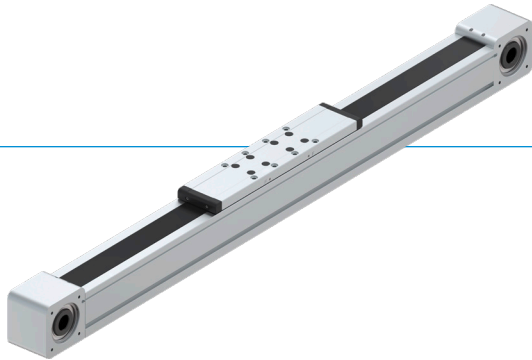


# LONG-STROKE AXES

## INSTALLATION SIZE AMB060

### ► PRODUCT ADVANTAGES



#### ► High dynamics and speed

Toothed belt axes are characterized by their high dynamics and speed, which makes them perfect for fast motion sequences and large working ranges.

#### ► Short cycle times

With maximum speeds of up to 5 m/s and accelerations of up to 50 m/s<sup>2</sup>, toothed belt axes enable extremely short cycle times, which increases production efficiency.

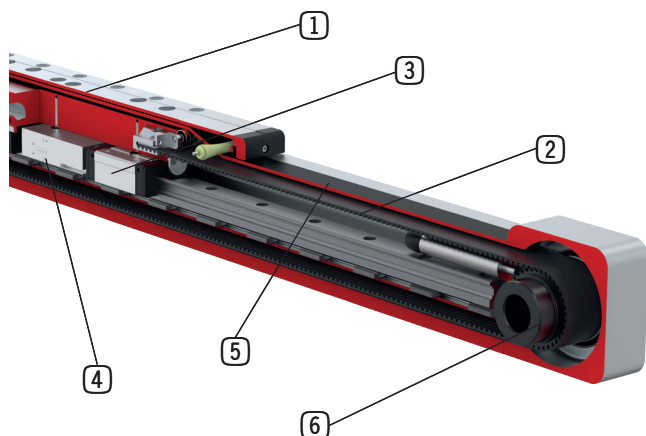
#### ► Integrated clamping element

With an optional integrated clamping element in NC design, toothed belt axes offer high clamping forces without interference contours, which increases flexibility and safety in the application.

### ► 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

- three carriage lengths and up to two carriages per axis as well as threads with centering sleeves and locating holes for quick and reliable mounting of payloads

### 2 Toothed belt drive

- designed for maximum speeds and acceleration levels,

### 3 Guidance system

- unrivaled load capacity and durability
- easy maintenance thanks to integrated lubrication connections on both sides

### 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 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

## ► FURTHER INFORMATION IS AVAILABLE ONLINE

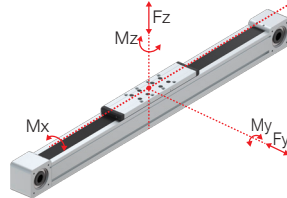


All information just a click away at: [www.zimmer-group.com](http://www.zimmer-group.com). Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product. Quick, clear and always up-to-date.

## ▶ PRODUCT SPECIFICATIONS



### ▶ Forces and moments



### ▶ Load data

Service life reference value:  
20.000 km

Carriage length	S	M	L
Fy [N]	2.175	2.175	2.175
Fz [N]	2.040	2.040	2.040
Mx [Nm]	19	19	19
My [Nm]	95	205	307
Mz [Nm]	91	178	265

## ▶ RECOMMENDED ACCESSORIES



### SENSORS



**ZUB188454**

Magnetic field sensor  
incl. mounting bracket



### CONNECTIONS / OTHER



**CPRO01215**

T-nuts size 6 / M5



**CPRO01075**

T-nuts size 6 / M6



**DST40800**

Centering disc



**ZUB187818**

Clamping claws incl. screws



**C71412061009**

Tapered grease nipple



**CNOR02558**

Hopper grease nipple



**GVM5**

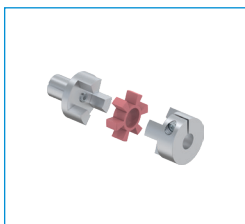
Pneumatic fitting straight



**WVM5**

Angled pneumatic fitting

## ► RECOMMENDED ACCESSORY DRIVE\*



Couplings



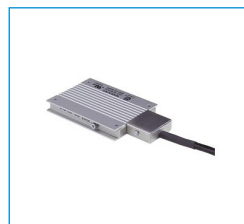
Gearbox



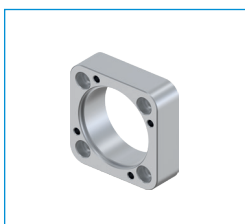
Motors



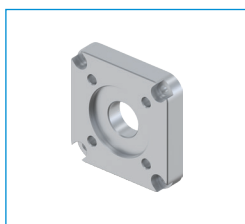
Cables



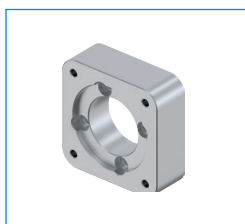
Braking resistance



Coupling housing



Adapter plates for gearboxes



Adapter plate for motors



Drive control system

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

## ► TECHNICAL DATA

	► Technical data		
	Carriage length S	Carriage length M	Carriage length L
Profile width [mm]	60	60	60
Max. stroke [mm]	5.670	5.590	5.510
Stroke reserve [mm]	15	15	15
Feed constant [mm/rev]	145	145	145
Effective diameter toothed belt pulley [mm]	45	45	45
Toothed belt width [mm]	25	25	25
Carriage length without cover strip [mm]	175	255	335
Carriage length with cover strip [mm]	305	385	465
Max. speed [m/s]	5	5	5
Max. acceleration [m/s <sup>2</sup> ]	50	50	50
Service life reference value [km]	20.000	20.000	20.000
F <sub>y</sub> max. [N]	2.175	2.175	2.175
F <sub>z</sub> max. [N]	2.040	2.040	2.040
Dyn. load rating linear guideway [N]	10.900	10.900	10.900
Stat. load rating of linear guideway [N]	15.700	15.700	15.700
Torque M <sub>x</sub> max. [Nm]	19	19	19
Torque M <sub>y</sub> max. [Nm]	95	205	307
Torque M <sub>z</sub> max. [Nm]	91	178	265
Typical payload [kg]	25	25	25
Distance top edge of slide - center of guide [mm]	49,10	49,10	35,90
Repeatability [mm]	+/- 0,05	+/- 0,05	+/- 0,05
Operating temperature [°C]	5 ... +60	5 ... +60	5 ... +60
Maximum feed force [N]	405	405	405
Peripheral force transmittable max. [N]	830	830	830
Maximum torque [Nm]	9,1	9,1	9,1
Static holding force of clamping element [N]	300-400	300-400	300-400
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	5,5-6,5 / 4,0-6,5
Number of clamping cycles	5.000.000	5.000.000	5.000.000
Additional weight clamping element [kg]	0,19	0,19	0,19
Mass of the carriage [kg]	0,84	1,10	1,35
Additional weight cover strip deflection [kg]	0,20	0,20	0,20
Mass at zero stroke [kg]	3,73	4,41	5,12
Mass per 1 m stroke [kg]	5,51	5,51	5,51
Protection class according to IEC60529 (without / with cover strip)	IP20 / IP40	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 linear guide
- ⑳ Groove for clamping claws
- ㉑ Fastening switch lug
- ㉒ Minimum distance between carriages
- ㉓ Energy supply clamping element

