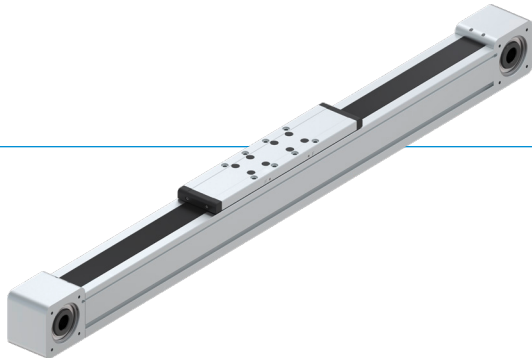


LONG-STROKE AXES

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/s², toothed belt axes enable extremely short cycle times, which increases production efficiency.

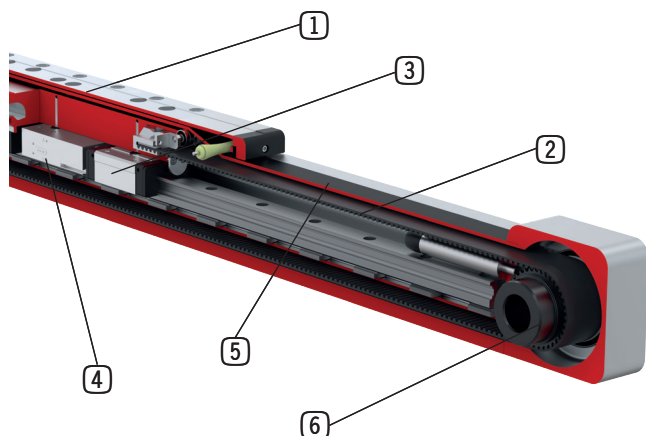
► Integrated clamping element

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 ²]	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

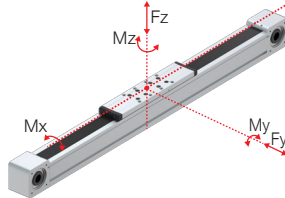


All information just a click away at: www.zimmer-group.com. Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product. Quick, clear and always up-to-date.

▶ 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



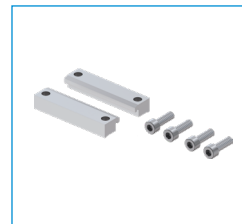
CPRO01075

T-nuts size 6 / M6



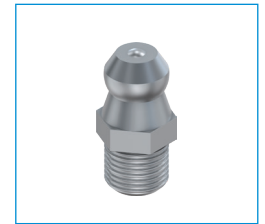
DST40800

Centering disc



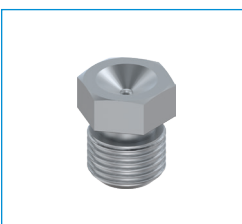
ZUB187818

Clamping claws incl. screws



C71412061009

Tapered grease nipple



CNOR02558

Hopper grease nipple



GVM5

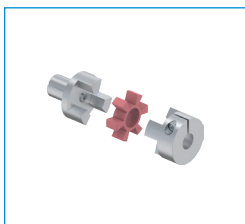
Pneumatic fitting straight



WVM5

Angled pneumatic fitting

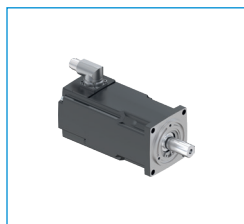
► RECOMMENDED ACCESSORY DRIVE*



Couplings



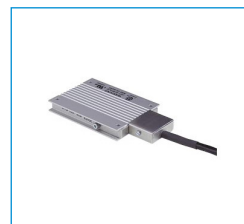
Gearbox



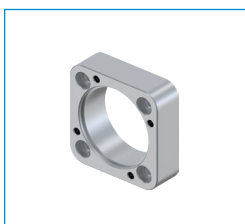
Motors



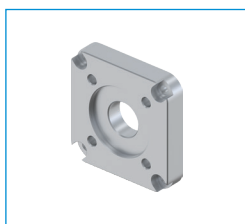
Cables



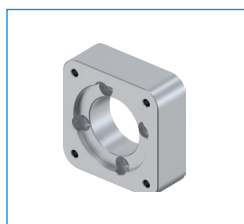
Braking resistance



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/s²]	50	50	50
Service life reference value [km]	20.000	20.000	20.000
Fy max. [N]	2.175	2.175	2.175
Fz 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 Mx max. [Nm]	19	19	19
Torque My max. [Nm]	95	205	307
Torque Mz 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
- ⑫ Lubrication for linear guide
- ⑬ Groove for clamping claws
- ⑭ Fastening switch lug
- ⑮ Minimum distance between carriages
- ⑯ Energy supply clamping element

