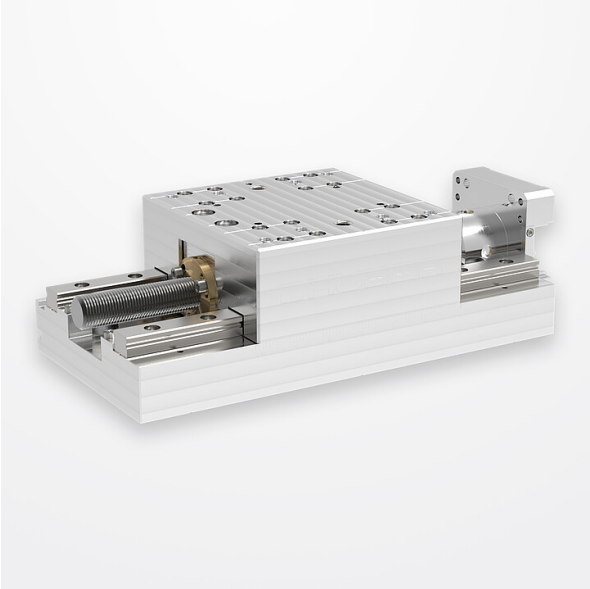
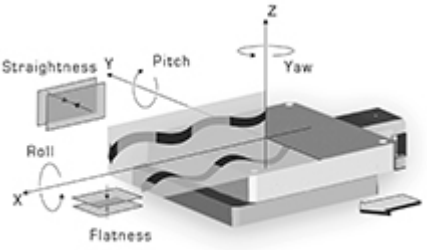


Linear Stage 5101.20

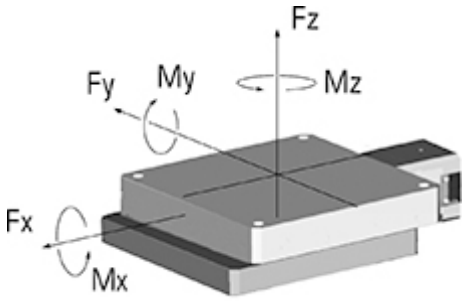
- multi-axis positioning systems possible by simple combination of stages
- wear resistant delta bronze spindle nut
- mounting of drive spindle free of play
- optionally available with precision ball-roll, thread-roll or ground thread spindle
- use of low-friction guides results in optimum fine adjustment 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 [µm]:	(+/-)	10	4	on request
Repeatability (unidir.) [µm]:	(+/-)	3	2	on request
Reversal error [µm]:		6	4	on request
Flatness [µm]:	(+/-)	3	2	2
Straightness [µm]:	(+/-)	3	2	2
Yaw ["]:	(+/-)	6	4	4
Pitch ["]:	(+/-)	6	4	4
Roll ["]:	(+/-)	6	4	4

Maximale Belastungen:



Fx [N]:	170
Fy [N]:	240
Fz↑ [N]:	1100
Fz↓ [N]:	2200
Mx [Nm]:	35
My [Nm]:	25
Mz [Nm]:	20

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

For the safety S must apply: S ≥ 1*

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

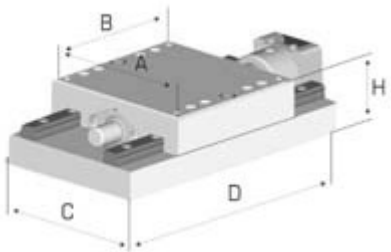
Application specific versions:

- vacuum suitable
- antimagnetic
- radiation resistant
- in black

Modularly individually configurable:

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

Dimensions [mm]:



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

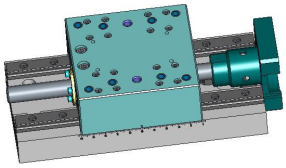
Specifications:

Travel range [mm]:	100*
Material (base/slide):	Aluminium
Spindle pitch [mm]:	2
Max. load Fz↓ [N]:	2200
Min. drive torque [Nm]:	0.6
Stiffness [”/Nm]:	1.8
Weight [kg]:	2.8

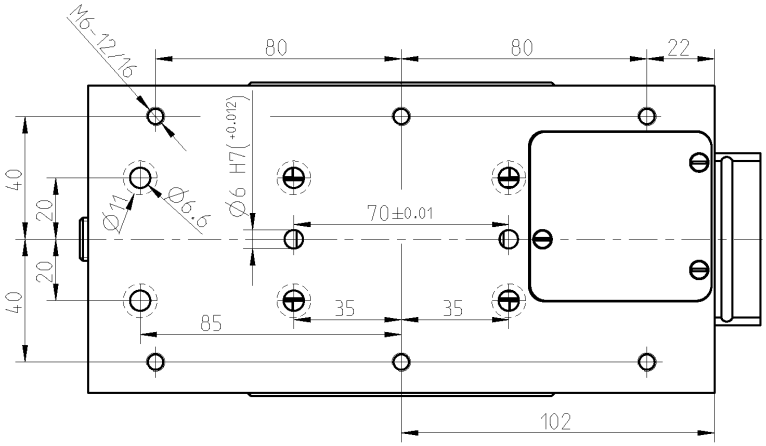
* optional: extended or shortened travel range

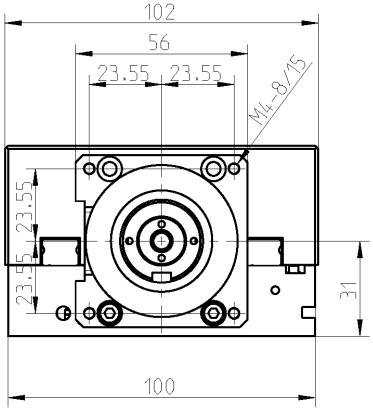
Accessories:

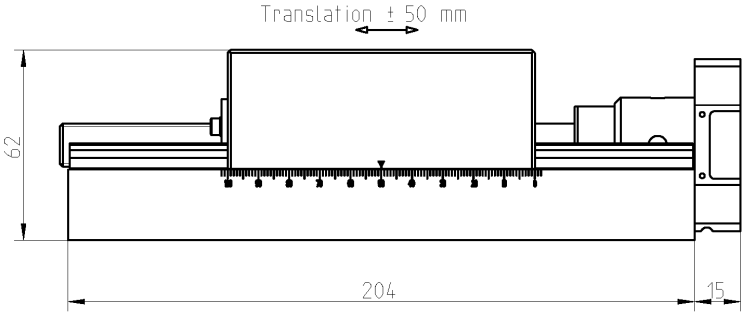
Motors:	2-/3-/5-Ph. Servo/DC
Hand wheels:	0056
Gear boxes:	2056.05
	2056.10
	2056.20
Limit switches:	included
Adjustable limit switches:	optional
Zero-point control:	9100
Encoder XE :	incremental
	absolute
Control system:	9300

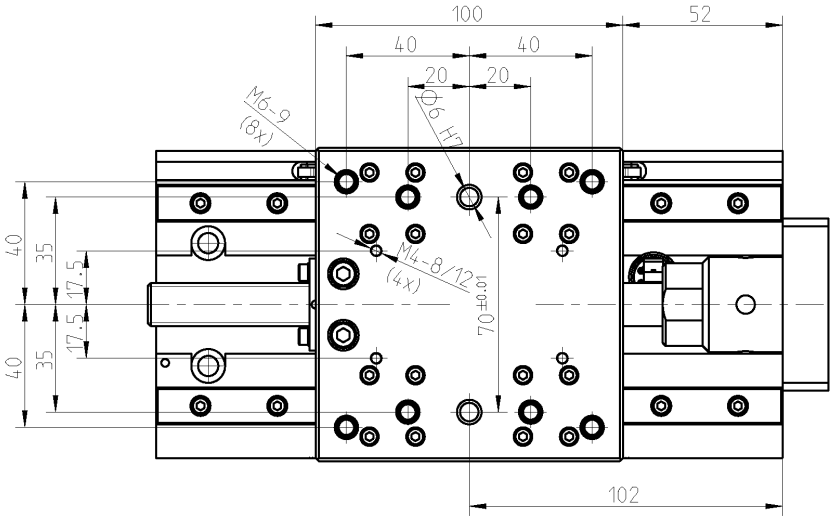


1:5


M6-12/16
80
80
22
40
20
20
40
Ø11
Ø6.6
Ø6 H7(+0.012)
70±0.01
85
35
35
102


102
56
23.55
23.55
M4-8/15
23.55
23.5
31
100


Translation ± 50 mm
62
204
15


100
52
40
40
20
20
M6-9
(8X)
Ø6 H7
M4-8/12
(4X)
70±0.01
40
35
17.5
17.5
35
40
102