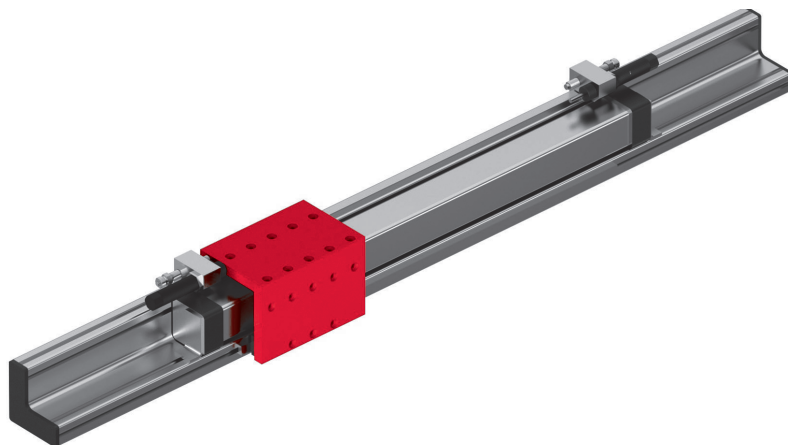
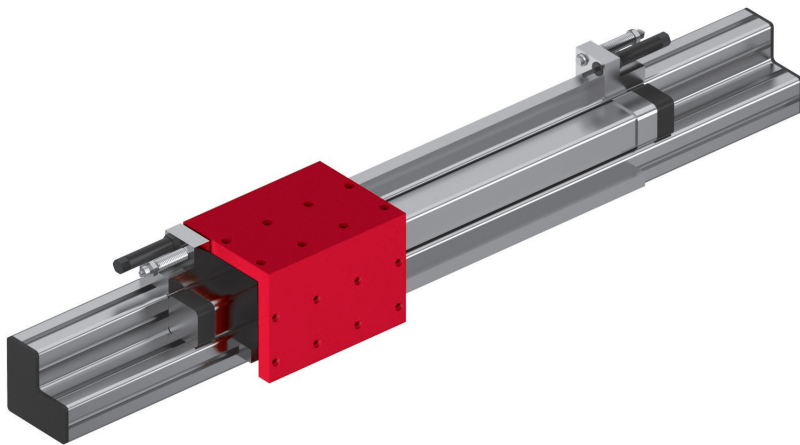


# Gantry modules pneumatic PMP

PMP & PMP-c



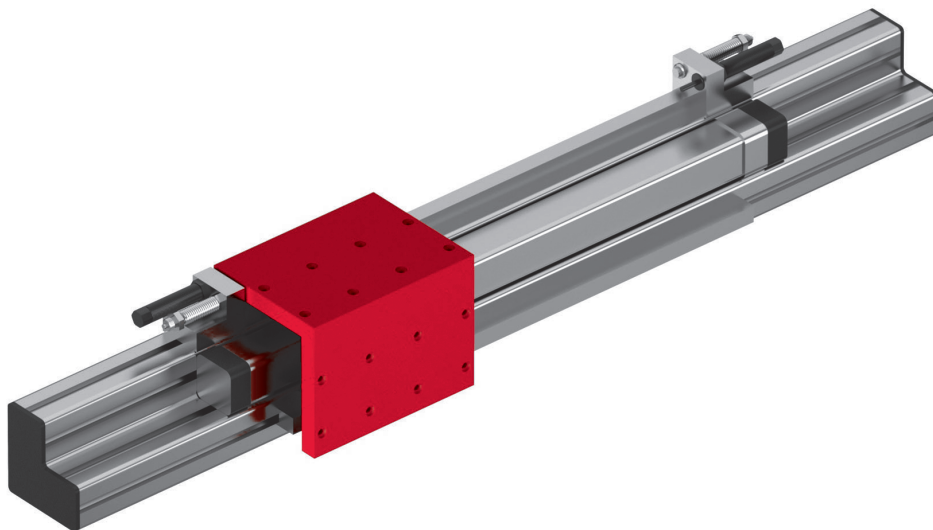
## Table of contents: PMP & PMP-c

Gantry modules pneumatic PMP & PMP-c	Page
PMP	117
PMP-c	125
Accessories PMP & PMP-c	132



# Gantry modules pneumatic PMP

## PMP

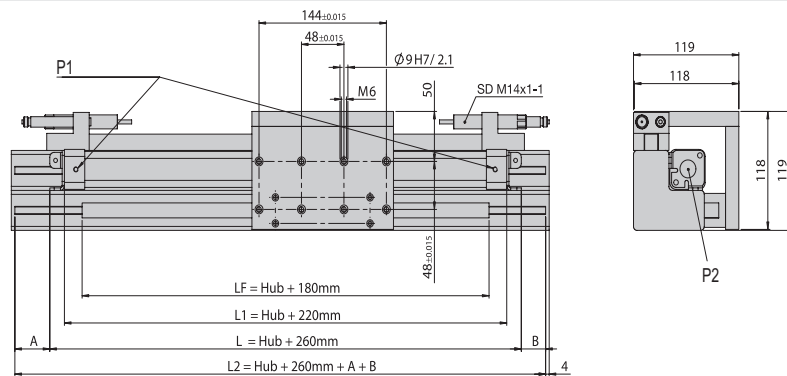


- Millimetre-accurate strokes
- Rigid construction
- Self-supporting profile
- Intermediate stop for any number of positions

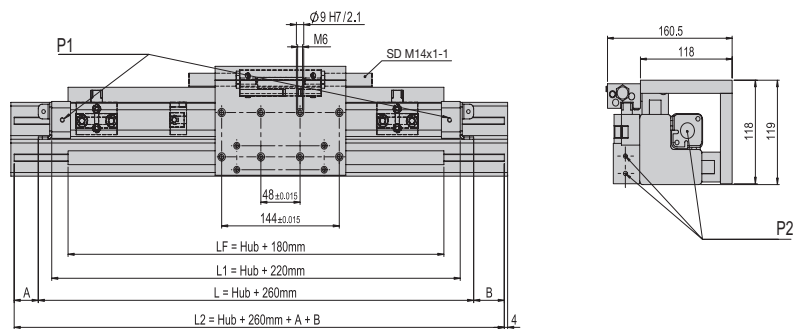
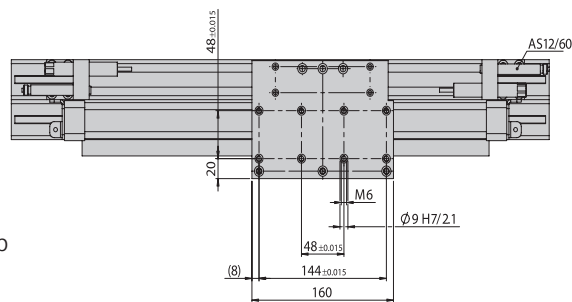
# Dimensions and dimension drawings

PMP

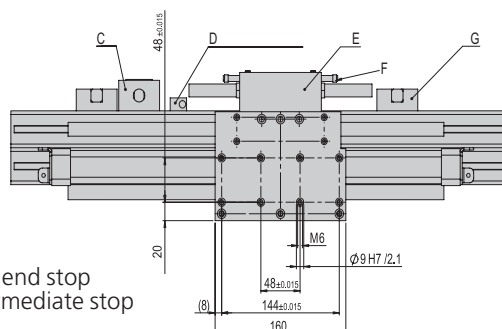
Type	PMP 01	PMP 02
A	Mounting protrusion 1	Mounting protrusion 1
B	Mounting protrusion 2	Mounting protrusion 2
C		
D		Proximity switch bracket
E		
F		
G		End stop
P1	G1/8 "	G1/8 "
P2	M5	M5

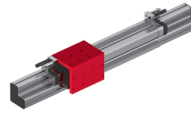


PMP 01  
Fix end stop



PMP 02  
Adjustable end stop  
plus 1 intermediate stop





PMP	
Attachment grid	48 x 48 mm
Attachment thread	M6
Operating pressure	6 +/-2 bar
Air connection P	M5 / G 1/8 "
Cylinder Ø	25 mm
Operating temperature	0 - 50 °C
Storage temperature	0 - 50 °C
Humidity	< 90 %

Type	PMP 01	PMP 02
<b>Order number</b>	<b>11000105</b>	<b>11000106</b>
Max. stroke	3000 mm	3000 mm
Net weight	6 kg	9.1 kg
Moving weight	1.87 kg	2.33 kg
Weight/100 mm stroke	1.11 kg	1.11 kg
Module weight, 0 mm stroke	6 kg	6 kg
Max. payload	*15 kg	*15 kg
Air consumption/100 mm stroke	0.25 NL	0.25 NL
Piston force	250 N	250 N
Repeat accuracy	+/- 0.1 mm	+/- 0.1 mm
Max. profile length	6000 mm	6000 mm
Mounting position	↔	↔

The technical data refer to a nominal pressure of 6 bar under Afag standard test conditions.

Note: Also included in the PMP 02 scope of delivery:

- 1 x stop slide PMP
- 2 x end stops PMP
- 1 x intermediate stop PMP

\*Observe operation time diagram  
\*\*0 mm stroke

### Included in the delivery

(Catalogue HT accessories)

- 2x Shock absorber SD M14x1 -1
- 2x Stop screw AS 12/60

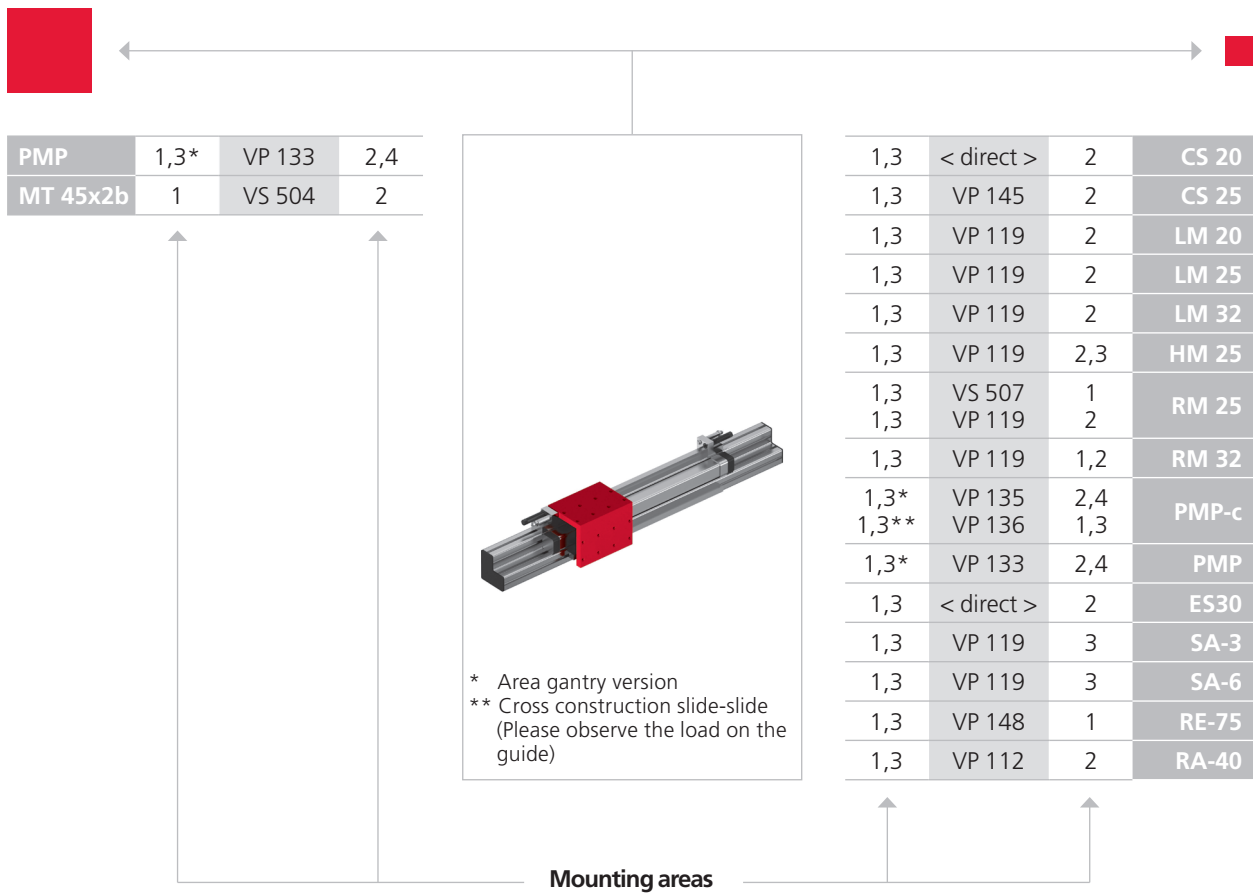
### Accessories

- Stop slide PMP [p. 153]
- Safety brake PMP [p. 153]
- Intermediate stop PMP [p. 154]
- Fine adjustment PMP [p. 154]
- End stop PMP [p. 154]
- Proximity switch bracket PMP [p. 154]
- Cover cap 40 x 40 [p. 155]
- Cover cap 40 x 80 [p. 155]
- Angle profile PMP [p. 155]
- Lubricator adapter PMP [p. 155]

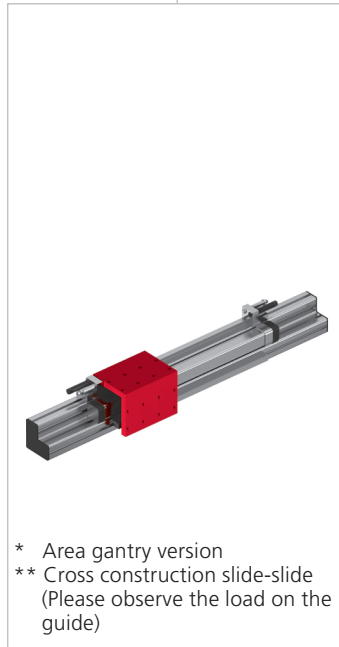
(Catalogue HT accessories)

- T-nut M8
- INI d6.5x44-Sn1.5-PNP-NO-M8x1

Warranty: 24 months following commissioning, but a maximum of 27 months following delivery



PMP	1,3*	VP 133	2,4
MT 45x2b	1	VS 504	2



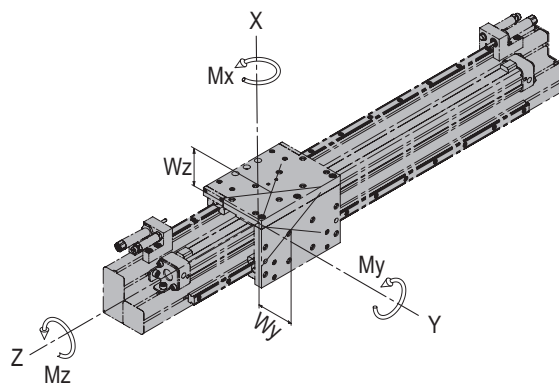
1,3	< direct >	2	CS 20
1,3	VP 145	2	CS 25
1,3	VP 119	2	LM 20
1,3	VP 119	2	LM 25
1,3	VP 119	2	LM 32
1,3	VP 119	2,3	HM 25
1,3	VS 507	1	RM 25
1,3	VP 119	2	RM 25
1,3	VP 119	1,2	RM 32
1,3*	VP 135	2,4	PMP-c
1,3**	VP 136	1,3	PMP-c
1,3*	VP 133	2,4	PMP
1,3	< direct >	2	ES30
1,3	VP 119	3	SA-3
1,3	VP 119	3	SA-6
1,3	VP 148	1	RE-75
1,3	VP 112	2	RA-40

Mounting areas

CS, ES	LM	HM	SA	UG, GM, SG, DG, PG, GE, SGE
PMP, PMP-c	PEZ, PDZ	PEL, PDL	RM, RE	CR, RM 32, RE, SREH, RA

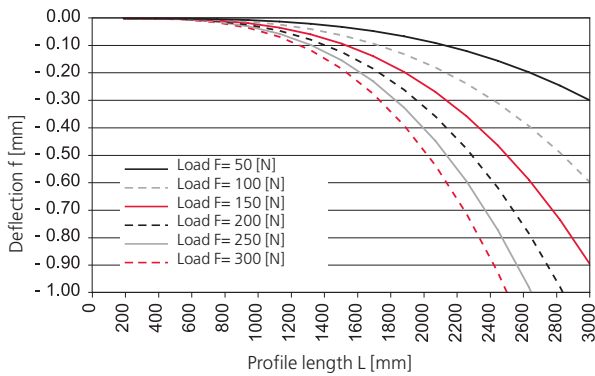
Note that there might be different mounting positions from one module to another one.  
 The required connection elements and the range of support columns are depicted in the catalogue HT accessories.

Type	PMP 01	PMP 02
Max. static torque $M_x$	380 Nm	380 Nm
Max. static torque $M_y$	380 Nm	380 Nm
Max. static torque $M_z$	650 Nm	650 Nm
Max. dynamic torque $M_x$	26.5 Nm	26.5 Nm
Max. dynamic torque $M_y$	26.5 Nm	26.5 Nm
Max. dynamic torque $M_z$	40 Nm	40 Nm
Effective distance $W_y$	40 mm	40 mm
Effective distance $W_z$	40 mm	40 mm

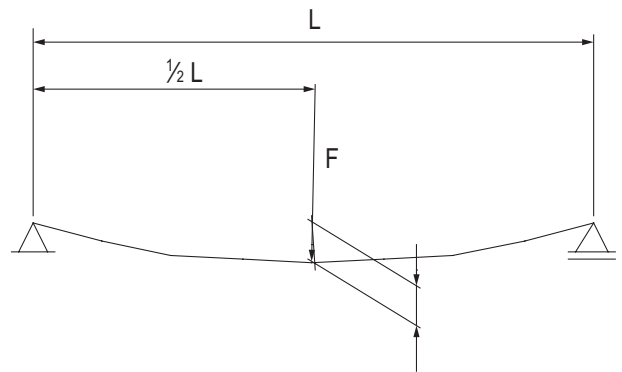


## PMP diagrams

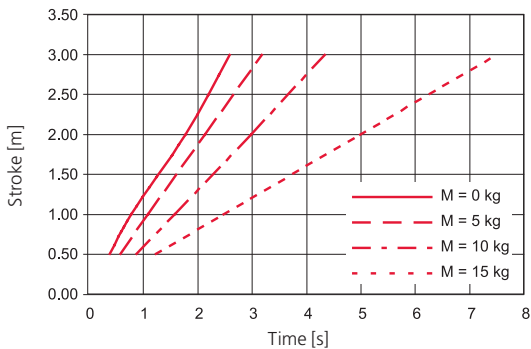
Angle profile deflection, load case static



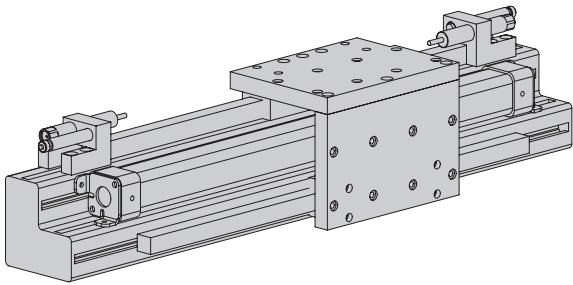
Angle profile deflection, load case static



Angle profile deflection, load case static





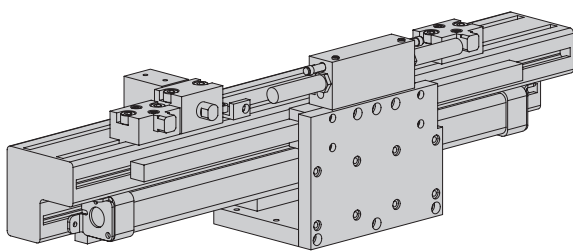
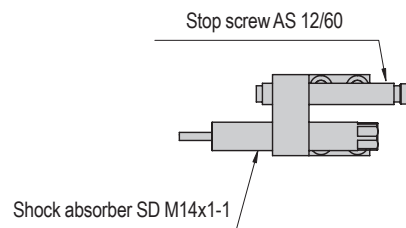
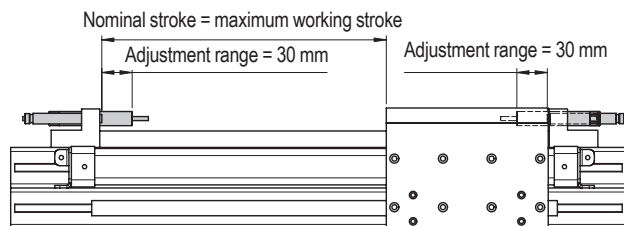


## PMP 01

Version with pneumatic cylinder and two fixed limit stops.

### Determination of the stroke for PMP 01

The maximum work area is determined with the nominal stroke data. We recommend a stroke reserve for the determination of the nominal stroke. The adjustment range of the stop screws is up to 30 mm per stop side.



## PMP 02

Version with pneumatic cylinder and adjustable intermediate and end stops.

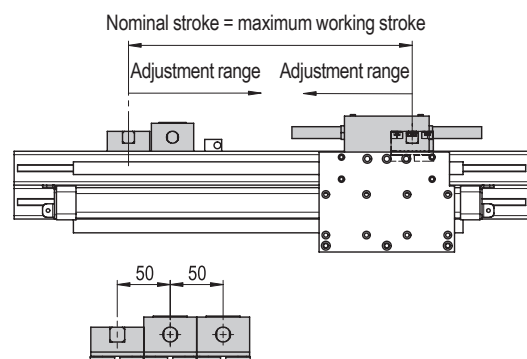
### Determination of the stroke for PMP 02

With the information of nominal stroke, you determine the maximum field of action. We recommend adding some extra stroke depending on the application.

Due to the slideable end stops the work area can be limited. Please note that a minimal grid of 50 mm is given when using more than one intermediate stop.

Please contact out technicians for tasks that require a smaller grid.

If pneumatic cylinders are measured by the means of magnetic switches a minimum gap of 60 mm is necessary.



Order form	PMP-Version	XXXXXXXX	XXXX	XXXX	XXXX
			stroke	Maß A	Maß B

### Ordering example 1

PMP 01	11000105	1500 mm	500 mm	800 mm
--------	----------	---------	--------	--------

### Ordering example 2

PMP 02	11000106	3000 mm	100 mm	100 mm
--------	----------	---------	--------	--------

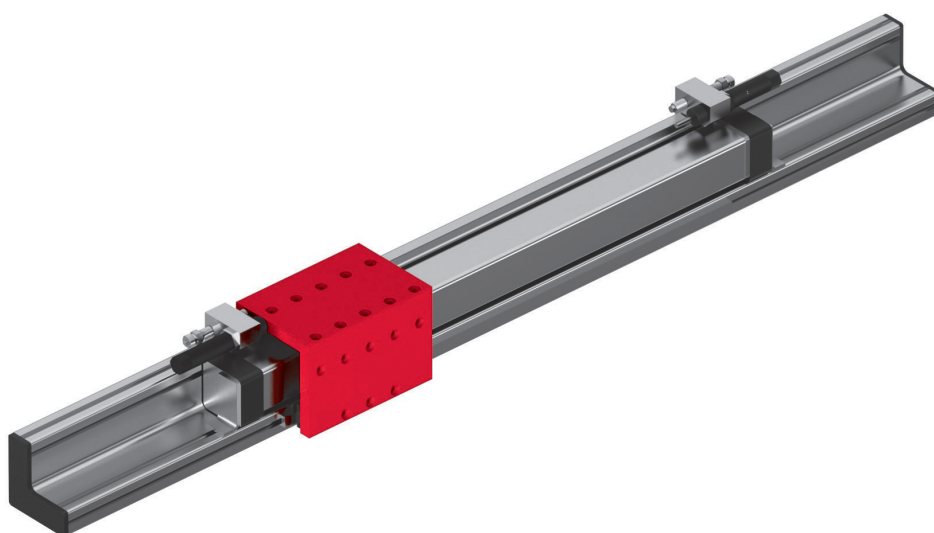
### Ordering process

- Select the desired PMP version, the stroke length, dimension A and dimension B.
- Enter the corresponding red order number in the order form in the place of the cross.
- Enter the corresponding lengths in mm for the stroke as well as dimensions A and B (also in mm) in the order form in the place of the cross.



# Gantry modules pneumatic PMP

## PMP-C

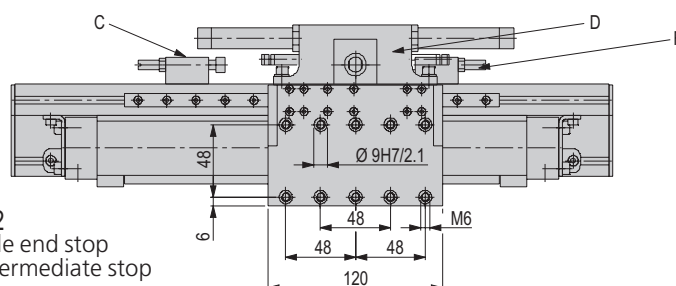
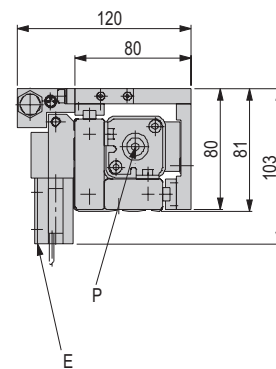
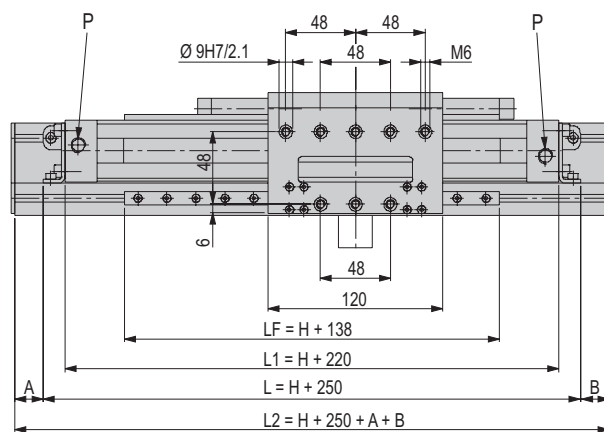
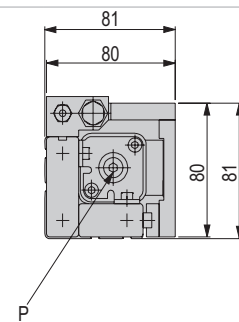
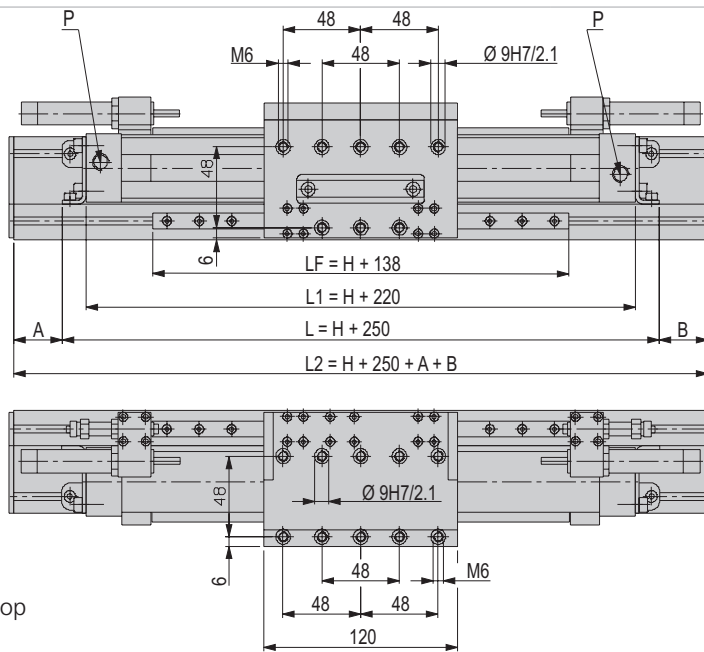


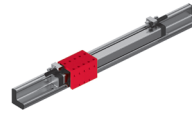
- Millimetre-accurate strokes
- Rigid construction
- Self-supporting profile
- Intermediate stop for any number of positions

# Dimensions and dimension drawings

**PMP-c**

Type	PMP-c 01	PMP-c 02
A	Mounting protrusion 1	Mounting protrusion 1
B	Mounting protrusion 2	Mounting protrusion 2
C		End stop
D		Stop slide
E		Intermediate stop
F		Proximity switch $\varnothing 6.5$ mm
P	G1/8 "	G1/8 "





PMP-c	
Attachment grid	48 x 48 mm
Attachment thread	M6
Operating pressure	6 +/-2 bar
Air connection P	G 1/8 "
Cylinder Ø	25 mm
Operating temperature	0 - 50 °C
Storage temperature	0 - 50 °C
Humidity	< 90 %

Type	PMP-c 01	PMP-c 02
<b>Order number</b>	<b>11015620</b>	<b>11015621</b>
Max. stroke	2000 mm	2000 mm
Net weight	2.2 kg	2.6 kg
Moving weight	0.55 kg	0.89 kg
Weight/100 mm stroke	0.54 kg	0.54 kg
Module weight, 0 mm stroke	2.22 kg	2.64 kg
Max. payload	*5 kg	*5 kg
Air consumption/100 mm stroke	0.25 NL	0.25 NL
Piston force	250 N	250 N
Repeat accuracy	+/- 0.1 mm	+/- 0.1 mm
Max. profile length	3000 mm	3000 mm
Mounting position	↔	↔

The technical data refer to a nominal pressure of 6 bar under Afag standard test conditions.

Note: Also included in the PMP-c 02 scope of delivery:

- 1 x stop slide PMP-c
- 2 x end stops PMP-c
- 1 x intermediate stop PMP-c

\*Observe operation time diagram

\*\*0 mm stroke

### Included in the delivery

(Catalogue HT accessories)

- 2x Stop screw AS 08/40
- 2x Shock absorber SD M14x1 -1

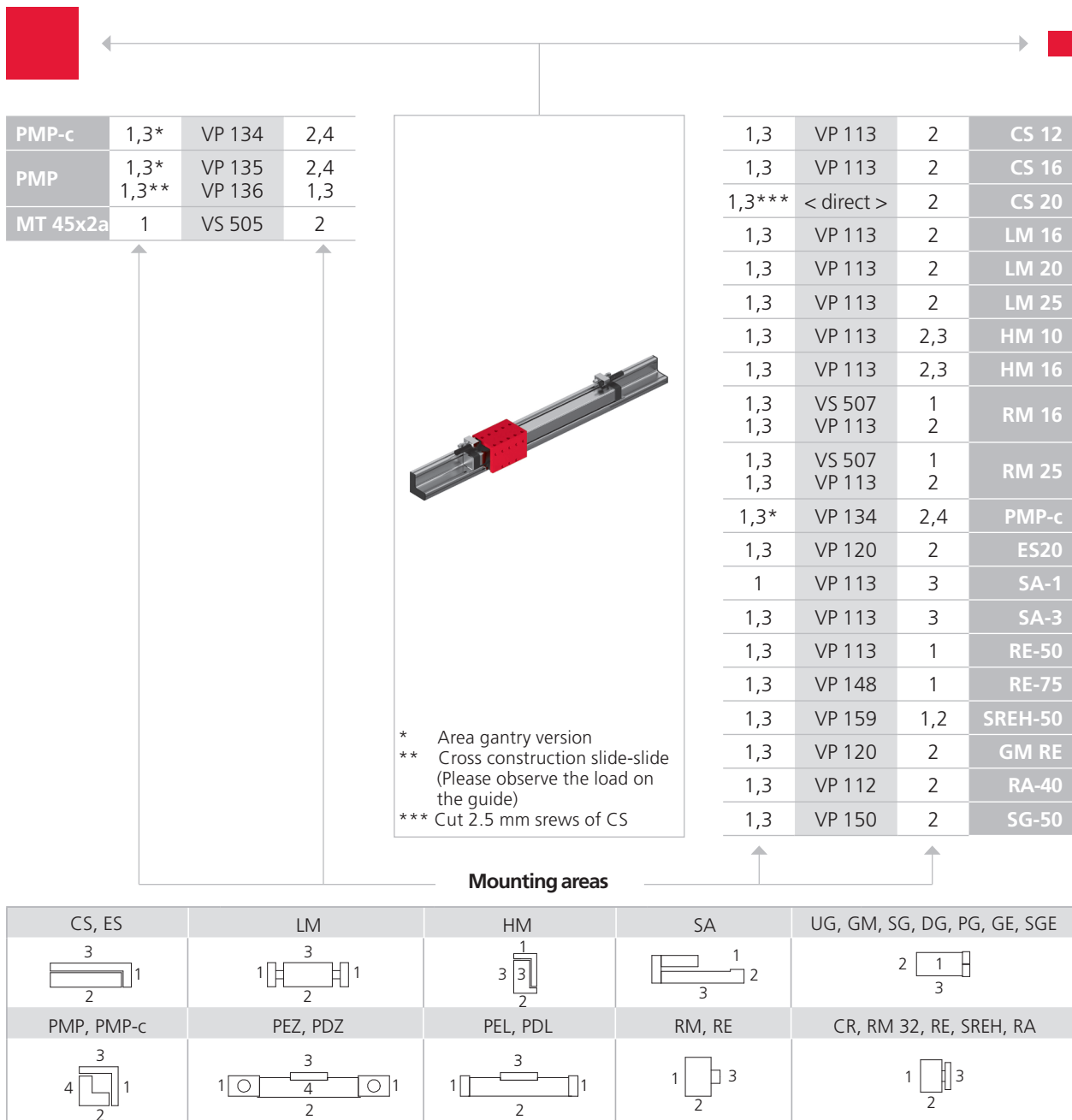
### Accessories

- Stop slide PMP-c [p. 156]
- Safety brake PMP-c [p. 157]
- Intermediate stop PMP -c [p. 156]
- Fine adjustment PMP-c [p. 156]
- End stop PMP-c [p. 158]
- Drag-chain PMP-c [p. 157]
- Cover cap 40 x 20 [p. 157]
- Cover cap 60 x 20 [p. 157]
- Angle profile PMP-c [p. 158]

(Catalogue HT accessories)

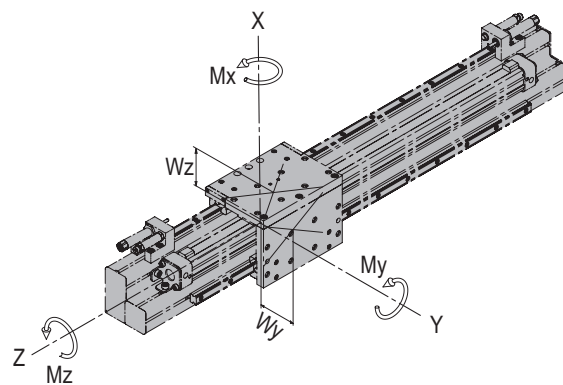
- INI d6.5x44-Sn1.5-PNP-NO-M8x1
- T-nut M4

Warranty: 24 months following commissioning, but a maximum of 27 months following delivery



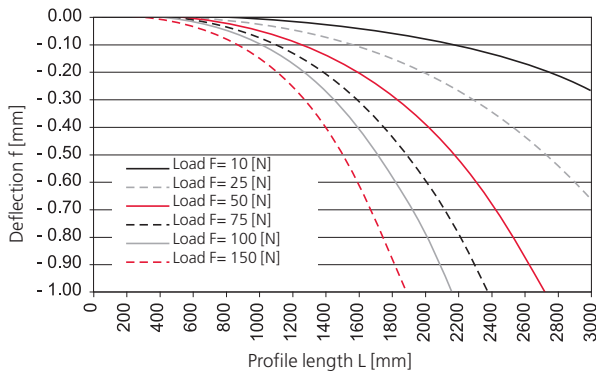
Note that there might be different mounting positions from one module to another one.  
The required connection elements and the range of support columns are depicted in the catalogue HT accessories.

Type	PMP-c 01	PMP-c 02
Max. static torque $M_x$	158 Nm	158 Nm
Max. static torque $M_y$	158 Nm	158 Nm
Max. static torque $M_z$	199 Nm	199 Nm
Max. dynamic torque $M_x$	5.2 Nm	5.2 Nm
Max. dynamic torque $M_y$	5.2 Nm	5.2 Nm
Max. dynamic torque $M_z$	6.5 Nm	6.5 Nm
Effective distance $W_y$	26 mm	26 mm
Effective distance $W_z$	26 mm	26 mm

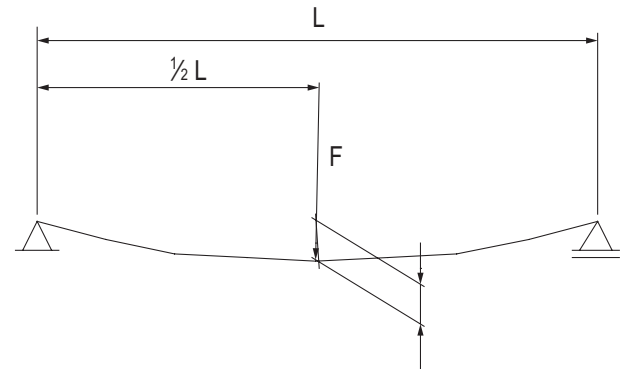


## PMP-c diagrams

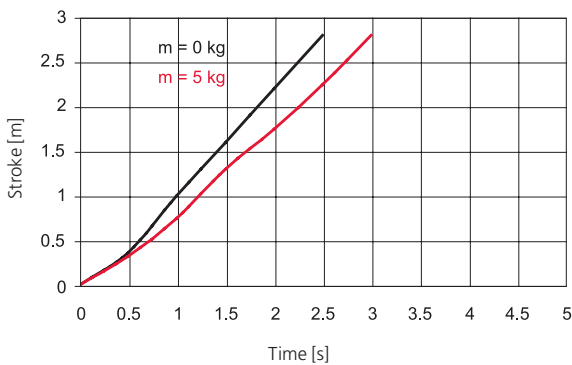
Angle profile deflection, load case static



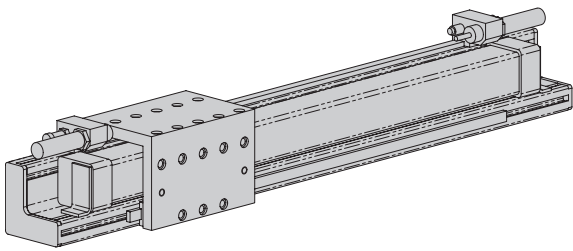
Angle profile deflection, load case static



Angle profile deflection, load case static







### PMP-c 01

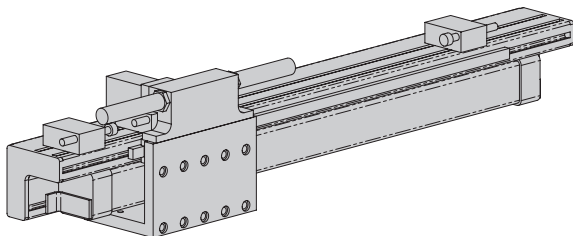
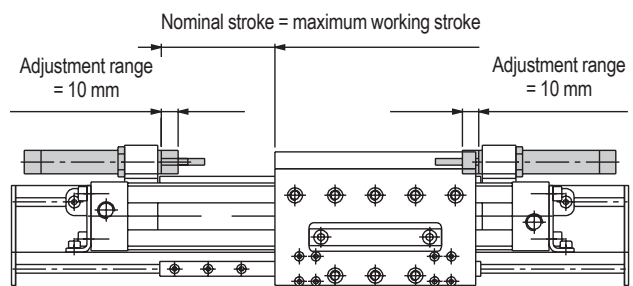
Version with pneumatic cylinder and two fixed limit stops.

#### Determination of the stroke for PMP-c 01

The maximum work area is determined with the nominal stroke data.

We recommend a stroke reserve for the determination of the nominal stroke.

The adjustment range of the stop screws is up to 10 mm per stop side.



### PMP-c 02

Version with pneumatic cylinder and adjustable intermediate and end stops.

#### Determination of the stroke for PMP-c 02

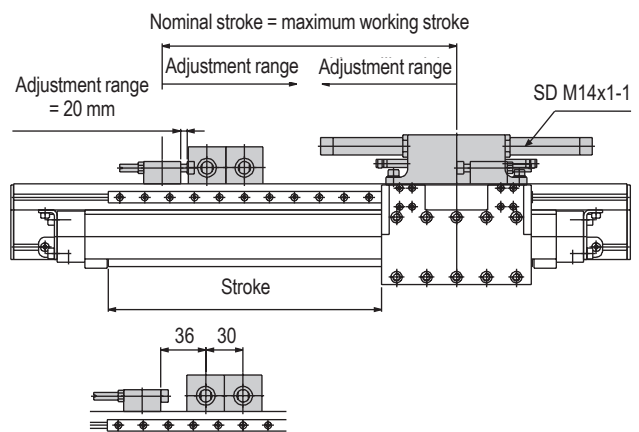
With the information of nominal stroke, you determine the maximum field of action. We recommend adding some extra stroke depending on the application.

Due to the slideable end stops the work area can be limited.

Please note that a minimal grid of 30 mm is given when using more than one intermediate stop.

Please contact out technicians for tasks that require a smaller grid.

If pneumatic cylinders are measured by the means of magnetic switches a minimum gap of 40 mm is necessary.



Order form	PMP-c Version	XXXXXXXX	XXXX	XXXX	XXXX
			Stroke	Dimension A	Dimension B

### Ordering example 1

PMP-c 01	11015620	1500 mm	500 mm	800 mm
----------	----------	---------	--------	--------

### Ordering example 2

PMP-c 02	11015621	2000 mm	100 mm	100 mm
----------	----------	---------	--------	--------

### Ordering process

- Select the desired PMP-c version, the stroke length, dimension A and dimension B.
- Enter the corresponding red order number in the order form in the place of the cross.
- Enter the corresponding lengths in mm for the stroke as well as dimensions A and B (also in mm) in the order form in the place of the cross.

# Accessories PMP & PMP-c

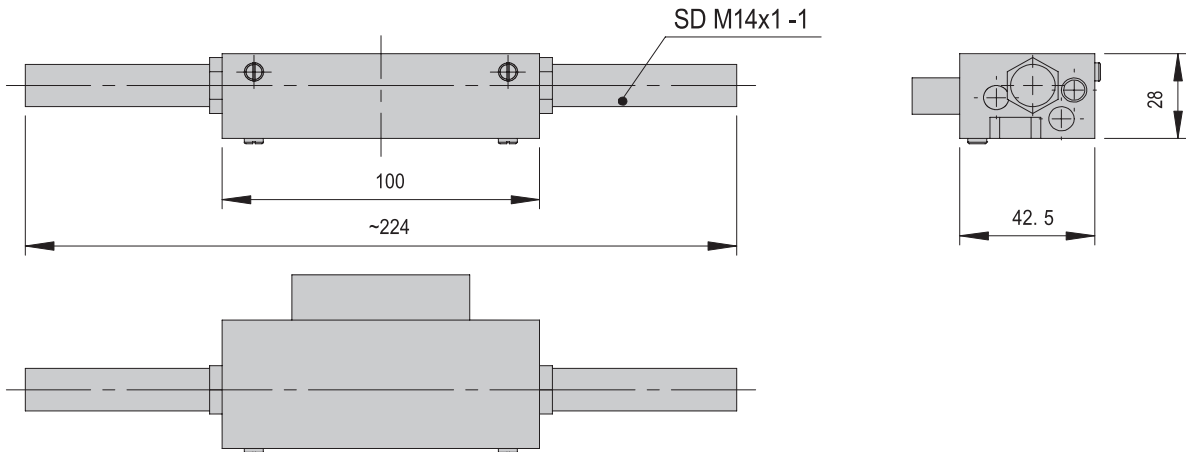
## Stop slide PMP

**Order number**

**11000110**

Net weight

0.5 kg



### Included in the delivery

(Catalogue HT accessories)

- 2x Shock absorber SD M14x1 -1

### Accessories

(Catalogue HT accessories)

- INI d6.5x35-Sn1.5-PNP-NO-M8x1
- INI d6.5x44-Sn1.5-PNP-NO-M8x1

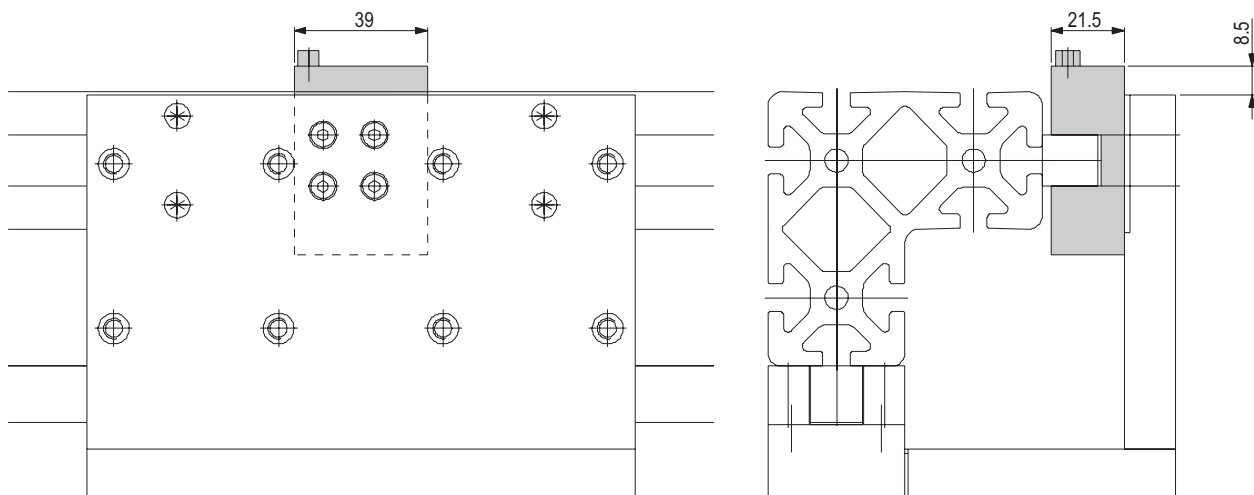
## Safety brake PMP

**Order number**

**11016936**

Net weight

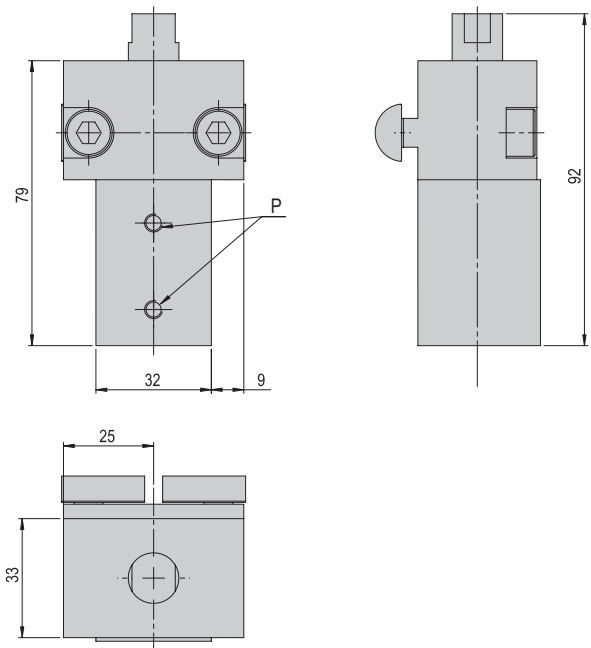
2.852 kg



# Accessories PMP & PMP-c

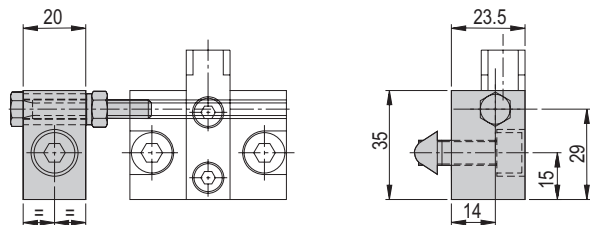
## Intermediate stop PMP

<b>Order number</b>	<b>11000111</b>
Net weight	0.351 kg
P	M5



## Fine adjustment PMP

<b>Order number</b>	<b>11004973</b>
Net weight	0.302 kg



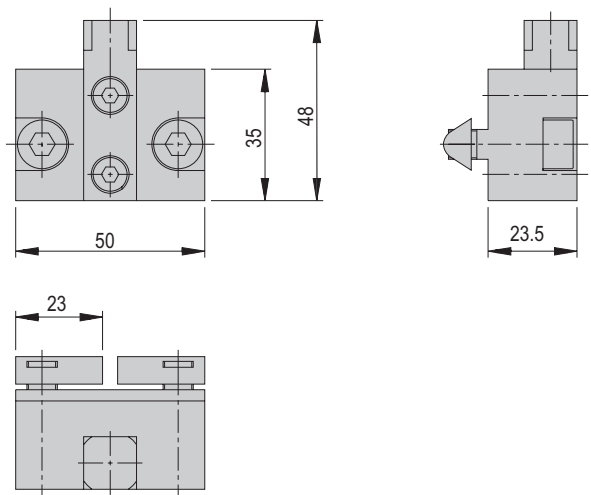
### Accessories

(Catalogue HT accessories)

- INI 10.5x5.8x30-Em-PNP-NO-M8x1

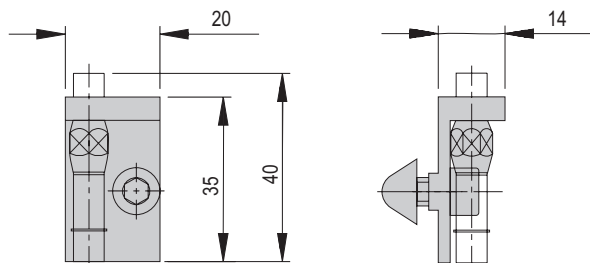
## End stop PMP

<b>Order number</b>	<b>11000112</b>
Net weight	0.203 kg



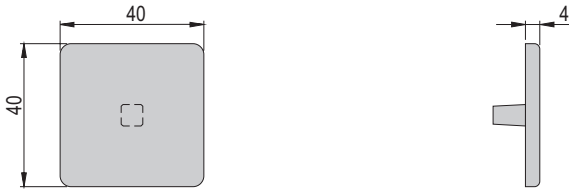
## Proximity switch holder PMP

<b>Order number</b>	<b>11004972</b>
Net weight	0.036 kg

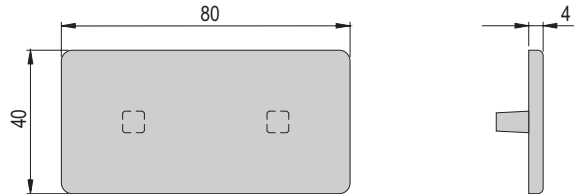


# Accessories PMP & PMP-c

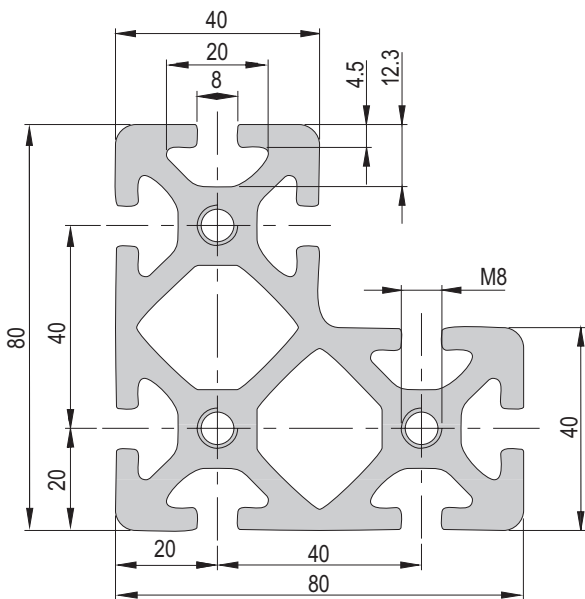
<b>Cover cap 40 x 40</b>	<b>40 x 40</b>
<b>Order number</b>	<b>11002454</b>
Net weight	0.007 kg



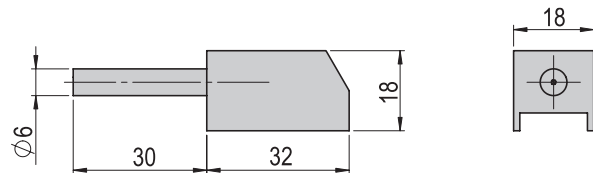
<b>Cover cap 40 x 80</b>	<b>40 x 80</b>
<b>Order number</b>	<b>11002455</b>
Net weight	0.006 kg



<b>Angle profile PMP</b>	
<b>Order number</b>	<b>11001162</b>
Net weight	0.646 kg
Weight/100 mm stroke	6.5 kg
Max. profile length	*6000 mm
Straightness and twisting	< 0.5/1000 mm



<b>Lubricator adapter PMP</b>	
<b>Order number</b>	<b>11016038</b>
Net weight	0.028 kg

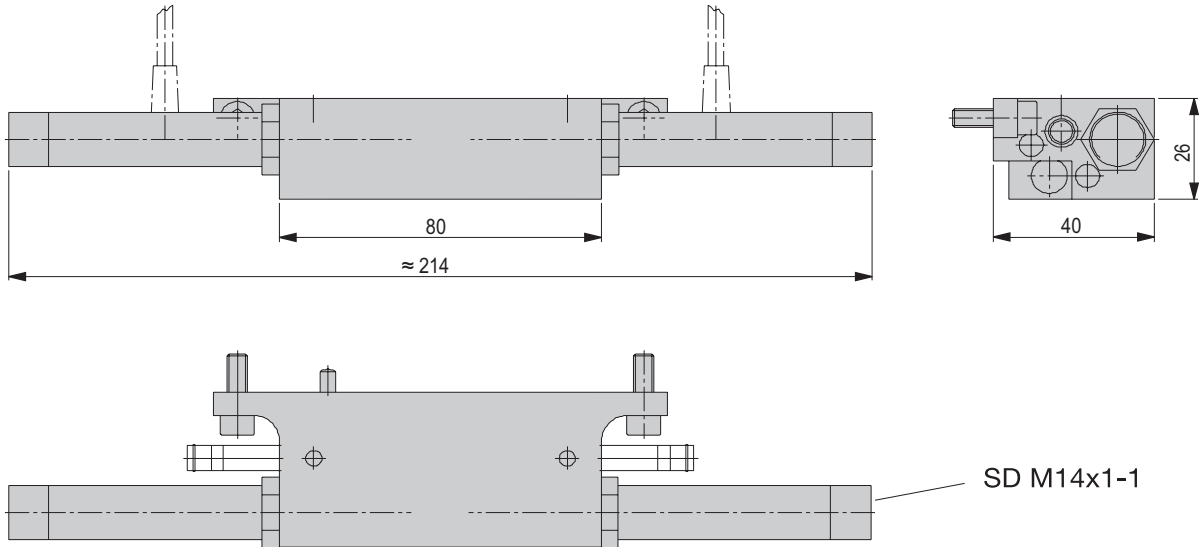


\*When ordering, note the desired length after the order number. Example: 11001162/300 mm

# Accessories PMP & PMP-c

## Fence carriage PMP-c

<b>Order number</b>	<b>11014642</b>
Net weight	0.376 kg



### Included in the delivery

(Catalogue HT accessories)

- 2x Shock absorber SD M14x1 -1

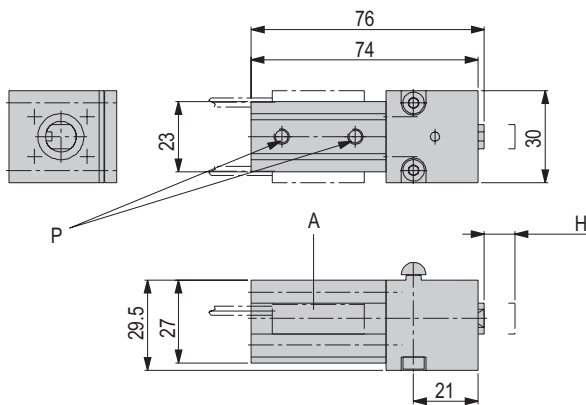
### Accessories

(Catalogue HT accessories)

- INI d6.5x44-Sn1.5-PNP-NO-M8x1
- INI d6.5x35-Sn1.5-PNP-NO-M8x1

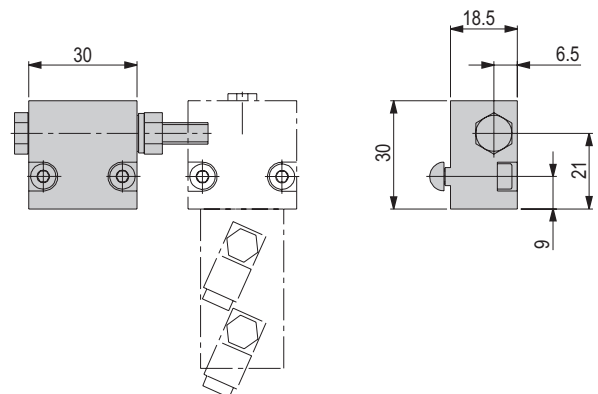
## Intermediary stop PMP-c

<b>Order number</b>	<b>11014641</b>
Net weight	0.167 kg
A	Magnetic proximity switch
H	10 mm
P	M5



## Fine adjustment PMP-c

<b>Order number</b>	<b>11015746</b>
Net weight	0.237 kg

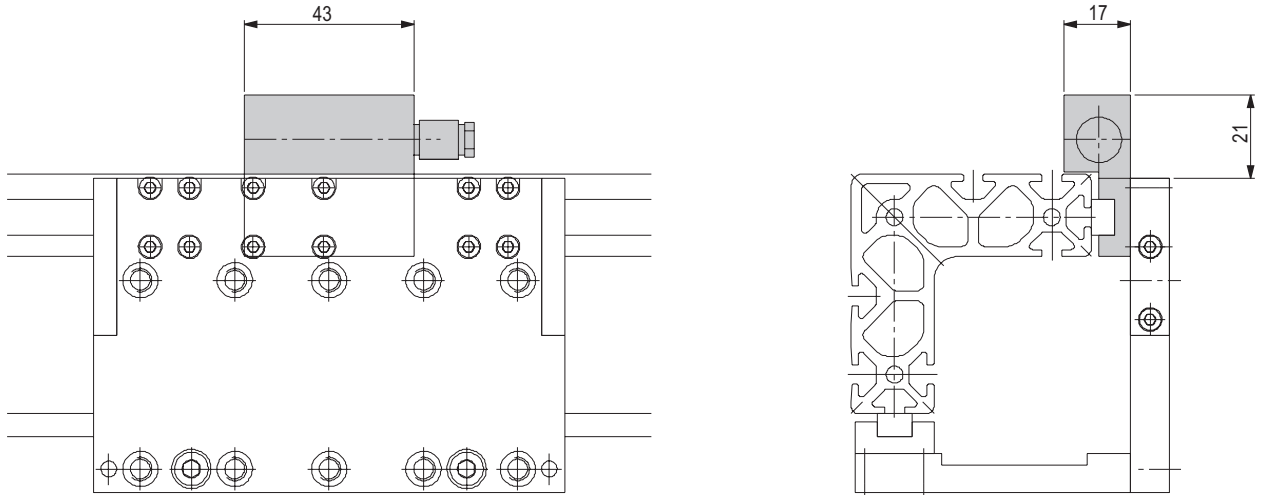


# Accessories PMP & PMP-c

## Safety brake PMP-c

**Order number** **11014638**

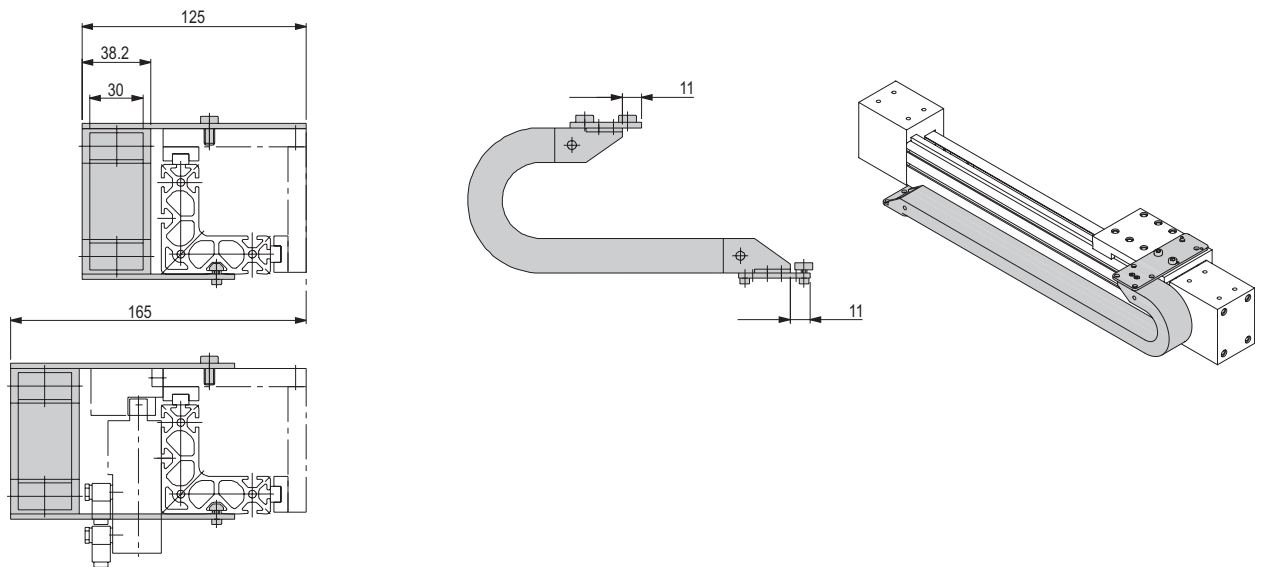
**Net weight** 0.15 kg



## Drag-chain PMP-c

**Order number** **11014738**

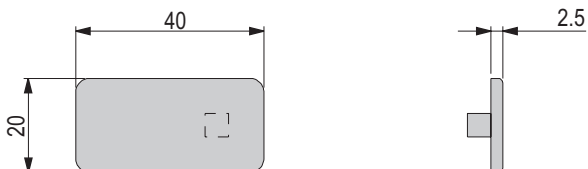
**Net weight** 0.8 kg



**Cover cap 40 x 20** 40x20

**Order number** **11014897**

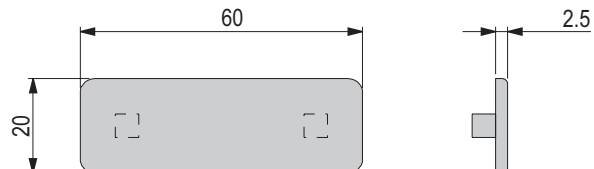
**Net weight** 0.002 kg



**Cover cap 60 x 20** 60x20

**Order number** **11014898**

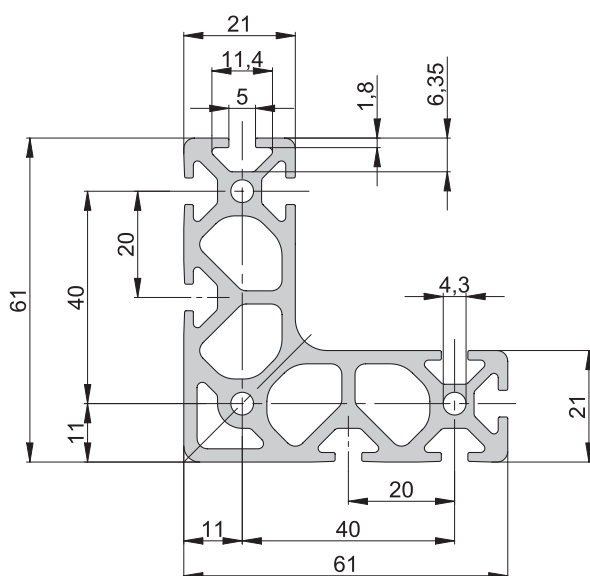
**Net weight** 0.003 kg



# Accessories PMP & PMP-c

## Angle profile PMP-c

<b>Order number</b>	<b>11015615</b>
Net weight	0.254 kg
Weight/100 mm stroke	2.544 kg
Max. profile length	*3000 mm
Straightness and twisting	< 0.5/1000 mm



\*When ordering, note the desired length after the order number. Example: 11015615/300 mm

## End stop PMP-c

<b>Order number</b>	<b>11014639</b>
Net weight	0.082 kg

