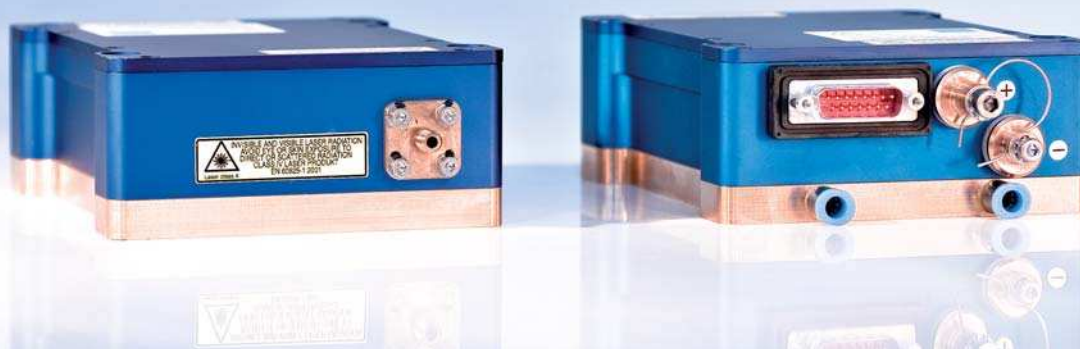




## Fiber-Coupled Diode Lasers

cw, passively cooled with tap water



JOLD-75-CPXF-2P W

Design 215531224

### Features:

- High optical output power of 75 W cw
- Fiber core diameter: 400  $\mu\text{m}$  (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

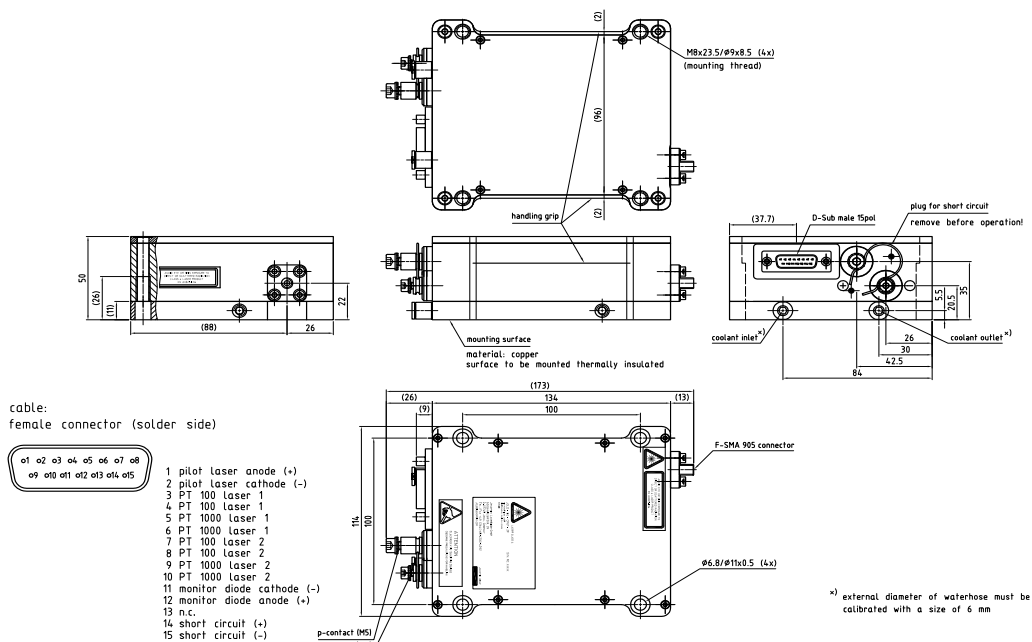
### Specifications (Start of Life)

Product	JOLD-75-CPXF-2P W, Design 215531224					
Operation Mode	cw, power modulation only between threshold and maximum current					
Maximum Optical Output Power	75	75	75	75	75	W
Center Wavelength at 25 °C	808	880	915	938	976	nm
Center Wavelength Variation at 25 °C	3	3	5	5	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	59	60	60	60	64	A
Maximum Operation Current	65	66	66	66	70	A
Typical Threshold Current	10	9	6	6	6	A
Maximum Threshold Current	13	12	9	9	9	A
Typical Slope	1.6	1.5	1.4	1.4	1.3	W/A
Minimum Slope	1.3	1.3	1.2	1.2	1.1	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; free standing fiber inside F-SMA 905 towards the module					
Fiber Connector	F-SMA 905, potential free; <b>metal armored patchcord only!</b>					
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	> 20,000 h (constant current), partly under qualification					

#### 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
	<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)



<sup>\*)</sup> external diameter of waterhose must be calibrated with a size of 6 mm



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