

For quick pick and place applications it is not optimal (weight wise) to have to move the axis body and the heavy drive motors, where often, the load to be positioned is only a few grams.

When handling small components, usually a short cycle time with superior dynamic properties and therefore a heavy drive is required.

An innovative solution to this dilemma is promised with the **MAXD1** linear positioner.

Since both motors are fixed, no unnecessary weight has to be moved with the axis. Combining it with an additional light weight cantilever axis results in an astonishing dynamic drive profile, harmonious movement and therefore a short cycle time.

As standard this axis is driven by Schneider Electric Size 90 3-phase stepping motors.



Features

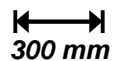
- Heavily reduced dead weight due to the motors being fixed, therefore it has superior dynamic properties in the positioning process.
- Thin construction allows many positioning tasks to be carried out in the tightest of spaces.
- Installation options of the system, provided by the central fixing surface.
- High moment stiffness with high positioning accuracy.

Maximum load



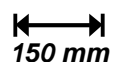
2kg

Maximum stroke
X-direction



300 mm

Z-direction



150 mm

Maximum speed



5 m/s

Maximum driving torque



4 Nm

Versions

Type key			Description
MAXD	1		
	1		Cantilever construction
MAXD			Linear positioner

Specifications

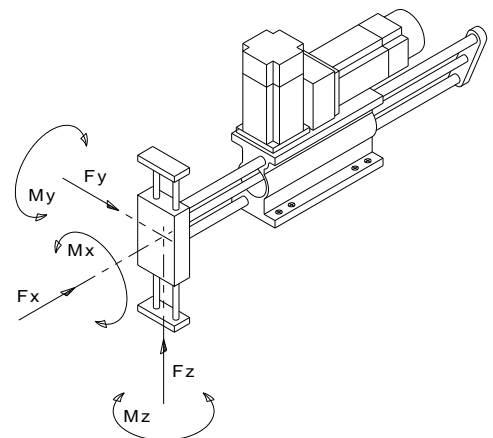
	MAXD1	
Max. load	2 kg	
Dead weight (zero stroke) (without the motor)	8,91 kg	
	X	Z
Max. stroke	300 mm	150 mm
Max. speed ①	5 m/s	5 m/s
Repeatability	± 0.1 mm	± 0.1 mm
Max. torque at the driving shaft	4 Nm	4 Nm
Stroke per revolution of the driving shaft	100 mm	50 mm
Effective diameter	31.83 mm	15.92 mm
Power transmission	rack	Spline shaft
Moving weight zero stroke per 100 mm stroke	3,72 Kg ② 0,66 kg	0,37 Kg 0,13 kg

① load and stroke dependent

② weight of the z-axis with 0 mm stroke included

Maximum Forces and Torque

		MAXD1
Max. forces	Fy	40 N
Max. torque	Mx My Mz	8 Nm 6 Nm 2.5Nm



Motors for MAXD1

3-phase stepping motors	X axis	Z axis
	BRS39A	BRS39A+break
Max. torque	4 Nm	4 Nm
Motor weight	3,1 kg	4.6 kg

