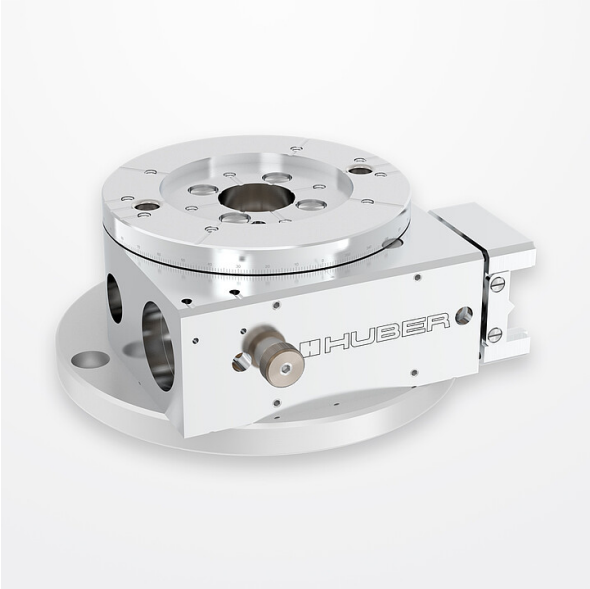


Goniometer 408

- four precision configurations
- two load configurations

Application specific versions:

- vacuum suitable
- antimagnetic
- radiation resistant
- in black

Modularly individually configurable:

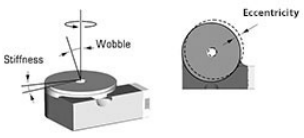
- from basic model to high-end system
- to multi-axis systems
- with individual transmission aperture
- with customer-specific hole pattern

Specifications:

Travel range [°]:	360
Material (housing/worm gear):	Aluminium/Bronze
Gear ratio:	180:1
Resolution [°]:	0.002 **
	0.001 minimum
Min. drive torque [Nm]:	0.05
Max. output torque [Nm]:	1.2
Stiffness [µrad/Nm]:	22
Weight [kg]:	1.5
Flange size [mm]:	32
Transm. aperture [mm]:	20

** step motor, 1000 steps/revolution

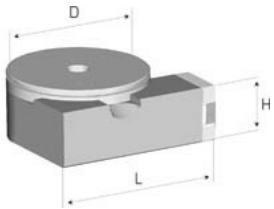
Precision configurations:



X1 X2 X3 XE

Accuracy ["]:	≤60	40	25	on request
Repeatability (unidir.) ["]:	≤4	2	2	on request
Reversal error ["]:	≤30	20	10	on request
Eccentricity [µm]:	≤8	5	2	2
Wobble ["]:	≤18	10	8	8

Dimensions [mm]:



D:	L:	H:
80	95	40

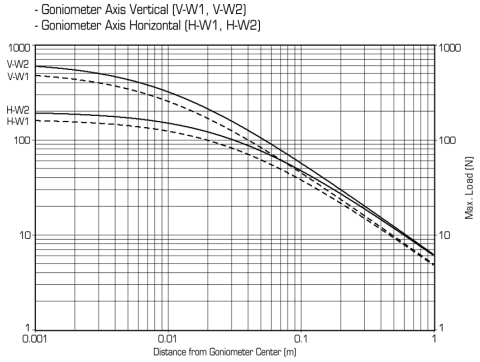
Accessories:

Motors:	2-/5-Ph.
	Servo/DC
Hand wheels:	0032
Gear boxes:	2042.10*
	2042.20*
Limit switches:	optional
Zero-point control:	9100
Encoder XE :	incremental
	absolute
Control system:	9300

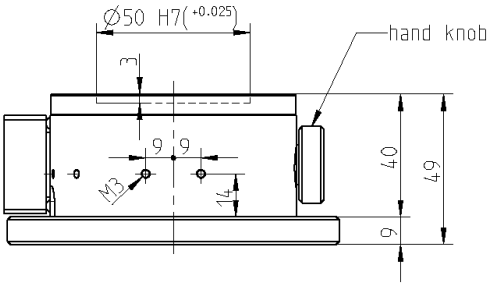
* adaptor required: M301.301-001

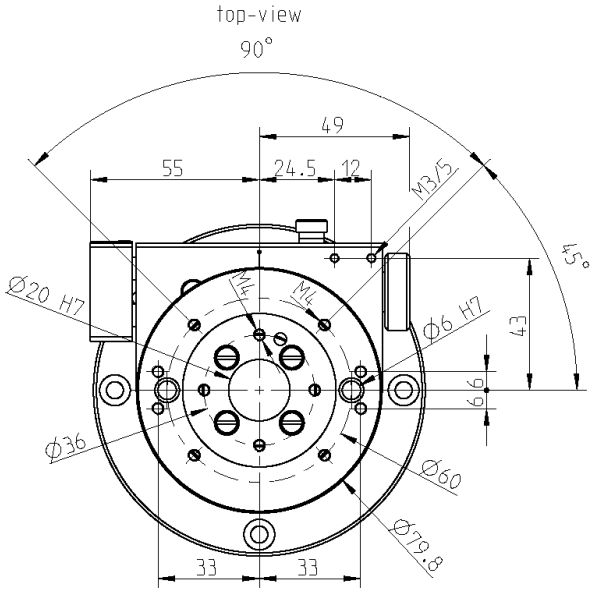
Load configurations:

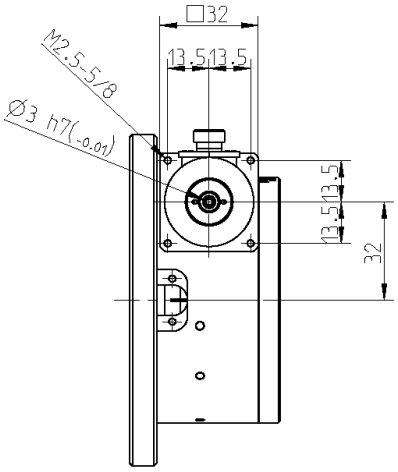
	vertical gonio. axis	horizontal gonio. axis
Max. load [N] W1 :	400	125
Max. load [N] W2 :	650	200

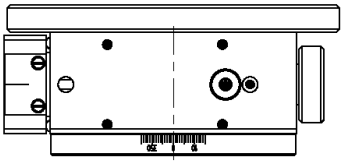


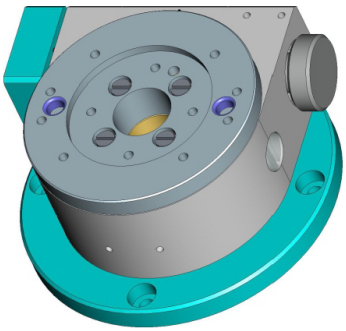
- vertical goniometer axis (V- W1 , V- W2)
- horizontal goniometer axis (H- W1 , H- W2)











HUBER Goniometer 408