



## Goniometer 480

- four precision configurations
- two load configurations

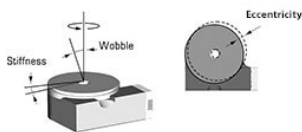
### Application specific versions:

- vacuum suitable
- antimagnetic
- radiation resistant
- in black

### Modularly individually configurable:

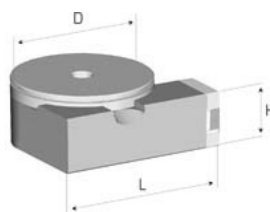
- from basic model to high-end system
- to multi-axis systems
- with individual transmission aperture
- with customer-specific hole pattern

### Precision configurations:



	X1	X2	X3	XE
Accuracy ["]:	≤35	20	12	on request
Repeatability (unidir.) ["]:	≤4	2	2	on request
reversal error ["]:	≤8	4	3	on request
Eccentricity [μm]:	≤5	3	2	2
Wobble ["]:	≤7	4	2	2

### Dimensions [mm]:



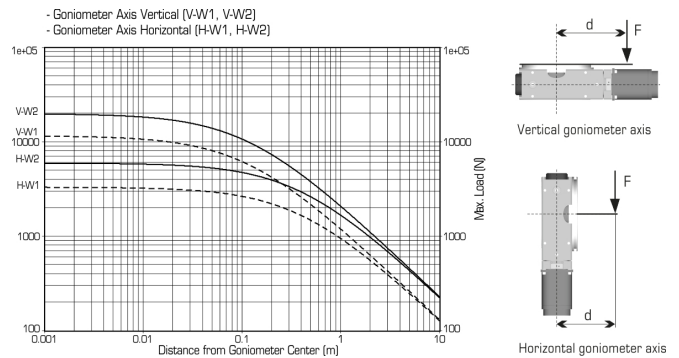
D:	L:	H:
800	621	165

## 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 <b>XE</b> :	incremental absolute
Control System:	9300

## Load configurations:

	vertical gonio. axis	horizontal gonio. axis
Max. load [N] <b>W1</b> :	11500	3300
Max. load [N] <b>W2</b> :	20000	6000



- 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]:	3.8

Max. output torque [Nm]:	250
Stiffness [ $\mu$ rad/Nm]:	0.02
Weight [kg]:	200
Flange size [mm]:	82
Transm. aperture [mm]:	500 (standard)

\* step motor, 1000 steps/revolution

