

marLED® examination lamp E1 ceiling

Mechanical Design



Martin LED examination lamp with flexible extension arm, integrated power supply unit, and mains plug for ceiling installation. The ceiling tube with a diameter of 25 mm is supplied in a standard length of 696 mm and can be adjusted to fit the location and the spatial circumstances.

The lamp is installed on the ceiling with a low-maintenance flex-arm. The closed lamp body has outstanding cleaning and disinfection properties

Item no. 89-701-02-04
(includes ceiling tube, canopy and mounting kit)

Light System

The optimal lighting can be attributed to the highly efficient LED module. The specially developed lens system guarantees cold white light and outstanding lighting characteristics and color rendering.



Control

The light is switched on and off by an easily accessible rocker switch on the flex-arm joint. The lamp body's smooth surface enables quick and easy cleaning and wiping disinfection. The lamp body can be comfortably positioned by an integrated handle element.

We reserve the right to make alterations

All lighting data are understood to have a tolerance of +/- 5% with regard to measurements and production specifications.

Electrical data	Unit	marLED® E1 ceiling
Power supply module		integrated in the lamp body
Primary connection voltage	VAC	100 – 240 VAC, 50 – 60 Hz
Total lamp body power consumption	VA	11.2-17.5
Lamp power consumption	W	7
Voltage on wall or ceiling mounting location	V	100 – 240 VAC
Expected lifetime of the lamp	h	50.000
Focus / light field adjustment		Fixed
Spare lamp		from KLS Martin
The electronics meet the requirements according to		IEC 60601-1
Classification acc. to German Medical Devices Act		I
Protection class acc. to IEC 601		II
Degree of protection support arm system		Protection class I
Degree of protection light body		IP20
Conformity		CE

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Light technical data	Unit	marLED® E1 ceiling
Central illuminance at a distance of 0.5 m	lx	50,000
Light field diameter (d10, distance 0.5 m)	mm	180
Light field diameter (d50, distance 0.5 m)	mm	100
Color temperature:	K	4,400
Color rendering index [Ra (1 – 8)]		>93
Lighting depth (without refocusing) L1 / L2	mm	663
Operating range from - to (without refocusing)	mm	0-663
UV radiation strength for wave lengths < 400 nm	W/m ²	0.05

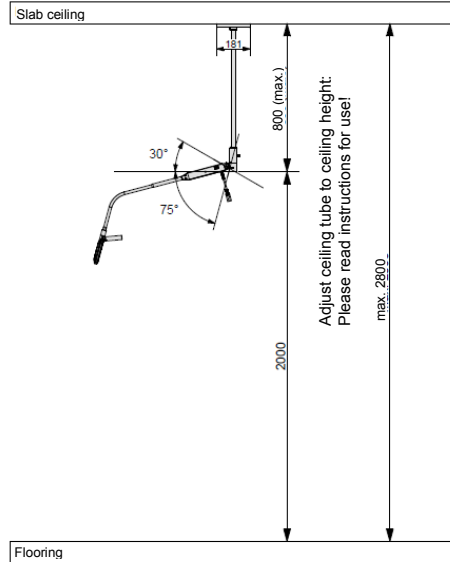
Mechanical Data	Unit	marLED® E1 ceiling
Minimum room height (passage height 2.00 m)	mm	2200
Operating forces on light body	N	acc. to standard
Action radius	mm	1000
Dimensions, diameter of the ceiling anchor plate	mm	120 x 120
max. horizontal weight force	N	32.37
Total weight	kg	3.3 kg
approx. individual weight (standard ceiling tube)	kg	2.1 kg
Permissible ambient temperature range during operation	°C	+10°C / +35°C
Storage temperature	°C	+70°C / -20°C
Canopy dimensions	mm	Ø181x21
Light body height (without sterile handle)	mm	26
Light body dimensions	mm	188x82

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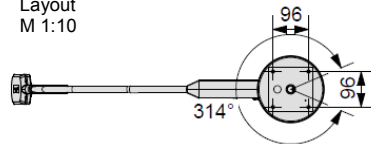
All lighting data are understood to have a tolerance of +/- 5% with regard to measurements and production specifications.

Technical drawing

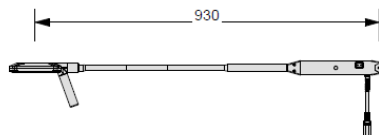
Illustration
 M 1:20 AM



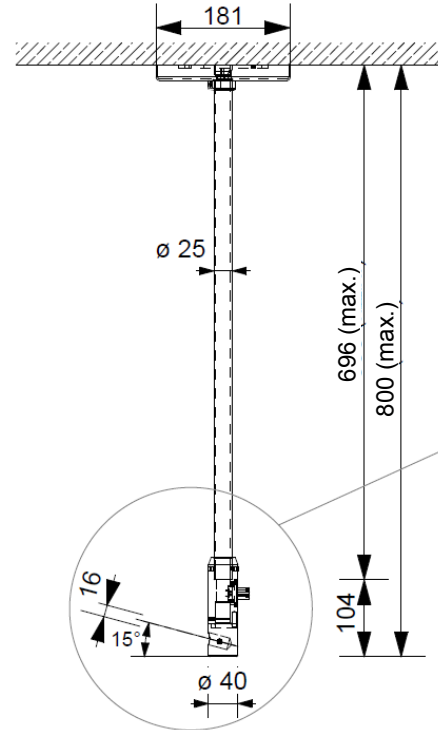
Layout
 M 1:10



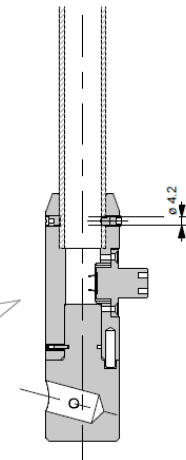
Layout in extended position
 M 1:10



Detail Z: Ceiling tube
 M 1:5



Detail Y:
 M 1:2

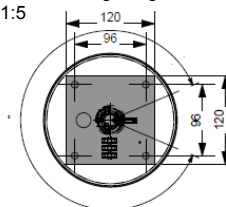


The ceiling tube must be shortened for the installation and drilled accordingly.

Technical performance data:

Electrical supply: 100-240 VAC
 Frequency range: 50/60 Hz
 Electrical protection class: II
 Standards: IEC 60601-2-41
 Lighting strength at 50cm: 50000 lx ; +20%/-10%
 Light field diameter d10: 180
 Color temperature: 4400K
 Color rendering index: Ra a93
 Color rendering index: R9 a90
 Color rendering index: R13 a93

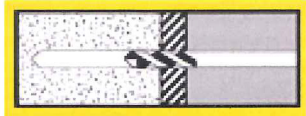
Detail X: Ceiling flange
 M 1:5



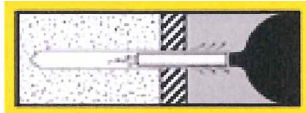
Subject to technical changes

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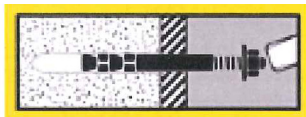
Ceiling installation



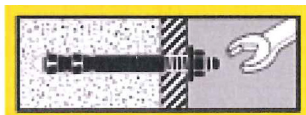
- Drill holes



- Use bellows to remove the bore dust from the drilled hole



- Pound the anchor into the drilled hole



- Tighten the nut against the installed object, noting the torque

Suitability

Certified for:

- Standard concrete B25 to B55 and C20/25 to C50/60, light ceiling paneling and suspended ceilings in accordance with DIN 18168 and statically comparable attachments.

Area of application

- Suitable for efficient anchoring in uncracked concrete and natural stone with dense microstructures.
- For attachment in wood construction, steel and metal construction, industrial construction.

Function

- The Upat EXA express anchor is pounded through the attached part into the drilled hole as a push-through installation.
- Their own tension enables the expanding elements to rest flat against the drilled-hole wall.
- Tightening the nut pulls the cones in the expanding sleeves and presses them against the drilled-hole wall.

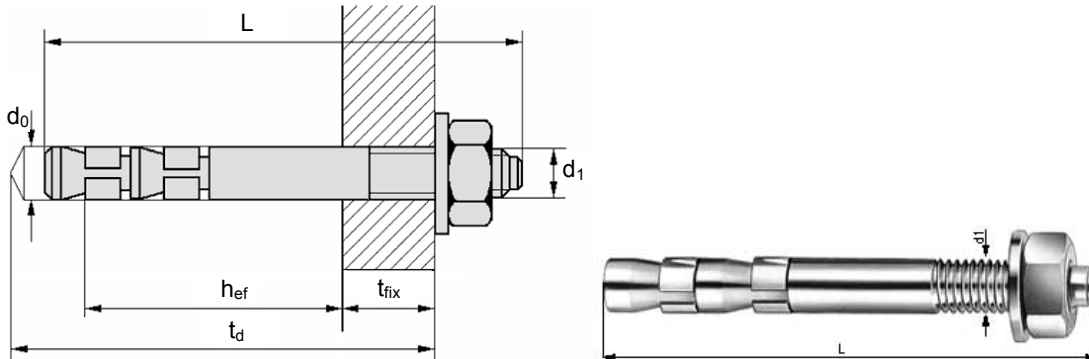
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Technical data sheet

Examination lamp
marLED® E1 ceiling – 2016-03

Technical data: Express anchor with external threads and large disk in accordance with DIN 440, yellow galvanized



Material	Steel, electro-galvanized
Thread type	External thread
Washer	According to DIN 440
Brand	Upat®
Type	EXA

d1 mm	L mm	Code	D0 mm	td mm	H ef mm	t fix mm	Torque Nm
M8	60	EXA 8/05	8	60	47	5	27

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