PrevaLED® COIN 50

Technical Information

Benefits

- Fits in most existing MR16 traditional luminaires
- Easy & fast design-in for luminaire manufacturers
- Narrow beam angles, 24° and 40°
- High lumen output for HID-mini replacement
- Flexibility through 3 lumen packages and 2 CCTs

Applications

- Shop
  - Cabinet & Shelf
- Hospitality
  - Restaurant & Hotel
  - Corridors & Elevator

Technical Operating Data

Product	Current [mA]	Power [W]	Radiance Angle [°]	Color Temp. [K]	Lum. Flux [lm]	Lum. Intensity [cd]	Typ. CRI [Ra]	Efficacy [lm/W]
PL-CN50-700-930-24D-G1	350	11.3	24	3000	750	3070	92	66
PL-CN50-700-940-24D-G1	350	11.3	24	4000	790	3235	92	70
PL-CN50-700-930-40D-G1	350	11.3	40	3000	750	1420	92	66
PL-CN50-700-940-40D-G1	350	11.3	40	4000	790	1500	92	70
PL-CN50-900-830-24D-G1	350	11.3	24	3000	920	3770	83	81
PL-CN50-900-840-24D-G1	350	11.3	24	4000	980	4015	83	87
PL-CN50-900-830-40D-G1	350	11.3	40	3000	920	1745	83	81
PL-CN50-900-840-40D-G1	350	11.3	40	4000	980	1860	83	87
PL-CN50-1100-830-24D-G1	350	13.5	24	3000	1080	4425	83	80
PL-CN50-1100-840-24D-G1	350	13.5	24	4000	1150	4710	83	85
PL-CN50-1100-830-40D-G1	350	13.5	40	3000	1080	2050	83	80
PL-CN50-1100-840-40D-G1	350	13.5	40	4000	1150	2180	83	85

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

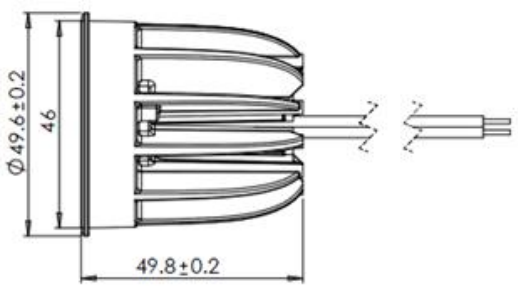
- Module ready to use with two cables:
  - red cable (+ pole)
  - black cable (- pole)
- Cable length 500 mm, cable Ø 1.6 mm/AWG 22
- Color Rendering index CRI (Ra) typ. 92 for PL-CN50-700 and typ. 83 for PL-CN50-900 & PL-CN50-1100
- Modul efficacy up to 87 lm/W
- Color tolerance: <MacAdam 4 SDCM
- tp temperature of 75°C (see IEC/PAS 62717)
- Max. tc temperature of 95°C (see IEC/PAS 62717)
- L70B50 >=50,000 hours at tp=75°C
- Best efficacy in combination with OSRAM OPTOTRONIC® constant current control gears

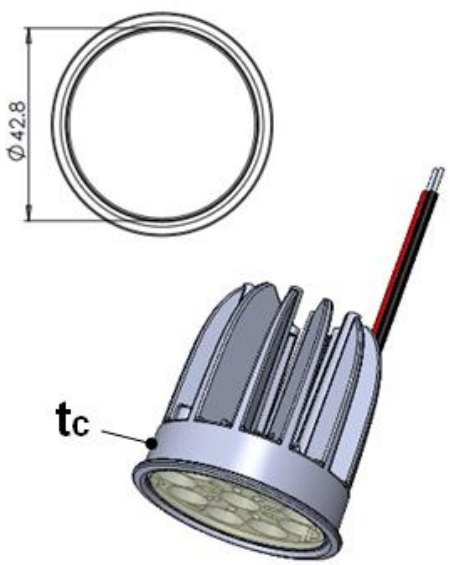
Minimum and Maximum Ratings

Product	Operating Temperature At tc-Point [C°]*	Storage Temperature [C°]*	Max. Current [mA]*
PL-CN50-700-930-24D-G1	-20 … 95	-40 … 80	370
PL-CN50-700-940-24D-G1	-20 … 95	-40 … 80	370
PL-CN50-700-930-40D-G1	-20 … 95	-40 … 80	370
PL-CN50-700-940-40D-G1	-20 … 95	-40 … 80	370
PL-CN50-900-830-24D-G1	-20 … 95	-40 … 80	370
PL-CN50-900-840-24D-G1	-20 … 95	-40 … 80	370
PL-CN50-900-830-40D-G1	-20 … 95	-40 … 80	370
PL-CN50-900-840-40D-G1	-20 … 95	-40 … 80	370
PL-CN50-1100-830-24D-G1	-20 … 95	-40 … 80	370
PL-CN50-1100-840-24D-G1	-20 … 95	-40 … 80	370
PL-CN50-1100-830-40D-G1	-20 … 95	-40 … 80	370
PL-CN50-1100-840-40D-G1	-20 … 95	-40 … 80	370

*) 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.
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.

Dimensions & Mechanical data



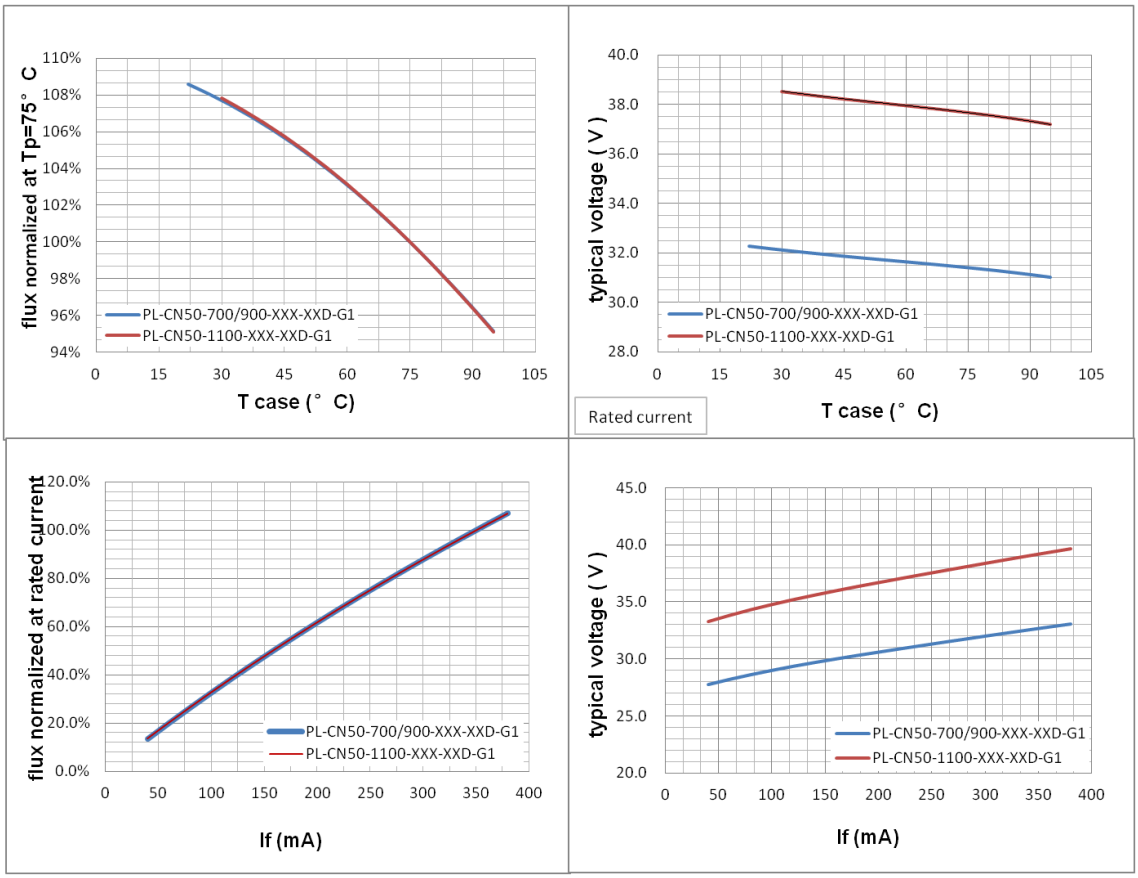


Dimension (mm)	Ø50 x 50 (H)
Mounting	MR16 similar
Optics	PC lens
Weight	80 grams

Standard Compliance

Safety	EN 62031, IEC 60598-1, UL 8750
EMC	EN 55015, EN 61547
Eye Security	EN 62471, RG1
Ingress Production	Dry Location, IP 20
Environment	RoHS

Electrical Operating Conditions



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.
- 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. The declarations of conformity must include the following standards:
CE: EC 61347-2-13, EN 55015, IEC 61547 and IEC 61000-3-2 - ENEC: 61347-2-13 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.
- Correct electrical polarity needs to be obsered. **Wrong polarity will destory the module** and will result in no light emission.
- 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.
- 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.
- Pay attention not to exceed the maximum operation temperature at tc point when the modules are used in enclosed environment.

Ordering Guide

Product Name	Product Code	Product Number (EAN10)	Product Number (EAN40)	Piece per box
PrevaLED® COIN 50	PL-CN50-700-930-24D-G1	4052899918436	4052899918559	20
PrevaLED® COIN 50	PL-CN50-700-940-24D-G1	4052899918443	4052899918566	20
PrevaLED® COIN 50	PL-CN50-700-930-40D-G1	4052899918450	4052899918573	20
PrevaLED® COIN 50	PL-CN50-700-940-40D-G1	4052899918467	4052899918580	20
PrevaLED® COIN 50	PL-CN50-900-830-24D-G1	4052899918474	4052899918597	20
PrevaLED® COIN 50	PL-CN50-900-840-24D-G1	4052899918481	4052899918603	20
PrevaLED® COIN 50	PL-CN50-900-830-40D-G1	4052899918498	4052899918610	20
PrevaLED® COIN 50	PL-CN50-900-840-40D-G1	4052899918504	4052899918627	20
PrevaLED® COIN 50	PL-CN50-1100-830-24D-G1	4052899918511	4052899918634	20
PrevaLED® COIN 50	PL-CN50-1100-840-24D-G1	4052899918528	4052899918641	20
PrevaLED® COIN 50	PL-CN50-1100-830-40D-G1	4052899918535	4052899918658	20
PrevaLED® COIN 50	PL-CN50-1100-840-40D-G1	4052899918542	4052899918665	20

Sales and Technical Support

OSRAM Asia Pacific

30th Floor, China Resource Building,
26 Harbour Road, Wanchai, Hong Kong

+852 3652 5678
www.osram.com

Sales and technical support is given by the local OSRAM subsidiaries. Complete subsidiaries listing is available at OSRAM homepage.

Application Note

Recommended OPTOTRONIC® devices

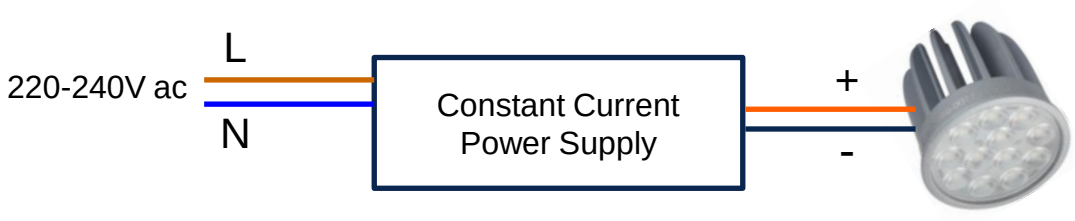
Drivers / Modules	Typ. Current [mA]	OTe 15/350 PC	OTe 25 CS	OTe 15 CS	OTe 13 PC	OTe 18 PC	OTi DALI 25/700 LT2
Dimming		PC	N.A	N.A.	PC	PC	DALI
PL-CN50-700	350	✓	✓	✓	✓		✓
PL-CN50-900	350	✓	✓	✓	✓		✓
PL-CN50-1100	350	✓	✓	✓		✓	✓
Connection Type		B	A	A	B	B	A
Driver Availability						Jul. 2014	

Reference Connection Diagrams

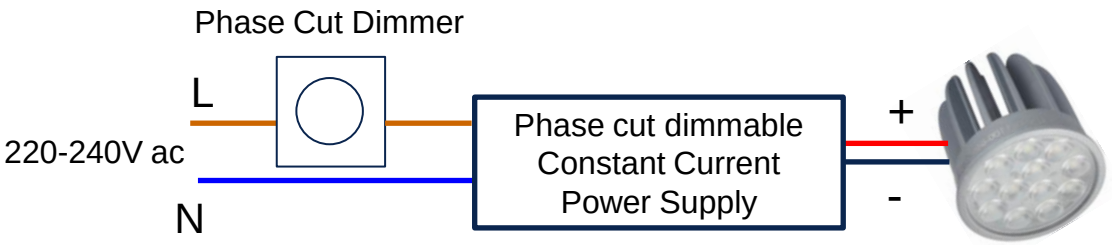
CAUTION

- The following diagrams are for reference only.
- Please refer to Instruction Sheet of power supply/ dimmer/ controller for details.
- **Disconnected from mains supply before wiring work.**
- **Wrong polarity will destroy the module and result in no light emission.**

Type A: 1-to-1 connection



Type B: 1-to-1 connection with Phase Cut dimming



Remark: - 1pc OTe PC driver for 1pc PL-CN50 @350mA
- Dimming by reduce output current

Sales and technical support

OSRAM GmbH

Marcel-Breuer-Straße 6
80807 Munich, Germany
www.osram.com
+49.89.6213-0 **(Headquarter)**
+49.89.6213-6000 **(Customer-Service-Center)**

Sales and technical support is given by the local OSRAM subsidiaries.

On the OSRAM website all subsidiaries are listed with complete address and phone numbers.

Links and related further information

OSRAM LED Systems www.osram.com/prevaled
OSRAM catalogue catalog.osram.com
General information www.osram.com