INTRINSICALLY SAFE LIGHTING

Factory Mutual System Approved

LIGHT SOURCES

Light sources are available enclosed in NEMA 4, 4X, 7, or 12 enclosures. The NEMA 4, 4X, and 12 light source enclosures incorporate a unique passive heat removal and dissipation system, which lowers the operating temperatures and extends lamp life. The NEMA 4, 4X, and 12 light source is Factory Mutual Approved for the Class, Division, and Groups as indicated. Explosion-proof NEMA 7 enclosures are supplied
standard with adjustable internal timers to limit lamp on times to minimize heat buildup and extend lamp life.

FM LISTINGS FOR LIGHT SOURCE SERIES ISL-4X-120-20-0

CLASS	DIV	GROUPS	MAX OPERATING TEMPERATURE	MAX AMBIENT TEMPERATURE
I	2	A,B,C & D	955°C (1750°F)	50°C (122°F)

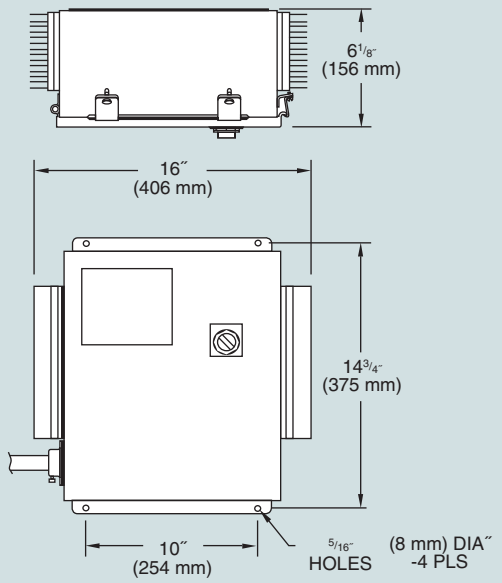
FM LISTINGS FOR LIGHT SOURCE SERIES ISL-7-120-20-0

CLASS	DIV	GROUPS	MAX OPERATING TEMPERATURE	OPERATING TEMP. CODE	MAX AMBIENT TEMPERATURE
I	1	C & D	165°C	T3B	40°C
II	1	E & F	165°C	T3B	40°C
III	1				

FM LISTINGS FOR FIBER OPTIC CABLE SERIES ISL-FOC

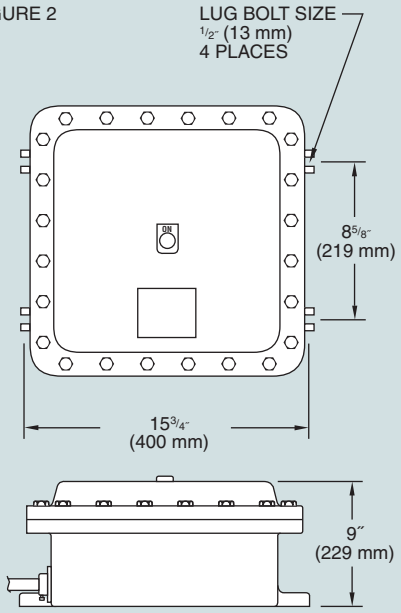
CLASS	DIV	GROUPS	TEMP CODE	MAX AMBIENT TEMPERATURE
I	1	A,B,C & D	T2D	50°C (122°F)
II	1	E & F	T3	35°C (95°F)

FIGURE 1



NEMA 4, 4X, AND 12 LAMP ENCLOSURE

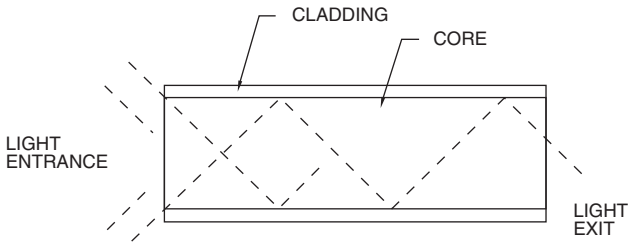
FIGURE 2



NEMA 7 LAMP ENCLOSURE

How do Fiber Optics Work?

Fiber optics is based upon the principle of internal reflection. This phenomenon very efficiently reflects light without loss. Fiber optics use this principle by encasing a small diameter glass fiber core in a casing of lower refractive index, called cladding. Light enters the end of the fiber within a specified entrance angle. Upon striking the interface of core and cladding, light is internally reflected back toward the center of the core. As this internal reflection continues, the light is transmitted down the fiber.



TRANSMISSION OF LIGHT
THROUGH OPTICAL FIBER