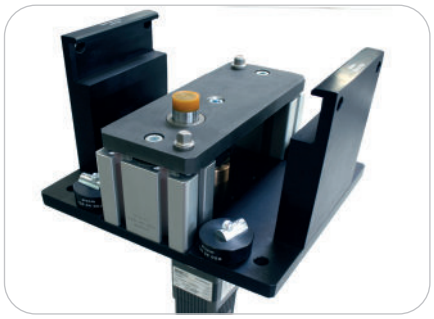
Positioning units

Stopping and positioning workpiece carriers for operations requiring accuracy. The workpiece carrier is stopped, then lifted off the belts and positioned by a pin and locating. In case of heavy shocks, it is possible to use positioning units with damped stopper.

Positioning unit 24 V

The stopper of workpiece carriers is positioned by the vertical movement (unnecessary stopper control).
A Brushless gear motor ensures the control of the stopper and the positioning unit.

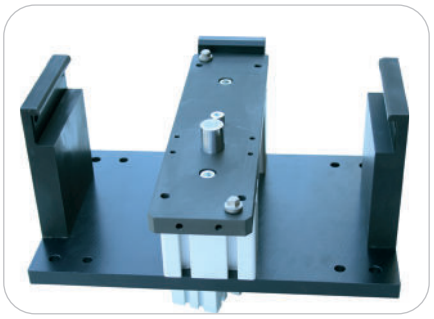
Irreversible system.



Positioning units low

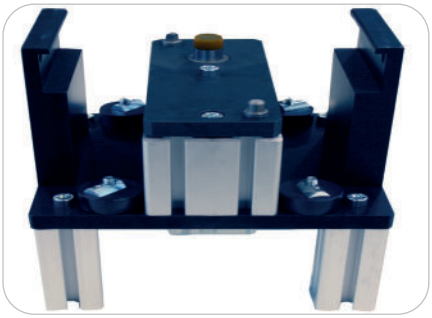
The positioning unit is directly fitted on the conveying units.

Damped low positioning units:
An upstream stopper is required.
A cam repositions the workpiece carrier when the positioning unit is rising.



Positioning units for station

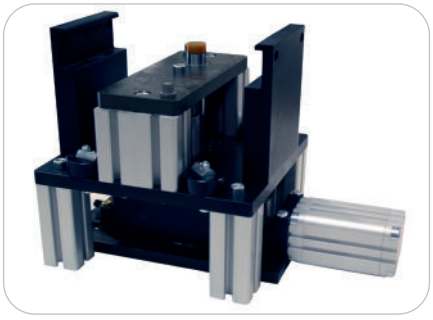
They are fixed to a table or a frame to ensure accuracy of the other surrounding elements.
Damped positioning units for station:
An upstream stopper is required.
A cam repositions the workpiece carrier when the positioning unit is rising.
Dead man option avaible on widths 200-300-400.



Positioning units heavy

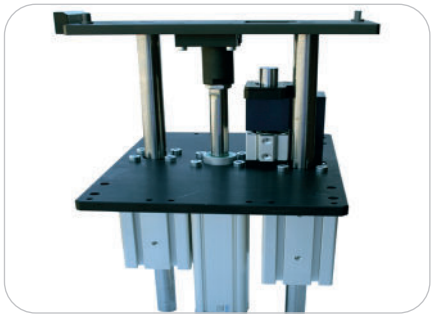
For operations requiring accuracy and involving important strain (up to 1500 daN) at the center of workpiece carrier.
The positioning unit must be fixed on a frame capable of supporting the strain applied.

Positioning units heavy, damped:
An upstream stopper is required.
A cam repositions the workpiece carrier when the positioning unit is rising.



Positioning units lift

They stop and position workpiece carriers at a significant height above the conveyor.
The workpiece carrier is stopped, then elevated to a specific height, while being held by two centering pieces.
Damped lift positioning units:
An upstream stopper is required.
A cam repositions the workpiece carrier when the positioning unit is rising.Dead man option avaible on widths 200-300-400.

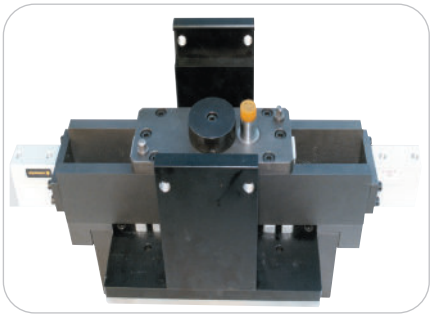


Positioning units bridge

The bridge positioning units allow to rise a workpiece carrier in a station and to another workpiece carrier can flow below.
Particularly suitable at the checkpoint.
Positioning accuracy +/- 1 mm.
A refocusing of workpiece carrier is required for operations which need an important accuracy.
Damped bridge positioning units. An upstream stopper is required.

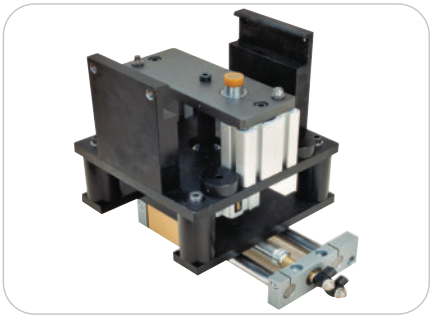
Positioning units press

Support significant strain (5000 daN) on the surface between the two belts.
The positioning unit must be fixed on a frame capable of supporting the strain applied.



Positioning units multi-positioning

They allow two accuracte positionings of the workpiece carrier at the same station.

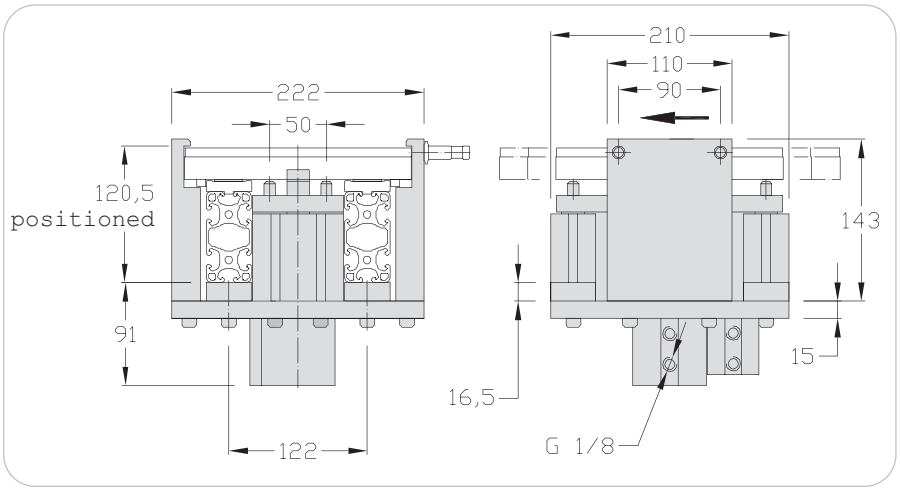


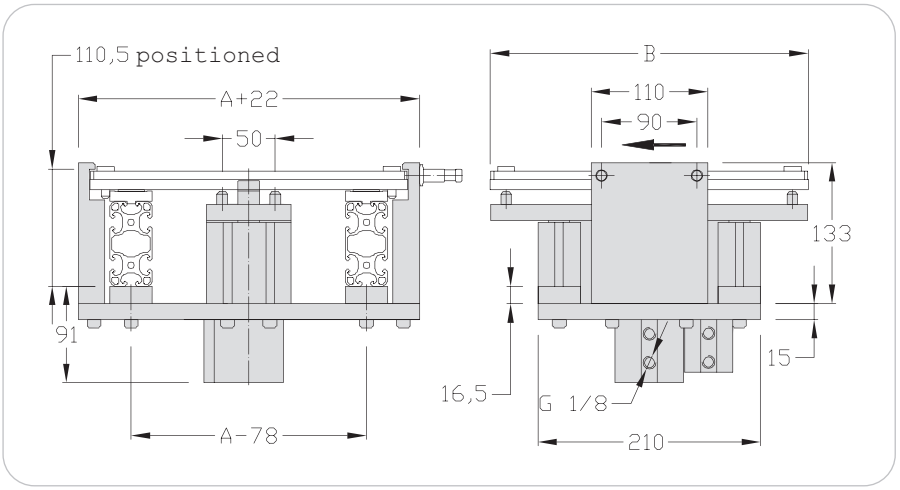
Positioning units Widths 200 - 300 - 400

Technical data

Complete set including:

- x Stopper
  1 double effect cylinder ø 32,
  detectable positions
- x Positioning unit
  1 double effect cylinder ø 50,
  detectable positions
- x Holes for shielding mounting sensors
  M12x100
- x Detection range: 4 mm
- x Fastening parts





A = workpiece carrier width
B = workpiece carrier length

4 flow rate controllers G 1/8 should be adapted

Maximum vertical strain: 100 daN for a pressure of 6 bars at the center of workpiece carrier.

Repeatability: +/- 0,03 mm

Weight: 200 : 8,7 kg
300 : 10,5 kg
400 : 12,2 kg

Designation / Dimensions	Order unit	Reference
Positioning unit 200	1 pce	120.64.000
Positioning unit 300	1 pce	130.64.000
Positioning unit 300x400	1 pce	134.64.000
Positioning unit 400	1 pce	140.64.000

Specify (R) for spring stopper eg: 130.64.000.R

Positioning units 24 V Widths 200 - 300 - 400

Technical data

Complete set including:

- x 1 gear motor 24 V
- x Vertical movement provided by an irreversible screw-nut system
- x Vertical position controlled by encoder
- x Housing for shielded mounting sensors M12x100
- x Detection range: 4 mm
- x Fastening parts

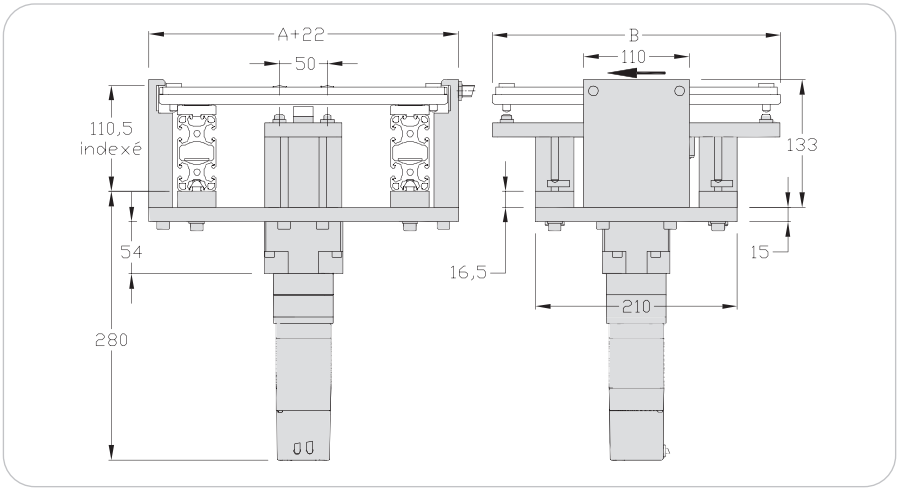
Maximum vertical strain: 100 daN.

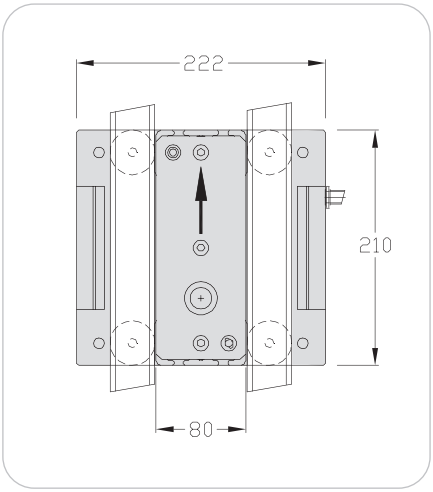
Repeatability: +/- 0.03 mm

Motor supply voltage: 24 VDC
Motor supply current: 5,2 A
Control voltage: 24 VDC
Control current: 10 mA

5 positioning input status
4 output status

Weight: 200 : 8,5 kg





elcom ITS 24 V

Designation / Dimensions	Order unit	Reference
Positioning unit 24 V 200	1 pce	120.64.000.E
Positioning unit 24 V 300	1 pce	130.64.000.E
Positioning unit 24 V 300x400	1 pce	134.64.000.E
Positioning unit 24 V 400	1 pce	140.64.000.E

Positioning units damped Widths 200 - 300 - 400

Technical data

Complete set including:

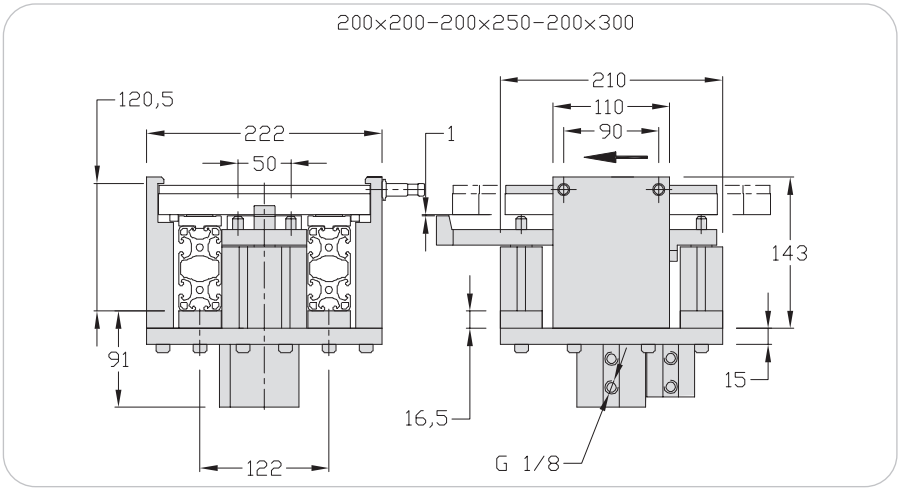
- x Stopper
  1 double effect cylinder ø 32, detectable positions
- x Positioning unit
  1 double effect cylinder ø 50, detectable positions
- x Holes for shielding mounting sensors M12x100
- x Detection range: 4 mm
- x 4 supports in profile 8 40x40
- x Fastening parts

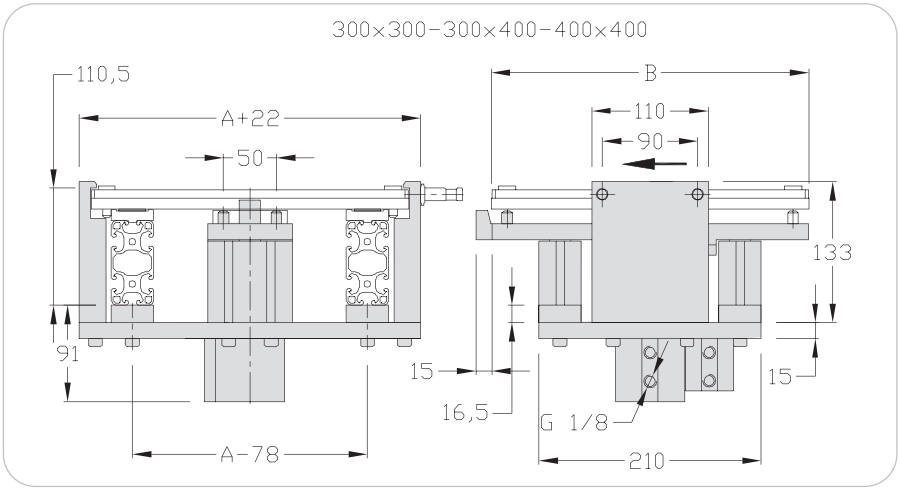
Maximum vertical strain: 100 daN for a pressure of 6 bars at the center of workpiece carrier.

Repeatability: +/- 0,03 mm

⚠ **Flow rate controllers G 1/8 should be adadpted G 1/8**

Weight: 200 : 10,2 kg
300 : 11,2 kg
400 : 13 kg





A = workpiece carrier width
B = workpiece carrier length

Designation / Dimensions	Order unit	Reference
Positioning unit 200 damped	1 pce	120.64.000.RA
Positioning unit 200x250 damped	1 pce	125.64.000.RA
Positioning unit 200x300 damped	1 pce	123.64.000.RA
Positioning unit 300 damped	1 pce	130.64.000.RA
Positioning unit 300x400 damped	1 pce	134.64.000.RA
Positioning unit 400 damped	1 pce	140.64.000.RA

R = for spring stopper A = damped

Positioning units for station Widths 200 - 300 - 400

Technical data

Complete set including:

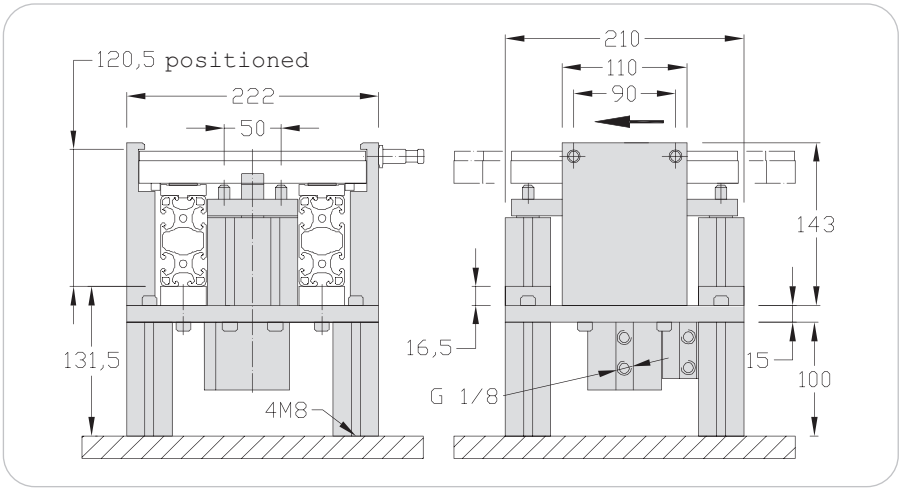
- x Stopper
  1 double effect cylinder ø 32,
  detectable positions
- x Positioning unit
  1 double effect cylinder ø 50,
  detectable positions
- x Holes for shielding mounting
  sensors M12x100
- x Detection range: 4 mm
- x 4 supports in profile 8 40x40
- x Fastening parts

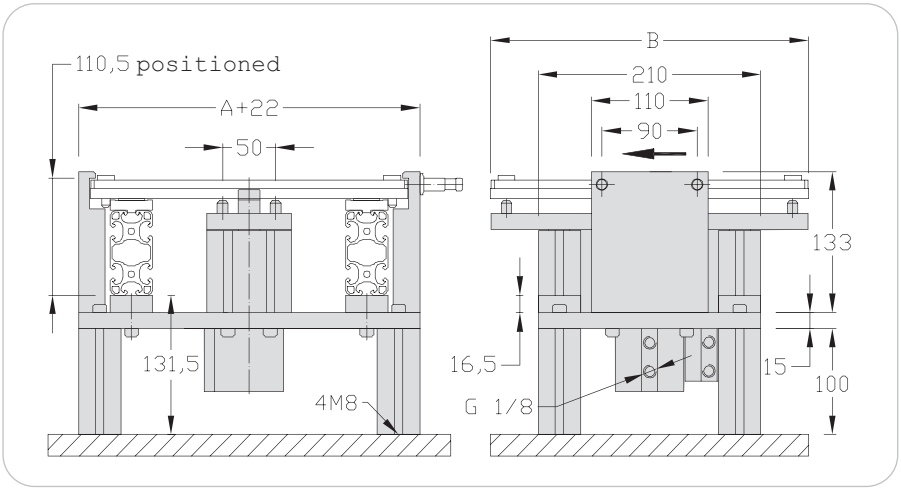
Maximum vertical strain: 100 daN for a pressure of 6 bars at the center of workpiece carrier

Repeatability: +/- 0,03 mm

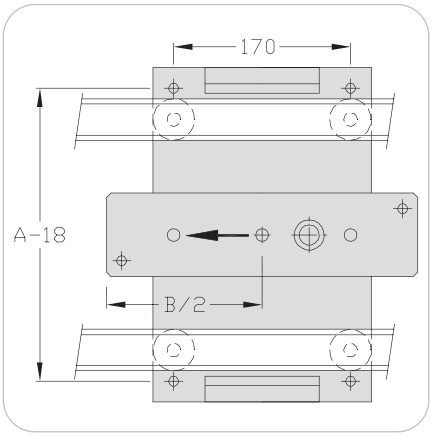
⚠ **4 flow rate controllers G 1/8 should be adapted**

Weight: 200 : 8,7 kg
300 : 10,5 kg
400 : 12,2 kg





A = workpiece carrier width
B = workpiece carrier length



Designation / Dimensions	Order unit	Reference
Positioning unit for station 200	1 pce	120.69.000
Positioning unit for station 300	1 pce	130.69.000
Positioning unit for station 300x400	1 pce	134.69.000
Positioning unit for station 400	1 pce	140.69.000

Specify (R) for spring stopper eg: 120.69.000.R

Positioning units for station, damped Widths 200 - 300 - 400

Technical data

Complete set including:

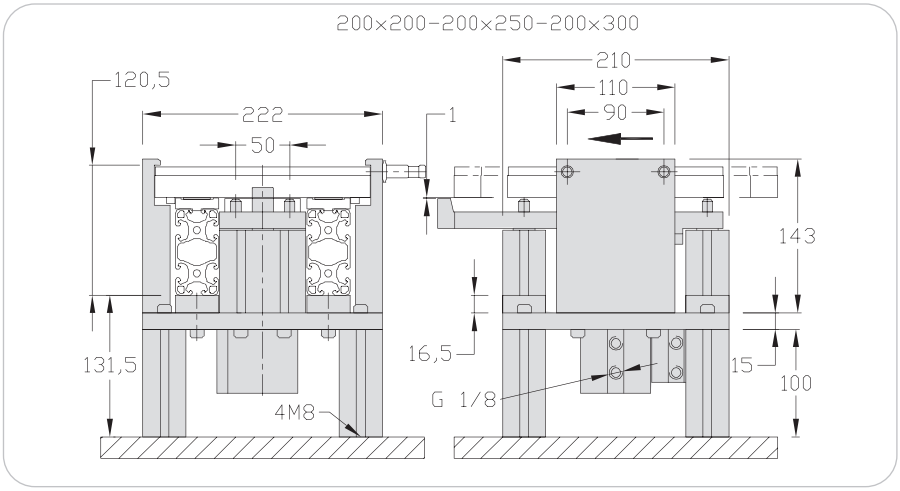
- x Stopper
  1 double effect cylinder ø 32, detectable positions
- x Positioning unit
  1 double effect cylinder ø 50, detectable positions
- x Holes for shielding mounting sensors M12x100
- x Detection range: 4 mm
- x 4 supports in profile 8 40x40
- x Fastening parts

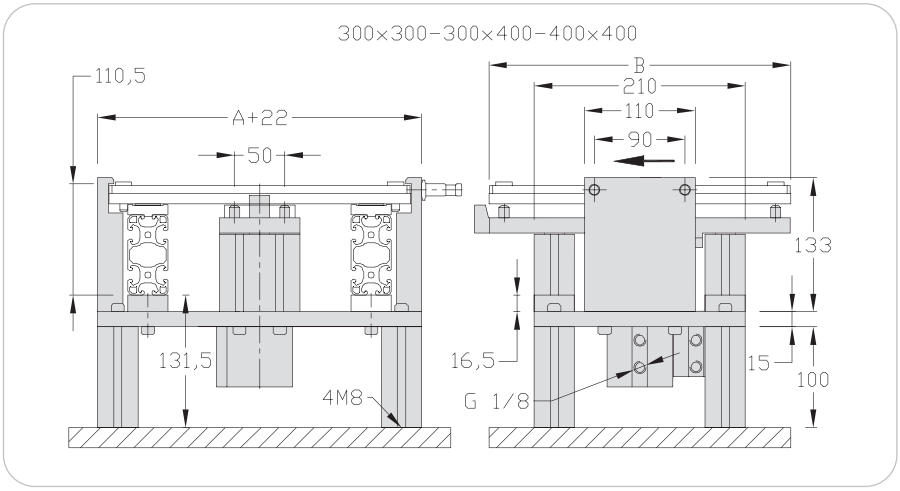
Maximum vertical strain: 100 daN for a pressure of 6 bars at the center of workpiece carrier.

Repeatability: +/- 0,03 mm

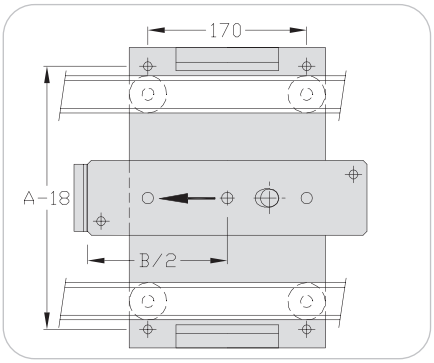
⚠ **Flow rate controllers G 1/8** should be adadpted

Weight: 200: 10,2 kg
300: 11,2 kg
400: 13 kg





A = workpiece carrier width
B = workpiece carrier length



Designation / Dimensions	Order unit	Reference
Positioning unit for station 200 damped	1 pce	120.69.000 RA
Positioning unit for station 200x250 damped	1 pce	125.69.000 RA
Positioning unit for station 200x300 damped	1 pce	123.69.000 RA
Positioning unit for station 300 damped	1 pce	130.69.000 RA
Positioning unit for station 300x400 damped	1 pce	134.69.000 RA
Positioning unit for station 400 damped	1 pce	140.69.000 RA

R = for spring stopper A = damped

Dead man option, positioning units Widths 200 - 300 - 400

Applications

This option is available for all positioning units and positioning units for station widths 200 - 300 - 400.

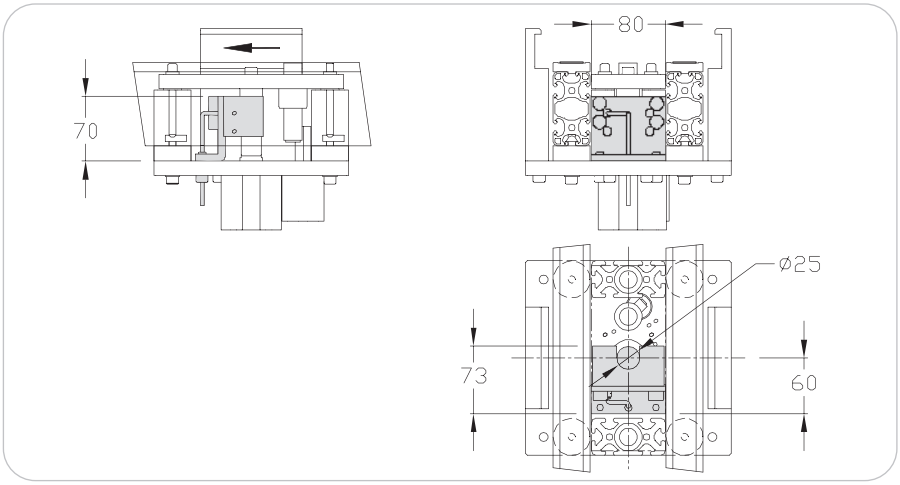
Pneumatic clamping element for shaft Ø 25.

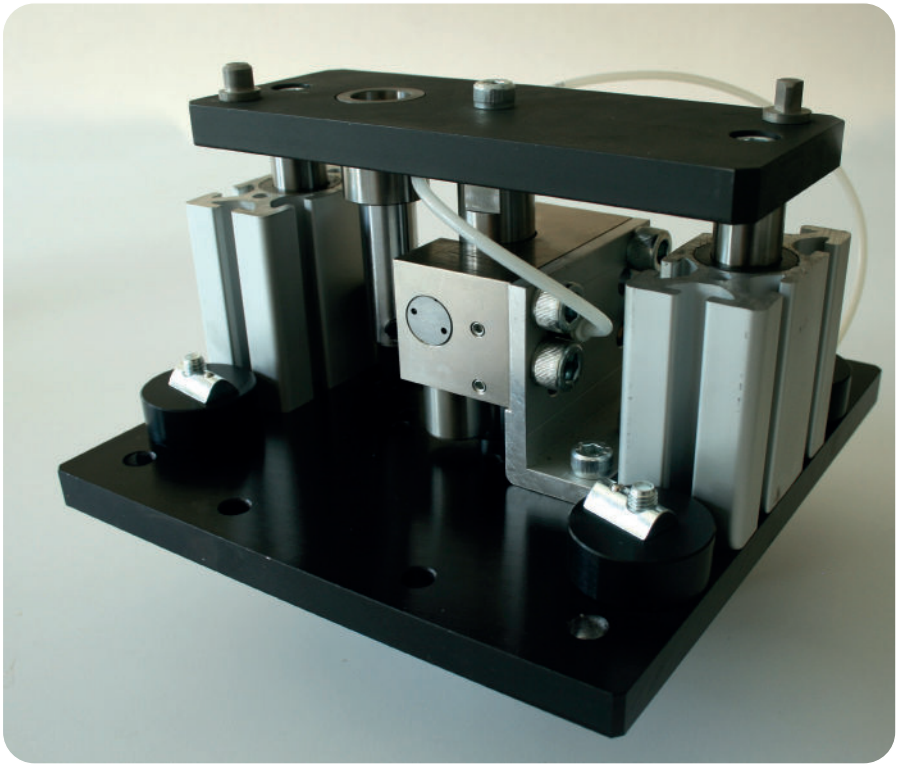
Locking by springs.

Retaining force: 750 N

Useful pressure range: 6 bars.

Weight: 1,3 kg





Designation / Dimensions	Order unit	Reference
Dead man option, positioning units 200 - 300 - 400	1 pce	120.74.000

Positioning units heavy Widths 200 - 300 - 400

Technical data

Complete set including:

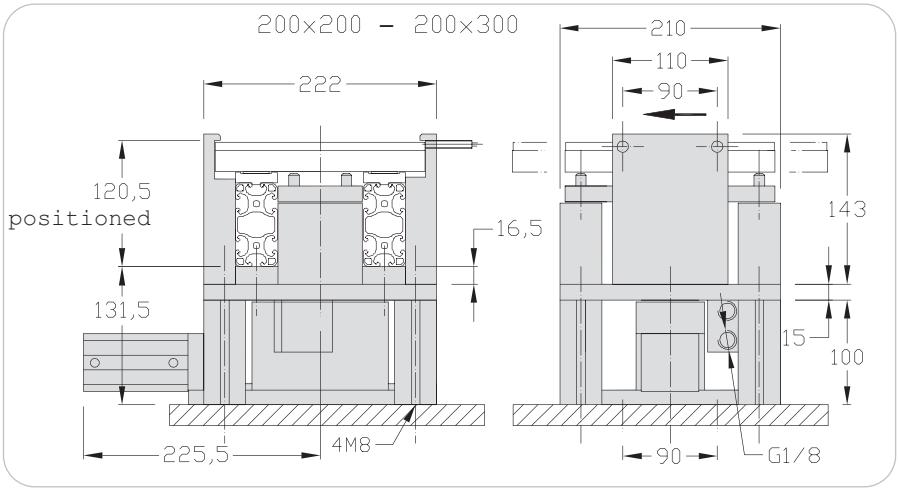
- x Stopper
- x Positioning unit
- x 2 pneumatic cylinders, detectable positions
- x Spacers profilé 40x40
- x Fastening parts
- x Holes for shielding mounting sensors M12x100, noyables
- x Detection range: 4 mm

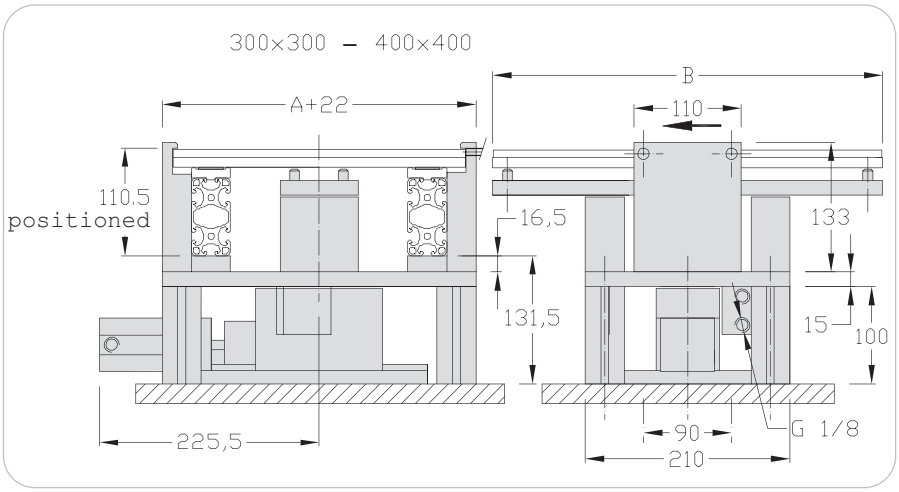
Maximum vertical strain: 1500 daN at the center of workpiece carrier (60x60 mm).

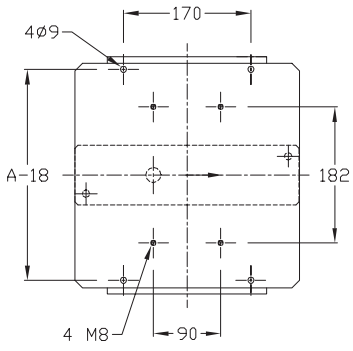
Repeatability: +/- 0,03 mm

⚠ **Flow rate controllers G 1/8 should be adadpted.**

Weight: 200: 18,3 kg
300: 19,6 kg
400: 21,8 kg







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Designation / Dimensions	Order unit	Reference
Positioning unit heavy 200	1 pce	120.68.000
Positioning unit heavy 300	1 pce	130.68.000
Positioning unit heavy 300x400	1 pce	134.68.000
Positioning unit heavy 400	1 pce	140.68.000

Positioning units heavy, damped Widths 200 - 300 - 400

Technical data

Complete set including:

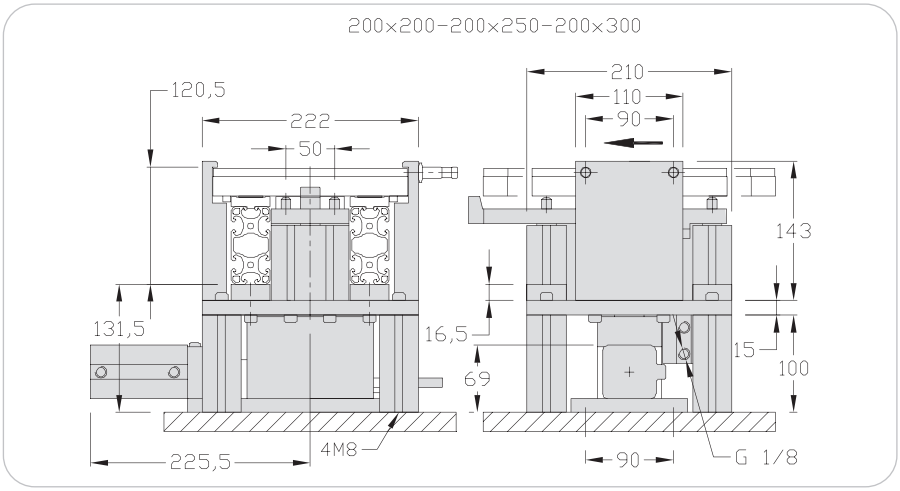
- x Stopper
- x Positioning unit
- x 2 pneumatic cylinders, detectable positions
- x Spacers profilé 40x40
- x Fastening parts
- x Holes for shielding mounting sensors M12x100, noyables
- x Detection range: 4 mm

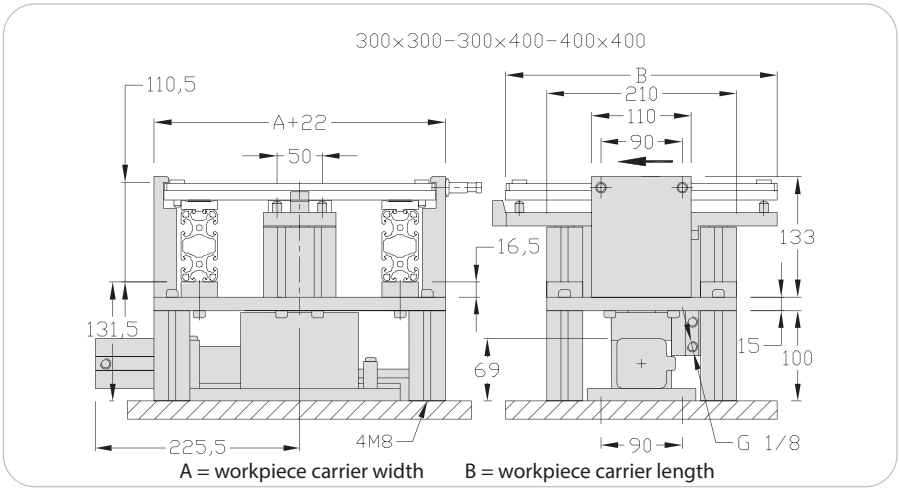
Maximum vertical strain: 1500 daN at the center of workpiece carrier (60x60 mm)

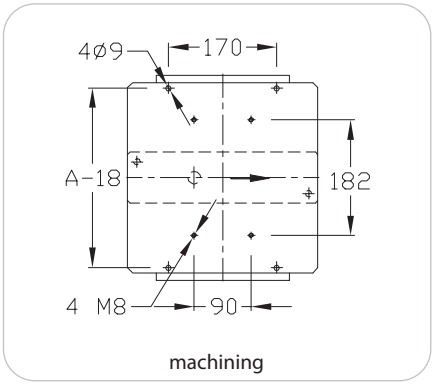
Repeatability: +/- 0,03 mm

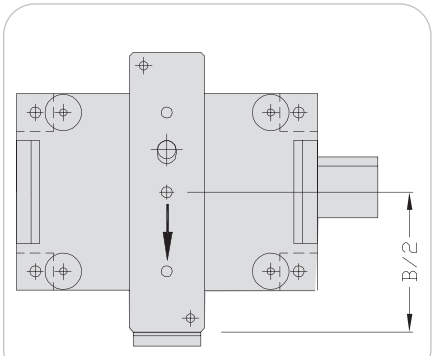
⚠ **Flow rate controllers G 1/8 should be adadpted.**

Weight: 200: 18,3 kg
300: 19,6 kg
400: 21,8 kg









Designation / Dimensions	Order unit	Reference
Positioning unit heavy 200, damped	1 pce	120.68.000 RA
Positioning unit heavy 200x250, damped	1 pce	125.68.000 RA
Positioning unit heavy 200x300, damped	1 pce	123.68.000 RA
Positioning unit heavy 300, damped	1 pce	130.68.000 RA
Positioning unit heavy 300x400, damped	1 pce	134.68.000 RA
Positioning unit heavy 400, damped	1 pce	140.68.000 RA

R = for spring stopper A = damped

Positioning units lift Widths 200 - 300 - 400

Technical data

Complete set including:

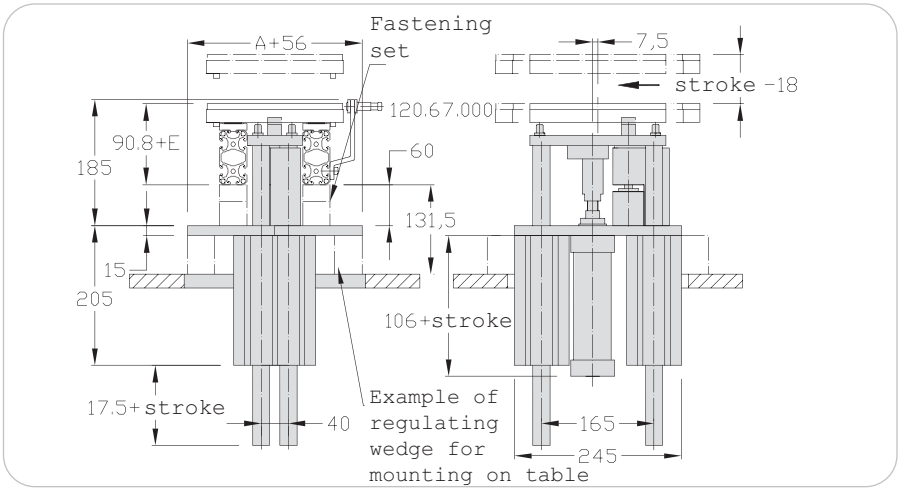
- x Stopper
  1 double effect cylinder ø 32, detectable positions
- x Positioning unit
  1 double effect cylinder ø 50, detectable positions
- x Ball bearing guide bush ø 25
- x Fastening parts
- x 1 bracket for shielded mounting sensor M12x10
- x Detection range: 4 mm

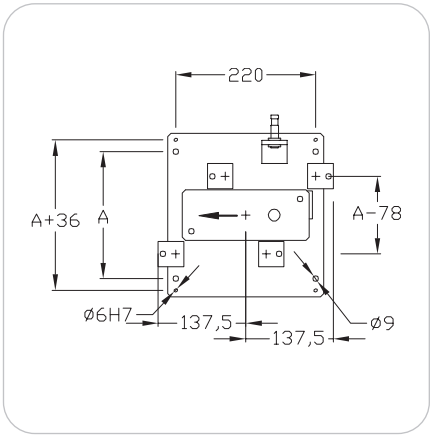
A stopper located before the lift unit is generally necessary to avoid the arrival of another workpiece carrier during lifting.

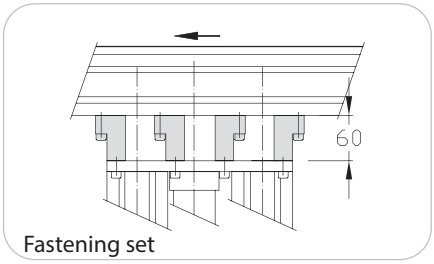
Available cylinder strokes:
50 - 80 - 100 - 125 - 160 -200 - 250 - 300 - 320 - 400 mm

Maximum vertical strain: 100 daN at the center of workpiece carrier

Repeatability: +/- 0,06 mm







Flow rate controllers G 1/8 should be adadpted

Weight: 200: 10,6 kg
300: 19,6 kg
400: 22,5 kg

Designation / Dimensions	Order unit	Reference
Positioning unit 200, lift	1 pce	120.66.000 R
Positioning unit 300, lift	1 pce	130.66.000 R
Positioning unit 300x400, lift	1 pce	134.66.000 R
Positioning unit 400, lift	1 pce	140.66.000 R
Kit de fixation	1 pce	120.67.000

Specify (R) for spring stopper eg: 120.66.000.R

Positioning units lift, damped Widths 200 - 300 - 400

Technical data

Complete set including:

- x Stopper
  1 double effect cylinder ø 32, detectable positions
- x Positioning unit
  1 double effect cylinder ø 50, detectable positions
- x Ball bearing guide bush ø 25
- x Fastening parts
- x 1 bracket for shielded mounting sensor M12x100
- x Detection range: 4 mm

A stopper located before the lift unit is generally necessary to avoid the arrival of another workpiece carrier during lifting.

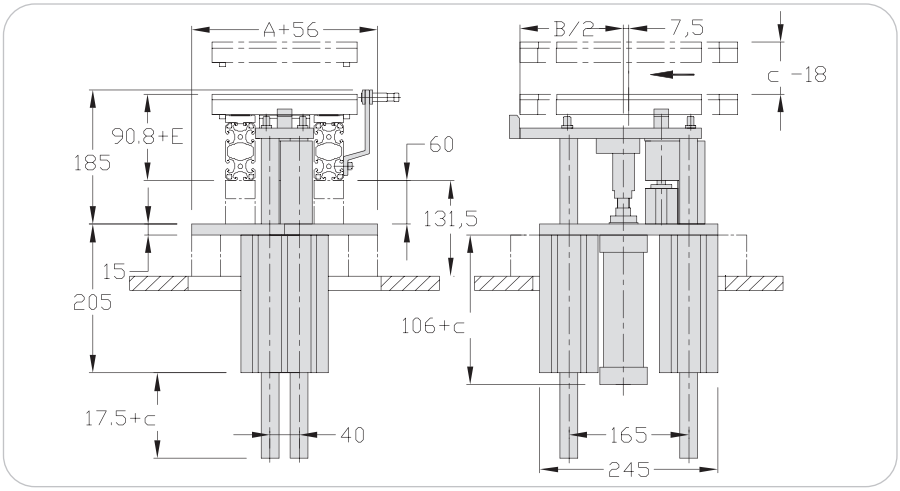
Available cylinder strokes:
50 - 80 - 100 - 125 - 160 - 200 - 250 - 300 - 320 - 400 mm

Maximum vertical strain: 100 daN at the center of workpiece carrier

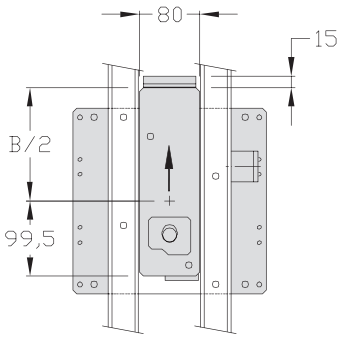
Repeatability: +/- 0,06 mm

Flow rate controllers G 1/4 should be adadpted

Weight: 200: 10,7 kg
300: 19,7 kg
400: 22,6 kg

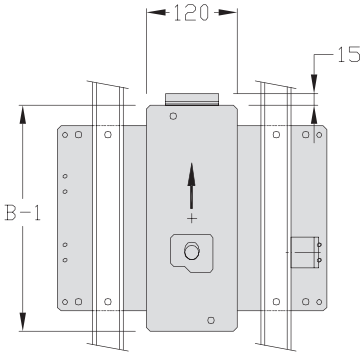


For workpiece carrier width 200

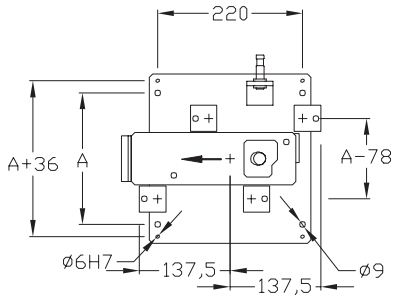


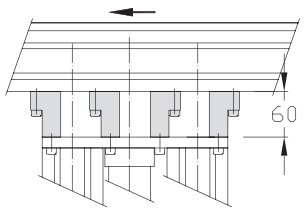
B = workpiece carrier length

For workpiece carriers widths 300 and 400



B = workpiece carrier length





Fastening set

Designation / Dimensions	Order unit	Reference
Positioning unit 200, lift, damped	1 pce	120.66.000 RA
Positioning unit 200x250, lift, damped	1 pce	125.66.000 RA
Positioning unit 200x300 lift, damped	1 pce	123.66.000 RA
Positioning unit 300 lift, damped	1 pce	130.66.000 RA
Positioning unit 300x400 lift, damped	1 pce	134.66.000 RA
Positioning unit 400 lift, damped	1 pce	140.66.000 RA

Dead man option, Positioning units lift Widths 200 - 300 - 400

Applications

This option is available for all lift positioning units widths 200 - 300 - 400.

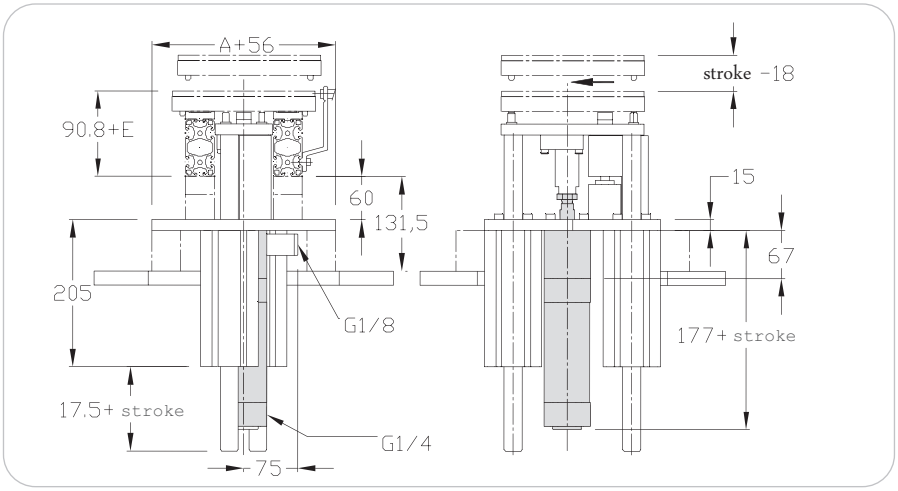
Locking by springs.

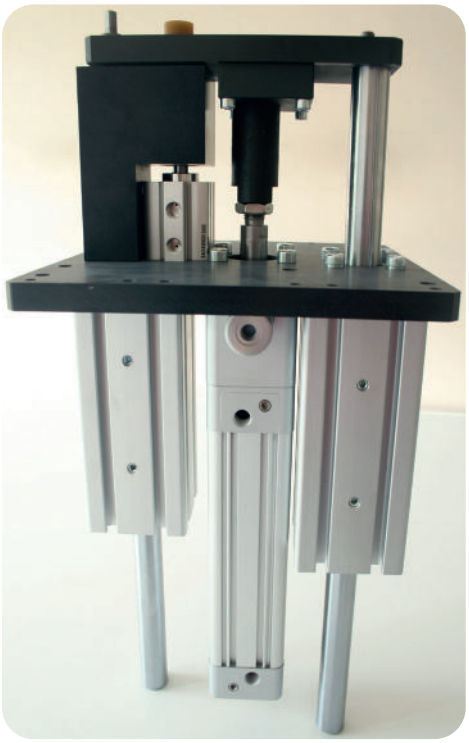
Retaining force: 1400 N

Useful pressure range: 6 bars.

2 flow rate controllers G1/4 + 1 connection G 1/8 are required.

Weight: 4,2 kg (stroke 400).





Designation / Dimensions	Order unit	Reference
Dead man option, Positioning units lift 200 - 300 - 400	1 pce	120.75.000

Positioning units bridge Width 200

Technical data

Complete set including:

- x Stopper
  1 double effect cylinder ø 32, detectable positions
- x Positioning unit
  1 double effect cylinder ø 50, detectable positions
- x Ball bearing guide bush ø 25
- x Fastening parts
- x 1 bracket for shielded mounting sensor M12x100
- x Dectection range: 4 mm

A stopper located before the lift unit is generally necessary to avoid the arrival of another workpiece carrier during lifting.

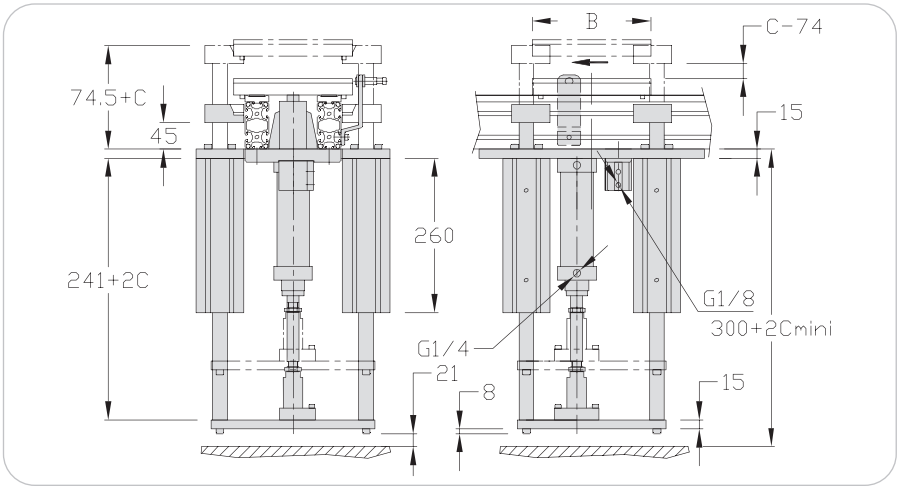
Available cylinder strokes:
100 - 125 - 160 - 200 - 250 mm

Maximum vertical strain:
60 daN at the center of workpiece carrier.

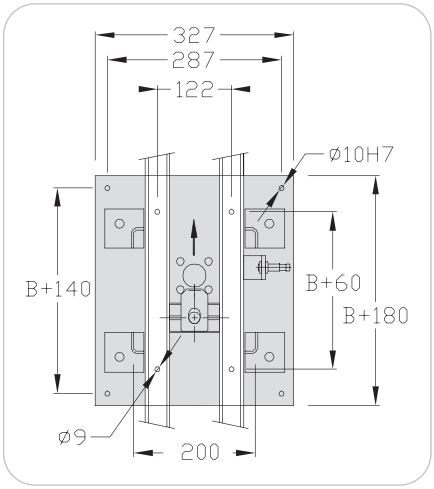
Repeatability: +/- 1 mm

Flow rate controllers G 1/4 should be adadpted

Weight: 200x200: 30 kg
200x250: 31,5 kg
200x300: 33 kg



B = Workpiece carrier length



Designation / Dimensions	Order unit	Reference
Positioning unit bridge 200	1 pce	120.71.000
Positioning unit bridge 200, spring	1 pce	120.71.000 R
Positioning unit bridge 200, damped, spring	1 pce	120.71.000 RA
Positioning unit bridge 200x250	1 pce	125.71.000
Positioning unit bridge 200x250, spring	1 pce	125.71.000 R
Positioning unit bridge 200x250, damped, spring	1 pce	125.71.000 RA
Positioning unit bridge 200x300	1 pce	123.71.000
Positioning unit bridge 200x300, spring	1 pce	123.71.000 R
Positioning unit bridge 200x300, damped, spring	1 pce	123.71.000 RA

Positioning units, press Widths 200 - 300 - 400

Technical data

Complete set including:

- x Stopper
- x Lifting cylinder
- x 2 locking cylinders
- x Fastening parts
- x 2 brackets for shielded mounting sensor M12x100
- x Dectection range: 4 mm

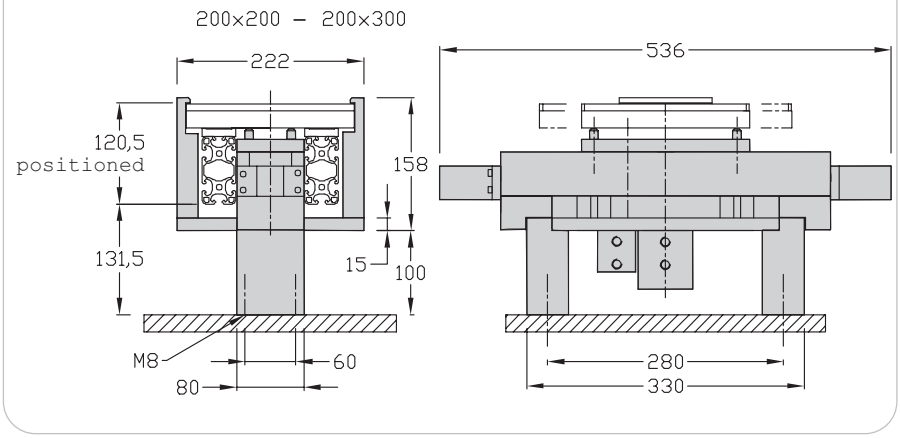
The positioning unit, press, must be fixed on a frame capable of supporting the strain applied.

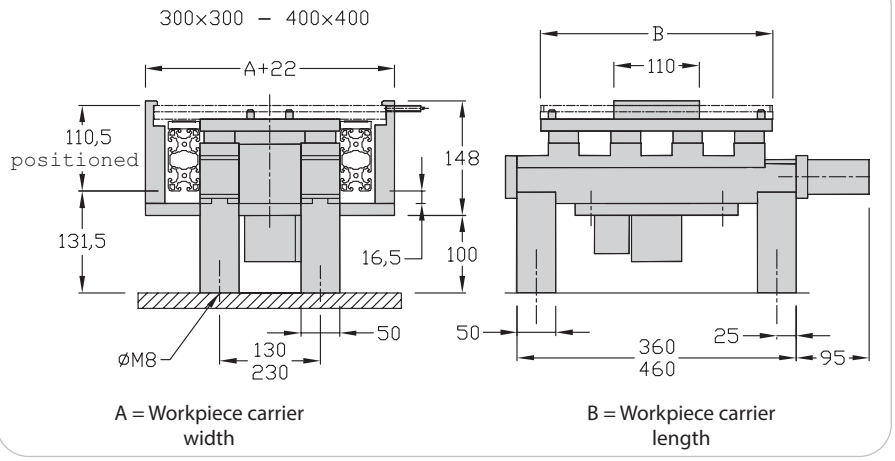
Maximum vertical strain
200x200: 3 000 daN
300x300: 5 000 daN
400x400: 5 000 daN

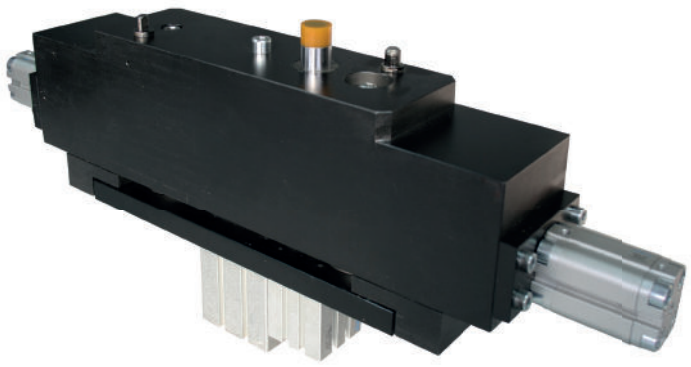
Repeatability: +/- 0,03 mm

⚠ **Flow rate controllers G 1/8 should be adadpted**

Weight: 200x200 : 25 kg
300x300 : 35 kg
300x400 : 42 kg
400x400 : 48 kg







Designation / Dimensions	Order unit	Reference
Positioning unit press 200x200	1 pce	120.33.000
Positioning unit press 300x300	1 pce	130.33.000
Positioning unit press 300x400	1 pce	134.33.000
Positioning unit press 400x400	1 pce	140.33.000

Specify (R) for spring stopper eg: 120.33.000.R

Multi-positioning unit Width 200

Technical data

Complete set including:

- x Stopper
- x Positioning unit 200
- x Slide PS 20
  stroke: 50-100 or 200

The slide is fitted with shock absorbers and stop screws with integrated sensors.

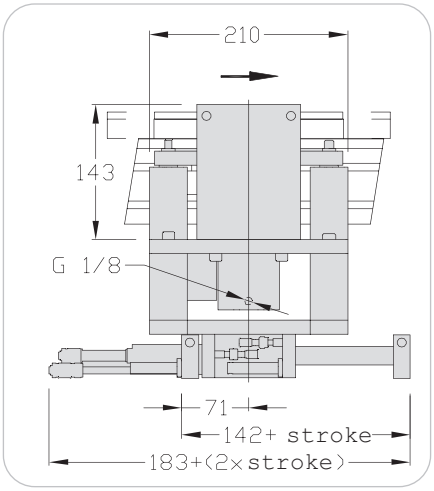
Maximum vertical strain:
stroke 50 or 100: 40 daN
stroke 200: 20 daN

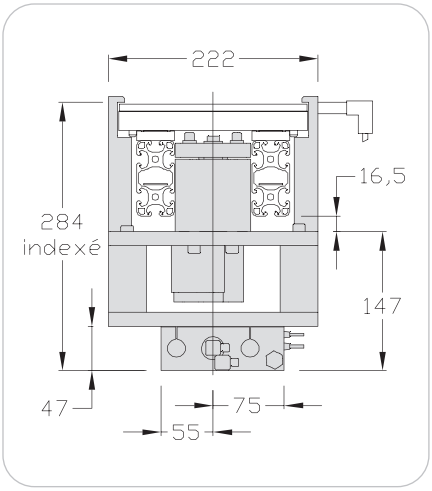
Repeatability: +/- 0,04 mm

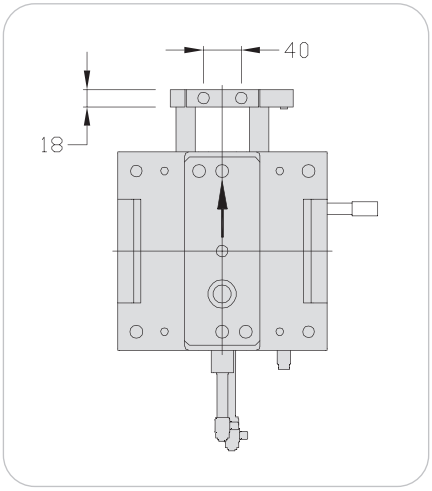
A stopper located before the multi-positioning unit is generally necessary to avoid the arrival of another workpiece carrier during the slide moving.

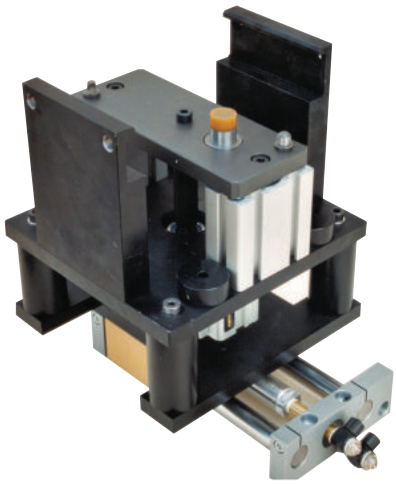
Multi-positioning units can be made on request.

Weight: 14,5 kg









Designation / Dimensions	Order unit	Reference
Multi-positioning unit 200	1 pce	120.72.000.***

(*** = strokes 50 - 100 - 200 Ex.: stroke 50 120.72.000.050)

Reinforcement for positioning units Widths 300 - 400

Applications

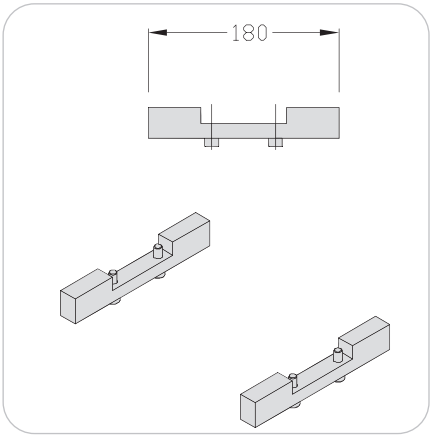
On positioning units and positioning units for station 300, 300x400 and 400, reinforcement bars allow a better force distribution applied on the workpiece carrier and therefore on all the positioning unit surface.

Width 300
- x 2 steel bars 180x19 thickness 29
- x Fastening 2x2 Chc M8

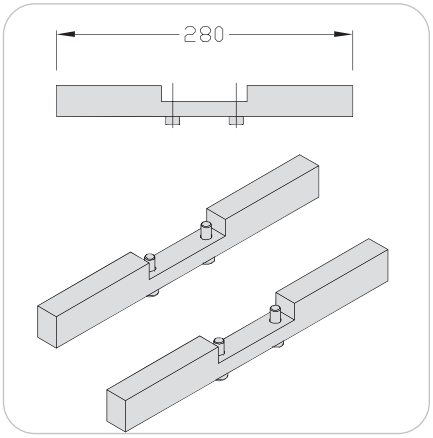
Width 400
- x 2 steel bars 280x20 thickness 29
- x Fastening 2x2 Chc M8

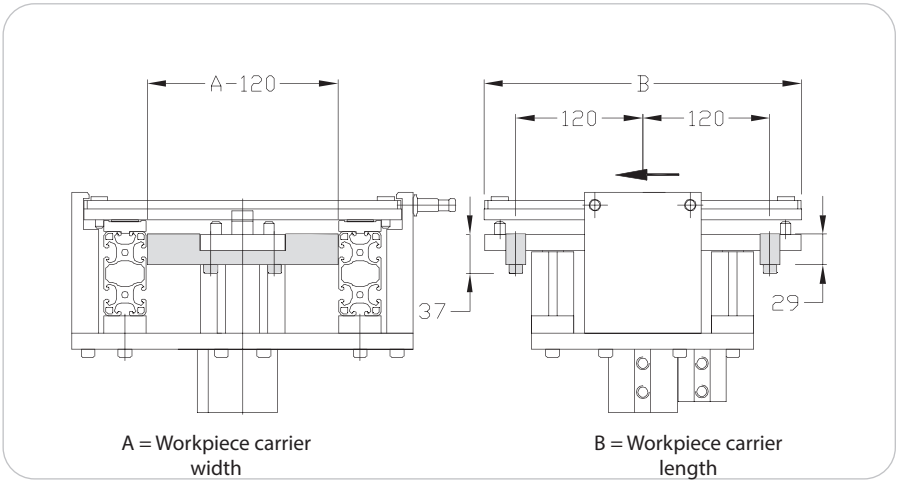
Weight: 300: 1,25 kg
400: 2,20 kg

300



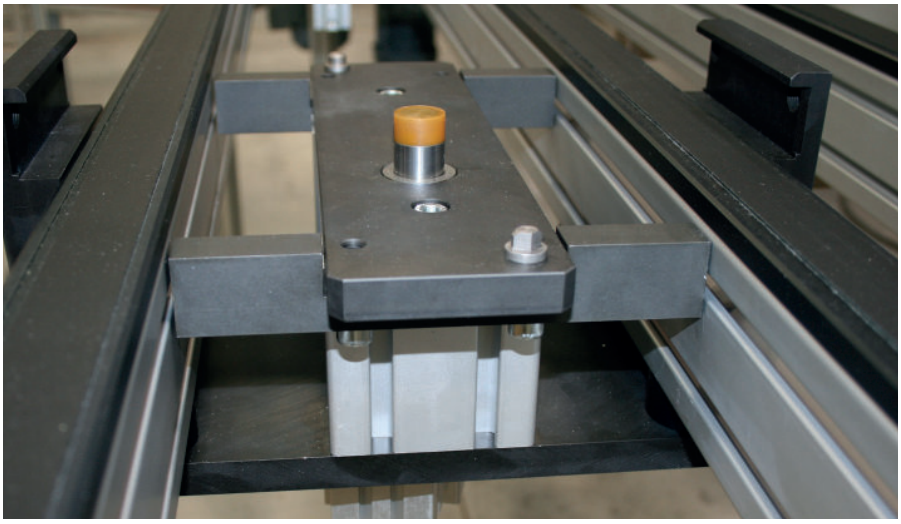
400





A = Workpiece carrier width

B = Workpiece carrier length



Designation / Dimensions	Order unit	Reference
Reinforcement for positioning unit 300	1 kit	130.64.100
Reinforcement for positioning unit 400	1 kit	140.64.100

Module TLM 2000 heavy load Width 200

Applications

Used with TLM 2000 flat belt range.
The standard belt guide is replaced by preassembled absorbing load modules of length 80 mm, pressed into transfer profiles, thus multiplying the strain on a pallet by 2,5 compared to a standard unit. The pallet is driven by a belt sliding on ball bearings mounted on springs. The pallet move on ball bearings to reduce the friction coefficient between the pallet and the belt. Define in advance lengths of conveying units to avoid cutting of these modules.

Technical data

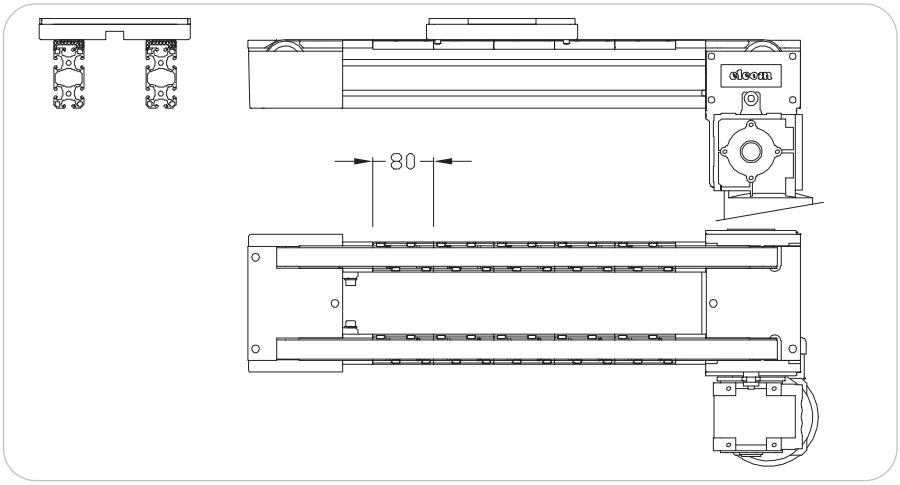
- Module length 80 mm
- Fastening with 2 clips
- External ball bearings pallet support Ø10, stainless steel
- Inside ball bearings belt support Ø7, stainless steel

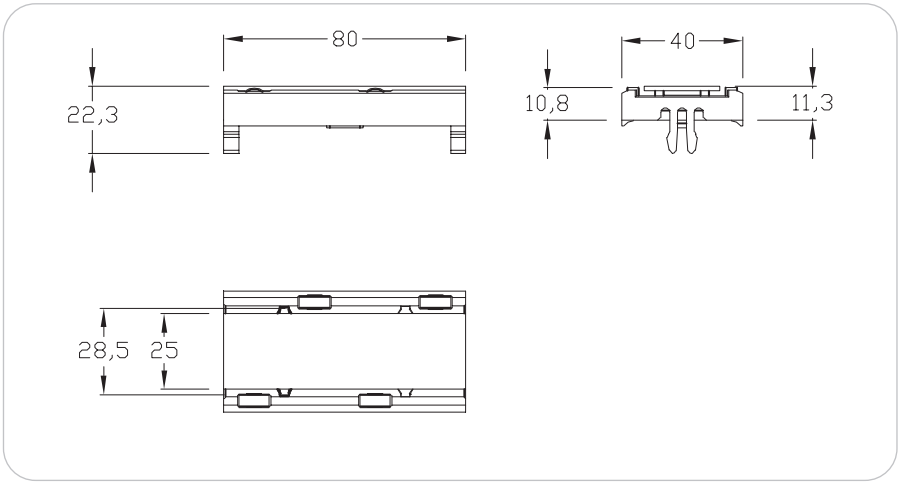
Maximum load / 6 m:
2.5 x standard load

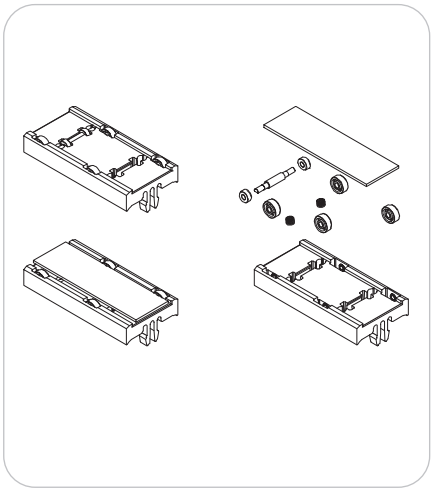
Maximum standard load:
2.5 x standard load

Possible combination of standard belt guide and absorbing load modules by following up application.

Weight: 0,035 kg / module







Designation / Dimensions	Order unit	Reference
Module TLM 2000, heavy load	1 pce	120.02.000L

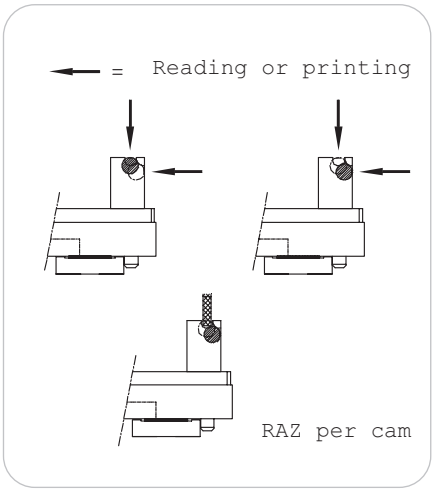
Logic block

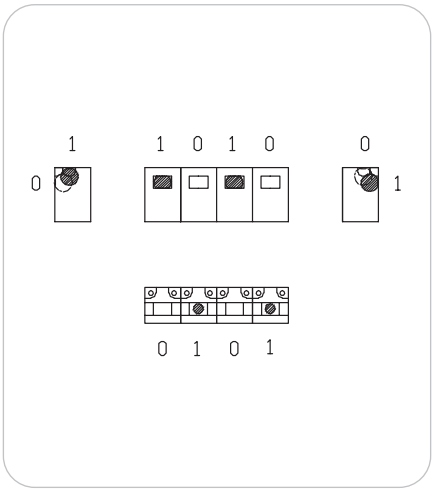
Applications

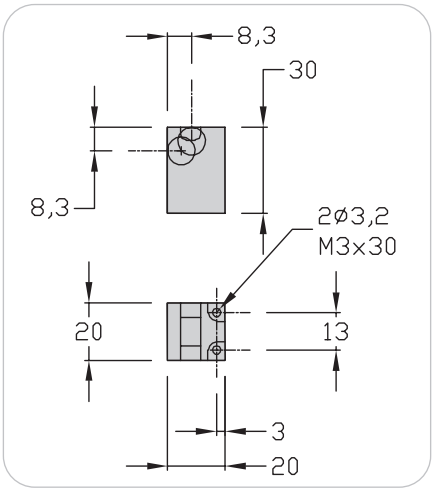
Allows simple identification of workpiece carriers and memorizing information at different stages of the line.

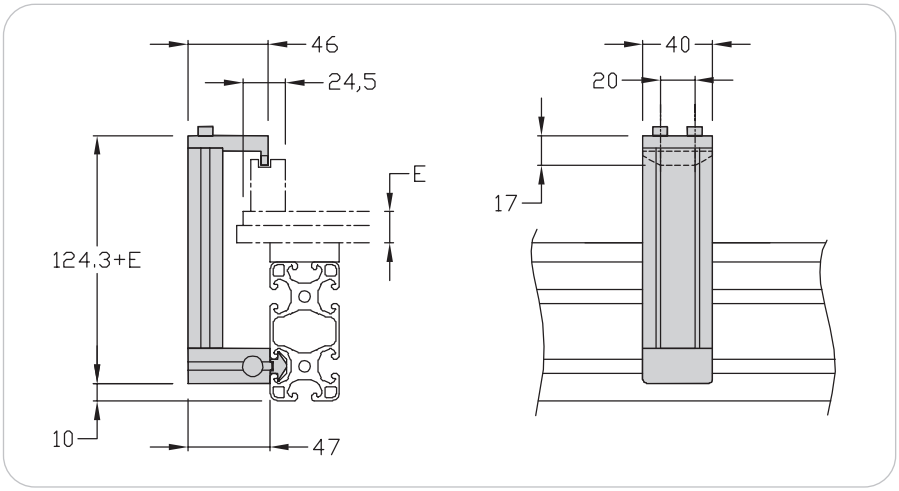
The coder consists in a plastic body in which steel ball can only have two stable positions.Coding is done by changing the position of the ball with a micro cylinder. Reading is done by magnetic detection. Resetting can be done simply by running the coder under a fixed cam.

One coder is equivalent to 1 byte of memory. Several coders can be placed side by side on the same workpiece carrier.









Technical data

- **x** Body, PA black
- **x** Steel ball ø10

Weight:

Logic block :	0,018 kg
RAZ :	0,19 kg

Designation / Dimensions	Order unit	Reference
Logic block	1 pce	100.00.000
RAZ codage 200	1 pce	100.01.000
RAZ codages 300 - 400	1 pce	100.02.000

Workpiece carrier sensor

Applications

Allows to detect the workpiece carrier's flow in a definite area of the transfer system and allows to know when the workpiece carrier leaves or enter into this area in order to manage accumulations.

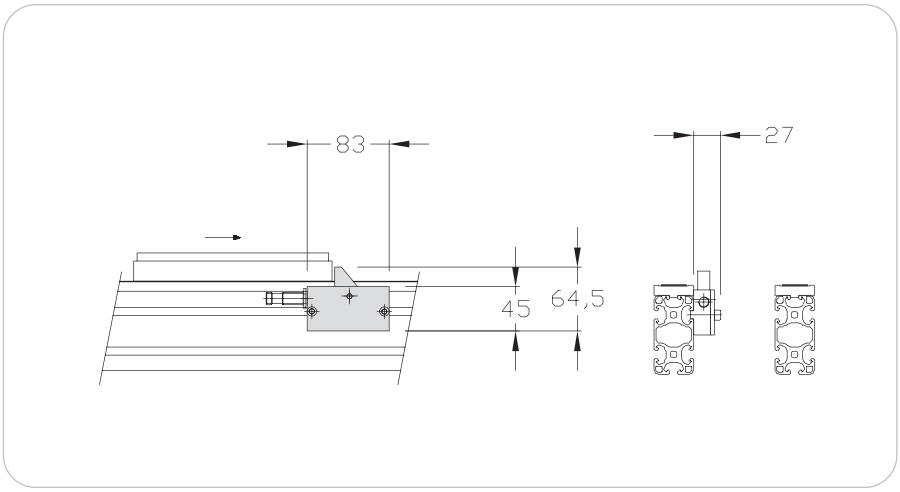
Avoid the sensor change of state in this area.

Technical data

- **x** Plastic body
- **x** Steel detection bar

⚠ **Sensor M12x100, reach of 4 mm shielded sensor not supplied**

Weight: 0,23 kg



Designation / Dimensions	Order unit	Reference
Workpiece carrier sensor	1 kit	200.20.000

Sensor brackets M12x100

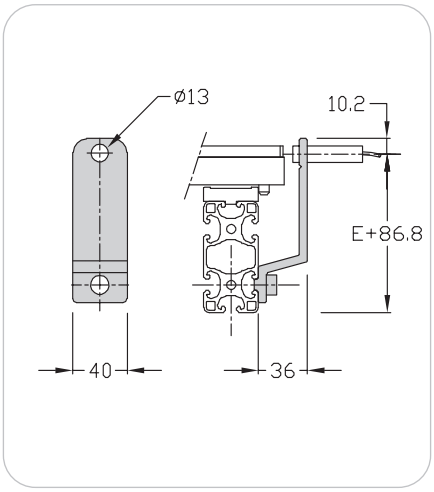
Applications

M12x100 sensor bracket for workpiece carrier.

Technical data

- Cast aluminium
- Nut 8 St M6 + screws
- Detection range: 4 mm

Weight: 200: 0,1 kg
300: 0,1 kg
400: 0,1 kg



Designation / Dimensions	Order unit	Reference
Sensor bracket 200	1 pce	120.10.000
Sensor bracket 300-400	1 pce	140.10.000

Positioning kit

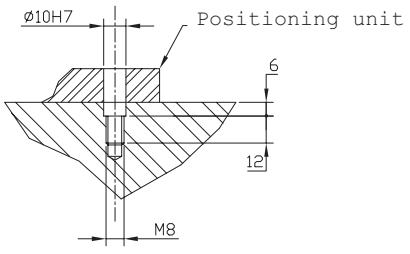
Applications

Allows accurate positioning unit on station.

Technical data

- 2 axis screws M8
- 2 hexagonal socket head cap screws M8

Weight: 0,08 kg



Machining for positioning kit

Designation / Dimensions	Order unit	Reference
Positioning kit	1 kit	120.62.000

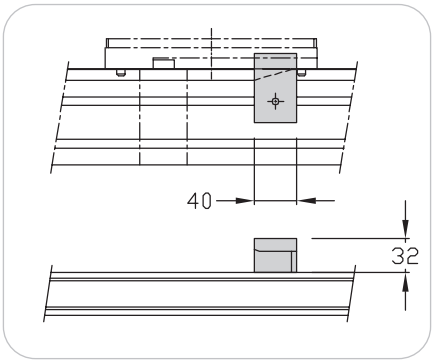
Anti bouncing back

Applications

Avoids workpiece carrier bouncing back on stoppers or positioning units in case of high speed. Allows to reduce the changing time of workpiece carriers in the positioning units.

Technical data

- x Parts, PA black
- x Fastening parts



Weight: 0,1 kg

Designation / Dimensions	Order unit	Reference
Anti bouncing back 200	1 kit	120.30.000

Inductive sensor M12x100

Applications

Detection for the workpiece carrier.

Technical data

- x Shielded mounting sensor M12x100
- x LED control display
- x PNP-10-30 VDC
- x Screwed connection
- x Cable 5 m

Designation / Dimensions	Order unit	Reference
Inductive sensor M12x100	1 kit	200.10.200

Cylinder sensors

Applications

Detection the position of cylinders, stoppers or positioning units.

Technical data

- x 12-27 V-LED control display

Designation / Dimensions	Order unit	Reference
Cylinder sensor, positioning unit	1 kit	200.10.201
Cylinder sensor, positioning unit lift	1 kit	200.10.202