

## Data sheet



Support arm system  
ACROBAT SWING



Support arm system  
with height stop



Support arm system  
with height stop and  
full cardanic  
suspension

### Features

- User-friendly display keypad
- Electronic focussing (F)
- Adjustment of light intensity

### Optional features

- Sterilizable handle - 200 sterilisation cycles

### Technical data

|  |                               |
|--|-------------------------------|
| Type of device   | Examination light             |
| Class (according to MDR)                                   | I                             |
| IP protection class (IEC 60529)                            | IP 42                         |
| Temperature (for transport and storage) <sup>1</sup>       | -25 °C to +70 °C              |
| Relative humidity (for transport and storage) <sup>1</sup> | 5 % RH to 95 % RH             |
| Air pressure (for transport and storage) <sup>1</sup>      | 700 hPa to 1060 hPa           |
| Operating time   | Continuous operation possible |
| Weight of light body incl. accessories (kg / lbs)          | max. 1.9 / 4.19               |
| Expected life <sup>2</sup>                                 | 10 years                      |

<sup>1</sup> Transport and storage conditions for lamp body and power supply unit.

<sup>2</sup> At the end of the expected (designed) service life, the lamp must be serviced more frequently for safe operation.

**Lighting technical data**

|   | <b>Mach LED 120F</b>  | <b>Mach LED 120</b>   |
|---|---|---|
| Central illuminance $E_c$<br>(distance 1 m)                 | 50,000 Lux  | 40,000 Lux  |
| Light field diameter d10 (mm / in)                          | 132 / 5.20  | 146 / 5.75  |
| Light field diameter d50 (mm / in)                          | 69 / 2.72   | 75 / 2.95   |
| Remaining illuminance<br>with one mask                      | 0 %   | 0 %   |
| Remaining illuminance<br>with two masks                     | 61 %  | 57 %  |
| Remaining illuminance<br>with tube                          | 100 %   | 100 %   |
| Remaining illuminance<br>with tube and one mask             | 0 %   | 0 %   |
| Remaining illuminance<br>with tube and two masks            | 61 %  | 57 %  |
| Depth of illumination<br>(20% of $E_c$ , L1+L2) (mm / in)   | 1802 / 70.95  | 1635 / 64.37  |
| Depth of illumination<br>(60% of $E_c$ , L1+L2) (mm / in)   | 987 / 38.86   | 863 / 33.98   |
| Color rendering index $R_a$ (type)                          | 96  | 96  |
| Color rendering index $R_9$ (type)                          | 93  | 91  |
| Color rendering index $R_{13}$ (type)                       | 98  | 97  |
| Irradiance $E_e$<br>(distance 1 m / 39.37 in)               | 216 W/m <sup>2</sup> (0.139 W/in <sup>2</sup> )                   | 150 W/m <sup>2</sup> (0.097 W/in <sup>2</sup> )                   |
| Max. irradiance $E_{e,max}$<br>(distance 0.82 m / 32.28 in) | 245 W/m <sup>2</sup> (0.158 W/in <sup>2</sup> )                   | 173 W/m <sup>2</sup> (0.112 W/in <sup>2</sup> )                   |
| Ratio of irradiance ( $E_e / E_c$ )                         | 3.72 (mW/m <sup>2</sup> ) /lx<br>0.0024 (mW/in <sup>2</sup> ) /lx | 3.75 (mW/m <sup>2</sup> ) /lx<br>0.0024 (mW/in <sup>2</sup> ) /lx |
| Focusable light field size (cm / in)                        | 13 - 18 / 5.12 - 7.09   | 15 / 5.91 (fixed focus)   |
| Color temperature (Kelvin)                                  | 4500  | 4500  |
| Temperature increase in the<br>head area                    | 0.5 °C  | 0.5 °C  |
| Luminous efficacy (efficiency)                              | 269 lm/W  | 267 lm/W  |
| Number of LEDs  | 12  | 12  |
| Working distance (cm / in)                                  | 70 - 140 / 27.56 - 55.12  | 70 - 140 / 27.56 - 55.12  |
| Dimming range (%)   | 50 - 100  | 50 - 100  |
| Dimming levels  | 5   | 5   |
| Diameter of light body (cm / in)                            | 29 / 14.42  | 29 / 14.42  |
| Life-span of LEDs   | 60,000  | 60,000  |
| Height adjustment (cm / in)                                 | 121 / 47.64   | 121 / 47.64   |

All technical data are subject to certain fluctuations. For production reasons, the actual values have a tolerance of  $\pm 10\%$ .

The values for the color temperature can have deviations of  $\pm 200$  K.

**Electrical data**

|   |                        |
|---|------------------------|
| Protection class/-type                          | I                      |
| Input voltage                                   | 24-30 V DC             |
| Power consumption                               | 9 W                    |
| Current   | 0.4 A max.             |
| <b>Mains power supply 60 W</b>                  |                        |
| Input voltage (primary)                         | 100-240 V AC, 50/60 Hz |
| Current (primary)                               | 1.5 A max.             |
| Output voltage (secondary)                      | 24 V DC                |
| Output power (secondary)                        | 60 W                   |
| <b>Mains power supply 40 W (mobile version)</b> |                        |
| Input voltage (primary)                         | 100-240 V AC, 50/60 Hz |
| Current (primary)                               | 1.2 A max.             |
| Output voltage (secondary)                      | 24 V DC                |
| Output power (secondary)                        | 40 W                   |

**Mechanical data**

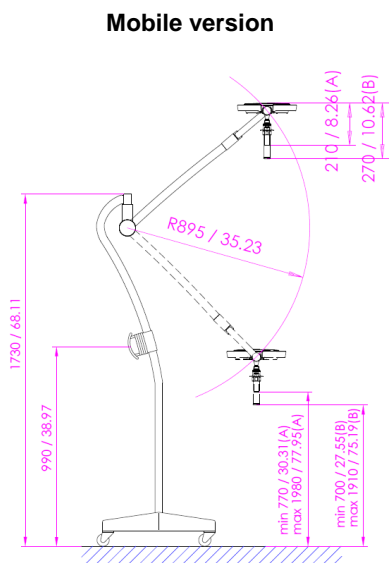
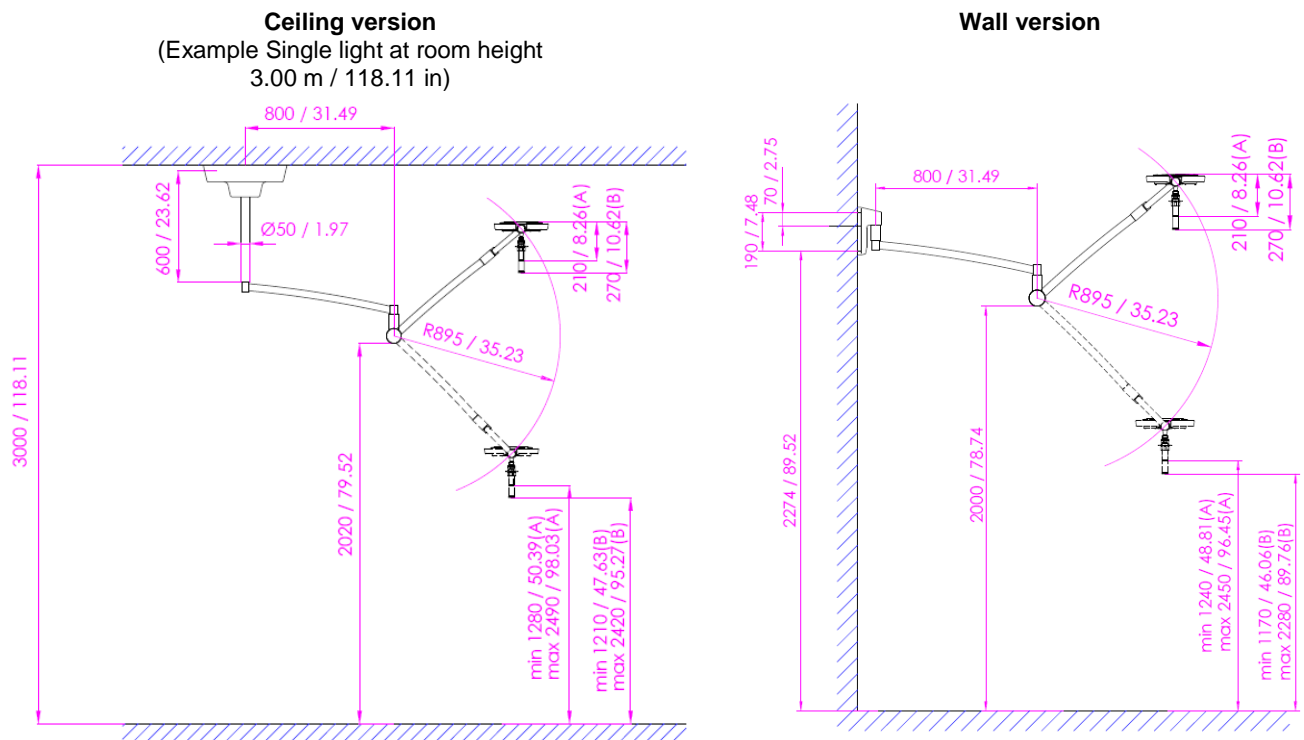
|  |
|--|
| Joins on cardanic bows rotatable by 430° (± 215°), on spring arm > 360° without stop   |
| Rotatability on ceiling tube/flange tube of single suspension: > 360° without stop   |
| Rotatability on 2-fold standard axis: <ul style="list-style-type: none"><li>- Lower mounting pin : &gt; 360° without stop</li><li>- Upper mounting pin : 300° (± 150°)</li></ul> |
| Rotatability on stand tube of mobile stand: 60° (± 30°)  |
| Height adjustment: <ul style="list-style-type: none"><li>- Spring arm Swing: 1210 mm / 47.46 in</li><li>- Spring arm Acrobat 2000: 1180 mm / 46.46 in</li></ul>                  |

## Support arm system ACROBAT SWING (all measurements in mm / in)

### Minimum clear room height for single light

| Light body  | Ceiling version | Wall version  |
|---|-----------------|---------------|
| Mach LED 120 / 120F with standard handle (A)<br>(mm / in)     | 2550 / 100.39   | 2550 / 100.39 |
| Mach LED 120 / 120F with sterilizable handle (B)<br>(mm / in) | 2550 / 100.39   | 2550 / 100.39 |

### Technical drawings

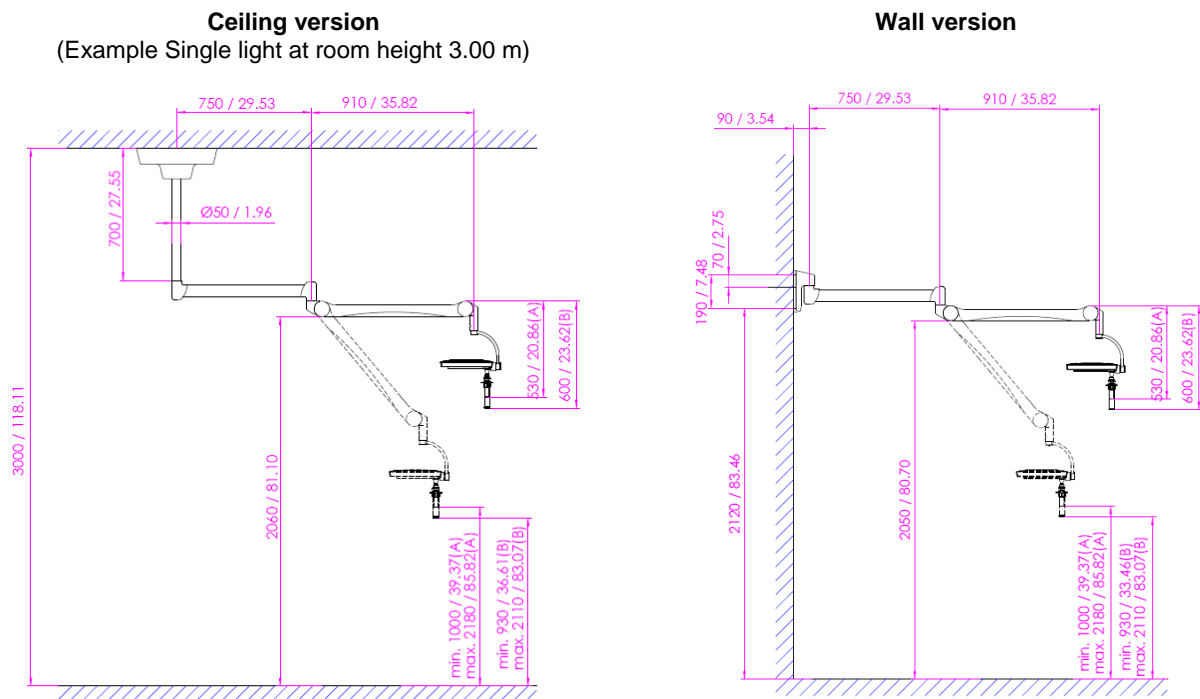


## Support arm system with height stop and option for full cardanic suspension (all measurements in mm / in)

### Minimum clear room height for single light

| Light body  | Ceiling version | Wall version  |
|---|-----------------|---------------|
| Mach LED 120 / 120F with standard handle (A)<br>(mm / in)     | 2560 / 100.79   | 2560 / 100.79 |
| Mach LED 120 / 120F with sterilizable handle (B)<br>(mm / in) | 2630 / 103.54   | 2630 / 103.54 |

### Technical drawings



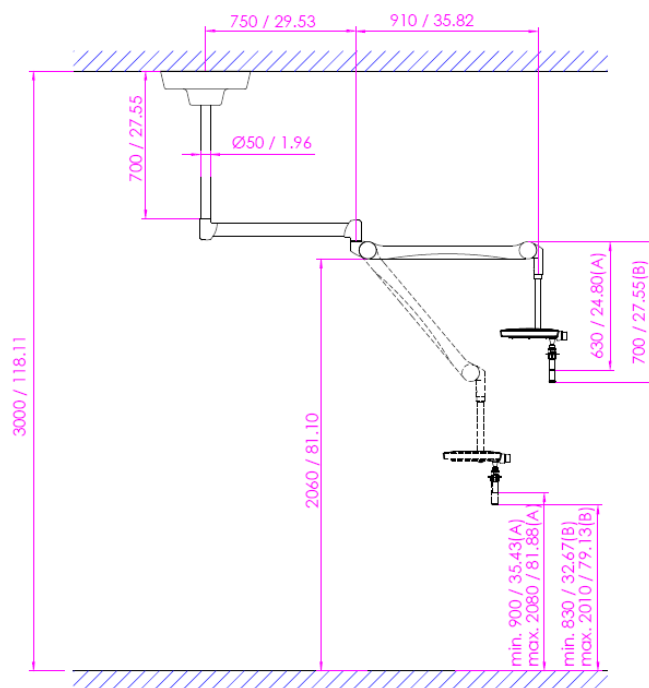
## Support arm system with height stop and full cardanic suspension (all measurements in mm / in)

### Minimum clear room height for single light

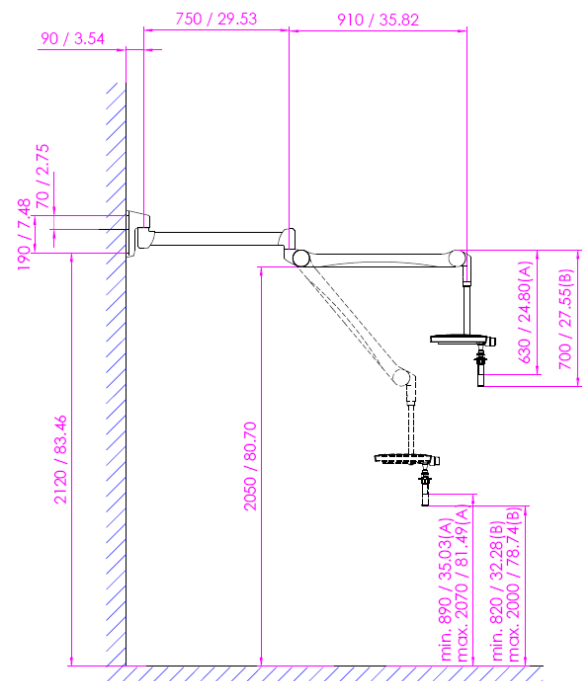
| Light body  | Ceiling version | Wall version  |
|---|-----------------|---------------|
| Mach LED 120 / 120F with standard handle (A)<br>(mm / in)     | 2660 / 104.72   | 2660 / 104.72 |
| Mach LED 120 / 120F with sterilizable handle (B)<br>(mm / in) | 2730 / 107.48   | 2730 / 107.48 |

### Technical drawings

**Ceiling version**  
(Example Single light at room height 3.00 m / 118.11 in)



**Wall version**



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Subject to technical modification

