

## **PRODUCT SPECIFICATIONS**

## APPLICATION

The MF40-70 fluorescent emergency ballast works in conjunction with the AC ballast to convert new or existing fluorescent fixtures into emergency lighting. The emergency ballast consists of a high-temperature nickel cadmium battery, charger and electronic circuitry in one compact red case. This ballast can be used with most 17 W through 110 W (2'-8') T8, T10, or T12 fluorescent lamps without integral starters, including U-shaped, HO, VHO, circline, energy saving, and (4-pin) long compacts. It is also compatible with most 1, 2, 3, and 4-lamp electronic, standard, energy saving, and dimming AC ballasts. If used in an emergency-only fixture, no AC ballast is necessary. The MF40-70 is not suitable for use in air handling heated air outlet fixtures, and wet or hazardous location fixtures. For information about specific lamps and ballast compatibility, please call the factory.

## OPERATION

When AC power fails, the MF40-70 immediately switches to the emergency mode, keeping one lamp illuminated at a reduced lumen output for a minimum of 90 minutes. When AC power is restored, the ballast automatically returns to the charging mode.

## INSTALLATION

The MF40-70 does not affect normal fixture operation and may be used with either a switched or unswitched fixture. If a switched fixture is used, an unswitched hot lead must be connected to the emergency ballast. The emergency ballast must be fed from the same branch circuit as the AC ballast. The MF40-70 may be installed inside, on top of, or remote from the fixture. The emergency ballast may be remote-installed up to half the distance the AC ballast manufacturer recommends remoting the AC ballast from the lamp, or up to 50 feet, whichever is less. Installation is not recommended with fixtures where the ambient temperature may fall below 0°C for extended periods.

PROJECT:		
FIXTURE TYPE:		
LOCATION:		
CONTACT/PHONE:		

#### UL AND CODE COMPLIANCE

The MF40-70 has been tested by Underwriters Laboratories in accordance with the standards set forth in UL 924, "Emergency Lighting and Power Equipment," and is UL Listed for factory or field installation. Emergency illumination time exceeds the National Electrical Code (NEC), Life Safety Code (NFPA-LSC) and UL 90-minute requirements.

## **BATTERY**

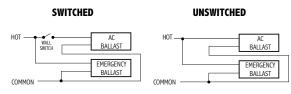
Since high temperatures exist in fluorescent fixtures, the MF40-70 uses a specially constructed, high-temperature nickel cadmium battery. This battery requires no maintenance, and has a life expectancy of 7 to 10 years.

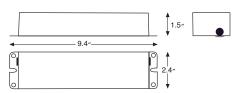
#### EMERGENCY ILLUMINATION

The MF40-70 produces 600 to 700 lumens initial emergency light output with two (2'-4') T8, T10, or T12 lamps. If two-lamp operation is selected, light output is evenly divided between the lamps for better distribution of emergency illumination. Lumen output will be less with one-lamp operation or with a compact fluorescent lamp.

## SPECIFICATION

Emergency lighting shall be provided by using a standard fluorescent fixture equipped with a MF40-70 emergency ballast. his emergency ballast shall consist of a hightemperature, maintenance-free nickel cadmium battery, charger and electronic circuitry contained in one 9 3/8" x 2 3/8" x 1 1/2" white metal case. A solid-state charging indicator light to monitor the charger and battery, a singlepole test switch, and installation hardware shall be provided. The emergency ballast shall be capable of operating one 17 W - 40 W (2'- 4') T8, T10, or T12 fluorescent lamp or (4-pin) long compact fluorescent lamp at reduced illumination in the emergency mode for a minimum of 90 minutes. The MF40-70 shall produce 600 to 700 lumens initial emergency light output, have 3.5 Watts of input power, a 14.4 Watt-hour battery capacity, and comply with emergency standards set forth by the current NEC. The emergency ballast shall be UL Listed for installation inside, on top of, or remote from the fixture, warranted for three years from date of purchase.





Primary circuit only. Lamp leads not shown



# MF40-70

## FLUORESCENT EMERGENCY BALLAST

## WARRANTY

Model MF40-70 is warranted for three (3) full years from date of purchase. This warranty covers only properly installed emergency ballasts used under normal conditions. For the warranty period Mule will, at its option, repair or replace without charge a defective emergency ballast, provided it is returned to the factory transportation prepaid, and our inspection determines it to be defective under terms of the warranty. Repair or replacement, as stated above, shall constitute the purchaser's exclusive warranty, which does not extend to transportation, installation, labor or any other charges; nor does it apply to any equipment of another manufacturer used in conjunction with the emergency ballast.

PROJECT:
FIXTURE TYPE:
LOCATION:
CONTACT/PHONE:

## PRODUCT SUMMARY

UL LISTED Factory or Field Installation ILLUMINATION

90 Minutes

INITIAL LIGHT OUTPUT 600-700 Lumens

FULL WARRANTY 3 Years (NOT pro-rata) DUAL VOLTAGE INPUT 120/277 VAC

AC INPUT CURRENT

280mA

60 Hz

AC INPUT POWER RATING 3.5 Watts

TEST SWITCH Single pole

**BATTERY** 

**High-Temperature** Maintenance-Free Nickel-Cadmium Battery

7-10 Year Life Expectancy

BATTERY CHARGING CURRENT 280mA

RECHARGE TIME

24 Hours

CHARGING INDICATOR LIGHT LED

TEMPERATURE RATING (AMBIENT)

 $0^{\circ}\text{C TO } +55^{\circ}\text{C}$ (32°F TO 131°F)

DIMENSIONS 9.4" x 2.4" x 1.5"

(238mm x 60mm x 38mm) Mounting center 8.9" (226mm)

WEIGHT 2.5 lbs (1.1 kg)

Lamp	Initial Lumens			
1-lamp 2-lamp				
T8 17W	475	650		
T8 32W	600	700		
T12 20W	475	600		
T12 40W	625	650		
T8 59W	675	-		
T12 110W	650	-		

Lamp	Initial Lumens		
	1-lamp	2-lamp	
4-pin PL CF 13W	425	550	
4-pin PL CF 18W	475	600	
4-pin PL CF 26W	525	650	
4-pin PL CF 32W	575	650	
4-pin PL CF 42W	650	-	

Lamp	initiai Lumens	
	1-lamp	2-lamp
4-pin Long CF 18W	525	-
4-pin Long CF 24W	575	-
4-pin Long CF 36W	650	-

NOTE: In 2-lamp operation, lumens are equally split between the two lamps.

<sup>\*</sup> When battery packs are remote mounted, the remote distance cannot exceed 1/2 of the distance from ballast to lamp specified by the A.C. ballast manufacturer. The maximum allowable remote mounting distance is 50 feet.