



## Long-stroke axes

AMB series  
AMS series

THE KNOW-HOW FACTORY

# LONG-STROKE AXES AT A GLANCE

## LINEAR DRIVE FOR YOUR HANDLING PROCESSES

### PRECISION, DYNAMICS AND SPEED

Long-stroke axes are essential components in automation technology and offer reliable solutions for precise linear movements over long distances. Ball screw axes and toothed belt axes have proven particularly effective in this area.

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

In contrast, toothed belt axes excel with high dynamics and speed, making them perfectly suited for fast motion sequences and large working ranges. Discover the advantages of both axes types and learn how to take your production efficiency to a new level with the AMS and AMB series.

### OUR EXPERTISE – YOUR ADVANTAGES

#### High forces and moments

The optimized axis profile, in combination with the integrated guide rail, enables maximum absorption of forces and moments.

#### Optional drive train

On request, including a drive train consisting of a clutch, gearbox, motor, drive control system and other accessories.

#### Maximum movement speeds

The optional spindle support enables high speeds and thus smooth high feed rates, even with long strokes.

#### Short cycle times

Maximum speeds of up to 5 m/s and acceleration of up to 50 m/s<sup>2</sup> are possible.

#### Integrated clamping element

The optional clamping element allows high clamping forces without interference contours or larger design lengths.

### SIMPLE CONFIGURATION

Numerous customized options ensure that your specific needs and requirements are optimally met.

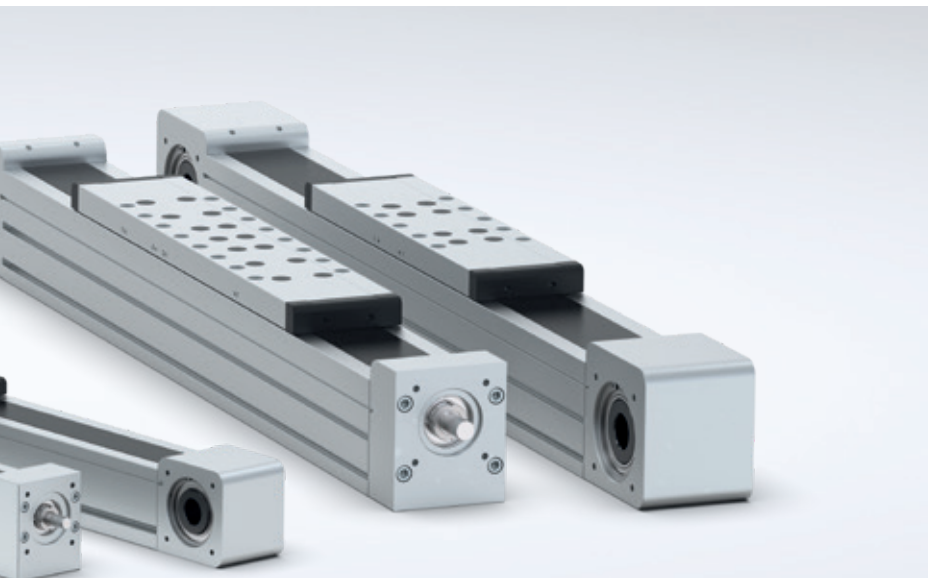


## LONG-STROKE AXES WITH TOOTHED BELT DRIVE

Installation size	Max. stroke [mm]	Max. speed [m/s]	Max. acceleration [m/s <sup>2</sup> ]	Holding force [N]
AMB040	1,810	4	50	-
AMB060	5,670	5	50	400
AMB080	5,610	5	50	650
AMB120	5,550	5	50	1,200

## LONG-STROKE AXES WITH BALL SCREW DRIVE

Installation size	Max. stroke [mm]	Max. speed [m/s]	Max. acceleration [m/s <sup>2</sup> ]	Max. 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



**WHEN HIGH STANDARDS  
ARE NO LONGER ENOUGH**

Contact our sales team for additional information and a customized offer.



Toothed belt drive from the AMB series



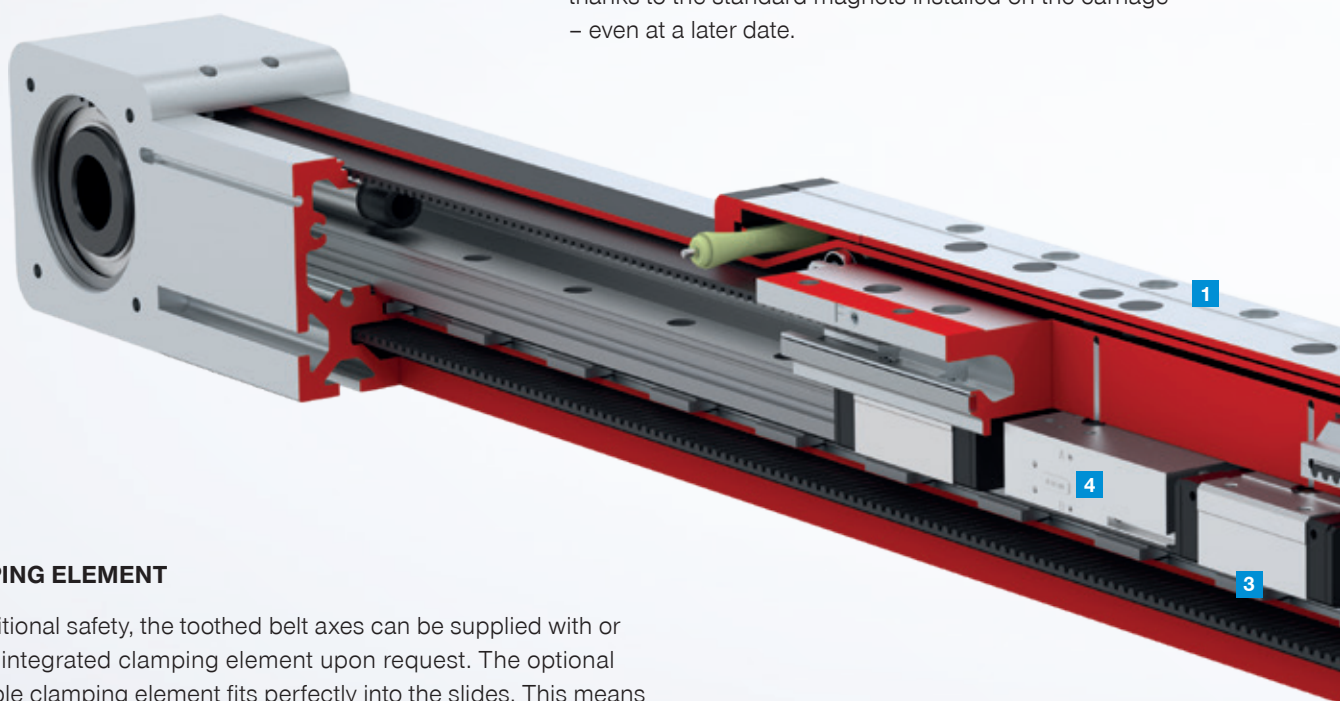
Ball screw drive from the AMS series

# LONG-STROKE AXES WITH TOOTHED BELT DRIVE

## THE AMB SERIES IN DETAIL

### 1 CARRIAGES

The AMB series features three carriage lengths and up to two carriages per axis, which can reliably handle high payloads. Numerous threads with centering sleeves and locating holes help to ensure reproducible mounting. Optional magnetic field sensors can be easily integrated thanks to the standard magnets installed on the carriage – even at a later date.



### 4 CLAMPING ELEMENT

For additional safety, the toothed belt axes can be supplied with or without integrated clamping element upon request. The optional selectable clamping element fits perfectly into the slides. This means that there are no interference contours or increases in the overall length. Thanks to the NC design, the position can be held securely without compressed air - this saves energy and costs.

### 5 COVER STRIP AND DEFLECTOR

The optionally available cover strip reliably protects the interior of the axis from external influences and helps to maximize its service life. It locks into the axis profile, sealing it securely against dust and dirt and holding it reliably in position.

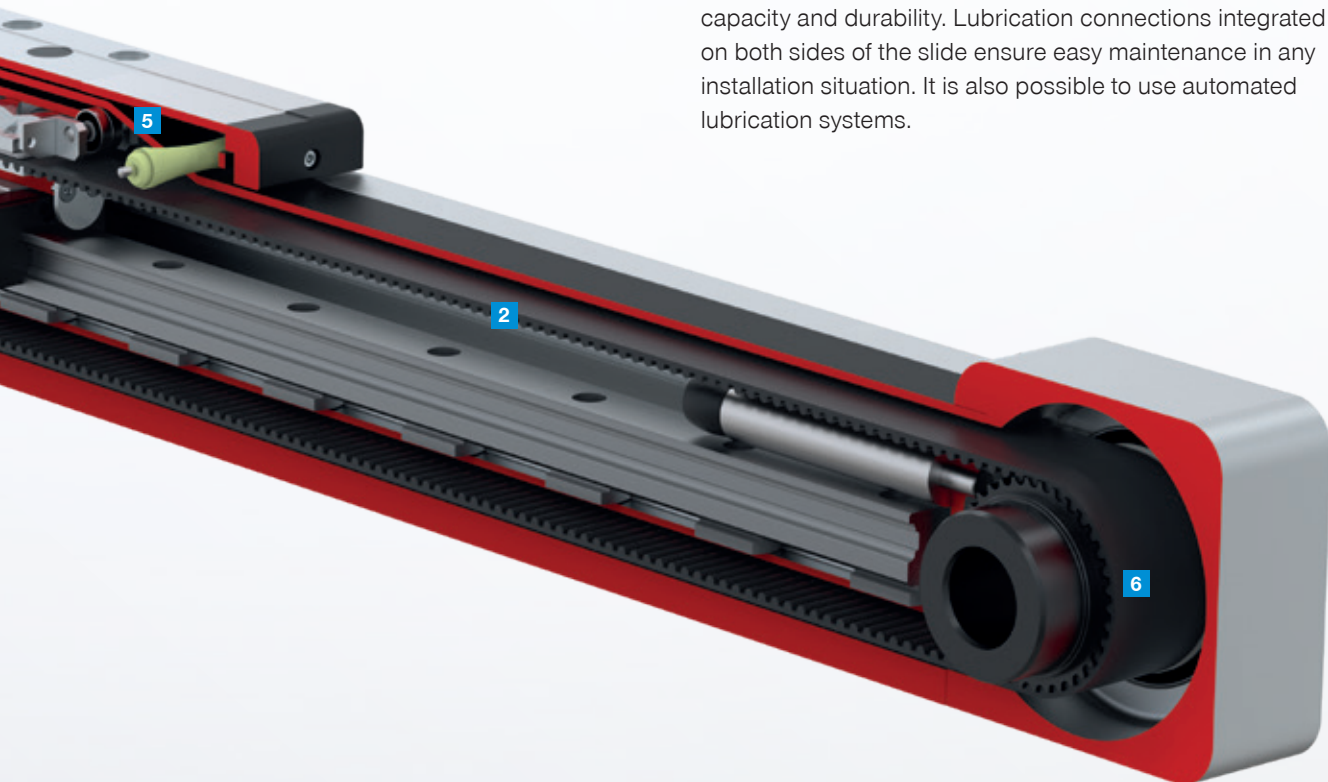
## 2 TOOTHED BELT DRIVE

Designed for maximum speeds and acceleration levels, the long-stroke axes with toothed belt drive are particularly well-suited for applications that require high dynamics, short cycle times and a large stroke. They also excel in terms of drive torque and high skip-proofing.



## 3 GUIDANCE SYSTEM

The recirculating ball bearing guide provides unrivaled load capacity and durability. Lubrication connections integrated on both sides of the slide ensure easy maintenance in any installation situation. It is also possible to use automated lubrication systems.



## 6 DRIVETRAIN

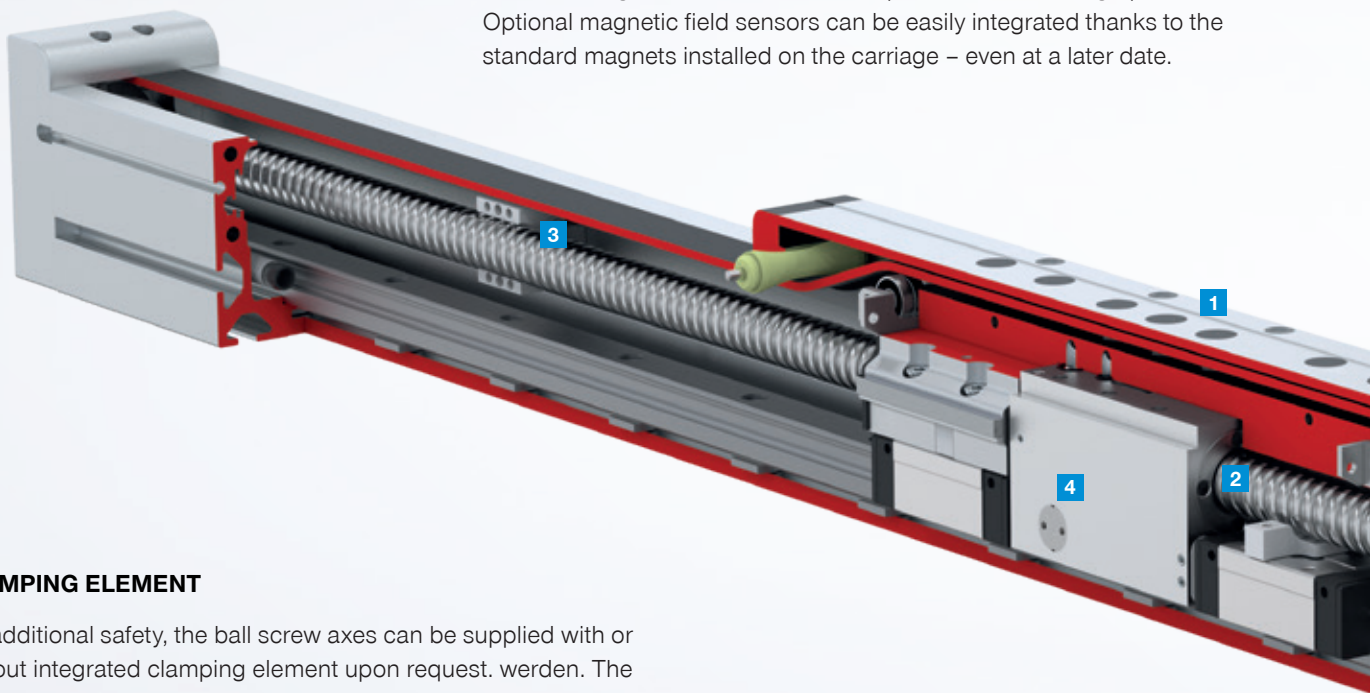
The long-stroke axis with toothed belt drive from the AMB series can optionally be supplied with a drive train including a coupling, gearbox, motor and drive control system, as well as other accessories. The symmetrical design ensures that the selected and coordinated drive components can be easily connected at four possible positions.

# LONG-STROKE AXES WITH BALL SCREW DRIVE

## THE AMS SERIES IN DETAIL

### 1 CARRIAGES

The long-stroke axes with ball screw drive of the AMS series feature two carriage lengths and up to two carriages per axis, as well as threaded and centering holes for reliable and reproducible mounting options. Optional magnetic field sensors can be easily integrated thanks to the standard magnets installed on the carriage – even at a later date.



### 4 CLAMPING ELEMENT

For additional safety, the ball screw axes can be supplied with or without integrated clamping element upon request. The optional selectable clamping element fits perfectly into the slides. This does not result in longer slides or interference contours. Thanks to the NC design, the position can be held securely without compressed air - this saves energy and costs.

### 5 COVER STRIP AND DEFLECTOR

The optionally available cover strip reliably protects the interior of the axis from external influences and helps to maximize its service life. It locks into the axis profile, sealing it securely against dust and dirt and holding it reliably in position.

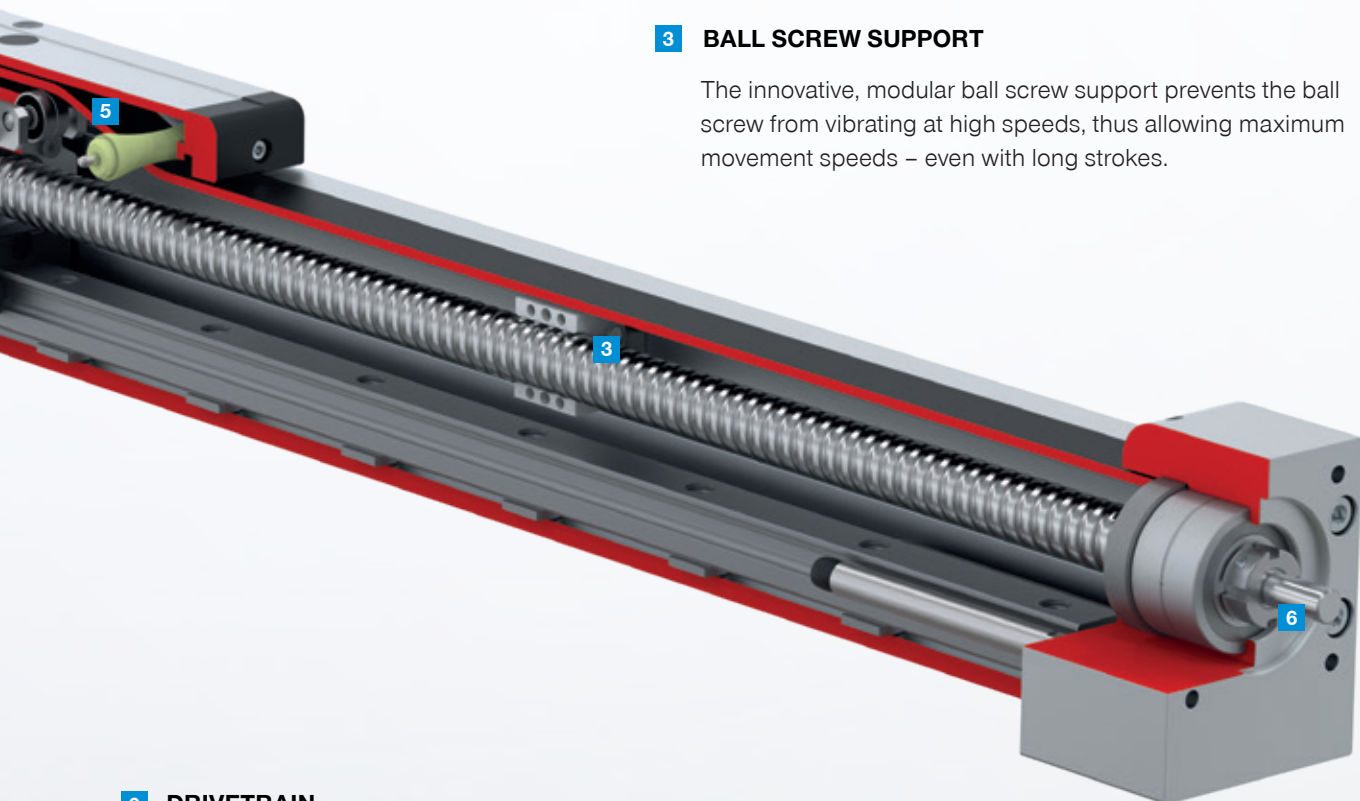


## 2 BALL SCREW DRIVE

The ball screw axes represent precision, rigidity and high feed forces. The ball screw nut enables very low-friction and precise movements. With up to four screw pitches per size, the axes can be optimally adapted to the respective application.

## 3 BALL SCREW SUPPORT

The innovative, modular ball screw support prevents the ball screw from vibrating at high speeds, thus allowing maximum movement speeds – even with long strokes.



## 6 DRIVETRAIN

The AMS series can be optionally supplied to suit your application with a complete drive train including a coupling, motor and drive control system, as well as other accessories.

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#### HEADQUARTERS:

#### ZIMMER GROUP

Am Glockenloch 2  
DE 77866 Rheinau  
T +49 7844 9139-0  
F +49 7844 9139-1199  
info.de@zimmer-group.com  
[www.zimmer-group.com](http://www.zimmer-group.com)