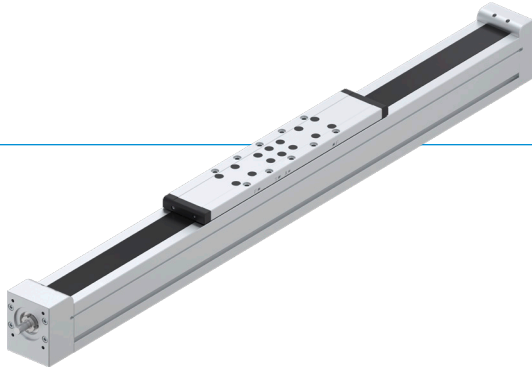


LONG-STROKE AXES

INSTALLATION SIZE AMS080

► 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.

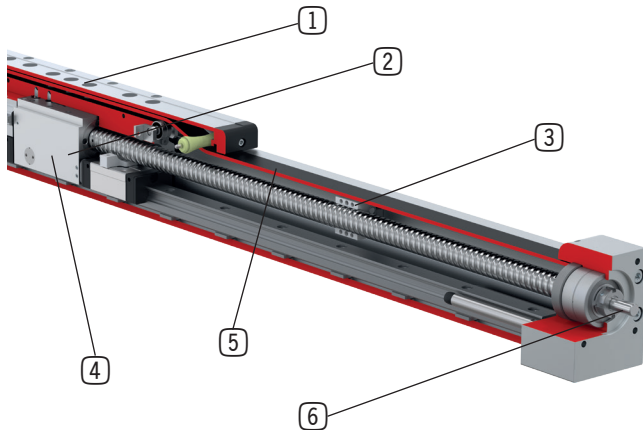
► Integrated clamping element

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

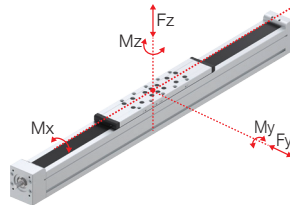


All information just a click away at: www.zimmer-group.com. Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product. Quick, clear and always up-to-date.

▶ PRODUCT SPECIFICATIONS



▶ Forces and moments



▶ Load data

Service life reference value:
10.000 km

Carriage length	S	L
Fy [N]	5.755	5.755
Fz [N]	4.715	4.715
Mx [Nm]	44	44
My [Nm]	515	875
Mz [Nm]	350	595

▶ 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



019280

Centering disc



ZUB187819

Clamping claws incl. screws



C71412061009

Tapered grease nipple



CNOR02558

Hopper grease nipple



GVM5

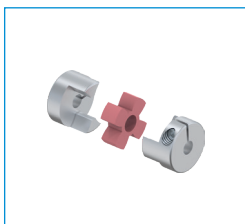
Pneumatic fitting straight



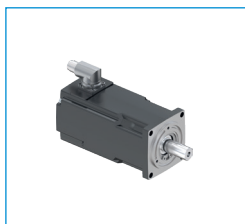
WVM5

Angled pneumatic fitting

► RECOMMENDED ACCESSORY DRIVE*



Couplings



Motors



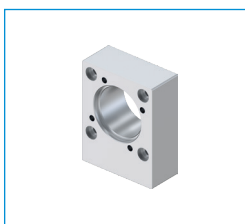
Cables



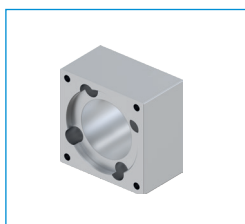
Braking resistance



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]	80	80
Max. stroke [mm]	2.100	1.970
Stroke reserve [mm]	15	15
Spindle diameter [mm]	20	20
Spindle pitches [mm]	5/10/20/40	5/10/20/40
Spindle supports	optional	optional
Carriage length without cover strip [mm]	284	410
Carriage length with cover strip [mm]	414	540
Max. speed [m/s]	2	2
Max. acceleration [m/s ²]	30	30
Service life reference value [km]	10.000	10.000
F _y max. [N]	5.755	5.755
F _z max. [N]	4.715	4.715
Dyn. load rating linear guideway [N]	19.800	19.800
Stat. load rating of linear guideway [N]	27.400	27.400
Dyn. load rating ball screw [N]	20.700/14.000/13.200/6.800	20.700/14.000/13.200/6.800
Stat. load rating ball screw [N]	37.900/25.000/23.300/10.400	37.900/25.000/23.300/10.400
Moment M _x max. [Nm]	44	44
Moment M _y max. [Nm]	515	875
Moment M _z max. [Nm]	350	595
Typical payload [kg]	60	60
Distance top edge of slide - center of guide [mm]	74,80	74,80
Repeatability [mm]	+/- 0,02	+/- 0,02
Operating temperature [°C]	5 ... +60	5 ... +60
Maximum feed force [N]	3.440/2.270/2.405/1.210	3.440/2.270/2.405/1.210
Maximum torque [Nm]	2,7/3,6/7,7/7,7	2,7/3,6/7,7/7,7
Static holding force of clamping element [N]	320-500	320-500
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]	0,46	0,46
Mass of the carriage [kg]	3,13	3,50
Additional weight cover strip deflection [kg]	0,28	0,28
Mass of second carriage [kg]	2,04	2,44
Mass at zero stroke [kg]	8,52	10,22
Mass per 1 m stroke [kg]	17,75	17,75
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

