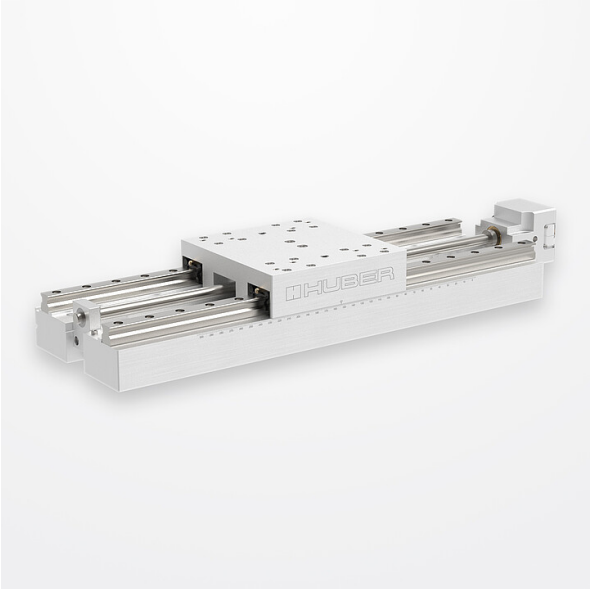


Linear Stage 5101.30H-300 X2

The linear table type 5101.30 in precision configuration X2 with an operational range of 300mm is exemplary for the precision technology of the series 5101.

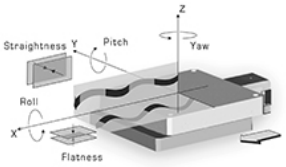
- high-precision recirculating ball spindle
- drive and guide components manually adjusted and controlled with up-to-date measurement technology
- mounting of drive spindle free of play
- use of low-friction guides results in optimum fine adjustment due to high reproducibility of minimum system step distance
- use of stress-relieved, highly resilient materials guarantees high system stability and long life
- robust surfaces through galvanic natural-anodising treatment

Specifications:

Travel range [mm]:	300*
Material (base/slide):	Aluminium
Spindle pitch [mm]:	2
Max. load Fz↓ [N]:	7600
Min. drive torque [Nm]:	0.6
Stiffness ["/Nm]:	0.7
Weight [kg]:	11

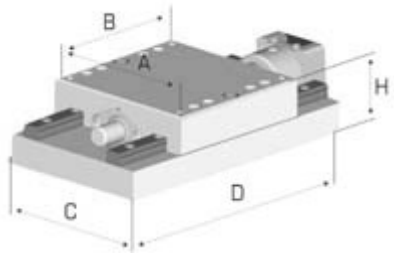
* optional: extended or shortened travel range

Precision configurations:



		X2	XE
Accuracy [µm]:	(+/-)	10	on request
Repeatability (unidir.) [µm]:	(+/-)	2	on request
Reversal error [µm]:		6	on request
Flatness [µm]:	(+/-)	3.5	3.5
Straightness [µm]:	(+/-)	3.5	3.5
Yaw ["]:	(+/-)	2.5	2.5
Pitch ["]:	(+/-)	3.5	3.5
Roll ["]:	(+/-)	2.5	2.5

Dimensions [mm]:



A:	B:	C:	D:	H:
151	150	150	475	75

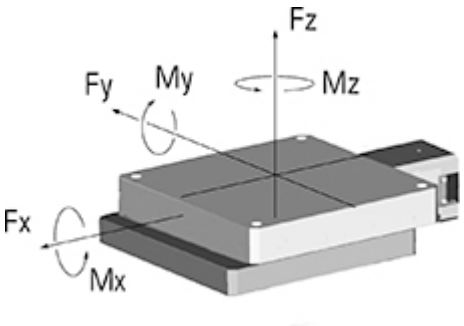
Application specific versions:

- vacuum suitable
- antimagnetic
- radiation resistant
- in black

Modularly individually configurable:

- to multi-axis systems
- with individual travel range
- with customer-specific hole pattern

Maximum load:



Fx [N]:	550
Fy [N]:	350
Fz↑ [N]:	5700
Fz↓ [N]:	7600
Mx [Nm]:	75
My [Nm]:	70

Mz [Nm]:	35

$$S = \frac{1}{\frac{Fy}{Fy\,max} + \frac{Fz}{Fz\,max} + \frac{Mx}{Mx\,max} + \frac{My}{My\,max} + \frac{Mz}{Mz\,max}}$$

For the safety S must apply: S ≥ 1*

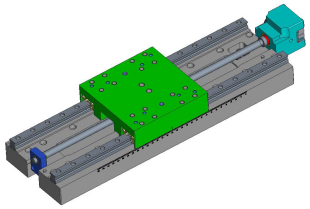
*For the calculation of the single maximum forces, safety factors have already been taken into account.

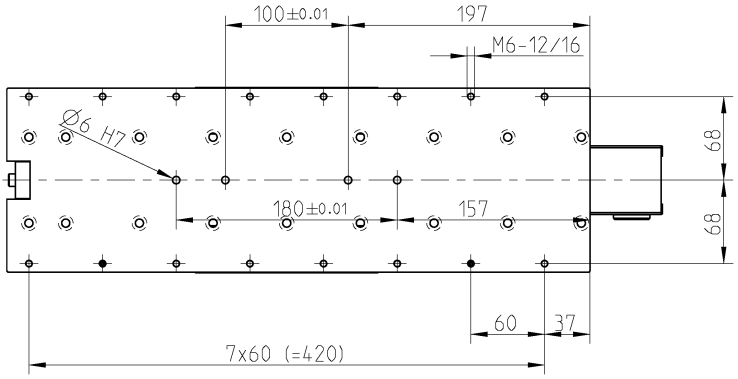
** z: distance from mounting surface to centre of gravity of load [m]

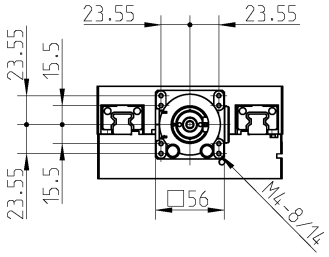
Accessories:

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 XE :	incremental
	absolute
Control system:	9300

5101.30H-300







Translation ± 150 mm

