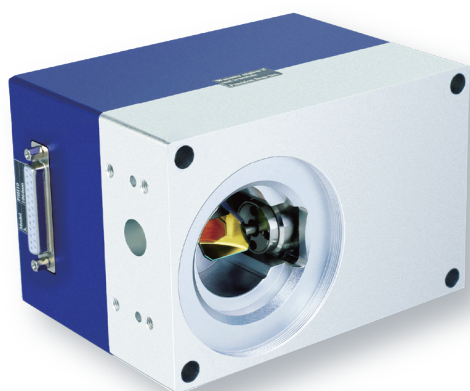


# PSH10 Scan Head

Focusing on high-end industrial laser applications



---

## Typical Applications:

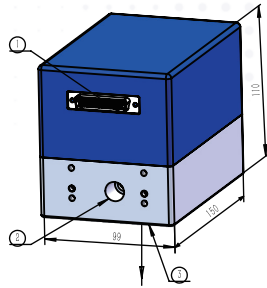
The PSH10 scan heads offer great versatile applications, making them well-suited for almost all laser processing tasks, including precise marking, materials processing, micro-structuring, additive manufacturing (3D printing), processing-on-the-fly, and more. With its outstanding cost-efficiency, the PSH10 exhibits low temperature drift, while delivering high precision and dynamic performance.

# PSH10 Scan Head

Focusing on high-end industrial laser applications



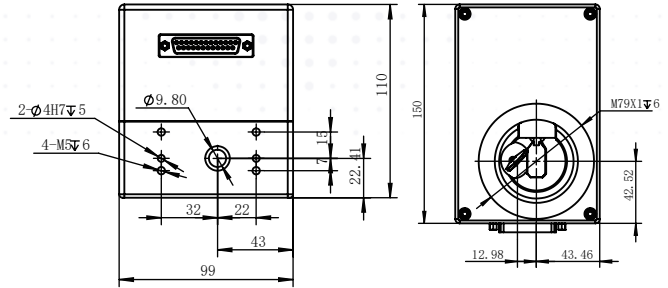
## Mechanical Drawings (Dimensions in mm)



PSH10 Scan Head

### Legend:

- 1. Electrical interface (XY2-100, power in)
- 2. Beam in
- 3. Beam out



Beam In & Mounting Bracket

Beam Exit Side

## Specifications

Specifications	PSH10
Maximum allowed average laser power <sup>(1)</sup>	300 W
Aperture	10 mm
Typical scan angle <sup>(2)</sup>	± 10°
Tracking error	≤ 0.12 ms
Step response time (1% of full scale)	≤ 0.26 ms
<b>Speed</b>	
Positioning / Jump <sup>(3)</sup>	< 20 m/s
Line scan <sup>(3)</sup>	< 20 m/s
Vector scan <sup>(4)</sup>	< 3.5 m/s
Good writing quality <sup>(3)(5)</sup>	950 cps
<b>Precision</b>	
Linearity	99.9 %
Repeatability	2 µrad
<b>Temperture drift</b>	
Offset	20 µrad/ C
Gain	20 µrad/ C
<b>Long-term drift (at constant ambient temperature around 25 °C)</b>	
Over 8 hours long-term offset drift (after 30mins warm-up)	40 µrad
Over 8 hours long-term gain drift (after 30 mins warm-up)	60 µrad
Operating Temperature Range	25 °C ± 10 °C
Signal interface	Analog: ± 10 V or ± 5 V Digital: XY <sub>2</sub> - 100, PRS422 protocol
Input power requirement (DC)	± 15 V @ 5 A Max RMS

### Note:

- (1) For laser wavelength 1030-1090 nm.
- (2) All angles are in mechanical degrees.
- (3) With F-Theta objective f = 163 mm. Speed value varies correspondingly with different focal lengths.
- (4) Reapeatability and temperature drift are measured within this speed.
- (5) Single-stroke font with 1 mm height.