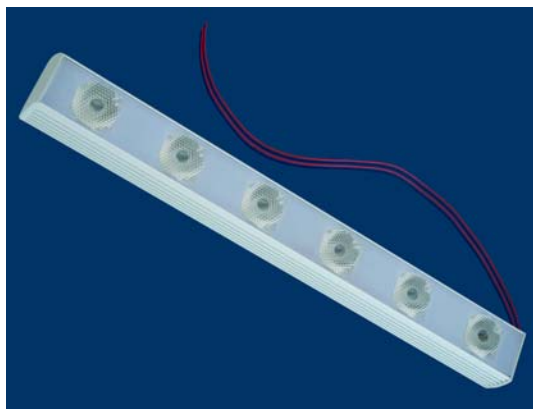


LINEARlight-DRAGON® - LD06A/B

Data Sheet



Benefits

- Powerful, high value LED module
- Integrated secondary optics and heat sink
- Available in light colours 830, 840, 854

Applications

- General lighting
- Furniture lighting
- Shop lighting
- Architectural lighting

Technical Operating Data

Product	Color	Number of LEDs	Voltage [V DC]*	Power [W]*	Current [A]*	Radiance Angle [°]*	Wavelength [nm] Color Temp [K]*	Lum. Intensity [cd]*
LD06B-W4F-854-L30	white	6	24	12,0	0,5	30	5400 K	1350
LD06A-W3F-854-L30**	white	6	24	8,0	0,3	30	5400 K	750
LD06B-W4F-840-L30	white	6	24	12,0	0,5	30	4000 K	1350
LD06B-W4F-830-L30	white	6	24	12,0	0,5	30	3000 K	1350
LD06A-W3F-827-L30**	white	6	24	12,0	0,5	30	2700 K	600

*) All Data are related to the entire module

Due to the special conditions of the manufacturing processes of LED the typical data of technical parameters can only reflect statistical figures and do not necessarily correspond to the actual parameters of each single product which could differ from the typical data.

+) Preliminary Data

**) Discontinued

Technical Features

- Each module comprises 6 high-flux GOLDEN DRAGON® (Plus) LEDs
- Integrated lens: 30° (FWHI) for flood lighting
- LD06B: Approx. 80% - 125% higher intensity as LD06A depending on light colour
- Mounting by means of screws M3 or mounting brackets LD-MB
- The LED module comes ready to use with preassembled feeder with open leads
- Operation only with OPTOTRONIC® power supplies: OT20, OT20S, OT75, OT75E
- Parallel connection of up to 6 modules with the power feed in the center to one OT75
- Dimmable by pulse width modulation (PWM) with the electronic controller OT DIM
- Easy connection with OSRAM CONNECTsystem LM-2x
- Up to 70,000h lifetime

Minimum and Maximum Ratings

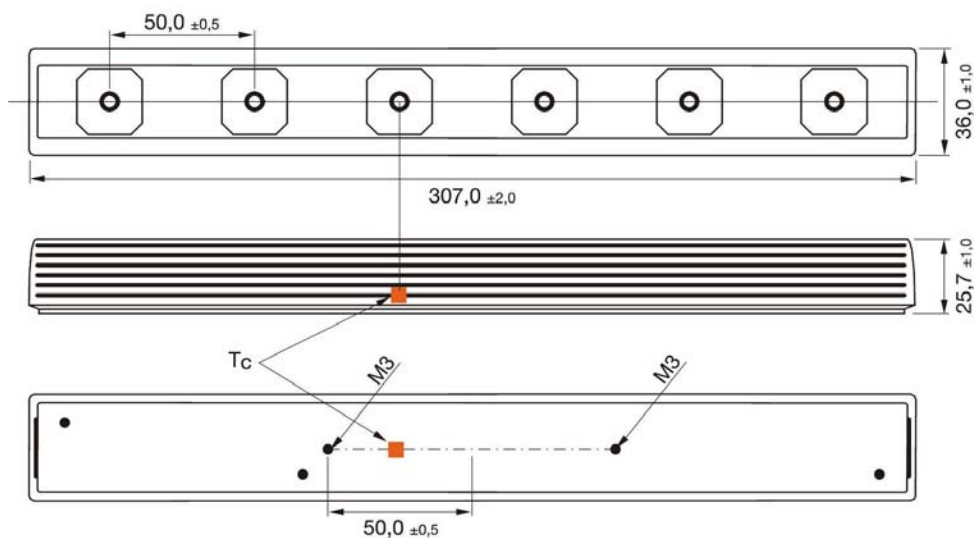
Product	Operating Temperature at Tc-Point [°C] *	Storage Temperature [°C] *	Voltage Range [V dc] *	Reverse Voltage [V dc] *
LD06B-W4F-854-L30	-30 ... 80	-30 ... 85	23 ... 25	25
LD06A-W3F-854-L30**	-30 ... 75	-30 ... 80	23 ... 25	25
LD06B-W4F-840-L30	-30 ... 80	-30 ... 85	23 ... 25	25
LD06B-W4F-830-L30	-30 ... 80	-30 ... 85	23 ... 25	25
LD06A-W3F-827-L30**	-30 ... 80	-30 ... 85	23 ... 25	25

*) Exceeding maximum ratings for operating and storage temperature will reduce expected life time or destroy the LED Module.

Exceeding maximum ratings for operating voltage will cause hazardous overload and will likely destroy the LED Module.

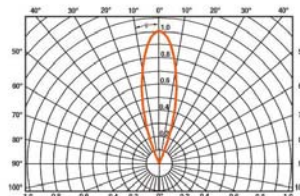
The temperature of the LED module must be measured at the Tc-point according to EN60598-1 in a thermally constant status with a temperature sensor or a temperature sensitive label. For exact location of the Tc-point see drawing below.

Drawings



Abstrahlcharakteristik (Einzel-LED) Radiation Characteristic (Single-LED)

$$I_{\text{rel}} = f(\varphi); T_A = 25^\circ\text{C}$$



F W W IP20 CE

Alle Angaben in mm
All values in mm

Safety Information

- The LED module itself and all its components must not be mechanically stressed.
- Assembly must not damage or destroy conducting paths on the circuit board.
- The mounting of the module is carried out by attaching it at the mounting holes. Metal mounting screws with 3 mm should be treated with synthetic washers to prevent circuit board damage and possible short circuiting. Using of plastic screws 3 mm is also possible.
- To avoid mechanical damage to the connecting cables, the module should be attached securely to the intended substrate. Heavy vibration should be avoided.

In order to drive OSRAM LED-Modules safely, it is absolutely necessary to operate them with an electronically stabilised power supply protecting against short circuits, overload and overheating.

To also ease the luminaire/installation approval, electronic control gear for LED or LED modules should carry the CE mark and be ENEC certified. In Europe the declarations of conformity must include the following standards:

CE: EC 61374-2-13, EN 55015, IEC 61547 and IEC 61000-3-2 - ENEC: 61374-2-13 and IEC/EN 62384.

Also check for the mark of an independent authorized certification institute.

Please see the relevant brochure for more detailed information (see "Related and Further Information")

OSRAM OPTOTRONIC® electronic control gear complies to all relevant standards and guarantees safe operation.

- Installation of LED modules (with power supplies) needs to be made with regard to all applicable electrical and safety standards. Only qualified personnel should be allowed to perform installations.
- Observe correct polarity!
Depending on the product incorrect polarity will lead to emission of red or no light. The module can be destroyed! Correct polarity immediately! (see "reverse voltage", page 2)
- Parallel connection is highly recommended as safe electrical operation mode.
Serial connection is not recommended. Unbalanced voltage drop can cause hazardous overload and damage the LED module.
- Pay attention to standard ESD precautions when installing the module.
- Use only LD-2x CONNECTsystem for electrical installation. Three types of connectors are available: LD-2PIN - Feeder with 500 mm cables. LD-2CONN-40 - Connector for through wiring with 40 mm cable length. LD-2CONN-100 - Connector for through wiring with 100 mm cable length.
- Connect the two red cables with the plus pole and the two black cable with the minus pole of the OPTOTRONIC. Both red cables must be used as common plus pole and both black cables must be used as common minus poles.
- The LED module can typically survive levels of up to 2 Amperes. As a general design precaution, if the maximum output current of the power supply is more than 2 Amperes, fast-blow fuses should be incorporated into the wiring plan.
- Electrical contact is achieved with the contact cables. A maximum number of 4 modules (12 W version) and 6 modules (8 W version) respectively can be installed consecutively from one power feed. Operation with more than 4 (12 W version) or 6 (8 W version) consecutive modules will reduce photometric performance and exceed the current carrying capacity of the module.
- Installation of 6 modules (for 12 W version) or 9 modules (for 8 W version) on one OPTOTRONIC® 75W has to be realised by either feeding the power to the centre or by splitting the power feed to contact groups of the maximum allowed number of modules in-line.
- The module, as manufactured, has no conformal coating and therefore offers no inherent protection against corrosion.
- Damage by corrosion will not be honored as a materials defect claim. It is the user's responsibility to provide suitable protection against corrosive agents such as moisture and condensation and other harmful elements.
- If the IP rating of the fixture should be higher than IP20, the design of the housing should be according to the IP standards in the application.

Assembly Information

- The housing of the LINEARlight-DRAGON is already an optimum heat sink. Additional cooling is not necessary. The metal surface increases the cooling effect and prolongs the service life time.
- To connect two or more modules please proceed as follows: 1) Remove end cap on the opposite side to the feeder of the first module. Put in one end of the desired board-to-board connector LD-2CONN-40/100 into the slot on the "OUTPUT"-side. 3) Remove the end cap on the second module on the feeder side and unplug the connector with the feeder. 4) Plug in the remaining slot of the cable connector on the "INPUT"-side. To link more modules please connect the "OUTPUT"-side of the first module with the "INPUT"-side of the following module.
- The mounting of the module can be done by M3 screws. Alternatively two mounting brackets LD-MB per module can be used. After positioning the brackets as desired, the module can be simply snapped in (not applicable for vertical mounting).

Ordering Guide

Productgroup	Productname	EAN *	S-Unit *
LINEARlight-DRAGON®	LD06B-W4F-854-L30	4008321395290	6
LINEARlight-DRAGON®	LD06A-W3F-854-L30**	4008321940438	6
LINEARlight-DRAGON®	LD06B-W4F-840-L30	4008321394613	6
LINEARlight-DRAGON®	LD06B-W4F-830-L30	4008321394491	6
LINEARlight-DRAGON®	LD06A-W3F-827-L30**	4008321940476	6

*) EAN: Ordering number per single module
S-Unit: Modules per shipping unit

Note: Typical performance data are subject to change without any further notice, particularly as LED technology evolves.

Sales and Technical Support

OSRAM GmbH

Hellabrunner Strasse 1
D - 81536 München
Germany
www.osram.com
+49 (0)89 6213-0

Sales and technical support is given by the local OSRAM subsidiaries.
On our world wide homepage all OSRAM subsidiaries are listed with complete address and phone numbers.

Related and Further Information

- The new dimension of light
153 S006 GB
www.osram.com/led-systems-downloads
- OPTOTRONIC® Data Sheets
<http://catalog.myosram.com>
- OPTOTRONIC® Technical Guide
130 T008 GB www.osram.com/ecg-downloads
- New standards for LED control gear
130 W011 GB
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