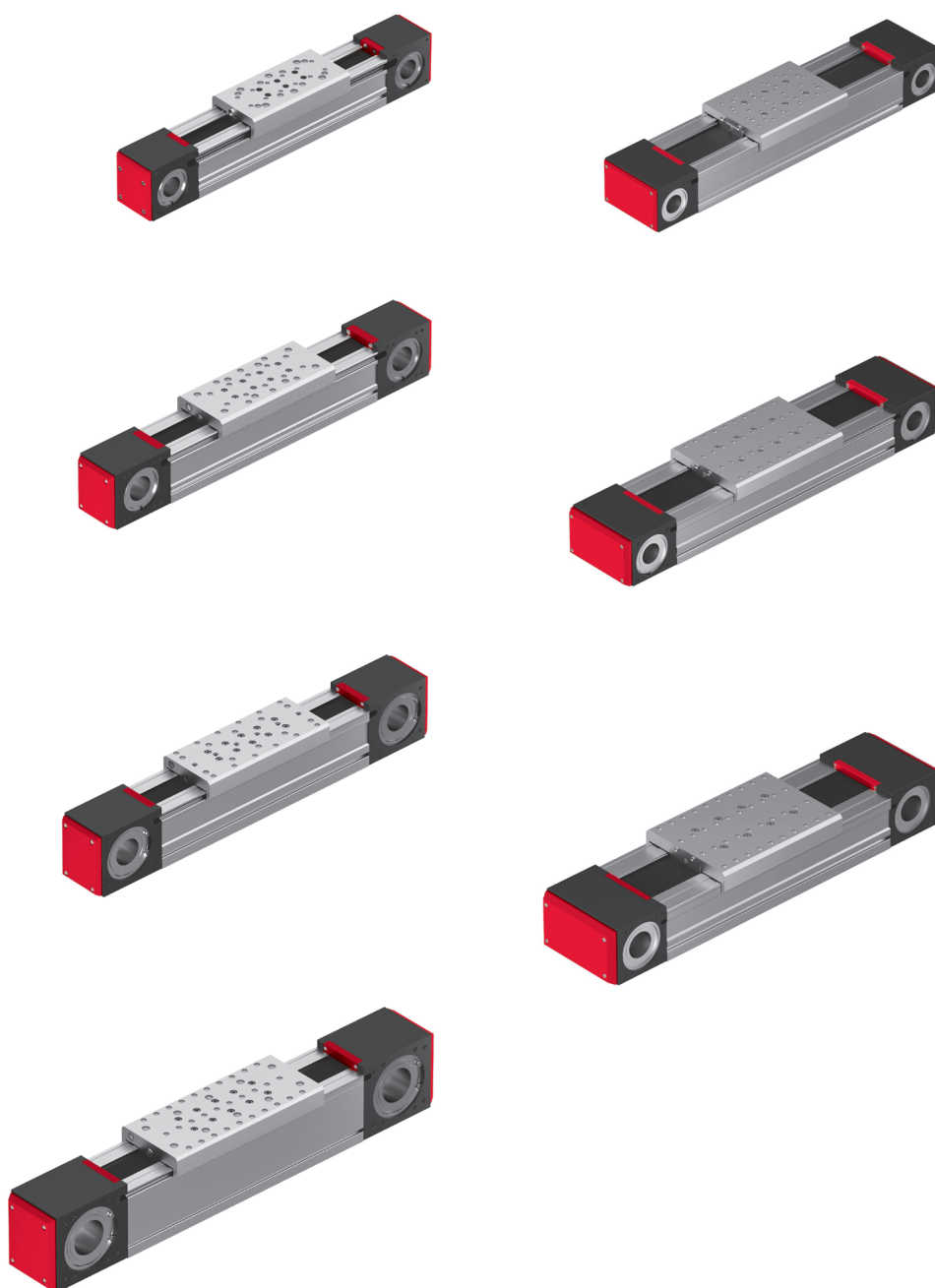


## Portal axes PEZ & PDZ

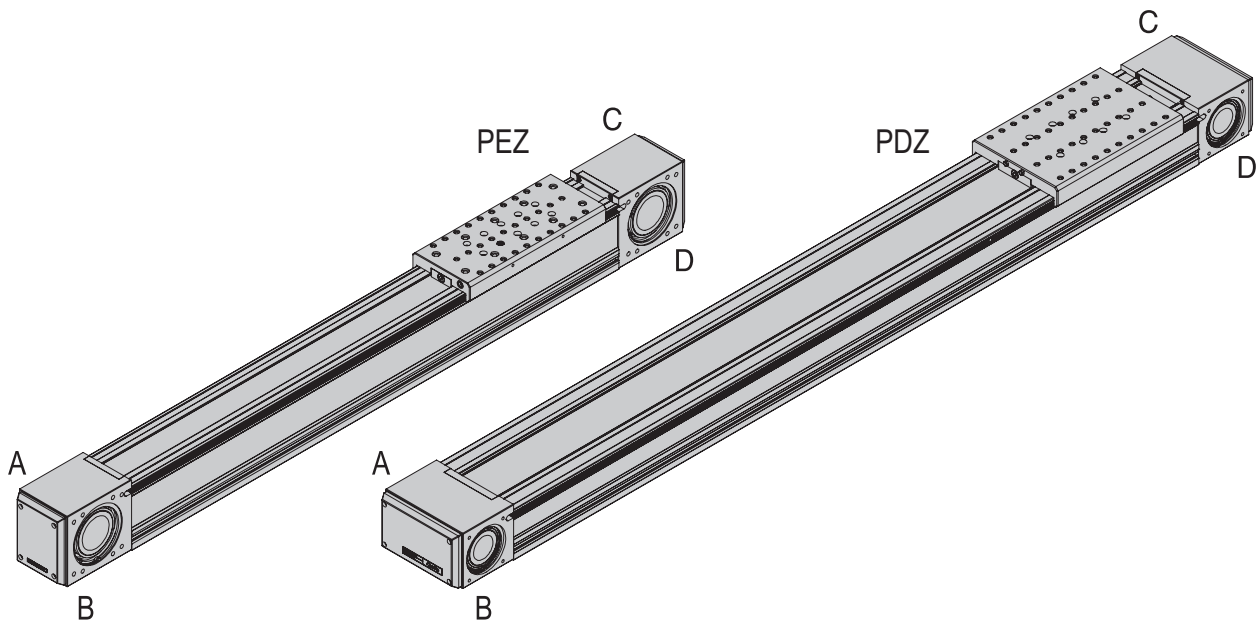
PEZ-52 - PEZ-100 &  
PDZ-128 - PDZ-200



## Table of contents: PEZ & PDZ

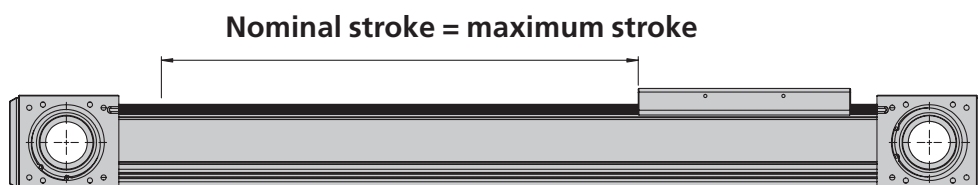
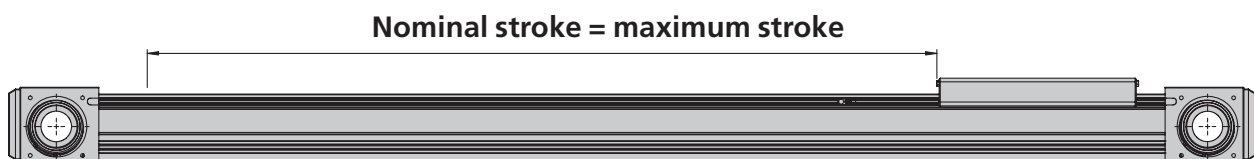
Portal axes PEZ & PDZ	Page
PEZ-52	237
PEZ-65	245
PEZ-80	253
PEZ-100	261
PDZ-128	269
PDZ-160	277
PDZ-200	285
Accessories PEZ & PDZ	292

Type	P	D	E	Z	Mounting kit/gear	Guide carriage
PEZ	Portal axis		Single guide	Belt drive	A, B, C, D	2 pieces
PDZ	Portal axis	Double guide		Belt drive	A, B, C, D	4 pieces



### Definition of stroke on PEZ & PDZ

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



### Definition of the suitable drive for PEZ & PDZ

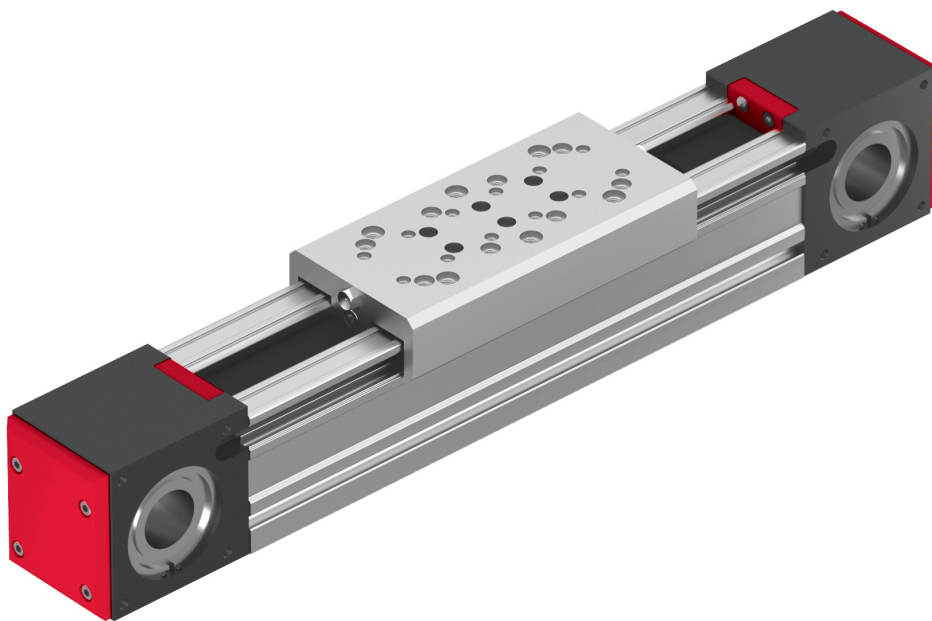
Our technicians are gladly ready to help you in the case of the determination of the suitable drive. Please send us the information of the table below for your application. With that information we will find the correct drive for you.

	Planned, max. length of stroke	Max. mass (to be moved):	Min. desired translating time:
PEZ	xxxx mm	xx kg	xx seconds
PDZ	xxxx mm	xx kg	xx seconds

# Portal axes PEZ & PDZ

## PEZ-52

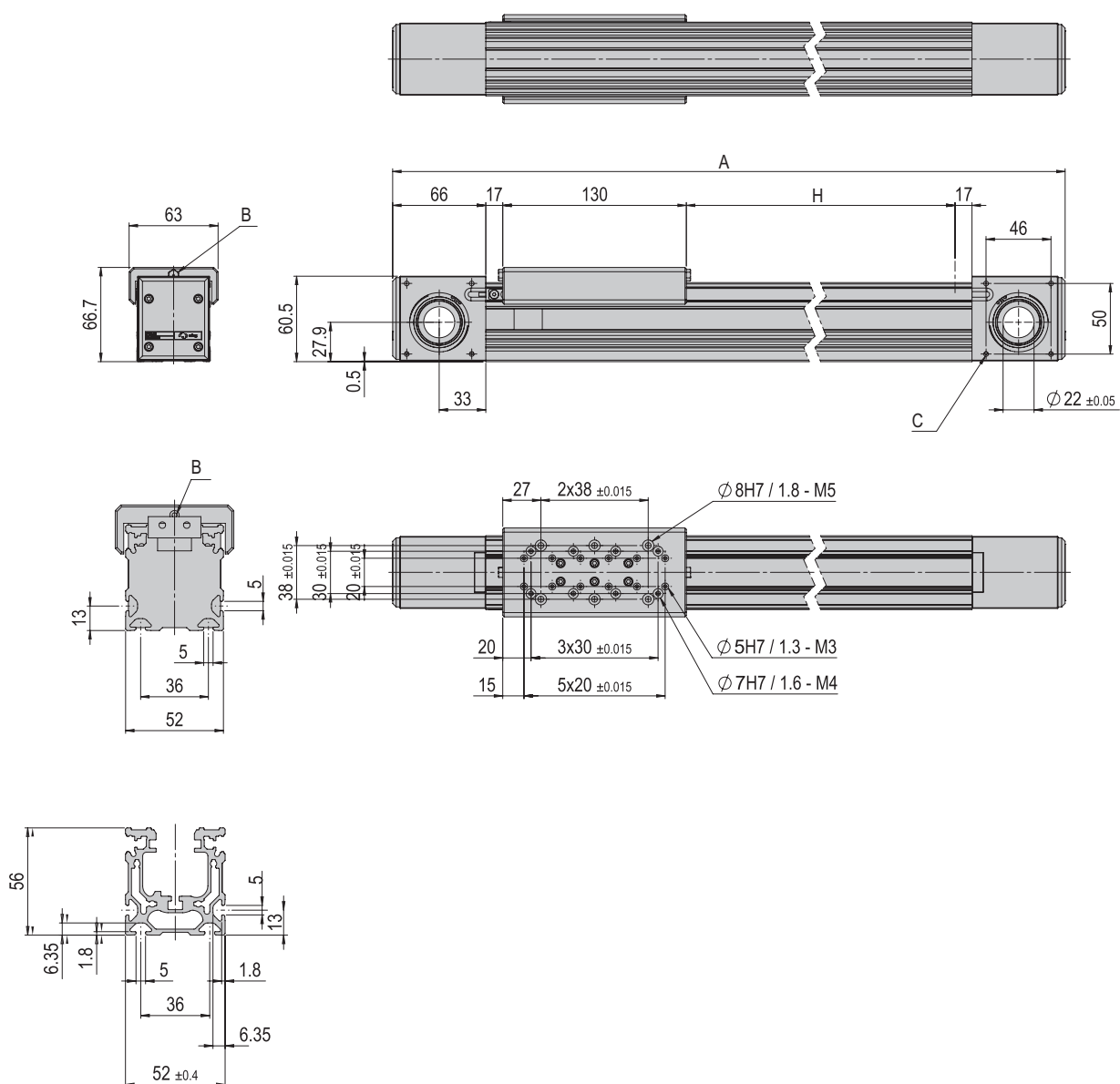
7

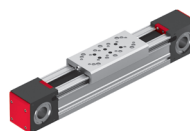


- The most rigid portal axes
- Single or double guide
- Fully symmetrical



Type	PEZ-52
A	Module length (stroke + 296) mm
B	Lubricator nipple
C	8x both sides M4
H	Module stroke xxxx mm





PEZ-52	
Operating temperature	10 - 40 °C
Storage temperature	0 - 50 °C
Humidity	< 90 %

Type	PEZ-52
------	--------

**Order number** **50394895**

Max. stroke	1800 mm
Net weight	2.5 kg (at 0 mm stroke)
Moving weight	0.8 kg
Weight/100 mm stroke	0.34 kg
Cross-section profile W x H	52 x 56 mm
Module length	H + 296 mm
Toothed belt width	25 mm
Groove size (below/side)	5/5 mm
Groove distance (below)	36 mm
Hollow shaft Ø	22 mm
Number of linear guides	1 pcs
Torque	5 Nm
Protection type	IP 30
Feed constant	126 mm/U
Max. speed v	*3 m/s
Max. acceleration a	*30 m/s <sup>2</sup>
Max. circumferential force	250 N
Repeat accuracy	+/- 0.05 mm
Mounting position	✚

The technical data pertains to Afag standard test conditions.

Note: The mounting sets, gears, motors, controllers and cables can be found in the corresponding chapters.  
Cleanroom class ISO 14644-1, class ISO 7

\*The maximum values listed above depend on the application and must not be combined. In case of doubt, please contact your Afag partner.

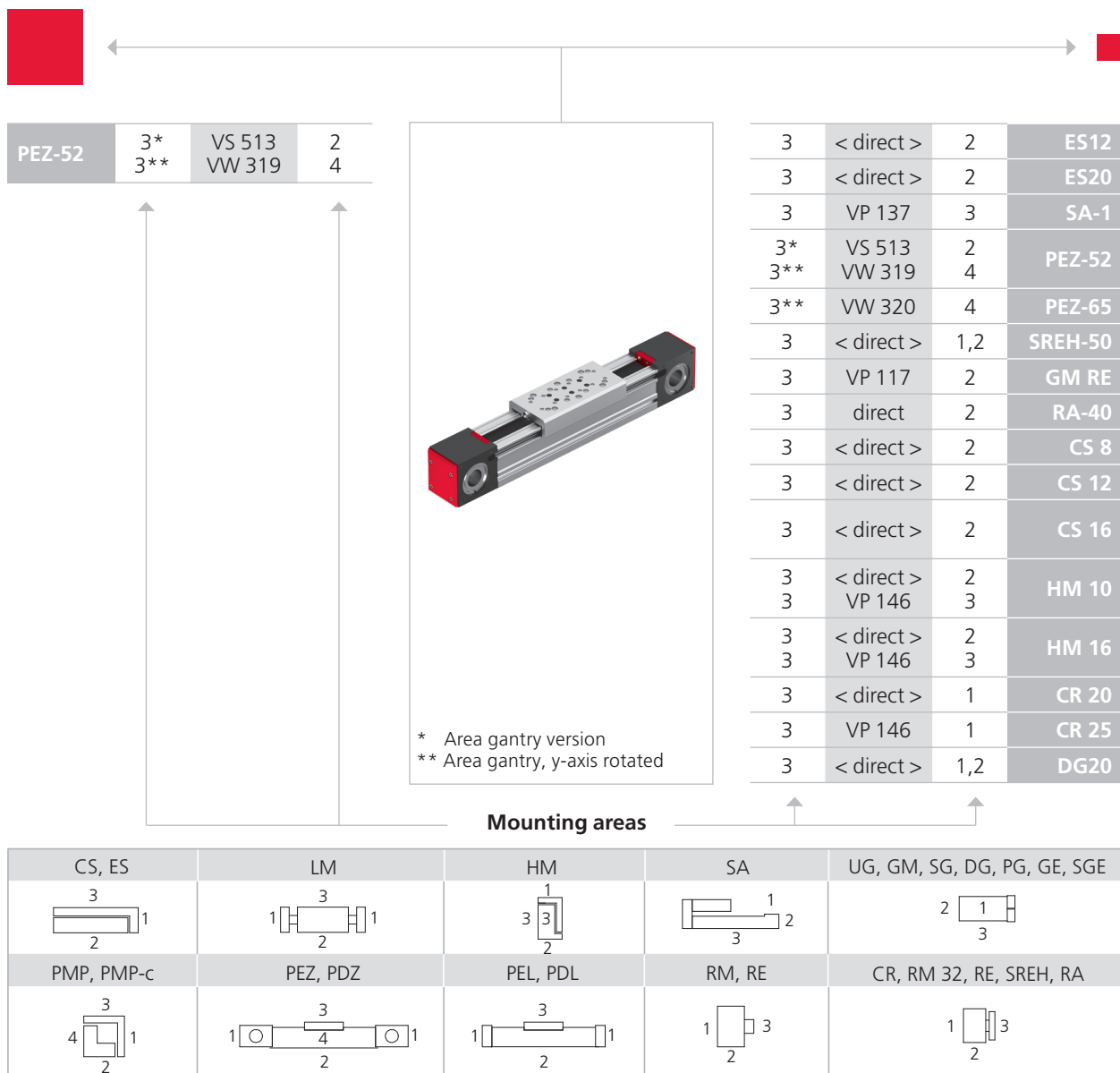
### Included in the delivery

- 1x Sensor set portal axes [p. 321]

### Accessories

- Load transmission unit PEZ-52 [p. 318]
- Stroke limitation PEZ-52 [p. 320]
- (Catalogue HT accessories)
- INI 8x4.7x16-Sn2.0-PNP-NC-M8x1
- T-nut M5
- Connecting set VS 513
- Mounting set 042
- Planetary gearbox PE050
- Servomotor-2-48VDC-400W
- Servomotor-21-320VDC-400W
- Servo controller SE-Power
- Servo controller C1xxx-1S
- Servo controller E12xx

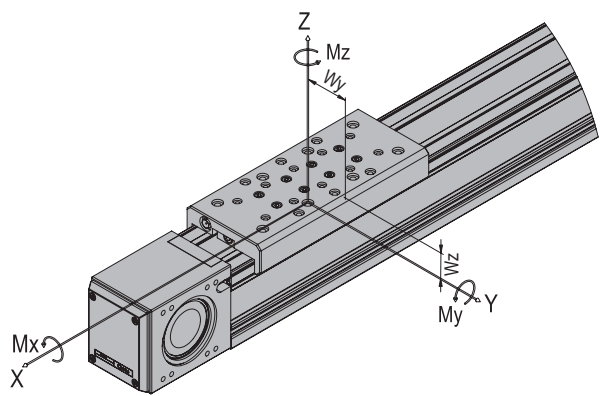
Warranty: 24 months following commissioning, but a maximum of 27 months following delivery



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	PEZ-52
Max. torque Mx	15 Nm
Max. torque My	130 Nm
Max. torque Mz	130 Nm

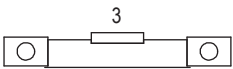


$$\frac{M_x}{M_{x \max}} + \frac{M_y}{M_{y \max}} + \frac{M_z}{M_{z \max}} < 1$$

Maximum payload/type	PEZ-52
Installation position (horizontal) for mounting side 3	20 kg
Installation position (vertical) for mounting side 3	20 kg

Assembly sides module mounting

horizontal:



vertical:



Calculation of position versus time

The travel times of electrically driven gantry axis are dependent on the useful load, stroke + drive.

Our technicians will be pleased to make an optimum position/time calculation for you based on the gantry axis chosen. For being able to advise you correctly, we need the following data from you.

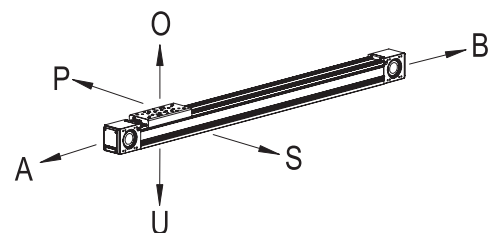
- Maximum planned stroke length
- Maximum moving mass
- Operation time desired

Order form	PEZ-52	xxxxxxxx	xxxx	xxxxxxxx	xxxxxxxx	xxxxxxxx	x	x	x
		Axis	Nominal stroke	Mounting set	Gear	Motor	Position gear	Position angular gearbox	Position motor plug.

### Coordinate system

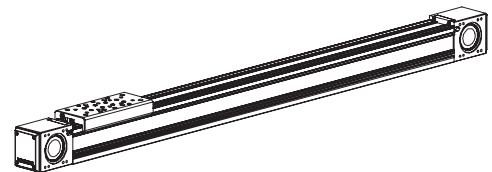
The coordinate system allows you to define the position of the gear as well as that of the motor plug.

- A = before
- B = base
- O = top
- P = left
- S = right
- U = downside



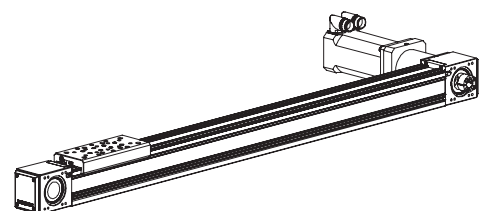
### Ordering example 1 without motor

PEZ-52	50394895	800	x	x	x	x	x	x
--------	----------	-----	---	---	---	---	---	---



### Ordering example 2 with motor

PEZ-52	50394895	600	50396325	50477898	50495884	P	x	O
--------	----------	-----	----------	----------	----------	---	---	---



### Ordering process

- Select the desired portal axis, the gear and the motor.
- Enter the corresponding red order numbers in the order form in the place of the cross.
- Enter the desired length (mm) in the field nominal stroke.
- Select the desired position of the gears as well as the position of the motor plug.
- Enter the corresponding letters from the coordinate system in the order form in the place of the cross.




### Third-party motors

- If the mounting of a third-party motor is desired the Afag axis can be provided with a gear, including a motor adapter plate for the third-party motor.

### External controller











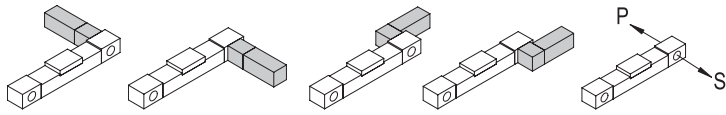
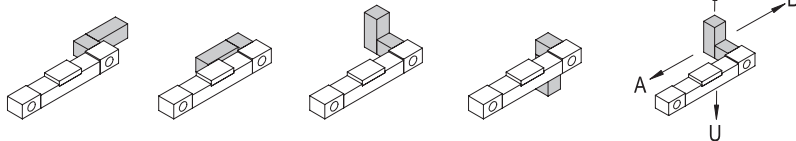
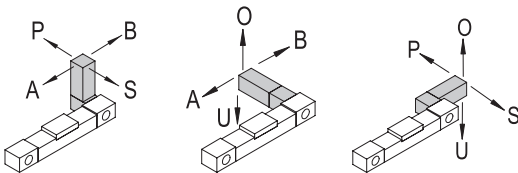
- Mechanical limiting values of the module must be observed (v max., a max.,...).
- The controller parametrisation is carried out by the customer.

### Legend order key

-  Planetary gearbox
-  Angular gearbox
-  Coupling housing

# Order key

## PEZ-52 /SE-Power/C1xxx/E12xx

Axis	PEZ-52	50394895	xxxx	xxxxxxxx	xxxxxxxx	xxxxxxxx	x	x	x	
	Axis	Nominal stroke	Mounting kit	Gear	Motor		Position of gear	Assembly direction of the angular gear	Position of the motor connector	
Mounting kit/gear (1 : x)		PE	AF	PER	AFR					
										
	Mounting kit	50396325	50467366	50396325	50467366					
	1 : 5	50477897	50467055	50477909	50467067	 BG2				
	1 : 7	50477898	50467056	50477910	50467068					
	1 : 10	50477899	50467057	50477911	50467069					
Motor/controller	Third-party motor				KG 	AA	 M0	X	X	X
						AA	 M0	X	X	X
	Without gear					X	X	X	X	X
	Without motor M0					X	X	X	X	X
	 BG2	Servomotor-21-72VDC-400W-45-B-I-x-x			B	50485435				
		Servomotor-21-72VDC-400W-45-x-I-x-x				50495882				
		Servomotor-21-320VDC-400W-45-B-R-x-x			B	50495884				
Servomotor-21-320VDC-400W-45-x-R-x-x				50495883						
Assembly	Position of gear						P S			
	Assembly direction of the angular gear						A B O U			
	Position of the motor connector						A B O P S U			
The plug can be turned 180°. You can find further information in the operating manual.										

Motor and gear selection: Design by Afag

SE-Power C1xxx  
1kVA E12xx

AA: Upon request  
B: Motor with brakes

BG: Motor size  
KG: Coupling housing

PE: Planetary gearbox  
PER: Angular gearbox

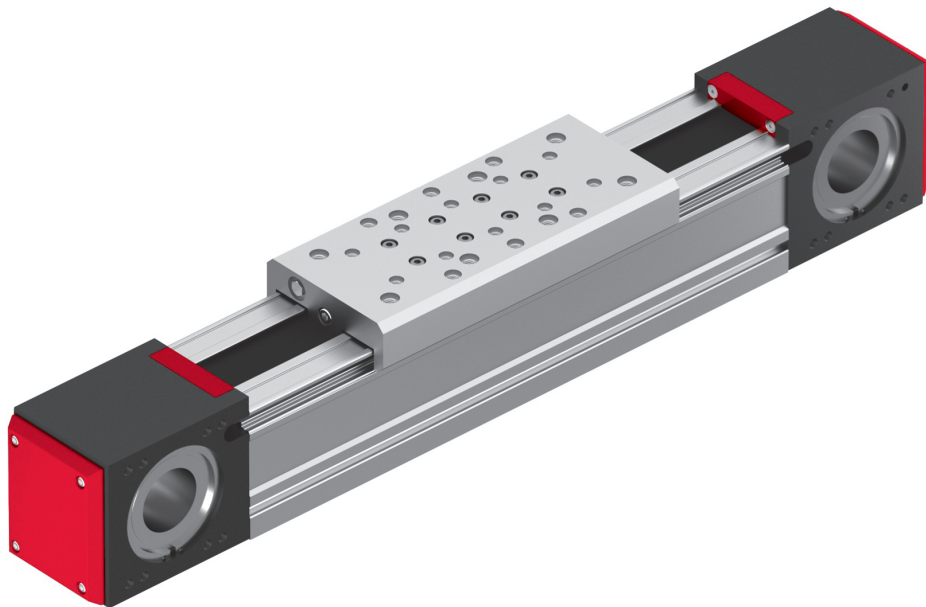
AF: Planetary gearbox, low-backlash  
AFR: Angular gearbox, low-backlash



# Portal axes PEZ & PDZ

## PEZ-65

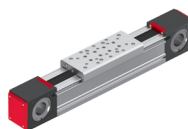
7



- The most rigid portal axes
- Single or double guide
- Fully symmetrical







PEZ-65	
Operating temperature	10 - 40 °C
Storage temperature	0 - 50 °C
Humidity	< 90 %

Type	PEZ-65
------	--------

**Order number** **50245031**

Max. stroke	3760 mm
Net weight	5.2 kg (at 0 mm stroke)
Moving weight	1.7 kg
Weight/100 mm stroke	0.5 kg
Cross-section profile W x H	65 x 70 mm
Module length	H + 413 mm
Toothed belt width	30 mm
Groove size (below/side)	6/5 mm
Groove distance (below)	43 mm
Hollow shaft Ø	32 mm
Number of linear guides	1 pcs
Torque	14.2 Nm
Protection type	IP 30
Feed constant	165 mm/U
Max. speed v	*5 m/s
Max. acceleration a	*50 m/s <sup>2</sup>
Max. circumferential force	540 N
Repeat accuracy	+/- 0.05 mm
Mounting position	✚

The technical data pertains to Afag standard test conditions.

Note: The mounting sets, gears, motors, controllers and cables can be found in the corresponding chapters.

Cleanroom class ISO 14644-1, class ISO 7

\*The maximum values listed above depend on the application and must not be combined. In case of doubt, please contact your Afag partner.

### Included in the delivery

- 1x Sensor set portal axes [p. 321]

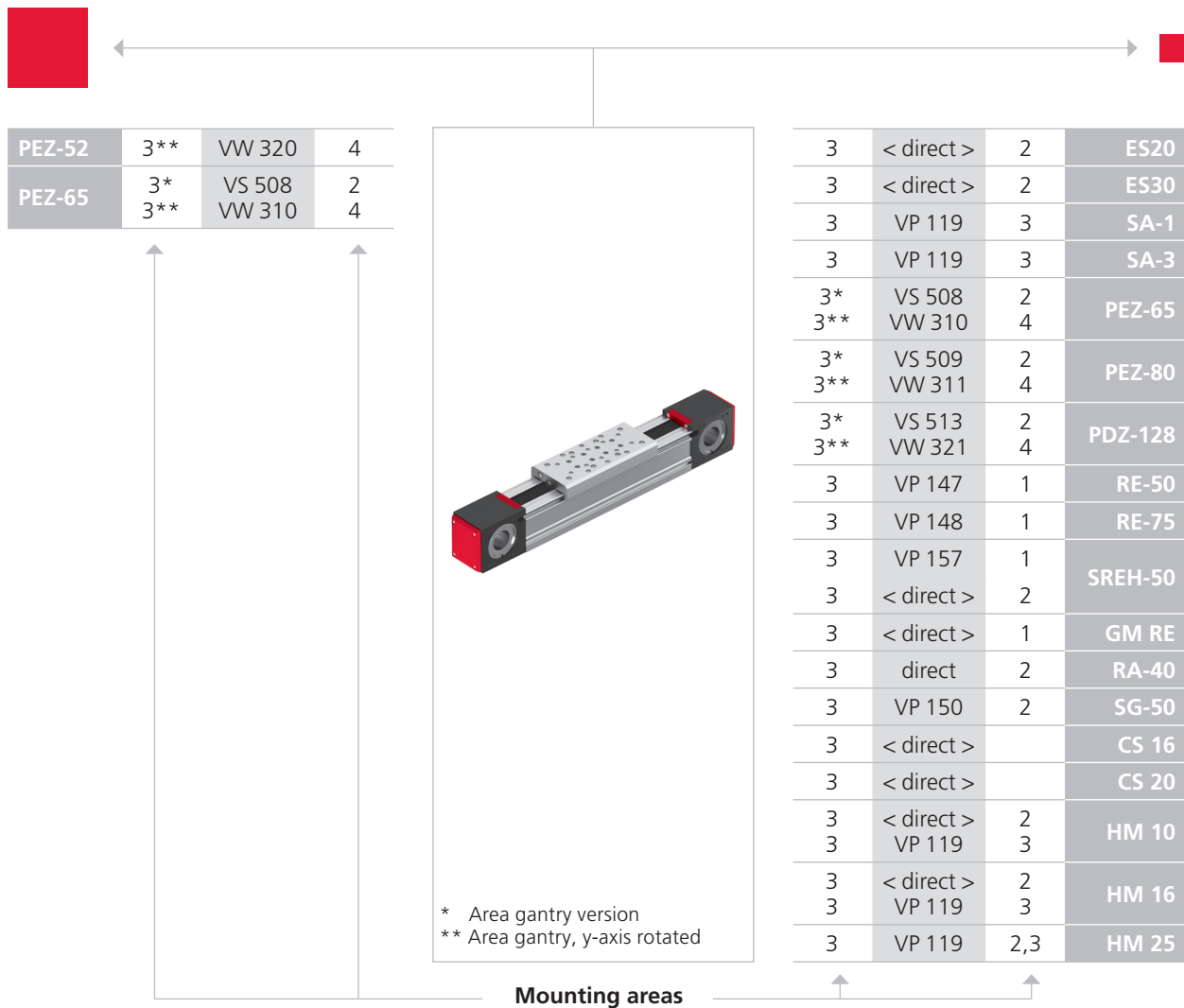
### Accessories

- Load transmission unit PEZ-65/PDZ-128 [p. 317]
- Stroke limitation PEZ-65 [p. 319]
- (Catalogue HT accessories)
  - INI 8x4.7x16-Sn2.0-PNP-NC-M8x1
  - T-nut M5
  - Connecting set VS 508
  - Mounting set 050
  - Mounting set 060
  - Mounting set 070
  - Planetary gearbox PE050
  - Planetary gearbox PE070
  - Planetary gearbox AF060
  - Angular gearbox PER070
  - Angular gearbox AFR060
  - Servomotor-21-72VDC-400W
  - Servomotor-31-320VDC-950W
  - Servomotor-31-560VDC-950W
  - Servo controller SE-Power
  - Servo controller C1xxx-1S
  - Servo controller E12xx
  - Servo controller E14xx

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

afag.com

Handling technology HT Components linear

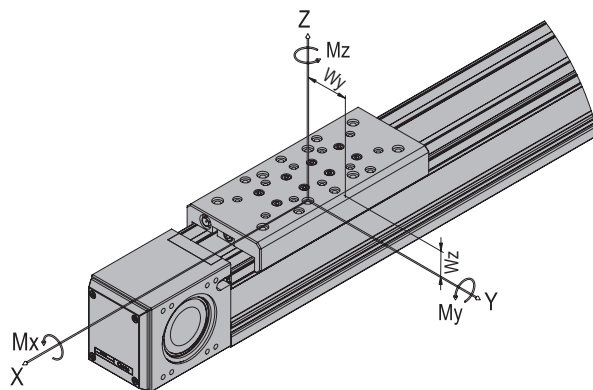


CS, ES	LM	HM	SA	UG, GM, SG, DG, PG, GE, SGE
PMP, PMP-c	PEZ, PDZ	PEL, PDL	RM, RE	CR, RM 32, RE, SREH, RA

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	PEZ-65
Max. torque Mx	26 Nm
Max. torque My	260 Nm
Max. torque Mz	260 Nm

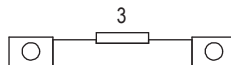


$$\frac{M_x}{M_{x \max}} + \frac{M_y}{M_{y \max}} + \frac{M_z}{M_{z \max}} < 1$$

Maximum payload/type	PEZ-65
Installation position (horizontal) for mounting side 3	40 kg
Installation position (vertical) for mounting side 3	40 kg

Assembly sides module mounting

horizontal:



vertical:



### Calculation of position versus time

The travel times of electrically driven gantry axis are dependent on the useful load, stroke + drive.

Our technicians will be pleased to make an optimum position/time calculation for you based on the gantry axis chosen. For being able to advise you correctly, we need the following data from you.

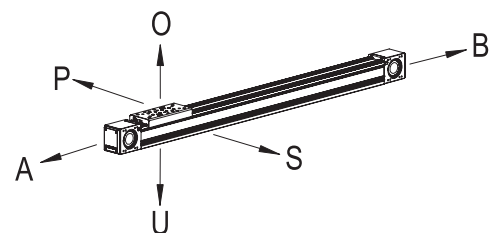
- Maximum planned stroke length
- Maximum moving mass
- Operation time desired

Order form	PEZ-65	xxxxxxxx	xxxx	xxxxxxxx	xxxxxxxx	xxxxxxxx	x	x	x
		Axis	Nominal stroke	Mounting set	Gear	Motor	Position gear	Position angular gearbox	Position motor plug

### Coordinate system

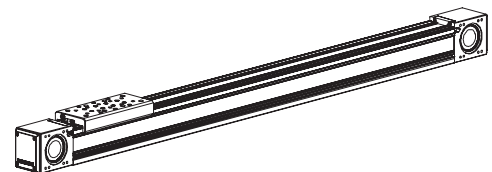
The coordinate system allows you to define the position of the gear as well as that of the motor plug.

- A = before
- B = base
- O = top
- P = left
- S = right
- U = downside



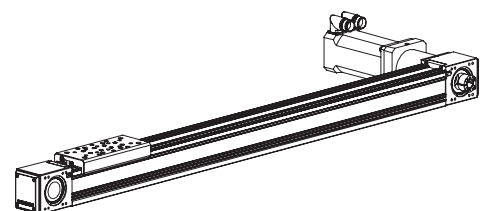
### Ordering example 1 without motor

PEZ-65	50245031	800	x	x	x	x	x	x
--------	----------	-----	---	---	---	---	---	---



### Ordering example 2 with motor

PEZ-65	50245031	600	50253994	50477899	50485435	P	x	O
--------	----------	-----	----------	----------	----------	---	---	---



### Ordering process

- Select the desired portal axis, the gear and the motor.
- Enter the corresponding red order numbers in the order form in the place of the cross.
- Enter the desired length (mm) in the field nominal stroke.
- Select the desired position of the gears as well as the position of the motor plug.
- Enter the corresponding letters from the coordinate system in the order form in the place of the cross.




### Third-party motors

- If the mounting of a third-party motor is desired the Afag axis can be provided with a gear, including a motor adapter plate for the third-party motor.

### External controller









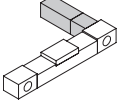
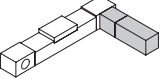
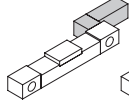
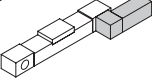
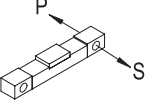
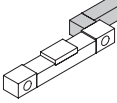
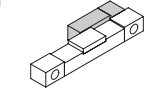
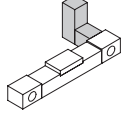
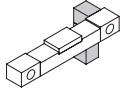
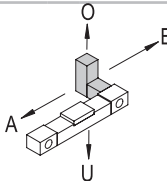
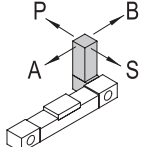
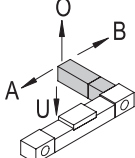
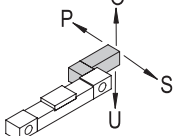
- Mechanical limiting values of the module must be observed (v max., a max.,...).
- The controller parametrisation is carried out by the customer.

### Legend order key

-  Planetary gearbox
-  Angular gearbox
-  Coupling housing

# Order key

## PEZ-65 /SE-Power/C1xxx/E1xxx

Axis	PEZ-65	50245031	xxxx	xxxxxxxx	xxxxxxxx	xxxxxxxx	x	x	x	Motor and gear selection: Design by Afag
	Axis	Nominal stroke	Mounting kit	Gear	Motor	Position of gear	Assembly direction of the angular gear	Position of the motor connector		
Mounting kit/gear (1 : x)		PE	AF	PER	AFR					
										
	Mounting kit	50253994								
	1 : 5	50477897								
	1 : 7	50477898								
	1 : 10	50477899								
	Mounting kit	50253995	50253996	50253995	50253996					
	1 : 5	50477900	50467058	50477912	50467070					
	1 : 7	50477901	50467059	50477913	50467071					
	1 : 10	50477902	50467060	50477914	50467072					
Motor/controller	Third-party motor			KG 	AA		M0	X	X	X
					AA		M0	X	X	X
	Without gear				X		X	X	X	X
	Without motor M0				X		X	X	X	X
		Servomotor-21-72VDC-400W-45-B-I-x-x	B	50485435						
		Servomotor-21-72VDC-400W-45-x-I-x-x		50495882						
		Servomotor-21-320VDC-400W-45-B-R-x-x	B	50495884						
		Servomotor-21-320VDC-400W-45-x-R-x-x		50495883						
		Servomotor-31-320VDC-950W-45-B-R-x-x	B	50503160						
		Servomotor-31-320VDC-950W-45-x-R-x-x		50503156						
Assembly		Servomotor-31-560VDC-950W-45-B-R-x-x	B	50495887						
		Servomotor-31-560VDC-950W-45-x-R-x-x		50495886						
		Servomotor-31-560VDC-950W-45-B-I-x-x	B	50485436						
		Servomotor-31-560VDC-950W-45-x-I-x-x		50495885						
	Position of gear						P S			
	Assembly direction of the angular gear						A B O U			
	Position of the motor connector						A B O P S U			
	The plug can be turned 180°. You can find further information in the operating manual.									

AA: Upon request  
B: Motor with brakes

BG: Motor size  
KG: Coupling housing

PE: Planetary gearbox  
PER: Angular gearbox

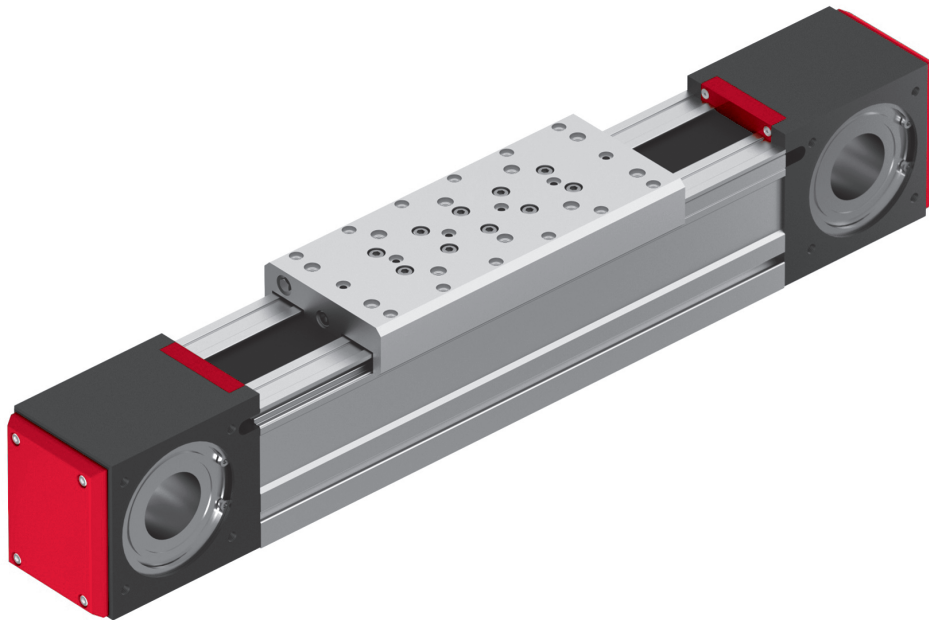
AF: Planetary gearbox, low-backlash  
AFR: Angular gearbox, low-backlash



# Portal axes PEZ & PDZ

## PEZ-80

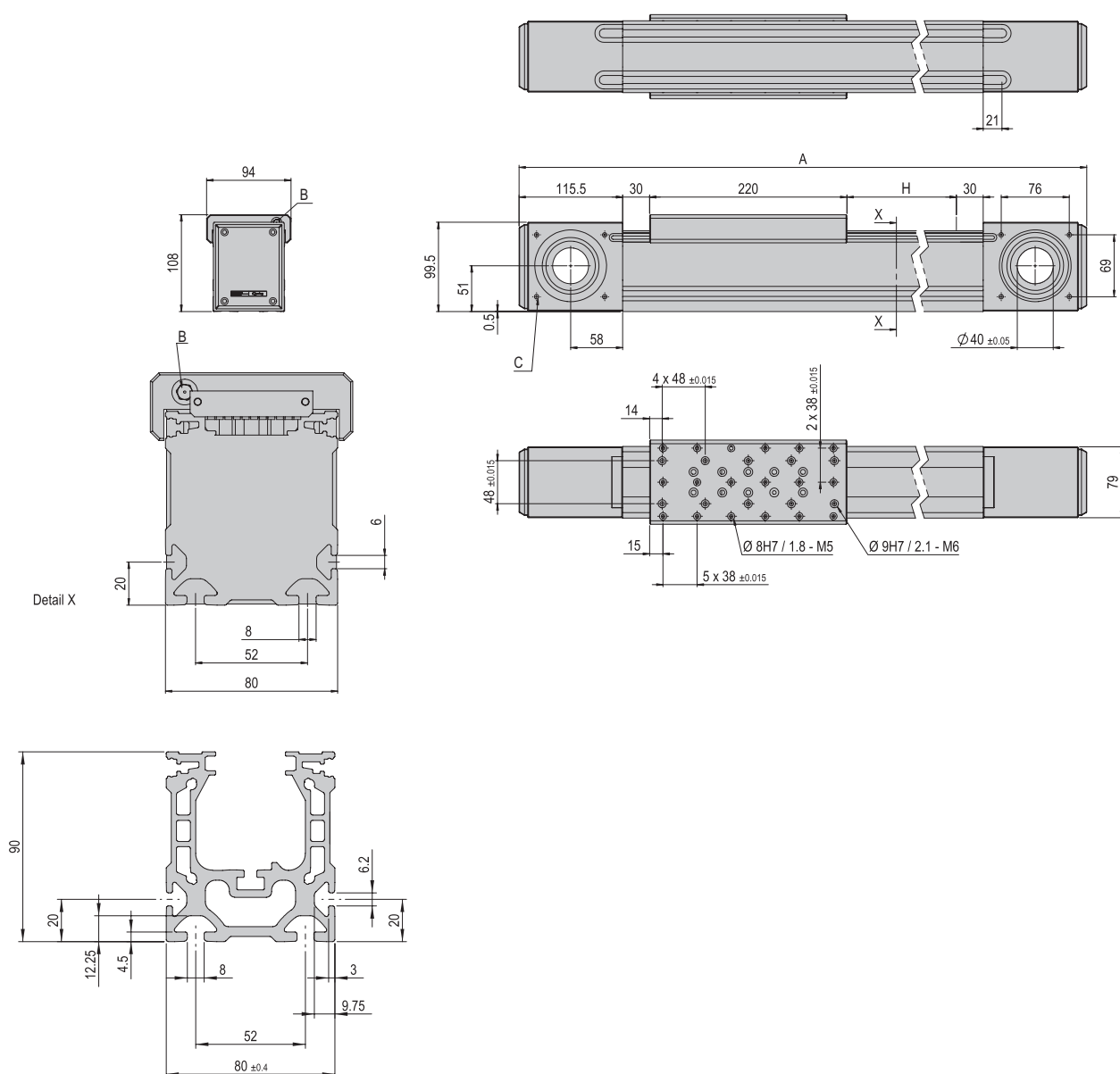
7

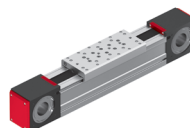


- The most rigid portal axes
- Single or double guide
- Fully symmetrical



Type	PEZ-80
A	Module length (stroke + 511) mm
B	Lubricator nipple
C	4x both sides M6
H	Module stroke xxxx mm





PEZ-80	
Operating temperature	10 - 40 °C
Storage temperature	0 - 50 °C
Humidity	< 90 %

Type	PEZ-80
------	--------

<b>Order number</b>	<b>50245032</b>
---------------------	-----------------

Max. stroke	5330 mm
Net weight	10.1 kg (at 0 mm stroke)
Moving weight	3 kg
Weight/100 mm stroke	0.83 kg
Cross-section profile W x H	80 x 80 mm
Module length	H + 511 mm
Toothed belt width	38 mm
Groove size (below/side)	8/6 mm
Groove distance (below)	52 mm
Hollow shaft Ø	40 mm
Number of linear guides	1 pcs
Torque	23.4 Nm
Protection type	IP 30
Feed constant	215 mm/U
Max. speed v	*5 m/s
Max. acceleration a	*50 m/s <sup>2</sup>
Max. circumferential force	684 N
Repeat accuracy	+/- 0.05 mm
Mounting position	✚

The technical data pertains to Afa standard test conditions.

Note: The mounting sets, gears, motors, controllers and cables can be found in the corresponding chapters.  
Cleanroom class ISO 14644-1, class ISO 7

\*The maximum values listed above depend on the application and must not be combined. In case of doubt, please contact your Afa partner.

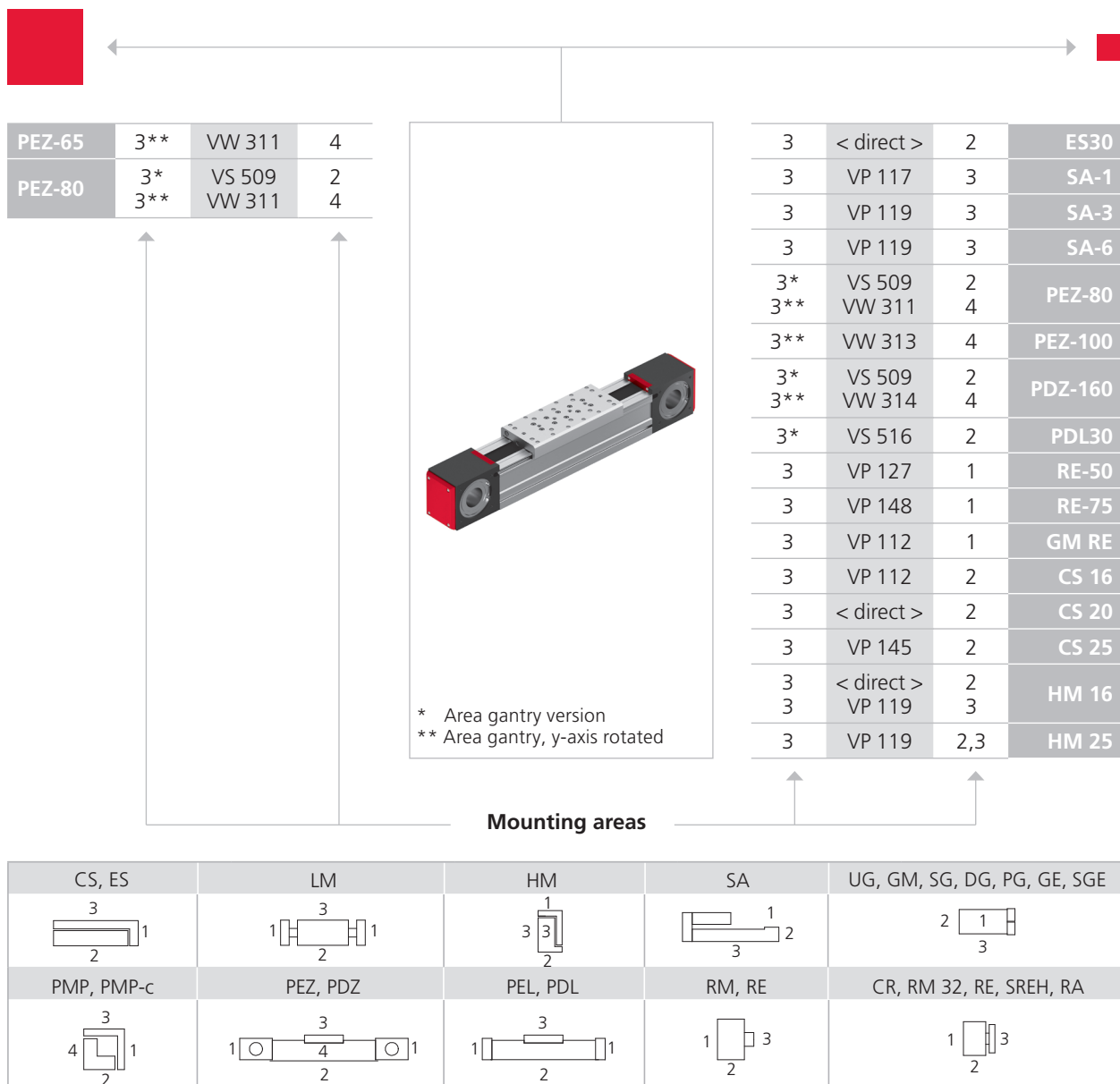
## Included in the delivery

- 1x Sensor set portal axes [p. 321]

## Accessories

- Stroke limitation PEZ-80 [p. 320]
- Load transmission unit PEZ-80/PDZ-160 [p. 318]
- (Catalogue HT accessories)
  - T-nut M6
  - INI 8x4.7x16-Sn2.0-PNP-NC-M8x1
  - Connecting set VS 509
  - Mounting set 060
  - Mounting set 070
  - Mounting set 075
  - Mounting set 090
  - Planetary gearbox PE070
  - Planetary gearbox PE090
  - Planetary gearbox AF060
  - Planetary gearbox AF075
  - Planetary gearbox AF090
  - Planetary gearbox AFR060
  - Planetary gearbox AFR075
  - Servomotor-31-320VDC-950W
  - Servomotor-31-560VDC-950W
  - Servomotor-41-560VDC-2.8kW
  - Servo controller SE-Power
  - Servo controller E14xx

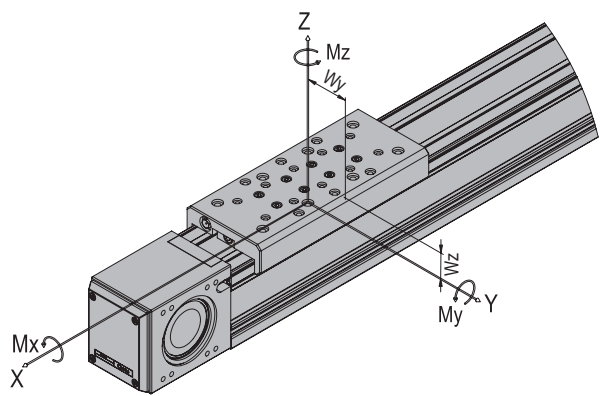
Warranty: 24 months following commissioning, but a maximum of 27 months following delivery



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	PEZ-80
Max. torque Mx	56 Nm
Max. torque My	630 Nm
Max. torque Mz	630 Nm

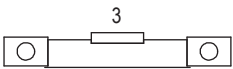


$$\frac{M_x}{M_{x \max}} + \frac{M_y}{M_{y \max}} + \frac{M_z}{M_{z \max}} < 1$$

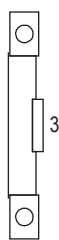
Maximum payload/type	PEZ-80
Installation position (horizontal) for mounting side 3	60 kg
Installation position (vertical) for mounting side 3	60 kg

Assembly sides module mounting

horizontal:



vertical:



Calculation of position versus time

The travel times of electrically driven gantry axis are dependent on the useful load, stroke + drive.

Our technicians will be pleased to make an optimum position/time calculation for you based on the gantry axis chosen. For being able to advise you correctly, we need the following data from you.

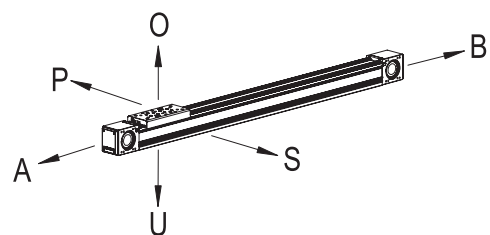
- Maximum planned stroke length
- Maximum moving mass
- Operation time desired

Order form	PEZ-80	xxxxxxxx	xxxx	xxxxxxxx	xxxxxxxx	xxxxxxxx	x	x	x
		Axis	Nominal stroke	Mounting set	Gear	Motor	Position gear	Position angular gearbox	Position motor plug

### Coordinate system

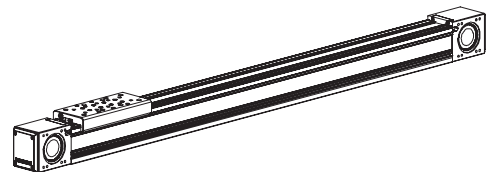
The coordinate system allows you to define the position of the gear as well as that of the motor plug.

- A = before
- B = base
- O = top
- P = left
- S = right
- U = downside



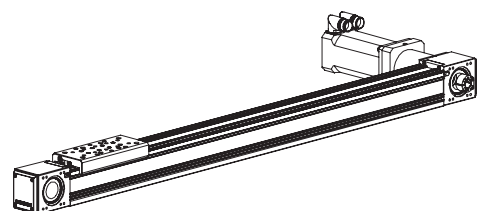
### Ordering example 1 without motor

PEZ-80	50245032	1000	x	x	x	x	x	x
--------	----------	------	---	---	---	---	---	---



### Ordering example 2 with motor

PEZ-80	50245032	1000	50253997	50477900	50495886	P	x	O
--------	----------	------	----------	----------	----------	---	---	---



### Ordering process

- Select the desired portal axis, the gear and the motor.
- Enter the corresponding red order numbers in the order form in the place of the cross.
- Enter the desired length (mm) in the field nominal stroke.
- Select the desired position of the gears as well as the position of the motor plug.
- Enter the corresponding letters from the coordinate system in the order form in the place of the cross.

### Third-party motors

- If the mounting of a third-party motor is desired the Afag axis can be provided with a gear, including a motor adapter plate for the third-party motor.

### External controller

- Mechanical limiting values of the module must be observed (v max., a max.,...).
- The controller parametrisation is carried out by the customer.

### Legend order key

- Planetary gearbox
- Angular gearbox
- Coupling housing

Axis	PEZ-80	50245032	xxxx	xxxxxxxx	xxxxxxxx	xxxxxxxx	x	x	x
	Axis	Nominal stroke	Mounting kit	Gear	Motor	Position of gear	Assembly direction of the angular gear	Position of the motor connector	
Mounting kit/gear (1 : x)		PE	AF	PER	AFR				
	Mounting kit								
	1 : 5	50477900	50467058	50477912	50467070				
	1 : 7	50477901	50467059	50477913	50467071				
	1 : 10	50477902	50467060	50477914	50467072				
	Mounting kit	50253998	50254000	50253998	50254000				
	1 : 5	50477903	50467061	50477915	50467073				
	1 : 7	50477904	50467062	50477916	50467074				
	1 : 10	50477905	50467063	50477917	50467075				
	Third-party motor			KG	AA		X	X	X
Motor/controller	Without gear				X	X	X	X	
	Without motor M0				X	X	X	X	
		Servomotor-31-320VDC-950W-45-B-R-x-x	B	50503160					
		Servomotor-31-320VDC-950W-45-x-R-x-x		50503156					
		Servomotor-31-560VDC-950W-45-B-R-x-x	B	50495887					
		Servomotor-31-560VDC-950W-45-x-R-x-x		50495886					
		Servomotor-31-560VDC-950W-45-B-l-x-x	B	50485436					
		Servomotor-31-560VDC-950W-45-x-l-x-x		50495885					
		Servomotor-41-560VDC-2.8kW-45-B-R-x-x	B	50495890					
		Servomotor-41-560VDC-2.8kW-45-x-R-x-x		50495889					
		Servomotor-41-560VDC-2.8kW-45-B-l-x-x	B	50485437					
		Servomotor-41-560VDC-2.8kW-45-x-l-x-x		50495888					
Assembly	Position of gear					P S			
	Assembly direction of the angular gear					A B O U			
	Position of the motor connector					A B O P S U			
	The plug can be turned 180°. You can find further information in the operating manual.								

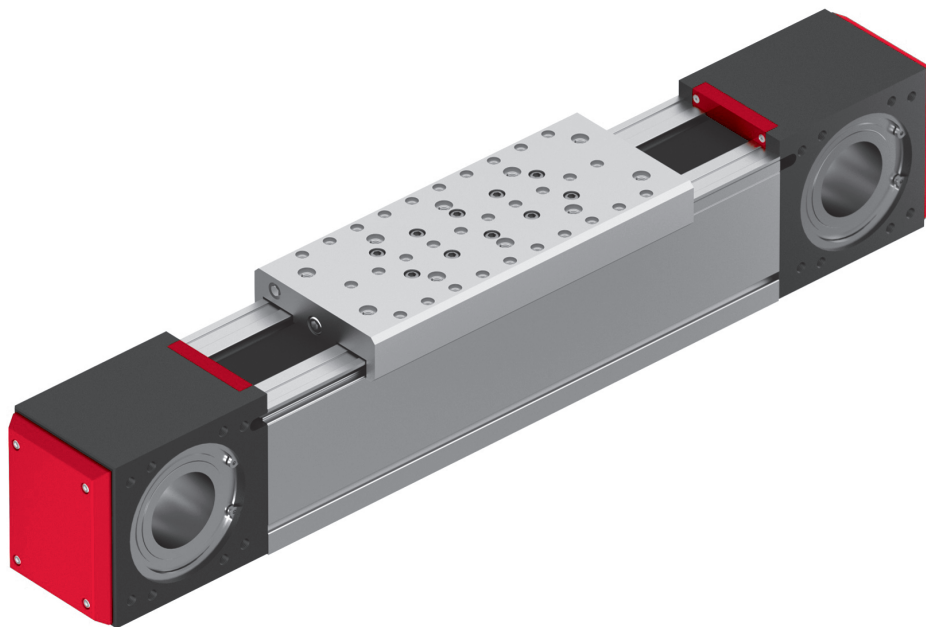
AA: Upon request      BG: Motor size      PE: Planetary gearbox      AF: Planetary gearbox, low-backlash  
 B: Motor with brakes      KG: Coupling housing      PER: Angular gearbox      AFR: Angular gearbox, low-backlash



# Portal axes PEZ & PDZ

## PEZ-100

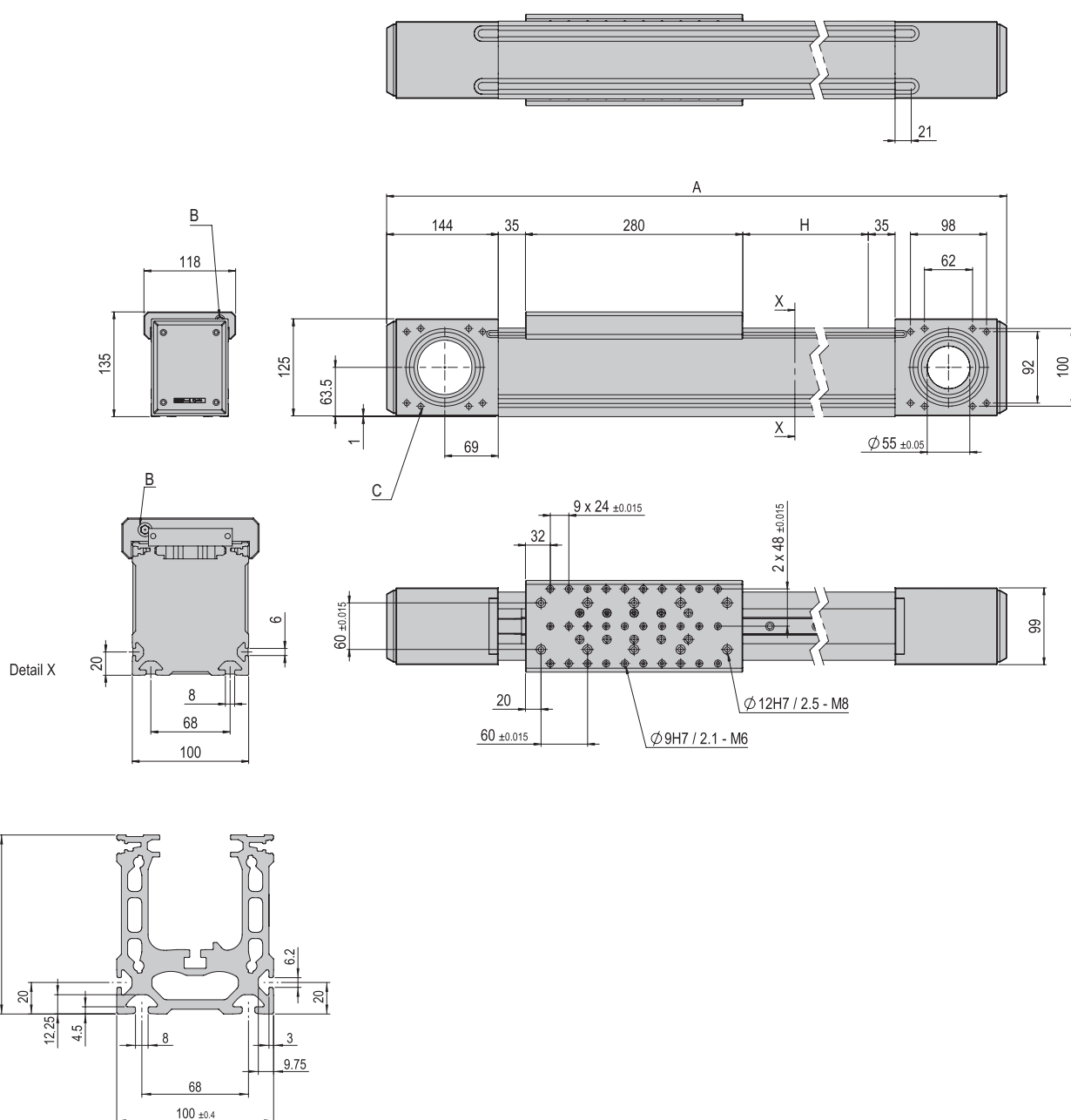
7

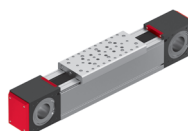


- The most rigid portal axes
- Single or double guide
- Fully symmetrical



Type	PEZ-100
A	Module length (stroke + 638) mm
B	Lubricator nipple
C	8x both sides M8
H	Module stroke xxxx mm





PEZ-100	
Operating temperature	10 - 40 °C
Storage temperature	0 - 50 °C
Humidity	< 90 %

Type	PEZ-100
------	---------

**Order number** **50231524**

Max. stroke	5260 mm
Net weight	18.3 kg (at 0 mm stroke)
Moving weight	5 kg
Weight/100 mm stroke	1.4 kg
Cross-section profile W x H	100 x 114 mm
Module length	H + 638 mm
Toothed belt width	50 mm
Groove size (below/side)	8/6 mm
Groove distance (below)	68 mm
Hollow shaft Ø	55 mm
Number of linear guides	1 pcs
Torque	89.1 Nm
Protection type	IP 30
Feed constant	280 mm/U
Max. speed v	*5 m/s
Max. acceleration a	*50 m/s <sup>2</sup>
Max. circumferential force	2000 N
Repeat accuracy	+/- 0.05 mm
Mounting position	↕

The technical data pertains to Afag standard test conditions.

Note: The mounting sets, gears, motors, controllers and cables can be found in the corresponding chapters.  
Cleanroom class ISO 14644-1, class ISO 7

\*The maximum values listed above depend on the application and must not be combined. In case of doubt, please contact your Afag partner.

## Included in the delivery

- 1x Sensor set portal axes [p. 321]

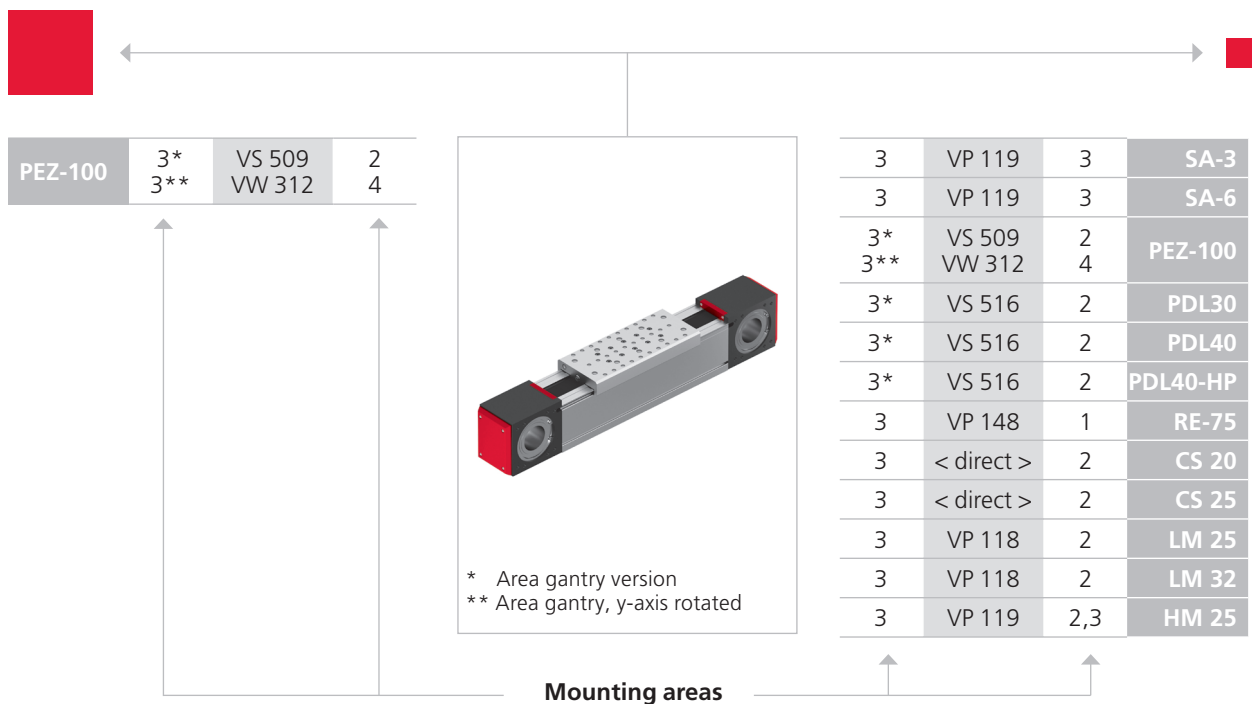
## Accessories

- Stroke limitation PEZ-100 [p. 320]
- Load transmission unit PEZ-100/PDZ-200 [p. 318]

(Catalogue HT accessories)

- INI 8x4.7x16-Sn2.0-PNP-NC-M8x1
- T-nut M10
- Connecting set VS 509
- Mounting set 075
- Mounting set 090
- Mounting set 100
- Mounting set 120
- Planetary gearbox PE090
- Planetary gearbox PE120
- Planetary gearbox AF075
- Planetary gearbox AF100
- Angular gearbox PER090
- Angular gearbox PER120
- Angular gearbox AFR075
- Angular gearbox AFR100
- Servomotor-41-560VDC-2.8kW
- Servomotor-51-560VDC-5.0kW
- Servo controller SE-Power
- Servo controller C1xxx-1S
- Servo controller E12xx
- Servo controller E14xx

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

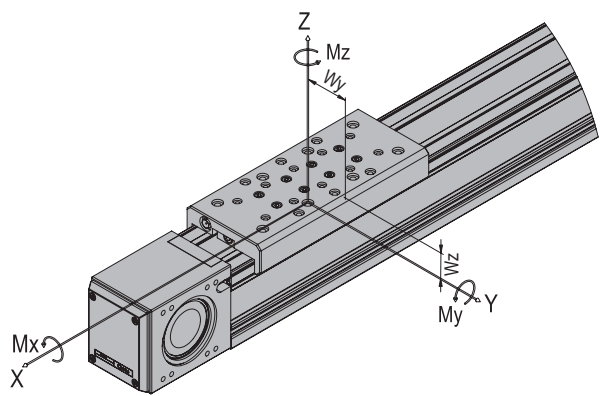


CS, ES	LM	HM	SA	UG, GM, SG, DG, PG, GE, SGE
PMP, PMP-c	PEZ, PDZ	PEL, PDL	RM, RE	CR, RM 32, RE, SREH, RA

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	PEZ-100
Max. torque Mx	94 Nm
Max. torque My	1100 Nm
Max. torque Mz	1100 Nm

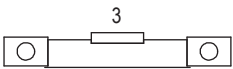


$$\frac{M_x}{M_{x \max}} + \frac{M_y}{M_{y \max}} + \frac{M_z}{M_{z \max}} < 1$$

Maximum payload/type	PEZ-100
Installation position (horizontal) for mounting side 3	100 kg
Installation position (vertical) for mounting side 3	100 kg

Assembly sides module mounting

horizontal:



vertical:



Calculation of position versus time

The travel times of electrically driven gantry axis are dependent on the useful load, stroke + drive.

Our technicians will be pleased to make an optimum position/time calculation for you based on the gantry axis chosen. For being able to advise you correctly, we need the following data from you.

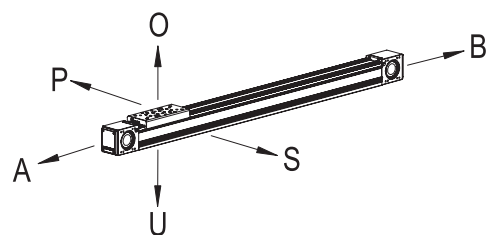
- Maximum planned stroke length
- Maximum moving mass
- Operation time desired

Order form	PEZ-100	xxxxxxxx	xxxx	xxxxxxxx	xxxxxxxx	xxxxxxxx	x	x	x
		Axis	Nominal stroke	Mounting set	Gear	Motor	Position gear	Position angular gearbox	Position motor plug.

### Coordinate system

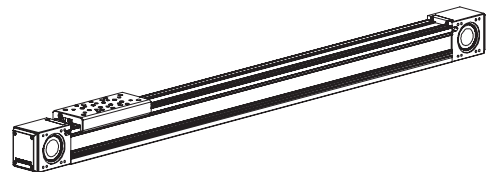
The coordinate system allows you to define the position of the gear as well as that of the motor plug.

- A = before
- B = base
- O = top
- P = left
- S = right
- U = downside



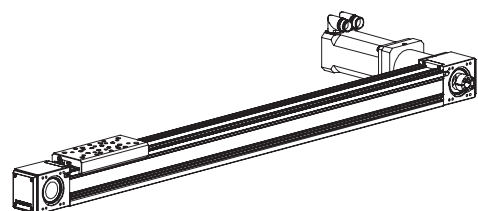
### Ordering example 1 without motor

PEZ-100	50231524	1200	x	x	x	x	x	x
---------	----------	------	---	---	---	---	---	---



### Ordering example 2 with motor

PEZ-100	50231524	1200	50254002	50477906	50495889	P	x	O
---------	----------	------	----------	----------	----------	---	---	---



### Ordering process

- Select the desired portal axis, the gear and the motor.
- Enter the corresponding red order numbers in the order form in the place of the cross.
- Enter the desired length (mm) in the field nominal stroke.
- Select the desired position of the gears as well as the position of the motor plug.
- Enter the corresponding letters from the coordinate system in the order form in the place of the cross.

### Third-party motors

- If the mounting of a third-party motor is desired the Afag axis can be provided with a gear, including a motor adapter plate for the third-party motor.

### External controller

- Mechanical limiting values of the module must be observed (v max., a max.,...).
- The controller parametrisation is carried out by the customer.

### Legend order key

- Planetary gearbox
- Angular gearbox
- Coupling housing

# Order key

## PEZ-100 /SE-Power/E14xx

Axis	PEZ-100	50231524	xxxx	xxxxxxxx	xxxxxxxx	xxxxxxxx	x	x	x
	Axis	Nominal stroke		Mounting kit	Gear	Motor	Position of gear	Assembly direction of the angular gear	Position of the motor connector
Mounting kit/gear (1 : x)		PE	AF	PER	AFR				
	Mounting kit	50254001	50254003	50254001	50254003				
	1 : 5	50477903	50467061	50477915	50467073				
	1 : 7	50477904	50467062	50477916	50467074				
	1 : 10	50477905	50467063	50477917	50467075				
	Mounting kit	50254002	50254004	50254002	50254004				
	1 : 5	50477906	50467064	50477918	50467076				
	1 : 7	50477907	50467065	50477919	50467077				
	1 : 10	50477908	50467066	50477920	50467078				
Motor/controller	Third-party motor			KG	AA	M0	X	X	X
					AA	M0	X	X	X
	Without gear				X	X	X	X	X
	Without motor M0				X	X	X	X	X
		Servomotor-41-560VDC-2.8kW-45-B-R-X-X				B	50495890		
		Servomotor-41-560VDC-2.8kW-45-X-R-X-X					50495889		
		Servomotor-41-560VDC-2.8kW-45-B-I-X-X				B	50485437		
		Servomotor-41-560VDC-2.8kW-45-X-I-X-X					50495888		
		Servomotor-51-560VDC-5.0kW-45-B-R-X-X				B	50495893		
		Servomotor-51-560VDC-5.0kW-45-X-R-X-X					50495892		
Servomotor-51-560VDC-5.0kW-45-B-I-X-X				B	50485438				
Servomotor-51-560VDC-5.0kW-45-X-I-X-X					50495891				
Assembly	Position of gear						P S	A B O U	
	Assembly direction of the angular gear								
	Position of the motor connector								A B O P S U
The plug can be turned 180°. You can find further information in the operating manual.									
Motor and gear selection: Design by Afag									

AA: Upon request  
B: Motor with brakes

BG: Motor size  
KG: Coupling housing

PE: Planetary gearbox  
PER: Angular gearbox

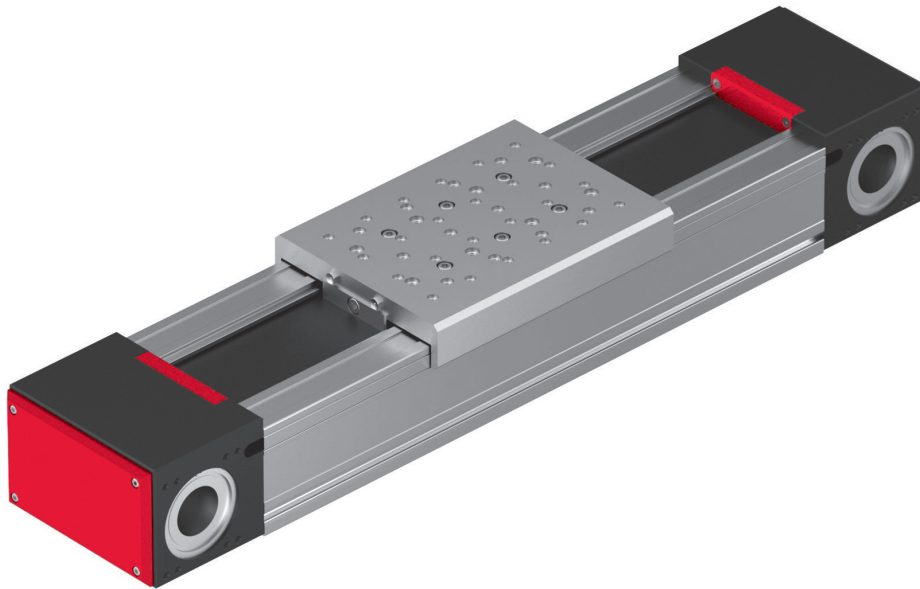
AF: Planetary gearbox, low-backlash  
AFR: Angular gearbox, low-backlash



# Portal axes PEZ & PDZ

## PDZ-128

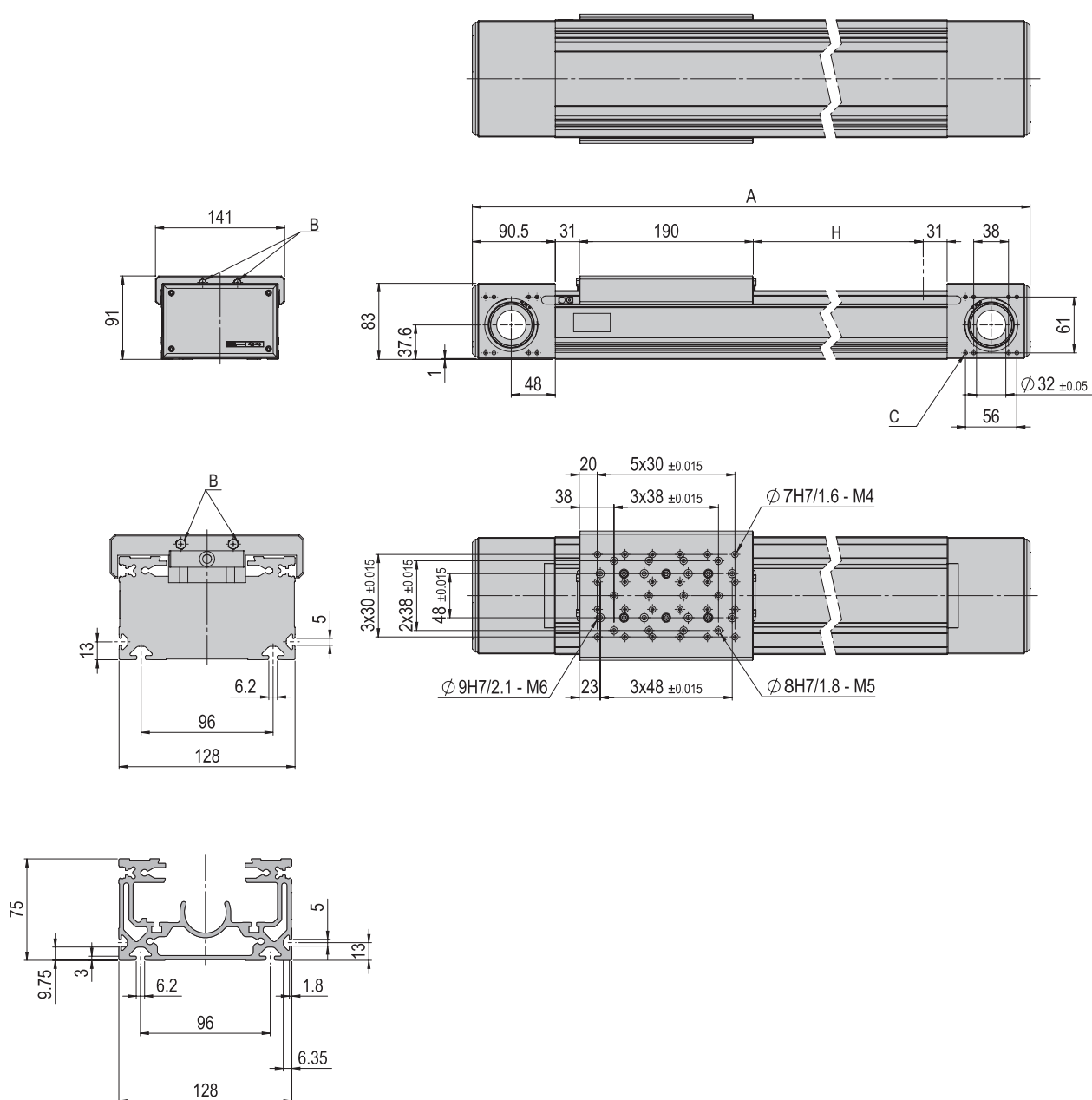
7

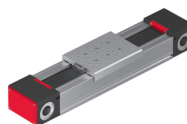


- The most rigid portal axes
- Single or double guide
- Fully symmetrical



Type	PDZ-128
A	Module length (stroke + 433) mm
B	Lubricator nipple
C	8x both sides M5
H	Module stroke xxxx mm





PDZ-128	
Operating temperature	10 - 40 °C
Storage temperature	0 - 50 °C
Humidity	< 90 %

Type	PDZ-128
------	---------

<b>Order number</b>	<b>50394896</b>
---------------------	-----------------

Max. stroke	1700 mm
Net weight	10.7 kg (at 0 mm stroke)
Moving weight	3.4 kg
Weight/100 mm stroke	0.95 kg
Cross-section profile W x H	128 x 75 mm
Module length	H + 433 mm
Toothed belt width	65 mm
Groove size (below/side)	6/5 mm
Groove distance (below)	96 mm
Hollow shaft Ø	32 mm
Number of linear guides	2 pcs
Torque	65.5 Nm
Protection type	IP 30
Feed constant	175 mm/U
Max. speed v	*3 m/s
Max. acceleration a	*30 m/s <sup>2</sup>
Max. circumferential force	2340 N
Repeat accuracy	+/- 0.05 mm
Mounting position	✚

The technical data pertains to Afag standard test conditions.

Note: The mounting sets, gears, motors, controllers and cables can be found in the corresponding chapters.  
Cleanroom class ISO 14644-1, class ISO 7

\*The maximum values listed above depend on the application and must not be combined. In case of doubt, please contact your Afag partner.

### Included in the delivery

- 1x Sensor set portal axes [p. 321]

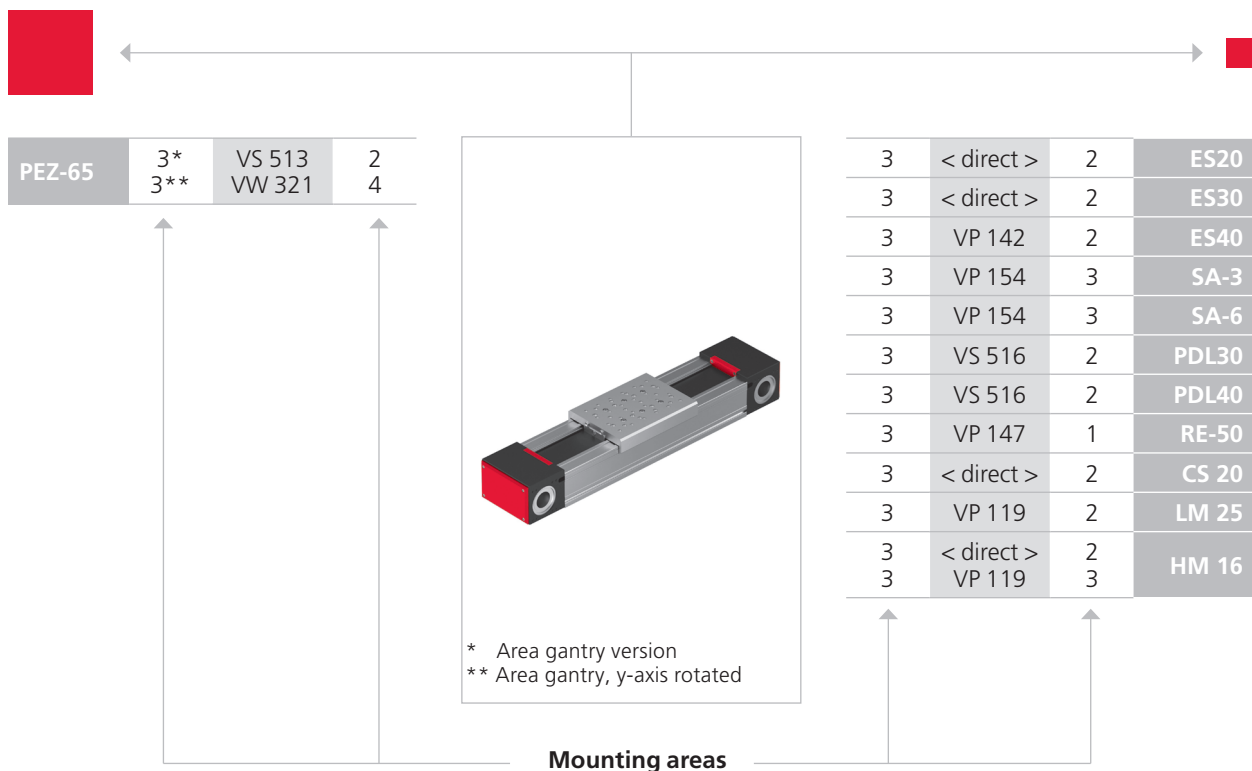
### Accessories

- Stroke limitation PDZ-128 [p. 317]
- Load transmission unit PEZ-65/PDZ-128 [p. 320]
- (Catalogue HT accessories)
  - T-nut M5
  - Connecting set VS 513
  - Mounting set 060
  - Mounting set 070
  - Planetary gearbox PE050
  - Planetary gearbox PE070
  - Planetary gearbox AF060
  - Angular gearbox AFR060
  - Servomotor-21-72VDC-400W
  - Servomotor-31-320VDC-950W
  - Servomotor-31-560VDC-950W
  - Servo controller SE-Power
  - Servo controller E14xx

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

afag.com

Handling technology HT Components linear

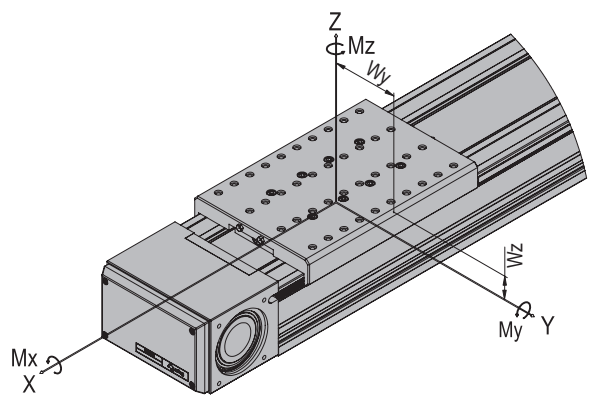


CS, ES	LM	HM	SA	UG, GM, SG, DG, PG, GE, SGE
PMP, PMP-c	PEZ, PDZ	PEL, PDL	RM, RE	CR, RM 32, RE, SREH, RA

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	PDZ-128
Max. torque Mx	110 Nm
Max. torque My	230 Nm
Max. torque Mz	230 Nm

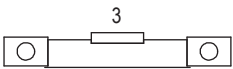


$$\frac{M_x}{M_{x \max}} + \frac{M_y}{M_{y \max}} + \frac{M_z}{M_{z \max}} < 1$$

Maximum payload/type	PDZ-128
Installation position (horizontal) for mounting side 3	100 kg
Installation position (vertical) for mounting side 3	100 kg

Assembly sides module mounting

horizontal:



vertical:



Calculation of position versus time

The travel times of electrically driven gantry axis are dependent on the useful load, stroke + drive.

Our technicians will be pleased to make an optimum position/time calculation for you based on the gantry axis chosen. For being able to advise you correctly, we need the following data from you.

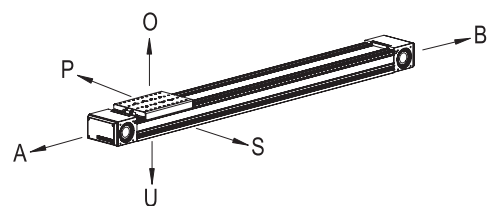
- Maximum planned stroke length
- Maximum moving mass
- Operation time desired

Order form	PDZ-128	xxxxxxxx	xxxx	xxxxxxxx	xxxxxxxx	xxxxxxxx	x	x	x
		Axis	Nominal stroke	Mounting set	Gear	Motor	Position gear	Position angular gearbox	Position motor plug.

### Coordinate system

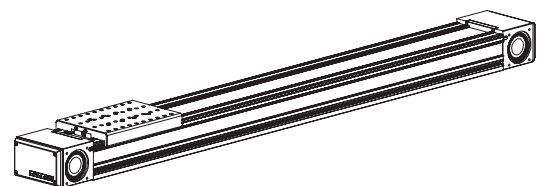
The coordinate system allows you to define the position of the gear as well as that of the motor plug.

- A = before
- B = base
- O = top
- P = left
- S = right
- U = downside



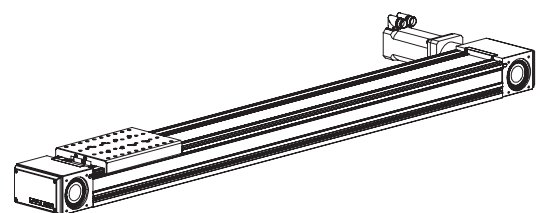
### Ordering example 1 without motor

PDZ-128	50394896	1000	x	x	x	x	x	x
---------	----------	------	---	---	---	---	---	---



### Ordering example 2 with motor

PDZ-128	50394896	1000	50253994	50477897	50495884	P	x	O
---------	----------	------	----------	----------	----------	---	---	---



### Ordering process

- Select the desired portal axis, the gear and the motor.
- Enter the corresponding red order numbers in the order form in the place of the cross.
- Enter the desired length (mm) in the field nominal stroke.
- Select the desired position of the gears as well as the position of the motor plug.
- Enter the corresponding letters from the coordinate system in the order form in the place of the cross.

### Third-party motors

- If the mounting of a third-party motor is desired the Afag axis can be provided with a gear, including a motor adapter plate for the third-party motor.

### External controller

- Mechanical limiting values of the module must be observed (v max., a max.,...).
- The controller parametrisation is carried out by the customer.

### Legend order key

- Planetary gearbox
- Angular gearbox
- Coupling housing

Axis	PDZ-128	50394896	xxxx	xxxxxxxxx	xxxxxxxxx	xxxxxxxxx	x	x	x	Motor and gear selection: Design by Afag
	Axis	Nominal stroke	Mounting kit	gear	Motor	Position of gear	Assembly direction of the angular gear	Position of the motor connector		
Mounting kit/gear (1 : x)		PE	AF	PER	AFR					
	Mounting kit	50253994								
	1 : 5	50477897								
	1 : 7	50477898								
	1 : 10	50477899								
	Mounting kit	50253995	50253996	50253995	50253996					
	1 : 5	50477900	50467058	50477912	50467070					
	1 : 7	50477901	50467059	50477913	50467071					
	1 : 10	50477902	50467060	50477914	50467072					
Motor/controller	Third-party motor			KG	AA		M0	X	X	X
					AA		M0	X	X	X
	Without gear				X		X	X	X	X
	Without Motor M0				X		X	X	X	X
		Servomotor-21-72VDC-400W-45-B-I-x-x			B	50485435				
		Servomotor-21-72VDC-400W-45-x-I-x-x				50495882				
		Servomotor-21-320VDC-400W-45-B-R-x-x			B	50495884				
		Servomotor-21-320VDC-400W-45-x-R-x-x				50495883				
		Servomotor-31-320VDC-950W-45-B-R-x-x			B	50503160				
		Servomotor-31-320VDC-950W-45-x-R-x-x				50503156				
Assembly		Servomotor-31-560VDC-950W-45-B-R-x-x			B	50495887				
		Servomotor-31-560VDC-950W-45-x-R-x-x				50495886				
		Servomotor-31-560VDC-950W-45-B-I-x-x			B	50485436				
		Servomotor-31-560VDC-950W-45-x-I-x-x				50495885				
	Position of gear									
	Assembly direction of the angular gear									
	Position of the motor connector									

AA: Upon request  
B: Motor with brakes

BG: Motor size  
KG: Coupling housing

PE: Planetary gearbox  
PER: Angular gearbox

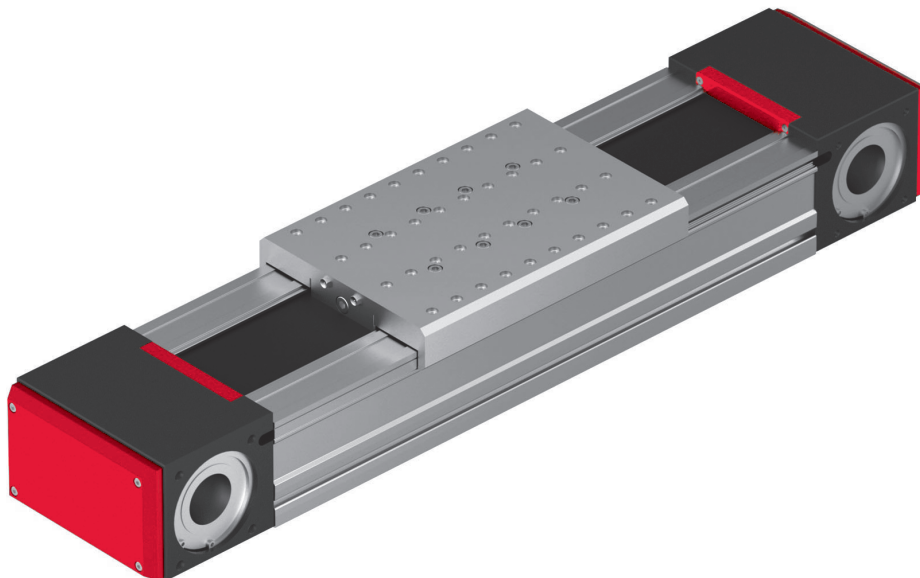
AF: Planetary gearbox, low-backlash  
AFR: Angular gearbox, low-backlash



# Portal axes PEZ & PDZ

## PDZ-160

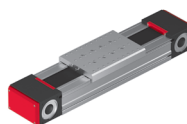
7



- The most rigid portal axes
- Single or double guide
- Fully symmetrical







PDZ-160	
Operating temperature	10 - 40 °C
Storage temperature	0 - 50 °C
Humidity	< 90 %

Type	PDZ-160
<b>Order number</b>	<b>50245033</b>
Max. stroke	3650 mm
Net weight	20.8 kg (at 0 mm stroke)
Moving weight	6.8 kg
Weight/100 mm stroke	1.62 kg
Cross-section profile W x H	160 x 90 mm
Module length	H + 574 mm
Toothed belt width	80 mm
Groove size (below/side)	8/6 mm
Groove distance (below)	120 mm
Hollow shaft Ø	40 mm
Number of linear guides	2 pcs
Torque	114.1 Nm
Protection type	IP 30
Feed constant	224 mm/U
Max. speed v	*5 m/s
Max. acceleration a	*50 m/s <sup>2</sup>
Max. circumferential force	3200 N
Repeat accuracy	+/- 0.05 mm
Mounting position	✚

The technical data pertains to Afag standard test conditions.

Note: The mounting sets, gears, motors, controllers and cables can be found in the corresponding chapters.  
Cleanroom class ISO 14644-1, class ISO 7

\*The maximum values listed above depend on the application and must not be combined. In case of doubt, please contact your Afag partner.

### Included in the delivery

- 1x Sensor set portal axes [p. 321]

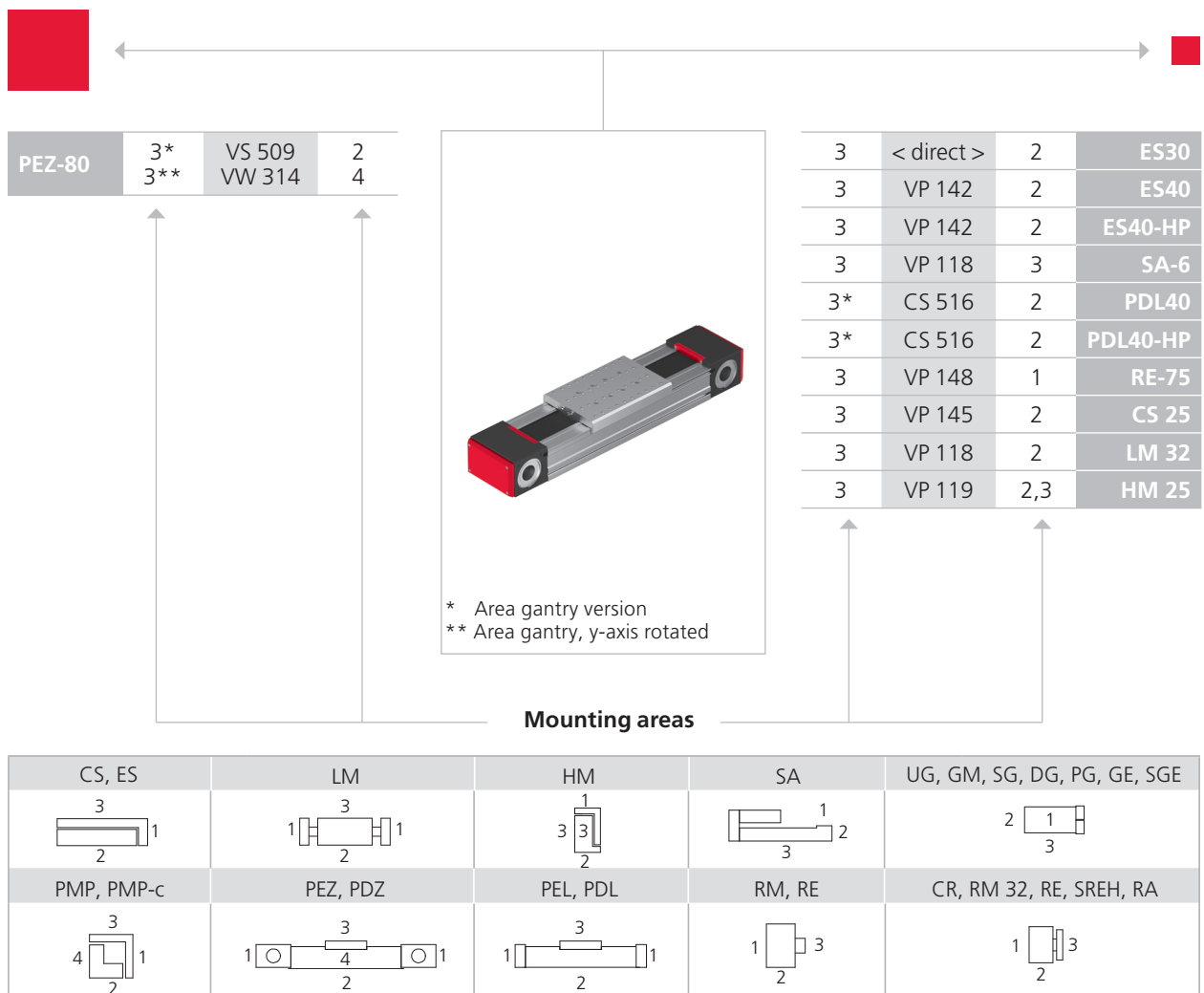
### Accessories

- Stroke limitation PDZ-160 [p. 321]
- Load transmission unit PEZ-80/PDZ-160 [p. 318]
- (Catalogue HT accessories)
  - T-nut M6
  - INI 8x4.7x16-Sn2.0-PNP-NC-M8x1
  - Connecting set VS 509
  - Mounting set 060
  - Mounting set 070
  - Mounting set 075
  - Mounting set 090
  - Planetary gearbox PE070
  - Planetary gearbox PE090
  - Planetary gearbox AF060
  - Planetary gearbox AF075
  - Angular gearbox PER070
  - Angular gearbox PER090
  - Angular gearbox AFR060
  - Angular gearbox AFR075
  - Servomotor-31-320VDC-950W
  - Servomotor-31-560VDC-950W
  - Servomotor-41-560VDC-2.8kW
  - Servo controller SE-Power
  - Servo controller E14xx

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

afag.com

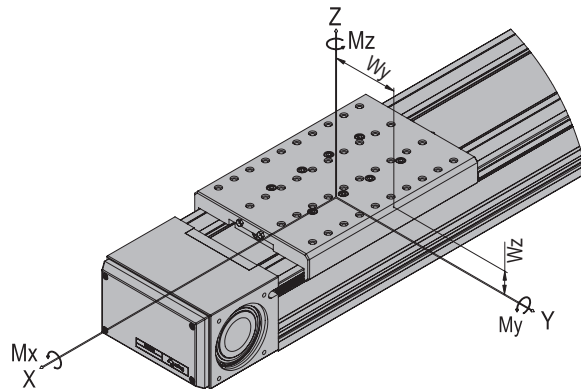
Handling technology HT Components linear



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	PDZ-160
Max. torque Mx	260 Nm
Max. torque My	550 Nm
Max. torque Mz	550 Nm



$$\frac{M_x}{M_{x \max}} + \frac{M_y}{M_{y \max}} + \frac{M_z}{M_{z \max}} < 1$$

Maximum payload/type	PDZ-160
Installation position (horizontal) for mounting side 3	200 kg
Installation position (vertical) for mounting side 3	200 kg

Assembly sides module mounting

horizontal:



vertical:



### Calculation of position versus time

The travel times of electrically driven gantry axis are dependent on the useful load, stroke + drive.

Our technicians will be pleased to make an optimum position/time calculation for you based on the gantry axis chosen. For being able to advise you correctly, we need the following data from you.

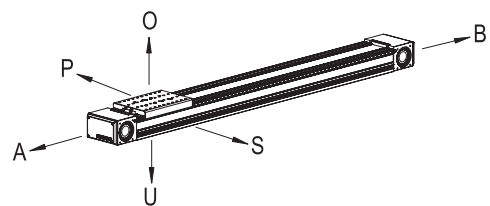
- Maximum planned stroke length
- Maximum moving mass
- Operation time desired

Order form	PDZ-160	xxxxxxxx	xxxx	xxxxxxxx	xxxxxxxx	xxxxxxxx	x	x	x
		Axis	Nominal stroke	Mounting set	Gear	Motor	Position gear	Position angular gearbox	Position motor plug.

### Coordinate system

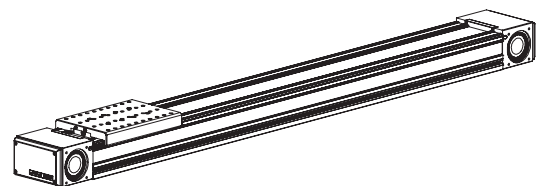
The coordinate system allows you to define the position of the gear as well as that of the motor plug.

- A = before
- B = base
- O = top
- P = left
- S = right
- U = downside



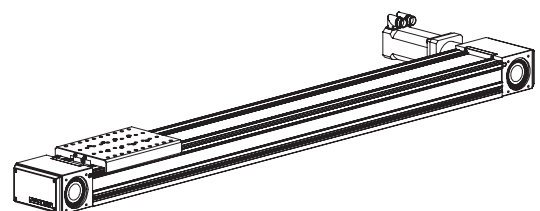
### Ordering example 1 without motor

PDZ-160	50245033	1500	x	x	x	x	x	x
---------	----------	------	---	---	---	---	---	---



### Ordering example 2 with motor

PDZ-160	50253997	1500	50253997	50253999	x	P	x	O
---------	----------	------	----------	----------	---	---	---	---



### Ordering process

- Select the desired portal axis, the gear and the motor.
- Enter the corresponding red order numbers in the order form in the place of the cross.
- Enter the desired length (mm) in the field nominal stroke.
- Select the desired position of the gears as well as the position of the motor plug.
- Enter the corresponding letters from the coordinate system in the order form in the place of the cross.




### Third-party motors

- If the mounting of a third-party motor is desired the Afag axis can be provided with a gear, including a motor adapter plate for the third-party motor.

### External controller

- Mechanical limiting values of the module must be observed (v max., a max.,...).
- The controller parametrisation is carried out by the customer.

### Legend order key

-  Planetary gearbox
-  Angular gearbox
-  Coupling housing

Axis	PDZ-160	50245033	xxxx	xxxxxxxx	xxxxxxxx	xxxxxxxx	x	x	x	Motor and gear selection: Design by Afag
	Axis	Nominal stroke	Mounting kit	gear	Motor	Position of gear	Assembly direction of the angular gear	Position of the motor connector		
Mounting kit/gear (1 : x)		PE	AF	PER	AFR					
	Mounting kit									
	1 : 5	50477900	50467058	50477912	50467070					
	1 : 7	50477901	50467059	50477913	50467071					
	1 : 10	50477902	50467060	50477914	50467072					
	Mounting kit	50253998	50254000	50253998	50254000					
	1 : 5	50477903	50467061	50477915	50467073					
	1 : 7	50477904	50467062	50477916	50467074					
	1 : 10	50477905	50467063	50477917	50467075					
Motor/controller	Third-party motor			KG	AA		X	X	X	
					AA		X	X	X	
	Without gear				X		X	X	X	
	Without Motor M0				X		X	X	X	
		Servomotor-31-320VDC-950W-45-B-R-x-x	B	50503160						
		Servomotor-31-320VDC-950W-45-x-R-x-x		50503156						
		Servomotor-31-560VDC-950W-45-B-R-x-x	B	50495887						
		Servomotor-31-560VDC-950W-45-x-R-x-x		50495886						
		Servomotor-31-560VDC-950W-45-B-l-x-x	B	50485436						
		Servomotor-31-560VDC-950W-45-x-l-x-x		50495885						
		Servomotor-41-560VDC-2.8kW-45-B-R-x-x	B	50495890						
		Servomotor-41-560VDC-2.8kW-45-x-R-x-x		50495889						
		Servomotor-41-560VDC-2.8kW-45-B-l-x-x	B	50485437						
		Servomotor-41-560VDC-2.8kW-45-x-l-x-x		50495888						
Assembly	Position of gear						P S			A B O U  A B O P S U
	Assembly direction of the angular gear									
	Position of the motor connector									
	The plug can be turned 180°. You can find further information in the operating manual.									

AA: Upon request  
B: Motor with brakes

BG: Motor size  
KG: Coupling housing

PE: Planetary gearbox  
PER: Angular gearbox

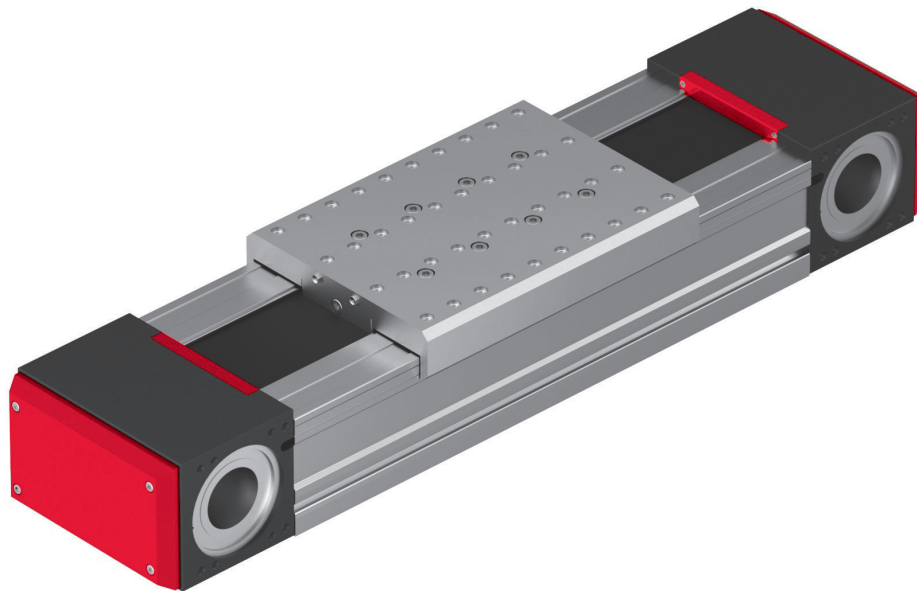
AF: Planetary gearbox, low-backlash  
AFR: Angular gearbox, low-backlash



# Portal axes PEZ & PDZ

## PDZ-200

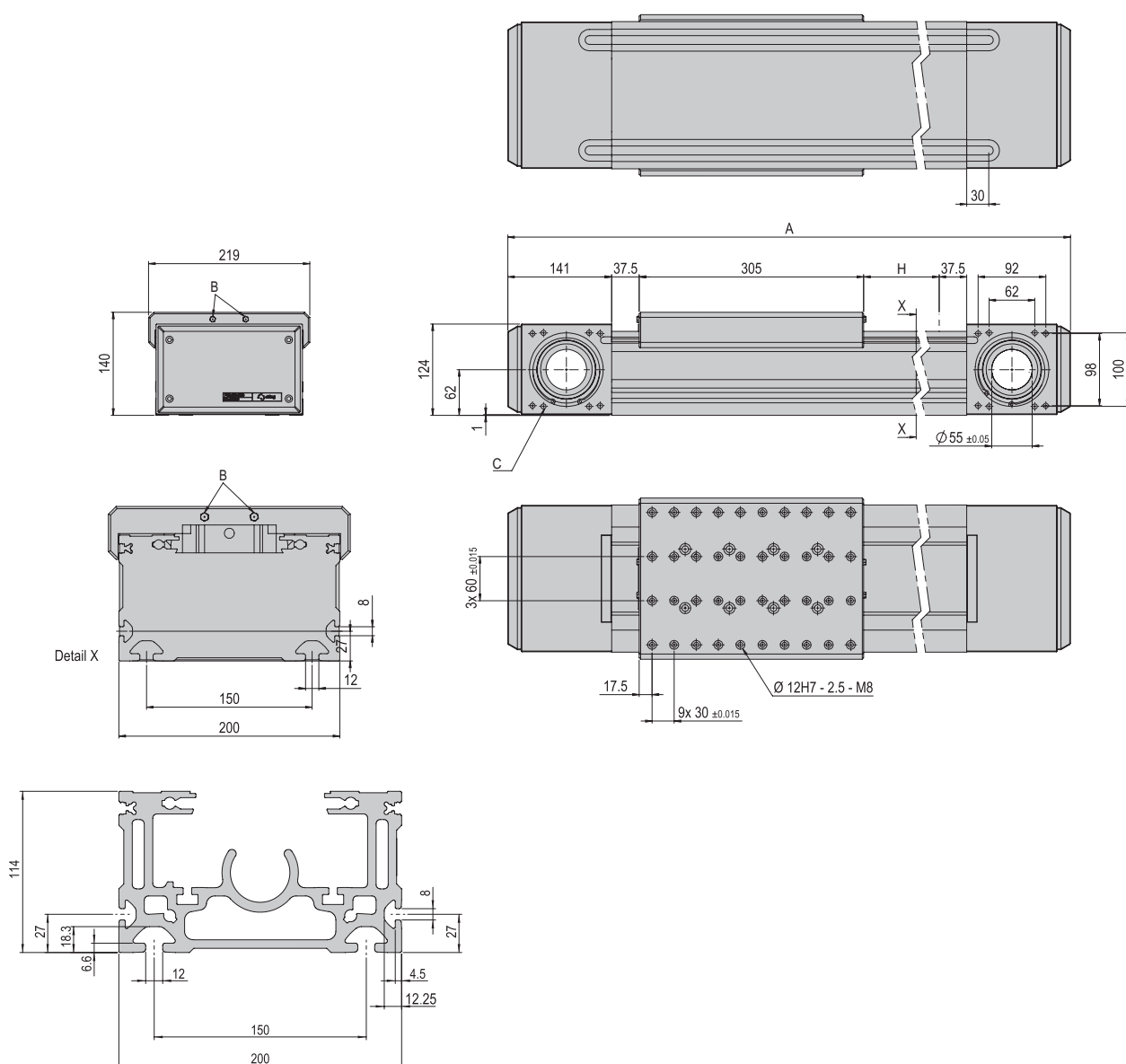
7

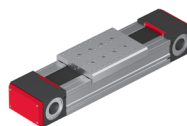


- The most rigid portal axes
- Single or double guide
- Fully symmetrical



Type	PDZ-200
A	Module length (stroke + 662) mm
B	Lubricator nipple
C	8x both sides M8
H	Module stroke xxxx mm





PDZ-200	
Operating temperature	10 - 40 °C
Storage temperature	0 - 50 °C
Humidity	< 90 %

Type	PDZ-200
<b>Order number</b>	<b>50228209</b>
Max. stroke	5260 mm
Net weight	35.6 kg (at 0 mm stroke)
Moving weight	11.8 kg
Weight/100 mm stroke	2.5 kg
Cross-section profile W x H	200 x 114 mm
Module length	H + 662 mm
Toothed belt width	100 mm
Groove size (below/side)	12/8 mm
Groove distance (below)	150 mm
Hollow shaft Ø	55 mm
Number of linear guides	2 pcs
Torque	178.3 Nm
Protection type	IP 30
Feed constant	280 mm/U
Max. speed v	*5 m/s
Max. acceleration a	*50 m/s <sup>2</sup>
Max. circumferential force	4000 N
Repeat accuracy	+/- 0.05 mm
Mounting position	

The technical data pertains to Afag standard test conditions.

Note: The mounting sets, gears, motors, controllers and cables can be found in the corresponding chapters.  
Cleanroom class ISO 14644-1, class ISO 7

\*The maximum values listed above depend on the application and must not be combined. In case of doubt, please contact your Afag partner.

### Included in the delivery

(Catalogue HT accessories)

- 1x Sensor set portal axes [p. 321]

### Accessories

- Stroke limitation PDZ-200 [p. 321]
- Load transmission unit PEZ-100/PDZ-200 [p. 318]

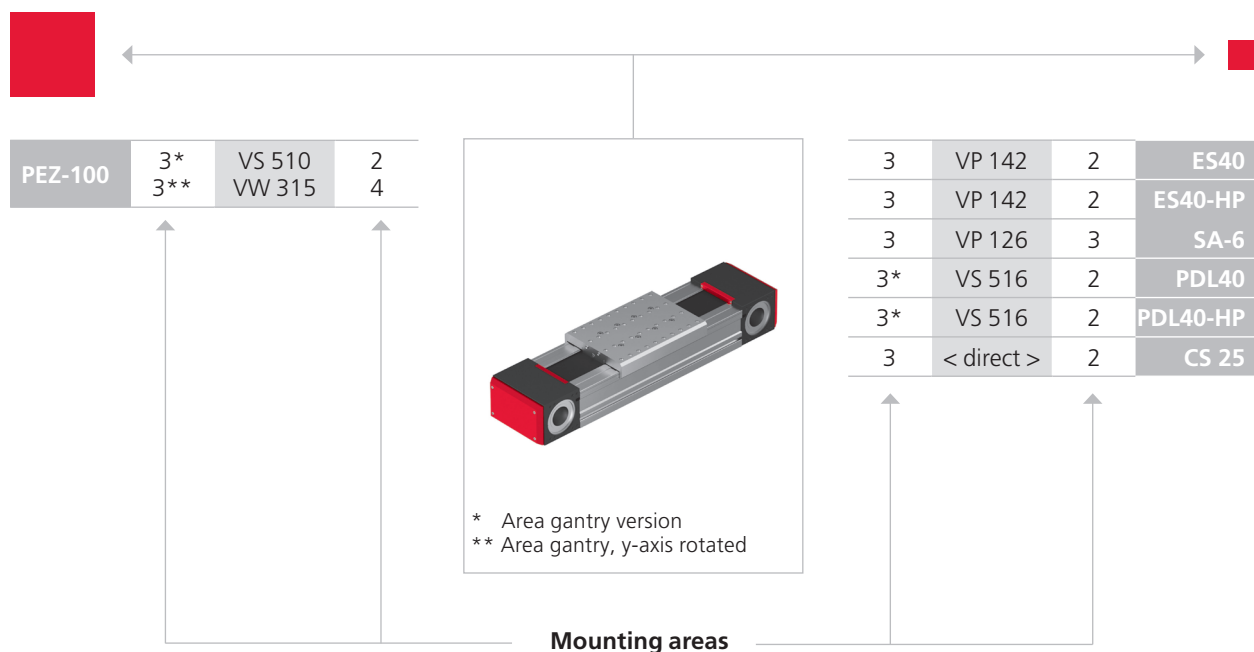
(Catalogue HT accessories)

- INI 8x4.7x16-Sn2.0-PNP-NC-M8x1
- T-nut M10
- Connecting set VS 510
- Mounting set 075
- Mounting set 090
- Mounting set 100
- Mounting set 120
- Planetary gearbox PE090
- Planetary gearbox PE120
- Planetary gearbox AF075
- Planetary gearbox AF100
- Angular gearbox PER090
- Angular gearbox PER120
- Angular gearbox AFR075
- Angular gearbox AFR100
- Servomotor-41-560VDC-2.8kW
- Servomotor-51-560VDC-5.0kW
- Servo controller SE-Power
- Servo controller E14xx

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

afag.com

Handling technology HT Components linear

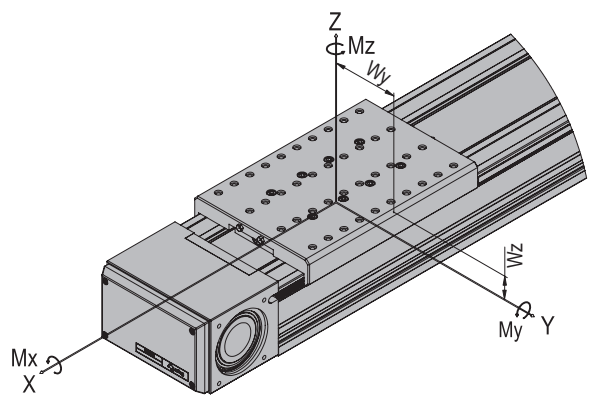


CS, ES	LM	HM	SA	UG, GM, SG, DG, PG, GE, SGE
PMP, PMP-c	PEZ, PDZ	PEL, PDL	RM, RE	CR, RM 32, RE, SREH, RA

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	PDZ-200
Max. torque Mx	500 Nm
Max. torque My	930 Nm
Max. torque Mz	930 Nm

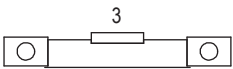


$$\frac{M_x}{M_{x \max}} + \frac{M_y}{M_{y \max}} + \frac{M_z}{M_{z \max}} < 1$$

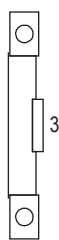
Maximum payload/type	PDZ-200
Installation position (horizontal) for mounting side 3	300 kg
Installation position (vertical) for mounting side 3	300 kg

Assembly sides module mounting

horizontal:



vertical:



Calculation of position versus time

The travel times of electrically driven gantry axis are dependent on the useful load, stroke + drive.

Our technicians will be pleased to make an optimum position/time calculation for you based on the gantry axis chosen. For being able to advise you correctly, we need the following data from you.

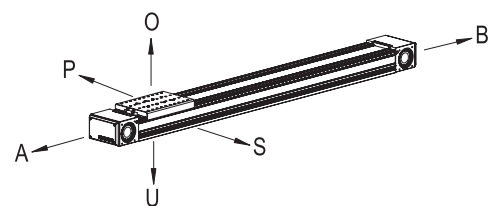
- Maximum planned stroke length
- Maximum moving mass
- Operation time desired

Order form	PDZ-200	xxxxxxxx	xxxx	xxxxxxxx	xxxxxxxx	xxxxxxxx	x	x	x
		Axis	Nominal stroke	Mounting set	Gear	Motor	Position gear	Position angular gearbox	Position motor plug.

### Coordinate system

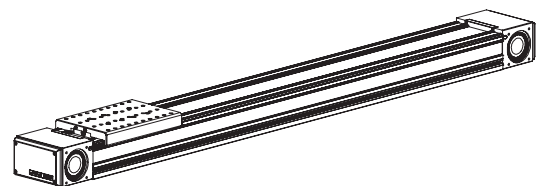
The coordinate system allows you to define the position of the gear as well as that of the motor plug.

- A = before
- B = base
- O = top
- P = left
- S = right
- U = downside



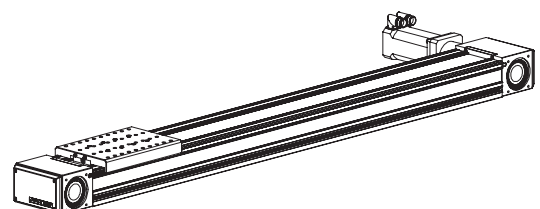
### Ordering example 1 without motor

PDZ-200	50228209	2000	x	x	x	x	x	x
---------	----------	------	---	---	---	---	---	---



### Ordering example 2 with motor

PDZ-200	50228209	2000	50254004	50467064	50245911	P	x	O
---------	----------	------	----------	----------	----------	---	---	---



### Ordering process

- Select the desired portal axis, the gear and the motor.
- Enter the corresponding red order numbers in the order form in the place of the cross.
- Enter the desired length (mm) in the field nominal stroke.
- Select the desired position of the gears as well as the position of the motor plug.
- Enter the corresponding letters from the coordinate system in the order form in the place of the cross.

### Third-party motors











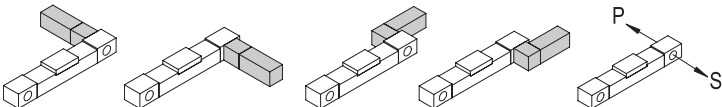
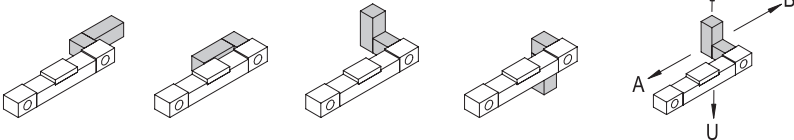
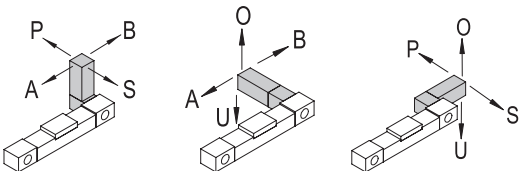
- If the mounting of a third-party motor is desired the Afag axis can be provided with a gear, including a motor adapter plate for the third-party motor.

### External controller

- Mechanical limiting values of the module must be observed (v max., a max.,...).
- The controller parametrisation is carried out by the customer.

### Legend order key

- Planetary gearbox
- Angular gearbox
- Coupling housing

Axis	PDZ-200	50228209	xxxx	xxxxxxxx	xxxxxxxx	xxxxxxxx	x	x	x	Motor and gear selection: Design by Afag	
	Axis	Nominal stroke	Mounting kit	gear	Motor	Position of gear	Assembly direction of the angular gear	Position of the motor connector			
Mounting kit/gear (1 : x)		PE	AF	PER	AFR						
											
	Mounting kit	50254001	50254003	50254001	50254003						
	1 : 5	50477903	50467061	50477915	50467073						
	1 : 7	50477904	50467062	50477916	50467074						
	1 : 10	50477905	50467063	50477917	50467075						
	Mounting kit	50254002	50254004	50254002	50254004						
	1 : 5	50477906	50467064	50477918	50467076						
	1 : 7	50477907	50467065	50477919	50467077						
	1 : 10	50477908	50467066	50477920	50467078						
Third-party motor			KG 	AA		X	X	X			
				AA		X	X	X			
Without gear				X	X	X	X	X			
Without Motor M0					X	X	X	X			
Motor/controller		Servomotor-41-560VDC-2.8kW-45-B-R-X-X	B	50495890							
		Servomotor-41-560VDC-2.8kW-45-X-R-X-X		50495889							
		Servomotor-41-560VDC-2.8kW-45-B-I-X-X	B	50485437							
		Servomotor-41-560VDC-2.8kW-45-X-I-X-X		50495888							
		Servomotor-51-560VDC-5.0kW-45-B-R-X-X	B	50495893							
		Servomotor-51-560VDC-5.0kW-45-X-R-X-X		50495892							
		Servomotor-51-560VDC-5.0kW-45-B-I-X-X	B	50485438							
		Servomotor-51-560VDC-5.0kW-45-X-I-X-X		50495891							
	Assembly	Position of gear						P S			
		Assembly direction of the angular gear						A B O U			
Position of the motor connector							A B O P S U				
The plug can be turned 180°. You can find further information in the operating manual.											

AA: Upon request  
B: Motor with brakes

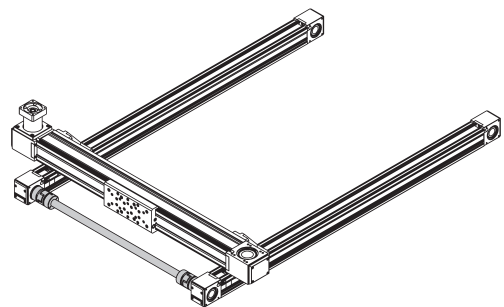
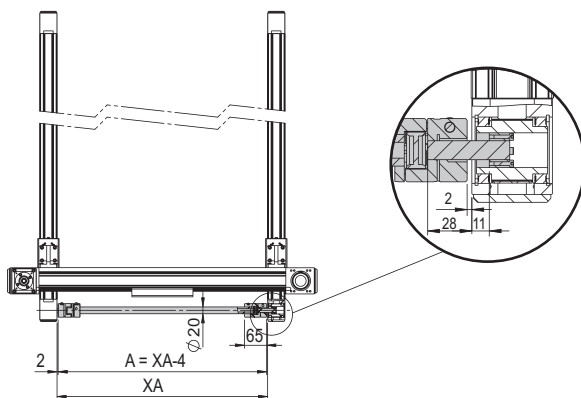
BG: Motor size  
KG: Coupling housing

PE: Planetary gearbox  
PER: Angular gearbox

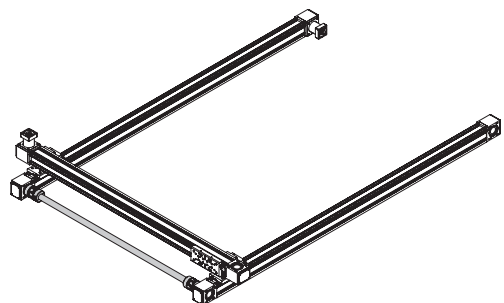
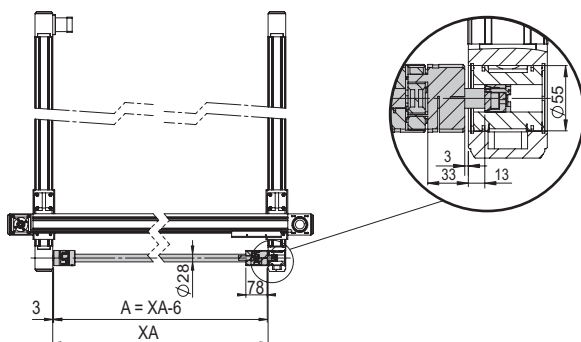
AF: Planetary gearbox, low-backlash  
AFR: Angular gearbox, low-backlash

## Accessories PEZ & PDZ

Load transmission unit PEZ-52	PEZ-52
<b>Order number</b>	<b>50396400</b>
Net weight	1.579 kg
Suitable for	PEZ-52
A	Required length in mm

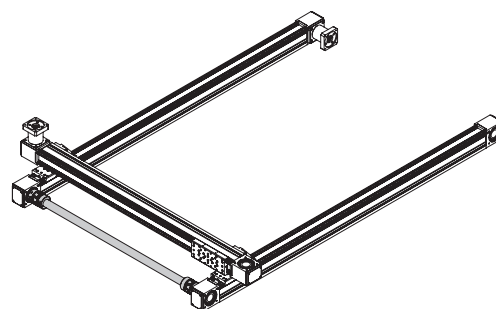
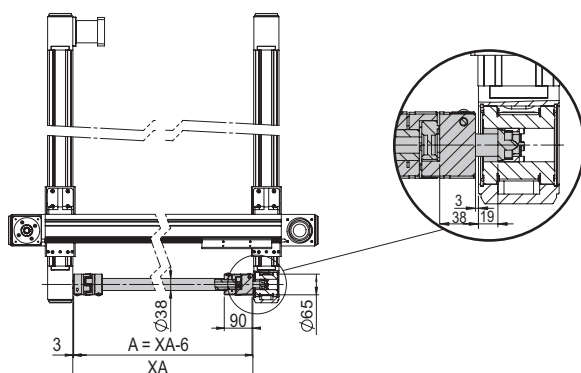


Load transmission unit PEZ-65/PDZ-128	PEZ-65 / PDZ-128
<b>Order number</b>	<b>50267101</b>
Net weight	3.276 kg
Suitable for	PEZ-65 PDZ-128
A	Required length in mm

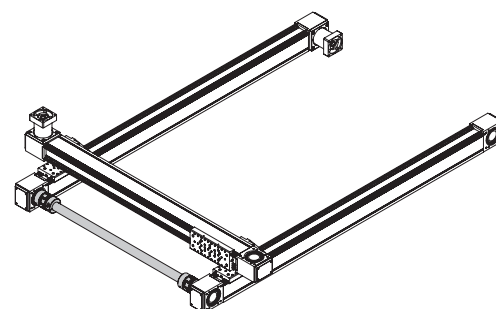
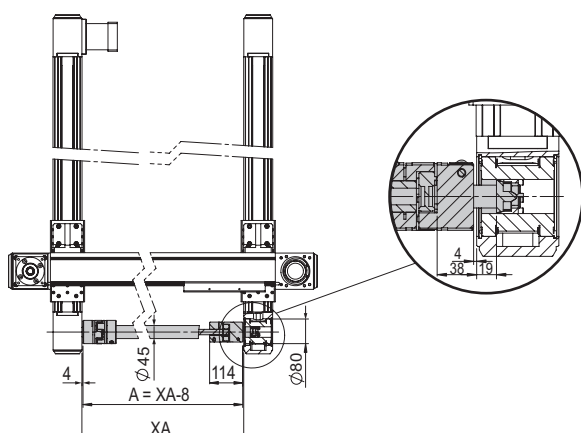


# Accessories PEZ & PDZ

Load transmission unit PEZ-80/PDZ-160		PEZ-80 / PDZ-160
<b>Order number</b>		<b>50267102</b>
Net weight		4.948 kg
Suitable for		PEZ-80 PDZ-160
A		Required length in mm



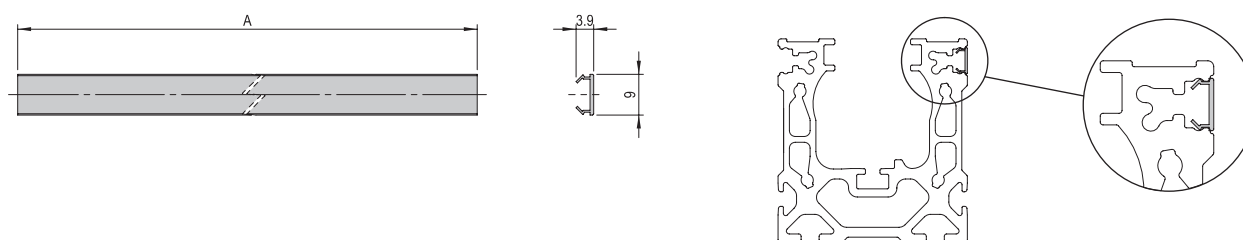
Load transmission unit PEZ-100/PDZ-200		PEZ-100 / PDZ-200
<b>Order number</b>		<b>50267103</b>
Net weight		4.85 kg
Suitable for		PEZ-100 PDZ-200
A		Required length in mm



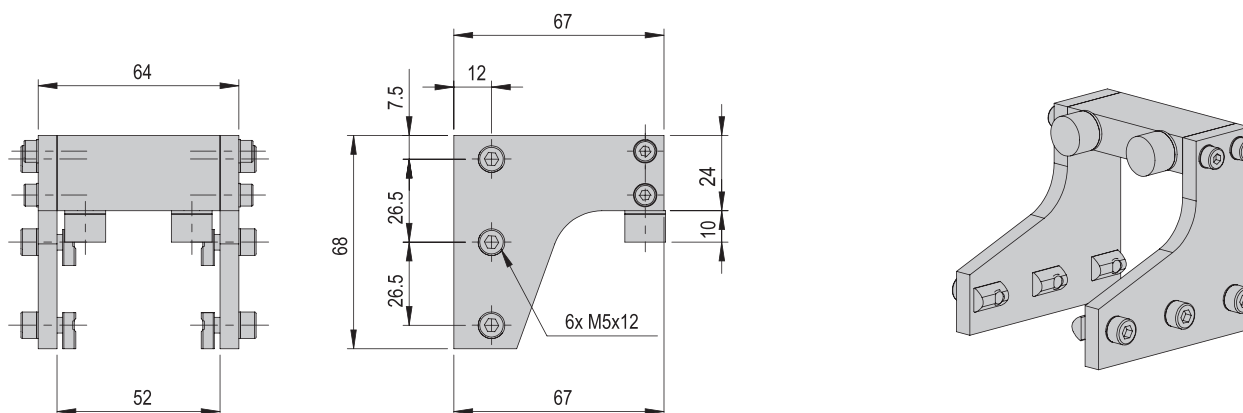


# Accessories PEZ & PDZ

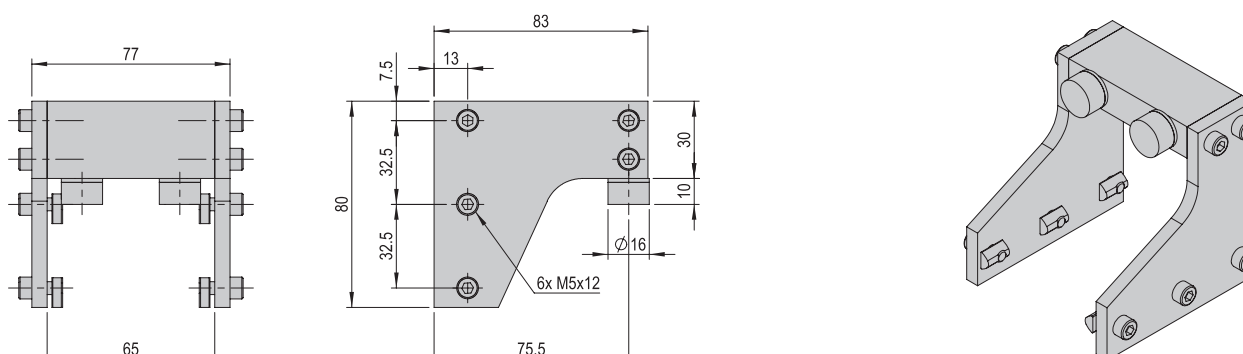
Sensor slot cover PEZ/PDZ	PEZ/PDZ
<b>Order number</b>	<b>50247660</b>
Net weight	0.011 kg
Suitable for	all PEZ and PDZ
A	Required length in mm



Stroke limitation PEZ-52	PEZ-52
<b>Order number</b>	<b>50403195</b>
Net weight	0.195 kg
Suitable for	PEZ-52

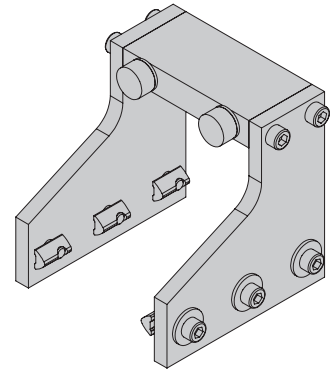
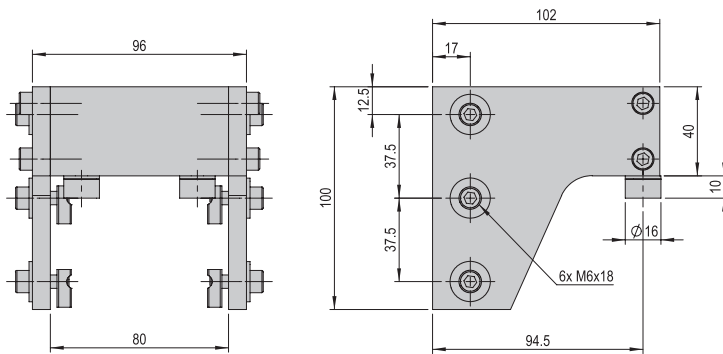


Stroke limitation PEZ-65	PEZ-65
<b>Order number</b>	<b>50281376</b>
Net weight	0.275 kg
Suitable for	PEZ-65



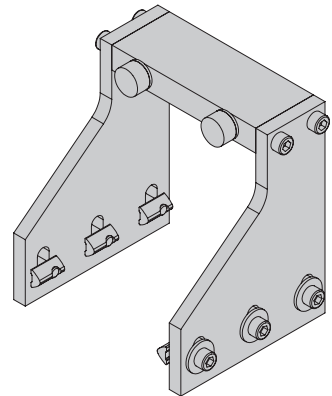
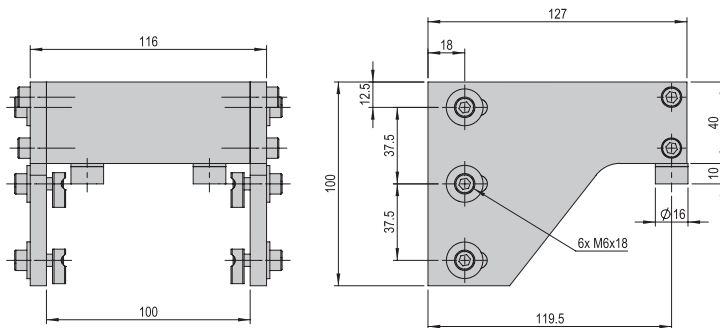
# Accessories PEZ & PDZ

Stroke limitation PEZ-80	PEZ-80
<b>Order number</b>	<b>50281045</b>
Net weight	0.542 kg
Suitable for	PEZ-80

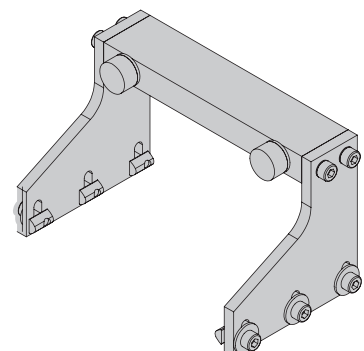
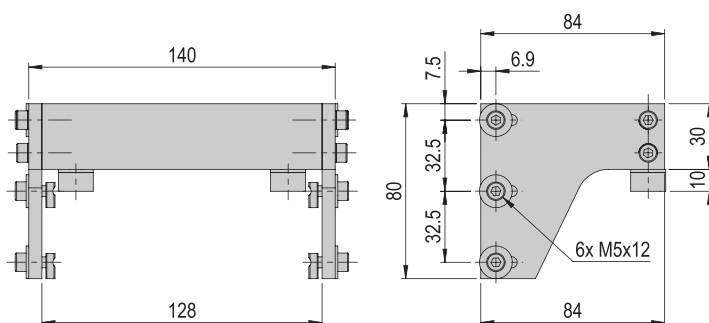


7

Stroke limitation PEZ-100	PEZ-100
<b>Order number</b>	<b>50281046</b>
Net weight	0.646 kg
Suitable for	PEZ-100

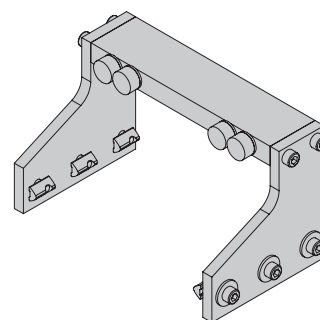
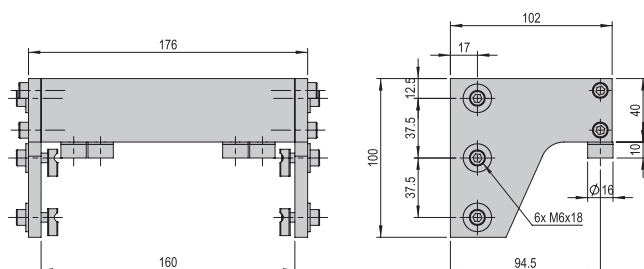


Stroke limitation PDZ-128	PDZ-128
<b>Order number</b>	<b>50403196</b>
Net weight	0.358 kg
Suitable for	PDZ-128

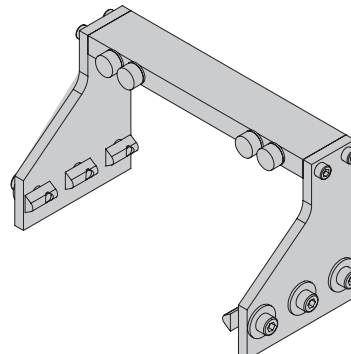
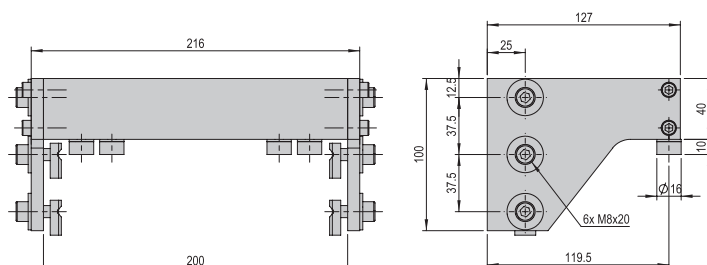


## Accessories PEZ & PDZ

Stroke limitation PDZ-160	PDZ-160
<b>Order number</b>	<b>50281047</b>
Net weight	0.675 kg
Suitable for	PDZ-160



Stroke limitation PDZ-200	PDZ-200
<b>Order number</b>	<b>50281048</b>
Net weight	0.908 kg
Suitable for	PDZ-200



Sensor set portal axes [p. 321]	Sensor-Set
<b>Order number</b>	<b>50318206</b>
Net weight	0.006 kg
Suitable for	all PEZ and PDZ

