# SubstiTUBE® Value - ST8-HV2

#### **Datasheet**



Innovative LED-lamp, easy and safe to use in CCG installations as direct retrofit. Energy saving potential of up to 68% by replacing 0.6 m T8 fluorescent tubes. Instant 100% light without flickering. No mercury.

Applicable in warehouses, cold storage, supply rooms, corridors, industry, stairways, garages, indirect illumination etc; for applications with high operating hours.

### **Technical operating data**

Product	Color	Colortemp. [K]	Lum. Flux [lm]	Voltage [V] / Frequency [Hz] Input current [A]	Power [W]	Radiance- Angle [°]
ST8-HV2-075-865	Cool Daylight	6500 K	750	230 V*		
ST8-HV2-075-840	Cool White	4000 K	750	220 - 240 V 50 / 60 Hz	8 W	160°
ST8-HV2-065-830	Warm White	3000 K	650	0,05 A		

All Data are related to the entire lamp. Due to the special conditions of the manufacturing processes of LED the typical data of technical parameters can only reflect statistical figures and do not necessarily correspond to the actual parameters of each single product which could differ from the typical data.

### **Technical Features**

- ➤ LED lamp in T8 shape with G13 socket
- > Length excl. pins: 590 mm
- ➤ Weight: 90g
- > For operation at magnetic ballast
- No rewiring necessary at CCG
- Direct Retrofit for CCG luminaires; replacement of lamp and included starter
- Extremely robust due to polycarbonate body
- > Fully integrated ECG complies to relevant standards

- Powerfactor > 0.9
- > Up to 30,000 h lifetime
- > Switching cycles > 200.000
- Color Rendering Index (CRI) > 80
- Overpower, overheat and short circuit protected
- High color homogeneity
- > RoHS-conformity, no mercury
- Not for operation with ECG, not dimmable
- Energy Efficiency Class: A



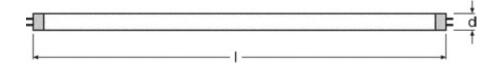
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<sup>\*</sup> Rated voltage

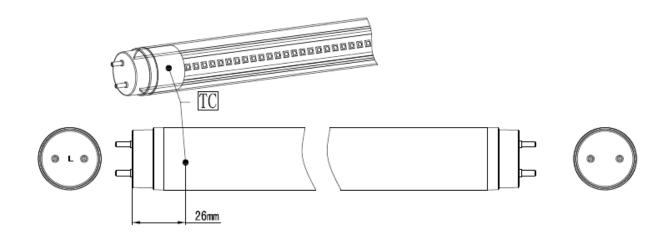
## Minimum / Maximum ratings

	Operating temperature Tc	Storage temperature Ts	Ambient temperature Ta
ST8-HV2	-20° 75°C	-20° 80°C	-20° 45°C

## Drawings



Product	I	d	
ST8-HV2	590 mm	27,5 mm	





## **Safety and Application notes**

- > The SubstiTUBE® Value must not be damaged or operated in a damaged condition.
- ➤ When operating with CCG, the included "SubstiTUBE® Start" has to be inserted as well. If the conventional starter is not replaced the SubstiTUBE® Value will start blinking. Switch off immediately, the SubstiTUBE® Value can be damaged!



Lamp suitable for 50 Hz or 60 Hz operation



Lamp not suitable for high frequency operation



- ➤ Do not use SubstiTUBE® Value in luminaires which do not have any starter or when the starter cannot be replaced.
- Not usable in luminaires with serial lamp connection i.e. more than one tube at one magnetic ballast (tandem circuitry).
- ➤ The SubstiTUBE® Value emits light only with a limited angle, not like a fluorescent tube with 360°output.
- ➤ Due to the characteristic light distribution of the SubstiTUBE® Value, the resulting luminaire light characteristic is likely to change. It is not guaranteed that e.g. standards for lighting at working places will be complied to after replacement. A photometric check of the installation is recommended.
- The effective energy savings depend on the efficiency of the luminaire setup to be replaced and should be considered individually in each case. Particularly magnetic ballast losses are reduced to ohmic losses and are normally only about 1 W.

The SubstiTUBE® Value is protected according to IP20. Applications with external risk of moisture and dust can be served with an adequately protected luminaire.

- ➤ SubstiTUBE® Value may also be driven directly on line voltage. In order to grant a safe operation mode please refer to the installation instructions for further information.
- Photobiological Safety of lamps and lamp systems according to IEC 62471. Risk Group: Exempt



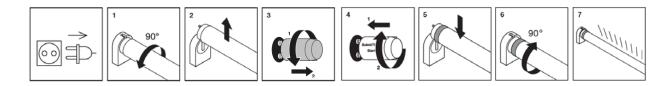
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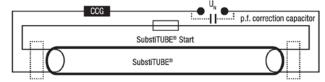
#### **Installation Instructions for CGG**

- Make sure that the supply voltage is disconnected.
- > Carefully remove the fluorescent tube and starter according to the lamp holder type.
- ➤ Insert SubstiTUBE® Value and SubstiTUBE® Start properly.

Below an example for typical lamp holder types is described

- > Turn the conventional lamp 90° degrees and take it out of the socket.
- > Remove the conventional starter by turning it.
- ➤ Insert and latch the SubstiTUBE® Start into starter socket.
- ➤ Insert SubstiTUBE® Value into socket and locate into position by turning 90°.
- > Check light emission direction.





Circuit diagram of a retrofitted CCG luminaire



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## **Ordering guide**

Product name	Light color	EAN*	S-Unit**			
ST8-HV2-075-865	Cool Daylight / 6500 K	4052899922303				
ST8-HV2-075-840	Cool White / 4000 K	4052899922297	4 x 1			
ST8-HV2-065-830	Warm White / 3000 K	4052899922280				
* EAN: Ordering number per single module  ** S-I lait: Lamps per shipping unit						

<sup>\*\*</sup> S-Unit: Lamps per shipping unit

## **Sales and Technical Support**

#### **OSRAM GmbH**

Marcel-Breuer-Strasse 6 D - 80807 München Germany www.osram.com +49 (0)89 6213-0 Sales and technical support is given by the local OSRAM subsidiaries.
On our world wide homepage all OSRAM subsidiaries are listed with complete address and phone numbers.

### **Further Information**

➤ Downloads: Eulumdat /IES files, CE declaration

www.osram.com/SubstiTUBE

