

# **Examination light marLED® E3 Wall**



Item-No. 89-700-01-04

## 1 Mechanical design

Wall-mounting KLS Martin examination light in LED technology. The wall bearing with mounting plate is included in the scope of delivery. The wall bearing carries the maintenance-free suspension arm system with the light head mounted in place. Unrestricted movability is guaranteed by stop-free rotary joints and the cardanic suspension. The light head made of high-strength and impact-resistant plastic (PC/ABS) is completely closed and dust-tight. This ensures excellent resistance to mechanical stress.

### 2 Light system

Optimal illumination is guaranteed by the innovative and highly efficient LED light system. Special optical systems offer cold, white and shadow-free light. Excellent light properties and best color rendition are guaranteed by the use of high-quality LED technology. The light exit surface is made of highly scratch-resistant plastic to ensure high resistance to mechanical as well as chemical impact.

We reserve the right to make alterations.

Due to manufacturing and measuring tolerances, all data relating to lighting systems has a tolerance of +/- 5%.



#### 3 Operation

The ON/OFF and brightness control buttons are directly integrated into the light head in the form of a membrane keypad. Together with the smooth surface design of the light head, this enables fast cleaning and wiping disinfection. To ensure easy positioning, the light head features an integrated handle. This handle component can be easily replaced with one of the following handle versions at the user's choice.

Optional handle elements:

Option 1: Sterilizable Handle

Option 2: Handle for Sterile Disposable Cover

Optional handle elements	Illustration	Order no.
<b>Option 1:</b> Light equipped with sterilizable handle for sterile operation.		89-700-05-04 Handle adapter and 2 x sterile handle
<b>Option 2:</b> As an alternative, the light can be equipped with handle elements for the use of disposable handle covers.		89-940-02-04 Handle for sterile covers  89-940-20-04 Sterile covers (100 pcs.)



Electrical Data		marLED® E3 Wall
Power module	mm	integrated into light head
Supply voltage, primary	V	100-240 VAC, 50-60 Hz
Power input at 220 – 240 VAC	VA	39
Power input at 100 - 130 VAC	VA	32
Power input, light engines	W	3 x 5
Anticipated LED service life	h	40,000
Starting performance		last setting
Spare light sources		
Electronic system meets requirements acc. to		VDE/IEC
Classification acc. to MPG (Medical Devices Act / MDD)		I
Protection class acc. to IEC 60601		I
Degree of protection: suspension system		IP30
Degree of protection: light head		IP42
Conformity		CE

Photometric Data		marLED® E3 Wall
Central illuminance, electrically dimmable from/to	%	30-100%
Central illuminance at a distance of 1 m	lx	100,000
Light field diameter (d10, distance 1m)	mm	170
Color temperature	К	4,300
Color rendering index (CRI) [Ra(1-8)]		95
Total radiation strength at max. lighting intensity	W/m²	364
Illumination depth (without refocusing) L1/L2 at 20% at 60%	mm	825 / 820 600 / 320
Working range from/to (without refocusing) at 20% at 60%	mm	175-1820 400-1320
UV irradiance for wavelengths < 400 nm	W/m²	3

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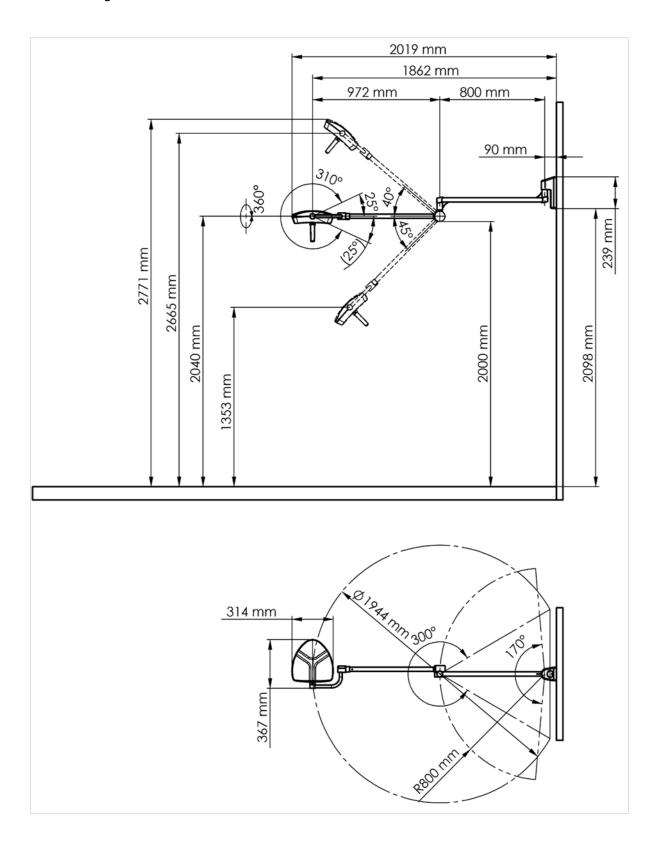
Mechanical Data		marLED® E3 Wall
Operating forces on light head	N	acc. to standard
Range of movement	mm	1772
Spring arm height adjustment	mm	1312
Top position of light head	mm	2665
Bottom position of light head	mm	1353
Force required for moving light head up/down	N	8
Force required for swiveling the light head	N	2
Max. vertical force due to weight	N	70
Total weight	kg	7
Single weight (approx.): tracking arm, central bearing shaft, spring arm	kg	4
Single weight (approx.): light head	kg	3
Torque, bending moment	Nm	70
Permissible ambient temperature range during operation	°C / °F	+5° to +40°C [41-104°F]
Storage temperature	°C / °F	-10° to +50°C [14-122°F]
Light head height (w/o sterile handle)	mm	approx. 85
Light head dimensions	mm	300 x 310

Manufacturer: Gebrüder Martin GmbH & Co. KG

Type:  $marLED^{\otimes} E3 W$ Item no.: 89-700-01-04



#### Technical drawing:



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