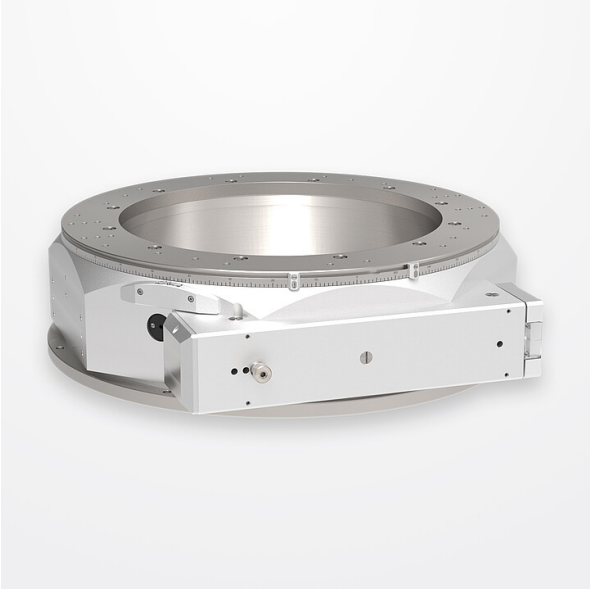


Goniometer 440

- four precision configurations
- two load configurations

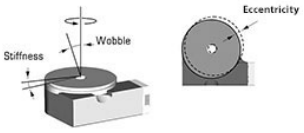
Application specific versions:

- vacuum suitable
- antimagnetic
- radiation resistant
- in black

Modularly individually configurable:

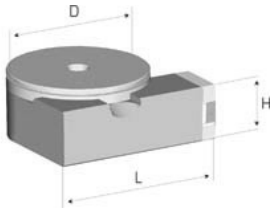
- from basic model to high-end system
- to multi-axis systems
- with individual transmission aperture
- with customer-specific hole pattern

Präzisionsklassen:



	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 ["]:	≤6	2	2	2

Dimensions [mm]:



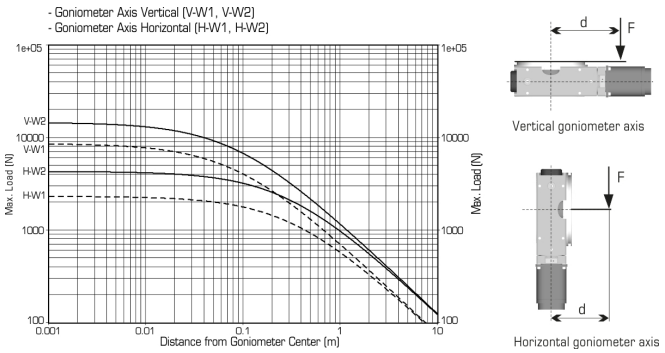
D:	L:	H:
500	447	133

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 :	8850	2300
Max. load [N] W2 :	14500	4300



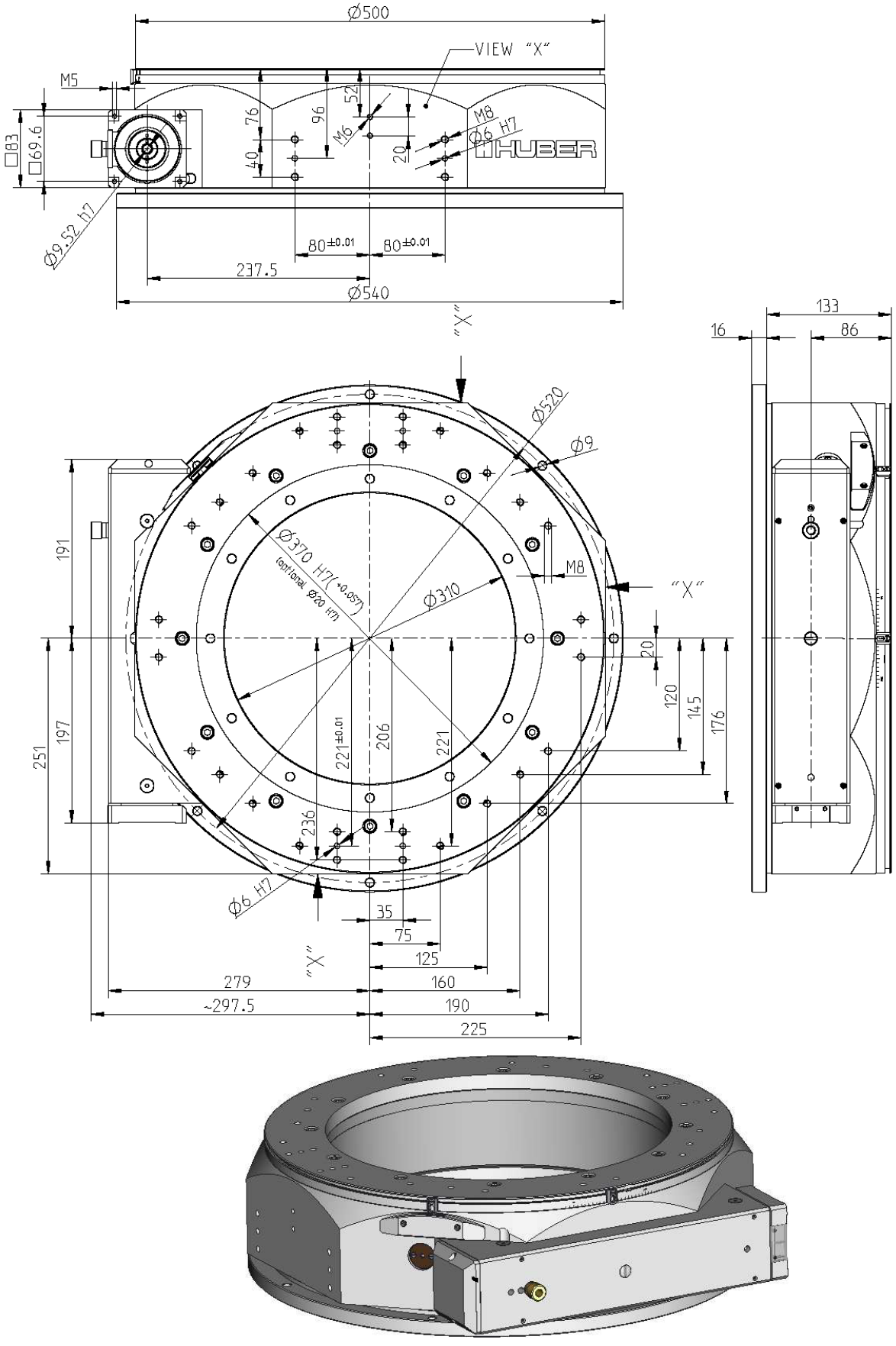
- vertical goniometer axis (V- W1 , V- W2)
- horizontal goniometer axis (H- W1 , H- W2)

Specifications:

Travel range [°]:	360
Material (housing/worm gear):	Aluminium/Bronze
Gear ratio:	360:1
Resolution [°]:	0.001*
	0.00005 minimum
Min. drive torque [Nm]:	2.0

Max. output torque [Nm]:	125
Stiffness [µrad/Nm]:	0.07
Weight [kg]:	77
Flange size [mm]:	82
Transm. aperture [mm]:	370 (standard)

* step motor, 1000 steps/revolution


Ø500
VIEW "X"
M5
□83
□69.6
76
96
52
40
M6
M8
Ø6 H7
20
HUBER
Ø9.52 h7
80±0.01
80±0.01
237.5
Ø540
"X"
133
16
86
Ø520
Ø9
Ø370 H7(+0.057)
optional Ø20 H7)
Ø310
M8
"X"
191
251
197
221±0.01
206
221
20
120
145
176
236
Ø6 H7
35
75
125
279
160
~297.5
190
225

440