

## XY-Stage 5102.40

- multi-axis positioning systems possible by simple combination of stages (e.g.with 5203.80, 5104.D80)
- high-precision trapezoidal spindle drive with smoothed and tempered spindle (self-locking)
- wear resistant, delta bronze spindle nut
- mounting of drive spindle free of play
- use of low-friction 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
- robust surfaces through galvanic anodisation
- three precision configurations ( $\mathrm{X}_{2}$ : values on request)


## Modularly individually configurable:

- from basic model to high-end system
- to multi-axis systems
- with individual travel range
- with customer-specific hole pattern


## 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.

## Specifications:

| Travel range $[\mathrm{mm}]:$ | $+/-25^{*}$ |
| :--- | :--- |
| Material (base/slide): | Aluminium |
| Spindle pitch [mm]: | 2 |
| Max. load [N]: | 8000 |

Min. drive torque [Nm]: 0.5
Stiffness ["/Nm]: 0.8
Weight [kg]: 26

* optional: extended or shortened travel range

Dimensions [mm]:


| A: | B: | H: |
| :--- | :--- | :--- |
| 300 | 300 | 100 |

## Application specific versions:

- vacuum suitable
- antimagnetic
- radiation resistant
- in black


## Accessories:

| Motors: | 2-/3-/5-Ph. <br> Servo/DC |
| :--- | :--- |
| Hand wheels: | 0083 |
| Gear boxes: | 2083.05 |
|  | 2083.10 |
|  | 2083.20 |
| Limit switches: | included |
| Adjustable limit switches: | optional |
| Zero-point control: | 9100 |
| Encoder XE : | incremental |
|  | absolute |
| Control system: | 9300 |

## Precision configurations:



|  |  | X1 | XE |
| :---: | :---: | :---: | :---: |
| Accuracy [ $\mu \mathrm{m}$ ]: | (+/-) | 4 | on request |
| Repeatability (unidir) [ $\mu \mathrm{m}$ ]: | (+/-) | 2 | on request |
| Reversal error [ $\mu \mathrm{m}$ ]: |  | 5 | on request |
| Flatness [ $\mu \mathrm{m}$ ]: | (+/-) | 7 | 7 |
| Straightness [ $\mu \mathrm{m}$ ]: | (+/-) | 3 | 3 |
| Yaw ["]: | (+/-) | 4 | 4 |
| Pitch ["]: | (+/-) | 4 | 4 |
| Roll ["]: | (+/-) | 4 | 4 |

[^0]


[^0]:    X2
    : values on request

