



intelliDRILL_{se} II – smart drilling

Key Features

- Fast step response times permit highest throughput
- New motor design with improved thermal management
- Lightweight beryllium mirrors
- Digital dynAXIS_{se} encoder technology
- Drill time optimization⁽¹⁾:
 - automatic jump time setting for all jump lengths
 - time-efficient parallel handling of positioning and laser delays
- On request also available with SCANahead technology

Typical Applications

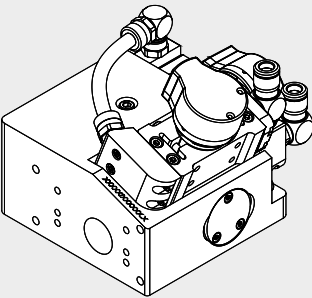
- PCB industry
- Via hole drilling
- Percussion drilling

Specifications

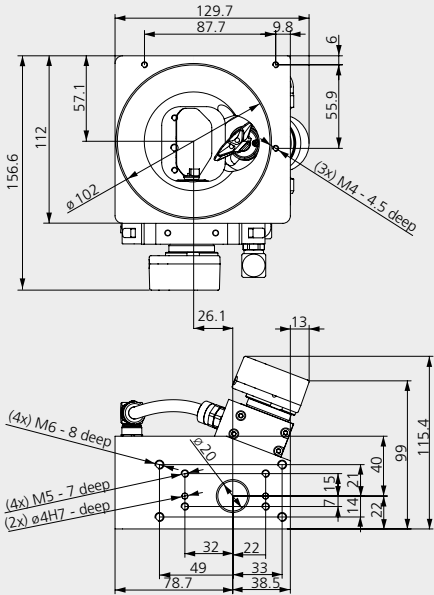
Aperture	20 mm
Maximum scan angle ⁽²⁾	± 0.349 rad
Wavelength ⁽³⁾	9400 nm
Step response (positioning and settling to ±5 µm at 100 mm focal length)	0.22 ms at 0.25 mm 0.25 ms at 0.5 mm 0.34 ms at 1 mm
Temperature drift ⁽²⁾	Offset: < 10 µrad/K Gain: < 5 ppm/K
Long-term drift ⁽²⁾ (8-hour-Drift after 30 min warm-up, at constant ambient temperature and load)	Offset: < 50 µrad Gain: < 50 ppm
Power supply requirements	48 V, 6 A (RMS)
Water cooling requirements	3 l/min at 20 °C and Δp < 1 bar, p < 4 bar

⁽¹⁾ RTC5 or RTC6 control board required
⁽²⁾ all angles are optical angles
⁽³⁾ others on request

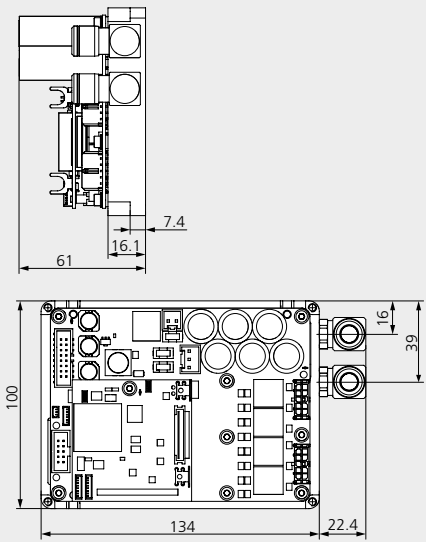
intelliDRILL_{se} II Module Layout



intelliDRILL_{se} II Module Dimensions



Digital ISB Servo Board Dimensions



all dimensions in mm