

## POWERBALL HCI-TS

Metal halide lamps with ceramic technology for enclosed luminaires



### Areas of application

- Shopping arcades
- Foyers, reception areas
- Museums, exhibitions
- Exhibition halls and trade fairs
- Factories and workshops
- Buildings, monuments, bridges
- 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)



# Product family datasheet

## Technical data

Product description	Electrical data					Photometrical data				
	Nominal wattage	Construction wattage [PICOS]	Lamp current	PFC capacitor at 50 Hz	Ignition voltage	Luminous flux	Luminous efficacy	Color rendering index Ra	Color temperature	Light color
HCI-TS 70 W/830 WDL PB	70.00 W	73.00 W	0.95000 A	12 µF <sup>1)</sup>	3.6 / 4.5 kVp <sup>2)</sup>	7000 lm <sup>3)</sup>	96 lm/W <sup>4)</sup>	88	3000 K	830
HCI-TS 70 W/942 NDL PB	70.00 W	73.00 W	0.94000 A	12 µF <sup>1)</sup>	3.6 / 5.0 kVp <sup>2)</sup>	6700 lm <sup>3)</sup>	92 lm/W <sup>4)</sup>	94	4200 K	942
HCI-TS 150 W/830 WDL PB	150.00 W	147.00 W	1.77000 A	20 µF <sup>1)</sup>	3.6 / 5.0 kVp <sup>2)</sup>	15000 lm <sup>3)</sup>	102 lm/W <sup>4)</sup>	89	3000 K	830
HCI-TS 150 W/942 NDL PB	150.00 W	147.00 W	1.80000 A	20 µF <sup>1)</sup>	3.6 / 5.0 kVp <sup>2)</sup>	14800 lm <sup>3)</sup>	101 lm/W <sup>4)</sup>	96	4200 K	942

Product description	Lifespan						Dimensions & weight				Temperatures
	Rated LLMF at 2,000 h	Rated LLMF at 4,000 h	Rated LLMF at 6,000 h	Rated LLMF at 8,000 h	Rated LLMF at 12,000 h	UV protection	Diameter	Length	Light center length (LCL)	Product weight	Max. permitted outer bulb temperature
HCI-TS 70 W/830 WDL PB	0.84	0.82	0.79	0.76	0.71	Yes	20.0 mm	120.0 mm	60.0 mm	22.00 g	500 °C
HCI-TS 70 W/942 NDL PB	0.82	0.78	0.76	0.74	0.71	Yes	20.0 mm	120.0 mm	60.0 mm	22.00 g	500 °C
HCI-TS 150 W/830 WDL PB	0.87	0.80	0.74	0.68	0.63	Yes	23.0 mm	138.0 mm	69.0 mm	27.00 g	650 °C
HCI-TS 150 W/942 NDL PB	0.85	0.75	0.70	0.67	0.65	Yes	23.0 mm	138.0 mm	69.0 mm	27.00 g	650 °C

Product description	Max. permitted pinch temp.	Lifespan						Lifespan B50	Operation mode LLMF/LSF	Additional product data		
		Rated lamp survival factor at 2,000 h	Rated lamp survival factor at 4,000 h	Rated lamp survival factor at 6,000 h	Rated lamp survival factor at 8,000 h	Rated lamp survival factor at 12,000 h	Base (standard designation)			System guarantee level	Lamp mercury content	
HCI-TS 70 W/830 WDL PB	330 °C	0.99	0.98	0.97	0.96	0.80	15000 h <sup>5)</sup>	ECG	RX7s	3 (2/5)	5.5 mg <sup>6)</sup>	
HCI-TS 70 W/942 NDL PB	330 °C	0.99	0.98	0.97	0.96	0.80	15000 h <sup>5)</sup>	ECG	RX7s	3 (2/5)	8.0 mg <sup>6)</sup>	

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Product description	Max. permitted pinch temp.	Lifespan							Additional product data		
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HCI-TS 150 W/830 WDL PB	330 °C	0.99	0.95	0.90	0.83	0.65	15000 h <sup>5)</sup>	ECG	RX7s-24	3 (2/5)	24.2 mg <sup>6)</sup>
HCI-TS 150 W/942 NDL PB	330 °C	0.99	0.98	0.97	0.96	0.80	15000 h <sup>5)</sup>	ECG	RX7s-24	3 (2/5)	17.9 mg <sup>6)</sup>

Product description	Capabilities			Certificates & standards		Country specific categorizations
	Dimmable	Burning position	Enclosed luminaire required	Energy efficiency class	Energy consumption	ILCOS
HCI-TS 70 W/830 WDL PB	Yes <sup>7)</sup>	p45	Yes	A+	81 kWh/1000h	MD/UB-70/830-H/SL-RX7s-22/114,2/H
HCI-TS 70 W/942 NDL PB	Yes <sup>7)</sup>	p45	Yes	A+	81 kWh/1000h	MD/UB-70/942-H/SL-RX7s-22/114,2/H
HCI-TS 150 W/830 WDL PB	Yes <sup>7)</sup>	p45	Yes	A+	162 kWh/1000h	MD/UB-150/830-H/SL-RX7s=24-25/132/H
HCI-TS 150 W/942 NDL PB	Yes <sup>7)</sup>	p45	Yes	A+	162 kWh/1000h	MD/UB-150/942-H/SL-RX7s=24-25/132/H

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

<sup>2)</sup> Minimum; for superimposed ignition with square wave electronic ballast 3.0 kVp are sufficient

<sup>3)</sup> In operation with low frequency square wave electronic ballast, 70...400 Hz. Operation with electromagnetic ballast may be less efficient.

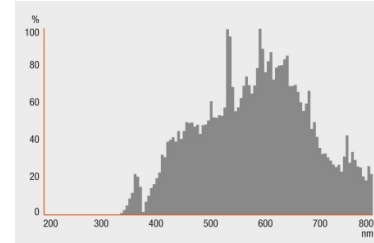
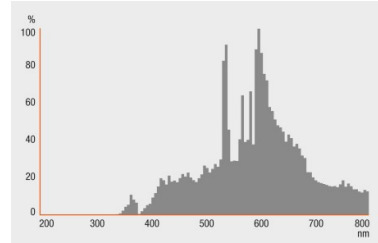
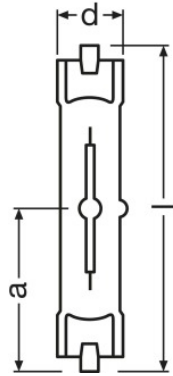
<sup>4)</sup> In operation with low frequency square wave electronic ballast, 70...400 Hz. Operation with electromagnetic ballast may be less efficient.

<sup>5)</sup> At ECG

<sup>6)</sup> Maximum

<sup>7)</sup> In combination with POWERTRONIC PTo

## Product family datasheet



HCI-TS 70 W/830 WDL PB, HCI-TS 70 W/942 ND L PB, HCI-TS 150 W/830 WDL PB, HCI-TS 150 W/942 ND L PB

HCI-TS 70 W/830 WDL PB, HCI-TS 150 W/830 WDL PB

HCI-TS 70 W/942 ND L PB, HCI-TS 150 W/942 ND L PB

### System guarantee

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

### Application advice

For more detailed application information and graphics please see product datasheet.

### Logistical Data

## Product family datasheet

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4008321688309	HCI-TS 70 W/830 WDL PB	Shipping carton box 12	180 mm x 161 mm x 139 mm	4.03 dm <sup>3</sup>	490.00 g
4008321688361	HCI-TS 70 W/942 NDL PB	Shipping carton box 12	180 mm x 161 mm x 139 mm	4.03 dm <sup>3</sup>	490.00 g
4008321679857	HCI-TS 150 W/830 WDL PB	Shipping carton box 12	180 mm x 179 mm x 139 mm	4.48 dm <sup>3</sup>	603.00 g
4008321679871	HCI-TS 150 W/942 NDL PB	Shipping carton box 12	180 mm x 178 mm x 142 mm	4.55 dm <sup>3</sup>	603.00 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.

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### References / Links

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

▶ [www.osram.com/system-guarantee](http://www.osram.com/system-guarantee)

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### Disclaimer

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