

## 2-Circle Goniometer 424

This system offers low height, high precision and high load capacity.

As in all other systems in this series, both circular motions are independent of each other. The 2-Theta circle is equipped with an arm with prism guide and carriage.

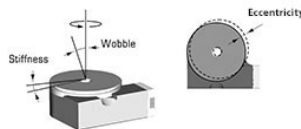
A further prism guide with carriage is mounted to the side of both circles.

### Application specific versions:

- vacuum suitable
- antimagnetic
- radiation resistant
- in black

### Specifications:

|                               |                  |
|-------------------------------|------------------|
| Travel range [°]:             | 360              |
| Material (housing/worm gear): | Aluminium/Bronze |
| Gear ratio:                   | 360:1            |
| Resolution [°]:               | 0.001*           |
|                               | 0.00005 minimum  |
| Min. drive torque [Nm]:       | 0.5              |
| Weight [kg]:                  | 36               |
| Flange size [mm]:             | 56               |
| Stiffness [μrad/Nm]:          | 2                |
| Max. load [N]:                |                  |
| - Theta:                      | 3400             |
| - 2-Theta:                    | 100              |

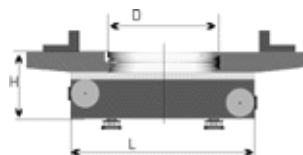


|                              |    |    |
|------------------------------|----|----|
| Accuracy ["]:                | <= | 30 |
| Repeatability (unidir.) ["]: | <= | 2  |
| Reversal error ["]:          | <= | 7  |
| Eccentricity [μm]:           | <= | 3  |
| Wobble ["]:                  | <= | 4  |

\* step motor, 1000 steps/revolution

## Dimensions [mm]:

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|     |     |     |
|-----|-----|-----|
| D:  | L:  | H:  |
| 215 | 356 | 130 |

## Accessories:

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|                         |                               |
|-------------------------|-------------------------------|
| Motors:                 | 2-/3-/5-Ph.<br>Servo/DC       |
| Hand wheels:            | 0056                          |
| Gear boxes:             | 2056.05<br>2056.10<br>2056.20 |
| Limit switches:         | included                      |
| Zero-point control:     | included                      |
| Encoder <b>XE</b> :     | incremental<br>absolute       |
| Control system:         | 9300                          |
| Various arms:           | optional                      |
| Counter weight:         | optional                      |
| Soller aperture system: | optional                      |

