

# HCI-T 70 W/942 NDL 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	70.0 W
Rated wattage	73.00 W
Lamp current	0.99 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	6800 lm <sup>1)</sup>
Luminous efficacy	93 lm/W <sup>2)</sup>
Color rendering index Ra	95
Color temperature	4200 K
Light color	942
Rated LLMF at 2,000 h	0.87
Rated LLMF at 4,000 h	0.81
Rated LLMF at 6,000 h	0.78
Rated LLMF at 8,000 h	0.77
Rated LLMF at 12,000 h	0.76
UV protection	Yes

<sup>1)</sup> 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 weight	28.00 g

# **Temperatures**

Maximum permitted outer bulb temperature	500 °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

<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.

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)	G12
Design / version	Clear
System guarantee level	3 (2/5)
Lamp mercury content	7.3 mg <sup>1)</sup>

<sup>1) &</sup>lt;sub>Maximum</sub>

# **Capabilities**

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

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

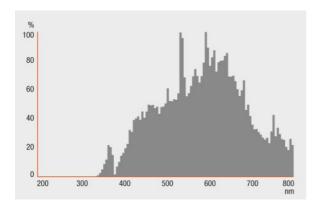
# Certificates & standards

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

# **Country specific categorizations**

ILCOS	MT/UB-70/942-H/SL-G12-20/90

# **Light Distribution**



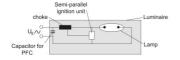
Spectral power distribution

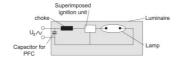
# System guarantee

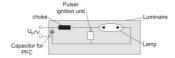
For the vast majority of our lamps we are offering an extended system guarantee in conjunction with OSRAM POWERTRONIC control gear.



Guarantee







Circuit diagram

Circuit diagram

Circuit diagram



Circuit diagram

### Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4008321678522	HCI-T 70 W/942 NDL PB	Shipping carton box 12	180 mm x 161 mm x 139 mm	4.03 dm <sup>3</sup>	600.40 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.