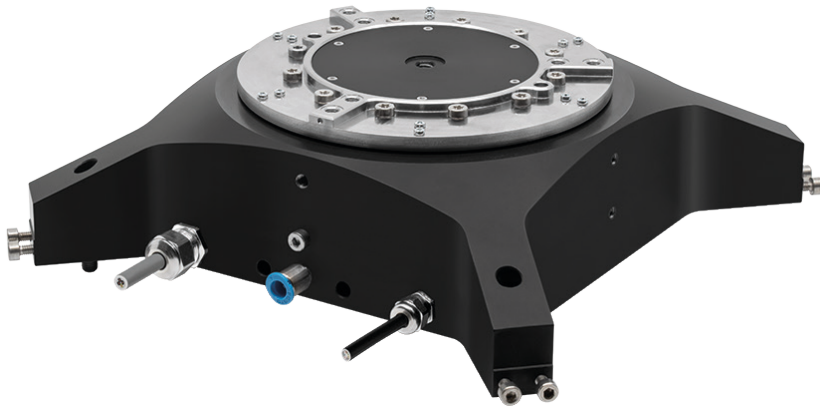




More info



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Bidirectional repeatability
±2 arcsec at ±3 sigma



Position accuracy
down to ±30 arcsec (w/o calibration),
down to ±3 arcsec after calibration



Position stability
0.02 arcsec

DXR+

Rotary axes

For mid to high end semiconductor applications

The DXR+ is a rotary module designed for mid-end applications in the semiconductor and electronics industries, featuring a compact design, light mass, and large hollow shaft to optimize performance to cost ratio.

The system offers significant improvements in rigidity and directly increases the control bandwidth of the supporting XY tables. It operates over a wide range of bus voltages from 48 to 300 VDC. To get the best position stability performance, it is recommended to associate the DXR+ module with one of our AccurET+ drive.

Compatible with standard XY platforms, the DXR+ module offers versatility with an unlimited angular travel or with a limited one to an angular segment. It fulfills cleanliness standards from ISO 5 to ISO 1 under certain conditions.

OPTIMIZED THERMAL STABILITY

Through its ergonomic fixation flexures, the DXR+ module warrants a thermal decoupling between the rotary module and the XY stage, which translates in a widely improved thermal stability of the inspection area's surroundings.

CLEANLINESS IMPROVEMENT

The DXR+ theta module comes with integrated vacuum tube connections, allowing the use of additional suction lines to prevent particles from reaching the processing area.

HIGH ACCURACY OPTICAL ENCODER

Through our inhouse 18'000 lines encoder, a precise motion control is provided, allowing for an accurate payload positioning at all times.

LOW PROFILE AND LOW MASS

The DXR+ theta module limits the payload to be carried by the XY stage and the height of the bridge that carries the processing elements (optics, laser...). This way, the Abbe error is reduced, improving the overall efficiency of the process. Also, the forces needed on the XY stage are reduced, making it the ideal choice for mid to high-precision applications.

UNLIMITED TRAVEL OR LIMITED ANGULAR SEGMENT

The DXR+ module offers flexibility in positioning, either allowing for 360° travels, or limiting the travel range through mechanical hard stops to prevent collisions with the surrounding elements.

- > **Bidirectional repeatability ±2 arcsec at ± 3 sigma**
- > **155 mm outer diameter, 44 mm inner hollow shaft, ensuring compatibility with various setups**
- > **Position accuracy down to ±30 arcsec w/o calibration, down to ±3 arcsec after calibration**
- > **Speed up to 400 rpm**
- > **High speed stability capabilities**
- > **Infinite stroke**
- > **Up to 30 kg payload**
- > **Position stability up to ±0.02 arcsec**