

# DRAGONeye

DE1



## Benefits

- Compact High-Flux LED Minispotlight
- Metallic package for optimum heat dissipation
- Protection IP65 for use in outdoor lighting

## Applications

- Small luminaire head for mini spotlights
- Orientation and accent lighting
- Luminaires for single LED

## Technical Operating Data

Product	Color	Number of LEDs	Current [mA]*	Power [W]*	Radiance Angle [°]*	Wavelength [nm] Color Temp [K]*	Lum. Intensity [cd]*
DE1-W3-854 +	white	1	350	1,2	15	5400 K	310
DE1-W3-733 +	warm white	1	350	1,2	15	3300 K	230
DE1-A2 +	red	1	350	0,8	18	617 nm	380
DE1-Y2 +	yellow	1	350	0,8	18	587 nm	165
DE1-T2 +	green	1	350	1,2	15	528 nm	135
DE1-B2 +	blue	1	350	1,2	15	465 nm	32

+ ) Preliminary Data

\* ) 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.

## Technical Features

- Dimensions DRAGONeye: H: 25 mm, Ø: 23 mm
- Easy assembly due to integrated thread M10
- Factory installed 200 mm /AWG22 double pole cable
- Operation only with OPTOTRONIC® constant current devices (see page 3)
- A crank at the bottom of the housing (Ø: 12 mm) allows perfect centering.
- Protection class IP 65 according to DIN EN 60529
- Metallic housing for optimum heat dissipation
- Narrow beam angle for use as a spot light source
- Only serial connection of modules allowed

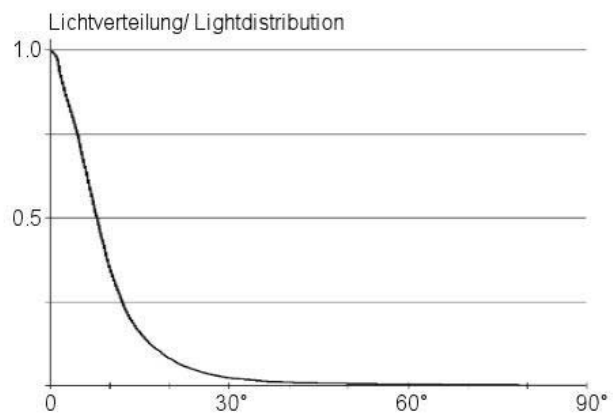
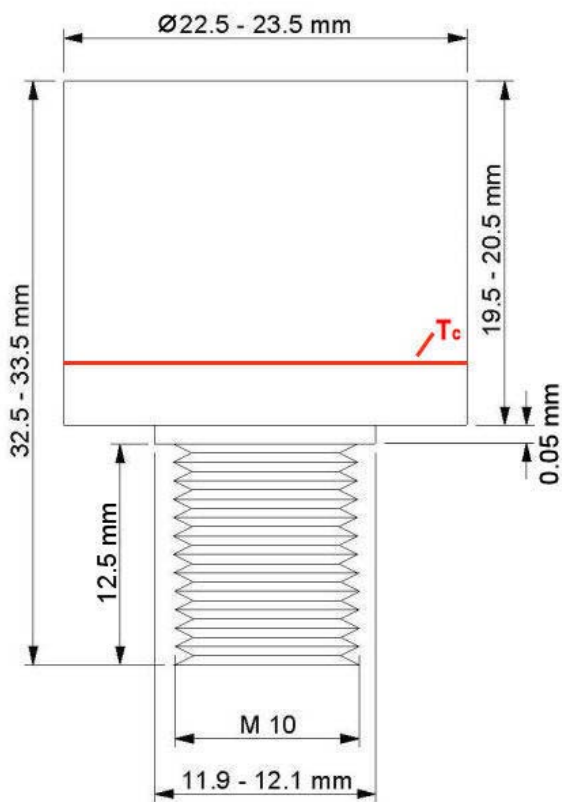
## Minimum and Maximum Ratings

Product	Operating Temperature at Tc-Point [ °C ] *	Storage Temperature [ °C ] *	Max. Current [ A dc ] *	Reverse Voltage [ V dc ] *
DE1-W3-854	-30 ... 65	-40 ... 65	0,5	0
DE1-W3-733	-30 ... 65	-40 ... 65	0,5	0
DE1-A2	-30 ... 65	-40 ... 65	0,5	0
DE1-Y2	-30 ... 65	-40 ... 65	0,5	0
DE1-T2	-30 ... 65	-40 ... 65	0,5	0
DE1-B2	-30 ... 65	-40 ... 65	0,5	0

The module is designed to work with current sources. The maximum output voltage may not exceed 100 V DC. Reverse operation is not allowed and may destroy the module.

\*) Exceeding maximum ratings for operation and storage temperature will reduce expected life time or destroy the LED Module.  
 Exceeding maximum ratings for operation current will cause hazardous overload and will likely destroy the LED Module. Several modules may be connected in series up to the maximum voltage of 100 V DC (outside SELV limits).  
 The temperature of the LED module needs to 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.

## Drawing



## Safety Information

- The LED module itself and all its components may not be mechanically stressed.
- Assembly must not damage or destroy conducting paths on the circuit board.

The LED Module incorporates no protection against short circuits, overload or overheating. Therefore it is absolutely necessary to operate the modules with a electronically stabilised power supply offering protection against the above mentioned safety risks. For dimming applications attention should be paid to specific references in "OPTOTRONIC® Technical Guide".

**OSRAM OPTOTRONIC® power supplies are specifically designed with protection features for safe operation.**

When using power supplies other than OPTOTRONIC® the following basic safety features are required, in addition to any other application specific concerns and local safety codes:

- Short circuit protection
  - Overload protection
  - Overheat protection
- 
- 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.
  - Correct electrical polarity needs to be observed. Wrong polarity may destroy the module and will result in no light emission.
  - Serial connection is highly recommended as safe electrical operation mode. Parallel 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.
  - Recommended Powersupply:
    - 350 mA constant current operation: OT 9/200-240/350 or OT 9/100-120/350(E)
    - 350 mA constant current PWM dimming, 1..10V interface: OT 9/10-24/350 DIM, OT 9/10-24/350 DIM(E)
    - 0-350 mA constant current operation, 1..10 V interface (dimming), strain relief: OT 9/200-240/350 DIM
    - Maximum number of DE1 for all OT9: White/Blue/Green: 6; Red/Yellow: 9
    - 0-500 mA constant current operation, 1..10 V interface (dimming), strain relief: OT 18/200-240/700 DIM. The OT18 comes with preset limitation to 500mA, thus giving 12W due to SELV (<=25V)
    - Maximum number of DE1 for OT18: White/Blue/Green: 6; Red/Yellow: 9

## Assembly Information

- Please planely mount the rear side to the mounting surface (thermal contact).
- Pay attention to pull relief for the cable.
- In environments with significant vibrations we recommend to add a securing of the mount.
- A borehole of Ø 12 mm and a M10 screw nut must be taken into consideration for the assembly.
- To assure the IP protection of the module the ends of the wires must be protected according to IP65 as well.

## Ordering Guide

Productgroup	Productname	EAN *	S-Unit *
DRAGONeye	DE1-W3-854	4008321909725	264
DRAGONeye	DE1-W3-733	4008321909718	264
DRAGONeye	DE1-A2	4008321909732	264
DRAGONeye	DE1-Y2	4008321909756	264
DRAGONeye	DE1-T2	4008321909763	264
DRAGONeye	DE1-B2	4008321909749	264

\*) 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

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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

- OSRAM LED systems [www.osram.com/products/led-systems](http://www.osram.com/products/led-systems)
- The new dimension of light 153 S006 GB
- OPTOTRONIC® Technical Guide 130 T008 GB
- OPTOTRONIC® Technical Guide - Download: Electronic Control Gear - Handbook OPTOTRONIC® [www.osram.com/service\\_corner/download\\_center](http://www.osram.com/service_corner/download_center)
- OPTOTRONIC® Data Sheets <http://catalog.myosram.com>