



## Z-Stage 5103.A10

- multi-axis positioning systems possible by simple combination of stages (e.g. with 5102.10, 5203.10)
- use of low-friction plastic slideway high-precision pillar guides results in optimum fine adjustment due to high reproducibility of minimum system step distance
- use of stress-relieved, highly resilient materials guarantees high system stability and long life
- high-precision worm gear drive
- robust surfaces through galvanic anodisation
- three precision configurations

### Modularly individually configurable:

- from basic model to high-end system
- to multi-axis systems
- with option of three spindle pitches
- with customer-specific hole pattern

### Specifications:

Travel range [mm]: 15\*

Material (housing/plates): Aluminium

Spindle pitch [mm]: 0.02 standard / optional 0.04 / 0.10 Resolution [ $\mu$ m] (400 steps/rev):0.05 standard / optional 0.1 / 0.25

 Max. load [N]:
 300

 Min. drive torque [Nm]:
 0.05

 Stiffness ["/Nm]:
 12

 Weight [kg]:
 1.5

\*35mm on request; different total

height!

#### Dimensions [mm]:

A: B: H1: H2: 100 100 55 55+15

#### Maximum load:

A general statement of maximum load and torque capacities is not possible for eccentric forces due to the amount of different configurations.



However, our engineers will gladly calculate the maximum load capacity for your specific application.

# Application specific versions:

- vacuum suitable
- antimagnetic
- radiation resistant
- in black

# Precision configurations:

	X1	X2	XE
Accuracy [µm]:	(+/-) 7	3	on request
Repeatability (unidir.) [μm]:	(+/-) 3	2	on request
Reversal error [µm]:	10	3	on request
Flatness [µm]:	(+/-) 12	5	5
Straightness [µm]:	(+/-) 12	5	5
Yaw ["]:	(+/-) 14	8	8
Pitch ["]:	(+/-) 14	8	8
Roll ["]:	(+/-) 14	8	8

## Accessories:

Motors:	2-/5-Ph.	
11000131		
	Servo/DC	
Hand wheels:	0032	
Gear boxes:	2042.10*	
	2042.20*	
Limit switches:	included	
Zero-point control:	9100	
Encoder XE :	incremental	
	absolute	
Control system:	9300	

<sup>\*</sup> adaptor required: M301.301-001



