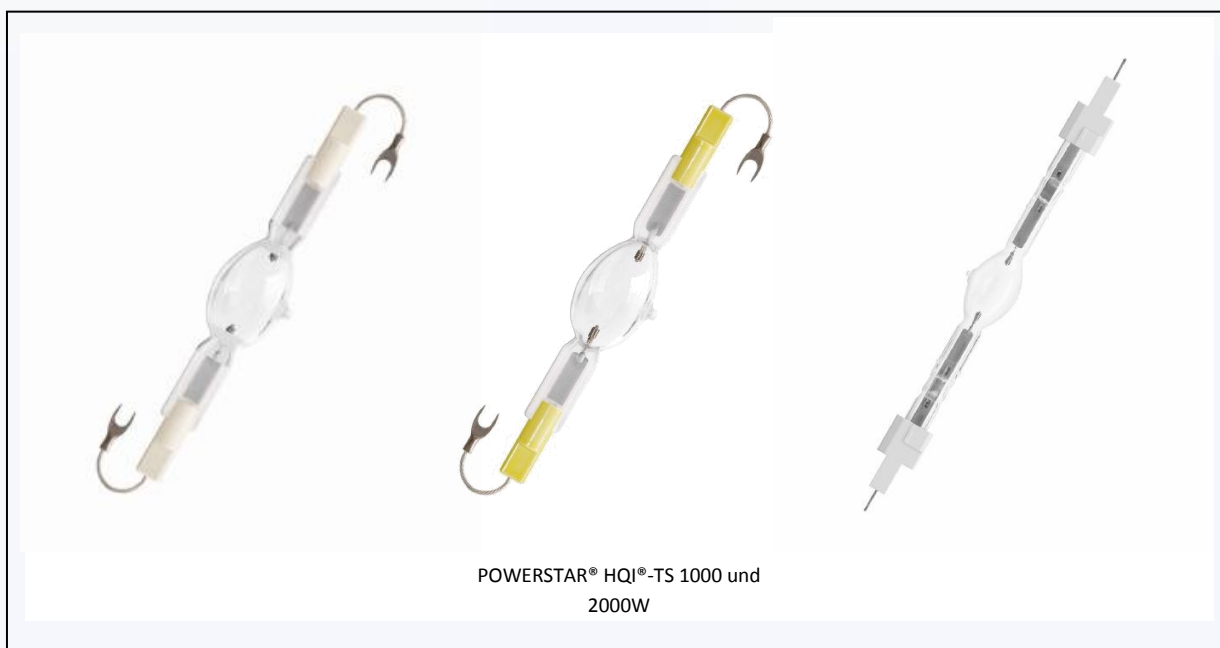


POWERSTAR® HQI®-TS 1000/2000W

Technical Information

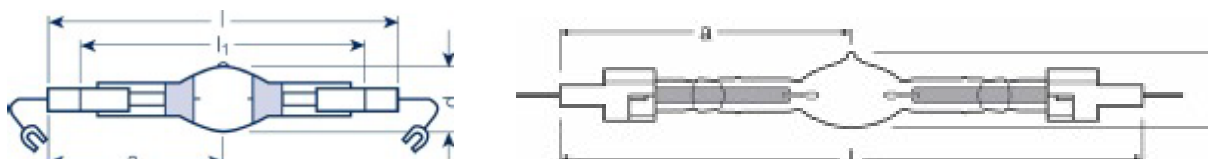


POWERSTAR® HQI®-TS 1000 und
2000W

General product description

- POWERSTAR® quartz technology
- High luminous flux and efficacy
- Hot restrikable
- Neutral white light ND/L and daylight D
- Compact dimensions for small fixtures
- Short arc and uniform light distribution for optimal beam control
- Approved for use only in enclosed fixtures
- K12s for good base positioning

Basic technical description



Product reference	Nominal lamp wattage	Cap	Correlated colour temperature	Comp. Cap. @50hz, cos φ ≈0.9	Light colour code	Length max. (l)	Diameter (d)	Weight per piece	Light centre length (a)	Lamp voltage ¹	Lamp current ¹
	[W]		[K]	[μF]		[mm]	[mm]	[g]	[mm]	[V]	[A]
HQI-TS 1000W/D/S PRO	1000	K12s-36	6100	85	861	187	41	58.5	93	120	9.6
HQI-TS 1000W/ND/L/S	1000	K12s-36	4400	85	944	187	41	51.0	93	120	9.7
HQI-TS 2000W/D/S	2000	K12s-36	6100	60	861	187	41	61.0	93	190	11.4
HQI-TS 2000W/D/S/DP	2000	Cable	6100	70	861	365	41	94.0	182	200	11.6
HQI-TS 2000W/D/S/HF	2000	K12s-36	6200	70	862	187	41	61.0	93	200	12.2
HQI-TS 2000W/ND/L/S	2000	K12s-36	4650	60	846	187	41	63.0	93	200	11.3

Performance specification²

Product reference	Rated lamp wattage	Rated system wattage ³	Luminous flux	Luminous efficacy	Colour rendering index CRI ⁴	Colour rendering level	Average life (B50) [h]
	[W]	[W]	[lm]	[lm/W]			
HQI-TS 1000W/D/S PRO	1000	n.a.	90000	90	90 / 85	1B	8000
HQI-TS 1000W/ND/L/S	1000	n.a.	90000	90	90 / 85	1A	6000
HQI-TS 2000W/D/S	1950	n.a.	210000	108	90 / 83	1B	4500
HQI-TS 2000W/D/S/DP	2020	n.a.	220000	109	90 / 83	1B	5000
HQI-TS 2000W/D/S/HF	2060	n.a.	230000	112	90 / 83	1B	4500
HQI-TS 2000W/ND/L/S	1930	n.a.	222000	115	90 / 88	1A	6000

¹ Refers to 50 Hz operation with a reference electromagnetic ballast (IEC 60923).

² The specified values refer to 50 Hz operation with electromagnetic control gear at rated wattage, unless otherwise specified. They refer to horizontal burning position, in line with IEC 61167. Other burning positions may result in differing values.

³ With OSRAM POWERTRONIC PTi, PT-FIT or PT0

⁴ CRI Nominal / Rated

Edition December 3, 2013; replaces edition August 30, 2013. Subject to change without notice. Errors and omissions excepted. Make sure to use the most recent edition.

Product reference	Lamp lumen maintenance factor (LLMF) vs. operation hours			
	2000h	4000h	6000h	8000h
HQI-TS 1000W/D/S PRO	98%	98%	97%	88%
HQI-TS 1000W/NDL/S	91%	86%	84%	-
HQI-TS 2000W/D/S	95%	90%	-	-
HQI-TS 2000W/D/S/DP	95%	92%	-	-
HQI-TS 2000W/D/S/HF	96%	92%	-	-
HQI-TS 2000W/NDL/S	89%	76%	72%	-

Product reference	Lamp survival factor ² (LSF) vs. operation hours			
	2000h	4000h	6000h	8000h
HQI-TS 1000W/D/S PRO	95%	77%	65%	50%
HQI-TS 1000W/NDL/S	95%	70%	50%	
HQI-TS 2000W/D/S	94%	61%		
HQI-TS 2000W/D/S/DP	93%	63%		
HQI-TS 2000W/D/S/HF	94%	61%		
HQI-TS 2000W/NDL/S	95%	76%	50%	

Operation conditions

Product reference	Bur-ning position	Max. permitted outer bulb temperature [°C]	Max. permitted pinch Temperature [°C]	Ignition voltage min. / max. [kVs]	Hot restrike voltage [kVs]	Required control gear ⁵	Suitable OSRAM electronic control gear	Dimming
HQI-TS 1000W/D/S PRO	p15	950	390	4 / 5	36	CCG	n.a.	Not allowed
HQI-TS 1000W/NDL/S	p15	950	390	4 / 5	36	CCG	n.a.	Not allowed
HQI-TS 2000W/D/S	p15	950	390	4 / 5	36	CCG	n.a.	Not allowed
HQI-TS 2000W/D/S/DP	p15	950	390	4 / 5	36	CCG	n.a.	Not allowed
HQI-TS 2000W/D/S/HF	p15	950	390	4 / 5	36	CCG	n.a.	Not allowed
HQI-TS 2000W/NDL/S	p15	950	390	4 / 5	36	CCG	n.a.	Not allowed

⁵ Indicates the percentage of operational lamps after a given period of operation time.

⁶ ECG stands for low frequency square wave electronic ballast. See the respective lamp data sheet in IEC 61167 and Annexes G and H, therein.

CCG stands for electromagnetic ballast (see IEC 61347).

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Safety, materials and environment

Product description	Typical specific effective radiant UV power [mW/1000 lm]	Typical mercury content [mg]
HQI-TS 1000W/D/S PRO	>2	70
HQI-TS 1000W/NDL/S	>2	70
HQI-TS 2000W/D/S	>2	180
HQI-TS 2000W/D/S/DP	>2	170
HQI-TS 2000W/D/S/HF	>2	187
HQI-TS 2000W/NDL/S	>2	150

- Compliant with safety specifications according to EN 62035
- Compliant with RoHS.
- Only for luminaires with protective shield according to IEC 60598-1
- For operation with an electromagnetic ballast⁷ a protection against rectifying effect at end-of-life required
- Starting to operating light source to be avoided because of high brightness

Energy labelling⁸

Product description	Energy efficiency class	Weighted energy consumption E _c [kWh/1000h]
HQI-TS 1000W/D/S PRO	A+	1100
HQI-TS 1000W/NDL/S	A+	1100
HQI-TS 2000W/D/S	A+	2145
HQI-TS 2000W/D/S/DP	A+	2222
HQI-TS 2000W/D/S/HF	A+	2266
HQI-TS 2000W/NDL/S	A+	2123

Logistics data

Product description	ILCOS	EAN 10	EAN 40	Standard pack quantity
HQI-TS 1000W/D/S PRO	MN-1000/861-H/E/SL-KI25s=36-41/187/H	4008321525475	4008321525482	10
HQI-TS 1000W/NDL/S	MN-1000/944- H/E/SL-KI25s=36-41/187/H	4008321591944	4008321591951	10
HQI-TS 2000W/D/S	MN-2000/861-E/E/SL- KI25s=36-41/187/H	4050300271682	4050300271699	10
HQI-TS 2000W/D/S/DP	MN-2000/861-E/SL-Cable-41/385/H		4008321772992	6*
HQI-TS 2000W/D/S/HF	MN-2000/862-E/E/SL-KI25s=36-41/187/H	4008321338310	4008321338327	10
HQI-TS 2000W/NDL/S	MN-2000/846- E/SL -KI25=36-41/385/H	4008321525499	4008321525505	10

⁷ See IEC 61347.

* only EAN 40 available

⁸ According to Regulation (EU) No 874/2012 of July 12, 2012

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Typical spectral power distribution

Light colour code	Fig. no.
D/S PRO	1
NDL/S	2
D/S DP	3
D/S HF	4

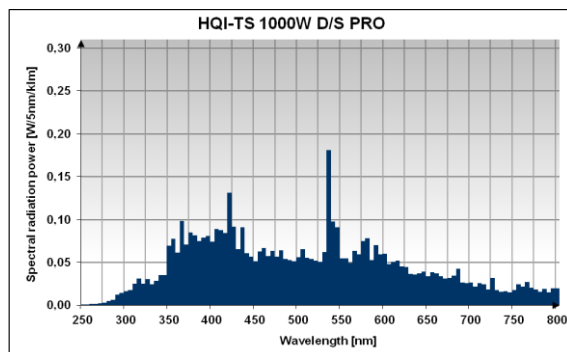


Fig 1

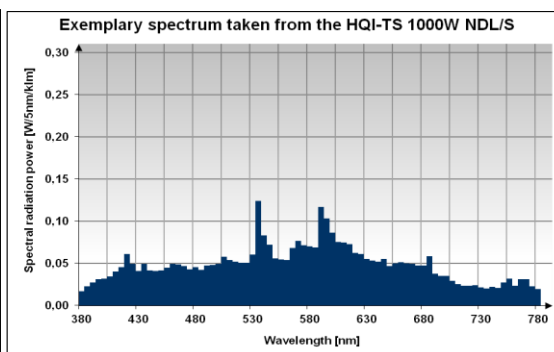


Fig 2

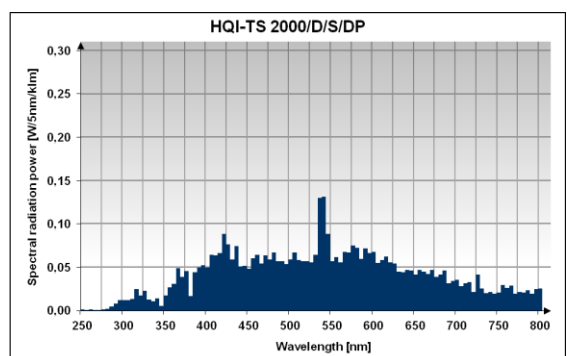


Fig 3

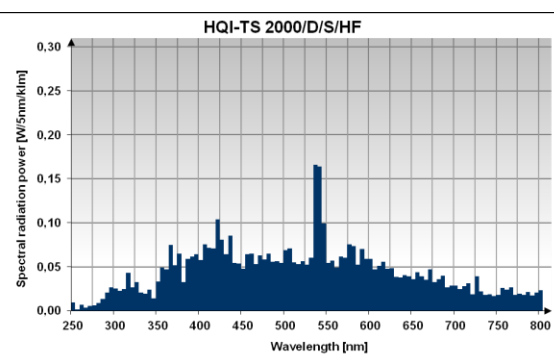


Fig 4

References

Reference	
Brochure "Metal halide lamps. Instructions for the use and application"	www.osram.com
Brochure "High Intensity Discharge lamps. Technical information on reducing the wattage"	www.osram.com
Ray data (e.g. ASAP, SPEOS, LightTools)	available on request
3D data (e.g. Parasolid, STEP)	available on request
System ⁺ guarantee	level 3C, see www.osram.com