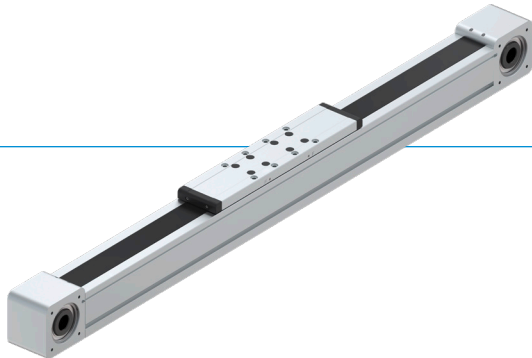


LONG-STROKE AXES

INSTALLATION SIZE AMB120

► 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.

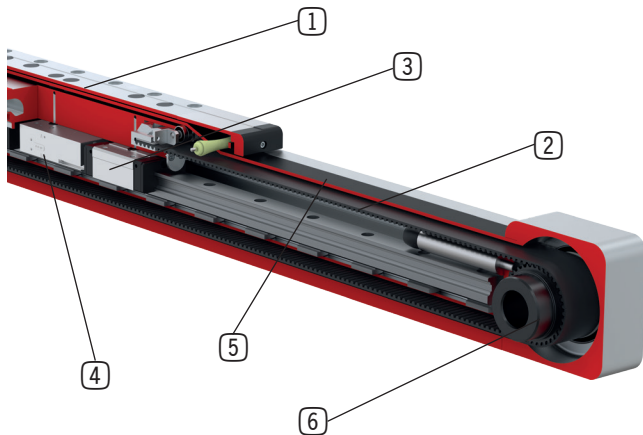
► Integrated clamping element

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

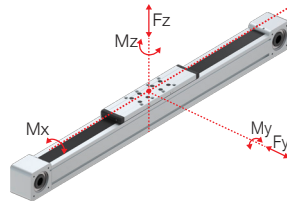


All information just a click away at: www.zimmer-group.com. Find data, illustrations, 3D models and operating instructions for your installation size using the order number for your desired product. Quick, clear and always up-to-date.

▶ PRODUCT SPECIFICATIONS



▶ Forces and moments



▶ Load data

Service life reference value:
20.000 km

Carriage length	S	M	L
Fy [N]	8.875	8.875	8.875
Fz [N]	9.340	9.340	9.340
Mx [Nm]	93	93	93
My [Nm]	630	1.050	1.890
Mz [Nm]	600	1.000	1.795

▶ 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



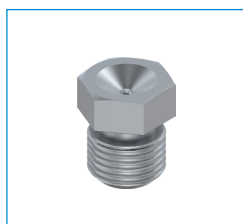
030529
Centering disc



ZUB187819
Clamping claws incl. screws



C71412061009
Tapered grease nipple



CNOR02558
Hopper grease nipple

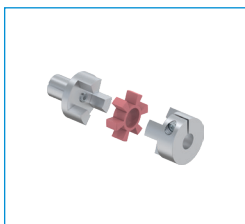


GVM5
Pneumatic fitting straight



WVM5
Angled pneumatic fitting

► RECOMMENDED ACCESSORY DRIVE*



Couplings



Gearbox



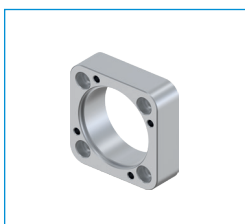
Motors



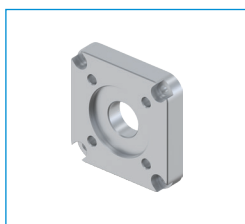
Cables



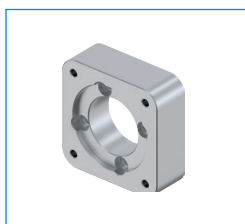
Braking resistance



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]	120	120	120
Max. stroke [mm]	5.550	5.460	5.280
Stroke reserve [mm]	15	15	15
Feed constant [mm/rev]	288	288	288
Effective diameter toothed belt pulley [mm]	91,7	91,7	91,7
Toothed belt width [mm]	60	60	60
Carriage length without cover strip [mm]	290	380	560
Carriage length with cover strip [mm]	456	546	726
Max. speed [m/s]	5	5	5
Max. acceleration [m/s ²]	50	50	50
Service life reference value [km]	20.000	20.000	20.000
F _y max. [N]	8.875	8.875	8.875
F _z max. [N]	9.340	9.340	9.340
Dyn. load rating linear guideway [N]	40.500	40.500	40.500
Stat. load rating of linear guideway [N]	53.700	53.700	53.700
Torque M _x max. [Nm]	93	93	93
Torque M _y max. [Nm]	630	1.050	1.890
Torque M _z max. [Nm]	600	1.000	1.795
Typical payload [kg]	120	120	120
Distance top edge of slide - center of guide [mm]	91,50	91,50	91,50
Repeatability [mm]	+/- 0,05	+/- 0,05	+/- 0,05
Operating temperature [°C]	5 ... +60	5 ... +60	5 ... +60
Maximum feed force [N]	1.800	1.800	1.800
Peripheral force transmittable max. [N]	4.980	4.980	4.980
Maximum torque [Nm]	82,5	82,5	82,5
Static holding force of clamping element [N]	850-1.200	850-1.200	850-1.200
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]	0,80	0,80	0,80
Mass of the carriage [kg]	5,33	6,36	8,56
Additional weight cover strip deflection [kg]	0,82	0,82	0,82
Mass at zero stroke [kg]	23,60	26,44	32,28
Mass per 1 m stroke [kg]	19,94	19,94	19,94
Protection class according to IEC60529 (without / with cover strip)	IP20 / IP40	IP20 / IP40	IP20 / IP40

- 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

