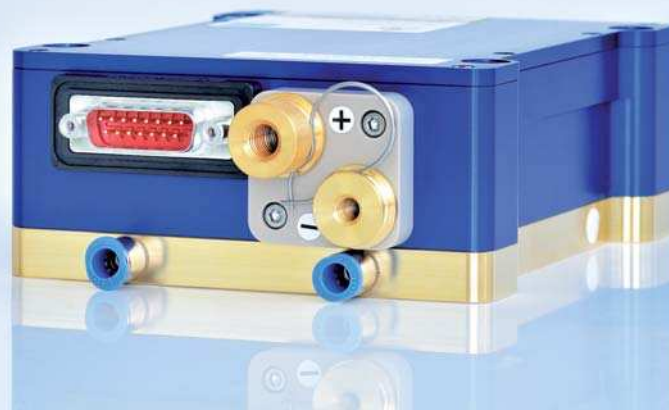




## Fiber-Coupled Diode Lasers

cw, passively cooled with tap water



JOLD-100-CPXF-2P W

Design 215533224 | 215533124

### Features:

- High optical output power up to 100 W cw
- Fiber core diameter: 400  $\mu\text{m}$  | 600  $\mu\text{m}$  (NA 0.22)
- Integrated pilot laser and power monitor
- Long lifetime > 20,000 h, high reliability

### Applications:

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

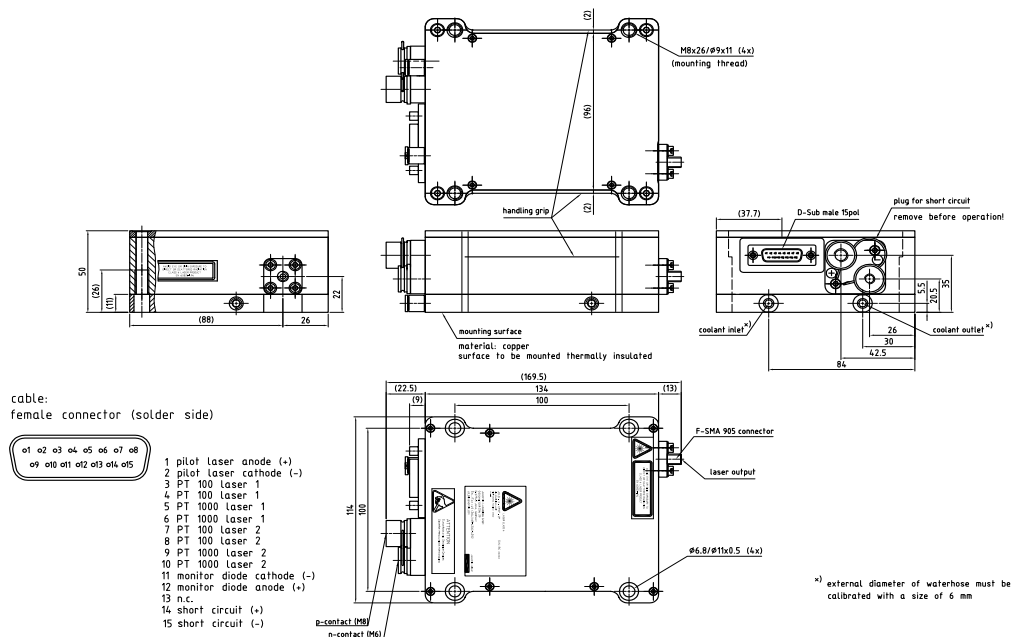
# Fiber-Coupled Diode Lasers

## cw, passively cooled with tap water

### Specifications (Start of Life)

Product	JOLD-100-CPXF-2P W, Design 215533224				JOLD-100-CPXF-2P W, Design 215533124	
Operation Mode	cw / pulsed					
Maximum Optical Output Power	100	100	100	100	100	W
Center Wavelength at 25 °C	880	915	938	976	808	nm
Center Wavelength Variation at 25 °C	3	5	5	3	3	nm
Typical Spectral Bandwidth (FWHM)	5	5	5	5	5	nm
Maximum Spectral Bandwidth (FWHM)	6	6	6	6	6	nm
Typical Operation Current	75	70	72	72	85	A
Maximum Operation Current	85	80	80	80	95	A
Typical Threshold Current	9	6	6	6	19	A
Maximum Threshold Current	12	9	9	9	22	A
Typical Slope	1.6	1.6	1.6	1.6	1.6	W/A
Minimum Slope	1.3	1.3	1.3	1.3	1.3	W/A
Maximum Operating Voltage	4.5	4.5	4.5	4.5	4.5	V
Fiber Core Diameter, Numerical Aperture	400 µm, NA 0.22 *	400 µm, NA 0.22 *	400 µm, NA 0.22 *	400 µm, NA 0.22 *	600 µm, NA 0.22	
Fiber Connector	F-SMA 905, potential free; <b>metal armored patchcord only!</b> ; * free standing fiber towards the module					
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	M8, M6 (e.g. socket cap screws ISO 4762)					
Signal Connector	D-Sub, male, 15 pin					
Operation Conditions	Non-condensing atmosphere					
Expected Lifetime	> 20,000 h (constant current), partly under qualification					
<b>Cooling:</b>						
Flow Rate	> 3 l/min					
Water Temperature	8 ... 20 °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 ... 35°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					
	<b>See General User Information!</b>					

Options on request: 88x nm; for additional designs or specifications please visit our website: [www.jenoptik.com](http://www.jenoptik.com)



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