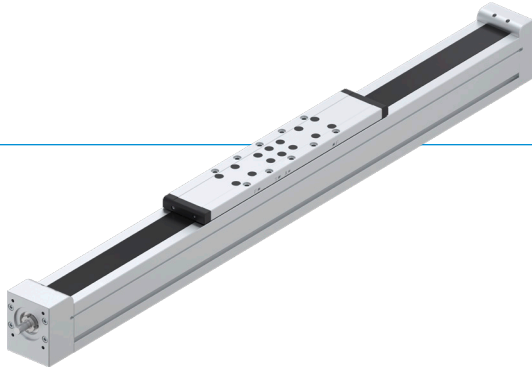


LONG-STROKE AXES

INSTALLATION SIZE AMS120

► PRODUCT ADVANTAGES



► High precision and feed forces

Ball screw axes offer exceptional accuracy and high feed forces, making them ideal for applications that require both precision and load capacity.

► Optional drivetrain

On request, we can also supply you with drive components tailored to your specific application, from couplings to motors and drive control system.

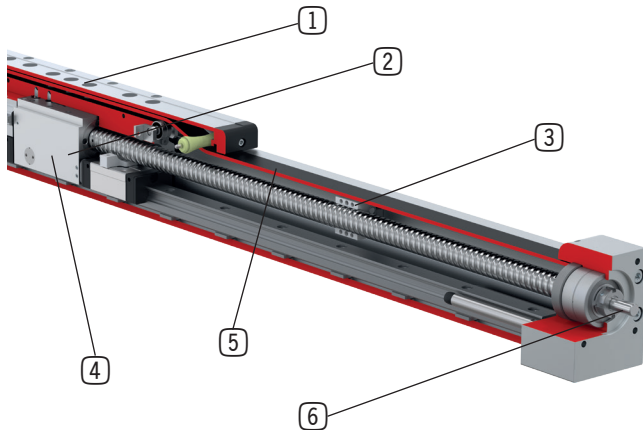
► Integrated clamping element

With an optionally integrated clamping element in NC design, ball screw axes offer high clamping forces without interference contours, which increases flexibility and safety in use.

► SERIES CHARACTERISTICS

	Series	
	AMB	AMS
 Profile rail guide	•	•
 High movement speed	•	•
 Powerful	•	•
 IP40	•	•
 Carriage lengths S/M/L	•	
 Carriage lengths S/-/L		•
 Drive (optional)	•	•
 Second carriage (optional)	•	•
 Cover strip (optional)	•	•
 Clamping integrated (optional)	•	•
 Spindle support (optional)		•
 Magnetic field sensor (optional)	•	•
 Inductive sensor (optional)	•	•

► BENEFITS IN DETAIL



1 Carriages

- two carriage lengths and up to two carriages per axis as well as threaded and centering holes for quick and reliable mounting of payloads

2 Ball screw drive

- up to four screw pitches allow for optimal adaptation of the axes to the corresponding application

3 Ball screw support (optional)

- effectively prevents the spindle from vibrating
- maximum movement speeds even with long strokes

4 Clamping element (optional)

- perfectly integrated for additional safety
- high holding forces thanks to NC design

5 Cover strip (optional)

- ensures reliable protection and maximizes service life

6 Drivetrain (optional)

- including a complete drivetrain with adapter plates, motors, drive control system and other accessories on request

► TECHNICAL DATA INSTALLATION SIZES

LONG-STROKE AXES WITH BALL SCREW DRIVE

Installation size	Max. stroke [mm]	Max. speed [m/s]	Max. acceleration [m/s ²]	Holding force [N]
AMS040	900	0,5	30	-
AMS060	1.970	1,5	30	250
AMS080	2.100	2	30	500
AMS120	2.300	3,2	30	1.000

► FURTHER INFORMATION IS AVAILABLE ONLINE

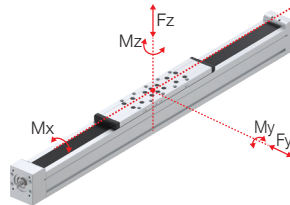


All information just a click away at: www.zimmer-group.com. Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product. Quick, clear and always up-to-date.

▶ PRODUCT SPECIFICATIONS



▶ Forces and moments



▶ Load data

Service life reference value:
10.000 km

Carriage length	S	L
Fy [N]	11.770	11.770
Fz [N]	11.770	11.770
Mx [Nm]	118	118
My [Nm]	1.750	2.930
Mz [Nm]	1.322	2.209

▶ RECOMMENDED ACCESSORIES



SENSORS



ZUB188454
Magnetic field sensor
incl. mounting bracket



CONNECTIONS / OTHER



CNOR02220
T-nuts size 8 / M5



CPRO01348
T-nuts size 8 / M6



CNOR03044
T-nuts size 8 / M8



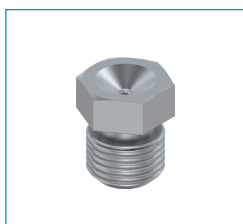
030529
Centering disc



ZUB187819
Clamping claws incl. screws



C71412061009
Tapered grease nipple



CNOR02558
Hopper grease nipple

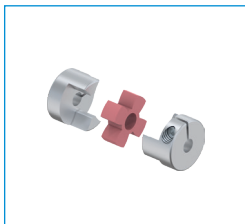


GVM5
Pneumatic fitting straight



WVM5
Angled pneumatic fitting

► RECOMMENDED ACCESSORY DRIVE*



Couplings



Motors



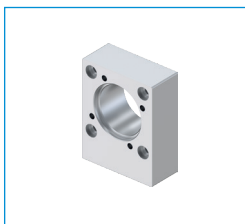
Cables



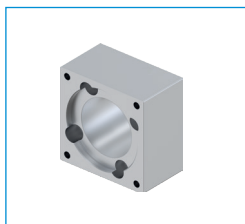
Braking resistance



Drive control system



Coupling housing



Adapter plate for motors

*For further information, please contact your Zimmer Group contact person.

► TECHNICAL DATA

	► Technical data	
	Carriage length S	Carriage length L
Profile width [mm]	120	120
Max. stroke [mm]	2.300	2.100
Stroke reserve [mm]	15	15
Spindle diameter [mm]	31	31
Spindle pitches [mm]	10/20/32/64	10/20/32/64
Spindle supports	optional	optional
Carriage length without cover strip [mm]	440	640
Carriage length with cover strip [mm]	606	806
Max. speed [m/s]	3,2	3,2
Max. acceleration [m/s ²]	30	30
Service life reference value [km]	10.000	10.000
F _y max. [N]	11.770	11.770
F _z max. [N]	11.770	11.770
Dyn. load rating linear guideway [N]	40.500	40.500
Stat. load rating of linear guideway [N]	53.700	53.700
Dyn. load rating ball screw [N]	54.700/53.900/22.100/17.300	54.700/53.900/22.100/17.300
Stat. load rating ball screw [N]	99.700/95.100/35.400/26.300	99.700/95.100/35.400/26.300
Moment M _x max. [Nm]	118	118
Moment M _y max. [Nm]	1.750	2.930
Moment M _z max. [Nm]	1.322	2.209
Typical payload [kg]	120	120
Distance top edge of slide - center of guide [mm]	117,70	117,70
Repeatability [mm]	+/- 0,02	+/- 0,02
Operating temperature [°C]	5 ... +60	5 ... +60
Maximum feed force [N]	8.810/9.830/4.115/1.605	8.810/9.830/4.115/1.605
Maximum torque [Nm]	14,0/31,3/21,0/16,3	14,0/31,3/21,0/16,3
Static holding force of clamping element [N]	800-1.000	800-1.000
Operating pressure of clamping element standard/LP version [bar]	5,5-6,5 / 4,0-6,5	5,5-6,5 / 4,0-6,5
Number of clamping cycles	5.000.000	5.000.000
Additional weight clamping element [kg]	1,20	1,20
Mass of the carriage [kg]	11,13	12,50
Additional weight cover strip deflection [kg]	0,82	0,82
Mass of second carriage [kg]	7,34	8,71
Mass at zero stroke [kg]	25,88	31,21
Mass per 1 m stroke [kg]	27,66	27,66
Protection class according to IEC60529 (without / with cover strip)	IP20 / IP40	IP20 / IP40

TECHNICAL DRAWING

- ① Fastening linear cylinder
- ③ Fastening customer application
- ⑥ Mounting groove for magnetic field sensor
- ⑧ Fixing for adapter plate
- ⑪ Stroke
- ⑲ Lubrication for ball screw
- ⑳ Lubrication for linear guide
- ㉑ Groove for clamping claws
- ㉒ Fastening switch lug
- ㉓ Minimum distance between carriages
- ㉔ Energy supply clamping element

