

70 W/830 WDL PB

POWERBALL HCI-T | Metal halide lamps with ceramic technology for enclosed luminaires



Areas of application

- Shop interiors, shop windows
- Shopping arcades
- Foyers, reception areas
- Museums, exhibitions
- Exhibition halls and trade fairs
- Factories and workshops
- Approved only for use in enclosed luminaires
- Outdoor applications only in suitable luminaires

Product benefits

- Very high efficiency
- Good to excellent color rendering
- Very good color stability
- UV values significantly below the maximum permitted thresholds to IEC 61167 thanks to UV filter

Product features

- POWERBALL ceramic technology
- Light colors: warm white (830 WDL), neutral white (942 ND)
- Average lifetime: 15,000 h (operation with ECG with 70...400 Hz square-wave current)
- Average lifetime: 12,000 hours (with magnetic control gear)
- HCI-T 50 W only for operation with ECG with 70...400 Hz square-wave current



Product datasheet

Technical data

Electrical data

Nominal wattage	70.00 W
Lamp current	0.96000 A
Rated wattage	73.00 W
PFC capacitor at 50 Hz	12 μ F ¹⁾
Ignition voltage	3.6 / 5.0 kVp ²⁾

¹⁾ At rated voltage and $\cos \varphi \geq 0.9$

²⁾ Minimum; for superimposed ignition with square wave electronic ballast 3.0 kVp are sufficient / Maximum; this limit is for safety reasons

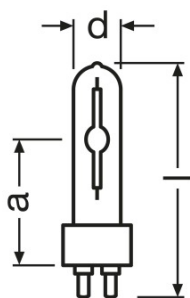
Photometrical data

Luminous flux	7400 lm ¹⁾
Color rendering index Ra	89
Color temperature	3000 K
Luminous efficacy	101 lm/W ²⁾
Light color	830
Rated LLMF at 2,000 h	0.85
Rated LLMF at 4,000 h	0.81
Rated LLMF at 6,000 h	0.80
Rated LLMF at 8,000 h	0.78
Rated LLMF at 12,000 h	0.75
UV protection	Yes

¹⁾ In operation with low frequency square wave electronic ballast, 70-400 Hz. Operation with electromagnetic ballast may be less efficient.

²⁾ In operation with low frequency square wave electronic ballast, 70...400 Hz. Operation with electromagnetic ballast may be less efficient.

Dimensions & weight



Diameter	20.0 mm
Length	100.0 mm
Light center length (LCL)	56.0 mm

Product datasheet

Product weight	28.00 g
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Temperatures

Maximum permitted pinch temperature	350 °C
Maximum permitted outer bulb temperature	500 °C

Lifespan

Rated lamp survival factor at 2,000 h	0.99
Rated lamp survival factor at 4,000 h	0.98
Rated lamp survival factor at 6,000 h	0.97
Rated lamp survival factor at 8,000 h	0.96
Rated lamp survival factor at 12,000 h	0.80
Lifespan B50	15000 h ¹⁾
Operation mode LLMF/LSF	ECG

¹⁾ At ECG

Additional product data

Base (standard designation)	G12
Design / version	Clear
System guarantee level	3 (2/5)
Lamp mercury content	6.1 mg ¹⁾

¹⁾ maximum

Capabilities

Dimmable	Yes ¹⁾
Burning position	Any
Enclosed luminaire required	Yes
Hot restart	No

¹⁾ In combination with POWERTRONIC PTo

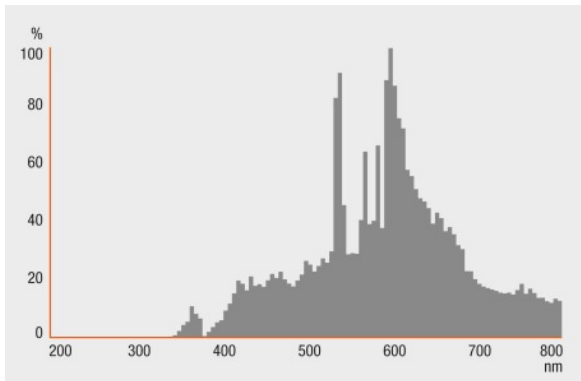
Certificates & standards

Energy efficiency class	A+
Energy consumption	81 kWh/1000h

Country specific categorizations

ILCOS	MT/UB-70/830-H/SL-G12-20/90
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Light Distribution



Spectral power distribution

System guarantee

For the vast majority of our lamps we are offering an extended system guarantee in conjunction with OSRAM POWERTRONIC control gear.

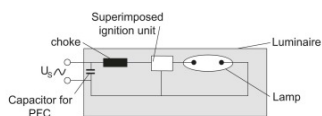


Guarantee

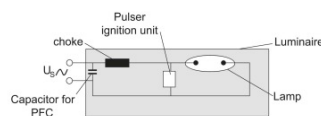
Product datasheet



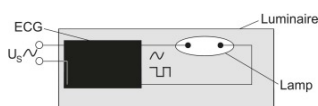
Circuit diagram



Circuit diagram



Circuit diagram



Circuit diagram

Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (height x width x length)	Volume	Gross weight
4008321678447	70 W/830 WDL PB	Shipping carton box 12	139 mm x 161 mm x 180 mm	4.03 dm ³	586.00 g

The mentioned product code describes the smallest quantity unit which can be ordered. One shipping unit can contain one or more single products. When placing an order, for the quantity please enter single or multiples of a shipping unit.

References / Links

For more information on the system guarantee and the terms and conditions of the guarantee visit

- ▶ www.osram.com/system-guarantee

Disclaimer

Product datasheet

Subject to change without notice. Errors and omission excepted. Always make sure to use the most recent release.