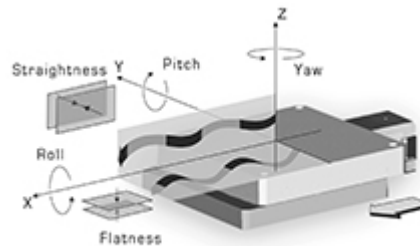


## Linear Stage 5101.20

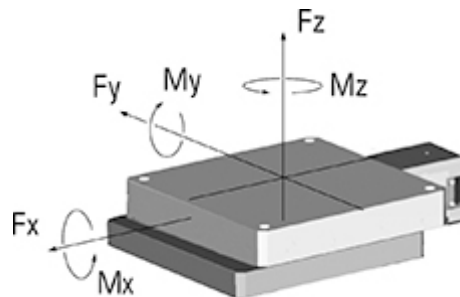
- multi-axis positioning systems possible by simple combination of stages
- wear resistant delta bronze spindle nut
- mounting of drive spindle free of play
- optionally available with precision ball-roll, thread-roll or ground thread spindle
- use of low-friction guides results in optimum fine adjustment 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 natural-anodising treatment
- three precision configurations

## Precision configurations:



	X1	X2	XE
Accuracy [ $\mu\text{m}$ ]:	(+/-) 10	4	on request
Repeatability (unidir.) [ $\mu\text{m}$ ]:	(+/-) 3	2	on request
Reversal error [ $\mu\text{m}$ ]:	6	4	on request
Flatness [ $\mu\text{m}$ ]:	(+/-) 3	2	2
Straightness [ $\mu\text{m}$ ]:	(+/-) 3	2	2
Yaw ["]:	(+/-) 6	4	4
Pitch ["]:	(+/-) 6	4	4
Roll ["]:	(+/-) 6	4	4

## Maximale Belastungen:



Fx [N]:	150
Fy [N]:	360
Fz↑ [N]:	1650
Fz↓ [N]:	1990
Mx [Nm]:	55
My [Nm]:	41
Mz [Nm]:	30

$$S = \frac{1}{\frac{F_y}{F_{y \max}} + \frac{F_z}{F_{z \max}} + \frac{M_x}{M_{x \max}} + \frac{M_y}{M_{y \max}} + \frac{M_z}{M_{z \max}}}$$

For the safety S must apply:  $S \geq 1^*$

\*For the calculation of the single maximum forces, safety factors have already been taken into account.

### Application specific versions:

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- vacuum suitable
- antimagnetic
- radiation resistant
- in black

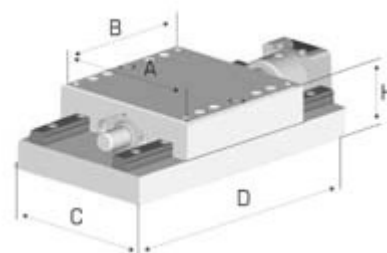
### Modularly individually configurable:

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

### Dimensions [mm]:

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A:	B:	C:	D:	H:
102	100	100	216	62

### Specifications:

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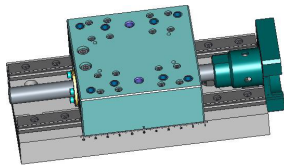
Travel range [mm]:	100*
Material (base/slide):	Aluminium
Spindle pitch [mm]:	2
Max. load Fz↓ [N]:	1990
Min. drive torque [Nm]:	0.6
Stiffness ["/Nm]:	1.8
Weight [kg]:	2.8

\* optional: extended or shortened travel range

### Accessories:

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Motors:	2-/3-/5-Ph. Servo/DC
Hand wheels:	0056
Gear boxes:	2056.05 2056.10 2056.20
Limit switches:	included
Adjustable limit switches:	optional
Zero-point control:	9100
Encoder <b>XE</b> :	incremental absolute
Control system:	9300



1:5

