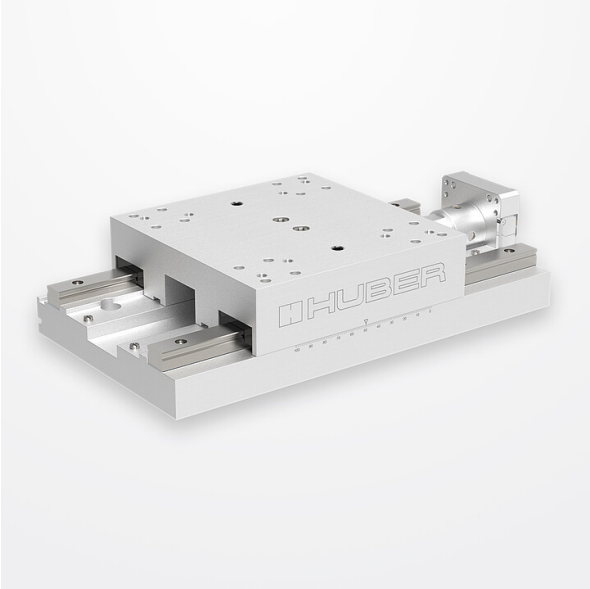


Linear Stage 5101.35

- multi-axis positioning systems possible by simple combination of stages
- optionally available with precision ball-roll, thread-roll or ground thread spindle
- 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 natural-anodising treatment
- three precision configurations

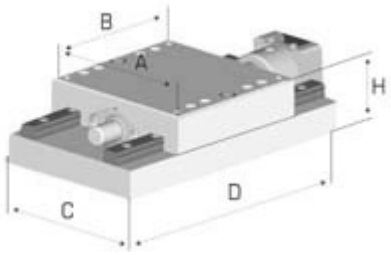
Modularly individually configurable:

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

Application specific versions:

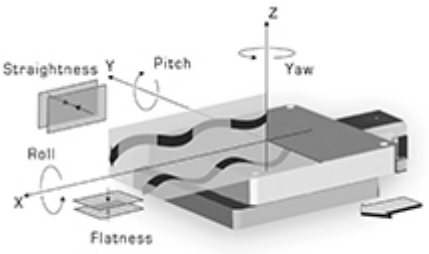
- vacuum suitable
- antimagnetic
- radiation resistant
- in black

Dimensions [mm]:



A:	B:	C:	D:	H:
171	170	170	294	62

Precision configurations:



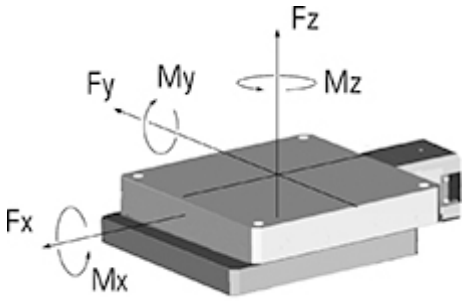
		X1	X2	XE
Accuracy [µm]:	(+/-)	10	4	on request
Repeatability (unidir.) [µm]:	(+/-)	3	2	on request
Reversal error [µm]:		6	4	on request
Flatness [µm]:	(+/-)	3	2	2
Straightness [µm]:	(+/-)	3	2	2
Yaw ["]:	(+/-)	6	4	4
Pitch ["]:	(+/-)	6	4	4
Roll ["]:	(+/-)	6	4	4

Specifications:

Travel range [mm]:	100*
Material (base/slide):	Aluminium
Spindle pitch [mm]:	2
Max. load Fz↓ [N]:	3250
Min. drive torque [Nm]:	0.6
Stiffness [”/Nm]:	0.7
Weight [kg]:	6.7

* optional: extended or shortened travel range

Maximum load:



Fx [N]:	170
Fy [N]:	230
Fz↑ [N]:	1200
Fz↓ [N]:	3250
Mx [Nm]:	75
My [Nm]:	70

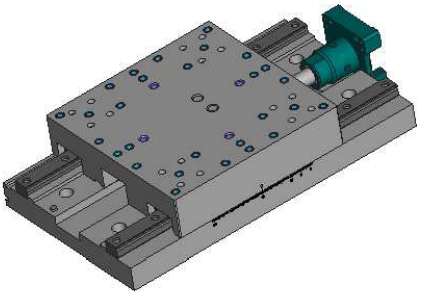
$$S = \frac{1}{\frac{Fx}{Fy\,max} + \frac{Fz}{Fz\,max} + \frac{Mx}{Mx\,max} + \frac{My}{My\,max} + \frac{Mz}{Mz\,max}}$$

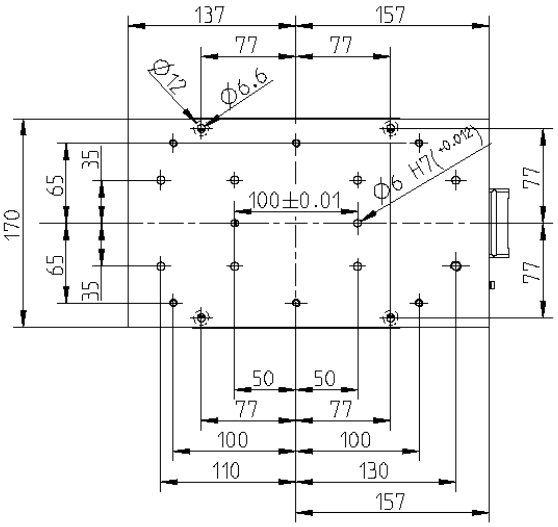
For the safety S must apply: S ≥ 1*

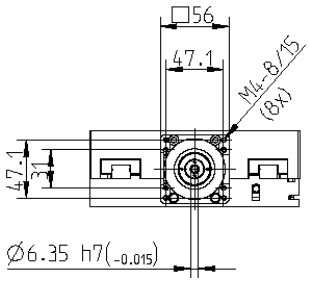
*For the calculation of the single maximum forces, safety factors have already been taken into account.

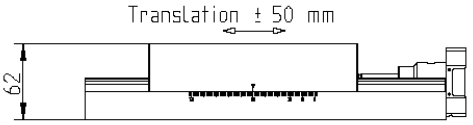
Accessories:

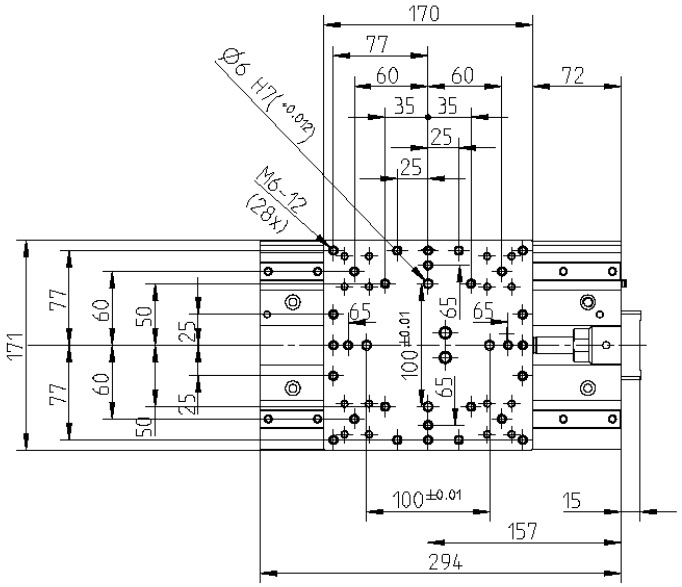
Motors:	2-/3-/5-Ph. Servo/DC
Hand wheels:	0056
Gear boxes:	2056.05
	2056.10
	2056.20
Limit switches:	included
Adjustable limit switches:	optional
Zero-point control:	9100
Encoder XE :	incremental
	absolute
Control system:	9300




137
157
77
77
Ø12
Ø6.6
Ø6 H7(+0.012)
35
65
65
35
170
100±0.01
77
77
50
50
77
77
100
100
110
130
157


□56
47.1
M4-8/15
(8x)
47.1
31
Ø6.35 h7(-0.015)


Translation ± 50 mm
62


170
77
60
60
72
35
35
25
25
Ø6 H7(+0.012)
M6-12
(28x)
171
77
60
50
25
65
65
65
65
100±0.01
77
60
50
25
100±0.01
15
157
294