

# PRODUCT DATASHEET HCI-TC 70 W/830 WDL PB

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



#### **AREAS OF APPLICATION**

- Shop interiors, shop windows
- Shopping arcades
- Foyers, reception areas
- Museums, exhibitions
- Accent lighting
- Decorative lighting
- 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 h (with magnetic control gear)
- HCI-TC 20 W, HCI-TC 50 W only for operation with ECG with 70...400 Hz square-wave current



#### **TECHNICAL DATA**

#### Electrical data

Nominal wattage	70.00 W
Rated wattage	73.00 W
Lamp current	0.95 A
PFC capacitor at 50 Hz	12 μF <sup>1)</sup>
Ignition voltage	3.6 / 5.0 kVp <sup>2)</sup>

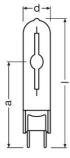
 $<sup>^{1)}</sup>$  At rated voltage and cos  $\phi \geq 0.9$ 

#### Photometrical data

Luminous flux	7200 lm <sup>1)</sup>
Luminous efficacy	99 lm/W <sup>2)</sup>
Color rendering index Ra	89
Color temperature	3000 K
Light color	829
Rated LLMF at 2,000 h	0.84
Rated LLMF at 4,000 h	0.82
Rated LLMF at 6,000 h	0.80
Rated LLMF at 8,000 h	0.78
Rated LLMF at 12,000 h	0.70
UV protection	Yes

<sup>1)</sup> In operation with electronic control gear with 70...400 Hz square-wave current. Operation with magnetic ballast can be less efficient

## Dimensions & weight



Diameter	15.0 mm
Length	81.0 mm
Light center length (LCL)	52.0 mm
Product weight	9.00 g

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

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

# Temperatures & operating conditions

Maximum permitted outer bulb temperature	550 °C
Maximum permitted pinch temperature	350 °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 <sup>1)</sup>
Operation mode LLMF/LSF	ECG

<sup>1)</sup> At ECG

# Additional product data

Base (standard designation)	G8.5	
System guarantee level	3 (2/5)	
Mercury content	4.2 mg <sup>1)</sup>	

 $<sup>^{1)}</sup>$  Maximum

# Capabilities

Dimmable	Yes <sup>1)</sup>	
Burning position	Any	
Enclosed luminaire required	Yes	

 $<sup>^{1)}</sup>$  In combination with POWERTRONIC PTo

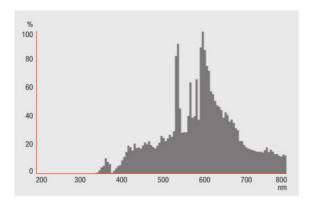
# Certificates & standards

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

# Country-specific categorizations

ILCOS	MT/UB-70/830-H/SL-G8.5-17/85

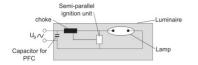
# **Light Distribution**

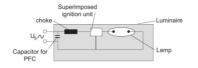


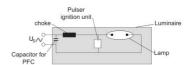
Spectral power distribution

## **SYSTEM GUARANTEE**

When operated with OSRAM POWERTRONIC control gear, an extended system guarantee is granted for these lamps







Circuit diagram

Circuit diagram

Circuit diagram



## Circuit diagram

#### **LOGISTICAL DATA**

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4008321681799	HCI-TC 70 W/830 WDL PB	Shipping carton box 12	180 mm x 127 mm x 140 mm	3.20 dm <sup>3</sup>	363.00 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.ledvance.com/system-guarantee

## **DISCLAIMER**

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