

The **LM-A608** cantilever axis with its compact dimensions, long stroke and high load capacity is universally suitable. Through the variety of variation possibilities (see page 4) it can be adapted to suit other specific requirements, which are not specified in the following document. With the same outer dimensions, different guides and transmission elements can be chosen, which consequently allows for a more flexible application range.

Item compatible grooves on three sides of the profile and on the end plates allows the customer to easily attach components e.g. grippers, on to the axis.

The special extruded aluminium axis profile ensures high torsional and flexural strength as well as a low weight.

The axis can be driven by Berger Lahr 3-phase stepping motors or with customer specified motors such as servo motors.

Features

- Roller or circulating ball bearings for optimised running characteristics.
- The guides can be lubricated from the outside, and require no further maintenance.
- Extruded aluminium profile with high torsional and flexural strength.
- Trigger point for the limit switch is mounted in the profile groove and is moveable.
- Axis available in corrosion resistant material.
- Stroke length up to 600mm. Cut to length.

Versions

Type key						Description
LM-	A	608	R	T	100	
					100	Stroke per revolution of the driving shaft
					144	
				T		Toothed belt
				Z		Toothed rack
			R			Roller guide
			K			Circulating ball bearings
		608				Axis profile size
	A					Cantilever axis
LM						Linear module

e.g.: LM-A608RT100 Cantilever axis LM-A608 with roller guide, toothed belt and 100 mm stroke per



**LM-A608
with toothed belt**

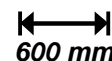
revolution of the drive shaft

Maximum load



18 kg

Maximum stroke



600 mm

Maximum speed



5 m/s

Maximum driving torque



15 Nm

Specifications

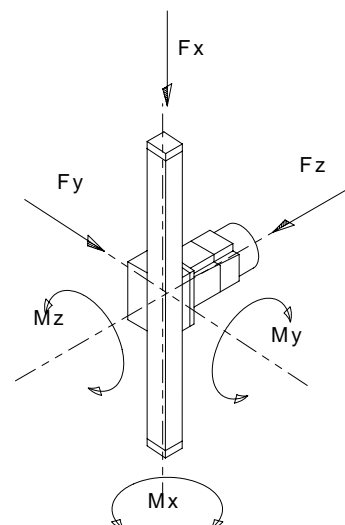
	LM-A608RT100	LM-A608KT100	LM-A608KZ144
Max. load	18 kg	18kg	18kg
Max. stroke	600 mm	600 mm	600 mm
Min. stroke ①	160 mm	no restriction	no restriction
Max. torque at the driving shaft	15 Nm	15 Nm	15 Nm
Max. speed ②	5 m/s	2 m/s	2 m/s
Repeatability	± 0.05 mm	± 0.05 mm	± 0.05 mm
Stroke per revolution of the driving shaft	100 mm	100 mm	144.5 mm
Effective diameter	31.83 mm	31.83 mm	46 mm
Rotational moment of inertia (without the motor)	0.13 kgcm ²	0.13 kgcm ²	0.1 kgcm ²
Power transmission	Toothed belt b32 AT5	Toothed belt b32 AT5	Rack and pinion m=2
Dead weight (zero stroke) (without the motor)	10.7 kg	11.2 kg	14 kg
Moving weight			
zero stroke	4.5 kg	5 kg	5.5 kg
per 100 mm stroke	0.9 kg	1 kg	1.15 kg

① In case of smaller strokes the rollers do not touch the oil on the guide

② load and stroke dependent

Maximum Forces and Torque

		LM-A608RT100	LM-A608KT100 LM-A608KZ144
Max. forces	F _x	942 N	942 N
	F _y	300 N	600 N
	F _z	300 N	600 N
Max. torque	M _x	35 Nm	60 Nm
	M _y	125 Nm	300 Nm
	M _z	205 Nm	250 Nm

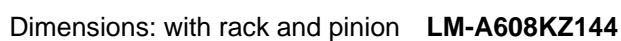


Motors for LM-A608

3-phase stepping motors	VRDM 3913	VRDM 31117	VRDM 31122
Max. torque	6 Nm	12 Nm	16.5 Nm
Motor weight	4.2 kg	8 kg	11Kg

Motor with gearbox for LM-A608

3-phase stepping motor with gearbox	VRDM 3913 with PL50 (3:1)
Max. torque	15 Nm
Weight	6.3 kg



INQUIRY

Please fill in the form on this page and mail or fax it to your local **Berger Lahr Positec** sales office.

Within the next couple of days, we will send you an obligation free offer for your desired axis version.

Sender:

Contact _____
 Company _____
 Street/P.O. box _____
 City/postal code _____
 Phone _____
 Fax _____

Cantilever axis LM-A608

Basic version

- ☐ LM-A608RT100
- ☐ LM-A608KT100
- ☐ LM-A608KZ144

Stainless version

- ☐ no (standard)
- ☐ yes

Limit switch

- ☐ none
- ☐ two
- ☐ three

Stroke length _____ mm
 (max.600 mm)



NOTE

Additional axes available on request.

NOTE

You may use customer specific motors.



Standard motors for LM-P608

3-phase stepping motors

- ☐ VRDM 3913 (6 Nm)
- ☐ VRDM 31117 (12 Nm)
- ☐ VRDM 31122 (16.5 Nm)

3-phase stepping motors with gearbox

- ☐ VRDM 3913 with PL50 3:1 (15 Nm)

Motor connection

- ☐ with connector
- ☐ with terminal box

Motor options

- ☐ with encoder (only for motors with connector)
- ☐ with brake

Remarks: