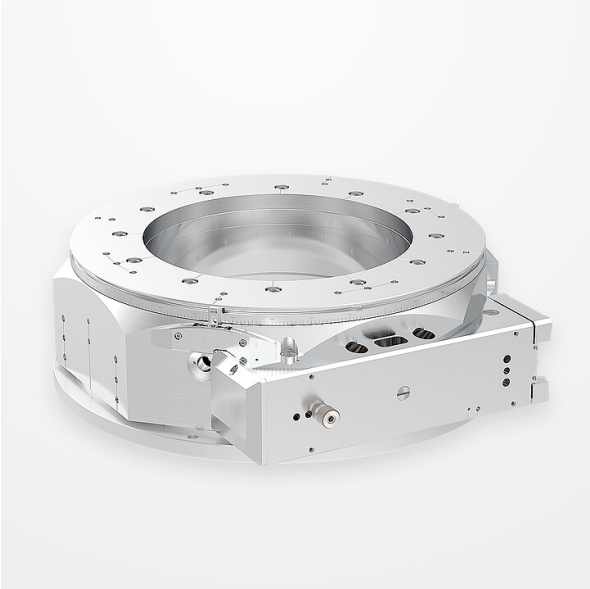


## Goniometer 430

- four precision configurations
- two load configurations

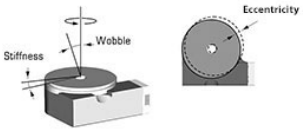
## Application specific versions:

- vacuum suitable
- antimagnetic
- radiation resistant
- in black

## Modularly individually configurable:

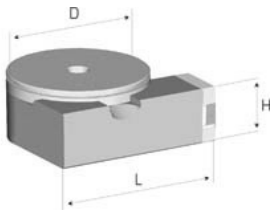
- from basic model to high-end system
- to multi-axis systems
- with individual transmission aperture
- with customer-specific hole pattern

## 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 ["]: | ≤6 | 2 | 2 | 2 |

## Dimensions [mm]:



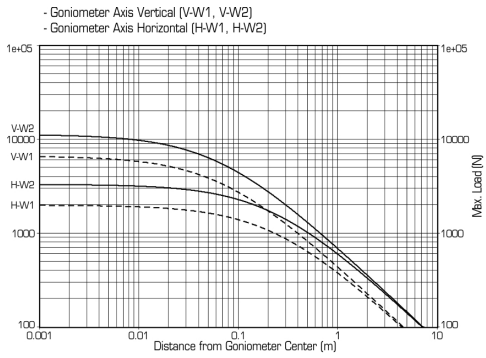

| D: | L: | H: |
|---|---|---|
| 400 | 359 | 125 |

## 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 | : | 6650 | 2000 |
| Max. load [N] W2 | : | 11300 | 3300 |



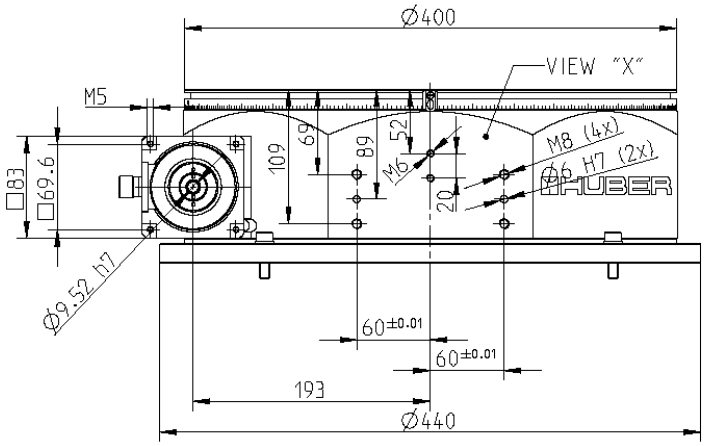

- vertical goniometer axis (V- W1 , V- W2 )
- horizontal goniometer axis (H- W1 , H- W2 )

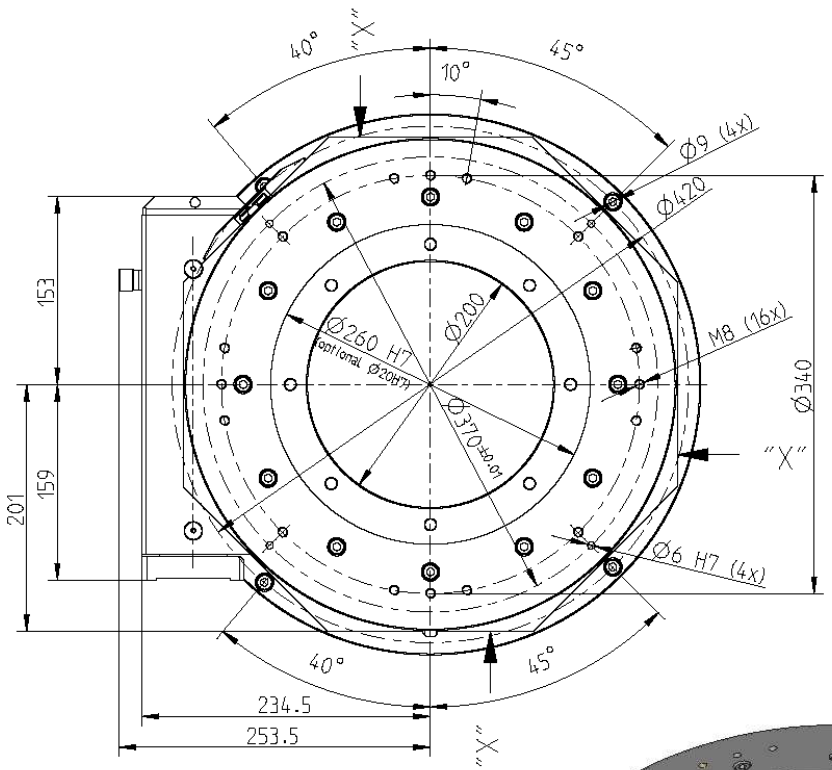
## Specifications:

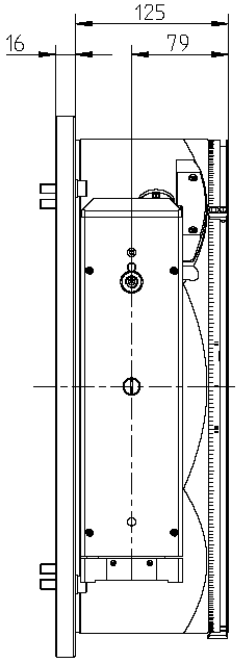
| | |
|---|---|
| Travel range [°]: | 360 |
| Material (housing/worm gear): | Aluminium/Bronze |
| Gear ratio: | 360:1 |
| Resolution [°]: | 0.001* |
| | 0.00005 minimum |
| Min. drive torque [Nm]: | 1.5 |

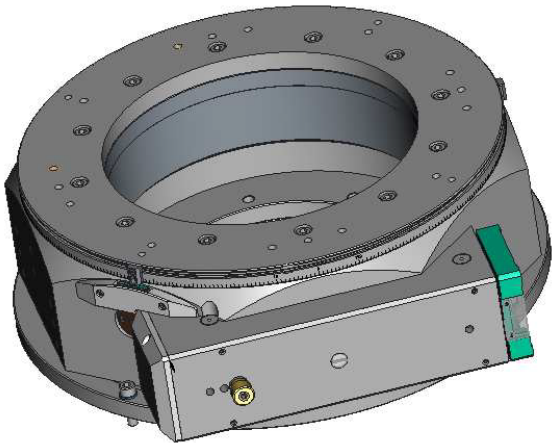
| | |
|---|---|
| Max. output torque [Nm]: | 100 |
| Stiffness [µrad/Nm]: | 0.1 |
| Weight [kg]: | 55 |
| Flange size [mm]: | 82 |
| Transm. aperture [mm]: | 260 (standard) |

* step motor, 1000 steps/revolution


Ø400
VIEW "X"
M5
□83
□69.6
109
69
89
52
M6
M8 (4x)
Ø6 H7 (2x)
HUBER
20
Ø9.52 h7
60±0.01
60±0.01
193
Ø440


40°
"X"
10°
45°
Ø9 (4x)
Ø420
153
Ø200
Ø260 H7
optional Ø20H7
M8 (16x)
Ø340
Ø370±0.01
"X"
201
159
Ø6 H7 (4x)
40°
45°
234.5
253.5
"X"


125
16
79



430