



# Shatterfree fluorescent lighting

### MASTER TL5 High Efficiency Secura

This TL5 High Efficiency Secura lamp (tube diameter 16 mm) has a protective coating that keeps glass and lamp components together in the event of accidental breakage. The lamp is easily identifiable by a blue ring at one end. Application areas are all places where glass shatters can disturb operations and can have an impact on product and people safety, e.g. the food and beverage industry. This lamp is compliant with HACCP regulations and supports HACCP certification.

#### **Benefits**

- Special protective coating around the lamp prevents products from contamination in case of accidental lamp breakage
- The protective coating has a high temperature-resistance and no degradation to be expected under influence of temperature or UV within specified lamp life (50% failures @ 3 hrs switching cycle)
- Making luminaires compliant with relevant standards in the industry, such as HACCP, ISO 22000 and IEC 61549

#### **Features**

- Protective coating around the lamp
- Fully compliant with IEC 61549 Fragment Retention Lamp Standard
- Compliant with relevant standards in the food industry, such as HACCP and ISO 22000
- Superior coating material (Teflon) with high temperature resistance (up to 200 °C) and no degradation under influence of temperature or UV
- · Single blue ring around one end for identification
- Direct retrofit for all TL5 HE lamps

## **MASTER TL5 High Efficiency Secura**

#### **Application**

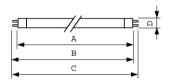
- For use where contamination resulting from lamp breakage must be prevented, e.g. in food industry, suppliers to the food industry, health care, pharmaceuticals, cleanrooms etc.
- Suitable for use in environments with increased risk of breakage, e.g. sports halls

#### Versions



G5, T5

#### **Dimensional drawing**



Product	D (max)	A (max)	B (max)	B (min)	C (max)
MASTER TL5 HE Secura 35W/840 UNP/40	17 mm	1449.0 mm	1456.1 mm	1453.7 mm	1463.2 mm
MASTER TL5 HE Secura 14W/840 UNP/40	17 mm	549.0 mm	556.1 mm	553.7 mm	563.2 mm
MASTER TL5 HE Secura 28W/840 UNP/40	17 mm	1149.0 mm	1156.1 mm	1153.7 mm	1163.2 mm

# MASTER TL5 High Efficiency Secura

Approval and Application	
Energy Efficiency Label (EEL)	A+
Mercury (Hg) Content (Nom)	1.4 mg
Controls and Dimming	
Dimmable	Yes
General Information	
Cap-Base	G5
Life To 50% Failures Preheat (Nom)	24000 h
LSF Preheat 16000 h Rated	97 %
LSF Preheat 20000 h Rated	84 %
LSF Preheat 2000 h Rated	99 %
LSF Preheat 4000 h Rated	99 %
LSF Preheat 6000 h Rated	99 %
LSF Preheat 8000 h Rated	99 %
System Description	High Efficiency
Light Technical	
Color Code	840
Color Designation	Cool White (CW)
Correlated Color Temperature (Nom)	4000 K
Color Rendering Index (Max)	85
Color Rendering Index (Min)	80
Color Rendering Index (Nom)	82
LLMF 12000 h Rated	92 %
LLMF 16000 h Rated	91 %
LLMF 2000 h Rated	96 %
LLMF 20000 h Rated	90 %
LLMF 4000 h Rated	95 %
LLMF 6000 h Rated	94 %
LLMF 8000 h Rated	93 %
Mechanical and Housing	
Bulb Shape	T5
Temperature	
Design Temperature (Nom)	35 °C

#### Approval and Application

Order Code	Full Product Name	Energy Consumption kWh/1000 h
927926184018	MASTER TL5 HE Secura 14W/840 UNP/40	15 kWh
927926684018	MASTER TL5 HE Secura 28W/840 UNP/40	31 kWh
927927184018	MASTER TL5 HE Secura 35W/840 UNP/40	38 kWh

#### Operating and Electrical

		Lamp Current	Power (Rated)	
Order Code	Full Product Name	(Nom)	(Nom)	
927926184018	MASTER TL5 HE Secura 14W/840 UNP/40	0.165 A	14.0 W	
927926684018	MASTER TL5 HE Secura 28W/840 UNP/40	0.170 A	27.9 W	

		Lamp Current	Power (Rated)	
Order Code	Full Product Name	(Nom)	(Nom)	
927927184018	MASTER TL5 HE Secura 35W/840	0.175 A	35.5 W	
	UNP/40			

#### **Light Technical**

# MASTER TL5 High Efficiency Secura

Full Product   Order Code Name   927926184018 MASTER TL5 HE		Max Lumen, Rated) (Nom)	Luminous Efficacy (rated) (Nom) 86 lm/W	Luminous Flux (Nom) 1350 lm	Luminous Flux (Rated) (Nom)
	Secura 14W/840 UNP/40				
927926684018	MASTER TL5 HE Secura 28W/840 UNP/40	104 lm/W	96 lm/W	2900 lm	2675 lm

		Luminous			
		Efficacy (@	Luminous		Luminous
	Full Product	Max Lumen,	Efficacy	Luminous	Flux (Rated)
Order Code	Name	Rated) (Nom)	(rated) (Nom)	Flux (Nom)	(Nom)
927927184018	MASTER TL5 HE	105 lm/W	94 lm/W	3650 lm	3325 lm
	Secura 35W/840				
	UNP/40				

