

# FQSS 266-200

Diode pumped passively Q-switched solid state laser

- 266 nm
- single pulse
- < 1.5 ns
- 1 – 60 Hz
- > 200  $\mu$ J

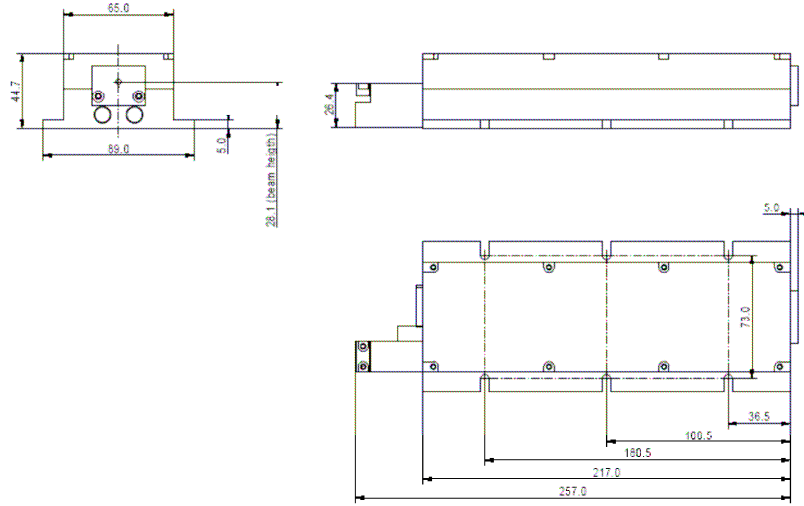


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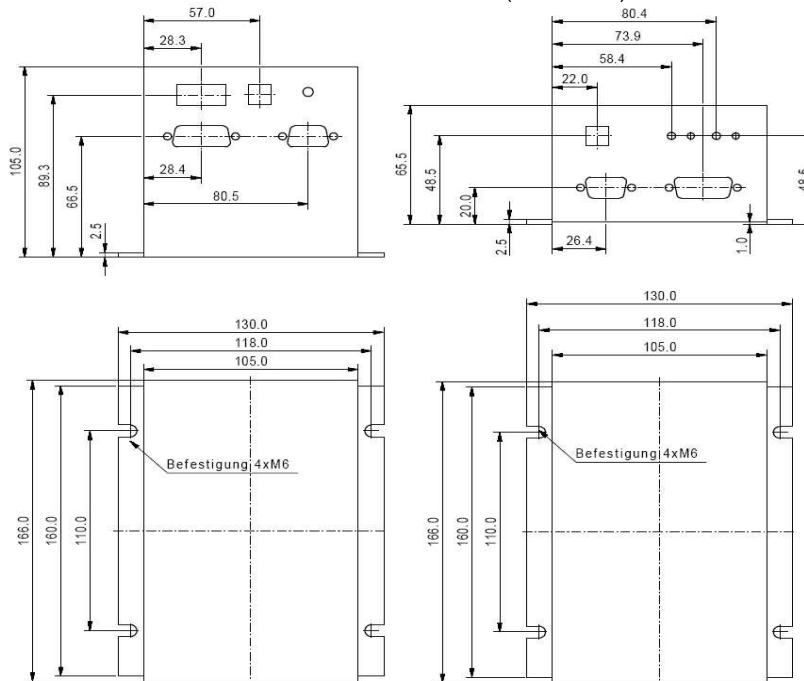
<b>Optical Data</b>	Wavelength	266 nm
	Beam Divergence (full angle)	< 3.0 mrad
	Beam Ellipticity	< 2:1
	Waist Diameter	500 $\pm$ 150 $\mu$ m (located at about 110mm inside the laser head)
	Beam Diameter	0.8 $\pm$ 0.3 mm (at laser exit)
	Peak Power	> 130 kW @ 20 Hz
	Pulse Energy	> 200 $\mu$ J @ 20 Hz
	Pulse Repetition Rate (with external trigger)	1 - 60 Hz
	Pulse Width (FWHM)	< 1.5 ns
	Polarization Ratio	> 100:1, vertical
	Long term pulse energy stability (6 hrs)	< $\pm$ 8 %
Laser Classification	4 / IV	
<b>Optical Output</b>	Free Beam	
<b>Electrical Data</b>	Electrical Power Consumption	< 150 W
	Line Voltage	90 - 265 V AC (50-60 Hz) or 24 V DC
<b>Interface</b>	RS 232 (USB on request)	
<b>Miscellaneous</b>	Warm-up Time	< 10 min
	Operating Temperature	22 - 32 $^{\circ}$ C
	Laser Head Size	217 x 65 x 45 mm (core dimensions)
<b>Options</b>	Synchronization signal output (rise time < 2 ns)	
	Electrical driven shutter	
	Heat sink with fan (recommended for repetition rates > 20 Hz)	

## Laser Head and Controller

Laser head (schematic)



Laser booster and controller (schematic)



## Laser Safety Labels

The FQSS266-200 lasers are class 4 according to IEC 60825-1

