

Omega-cantilever axes OZ

OZ-50 & OZ-60

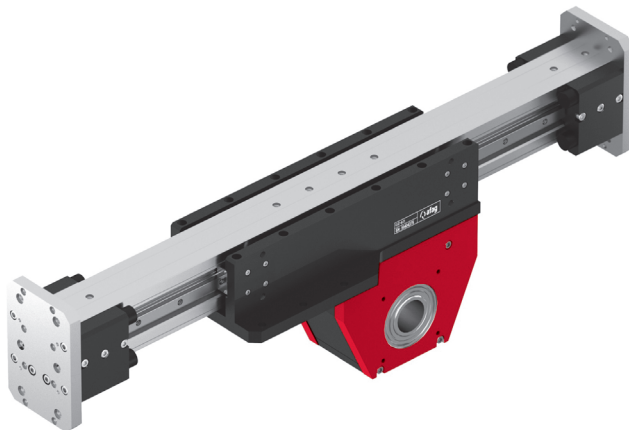
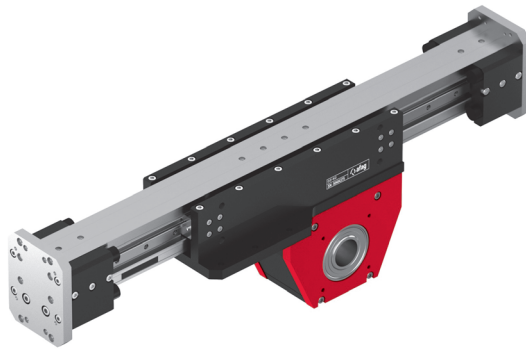
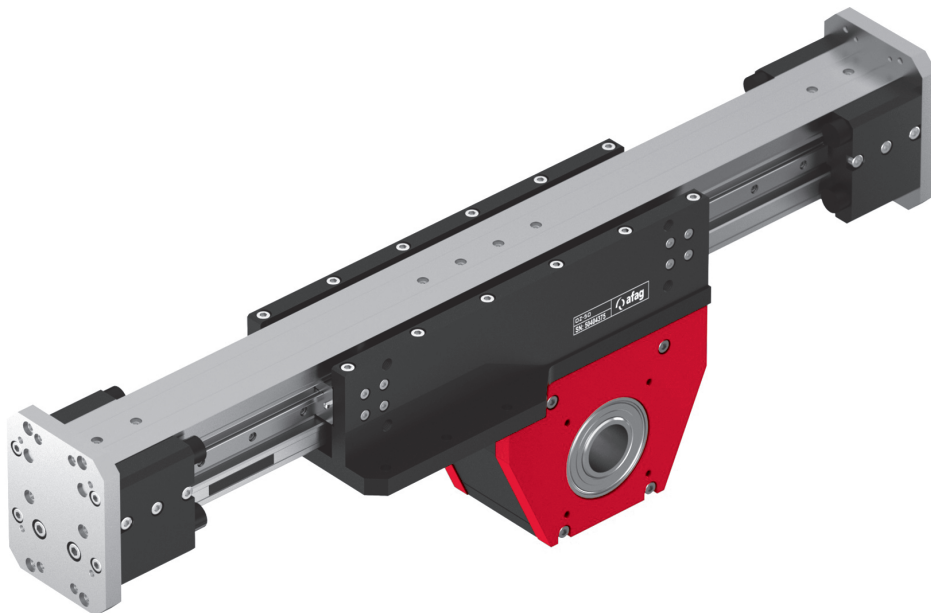


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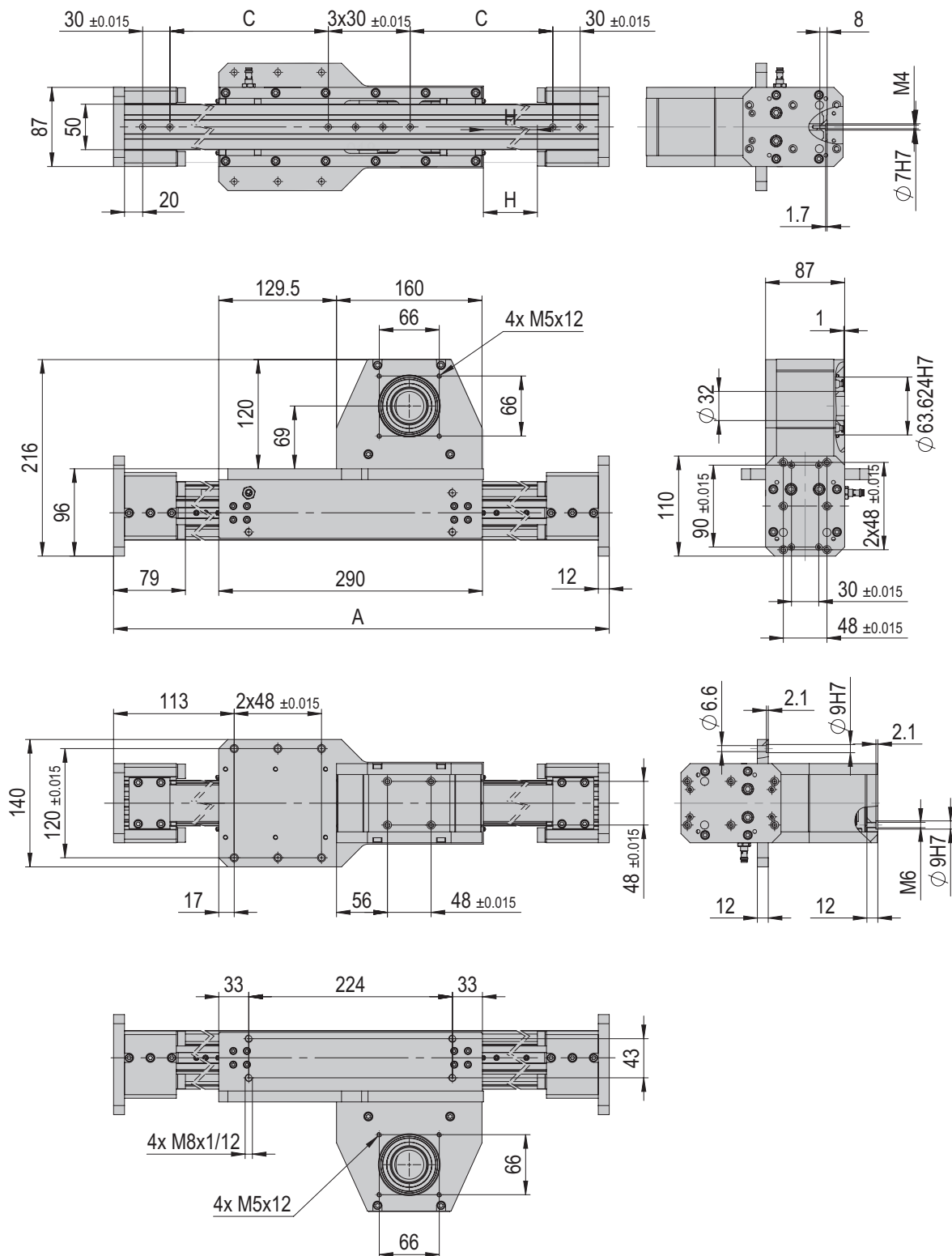
Omega-cantilever axes OZ

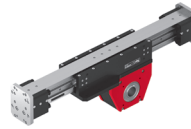
OZ-50



- Highly dynamic cantilever axis
- Simple, short cable guide
- Horizontal and vertical installation

Type	OZ-50-XXX
A	H + 482 mm
C	(H+458)/2 - 95 mm
H	100 - 820 mm





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

Type	OZ-50-XXX
Order number	50404375
Max. stroke	820 mm
Stroke increment	40 from 100 mm
Net weight	10.7 kg (at 100 mm stroke)
Moving weight at 100 mm stroke	5.6 kg
Moving weight/40 mm stroke	0.2 kg
Noise level	78 dB (A)
Torque	14.3 Nm
Protection type	IP 20
Feed constant	180 mm/U
Max. speed v	*5 m/s
Max. acceleration a	*50 m/s ²
Peak force Fx	**500 N
Repeat accuracy	+/- 0.05 mm
Mounting position	↕

The technical data pertains to Afag standard test conditions.

Note: Total weight = gross weight + motor + mounting set + gear

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.

**If Fx is exceeded, the toothed belt may jump.

Included in the delivery

(Catalogue HT accessories)

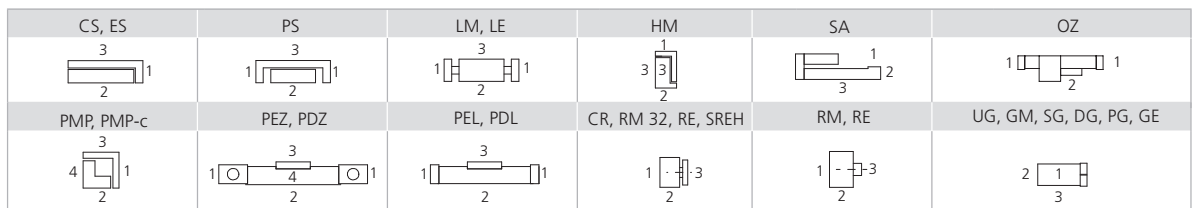
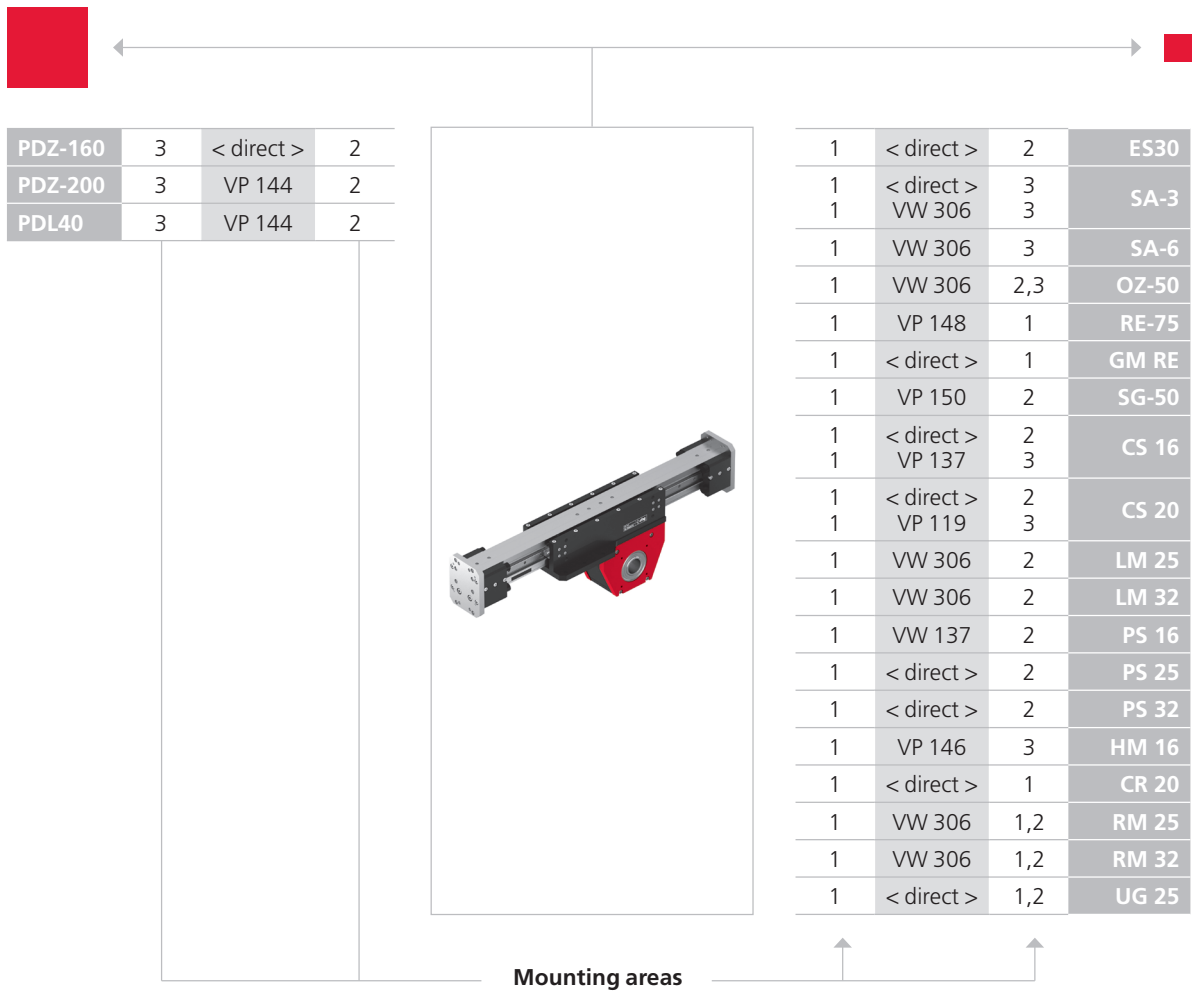
- 2x Centering bushing Ø9x4
- 4x Mounting screw M6x25

Accessories

(Catalogue HT accessories)

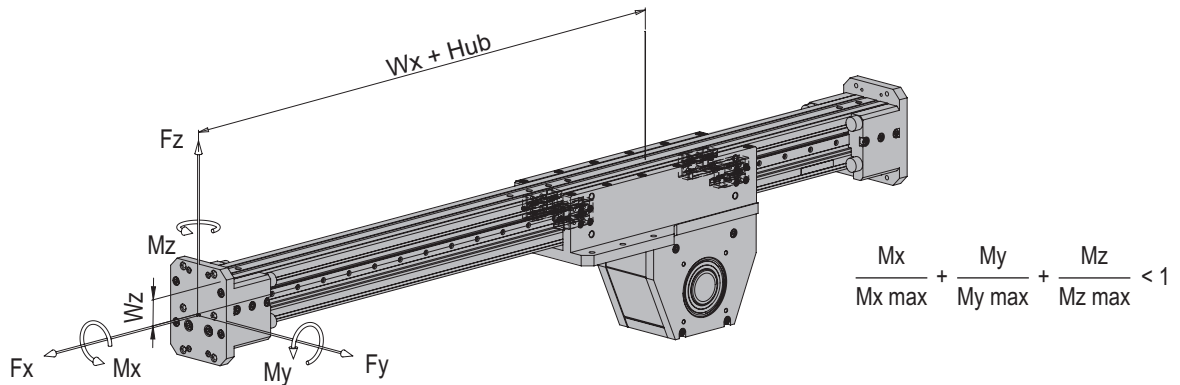
- INI d8x36-Sn2.0-PNP-NC-M8x1
- Mounting set 060
- Mounting set 070
- Planetary gearbox PE070
- Planetary gearbox AF060
- Angular gearbox PER070
- Angular gearbox AFR060
- Servomotor-31-320VDC-950W
- Servomotor-31-560VDC-950W
- Servo controller SE-Power
- Servo controller E14xx

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

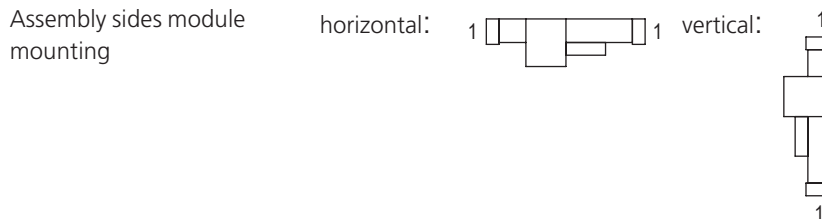


Note that there might be different mounting positions from one module to another one.
The required connection elements and the range of support columns are depicted in the catalogue HT accessories.

Type	OZ-50-XXX
Max. torque Mx	40 Nm
Max. torque My	170 Nm
Max. torque Mz	170 Nm
Effective distance Wx	262 mm
Effective distance Wy	0 mm
Effective distance Wz	30 mm
Peak force Fx	**500 N

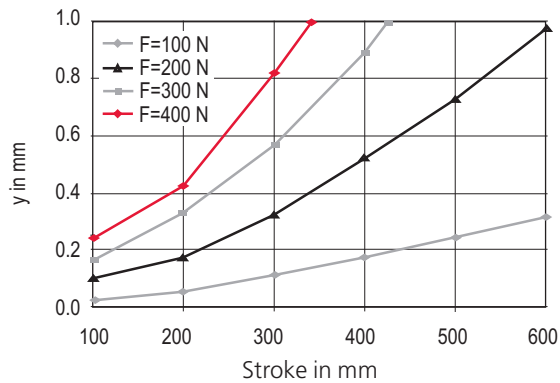


Maximum payload/type	OZ-50-XXX
Installation position (horizontal) for mounting side 1	40 kg
Installation position (vertical) for mounting side 1	40 kg

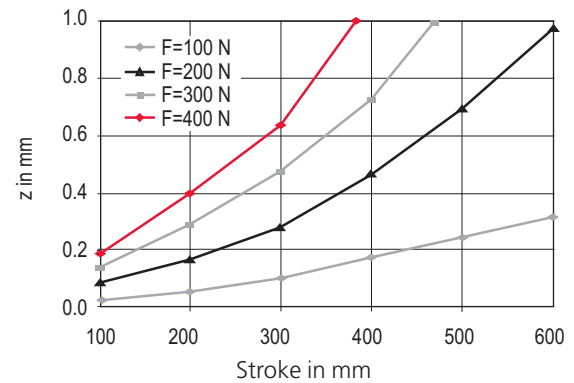


Deviation diagrams

OZ-50: Deviation Y-direction via force Fy



OZ-50: Deviation Z-direction via force Fz

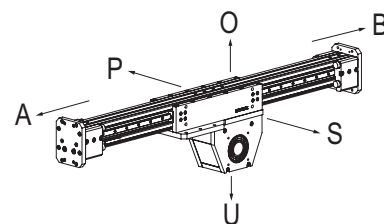


Order form	OZ-50	50404375	xxxxxxxx	xxxxxxxx	xxxxxxxx	xxxxxxxx	x	x	x
	Axis	Nominal stroke	Mounting set	Gear	Motor		Position gear	Position angular gearbox	Position motor plug.

Coordinate system

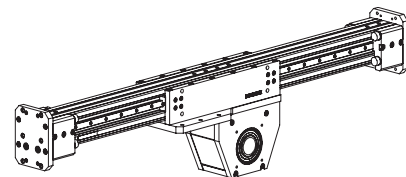
The coordinate system allows you to define the Position von gear as well as that of the motor plug.

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



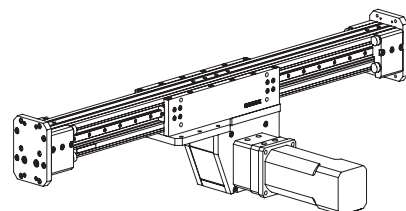
Ordering example 1 without motor

OZ-50	50404375	220	x	x	x	x	x	x
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Ordering example 2 with motor

OZ-50	50404375	220	50255204	50467058	50495887	S	x	U
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Ordering process

- Select the desired stroke length, gear and motor from the order key.
- Enter the corresponding red order numbers in the order form in the place of the cross.
- Determine the desired position of the gear and 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

OZ-50		50404375	x	x	x	x	x	x
Mounting kit/gear (1 : x)		PE	AF	PER	AFR			
	Mounting kit	50255203	50255204	50255203	50255204			
	1 : 5	50477900	50467058	50477912	50467070			
	1 : 7	50477901	50467059	50477913	50467071			
	1 : 10	50477902	50467060	50477914	50467072			
Third-party motor		KG		AA			M0	X
				AA			M0	X
	Without gear			X			X	X
Without motor		M0					X	X
Motor/controller		Servomotor-31-320VDC-950W-45-B-R-x-x	B	50503160				
		Servomotor-31-320VDC-950W-45-x-R-x-x		50503156				
	BG3	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				
Assembly	Assembly side of the gear						P S	
	Assembly direction of the angular gear						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**

E14xx SE-Power 3 kVA
SE-Power 1 kVA

AA: Upon request
B: Motor with brakes

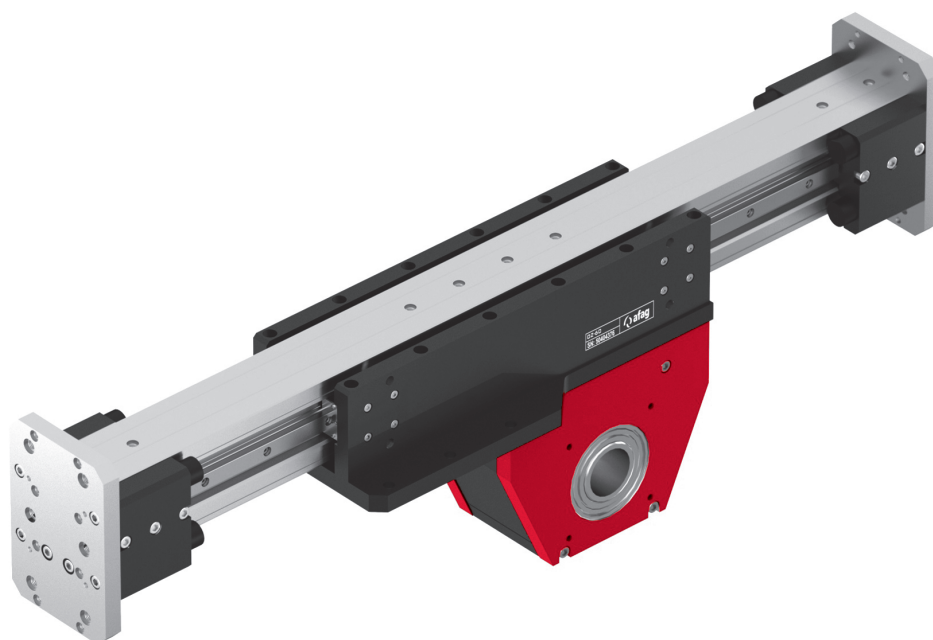
BG: Motor size
KG: Coupling housing

PE: Planetary gearbox
PER: Angular gearbox

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

Omega-cantilever axes OZ

OZ-60



- Highly dynamic cantilever axis
- Simple, short cable guide
- Horizontal and vertical installation



OZ-60	
Operating temperature	10 - 40 °C
Storage temperature	0 - 50 °C
Humidity	< 90 %

Type	OZ-60-XXX
Order number	50404376
Max. stroke	1320 mm
Stroke increment	60 from 120 mm
Net weight	20.3 kg (at 120 mm stroke)
Moving weight at 120 mm stroke	10.7 kg
Moving weight/60 mm stroke	0.5 kg
Noise level	78 dB (A)
Torque	28 Nm
Protection type	IP 20
Feed constant	220 mm/U
Max. speed v	*5 m/s
Max. acceleration a	*50 m/s ²
Peak force Fx	**800 N
Repeat accuracy	+/- 0.05 mm
Mounting position	↕

The technical data pertains to Afag standard test conditions.

Note: Total weight = gross weight + motor + mounting set + gear

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.

**If Fx is exceeded, the toothed belt may jump.

Included in the delivery

(Catalogue HT accessories)

- 2x Centering bushing Ø12x4.8
- 4x Mounting screw M8x30

Accessories

(Catalogue HT accessories)

- INI d8x36-Sn2.0-PNP-NC-M8x1
- Mounting set 075
- Mounting set 090
- Planetary gearbox PE075
- Planetary gearbox AF090
- Angular gearbox PER075
- Angular gearbox AFR090
- 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



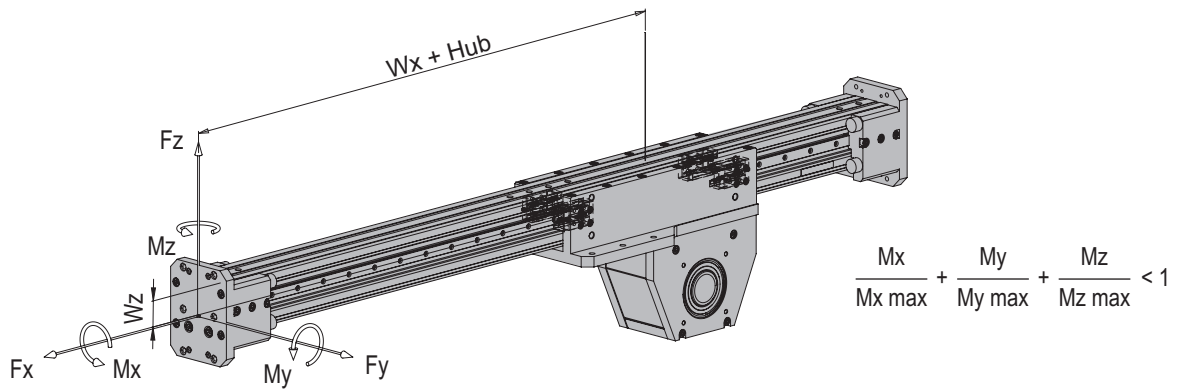
Mounting areas

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

Note that there might be different mounting positions from one module to another one.

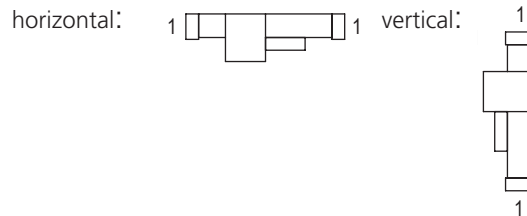
The required connection elements and the range of support columns are depicted in the catalogue HT accessories.

Type	OZ-60-XXX
Max. torque Mx	80 Nm
Max. torque My	400 Nm
Max. torque Mz	400 Nm
Effective distance Wx	315 mm
Effective distance Wy	0 mm
Effective distance Wz	37 mm
Peak force Fx	**800 N



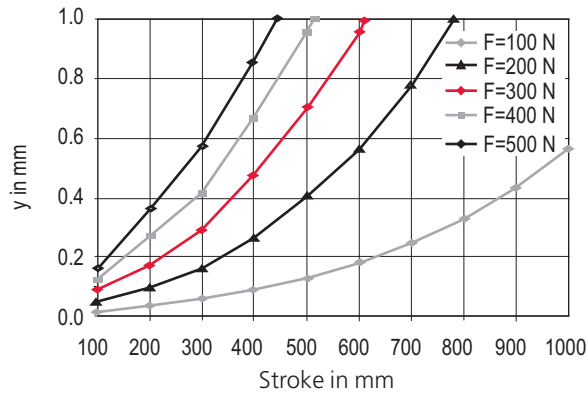
Maximum payload/type	OZ-60-XXX
Installation position (horizontal) for mounting side 1	60 kg
Installation position (vertical) for mounting side 1	60 kg

Assembly sides module mounting

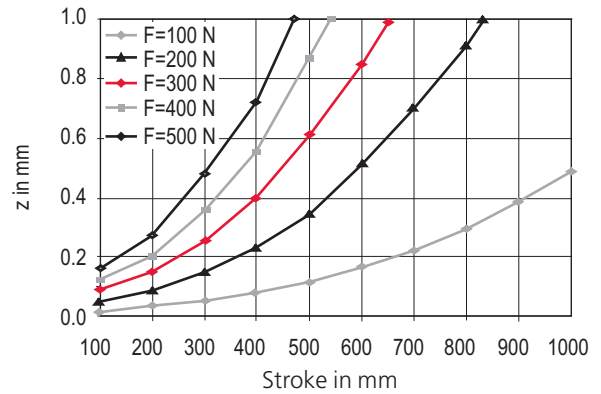


Deviation diagrams

OZ-60: Deviation Y-direction via force Fy



OZ-60: Deviation Z-direction via force Fz

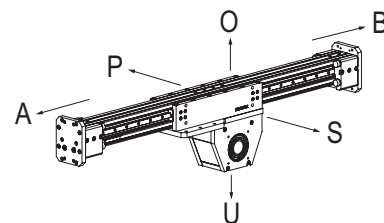


Order form	OZ-60	50404376	xxxxxxxx	xxxxxxxx	xxxxxxxx	xxxxxxxx	x	x	x
	Axis	Nominal stroke	Mounting set	Gear	Motor		Position gear	Position angular gearbox	Position motor plug.

Coordinate system

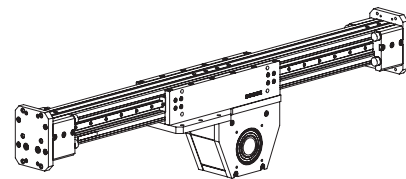
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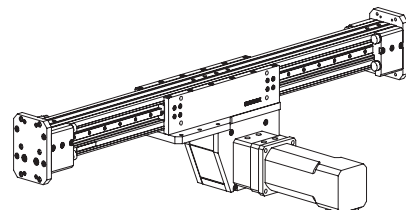
Ordering example 1 without motor

OZ-60	50404376	300	x	x	x	x	x	x
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Ordering example 2 with motor

OZ-60	50404376	300	50255205	50477903	50495890	S	x	U
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