

2 7/8" (73 mm)

2 3/8" (60 mm)



Approved

INTRINSICALLY SAFE LIGHTING

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)

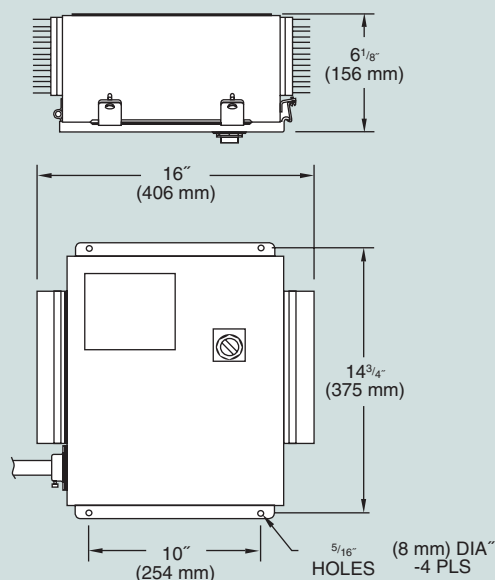
FM LISTINGS FOR LIGHT SOURCE SERIES ISL-7-120-20-0

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

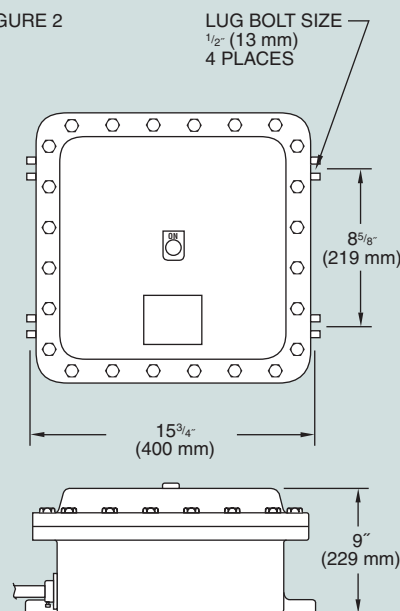
CLASS	DIV	GROUPS	TEMP CODE	MAX AMBIENT TEMPERATURE
I	1	A,B,C & D	T2D	50°C (122°F)
II	1	E & F	T3	35°C (95°F)

FIGURE 1



NEMA 4, 4X, AND 12 LAMP ENCLOSURE

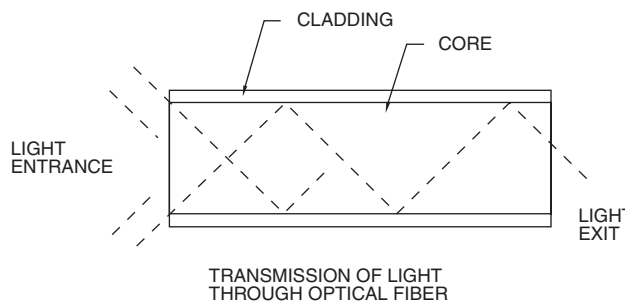
FIGURE 2



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.



LIGHTING

INTRINSICALLY SAFE LIGHT/SIGHTGLASSES AND LIGHTPORTS

Fiberlux Series

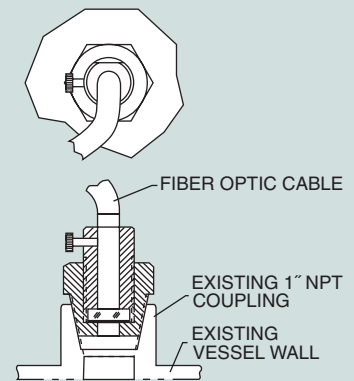
FIBERLUX LIGHT/SIGHTGLASSES AND LIGHTPORTS

Fiberlux Series of Light/Sightglasses and Lightports incorporates fiber optic technology to provide intrinsically safe illumination in hazardous classified locations. With the light source positioned outside the hazardous area, light is piped to the sightglass through a Factory Mutual Approved intrinsically safe fiber optic cable.

The Fiberlux illumination system is offered in three basic configurations; as an illumination port where viewing is through a second sightglass, an off-set light/sightglass especially suited for glass lined nozzles and as an illuminator for standard sightglasses. The light source for each configuration is available housed in a NEMA 4, 4X, 7 or 12 enclosure.

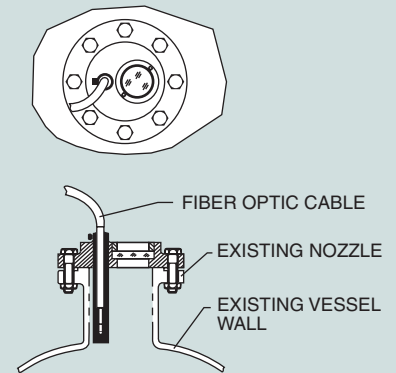
Series TFBX

Series TFBX provides intrinsically safe illumination to a vessel's interior. Viewing is accomplished through a detached sightglass. Series TFBX may be mounted to a standard 1" or larger NPT coupling or flange.



Series FFBX

Series FFBX offers viewing and illumination in a single unit. Designed to be mounted to standard flange-type nozzles, the unit is particularly suited for glass lined vessels. The illumination takes place at or below the nozzle neck to prevent blinding reflections off the nozzle's glass lining.



Series B-FBX

Series B-FBX provides illumination for standard Series NW sightglasses. External mounting to the sightglasses upper flange makes assembly fast and easy and is perfectly suited to retrofit existing sightglasses.

