



# One lamp for magnetic or electronic ballasts

## T12

Philips UniversalFit TLEDs offer unique ballast compatibility working with both electronic (instant-start) and magnetic ballasts while meeting the revised UL1993 standards. The UniversalFit TLEDs are engineered to deliver excellent lighting effects and substantial energy savings while providing unmatched user & installer safety.

### Benefits

- Lowers lighting costs
- Offers professional upgrade to LED lighting technology
- Reduced installation time, no need to replace ballasts

### Features

- Compatible with both Magnetic and Electronic ballasts
- Meets the latest UL1993 standards
- Reliable performance
- Easy installation, just plug-and-play (UL Type A)

### Application

- Office, Industrial & warehouses
- Signage
- Parking lots and covered car parks
- Residential and multi-family dwellings

# T12

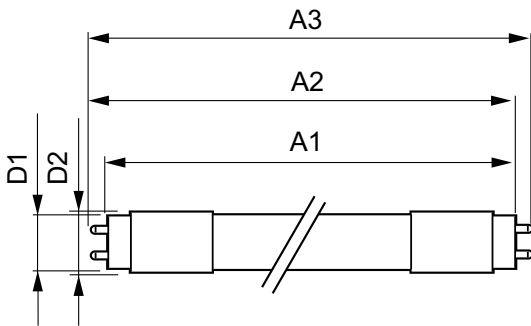
## Versions



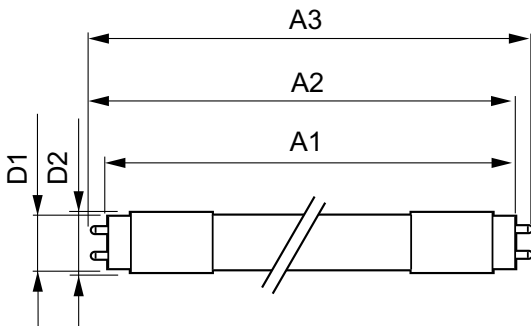
G13

Medium Bi-Pin Fluorescent

## Dimensional drawing



Product	D1	D2	A1	A2	A3
16T8/LED/48-840/UF18/G 10/1	25.7 mm	28 mm	1198 mm	1205 mm	1212 mm
16T8/LED/48-850/UF18/G 10/1	25.7 mm	28 mm	1198 mm	1205 mm	1212 mm



Product	D1	D2	A1	A2	A3
20T12 EM LED/48-4000 IF G 10/1	26 mm	28 mm	1198 mm	1205 mm	1212 mm

**Controls and Dimming**

Dimmable	No
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**Operating and Electrical**

Starting Time (Nom)	0.5 s
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**General Information**

Cap-Base	G13
Nominal Lifetime (Nom)	36000 h
Switching Cycle	50000X

**Light Technical**

Beam Angle (Nom)	240 °
Llmf At End Of Nominal Lifetime (Nom)	70 %

**Mechanical and Housing**

Bulb Shape	Tube, double-ended
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**Temperature**

T-Ambient (Min)	-20 °C
T-Storage (Max)	65 °C
T-Storage (Min)	-40 °C

**Approval and Application**

Order Code	Full Product Name	Energy Consumption kWh/1000	Energy Efficiency Label
		h	(EEL)
463117	20T12 EM LED/48-4000 IFG 10/1	20 kWh	A+
539972	16T8/LED/48-840/UF18/G 10/1	- kWh	Not applicable
539980	16T8/LED/48-850/UF18/G 10/1	- kWh	Not applicable

**Operating and Electrical**

Order Code	Full Product Name	Input Frequency	Voltage (Nom)	Power (Rated) (Nom)
463117	20T12 EM LED/48-4000 IFG 10/1	60 Hz	120-277 V	20 W
539972	16T8/LED/48-840/UF18/G 10/1	50-120000 Hz	40-330 V	16 W

Order Code	Full Product Name	Input Frequency	Voltage (Nom)	Power (Rated) (Nom)
539980	16T8/LED/48-850/UF18/G 10/1	50-120000 Hz	40-330 V	16 W

**Light Technical**

Order Code	Full Product Name	Color Code	Correlated Color	Color	Luminous Flux (Nom)
			Temperature (Nom)	Rendering Index (Nom)	
463117	20T12 EM LED/48-4000 IFG 10/1	841	4000 K	82	2100 lm
539972	16T8/LED/48-840/UF18/G 10/1	841	4000 K	80	1800 lm

Order Code	Full Product Name	Color Code	Correlated Color	Color	Luminous Flux (Nom)
			Temperature (Nom)	Rendering Index (Nom)	
539980	16T8/LED/48-850/UF18/G 10/1	850	5000 K	80	1800 lm

**Temperature**

Order Code	Full Product Name	T-Ambient (Max)	T-Case Maximum (Nom)	
			463117	20T12 EM LED/48-4000 IFG 10/1
539972	16T8/LED/48-840/UF18/G 10/1	45 °C	60 °C	
539980	16T8/LED/48-850/UF18/G 10/1	45 °C	60 °C	

