## Z-Stage 5103.C10

- conversion of horizontal to vertical movement by means of a precision wedge-drive with four linear ball guides
- 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 trapezoidal spindle drive with smoothed and tempered spindle (self-locking)
- robust surfaces through galvanic anodisation
- two precision configurations

### Application specific versions:

- vacuum suitable
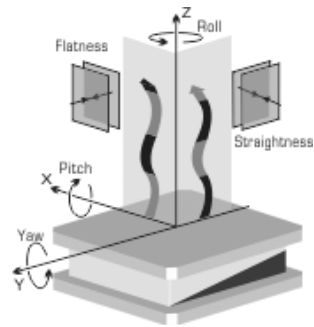- antimagnetic
- radiation resistant
- in black

### Modularly individually configurable:

- from basic model to high-end system
- to multi-axis systems
- with customer-specific hole pattern
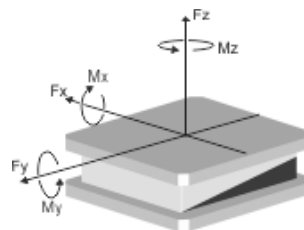
### Specifications:

| | |
|---|---|
| Travel range [mm]: | 6 |
| Material (housing/plates): | Aluminium |
| Spindle pitch [mm]: | 0.25 |
| Resolution [μm] (400 steps/rev): | 0.625 |
| Max. load [N]: | 350 |
| Min. drive torque [Nm]: | 0.05 |
| Stiffness ["/Nm]: | 8 |
| Weight [kg]: | 2 |

### Precision configurations:

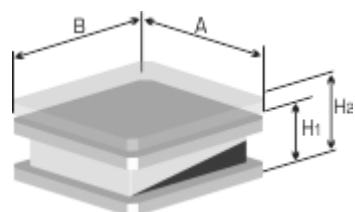|  | X1 | XE |
|---|---|---|
| Accuracy [µm]: | (+/-) 7 | on request |
| Repeatability (unidir.) [µm]: | (+/-) 2 | on request |
| Reversal error [µm]: | 10 | on request |
| Flatness [µm]: | (+/-) 9 | 9 |
| Straightness [µm]: | (+/-) 9 | 9 |
| Wobble ["]: | (+/-) 14 | 14 |
| Pitch ["]: | (+/-) 14 | 14 |
| Roll ["]: | (+/-) 14 | 14 |

## Maximum load:



A general statment 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.

## Dimensions [mm]:



| A: | B: | H1: | H2: |
|---|---|---|---|
| 100 | 100 | 55 | 55+6 |

**HUBER**
Diffraction and Positioning Equipment

## Accessories:

| | |
|---|---|
| Motors: | 2-/5-Ph. |
| | 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 |

* adaptor required: M301.301-001

M5-12/16 (4x)

Ø8.5

M4-8/13 (8x)

Ø6 H7(+0.012)

Ø4.5

44

30.3

20

100

44

30.3

20

20

43

43

43

Ø70 ±0.01

43

43

17.5 17.5

20 20

44 44

100

M2.5-5/8 (4x)

Ø5 h6(-0.008)

13.5 13.5

22

13.5 13.5

□32

Translation ± 3 mm

58

top view

43 43

20 20

R53.5

43

100

20

20

43

70 ±0.01

Ø6 H7(+0.012)

45.5