

HCI-T 100 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 NDL)
- 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



Technical data

Electrical data

Nominal wattage	100.00 W
Lamp current	1.22000 A
Rated wattage	100.00 W
PFC capacitor at 50 Hz	12 µF ¹⁾
Ignition voltage	3.6 / 5.0 kVp ²⁾

^1) At rated voltage and $\cos\phi \geq 0.9$

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	11300 lm ¹⁾
Color rendering index Ra	86
Color temperature	3000 K
Luminous efficacy	103 lm/W ²⁾
Light color	830
Rated LLMF at 2,000 h	0.88
Rated LLMF at 4,000 h	0.83
Rated LLMF at 6,000 h	0.80
Rated LLMF at 8,000 h	0.79
Rated LLMF at 12,000 h	0.76
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	105.0 mm	
Light center length (LCL)	56.0 mm	

Product weight	30.00 g	
Temperatures		
Maximum permitted pinch temperature	350 °C	
Maximum permitted outer bulb temperature	500 °C	
ifespan 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	
	0.96	
Rated lamp survival factor at 8,000 h	0.70	
Rated lamp survival factor at 8,000 h Rated lamp survival factor at 12,000 h	0.80	
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Additional product data

Base (standard designation)	G12
Design / version	Clear
System guarantee level	3 (2/5)
Lamp mercury content	8.7 mg ¹⁾

¹⁾ maximum

Capabilities

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

 $^{1)}$ In combination with POWERTRONIC PTo $\,$

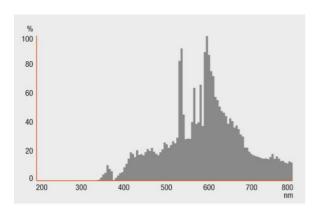
Certificates & standards

Energy efficiency class	A+	
Energy consumption	110 kWh/1000h	

Country specific categorizations

ILCOS	MT/UB-100/830-H/SL-G12-20/100

Light Distribution



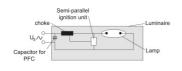
Spectral power distribution

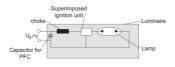
System guarantee

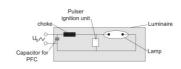
For the vast majority of our lamps we are offering an extended system guarantee in conjunction with OSRAM POWERTRONIC control gear.



Guarantee







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
4008321682970	HCI-T 100 W/830 WDL PB	Shipping carton box 12	139 mm x 161 mm x 180 mm	4.03 dm ³	587.20 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

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