

Tubular fittings

XFFL Tubular LED fitting - zones 1, 2, 21 & 22



Features

- Operating life up to 100 000h
- High lumen output - 5 000 lumens with 100% yield
- LED module with diffuser
- All components mounted on sliding gear tray for easy installation and maintenance
- Including accessories (cable gland, plug & fixing brackets)
- Supplied with offshore grade paint

XFFL Tubular LED fitting

Approvals & certifications



Specifications

Manufactured from marine grade aluminum alloy copper free
Borosilicate glass - thickness 7mm
Rated voltage 100-240Vac 50/60Hz
Wiring configuration: 5 wires
2x entries 3/4" NPT

Standards

Approved to:	EN 60079-0 : General requirements EN 60079-1 : Flameproof enclosure "d" EN 60079-31 : Enclosure "t"
EC Type examination certificate to:	Directive 2014/34/EU INERIS 13 ATEX 0050X Ex II 2 G Ex d IIB or IIC T6 Gb for -20°C to + 55°C Ex II 2 D Ex tb IIIC T80°C or T70°C Db IP66 for -20°C to + 55°C
Photobiological safety:	IEC62471 Exempt group
EMC Directive (2004/108/CE) - April 2016 (2014/30/UE)	EN 55015 : Conducted emission test and radiated emission test EN 61547 : CEM immunity EN 61000-3-2 : Harmonic current Emissions Class C EN 61000-3-3 : Limitation of voltage changes and flickers
Low voltage Directive (2006/95/CE) - April 2016 (2014/35/UE)	EN 60598-1 : Luminaire general requirements and tests, including dielectric strength and isolation resistance
Glow wire test:	960°C
Operating temperature:	-20°C to +55°C
IP test:	IEC 60529: IP66
Impact protection index:	IEC 62262: IK08

01 Remove existing fluorescent gear tray

02 Replace with LED gear tray

03 Connect gear tray to power supply

01

02

03



Tubular fittings

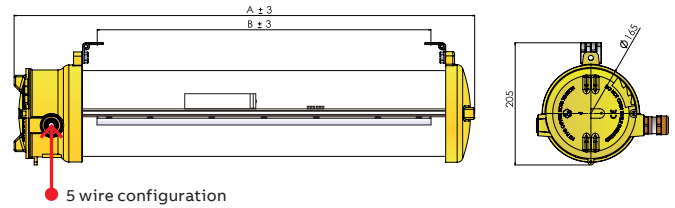
XFFL Tubular LED fitting - zones 1, 2 & 21, 22



XFFL Tubular LED fitting

- 5 wires
- Glass Diffuser
- Equipped with 1 cable gland & 1 plug
- Suitable for use in Zones 1, 2, 21, 22

Dimensions



XFFL 5 wires: Glass Diffuser Equipped with 1 cable gland & 1 plug

Type	Light Rating W	Current A @ 230V	Lumen Output lm	Operating life		Efficiency lm/W	Gas	Dust	Dimensions mm		Weight kg
				at 25°C h	at 55°C h				A	B	
XFRL120V-00000	1 x 12	0.07	1 194	100 000	45 000	95	IIC	T70°C	775	565	8.00
XFRL140V-00000	1 x 25	0.12	2 353	90 000	75 000	94	IIB	T70°C	1 390	1 170	12.50
XFRL165V-00000	1 x 31	0.16	2 450	80 000	60 000	79	IIB	T80°C	1 690	1 475	18.80
XFFL220V-00000	1 x 19	0.10	1 613	80 000	35 000	85	IIC	T70°C	775	565	8.00
XFFL240V-00000	1 x 56	0.27	4 257	70 000	50 000	76	IIB	T80°C	1 390	1 170	12.50
XFFL265V-00000	1 x 71	0.34	5 076	70 000	50 000	71	IIB	T80°C	1 690	1 475	18.80

Technical information

General data	
LED installed	Set of LED modules with integrated diffuser Colour temperature 4 000°K L70/B10 at 25°C (70% lumen output/ 90% active LED) according to operating life
Photometric curve	See page 189
Rated voltages	Electronic driver: 100- 240Vac 50/60Hz
Power factor	0.9.
CRI	84
Wiring Configuration	5 wires
Dielectrical class	I
Over-current protection	The power supply shall be self-recovery when the fault condition is removed
Grounding system	TNS, TNC, TT, IT neutral system
Inrush current	for the part XFFL240 I peak = 60A @230Vac delta t = 275µs Max. light fittings per circuit breaker
Type	10A 16A 20A 25A
B	4 7 9 11
C	7 12 15 18

General data	
External grounding lug	Screw M4x20 (stainless steel 316L) (nearby cable gland)
Terminal block (screws plug in terminal block)	10mm ² (rigid wire), 6mm ² (flexible wire) Terminals supplied L1, L2, L3, N, PE (looping possible with one additional cable gland)
Cable entries	Two entries 3/4" NPT Included: One 3/4" nickel plated brass plug (EXN/075/SP) and one 3/4"nickel plated brass cable gland for non armoured cable, diameter 6-12mm (EXN05ASC3)
Casting	Casting Marine grade aluminum alloy according to standard: EN 1706: EN AC-AISi12 (Fe) DF or EN AC-AISi 10Mg(A) DF borosilicate glass thickness 7mm
Colour of casting (std)	● XF****-00000 - Yellow offshore, RAL 1003
Colour options:	● XF****-B0000 - Grey, RAL 7035
Fixing (included with product)	D023- 2x zinc plated steel articulated brackets for ceiling mounting

Fluorescent fitting to a LED fitting

01 T8 fluorescent lamp 3d photometric data

02 LED module 3d photometric data

03 Remove existing fluorescent gear tray

04 Replace with LED gear tray with driver

05 Connect LED gear tray to power supply

What are the LED benefits?

The benefits of the LED technology consist in a significant improvement in the life expectancy of your product, lower power consumption and the improvement of the photometric features.

T8 fluorescent lamp - XFF240-0G000 3D view

- Lumen output (light fitting): 3 546lm
- Lumen output (lamp): 6 700lm
- Yield: 52%
- Rating per light fitting: 73,5W
- Light source: 2x L36W/840 OSRAM Lumilux
- Cool White (corrector factor 1,00)

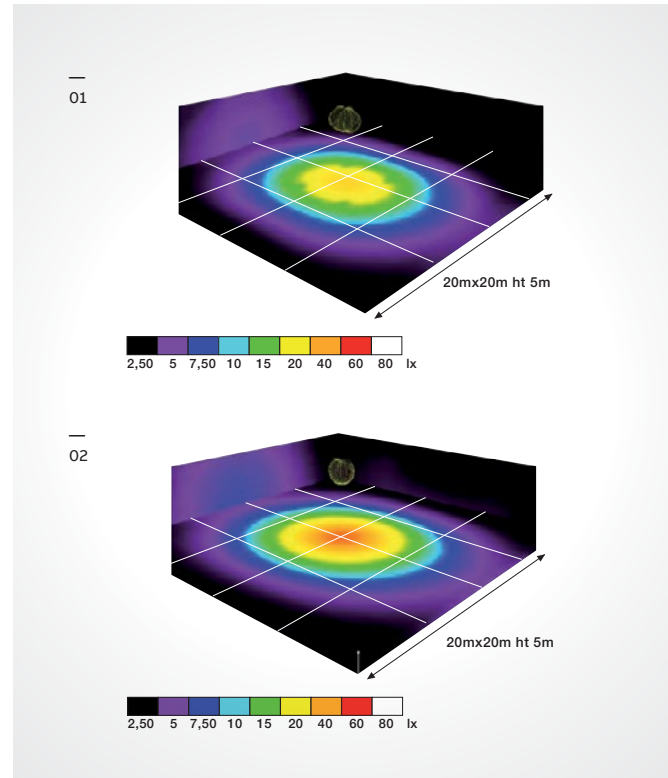
LED module - XFFL240-00000 3D view

- Lumen output (light fitting): 4 188lm
- Lumen output (lamp): 4 257lm
- Yield: 98%
- Rating per light fitting: 58,0W
- Light source: 1x LED module (corrector factor 1,00)

MRO benefits

How can I upgrade my current light fitting?

Tubular fittings could be switched from fluorescent to LED technology by easy sliding gear tray without any specific tool. The fixture with 1 or 2 fluorescent tubes T8 could be replaced by only one LED module fixed on the new gear tray.



How is my upgraded LED light fitting certified?

The EC type (ATEX) certification, EC declaration and the installation notice of the fluorescent fitting remain valid for all the LED fittings (more details on demand).

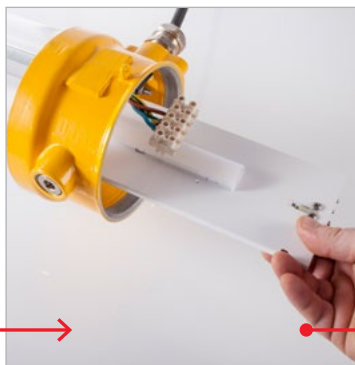
Gear trays parts to upgrade from a “fluorescent” to a “LED” fitting - LED gear tray with driver 100-240Vac 50/60Hz:

- D0051X20WEL - To upgrade XFR120 to XFRL120
- D0051X40WEL - To upgrade XFR140 to XFRL140
- D0051X65WEL - To upgrade XFR165 to XFRL165
- D0052X20WEL - To upgrade XFF220 to XFFL220
- D0052X40WEL - To upgrade XFF240 to XFFL240
- D0052X65WEL - To upgrade XFF265 to XFFL265

03



04

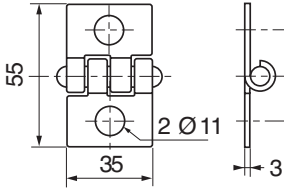


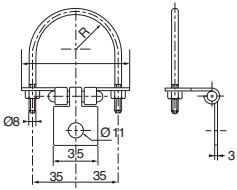
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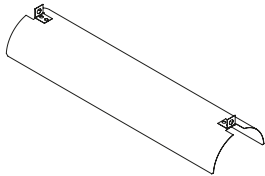


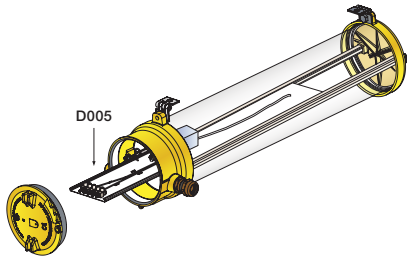
Tubular fittings - accessories & spare parts

XFFL - zones 1, 2 & 21, 22

Hinged bracket	Type	Specifications
	D023	2x zinc plated steel articulated brackets for ceiling mounting (included with product)
	D024	2x stainless steel 304L articulated brackets for ceiling mounting

U-bolt for pole mounting	Type	Specifications
	D025	2x U-bolt and 2x zinc plated steel brackets for pole mounted 1" 1/4
	D026	2x U-bolt and 2x zinc plated steel brackets for pole mounted 1" 1/2
	D027	2x U-bolt and 2x zinc plated steel brackets for pole mounted 2"
	D029	2x U-bolts and 2x stainless steel brackets (304L) for pole mounted 1" 1/2
	D030	x U-bolts and 2x stainless steel brackets (304L) for pole mounted 2"

Shock proof kit	Type	Specifications
	D034	Stainless steel 304L canopy & shock proof kit for XFRL120, XFFL220
	D035	Stainless steel 304L canopy and shock proof kit for XFRL140, XFFL240
	D036	Stainless steel 304L canopy and shock proof kit for XFRL165, XFFL265

Spare parts	Type	Specifications
	D003	Gasket
	D0051X20WEL	LED replacement gear tray with universal electronic driver and LED included 100-254V, 50-60 Hz for XFRL120
	D0051X40WEL	LED replacement gear tray with universal electronic driver and LED included 100-254V, 50-60 Hz for XFRL140
	D0051X65WEL	LED replacement gear tray with universal electronic driver and LED included 100-254V, 50-60 Hz for XFRL165
	D0052X20WEL	LED replacement gear tray with universal electronic driver and LED included 100-254V, 50-60 Hz for XFFL220
	D0052X40WEL	LED replacement gear tray with universal electronic driver and LED included 100-254V, 50-60 Hz for XFFL240
	D0052X65WEL	LED replacement gear tray with universal electronic driver and LED included 100-254V, 50-60 Hz for XFFL265
	EXN05ASC3K	Kit 3/4 NPT Exd Exe IIC Ex-td nickel plated cable gland for non armoured cable diameter 6-12mm