# **Dr. Mach** LED-technology



### **Superiour colour rendition**

With outstanding colour rendering indexes  $R_a = 95$  the surgeon recognizes clearly the tiniest nuances of colour in tissue.

The colour spectrum of the wound is rendered naturally with rich contrast.

The OT-light clearly provides welcome relief for your eyes.



### Facetted multi-lens system

A multitude of computer-calculated facetted lenses guarantees homogeneity and lowest shadiness in the light field. Separately arranged optical systems, each with one LED module, generate their own light field, which increases the contrast effect of the OT-light. Light intensities of 50.000 Lux can be attained without difficulty.



### Key pad on the lamp housing

The following light functions can be adjusted electronically, such as:

- Switching ON and OFF
- Electronic light intensity control



# Handling

During development high attention was paid to easy handling and high ease of maintenance. Furthermore the flow-enhancing ring form and the minimal surface avoid any heat increase in the surgeon's head area and create a perfect laminar flow performance. The light can be positioned exactly to the wound field with the handle.



### Focusing (optional)

The light field can be focused by turning the handle (pictured sterilisable handle available as an option against surcharge). The focussable light beam allows a punctual illumination of deepest wound channels with light intensity and a exact matching of the light field diameter with the size of the wound field.



### Long life-span/low power consumption

The life-span of more than 60.000 operating hours reduces the costs for exchanging and replacing the illuminants considerably, compared with the conventional halogen technology used with former OT-lights. By implementation of the LED technology the power consumption could be reduced partially with more than 50%.



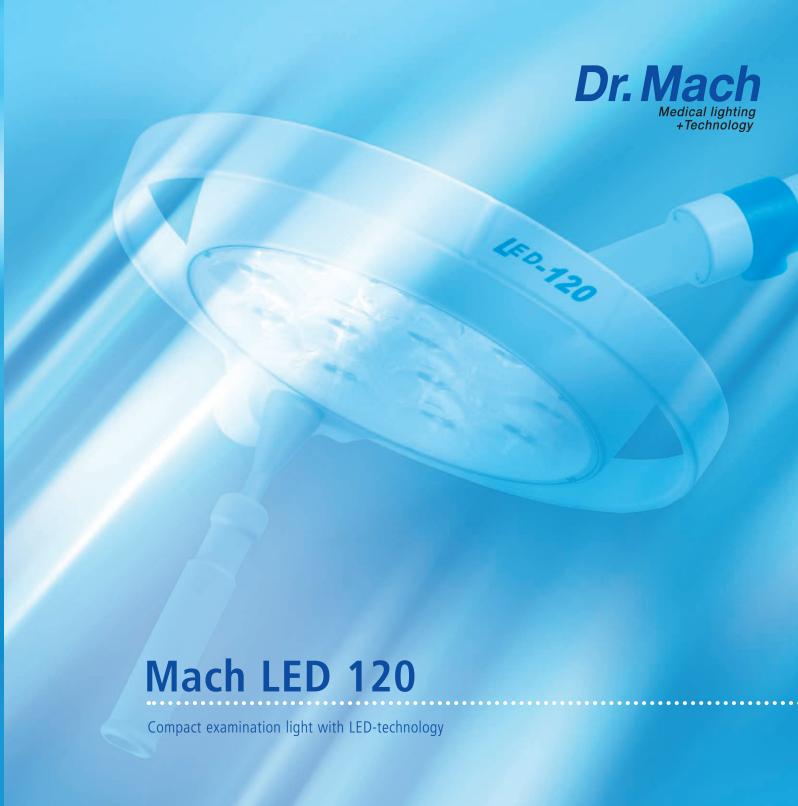
### Cool light

The LED technology is much more effective than conventional light sources such as halogen bulbs. The heat radiation is reduced to a minimum without using any expensive filter technique. The temperature increase in the surgeon's head area is almost nonexistent.

# Mach LED 12

## Dr. Mach GmbH & Co. KG

Flossmannstraße 28 · D-85560 Ebersberg
Phone: +49 (0) 8092 / 20 93-0 · Fax: +49 (0) 8092 / 20 93-50
www.dr-mach.com · e-mail: info@dr-mach.de



LED EXAMINATION LIGHTS



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Technical data <sup>(1)</sup>		
Mach LED 120 light system	Mach LED 120 F <sup>(2)</sup>	Mach LED 120 <sup>(3)</sup>
Light intensity Lux at 1 meter distance	50.000	40.000
Colour temperature (Kelvin)	4.500	4.500
Colour rendering index R <sub>a</sub> (4) at 4300 Kelvin	95	95
Focussable size of the light field (in cm)	15 – 20	17
Working distance (in cm)	70 – 140	70 – 140
Diameter of the lamp head (in cm)	29	29
Temperature increase in head area	0,5° C	0,5° C
Electronic light intensity control at the lamp head	standard	standard
Number of LEDs	12	12
Life-span of the LED's	60.000 h	60.000 h
Total power consumption	18 W	18 W

- (1) Further technical details in the data sheet of the lamp,

- available upon request

  (2) F-models with focussing

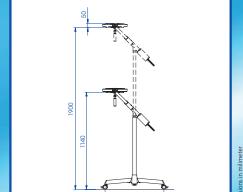
  (3) models with fixed focus

  (4) Ra is an average of R1 = burnt pink, R2 = mustard yellow, R3 = yellow green, R4 = light green, R5 = turquoise blue, R6 = skyviolet, R7 = violet, R8 = lilac.

  Maximum value = 100.



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Colour rendering index R <sub>a</sub> <sup>(4)</sup> at 4300 Kelvin	95	95
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Working distance (in cm)	70 – 140	70 – 140
Diameter of the lamp head (in cm)	29	29
Temperature increase in head area	0,5° C	0,5° C
Electronic light intensity control at the lamp head	standard	standard
Number of LEDs	12	12
Life-span of the LED's	60.000 h	60.000 h
Total power consumption	18 W	18 W
Height adjustment (in cm)	121	121



Mobile light with five castors

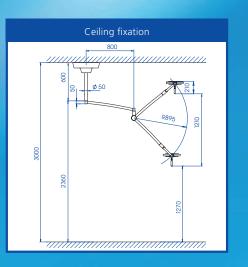
Mobile light with four castors

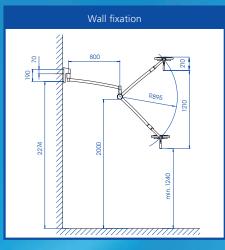




### Mach LED 120 with wall fixation

Mach LED 120 with ceiling fixation





Mach LED 120 40.000 Lux

Mach LED 120 examination lights

Mach LED 120 F 60.000 Lux

**Compact examination light** with LED-technology for diagnosys and prophylaxis