# DLK Coolers for Diode Lasers

- Specially designed to cool diode lasers. Capacities from 250 W to 2.5 kW
- Cooler contains R134a
- Available as 19" drawer, OEM unit or fully enclosed
- Water temperature ranging from 15°C to 28°C
- Air cooling

- Temperature constancy up to ± 0.2K
- Designed for running with deionized water. Ion exchanger in bypass on request
- Customized designs
- Wide range of alarms and PDA
- Only hi-rel components used



# **Description**

Diode lasers place special demands on the cooler. This is why we developed a total new performance class of laser cooler - specially matched to cooling diode lasers: the DLK series.

Cooling requirements differ considerably depending on the application. The DLK series is therefore based on the concept that provides the customer with a wide range of possibilities for matching the coolers precisely to a particular diode laser, i.e. the diode's characteristics and components used.

Expensive diodes require reliable cooling. This is why we only use high-reliability components in the construction of our laser coolers.

The DLK series coolers are not "off-the-peg" all-rounders. They are designed in close cooperation with our customers. We first need precise design data such as capacity, temperature range, temperature constancy, pump flow rate, pump pressure, type of cooling medium and the monitoring functions the

customer wants. We then define the cooler design based on this data, select the components, etc. Although we manufacture the DLK series at our plant like a volume product, we customize each unit precisely to the characteristics of your diode laser. You can rely on our many years of experience in building laser coolers.

Nothing is more expensive than cheap tools! This statement applies in particular when building diode laser coolers. This is why we only use carefully selected and tested components, not only for elements in the cooling circuit but also for the sensors in the control and monitoring circuits. Time and again we find that using high-reliability components raises operational reliability and minimizes downtimes to a great extent. For example, we use a turbine to monitor flow. Not exactly a low-cost solution but it is extremely reliable.

We put a lot of effort in reducing pump and fan noise as far as possible. We place great store on "minor detail", such as mounting pumps on vibration dampers. Naturally, we only use stainless steel for water-conveying parts, and plastic free from softeners for screw unions and pipes. For example, the evaporator is completely made of stainless steel.

Admittedly, the DLK series devices are highly complex, but your laser is also a high-tech device and you shouldn't be satisfied with anything less.

Laser cooling is a burning topic - that's why you should take advantage of our long experience in building laser cooling devices.

Ask us for detailed technical data or just send us your specifications and we will submit you an offer.

Specifications subject to change.

**DLK 0.3 DLK 0.6 DLK 1.2** DLK 1.5 Cooling capacity (W) 300 650 1200 1500 Temperature range (° C) +18° C - +28° C Temperature constancy (K) ±0,5 K Air volume m³/m 300 300 500 570 Pump capacity l/min 1.5 1.5 5 15 Pressure bar 3.0 3.0 3.5 3.5 Compressor motor 240 420 480 620 Pump motor 120 300 450 Connected load 400 660 880 1300 Rated current Α 3.2 5.2 7 Power supply V/HZ 230 V/50 Hz, 1 ph Tank capacity 1 7 7 7 12 Water connections Zoll 3/8 3/8" 3/8" 3/4" Cooling type luftaekühlt Height HE 6 6 6 9 Depth mm 550 550 620 700 Width Zoll 19" 19" 19"

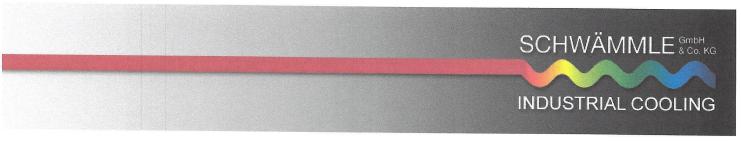
Industrial cooling systems Development of customised cooling systems

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### DLK series diode laser coolers



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### Highlights

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# Some of our customers



### How can we help?

We'll gladly answer your questions. **E-Mail:** info@schwaemmle-cooling.com
or give us a call: +49 7191 92 42 -0

### Our products:

Kategorie auswählen 

Adress

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### Video

SCHWÄMMLE in 30 seconds.

Herzlich Willkommen.

Postal