

# Dr. Mach Light System M3



Duo-Focus Technology

Outstanding colour rendition

Daylight character

Easy maintenance

Optimum flow properties

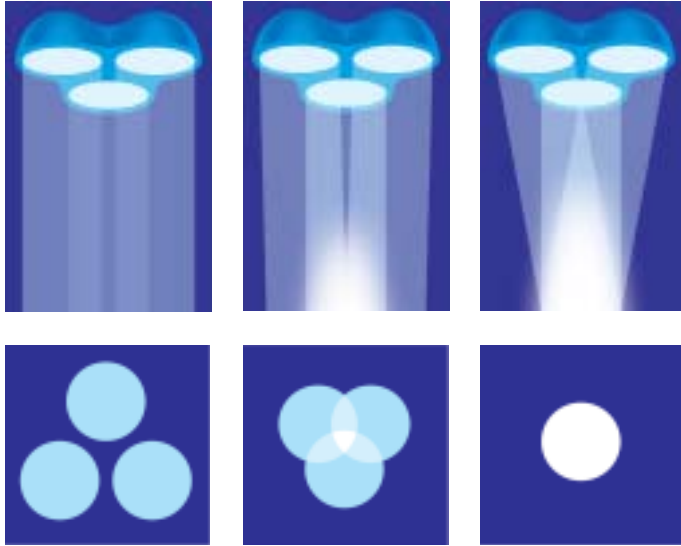
Integrated OT camera system



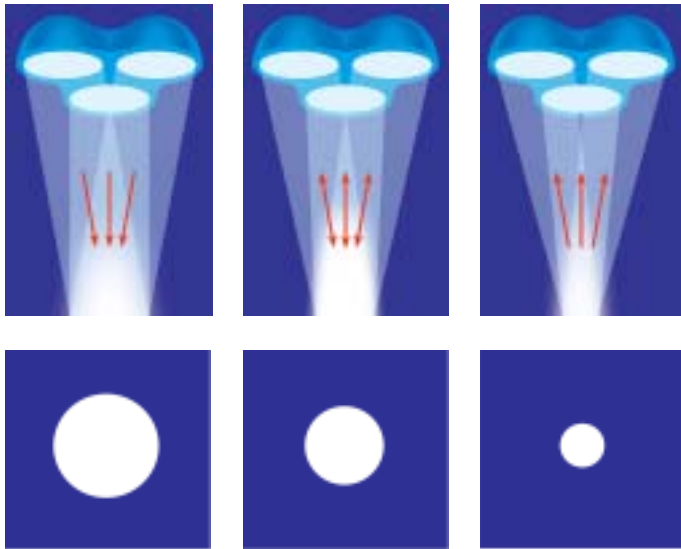
Dr. Mach  
Light system  
M3

Modern production facilities and highly qualified personnel are a fundamental part of our perfected and innovative light systems.

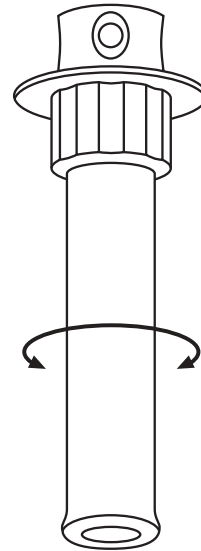
# Duo-Focus Technology



1. Merging the luminous fields by swivelling the reflectors inside the lamp housing



2. Focusing by moving the halogen bulbs inside each reflector up or down



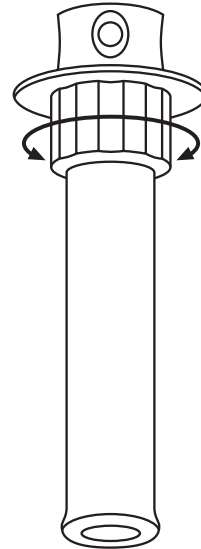
## 1. Merging of the individual luminous fields

The light fields which are produced by each single reflector are joined to one light field. The light fields overlap.

This feature is activated by turning the sterilisable handle.

F-models of Dr. Mach feature merging of the light field.

DF-models of Dr. Mach feature both technologies; merging of luminous field and focusing.



## 2. Focusing

Focusing is done by moving the bulbs inside the reflector up or down. In this way you can further adjust the illuminated field to an extra small or extra large size, depending on the specific requirements.

This feature is activated by turning the ring at the top of the sterilisable handle.

DF-models include both technologies, merging of the luminous fields and focusing.

- Illumination of specific points in the deepest wound channels with high light intensity
- Exact matching of the light field diameter with the size of the wound field



### Handling

Focusing and step-less light intensity control by means of membrane keyboard. The display shows the actual setting of focus and light intensity.

### Flow properties

The form of the housing shows excellent flow properties, is easy to clean and prevents heat retention in the area of the head. Furthermore it produces optimum conditions for laminar flow systems.

### Easy maintenance

The housing may be opened without a tool. All components are easily accessible.

Module technique ensures that all essential components can be simply replaced. Change of bulbs within 30 seconds.



### Integrated OT video system

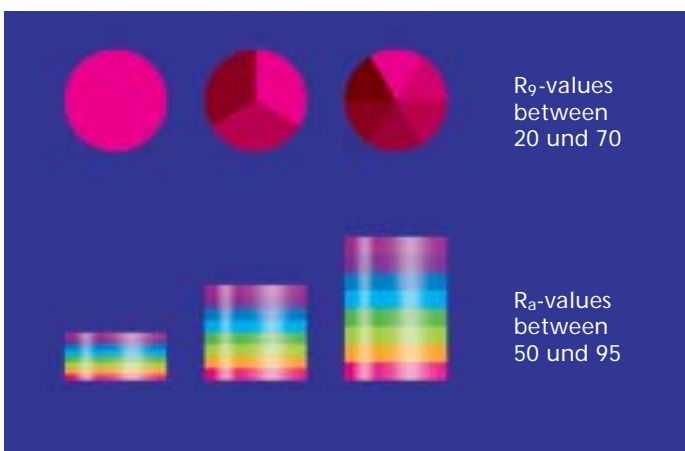
A special electronic system enables the lamp's power supply as well as the sliding contacts to be used for transmitting the control and video signals. No additional cables are required for the camera, as previously necessary. Continuous rotary movement of the lamp at all joints. Unproblematic later installation of camera and therefore definitely inexpensive. The camera is integrated in the centre of the lamp. Advantage: no adjustment at different working distances between light field and wound field.

The base is a Sony camera with 72x zoom, autofocus, iris control and picture rotation. Superimposed date and time. Remote camera control is possible at same time from lecture hall and other rooms.

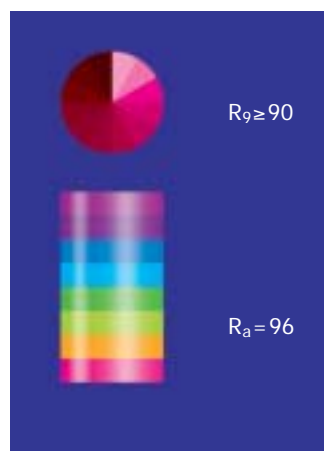


### Multi-reflector system Cool light

Computer calculated biconvex dispersion lenses together with the multi-reflector system increase the contrast of the OT-light and ensure a homogeneous luminous field with lowest possible amount of shadow. Dielectric coated coldlight glass reflectors reduce the lamp's heat radiation in the area of the head to a minimum.



Conventional lighting systems



Dr. Mach lighting systems R96

### Colour rendition

previously unattainable colour rendition  $R_a = 96$  and  $R_9 = 90$  makes it easy for you to see the tiniest nuances of colour in tissue, especially in the red and yellow range. The colour spectrum of the wound is rendered naturally and with ample contrast. The OT-light clearly provides welcome relief for your eyes. Special care has been given to the natural rendition of the colour red. The value  $R_9 \geq 90$  allows the surgeon to recognise details better in the area of the wound.

Take your choice ...



**M3 wall model**



**M3 stand model** (battery as shown above, optional)



**M3 ceiling model** (camera integrated in lamp head as shown above, optional)

# OT video systems



Output for video and control signals

Remote control



Camera	MFB-Mo <sup>(1)</sup>	OFB-ST <sup>(2)</sup>
Colour film camera for visual communication (PAL)		
lens system	72-fach Zoom f = 4.1 bis 73.8 mm F1.4-3.0 Autofocus (integrated focus system)	Auto Fokus Autofocus (integrated focus system)
Video output 75Ω	Y: VS1.0 Vp-p. Sync. negative C: Burst 0.300 Vp-p VBS: 1.0 Vp-p Composite	Y: VS1.0 Vp-p. Sync. negative C: Burst 0.300 Vp-p VBS: 1.0 Vp-p Composite
Image points	752 (H) x 582 (V)	752 (H) 582 (V)
Horizontal resolution	more than 460 lines	more than 460 lines
Vertical resolution	more than 400 lines	more than 400 lines
Humidity	20 – 85%	20– 85%
Dimensions (Ø, length)	80 x 150 mm	80 x 150 mm
Weight	900 g	900 g
Interference radiation in acc. with	FCC Klasse A	FCC Klasse A

(1) remote control with picture rotation

(2) without remote control without picture rotation

