

CHLORIDE

by  Signify

Exit/Emergency

DEB 5W

Low profile emergency ballast



Project:	
Location:	
Cat.No:	
Type:	
Lamps:	Qty:
Notes:	

Chloride emergency ballast DEB-5W provides 90 minutes of emergency illumination by utilizing existing fluorescent lighting, and produces up to 1600 lumens initial emergency light output.

Ordering guide

Model

DEB-5W

DEB-5W 1600 lumen max output emergency ballast with damp location listing. For factory installed **DEB-5W** use a suffix number **-E5** with the luminaire catalog number

Accessories (order separately)

- **PL-SP** – Single pole remote test switch

Codes & Standards

- UL listed in accordance with the standards set forth in UL924
- NFPA 70 (National Electric Code)
- NFPA101 (Life Safety Code)
- UL listed for use in damp locations.

Application

- The DEB-5W provides 90 minutes of emergency illumination by utilizing existing fluorescent lighting, and produces up to 1600 lumens initial emergency light output. The DEB-5W can be used with one or two T8, T9, T10, T12 fluorescent lamps. It operates one 22-55W T5 lamps, and also including standard, energy saving, HO, VHO, circline, U-shaped and rapid start (4-pin) long compact fluorescent lamps. Also operate one 8.5-16.5W Philips LED T8 InstantFit lamp. One or two lamp operation may be selected (see table 1). It is also compatible with most dimming and electronic AC ballasts. The DEB-5W Series is a universal voltage device rated for use on 120 through 277 volt 50/60-Hertz circuit. If used in an emergency only luminaire, no AC ballast is necessary.

Operation

- Normal lamp lumen output is provided by the lamp when DEB-5W Series is not in the emergency mode. When AC power fails, the DEB-5W Series automatically switches to the emergency mode, keeping one or two lamps illuminated at reduced output for a minimum of 90 minutes. When AC power is restored, the DEB-5W Series automatically returns to the charging mode and, using a patented circuit, delays AC ballast operation for approximately 3 seconds to prevent false tripping of the AC ballast end-of-lamp-life shutdown circuits.

Battery

- DEB-5W uses a high temperature nickel cadmium battery. This battery requires no maintenance and has a life expectancy of 7 to 10 years. The suggested operating temperature range is 32°F (0°C) to 122°F (50°C).

Restrictions

- Suitable for indoor and damp locations and for sealed and gasketed fixtures including installation inside of fixtures rated for wet locations. It is not suitable for installation in wet locations, hazardous locations or for air handling air outlet applications.

Emergency Illumination

- The DEB-5W Series produces up to 1600 lumens (depending on the type of lamp) initial emergency light output (see Table 2). If two lamp operation is selected, light output is evenly divided between the lamps for better distribution of emergency illumination.

Installation

- The DEB-5W Series does not affect normal luminaire operation. It requires an unswitched source of power; therefore, in switched luminaires, an unswitched source of power must be provided (see wiring diagram). Installation is not recommended in luminaires where the ambient ballast channel temperature may fall below 5°C for extended periods. Before installing the DEB-5W Series, make sure that the necessary branch circuit wiring is available. The DEB-5W Series requires an unswitched source of power and must be fed from the same branch circuit as the AC ballast; therefore, in switched luminaires the DEB-5W Series must be connected ahead of any local switching (see wiring diagram). Installation instructions (including internal wiring diagrams for retrofit installation) are supplied with each ballast. The emergency ballast may be remotely installed up to half the distance the AC ballast manufacturer recommends removing the AC ballast from the lamp or up to 50 feet, whichever is less.

DEB-5W Low profile emergency ballast

Up to 1600 lumens, one or two lamp operation

Suggested Specifications

Emergency lighting shall be provided by using a standard fluorescent luminaire equipped with a DEB-5W emergency ballast. This emergency ballast shall consist of a high temperature, maintenance-free nickel cadmium battery, charger and electronic circuitry contained in one 13.31"x 2.2"x1.18" low profile case. A solid state charging indicator light to monitor the charger and battery, a two-wire illuminated test switch and installation hardware shall be provided. The emergency ballast, using a patented circuit, shall delay AC ballast operation for approximately three seconds to prevent false tripping of AC ballast end-of-lamp-life shutdown circuits. The emergency ballast shall be capable of operating (one or two) fluorescent lamps(s) (see Table 1) at lumens (see Table 2) initial light output in the emergency mode for a minimum of 90 minutes. It shall be suitable for indoor and damp locations and for sealed & gasketed fixtures, including fixtures rated for wet locations. The DEB-5W shall have 5 Watts of input power and a 28.8 watt-hour battery capacity and shall exceed emergency standards set forth by the current NEC and CEC. The emergency ballast shall be UL Listed for installations inside, on top of or remote from the fixture.

Electrical

- AC or DC output
- Universal voltage 120 through 277VAC, 50 or 60Hz
- Electrical rating – 5.0 Watts
- AC input current – 60 mA
- Recharge time – 24 hours
- Illuminated test switch provided – 2W-ITS (2-wire)
- Charging indicator light provided – LED
- Ballast case dimensions – 13.31"x2.2"x1.18"
- Weight – 2.7 lbs (1.26 Kg).

Warranty

- Five year warranty on unit from date of purchase.

Dimensions

13.3" x 2.2" x 1.18" (mounting center – 12.8")

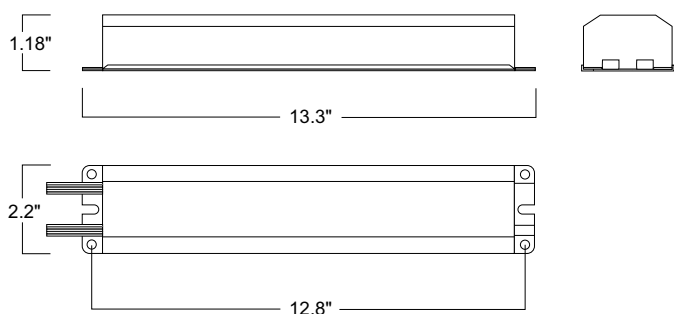


Table 1 Lamp Compatibility

Lamp (Diameter)	Base Type	Wattage (Length)	No. of Lamps (Emergency)	Brown Connector	Violet Connector
(1", 1-1/4", 1-1/2") T8, T9, T10, T12	Single or Bipin	17 – 40 W (2'-4')	1	Closed	Open
		40 – 215 W (5' -8')	2	Open	Closed
Long Compact	4-pin (2G11)	18 – 39 W	1	Closed	Open
		40 – 55 W	1	Closed	Open
Twin/Quad/Triple Twin-Tube Compact	4-pin (G24q, Gx24q)	13 – 42 W	1	Closed	Open
T5 & T5 HO	Miniature bi-pin	14 – 54 W (2'-4')	1	Closed	Open
		HO Circline	1	Closed	Open
2D	4-pin (GR10q)	16 – 55 W	1	Closed	Open
Philips LED T8 InstantFit	Bipin	8.5 – 16 .5 W	1	Closed	Open

Table 2 Initial Lumen Output

Lamp	Lumens	
	1 Lamp	2 Lamps
F14T5/HE	839	
F21T5/HE	1245	
F28T5/HE	1582	
F24T5/HO	873	
F39T5/HO	1395	
F54T5/HO	1401	
FC9T5 22W Circline	812	
F12T5 40W Circline	1194	
FC12T5 55/W Circline	1183	
F17T8	511	792
F25T8	903	1223
F32T8	1069	1460
F40T8	762	
F96T12/HO 110W	1100	
PL-L 24W	762	
PL-L 36W	1100	
PL-L 40W	1174	
PL-L 55W	1430	
PL-T 26W	858	
PL-T 32W	877	
PL-T 42W	991	
Philips LED T8InstantFit 14.5 W	892	
Philips LED T8InstantFit 16.5 W	1053	

Test results at 25°C, lamp-loads are new fresh model lamps.

