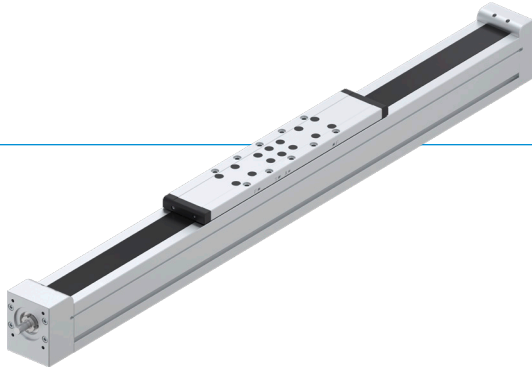


LONG-STROKE AXES

INSTALLATION SIZE AMS040

► 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.

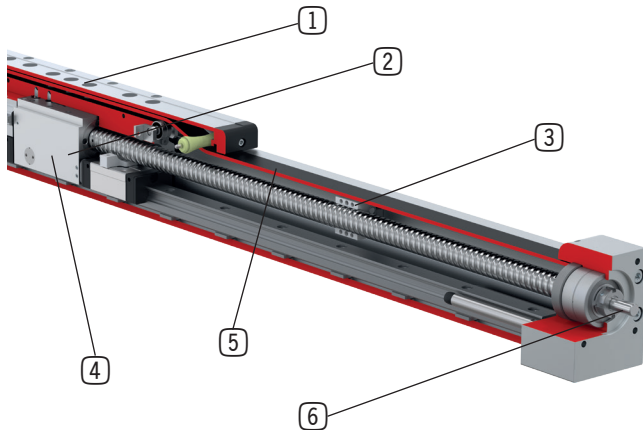
► Integrated clamping element

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) | • | • |
|  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

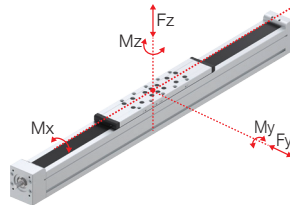


All information just a click away at: www.zimmer-group.com. Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product. Quick, clear and always up-to-date.

▶ PRODUCT SPECIFICATIONS



▶ Forces and moments



▶ Load data

Service life reference value:
10.000 km

| Carriage length | S | L |
|-----------------|-------|-------|
| Fy [N] | 1.105 | 1.105 |
| Fz [N] | 1.240 | 1.240 |
| Mx [Nm] | 9 | 9 |
| My [Nm] | 95 | 127 |
| Mz [Nm] | 43 | 57 |

▶ RECOMMENDED ACCESSORIES



SENSORS



ZUB188454

Magnetic field sensor
incl. mounting bracket



CONNECTIONS / OTHER



CNOR00094

T-nuts size 5 / M4



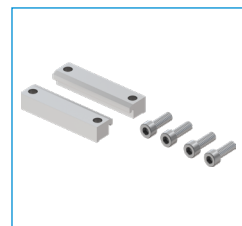
CNOR00099

T-nuts size 5 / M5



DST40800

Centering disc



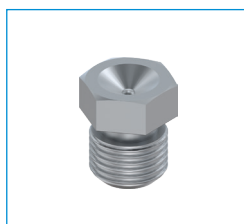
ZUB187816

Clamping claws incl. screws



C71412061009

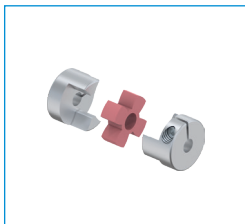
Tapered grease nipple



CNOR02558

Hopper grease nipple

► RECOMMENDED ACCESSORY DRIVE*



Couplings



Motors



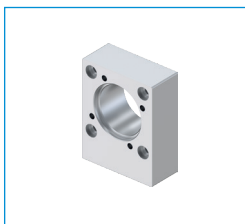
Cables



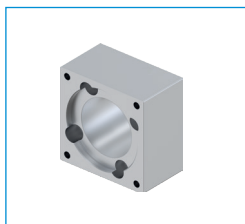
Braking resistance



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] | 40 | 40 |
| Max. stroke [mm] | 900 | 860 |
| Stroke reserve [mm] | 15 | 15 |
| Spindle diameter [mm] | 12 | 12 |
| Spindle pitches [mm] | 5/10 | 5/10 |
| Spindle supports | - | - |
| Carriage length without cover strip [mm] | 180 | 220 |
| Carriage length with cover strip [mm] | 290 | 330 |
| Max. speed [m/s] | 0,5 | 0,5 |
| Max. acceleration [m/s ²] | 30 | 30 |
| Service life reference value [km] | 10.000 | 10.000 |
| F _y max. [N] | 1.105 | 1.105 |
| F _z max. [N] | 1.240 | 1.240 |
| Dyn. load rating linear guideway [N] | 5.590 | 5.590 |
| Stat. load rating of linear guideway [N] | 6.780 | 6.780 |
| Dyn. load rating ball screw [N] | 5.000/3.300 | 5.000/3.300 |
| Stat. load rating ball screw [N] | 7.000/4.250 | 7.000/4.250 |
| Moment M _x max. [Nm] | 9 | 9 |
| Moment M _y max. [Nm] | 95 | 127 |
| Moment M _z max. [Nm] | 43 | 57 |
| Typical payload [kg] | 10 | 10 |
| Distance top edge of slide - center of guide [mm] | 45,40 | 45,40 |
| Repeatability [mm] | +/- 0,02 | +/- 0,02 |
| Operating temperature [°C] | 5 ... +60 | 5 ... +60 |
| Maximum feed force [N] | 840/690 | 840/690 |
| Maximum torque [Nm] | 0,7/1,1 | 0,7/1,1 |
| Static holding force of clamping element [N] | - | - |
| Operating pressure of clamping element standard/LP version [bar] | - | - |
| Number of clamping cycles | - | - |
| Additional weight clamping element [kg] | - | - |
| Mass of the carriage [kg] | 0,66 | 0,69 |
| Additional weight cover strip deflection [kg] | 0,10 | 0,10 |
| Mass of second carriage [kg] | 0,46 | 0,49 |
| Mass at zero stroke [kg] | 1,89 | 2,13 |
| Mass per 1 m stroke [kg] | 4,18 | 4,18 |
| 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

