



Fiber-Coupled Diode Lasers

qcw, passively cooled with tap water



JOLD-120-QPXF-2P W

Design 215531124

Features:

- High optical output power of 120 W qcw
- Fiber core diameter: 600 μm (NA 0.22)
- Integrated pilot laser and power monitor
- Long lifetime > 1GShot, high reliability

Applications:

- Pumping of solid-state lasers and fiber lasers
- Material processing
- Medical applications

Fiber-Coupled Diode Lasers

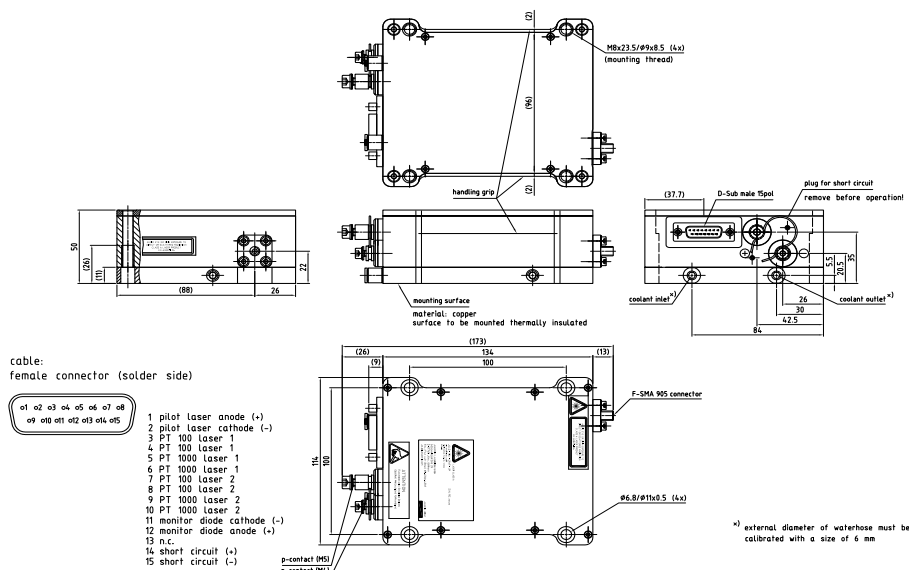
qcw, passively cooled with tap water

Specifications (Start of Life)

Product	JOLD-120-QPXF-2P W, Design 215531124		
Operation Mode	qcw		
	maximum current		
Maximum Pulse Length / Duty Cycle	≤ 0.3 ms / ≤ 20 %		
Maximum Optical Output Power	120	120	W
Center Wavelength at 25 °C	808	938	nm
Center Wavelength Variation at 25 °C	5	5	nm
Typical Spectral Bandwidth (FWHM)	5	5	nm
Maximum Spectral Bandwidth (FWHM)	6	6	nm
Typical Operation Current	105	120	A
Maximum Operation Current	120	130	A
Typical Threshold Current	18	20	A
Maximum Threshold Current	20	25	A
Typical Slope	1.4	1.2	W/A
Minimum Slope	1.1	1.0	W/A
Maximum Operating Voltage	5.5	5.5	V
Fiber Core Diameter, Numerical Aperture	600 μm, NA 0.22		
Fiber Connector	F-SMA 905, potential free		
Power Monitor	Infineon, SFH 229		
Pilot Laser	0.5 ... 3 mW, 650 nm ± 15 nm, 3 ... 5 V, 40 ± 15 mA, power not adjustable (only for teaching and targeting purposes before laser operation)		
Anode, Cathode Connectors	M5, M4 (e.g. socket cap screws ISO 4762)		
Signal Connector	D-Sub, male, 15 pin		
Operation Conditions	Non-condensing atmosphere		
Expected Lifetime	> 1 GShot		
Cooling:			
Flow Rate	> 3 l/min		
Water Temperature	8 ... 23 °C		
Water Pressure	400 kPa maximum inlet and outlet pressure, < 80 kPa pressure drop		
Water Connectors	Ø 6 mm (OD) push-in fittings		
Water Quality	Industrial water, unfiltered up to a particle size of 0.5 mm		
Diode Laser Operating Temperature	15 ... 30 °C, measured with internal temperature sensor		
Integrated Temperature Sensor	PT 100 and PT 1000, separately for each diode laser		
Note	Specify exact wavelength needed with your order		

See General User Information!

Options on request: For additional designs or specifications please visit our website: www.jenoptik.com/diodelasers



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