



*Crafting ideas into light*

## Pumping Heads

### QCW laser gain modules

The cylindrical symmetry of this design allows rotation of the pumping chamber giving flexibility during the production and optimization of a laser system.

The pumping laser diode bars are mounted using our patented clamping technology. The main features of the solder-free concept of the clamping technology, exclusively used by Monocrom.



PH / 450W to 1800W QCW

Product specification are subject to change without notice.  
For complete details, please contact your local MONOCROM sales representative

UNE EN ISO 9001:2008

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## Technical specifications (typical values)

	PH-450	PH-900	PH-1200	PH-1800
$P_{peak}$ (W)	450	900	1200	1800
$I_{op}$ (A)	150	150	180	270
$V$ ( $V_{dc}$ )	6	12	12	12
Pumped length (mm)	11	23	23	23
$t_{pulse}$ ( $\mu s$ )	Up to 500			
Rep. rate (Hz)	Up to 1000			
Rod diameter (mm)	2 to 4			
Rod material	Nd:YAG		Nd:YLF	
Nd concentration	0,4% to 1%		0,4% to 2%	

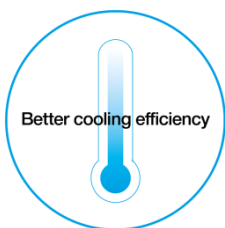
### No mechanical stress

Our patented solder-free technology is used in our diode bars stacks. Thanks to it clamped bars expand and contract freely during the thermal cycles of the pulsed regime avoiding mechanical stress.

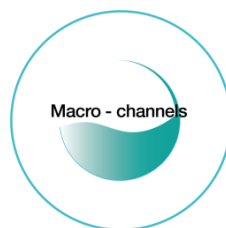


## Clamping™ patented technology

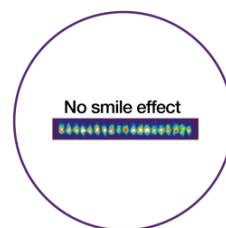
## main advantages



Our diode bars are in direct contact with 2 heat sinks that help them cool easier



We avoid water obstructions thanks to the use of macro-channels



Our diode bar mounts don't smile even though they live happily .



The lack of a "smile" allows a superb beam. Our diode bar mounts achieve higher energy per pulse and excellent beam quality, thus higher brightness



When mechanical stress is not an issue any more, product life-time increases significantly

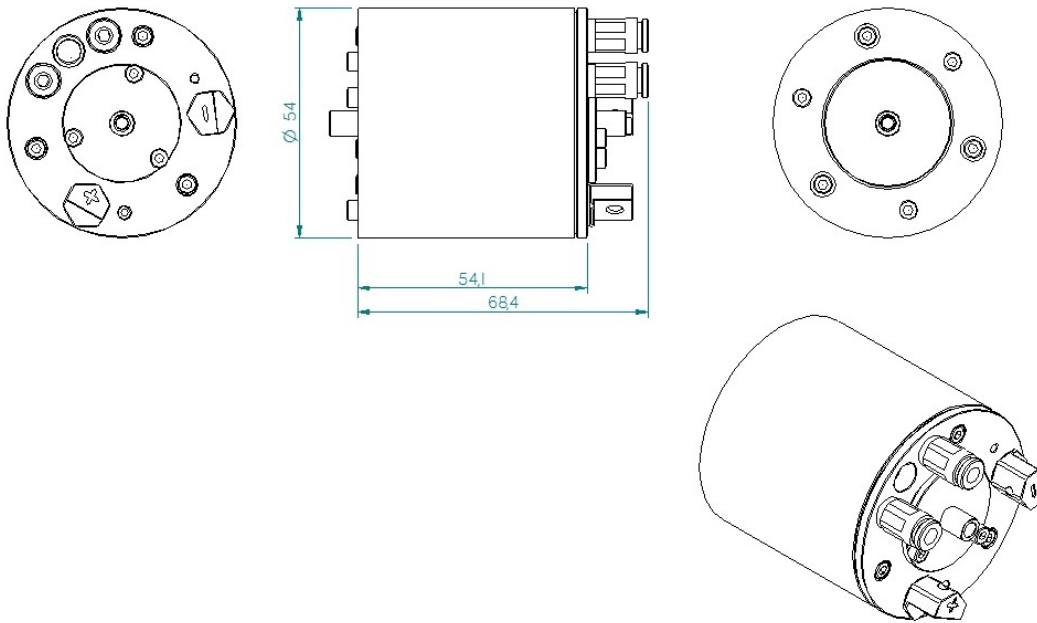
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