



# TUV TL Mini - Small diameter lamps for residential applications

## TUV TL Mini

TUV TL Mini lamps are slim double-ended UV-C 253.7 nm emitting lamps. The small 16 mm diameter of the lamp allows for a small system design and design flexibility. TUV TL Mini lamps offer almost constant UV output over their complete lifetime.

### Benefits

- Controlled UV-C output over lifetime of the lamp
- High system efficacy
- Good environmental choice because of lowest amount of mercury

### Features

- Short-wave UV radiation with a peak at 253.7 nm (UV-C)
- Protective inside coating ensures almost constant UV output over the complete lifetime of the lamp
- Special lamp glass filters out the 185 nm ozone-forming radiation
- Warning sign on lamp indicates that the lamp radiates UVC

### Application

- Residential drinking water units
- Fish pond water units
- In-duct air treatment units
- Stand alone air handling units

## TUV TL Mini

### Warnings and Safety

- A lamp breaking is extremely unlikely to have any impact on your health. If a lamp breaks, ventilate the room for 30 minutes and remove the parts, preferably with gloves. Put them in a sealed plastic bag and take it to your local waste facilities for recycling. Do not use a vacuum cleaner.
- DANGER: Risk Group 3 Ultra Violet product. These lamps emit high-power UV radiation that can cause severe injury to skin and eyes. Avoid eye and skin exposure to unshielded product. Use only in an enclosed environment which shields users from the radiation.
- Plants and/or materials that are exposed to UV-C and/or ozone for a long time may become damaged and/or discolored.

### Versions



4 pins single ended



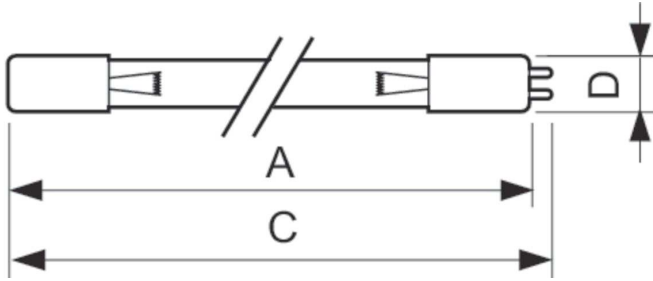
TUV G5



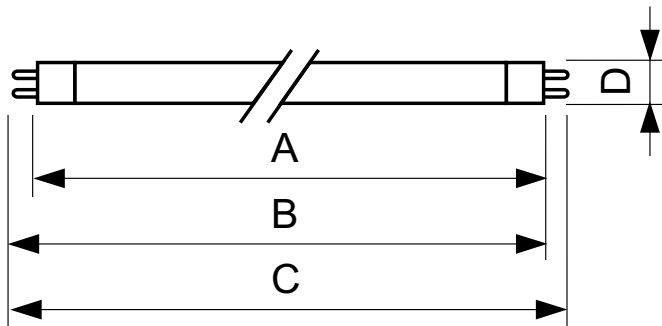
E27 PAR 2.5 inch

# TUV TL Mini

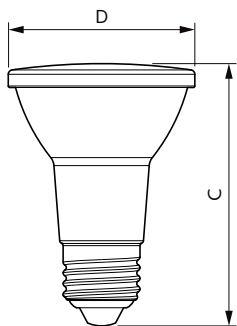
## Dimensional drawing



Product	D (max)	C (max)	A (max)
TUV 11W 4P SE UNP/32	19 mm	251.8 mm	244.1 mm
TUV 16W 4P SE UNP/32	19 mm	328 mm	320.3 mm
TUV 25W - 4P SE UNP/32	19.3 mm	556.6 mm	548.9 mm
TUV 20W 4P SE UNP/32	19.3 mm	437.7 mm	430 mm



Product	D	C			
TUV 4W FAM/10X25BOX	16 mm	150.1 mm			
TUV 6W FAM/10X25BOX	16 mm	226.3 mm			
TUV 8W FAM/10X25BOX	16 mm	302.5 mm			
TUV 16W FAM/10X25BOX	16 mm	302.5 mm			
TUV 11W FAM/10X25BOX	16 mm	226.3 mm			
TUV 20W FAM/10X25CC	16 mm	405.1 mm	402.7 mm	412.2 mm	398 mm
TUV 11W IN FAM/10X25BOX	16 mm	226.3 mm			
TUV 16W CN FAM/10X25BOX	16 mm	302.5 mm			
TUV 4W CN FAM/10X25BOX	16 mm	150.1 mm			
TUV 8W CN FAM/10X25BOX	16 mm	302.5 mm			
TUV 16W IN FAM/10X25BOX	16 mm	302.5 mm			
TUV 8W IN FAM/10X25BOX	16 mm	302.5 mm			
TUV 11W CN FAM/10X25BOX	16 mm	226.3 mm			
TUV 6W CN FAM/10X25BOX	16 mm	226.3 mm			
TUV 4W IN FAM/10X25BOX	16 mm	150.1 mm			



Product	D	C
LEDspot 50W PAR20 827 100-240V 25D ND SO	66 mm	92 mm

## Approval and Application

Order Code	Full Product Name	Mercury (Hg) Content (Nom)
927971204099	TUV 11W 4P SE UNP/32	4.4 mg
927971404099	TUV 16W 4P SE UNP/32	4.4 mg
927972204099	TUV 25W - 4P SE UNP/32	4.4 mg
927973404099	TUV 20W 4P SE UNP/32	4.4 mg

Order Code	Full Product Name	Mercury (Hg) Content (Nom)
928000104013	TUV 4W FAM/10X25BOX	4.4 mg
928000104019	TUV 4W CN FAM/10X25BOX	4.4 mg
928000104021	TUV 4W IN FAM/10X25BOX	4.4 mg
928000704013	TUV 6W FAM/10X25BOX	4.4 mg

## TUV TL Mini

Order Code	Full Product Name	Mercury (Hg) Content (Nom)
928000704019	TUV 6W CN FAM/10X25BOX	4.4 mg
928001104013	TUV 8W FAM/10X25BOX	4.4 mg
928001104019	TUV 8W CN FAM/10X25BOX	4.4 mg
928001104021	TUV 8W IN FAM/10X25BOX	4.4 mg
928002004013	TUV 16W FAM/10X25BOX	4.4 mg
928002004019	TUV 16W CN FAM/10X25BOX	4.4 mg
928002004021	TUV 16W IN FAM/10X25BOX	4.4 mg

Order Code	Full Product Name	Mercury (Hg) Content (Nom)
928002204013	TUV 11W FAM/10X25BOX	4.4 mg
928002204019	TUV 11W CN FAM/10X25BOX	4.4 mg
928002204021	TUV 11W IN FAM/10X25BOX	4.4 mg
928003404013	TUV 20W FAM/10X25CC	4.4 mg
929002403012	LEDspot 50W PAR20 827 100-240V 25D ND SO	-

### Operating and Electrical

Order Code	Full Product Name	Lamp			Power
		Current (Nom)	Input Frequency	Voltage (Nom)	(Rated) (Nom)
927971204099	TUV 11W 4P SE UNP/32	0.4 A	-	34 V	11.5 W
927971404099	TUV 16W 4P SE UNP/32	0.4 A	-	43 V	15 W
927972204099	TUV 25W - 4P SE UNP/32	0.35 A	-	82 V	23 W
927973404099	TUV 20W 4P SE UNP/32	0.45 A	-	45 V	20.24 W
928000104013	TUV 4W FAM/10X25BOX	0.17 A	-	29 V	4.5 W
928000104019	TUV 4W CN FAM/10X25BOX	0.17 A	-	29 V	4.5 W
928000104021	TUV 4W IN FAM/10X25BOX	0.17 A	-	29 V	4.5 W
928000704013	TUV 6W FAM/10X25BOX	0.16 A	-	42 V	6 W
928000704019	TUV 6W CN FAM/10X25BOX	0.16 A	-	42 V	6 W
928001104013	TUV 8W FAM/10X25BOX	0.145 A	-	56 V	7.1 W
928001104019	TUV 8W CN FAM/10X25BOX	0.145 A	-	56 V	7.1 W

Order Code	Full Product Name	Lamp			Power
		Current (Nom)	Input Frequency	Voltage (Nom)	(Rated) (Nom)
928001104021	TUV 8W IN FAM/10X25BOX	0.145 A	-	56 V	7.1 W
928002004013	TUV 16W FAM/10X25BOX	0.4 A	-	43 V	15 W
928002004019	TUV 16W CN FAM/10X25BOX	0.4 A	-	43 V	15 W
928002004021	TUV 16W IN FAM/10X25BOX	0.4 A	-	43 V	15 W
928002204013	TUV 11W FAM/10X25BOX	0.4 A	-	34 V	11.5 W
928002204019	TUV 11W CN FAM/10X25BOX	0.4 A	-	34 V	11.5 W
928002204021	TUV 11W IN FAM/10X25BOX	0.4 A	-	34 V	11.5 W
928003404013	TUV 20W FAM/10X25CC	0.450 A	-	45 V	20.25 W
929002403012	LEDspot 50W PAR20 827 100-240V 25D ND SO	61 mA	50 to 60 Hz	100-240 V	4.9 W

### General Information

Order Code	Full Product Name	Cap-Base	Nominal Lifetime (Nom)	Useful Life (Nom)	Main Application	System Description
927971204099	TUV 11W 4P SE UNP/32	4PINSSINGLEENDED	-	9000 h	Disinfection	-
927971404099	TUV 16W 4P SE UNP/32	4PINSSINGLEENDED	-	9000 h	Disinfection	-
927972204099	TUV 25W - 4P SE UNP/32	4PINSSINGLEENDED	-	9000 h	Disinfection	-
927973404099	TUV 20W 4P SE UNP/32	4PINSSINGLEENDED	-	11000 h	Disinfection	High Output
928000104013	TUV 4W FAM/10X25BOX	G5	-	6000 h	Disinfection	-
928000104019	TUV 4W CN FAM/10X25BOX	G5	-	6000 h	Disinfection	-
928000104021	TUV 4W IN FAM/10X25BOX	G5	-	6000 h	Disinfection	-
928000704013	TUV 6W FAM/10X25BOX	G5	-	9000 h	Disinfection	-
928000704019	TUV 6W CN FAM/10X25BOX	G5	-	9000 h	Disinfection	-
928001104013	TUV 8W FAM/10X25BOX	G5	-	11000 h	Disinfection	-
928001104019	TUV 8W CN FAM/10X25BOX	G5	-	11000 h	Disinfection	-

## TUV TL Mini

Order Code	Full Product Name	Cap-Base	Nominal Lifetime (Nom)	Useful Life (Nom)	Main Application	System Description
928001104021	TUV 8W IN FAM/10X25BOX	G5	-	11000 h	Disinfection	-
928002004013	TUV 16W FAM/10X25BOX	G5	-	11000 h	Disinfection	-
928002004019	TUV 16W CN FAM/10X25BOX	G5	-	11000 h	Disinfection	-
928002004021	TUV 16W IN FAM/10X25BOX	G5	-	11000 h	Disinfection	-
928002204013	TUV 11W FAM/10X25BOX	G5	-	11000 h	Disinfection	-
928002204019	TUV 11W CN FAM/10X25BOX	G5	-	11000 h	Disinfection	-
928002204021	TUV 11W IN FAM/10X25BOX	G5	-	11000 h	Disinfection	-
928003404013	TUV 20W FAM/10X25CC	G5	-	11000 h	Disinfection	-
929002403012	LEDspot 50W PAR20 827 100-240V 25D ND SO	E27	25000 h	-	-	-

### Light Technical (1/2)

Order Code	Full Product Name	Beam Angle (Nom)	Color Code	Color Designation	Correlated Color		Lumen Depreciation At Useful Lifetime	Luminous Flux (Nom)
					Temperature (Nom)	Color Rendering Index (Nom)		
927971204099	TUV 11W 4P SE UNP/32	-	TUV	-	-	-	15 %	-
927971404099	TUV 16W 4P SE UNP/32	-	TUV	-	-	-	15 %	-
927972204099	TUV 25W - 4P SE UNP/32	-	TUV	-	-	-	0.15 %	-
927973404099	TUV 20W 4P SE UNP/32	-	TUV	-	-	-	15 %	-
928000104013	TUV 4W FAM/10X25BOX	-	TUV	-	-	-	0.25 %	-
928000104019	TUV 4W CN FAM/10X25BOX	-	TUV	-	-	-	0.25 %	-
928000104021	TUV 4W IN FAM/10X25BOX	-	TUV	-	-	-	0.25 %	-
928000704013	TUV 6W FAM/10X25BOX	-	TUV	-	-	-	20 %	-
928000704019	TUV 6W CN FAM/10X25BOX	-	TUV	-	-	-	20 %	-
928001104013	TUV 8W FAM/10X25BOX	-	TUV	-	-	-	15 %	-
928001104019	TUV 8W CN FAM/10X25BOX	-	TUV	-	-	-	15 %	-
928001104021	TUV 8W IN FAM/10X25BOX	-	TUV	-	-	-	15 %	-
928002004013	TUV 16W FAM/10X25BOX	-	TUV	-	-	-	15 %	-
928002004019	TUV 16W CN FAM/10X25BOX	-	TUV	-	-	-	15 %	-
928002004021	TUV 16W IN FAM/10X25BOX	-	TUV	-	-	-	15 %	-
928002204013	TUV 11W FAM/10X25BOX	-	TUV	-	-	-	15 %	-
928002204019	TUV 11W CN FAM/10X25BOX	-	TUV	-	-	-	15 %	-
928002204021	TUV 11W IN FAM/10X25BOX	-	TUV	-	-	-	15 %	-
928003404013	TUV 20W FAM/10X25CC	-	TUV	-	-	-	0.2 %	-
929002403012	LEDspot 50W PAR20 827 100-240V 25D ND SO	25 °	827	Warm White (WW)	2700 K	80	-	525 lm

### Light Technical (2/2)

Order Code	Full Product Name	Luminous Intensity (Nom)	Order Code	Full Product Name	Luminous Intensity (Nom)
927971204099	TUV 11W 4P SE UNP/32	-	928001104019	TUV 8W CN FAM/10X25BOX	-
927971404099	TUV 16W 4P SE UNP/32	-	928001104021	TUV 8W IN FAM/10X25BOX	-
927972204099	TUV 25W - 4P SE UNP/32	-	928002004013	TUV 16W FAM/10X25BOX	-
927973404099	TUV 20W 4P SE UNP/32	-	928002004019	TUV 16W CN FAM/10X25BOX	-
928000104013	TUV 4W FAM/10X25BOX	-	928002004021	TUV 16W IN FAM/10X25BOX	-
928000104019	TUV 4W CN FAM/10X25BOX	-	928002204013	TUV 11W FAM/10X25BOX	-
928000104021	TUV 4W IN FAM/10X25BOX	-	928002204019	TUV 11W CN FAM/10X25BOX	-
928000704013	TUV 6W FAM/10X25BOX	-	928002204021	TUV 11W IN FAM/10X25BOX	-
928000704019	TUV 6W CN FAM/10X25BOX	-	928003404013	TUV 20W FAM/10X25CC	-
928001104013	TUV 8W FAM/10X25BOX	-	929002403012	LEDspot 50W PAR20 827 100-240V 25D ND SO	1400 cd

**Mechanical and Housing**

Order Code	Full Product Name	Bulb Shape
927971204099	TUV 11W 4P SE UNP/32	T16
927971404099	TUV 16W 4P SE UNP/32	T16
927972204099	TUV 25W - 4P SE UNP/32	T16
927973404099	TUV 20W 4P SE UNP/32	-
928000104013	TUV 4W FAM/10X25BOX	T16
928000104019	TUV 4W CN FAM/10X25BOX	T16
928000104021	TUV 4W IN FAM/10X25BOX	T16
928000704013	TUV 6W FAM/10X25BOX	T16
928000704019	TUV 6W CN FAM/10X25BOX	T16
928001104013	TUV 8W FAM/10X25BOX	T16

Order Code	Full Product Name	Bulb Shape
928001104019	TUV 8W CN FAM/10X25BOX	T16
928001104021	TUV 8W IN FAM/10X25BOX	T16
928002004013	TUV 16W FAM/10X25BOX	T16
928002004019	TUV 16W CN FAM/10X25BOX	T16
928002004021	TUV 16W IN FAM/10X25BOX	T16
928002204013	TUV 11W FAM/10X25BOX	T16
928002204019	TUV 11W CN FAM/10X25BOX	T16
928002204021	TUV 11W IN FAM/10X25BOX	T16
928003404013	TUV 20W FAM/10X25CC	T16
929002403012	LEDspot 50W PAR20 827 100-240V 25D ND SO	PAR20

**UV**

Order Code	Full Product Name	UV-C Radiation
927971204099	TUV 11W 4P SE UNP/32	2.6 W
927971404099	TUV 16W 4P SE UNP/32	4.0 W
927972204099	TUV 25W - 4P SE UNP/32	8.0 W
927973404099	TUV 20W 4P SE UNP/32	6.0 W
928000104013	TUV 4W FAM/10X25BOX	0.9 W
928000104019	TUV 4W CN FAM/10X25BOX	0.9 W
928000104021	TUV 4W IN FAM/10X25BOX	0.9 W
928000704013	TUV 6W FAM/10X25BOX	1.75 W
928000704019	TUV 6W CN FAM/10X25BOX	1.75 W
928001104013	TUV 8W FAM/10X25BOX	2.4 W

Order Code	Full Product Name	UV-C Radiation
928001104019	TUV 8W CN FAM/10X25BOX	2.4 W
928001104021	TUV 8W IN FAM/10X25BOX	2.4 W
928002004013	TUV 16W FAM/10X25BOX	4.2 W
928002004019	TUV 16W CN FAM/10X25BOX	4.2 W
928002004021	TUV 16W IN FAM/10X25BOX	4.2 W
928002204013	TUV 11W FAM/10X25BOX	2.6 W
928002204019	TUV 11W CN FAM/10X25BOX	2.6 W
928002204021	TUV 11W IN FAM/10X25BOX	2.6 W
928003404013	TUV 20W FAM/10X25CC	6.0 W
929002403012	LEDspot 50W PAR20 827 100-240V 25D ND SO	-

**Controls and Dimming**

Order Code	Full Product Name	Dimmable
927971204099	TUV 11W 4P SE UNP/32	-
927971404099	TUV 16W 4P SE UNP/32	-
927972204099	TUV 25W - 4P SE UNP/32	-
927973404099	TUV 20W 4P SE UNP/32	-
928000104013	TUV 4W FAM/10X25BOX	-
928000104019	TUV 4W CN FAM/10X25BOX	-
928000104021	TUV 4W IN FAM/10X25BOX	-
928000704013	TUV 6W FAM/10X25BOX	-
928000704019	TUV 6W CN FAM/10X25BOX	-
928001104013	TUV 8W FAM/10X25BOX	-

Order Code	Full Product Name	Dimmable
928001104019	TUV 8W CN FAM/10X25BOX	-
928001104021	TUV 8W IN FAM/10X25BOX	-
928002004013	TUV 16W FAM/10X25BOX	-
928002004019	TUV 16W CN FAM/10X25BOX	-
928002004021	TUV 16W IN FAM/10X25BOX	-
928002204013	TUV 11W FAM/10X25BOX	-
928002204019	TUV 11W CN FAM/10X25BOX	-
928002204021	TUV 11W IN FAM/10X25BOX	-
928003404013	TUV 20W FAM/10X25CC	-
929002403012	LEDspot 50W PAR20 827 100-240V 25D ND SO	No

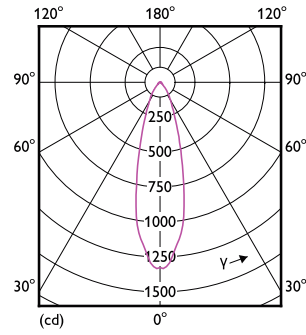
**Temperature**

Order Code	Full Product Name	T-Case Maximum (Nom)	T-Case Maximum (Nom)
927971204099	TUV 11W 4P SE UNP/32	-	-
927971404099	TUV 16W 4P SE UNP/32	-	-
927972204099	TUV 25W - 4P SE UNP/32	-	-
927973404099	TUV 20W 4P SE UNP/32	-	-
928000104013	TUV 4W FAM/10X25BOX	-	-
928000104019	TUV 4W CN FAM/10X25BOX	-	-

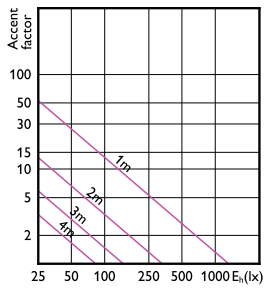
Order Code	Full Product Name	T-Case Maximum (Nom)	T-Case Maximum (Nom)
928000104021	TUV 4W IN FAM/10X25BOX	-	-
928000704013	TUV 6W FAM/10X25BOX	-	-
928000704019	TUV 6W CN FAM/10X25BOX	-	-
928001104013	TUV 8W FAM/10X25BOX	-	-
928001104019	TUV 8W CN FAM/10X25BOX	-	-
928001104021	TUV 8W IN FAM/10X25BOX	-	-

# TUV TL Mini

Order Code	Full Product Name	T-Case Maximum (Nom)	T-Case Maximum (Nom)
928002004013	TUV 16W FAM/10X25BOX	-	-
928002004019	TUV 16W CN FAM/10X25BOX	-	-
928002004021	TUV 16W IN FAM/10X25BOX	-	-
928002204013	TUV 11W FAM/10X25BOX	-	-
928002204019	TUV 11W CN FAM/10X25BOX	-	-
928002204021	TUV 11W IN FAM/10X25BOX	-	-
928003404013	TUV 20W FAM/10X25CC	-	-
929002403012	LEDspot 50W PAR20 827 100-240V 25D ND SO	75 °C	75 °C

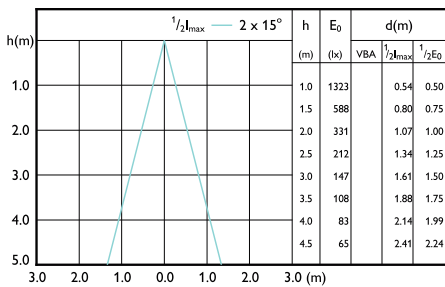


## Accent Diagrams



LEDspots PL 4,9W PAR20 E27 827 25D

## Beam Diagrams



LEDspots PL 4,9W PAR20 E27 827 25D

