**Benefits**

- Compact High-Flux LED light source with high light intensity
- Flat design for wide range of novel applications

**Applications**

- Specialized spot lighting
- Reading lights
- Small signals

**Technical Operating Data**

Product	Color	Number of LEDs	Current [mA]*	Power [W]*	Radiance Angle [°]*	Wavelength [nm] Color Temp [K]*	Lum. Intensity [cd]*
DP3-W2B-865	white	3	350	3,6	20	6500 K	410
DP3-W3F-854	white	3	350	3,6	16	5400 K	900
DP3-W2B-847	white	3	350	3,6	20	4700 K	410
DP3-W3F-727	white	3	350	3,6	16	2700 K	630
DP3-A2	red	3	350	2,4	20	616 nm	500
DP3-A1	red	3	350	2,4	16	616 nm	215
DP3-Y1	yellow	3	350	2,4	16	589 nm	215
DP3-T2	green	3	350	3,6	16	531 nm	850
DP3-V1	verde	3	350	3,6	16	505 nm	295
DP3-B2	blue	3	350	3,6	20	468 nm	115
DP3-B1	blue	3	350	3,6	16	468 nm	95

+) 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**

- Operation only with OPTOTRONIC® constant current devices (see page 3)
- Dimensions: H: 12 mm, Ø: 35 mm
- Assembly with M3 screw on metallic heat sink
- Factory installed 200 mm / AWG22 double pole cable
- Protection class IP 22 according to DIN EN 60529
- Proofed according to IEC 60068-2 (shock and vibration)
- To obtain maximum LED lifetime please read the recommended procedures concerning thermal management before beginning design and construction of luminaires.

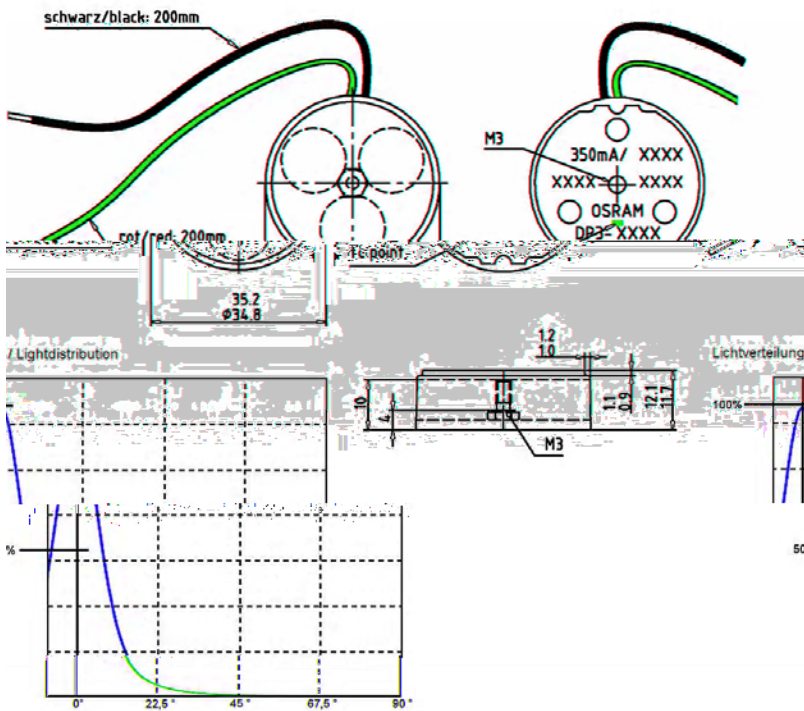
## Minimum and Maximum Ratings

Product	Operating Temperature at Tc-Point [ °C ]*	Storage Temperature [ °C ]*	Max. Current [ A dc ]*	Reverse Voltage [ V dc ]*
DP3-W2B-865	-30 ... 85	-30 ... 85	0,5	24
DP3-W3F-854	-30 ... 85	-30 ... 85	0,5	24
DP3-W2B-847	-30 ... 85	-30 ... 85	0,5	24
DP3-W3F-727	-30 ... 85	-30 ... 85	0,5	24
DP3-A2	-30 ... 85	-30 ... 85	0,5	24
DP3-A1	-30 ... 85	-30 ... 85	0,5	24
DP3-Y1	-30 ... 85	-30 ... 85	0,5	24
DP3-T2	-30 ... 85	-30 ... 85	0,5	24
DP3-V1	-30 ... 85	-30 ... 85	0,5	24
DP3-B2	-30 ... 85	-30 ... 85	0,5	24
DP3-B1	-30 ... 85	-30 ... 85	0,5	24

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

## Drawing



## 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 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.
  - 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.
  - Recommended power supply:
    - OT 9/200-240/350 or OT 9/100-120/350(E): 350 mA constant current operation
    - OT 9/10-24/350 DIM, OT 9/10-24/350 DIM(E): 350 mA constant current PWM dimming, 1..10V interface
    - OT 9/200-240/350 DIM: 0-350 mA constant current operation, 1..10 V interface (dimming), strain relief
    - Maximum number of DP3 for OT9: White/Blue/Green: 2; Red/Yellow: 3
    - OT 18/200-240/700 DIM: 0-500 mA constant current operation, 1..10 V interface (dimming), strain relief. The OT18 comes with preset limitation to 500mA, thus giving 12W due to SELV (<=25V)
    - Maximum number of LEDs for OT18: White/Blue/Green: 2; Red/Yellow: 3
  - Pay attention to standard ESD precautions when installing the module.
  - 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.

## Assembly Information

- The mounting of the module is facilitated by means of a M3 screw which fits to a threaded hole in the rear of the DRAGONpuck® housing. Do not exceed a torque of 40 Ncm.
- The module should be in good thermal contact with the designed metallic mounting surface. Use of an appropriate heat sink compound is recommended to eliminate air gaps.
- To obtain maximum LED-lifetime please read carefully the recommended procedures concerning thermal management in our application note "Lifetime of LED-modules" before beginning construction of luminaires. This application note is available from your OSRAM representative.

## Ordering Guide

Productgroup	Productname	EAN *	S-Unit *
DRAGONpuck®	DP3-W2B-865	4008321033406	16
DRAGONpuck®	DP3-W3F-854	4008321214508	
DRAGONpuck®	DP3-W2B-847	4008321033369	16
DRAGONpuck®	DP3-W3F-727	4008321214447	
DRAGONpuck®	DP3-A2	4008321149534	16
DRAGONpuck®	DP3-A1	4008321033185	16
DRAGONpuck®	DP3-Y1	4008321033420	16
DRAGONpuck®	DP3-T2	4008321149510	16
DRAGONpuck®	DP3-V1	4008321033345	16
DRAGONpuck®	DP3-B2	4008321149473	16
DRAGONpuck®	DP3-B1	4008321033208	16

\*) 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

- The new dimension of light
  - OPTOTRONIC® Data Sheets
  - OPTOTRONIC® Technical Guide
  - OSRAM LED systems
  - Application Note: Life Expectancy
- 153 S006 GB  
<http://catalog.myosram.com>  
130 T008 GB  
[www.osram.com/led-systems](http://www.osram.com/led-systems)  
[www.osram.com/led-systems-downloads](http://www.osram.com/led-systems-downloads)