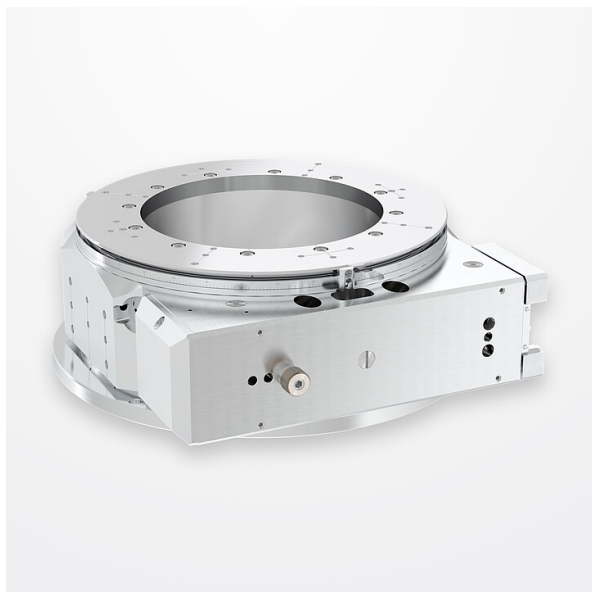




Goniometer 420

- four precision configurations
- two load configurations

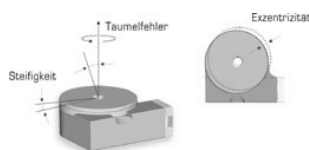
Application specific versions:

- vacuum suitable
- antimagnetic
- radiation resistant
- in black

Modularly individually configurable:

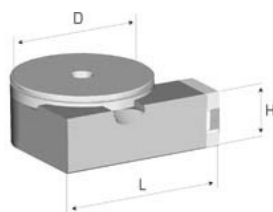
- from basic model to high-end system
- to multi-axis systems
- with individual transmission aperture
- with customer-specific hole pattern

Precision configurations:



	X1	X2	X3	XE
Accuracy ["]:	≤40	25	12	on request
Repeatability (unidir.) ["]:	≤4	2	2	on request
Reversal error ["]:	≤8	4	3	on request
Eccentricity [μm]:	≤5	3	2	2
Wobble ["]:	≤8	3	3	3

Dimensions [mm]:



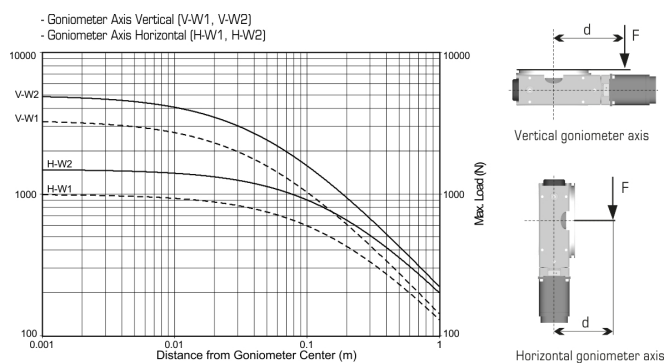
D:	L:	H:
290	294	105

Accessories:

Motors:	2-/3-/5-Ph. Servo/DC
Hand wheels:	0083
Gear boxes	2083.05 2083.10 2083.20
Limit switches:	included
Zero-point control:	9100
Encoder XE :	incremental absolute
Control system:	9300

Load configurations:

	vertical gonio. axis	horizontal gonio. axis
Max. load [N] W1 :	3300	1000
Max. load [N] W2 :	5000	1500



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

Specifications:

Travel range [°]:	360
Material (housing/worm gear):	Aluminium/Bronze
Gear ratio:	360:1
Resolution [°]:	0.001* 0.00005 minimum
Min. drive torque [Nm]:	1.0

Max. output torque [Nm]:	40
Stiffness [μ rad/Nm]:	0.2
Weight [kg]:	33
Flange size [mm]:	82
Transm. aperture [mm]:	190 (standard)

* step motor, 1000 steps/revolution

