

SUPERSCAN-LD

General Specifications

Power Supply	Voltage	±15 to ±18 V	Interface Signals	Digital	XY2-100 Protocol
	Current	3.5 A, RMS, max. 10 A	Typical Deflection		±0.393 rad
	Ripple	≤ 100 mV	Resolution		12 µrad
	Noise	≤ 0,5 % DC to 30 MHz	Repeatability		20 µrad
Ambient Temperature	+15 to +35 °C		Max. Gaindrift ¹⁾		0.005 %/K
Storage Temperature	-10 to +60 °C		Max. Offsetdrift ¹⁾		30 µrad/K
Humidity	≤ 80 % non-condensing		Long-term Drift over 24 hours ^{1,2)}		< 200 µrad

1) Drift per axis, 2) after warming-up, variations of ambient temperature < 1K, variations of cooling water temperature < 1K,

Aperture dependent Specifications

SS-LD-30	
Mechanical Data:	
Input Aperture	30.0 mm
Beam Displacement	35.7 mm
Max. Immersion Depth for Lenses ¹⁾	17.0 mm
Weight (without Lens)	approx. 8.4 kg
Dynamic Data:	
Acceleration Time	0.56 ms
Positioning Speed ²⁾	> 6 m/s

1) from bearing surface of lens ring, incl. 1 mm safety clearance, 2) field size 140 mm x 140 mm,

Mirror Specifications

CO ₂	
Wavelength	10,600 nm
Coating	dielectric
Min. Reflectivity @ Wavelength (nm)	99.9% @ 10,600 60.0% @ 450-650
Flatness @ 10.600 nm	λ/5
Max. Laser Power, cw	500 W/cm ²
Max. Laser Power, 100ns Pulse Width	400 MW/cm ²
Surface Quality	40/20 Scratch/Dig

Water tempering

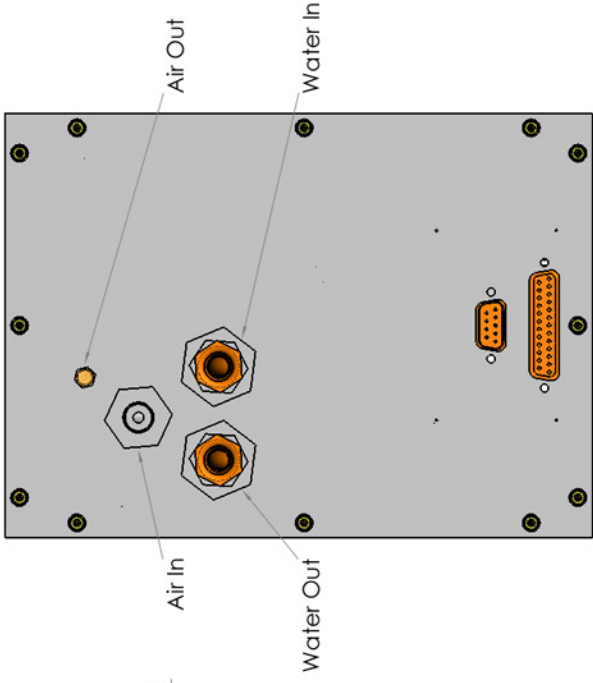
Specifications	
Water	deionized
Temperature	25-28°C
Pressure	2-3 bar

Flow rate	Pressure loss
2 l / min	0,3 bar
4 l / min	0,4 bar
6 l / min	0,7 bar

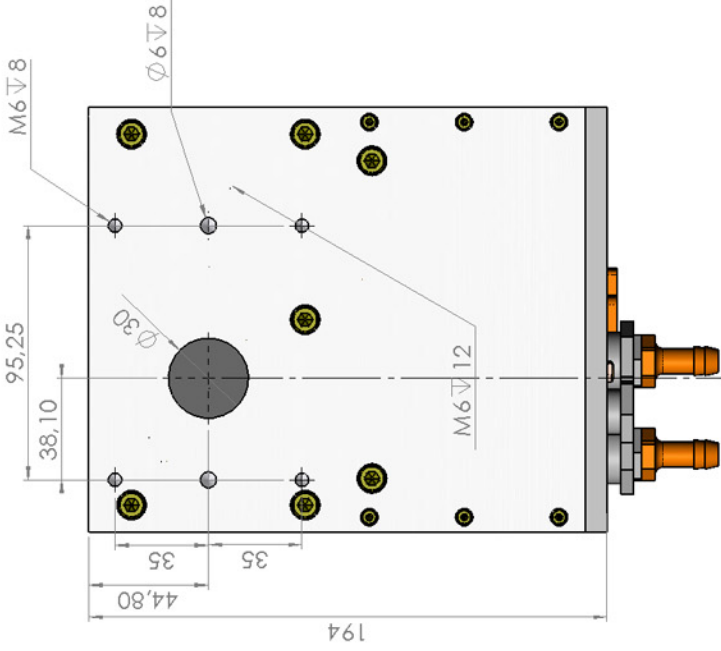
Air flushing

Specifications	
Air	oil free, technically pure

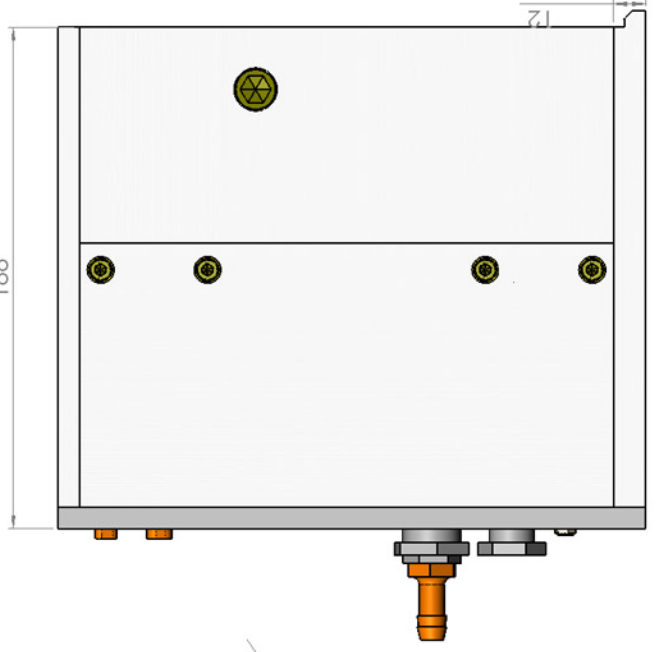
Back View



Input Side

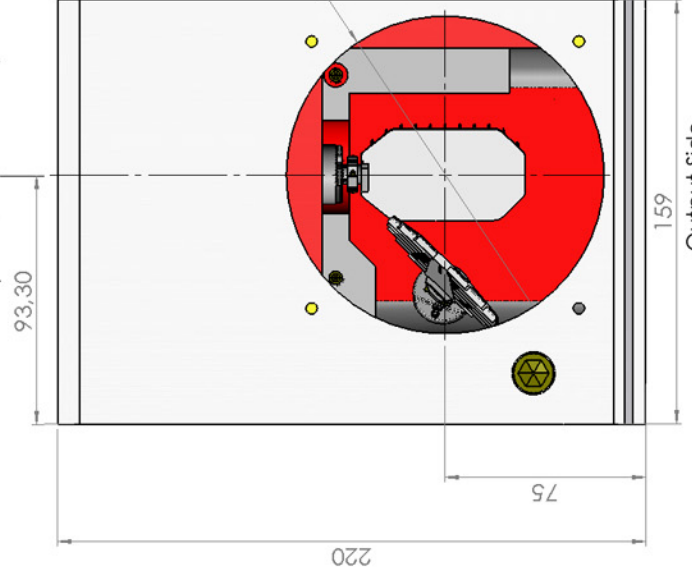


35,74 Beam displacement



Side View

M120x1



Output Side

