

Product Catalogue

Light fittings, boxes
& custom built control panels
for hazardous areas



Power and productivity
for a better world™





Light fittings, boxes and custom built control panels for hazardous areas

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Introduction

Introduction

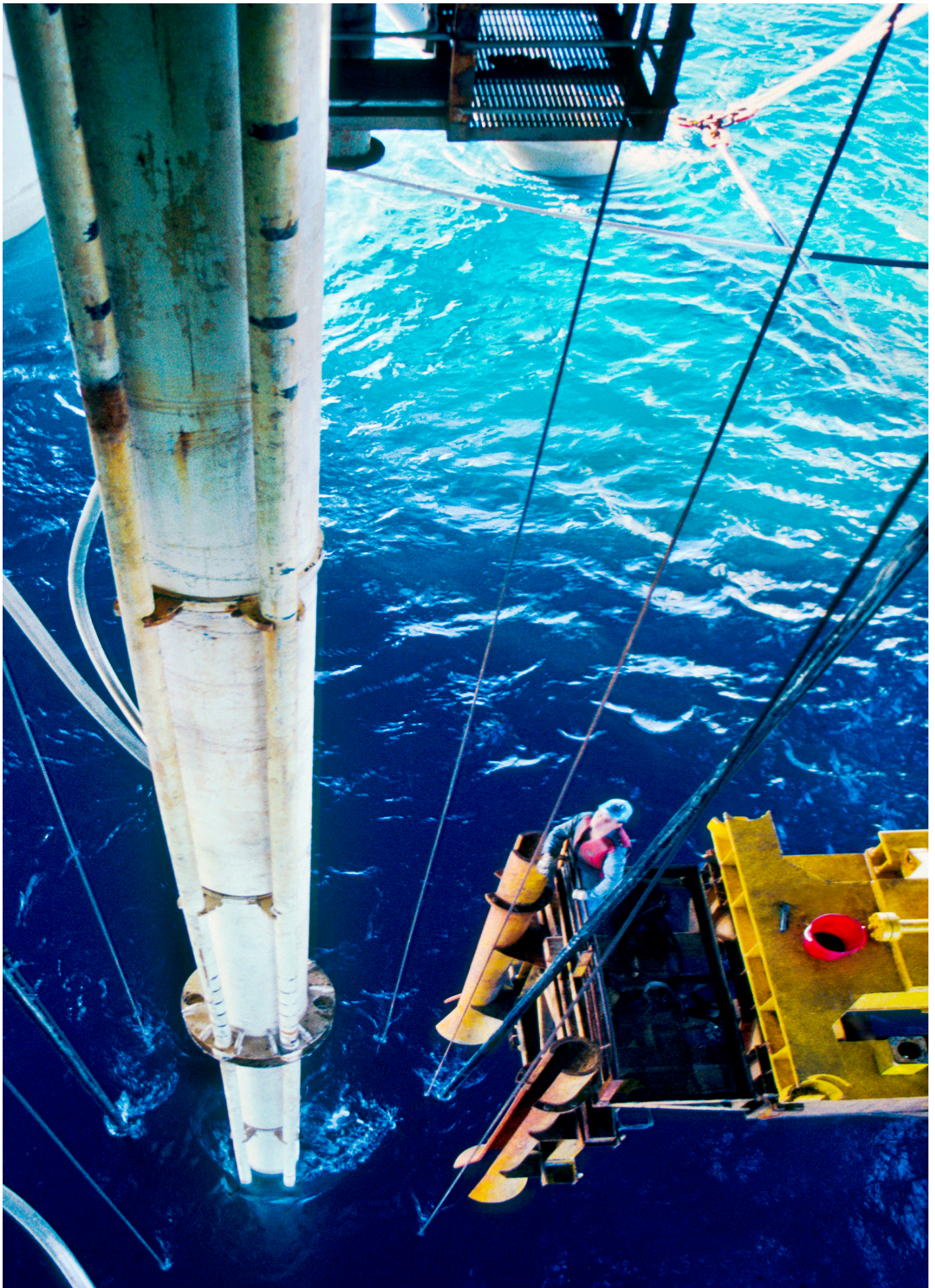
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Introduction

Low voltage products for hazardous areas

At ABB, our focus is on improving your business performance by providing practical, reliable electrical products & services. To connect & protect for life. To solve everyday problems in the area's of Wire & Cable Management, Cable Protection, Power Connection & Control and Safety.

Our extensive engineering, supply chain management and technical sales support teams are committed to understanding everything that impacts your ability to accomplish your business objectives by reducing your total cost of ownership.

Whether you are designing, installing, operating, maintaining or owning an office building, off-shore platform, hospital, or a high speed train, power generating plant, machine equipment or a manufacturing facility, ABB engineered products fit and function in your application while providing superior performance, sustainability, and value throughout the project life cycle.

All our brands are built upon four product & service solution platforms. Platforms that address you or your customers' critical electrical & lighting needs covering the protection of data, energy, processes, assets and personal safety. Beyond high performance application characteristics, ABB products, information and services facilitate and speed up your time critical assembly, installation or maintenance process.



Light fittings, boxes and enclosures. Customised control panels for hazardous areas. Ongoing R&D program for innovative and high performance products. ATEX, IEC & IECEx products.

Introduction

Low voltage products for hazardous areas

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Delivering value through system solutions based on engineering innovation.

About DTS

With the DTS brand, ABB provides a complete range of explosion proof lighting, emergency lighting, enclosures, junction boxes and control panels. Our DTS range covers all zones of potential explosion gas & dust atmospheres and is compliant with most stringent national, European and international regulations including IECEx and ATEX and ISO9001 standards. This makes it possible to be used in a wide variety of industries across most of the world.

What is in it for you?

With DTS we offer you lighting & enclosure solutions for:

- Hazardous Environment Protection: full range of IECEx & ATEX certified lighting & enclosure solutions for Gas and Dust areas
- Corrosive & Harsh Environment Protection: we offer special materials and coating options for protection in harshest environments like seasalt, UV radiation etc.
- Total Project Cost Reductions: smart & modular product design will reduce your installation and maintenance cost of our luminaires

- Complementary to DTS we also offer Kopex-Ex, a full range of nylon and metallic cable protection systems ATEX, IECEx, UL/CSA approved.

About ABB?

DTS was one of the brands of Thomas & Betts. Since the acquisition in 2012, Thomas & Betts (T&B) is now a Member of the ABB Group, a leading power and automation technology group, active in more than 100 countries with over 145,000 employees worldwide. The firm's shares are traded on the stock exchanges of Zurich, Stockholm and New York.

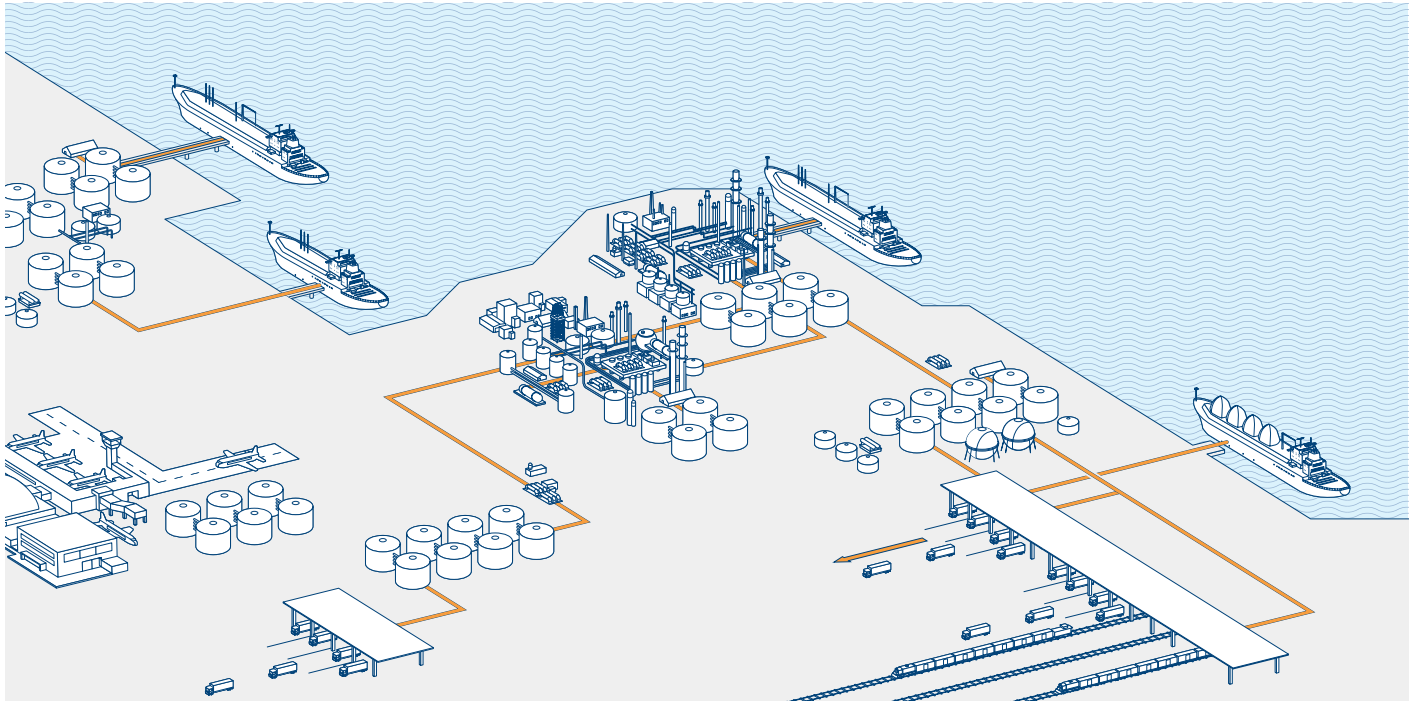
ABB's business is comprised of five divisions that are in turn organized in relation to the customers and industries we serve. Our five divisions include: Power products, Power systems, Discrete Automation & Motion, Low Voltage Products and Process Automation. Today, ABB stands as the largest supplier of industrial motors and drives, the largest provider of generators to the wind industry, and the largest supplier of power grids worldwide. Please see for more information: www.abb.com



Introduction

Oil & Gas applications

1



The oil and gas market is split into three sectors Upstream, Midstream and Downstream. Upstream consists of Exploration and production. Midstream relates to the transportation, storage and partial processing of crude oil and gas from the wellheads to the refining plants. This brings another set of challenges to overcome. The term downstream relates to the processing and delivery of finished carbon related product to the end-user.

Upstream applications

First there are offshore applications such as the drilling rigs and production platforms; these are always opened to extreme weather conditions so equipment used here needs to be able to withstand a salty environment. This is achieved through either manufacturing product from stainless DTS enclosures, or by ensuring that the product is coated or painted to withstand marine environments as in the DTS XFF Light fittings.

Equipment in offshore applications also needs to be hardwearing and easy to maintain as production downtime can be extremely costly for example FPSO (Floating Production Storage and Offloading) vessel can produce 200,000 barrels of crude oil per day at approx \$80 to \$90 per barrel. A breakdown would result in the vessel producing a loss of revenue of over \$700,000 per hour.

Product Selection

- Salt water corrosion (offshore platforms)
- Oil and chemical resistance (Drilling rig MUD)
- Extreme ambient temperature
- Protection level
- Connectivity to other pieces of equipment
- Consequence of down time
- Approval level required (Ex e, Ex d, etc.)
- Approval specification required ATEX, IECEx – Where product will be positioned, e.g. Zone 1 or Zone 2
- Approvals / Characteristics
- ATEX Europe Directives 94/9/EC
- IECEx (International Scheme)
- Zones 1, 2, 21, 22
- IP66 ingress protection

Introduction

Oil & Gas - Upstream



1

DTS lighting offers easy maintenance with removable gear trays allowing maintenance to be carried out quickly and safely.

In fact the XFF Exd Luminaries' components such as ballasts are standard so the storage and the sourcing of spare parts is made easily. Again this is essential to an offshore vessel.

Onshore applications can also be split into exploration and production. Single onshore wells may produce as little as a few barrels per day but networking of onshore wells can result in production of millions of barrels per day.

This brings with it a whole new series of challenges to be overcome. First the drilling rigs tend to be mobile with motors and pumps often mounted on skids for easy transportation.

Secondly with so many rigs in network there is a massive monitoring operation to be done to ensure that the flow of all the rigs is ongoing and consistent. This is where the DTS range of instrumentation boxes can offer great flexibility as they can be custom built to meet exact specifications.

The need to maintain flow also leads to the need for motors and controls on the well heads themselves often referred to as "Christmas Trees." These are under high pressure and must be able to withstand 1400 bar. This is a critical area and

Introduction

Oil & Gas - Midstream

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Midstream relates to the transportation, storage and partial processing of crude oil and gas from the wellheads to the refining plants. This brings a different set of challenges to overcome.

This all relates to the fact that what is pumped out of the well is not pure and often contains a mixture of oil, gas, water and often sand which firstly need to be separated off from each other before being shipped or piped to a storage facility. This can be done in a variety of ways depending on the type of oil or gas that the well is pumping and can often take up to 4 processes before the commodity is separated out ready for piping or shipping. These processes require energy and this energy is often created from the commodity itself by the utilisation of the gas.

Once the separating has been completed, the commodity can then be moved to storage. In the case of an offshore rig this separating is often done on shore away from the rig then pumped to the storage depots. In the case of the FPSO vessels it is all done on board and the oil transferred to tankers at sea for delivery to storage depots.

Product Selection

- Salt water corrosion (Tankers)
- Extreme ambient temperature
- Protection level
- Approval level required (Ex e, Ex d, etc.)
- Approval specification required ATEX, IECEx
- Where product will be positioned, e.g. Zone 1 or Zone 2

Approvals / Characteristics

- ATEX Europe Directives 94/9/EC
- IECEx (International Scheme)
- Zones 1, 2, 21, 22
- IP66 ingress protection



This is also the point when all metering needs to take place to calculate invoices and taxes today. The amount of oil produced is shapely measures, also the density, viscosity, pressure, temperature, and in the case of gas, the amount of water vapour is also measured.

Oil is often pumped directly to the oil refinery which is where the down stream operation starts but often needs to go through a series of pumps to get the required pressure.

With DTS range of products, ABB can offer a range of products and services to meet the demands of midstream oil and gas markets. The DTS range of light fittings is manufactured to meet ATEX and IECEx standards. They are designed to be robust and to meet the vigors of the environment whether it is on oil tankers where the XFF product is ideal.

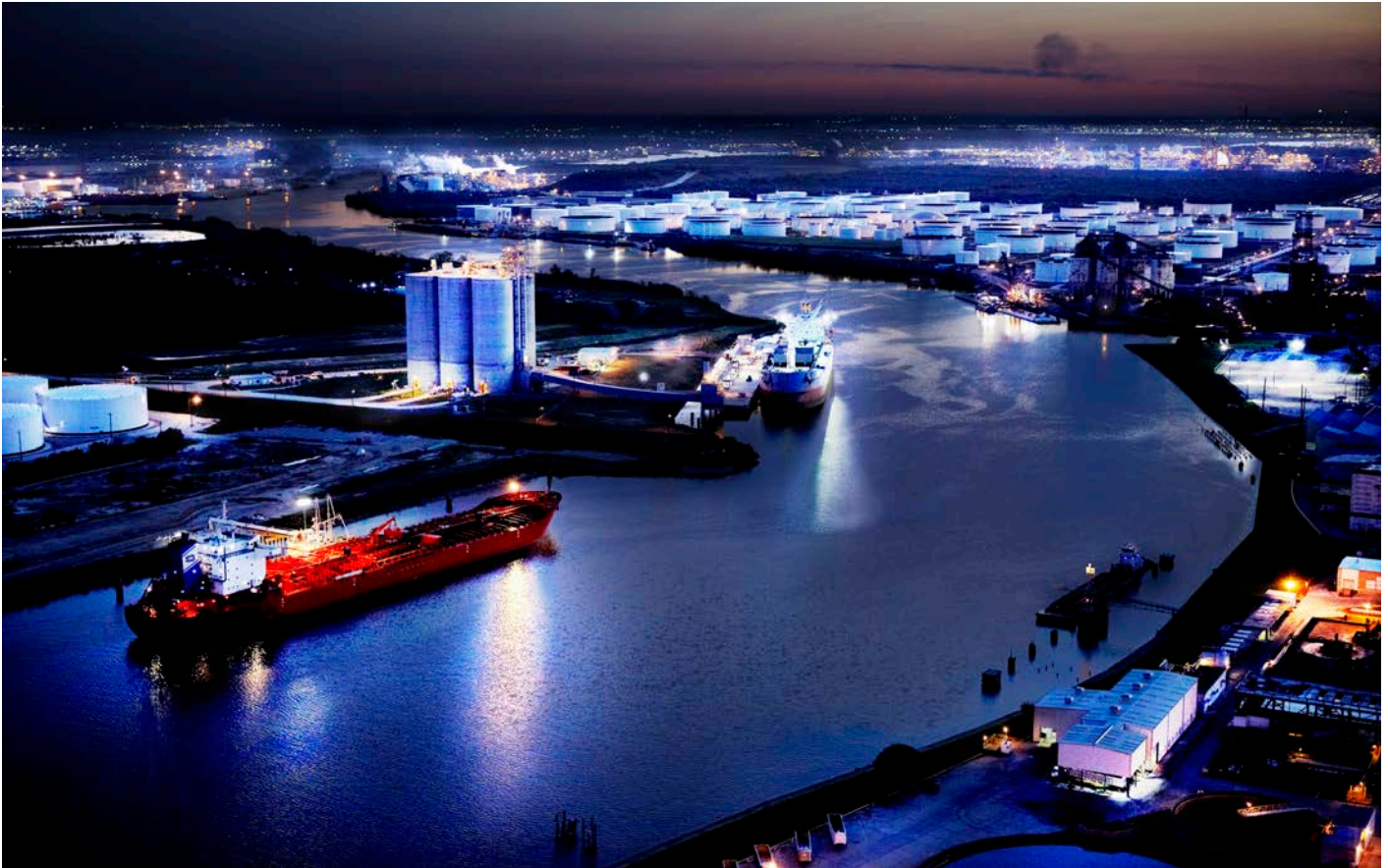
The EVS range is often chosen for warehouses. Added to this all the lighting fittings has been developed with the installer and maintenance people. Thus, removable gear trays has been thought to ensure easy and safe installation and maintenance.

DTS also offers a wide range of standard and custom built instrumentation boxes. They are often used in the monitoring equipment to relay signals from the sensors back to the central control systems as well as a range of standard configuration for control stations including "Emergency Stop" and "On - Off" to control motors etc. All of these are available in GRP (Glass Reinforced Polyester), aluminum and Stainless steel 316L therefore meeting any environmental requirement.

Introduction

Oil & Gas - Downstream

1



The term downstream relates to the processing and delivery of finished carbon related product to the end-user. This covers a whole range of applications from refining to petrol stations.

There are over 700 refineries globally all competing to supply finished carbon based products to local and international markets. The products refined are varied including:

- Transportation fuels - LPG, gasoline, jet fuel, diesel, gas oil and bunker fuel.
- Petrochemical feedstocks - LPG, naphtha and aromatics.
- Energy sources - LPG, kerosene, heating oil and fuel oil.
- Specialities - Lubricants, bitumen, coke, solvents and waxes.
- Petrochemical feedstocks - Synthetic fibres (nylon), plastics (polyethylene, PVC).

Product Selection

- Continual Movement (CCTV)
- Extreme ambient temperature
- Protection level
- Consequence of down time
- Approval level required (Ex e, Ex d, etc.)
- Approval specification required ATEX, IECEx, UL, GOST, etc.
- Where product will be positioned, e.g. Zone 1 or Zone 2

Approvals / Characteristics

- ATEX Europe Directives 94/9/EC
- IECEx (International Scheme)
- Zones 1, 2, 21, 22
- IP66 ingress protection



The refining process is in four stages, firstly distillation which separates it into 5 product sectors LPG, Naphtha, Kerosine, Gas, Oil, and Atmospheric residue, this is done using high temperature. The higher the temperature the higher the quality of the product.

The second stage is the upgrading or reforming. This stage is used to change the product at a molecular level for example changing the low octane version of Naphtha to high octane which can be blended into gasoline.

Stages three and four are about treating the product to remove impurities such as sulphur and blending the refined product into distinct products for the market.

The final stage of the downstream process is delivery to the market which involves storage and transportation. For example in the case of aviation fuel this can be shipped direct to airports by road or rail where it is stored, before transferring to tanker trucks for the refueling of aircraft.

All the stages in the downstream operation have different requirements to ensure safety of personnel and the quality of the end product. DTS products are used in this area whether it is the XF floodlight range or EVS fluorescent range. They are all designed for easy maintenance. There is also a range of instrumentation boxes either with standard configurations or custom built to meet the end-users' requirements, all of which are essential within a refinery where sensors play a key part on the process to ensure quality.

Introduction

Food & Beverage applications

1



1 Food manufacture - Explosion proof (Dust) | 2 Beverage manufacture - Explosion proof (Vapour)

Food Industry

ABB offers a range of products for the food processing market, including products for use in areas where stainless steel is preferred as well as areas classified as hazardous. ABB can offer stainless steel control stations for use on automated food processing and packaging machines as well as lighting specifically designed for use in dust filled atmospheres such as flour mills or other places where the risk of explosion is considered to be extremely high.

Beverage Industry

ABB has a range of products designed for being used in all beverage production sectors in the malting, brewing, wine, spirits or soft drink business. DTS can supply light fittings to reach the needs of hazardous areas where explosive gases may occur or in areas where cleanliness is required.

Introduction

Chemical & Pharmaceutical applications



1



3 Chemical engineering - Explosion proof | 4 Pharmaceutical production - Explosion proof

Chemical Industry

The chemical industry produces very diverse products, everything from fertilizers to explosives such as nitroglycerin. The processes used in this industry mean that there are lots of applications for the DTS lighting and box ranges. DTS can offer standard or custom built products, whether it is for a process control station or for instrumentation boxes linking sensors back to central control panels.

Pharmaceutical Industry

The ABB range of products and solutions are ideal for use in the pharmaceutical Industry. Whether it is upstream in the primary production stage or downstream in the packing stage. Many of the processes and applications used in these areas require approvals to hazardous area standards making stainless steel junction and control boxes ideal.

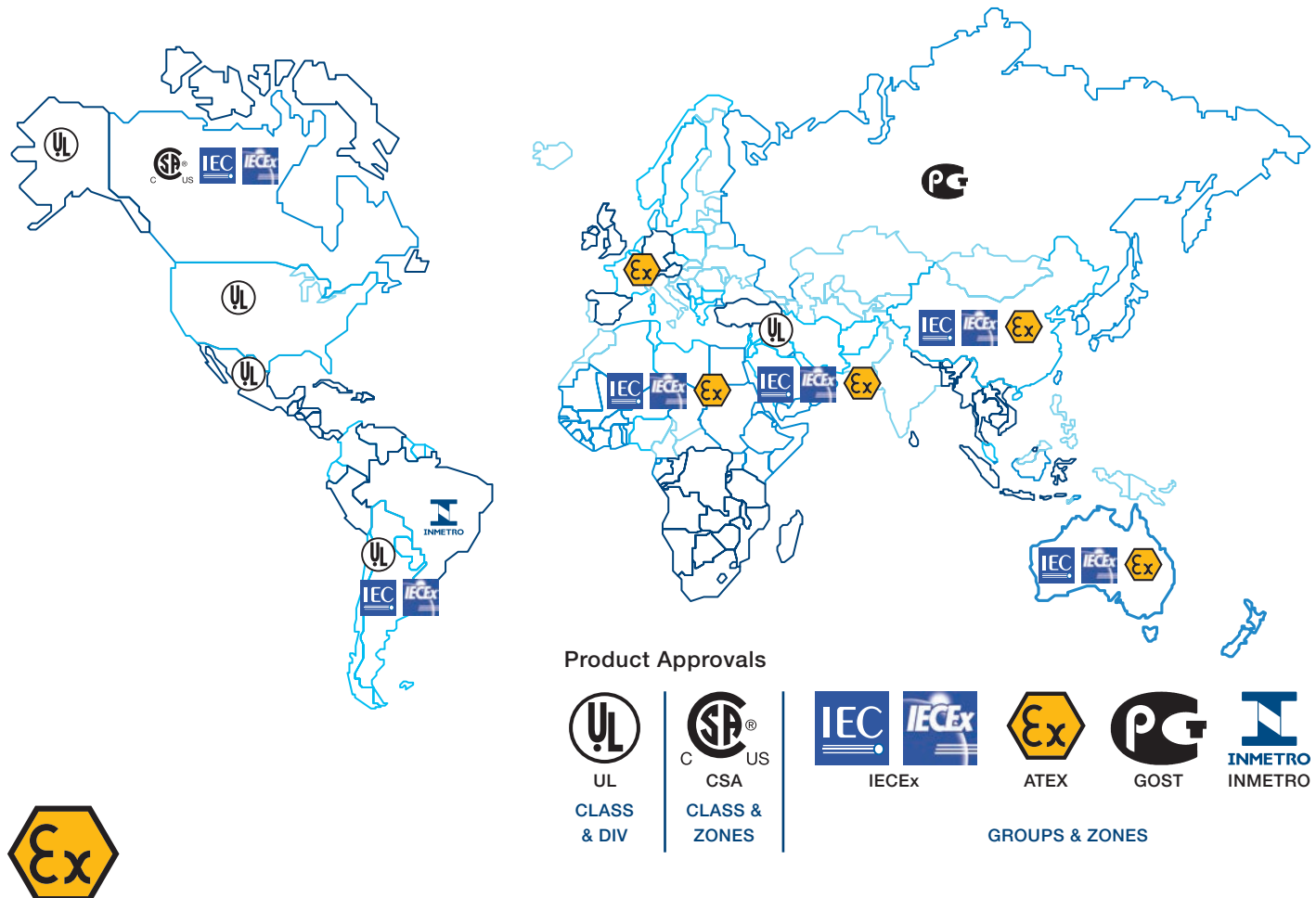
Standards, zone definitions & product markings

World standards & what they mean

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World standards and what they mean.

In this Section we will outline the different Standards used throughout the world and what it means for products specified for use in Hazardous Areas. Below is a map of the world which illustrates the Standards that are generally used in these regions.



The ATEX Europe Directives 94/9/EC

ATEX requires employers to eliminate or control risks from dangerous substances and to classify areas where explosive atmospheres may occur into zones, as laid down in regulations. ATEX Directives are designed to protect employees, the public and the environment from accidents owing to explosive atmospheres and since July 1st 2006 all existing sites, as well as new sites, must be fully ATEX compliant.

Directive ATEX100a applies to equipment suppliers and manufacturers and ATEX137 applies to end users. These directives compliment each other, but have different purposes. ATEX100A covers both electrical and non-electrical products intended for use in hazardous areas, including mechanical equipment.

The Directive came into existence in 2003 and products sold within the European Union designed for use in hazardous areas must have ATEX certification and bear the ATEX marking on the product or on a certificate plate. The obligation is placed upon the manufacturer or supplier of the product and the intention is to facilitate free movement of goods within the EU.

Declaration of Conformance

This has to be issued by the supplier for every order which is to be installed in a hazardous area. This document has to show that the equipment supplied complies with the latest harmonized standard.



IECEx (International Scheme)

The IECEx scheme is an international certificate of conformance for products used in a hazardous area.

This scheme provides:

- a) A single certification of conformity for manufacturers to comply that includes:
- b) Testing and assessment of products to a standard including a full test report.
- c) Ongoing surveillance of manufacturers premises.
- d) A fast-track process for countries where regulations still require the issuing of national Ex certificates or approvals.

This scheme is in the process of being adopted by all the known standards across the world but are all working to various time scales.



UL (America) & CSA (Canada)

The American and Canadian standards are the only ones to have different classifications and locations. ATEX & IECEx work to Groups and Zones whereas the NEC & CEC works to Classes and Divisions, there is no direct comparison between the two. This means that it is imperative that the two standards are not inter-changed within an area.



GOST (Russia)

GOST follows similar rules to that of IECEx as far as the breakdown of the zones and other criteria are concerned. However, the requirements for this country mean that separate GOST markings are required on the product.

GOST is divided into GOST (R) which is the standard for Russian Federation and GOST (K) that cover Kazakhstan.

Electrical materials for use in potentially explosive atmospheres must conform to two major certification standards: IEC/CENELEC and NEC

The IEC (International Electrotechnical Commission) standards are accepted in practically all countries. They are identical to the European CENELEC standards.

The NEC (National Electrical Code) is mandatory in the United States. The 1996 version, art. 505, takes up the IEC designations for gas, temperature classes for materials and zone definition.

Gases and vapours classification

Gases are divided into four groups in the NEC (National Electrical Code) and three groups for IEC/CENELEC. The groups display the same hierarchy of classification of gases and vapour (See table on page 1/20).

Temperature classification

The IEC and the NEC have also defined a temperature classification for material used in zones at risk of explosion (See table on page 1/21).



Standards, zone definitions & product markings

Zone definitions - Onshore gases & vapours

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Zones for onshore gases & vapours

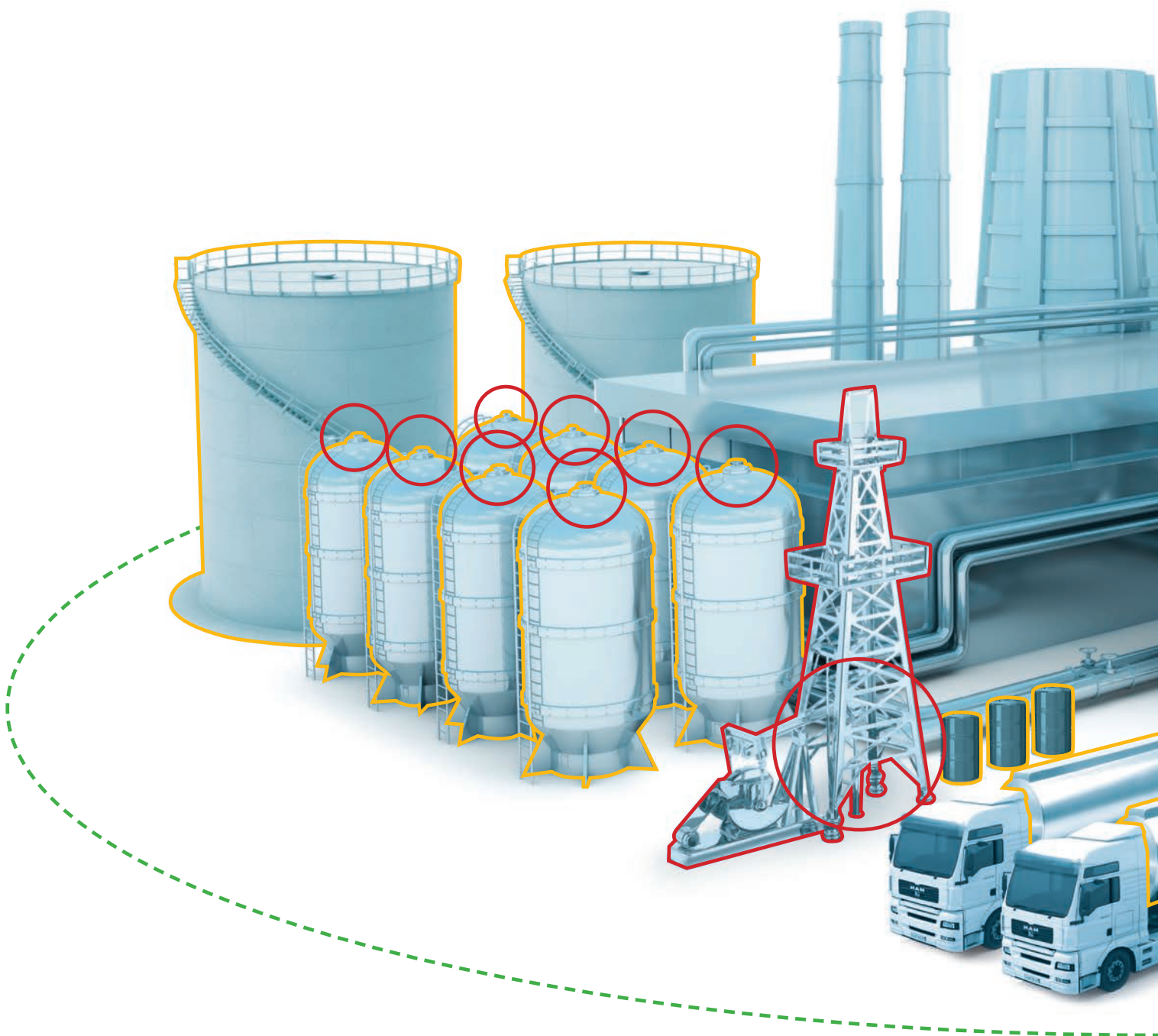
For Gases & Vapours

ZONE 0 Zone 0 Permanent / Frequent

Place in which an explosive atmosphere consisting of a mixture with air of flammable substances in the form of gas, vapour or mist is present continuously or for long periods, or frequently.

ZONE 1 Zone 1 Occasional

Site where an atmosphere consisting of a mixture of air and inflammable substances in the form of gas, vapour or mist is likely to arise occasionally during normal operation.

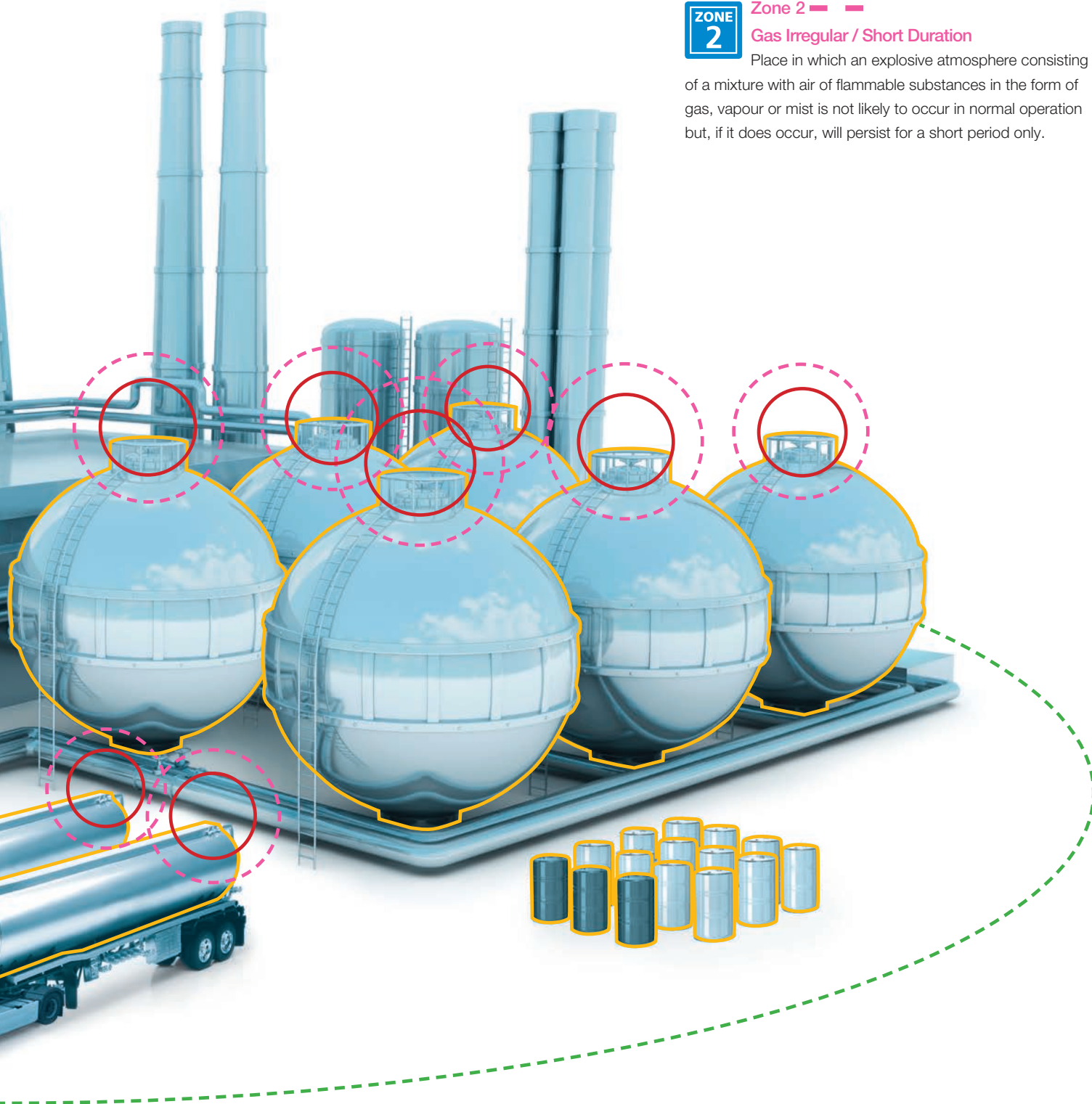


Safety Zone — —
Low Explosion Risk

ZONE
2

Zone 2 — —
Gas Irregular / Short Duration

Place in which an explosive atmosphere consisting of a mixture with air of flammable substances in the form of gas, vapour or mist is not likely to occur in normal operation but, if it does occur, will persist for a short period only.



Standards, zone definitions & product markings

Zone definitions - Offshore gases & vapours

1

Zones for offshore gases & vapours

For Gases & Vapours

ZONE 0 Zone 0 — Permanent / Frequent

Place in which an explosive atmosphere consisting of a mixture with air of flammable substances in the form of gas, vapour or mist is present continuously or for long periods, or frequently.

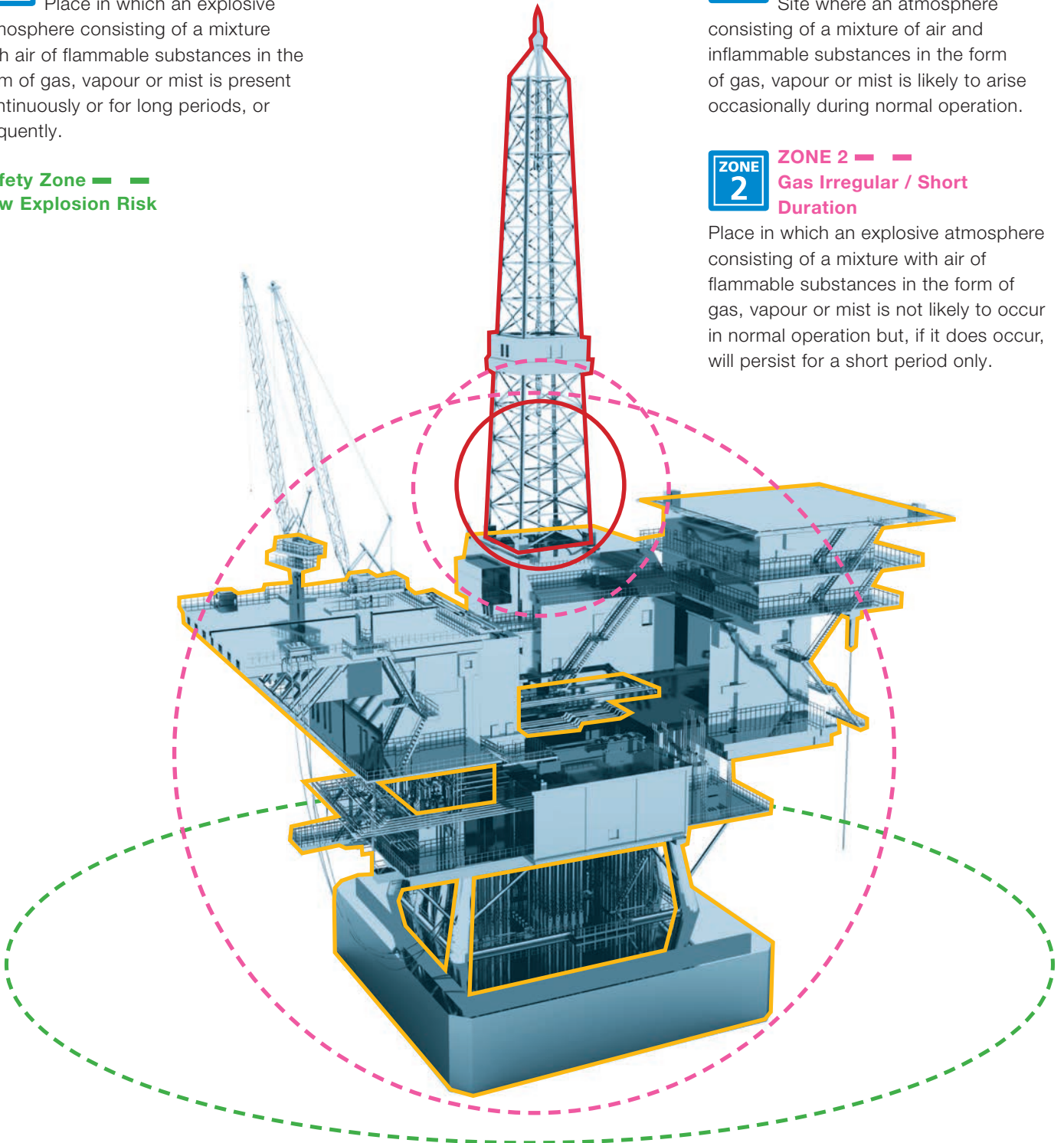
Safety Zone — —
Low Explosion Risk

ZONE 1 Zone 1 — Occasional

Site where an atmosphere consisting of a mixture of air and inflammable substances in the form of gas, vapour or mist is likely to arise occasionally during normal operation.

ZONE 2 ZONE 2 — Gas Irregular / Short Duration

Place in which an explosive atmosphere consisting of a mixture with air of flammable substances in the form of gas, vapour or mist is not likely to occur in normal operation but, if it does occur, will persist for a short period only.



Standards, zone definitions & product markings

Zone definitions - Dust

Zones for dust areas

1

ZONE
20

Zone 20 **Permanent / Frequent**

Area in which an explosive atmosphere in the form of a cloud of combustible dust in air is present continuously, or for long periods, or frequently.

ZONE
21

Zone 21 **Occasional**

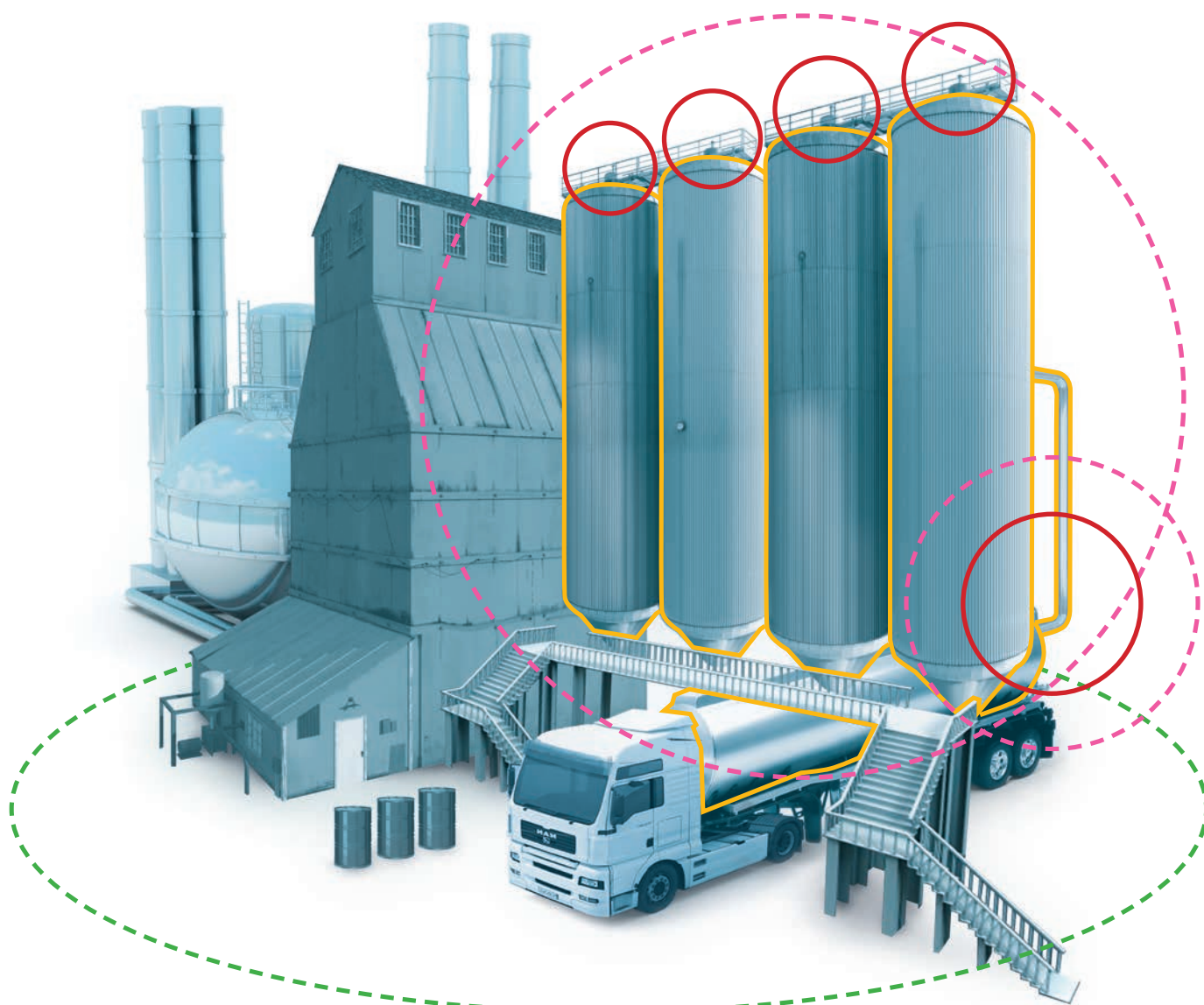
Area in which an explosive atmosphere, in the form of a cloud of combustible dust in air is likely to occur, occasionally, in normal operation, occasionally.

ZONE
22

Zone 22 **Dust Irregular / Short Duration**

Area in which an explosive atmosphere, in the form of a cloud of combustible dust in air is not likely to occur in normal operation but, if it does occur, will persist for a short period only.

Safety Zone
No Explosion Risk



Standards, zone definitions & product markings

DTS - Product marking guide


1

Classification of hazardous areas		European/IEC or NEC classifications	
Flammable substances	Temporary behaviour of flammable substances in hazardous places	Typical zones	Required marking for installation
			equipment group equipment protection level
Gases Vapours	is present continuously or for long periods or frequently	zone 0	II Ga
	is likely to occur in normal operation occasionally	zone 1	II Gb
	is not likely to occur in normal operation but, if it does occur, will persist for a short period only	zone 2	II Gc
Dusts	is present continuously or for long periods or frequently	zone 20	III Da
	is likely to occur in normal operation occasionally	zone 21	III Db
	it is not likely to occur in normal operation but, if it does occur, will persist for a short period only	zone 22	III Dc
Methane Dusts	-	mines	I Ma
	-	mines	I Mb

Subdivision of gases and vapours						
Apparatus may be used in group			Gases or vapours			
IIA	IIB	IIC	ammonia methane ethane propane	ethyl alcohol cyclohexane n-butane	galsoline n-hexane	acetaldehyde
			town gas, acrylnitril	ethylene ethylene oxide	ethylene glycol cyclohexane	ethyl-ether n-hexane
			hydrogen	ethine (acetylene)	sulphide of carbon	

Dust	
IIIA	Combustible Flyings
IIIB	Non-Conductive Dust
IIIC	Conductive Dust



Product stamp detail



XFFL240-00000

19-21, avenue Henri Baudet
77831 Ozoir-la-Ferrière (France)

12/0116422
(Serial No.)



Ex II 2 G Exe IIC T6/ II 2 D

0081 (Gas)

Extb IIIC T85C IP66

(Dust)

LCIE 11 ATEX 3050 X

(Certification Number)

Restriction for using apparatus

Requirements	Marking
Equipment without restriction	-
Equipment with special condition may be noted	X
Ex component, which is not intended to be used alone and requires additional certification before being used in hazardous area	U

Technical protection

Application	Type of protection		Marking	EN/IEC standard
All applications	General requirements		-	60079-0
Control stations, motors, fuses, switchgear, power electronics	Flameproof enclosure		Ex d	60079-1
Installation materials, motors, luminaries	Increased safety		Ex e	60079-7
Measurement and control, automation technology, sensors, actuators	Intrinsic safety		Ex i	60079-11
Switch- and control cupboards, analyse-apparatus, computers	Pressurisation		Ex p	60079-2
Coils of motors or relays, solenoid valves	Encapsulation		Ex m	60079-18
Transformers, relays, control stations, magnetic contactors	Oil immersion		Ex o	60079-6
Capacitors, transformers	Powder filling		Ex q	60079-5
See at the top - only for zone 2	'Non sparking'		Ex n	60079-15
For use in zone 0, 1, 2 / for use in zone 1, 2	Dust atmospheres		Ex t	60079-31

IIA **T1** Acetone 735°
 IIA **T1** Ammonia 630°
 IIB **T1** Carbon Monoxide 605°
 IIA **T1** Bensene 560°
 IIC **T1** Hydrogen 560°
 IIA **T1** Methane 537°
 IIA **T1** Toluene 535°
 IIA **T1** Styrene 490°
 IIA **T1** Propane 470°
 IIA **T1** 1-Butene 455°
 IIB **T1** Butadiene 430°

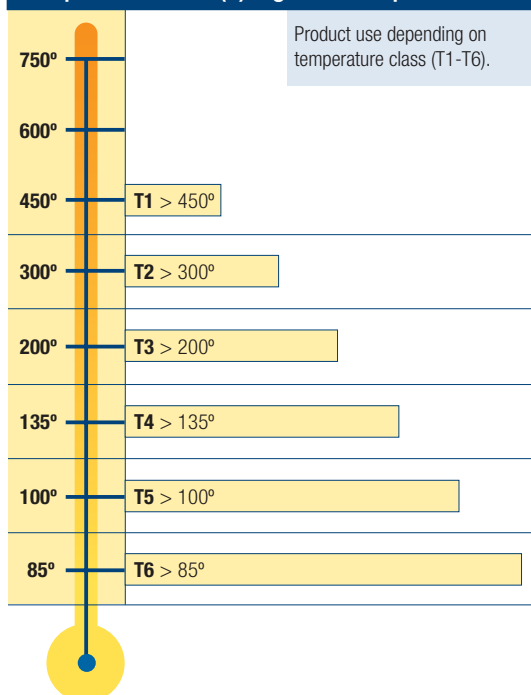
 IIB **T2** Ethylene 425°
 IIA **T2** Butane 372°
 IIA **T2** Ethanol 363°
 IIA **T2** Butylalcohol 359°
 IIB **T2** Dimethylether 350°
 IIC **T2** Acetylene 305°

 IIA **T3** Nafta 290°
 IIA **T3** Hydrogen Sulphide 270°
 IIA **T3** Cyclohexane 259°
 IIA **T3** Hexane 233°
 IIA **T3** Heptane 215°
 IIA **T3** Kerosene 210°
 IIA **T3** Dekane 201°

 IIB **T4** Diethyl Ether 160°

 IIC **T6** Carbon Disulphide 95°

Temperature Class (T) / Ignition Temperature



Standards, zone definitions & product markings

Index of ingress protection

1

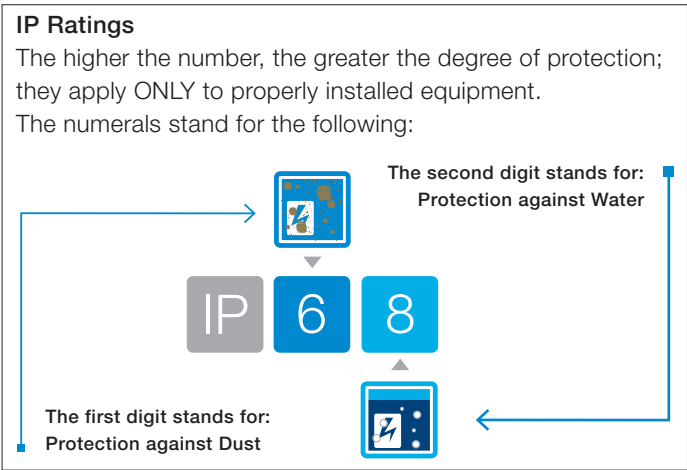
IP Ratings

IP suitability ratings are a system for classifying the degree of protection provided by enclosures of electrical equipment.

Protection against Solid Bodies

Degree of protection for persons against access to hazardous parts inside the enclosure and/or against the ingress of solid foreign objects.

	0	No protection
	1	Objects greater than 50 mm, accidental touch by hands
	2	Objects greater than 12 mm, accidental touch by fingers
	3	Objects greater than 2.5 mm, e.g. tools/wires
	4	Objects greater than 1 mm, e.g. tools/wires/small wires
	5	Protected against dust - limited ingress (no harmful deposits)
	6	Totally protected against dust (Dust-tight)



Protection against Water

Degree of protection of equipment inside enclosures against damage from the ingress of water.

	0	No protection
	1	Protected against vertically falling drops of water
	2	Protected against direct sprays of water 15° from vertical
	3	Protected against sprays of water to 60° from vertical
	4	Protected against water sprayed from all directions - limited ingress permitted
	5	Protected against low pressure jets of water from all directions - limited ingress permitted
	6	Protected against strong pressure jets of water, heavy seas - limited ingress permitted
	7	Protection against the effects of immersion between 15cm - 1 m
	8	Protection against long periods of immersion under a quoted pressure, e.g. 2 bar at 24 hours
	9	IP69k Automotive standard DIN40050 and signifies resistance to high pressure jets of water (up to 80bar) from any angle

Light fittings for all zones and industrial applications

Light fittings - Guide

Tubular fitting, Miniature tubular fluorescent fitting & Self contained emergency LED light fitting

Section 2

1



	Tubular fitting					
Référence	XFFL - LED	XFF	XFPL - LED	XFP	FFL - LED	FF
Page	2/3	2/7	2/13	2/19	2/25	2/29



	Miniature tubular fluorescent fitting			Self contained emergency LED light fitting
Référence	XEL	XEP	EL	XEL-BAES-LED
Page	2/35	2/39	2/43	2/47

Linear fitting & Recessed fitting

Section 3



	Linear fitting						
Référence	EVS	EVNL	EVN	EVDL	EVD	EVTL	EVT
Page	3/3	3/9	3/15	3/21	3/27	3/33	3/39



	Recessed fitting	
Référence	ESB	EST
Page	3/45	3/49

Floodlight , Beacon and warning & Wellglass

Section 4



	Floodlight		Beacon and warning	
Référence	XSF, XQF, XEF	SF, QF, EF	XFB,XFL	FB,FL
Page	4/3	4/9	4/15	4/19








	Drilling fitting	Wellglass
Référence	XDF	EVH/X
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Light fittings for all zones and industrial applications

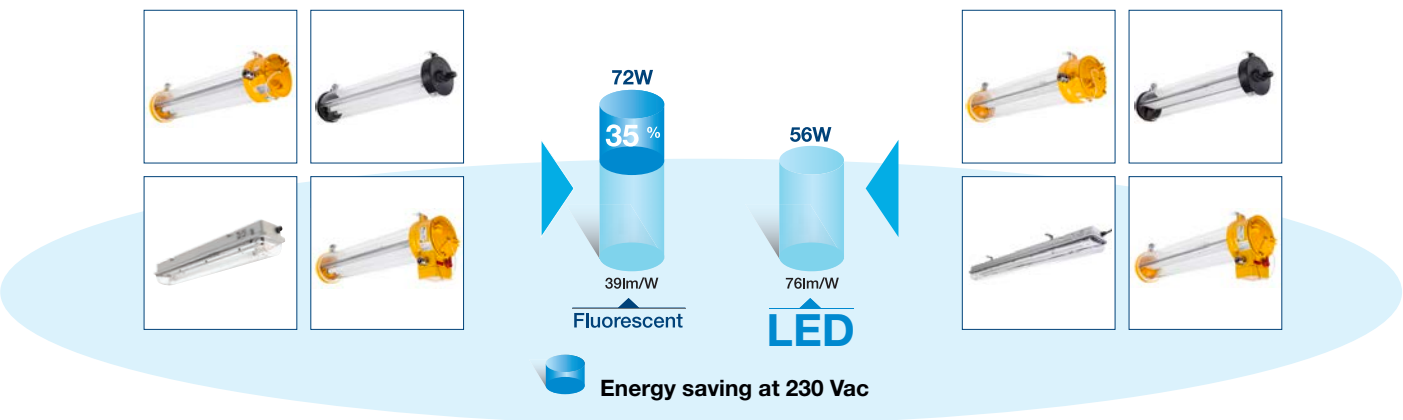
LED Light fittings for hazardous area - The benefits

1

LED benefits		DTS benefits
Resistance - Shock & vibration 20 years		
	<ul style="list-style-type: none"> - No filaments or glass components 	<ul style="list-style-type: none"> - Operating T: -20°C to +55°C, T6 - Zone 1, 2, 21, 22, IP66 - Sealed enclosure suitable for indoors/outdoors - 20 years successful operation in harsh & hazardous environments on the enclosures
Safety - Safe & healthy work, 1 gear tray		
	<ul style="list-style-type: none"> - No UV or IR radiation: Instant ignition - No negative influence on lifetime from switching cycles 	<ul style="list-style-type: none"> - No need for special reflector - CRI 80 - Colour temperature 4000°K - Ex e integral junction box - Quick and easy insulation to switch off one luminair in hazardous area - All components in one gear tray for easy maintenance
TCO - Less maintenance 100kh		
	<ul style="list-style-type: none"> - High light yield - Reduce the high maintenance costs associated with traditional lamps and frequent lamp changes 	<ul style="list-style-type: none"> - Over 100,000 hours Longer life fixtures - Converting a traditional fluorescent light fitting into an LED light fitting with one gear tray
Energy - Saving 35% less		
	<ul style="list-style-type: none"> - 50% less on energy consumption compared to fluorescent light fitting 	<ul style="list-style-type: none"> - Over 84lm/W depend on fixture - 35% of energy saving for LED flitting compared to fluorescent 2x36W fitting
Sustainability - Contributes to a respectful environment, only 4 parts		
	<ul style="list-style-type: none"> - No mercury or other hazardous substances 	<ul style="list-style-type: none"> - 4 components on gear tray - all dissociable

Light fittings for all zones and industrial applications

LED Light fittings for hazardous area - The 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.

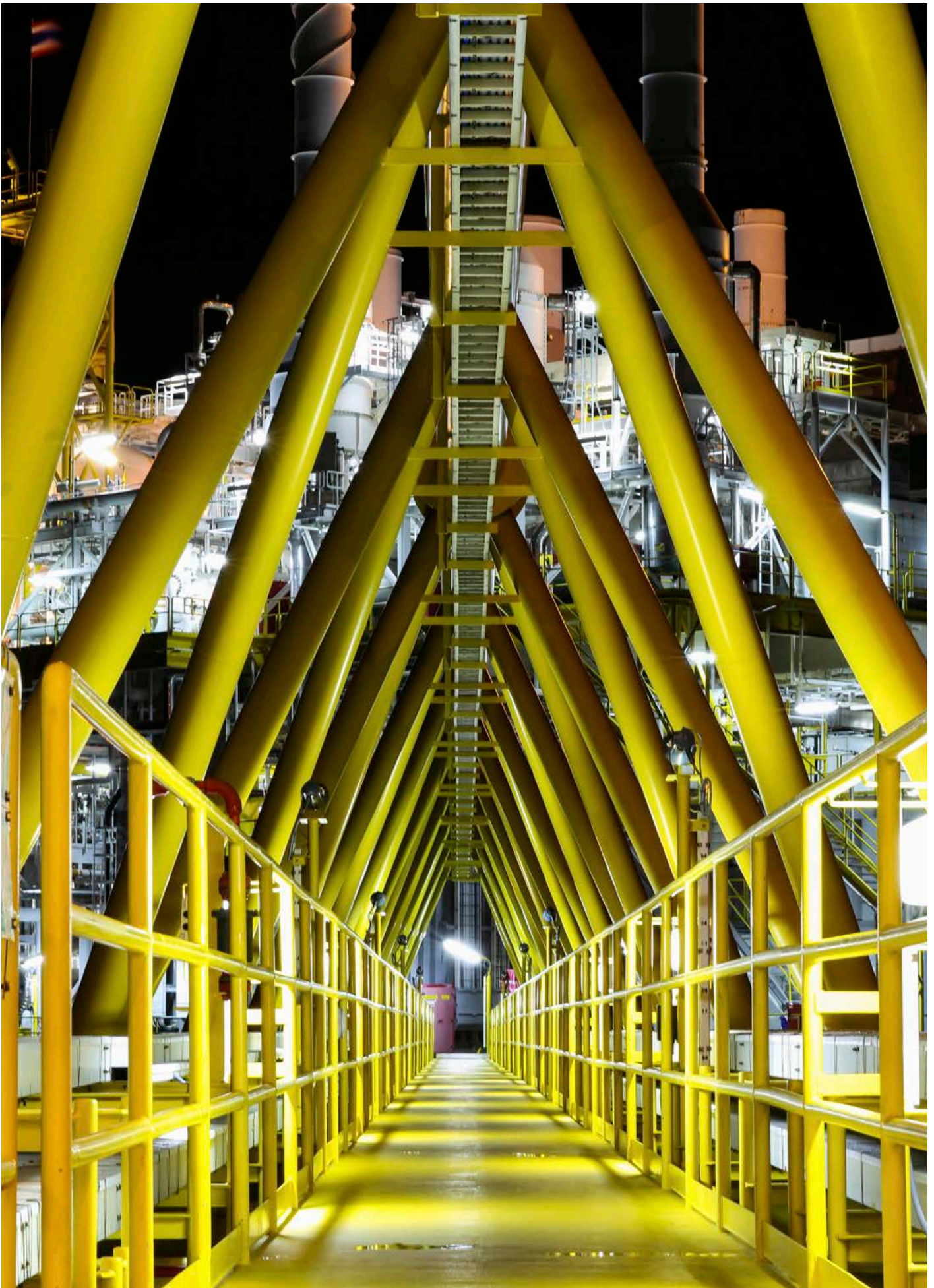
LED product overview

For more information about our LED light fittings, please refer to the following pages:



	LED lighting range							
Type	XFFL	XFPL	FFL	XEL BAES	EVNL	EVDL	EVTL	XFB
Page	2/3	2/13	2/25	2/47	3/9	3/21	3/33	4/15





Light fittings for all zones & industrial applications

Tubular, miniature tubular fluorescent & self-contained emergency LED light fittings

Tubular fitting	
XFFL - LED - Zones 1, 2 & 21, 22	2/3
XFF - Zones 1, 2 & 21, 22	2/7
XFPL - LED - Zones 1, 2 & 21, 22	2/13
XFP - Zones 2, 22	2/19
FFL - LED - Industrial application	2/25
FF - Industrial application	2/29

Miniature tubular fluorescent fitting	
XEL - Zones 1, 2 & 21, 22	2/35
XEP - Zones 1, 2 & 21, 22	2/39
EL - Industrial application	2/43

Self-contained emergency LED fitting	
XEL BAES - LED - Zones 1, 2 & 21, 22	2/47



Tubular fittings

Tubular LED fitting

XFFL - Zones 1, 2 & 21, 22



Features

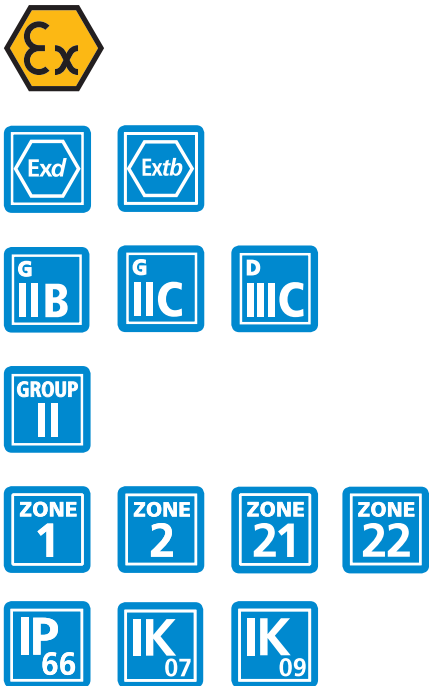
- Operating life 100,000 h (according items)
- High lumen output - 5000 lumens with 100% yield (according items) - LED module with diffuser
- All components mounted on sliding gear tray for easy installation and maintenance
- Possibility to retro-fit LED gear tray into existing fixtures mounted with T8 lamps
- Available in polycarbonate or in glass
- Including accessories (cable gland, plug & fixing brackets)
- Supplied with offshore grade paint

Specifications

- Manufactured from marine grade aluminium alloy copper free
- UV protected polycarbonate tube - thickness 2,5mm or borosilicate glass - thickness 7mm
- Rated voltage 100- 254Vac 50/60Hz
- Wiring configuration: 5 wires
- 2xEntries 3/4" NPT



Certifications



Standards

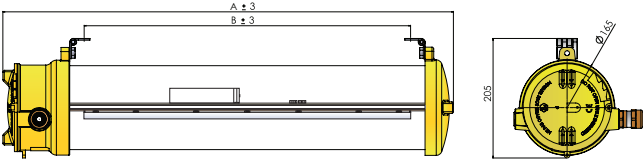
Approved to:	EN60079-0, 60079-1, 60079-31
EC Type examination certificate to:	Directive 94/9/EC INERIS 13 ATEX 0050X Ex II 2 G Ex d IIC T6 Gb for -20°C to + 55°C Ex d IIB T6 Gb for -20°C to + 55°C (for XFRL140V, XFFL240V, XFRL165V, XFFL265V) Ex II 2 D Ex tb IIIC T 70°C Db IP66 for -20°C to + 55°C (for XFRL120, XFRL120V, XFRL140, XFRL140V, XFFL220, XFFL220V) Ex tb IIIC T80°C Db IP66 for -20°C to + 55°C (for XFRL165, XFRL165V, XFFL240, XFFL240V, XFFL265, XFFL265V)
Glow wire test:	960°C EN60598-2-22
Safe operating temperature range:	-20°C to +55°C
IP test:	IP66 IEC 60529 (2001)
Impact protection index:	IK09 (poly) IK07 (glass) according to IEC 62262

Tubular fittings

Tubular LED fitting

XFFL - Zones 1, 2 & 21, 22

2



XFFL

Dimensional drawing

Technical specifications

Type	Wiring Configuration	Rating W	Current A 230V	Lumen Output lm	Operating life at 25°C h	Diffuser	External dimensions mm		Weight kg
							A	B	



5 wires: Polycarbonate Diffuser Equipped with 1 cable gland & 1 plug

XFRL120-00000	5 wires	1 x 12	0.07	1194	100,000	Polycarbonate	775	565	4.80
XFRL140-00000	5 wires	1 x 25	0.12	2353	90,000	Polycarbonate	1390	1170	7.60
XFRL165-00000	5 wires	1 x 31	0.16	2450	80,000	Polycarbonate	1690	1475	8.80
XFFL220-00000	5 wires	1 x 19	0.10	1613	80,000	Polycarbonate	775	565	4.80
XFFL240-00000	5 wires	1 x 56	0.27	4257	70,000	Polycarbonate	1390	1170	7.60
XFFL265-00000	5 wires	1 x 71	0.34	5076	70,000	Polycarbonate	1690	1475	8.80

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

XFRL120V-00000	5 wires	1 x 12	0.07	1194	100,000	Glass	775	565	8.00
XFRL140V-00000	5 wires	1 x 25	0.12	2353	90,000	Glass	1390	1170	12.50
XFRL165V-00000	5 wires	1 x 31	0.16	2450	80,000	Glass	1690	1475	13.80
XFFL220V-00000	5 wires	1 x 19	0.10	1613	80,000	Glass	775	565	8.00
XFFL240V-00000	5 wires	1 x 56	0.27	4257	70,000	Glass	1390	1170	12.50
XFFL265V-00000	5 wires	1 x 71	0.34	5076	70,000	Glass	1690	1475	13.80

Technical information

LED installed

Set of LED modules with integrated diffuser
Colour temperature 4000°K
L70/B10 at 25°C (70% lumen output/ 90% active LED) according to operating life.

Photometric curve

See page 6/3

Rated voltages

Electronic driver: 100- 254Vac 50/60Hz.

Power factor

0.9.

Terminal block

(screws plug in terminal block)

10mm² (rigid wire), 6mm² (flexible wire)
Terminals supplied L1, L2, L3, N, PE (looping possible with one additional cable gland).

Wiring Configuration

5 wires

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)

Housing

Casting Marine grade aluminium alloy according to standard: EN 1706: EN AC-AISI12 (Fe) DF or EN AC-AISI 10Mg(A) DF
UV protected extruded polycarbonate tube, thickness 2,5mm or borosilicate glass thickness 7mm

Colour of casting (standard)

- XF****-00000 - Yellow offshore, RAL 1003
- Colour options:
- XF****-B0000 - Grey, RAL 7035
- XF****-C0000 - Black, RAL 9004
- XF****-D0000 - Hammered Blue, RAL 5015
- XF****-F0000 - Red, RAL 3001
- XF****-G0000 - Blue, RAL 5010
- XF****-J0000 - Green, RAL 6032
- XF****-M0000 - White, RAL 9010

Fixing (included)

D023 -2x zinc plated steel articulated brackets for ceiling mounting

Tubular fittings

From a fluorescent fitting to a LED fitting XFFL - Zones 1, 2 & 21, 22

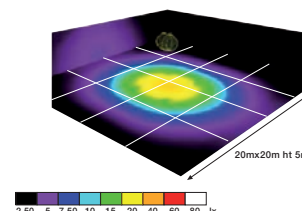
What are the LED benefits?

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.

2

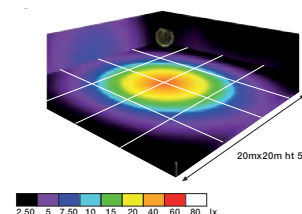
T8 fluorescent lamp - XFF240-0G000 3D view

- Lumen output (Light fitting): 3546lm
- Lumen output (Lamp): 6700lm
- Yield: 52%
- Rating per light fitting: 73,5W
- Light Source: 2xL36W/840 OSRAM Lumilux
- CoolWhite (corrector factor 1,00)



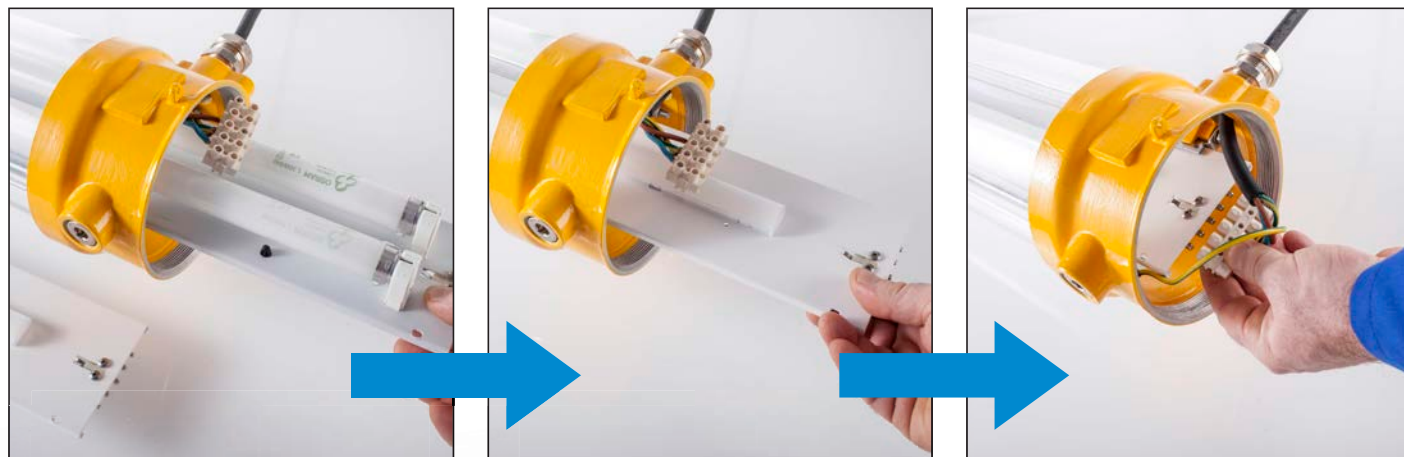
LED module - XFFL240-00000 3D view

- Lumen output (Light fitting): 4188lm
- Lumen output (Lamp): 4257lm
- 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?

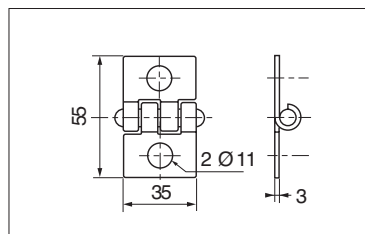
The EC type (ATEX) certification, EC declaration and the installation notice of the fluorescent fitting remain valid for all the LED fittings (more details on demand).

Gear trays parts to upgrade from a “fluorescent” to a “LED” fitting - LED gear tray with driver 100-254Vac 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

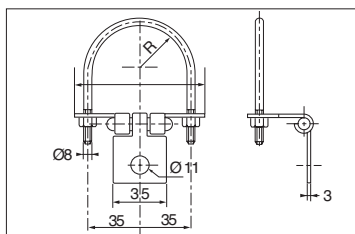
Tubular fittings
Accessories & spare parts
XFFL - Zones 1, 2 & 21, 22

Brackets



Hinged bracket

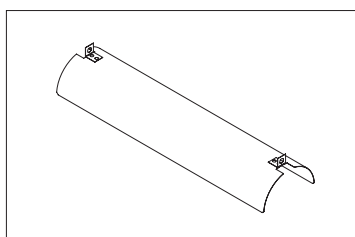
Type	Specifications
D023	2x zinc plated steel articulated brackets for ceiling mounting (included with product)
D024	2x stainless steel 304L articulated brackets for ceiling mounting



U-bolt for pole mounting

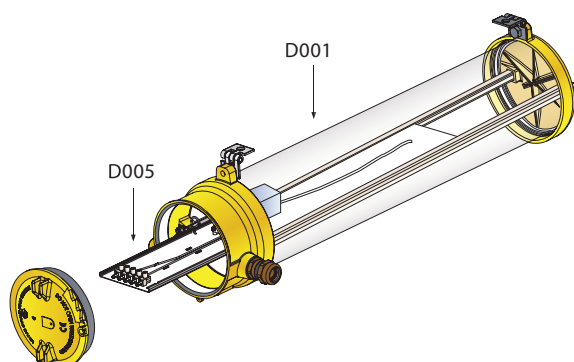
Type	Specifications
D025	2x U-bolt and 2x zinc plated steel brackets for pole mounted 1" 1/4
D026	2x U-bolt and 2 x zinc plated steel brackets for pole mounted 1" 1/2
D027	2x U-bolt and 2x zinc plated steel brackets for pole mounted 2"
D029	2x U-bolts and 2x stainless steel brackets (304L) for pole mounted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

Accessories



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
D00120WC	Sealed polycarbonate tube, cover, gasket, chain and slides - Offshore grade yellow paint RAL 1003 - XFFL220, XFRL120
D00140WC	Sealed polycarbonate tube, cover, gasket, chain and slides - Offshore grade yellow paint RAL 1003 - XFFL240, XFRL140
D00165WC	Sealed polycarbonate tube, cover, gasket, chain and slides - Offshore grade yellow paint RAL 1003 - XFFL265, XFRL165
D001V20WC	Sealed glass tube, cover, gasket, chain and slides- Offshore grade yellow paint RAL 1003 - XFFL220, XFRL120
D001V40WC	Sealed glass tube, cover, gasket, chain and slides- Offshore grade yellow paint RAL 1003 - XFFL240, XFRL140
D001V65WC	Sealed glass tube, cover, gasket, chain and slides - Offshore grade yellow paint RAL 1003 - XFFL265, XFRL165
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
4GRA00002S	Grease
EXN05ASC3-01	Kit 3/4 NPT Exd Exe IIC Ex-td nickel plated cable gland for non armoured cable diameter 6,0-12,0mm

Tubular fittings

Tubular fluorescent fitting

XFF - Zones 1, 2 & 21, 22



Features

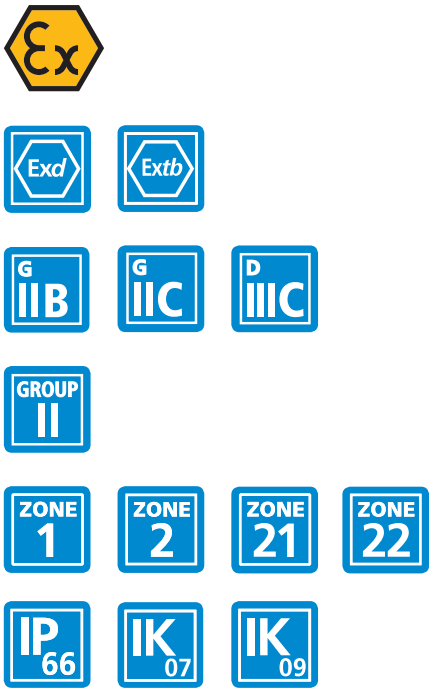
- All components mounted on sliding gear tray for easy installation and maintenance
- Standard components used inside body allowing reduced maintenance costs
- Available in polycarbonate (light, high impact resistant) or in glass (specific chemical environment & paint shop)
- Including accessories (cable gland, plug & fixing brackets)
- Supplied with offshore grade paint

Specifications

- Manufactured from marine grade aluminium alloy copper free
- UV protected polycarbonate tube - thickness 2,5mm or borosilicate glass - thickness 7mm
- Rated voltage 110- 260Vac/Vdc, 50-60Hz
- Wiring configuration: 5 wires
- 2xEntries 3/4" NPT
- Emergency version (Type: "EM" version 3h battery duration)



Certifications



Standards

Approved to:	EN60079-0, 60079-1, 60079-31
EC Type examination certificate to:	Directive 94/9/EC INERIS 11 ATEX 0051X Ex II 2 G Ex d IIC T6 Gb for -20°C to + 55°C Ex d IIC T6 Gb for -20°C to + 55°C (XFR120V, XFF220V, XFR136V, XFF236V, XFR155V, XFF255V) Ex d IIB T6 Gb for -20°C to + 55°C (XFR140V, XFR165V, XFF240V, XFF265V) Ex II 2D Ex tb IIIC T80°C Db IP66 for -20°C to + 55°C
Glow wire test:	960°C EN60598-2-22
Safe operating temperature range:	-20°C to +55°C XFF, -10°C to +50°C XFF EM
IP test:	IP66 IEC 60529 (2001)
Impact protection index:	IK09 (poly) IK07 (glass) according to IEC 62262

Tubular fittings

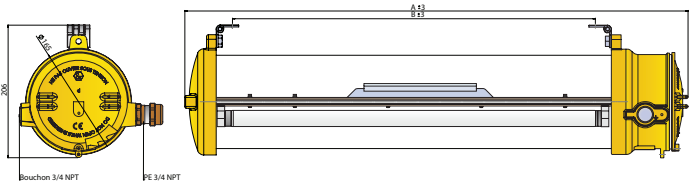
Tubular fluorescent fitting

XFF - Zones 1, 2 & 21, 22

2



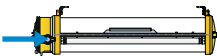
XFF



Dimensional drawing

Technical specifications

Type	Wiring Configuration	Rating W	Current A 230V	Diffuser	External dimensions mm		Weight kg
					A	B	



5 wires: Polycarbonate Diffuser Equipped with 1 cable gland & 1 plug

XFR120-0G000	5 wires	1 x 18	0.15	Polycarbonate	775	565	5.6
XFR136-0G000	5 wires	1 x PL36	0.20	Polycarbonate	775	565	5.6
XFR140-0G000	5 wires	1 x 36	0.20	Polycarbonate	1390	1170	8.8
XFR155-0G000*	5 wires	1 x PL55	0.25	Polycarbonate	1390	1170	8.8
XFR165-0G000	5 wires	1 x 58	0.35	Polycarbonate	1690	1475	10
XFF220-0G000	5 wires	2 x 18	0.30	Polycarbonate	775	565	5.6
XFF236-0G000	5 wires	2 x PL36	0.40	Polycarbonate	775	565	5.6
XFF240-0G000	5 wires	2 x 36	0.40	Polycarbonate	1390	1170	8.8
XFF255-0G000*	5 wires	2 x PL55	0.50	Polycarbonate	1390	1170	8.8
XFF265-0G000	5 wires	2 x 58	0.50	Polycarbonate	1690	1475	10

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

XFR120V-0G000	5 wires	1 x 18	0.15	Glass	775	565	10.6
XFR136V-0G000	5 wires	1 x PL36	0.20	Glass	775	565	10.6
XFR140V-0G000	5 wires	1 x 36	0.20	Glass	1390	1170	15
XFR155V-0G000*	5 wires	1 x PL55	0.25	Glass	1390	1170	15
XFR165V-0G000	5 wires	1 x 58	0.35	Glass	1690	1475	18.6
XFF220V-0G000	5 wires	2 x 18	0.30	Glass	775	565	10.6
XFF236V-0G000	5 wires	2 x PL36	0.40	Glass	775	565	10.6
XFF240V-0G000*	5 wires	2 x 36	0.40	Glass	1390	1170	15
XFF255V-0G000	5 wires	2 x PL55	0.50	Glass	1390	1170	15
XFF265V-0G000	5 wires	2 x 58	0.50	Glass	1690	1475	18.6

* T5 for gas or T95°C for dust when supply is 240Vac

Technical information

Lamps Fluorescent Lamp (order separately) T8 bi-pin tube, lampholder G13, diameter 26mm - white industry 4000°K Compact PL lamp, lampholder G11.	Power factor 0.98.	Casting Marine grade aluminium alloy according to standard: EN 1706: EN AC-AISI12 (Fe) DF or EN AC-AISI 10Mg(A) DF UV protected extruded polycarbonate tube, thickness 2,5mm or borosilicate glass thickness 7mm	Fixing (included) D023 -2x zinc plated steel articulated brackets for ceiling mounting
Photometric curve See page 6/3	Terminal block (screws plug in terminal block) 10mm² (rigid wire), 6mm² (flexible wire) Terminals supplied L1, L2, L3, N, PE (looping possible with one additional cable gland).	Colour of casting (standard) ● XF****-0G000 - Yellow offshore, RAL 1003 Colour options: ● XF****-BG000 - Grey, RAL 7035 ● XF****-CG000 - Black, RAL 9004 ● XF****-DG000 - Hammered Blue, RAL 5015 ● XF****-FG000 - Red, RAL 3001 ● XF****-GG000 - Blue, RAL 5010 ● XF****-JG000 - Green, RAL 6032 ○ XF****-MG000 - White, RAL 9010	
Rated voltages Electronic ballast: 110- 260Vac/Vdc, 50-60Hz.	Wiring Configuration 5 wires	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)	

Tubular fittings

Emergency tubular fluorescent fitting - 3h

XFF EM - Zones 1, 2 & 21, 22

Technical specifications

Type	Wiring Configuration	Rating W	Battery h	Current A 230V	Diffuser	External dimensions mm		Weight kg
						A	B	
3 wires: Polycarbonate Diffuser Equipped with 1 cable gland & 1 plug								
XFR120EM-0G000	3 wires	1 x 18	3	0.15	Polycarbonate	775	565	7.2
XFR140EM-0G000	3 wires	1 x 36	3	0.20	Polycarbonate	1390	1170	10.4
XFR165EM-0G000	3 wires	1 x 58	3	0.25	Polycarbonate	1690	1475	10
XFF220EM-0G000	3 wires	2 x 18	3	0.30	Polycarbonate	775	565	7.2
XFF240EM-0G000	3 wires	2 x 36	3	0.40	Polycarbonate	1390	1170	10.4
XFF265EM-0G000	3 wires	2 x 58	3	0.50	Polycarbonate	1690	1475	10

3 wires: Glass Diffuser Equipped with 1 cable gland & 1 plug

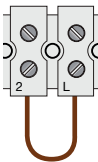
XFR120VEM-0G000	3 wires	1 x 18	3	0.15	Glass	775	565	12.4
XFR140VEM-0G000	3 wires	1 x 36	3	0.20	Glass	1390	1170	16.6
XFR165VEM-0G000	3 wires	1 x 58	3	0.25	Glass	1690	1475	18
XFF220VEM-0G000	3 wires	2 x 18	3	0.30	Glass	775	565	12.4
XFF240VEM-0G000	3 wires	2 x 36	3	0.40	Glass	1390	1170	16.6
XFF265VEM-0G000	3 wires	2 x 58	3	0.50	Glass	1690	1475	18

Electrical Features

Lamps Fluorescent Lamp (order separately) T8 bi-pin tube, lampholder G13, diameter 26mm - white industry 4000°K Compact PL lamp, lampholder G11.	Power factor 0.98.	Wiring Configuration 3 wires	Colour of casting (standard) ● XF****-0G000 - Yellow offshore, RAL 1003 Colour options: ● XF****-BG000 - Grey, RAL 7035 ● XF****-CG000 - Black, RAL 9004 ● XF****-DG000 - Hammered Blue, RAL 5015 ● XF****-FG000 - Red, RAL 3001 ● XF****-GG000 - Blue, RAL 5010 ● XF****-JG000 - Green, RAL 6032 ○ XF****-MG000 - White, RAL 9010
Photometric curve See page 6/3	Battery NiCd 7,2V Lumen output in emergency mode (1 lamp lit) 2 hours: 40% for XFR120, XFF220, 33% for XFR140, XFF240, 10% for XFR165, XFF265 3 hours: 24% for XFR120, XFF220, 18% for XFR140, XFF240, 8% for XFR165, XFF265 Monitored by one LED	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)	Fixing (included) D023 -2x zinc plated steel articulated brackets for ceiling mounting
Rated voltages Electronic ballast: 220-240Vac/Vdc 50/60Hz	Terminal block (screws plug in terminal block) Up to 10mm² (rigid wire), 6mm² (flexible wire) Terminals supplied L1, 2, N, PE (looping possible with one additional cable gland).	Casting Marine grade aluminium alloy according to standard: EN 1706: EN AC-AISI12 (Fe) DF or EN AC-AISI 10Mg(A) DF UV protected extruded polycarbonate tube, thickness 2,5mm or borosilicate glass thickness 7mm	

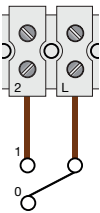
Emergency function diagrams

Wiring provided by DTS - Maintained Mode



Mains Supply	Tube	Battery
ON	Lit	Charged
OFF	Only emergency tube lit	Discharged

Switch between L/2 - Non Maintained Mode *



Mains Supply	Tube	Battery
ON	OFF	Charged
OFF	Only emergency tube lit	Discharged

* This table corresponds to the position 0 "open".
If the switch is on position 1 "close", refer to the table on the left

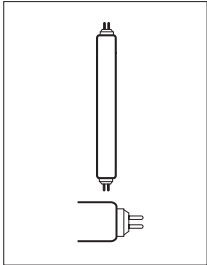
Tubular fittings

Accessories

XFF - Zones 1, 2 & 21, 22

Lamps

2

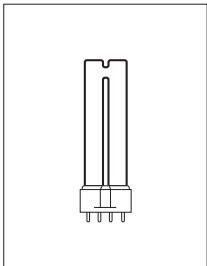


Bi-pin T8 fluorescent lamps

Specifications:

G13 - ø 26mm
Colour temperature: White industry 4000°K
CRI: > 80
lm/W: 65 to 93
Average operating life: 12,000 hours

Type	Power W	Lumen output lm	Lampholder
TL18W	18	1250	G13
TL36W	36	3350	G13
TL58W	58	5200	G13



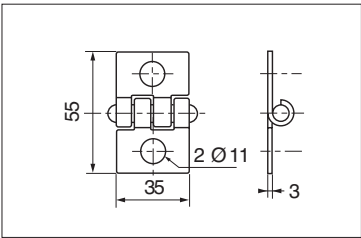
Compact fluorescent lamps

Specifications:

G11
Colour temperature: White industry 4000°K
CRI: > 80
lm/W: 57 to 87
Average operating life: 20,000 hours

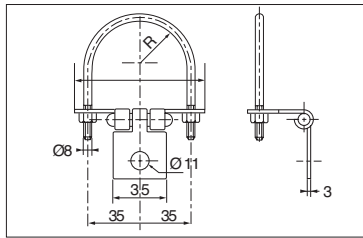
Type	Power W	Lumen output lm	Lampholder
PL18W	18	1200	G11
PL36W	36	2900	G11
PL55W	55	4800	G11

Brackets



Hinged bracket

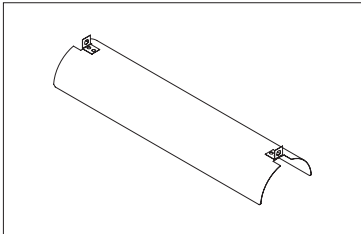
Type	Specifications
D023	2x zinc plated steel articulated brackets for ceiling mounting (included with product)
D024	2x stainless steel 304L articulated brackets for ceiling mounting



U-bolt for pole mounting

Type	Specifications
D025	2x U-bolt and 2 x 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 2 x 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	2x U-bolts and 2x stainless steel brackets (304L) for pole mounted 2"

Accessories



Shock proof kit

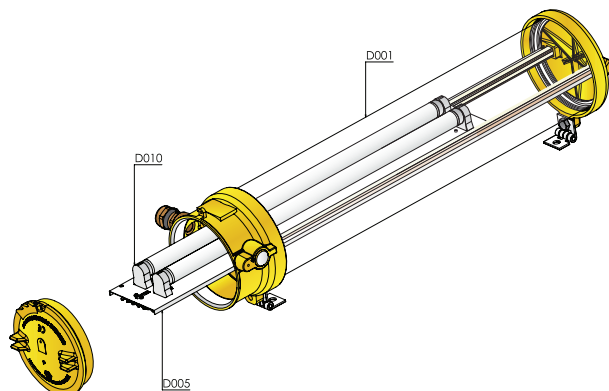
Type	Specifications
D034	Stainless steel 304L canopy and shock proof kit for XFR120, XFF220
D035	Stainless steel 304L canopy and shock proof kit for XFR140, XFF240
D036	Stainless steel 304L canopy and shock proof kit for XFR165, XFF265

Tubular fittings

Spare parts

XFF - Zones 1, 2 & 21, 22

2



Spare parts

Type	Specifications
D00120WC	Sealed polycarbonate tube, cover, gasket, chain and slides - Offshore grade yellow paint RAL 1003 - XFF220, XFR120, XFR136, XFF236
D00140WC	Sealed polycarbonate tube, cover, gasket, chain and slides - Offshore grade yellow paint RAL 1003 - XFF240, XFR140, XFF255, XFR155
D00165WC	Sealed polycarbonate tube, cover, gasket, chain and slides - Offshore grade yellow paint RAL 1003 - XFF265, XFR165
D001V20WC	Sealed glass tube, cover, gasket, chain and slides - Offshore grade yellow paint RAL 1003 - XFF220, XFR120, XFR136, XFF236
D001V40WC	Sealed glass tube, cover, gasket, chain and slides - Offshore grade yellow paint RAL 1003 - XFF240, XFR140, XFF255, XFR155
D001V65WC	Sealed glass tube, cover, gasket, chain and slides - Offshore grade yellow paint RAL 1003 - XFF265, XFR165
D003	Gasket
D0051X20WE	Gear tray with electronic ballast 110-260Vac/Vdc, 50-60 Hz for XFR120
D0051X20WEM	Emergency Gear tray with electronic ballast 220-240Vac/Vdc, 50-60 Hz for XFR120EM
D0051X36WE	Gear tray with electronic ballast 110-260Vac/Vdc, 50-60 Hz for XFR136
D0051X40WE	Gear tray with electronic ballast 110-260Vac/Vdc, 50-60 Hz for XFR140
D0051X40WEM	Emergency Gear tray with electronic ballast 220-240Vac/Vdc, 50-60 Hz for XFR140EM
D0051X55WE	Gear tray with electronic ballast 110-260Vac/Vdc, 50-60 Hz for XFR155
D0051X65WE	Gear tray with electronic ballast 110-260Vac/Vdc, 50-60 Hz for XFR165
D0051X65WEM	Emergency Gear tray with electronic ballast 220-240Vac/Vdc, 50-60 Hz for XFR165EM
D0052X20WE	Gear tray with electronic ballast 110-260Vac/Vdc, 50-60 Hz for XFF220
D0052X20WEM	Emergency Gear tray with electronic ballast 220-240Vac/Vdc, 50-60 Hz for XFF220EM
D0052X36WE	Gear tray with electronic ballast 110-260Vac/Vdc, 50-60 Hz for XFF236
D0052X40WE	Gear tray with electronic ballast 110-260Vac/Vdc, 50-60 Hz for XFF240
D0052X40WEM	Emergency Gear tray with electronic ballast 220-240Vac/Vdc, 50-60 Hz for XFF240EM
D0052X55WE	Gear tray with electronic ballast 110-260Vac/Vdc, 50-60 Hz for XFF255
D0052X65WE	Gear tray with electronic ballast 110-260Vac/Vdc, 50-60 Hz for XFF265
D0052X65WEM	Emergency Gear tray with electronic ballast 220-240Vac/Vdc, 50-60 Hz for XFF265EM
D010	Lampholder for T8 lamp
D010PL	Lampholder for PL lamp
D016	Battery pack for XFF EM
4GRA00002S	Grease
EXN05ASC3-01	Kit 3/4 NPT Exd Exe IIC Ex-td nickel plated cable gland for non armoured cable diameter 6,0-12,0mm



Tubular LED fitting with automatic switch off
XFPL - Zones 1, 2 & 21, 22



Features

- Operating life 100,000 h (according items)
- High lumen output - 5000 lumens with 100% yield (according items) - LED module with diffuser
- Quick and easy insulation switch for safe maintenance
- Ex e integral junction box
- All components mounted on sliding gear tray for easy installation and maintenance
- Possibility to retro-fit LED gear tray into existing fixtures mounted with T8 lamps
- Available in polycarbonate or in glass
- Including accessories (cable gland, plug & fixing brackets)
- Supplied with offshore grade paint

Specifications

- Manufactured from marine grade aluminium alloy copper free
- UV protected polycarbonate tube - thickness 2,5mm or borosilicate glass - thickness 7mm
- Rated voltage 100- 254Vac 50/60Hz
- Wiring configuration: 3 wires
- 1xEntry M20



Certifications



Standards

Approved to:	EN60079-0, 60079-1, 60079-31, 60079-7
EC Type examination certificate to:	<p>Directive 94/9/EC</p> <p>INERIS 13 ATEX 0051X</p> <p>Ex II 2 G</p> <p>Ex de IIC T6 Gb for -20°C to + 55°C</p> <p>Ex de IIB T6 Gb for -20°C to + 55°C</p> <p>(for XFPL140V, XFPL240V, XFPL165V and XFPL265V)</p> <p>Ex II 2 D</p> <p>Ex tb IIIC T 70°C Db IP66 for -20°C to + 55°C</p> <p>(for XFPL120, XFPL120V, XFPL140, XFPL140V, XFPL220, XFPL220V)</p> <p>Ex tb IIIC T80°C Db IP66 for -20°C to + 55°C</p> <p>(for XFPL165, XFPL165V, XFPL240, XFPL240V, XFPL265, XFPL265V)</p>
Glow wire test:	960°C EN60598-2-22
Safe operating temperature range:	-20°C to +55°C
IP test:	IP66 IEC 60529 (2001)
Impact protection index:	IK09 (poly) IK07 (glass) according to IEC 62262

Tubular fittings

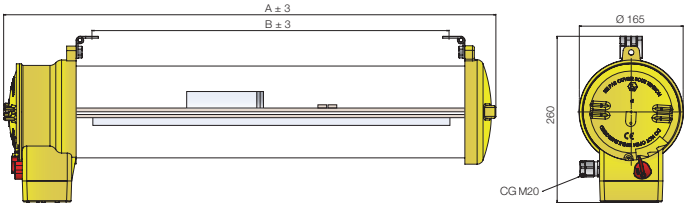
Tubular LED fitting with automatic switch off

XFPL - Zones 1, 2 & 21, 22

2



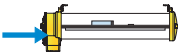
XFPL



Dimensional drawing

Technical specifications

Type	Wiring Configuration	Rating W	Current A 230V	Lumen Output lm	Operating life at 25°C h	Diffuser	External dimensions mm		Weight kg
							A	B	



3 wires: Polycarbonate Diffuser Equipped with 1 cable gland & 1 plug

XFPL120-00000	3 wires	1 x 12	0.07	1194	100,000	Polycarbonate	775	565	5.40
XFPL140-00000	3 wires	1 x 25	0.12	2353	90,000	Polycarbonate	1390	1170	8.20
XFPL165-00000	3 wires	1 x 31	0.16	2450	80,000	Polycarbonate	1690	1475	9.40
XFPL220-00000	3 wires	1 x 19	0.10	1613	80,000	Polycarbonate	775	565	5.40
XFPL240-00000	3 wires	1 x 56	0.27	4257	70,000	Polycarbonate	1390	1170	8.20
XFPL265-00000	3 wires	1 x 71	0.34	5076	70,000	Polycarbonate	1690	1475	9.40

3 wires: Glass Diffuser Equipped with 1 cable gland & 1 plug

XFPL120V-00000	3 wires	1 x 12	0.07	1194	100,000	Glass	775	565	8.60
XFPL140V-00000	3 wires	1 x 25	0.12	2353	90,000	Glass	1390	1170	13.10
XFPL165V-00000	3 wires	1 x 31	0.16	2450	80,000	Glass	1690	1475	17.40
XFPL220V-00000	3 wires	1 x 19	0.10	1613	80,000	Glass	775	565	8.60
XFPL240V-00000	3 wires	1 x 56	0.27	4257	70,000	Glass	1390	1170	13.10
XFPL265V-00000	3 wires	1 x 71	0.34	5076	70,000	Glass	1690	1475	17.40

Technical information

LED installed

Set of LED modules with integrated diffuser
Color temperature 4000°K
L70/B10 at 25°C (70% lumen output/ 90% active LED) according to operating life.

Photometric curve

See page 6/3

Rated voltages

Electronic driver: 100- 254Vac 50/60Hz.

Power factor

0.9.

Terminal block (screws plug in terminal block)

6mm²(rigid wire), 4mm² (flexible wire)
Terminals supplied L, N, PE

Wiring Configuration

3 wires

Cable entries

One entry M20
Included: One M20 nickel plated brass cable gland for non armoured cable, diameter 10-16mm (EXN04MLC2)

Casting

Marine grade aluminium alloy according to standard: EN 1706: EN AC-AISi12 (Fe) DF or EN AC-AISi 10Mg(A) DF
UV protected extruded polycarbonate tube, thickness 2,5mm or borosilicate glass thickness 7mm

Colour of casting (standard)

- XF****-00000 - Yellow offshore, RAL 1003
- Colour options:
- XF****-B0000 - Grey, RAL 7035
- XF****-C0000 - Black, RAL 9004
- XF****-D0000 - Hammered Blue, RAL 5015
- XF****-F0000 - Red, RAL 3001
- XF****-G0000 - Blue, RAL 5010
- XF****-J0000 - Green, RAL 6032
- XF****-M0000 - White, RAL 9010

Fixing (included)

D023 -2x zinc plated steel articulated brackets for ceiling mounting (included with product)

Tubular fittings

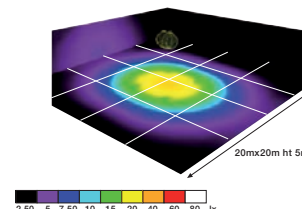
From a fluorescent fitting to a LED fitting XFPL - Zones 1, 2 & 21, 22

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.

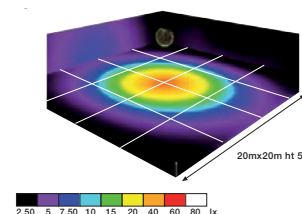
T8 fluorescent lamp - XFP240-0G000 3D view

- Lumen output (Light fitting): 3546lm
- Lumen output (Lamp): 6700lm
- Yield: 52%
- Rating per light fitting: 73,5W
- Light Source: 2xL36W/840 OSRAM Lumilux
- CoolWhite (corrector factor 1,00)



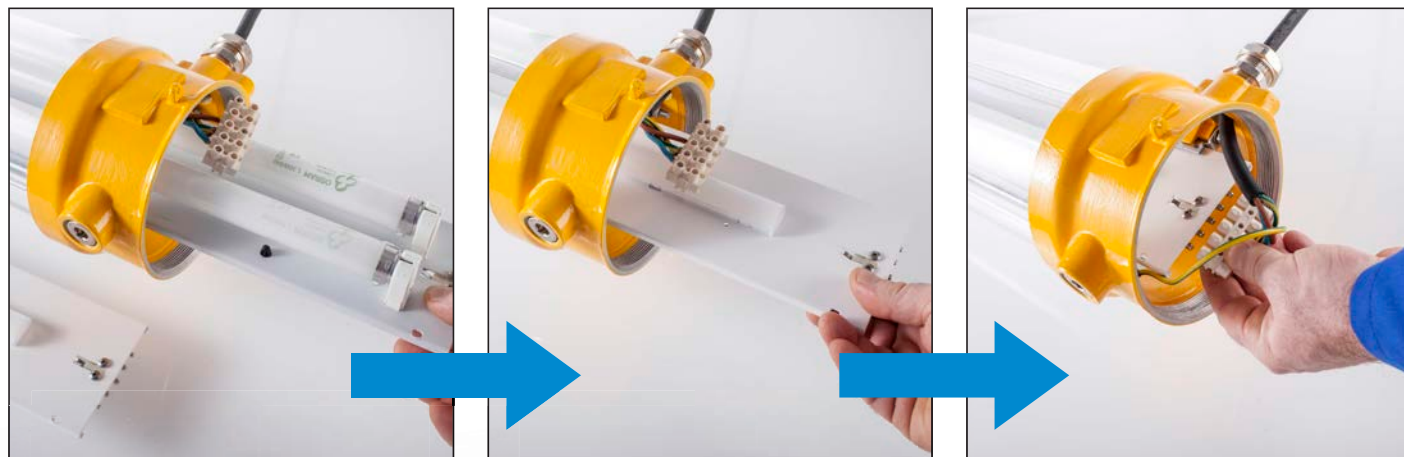
LED module - XFPL240-00000 3D view

- Lumen output (Light fitting): 4188lm
- Lumen output (Lamp): 4257lm
- 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).

Spare parts to upgrade from a “fluorescent” to a “LED” fitting - LED gear tray with driver 100-254Vac 50/60Hz:

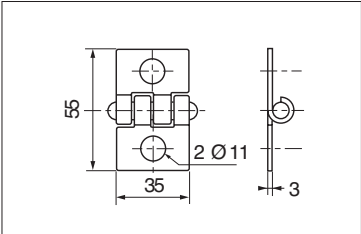
- D0051X20WEL - To upgrade XFP120 to XFPL120
- D0051X40WEL - To upgrade XFP140 to XFPL140
- D0051X65WEL - To upgrade XFP165 to XFPL165
- D0052X20WEL - To upgrade XFP220 to XFPL220
- D0052X40WEL - To upgrade XFP240 to XFPL240
- D0052X65WEL - To upgrade XFP265 to XFPL265

Tubular fittings

Accessories

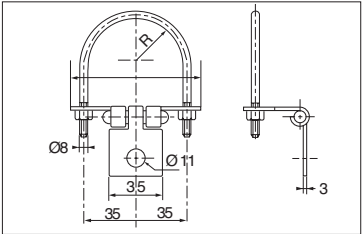
XFPL - Zones 1, 2 & 21, 22

Brackets



Hinged bracket

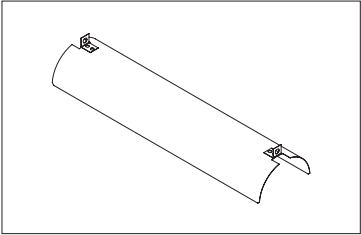
Type	Specifications
D023	2x zinc plated steel articulated brackets for ceiling mounting (included with product)
D024	2x stainless steel 304L articulated brackets for ceiling mounting



U-bolt for pole mounting

Type	Specifications
D025	2x U-bolt and 2 x 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	2x U-bolts and 2x stainless steel brackets (304L) for pole mounted 2"

Accessories



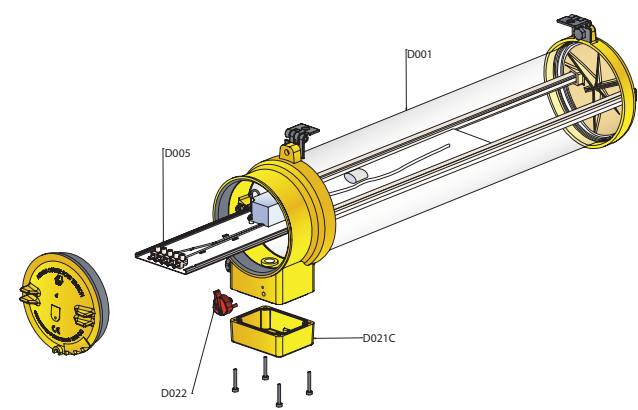
Shock proof kit

Type	Specifications
D034	Stainless steel 304L canopy & shock proof kit for XFPL120, XFPL220
D035	Stainless steel 304L canopy and shock proof kit for XFPL140, XFPL240
D036	Stainless steel 304L canopy and shock proof kit for XFPL165, XFPL265

Tubular fittings

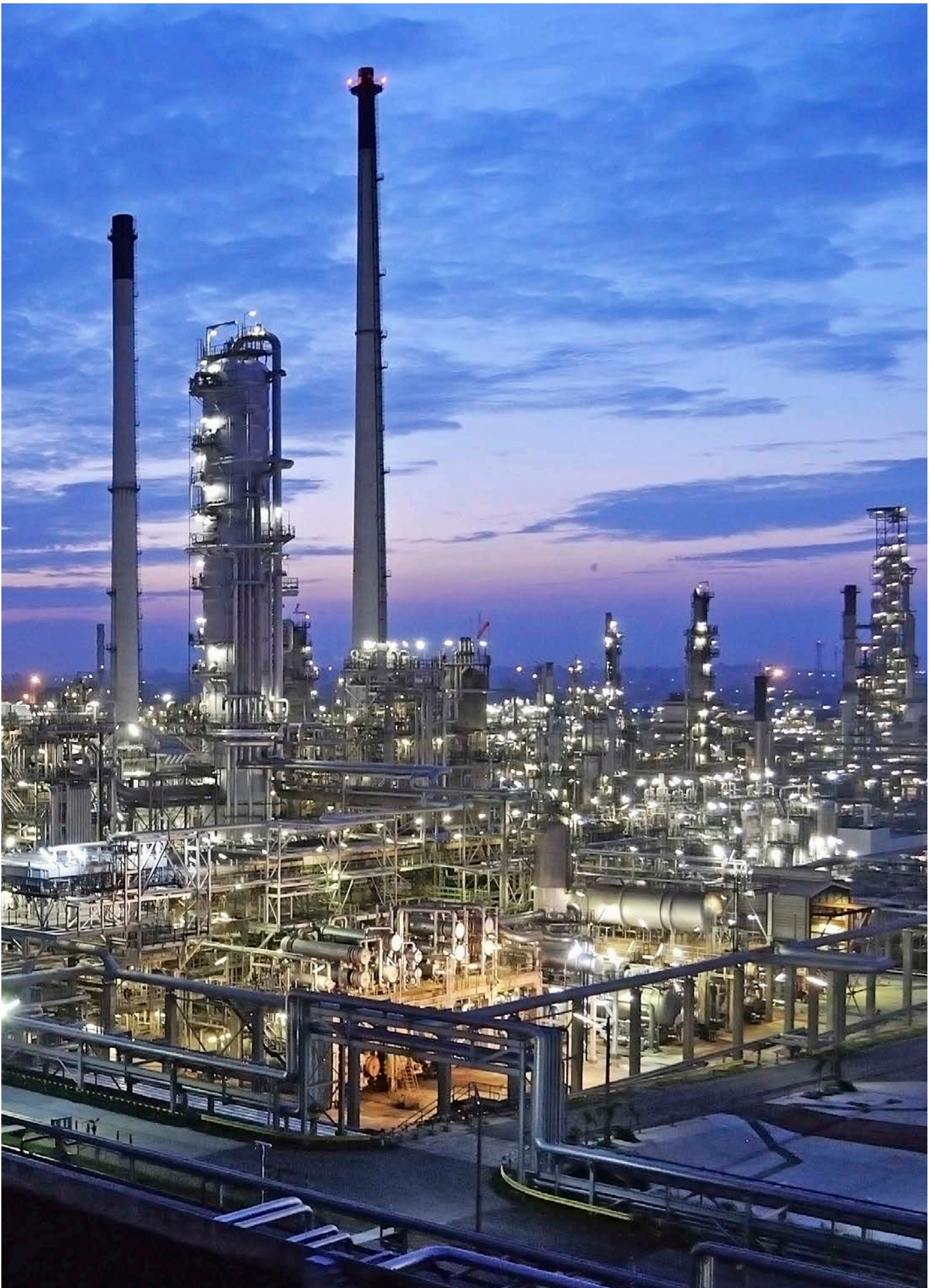
Spare parts

XFPL - Zones 1, 2 & 21, 22



Spare parts

Type	Specifications
D001P20WC	Sealed polycarbonate tube, cover, gasket, chain and slides - Offshore grade yellow paint RAL 1003 - XFPL220, XFPL120
D001P40WC	Sealed polycarbonate tube, cover, gasket, chain and slides - Offshore grade yellow paint RAL 1003 - XFPL240, XFPL140
D001P65WC	Sealed polycarbonate tube, cover, gasket, chain and slides- Offshore grade yellow paint RAL 1003 - XFPL265, XFPL165
D001PV20WC	Sealed glass tube, cover, gasket, chain and slides- Offshore grade yellow paint RAL 1003 - XFPL220, XFPL120
D001PV40WC	Sealed glass tube, cover, gasket, chain and slides- Offshore grade yellow paint RAL 1003 - XFPL240, XFPL140
D001PV65WC	Sealed glass tube, cover, gasket, chain and slides - Offshore grade yellow paint RAL 1003 - XFPL265, XFPL165
D0051X20WEL	LED replacement gear tray with universal electronic driver and LED included 100-254Vac, 50-60 Hz for XFPL120
D0051X40WEL	LED replacement gear tray with universal electronic driver and LED included 100-254Vac, 50-60 Hz for XFPL140
D0051X65WEL	LED replacement gear tray with universal electronic driver and LED included 100-254Vac, 50-60 Hz for XFPL165
D0052X20WEL	LED replacement gear tray with universal electronic driver and LED included 100-254Vac, 50-60 Hz for XFPL220
D0052X40WEL	LED replacement gear tray with universal electronic driver and LED included 100-254Vac, 50-60 Hz for XFPL240
D0052X65WEL	LED replacement gear tray with universal electronic driver and LED included 100-254Vac, 50-60 Hz for XFPL265
D021C	Cover, gasket, screw, terminals, switch and interlock of jonction box
D022	Interlock
D03	Gasket
4GRA00002S	Grease
EXN04MLC2-01	Kit M20 Exd Exe IIC Ex-td nickel plated cable gland for non armoured cable diameter 10,0-16,0mm, locknut, sealing gasket
EXN04MMC1-01	Kit M20 Ex-d IIC Ex-e II Ex-td double nickel plated cable gland for armoured cable diameter inner 6-12 outer 8,5-16, locknut, sealing gasket



Tubular fittings

Tubular fluorescent fitting with automatic switch off

XFP - Zones 1, 2 & 21, 22



- Features**
- Quick and easy insulation switch for safe maintenance
 - Ex e integral junction box
 - All components mounted on sliding gear tray for easy installation and maintenance
 - Standard components used inside body allowing reduced maintenance costs
 - Available in polycarbonate (light, high impact resistant) or in glass (specific chemical environment & paint shop)
 - Including accessories (cable gland, plug & fixing brackets)
 - Supplied with offshore grade paint

- Specifications**
- Manufactured from marine grade aluminium alloy copper free
 - UV protected polycarbonate tube - thickness 2,5mm or borosilicate glass - thickness 7mm
 - Rated voltage 110- 260Vac/Vdc 50/60Hz
 - Wiring configuration: 3 wires
 - 1xEntry M20
 - Emergency version (Type: “EM” version 3h battery duration)



Certifications

Exde

Extb

G IIB

G IIC

D IIIC

GROUP II

ZONE 1

ZONE 2

ZONE 21

ZONE 22

IP 66

IK 07

IK 09

Standards	
Approved to:	EN60079-0, 60079-1, 60079-7, 60079-31
EC Type examination certificate to:	Directive 94/9/EC INERIS 11 ATEX 0052X Ex II 2 G Ex de IIC T6 Gb for -20°C to + 55°C (XFP120, XFP136, XFP140, XFP155, XFP165, XFP220, XFP236, XFP240, XFP255, XFP265) Ex de IIC T6 Gb for -20°C to + 55°C (XFP120V, XFP220V, XFP136V, XFP236V, XFP155V, XFP255V) Ex de IIB T6 Gb for -20°C to + 55°C (XFP140V, XFP165V, XFP240V and XFP265V) Ex II 2 D Ex tb IIIC T80°C Db IP66 for -20°C to + 55°C
Glow wire test:	960°C EN60598-2-22
Safe operating temperature range:	-20°C to +55°C XFP, -10°C to +50°C XFP EM
IP test:	IP66 IEC 60529 (2001)
Impact protection index:	IK09 (poly) IK07 (glass) according to IEC 62262

Tubular fittings

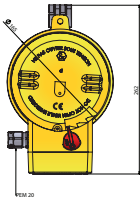
Tubular fluorescent fitting with automatic switch off

XFP - Zones 1, 2 & 21, 22

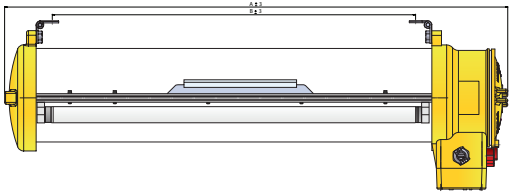
2



XFP

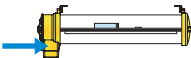


Dimensional drawing



Technical specifications

Type	Wiring Configuration	Rating W	Current A 230V	Diffuser	External dimensions mm		Weight kg
					A	B	



3 wires: Polycarbonate Diffuser Equipped with 1 cable gland & 1 plug

XFP120-0G000	3 wires	1 x 18	0.15	Polycarbonate	775	565	6.2
XFP136-0G000	3 wires	1 x PL36	0.2	Polycarbonate	775	565	6.2
XFP140-0G000	3 wires	1 x 36	0.2	Polycarbonate	1390	1170	9.4
XFP155-0G000 *	3 wires	1 x PL55	0.25	Polycarbonate	1390	1170	9.4
XFP165-0G000	3 wires	1 x 58	0.35	Polycarbonate	1690	1475	10.6
XFP220-0G000	3 wires	2 x 18	0.3	Polycarbonate	775	565	6.2
XFP236-0G000	3 wires	2 x PL36	0.4	Polycarbonate	775	565	6.2
XFP240-0G000	3 wires	2 x 36	0.4	Polycarbonate	1390	1170	9.4
XFP255-0G000 *	3 wires	2 x PL55	0.5	Polycarbonate	1390	1170	9.4
XFP265-0G000	3 wires	2 x 58	0.5	Polycarbonate	1690	1475	10.6

3 wires: Glass Diffuser Equipped with 1 cable gland & 1 plug

XFP120V-0G000	3 wires	1 x 18	0.15	Glass	775	565	10.7
XFP136V-0G000	3 wires	1 x PL36	0.2	Glass	775	565	10.7
XFP140V-0G000	3 wires	1 x 36	0.2	Glass	1390	1170	15.6
XFP155V-0G000*	3 wires	1 x PL55	0.25	Glass	1390	1170	15.6
XFP165V-0G000	3 wires	1 x 58	0.35	Glass	1690	1475	19.2
XFP220V-0G000	3 wires	2 x 18	0.3	Glass	775	565	10.7
XFP236V-0G000	3 wires	2 x PL36	0.4	Glass	775	565	10.7
XFP240V-0G000	3 wires	2 x 36	0.4	Glass	1390	1170	15.6
XFP255V-0G000*	3 wires	2 x PL55	0.5	Glass	1390	1170	15.6
XFP265V-0G000	3 wires	2 x 58	0.5	Glass	1690	1475	19.2

* T5 for gas or T95°C for dust when supply is 240Vac

Technical information

Lamps Fluorescent Lamp (order separately) T8 bi-pin tube, lampholder G13, diameter 26mm - white industry 4000°K Compact PL lamp, lampholder G11.	Power factor 0.98.	Casting Marine grade aluminium alloy according to standard: EN 1706: EN AC-AISi12 (Fe) DF or EN AC-AISi 10Mg(A) DF UV protected extruded polycarbonate tube, thickness 2,5mm or borosilicate glass thickness 7mm	Fixing (included) D023 - 2x zinc plated steel articulated brackets for ceiling mounting (included with product)
Photometric curve See page 6/3	Terminal block (screws plug in terminal block) 6mm²(rigid wire), 4mm² (flexible wire) Terminals supplied L, N, PE	Colour of casting (standard) ● XFP****-0G000 - Yellow offshore, RAL 1003 Colour options: ● XFP****-BG000 - Grey, RAL 7035 ● XFP****-CG000 - Black, RAL 9004 ● XFP****-DG000 - Hammered Blue, RAL 5015 ● XFP****-FG000 - Red, RAL 3001 ● XFP****-GG000 - Blue, RAL 5010 ● XFP****-JG000 - Green, RAL 6032 ○ XFP****-MG000 - White, RAL 9010	
Rated voltages Electronic ballast: 110- 260Vac/Vdc, 50- 60Hz.	Wiring Configuration 3 wires		
	Cable entries One entry M20 Included: One M20 nickel plated brass cable gland for non armoured cable, diameter 10- 16mm (EXN04MLC2)		

Tubular fittings

Emergency tubular fluorescent fitting with automatic switch off - 3h XFP EM - Zones 1, 2 & 21, 22

Technical specifications

Type	Wiring Configuration	Rating W	Battery h	Current A 230V	Diffuser	External dimensions mm		Weight kg
						A	B	
3 wires: Polycarbonate Diffuser Equipped with 1 cable gland & 1 plug								
XFP120EM-0G000	3 wires	1 x 18	3h	0.15	Polycarbonate	775	565	7.8
XFP140EM-0G000	3 wires	1 x 36	3h	0.2	Polycarbonate	1390	1170	11
XFP165EM-0G000	3 wires	1 x 58	3h	0.35	Polycarbonate	1690	1475	10.6
XFP220EM-0G000	3 wires	2 x 18	3h	0.3	Polycarbonate	775	565	7.8
XFP240EM-0G000	3 wires	2 x 36	3h	0.4	Polycarbonate	1390	1170	11
XFP265EM-0G000	3 wires	2 x 58	3h	0.5	Polycarbonate	1690	1475	10.6

3 wires: Glass Diffuser Equipped with 1 cable gland & 1 plug

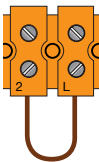
XFP120VEM-0G000	3 wires	1 x 18	3h	0.15	Glass	775	565	13
XFP140VEM-0G000	3 wires	1 x 36	3h	0.2	Glass	1390	1170	17.4
XFP165VEM-0G000	3 wires	1 x 58	3h	0.35	Glass	1690	1475	18.6
XFP220VEM-0G000	3 wires	2 x 18	3h	0.3	Glass	775	565	13
XFP240VEM-0G000	3 wires	2 x 36	3h	0.4	Glass	1390	1170	17.4
XFP265VEM-0G000	3 wires	2 x 58	3h	0.5	Glass	1690	1475	18.6

Electrical Features

Lamps Fluorescent Lamp (order separately) T8 bi-pin tube, lampholder G13, diameter 26mm - white industry 4000°K Compact PL lamp, lampholder G11.	Power factor 0.98.	Wiring Configuration 3 wires	Colour of casting (standard) ● XFP****-0G000 - Yellow offshore, RAL 1003 Colour options: ● XFP****-BG000 - Grey, RAL 7035 ● XFP****-CG000 - Black, RAL 9004 ● XFP****-DG000 - Hammered Blue, RAL 5015 ● XFP****-FG000 - Red, RAL 3001 ● XFP****-GG000 - Blue, RAL 5010 ● XFP****-JG000 - Green, RAL 6032 ○ XFP****-MG000 - White, RAL 9010
Photometric curve See page 6/3	Battery Battery NiCd 7,2V 4Ah in flameproof case (Ex"d") Lumen output in emergency mode (1 lamp lit) 2 hours: 40% for XFP120, XFP220, 33% for XFP140, XFP240, 10% for XFP165, XFP265 3 hours: 24% for XFP120, XFP220, 18% for XFP140, XFP240, 8% for XFP165, XFP265 Monitored by one LED	Cable entries One entry M20 Included: One M20 nickel plated brass cable gland for non armoured cable, diameter 10-16mm (EXN04MLC2)	Fixing (included) D023 - 2x zinc plated steel articulated brackets for ceiling mounting (included with product)
Rated voltages Electronic ballast: 220-240Vac/Vdc 50/60Hz	Terminal block (screws plug in terminal block) 6mm ² (rigid wire), 4mm ² (flexible wire) Terminals supplied L1, 2, N, PE.	Casting Marine grade aluminium alloy according to standard: EN 1706: EN AC-AISi12 (Fe) DF or EN AC-AISi 10Mg(A) DF UV protected extruded polycarbonate tube, thickness 2,5mm or borosilicate glass thickness 7mm	

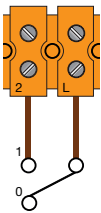
Emergency function diagrams

Wiring provided by DTS - Maintained Mode



Mains Supply	Tube	Battery
ON	Lit	Charged
OFF	Only emergency tube lit	Discharged

Switch between L/2 - Non Maintained Mode *



Mains Supply	Tube	Battery
ON	OFF	Charged
OFF	Only emergency tube lit	Discharged

* This table corresponds to the position 0 "open".
If the switch is on position 1 "close", refer to the table on the left

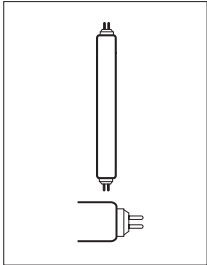
Tubular fittings

Accessories

XFP - Zones 1, 2 & 21, 22

Lamps

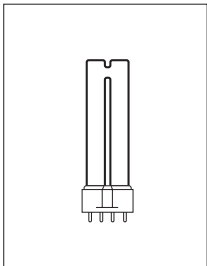
2



Bi-pin T8 fluorescent lamps

Specifications:

G13 - ø 26mm
Colour temperature: White industry 4000°K
CRI: > 80
lm/W: 65to 93
Average operating life: 12,000 hours



Compact fluorescent lamps

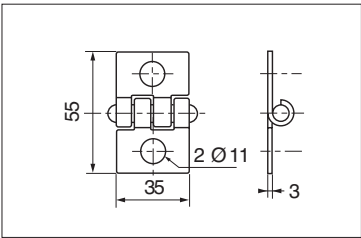
Specifications:

G11
Colour temperature: White industry 4000°K
CRI: > 80
lm/W: 57 to 87
Average operating life: 20,000 hours

Type	Power W	Lumen output lm	Lampholder
TL18W	18	1250	G13
TL36W	36	3350	G13
TL58W	58	5200	G13

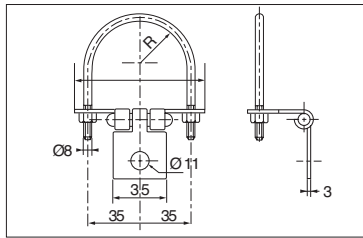
Type	Power W	Lumen output lm	Lampholder
PL18W	18	1200	G11
PL36W	36	2900	G11
PL55W	55	4800	G11

Brackets



Hinged bracket

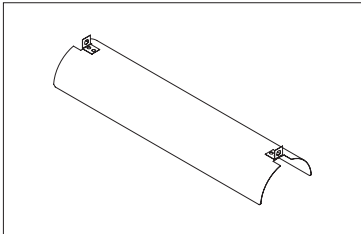
Type	Specifications
D023	2x zinc plated steel articulated brackets for ceiling mounting (included with product)
D024	2x stainless steel 304L articulated brackets for ceiling mounting



U-bolt for pole mounting

Type	Specifications
D025	2x U-bolt and 2 x 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	2x U-bolts and 2x stainless steel brackets (304L) for pole mounted 2"

Accessories



Shock proof kit

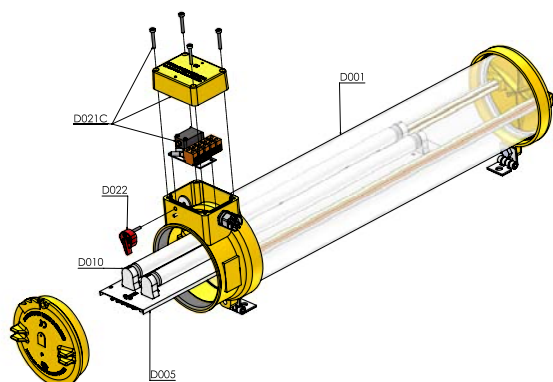
Type	Specifications
D034	Stainless steel 304L canopy and shock proof kit for XFP120, XFP220
D035	Stainless steel 304L canopy and shock proof kit for XFP140, XFP240
D036	Stainless steel 304L canopy and shock proof kit for XFP165, XFP265

Tubular fittings

Spare parts

XFP - Zones 1, 2 & 21, 22

2



Spare parts

Type	Specifications
D001P20WC	Sealed polycarbonate tube, cover, gasket, chain and slides - Offshore grade yellow paint RAL 1003 - XFP220, XFP120, XFP136, XFP236
D001P40WC	Sealed polycarbonate tube, cover, gasket, chain and slides - Offshore grade yellow paint RAL 1003 - XFP240, XFP140, XFP255, XFP155
D001P65WC	Sealed polycarbonate tube, cover, gasket, chain and slides- Offshore grade yellow paint RAL 1003 - XFP265, XFP165
D001PV20WC -	Sealed glass tube, cover, gasket, chain and slides- Offshore grade yellow paint RAL 1003 - XFP220, XFP120, XFP136, XFP236
D001PV40WC	Sealed glass tube, cover, gasket, chain and slides- Offshore grade yellow paint RAL 1003 - XFP240, XFP140, XFP255, XFP155
D001PV65WC	Sealed glass tube, cover, gasket, chain and slides - Offshore grade yellow paint RAL 1003 - XFP265, XFP165
D0051X20WE	Gear tray with electronic ballast 110-260V, 50-60 Hz for XFP120
D0051X20WEM	Emergency Gear tray with electronic ballast 220-240V, 50-60 Hz for XFP120EM
D0051X36WE	Gear tray with electronic ballast 110-260V, 50-60 Hz for XFP136
D0051X40WE	Gear tray with electronic ballast 110-260V, 50-60 Hz for XFP140
D0051X40WEM	Emergency Gear tray with electronic ballast 220-240V, 50-60 Hz for XFP140EM
D0051X55WE	Gear tray with electronic ballast 110-260V, 50-60 Hz for XFP155
D0051X65WE	Gear tray with electronic ballast 110-260V, 50-60 Hz for XFP165
D0051X65WEM	Emergency Gear tray with electronic ballast 220-240V, 50-60 Hz for XFP165EM
D0052X20WE	Gear tray with electronic ballast 110-260V, 50-60 Hz for XFP220
D0052X20WEM	Emergency Gear tray with electronic ballast 220-240V, 50-60 Hz for XFP220EM
D0052X36WE	Gear tray with electronic ballast 110-260V, 50-60 Hz for XFP236
D0052X40WE	Gear tray with electronic ballast 110-260V, 50-60 Hz for XFP240
D0052X40WEM	Emergency Gear tray with electronic ballast 220-240V, 50-60 Hz for XFP240EM
D0052X55WE	Gear tray with electronic ballast 110-260V, 50-60 Hz for XFP255
D0052X65WE	Gear tray with electronic ballast 110-260V, 50-60 Hz for XFP265
D0052X65WEM	Emergency Gear tray with electronic ballast 220-240V, 50-60 Hz for XFP265EM
D010	Lampholder for T8 lamp
D010PL	Lampholder for PL lamp
D016	Battery pack for XFF EM
D021C	Cover, gasket, screw, terminals, switch and interlock of jonction box
D022	Interlock
D003	Gasket
4GRA00002S	Grease
EXN04MLC2-01	Kit M20 Exd Exe IIC Ex-td nickel plated cable gland for non armoured cable diameter 10,0-16,0mm, locknut, sealing gasket
EXN04MMC1-01	Kit M20 Ex-d IIC Ex-e II Ex-td double compression nickel plated cable gland for armoured cable diameter inner 6-12 outer 8,5-16, locknut, sealing gasket



Tubular fittings

Weatherproof LED tubular fitting

FFL - Industrial application



Features

- Operating life 100,000 h (according items)
- High lumen output - 5000 lumens with 100% yield (according items) - LED module with diffuser
- All components mounted on sliding gear tray for easy installation and maintenance
- Possibility to retro-fit LED gear tray into existing fixtures mounted with T8 lamps
- Ingress protection IP66 ideal for wash down areas
- Tubular shape to avoid waste accumulation
- Including accessories (cable gland, plug & fixing brackets)

Specifications

- Reinforced polycarbonate black end caps
- UV protected polycarbonate tube - thickness 2,5mm
- Rated voltage 100- 254Vac 50-60Hz
- Wiring configuration: 5 wires
- 2xEntries M20

Certifications



Standards

Glow wire test:	960°C EN60598-2-22
Safe operating temperature range:	-20°C to +55°C
IP test:	IP66 IEC 60529 (2001)
Impact protection index:	IK09 according to IEC 62262

Tubular fittings

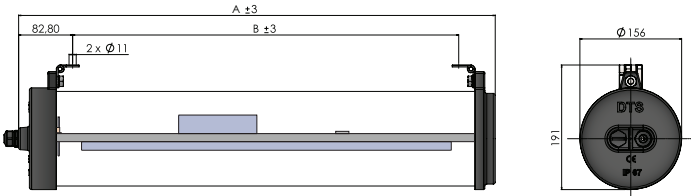
Weatherproof LED tubular fitting

FFL - Industrial application

2



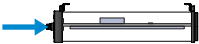
FFL



Dimensional drawing

Technical specifications

Type	Wiring Configuration	Rating W	Current A 230V	Lumen Output lm	Operating life at 25°C h	Diffuser	External dimensions mm		Weight kg
							A	B	



5 wires: Polycarbonate Diffuser Equipped with 1 cable gland & 1 plug

FRL120-00000	5 wires	1 x 12	0.07	1194	100,000	Polycarbonate	775	565	4.6
FRL140-00000	5 wires	1 x 25	0.12	2353	90,000	Polycarbonate	1390	1170	5.2
FRL165-00000	5 wires	1 x 31	0.16	2450	80,000	Polycarbonate	1690	1475	9.4
FFL220-00000	5 wires	1 x 19	0.10	1613	80,000	Polycarbonate	775	565	4.6
FFL240-00000	5 wires	1 x 56	0.27	4257	70,000	Polycarbonate	1390	1170	5.2
FFL265-00000	5 wires	1 x 71	0.34	5076	70,000	Polycarbonate	1690	1475	9.4

Technical information

LED installed

Set of LED modules with integrated diffuser
Color temperature 4000°K
L70/B10 at 25°C (70% lumen output/ 90% active LED) according to operating life.

Photometric curve

See page 6/3

Rated voltages

Electronic driver: 100 - 254Vac 50/60Hz.

Power factor

0.9.

Terminal block

(screws plug in terminal block)

10mm²(rigid wire), 6mm² (flexible wire)
Terminals supplied L1, L2, L3, N, PE (looping possible with one additional cable gland)

Wiring Configuration

5 wires

Cable entries

Two entries M20
Included: One M20 nylon plug (EX-M20) and one M20 nylon cable gland for non armoured cable, diameter 6-12mm (EXCGM20S)

Housing

Reinforced polycarbonate black end caps
UV protected extruded polycarbonate tube, thickness 2,5mm

Fixing (included)

D023 - 2x zinc plated steel articulated brackets for ceiling mounting (included with product)

Tubular fittings

From a fluorescent fitting to a LED fitting

FFL - Industrial application

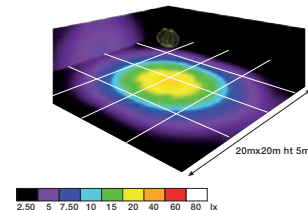
What are the LED benefits?

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.

2

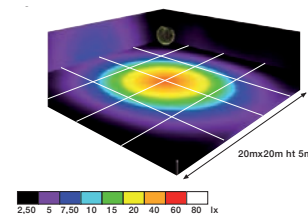
T8 fluorescent lamp - FF240-0G000 3D view

- Lumen output (Light fitting): 3546lm
- Lumen output (Lamp): 6700lm
- Yield: 52%
- Rating per light fitting: 73,5W
- Light Source: 2xL36W/840 OSRAM Lumilux
- CoolWhite (corrector factor 1,00)



LED module - FFL240-00000 3D view

- Lumen output (Light fitting): 4188lm
- Lumen output (Lamp): 4257lm
- 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).

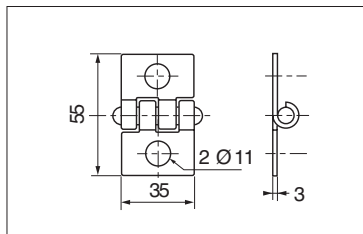
Spare parts to upgrade from a "fluorescent" to a "LED" fitting - LED gear tray with driver 100-254Vac 50/60Hz:

- D0051X20WEL - To upgrade FR120 to FRL120
- D0051X40WEL - To upgrade FR140 to FRL140
- D0051X65WEL - To upgrade FR165 to FRL165
- D0052X20WEL - To upgrade FF220 to FFL220
- D0052X40WEL - To upgrade FF240 to FFL240
- D0052X65WEL - To upgrade FF265 to FFL265

Tubular fittings
Accessories & spare parts
FFL - Industrial application

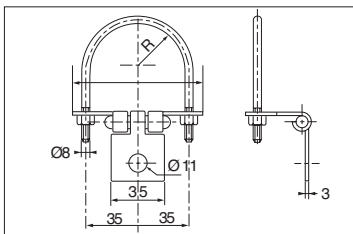
Brackets

2



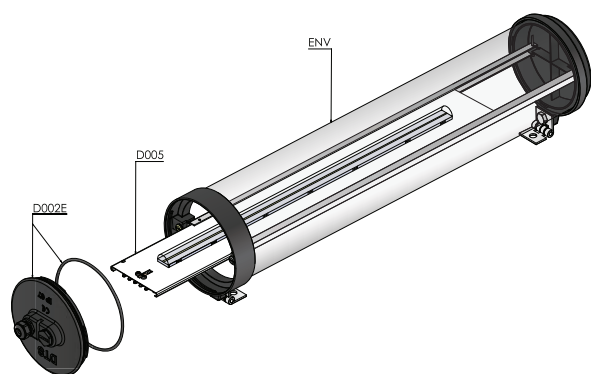
Hinged bracket

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 2 x 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	2x U-bolts and 2x stainless steel brackets (304L) for pole mounted 2"



Spare parts

Type	Specifications
ENV20WC	Sealed polycarbonate tube, cover, gasket, slides for FRL120, FFL220
ENV40WC	Sealed polycarbonate tube, cover, gasket, slides for FRL140, FFL240
ENV65WC	Sealed polycarbonate tube, cover, gasket, slides for FRL165, FFL265
D002E	Cover and gasket
4GRA00002S	Grease
D0051X20WEL	LED replacement gear tray with universal electronic driver and LED included 100-254Vac, 50-60 Hz for FRL120
D0051X40WEL	LED replacement gear tray with universal electronic driver and LED included 100-254Vac, 50-60 Hz for FRL140
D0051X65WEL	LED replacement gear tray with universal electronic driver and LED included 100-254Vac, 50-60 Hz for FRL165
D0052X20WEL	LED replacement gear tray with universal electronic driver and LED included 100-254Vac, 50-60 Hz for FFL220
D0052X40WEL	LED replacement gear tray with universal electronic driver and LED included 100-254Vac, 50-60 Hz for FFL240
D0052X65WEL	LED replacement gear tray with universal electronic driver and LED included 100-254Vac, 50-60 Hz for FFL265
EXCGM20S-01	Kit M20 Exe IIC nylon cable gland for non armoured cable diameter 6-12,0 and locknut
EXN04MMC1-01	Kit M20 Ex-d IIC Ex-e II Ex-td double compression nickel plated cable gland for armoured cable diameter inner 6-12 outer 8,5-16, locknut, sealing gasket

Tubular fittings

Weatherproof tubular fluorescent fitting

FF - Industrial application



Features

- Ingress protection IP66 ideal for wash down areas
- All components mounted on sliding gear tray for easy installation and maintenance
- Tubular shape to avoid waste accumulation
- Including accessories (cable gland, plug & fixing brackets)

Specifications

- Reinforced polycarbonate black end caps
- UV protected polycarbonate tube - thickness 2,5mm
- Rated voltage 110- 260Vac/Vdc 50/60Hz
- Wiring configuration: 5 wires
- 2xEntries M20
- Emergency version (Type: "EM" version 3h battery duration)

Certifications



Standards

Glow wire test:	960°C EN60598-2-22
Safe operating temperature range:	-20°C to +55°C FF
IP test:	IP66 IEC 60529 (2001)
Impact protection index:	IK09 according to IEC 62262

Tubular fittings

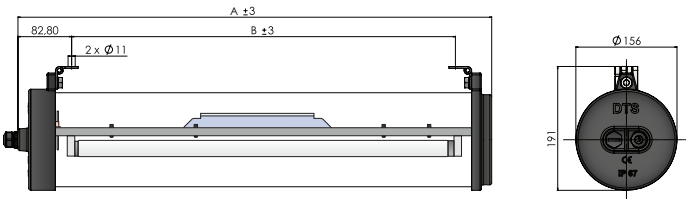
Weatherproof tubular fluorescent fitting

FF - Industrial application

2



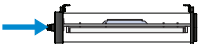
FF



Dimensional drawing

Technical specifications

Type	Wiring Configuration	Rating W	Current A 230V	Diffuser	External dimensions mm		Weight kg
					A	B	



5 wires: Polycarbonate Diffuser Equipped with 1 cable gland & 1 plug

FR120-OG000	5 wires	1 x 18	0.15	Polycarbonate	775	565	5.10
FR136-OG000	5 wires	1 x PL36	0.20	Polycarbonate	775	565	5.10
FR140-OG000	5 wires	1 x 36	0.20	Polycarbonate	1390	1170	6.81
FR155-OG000	5 wires	1 x PL55	0.25	Polycarbonate	1390	1170	6.81
FR165-OG000	5 wires	1 x 58	0.35	Polycarbonate	1690	1475	8.00
FF220-OG000	5 wires	2 x 18	0.30	Polycarbonate	775	565	5.10
FF236-OG000	5 wires	2 x PL36	0.40	Polycarbonate	775	565	5.10
FF240-OG000	5 wires	2 x 36	0.40	Polycarbonate	1390	1170	6.81
FF255-OG000	5 wires	2 x PL55	0.50	Polycarbonate	1390	1170	6.81
FF265-OG000	5 wires	2 x 58	0.50	Polycarbonate	1690	1475	8.00

Technical information

Lamps Fluorescent Lamp (order separately) T8 bi-pin tube, lampholder G13, diameter 26mm - white industry 4000°K Compact PL lamp, lampholder G11.	Power factor 0.98.	Cable entries Two entries M20 Included: One M20 nylon plug (EX-M20) and one M20 nylon cable gland for non armoured cable, diameter 6-12mm (EXCGM20S)	Fixing (included) D023 - 2x zinc plated steel articulated brackets for ceiling mounting (included with product)
Photometric curve See page 6/3	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)	Housing Reinforced polycarbonate black end caps UV protected extruded polycarbonate tube, thickness 2,5mm	
Rated voltages Electronic ballast: 110- 260Vac/Vdc, 50- 60Hz.	Wiring Configuration 5 wires		

Tubular fittings

Emergency weatherproof tubular fluorescent fitting - 3h

FF EM - Industrial application

Technical specifications

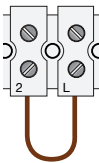
Type	Wiring Configuration	Rating W	Battery h	Current A 230V	Diffuser	External dimensions mm		Weight kg
						A	B	
3 wires: Polycarbonate Diffuser Equipped with 1 cable gland & 1 plug								
FR120EM-0G000	3 wires	1 x 18	3h	0.15	Polycarbonate	775	565	6.7
FR140EM-0G000	3 wires	1 x 36	3h	0.20	Polycarbonate	1390	1170	8.2
FR165EM-0G000	3 wires	1 x 58	3h	0.35	Polycarbonate	1690	1475	9.4
FF220EM-0G000	3 wires	2 x 18	3h	0.30	Polycarbonate	775	565	6.7
FF240EM-0G000	3 wires	2 x 36	3h	0.40	Polycarbonate	1390	1170	8.2
FF265EM-0G000	3 wires	2 x 58	3h	0.50	Polycarbonate	1690	1475	9.4

Electrical Features

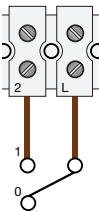
Lamps Fluorescent Lamp (order separately) T8 bi-pin tube, lampholder G13, diameter 26mm - white industry 4000°K Compact PL lamp, lampholder G11.	Power factor 0.98.	Wiring Configuration 3 wires	Fixing (included) D023 - 2x zinc plated steel articulated brackets for ceiling mounting (included with product)
Photometric curve See page 6/3	Battery Battery NiCd 7,2V 4Ah Lumen output in emergency mode (1 lamp lit) 2 hours: 40% for FR120, FF220, 33% for FR140, FF240, 10% for FR165, FF265 3 hours: 24% for FR120, FF220, 18% for FR140, FF240, 8% for FR165, FF265 Monitored by one LED	Cable entries Two entries M20 Included: One M20 nylon plug (EX-M20) and one M20 nylon cable gland for non armoured cable, diameter 6-12mm (EXCGM20S)	
Rated voltages Electronic ballast: 220-240Vac/Vdc 50/60Hz	Terminal block (plug in terminal block) 10mm²(rigid wire), 6mm² (flexible wire) Terminals supplied L1, 2, N, PE (looping possible with one additional cable gland)	Housing Reinforced polycarbonate black end caps UV protected extruded polycarbonate tube, thickness 2,5mm	

Emergency function diagrams

Wiring provided by DTS - Maintained Mode



Switch between L/2 - Non Maintained Mode *



Mains Supply	Tube	Battery
ON	Lit	Charged
OFF	Only emergency tube lit	Discharged

Mains Supply	Tube	Battery
ON	OFF	Charged
OFF	Only emergency tube lit	Discharged

* This table corresponds to the position 0 "open".
If the switch is on position 1 "close", refer to the table on the left

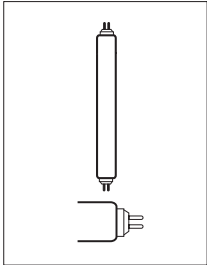
Tubular fittings

Accessories

FF - Industrial application

Lamps

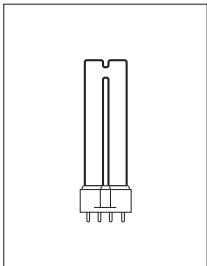
2



Bi-pin T8 fluorescent lamps

Specifications:

G13 - ø 26mm
Colour temperature: White industry 4000°K
CRI: > 80
lm/W: 65 to 93
Average operating life: 12,000 hours



Compact fluorescent lamps

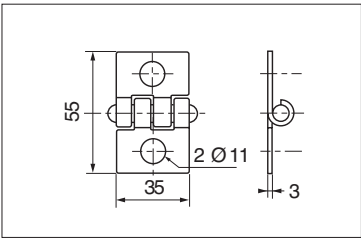
Specifications:

G11
Colour temperature: White industry 4000°K
CRI: > 80
lm/W: 57 to 87
Average operating life: 20,000 hours

Type	Power W	Lumen output lm	Lampholder
TL18W	18	1250	G13
TL36W	36	3350	G13
TL58W	58	5200	G13

Type	Power W	Lumen output lm	Lampholder
PL18W	18	1200	G11
PL36W	36	2900	G11
PL55W	55	4800	G11

Brackets



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



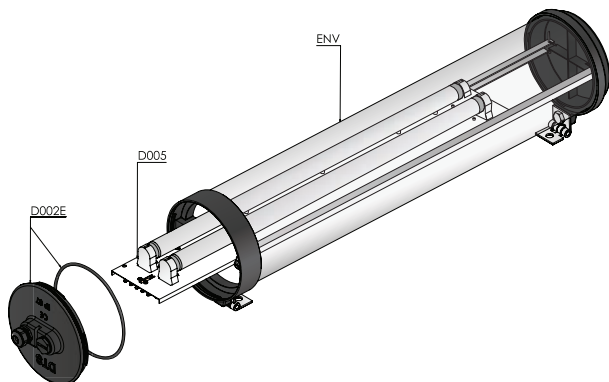
U-bolt for pole mounting

Type	Specifications
D025	2x U-bolt and 2 x 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	2x U-bolts and 2x stainless steel brackets (304L) for pole mounted 2"

Tubular fittings

Spare parts

FF - Industrial application



Spare parts

Type	Specifications
ENV20WC	Sealed polycarbonate tube, cover, gasket, slides for FR120, FF220, FR136, FF236
ENV40WC	Sealed polycarbonate tube, cover, gasket, slides for FR140, FF240, FR155, FF255
ENV65WC	Sealed polycarbonate tube, cover, gasket, slides for FR165, FF265
D002E	Cover and gasket
D0051X20WE	Gear tray with electronic ballast 110-260V, 50-60 Hz for FR120
D0051X20WEM	Emergency Gear tray with electronic ballast 220-240V, 50-60 Hz for FR120EM
D0051X36WE	Gear tray with electronic ballast 110-260V, 50-60 Hz for FR136
D0051X40WE	Gear tray with electronic ballast 110-260V, 50-60 Hz for FR140
D0051X40WEM	Emergency Gear tray with electronic ballast 220-240V, 50-60 Hz for FR140EM
D0051X55WE	Gear tray with electronic ballast 110-260V, 50-60 Hz for FR155
D0051X65WE	Gear tray with electronic ballast 110-260V, 50-60 Hz for FR165
D0051X65WEM	Emergency Gear tray with electronic ballast 220-240V, 50-60 Hz for FR165EM
D0052X20WE	Gear tray with electronic ballast 110-260V, 50-60 Hz for FF220
D0052X20WEM	Emergency Gear tray with electronic ballast 220-240V, 50-60 Hz for FF220EM
D0052X36WE	Gear tray with electronic ballast 110-260V, 50-60 Hz for FF236
D0052X40WE	Gear tray with electronic ballast 110-260V, 50-60 Hz for FF240
D0052X40WEM	Emergency Gear tray with electronic ballast 220-240V, 50-60 Hz for FF240EM
D0052X55WE	Gear tray with electronic ballast 110-260V, 50-60 Hz for FF255
D0052X65WE	Gear tray with electronic ballast 110-260V, 50-60 Hz for FF265
D0052X65WEM	Emergency Gear tray with electronic ballast 220-240V, 50-60 Hz for FF265EM
D010	Lampholder for T8 lamp
D010PL	Lampholder for PL lamp
4GRA00002S	Grease
EXCGM20S-01	Kit M20 Exe IIC nylon cable gland for non armoured cable diameter 6-12,0 and locknut
EXN04MMC1-01	Kit M20 Ex-d IIC Ex-e II Ex-td double compression nickel plated cable gland for armoured cable diameter inner 6-12 outer 8,5-16, locknut, sealing gasket



Miniature tubular fittings

Miniature tubular fluorescent fitting

XEL - Zones 1, 2 & 21, 22



Features

- All components mounted on sliding gear tray for easy installation and maintenance
- Standard components used inside body allowing reduced maintenance costs
- Available in polycarbonate (light, high impact resistant) or in glass (specific chemical environment & paint shop)
- Including accessories (cable gland, plug & fixing brackets)
- Supplied with offshore grade paint

Specifications

- Manufactured from marine grade aluminium alloy copper free
- UV protected polycarbonate tube - thickness 2,5mm or borosilicate glass - thickness 7mm
- Rated voltage 220- 240Vac/Vdc 50/60Hz
- Wiring configuration: 5 wires
- 2xEntries 3/4"NPT



Certifications



Standards

Approved to:	EN60079-0, 60079-1, 60079-31
EC Type examination certificate to:	Directive 94/9/EC INERIS 11 ATEX 0051X Ex II 2 G Ex d IIC T6 Gb for -20°C to + 55°C Ex II 2 D Ex tb IIIC T80°C Db IP66 for -20°C to + 55°C
Glow wire test:	960°C EN60598-2-22
Safe operating temperature range:	-20°C to +55°C
IP test:	IP66 IEC 60529 (2001)
Impact protection index:	IK09 (poly) IK07 (glass) according to IEC 62262

Miniature tubular fittings

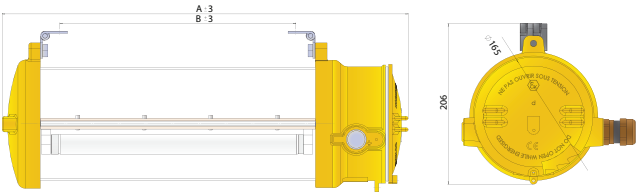
Miniature tubular fluorescent fitting

XEL - Zones 1, 2 & 21, 22

2



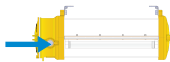
XEL



Dimensional drawing

Technical specifications

Type	Wiring Configuration	Rating W	Current A 230V	Diffuser	External dimensions mm		Weight kg
					A	B	



5 wires: Polycarbonate Diffuser Equipped with 1 cable gland & 1 plug

XEL3008-0G000	5 wires	1 x 8	0.10	Polycarbonate	455	240	4.61
XEL30028-0G000	5 wires	2 x 8	0.10	Polycarbonate	455	240	4.61
XEL120-0G000	5 wires	1 x PL18	0.30	Polycarbonate	455	240	4.61
XEL220-0G000	5 wires	2 x PL18	0.50	Polycarbonate	455	240	4.61

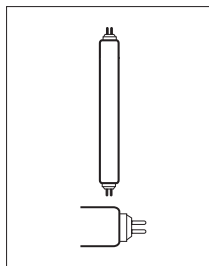
5 wires: Glass Diffuser Equipped with 1 cable gland & 1 plug

XEL3008V-0G000	5 wires	1 x 8	0.10	Glass	455	240	7.41
XEL30028V-0G000	5 wires	2 x 8	0.10	Glass	455	240	7.41
XEL120V-0G000	5 wires	1 x PL18	0.30	Glass	455	240	7.41
XEL220V-0G000	5 wires	2 x PL18	0.50	Glass	455	240	7.41

Technical information

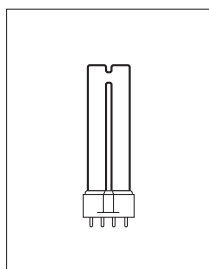
Lamps Fluorescent lamp (order separately). T5 bi-pin tube, lampholder G5 , diameter 16mm - white industry 4000°K Compact PL lamp, lampholder G23	Power factor 0.98.	Casting Marine grade aluminium alloy according to standard: EN 1706: EN AC-AISi12 (Fe) DF or EN AC-AISi 10Mg(A) DF UV protected extruded polycarbonate tube, thickness 2,5mm or borosilicate glass thickness 7mm	Fixing (included) D023 - 2x zinc plated steel articulated brackets for ceiling mounting (included with product)
Photometric curve See page 6/3	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).	Colour of casting (standard) ● XEL****-0G000 - Yellow offshore, RAL 1003 Colour options: ● XEL****-BG000 - Grey, RAL 7035 ● XEL****-CG000 - Black, RAL 9004 ● XEL****-DG000 - Hammered Blue, RAL 5015 ● XEL****-FG000 - Red, RAL 3001 ● XEL****-GG000 - Blue, RAL 5010 ● XEL****-JG000 - Green, RAL 6032 ○ XEL****-MG000 - White, RAL 9010	
Rated voltages Electronic ballast: 220-240Vac/Vdc 50/60Hz	Wiring Configuration 5 wires	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)	

Lamps



Specifications:

G5 - ø 16mm
Colour temperature: White industry 4000°K
CRI > 80
lm/W: 51 to 59
Average operating life: 6,000 hours



Specifications:

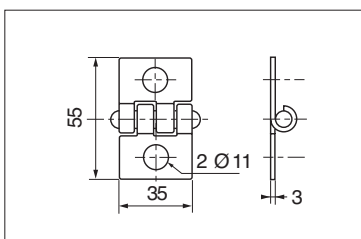
G11
Colour temperature: White industry 4000°K
CRI > 80
lm/W : 57 to 87
Average operating life: 20,000 hours

Type	Power W	Lumen output lm	Lampholder
TL8W	8	430	G5

2

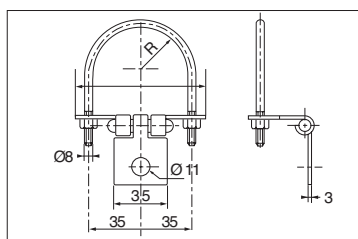
Type	Power W	Lumen output lm	Lampholder
PL18W	18	1200	G11

Brackets



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

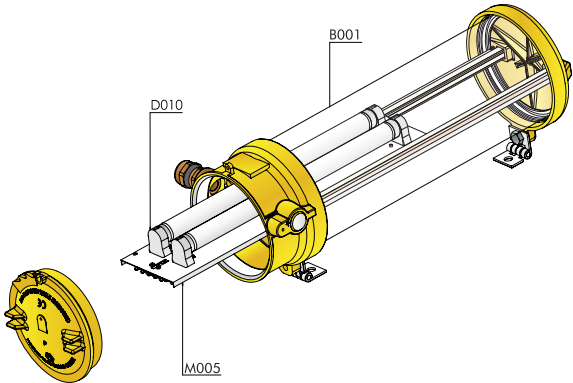
Type	Specifications
D025	2x U-bolt and 2 x zinc plated steel brackets for pole mounted 1" 1/4
D026	2x U-bolt and 2x zinc plated steel brackets for pole mounted 1" 1/2
D027	2x U-bolt and 2x zinc plated steel brackets for pole mounted 2"
D029	2x U-bolts and 2x stainless steel brackets (304L) for pole mounted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

Miniature tubular fittings

Spare parts

XEL - Zones 1, 2 & 21, 22

2



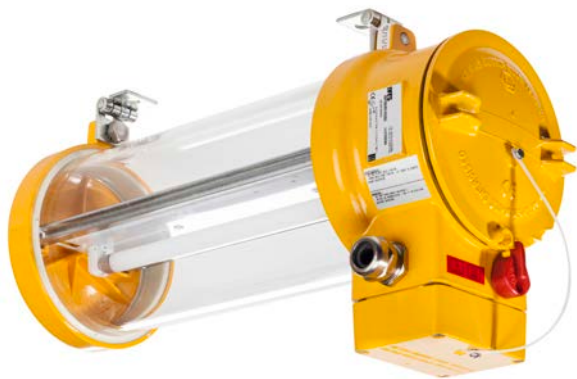
Spare parts

Type	Specifications
B001C	Sealed polycarbonate tube, cover, gasket, chain and slides - Offshore grade yellow paint RAL 1003 - XEL
B001VC	Sealed glass tube, cover, gasket, chain and slides - Offshore grade yellow paint RAL 1003 - XEL
B004	Slides for gear tray
D003	Gasket
M0051E	Gear tray 220-240Vac/Vdc, 50-60 HZ for XEL3008
M0052E	Gear tray 220-240Vac/Vdc, 50-60 HZ for XEL30028
M0054E	Gear tray 220-240Vac/Vdc, 50-60 HZ for XEL120
M0055E	Gear tray 220-240Vac/Vdc, 50-60 HZ for XEL220
D0108W	Lampholder for XEL3008, XEL30028, XEP3008, XEP30028
D010PL	Lampholder for PL lamp
4GRA00002S	Grease
EXN05ASC3-01	Kit 3/4 NPT Exd Exe IIC Ex-td nickel plated cable gland for non armoured cable diameter 6,0-12,0mm

Miniature tubular fittings

Miniature tubular fluorescent fitting with automatic switch off

XEP - Zones 1, 2 & 21, 22



Features

- Quick and easy insulation switch for safe maintenance
- Ex e integral junction box
- All components mounted on sliding gear tray for easy installation and maintenance
- Standard components used inside body allowing reduced maintenance costs
- Available in polycarbonate (light, high impact resistant) or in glass (specific chemical environment & paint shop)
- Including accessories (cable gland, plug & fixing brackets)
- Supplied with offshore grade paint

Specifications

- Manufactured from marine grade aluminium alloy copper free
- UV protected polycarbonate tube - thickness 2,5mm or borosilicate glass - thickness 7mm
- Rated voltage 220- 240Vac/Vdc 50/60Hz
- Wiring configuration: 3 wires
- 1xEntry M20



Certifications



Standards

Approved to:	EN60079-0, 60079-1, 60079-31, 60079-7
EC Type examination certificate to:	Directive 94/9/EC INERIS 11 ATEX 0052X Ex II 2 G Ex d IIC T6 Gb for -20°C to + 55°C Ex II 2 D Ex tb IIIC T80°C Db IP66 for -20°C to + 55°C
Glow wire test:	960°C EN60598-2-22
Safe operating temperature range:	-20°C to +55°C
IP test:	IP66 IEC 60529 (2001)
Impact protection index:	IK09 (poly) IK07 (glass) according to IEC 62262

Miniature tubular fittings

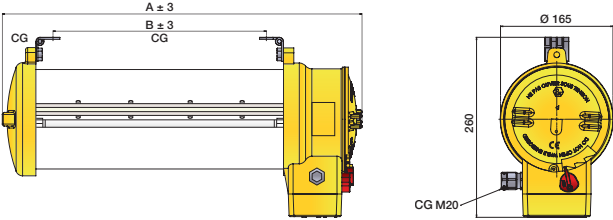
Miniature tubular fluorescent fitting with automatic switch off

XEP - Zones 1, 2 & 21, 22

2

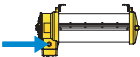


XEP



Technical specifications

Type	Wiring Configuration	Rating W	Current A 230V	Diffuser	External dimensions mm		Weight kg
					A	B	



3 wires: Polycarbonate Diffuser Equipped with 1 cable gland & 1 plug

XEP3008-0G000	3 wires	1 x 8	0.10	Polycarbonate	455	240	5.41
XEP30028-0G000	3 wires	2 x 8	0.10	Polycarbonate	455	240	5.41
XEP120-0G000	3 wires	1 x PL18	0.30	Polycarbonate	455	240	5.41
XEP220-0G000	3 wires	2 x PL18	0.50	Polycarbonate	455	240	5.41

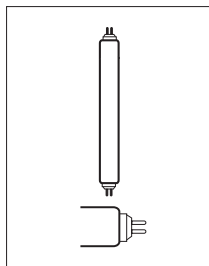
3 wires: Glass Diffuser Equipped with 1 cable gland & 1 plug

XEP3008V-0G000	3 wires	1 x 8	0.10	Glass	455	240	7.71
XEP30028V-0G000	3 wires	2 x 8	0.10	Glass	455	240	7.71
XEP120V-0G000	3 wires	1 x PL18	0.30	Glass	455	240	7.71
XEP220V-0G000	3 wires	2 x PL18	0.50	Glass	455	240	7.71

Technical information

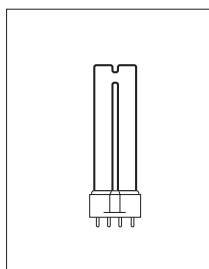
Lamps Fluorescent lamp (order separately) T5 bi-pin tube, lampholder G5 , diameter 16mm - white industry 4000°K Compact PL lamp, lampholder G23	Power factor 0.98.	Casting Marine grade aluminium alloy according to standard: EN 1706: EN AC-AISi12 (Fe) DF or EN AC-AISi 10Mg(A) DF UV protected extruded polycarbonate tube, thickness 2,5mm or borosilicate glass thickness 7mm	Fixing (included) D023 - 2x zinc plated steel articulated brackets for ceiling mounting (included with product)
Photometric curve See page 6/3	Terminal block (screws plug in terminal block) 6mm²(rigid wire), 4mm² (flexible wire) Terminals supplied L, N, PE.	Colour of casting (standard) ● XEP****-0G000 - Yellow offshore, RAL 1003 Colour options: ● XEP****-BG000 - Grey, RAL 7035 ● XEP****-CG000 - Black, RAL 9004 ● XEP****-DG000 - Hammered Blue, RAL 5015 ● XEP****-FG000 - Red, RAL 3001 ● XEP****-GG000 - Blue, RAL 5010 ● XEP****-JG000 - Green, RAL 6032 ○ XEP****-MG000 - White, RAL 9010	
Rated voltages Electronic ballast: 220-240Vac/Vdc 50/60Hz	Wiring Configuration 3 wires	Cable entries One entry M20 Included: One M20 nickel plated brass cable gland for non armoured cable, diameter 10- 16mm (EXN04MLC2)	

Lamps



Specifications:

G5 - \varnothing 16mm
 Colour temperature: White industry 4000°K
 CRI: > 80
 m/W: 51 to 59
 Average operating life: 6,000 hours



Specifications:

G11

Colour temperature: White industry 4000°K

CRI: > 80

lm/W: 57 to 87

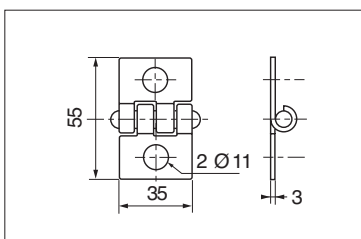
Average Operating life: 20,000 hours

Type	Power W	Lumen output lm	Lampholder
TL8W	8	430	G5

2

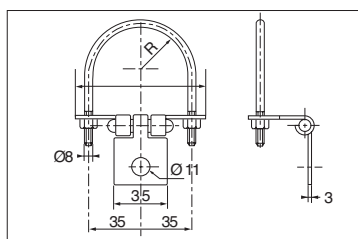
Type	Power W	Lumen output lm	Lampholder
PL18W	18	1200	G11

Brackets



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

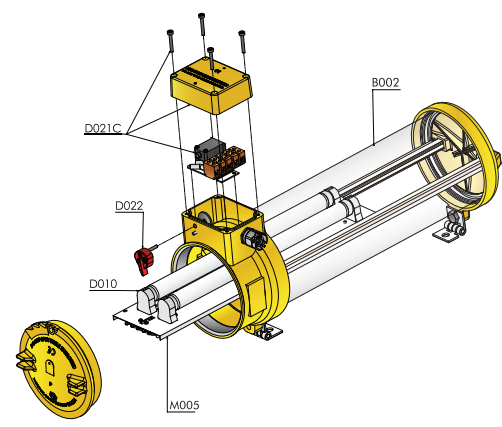
Type	Specifications
D025	2x U-bolt and 2 x zinc plated steel brackets for pole mounted 1" 1/4
D026	2x U-bolt and 2x zinc plated steel brackets for pole mounted 1" 1/2
D027	2x U-bolt and 2x zinc plated steel brackets for pole mounted 2"
D029	2x U-bolts and 2x stainless steel brackets (304L) for pole mounted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

Miniature tubular fittings

Spare parts

XEP - Zones 1, 2 & 21, 22

2



Spare parts

Type	Specifications
B002C	Sealed polycarbonate tube, cover, gasket, chain and slides - Offshore grade yellow paint RAL 1003 - XEP
B002VC	Sealed glass tube, cover, gasket, chain and slides - Offshore grade yellow paint RAL 1003 - XEP
B004	Slides for gear tray
D003	Gasket
M0051E	Gear tray 220-240V, 50-60 HZ for XEP3008
M0052E	Gear tray 220-240V, 50-60 HZ for XEP30028
M0054E	Gear tray 220-240V, 50-60 HZ for XEP120
M0055E	Gear tray 220-240V, 50-60 HZ for XEP220
D0108W	Lampholder for XEL3008, XEL30028, XEP3008, XEP30028
D010PL	Lampholder for PL lamp
D021C	Cover, gasket, screw, terminals, switch and interlock of jonction box
D022	Interlock
4GRA00002S	Grease
EXN04MLC2-01	Kit M20 Exd Exe IIC Ex-td nickel plated cable gland for non armoured cable diameter 10,0-16,0mm, locknut, sealing gasket
EXN04MMC1	01Kit M20 Ex-d IIC Ex-e II Ex-td double compression nickel plated cable gland for non armoured cable diameter inner 6-12 outer 8,5-16, locknut, sealing gasket

Miniature tubular fittings

Weatherproof miniature tubular fluorescent fitting

EL - Industrial application



Features

- Ingress protection IP66 ideal for wash down areas
- All components mounted on sliding gear tray for easy installation and maintenance
- Tubular shape to avoid waste accumulation
- Including accessories (cable gland, plug & fixing brackets)

2

Specifications

- Reinforced polycarbonate black end caps
- UV protected polycarbonate tube - thickness 2.5mm
- Rated voltage 220-240Vac/Vdc,50-60Hz
- Wiring configuration: 5 wires
- 2xEntries M20

Certifications



Standards

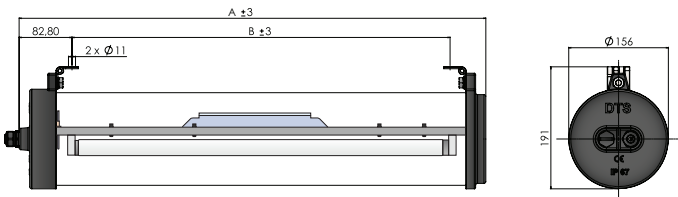
Glow wire test:	960°C EN60598-2-22
Safe operating temperature range:	-20°C to +55°C
IP test:	IP66 IEC 60529 (2001)
Impact protection index:	IK09 according to IEC 62262

Miniature tubular fittings

Weatherproof miniature tubular fluorescent fitting

EL - Industrial application

2

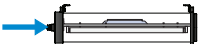


EL

Dimensional drawing

Technical specifications

Type	Wiring Configuration	Rating W	Current A 230V	Diffuser	External dimensions mm		Weight kg
					A	B	



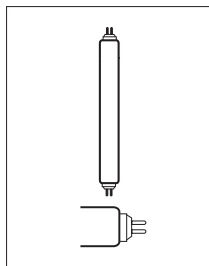
5 wires: Polycarbonate Diffuser Equipped with 1 cable gland & 1 plug

EL3008-0G000	5 wires	1 x 8	0.10	Polycarbonate	455	240	5.00
EL30028-0G000	5 wires	2 x 8	0.10	Polycarbonate	455	240	5.00
EL120-0G000	5 wires	1 x PL18	0.30	Polycarbonate	455	240	5.00
EL220-0G000	5 wires	2 x PL18	0.50	Polycarbonate	455	240	5.00

Technical information

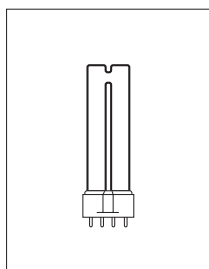
Lamps Fluorescent Lamp (order separately) T5 bi-pin tube, lampholder G5, diameter 16mm - white industry 4000°K Compact PL lamp, lampholder G23.	Power factor 0.98.	Cable entries Two entries M20 Included: One M20 nylon plug (EX-M20) and one M20 nylon cable gland for non armoured cable, diameter 6-12mm (EXCGM20S)	Fixing (included) D023 - 2x zinc plated steel articulated brackets for ceiling mounting (included with product)
Photometric curve See page 6/3	Terminal block (screws plug in terminal block) 10mm²(rigid wire), 6mm² (flexible wire) Terminals supplied L1, L2, L3, N, PE (looping possible with one additional cable gland)	Housing Reinforced polycarbonate black end caps UV protected extruded polycarbonate tube, thickness 2,5mm	
Rated voltages Electronic ballast: 220-240Vac/Vdc 50/60Hz	Wiring Configuration 5 wires		

Lamps



Specifications:

G5 - ø 16mm
Colour temperature: White industry 4000°K
CRI: > 80
lm/W: 51 to 59
Average operating life: 6,000 hours



Specifications:

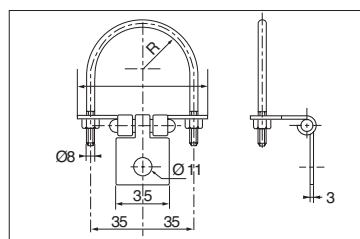
G11
Colour temperature: White industry 4000°K
CRI: > 80
lm/W: 57 to 87
Average operating life: 20,000 hours

Type	Power W	Lumen output lm	Lampholder
TL8W	8	430	G5

2

Type	Power W	Lumen output lm	Lampholder
PL18W	18	1200	G11

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



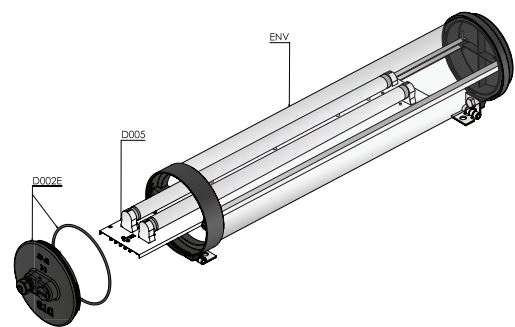
Type	Specifications
D025	2x U-bolt and 2 x zinc plated steel brackets for pole mounted 1" 1/4
D026	2x U-bolt and 2x zinc plated steel brackets for pole mounted 1" 1/2
D027	2x U-bolt and 2x zinc plated steel brackets for pole mounted 2"
D029	2x U-bolts and 2x stainless steel brackets (304L) for pole mounted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

Miniature tubular fittings

Spare parts

EL - Industrial application

2



Spare parts

Type	Specifications
ENV08WC	Sealed polycarbonate tube, cover, gasket, slides for EL
D002E	Cover and gasket
B004	Slides for gear tray
4GRA00002S	Grease
M0051E	Gear tray 220-240Vac, 50-60 HZ for EL3008
M0052E	Gear tray 220-240Vac, 50-60 HZ for EL30028
M0054E	Gear tray 220-240Vac, 50-60 HZ for EL120
M0055E	Gear tray 220-240Vac, 50-60 HZ for EL220
D0108W	Lampholder for XEL3008, XEL30028, XEP3008, XEP30028
D010PL	Lampholder for PL lamp
EXCGM20S-01	Kit M20 Exe IIC nylon cable gland for non armoured cable diameter 6-12,0 and locknut
EXN04MMC1-01	Kit M20 Ex-d IIC Ex-e II Ex-tD double compression nickel plated cable gland for non armoured cable diameter inner 6-12 outer 8,5-16, locknut, sealing gasket

Self contained emergency LED light fitting

XEL BAES - Zones 1, 2 & 21, 22



Features

- Self contained fixture with status LED indicators including: Healthy, Fault, Test in progress, main emergency LED fault
- Emergency battery duration 1 hour (in accordance with standard EN60598-2-22)- and 3h only for fluorescent version
- All components mounted on sliding gear tray for easy installation and maintenance
- Available in polycarbonate (light, high impact resistant) or in glass (specific chemical environment & paint shop)
- Possibility to retrofit LED gear tray into existing XEL BAES fixtures mounted with T5 lamps.
- Including accessories (cable gland, plug & fixing brackets)
- Supplied with offshore grade paint

Specifications

- Manufactured from marine grade aluminium alloy copper free
- UV protected polycarbonate tube - thickness 2,5mm or borosilicate glass - thickness 7mm
- Rating: 1x4W LED or 1x8W or 2x8W Fluorescent
- Escape route supplied with stickers pictogramm / Large area
- Rated voltage 220-240Vac 50-60Hz
- Wiring configuration: 3 wires
- 2xEntries 3/4"NPT or 1xEntry M20



Certifications



Standards

Approved to:	EN60079-0, 60079-1, 60079-7, 60079-31, 60098-2-22
EC Type examination certificate to:	Directive 94/9/EC Models A&AK INERIS 13 ATEX 0050X XEL3001 & XEL3002 INERIS 11 ATEX 0051X Ex II 2 G Ex d IIC T6 Gb for -20°C to + 55°C Ex II 2 D Ex tb IIIC T80°C Db IP66 for -20°C to + 55°C Models AI&SI INERIS 13 ATEX 0051X Ex II 2 G Ex de IIC T6 Gb for -20°C to + 55°C Ex II 2D Ex tb IIIC T80°C Db IP66 for -20°C to + 55°C
Glow wire test:	960°C EN60598-2-22
Safe operating temperature range:	-20°C to +55°C
IP test:	IP66 IEC 60529 (2001)
Impact protection index:	IK09 (poly) IK07 (glass) according to IEC 62262

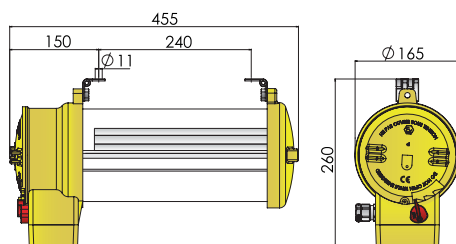
Self contained emergency LED light fitting

XEL BAES - Zones 1, 2 & 21, 22

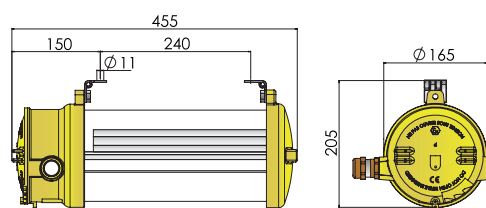
2



XEL-BAES-LED



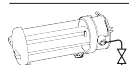
Dimensional drawing for XEL...AI/SI



Dimensional drawing for XEL...A/AK, 3001,3002

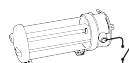
Technical specifications

Type	Function	Rating W	Battery h	Lumen Output lm	Operating Life at 25°C h	Diffuser	Testing Type	External dimensions mm		Weight kg
								A	B	



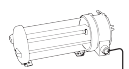
Unswitched enclosure: additional power socket needed . Fitting has to be removed. Maintenance must be done in safe area

XEL3001-00000	Large area - non maintained	1 x 8 Fluo	3h	300	6000	Polycarbonate	Manual	455	240	4.61
XEL3002-00000	Large area - maintained	2 x 8 Fluo	3h	300	6000	Polycarbonate	Manual	455	240	4.61
XEL400LPA-00000	Large area - maintained	1 x 4 LED	1h	150	80000	Polycarbonate	Automatic	455	240	4.61
XEL45LA-00000	Escape route - non maintained	1 x 4 LED	1h	100	80000	Polycarbonate	Automatic	455	240	4.61
XEL400LA-00000	Large area - non maintained	1 x 4 LED	1h	330	80000	Polycarbonate	Automatic	455	240	4.61
XEL3001V-00000	Large area - non maintained	1 x 8 Fluo	3h	300	6000	Glass	Manual	455	240	7.41
XEL3002V-00000	Large area - maintained	2 x 8 Fluo	3h	300	6000	Glass	Manual	455	240	7.41
XEL400VLP-00000	Large area - maintained	1 x 4 LED	1h	150	80000	Glass	Automatic	455	240	7.41
XEL45VLA-00000	Escape route - non maintained	1 x 4 LED	1h	100	80000	Glass	Automatic	455	240	7.41
XEL400VLA-00000	Large area - non maintained	1 x 4 LED	1h	330	80000	Glass	Automatic	455	240	7.41



Switch off- Enclosure with battery: no power socket needed . External cut out required. Maintenance could be done in safe area

XEL45LAK-00000	Escape route - non maintained	1 x 4 LED	1h	100	80000	Polycarbonate	Automatic	455	240	4.61
XEL400LAK-00000	Large area - non maintained	1 x 4 LED	1h	330	80000	Polycarbonate	Automatic	455	240	4.61
XEL45VLAK-00000	Escape route - non maintained	1 x 4 LED	1h	100	80000	Glass	Automatic	455	240	7.41
XEL400VLAK-00000	Large area - non maintained	1 x 4 LED	1h	330	80000	Glass	Automatic	455	240	7.41



Enclosure with combined battery & supply switch off: no power socket needed . No external cut out required. Maintenance could be done in hazardous area

XEL45LAI-00000	Escape route - non maintained	1 x 4 LED	1h	100	80000	Polycarbonate	Automatic	455	240	5.41
XEL400LAI-00000	Large area - non maintained	1 x 4 LED	1h	330	80000	Polycarbonate	Automatic	455	240	5.41
XEL45LSI-00000	Escape route - non maintained	1 x 4 LED	1h	100	80000	Polycarbonate	Adressable	455	240	5.41
XEL400LSI-00000	Large area - non maintained	1 x 4 LED	1h	330	80000	Polycarbonate	Adressable	455	240	5.41
XEL45VLAI-00000	Escape route - non maintained	1 x 4 LED	1h	100	80000	Glass	Automatic	455	240	7.71
XEL400VLAI-00000	Large area - non maintained	1 x 4 LED	1h	330	80000	Glass	Automatic	455	240	7.71
XEL45VLSI-00000	Escape route - non maintained	1 x 4 LED	1h	100	80000	Glass	Adressable	455	240	7.71
XEL400VLSI-00000	Large area - non maintained	1 x 4 LED	1h	330	80000	Glass	Adressable	455	240	7.71

Test

Self Test SATI
Compliant to NFC71820
Certified NF Performance Sati
Automatic test
SATI technology - all tests are done according to regulation

Safety lighting with automatic built in systems test the lamps every 7 days and the battery pack every 12 weeks. Results of the test are displayed by yellow and green LED.



Healthy



Emergency or
Indicator Lamp Default



Test in
progress



Fault

Self contained emergency LED light fitting

Technical information & accessories

XEL BAES - Zones 1, 2 & 21, 22

Technical information

Lamps

LED installed
Cool white
L70/B10 at 25°C (70% lumen output/ 90% active LED) according to operating life

for XEL3001 & XEL3002 - fluorescent lamp
T5 installed - white industry 4000°K

Rated voltages

Electronic ballast: 220-240 Vac 50-60Hz
Power 0.5W

Power factor

0.4.

Battery

For XEL45, XEL400
Battery NiMh 3,6V 1,1Ah
Lumen output in emergency mode (1 lamp lit)
1 hour: 100 lm for XEL45, 330lm for XEL400
For XEL3001
Battery NiCd 3,6V 4Ah
Lumen output in emergency mode (1 lamp lit)
3 hours: 100lm

For XEL3002

Battery NiCd 2,4V 4Ah
Lumen output in emergency mode (1 lamp lit)
3 hours: 100lm

Wiring Configuration

3 wires

Cable entries

Model A & AK and XEL3001 or XEL3002

Two entries 3/4" NPT
Included: One 3/4" NPT nickel plated brass plug (EXN/075/SP) and one 3/4" NPT nickel plated brass cable gland for non armoured cable, diameter 6-12mm (EXN05ASC3)
Terminal block (screws plug in terminal block)
10mm²(rigid wire), 6mm² (flexible wire)
Terminals supplied L1, N, PE (looping possible with one additional cable gland)

Model AI & SI

One entry M20
Included: One M20 nickel plated brass cable gland for non armoured cable, diameter 10-16mm (EXN04MLC2)
Terminal block (screws plug in terminal block)
6mm²(rigid wire), 4mm² (flexible wire)
Terminals supplied L, N, PE

Casting

Marine grade aluminium alloy according to standard: EN 1706: EN AC-AISi12 (Fe) DF or EN AC-AISi 10Mg(A) DF
UV protected extruded polycarbonate tube, thickness 2,5mm or borosilicate glass thickness 7mm

Colour of casting (standard)

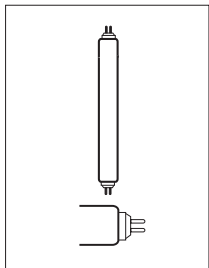
● XEL****-00000 - Yellow offshore, RAL 1003
Colour options:

- XEL****-B0000 - Grey, RAL 7035
- XEL****-C0000 - Black, RAL 9004
- XEL****-D0000 - Hammered Blue, RAL 5015
- XEL****-F0000 - Red, RAL 3001
- XEL****-G0000 - Blue, RAL 5010
- XEL****-J0000 - Green, RAL 6032
- XEL****-M0000 - White, RAL 9010

Fixing (included)

D023 - 2x zinc plated steel articulated brackets for ceiling mounting (included with product)

Lamps



Bi-pin T5 fluorescent lamps

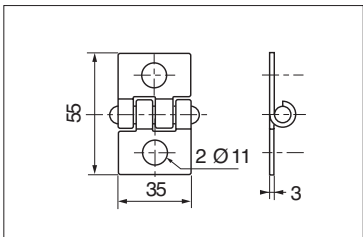
Specifications:

For XEL3001 & XEL3002

G5 - ø 16mm
Colour temperature: 4000°K
CRI: > 80
lm/W: 51 to 59
Average operating life: 6,000 hours

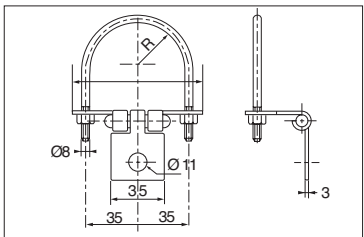
Type	Power W	Lumen output lm	Lampholder
TL8W	8	430	G5

Brackets



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

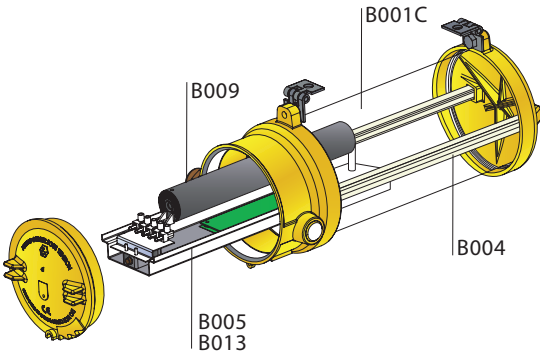
Type	Specifications
D025	2x U-bolt and 2 x zinc plated steel brackets for pole mounted 1" 1/4
D026	2x U-bolt and 2x zinc plated steel brackets for pole mounted 1" 1/2
D027	2x U-bolt and 2x zinc plated steel brackets for pole mounted 2"
D029	2x U-bolts and 2x stainless steel brackets (304L) for pole mounted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

Self contained emergency LED light fitting

Spare Parts

XEL BAES - Zones 1, 2 & 21, 22

2



Spare parts

Type	Specifications
B001C	Sealed polycarbonate tube, cover, gasket, chain and slides - Offshore grade yellow paint RAL 1003 - XEL45LA, XEL45LAK, XEL400LA, XEL400LAK and XEL400LPA
B001VC	Sealed glass tube, cover, gasket, chain and slides - Offshore grade yellow paint RAL 1003 - XEL45LA, XEL45LAK, XEL400LA, XEL400LAK and XEL400LPA
B002C	Sealed polycarbonate tube, cover, gasket, chain and slides - Offshore grade yellow paint RAL 1003 - XEL45LAI, XEL45LSI, XEL400LAI, XEL400LSI
B002VC	Sealed glass tube, cover, gasket, chain and slides - Offshore grade yellow paint RAL 1003 - XEL45LAI, XEL45LSI, XEL400LAI, XEL400LSI
D003	Gasket
B004	Slides for gear tray
B013A	Gear Tray for XEL BAES LED-220-240 Vac, 50-60Hz - includes battery for XEL400LA, XEL400VLA or to convert XEL300A, XEL300VA
B013B	Gear Tray-220-240 Vac, 50-60Hz -includes battery for XEL400LAK, XEL400VLAK, XEL400LAI, XEL400VLA or to convert XEL300AK, XEL300VAK, XEL300AI, XEL300VAI
B013C	Gear tray-220-240 Vac, 50-60Hz -includes battery for XEL 400LSI,XEL 400LVSI or to convert XEL 300SI,XEL 300VSI
B013D	Gear Tray 220-240Vac 50-60Hz - includes battery for XEL400LPA, XEL400VLP
B005C	Gear tray for XEL BAES LED- 220-240 Vac, 50-60Hz - includes battery for XEL45LA, XEL45VLA or to convert XEL80A, XEL80VA
B005D	Gear Tray for XEL BAES LED-220-240 Vac, 50-60Hz - includes battery for XEL45LAK, XEL45VLAK, XEL45LAI, XEL45VLAI or to convert XEL80AK, XEL80VAK, XEL80AI, XEL80VAI
B005E	Gear Tray -220-240 Vac, 50-60Hz - includes battery for XEL45LSI,XEL45VLSI or to convert XEL80SI, XEL80VSI
B009B	Battery pack only for XEL45LA, XEL45VLA, XEL400LA, XEL400VLA
B009C	Battery (tube + XIN) for XEL45LAK, XEL45VLAK, XEL400LAK, XEL400VLAK, XEL45LAI, XEL45VLAI, XEL400LAI, XEL400VLAI, XEL45LSI, XEL45VLSI, XEL400LSI, XEL400VLSI
B009	Battery XEL3001
B006L	Gear tray - 220-240 Vac, 50-60Hz - XEL3001
B007	Gear tray - 220-240 Vac, 50-60Hz - XEL3002
B019T	Package of 4 adhesive pictogram type labels
4GRA00002S	Grease
EXN05ASC3-01	Kit 3/4 NPT Exd Exe IIC Ex-td nickel plated cable gland for non armoured cable diameter 6,0-12,0mm
EXN04MLC2-01	Kit M20 Exd Exe IIC Ex-td nickel plated cable gland for non armoured cable diameter 10,0-16,0mm, locknut, sealing gasket
EXN04MMC1-01	Kit M20 Ex-d IIC Ex-e II Ex-td double compression nickel plated cable gland for armoured cable diameter inner 6-12 outer 8,5-16, locknut, sealing gasket

Light fittings for all zones and industrial applications

Linear and recessed fittings

Linear fittings

EVS - Zones 1, 2 & 21, 22	3/3
EVNL - LED - Zones 2 & 22	3/9
EVN - Zones 2 & 22	3/15
EVDL - LED - Zones 21 & 22	3/21
EVD - Zones 21, 22	3/27
EVTL - LED - Industrial application	3/33
EVT - Industrial application	3/39

Recessed fluorescent fittings

ESB - Zones 1, 2	3/45
EST - Industrial application	3/49



Linear fittings

Fluorescent fitting with easy disconnect

EVS - Zones 1, 2 & 21, 22



- Features
- Easy disconnect without wiring to remove the gear tray
 - All components mounted on hinged and removable gear tray for easy maintenance
 - Double central locking for ingress protection
 - Automatic switch off on opening
 - Including accessories (cable gland, plugs & fixing brackets)

- Specifications
- Main body constructed of glass reinforced polyester for high impact strength
 - UV protected polycarbonate diffuser to resist harsh environments
 - Rated voltage 220 - 240Vac/Vdc 50-60Hz
 - EOL (End of life) the ballast prevents the lamp cap at the end of lamp life cycle from overheating
 - Instant start
 - Wiring configuration: 5 wires
 - 3xEntries M20
 - 2x Emergency versions (Type: “EM” version 3h battery duration or “EMA” with 3h with automatic test and blackstart capabilities)



Certifications

Standards	
Approved to:	EN60079-0, 60079-1, 60079-7, 60079-31
EC Type examination certificate to:	Directive 94/9/EC LCIE 11 ATEX 3065X IEC Ex LCI 11.0053X Ex II 2 G Ex de IIC T4 Gb for -40°C to +60°C Ex de IIC T5 Gb for -40°C to +35°C Ex II 2 D Ex tb IIIC T85°C Db IP66 for -40°C to +60°C
Glow wire test:	960°C EN60598-2-22
Safe operating temperature range:	-20°C to +55°C EVS, -10°C to +50°C EVS EM & EVS EMA
IP test:	IP66 IEC 60529 (2001)
Impact protection index:	IK09 according to IEC 62262

Linear fittings

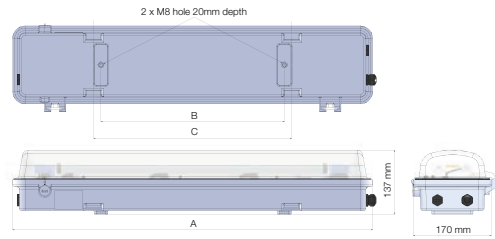
Fluorescent fitting with easy disconnect

EVS - Zones 1, 2 & 21, 22



3

EVS



Dimensional drawing

Technical specifications

Type	Wiring Configuration	Rating W	Current A 230V	External dimensions mm			Weight kg
				A	B	C	



5 wires: Equipped with 1 cable gland & 2 plugs

EVS120-0000	5 wires	1 x 18	0.09	785	432	400	5.5
EVS140-0000	5 wires	1 x 36	0.17	1370	900	700	7.5
EVS165-0000	5 wires	1 x 58	0.26	1670	900	700	9
EVS220-0000	5 wires	2 x 18	0.17	785	432	400	6.5
EVS240-0000	5 wires	2 x 36	0.33	1370	900	700	8.5
EVS265-0000	5 wires	2 x 58	0.5	1670	900	700	10
EVS120-D000	5 wires & continuity plate	1 x 18	0.09	785	432	400	5.5
EVS140-D000	5 wires & continuity plate	1 x 36	0.17	1370	900	700	7.5
EVS165-D000	5 wires & continuity plate	1 x 58	0.26	1670	900	700	9
EVS220-D000	5 wires & continuity plate	2 x 18	0.17	785	432	400	6.5
EVS240-D000	5 wires & continuity plate	2 x 36	0.33	1370	900	700	8.5
EVS265-D000	5 wires & continuity plate	2 x 58	0.5	1670	900	700	10



5 wires through: Equipped with 2 cable glands & 1 plug

EVS120-B000	5 wires through	1 x 18	0.09	785	432	400	5.5
EVS140-B000	5 wires through	1 x 36	0.17	1370	900	700	7.5
EVS165-B000	5 wires through	1 x 58	0.26	1670	900	700	9
EVS220-B000	5 wires through	2 x 18	0.17	785	432	400	6.5
EVS240-B000	5 wires through	2 x 36	0.33	1370	900	700	8.5
EVS265-B000	5 wires through	2 x 58	0.5	1670	900	700	10
EVS120-E000	5 wires through & 2 continuity plates	1 x 18	0.09	785	432	400	5.5
EVS140-E000	5 wires through & 2 continuity plates	1 x 36	0.17	1370	900	700	7.5
EVS165-E000	5 wires through & 2 continuity plates	1 x 58	0.26	1670	900	700	9
EVS220-E000	5 wires through & 2 continuity plates	2 x 18	0.17	785	432	400	6.5
EVS240-E000	5 wires through & 2 continuity plates	2 x 36	0.33	1370	900	700	8.5
EVS265E-0000	5 wires through & 2 continuity plates	2 x 58	0.50	1670	900	700	10

Technical information

Lamps Fluorescent Lamp (order separately) T8 bi-pin tube, lampholder G13, diameter 26mm - white industry 4000°k.	Power factor 0.98.	Cable entries Three entries M20 For non- armoured cable: included two M20 nylon plugs (EX-M20) and one M20 nylon cable gland, diameter 6-12mm (EXCGM20S) For armoured cable: included continuity plate - two M20 nylon plugs (EX-M20) and one M20 nickel plated brass cable gland, diameter 6-12/ 8.5-16mm (EXN04MMC1)	Housing Fiberglass reinforced polyester housing for high impact strength, UV protected polycarbonate diffuser to resist harsh environments, Painted steel gear tray & Stainless steel 316L insert
Photometric curve See page 6/3	Terminal block (spring) Jumped bar x2 terminal blocks 4mm²(rigid wire), 2.5mm² (flexible wire) Terminals supplied L1, L2, L3, N, PE (looping possible with one additional cable gland)		
Rated voltages Electronic ballast: 220-240Vac/Vdc 50/60Hz. EOL (End of life) the ballast prevents the lamp cap at the end of lamp life cycle from overheating			Fixing (included) V015 - 2x Two zinc-plated steel brackets for ceiling mounting

Linear fittings

Emergency Fluorescent fitting with easy disconnect - 3h

EVS EM - Zones 1, 2 & 21, 22

Technical specifications

Type	Wiring Configuration	Rating W	Battery h	Current A 230V	External dimensions mm			Weight kg
					A	B	C	
3 wires: Equipped with 1 cable gland & 2 plugs								
EVS120EME-0000	3 wires	1 x 18	3	0.09	785	432	400	7.5
EVS140EM-0000	3 wires	1 x 36	3	0.17	1370	900	700	9.5
EVS165EM-0000	3 wires	1 x 58	3	0.26	1670	900	700	10
EVS220EME-0000	3 wires	2 x 18	3	0.17	785	432	400	8.5
EVS240EM-0000	3 wires	2 x 36	3	0.33	1370	900	700	10.5
EVS265EM-0000	3 wires	2 x 58	3	0.5	1670	900	700	11
EVS120EME-C000	3 wires & continuity plate	1 x 18	3	0.09	785	432	400	7.5
EVS140EM-C000	3 wires & continuity plate	1 x 36	3	0.17	1370	900	700	9.5
EVS165EM-C000	3 wires & continuity plate	1 x 58	3	0.26	1670	900	700	10
EVS220EME-C000	3 wires & continuity plate	2 x 18	3	0.17	785	432	400	8.5
EVS240EM-C000	3 wires & continuity plate	2 x 36	3	0.33	1370	900	700	10.5
EVS265EM-C000	3 wires & continuity plate	2 x 58	3	0.5	1670	900	700	11

* For dimensional drawing please refer to page 3/4

Electrical Features

Lamps

Fluorescent Lamp (order separately)
T8 bi-pin tube, lampholder G13, diameter 26mm - white industry 4000°K

Rated voltages

Electronic ballast: 220-240Vac/Vdc 50/60Hz
EOL (End of life) the ballast prevents the lamp cap at the end of lamp life cycle from overheating.

Power factor

0.98.

Battery

Battery NiCd 7,2V
4Ah in flameproof case (Ex d)
Lumen output in emergency mode (1 lamp lit)
2 hours: 40% for EVS120, EVS220, 33% for EVS140, EVS240, 10% for EVS165, EVS265
3 hours: 24% for EVS120, EVS220, 18% for EVS140, EVS240, 8% for EVS165, EVS265
Monitored by one LED

Terminal block

Terminal block (screws plug in terminal block)
4mm²(rigid wire), 2,5mm² (flexible wire)
Terminals supplied L1, L2, L3, N, PE (looping possible with one additional cable gland)

Cable entries

Three entries M20
For non- armoured cable: included two M20 nylon plugs (EX-M20) and one M20 nylon cable gland, diameter 6-12mm (EXCGM20S)
For armoured cable: included continuity plate - two M20 nylon plugs (EX-M20) and one M20 nickel plated brass cable gland, diameter 6-12/ 8,5-16mm (EXN04MMC1)

Housing

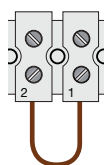
Fiberglass reinforced polyester housing for high impact strength, UV protected polycarbonate diffuser to resist harsh environments
Stainless steel 316L insert
Painted steel gear tray

Fixing

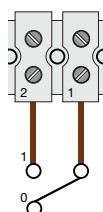
V015 - 2x Two zinc-plated steel brackets for ceiling mounting

Emergency function diagrams

Wiring provided by DTS - Maintained Mode



Switch between 1/2 - Non Maintained Mode *



Mains Supply	Tube	Battery
ON	Lit	Charged
OFF	Only emergency tube lit	Discharged

Mains Supply	Tube	Battery
ON	Lit	Charged
OFF	Only emergency tube lit	Discharged

* This table corresponds to the position 0 "open".
If the switch is on position 1 "close", refer to the table on the left

Linear fittings

Emergency Fluorescent fitting with automatic test & blackstart capabilities. EVS EMA - Zones 1, 2 & 21, 22

Technical specifications

Type	Wiring Configuration	Rating W	Battery h	Nominal Current A	External dimensions mm			Weight kg
					A	B	C	
5 wires: Equipped with 1 cable gland & 2 plugs								
EVS120EMA-0000	5 wires	1 x 18	3	0.09	785	432	400	7.5
EVS140EMA-0000	5 wires	1 x 36	3	0.17	1370	900	700	9.5
EVS220EMA-0000	5 wires	2 x 18	3	0.17	785	432	400	8.5
EVS240EMA-0000	5 wires	2 x 36	3	0.33	1370	900	700	10.5
EVS120EMA-D000	5 wires & continuity plate	1 x 18	3	0.09	785	432	400	7.5
EVS140EMA-D000	5 wires & continuity plate	1 x 36	3	0.17	1370	900	700	9.5
EVS220EMA-D000	5 wires & continuity plate	2 x 18	3	0.17	785	432	400	8.5
EVS240EMA-D000	5 wires & continuity plate	2 x 36	3	0.33	1370	900	700	10.5

* For dimensional drawing please refer to page 3/4

Electrical Features

Lamps

Fluorescent Lamp (order separately)
T8 bi-pin tube, lampholder G13, diameter 26mm - white industry 4000°K

Rated voltages

Electronic ballast: 220-240Vac/Vdc 50/60Hz
EOL (End of life) the ballast prevents the lamp cap at the end of lamp life cycle from overheating

Power factor

0.98.

Battery

Battery NiCd 6V 4Ah in flameproof case (Ex"d") for EVS120, EVS220
Battery NiCd 6V 7Ah in flameproof case (Ex"d") for EVS140, EVS240
Lumen output in emergency mode (1 lamp lit)
3h: 40% for EVS120, EVS220
33% for EVS140, EVS240
Monitored by two LED

Terminal block (spring)

Jumped bar x2 terminal blocks
4mm²(rigid wire), 2,5mm² (flexible wire)
Terminals supplied L1, L2, L3, LS, N, E, BS
(looping possible with one additional cable gland)

Cable entries

Three entries M20
For non- armoured cable: included two M20 nylon plugs (EX-M20) and one M20 nylon cable gland, diameter 6-12mm (EXCGM20S)
For armoured cable: included continuity plate - two M20 nylon plugs (EX-M20) and one M20 nickel plated brass cable gland, diameter 6-12/ 8,5-16mm (EXN04MMC1)

Housing

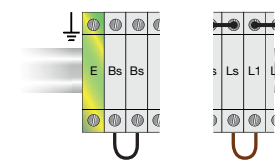
Fiberglass reinforced polyester housing for high impact strength, UV protected polycarbonate diffuser to resist harsh environments
Stainless steel 316L insert
Painted steel geartray

Fixing (included)

V015 - 2x Two zinc-plated steel brackets for ceiling mounting

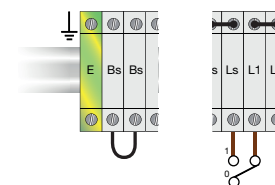
Emergency function diagrams

Wiring provided by DTS - Maintained Mode



Mains Supply	Tube	Battery
ON	Lit	Charged
OFF	Only emergency tube lit	Discharged

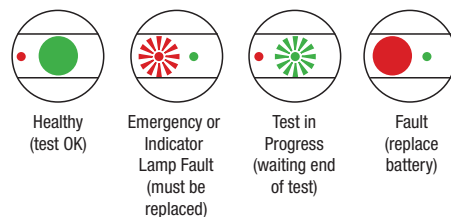
Switch between LS/L1 - Non Maintained Mode



Mains Supply	Tube	Battery
ON	Lit	Charged
OFF	Only emergency tube lit	Discharged

Preventive maintenance mode

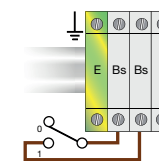
Battery charge - daily
Emergency lamp during 1min - weekly
Battery charge capacity during 1hr - quarterly
Clear system test display
Battery charge monitored by 2 LED



Emergency function diagram - Blackstart mode

The EMA product contains 2 blackstart terminals. The **blackstart mode** consists in disconnecting the battery and so switching off the fitting. This mode is mainly used during maintenance. As soon as the maintenance is done, the main power ON and the blackstart terminals connected, the emergency fitting is ready to be used as the battery is not discharged.

Switch between BS terminals



This table corresponds to the position 0 "open".
If the switch is on position 1 "close", please refer to the above tables.

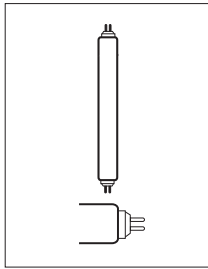
Mains supply	Tube	Battery
ON	Lit	Disconnected - not charged
OFF	OFF	Disconnected - not charged

Linear fittings

Accessories

EVS - Zones 1, 2 & 21, 22

Lamps

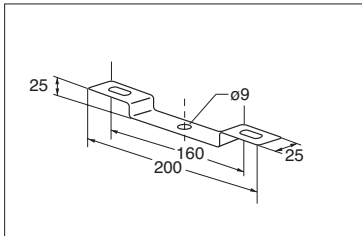


Bi-pin T8 fluorescent lamps

Specifications:
G13 - ø 26mm
Colour temperature: White industry 4000°K
CRI: > 80
lm/W: 65 to 93
Average operating life: 12,000 hours

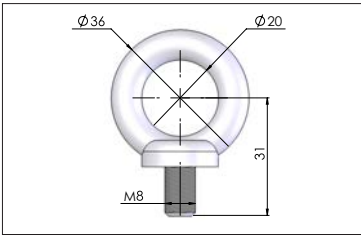
Type	Power W	Lumen output lm	Lampholder
TL18W	18	1250	G13
TL36W	36	3350	G13
TL58W	58	5200	G13

Brackets



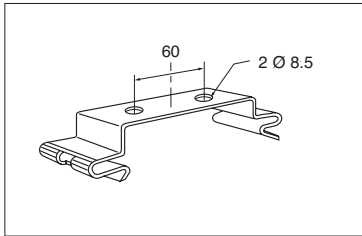
Brackets

Type	Specifications
V015	2 x pair of zinc plated steel for ceiling mounting (Included with product)
V016	stainless steel 316L brackets for ceiling mounting



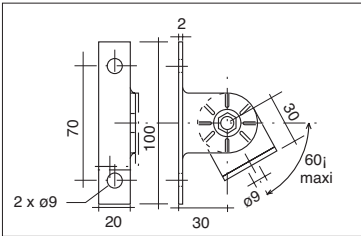
Hook

Type	Specifications
V024	2x Zinc plated steel suspension hook



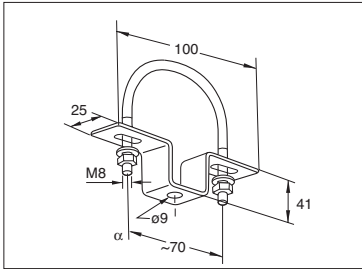
Mounting bracket clip

Type	Specifications
V014	2x Rapid ceiling mounting with stainless steel clip



Hinged bracket

Type	Specifications
V023	2x Steel hinged brackets plastic coated



Fixing bracket and flange

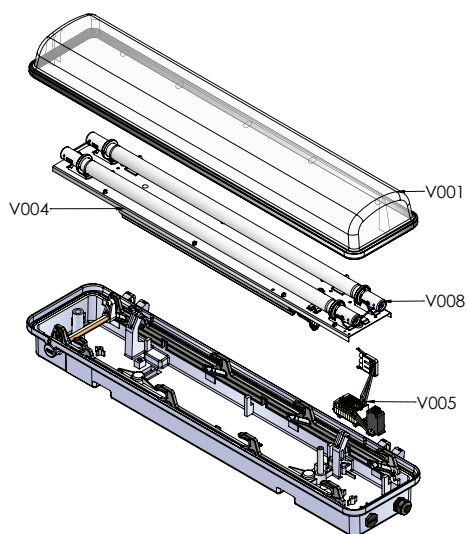
Type	Specifications
V018	2x zinc plated steel pole mounted brackets for ø1"¼ & 1"½
V019	2x zinc plated steel pole mounted brackets for ø2"
V021	2x Stainless steel 316L pole mounted brackets for ø1"¼ & 1"½
V022	2x Stainless steel 316L pole mounted brackets ø2"

Linear fittings

Spare parts

EVS - Zones 1, 2 & 21, 22

3



Spare parts

Type	Specifications
V00120W	20W diffuser with gasket for EV. range
V00140W	40W diffuser with gasket for EV. range
V00165W	65W diffuser with gasket for EV. range
V0041X20WS	Gear tray 1x18W with electronic ballast 220-240Vac/Vdc 50-60Hz for EVS120
V0041X40WS	Gear tray 1x36W with electronic ballast 220-240Vac/Vdc 50-60Hz for EVS140
V0041X65WS	Gear tray 1x58W with electronic ballast 220-240Vac/Vdc 50-60Hz for EVS165
V0042X20WS	Gear tray 2x18W with electronic ballast 220-240Vac/Vdc 50-60Hz for EVS220
V0042X40WS	Gear tray 2x36W with electronic ballast 220- 240Vac/Vdc 50-60Hz for EVS240
V0042X65WS	Gear tray 2x58W with electronic ballast 220- 240Vac/Vdc 50-60Hz for EVS265
V0041X20WEMS	Emergency gear tray 1x18W with electronic ballast 220-240Vac/Vdc 50-60Hz for EVS120EM
V0041X40WEMS	Emergency gear tray 1x36W with electronic ballast 220-240Vac/Vdc 50-60Hz for EVS140EM
V0042X20WEMS	Emergency gear tray 2x18W with electronic ballast 220-240Vac/Vdc 50-60Hz for EVS220EM
V0042X40WEMS	Emergency gear tray 2x36W with electronic ballast 220-240Vac/Vdc 50-60Hz for EVS240EM
V0041X65WEMS	Emergency gear tray 1x58W with electronic ballast 220-240Vac/Vdc 50-60Hz for EVS165EM
V0042X65WEMS	Emergency gear tray 2x58W with electronic ballast 220-240Vac/Vdc 50-60Hz for EVS265EM
V0041X20WEMAS	Emergency gear tray + auto test 1x18W with electronic ballast 220-240Vac/Vdc 50-60Hz for EVS120EMA
V0041X40WEMAS	Emergency gear tray + auto test 1x36W with electronic ballast 220-240Vac/Vdc 50-60Hz for EVS140EMA
V0042X20WEMAS	Emergency gear tray + auto test 2x18W with electronic ballast 220-240Vac/Vdc 50-60Hz for EVS220EMA
V0042X40WEMAS	Emergency gear tray + auto test 2x36W with electronic ballast 220-240Vac/Vdc 50-60Hz for EVS240EMA
V005S	Connection pack: XIN, terminal, track, connector
V008	Bi-pin G13 lampholder
V011	Battery pack Ni-Cd 7.2v - 4Ah for EVS120EM, EVS220EM, EVS140EM, EVS240EM
V01120WEMEA	Battery for EVS120EMA, EVS220EMA
V01140WEMEA	Battery for EVS140EMA, EVS240EMA
V02520x40W	Brass continuity plate for EV. 120, EV. 220, EV. 140, EV. 240
V02565W	Brass continuity plate for EV. 165, EV. 265
EXCGM20S-01	Kit M20 Exe IIC nylon cable gland for non armoured cable diameter 6-12,0 and locknut
EXN04MMC1-01	Kit M20 Ex-d IIC Ex-e II Ex-td double compression nickel plated cable gland for armoured cable diameter inner 6-12 outer 8,5-16, locknut, sealing gasket

Linear fittings

LED fitting

EVNL - Zones 2 & 22



Features

- Operating life 100,000 h (according items)
- High lumen output - 5000 lumens with 100% yield (according items) - LED module with diffuser
- Double central locking for ingress protection
- All components mounted on hinged and removable gear tray which gives easy access for maintenance
- Including accessories (cable gland, plugs & fixing brackets)
- Option: Automatic switch off on opening for safe maintenance

Specifications

- Main body constructed of glass reinforced polyester for high impact strength
- UV protected polycarbonate diffuser to resist harsh environments
- Rated voltage 100- 254Vac 50-60Hz
- Wiring configuration: 5 wires
- 3xEntries M20



Certifications



Standards

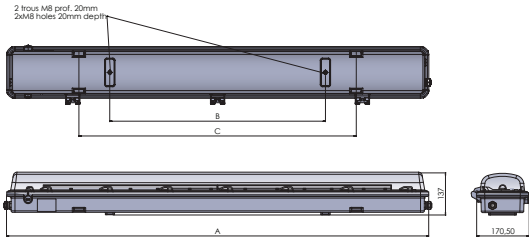
Approved to:	EN60079-0, 60079-15, 60079-31
EC Type examination certificate to:	Directive 94/9/EC Ex II 3 G Ex nR IIC T4 Gc for -40°C to + 60°C Ex nR IIC T5 Gc for -40°C to + 35°C Ex II 3 D Ex tc IIIC T135°C Dc IP66 for -40°C to + 60°C Ex tc IIIC T100°C Dc IP66 for -40°C to + 35°C
Glow wire test:	960°C EN60598-2-22
Safe operating temperature range:	-20°C to +55°C
IP test:	IP66 IEC 60529 (2001)
Impact protection index:	IK09 according to IEC 62262

Linear fittings
LED fitting
EVNL - Zones 2 & 22



3

EVNL



Dimensional drawing

Technical specifications

Type	Wiring Configuration	Rating W	Current A 230V	Lumen Output lm	Operating Life at 25°C h	External dimensions mm			Weight kg
						A	B	C	



5 wires: Equipped with 1 cable gland & 2 plugs

EVNL120-0000	5 wires	1 x 12	0.07	1194	100,000	785	432	400	4.00
EVNL140-0000	5 wires	1 x 25	0.12	2353	90,000	1370	900	700	7.20
EVNL165-0000	5 wires	1 x 31	0.16	2450	80,000	1670	900	700	8.80
EVNL220-0000	5 wires	1x19	0.10	1613	80,000	785	432	400	4.00
EVNL240-0000	5 wires	1x56	0.27	4257	70,000	1370	900	700	7.20
EVNL265-0000	5 wires	1x71	0.34	5076	70,000	1670	900	700	8.80
EVNL120-D000	5 wires & continuity plate	1 x 12	0.07	1194	100,000	785	432	400	4.00
EVNL140-D000	5 wires & continuity plate	1 x 25	0.12	2353	90,000	1370	900	700	7.20
EVNL165-D000	5 wires & continuity plate	1 x 31	0.16	2450	80,000	1670	900	700	8.80
EVNL220-D000	5 wires & continuity plate	1x19	0.10	1613	80,000	785	432	400	4.00
EVNL240-D000	5 wires & continuity plate	1x56	0.27	4257	70,000	1370	900	700	7.20
EVNL265-D000	5 wires & continuity plate	1x71	0.34	5076	70,000	1670	900	700	8.80

Technical information

LED installed Set of LED modules with integrated diffuser colour temperature 4000°K L70/B10 at 25°C (70% lumen output/ 90% active LED) according to operating life.	Power factor 0.9.	Cable entries Three entries M20 For non- armoured cable: included two M20 nylon plugs (EX-M20) and one M20 nylon cable gland, diameter 6-12mm (EXCGM20S) For armoured cable: included continuity plate - two M20 nylon plugs (EX-M20) and one M20 nickel plated brass cable gland, diameter 6-12/ 8.5-16mm (EXN04MMC1)	Housing Fiberglass reinforced polyester housing for high impact strength UV protected polycarbonate diffuser to resist harsh environments White painted steel gear tray 2 x M8 Stainless steel 316L insert
Photometric curve See page 6/3	Terminal block (screws plug in terminal block) 10mm² (rigid wire), 6mm² (flexible wire) Terminals supplied L1, L2, L3, N, PE (looping possible with one additional cable gland)		Fixing (included) V015 - 2x Two zinc-plated steel brackets for ceiling mounting
Rated voltages Electronic driver: 100- 254Vac 50-60Hz.			

Linear fittings

From a fluorescent fitting to a LED fitting

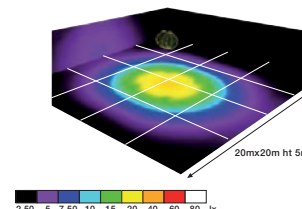
EVNL - Zones 2 & 22

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.

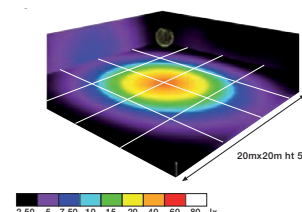
T8 fluorescent lamp - EVN240-0000 3D view

- Lumen output (Light fitting): 5005lm
- Lumen output (Lamp): 6700lm
- Yield: 74%
- Rating per light fitting: 73.5W
- Light Source: 2xL36W/840 OSRAM Lumilux
- CoolWhite (corrector factor 1,00)



LED module - EVNL240-0000 3D view

- Lumen output (Light fitting): 4188lm
- Lumen output (Lamp): 4257lm
- 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 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).

Spare parts to upgrade from a "fluorescent" to a "LED" fitting - LED gear tray with driver 100-254Vac 50/60Hz:

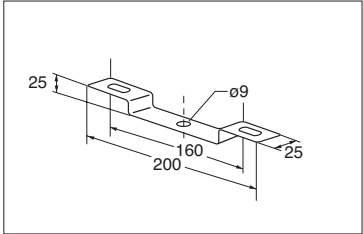
- V0041X20WEL - To upgrade EVN120 to EVNL120
- V0041X40WEL - To upgrade EVN140 to EVNL140
- V0041X65WEL - To upgrade EVN165 to EVNL165
- V0042X20WEL - To upgrade EVN220 to EVNL220
- V0042X40WEL - To upgrade EVN240 to EVNL240
- V0042X65WEL - To upgrade EVN265 to EVNL265

Linear fittings

Accessories & spare parts

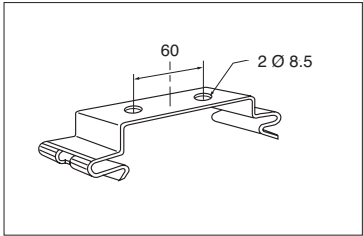
EVNL - Zones 2 & 22

Fixing Accessories



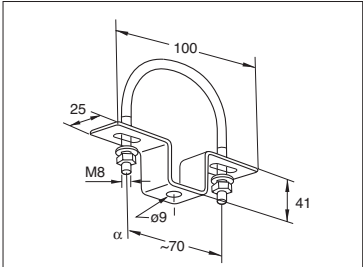
Brackets

Type	Specifications
V015	2 x pair of zinc plated steel for ceiling mounting (Included with product)
V016	2 x stainless steel 316L brackets for ceiling mounting



Mounting bracket clip

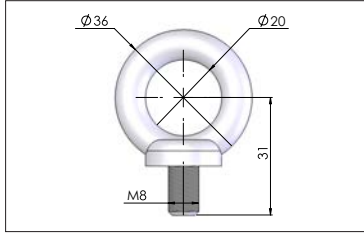
Type	Specifications
V014	2x Rapid ceiling mounting with stainless steel clip



Fixing bracket and flange

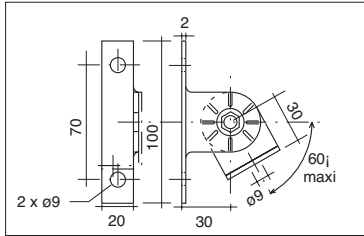
Type	Specifications
V018	2x zinc plated steel pole mounted brackets for Ø1"¼ & 1"½
V019	2x zinc plated steel pole mounted brackets for Ø2"
V021	2x Stainless steel 316L pole mounted brackets for Ø1"¼ & 1"½
V022	2x Stainless steel 316L pole mounted brackets Ø2"

3



Hook

Type	Specifications
V024	2x Zinc plated steel ceiling suspension hook



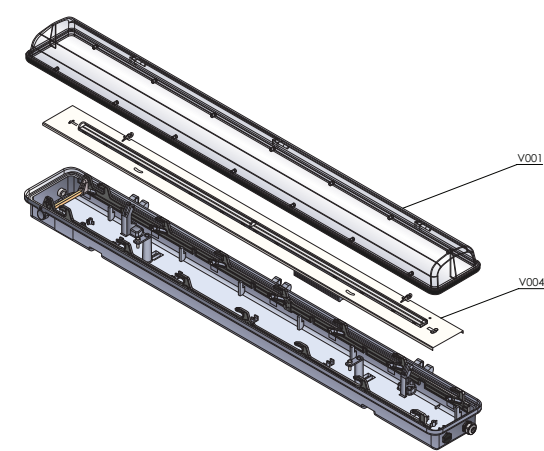
Hinged bracket

Type	Specifications
V023	2x Steel hinged brackets plastic coated

Linear fittings

Spare parts

EVNL - Zones 2 & 22



Spare parts

Type	Specifications
V00120W	20W diffuser with gasket for EV. range
V00140W	40W diffuser with gasket for EV. range
V00165W	65W diffuser with gasket for EV. range
V0041X20WEL	Gear tray 12,6W with driver 100-254Vac 50-60Hz and bracket kit of gear tray for EVNL120
V0041X40WEL	Gear tray 25W with driver 100-254Vac 50-60Hz and bracket kit of gear tray for EVNL140
V0041X65WEL	Gear tray 58W with driver 100-254Vac 50-60Hz and bracket kit of gear tray for EVNL165
V0042X20WEL	Gear tray 19W with driver 100-254Vac 50-60Hz and bracket kit of gear tray for EVNL220
V0042X40WEL	Gear tray 56W with driver 100-254Vac 50-60Hz and bracket kit of gear tray for EVNL240
V0042X65WEL	Gear tray 71W with driver 100-254Vac 50-60Hz and bracket kit of gear tray for EVNL265
V02520x40W	Brass continuity plate for EV. 120, EV. 220, EV. 140, EV. 240
V02565W	Brass continuity plate for EV. 165, EV. 265
EXCGM20S-01	Kit M20 Exe IIC nylon cable gland for non armoured cable diameter 6-12,0 and locknut
EXN04MMC1-01	Kit M20 Ex-d IIC Ex-e II Ex-td double compression nickel plated cable gland for armoured cable diameter inner 6-12 outer 8,5-16, locknut, sealing gasket



Linear fittings

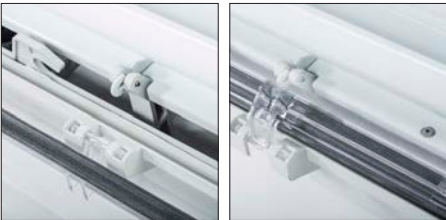
Fluorescent fitting

EVN - Zones 2 & 22



- Features**
 - Double central locking for ingress protection
 - All components mounted on hinged and removable gear tray which gives easy access for maintenance
 - Including accessories (cable gland, plugs & fixing brackets)
 - Option: Automatic switch off on opening for safe maintenance

- Specifications**
 - Main body constructed of glass reinforced polyester for high impact strength
 - UV protected polycarbonate diffuser to resist harsh environments
 - Rated voltage 110- 260Vac/Vdc 50-60Hz
 - Wiring configuration: 5 wires
 - 3xEntries M20
 - 2x Emergency versions (Type: “EM” version 3h battery duration or “EMA” with 3h with automatic test and blackstart capabilities)



Certifications

Standards	
Approved to:	EN60079-0, 60079-15, 60079-31
EC Type examination certificate to:	Directive 94/9/EC Ex II 3 G Ex nR IIC T4 Gc for -40°C to + 60°C Ex nR IIC T5 Gc for -40°C to + 35°C Ex II 3 D Ex tc IIIC T135°C Dc IP66 for -40°C to + 60°C Ex tc IIIC T100°C Dc IP66 for -40°C to + 35°C
Glow wire test:	960°C EN60598-2-22
Safe operating temperature range:	-20°C to +55°C EVN, -10°C to +50°C EVN EM & EVN EMA
IP test:	IP66 IEC 60529 (2001)
Impact protection index:	IK09 according to IEC 62262

Linear fittings

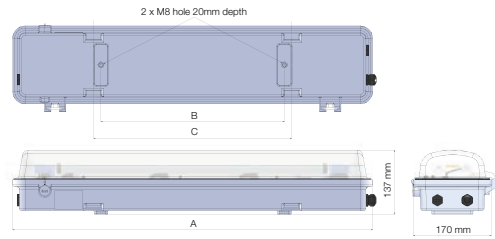
Fluorescent fitting

EVN - Zones 2 & 22



3

EVN



Dimensional drawing

Technical specifications

Type	Wiring Configuration	Rating W	Current A 230V	External dimensions mm			Weight kg
				A	B	C	



5 wires: Equipped with 1 cable gland & 2 plugs

EVN120-0000	5 wires	1 x 18	0.09	785	432	400	4.40
EVN140-0000	5 wires	1 x 36	0.17	1370	900	700	7.60
EVN165-0000	5 wires	1 x 58	0.26	1670	900	700	9.20
EVN220-0000	5 wires	2 x 18	0.17	785	432	400	4.40
EVN240-0000	5 wires	2 x 36	0.33	1370	900	700	7.60
EVN265-0000	5 wires	2 x 58	0.50	1670	900	700	9.20
EVN120-D000	5 wires & continuity plate	1 x 18	0.09	785	432	400	4.40
EVN140-D000	5 wires & continuity plate	1 x 36	0.17	1370	900	700	7.60
EVN165-D000	5 wires & continuity plate	1 x 58	0.26	1670	900	700	9.20
EVN220-D000	5 wires & continuity plate	2 x 18	0.17	785	432	400	4.40
EVN240-D000	5 wires & continuity plate	2 x 36	0.33	1370	900	700	7.60
EVN265-D000	5 wires & continuity plate	2 x 58	0.50	1670	900	700	9.20



5 wires through: Equipped with 2 cable glands & 1 plug

EVN120-B000	5 wires through	1 x 18	0.09	785	432	400	4.40
EVN140-B000	5 wires through	1 x 36	0.17	1370	900	700	7.60
EVN165-B000	5 wires through	1 x 58	0.26	1670	900	700	9.20
EVN220-B000	5 wires through	2 x 18	0.17	785	432	400	4.40
EVN240-B000	5 wires through	2 x 36	0.33	1370	900	700	7.60
EVN265-B000	5 wires through	2 x 58	0.50	1670	900	700	9.20
EVN120-E000	5 wires through & 2 continuity plates	1 x 18	0.09	785	432	400	4.40
EVN140-E000	5 wires through & 2 continuity plates	1 x 36	0.17	1370	900	700	7.60
EVN165-E000	5 wires through & 2 continuity plates	1 x 58	0.26	1670	900	700	9.20
EVN220-E000	5 wires through & 2 continuity plates	2 x 18	0.17	785	432	400	4.40
EVN240-E000	5 wires through & 2 continuity plates	2 x 36	0.33	1370	900	700	7.60
EVN265-E000	5 wires through & 2 continuity plates	2 x 58	0.50	1670	900	700	9.20

Technical information

Lamps

Fluorescent Lamp (order separately)
T8 bi-pin tube, lampholder G13, diameter 26mm - white industry 4000°K.

Photometric curve

See page 6/3

Rated voltages

Electronic ballast: 110- 260Vac/Vdc
50-60Hz.

Power factor

0.98.

Terminal block (screws)

6mm²(rigid wire), 4mm² (flexible wire)
Terminals supplied L1, L2, L3, N, PE (looping possible with one additional cable gland)

Cable entries

Three entries M20

For non- armoured cable: included two M20 nylon plugs (EX-M20) and one M20 nylon cable gland, diameter 6-12mm (EXCGM20S)

For armoured cable: included continuity plate - two M20 nylon plugs (EX-M20) and one M20 nickel plated brass cable gland, diameter 6-12/ 8.5-16mm (EXN04MMC1)

Housing

Fiberglass reinforced polyester housing for high impact strength, UV protected polycarbonate diffuser to resist harsh environments, Painted steel gear tray & Stainless steel 316L insert

Fixing (included)

V015 - 2x Two zinc-plated steel brackets for ceiling mounting

Linear fittings

Emergency fluorescent fitting - 3h

EVN EM - Zones 2 & 22

Technical specifications

Type	Wiring Configuration	Rating W	Battery h	Current A 230V	External dimensions mm			Weight kg
					A	B	C	
3 wires: Equipped with 1 cable gland & 2 plugs								
EVN120EM-0000	3 wires	1 x 18	3h	0.09	785	432	400	5.80
EVN140EM-0000	3 wires	1 x 36	3h	0.17	1370	900	700	9.00
EVN165EM-0000	3 wires	1 x 58	3h	0.26	1670	900	700	10.60
EVN220EM-0000	3 wires	2 x 18	3h	0.17	785	432	400	5.80
EVN240EM-0000	3 wires	2 x 36	3h	0.33	1370	900	700	9.00
EVN265EM-0000	3 wires	2 x 58	3h	0.50	1670	900	700	10.60
EVN120EM-D000	3 wires & continuity plate	1 x 18	3h	0.09	785	432	400	5.80
EVN140EM-D000	3 wires & continuity plate	1 x 36	3h	0.17	1370	900	700	9.00
EVN165EM-D000	3 wires & continuity plate	1 x 58	3h	0.26	1670	900	700	10.60
EVN220EM-D000	3 wires & continuity plate	2 x 18	3h	0.17	785	432	400	5.80
EVN240EM-D000	3 wires & continuity plate	2 x 36	3h	0.33	1370	900	700	9.00
EVN265EM-D000	3 wires & continuity plate	2 x 58	3h	0.50	1670	900	700	10.60

* For dimensional drawing please refer to page 3/16

Electrical Features

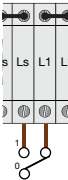
Lamps Fluorescent Lamp (order separately) T8 bi-pin tube, lampholder G13, diameter 26mm - white industry 4000°K	Power factor 0.98.	Terminal block Terminal block (screws plug in terminal block) 4mm²(rigid wire), 2,5mm² (flexible wire) Terminals supplied L1, L2, L3, LS, N, PE (looping possible with one additional cable gland)	Housing Fiberglass reinforced polyester housing for high impact strength, UV protected polycarbonate diffuser to resist harsh environments Stainless steel 316L insert Painted steel geartray
Rated voltages Electronic ballast: 220-240 Vac/Vdc 50/60Hz	Battery Battery NiCd 7,2V Lumen output in emergency mode (1 lamp lit) 2 hours: 40% for EVN120, EVN220, 33% for EVN140, EVN240, 10% for EVN165, EVN265 3 hours: 24% for EVN120, EVN220, 18% for EVN140, EVN240, 8% for EVN165, EVN265 Monitored by one LED	Cable entries Three entries M20 For non- armoured cable: included two M20 nylon plugs (EX-M20) and one M20 nylon cable gland, diameter 6-12mm (EXCGM20S) For armoured cable: included continuity plate - two M20 nylon plugs (EX-M20) and one M20 nickel plated brass cable gland, diameter 6-12/ 8,5-16mm (EXN04MMC1)	Fixing V015 - 2x Two zinc-plated steel brackets for ceiling mounting

Emergency function diagrams

Wiring provided by DTS - Maintained Mode



Switch between LS/L1 - Non Maintained Mode *



Mains Supply	Tube	Battery
ON	Lit	Charged
OFF	Only emergency tube lit	Discharged

Mains Supply	Tube	Battery
ON	OFF	Charged
OFF	Only emergency tube lit	Discharged

* This table corresponds to the position 0 "open".
If the switch is on position 1 "close", refer to the table on the left

Linear fittings

Emergency Fluorescent fitting with automatic test & blackstart capabilities - 3h. EVN EMA - Zones 2 & 22

Technical specifications

Type	Wiring Configuration	Rating W	Battery h	Nominal Current A	External dimensions mm			Weight kg
					A	B	C	
5 wires: Equipped with 1 cable gland & 2 plugs								
EVN120EMA-0000	5 wires	1 x 18	3h	0.09	785	432	400	5.80
EVN140EMA-0000	5 wires	1 x 36	3h	0.17	1370	900	700	9.00
EVN220EMA-0000	5 wires	2 x 18	3h	0.17	785	432	400	5.80
EVN240EMA-0000	5 wires	2 x 36	3h	0.33	1370	900	700	9.00
EVN120EMA-D000	5 wires & continuity plate	1 x 18	3h	0.09	785	432	400	5.80
EVN140EMA-D000	5 wires & continuity plate	1 x 36	3h	0.17	1370	900	700	9.00
EVN220EMA-D000	5 wires & continuity plate	2 x 18	3h	0.17	785	432	400	5.80
EVN240EMA-D000	5 wires & continuity plate	2 x 36	3h	0.33	1370	900	700	9.00

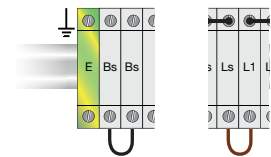
* For dimensional drawing please refer to page 3/16

Electrical Features

Lamp Fluorescent Lamp (order separately) T8 bi-pin tube, lampholder G13, diameter 26mm - white industry 4000°K	Power factor 0.98.	Cable entries Three entries M20 For non- armoured cable: included two M20 nylon plugs (EX-M20) and one M20 nylon cable gland, diameter 6-12mm (EXCGM20S) For armoured cable: included continuity plate - two M20 nylon plugs (EX-M20) and one M20 nickel plated brass cable gland, diameter 6-12/ 8,5-16mm (EXN04MMC1)	Fixing (included) V015 - 2x Two zinc-plated steel brackets for ceiling mounting
Rated voltages Electronic ballast: 220-240Vac/Vdc 50/60Hz	Battery Battery NiCd 6V 4Ah for EVN120, EVN220 Battery NiCd 6V 7Ah for EVN140, EVN240 Lumen output in emergency mode (1 lamp lit) 3 hours: 40% for EVN120, EVN220 3 hours: 33% for EVN140, EVN240 Monitored by two LED	Housing Fiberglass reinforced polyester housing for high impact strength, UV protected polycarbonate diffuser to resist harsh environments, 2 x M8 Stainless steel 316L insert Painted steel geartray	
	Terminal block (spring) Jumped bar x2 terminal blocks 4mm²(rigid wire), 2,5mm² (flexible wire) Terminals supplied L1, L2, L3, LS, N, E, BS (looping possible with one additional cable gland)		

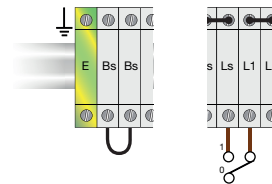
Emergency function diagrams

Wiring provided by DTS - Maintained Mode



Mains Supply	Tube	Battery
ON	Lit	Charged
OFF	Only emergency tube lit	Discharged

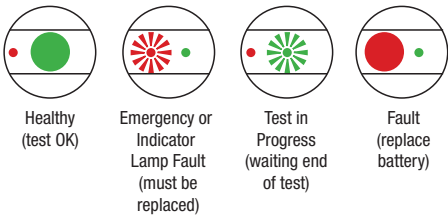
Switch between LS/L1 - Non Maintained Mode



Mains Supply	Tube	Battery
ON	Lit	Charged
OFF	Only emergency tube lit	Discharged

Preventive maintenance mode

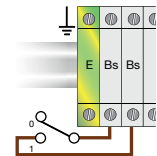
Battery charge - daily
Emergency lamp during 1min - weekly
Battery charge capacity during 1hr - quarterly
Clear system test display
Battery charge monitored by 2 LED



Emergency function diagram - Blackstart mode

The EMA product contains 2 blackstart terminals. The **blackstart mode** consists in disconnecting the battery and so switching off the fitting. This mode is mainly used during maintenance. As soon as the maintenance is done, the main power ON and the blackstart terminals connected, the emergency fitting is ready to be used as the battery is not discharged.

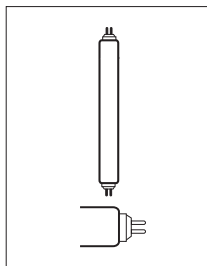
Switch between BS terminals



This table corresponds to the position 0 "open".
If the switch is on position 1 "close", please refer to the above tables.

Mains supply	Tube	Battery
ON	Lit	Disconnected - not charged
OFF	OFF	Disconnected - not charged

Lamps

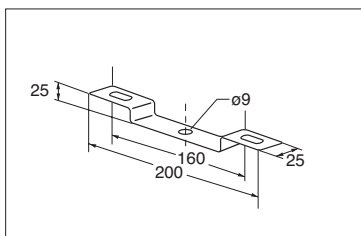


Specifications:

G13 - \varnothing 26mm
Colour temperature: White industry 4000°K
CRI: > 80
lm/W: 65 to 93
Average operating life: 12,000 hours

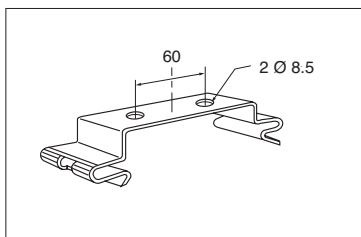
Type	Power W	Lumen output lm	Lampholder
TL18W	18	1250	G13
TL36W	36	3350	G13
TL58W	58	5200	G13

Fixing Accessories



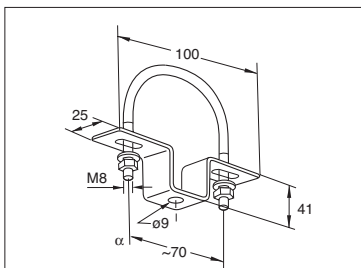
Brackets

Type	Specifications
V015	2 x pair of zinc plated steel for ceiling mounting (Included with product)
V016	2 x stainless steel 316L brackets for ceiling mounting



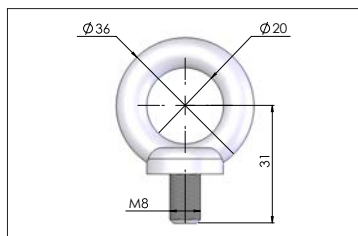
Mounting bracket clip

Type	Specifications
V014	2x Rapid ceiling mounting with stainless steel clip



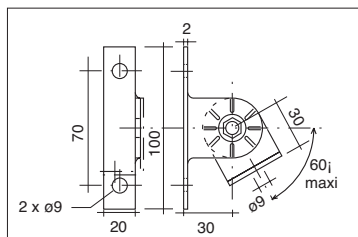
Fixing bracket and flange

Type	Specifications
V018	2x zinc plated steel pole mounted brackets for ø1"¼ & 1"½
V019	2x zinc plated steel pole mounted brackets for ø2"
V021	2x Stainless steel 316L pole mounted brackets for ø1"¼ & 1"½
V022	2x Stainless steel 316L pole mounted brackets ø2"



Hook

Type	Specifications
V024	2x Zinc plated steel ceiling suspension hook



Hinged bracket

Type	Specifications
V023	2x Steel hinged brackets plastic coated

Linear fittings
Spare parts
EVN - Zones 2 & 22

3



Spare parts

Type	Specifications
V00120W	20W diffuser with gasket for EV. range
V00140W	40W diffuser with gasket for EV. range
V00165W	65W diffuser with gasket for EV. range
V0041X20WE	Gear tray 1X18W with electronic ballast 110-260V 50-60Hz for EVN120
V0041X40WE	Gear tray 1X36W with electronic ballast 110-260V 50-60Hz for EVN140
V0041X65WE	Gear tray 1X58W with electronic ballast 110-260V 50-60Hz for EVN165
V0042X20WE	Gear tray 2X18W with electronic ballast 110-260V 50-60Hz for EVN220
V0042X40WE	Gear tray 2x36W with electronic ballast 220- 240V 50-60Hz for EVN240
V0042X65WE	Gear tray 2x58W with electronic ballast 220- 240V 50-60Hz for EVN265
V0041X20WEM	Emergency gear tray 1x18W with electronic ballast 220-240V 50-60Hz for EVN120EM
V0041X40WEM	Emergency gear tray 1x36W with electronic ballast 220-240V 50-60Hz for EVN140EM
V0041X65WEM	Emergency gear tray 1x58W with electronic ballast 220-240V 50-60Hz for EVN165EM
V0042X20WEM	Emergency gear tray 2x18W with electronic ballast 220-240V 50-60Hz for EVN220EM
V0042X40WEM	Emergency gear tray 2x36W with electronic ballast 220-240V 50-60Hz for EVN240EM
V0042X65WEM	Emergency gear tray 2x58W with electronic ballast 220-240V 50-60Hz for EVN265EM
V0041X20WEMA	Emergency gear tray + auto test 1X18W with electronic ballast 220-240V 50-60Hz for EVN120EMA
V0041X40WEMA	Emergency gear tray + auto test 1X36W with electronic ballast 220-240V 50-60Hz for EVN140EMA
V0042X20WEMA	Emergency gear tray + auto test 2X18W with electronic ballast 220-240V 50-60Hz for EVN220EMA
V0042X40WEMA	Emergency gear tray + auto test 2X36W with electronic ballast 220-240V 50-60Hz for EVN240EMA
V008N	Bi-pin G13 lampholder
V02520x40W	Brass continuity plate for EV. 120, EV. 220, EV. 140, EV. 240
V02565W	Brass continuity plate for EV. 165, EV. 265
EXCGM20S-01	Kit M20 Exe IIC nylon cable gland for non armoured cable diameter 6-12,0 and locknut
EXN04MMC1-01	Kit M20 Ex-d IIC Ex-e II Ex-t double compression nickel plated cable gland for armoured cable diameter inner 6-12 outer 8,5-16, locknut, sealing gasket

Linear fittings

LED fitting

EVDL - Zones 21 & 22



Features

- Operating life 100,000 h (according items)
- High lumen output - 5000 lumens with 100% yield (according items) - LED module with diffuser
- Double central locking for ingress protection
- All components mounted on hinged and removable gear tray which gives easy access for maintenance
- Including accessories (cable gland, plugs & fixing brackets)
- Option: Automatic switch off on opening for safe maintenance

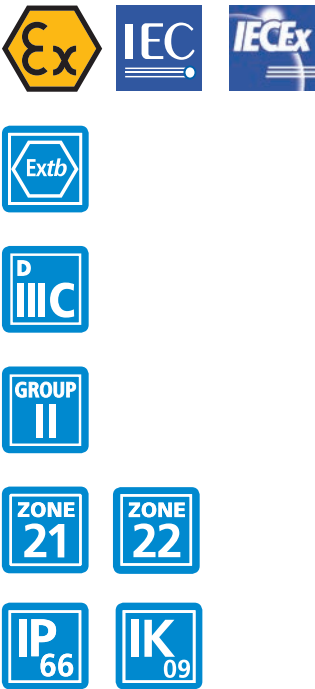
3

Specifications

- Main body constructed of glass reinforced polyester for high impact strength
- UV protected polycarbonate diffuser to resist harsh environments
- Rated voltage 100- 254Vac 50-60Hz
- Wiring configuration: 5 wires
- 3xEntries M20



Certifications



Standards

Approved to:	EN60079-0, 60079-31
EC Type examination certificate to:	Directive 94/9/EC LCIE 11 ATEX 3092X IEC Ex LCIE 11.0064X Ex II 2 D Ex tb IIC T85°C Db for -40°C to +60°C Ex tb IIC T65°C Db for -40°C to +40°C
Glow wire test:	960°C EN60598-2-22
Safe operating temperature range:	-20°C to +55°C
IP test:	IP66 IEC 60529 (2001)
Impact protection index:	IK09 according to IEC 62262

Linear fittings

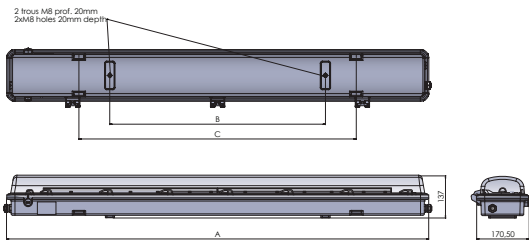
LED fitting

EVDL - Zones 21 & 22



3

EVDL



Dimensional drawing

Technical specifications

Type	Wiring Configuration	Rating W	Current A 230V	Lumen Output lm	Operating Life at 25°C h	External dimensions mm			Weight kg
						A	B	C	



5 wires: Equipped with 1 cable gland & 2 plugs

EVDL120-0000	5 wires	1 x 12	0.07	1194	100,000	785	432	400	4.00
EVDL140-0000	5 wires	1 x 25	0.12	2353	90,000	1370	900	700	7.20
EVDL165-0000	5 wires	1 x 31	0.16	2450	80,000	1670	900	700	8.80
EVDL220-0000	5 wires	1x19	0.10	1613	80,000	785	432	400	4.00
EVDL240-0000	5 wires	1x56	0.27	4257	70,000	1370	900	700	7.20
EVDL265-0000	5 wires	1x71	0.34	5076	70,000	1670	900	700	8.80
EVDL120-D000	5 wires & continuity plate	1 x 12	0.07	1194	100,000	785	432	400	4.00
EVDL140-D000	5 wires & continuity plate	1 x 25	0.12	2353	90,000	1370	900	700	7.20
EVDL165-D000	5 wires & continuity plate	1 x 31	0.16	2450	80,000	1670	900	700	8.80
EVDL220-D000	5 wires & continuity plate	1x19	0.10	1613	80,000	785	432	400	4.00
EVDL240-D000	5 wires & continuity plate	1x56	0.27	4257	70,000	1370	900	700	7.20
EVDL265-D000	5 wires & continuity plate	1x71	0.34	5076	70,000	1670	900	700	8.80

Technical information

LED installed

Set of LED modules with integrated diffuser colour temperature 4000°K L70/B10 at 25°C (70% lumen output/ 90% active LED) according to operating life.

Photometric curve

See page 6/3

Rated voltages

Electronic driver: 100- 254Vac 50-60Hz.

Power factor

0.9.

Terminal block

(screws plug in terminal block)

10mm² (rigid wire),

6mm² (flexible wire)

Terminals supplied L1, L2, L3, N, PE (looping possible with one additional cable gland)

Cable entries

Three entries M20

For non- armoured cable: included two M20 nylon plugs (EX-M20) and one M20 nylon cable gland, diameter 6-12mm (EXCGM20S)

For armoured cable: included continuity plate - two M20 nylon plugs (EX-M20) and one M20 nickel plated brass cable gland, diameter 6-12/ 8.5-16mm (EXN04MMC1)

Housing

Fiberglass reinforced polyester housing for high impact strength
UV protected polycarbonate diffuser to resist harsh environments
White painted steel gear tray
2 x M8 Stainless steel 316L insert

Fixing (included)

V015 - 2x Two zinc-plated steel brackets for ceiling mounting

Linear fittings

From a fluorescent fitting to a LED fitting

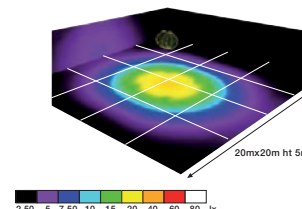
EVDL - Zones 21 & 22

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.

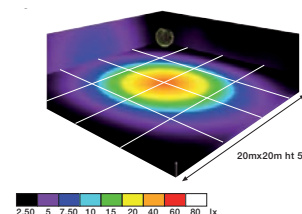
T8 fluorescent lamp - EVD240-000J0 3D view

- Lumen output (Light fitting): 5005lm
- Lumen output (Lamp): 6700lm
- Yield: 74%
- Rating per light fitting: 73,5W
- Light Source: 2xL36W/840 OSRAM Lumilux
- CoolWhite (corrector factor 1,00)



LED module - EVDL240-0000 3D view

- Lumen output (Light fitting): 4188lm
- Lumen output (Lamp): 4257lm
- 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 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).

Spare parts to upgrade from a "fluorescent" to a "LED" fitting - LED gear tray with driver 100-254Vac 50/60Hz:

- V0041X20WEL - To upgrade EVD120 to EVDL120
- V0041X40WEL - To upgrade EVD140 to EVDL140
- V0041X65WEL - To upgrade EVD165 to EVDL165
- V0042X20WEL - To upgrade EVD220 to EVDL220
- V0042X40WEL - To upgrade EVD240 to EVDL240
- V0042X65WEL - To upgrade EVD265 to EVDL265

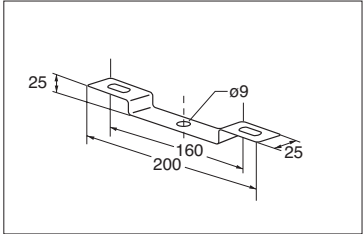
Linear fittings

Accessories & spare parts

EVDL - Zones 21 & 22

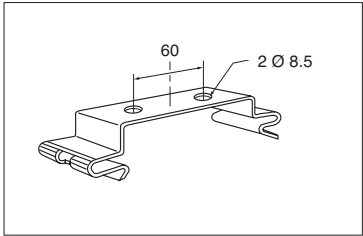
3

Brackets



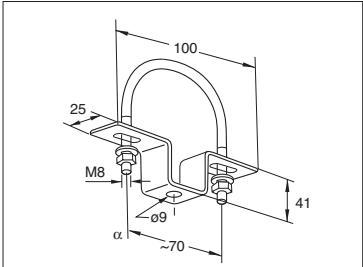
Brackets

Type	Specifications
V015	2 x pair of zinc plated steel for ceiling mounting (Included with product)
V016	2 x stainless steel 316L brackets for ceiling mounting



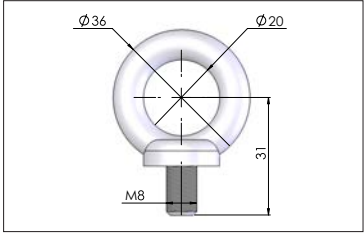
Mounting bracket clip

Type	Specifications
V014	2x Rapid ceiling mounting with stainless steel clip



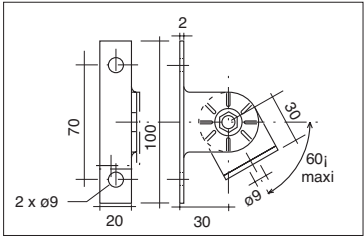
Fixing bracket and flange

Type	Specifications
V018	2x zinc plates steel pole mounted brackets for Ø1"¼ & 1"½
V019	2x zinc plates steel pole mounted brackets for Ø2"
V021	2x Stainless steel 316L pole mounted brackets for Ø1"¼ & 1"½
V022	2x Stainless steel 316L pole mounted brackets Ø2"



Hook

Type	Specifications
V024	2x Zinc plated steel ceiling suspension hook



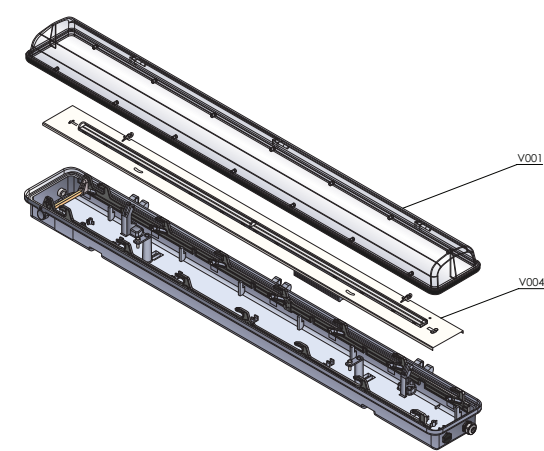
Hinged bracket

Type	Specifications
V023	2x Steel hinged brackets plastic coated

Linear fittings

Spare parts

EVDL - Zones 21 & 22



Spare parts

Type	Specifications
V00120W	20W diffuser with gasket for EV. range
V00140W	40W diffuser with gasket for EV. range
V00165W	65W diffuser with gasket for EV. range
V0041X20WEL	Gear tray 12,6W with driver 100-254Vac 50-60Hz and bracket kit of gear tray for EVDL120
V0041X40WEL	Gear tray 25W with driver 100-254Vac 50-60Hz and bracket kit of gear tray for EVDL140
V0041X65WEL	Gear tray 58W with driver 100-254Vac 50-60Hz and bracket kit of gear tray for EVDL165
V0042X20WEL	Gear tray 19W with driver 100-254Vac 50-60Hz and bracket kit of gear tray for EVDL220
V0042X40WEL	Gear tray 56W with driver 100-254Vac 50-60Hz and bracket kit of gear tray for EVDL240
V0042X65WEL	Gear tray 71W with driver 100-254Vac 50-60Hz and bracket kit of gear tray for EVDL265
V02520x40W	Brass continuity plate for EV. 120, EV. 220, EV. 140, EV. 240
V02565W	Brass continuity plate for EV. 165, EV. 265
EXCGM20S-01	Kit M20 Exe IIC nylon cable gland for non armoured cable diameter 6-12,0 and locknut
EXN04MMC1-01	Kit M20 Ex-d IIC Ex-e II Ex-td double compression nickel plated cable gland for armoured cable diameter inner 6-12 outer 8,5-16, locknut, sealing gasket



Linear fittings

Fluorescent fitting

EVD - Zones 21 & 22



- Features
- Double central locking for ingress protection
 - All components mounted on hinged and removable gear tray which gives easy access for maintenance
 - Including accessories (cable gland, plugs & fixing brackets)
 - Option: Automatic switch off on opening for safe maintenance

- Specifications
- Main body constructed of glass reinforced polyester for high impact strength
 - UV protected polycarbonate diffuser to resist harsh environments
 - Rated voltage 110- 260Vac/Vdc 50-60Hz
 - Wiring configuration: 5 wires
 - 3xEntries M20
 - 2x Emergency versions (Type: “EM” version 3h battery duration or “EMA” with 3h with automatic test and blackstart capabilities)



Certifications

















Standards

Approved to:	EN60079-0, 60079-31
EC Type examination certificate to:	Directive 94/9/EC LCIE 11 ATEX 3092X IEC Ex LCIE 11.0064X Ex II 2 D Ex tb IIIC T85°C Db for -40°C to +60°C Ex tb IIIC T65°C Db for -40°C to +40°C
Glow wire test:	960°C EN60598-2-22
Safe operating temperature range:	-20°C to +55°C EVD, -10°C to +50°C EVD EM & EVN EMA
IP test:	IP66 IEC 60529 (2001)
Impact protection index:	IK09 according to IEC 62262

Linear fittings

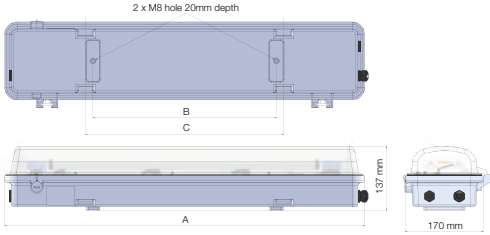
Fluorescent fitting

EVD - Zones 21 & 22



3

EVD



Dimensional drawing

Technical specifications

Type	Wiring Configuration	Rating W	Current A 230V	External dimensions mm			Weight kg
				A	B	C	



5 wires: Equipped with 1 cable gland & 2 plugs

EVD120-00J0	5 wires	1 x 18	0.09	785	432	400	4.40
EVD140-00J0	5 wires	1 x 36	0.17	1370	900	700	7.60
EVD165-00J0	5 wires	1 x 58	0.26	1670	900	700	9.20
EVD220-00J0	5 wires	2 x 18	0.17	785	432	400	4.40
EVD240-00J0	5 wires	2 x 36	0.33	1370	900	700	7.60
EVD265-00J0	5 wires	2 x 58	0.50	1670	900	700	9.20
EVD120-D0J0	5 wires & continuity plate	1 x 18	0.09	785	432	400	4.40
EVD140-D0J0	5 wires & continuity plate	1 x 36	0.17	1370	900	700	7.60
EVD165-D0J0	5 wires & continuity plate	1 x 58	0.26	1670	900	700	9.20
EVD220-D0J0	5 wires & continuity plate	2 x 18	0.17	785	432	400	4.40
EVD240-D0J0	5 wires & continuity plate	2 x 36	0.33	1370	900	700	7.60
EVD265-D0J0	5 wires & continuity plate	2 x 58	0.50	1670	900	700	9.20



5 wires through: Equipped with 2 cable glands & 1 plug

EVD120-B0J0	5 wires through	1 x 18	0.09	785	432	400	4.40
EVD140-B0J0	5 wires through	1 x 36	0.17	1370	900	700	7.60
EVD165-B0J0	5 wires through	1 x 58	0.26	1670	900	700	9.20
EVD220-B0J0	5 wires through	2 x 18	0.17	785	432	400	4.40
EVD240-B0J0	5 wires through	2 x 36	0.33	1370	900	700	7.60
EVD265-B0J0	5 wires through	2 x 58	0.50	1670	900	700	9.20
EVD120-E0J0	5 wires through & 2 continuity plates	1 x 18	0.09	785	432	400	4.40
EVD140-E0J0	5 wires through & 2 continuity plates	1 x 36	0.17	1370	900	700	7.60
EVD165-E0J0	5 wires through & 2 continuity plates	1 x 58	0.26	1670	900	700	9.20
EVD220-E0J0	5 wires through & 2 continuity plates	2 x 18	0.17	785	432	400	4.40
EVD240-E0J0	5 wires through & 2 continuity plates	2 x 36	0.33	1370	900	700	7.60
EVD265-E0J0	5 wires through & 2 continuity plates	2 x 58	0.50	1670	900	700	9.20

Technical information

Lamps
Fluorescent Lamp (order separately)
T8 bi-pin tube, lampholder G13, diameter 26mm - white industry 4000°K.

Photometric curve
See page 6/3

Rated voltages
Electronic ballast: 110- 260Vac/Vdc
50-60Hz.

Power factor
0.98.

Terminal block (screws)
6mm²(rigid wire), 4mm² (flexible wire)
Terminals supplied L1, L2, L3, N, PE (looping possible with one additional cable gland)

Cable entries
Three entries M20

For non- armoured cable: included two M20 nylon plugs (EX-M20) and one M20 nylon cable gland, diameter 6-12mm (EXCGM20S)

For armoured cable: included continuity plate - two M20 nylon plugs (EX-M20) and one M20 nickel plated brass cable gland, diameter 6-12/ 8.5-16mm (EXN04MMC1)

Housing
Fiberglass reinforced polyester housing for high impact strength
UV protected polycarbonate diffuser to resist harsh environments
White painted steel gear tray
2 x M8 Stainless steel 316L insert

Fixing (included)
V015 - 2x Two zinc-plated steel brackets for ceiling mounting

Linear fittings

Emergency fluorescent fitting - 3h

EVD EM - Zones 21 & 22

Technical specifications

Type	Wiring Configuration	Rating W	Battery h	Current A 230V	External dimensions mm			Weight kg
					A	B	C	
3 wires: Equipped with 1 cable gland & 2 plugs								
EVD120EM-00J0	3 wires	1 x 18	3h	0.09	785	432	400	5.80
EVD140EM-00J0	3 wires	1 x 36	3h	0.17	1370	900	700	9.00
EVD165EM-00J0	3 wires	1 x 58	3h	0.26	1670	900	700	10.60
EVD220EM-00J0	3 wires	2 x 18	3h	0.17	785	432	400	5.80
EVD240EM-00J0	3 wires	2 x 36	3h	0.33	1370	900	700	9.00
EVD265EM-00J0	3 wires	2 x 58	3h	0.50	1670	900	700	10.60
EVD120EM-D0J0	3 wires & continuity plate	1 x 18	3h	0.09	785	432	400	5.80
EVD140EM-D0J0	3 wires & continuity plate	1 x 36	3h	0.17	1370	900	700	9.00
EVD165EM-D0J0	3 wires & continuity plate	1 x 58	3h	0.26	1670	900	700	10.60
EVD220EM-D0J0	3 wires & continuity plate	2 x 18	3h	0.17	785	432	400	5.80
EVD240EM-D0J0	3 wires & continuity plate	2 x 36	3h	0.33	1370	900	700	9.00
EVD265EM-D0J0	3 wires & continuity plate	2 x 58	3h	0.50	1670	900	700	10.60

* For dimensional drawing please refer to page 3/28

Electrical Features

Lamps

Fluorescent Lamp (order separately)
T8 bi-pin tube, lampholder G13, diameter
26mm - white industry 4000°K

Rated voltages

Electronic ballast: 220-240Vac/Vdc 50/60Hz

Power factor

0.98.

Battery

Battery NiCd 7,2V
4Ah Lumen output in emergency mode (1 lamp lit)
2 hours: 40% for EVD120, EVD220, 33% for EVD140, EVD240, 10% for EVD165, EVD265
3 hours: 24% for EVD120, EVD220, 18% for EVD140, EVD240, 8% for EVD165, EVD265
Monitored by one LED

Terminal block

Terminal block (screws plug in terminal block)
4mm²(rigid wire), 2,5mm² (flexible wire)
Terminals supplied L1, L2, L3, LS, N, PE (looping possible with one additional cable gland)

Cable entries

Three entries M20
For non- armoured cable: included two M20 nylon plugs (EX-M20) and one M20 nylon cable gland, diameter 6-12mm (EXCGM20S)
For armoured cable: included continuity plate - two M20 nylon plugs (EX-M20) and one M20 nickel plated brass cable gland, diameter 6-12/ 8,5-16mm (EXN04MMC1)

Housing

Fiberglass reinforced polyester housing for high impact strength
UV protected polycarbonate diffuser to resist harsh environments
2 x M8 Stainless steel 316L insert
Painted steel geartray

Fixing

V015 - 2x Two zinc-plated steel brackets for ceiling mounting

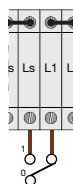
Emergency function diagrams

Wiring provided by DTS - Maintained Mode



Mains Supply	Tube	Battery
ON	Lit	Charged
OFF	Only emergency tube lit	Discharged

Switch between LS/L1 - Non Maintained Mode *



Mains Supply	Tube	Battery
ON	OFF	Charged
OFF	Only emergency tube lit	Discharged

* This table corresponds to the position 0 "open".
If the switch is on position 1 "close", refer to the table on the left

Linear fittings

Emergency Fluorescent fitting with automatic test & blackstart capabilities - 3h. EVD EMA - Zones 21 & 22

Technical specifications

Type	Wiring Configuration	Rating W	Battery h	Nominal Current A	External dimensions mm			Weight kg
					A	B	C	
5 wires: Equipped with 1 cable gland & 2 plugs								
EVD120EMA-00J0	5 wires	1 x 18	3h	0.09	785	432	400	5.80
EVD140EMA-00J0	5 wires	1 x 36	3h	0.17	1370	900	700	9.00
EVD220EMA-00J0	5 wires	2 x 18	3h	0.17	785	432	400	5.80
EVD240EMA-00J0	5 wires	2 x 36	3h	0.33	1370	900	700	9.00
EVD120EMA-D0J0	5 wires & continuity plate	1 x 18	3h	0.09	785	432	400	5.80
EVD140EMA-D0J0	5 wires & continuity plate	1 x 36	3h	0.17	1370	900	700	9.00
EVD220EMA-D0J0	5 wires & continuity plate	2 x 18	3h	0.17	785	432	400	5.80
EVD240EMA-D0J0	5 wires & continuity plate	2 x 36	3h	0.33	1370	900	700	9.00

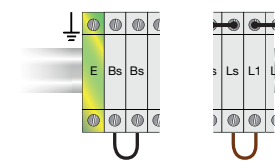
* For dimensional drawing please refer to page 3/28

Electrical Features

Lamps Fluorescent Lamp (order separately) T8 bi-pin tube, lampholder G13, diameter 26mm - white industry 4000°K	Power factor 0.98.	Cable entries Three entries M20 For non- armoured cable: included two M20 nylon plugs (EX-M20) and one M20 nylon cable gland, diameter 6-12mm (EXCGM20S) For armoured cable: included continuity plate - two M20 nylon plugs (EX-M20) and one M20 nickel plated brass cable gland, diameter 6-12/ 8,5-16mm (EXN04MMC1)	Housing Fiberglass reinforced polyester housing for high impact strength UV protected polycarbonate diffuser to resist harsh environments 2 x M8 Stainless steel 316L insert Painted steel geartray
Rated voltages Electronic ballast: 220-240Vac/Vdc 50/60Hz	Battery Battery NiCd 6V 4Ah for EVD120, EVD220 Battery NiCd 6V 7Ah for EVD140, EVD240 Lumen output in emergency mode (1 lamp lit) 3 hours: 40% for EVD120, EVD220 3 hours: 33% for EVD140, EVD240 Monitored by two LED		Fixing (included) V015 - 2x Two zinc-plated steel brackets for ceiling mounting
	Terminal block (spring) Jumped bar x2 terminal blocks 4mm²(rigid wire), 2,5mm² (flexible wire) Terminals supplied L1, L2, L3, LS, N, E, BS (looping possible with one additional cable gland)		

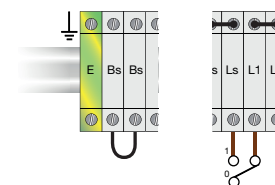
Emergency function diagrams

Wiring provided by DTS - Maintained Mode



Mains Supply	Tube	Battery
ON	Lit	Charged
OFF	Only emergency tube lit	Discharged

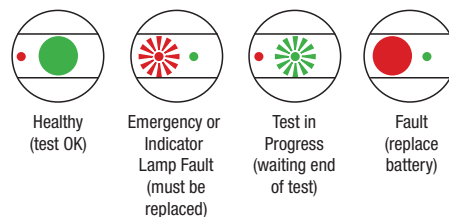
Switch between LS/L1 - Non Maintained Mode



Mains Supply	Tube	Battery
ON	Lit	Charged
OFF	Only emergency tube lit	Discharged

Preventive maintenance mode

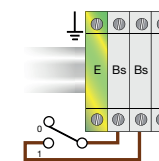
Battery charge - daily
Emergency lamp during 1min - weekly
Battery charge capacity during 1hr - quarterly
Clear system test display
Battery charge monitored by 2 LED



Emergency function diagram - Blackstart mode

The EMA product contains 2 blackstart terminals. The **blackstart mode** consists in disconnecting the battery and so switching off the fitting. This mode is mainly used during maintenance. As soon as the maintenance is done, the main power ON and the blackstart terminals connected, the emergency fitting is ready to be used as the battery is not discharged.

Switch between BS terminals



This table corresponds to the position 0 "open".
If the switch is on position 1 "close", please refer to the above tables.

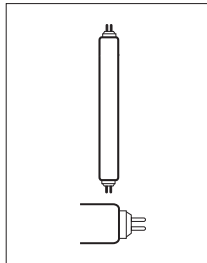
Mains supply	Tube	Battery
ON	Lit	Disconnected - not charged
OFF	OFF	Disconnected - not charged

Linear fittings

Accessories

EVD - Zones 21 & 22

Lamps



Bi-pin T8 fluorescent lamps

Specifications:

G13 - ø 26mm

Colour temperature: White industry 4000°K

CRI: > 80

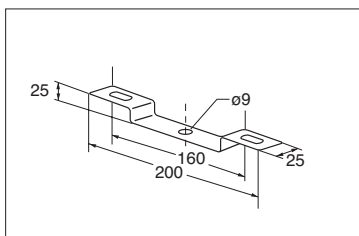
lm/W: 65 to 93

Average operating life: 12,000 hours

Type	Power W	Lumen output lm	Lampholder
TL18W	18	1250	G13
TL36W	36	3350	G13
TL58W	58	5200	G13

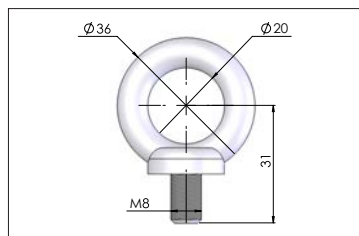
3

Fixing Accessories



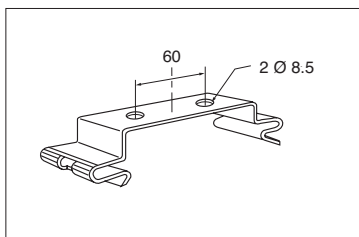
Brackets

Type	Specifications
V015	2 x pair of zinc plated steel for ceiling mounting (Included with product)
V016	2 x stainless steel 316L brackets for ceiling mounting



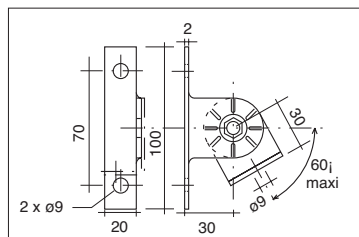
Hook

Type	Specifications
V024	2x Zinc plated steel ceiling suspension hook



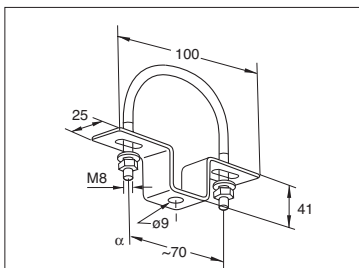
Mounting bracket clip

Type	Specifications
V014	2x Rapid ceiling mounting with stainless steel clip



Hinged bracket

Type	Specifications
V023	2x Steel hinged brackets plastic coated



Fixing bracket and flange

Type	Specifications
V018	2x zinc plated steel pole mounted brackets for ø1"¼ & 1"½
V019	2x zinc plated steel pole mounted brackets for ø2"
V021	2x Stainless steel 316L pole mounted brackets for ø1"¼ & 1"½
V022	2x Stainless steel 316L pole mounted brackets ø2"

Linear fittings

Spare parts

EVD - Zones 21 & 22

3



Spare parts

Type	Specifications
V00120W	20W diffuser with gasket for EV. range
V00140W	40W diffuser with gasket for EV. range
V00165W	65W diffuser with gasket for EV. range
V0041X20WE	Gear tray 1X18W with electronic ballast 110-260V 50-60Hz for EVD120
V0041X40WE	Gear tray 1X36W with electronic ballast 110-260V 50-60Hz for EVD140
V0041X65WE	Gear tray 1X58W with electronic ballast 110-260V 50-60Hz for EVD165
V0042X20WE	Gear tray 2X18W with electronic ballast 110-260V 50-60Hz for EVD220
V0042X40WE	Gear tray 2x36W with electronic ballast 220- 240V 50-60Hz for EVD240
V0042X65WE	Gear tray 2x58W with electronic ballast 220- 240V 50-60Hz for EVD265
V0041X20WEM	Emergency gear tray 1x18W with electronic ballast 220-240V 50-60Hz for EVD120EM
V0041X40WEM	Emergency gear tray 1x36W with electronic ballast 220-240V 50-60Hz for EVD140EM
V0041X65WEM	Emergency gear tray 1x58W with electronic ballast 220-240V 50-60Hz for EVD165EM
V0042X20WEM	Emergency gear tray 2x18W with electronic ballast 220-240V 50-60Hz for EVD220EM
V0042X40WEM	Emergency gear tray 2x36W with electronic ballast 220-240V 50-60Hz for EVD240EM
V0042X65WEM	Emergency gear tray 2x58W with electronic ballast 220-240V 50-60Hz for EVD265EM
V0041X20WEMA	Emergency gear tray + auto test 1X18W with electronic ballast 220-240V 50-60Hz for EVD120EMA
V0041X40WEMA	Emergency gear tray + auto test 1X36W with electronic ballast 220-240V 50-60Hz for EVD140EMA
V0042X20WEMA	Emergency gear tray + auto test 2X18W with electronic ballast 220-240V 50-60Hz for EVD220EMA
V0042X40WEMA	Emergency gear tray + auto test 2X36W with electronic ballast 220-240V 50-60Hz for EVD240EMA
V008N	Bi-pin G13 lampholder
V02520x40W	Brass continuity plate for EV. 120, EV. 220, EV. 140, EV. 240
V02565W	Brass continuity plate for EV. 165, EV. 265
EXCGM20S-01	Kit M20 Exe IIC nylon cable gland for non armoured cable diameter 6-12,0 and locknut
EXN04MMC1-01	Kit M20 Ex-d IIC Ex-e II Ex-td double compression nickel plated cable gland for armoured cable diameter inner 6-12 outer 8,5-16, locknut, sealing gasket

Linear fittings

Weatherproof LED fitting

EVTL - Industrial application



Features

- Operating life 100,000 h (according items)
- High lumen output - 5000 lumens with 100% yield (according items) - LED module with diffuser
- Double central locking for ingress protection
- All components mounted on hinged and removable gear tray which gives easy access for maintenance
- Including accessories (cable gland, plugs & fixing brackets)
- Option: Automatic switch off on opening for safe maintenance

Specifications

- Main body constructed of glass reinforced polyester for high impact strength
- UV protected polycarbonate diffuser to resist harsh environments
- Rated voltage 100- 254Vac 50-60Hz
- Wiring configuration: 5 wires
- 3xEntries M20



Certifications



Standards

Glow wire test:	960°C EN60598-2-22
Safe operating temperature range:	-20°C to +55°C
IP test:	IP66 IEC 60529 (2001)
Impact protection index:	IK09 according to IEC 62262

Linear fittings

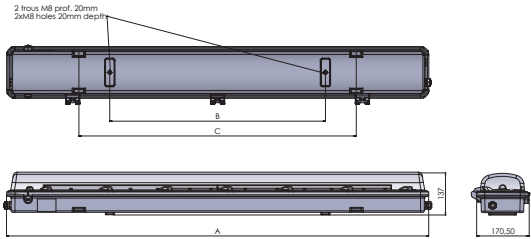
Weatherproof LED fitting

EVTL - Industrial application



3

EVTL



Dimensional drawing

Technical specifications

Type	Wiring Configuration	Rating W	Current A 230V	Lumen Output lm	Operating Life at 25°C h	External dimensions mm			Weight kg
						A	B	C	



5 wires: Equipped with 1 cable gland & 2 plugs

EVTL120-0000	5 wires	1 x 12	0.07	1194	100,000	785	432	400	4.00
EVTL140-0000	5 wires	1 x 25	0.12	2353	90,000	1370	900	700	7.20
EVTL165-0000	5 wires	1 x 31	0.16	2450	80,000	1670	900	700	8.80
EVTL220-0000	5 wires	1x19	0.10	1613	80,000	785	432	400	4.00
EVTL240-0000	5 wires	1x56	0.27	4257	70,000	1370	900	700	7.20
EVTL265-0000	5 wires	1x71	0.34	5076	70,000	1670	900	700	8.80
EVTL120-D000	5 wires & continuity plate	1 x 12	0.07	1194	100,000	785	432	400	4.00
EVTL140-D000	5 wires & continuity plate	1 x 25	0.12	2353	90,000	1370	900	700	7.20
EVTL165-D000	5 wires & continuity plate	1 x 31	0.16	2450	80,000	1670	900	700	8.80
EVTL220-D000	5 wires & continuity plate	1x19	0.10	1613	80,000	785	432	400	4.00
EVTL240-D000	5 wires & continuity plate	1x56	0.27	4257	70,000	1370	900	700	7.20
EVTL265-D000	5 wires & continuity plate	1x71	0.34	5076	70,000	1670	900	700	8.80

Technical information

LED installed Set of LED modules with integrated diffuser colour temperature 4000°K L70/B10 at 25°C (70% lumen output/ 90% active LED) according to operating life.	Power factor 0.9.	Cable entries Three entries M20 For non- armoured cable: included two M20 nylon plugs (EX-M20) and one M20 nylon cable gland, diameter 6-12mm (EXCGM20S) For armoured cable: included continuity plate - two M20 nylon plugs (EX-M20) and one M20 nickel plated brass cable gland, diameter 6-12/ 8.5-16mm (EXN04MMC1)	Housing Fiberglass reinforced polyester housing for high impact strength UV protected polycarbonate diffuser to resist harsh environments White painted steel gear tray 2 x M8 Stainless steel 316L insert
Photometric curve See page 6/3	Terminal block (screws plug in terminal block) 10mm² (rigid wire), 6mm² (flexible wire) Terminals supplied L1, L2, L3, N, PE (looping possible with one additional cable gland)		Fixing (included) V015 - 2x Two zinc-plated steel brackets for ceiling mounting
Rated voltages Electronic driver: 100- 254Vac 50-60Hz.			

Linear fittings

From a fluorescent fitting to a LED fitting

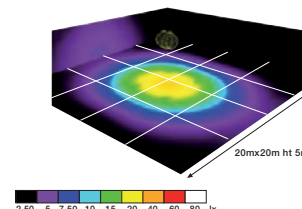
EVTL - Industrial application

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.

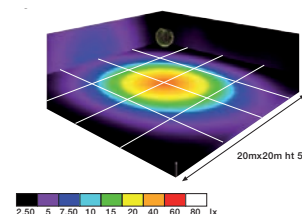
T8 fluorescent lamp - EVT240-00J0 3D view

- Lumen output (Light fitting): 5005lm
- Lumen output (Lamp): 6700lm
- Yield: 74%
- Rating per light fitting: 73.5W
- Light Source: 2xL36W/840 OSRAM Lumilux
- CoolWhite (corrector factor 1,00)



LED module - EVTL240-0000 3D view

- Lumen output (Light fitting): 4188lm
- Lumen output (Lamp): 4257lm
- 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 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).

Spare parts to upgrade from a "fluorescent" to a "LED" fitting - LED gear tray with driver 100-254Vac 50/60Hz:

- V0041X20WEL - To upgrade EVT120 to EVTL120
- V0041X40WEL - To upgrade EVT140 to EVTL140
- V0041X65WEL - To upgrade EVT165 to EVTL165
- V0042X20WEL - To upgrade EVT220 to EVTL220
- V0042X40WEL - To upgrade EVT240 to EVTL240
- V0042X65WEL - To upgrade EVT265 to EVTL265

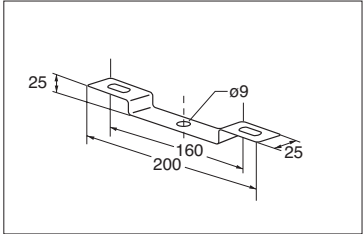
Linear fittings

Accessories & spare parts

EVTL - Industrial application

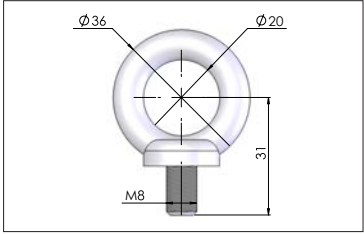
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Brackets



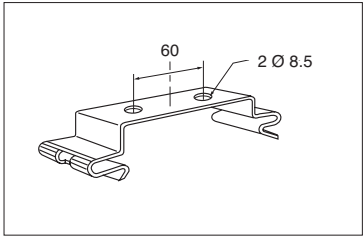
Brackets

Type	Specifications
V015	2 x pair of zinc plated steel for ceiling mounting (Included with product)
V016	2 x stainless steel 316L brackets for ceiling mounting



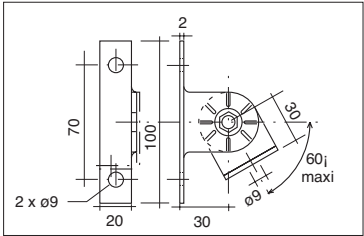
Hook

Type	Specifications
V024	2x Zinc plated steel ceiling suspension hook



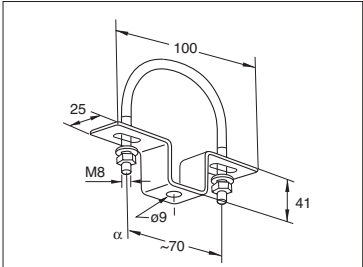
Mounting bracket clip

Type	Specifications
V014	2x Rapid ceiling mounting with stainless steel clip



Hinged bracket

Type	Specifications
V023	2x Steel hinged brackets plastic coated

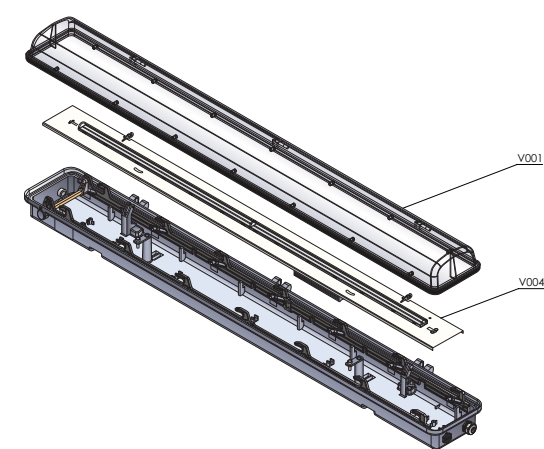


Fixing bracket and flange

Type	Specifications
V018	2x zinc plated steel pole mounted brackets for Ø1"¼ & 1"½
V019	2x zinc plated steel pole mounted brackets for Ø2"
V021	2x Stainless steel 316L pole mounted brackets for Ø1"¼ & 1"½
V022	2x Stainless steel 316L pole mounted brackets Ø2"

Linear fittings
Spare parts
EVTL - Industrial application

3



Spare parts

Type	Specifications
V00120W	20W diffuser with gasket for EV. range
V00140W	40W diffuser with gasket for EV. range
V00165W	65W diffuser with gasket for EV. range
V0041X20WEL	Gear tray 12,6W with driver 100-254V 50-60Hz and bracket kit of gear tray for EVTL120
V0041X40WEL	Gear tray 25W with driver 100-254V 50-60Hz and bracket kit of gear tray for EVTL140
V0041X65WEL	Gear tray 58W with driver 100-254V 50-60Hz and bracket kit of gear tray for EVTL165
V0042X20WEL	Gear tray 19W with driver 100-254V 50-60Hz and bracket kit of gear tray for EVTL220
V0042X40WEL	Gear tray 56W with driver 100-254V 50-60Hz and bracket kit of gear tray for EVTL240
V0042X65WEL	Gear tray 71W with driver 100-254V 50-60Hz and bracket kit of gear tray for EVTL265
V02520x40W	Brass continuity plate for EV. 120, EV. 220, EV. 140, EV. 240
V02565W	Brass continuity plate for EV. 165, EV. 265
EXCGM20S-01	Kit M20 Exe IIC nylon cable gland for non armoured cable diameter 6-12,0 and locknut
EXN04MMC1-01	Kit M20 Ex-d IIC Ex-e II Ex-td double compression nickel plated cable gland for armoured cable diameter inner 6-12 outer 8,5-16, locknut, sealing gasket



Linear fittings

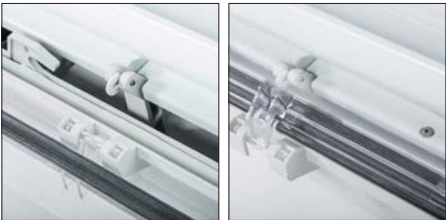
Weatherproof fluorescent fitting

EVT - Industrial application



- Features**
 - Double central locking for ingress protection
 - All components mounted on hinged and removable gear tray which gives easy access for maintenance
 - Including accessories (cable gland, plugs & fixing brackets)
 - Option: Automatic switch off on opening for safe maintenance

- Specifications**
 - Main body constructed of glass reinforced polyester for high impact strength
 - UV protected polycarbonate diffuser to resist harsh environments
 - Rated voltage 110- 260Vac/Vdc 50-60Hz
 - Wiring configuration: 5 wires
 - 3xEntries M20
 - 2x Emergency versions (Type: “EM” version 3h battery duration or “EMA” with 3h with automatic test and blackstart capabilities)



Certifications

Standards	
Glow wire test:	960°C EN60598-2-22
Safe operating temperature range:	-20°C to +55°C EVT -10°C to +50°C EVT EM, EVT EMA
IP test:	IP66 IEC 60529 (2001)
Impact protection index:	IK09 according to IEC 62262

Linear fittings

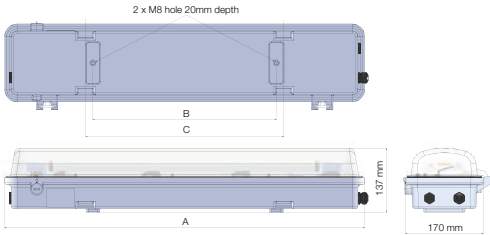
Weatherproof fluorescent fitting

EVT - Industrial application



3

EVT



Dimensional drawing

Technical specifications

Type	Wiring Configuration	Rating W	Current A 230V	External dimensions mm			Weight kg
				A	B	C	



5 wires: Equipped with 1 cable gland & 2 plugs

EVT120-00J0	5 wires	1 x 18	0.09	785	432	400	4.40
EVT140-00J0	5 wires	1 x 36	0.17	1370	900	700	7.60
EVT165-00J0	5 wires	1 x 58	0.26	1670	900	700	9.20
EVT220-00J0	5 wires	2 x 18	0.17	785	432	400	4.40
EVT240-00J0	5 wires	2 x 36	0.33	1370	900	700	7.60
EVT265-00J0	5 wires	2 x 58	0.50	1670	900	700	9.20
EVT120-D0J0	5 wires & continuity plate	1 x 18	0.09	785	432	400	4.40
EVT140-D0J0	5 wires & continuity plate	1 x 36	0.17	1370	900	700	7.60
EVT165-D0J0	5 wires & continuity plate	1 x 58	0.26	1670	900	700	9.20
EVT220-D0J0	5 wires & continuity plate	2 x 18	0.17	785	432	400	4.40
EVT240-D0J0	5 wires & continuity plate	2 x 36	0.33	1370	900	700	7.60
EVT265-D0J0	5 wires & continuity plate	2 x 58	0.50	1670	900	700	9.20



5 wires through: Equipped with 2 cable glands & 1 plug

EVT120-B0J0	5 wires through	1 x 18	0.09	785	432	400	4.40
EVT140-B0J0	5 wires through	1 x 36	0.17	1370	900	700	7.60
EVT165-B0J0	5 wires through	1 x 58	0.26	1670	900	700	9.20
EVT220-B0J0	5 wires through	2 x 18	0.17	785	432	400	4.40
EVT240-B0J0	5 wires through	2 x 36	0.33	1370	900	700	7.60
EVT265-B0J0	5 wires through	2 x 58	0.50	1670	900	700	9.20
EVT120-E0J0	5 wires through & 2 continuity plates	1 x 18	0.09	785	432	400	4.40
EVT140-E0J0	5 wires through & 2 continuity plates	1 x 36	0.17	1370	900	700	7.60
EVT165-E0J0	5 wires through & 2 continuity plates	1 x 58	0.26	1670	900	700	9.20
EVT220-E0J0	5 wires through & 2 continuity plates	2 x 18	0.17	785	432	400	4.40
EVT240-E0J0	5 wires through & 2 continuity plates	2 x 36	0.33	1370	900	700	7.60
EVT265-E0J0	5 wires through & 2 continuity plates	2 x 58	0.50	1670	900	700	9.20

Technical information

Lamps
Fluorescent Lamp (order separately)
T8 bi-pin tube, lampholder G13, diameter 26mm - white industry 4000°k.

Photometric curve
See page 6/3

Rated voltages
Electronic ballast: 110- 260Vac/Vdc 50-60Hz.

Power factor
0.98.

Terminal block (screws)
6mm²(rigid wire),
4mm² (flexible wire)
Terminals supplied L1, L2, L3, N, PE (looping possible with one additional cable gland)

Cable entries
Three entries M20

For non- armoured cable: included two M20 nylon plugs (EX-M20) and one M20 nylon cable gland, diameter 6-12mm (EXCGM20S)

For armoured cable: included continuity plate - two M20 nylon plugs (EX-M20) and one M20 nickel plated brass cable gland, diameter 6-12/ 8.5-16mm (EXN04MMC1)

Housing
Fiberglass reinforced polyester housing for high impact strength, UV protected polycarbonate diffuser to resist harsh environments, Painted steel gear tray & 2 x M8 Stainless steel 316L insert

Fixing (included)
V015 - 2x Two zinc-plated steel brackets for ceiling mounting

Linear fittings

Emergency fluorescent fitting - 3h

EVT EM - Industrial application

Technical specifications

Type	Wiring Configuration	Rating W	Battery h	Current A 230V	External dimensions mm			Weight kg
					A	B	C	
3 wires: Equipped with 1 cable gland & 2 plugs								
EVT120EM-00J0	3 wires	1 x 18	3h	0.09	785	432	400	5.80
EVT140EM-00J0	3 wires	1 x 36	3h	0.17	1370	900	700	9.00
EVT165EM-00J0	3 wires	1 x 58	3h	0.26	1670	900	700	10.60
EVT220EM-00J0	3 wires	2 x 18	3h	0.17	785	432	400	5.80
EVT240EM-00J0	3 wires	2 x 36	3h	0.33	1370	900	700	9.00
EVT265EM-00J0	3 wires	2 x 58	3h	0.50	1670	900	700	10.60
EVT120EM-D0J0	3 wires & continuity plate	1 x 18	3h	0.09	785	432	400	5.80
EVT140EM-D0J0	3 wires & continuity plate	1 x 36	3h	0.17	1370	900	700	9.00
EVT165EM-D0J0	3 wires & continuity plate	1 x 58	3h	0.26	1670	900	700	10.60
EVT220EM-D0J0	3 wires & continuity plate	2 x 18	3h	0.17	785	432	400	5.80
EVT240EM-D0J0	3 wires & continuity plate	2 x 36	3h	0.33	1370	900	700	9.00
EVT265EM-D0J0	3 wires & continuity plate	2 x 58	3h	0.50	1670	900	700	10.60

* For dimensional drawing please refer to page 3/40

Electrical Features

Lamps Fluorescent Lamp (order separately) T8 bi-pin tube, lampholder G13, diameter 26mm - white industry 4000°K	Power factor 0.98.	Terminal block (screws plug in terminal block) 4mm ² (rigid wire), 2,5mm ² (flexible wire) Terminals supplied L1, L2, L3, LS, N, PE (looping possible with one additional cable gland)	Housing Fiberglass reinforced polyester housing for high impact strength, UV protected polycarbonate diffuser to resist harsh environments Stainless steel 316L insert
Rated voltages Electronic ballast: 220-240Vac/Vdc 50/60Hz	Battery Battery NiCd 7,2V 4Ah Lumen output in emergency mode (1 lamp lit) 2 hours: 40% for EVD120, EVD220, 33% for EVD140, EVD240, 10% for EVD165, EVD265 3 hours: 24% for EVD120, EVD220, 18% for EVD140, EVD240, 8% for EVD165, EVD265 Monitored by one LED	Cable entries Three entries M20 For non- armoured cable: included two M20 nylon plugs (EX-M20) and one M20 nylon cable gland, diameter 6-12mm (EXCGM20S) For armoured cable: included continuity plate - two M20 nylon plugs (EX-M20) and one M20 nickel plated brass cable gland, diameter 6-12/ 8.5-16mm (EXN04MMC1)	Fixing V015 - 2x Two zinc-plated steel brackets for ceiling mounting

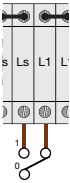
Emergency function diagrams

Wiring provided by DTS - Maintained Mode



Mains Supply	Tube	Battery
ON	Lit	Charged
OFF	Only emergency tube lit	Discharged

Switch between LS/L1 - Non Maintained Mode *



Mains Supply	Tube	Battery
ON	OFF	Charged
OFF	Only emergency tube lit	Discharged

* This table corresponds to the position 0 "open".
If the switch is on position 1 "close", refer to the table on the left

Linear fittings

Emergency Fluorescent fitting with automatic test & blackstart capabilities - 3h. EVT EMA - Zones 21 & 22

Technical specifications

Type	Wiring Configuration	Rating W	Battery h	Nominal Current A	External dimensions mm			Weight kg
					A	B	C	
5 wires: Equipped with 1 cable gland & 2 plugs								
EVT120EMA-00J0	5 wires	1 x 18	3h	0.09	785	432	400	5.80
EVT140EMA-00J0	5 wires	1 x 36	3h	0.17	1370	900	700	9.00
EVT220EMA-00J0	5 wires	2 x 18	3h	0.17	785	432	400	5.80
EVT240EMA-00J0	5 wires	2 x 36	3h	0.33	1370	900	700	9.00
EVT120EMA-D0J0	5 wires & continuity plate	1 x 18	3h	0.09	785	432	400	5.80
EVT140EMA-D0J0	5 wires & continuity plate	1 x 36	3h	0.17	1370	900	700	9.00
EVT220EMA-D0J0	5 wires & continuity plate	2 x 18	3h	0.17	785	432	400	5.80
EVT240EMA-D0J0	5 wires & continuity plate	2 x 36	3h	0.33	1370	900	700	9.00

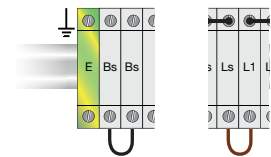
* For dimensional drawing please refer to page 3/40

Electrical Features

Lamps Fluorescent Lamp (order separately) T8 bi-pin tube, lampholder G13, diameter 26mm - white industry 4000°K	Power factor 0.98.	Cable entries Three entries M20 For non- armoured cable: included two M20 nylon plugs (EX-M20) and one M20 nylon cable gland, diameter 6-12mm (EXCGM20S) For armoured cable: included continuity plate - two M20 nylon plugs (EX-M20) and one M20 nickel plated brass cable gland, diameter 6-12/ 8,5-16mm (EXN04MMC1)	Fixing (included) V015 - 2x Two zinc-plated steel brackets for ceiling mounting
Rated voltages Electronic ballast: 220-240Vac/Vdc 50/60Hz	Battery Battery NiCd 6V 4Ah for EVT120, EVT220 Battery NiCd 6V 7Ah for EVT140, EVT240 Lumen output in emergency mode (1 lamp lit) 3 hours: 40% for EVT120, EVT220 3 hours: 33% for EVT140, EVT240 Monitored by two LED	Housing Fiberglass reinforced polyester housing for high impact strength, UV protected polycarbonate diffuser to resist harsh environments Stainless steel 316L insert Painted steel geartray	
	Terminal block (spring) Jumped bar x2 terminal blocks 4mm²(rigid wire), 2,5mm² (flexible wire) Terminals supplied L1, L2, L3, LS, N, E, BS (looping possible with one additional cable gland)		

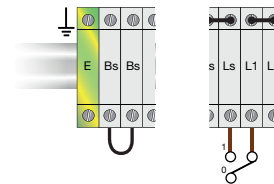
Emergency function diagrams

Wiring provided by DTS - Maintained Mode



Mains Supply	Tube	Battery
ON	Lit	Charged
OFF	Only emergency tube lit	Discharged

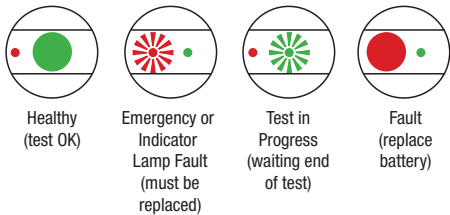
Switch between LS/L1 - Non Maintained Mode



Mains Supply	Tube	Battery
ON	OFF	Charged
OFF	Only emergency tube lit	Discharged

Preventive maintenance mode

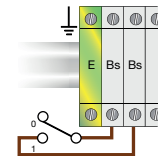
Battery charge - daily
Emergency lamp during 1min - weekly
Battery charge capacity during 1hr - quarterly
Clear system test display
Battery charge monitored by 2 LED



Emergency function diagram - Blackstart mode

The EMA product contains 2 blackstart terminals. The **blackstart mode** consists in disconnecting the battery and so switching off the fitting. This mode is mainly used during maintenance. As soon as the maintenance is done, the main power ON and the blackstart terminals connected, the emergency fitting is ready to be used as the battery is not discharged.

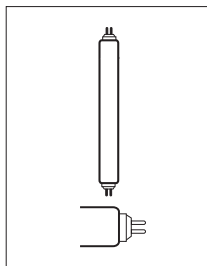
Switch between BS terminals



This table corresponds to the position 0 "open".
If the switch is on position 1 "close", please refer to the above tables.

Mains supply	Tube	Battery
ON	Lit	Disconnected - not charged
OFF	OFF	Disconnected - not charged

Lamps



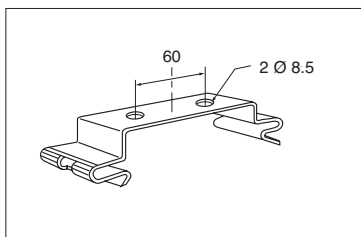
Specifications:

G13 - ø 26mm
Colour temperature: White industry 4000°K
CRI: > 80
lm/W: 65 > 93
Average operating life: 12,000 hours

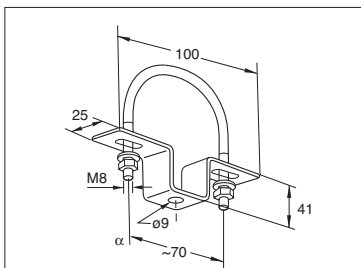
Type	Power W	Lumen output lm	Lampholder
TL18W	18	1250	G13
TL36W	36	3350	G13
TL58W	58	5200	G13

Isometric view of a mechanical part. The part has a total length of 200, a central section of length 160, and two end sections of length 25 each. The height of the part is 25. A hole with a diameter of 9 is located in the central section.

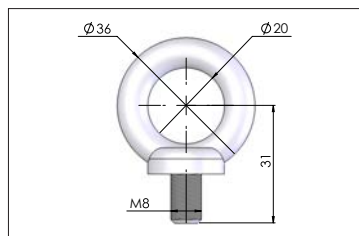
Type	Specifications
V015	2 x pair of zinc plated steel for ceiling mounting (Included with product)
V016	2 x stainless steel 316L brackets for ceiling mounting



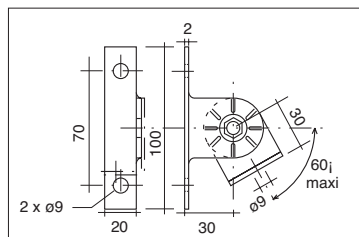
Type	Specifications
V014	2x Rapid ceiling mounting with stainless steel clip



Type	Specifications
V018	2x zinc plated steel pole mounted brackets for ø1"¼ & 1"½
V019	2x zinc plated steel pole mounted brackets for ø2"
V021	2x Stainless steel 316L pole mounted brackets for ø1"¼ & 1"½
V022	2x Stainless steel 316L pole mounted brackets ø2"



Type	Specifications
V024	2x Zinc plated steel ceiling suspension hook



Type	Specifications
V023	2x Steel hinged brackets plastic coated

Linear fittings

Spare parts

EVT Range - Industrial application

3



Spare parts

Type	Specifications
V00120W	20W diffuser with gasket for EV. range
V00140W	40W diffuser with gasket for EV. range
V00165W	65W diffuser with gasket for EV. range
V0041X20WE	Gear tray 1X18W with electronic ballast 110-260V 50-60Hz for EVT120
V0041X40WE	Gear tray 1X36W with electronic ballast 110-260V 50-60Hz for EVT140
V0041X65WE	Gear tray 1X58W with electronic ballast 110-260V 50-60Hz for EVT165
V0042X20WE	Gear tray 2X18W with electronic ballast 110-260V 50-60Hz for EVT220
V0042X40WE	Gear tray 2x36W with electronic ballast 220- 240V 50-60Hz for EVT240
V0042X65WE	Gear tray 2x58W with electronic ballast 220- 240V 50-60Hz for EVT265
V0041X20WEM	Emergency gear tray 1x18W with electronic ballast 220-240V 50-60Hz for EVT120EM
V0041X40WEM	Emergency gear tray 1x36W with electronic ballast 220-240V 50-60Hz for EVT140EM
V0041X65WEM	Emergency gear tray 1x58W with electronic ballast 220-240V 50-60Hz for EVT165EM
V0042X20WEM	Emergency gear tray 2x18W with electronic ballast 220-240V 50-60Hz for EVT220EM
V0042X40WEM	Emergency gear tray 2x36W with electronic ballast 220-240V 50-60Hz for EVT240EM
V0042X65WEM	Emergency gear tray 2x58W with electronic ballast 220-240V 50-60Hz for EVT265EM
V0041X20WEMA	Emergency gear tray + auto test 1X18W with electronic ballast 220-240V 50-60Hz for EVT120EMA
V0041X40WEMA	Emergency gear tray + auto test 1X36W with electronic ballast 220-240V 50-60Hz for EVT140EMA
V0042X20WEMA	Emergency gear tray + auto test 2X18W with electronic ballast 220-240V 50-60Hz for EVT220EMA
V0042X40WEMA	Emergency gear tray + auto test 2X36W with electronic ballast 220-240V 50-60Hz for EVT240EMA
V008N	Bi-pin G13 lampholder
V02520x40W	Brass continuity plate for EV. 120, EV. 220, EV. 140, EV. 240
V02565W	Brass continuity plate for EV. 165, EV. 265
EXCGM20S-01	Kit M20 Exe IIC nylon cable gland for non armoured cable diameter 6-12,0 and locknut
EXN04MMC1-01	Kit M20 Ex-d IIC Ex-e II Ex-td double compression nickel plated cable gland for armoured cable diameter inner 6-12 outer 8,5-16, locknut, sealing gasket

Recessed fittings

Recessed fluorescent fitting

ESB - Zones 1 & 2



Specifications

- Steel housing and body painted with powderpaint
- 6mm clear toughened glass panel (optional frosted for low lumen output)
- Rated voltage 220-240Vac/Vdc, 50/60Hz
- EOL (End of life) the ballast prevents the lamp cap at the end of lamp life cycle from overheating
- Instant start
- Wiring configuration: 5 wires
- 2xEntries M20
- Emergency version (Type: "EM" version 3h battery duration)

Certifications



Features

- Automatic switch off upon opening for high maintenance security level in hazardous area
- Flush ceiling mounting making it perfect for laboratories
- Including accessories (cable gland & plug)



Standards

Approved to:	EN60079-0, 60079-1, 60079-7
EC Type examination certificate to:	Directive 94/9/EC INERIS 11 ATEX 0058X Ex II 2 G Ex de IIC T4 Gb for -40°C to + 60°C
Glow wire test:	860°C EN60598-2-22
Safe operating temperature range:	-20°C to +55°C ESB -10°C to +50°C ESB EM
IP test:	IP64 IEC 60529 (2001)
Impact protection index:	IK08 according to IEC 62262

Recessed fittings

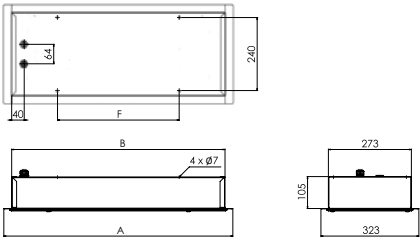
Recessed fluorescent fitting

ESB - Zones 1 & 2




3

ESB



Dimensional drawing

Technical specifications

Type	Wiring Configuration	Rating W	Current A 230V	Glass	External dimensions mm				Weight kg
					A	B	C	FxF	
									
5 wires: Equipped with 1 cable gland & 1 plug									
ESB220-0000	5 wires	2 x 18	0.17	Toughened	753	702	105	400x240	15
ESB240-0000	5 wires	2 x 36	0.33	Toughened	1364	1312	105	1000x240	20.1
ESB265-0000	5 wires	2 x 58	0.50	Toughened	1664	1612	105	1300x240	27
ESB220-A000	5 wires	2 x 18	0.17	Frosted	753	702	105	400x240	15
ESB240-A000	5 wires	2 x 36	0.33	Frosted	1364	1312	105	1000x240	20.1
ESB265-A000	5 wires	2 x 58	0.50	Frosted	1664	1612	105	1300x240	27

Technical information

Lamps Fluorescent Lamp (order separately) T8 bi-pin tube, lampholder G13, diameter 26mm - white industry 4000°k.	Power factor 0.98.	Cable entries Two entries M20 Included one M20 nylon plugs (EX-M20) and one M20 nylon cable gland , diameter 6-12mm (EXCGM20S) for non armoured cable	Fixing (included) Mounting by 4 M6 threaded bolts (not supplied) joined to the main body
Photometric curve See page 6/3	Terminal block (spring) Jumped bar x2 terminal blocks 4mm²(rigid wire), 2.5mm² (flexible wire) Terminals supplied L1, L2, L3, N, PE (looping possible with one additional cable gland)	Housing Steel housing and body painted with powderpaint 6 mm clear toughened glass panel (optional frosted low lumen output) Neopren gasket	
Rated voltages Electronic ballast: 220-240Vac/Vdc, 50/60Hz EOL (End of life) the ballast prevents the lamp cap at the end of lamp life cycle from overheating Instant start			

Recessed fittings

Emergency recessed fluorescent fitting

ESB EM - Zones 1 & 2

Technical specifications

Type	Wiring Configuration	Rating W	Current A 230V	Battery h	Glass	External dimensions mm				Weight kg
						A	B	C	FxF	
3 wires: Equipped with 1 cable gland & 1 plug										
ESB220EM-0000	3 wires	2 x 18	0.17	3	Toughened	753	702	105	400x240	17
ESB220EM-A000	3 wires	2 x 18	0.17	3	Frosted	753	702	105	400x240	17
ESB240EM-0000	3 wires	2 x 36	0.33	3	Toughened	1364	1312	105	1000x240	22
ESB240EM-A000	3 wires	2 x 36	0.33	3	Frosted	1364	1312	105	1000x240	22

* For dimensional drawing please refer to page 3/46

Electrical Features

Lamps Fluorescent Lamp (order separately) T8 bi-pin tube, lampholder G13, diameter 26mm - white industry 4000°K	Power factor 0.98.	Terminal block (spring) Jumped bar x2 terminal blocks 4mm²(rigid wire), 2,5mm² (flexible wire) Terminals supplied L1, N, PE,1,2 (looping possible with one additional cable gland)	Housing Steel housing and body painted with powderpaint 6 mm clear toughened glass panel (optional frosted low lumen output) Neopren gasket
Rated voltages Electronic ballast: 220-240Vac/Vdc 50/60Hz EOL (End of life) the ballast prevents the lamp cap at the end of lamp life cycle from overheating Instant start	Battery Battery NiCd 7,2V 4Ah in flameproof case (Ex d) Lumen output in emergency mode (1 lamp lit) 2 hours: 40% for ESB220, 33% for ESB240 3 hours: 24% for ESB220, 18% for ESB240 Monitored by one red LED	Cable entries Two entries M20 Included one M20 nylon plugs (EX-M20) and one M20 nnylon cable gland , diameter 6-12mm (EXCGM20S) for non armoured cable	Fixing Mounting by 4 M6 threaded bolts (not supplied) joined to the main body

Emergency function diagrams

Wiring provided by DTS - Maintained Mode



Mains Supply	Tube	Battery
ON	Lit	Charged
OFF	Only emergency tube lit	Discharged

Switch between 1/2 - Non Maintained Mode *



Mains Supply	Tube	Battery
ON	Lit	Charged
OFF	Only emergency tube lit	Discharged

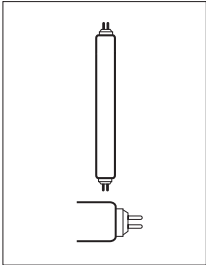
* This table corresponds to the position 0 “open”.
 If the switch is on position 1 “close”, refer to the table on the left

Recessed fittings

Accessories & spare parts

ESB - Zones 1 & 2

Lamps

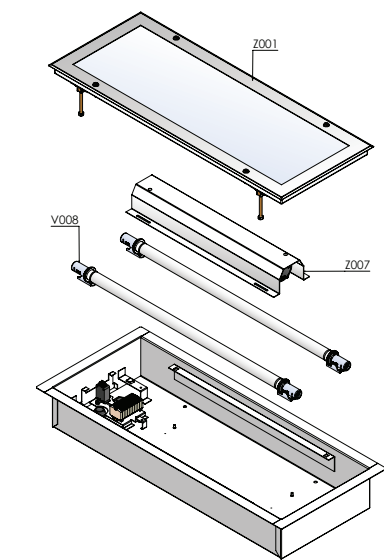


Bi-pin T8 fluorescent lamps

Specifications:

G13 - ø 26mm
Colour temperature: White industry 4000°K
CRI: > 80
lm/W: 65 to 93
Average operating life: 12,000 hours

Type	Power W	Lumen output lm	Lampholder
TL18W	18	1250	G13
TL36W	36	3350	G13
TL58W	58	5200	G13



Spare parts

Type	Specifications
Z001220	Transparent frame - hardened glass - for ESB220
Z001220F	Frame with frosted glass - for ESB220
Z001240	Transparent frame - hardened glass - for ESB240
Z001240F	Frame with frosted glass - for ESB240
Z001265	Transparent frame - hardened glass - for ESB265
Z001265F	Frame with frosted glass - for ESB265
Z0072X20WS	Ballast 220- 240Vac/Vdc 50-60Hz + cover of ballast for ESB220
Z0072X40WS	Ballast 220- 240Vac/Vdc 50-60Hz + cover of ballast for ESB240
Z0072X65WS	Ballast 220- 240Vac/Vdc 50-60Hz + cover of ballast for ESB265
V008	Bi-pin G13 lampholder
V01120WEME	Battery for ESB220EM
V01140WEME	Battery for ESB240EM
EXCGM20S-01	Kit M20 Exe IIC nylon cable gland for non armoured cable diameter 6-12,0 and locknut
EXN04MMC1-01	Kit M20 Ex-d IIC/Ex-e II/Ex-td double compression nickel plated cable gland for non armoured cable diameter inner 6-12 outer 8,5-16, locknut, sealing gasket

Recessed fittings

Weatherproof recessed fluorescent fitting

EST - Industrial application



Features

- Fitting combines photometric qualities, strength and design
- Flush ceiling mounting making it perfect for laboratories
- Including accessories (cable gland & plug)

Specifications

- Steel housing and body painted with powderpaint
- 6mm clear toughened glass panel (optional frosted for low lumen output)
- Rated voltage 110- 260Vac/Vdc 50-60Hz
- Wiring configuration: 5 wires
- 2xEntries M20
- Emergency version (Type: "EM" version 3h battery duration)

Certifications



Standards

Glow wire test:	860°C EN60598-2-22
Safe operating temperature range:	-20°C to +55°C EST
IP test:	IP64 IEC 60529 (2001)
Impact protection index:	IK08 according to IEC 62262

Recessed fittings

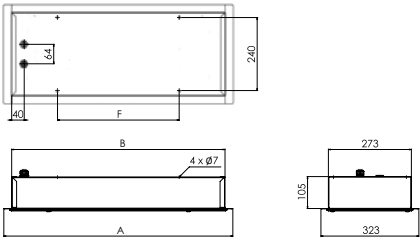
Weatherproof recessed fluorescent fitting

EST - Industrial application




3

EST



Dimensional drawing

Technical specifications

Type	Wiring Configuration	Rating W	Current A 230V	Glass	External dimensions mm				Weight kg
					A	B	C	FxF	
									
5 wires: Equipped with 1 cable gland & 1 plug									
EST220-00J0	5 wires	2 x 18	0.17	Toughened	753	702	105	400x240	15
EST240-00J0	5 wires	2 x 36	0.33	Toughened	1364	1312	105	1000x240	20.1
EST265-00J0	5 wires	2 x 58	0.50	Toughened	1664	1612	105	1300x240	27
EST220-A0J0	5 wires	2 x 18	0.17	Frosted	753	702	105	400x240	15
EST240-A0J0	5 wires	2 x 36	0.33	Frosted	1364	1312	105	1000x240	20.1
EST265-A0J0	5 wires	2 x 58	0.50	Frosted	1664	1612	105	1300x240	27

Technical information

Lamps Fluorescent Lamp (order separately) T8 bi-pin tube, lampholder G13, diameter 26mm - white industry 4000°k.	Power factor 0.98.	Cable entries Two entries M20 Included one M20 nylon plugs (EX-M20) and one M20 nylon cable gland, diameter 6-12mm (EXCGM20S) for non armoured cable	Fixing (included) Mounting by 4 M6 threaded bolts (not supplied) joined to the main body
Photometric curve See page 6/3	Terminal block (spring) Jumped bar x2 terminal blocks 4mm²(rigid wire), 2.5mm² (flexible wire) Terminals supplied L1, L2, L3, N, PE (looping possible with one additional cable gland)	Housing Steel housing and body painted with powderpaint 6 mm clear toughened glass panel (optional frosted low lumen output) Neopren gasket	
Rated voltages Electronic ballast: 110- 260Vac/Vdc 50-60Hz			

Recessed fittings

Emergency weatherproof recessed fluorescent fitting

EST EM - Industrial application

Technical specifications

Type	Wiring Configuration	Rating W	Current A 230V	Battery h	Glass	External dimensions mm				Weight kg
						A	B	C	FxF	
3 wires: Equipped with 1 cable gland & 1 plug										
EST240EM-00J0	3 wires	2 x 36	0.33	2	Toughened	1364	1312	105	1000x240	22
EST240EM-A0J0	3 wires	2 x 36	0.33	2	Frosted	1364	1312	105	1000x240	22

* For dimensional drawing please refer to page 3/50

Electrical Features

Lamps Fluorescent Lamp (order separately) T8 bi-pin tube, lampholder G13, diameter 26mm - white industry 4000°K	Power factor 0.98.	Terminal block (spring) Jumped bar x2 terminal blocks 4mm²(rigid wire), 2,5mm² (flexible wire) Terminals supplied L1, N, PE,1,2 (looping possible with one additional cable gland)	Housing Steel housing and body painted with powderpaint 6 mm clear toughened glass panel (optional frosted low lumen output) Neopren gasket
Rated voltages Electronic ballast: 220-240Vac/Vdc 50/60Hz	Battery Battery NiCd 7,2V Lumen output in emergency mode (1 lamp lit) 2 hours: 40% for EST220, 33% for EST240 3 hours: 24% for EST220, 18% for EST240 Monitored by one LED	Cable entries Two entries M20 Included one M20 nylon plugs (EX-M20) and one M20 nylon cable gland, diameter 6-12mm (EXCGM20S) for non-armoured cable	Fixing Mounting by 4 M6 threaded bolts (not supplied) joined to the main body

Emergency function diagrams

Wiring provided by DTS - Maintained Mode



Mains Supply	Tube	Battery
ON	Lit	Charged
OFF	Only emergency tube lit	Discharged

Switch between 1/2 - Non Maintained Mode *



Mains Supply	Tube	Battery
ON	Lit	Charged
OFF	Only emergency tube lit	Discharged

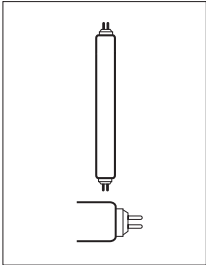
* This table corresponds to the position 0 "open".
If the switch is on position 1 "close", refer to the table on the left

Recessed fittings

Accessories & spare parts

EST - Industrial application

Lamps

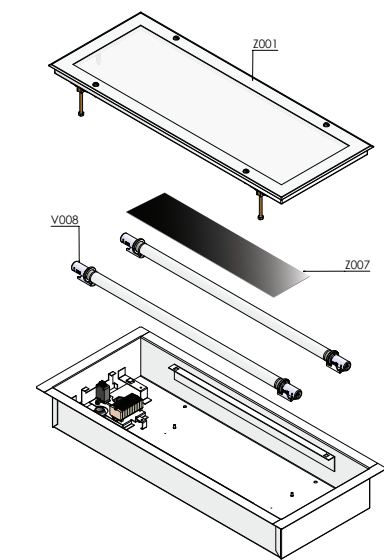


Bi-pin T8 fluorescent lamps

Specifications:

G13 - ø 26mm
Colour temperature: White industry 4000°K
CRI: > 80
lm/W: 65 to 93
Average operating life: 12,000 hours

Type	Power W	Lumen output lm	Lampholder
TL18W	18	1250	G13
TL36W	36	3350	G13
TL58W	58	5200	G13



Spare parts

Type	Specifications
Z001220	Transparent frame - hardened glass - for EST220
Z001220F	Frame with frosted glass - for EST220
Z001240	Transparent frame - hardened glass - for EST240
Z001240F	Frame with frosted glass - for EST240
Z001265	Transparent frame - hardened glass - for EST265
Z001265F	Frame with frosted glass - for EST265
Z0072X20WS	Ballast 220- 240V 50-60Hz for EST220
Z0072X40WS	Ballast 220- 240V 50-60Hz for EST240
Z0072X65WS	Ballast 220- 240V 50-60Hz for EST265
V008	Bi-pin G13 lampholder
EXCGM20S-01	Kit M20 Exe IIC nylon cable gland for non armoured cable diameter 6-12,0 and locknut
EXN04MMC1-01	Kit M20 Ex-d IIC/Ex-e II/Ex-td double compression nickel plated cable gland for non armoured cable diameter inner 6-12 outer 8,5-16, locknut, sealing gasket

Light fittings for all zones and industrial applications

Floodlights, beacons, warnings, drilling & wellglass fittings

Floodlights	
XSF, XQF, XEF - Zones 1, 2	4/3
SF, QF, EF - industrial application	4/9
Beacon & warning lights	
XFB, XFL - Zones 2, 22	4/15
FB, FL - industrial applications	4/19
Drilling fluorescent fittings	
XDF - Zones 2, 22	4/23
Wellglass	
EVH/X - Zones 1, 2, 21, 22	4/27



Floodlight fittings

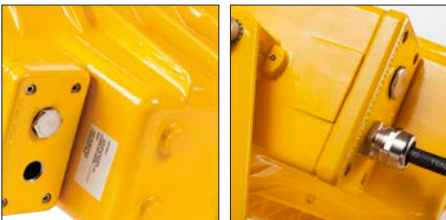
HPS, MH or Halogen Floodlight fitting

XSF, XQF, XEF - Zones 1, 2







- Features**
- Wide or narrow beam
 - Ex e integral junction box
 - Flat or pole mounting
 - Supplied with lamp installed
 - Including accessories (cable gland & plug)
 - Supplied with offshore grade paint


- Specifications**
- Manufactured from marine grade aluminium alloy - copper free
 - Toughened borosilicate glass - thickness 12mm
 - Rated voltage standard: 230Vac 50Hz - option: 220Vac 60Hz or 120Vac 60Hz depending on models - ferromagnetic ballast
 - 2xEntries M20






Certifications













Standards	
Approved to:	EN60079-0, 60079-1, 60079-7, 60079-31
EC Type examination certificate to:	Directive 94/9/EC LCIE 00 ATEX 6019X IEC Ex LCIE 11.0062X Ex II 2 G Ex de IIB T3 to T5 Gb for -20°C to +55°C according part numbers
Safe operating temperature range:	-20°C to +55°C
IP test:	IP66 IEC 60529 (2001)
Impact protection index:	IK09 according to IEC 62262

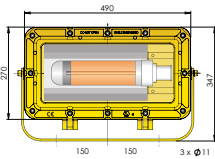
Floodlight fittings

HPS, MH or Halogen Floodlight fitting

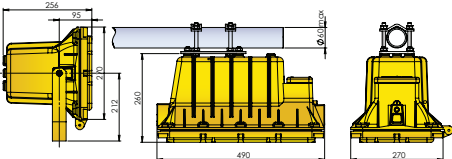
XSF, XQF, XEF - Zones 1, 2



XSF, XQF



XSF105P - flat mounting



XSF150G - pole mounting

Dimensional drawing

4 Technical specifications

Type	Mounting	Rating W	Beam	Rated Voltage V	Current A 230V	Temperature class		Weight kg
						-20°C to +40°C	-20°C to +55°C	
XSF Floodlight fitting								
XSF70P-00000	Flat	1 x 70 HP Sodium	Wide	230Vac 50HZ	0.40	T4	T3	17.04
XSF70G-00000	Pole	1 x 70 HP Sodium	Wide	230Vac 50HZ	0.40	T4	T3	18.04
XSF150P-00000	Flat	1 x 150 HP Sodium	Wide	230Vac 50HZ	0.80	T4	T3	17.04
XSF150G-00000	Pole	1 x 150 HP Sodium	Wide	230Vac 50HZ	0.80	T4	T3	18.04
XSF250P-00000	Flat	1 x 250 HP Sodium	Wide	230Vac 50HZ	1.30	T3	T3	19.64
XSF250G-00000	Pole	1 x 250 HP Sodium	Wide	230Vac 50HZ	1.30	T3	T3	20.24
XSF400P-00000	Flat	1 x 400 HP Sodium	Wide	230Vac 50HZ	2.10	T3	T3	21.25
XSF400G-00000	Pole	1 x 400 HP Sodium	Wide	230Vac 50HZ	2.10	T3	T3	21.85
XSF70P-0A000	Flat	1 x 70 HP Sodium	Narrow	230Vac 50HZ	0.40	T4	T3	17.04
XSF70G-0A000	Pole	1 x 70 HP Sodium	Narrow	230Vac 50HZ	0.40	T4	T3	18.04
XSF150P-0A000	Flat	1 x 150 HP Sodium	Narrow	230Vac 50HZ	0.80	T4	T3	17.04
XSF150G-0A000	Pole	1 x 150 HP Sodium	Narrow	230Vac 50HZ	0.80	T4	T3	18.04
XSF250P-0A000	Flat	1 x 250 HP Sodium	Narrow	230Vac 50HZ	1.30	T3	T3	19.64
XSF250G-0A000	Pole	1 x 250 HP Sodium	Narrow	230Vac 50HZ	1.30	T3	T3	20.24
XSF400P-0A000	Flat	1 x 400 HP Sodium	Narrow	230Vac 50HZ	2.10	T3	T3	21.25
XSF400G-0A000	Pole	1 x 400 HP Sodium	Narrow	230Vac 50HZ	2.10	T3	T3	21.85
XSF70P-0D000	Flat	1 x 70 HP Sodium	Wide	220Vac 60Hz	0.40	T4	T3	17.04
XSF70G-0D000	Pole	1 x 70 HP Sodium	Wide	220Vac 60Hz	0.40	T4	T3	18.04
XSF150P-0D000	Flat	1 x 150 HP Sodium	Wide	220Vac 60Hz	0.80	T4	T3	17.04
XSF150G-0D000	Pole	1 x 150 HP Sodium	Wide	220Vac 60Hz	0.80	T4	T3	18.04
XSF250P-0D000	Flat	1 x 250 HP Sodium	Wide	220Vac 60Hz	1.30	T3	T3	19.64
XSF250G-0D000	Pole	1 x 250 HP Sodium	Wide	220Vac 60Hz	1.30	T3	T3	20.24
XSF400P-0D000	Flat	1 x 400 HP Sodium	Wide	220Vac 60Hz	2.10	T3	T3	21.25
XSF400G-0D000	Pole	1 x 400 HP Sodium	Wide	220Vac 60Hz	2.10	T3	T3	21.85
XSF70P-0C000	Flat	1 x 70 HP Sodium	Narrow	220Vac 60Hz	0.40	T4	T3	17.04
XSF70G-0C000	Pole	1 x 70 HP Sodium	Narrow	220Vac 60Hz	0.40	T4	T3	18.04
XSF150P-0C000	Flat	1 x 150 HP Sodium	Narrow	220Vac 60Hz	0.80	T4	T3	17.04
XSF150G-0C000	Pole	1 x 150 HP Sodium	Narrow	220Vac 60Hz	0.80	T4	T3	18.04
XSF250P-0C000	Flat	1 x 250 HP Sodium	Narrow	220Vac 60Hz	1.30	T3	T3	19.64
XSF250G-0C000	Pole	1 x 250 HP Sodium	Narrow	220Vac 60Hz	1.30	T3	T3	20.24
XSF400P-0C000	Flat	1 x 400 HP Sodium	Narrow	220Vac 60Hz	2.10	T3	T3	21.25
XSF400G-0C000	Pole	1 x 400 HP Sodium	Narrow	220Vac 60Hz	2.10	T3	T3	21.85
XSF400P-0F000	Flat	1 x 400 HP Sodium	Wide	120Vac 60Hz	2.10	T3	T3	19.64
XSF400G-0F000	Pole	1 x 400 HP Sodium	Wide	120Vac 60Hz	2.10	T3	T3	20.24
XSF400P-0B000	Flat	1 x 400 HP Sodium	Narrow	120Vac 60Hz	2.10	T3	T3	21.25
XSF400G-0B000	Pole	1 x 400 HP Sodium	Narrow	120Vac 60Hz	2.10	T3	T3	21.85

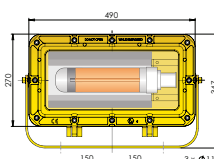
Floodlight fittings

HPS, MH or Halogen Floodlight fitting

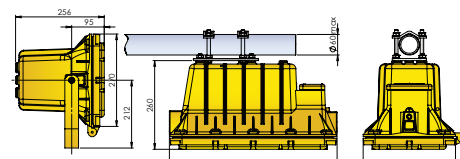
XSF, XQF, XEF - Zones 1, 2



XQF



XQF250P - flat mounting



XQF250G - pole mounting

Dimensional drawing

Technical specifications

Type	Mounting	Rating W	Beam	Rated Voltage V	Current A 230V	Temperature class		Weight kg
						-20°C to +40°C	-20°C to +55°C	
XQF Floodlight fitting								
XQF250P-00000	Flat	1 x 250 Metal Halide	Wide	230Vac 50HZ	1.30	T3	T3	19.64
XQF250G-00000	Pole	1 x 250 Metal Halide	Wide	230Vac 50HZ	1.30	T3	T3	20.24
XQF400P-00000	Flat	1 x 400 Metal Halide	Wide	230Vac 50HZ	2.10	T3	T3	21.25
XQF400G-00000	Pole	1 x 400 Metal Halide	Wide	230Vac 50HZ	2.10	T3	T3	21.85
XQF250P-0A000	Flat	1 x 250 HP Sodium	Narrow	230Vac 50HZ	1.30	T3	T3	19.64
XQF250G-0A000	Pole	1 x 250 HP Sodium	Narrow	230Vac 50HZ	1.30	T3	T3	20.24
XQF400P-0A000	Flat	1 x 400 HP Sodium	Narrow	230Vac 50HZ	2.10	T3	T3	21.25
XQF400G-0A000	Pole	1 x 400 HP Sodium	Narrow	230Vac 50HZ	2.10	T3	T3	21.85
XQF250P-0D000	Flat	1 x 250 HP Sodium	Wide	220Vac 60Hz	1.30	T3	T3	19.64
XQF250G-0D000	Pole	1 x 250 HP Sodium	Wide	220Vac 60Hz	1.30	T3	T3	20.24
XQF400P-0D000	Flat	1 x 400 HP Sodium	Wide	220Vac 60Hz	2.10	T3	T3	21.25
XQF400G-0D000	Pole	1 x 400 HP Sodium	Wide	220Vac 60Hz	2.10	T3	T3	21.85
XQF250P-0C000	Flat	1 x 250 HP Sodium	Narrow	220Vac 60Hz	1.30	T3	T3	19.64
XQF250G-0C000	Pole	1 x 250 HP Sodium	Narrow	220Vac 60Hz	1.30	T3	T3	21.25
XQF400P-0C000	Flat	1 x 400 HP Sodium	Narrow	220Vac 60Hz	2.10	T3	T3	21.85
XQF400G-0C000	Pole	1 x 400 HP Sodium	Narrow	220Vac 60Hz	2.10	T3	T3	22.05
XQF400P-0F000	Flat	1 x 400 HP Sodium	Wide	120Vac 60Hz	2.10	T3	T3	21.25
XQF400G-0F000	Pole	1 x 400 HP Sodium	Wide	120Vac 60Hz	2.10	T3	T3	21.85
XQF400P-0B000	Flat	1 x 400 HP Sodium	Narrow	120Vac 60Hz	2.10	T3	T3	21.45
XQF400G-0B000	Pole	1 x 400 HP Sodium	Narrow	120Vac 60Hz	2.10	T3	T3	22.05
XEF Floodlight fitting								
XEF110P-00000	Flat	2 x 55 Halogen	Wide	12Vdc	9.20	T5	T4	15.83
XEF110G-00000	Pole	2 x 55 Halogen	Wide	12Vdc	9.20	T5	T4	16.83
XEF140P-00000	Flat	2 x 70 Halogen	Wide	24Vdc	5.80	T5	T4	15.83
XEF140G-00000	Pole	2 x 70 Halogen	Wide	24Vdc	5.80	T5	T4	16.83

Technical information

Lamp installed

Tubular lamp, lampholder E40 or E27 for sodium and metal halide and H3 for Halogen version

Photometric curve

See page 6/3

Rated voltages

Ferromagnetic ballast: 230Vac 50Hz or 220Vac 60Hz or 120Vac 60Hz

Power factor

0,85 with compensated ballast

Terminal block (screws)

Jumped bar x2 terminal blocks
6mm²(rigid wire), 6mm² (flexible wire)
Terminals supplied L, N, PE (looping possible with one additional cable gland)

Cable entries

Two entries M20

For non- armoured cable: included one M20 nickel plated brass plug (EX-M20) and one M20 nickel plated brass cable gland, diameter 10-16mm (EXN04MLC2)

Casting

Marine grade aluminium alloy according to standard : EN 1706 : EN AC-AISi7 Mg 0,6 T6
Cataphoretically treated
Toughened glass 12mm

Colour of casting (standard)

● X.F****-0G000 - Yellow offshore, RAL 1003

Colour options:

● X.F****-B0000 - Grey, RAL 7035

● X.F****-C0000 - Black, RAL 9004

● X.F****-D0000 - Hammered Blue, RAL 5015

● X.F****-F0000 - Red, RAL 3001

● X.F****-G0000 - Blue, RAL 5010

● X.F****-J0000 - Green, RAL 6032

○ X.F****-M0000 - White, RAL 9010

Fixing (included)

Galvanised steel flat mounting bracket yellow paint RAL1003

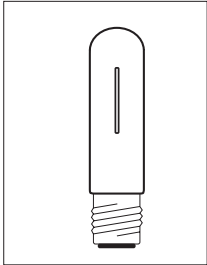
Pole mounted: diameter 40 to 60mm

Floodlight fittings

Accessories & spare parts

XSF, XQF, XEF - Zones 1, 2

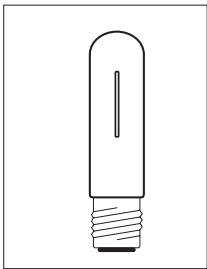
Lamps



High pressure sodium tubular lamps

Specifications:

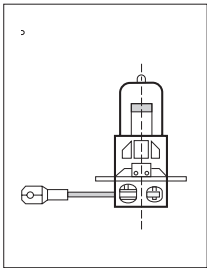
Colour temperature 2100°K
CRI: 100 > 120 - lm/W: 100 to 120
Average operating life: 15 000 to 20 000 hours
Minimum starting temperature: -30°C
Time to full power: 1 to 10mm with control gear & ignitor



Metal halide tubular lamps

Specifications:

Colour temperature 4300 to 4600°K
CRI: 65 - lm/W: 100 to 120
Average operating life: 3000 to 6000 hours
Minimum starting temperature: -25°C
Time to full power: 5 to 10mm with control gear & ignitor



Halogen lamps

Specifications:

Colour temperature 3000°K
CRI: 100 - lm/W: 25
Average operating life: 1000 hours

Brackets



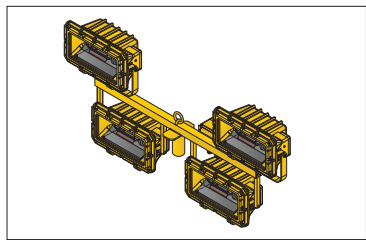
Forks

Type	Specifications
P017C	Galvanised steel mounting bracket forks with screws, yellow painting RAL1003
P017INOXC	Strainless steel 316L flat mounting bracket forks with screws
P017FC	Galvanised steel U-shaped mounting bracket forks with screws, yellow painting RAL1003
P017FC	Galvanised steel U-shaped mounting bracket forks with screws, yellow painting RAL1003

Type	Power W	Lumen output lm	Lampholder
P00670SHP	70	6000	E40
P006150SHP	150	15000	E40
P006250SHP	250	28000	E40
P006400SHP	400	48000	E40
P006250IM	250	20000	E40
P006400IM	400	42000	E40

Type	Power W	Lumen output lm	Lampholder
P006250IM	250	20000	E40
P006400IM	400	42000	E40

Type	Power W	Lumen output lm	Lampholder
E00755W	55	1350	H3
E007	70	1770	H3



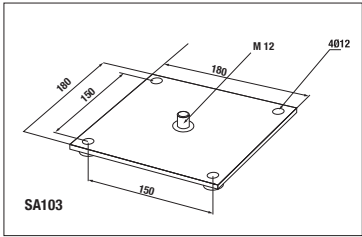
XHM Pre wired masthead

Type	Specifications
XHM2400	Pre wired masthead with - 2 HP sodium floodlights XSF400P with ferromagnetic ballast 230Vac 50Hz, LCIE 00 ATEX 6019X, IECEx LCI 11.0062X, Ex II 2 G, Ex de IIB T3 Gb for -20°C to 40°C, Ex de IIB T3 Gb for -20°C to 60°C
XHM4400	Pre wired masthead with 4 HP sodium floodlights XSF400P with ferromagnetic ballast 230Vac 50Hz, LCIE 00 ATEX 6019X, IECEx LCI 11.0062X, Ex II 2 G, Ex de IIB T3 Gb for -20°C to 40°C, Ex de IIB T3 Gb for -20°C to 60°C

Floodlight fittings

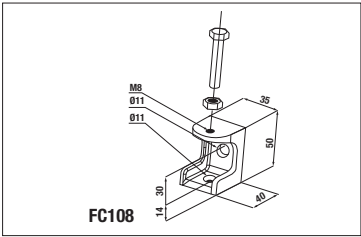
Accesssories & spare parts

XSF, XQF, XEF - Zones 1, 2



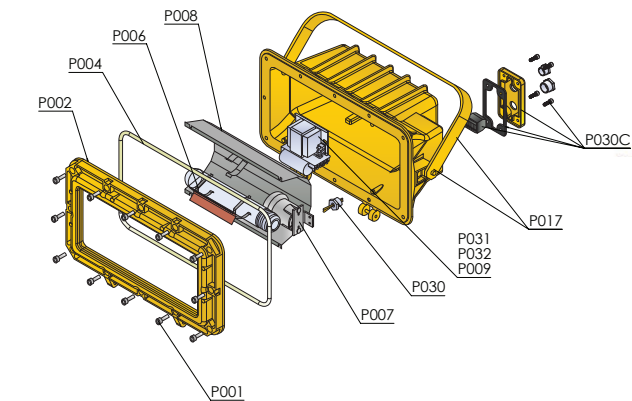
Mounting bracket clip

Type	Specifications
SA103	Galvanised steel plate for floodlight



Mounting clamp

Type	Specifications
FC108	Clamp for beam mounting



Sling for floodlight

Type	Specifications
SC100ELINGUE	Sling for floodlight

Spare parts

Type	Specifications
P001	Closing Screw for Floodlight (per 12)
P002	Sealed front glass
P004	Gasket
4GRA00001-01	Grease
P007	Lampholder E40 for floodlight
P008	Reflector for floodlight wide beam
P030	Ex connector
P031150W23050	Ferromagnetic ballast 230Vac 50Hz - 1 capacitor - ignitor - fixing plate for floodlight XSF150
P031250W23050	Ferromagnetic ballast 230Vac 50Hz - 1 capacitor - ignitor - fixing plate for floodlight XSF250, XQF250
P031400W23050	Ferromagnetic ballast 230Vac 50Hz - 1 capacitor - ignitor - fixing plate for floodlight XSF400, XQF400
P03170W23050	Ferromagnetic ballast 230Vac 50Hz - 1 capacitor cable support - ignitor - fixing plate for floodlight XSF70
P009150W60	Ferromagnetic ballast 220Vac 60Hz for floodlight XSF150, XQF150
P032S15060	1 capacitor 18UF cable support - 220V 60Hz - for floodlight XSF150, XQF150
P009250W60	Ferromagnetic ballast 220V 60Hz for floodlight XSF250, XQF250
P032S25060	1 capacitor 25UF cable support - 220V 60Hz -for floodlight XSF250, XQF250
P009400W60	Ferromagnetic ballast 220V 60Hz for floodlight XSF400, XQF400
P032S40060	2 capacitors 20UF cable support - 220V 60Hz -for floodlight XSF400, XQF400
E008C	Gear tray support with fixing for optic and optic for floodlight XEF
P030C	Accessories for junction box in floodlight: terminal 2x6mm² + earthing terminal + cover gasket + cover + screw of cover
EXN04MLC2-01	Kit M20 Exd Exe IIC Ex-td nickel plated cable gland for non armoured cable diameter 10,0-16,0mm, locknut, sealing gasket
EXN04MMC1-01	Kit M20 Ex-d IIC Ex-e II Ex-td double compression nickel plated cable gland for armoured cable diameter inner 6-12 outer 8,5-16, locknut, sealing gasket



Floodlight fittings

Weatherproof floodlight fitting

SF, QF, EF - Industrial applications

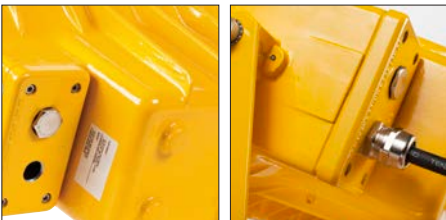


Features

- Wide or narrow beam
- Ex e integral junction box
- Flat or pole mounting
- Supplied with lamp installed
- Including accessories (cable gland & plug)
- Supplied with offshore grade paint

Specifications

- Manufactured from marine grade aluminium alloy - copper free
- Toughened borosilicate glass - thickness 12mm
- Rated voltage standard: 230Vac 50Hz - option: 220Vac -60Hz or 120V 60Hz depending on models - ferromagnetic ballast
- 2xEntries M20



Certifications



Standards

Safe operating temperature range:	-20°C to +55°C
IP test:	IP66 IEC 60529 (2001)
Impact protection index:	IK09 according to IEC 62262

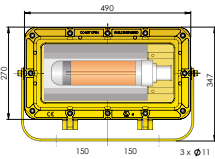
Floodlight fittings

Weatherproof floodlight fitting

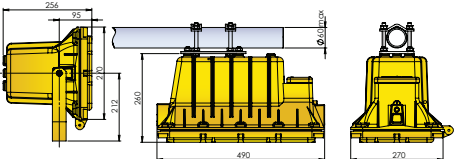
SF, QF, EF - Industrial applications



SF



SF105P - flat mounting



SF150G - pole mounting

Dimensional drawings

4 Technical specifications

Type	Mounting	Rating W	Beam	Rated Voltage V	Current A 230V	Weight kg
SF Floodlight fitting						
SF70P-00000	Flat	1 x 70 HP Sodium	Wide	230Vac 50HZ	0.40	17.04
SF70G-00000	Pole	1 x 70 HP Sodium	Wide	230Vac 50HZ	0.40	18.04
SF150P-00000	Flat	1 x 150 HP Sodium	Wide	230Vac 50HZ	0.80	17.04
SF150G-00000	Pole	1 x 150 HP Sodium	Wide	230Vac 50HZ	0.80	18.04
SF250P-00000	Flat	1 x 250 HP Sodium	Wide	230Vac 50HZ	1.30	19.64
SF250G-00000	Pole	1 x 250 HP Sodium	Wide	230Vac 50HZ	1.30	20.24
SF400P-00000	Flat	1 x 400 HP Sodium	Wide	230Vac 50HZ	2.10	21.25
SF400G-00000	Pole	1 x 400 HP Sodium	Wide	230Vac 50HZ	2.10	21.85
SF70P-0A000	Flat	1 x 70 HP Sodium	Narrow	230Vac 50HZ	0.40	17.04
SF70G-0A000	Pole	1 x 70 HP Sodium	Narrow	230Vac 50HZ	0.40	18.04
SF150P-0A000	Flat	1 x 150 HP Sodium	Narrow	230Vac 50HZ	0.80	17.04
SF150G-0A000	Pole	1 x 150 HP Sodium	Narrow	230Vac 50HZ	0.80	18.04
SF250P-0A000	Flat	1 x 250 HP Sodium	Narrow	230Vac 50HZ	1.30	19.64
SF250G-0A000	Pole	1 x 250 HP Sodium	Narrow	230Vac 50HZ	1.30	20.24
SF400P-0A000	Flat	1 x 400 HP Sodium	Narrow	230Vac 50HZ	2.10	21.25
SF400G-0A000	Pole	1 x 400 HP Sodium	Narrow	230Vac 50HZ	2.10	21.85
SF70P-0D000	Flat	1 x 70 HP Sodium	Wide	220Vac 60Hz	0.40	17.04
SF70G-0D000	Pole	1 x 70 HP Sodium	Wide	220Vac 60Hz	0.40	18.04
SF150P-0D000	Flat	1 x 150 HP Sodium	Wide	220Vac 60Hz	0.80	17.04
SF150G-0D000	Pole	1 x 150 HP Sodium	Wide	220Vac 60Hz	0.80	18.04
SF250P-0D000	Flat	1 x 250 HP Sodium	Wide	220Vac 60Hz	1.30	19.64
SF250G-0D000	Pole	1 x 250 HP Sodium	Wide	220Vac 60Hz	1.30	20.24
SF400P-0D000	Flat	1 x 400 HP Sodium	Wide	220Vac 60Hz	2.10	21.25
SF400G-0D000	Pole	1 x 400 HP Sodium	Wide	220Vac 60Hz	2.10	21.85
SF70P-0C000	Flat	1 x 70 HP Sodium	Narrow	220Vac 60Hz	0.40	17.04
SF70G-0C000	Pole	1 x 70 HP Sodium	Narrow	220Vac 60Hz	0.40	18.04
SF150P-0C000	Flat	1 x 150 HP Sodium	Narrow	220Vac 60Hz	0.80	17.04
SF150G-0C000	Pole	1 x 150 HP Sodium	Narrow	220Vac 60Hz	0.80	18.04
SF250P-0C000	Flat	1 x 250 HP Sodium	Narrow	220Vac 60Hz	1.30	19.64
SF250G-0C000	Pole	1 x 250 HP Sodium	Narrow	220Vac 60Hz	1.30	20.24
SF400P-0C000	Flat	1 x 400 HP Sodium	Narrow	220Vac 60Hz	2.10	21.25
SF400G-0C000	Pole	1 x 400 HP Sodium	Narrow	220Vac 60Hz	2.10	21.85
SF400P-0F000	Flat	1 x 400 HP Sodium	Wide	120Vac 60Hz	2.10	19.64
SF400G-0F000	Pole	1 x 400 HP Sodium	Wide	120Vac 60Hz	2.10	20.24
SF400P-0B000	Flat	1 x 400 HP Sodium	Narrow	120Vac 60Hz	2.10	21.25
SF400G-0B000	Pole	1 x 400 HP Sodium	Narrow	120Vac 60Hz	2.10	21.85

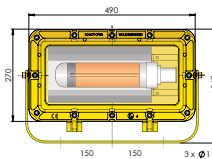
Floodlight fittings

Weatherproof floodlight fitting

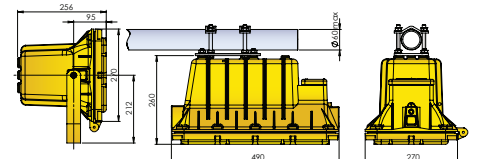
SF, QF, EF - Industrial applications



QF



QF250P - flat mounting



QF250G - pole mounting

Dimensional drawing

Technical specifications

Type	Mounting	Rating W	Beam	Rated Voltage V	Current A 230V	Weight kg
QF Floodlight fitting						
QF250P-00000	Flat	1 x 250 Metal Halide	Wide	230Vac 50HZ	1.30	19.64
QF250G-00000	Pole	1 x 250 Metal Halide	Wide	230Vac 50HZ	1.30	20.24
QF400P-00000	Flat	1 x 400 Metal Halide	Wide	230Vac 50HZ	2.10	21.25
QF400G-00000	Pole	1 x 400 Metal Halide	Wide	230Vac 50HZ	2.10	21.85
QF250P-0A000	Flat	1 x 250 HP Sodium	Narrow	230Vac 50HZ	1.30	19.64
QF250G-0A000	Pole	1 x 250 HP Sodium	Narrow	230Vac 50HZ	1.30	20.24
QF400P-0A000	Flat	1 x 400 HP Sodium	Narrow	230Vac 50HZ	2.10	21.25
QF400G-0A000	Pole	1 x 400 HP Sodium	Narrow	230Vac 50HZ	2.10	21.85
QF250P-0D000	Flat	1 x 250 HP Sodium	Wide	220Vac 60Hz	1.30	19.64
QF250G-0D000	Pole	1 x 250 HP Sodium	Wide	220Vac 60Hz	1.30	20.24
QF400P-0D000	Flat	1 x 400 HP Sodium	Wide	220Vac 60Hz	2.10	21.25
QF400G-0D000	Pole	1 x 400 HP Sodium	Wide	220Vac 60Hz	2.10	21.85
QF250P-0C000	Flat	1 x 250 HP Sodium	Narrow	220Vac 60Hz	1.30	19.64
QF250G-0C000	Pole	1 x 250 HP Sodium	Narrow	220Vac 60Hz	1.30	21.25
QF400P-0C000	Flat	1 x 400 HP Sodium	Narrow	220Vac 60Hz	2.10	21.85
QF400G-0C000	Pole	1 x 400 HP Sodium	Narrow	220Vac 60Hz	2.10	22.05
QF400P-0F000	Flat	1 x 400 HP Sodium	Wide	120Vac 60Hz	2.10	21.25
QF400G-0F000	Pole	1 x 400 HP Sodium	Wide	120Vac 60Hz	2.10	21.85
QF400P-0B000	Flat	1 x 400 HP Sodium	Narrow	120Vac 60Hz	2.10	21.45
QF400G-0B000	Pole	1 x 400 HP Sodium	Narrow	120Vac 60Hz	2.10	22.05
EF Floodlight fitting						
EF110P-00000	Flat	2 x 55 Halogen	Wide	12Vdc	9.20	15.83
EF110G-00000	Pole	2 x 55 Halogen	Wide	12Vdc	9.20	16.83
EF140P-00000	Flat	2 x 70 Halogen	Wide	24Vdc	5.80	15.83
EF140G-00000	Pole	2 x 70 Halogen	Wide	24Vdc	5.80	16.83

Technical information

Lamp installed

Tubular lamp, lampholder E40 or E27 for sodium and metal halide and H3 for Halogen version

Photometric curve

See page 6/3

Rated voltages

Ferromagnetic ballast: 230Vac 50Hz or 220Vac 60Hz or 120Vac 60Hz

Power factor

0,85 with compensated ballast

Terminal block (screws)

Jumped bar x2 terminal blocks
6mm²(rigid wire), 6mm² (flexible wire)
Terminals supplied L, N, PE (looping possible with one additional cable gland)

Cable entries

Two entries M20

For non- armoured cable: included one M20 nickel plated brass plug (EX-M20) and one M20 nickel plated brass cable gland, diameter 10-16mm (EXN04MLC2)

Casting

Marine grade aluminium alloy according to standard :
EN 1706 : EN AC-AISI7 Mg 0,6 T6
Cathaphoretically treated
Thoughened glass 12mm

Colour of casting (standard)

● SF/QF****-00000 - Yellow offshore, RAL 1003

Colour options:

● SF/QF****-B0000 - Grey, RAL 7035

● SF/QF****-C0000 - Black, RAL 9004

● SF/QF****-D0000 - Hammered Blue, RAL 5015

● SF/QF****-F0000 - Red, RAL 3001

● SF/QF****-G0000 - Blue, RAL 5010

● SF/QF****-J0000 - Green, RAL 6032

○ SF/QF****-M0000 - White, RAL 9010

Fixing (included)

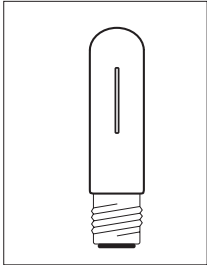
Galvanised steel flat mounting bracket yellow paint RAL1003
Pole mounted: diameter 40 to 60mm

Floodlight fittings

Accessories & spare parts

SF, QF, EF - Industrial applications

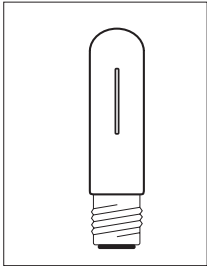
Lamps



High pressure sodium tubular lamps

Specifications:
Colour temperature 2100°K
CRI: 100 > 120 - lm/W: 100to 120
Average operating life: 15 000 to 20 000 hours
Minimum starting temperature: -30°C
Time to full power: 1 to 10mm with control gear & ignitor

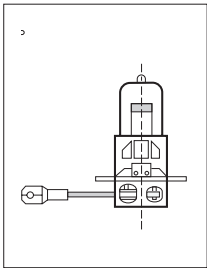
Type	Power W	Lumen output lm	Lampholder
P00670SHP	70	6000	E40
P006150SHP	150	15000	E40
P006250SHP	250	28000	E40
P006400SHP	400	48000	E40
P006250IM	250	20000	E40
P006400IM	400	42000	E40



Metal halide tubular lamps

Specifications:
Colour temperature 4300 to 4600°K
CRI: 65 - lm/W: 100to 120
Average operating life: 3000 to 6000 hours
Minimum starting temperature: -25°C
Time to full power: 5 to 10mm with control gear & ignitor

Type	Power W	Lumen output lm	Lampholder
P006250IM	250	20000	E40
P006400IM	400	42000	E40

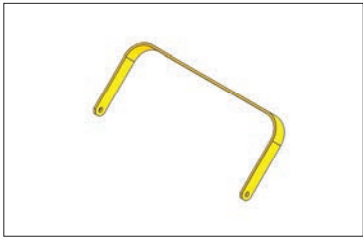


Halogen lamps

Specifications:
Colour temperature 3000°K
CRI: 100 - lm/W: 25
Average operating life: 1000 hours

Type	Power W	Lumen output lm	Lampholder
E00755W	55	1350	H3
E007	70	1770	H3

Brackets



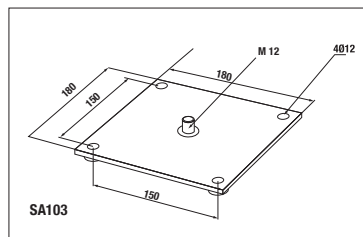
Forks

Type	Specifications
P017C	Galvanised steel mounting bracket forks with screws, yellow painting RAL1003
P017INOXC	Stainless steel 316L flat mounting bracket forks with screws
P017FC	Galvanised steel U-shaped mounting bracket forks with screws, yellow painting RAL1003
P017FC	Galvanised steel U-shaped mounting bracket forks with screws, yellow painting RAL1003

Floodlight fittings

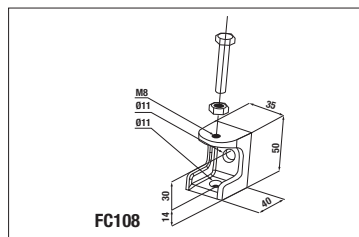
Accessories & spare parts

SF, QF, EF - Industrial applications



Mounting bracket clip

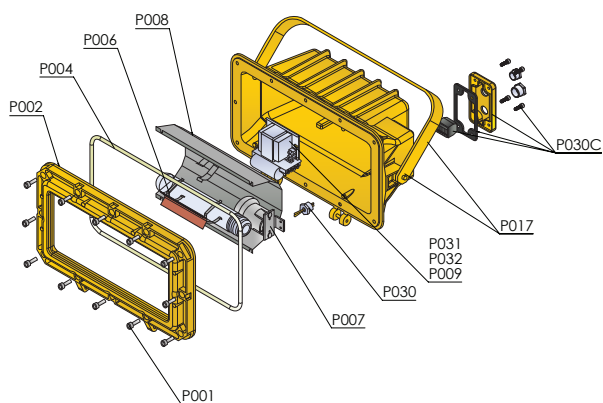
Type	Specifications
SA103	Galvanised steel plate for floodlight



Mounting clamp

Type	Specifications
FC108	Clamp for beam mounting

4



Sling for floodlight

Type	Specifications
SC100ELINGUE	Sling for floodlight

Spare parts

Type	Specifications
P001	Closing Screw for Floodlight (per 12)
P002	Sealed front glass
P004	Gasket
4GRA00001-01	Grease
P007	Lampholder E40 for floodlight
P008	Reflector for floodlight wide beam
P030	Ex connector
P031150W23050	Ferromagnetic ballast 230Vac 50Hz - 1 capacitor - ignitor - fixing plate for floodlight SF150
P031250W23050	Ferromagnetic ballast 230Vac 50Hz - 1 capacitor - ignitor - fixing plate for floodlight SF250, QF250
P03170W23050	Ferromagnetic ballast 230Vac 50Hz - 1 capacitor cable support - ignitor - fixing plate for floodlight SF70
P031400W23050	Ferromagnetic ballast 230Vac 50Hz - 1 capacitor - ignitor - fixing plate for floodlight SF400, QF400
P009150W60	Ferromagnetic ballast 220V 60Hz for floodlight SF150, QF150
P032S15060	1 capacitor 18UF cable support - 220V 60Hz - for floodlight SF150, QF150
P009250W60	Ferromagnetic ballast 220V 60Hz for floodlight SF250, QF250
P032S25060	1 capacitor 25UF cable support - 220V 60Hz - for floodlight SF250, QF250
P009400W60	Ferromagnetic ballast 220V 60Hz for floodlight SF400, QF400
P032S40060	2 capacitors 20UF cable support - 220V 60Hz - for floodlight SF400, QF400
E008C	Gear tray support with fixing for optic and optic for floodlight EF
P030C	Accessories for junction box in floodlight: terminal 2x6mm ² + earthing terminal + cover gasket + cover + screw of cover
EXN04MLC2-01	Kit M20 Exd Exe IIC Ex-td nickel plated cable gland for non armoured cable diameter 10,0-16,0mm, locknut, sealing gasket
EXN04MMC1-01	Kit M20 Ex-d IIC Ex-e II Ex-td double compression nickel plated cable gland for armoured cable diameter inner 6-12 outer 8,5-16, locknut, sealing gasket



Beacons & warning lights

LED, Halogen and Xenon beacon & warning light

XFB, XFL - Zones 2 & 22



Features

- Lightweight and robust for easy installation
- Static LED, Halogen or flashing Xenon versions available
- Choice of 5 colours of globe
- 2 or 3 light versions available for traffic signals
- Supplied with lamp installed
- Including accessories (cable gland & plug)

Specifications

- Manufactured from marine grade aluminium alloy - copper free
- UV protected extruded polycarbonate globe, thickness 3mm
- 2xEntries M20



Certifications



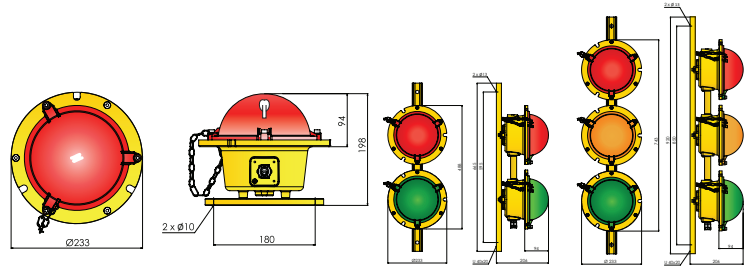
Standards

Approved to:	EN60079-0, 60079-15, 60079-31
EC Type examination certificate to:	Directive 94/9/EC Ex II 3 G Ex nA IIC T5 Gc for -20°C to + 60°C Ex II 3 D Ex tc IIIC T100°C Dc IP6X for -20°C to + 60°C
Safe operating temperature range:	-20°C to +60°C
IP test:	IP66 IEC 60529 (2001)
Impact protection index:	IK10 according to IEC 62262

Beacons & warning lights
LED, Halogen and Xenon beacon & warning light
XFB, XFL - Zones 2 & 22



XFB, XFL



Dimensional drawing

4

Type	Rating W	Version	Rated Voltage V	Globe Colour	Weight kg
XFB, XFL Beacon					
XFB30-00000	1 x 28	Halogen	230Vac 50-60Hz	● Red / other colors on demand	2.60
XFB70-00000	1 x 8	LED	100 - 240Vac 50-60Hz	● Red / other colors on demand	2.60
XFL30P-00000	1 x 30 joules	Xenon flash	230Vac 50-60Hz	● Red / other colors on demand	2.60
XFL30P-0C000	1 x 30 joules	Xenon flash	100Vac 50-60Hz	● Red / other colors on demand	2.60
XFL30P-0D000	1 x 30 joules	Xenon flash	24Vdc	● Red / other colors on demand	2.60
XFL30P-0E000	1 x 30 joules	Xenon flash	48Vdc	● Red / other colors on demand	2.60
XFL30P-0F0000	1 x 30 joules	Xenon flash	110Vdc	● Red / other colors on demand	2.60
XFB230-00000	2 x 28	Halogen	230Vac 50-60Hz	● Red / ● Green	6.00
XFB270-00000	2 x 8	LED	100 - 240Vac 50-60Hz	● Red / ● Green	6.00
XFL230P-00000	2 x 30 joules	Xenon flash	230Vac 50-60Hz	● Red / ● Green	6.00
XFL230P-0C000	2 x 30 joules	Xenon flash	100Vac 50-60Hz	● Red / ● Green	6.00
XFL230P-0D000	2 x 30 joules	Xenon flash	24Vdc	● Red / ● Green	6.00
XFL230P-0E000	2 x 30 joules	Xenon flash	48Vdc	● Red / ● Green	6.00
XFL230P-0F0000	2 x 30 joules	Xenon flash	110Vdc	● Red / ● Green	6.00
XFB330-00000	3 x 28	Halogen	230Vac 50-60Hz	● Red / ● Yellow / ● Green	9.00
XFB370-00000	3 x 8	LED	100 - 240Vac 50-60Hz	● Red / ● Yellow / ● Green	9.00
XFL330P-00000	3 x 30 joules	Xenon flash	230Vac 50-60Hz	● Red / ● Yellow / ● Green	9.00
XFL330P-0C000	3 x 30 joules	Xenon flash	100Vac 50-60Hz	● Red / ● Yellow / ● Green	9.00
XFL330P-0D000	3 x 30 joules	Xenon flash	24Vdc	● Red / ● Yellow / ● Green	9.00
XFL330P-0E000	3 x 30 joules	Xenon flash	48Vdc	● Red / ● Yellow / ● Green	9.00
XFL330P-0F0000	3 x 30 joules	Xenon flash	110Vdc	● Red / ● Yellow / ● Green	9.00

Technical information

Lamps (installed)

For LED or Halogen, lampholder E27
For Xenon: flashing rate 45 to 60 per minute

Terminal block (screws)

Jumped bar x2 terminal blocks
6mm²(rigid wire), 6mm² (flexible wire)
Terminals supplied L, N, PE (looping possible
with one additional cable gland)).

Cable entries

Included: One M20 nickel plated brass plug (EX-M20) and one M20 nickel plated brass cable gland for non armoured cable, diameter 10-16mm (EXN04MLC2)

Casting

Marine grade aluminium alloy according to standard: EN 1706: EN AC-AISi12 (Fe) DF or EN AC-AISi 10Mg(A) DF
Polycarbonate globe, thickness 3mm (color red or orange / transparent/ green/ blue)

Colour of casting (standard)

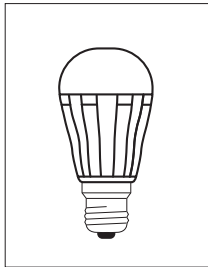
● XF****-00000 - Yellow offshore, RAL 1003
 Colour options:
 ● XF****-B0000 - Grey, RAL 7035
 ● XF****-C0000 - Black, RAL 9004
 ● XF****-D0000 - Hammered Blue, RAL 5015
 ● XF****-F0000 - Red, RAL 3001
 ● XF****-G0000 - Blue, RAL 5010
 ● XF****-J0000 - Green, RAL 6032
 ○ XF****-M0000 - White, RAL 9010

Beacons & warning lights

Accessories

XFB, XFL - Zones 2 & 22

Lamps

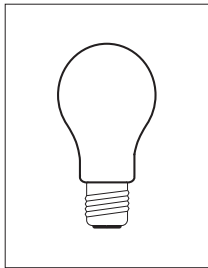


LED lamps

Specifications:

Colour temperature 3000°K
CRI=80 - lm/W: 55
Average operating life: 25,000 hour

Type	Power W	Lumen output lm	Lampholder
L021L	8	345	E27

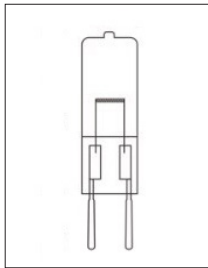


Halogen lamps

Specifications:

Colour temperature 2700°K
CRI=100 - lm/W: 10 to 17
Average operating life: 1000 hours

Type	Power W	Lumen output lm	Lampholder
L021H	28	345	E27



Xenon lamps

Specifications:

Flashing 45 to 60 per minute

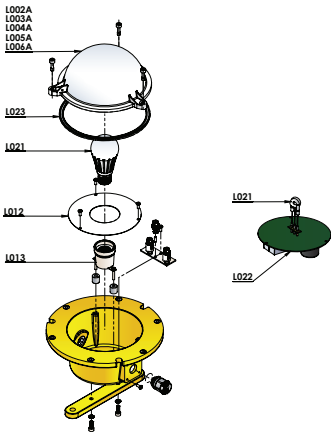
Type	Power
L021	30 joules

Beacons & warning lights

Spare parts

XFB, XFL - Zones 2 & 22

4



Spare parts

Type	Specifications
L002A	Red polycarbonate globe with gasket for XFB, XFL
L003A	Yellow polycarbonate globe with gasket for XFB, XFL
L004A	Blue polycarbonate globe with gasket for XFB, XFL
L005A	Transparent polycarbonate globe with gasket for XFB, XFL
L006A	Green polycarbonate globe with gasket for XFB, XFL
L012	Reflector for beacon XFB
L013	Lampholder E27 for beacon XFB
L022110VAC	Gear tray - 110V ac- for XFL30P, XFL230P, XFL330P
L022110VCC	Gear tray - 110V dc- for XFL30P, XFL230P, XFL330P
L022220VAC	Gear tray -220-230Vac/Vdc 50Hz - 60Hz - for XFL30P, XFL230P, XFL330P
L02224VCC	Gear tray -24V dc - for XFL30P, XFL230P, XFL330P
L02248VCC	Gear tray -48V dc - for XFL30P, XFL230P, XFL330P
L023	Gasket for XFB, XFL
EXN04MLC2-01	Kit M20 Exd Exe IIC Ex-td nickel plated cable gland for non armoured cable diameter 10,0-16,0mm, locknut, sealing gasket
EXN04MMC1-01	Kit M20 Ex-d IIC Ex-e II Ex-td double compression nickel plated cable gland for armoured cable diameter inner 6-12 outer 8,5-16, locknut, sealing gasket

Beacons & warning lights

Weatherproof beacon & warning light

FB, FL - Industrial applications



Features

- Lightweight and robust for easy installation
- Static LED, Halogen or flashing Xenon versions available
- Choice of 5 colours of globe
- 2 or 3 light versions available for traffic signals
- Supplied with lamp installed
- Including accessories (cable gland & plug)

Specifications

- Manufactured from marine grade aluminium alloy - copper free
- UV protected extruded polycarbonate globe, thickness 3mm
- 2xEntries M20



Certifications



Standards

Safe operating temperature range:	-20°C to +60°C
IP test:	IP66 IEC 60529 (2001)
Impact protection index:	IK10 according to IEC 62262

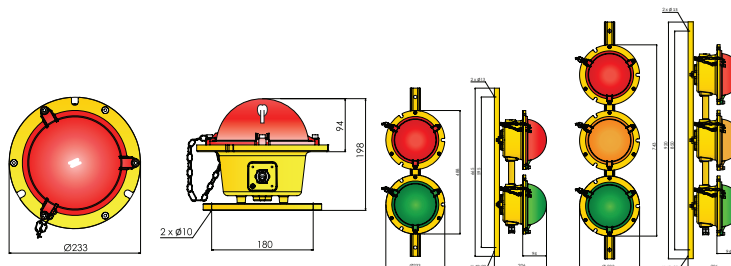
Beacons & warning lights

Weatherproof beacon & warning light

FB, FL - Industrial applications



FB, FL



Dimensional drawing

4 Technical specifications

Type	Rating W	Version	Rated Voltage V	Globe Colour	Weight kg
FB, FL Beacon					
FB30-00000	1 x 28	Halogen	230Vac 50-60Hz	● Red / other colors on demand	2.60
FB70-00000	1 x 8	LED	100 - 240Vac 50-60Hz	● Red / other colors on demand	2.60
FL30P-00000	1 x 30 joules	Xenon flash	230Vac 50-60Hz	● Red / other colors on demand	2.60
FL30P-0C000	1 x 30 joules	Xenon flash	100Vac 50-60Hz	● Red / other colors on demand	2.60
FL30P-0D000	1 x 30 joules	Xenon flash	24Vdc	● Red / other colors on demand	2.60
FL30P-0E000	1 x 30 joules	Xenon flash	48Vdc	● Red / other colors on demand	2.60
FL30P-0F0000	1 x 30 joules	Xenon flash	110Vdc	● Red / other colors on demand	2.60
FB230-00000	2 x 28	Halogen	230Vac 50-60Hz	● Red / ● Green	6.00
FB270-00000	2 x 8	LED	100 - 240Vac 50-60Hz	● Red / ● Green	6.00
FL230P-00000	2 x 30 joules	Xenon flash	230Vac 50-60Hz	● Red / ● Green	6.00
FL230P-0C000	2 x 30 joules	Xenon flash	100Vac 50-60Hz	● Red / ● Green	6.00
FL230P-0D000	2 x 30 joules	Xenon flash	24Vdc	● Red / ● Green	6.00
FL230P-0E000	2 x 30 joules	Xenon flash	48Vdc	● Red / ● Green	6.00
FL230P-0F0000	2 x 30 joules	Xenon flash	110Vdc	● Red / ● Green	6.00
FB330-00000	3 x 28	Halogen	230Vac 50-60Hz	● Red / ● Yellow / ● Green	9.00
FB370-00000	3 x 8	LED	100 - 240Vac 50-60Hz	● Red / ● Yellow / ● Green	9.00
FL330P-00000	3 x 30 joules	Xenon flash	230Vac 50-60Hz	● Red / ● Yellow / ● Green	9.00
FL330P-0C000	3 x 30 joules	Xenon flash	100Vac 50-60Hz	● Red / ● Yellow / ● Green	9.00
FL330P-0D000	3 x 30 joules	Xenon flash	24Vdc	● Red / ● Yellow / ● Green	9.00
FL330P-0E000	3 x 30 joules	Xenon flash	48Vdc	● Red / ● Yellow / ● Green	9.00
FL330P-0F0000	3 x 30 joules	Xenon flash	110Vdc	● Red / ● Yellow / ● Green	9.00

Technical information

Lamps (installed)

For LED or Halogen, lampholder E27
For Xenon: flashing rate 45 to 60 per minute

Terminal block (screws)

Jumped bar x2 terminal blocks
6mm²(rigid wire), 6mm² (flexible wire)
Terminals supplied L, N, PE (looping possible with one additional cable gland)).

Cable entries

Included: One M20 nickel plated brass plug (EX-M20) and one M20 nickel plated brass cable gland for non armoured cable, diameter 10-16mm (EXN04MLC2)

Casting

Casting Marine grade aluminium alloy according to standard: EN 1706: EN AC-AISi12 (Fe) DF or EN AC-AISi 10Mg(A) DF
Polycarbonate globe, thickness 3mm (color red or orange / transparent/ green/ blue)

Colour of casting (standard)

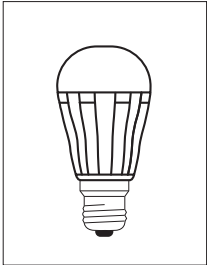
● XF****-00000 - Yellow offshore, RAL 1003
Colour options:
● XF****-B0000 - Grey, RAL 7035
● XF****-C0000 - Black, RAL 9004
● XF****-D0000 - Hammered Blue, RAL 5015
● XF****-F0000 - Red, RAL 3001
● XF****-G0000 - Blue, RAL 5010
● XF****-J0000 - Green, RAL 6032
○ XF****-M0000 - White, RAL 9010

Beacons & warning lights

Accessories

FB, FL - Industrial applications

Lamps



LED lamps

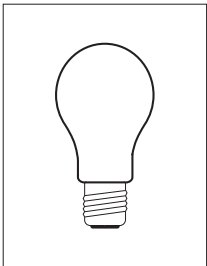
Specifications:

Colour temperature 3000°K

CRI=80 - lm/W: 55

Average operating life: 25,000 hour

Type	Power W	Lumen output lm	Lampholder
L021L	8	345	E27



Halogen lamps

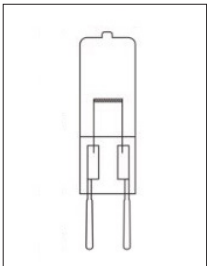
Specifications:

Colour temperature 2700°K

CRI=100 - lm/W: 10 to 17

Average operating life: 1000 hours

Type	Power W	Lumen output lm	Lampholder
L021H	28	345	E27



Xenon lamps

Specifications:

Flashing 45 to 60 per minute

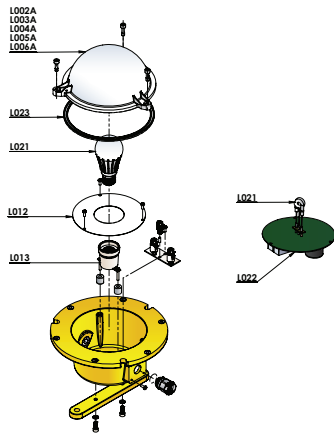
Type	Power
L021	30 joules

Beacons & warning lights

Spare parts

FB, FL - Industrial applications

4



Spare parts

Type	Specifications
L002A	Red polycarbonate globe with gasket for FB, FL
L003A	Yellow polycarbonate globe with gasket for FB, FL
L004A	Blue polycarbonate globe with gasket for FB, FL
L005A	Transparent polycarbonate globe with gasket for FB, FL
L006A	Green polycarbonate globe with gasket for FB, FL
L012	Reflector for beacon FB
L013	Lampholder E27 for beacon FB
L022110VAC	Gear tray - 110V ac- for FL30P, FL230P, FL330P
L022110VCC	Gear tray - 110V dc- for FL30P, FL230P, FL330P
L022220VAC	Gear tray -220-230Vac/Vdc 50Hz - 60Hz - for FL30P, FL230P, FL330P
L02224VCC	Gear tray -24V dc - for FL30P, FL230P, FL330P
L02248VCC	Gear tray -48V dc - for FL30P, FL230P, FL330P
L023	Gasket for FB, FL
EXN04MLC2-01	Kit M20 Exd Exe IIC Ex-td nickel plated cable gland for non armoured cable diameter 10,0-16,0mm, locknut, sealing gasket
EXN04MMC1-01	Kit M20 Ex-d IIC Ex-e II Ex-td double compression nickel plated cable gland for armoured cable diameter inner 6-12 outer 8,5-16, locknut, sealing gasket

Drilling fitting

Drilling fluorescent fitting

XDF - Zones 2 & 22



Features

- Vibration resistant lighting system
- Plug in system for fast installation
- Designed to minimise heat build up and overheating
- Corrosion resistant ideal for marine applications
- Including accessories (socket, plug, cable and fixings)
- Supplied with offshore grade paint

Specifications

- Manufactured from marine grade aluminium alloy - copper free
- UV protected polycarbonate tube - thickness 2.5mm
- Rated voltage 230Vac 50Hz or 220Vac 60hz ferromagnetic ballast
- Connected to a junction box XD104R



Certifications



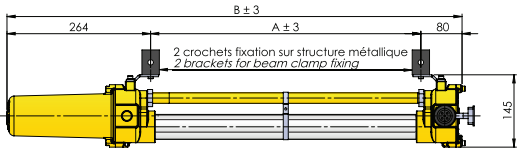
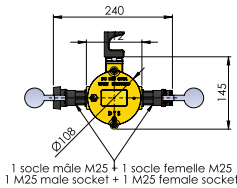
Standards

Approved to:	EN60079-0, 60079-15, 60079-31
EC Type examination certificate to:	Directive 94/9/EC Ex II 3 G Ex nA IIC T4 Gc for -20°C to + 60°C Ex II 3 D Ex tc IIIC T135°C Dc IP66 for -20°C to + 60°C
Safe operating temperature range:	-20°C to +60°C
IP test:	IP66 IEC 60529 (2001)
Impact protection index:	IK10 according to IEC 62262

Drilling fitting

Drilling fluorescent fitting

XDF - Zones 2 & 22



XDF

Dimensional drawing

4 Technical specifications

Type	Rating W	Rated Voltage V	Current A 230V	Diffuser	External dimensions mm		Weight kg
					A	B	
XDF Drilling fluorescent fitting							
XDF140-00000	1 x 36	230Vac 50Hz	0.20	Polycarbonate	1173	1540	9.12
XDF165-00000	1 x 58	230Vac 50Hz	0.35	Polycarbonate	1474	1841	10.00
XDF140-0D000	1 x 36	220Vac 60Hz	0.20	Polycarbonate	1173	1540	9.12
XDF165-0D000	1 x 58	220Vac 60Hz	0.35	Polycarbonate	1474	1841	10.00

Technical information

Lamps

Fluorescent Lamp (order separately)
T8 bi-pin tube, lampholder G13, diameter
26mm - white industry 4000°K

Rated voltages

Ferromagnetic ballast 230Vac 50Hz or
220Vac 60Hz

Power factor

0.85

Wiring configuration

3 wires

Cable entries

Two entries M25
Included: „plug entry” - male - 2 poles &
earth - 10Amp - 250Vac - „socket entry” -
female - 2 poles & earth - 10Amp - 250Vac
One extendable cable with male plug and
female socket (helical cable) expandable to
5 meter max.

Casting

Marine grade aluminium alloy according to
standard: EN 1706: EN AC-AISI12 (Fe) DF or
EN AC-AISI 10Mg(A) DF
UV protected extruded polycarbonate tube,
thickness 2,5mm

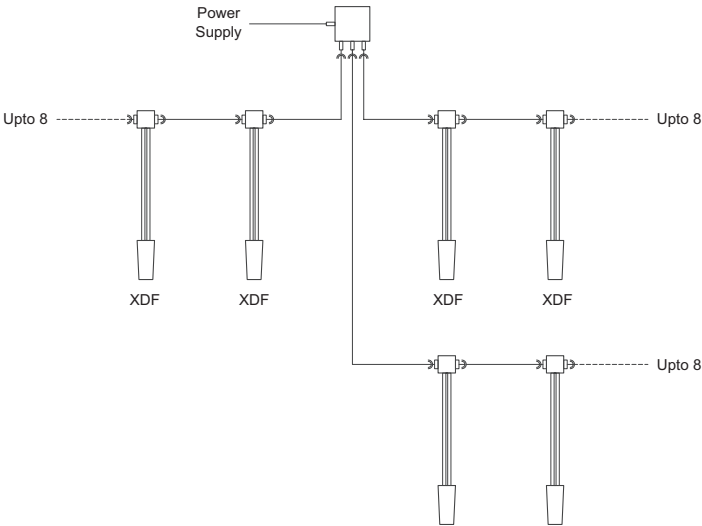
Colour of casting (standard)

- XDF****-00000 - Yellow offshore, RAL 1003
- XDF****-B0000 - Grey, RAL 7035
- XDF****-C0000 - Black, RAL 9004
- XDF****-D0000 - Hammered Blue, RAL 5015
- XDF****-F0000 - Red, RAL 3001
- XDF****-G0000 - Blue, RAL 5010
- XDF****-J0000 - Green, RAL 6032
- XDF****-MG0000 - White, RAL 9010

Fixing (included)

FC108 - Clamp for beam mounting

Wiring diagram

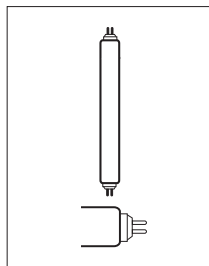


Junction box



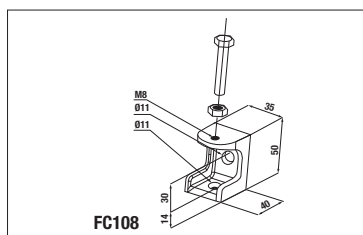
Drilling fitting has to be used with
XD104R This junction box allows
to connect 3 lines of 8 light fittings
(total 24 light fittings).
Contact Sales for more details.

Lamps



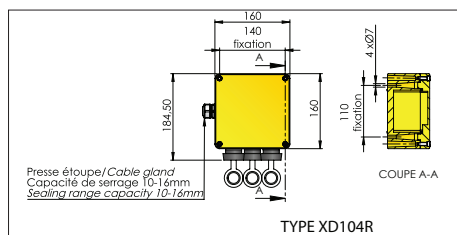
Specifications:

G13 - ø 26mm
CRI: > 80 - lm/W: 65 to 93
Colour temperature: 4000°K
Operating life: 12.000 hours



Type	Specifications
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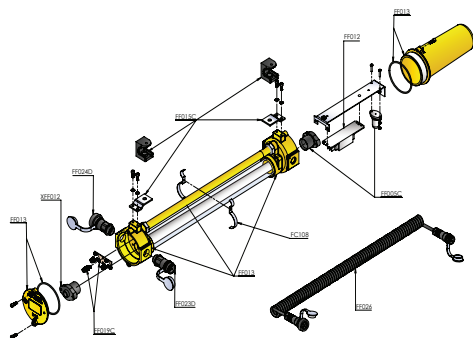
FC108	Clamp for beam mounting
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Type	Specifications
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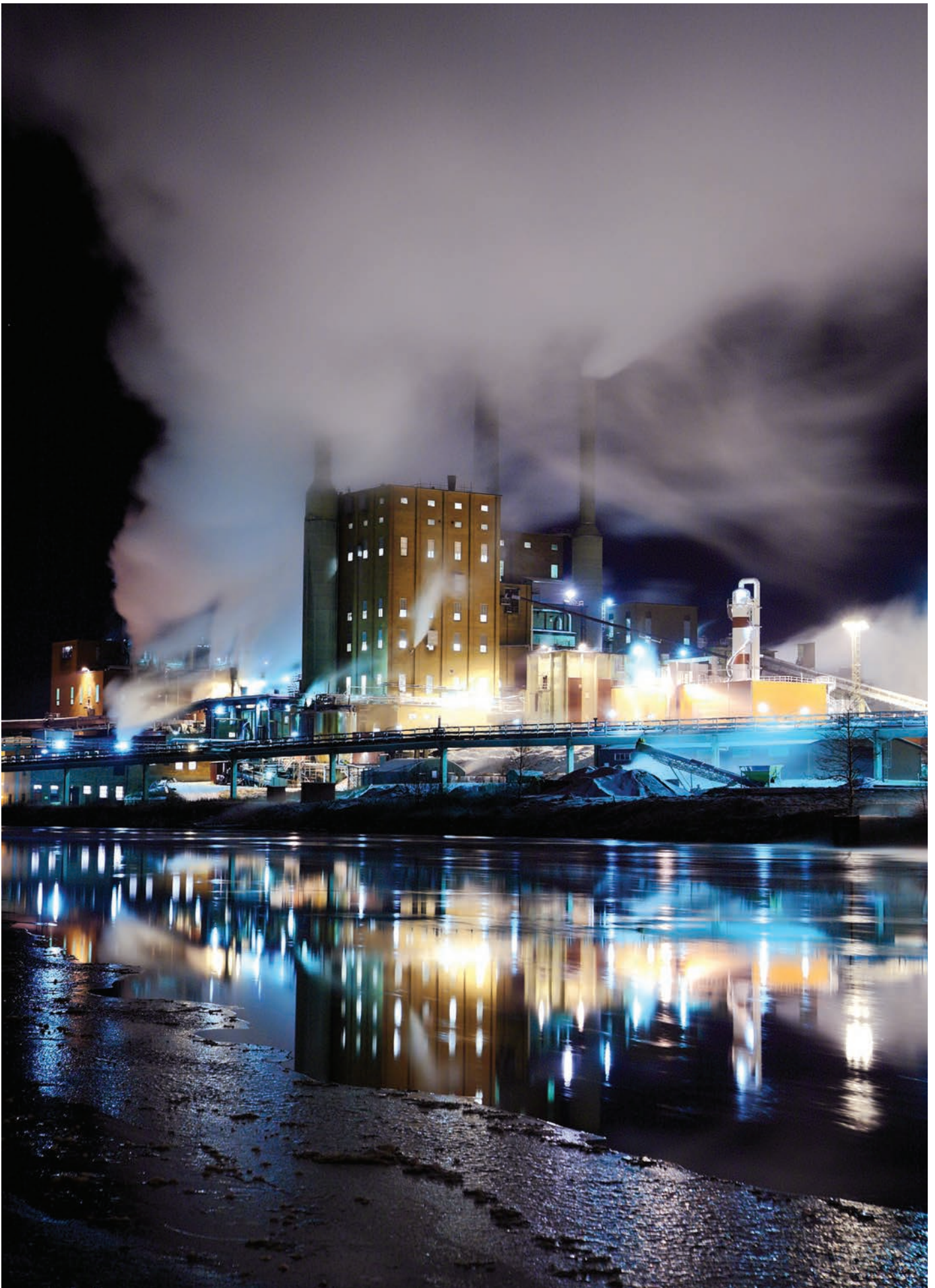
XD104R	Junction box
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Jumped bar x2 terminal blocks 6mm²(rigid wire), 6mm² (flexible wire)
Terminals supplied L, N, PE (looping possible with one additional cable gland).



Type	Specifications
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FF005C	Starter holder FF004 + starter FF005
FF0122206036W	Ferromagnetic ballast 220Vac 60Hz for XDF140
FF0122206058W	Ferromagnetic ballast 220Vac 60Hz for XDF165
FF0122305036W	Ferromagnetic ballast 230Vac 50Hz for XDF140
FF0122305058W	Ferromagnetic ballast 230Vac 50Hz for XDF165
FF01340WC	Enclosure for XDF140 with tube + cover + screw for cover + gasket for cover + fixing screws
FF01365WC	Enclosure for XDF165 with tube + cover + screw for cover + gasket for cover + fixing screws
FF015C	Beam clamp with screws + steel brackets
FF019C	Connecting terminal + earthing terminal
FF023D	Plug (2P+E) - 10Amp - 250Vac for XDF140, XDF165, XD104R
FF024D	Socket (2P+E) -10Amp - 250Vac for XDF140, XDF165, XD104R
FF026	one extendable cable with socket and plug -(helical cable) expandable to 5 metre max
XFF012	Lampholder bi pin
EXN05ASC3-01	Kit 3/4 NPT Exd Exe IIC Ex-td nickel plated cable gland for non armoured cable diameter 6,0-12,0mm



Wellglass

Wellglass fitting all zones

EVH, EVX - Zones 1, 2 & 21, 22



Features

- Compact design for easy installation
- For diffuse or ambient light
- Compatible with energy saving lamps or discharge lamp according models

Specifications

- Manufactured from marine grade aluminium alloy
- Borosilicate glass globe
- Rated voltage standard: 230Vac 50Hz
- 4xEntries 3/4 NPT

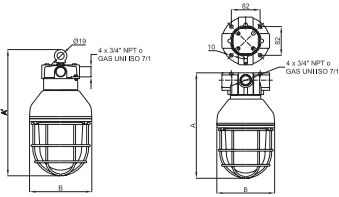
Certifications



Standards

Approved to:	EN60079-0, 60079-1, 60079-31
EC Type examination certificate to:	Directive 94/9/EC IECEx CES 07.0004 CESI 12 ATEX 006 GOST R II 2 GD Ex d IIC T...°C Gb Ex tb IIIC T...°C Db IP66
Glow wire test:	960°C EN60598-2-2
Safe operating temperature range:	-20°C to +60°C
IP test:	IP66 IEC 60529 (2001)

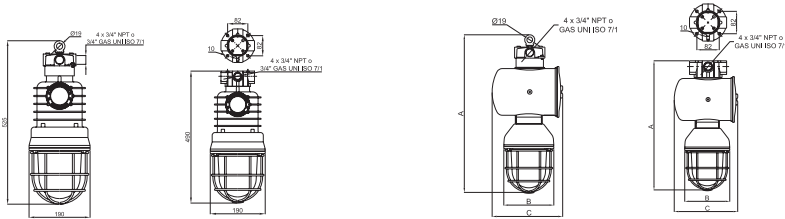
EVH, EVX - Zones 1, 2 & 21, 22



EVH, EVX

4

Type	Mounting	Rating W	Current A 230V	Temperature class		Dimensions mm		Weight kg
				-20°C to +40°C	-20°C to +60°C	A	B	
EVH, EVX Wellglass fitting								
EVH100-00000	suspension ring	1 x 70 Halogen	0.45	T4 -103°C	T4 -123°C	283	150	16.50
EVX100-00000	ceiling mounted	1 x 70 Halogen	0.45	T4 -103°C	T4 -123°C	250	150	16.50
EVH200-00000	suspension ring	1 x 140 Halogen	0.90	T4 -134°C	T3 -154°C	346	170	16.50
EVX200-00000	ceiling mounted	1 x 140 Halogen	0.90	T4 -134°C	T3 -154°C	313	170	16.50
EVH300-00000	suspension ring	1 x 250 Mixed light	1.30	T4 -134°C	T3 -154°C	463	220	16.50
EVX300-00000	ceiling mounted	1 x 250 Mixed light	1.30	T4 -134°C	T3 -154°C	410	220	16.50



Evhna20, Evxna20

EVHNA30/40/50, EVXNA30/40/50

Technical specifications

Type	Mounting	Rating W	Current A 230V	Temperature class		Dimensions mm		Weight kg
				-20°C to +40°C	-20°C to +60°C	A	B	
EVH Na, EVX Na Wellglass fitting								
EVHNA20-00000	suspension ring	1 x 70 HP Sodium	0.40	T5 -95°C	T4 -115°C	500	200	16.50
EVXNA20-00000	ceiling mounted	1 x 70 HP Sodium	0.40	T5 -95°C	T4 -115°C	470	200	16.50
EVHNA30-00000	suspension ring	1 x 150 HP Sodium	0.80	T3- 139°C	T3- 159°C	633	220	16.50
EVXNA30-00000	ceiling mounted	1 x 150 HP Sodium	0.80	T3 -139°C	T3 -159°C	600	220	16.50
EVHNA40-00000	suspension ring	1 x 250 HP Sodium	1.30	T3 -139°C	T3 -159°C	633	220	16.50
EVXNA40-00000	ceiling mounted	1 x 250 HP Sodium	1.30	T3 -139°C	T3 -159°C	600	220	16.50
EVHNA50-00000	suspension ring	1 x 400 HP Sodium	2.10	T3 -144°C	T3 -164°C	670	270	16.50
EVXNA50-00000	ceiling mounted	1 x 400 HP Sodium	2.10	T3 -144°C	T3 -164°C	630	270	16.50

Technical information

Lamps (order separately)

High pressure sodium elliptical lamp -
lampholder E40 - colour temperature 2000
to 2200°K

Metal Halides elliptical lamp - lampholder
E40 - colour temperature 3900 to 4300°K

Rated voltages

For EV.NA, EV.IM
230Vac 50Hz compensated wirewound
ferromagnetic ballast

Power factor

For EV.NA, EV.IM's ballast
0.85 (HP Sodium and metal halide)

Terminal block

6mm² (rigid wire), 4mm² (flexible wire)
Terminals supplied L, N, PE

Cable entries

Four 3/4" NPT entries - fitted with 2 plugs

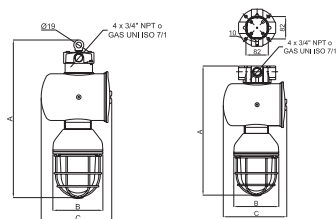
Casting

Marine grade aluminium alloy (CU<0.05%)
Yellow polyurethane paint RAL1003
Borosilicate glass globe
Galvanised steel protection grill
Neoprene ingress gasket
Stainless steel screws

Wellglass

Wellglass fitting all zones

EVH, EVX - Zones 1, 2 & 21, 22



EVH Im, EVX Im

Technical specifications

Type	Mounting	Rating W	Current A 230V	Temperature class		Dimensions mm		Weight kg
				-20°C to +40°C	-20°C to +60°C	A	B	
EVH Im, EVX Im Wellglass fitting								
EVHIM40-00000	suspension ring	1 x 250 Metal Halide	1.30	T3 -139°C	T3 -159°C	633	220	16.50
EVXIM40-00000	ceiling mounted	1 x 250 Metal Halide	1.30	T3 -139°C	T3 -159°C	600	220	16.50
EVHIM50-00000	suspension ring	1 x 400 Metal Halide	2.10	T3 -144°C	T3 -164°C	670	270	16.50
EVXIM50-00000	ceiling mounted	1 x 400 Metal Halide	2.10	T3 -144°C	T3 -164°C	630	270	16.50

Technical information

Lamps (order separately)

High pressure sodium elliptical lamp - lampholder E40 - colour temperature 2000 to 2200°K

Metal Halides elliptical lamp - lampholder E40 - colour temperature 3900 to 4300°K

Rated voltages

For EV.NA, EV.IM
230Vac 50Hz compensated wirewound ferromagnetic ballast

Power factor

For EV.NA, EV.IM's ballast
0.85 (HP Sodium and metal halide)

Terminal block

6mm² (rigid wire), 4mm² (flexible wire)
Terminals supplied L, N, PE

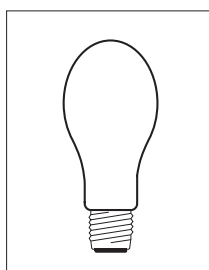
Cable entries

Four 3/4" NPT entries - fitted with 2 plugs

Casting

Marine grade aluminium alloy (CU<0.05%)
Yellow polyurethane paint RAL1003
Borosilicate glass globe
Galvanised steel protection grill
Neoprene ingress gasket
Stainless steel screws

Lamps



High pressure sodium elliptical lamps

Specifications:

colour temperature 2000 > 2200°K

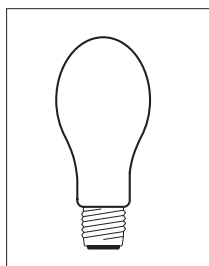
CRI: 33 > 49, lm/W: 80 to 125

Average operating life: 34 000 hours

Minimum starting temperature: -25°C

Time to full power: 1 to 10mm with control gear & ignitor

Type	Power W	Lumen output lm	Lampholder
3LAM00003S	150	17000	E40
3LAM00006S	250	31100	E40
3LAM00060S	400	55500	E40
3LAM00129S	70	6300	E27



Metal Halides elliptical lamps

Specifications:

colour temperature 3900 > 4300°K

CRI: 33 > 49, lm/W: 50 to 60

Average operating life: 15 000 > 20 000 hours

Minimum starting temperature: -25°C

Time to full power: 5 to 10mm with control gear & ignitor

Type	Power W	Lumen output lm	Lampholder
3LAM00106S	250	12700	E40
3LAM00097S	400	22000	E40

Wellglass

Accessories & spare parts

EVH, EVX - Zones 1, 2 & 21, 22

Fixing Accessories

Brackets

Type	Specifications
R006	External White painted aluminium Stainless steel reflector for EV 100
R007	External White painted aluminium Stainless steel reflector for EV 200
R008	External White painted aluminium Stainless steel reflector for EV NA 20
R009	External White painted aluminium Stainless steel reflector for EV 300, EV.NA 30, EV.NA 40, EV.IM40
R010	External White painted aluminium Stainless steel reflector for EV.NA 50, EV. IM 50
R018	30° angle wall mounting arm for wellglass

Spare parts

Type	Specifications
R001	Sealed globe, Electro-polished stainless steel protective guard and gasket for wellglass EV 100
R002 -	Sealed globe, Electro-polished stainless steel protective guard and gasket for wellglass EV 200
R003	Sealed globe, Electro-polished stainless steel protective guard and gasket for wellglass EV NA20
R004	Sealed globe, Electro-polished stainless steel protective guard and gasket for wellglass EV 300, EV NA30, EV NA40, EV IM40
R005	Sealed globe, Electro-polished stainless steel protective guard and gasket for wellglass EV NA50, EV IM50

Enclosures for all zones

Junction box	
GUV - Zones 1, 2	5/3
XB100 - Zones 1, 2 & 21, 22	5/5

Control station	
EFDC, SRC, XMC - Zones 1, 2	5/7
XBLA - polyester - Zones 1, 2 & 21, 22	5/11
XBIA - stainless steel - Zones 1, 2 & 21, 22	5/15
XBA - aluminium - Zones 1, 2 & 21, 22	5/19

One need, one control panel	
Custom built panel	5/22
EJB - Zones 1, 2 & 21, 22	5/25
GUB - Zones 1, 2 & 21, 22	5/27

Instrumentation box	
XBL -polyester Zones 1, 2 & 21, 22	5/31
XBI - stainless steel Zones 1, 2 & 21, 22	5/33
XB - aluminium Zones 1, 2 & 21, 22	5/35

Polyester/ Aluminium Plug & socket (safe disconnect)	
DPX/DRX - 1, 2 & 21, 22	5/37



Junction boxes

Cast aluminium junction box

GUV - Zones 1, 2



Features

- External mounting points allow junction boxes to be mounted without removing the lid
- Manufactured from cast aluminium and machined with a cylindrical spigot joint flame path
- Supplied with yellow grade paint RAL 1003 for high visibility

Specifications

- Marine grade aluminium alloy EN1706 AC - 43100KF- AISI 10Mg copper free
- 3 or 4 xEntries 3/4"NPT or 1"NPT
- Stainless steel screw
- Terminal ordered separately for flexibility

Certifications



Standards

Approved to:	EN60079-0, 60079-1
EC Type examination certificate to:	Directive 94/9/EC LCIE00 ATEX 6022X Ex II 2 G Ex d IIC T6 Gb for -20°C to + 40°C Ex d IIC T5 Gb for -20°C to + 55°C
IP test:	IP66 IEC 60529 (2001)
Impact protection index:	IK09 according to IEC 62262

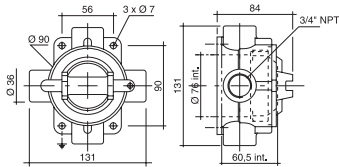
Junction boxes

Cast aluminium junction box

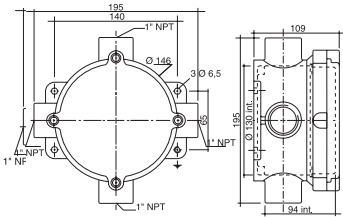
GUV - Zones 1, 2



GUV



Dimensional drawing GUV 26



Dimensional drawing GUV 36

Technical specifications

Type	Number of Entries	Number of Terminals (optional)	Weight kg
GUV Junction box			
GUVT26-00000	3T -3/4"NPT	4x2,5 to 6mm ²	0.80
GUVX26-00000	4X -3/4"NPT	4x2,5 to 6mm ²	0.80
GUVT36-00000	3T -3/4"NPT	Max. 8x2,5mm ² or 6x35mm ²	1.50
GUVT36-00A00	3T -1"NPT	Max. 8x2,5mm ² or 6x35mm ²	1.50
GUVX36-00000	4X -3/4"NPT	Max. 8x2,5mm ² or 6x35mm ²	1.50
GUVX36-00A00	4X -1"NPT	Max. 8x2,5mm ² or 6x35mm ²	1.50

Spare parts

Type	Specifications
G03	Rose terminal 4x6 mm ² for GUV26
G005	Terminal 6x4 mm ² (5 poles + 1 earth) for GUV36
G006	Terminal 10x4 mm ² (8 poles + 2 earth) for GUV36
G009	Terminal 4x10 mm ² (3 poles + 1 earth) for GUV36
G010	Terminal 5x10 mm ² (4 poles + 1 earth) for GUV36
G011	Terminal 4x16 mm ² (3 poles + 1 earth) for GUV36
G015	Terminal 8x16 mm ² (6 poles + 2 earth) for GUV36
G071	Terminal 6x6 mm ² (4 poles + 2 earth) for GUV36

Junction boxes

Polyester junction box

XB100 - Zones 1, 2 & 21, 22



- Features**
- External mounting points allow for junction boxes to be mounted without removing the lid
 - Robust design
 - Manufactured from anti static glass reinforced polyester GRP so eliminating any chance of static build up
 - Supplied complete with terminals and glands so all on site combinations are covered
 - Stainless steel captive screws

- Specifications**
- 4x M20 entries - fitted with 4 nylon cable glands and 1 plug
 - Size 121*121*75,5mm
 - Number of connectors: 6
 - Type of terminal: 2+ 2 jumped terminals + 2 ground (for L1, N, PE)

Certifications

Standards	
Approved to:	EN60079-0, 60079-7, 60079-31
EC Type examination certificate to:	Directive 94/9/EC LCIE 11 ATEX 3049X IEC Ex LCIE 11.0045X Ex II 2 G Ex e IIC T6 Gb for -20°C to +40°C Ex e IIC T5 Gb for -20°C to +55°C Ex e IIC T4 Gb for -20°C to +90°C Ex II 2 D Ex tb IIIC T85°C Db IP66 for -20°C to +40°C Ex tb IIIC T100°C Db IP66 for -20°C to +55°C Ex tb IIIC T135°C Db IP66 for -20°C to +90°C
IP test:	IP66 IEC 60529 (2001)
Impact protection index:	IK09 according to IEC 62262

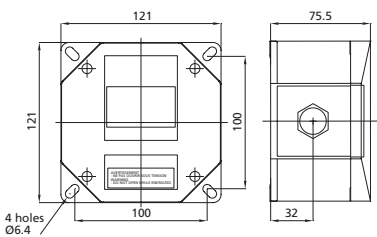
Junction boxes

Polyester junction box

XB100 - Zones 1, 2 & 21, 22



XB100



Dimensional drawing

Technical specifications

Type	Cable gland Material	Cable gland Size mm	Number of Terminals	Terminal Section	Connection	Plate bonding conductor	Weight kg
XB100 Junction box							
XB100-6BV	Polyamide	6x12	6	6x6	Screw/Screw	-	0.68
XB100-6BR	Polyamide	6x12	6	4x4	Spring/Spring	-	0.68
XB100A-6BV	Nickel Plated Brass	6x12int. / 8,5-16 ext.	6	6x6	Screw/Screw	1	0.80
XB100A-6BR	Nickel Plated Brass	6x12int. / 8,5-16 ext.	6	4x4	Spring/Spring	1	0.80

Control station

Cast aluminium control station









EFDC, SRC, XMC - Zones 1, 2



- Features**
- Manufactured from cast aluminium and machined with a cylindrical spigot joint flame path
 - External mounting points allow junction boxes to be mounted without removing the lid
 - Supplied with yellow grade paint RAL 1003 for high visibility (Except the emergency version - red)
 - Includes one nickel-plated brass plug

Specifications
<ul style="list-style-type: none"> – 2xEntries 3/4"NPT fitted with one plug – Marine grade aluminium alloy EN1706 AC - 43100KF- AISI 10Mg copper free – Stainless steel screws – Volume <2dm3
Maximum operating power
<ul style="list-style-type: none"> – 400Vac for the indicator lamp – 6A max for the push button – 40A max for the rotary switches



Certifications




 
 

Standards	
Approved to:	EN60079-0, 60079-1
EC Type examination certificate to:	Directive 94/9/EC LCIE00 ATEX 6022X Ex II 2 G Ex d IIC T6 Gb for -20°C to + 40°C Ex d IIC T5 Gb for -20°C to + 55°C
IP test:	IP66 IEC 60529 (2001)
Impact protection index:	IK09 according to IEC 62262

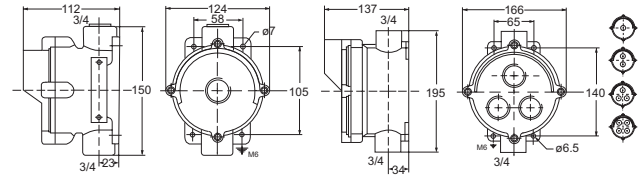
Control station

Cast aluminium control station

EFDC, SRC, XMC - Zones 1, 2



EFDC
Control station



Dimensional drawing

Technical specifications

Type	3D View	Wiring Diagram	Description	Weight kg
EFDC Control station				
EFDC21			1x green push-button NO+NC Contact 6A max with 120Vac, 3A with 240Vac, 1,2A with 500Vac	1.60
EFDC21F			1x push pull emergency button NO+NC Contact 6A max with 120Vac, 3A with 240Vac, 1,2A with 500Vac	1.60
EFDC21G			1x break glass automatic cut- off NO+NC (supplied with one added glass)	1.60
EFDC21G Man			1x break glass manual cut- off NO+NC (supplied with one added glass)	1.60
EFDC21V			1x emergency key operated push-button n°455 NO+NC - Contact 6A max with 120Vac, 3A with 240Vac, 1,2A with 500Vac	1.60
EFDC22			2x green and red push-buttons NO+NC Contact 6A max with 120Vac, 3A with 240Vac, 1,2A with 500Vac	1.60
EFDC23			1x green push-button NO+NC - Contact 6A max with 120Vac, 3A with 240Vac, 1,2A with 500Vac + 1x green indicator lamp - 230Vac	1.60
EFDC38			1x switch 0-1, 2NO 16A + 2x red and green push-button NO+NC Contact 6A max with 120Vac, 3A with 240Vac, 1,2A with 500Vac	2.60
EFDC40			3x black, green, red push-buttons NO+NC Contact 6A max with 120Vac, 3A with 240Vac, 1,2A with 500Vac	2.60
EFDC41			2x green and red push-buttons NO+NC Contact 6A max with 120Vac, 3A with 240Vac, 1,2A with 500Vac + 1x green indicator lamp - 230Vac	2.60

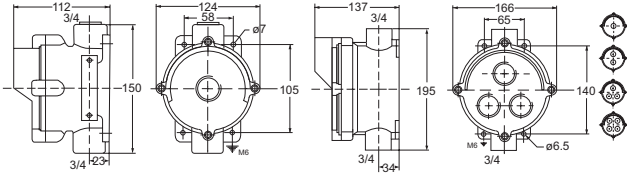
Control station

Cast aluminium control station

EFDC, SRC, XMC - Zones 1, 2



SRC



Control station

Cast aluminium control station

EFDC, SRC, XMC - Zones 1, 2



EFDC, SRC, XMC

Spare parts

Type	Specifications
BP01PC	Contacts NO+NC for push button switches
BP02	Head of green push switch
BP03	Head of red push switch
BP04	Head of black push switch
BP05	Head of mushroom push,pull switch
BP05V	Head of key operated mushroom push switch
BPN10PC	Black push-button NO+NC- Contact 6A max with 120Vac, 3A with 240Vac, 1,2A with 500Vac
BPR10PC	Red push-button NO+NC - Contact 6A max with 120Vac,, 3A with 240Vac, 1,2A with 500Vac
BPV10PC	Green push-button NO+NC - Contact 6A max with 120Vac,, 3A with 240Vac, 1,2A with 500Vac
BCP30PC	Simple emergency stop push button NO+NC- Contact 6A max with 120Vac, 3A with 240Vac, 1,2A with 500Vac
BCP40PC	Push,Pull button Emergency Stop NO+NC - Contact 6A max with 120Vac, 3A with 240Vac, 1,2A with 500Vac
BCP50PC	Push button NO+NC, unlockable by key n°455 - Contact 6A max with 120Vac, 3A with 240Vac, 1,2A with 500Vac
PRC10PC	Switch - 0-1 2, NO 16A
PRC20PC	Rotary switch operated by key n°455, 0-1, 2NO 16A
PRC30PC	Switch - 1-2, NO+NC 16A
PRC40PC	Switch - 1-0-2, NO-0-NC 16A
PRC50PC	Switch 0-1-2, 0-NO-NO 16A
PRC60PC	Rotary switch 0-1, 4NO 16A
PRC70PC	Lockable rotary switch 3NO 25A
VAB10PC	Blue indicator lamp - 230Vac
VAC10PC	White indicator lamp - 230Vac
VAJ10PC	Yellow indicator lamp - 230Vac
VAR10PC	Red indicator lamp - 230Vac
VAV10PC	Green indicator lamp - 230Vac
DE01	Green indicator lamp lens
DE02	Red indicator lamp lens
DE03	White indicator lamp lens
DE04	Amber indicator lamp lens
DE05	Blue indicator lamp lens

Control station

Polyester control station

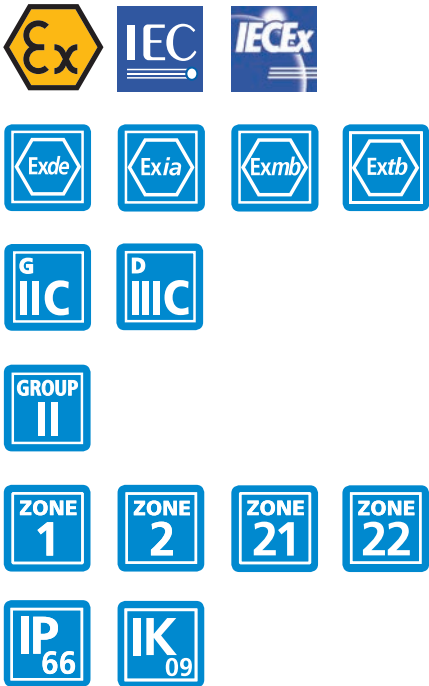
XBL A - Zones 1, 2 & 21, 22



Specifications

- 2xEntries M20 fitted with one plug
- Maximum operating power**
 - AC: Umax=415V, I= 1, 75A
 - AC: Umax=240V, I= 3A
 - AC: Umax=120V, I=6A
 - DC: Umax=415V, I= 0,165A
 - DC: Umax=250V, I= 0,27A
 - DC: Umax=125V, I=0,55A
 - All LED indicator lamp with voltage 24V- 254 Vac/Vdc

Certifications



Features

- Wide variety of sizes and functions, available as standard products for quick supply and as custom built parts to meet the users' exact requirement
- Manufactured from anti static glass reinforced polyester GRP to eliminate static build up
- Stainless steel captive screws



5

Standards

Approved to:	EN60079-0, 60079-1, 60079-7,60079-11, 60079-18, 60079-31
EC Type examination certificate to:	Directive 94/9/EC LCIE 11 ATEX 3049X IEC Ex LCIE 11.0045X Ex II 2 G Ex d e ia [ia] mb IIC T6 Gb for -20°C to +40°C Ex d e ia [ia] mb IIC T5 Gb for -20°C to +55°C Ex d e ia [ia] mb IIC T4 Gb for -20°C to +90°C Ex II 2 D Ex tb IIIC T85°C Db IP66 for -20°C to +40°C Ex tb IIIC T100°C Db IP66 for -20°C to +55°C Ex tb IIIC T135°C Db IP66 for -20°C to +90°C
IP test:	IP66 IEC 60529 (2001)
Impact protection index:	IK09 according to IEC 62262

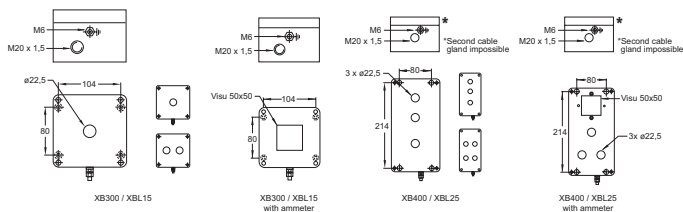
Control station

Polyester control station

XBL A - Zones 1, 2 & 21, 22



XBL A



Dimensional drawing

Technical specifications

Type	3D View	Wiring Diagram	Description	Weight kg
XBL Control station				
XBL215A			1x switch 0-1, 2 NO 16A	1.20
XBL215VA			1x switch with key n°455- 0-1, 1 NO 16A	1.20
XBL21A			1x green push-button 1 NO Contact 6A max with - 120Vac, 3A with - 220Vac, 1,8A with 600Vac	1.20
XBL21FA			1x emergency stop push-button push:pull 1 NC Contact 6A max with - 120V, 3A with - 220Vac, 1,8A with 600Vac	1.20
XBL21VA			1x emergency stop push-button push:pull 1 NC with key n°455 - Contact 6A max with - 120Vac, 3A with - 220Vac, 1,8A with 600Vac	1.20
XBL22A			1x green push-button 1 NO +1x red push-button 1 NC Contact 6A max with - 120Vac, 3A with - 220Vac, 1,8A with 600Vac	1.20
XBL22AMP			1x green push-button 1 NO +1x red push-button 1 NC Contact 6A max with - 120Vac, 3A with - 220Vac, 1,8A with 600Vac +1x Ammeter TC:IA graduate scale 0-In-3In dilo IN= to be indicated + 1x front plug	2.20
XBL23A			1x green push-button 1 NO Contact 6A max with - 120Vac, 3A with - 220Vac, 1,8A with 600Vac +1x green indicator lamp - 24-254Vac/Vdc	1.20
XBL41A			1x green push-button 1 NO +1x red push-button 1 NC Contact 6A max with - 120Vac, 3A with - 220Vac, 1,8A with 600Vac +1x green indicator lamp - 24-254Vac/Vdc	2.20

Control station

Spare parts

XBL A - Zones 1, 2 & 21, 22



XBL A

Spare parts

Type	Specifications
BP01EXNO	Contacts NO for push button switches
BP01EXNC	Contacts NC for push button switches
BPN10EX	Black push-button NO- Contact 6A max with - 120Vac, 3A with - 220Vac, 1,8A with 600Vac
BPR10EX	Red push-button NC- Contact 6A max with - 120Vac, 3A with - 220Vac, 1,8A with 600Vac
BPV10EX	Green push-button NO- Contact 6A max with - 120Vac, 3A with - 220Vac, 1,8A with 600Vac
BCP30EX	Simple emergency stop push button NC- Contact 6A max with 120Vac, 3A with 220Vac, 1,8A with 600Vac
BCP40EX	Push,Pull button Emergency Stop NC - Contact 6A max with 120Vac, 3A with 220Vac, 1,8A with 600Vac
BCP50EX	Push button NC, unlockable by key n°455 - Contact 6A max with 120Vac, 3A with 220Vac, 1,8A with 600Vac
PRC10EX	Switch 0-1, NO 6A
PRC20EX	Rotary switch operated by key n° 455 - 0-1, NO 16A
PRC40EX	Switch - 1-0-2 NO-0-NO 16A
VAB10EX	Blue indicator lamp - 24-254Vac/Vdc
VAC10EX	White indicator lamp - 24-254Vac/Vdc
VAJ10EX	Yellow indicator lamp - - 24-254Vac/Vdc
VAR10EX	Red indicator lamp - 24-254Vac/Vdc
VAV10EX	Green indicator lamp - 24-254Vac/Vdc



Control station

Aluminium control station

XBI A - Zones 1, 2 & 21, 22



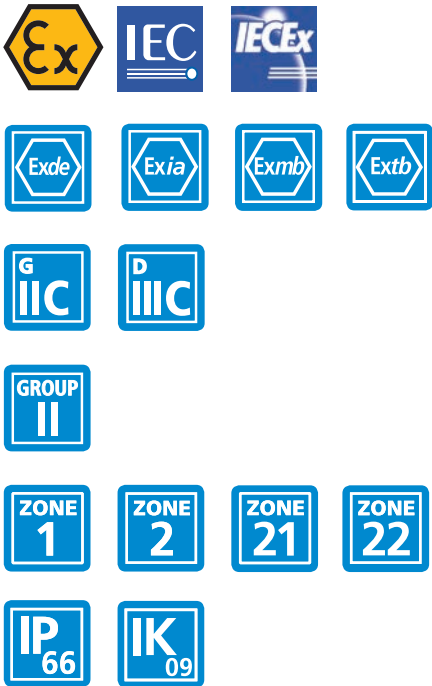
Specifications

- 2xEntries M20 fitted with one plug

Maximum operating power

- AC: Umax=415V, I= 1, 75A
- AC: Umax=240V, I= 3A
- AC: Umax=120V, I=6A
- DC: Umax=415V, I= 0,165A
- DC: Umax=250V, I= 0,27A
- DC: Umax=125V, I=0,55A
- All LED indicator lamp with voltage 24V- 254 Vac/Vdc

Certifications



Features

- Wide variety of sizes and functions, available as standard products for quick supply and as custom built parts to meet the users' exact requirement
- Manufacture from Stainless steel 316L, ideal for offshore application
- Stainless steel captive screws

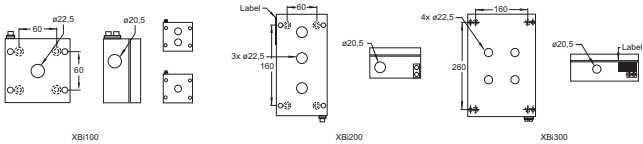
Standards

Approved to:	EN60079-0, 60079-1, 60079-7, 60079-11, 600979-18, 60079-31
EC Type examination certificate to:	Directive 94/9/EC LCIE 11 ATEX 3050X IEC Ex LCIE 11.0044X Ex II 2 G Ex d e ia [ia] mb IIC T6 Gb for -20°C to +40°C Ex d e ia [ia] mb IIC T5 Gb for -20°C to +55°C Ex d e ia [ia] mb IIC T4 Gb for -20°C to +90°C Ex II 2 D Ex tb IIIC T85°C Db IP66 for -20°C to +40°C Ex tb IIIC T100°C Db IP66 for -20°C to +55°C Ex tb IIIC T135°C Db IP66 for -20°C to +90°C
IP test:	IP66 IEC 60529 (2001)
Impact protection index:	IK09 according to IEC 62262

Control station

Aluminium control station

XBI A -Zones 1, 2 & 21, 22



XBI A

Dimensional drawing

Technical specifications

Type	3D View	Wiring Diagram	Description	Weight kg
XBL Control station				
XBI215A			1x switch 0-1, 2 NO 16A	1.20
XBI215VA			1x switch with key n°455- 0-1, 1 NO 16A	1.20
XBI21A			1x green push-button 1 NO Contact 6A max with - 120Vac, 3A with - 220Vac, 1,8A with 600Vac	1.20
XBI21FA			1x emergency stop push-button push:pull 1 NC Contact 6A max with - 120Vac, 3A with - 220Vac, 1,8A with 600Vac	1.20
XBI21VA			1x emergency stop push-button push:pull 1 NC with key n°455 - Contact 6A max with - 120Vac, 3A with - 220Vac, 1,8A with 600Vac	1.20
XBI22A			1x green push-button 1 NO +1x red push-button 1 NC Contact 6A max with - 120Vac, 3A with - 220Vac, 1,8A with 600Vac	1.20
XBI23A			1x green push-button 1 NO +1x green indicator lamp - 24-254Vac/Vdc	1.20
XBI41A			1x green push-button 1 NO +1x red push-button 1 NC +1x green indicator lamp - 24-254Vac/Vdc	2.20

Control station

Spare parts

XBI A - Zones 1, 2 & 21, 22



XBI A

Spare parts

Type	Specifications
BP01EXNO	Contacts NO for push button switches
BP01EXNC	Contacts NC for push button switches
BPN10EX	Black push-button NO- Contact 6A max with - 120Vac, 3A with - 220Vac, 1,8A with 600Vac
BPR10EX	Red push-button NC- Contact 6A max with - 120Vac, 3A with - 220Vac, 1,8A with 600Vac
BPV10EX	Green push-button NO- Contact 6A max with - 120Vac, 3A with - 220Vac, 1,8A with 600Vac
BCP30EX	Simple emergency stop push button NC- Contact 6A max with 120Vac, 3A with 220Vac, 1,8A with 600Vac
BCP40EX	Push,Pull button Emergency Stop NC - Contact 6A max with 120Vac, 3A with 220Vac, 1,8A with 600Vac
BCP50EX	Push button NC, unlockable by key n°455 - Contact 6A max with 120Vac, 3A with 220Vac, 1,8A with 600Vac
PRC10EX	Switch 0-1, NO 6A
PRC20EX	Rotary switch operated by key n° 455 - 0-1, NO 16A
PRC40EX	Switch - 1-0-2 NO-0-NO 16A
VAB10EX	Blue indicator lamp - 24-254Vac/Vdc
VAC10EX	White indicator lamp - 24-254Vac/Vdc
VAJ10EX	Yellow indicator lamp - 24-254Vac/Vdc
VAR10EX	Red indicator lamp - 24-254Vac/Vdc
VAV10EX	Green indicator lamp - 24-254Vac/Vdc



Control station

Aluminium control station

XB A - Zones 1, 2 & 21, 22



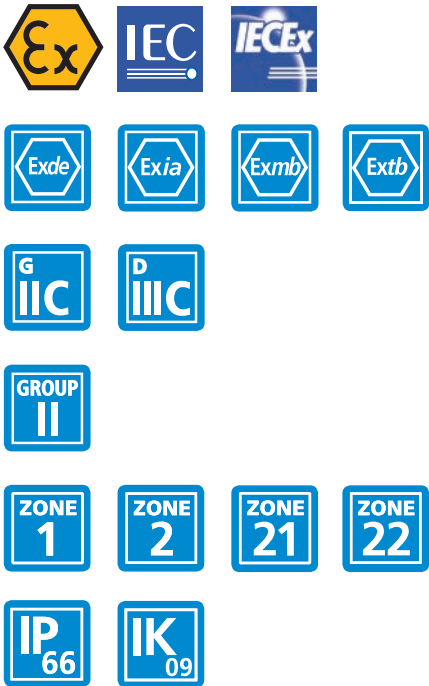
Specifications

- 2xEntries M20 fitted with one plug

Maximum operating power

- AC: Umax=415V, I= 1, 75A
- AC: Umax=240V, I= 3A
- AC: Umax=120V, I=6A
- DC: Umax=415V, I= 0,165A
- DC: Umax=250V, I= 0,27A
- DC: Umax=125V, I=0,55A
- All LED indicator lamp with voltage 24V- 254 Vac/Vdc

Certifications



Features

- Wide variety of sizes and functions, available as standard products for quick supply and as custom built parts to meet the users' exact requirement
- Aluminium Paint finish ideal for marine applications
- Stainless steel captive screws



Standards

Approved to:	EN60079-0, 60079-1, 60079-11, 60079-31 60079-07, 60079-18
EC Type examination certificate to:	Directive 94/9/EC LCIE 11 ATEX 3051X IEC Ex LCIE 11.0046X Ex II 2 G Ex d e ia [ia] mb IIC T6 Gb for -20°C to +40°C Ex d e ia [ia] mb IIC T5 Gb for -20°C to +55°C Ex d e ia [ia] mb IIC T4 Gb for -20°C to +90°C Ex II 2 D Ex tb IIIC T85°C Db IP66 for -20°C to +40°C Ex tb IIIC T100°C Db IP66 for -20°C to +55°C Ex tb IIIC T135°C Db IP66 for -20°C to +90°C
IP test:	IP66 IEC 60529 (2001)
Impact protection index:	IK09 according to IEC 62262

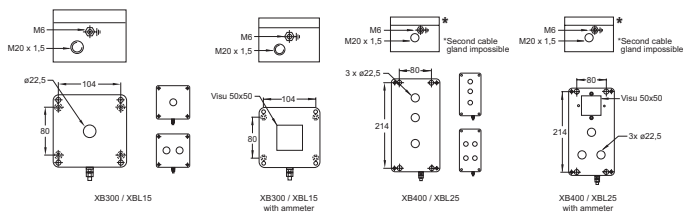
Control station

Aluminium control station

XB A - Zones 1, 2 & 21, 22



XB A



Dimensional drawing

Technical specifications

Type	3D View	Wiring Diagram	Description	Weight kg
XBL Control station				
XB215A			1x switch 0-1, 2 NO 16A	1.20
XB215VA			1x switch with key n°455- 0-1, 1 NO 16A	1.20
XB21A			1x green push-button 1 NO Contact 6A max with - 120Vac, 3A with - 220Vac, 1,8A with 600Vac	1.20
XB21FA			1x emergency stop push-button push:pull 1 NC Contact 6A max with - 120V, 3A with - 220Vac, 1,8A with 600Vac	1.20
XB21VA			1x emergency stop push-button push:pull 1 NC with key n°455 - Contact 6A max with - 120Vac, 3A with - 220V, 1,8A with 600V	1.20
XB22A			1x green push-button 1 NO +1x red push-button 1 NC Contact 6A max with - 120Vac, 3A with - 220Vac, 1,8A with 600Vac	1.20
XB22AMP			1x green push-button 1 NO +1x red push-button 1 NC Contact 6A max with - 120Vac, 3A with - 220Vac, 1,8A with 600Vac +1x Ammeter TC:IA graduate scale 0-In-3In dilo IN= to be indicated + 1x front plug	2.20
XB23A			1x green push-button 1 NO Contact 6A max with - 120Vac, 3A with - 220Vac, 1,8A with 600Vac +1x green indicator lamp - 24-254Vac/Vdc	1.20
XB41A			1x green push-button 1 NO +1x red push-button 1 NC Contact 6A max with - 120Vac, 3A with - 220Vac, 1,8A with 600Vac +1x green indicator lamp - 24-254Vac/Vdc	2.20

Control station

Spare parts

XB A - Zones 1, 2 & 21, 22



XB A

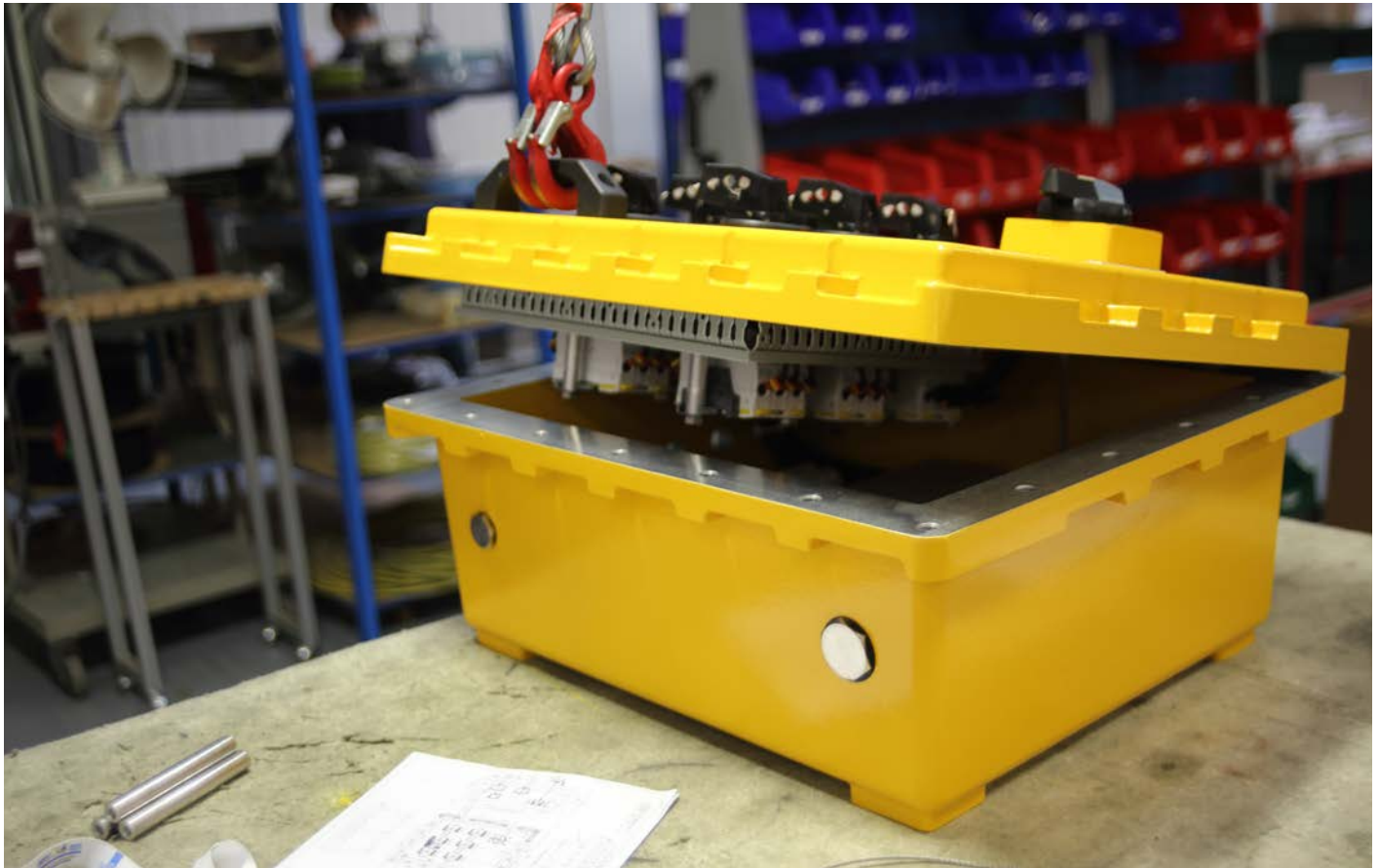
Spare parts

Type	Specifications
BP01EXNO	Contacts NO for push button switches
BP01EXNC	Contacts NC for push button switches
BPN10EX	Black push-button NO- Contact 6A max with - 120Vac, 3A with - 220Vac, 1,8A with 600Vac
BPR10EX	Red push-button NC- Contact 6A max with - 120Vac, 3A with - 220Vac, 1,8A with 600Vac
BPV10EX	Green push-button NO- Contact 6A max with - 120Vac, 3A with - 220Vac,1,8A with 600Vac
BCP30EX	Simple emergency stop push button NC- Contact 6A max with 120Vac, 3A with 220Vac, 1,8A with 600Vac
BCP40EX	Push,Pull button Emergency Stop NC - Contact 6A max with 120Vac, 3A with 220Vac, 1,8A with 600Vac
BCP50EX	Push button NC, unlockable by key n°455 - Contact 6A max with 120Vac, 3A with 220Vac, 1,8A with 600Vac
PRC10EX	Switch 0-1, NO 6A
PRC20EX	Rotary switch operated by key n° 455 - 0-1, NO 16A
PRC40EX	Switch - 1-0-2 NO-0-NO 16A
VAB10EX	Blue indicator lamp - 24-254Vac/Vdc
VAC10EX	White indicator lamp - 24-254Vac/Vdc
VAJ10EX	Yellow indicator lamp - - 24-254Vac/Vdc
VAR10EX	Red indicator lamp - 24-254Vac/Vdc
VAV10EX	Green indicator lamp - 24-254Vac/Vdc

Custom built control panels

One need, one control panel

5



Ex d control panels

DTS Ex d control panels are designed, manufactured and tested according to the ATEX protection type Ex d. (Ex d type of protection: Flameproof enclosure)

They can be composed of a wide variety of standard components which are switches, contactors and relays for instance. These components can be mounted into explosion proof enclosures built to keep internal explosions from igniting the surrounding atmosphere.

Our value commitment

DTS is committed to helping you meet the challenges of corrosion prevention with electrical solutions, services and systems that deliver value.

DTS helps to make your life easier by the practicality of its designs by providing effective advice and by being responsive to your need.

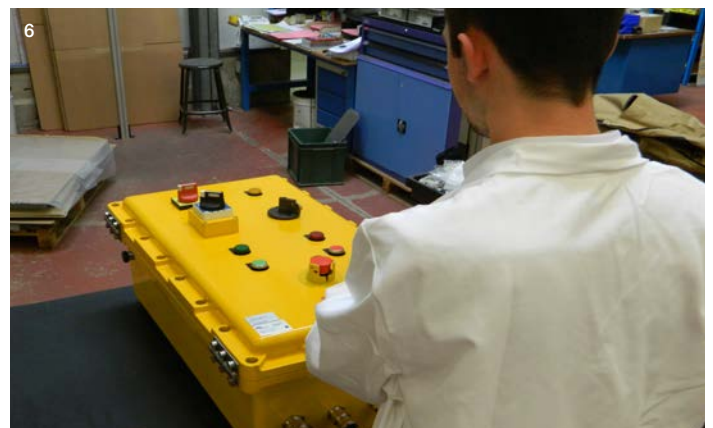
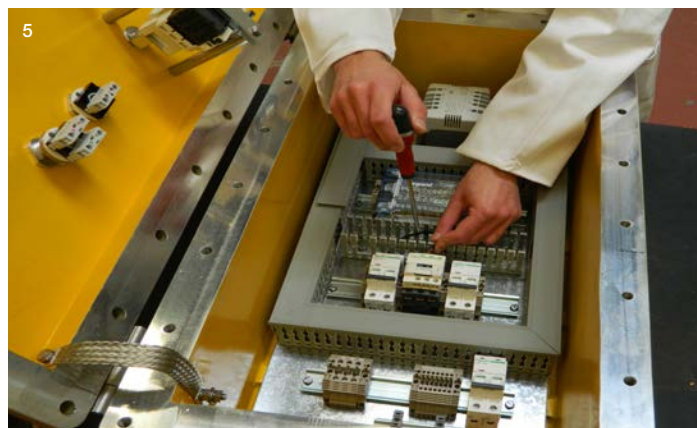
Stages to create a custom built control panel

1. **Brief:** Understand the customer's requirements
2. **Design:** Control panel's drawing by the R&D team
3. **Testing:** Drill and realise pressure test
4. **Specification:** Customise the control panel
5. **Production:** Assemble and populate
6. **Quality:** Control by the quality team
7. **Logistics:** Ship
8. **Installation:** Ready to be installed



Custom built control panels

One need, one control panel





Custom built control panels

Cast aluminium custom built control panels

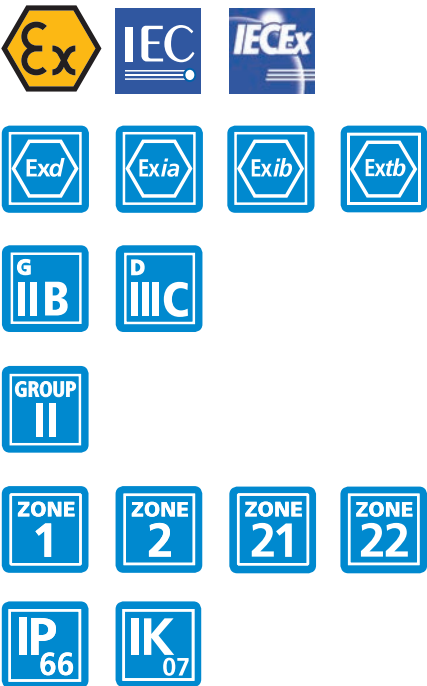
EJB - Zones 1, 2 & 21, 22



Specifications

- Marine grade aluminium alloy EN1706 AC - 43100KF- AISI 10Mg copper free
- Stainless steel external earth & screws
- Hinged door if command buttons are on the panel (except EJB0)
- 4 threaded holes on the back plate
- Frame or supporting feet on request

Certifications



Features

- Robust construction
- Wide variety of sizes
- Large choice of electrical components
- Customised to user's specification



Standards

Approved to:	EN60079-0, 60079-1, 60079-11, 60079-31
EC Type examination certificate to:	Directive 94/9/EC
Models EJB12, EJB13, EJB with or without window	INERIS 11 ATEX 0050X Ex II 2 G Ex d IIB T5 or T6 Gb Ex II 2 (1) G Ex d ia IIC/ IIB T6 Ga/Gb Ex d ib IIC/ IIB T6 Ga/Gb
Models EJB4 to EJB11	LCIE 00 ATEX 6021X, IEC Ex LCIE 13.0069X Ex II 2 G Ex d IIB T5 Gb for -20°C to + 40°C Ex d IIB T4 Gb for -20°C to + 60°C Ex II 2 D Ex tb IIIC T85°C Db for -20°C to + 40°C Ex tb IIIC T135°C Db for -20°C to + 60°C Ex II 2(1) G Ex d ia IIC/IIB T6 Ga/Gb Ex II 2(2) G Ex d ib IIC/ IIB T6 Ga/Gb
Models EJB0, EJB1, EJB2	LCIE 00 ATEX 6021X, IEC Ex LCIE 13.0069X Ex 2 G Ex d IIB+H² T6 Gb for -20°C to + 40°C Ex d IIB+H² T5 Gb for -20°C to + 60°C Ex II 2 D Ex tb IIIC T85°C Db for -20°C to + 40°C Ex tb IIIC T135°C Db for -20°C to + 60°C Ex II 2(1) G Ex II 2(1) G Ex d ia IIC/IIB+H² T6 Ga/Gb Ex II 2(2) G Ex d ib IIC/ IIB+H² T6 Ga/Gb
IP test:	IP66 IEC 60529 (2001)
Impact protection index:	IK07 according to IEC 62262

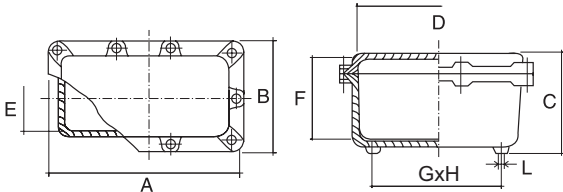
Custom built control panels

Cast aluminium custom built control panels

EJB - Zones 1, 2 & 21, 22



EJB



Dimensional drawing

Technical specifications

	External dimensions mm			Internal dimensions mm			Mounting dimensions mm			Internal	
Type	A	B	C	D	E	F	G	H	L	Plate mm	Weight kg
EJB Custom built control panels											
EJB0	200	145	130	145	90	90	140	85	M6	138 x 85	4
EJB1	302	190	170	225	115	130	200	100	M6	215 x 110	8
EJB2	295	230	165	225	165	132	185	130	M6	220 x 160	9
EJB4	410	300	167	340	220	127	290	190	M8	320 x 210	16
EJB5	475	295	220	390	207	179	335	178	M8	380 x 200	18
EJB8	625	360	250	525	260	195	480	210	M8	510 x 250	33
EJB11	595	505	275	485	395	207	436	335	M10	470 x 380	55
EJB12	805	435	315	690	345	246	605	262	M12	675 x 325	75
EJB13	832	612	323	720	435	252	628	405	M12	790 x 470	92

Options

- Boxes provided with load-break switch
- Visible breaking
- Switch off and on under load



Custom built control panels

Cast aluminium custom built control panels

GUB - Zones 1, 2 & 21, 22



- Features**
- IIC boxes
 - Anti-corrosion and marine protection
 - Large internal volume
 - Quick and easy opening and closing

- Specifications**
- Marine grade aluminium alloy copper free
 - Stainless steel screws
 - Fixing lugs incorporated to the panel



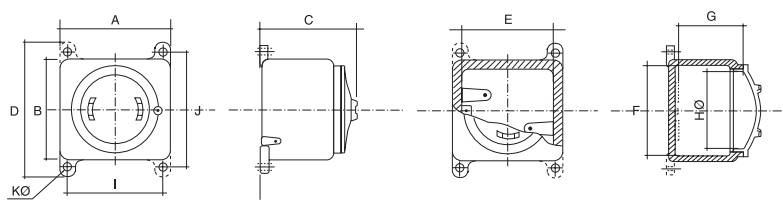
Certifications

Standards	
Approved to:	EN60079-0, 60079-1, 60079-31
EC Type examination certificate to:	Directive 94/9/EC CESA 01 ATEX 036 Ex II 2 G / D Ex d IIC T6 to T5 Gb Ex tb IIC T85°C to T100°C Gb IP66 T6: -20°C à +40°C T5: -20°C à +55°C
IP test:	IP66 IEC 60529 (2001)

Custom built control panels

Cast aluminium custom built control panels

GUB - Zones 1, 2 & 21, 22



GUB
Custom built control panels

Dimensional drawing

Technical specifications

Type	Cable entry or plug per side																											
	1/2"				3/4"				1"				1 1/4"				1 1/2"				2"				2 1/2"			
	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
GUB Custom built control panels																												
GUB0AS	3	2	1	3	2	1	1	2	1	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
GUB0BS	3	3	2	3	3	3	2	3	2	2	1	2	2	1	1	2	1	1	1	1	—	—	—	—	—	—	—	—
GUB01CS	5	4	3	5	4	4	3	4	3	2	2	3	2	1	1	2	2	1	1	2	1	1	1	1	—	—	—	—
GUB02DS	7	6	6	7	7	6	6	7	5	4	4	2	3	2	2	3	2	2	2	2	2	1	1	2	1	1	1	1
GUB03ES	15	15	15	15	15	14	13	15	8	8	7	8	8	7	6	8	5	4	4	5	3	2	2	3	2	2	1	2
GUB04FS	26	26	26	26	20	19	19	20	14	13	13	14	10	9	9	10	10	9	9	10	8	7	7	8	5	4	4	5

Type	External dimensions mm				Internal dimensions mm						Fixing	
	A	B	C	D	E	F	G	H	I	J	Kø mm	Weight kg
GUB0AS	120	120	116	166	96	96	54	75	100	145	9	2
GUB0BS	150	150	130	205	126	126	68	115	126	174	10	3
GUB01CS	174	174	140	218	146	146	75	115	150	195	10	4
GUB02DS	230	230	165	302	204	204	85	175	196	267	14	7
GUB03ES	276	276	217	346	274	256	134	220	236	316	14	12
GUB04FS	430	430	290	522	398	398	155	360	390	480	14	30

Custom built control panels

Spare parts

EJB & GUB - Zones 1, 2 & 21, 22



EJB

GUB

Spare parts

Type	Specifications
BP01	Contacts NO+NC for push button switches
BP02	Head of green push switch
BP03	Head of red push switch
BP04	Head of black push switch
BP05	Head of mushroom push,pull switch
BP05V	Head of key n°455 operated mushroom push switch
BPN10	Black push-button NO+NC- contact 6A max with 120Vac, 3A with 240Vac, 1.2A with 500Vac
BPR10	Red push-button NO+NC- Contact 6A max with 120Vac, 3A with 240Vac, 1.2A with 500Vac
BPV10	Green push-button NO+NC- Contact 6A max with 120Vac, 3A with 240Vac, 1.2A with 500Vac
REA20	Reset button
BCP30	Simple emergency stop push button NO+NC- Contact 6A max with 120Vac, 3A with 240Vac, 1.2A with 500Vac
BCP40	Push,Pull button Emergency Stop NO+NC - Contact 6A max with 120Vac, 3A with 240Vac, 1.2A with 500Vac
BCP50	Push button NO+NC, unlockable by key N 455 - Contact 6A max with 120Vac, 3A with 240Vac, 1.2A with 500Vac
PR01	Rotary switch unit 0-1 2NO 16A
PR02	Rotary switch unit 1-2 NO+NC 16A
PR03	Rotary switch unit 1-0-2 NO-0-NO 16A
PR04	Rotary switch unit 0-1-2, 0-NO-NO 16A
PR05	Rotary switch unit 0-1 4 NO 16A
PR06	Rotary switch unit 0-1 3NO 25A
PR07	Rotary switch top
PR07V	Key n°455 operated switch top
PRC10	Switch 0-1 2NO 16A
PRC20	Rotary switch operated by key No 455 0-1 2NO 16A
PRC30	Switch - 1-2 NO+NC 16A
PRC40	Switch - 1-0-2 NO-0-NC 16A
PRC50	Switch 0-1-2, 0-NO-NO 16A
PRC60	Rotary switch 0-1 4NO 16A
PRC70	Lockable rotary switch 3NO 25A
VAB10	Blue indicator lamp - 230Vac
VAB1012-24V	Blue indicator lamp 12-24Vac
VAB10400V	Blue indicator lamp 400Vac
VAB1048V	Blue indicator lamp 48Vac
VAC10	White indicator lamp - 230Vac
VAC1012-24V	White indicator lamp 12-24Vac
VAC10400V	White indicator lamp 400Vac
VAC1048V	White indicator lamp 48Vac
VAJ10	Yellow indicator lamp - 230Vac
VAJ1012-24V	Yellow indicator lamp 12-24Vac
VAJ10400V	Yellow indicator lamp 400Vac
VAJ1048V	Yellow indicator lamp 48Vac

Custom built control panels

Spare parts

EJB & GUB - Zones 1, 2 & 21, 22



EJB

GUB

Spare parts

Type	Specifications
VAJ10	Yellow indicator lamp - 230Vac
VAJ1012-24V	Yellow indicator lamp 12-24Vac
VAJ10400V	Yellow indicator lamp 400Vac
VAJ1048V	Yellow indicator lamp 48Vac
VAR10	Red indicator lamp - 230Vac
VAR1012-24V	Red indicator lamp 12-24Vac
VAR10400V	Red indicator lamp 400Vac
VAR1048V	Red indicator lamp 48Vac
VAV10	Green indicator lamp - 230Vac
VAV1012-24V	Green indicator lamp 12-24Vac
VAV10400V	Green indicator lamp 400Vac
VAV1048V	Green indicator lamp 48Vac
DE01	Green indicator lamp lens
DE02	Red indicator lamp lens
DE03	White indicator lamp lens
DE04	Amber indicator lamp lens
DE05	Blue indicator lamp lens

Instrumentation boxes

Polyester instrumentation box

XBL - Zones 1, 2 & 21, 22



Features

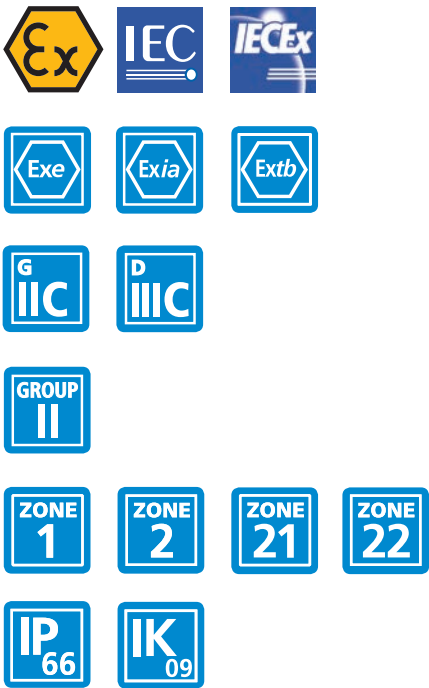
- Robust design
- Manufactured from anti static glass reinforced polyester GRP to eliminate static build up
- Can be supplied complete with terminals and glands so all on site combinations are covered

Specifications

- ISO entries and threads
- Stainless steel captive screws
- Optional hinges



Certifications



Standards

Approved to:	EN60079-0, 60079-1, 60079-11, 60079-31, 60079-7
EC Type examination certificate to:	Directive 94/9/EC LCIE 11 ATEX 3049X IEC Ex LCIE 11.0045X Ex II 2 G Ex e ia [ia] IIC T6 Gb for -20°C to +40°C Ex e ia [ia] IIC T5 Gb for -20°C to +55°C Ex e ia [ia] IIC T4 Gb for -20°C to +90°C Ex II 2 D Ex tb IIIC T85°C Db IP66 for -20°C to +40°C Ex tb IIIC T100°C Db IP66 for -20°C to +55°C Ex tb IIIC T135°C Db IP66 for -20°C to +90°C LCIE 11 ATEX 3035 U IEC Ex LCIE 11.0028U Ex II 2 G Ex e IIC Gb Ex II 2 D Ex tb IIIC Db IP66
IP test:	IP66 IEC 60529 (2001)
Impact protection index:	IK09 according to IEC 62262

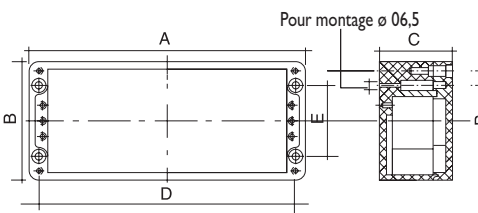
Instrumentation boxes

Polyester instrumentation box

XBL - Zones 1, 2 & 21, 22



XBL



Dimensional drawing

Technical specifications

Type	Material	Dimensions mm					Weight kg
		A	B	C	D	E	
XBL Instrumentation box							
XBL15	Polyester	120	122	91	106	82	0.78
XBL20	Polyester	75	110	75	98	45	0.40
XBL25	Polyester	120	220	91	204	82	1.10
XBL35	Polyester	160	360	91	340	110	2.27
XBL40	Polyester	405	400	121	380	355	5.76
XBL45	Polyester	250	400	121	380	200	3.74
XBL50	Polyester	250	255	121	380	200	2.82
XBL55	Polyester	250	400	161	380	200	4.80
XBL65	Polyester	250	600	121	580	200	5.52
XBL75	Polyester	605	405	252	370	570	8.30
XBL165	Polyester	160	160	91	140	110	1.30
XBL260	Polyester	260	160	91	240	110	1.80
XBL400	Polyester	405	400	201	380	355	7.40



Instrumentation boxes

Stainless steel 316L instrumentation box

XBI - Zones 1, 2 & 21, 22









- Features**
 - Robust design
 - Manufactured from stainless steel 316L so ideal for offshore applications
 - Can be supplied complete with terminals and glands so all on site combinations are covered



- Specifications**
 - ISO entries and threads
 - Stainless steel captive screws
 - Optional hinges








Certifications









Standards	
Approved to:	EN60079-0, 60079-1, 60079-11, 60079-31, 60079-7
EC Type examination certificate to:	Directive 94/9/EC LCIE 11 ATEX 3050X IEC Ex LCIE 11.0044X Ex II 2 G Ex e ia [ia] IIC T6 Gb for -20°C to +40°C Ex e ia [ia] IIC T5 Gb for -20°C to +55°C Ex e ia [ia] IIC T4 Gb for -20°C to +90°C Ex II 2 D Ex tb IIIC T85°C Db IP66 for -20°C to +40°C Ex tb IIIC T100°C Db IP66 for -20°C to +55°C Ex tb IIIC T135°C Db IP66 for -20°C to +90°C LCIE 11 ATEX 3045 U IEC Ex LCIE 11.0041U Ex II 2 G Ex e IIC Gb Ex II 2 D Ex tb IIIC Db IP66
IP test:	IP66 IEC 60529 (2001)
Impact protection index:	IK09 according to IEC 62262

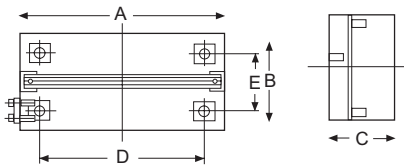
Instrumentation boxes

Stainless steel 316L instrumentation box

XBI - Zones 1, 2 & 21, 22



XBI
Instrumentation box



XBi
Dimensional drawing

Technical specifications

Type	Material	Dimensions mm					Weight kg
		A	B	C	D	E	
XBI Instrumentation box							
XBI100	Inox	100	100	61	60	60	0.58
XBI150	Inox	150	150	81	110	110	1.20
XBI200	Inox	100	200	61	160	110	0.93
XBI300	Inox	200	300	81	260	160	2.39
XBI316	Inox	300	300	161	260	260	4.10
XBI400	Inox	300	400	161	360	260	5.29
XBI500	Inox	400	500	161	460	360	7.35
XBI600	Inox	200	600	121	560	360	5.82

Instrumentation boxes

Aluminium instrumentation box

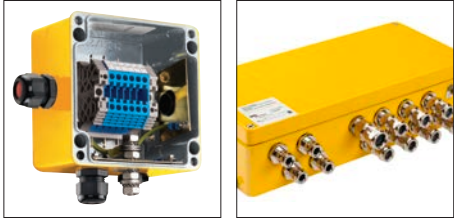
XB - Zones 1, 2 & 21, 22



- Features**
- Robust design
 - Aluminium paint finish ideal for marine applications
 - Can be supplied complete with terminals and glands so all on site combinations are covered

- Specifications**
- ISO entries and threads
 - Stainless steel captive screws
 - Optional hinges

Certifications



Standards	
Approved to:	EN60079-0, 60079-1, 60079-11, 60079-31, 60079-7
EC Type examination certificate to:	Directive 94/9/EC LCIE 11 ATEX 3051X IEC Ex LCIE 11.0046X Ex II 2 G Ex e ia [ia] IIC T6 Gb for -20°C to +40°C Ex e ia [ia] IIC T5 Gb for -20°C to +55°C Ex e ia [ia] IIC T4 Gb for -20°C to +90°C Ex II 2 D Ex tb IIIC T85°C Db IP66 for -20°C to +40°C Ex tb IIIC T100°C Db IP66 for -20°C to +55°C Ex tb IIIC T135°C Db IP66 for -20°C to +90°C LCIE 11 ATEX 3046 U IEC Ex LCIE 11.0043U Ex II 2 G Ex e IIC Gb Ex II 2 D Ex tb IIIC Db IP66
IP test:	IP66 IEC 60529 (2001)
Impact protection index:	IK09 according to IEC 62262

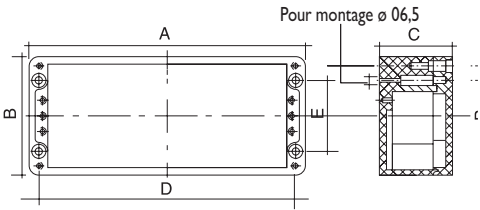
Instrumentation boxes

Aluminium instrumentation box

XB - Zones 1, 2 & 21, 22



XB



Dimensional drawing

Technical specifications

Type	Material	Dimensions mm					Weight kg
		A	B	C	D	E	
XBI Instrumentation box							
XB300	Aluminium	120	122	81	106	82	0.94
XB330	Aluminium	330	230	181	310	180	5.30
XB400	Aluminium	120	220	91	204	82	1.43
XB510	Aluminium	160	160	91	140	110	1.50
XB520	Aluminium	160	260	91	240	110	2.37
XB570	Aluminium	232	202	111	180	180	2.44
XB605	Aluminium	600	310	181	580	260	9.00
XB700	Aluminium	160	360	91	340	110	2.54
XB710	Aluminium	230	330	111	310	180	4.05
XB750	Aluminium	312	403	141	382	262	7.00
XB760	Aluminium	404	313	181	382	262	12.00
XB950	Aluminium	230	600	111	580	260	6.95
XB960	Aluminium	600	600	202	555	525	26.50



Plug & socket

Polyester/ Aluminium Plug & socket (safe disconnect)

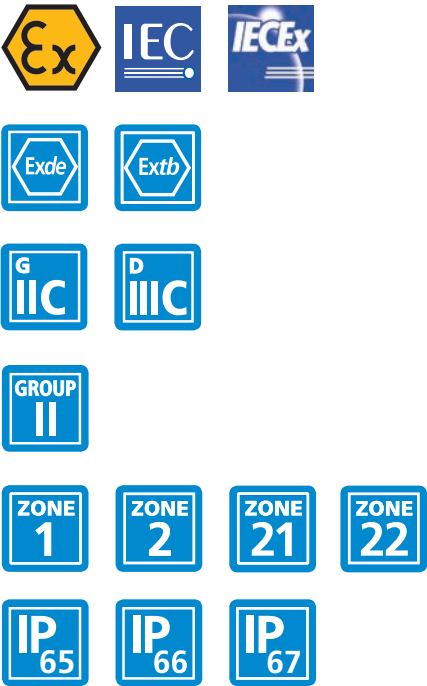
DPX/ DRX - Zones 1,2 & 21, 22



Features

- Robust design
- Manufactured from anti static glass reinforced polyester GRP (for version 20 or 32 A) to eliminate static build up or aluminium (version 125A)

Certifications



Standards

Approved to:	60079-0, 60079-1, 60079-7, 60079-31 60309-1, 60309-4
EC Type examination certificate to:	Directive 94/9/EC
Versions 20 A:	LCIE 99 ATEX 6027X, IECEx LCI09.005X, -40 °C à +60 °C T5 T90°C, -40 °C à +40 °C T6 T70°C
Versions 32 A:	LCIE 05 ATEX 6149, IECEx LCI09.0006, -40 °C à +60 °C T4 T98°C, -40 °C à +40 °C T6 T78°C
Versions 63 A:	LCIE 05 ATEX 6150, IECEx LCI09.0007, -40 °C à +60 °C T4 T107°C, -40 °C à +40 °C T5 T87°C
Versions 125 A:	LCIE 04 ATEX 6038, IECEx LCI09.0015, -40 °C à +60 °C T5 T90°C, -40 °C à +50 °C T6 T80°C
	Ex II 2 G Ex de IIC T...°C Gb Ex II 2 D Ex tb IIIC T...°C Db IP66/67
IP test:	IP66/67 (PBT), IP65 (aluminium) according to IEC60529 (2001)

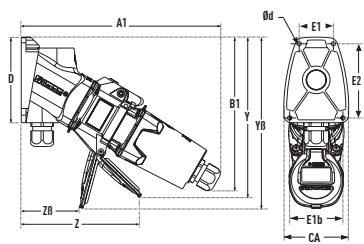
Plug & socket

Polyester/ Aluminium Plug & socket (safe disconnect)

DPX/ DRX - Zones 1,2 & 21, 22



GRP plug & socket - 20A



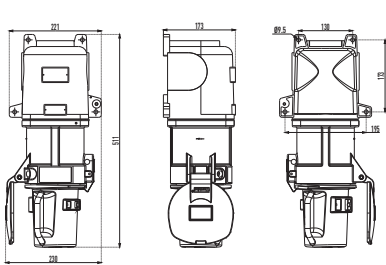
Dimensional drawing

Technical specifications

Type	Version	Poles	Rated Voltage V	Current A 230V	Cable Gland	Dimensions mm								Weight kg
						A1	B1	CA	D	E1	E2	L	ø	
GRP plug & socket - 20A														
DPX116E250	Plug	1P+N+PE	220-250V	20	M20 - 8-13	209	162	68	90	36	78	—	4.5	0.16
DRX116E250	Socket	1P+N+PE	220-250V	20	M20 - 8-13	—	—	—	—	—	—	—	—	0.16
DPX216E24	Plug	2P+PE	24V	20	M20 - 8-13	209	162	68	90	36	78	—	4.5	0.16
DRX216E24	Socket	2P+PE	24V	20	M20 - 8-13	—	—	—	—	—	—	—	—	0.16
DPX216X24	Plug	2P	20-24V	20	M20 - 8-13	209	162	68	90	36	78	—	4.5	0.16
DRX216X24	Socket	2P	20-24V	20	M20 - 8-13	—	—	—	—	—	—	—	—	0.16
DPX216E250	Plug	2P+PE	220-250V	20	M20 - 8-13	209	162	68	90	36	78	—	4.5	0.16
DRX216E250	Socket	2P+PE	220-250V	20	M20 - 8-13	—	—	—	—	—	—	—	—	0.16
DPX216E415	Plug	2P+PE	380-440V	20	M20 - 8-13	209	162	68	90	36	78	—	4.5	0.16
DRX216E415	Socket	2P+PE	380-440V	20	M20 - 8-13	—	—	—	—	—	—	—	—	0.16
DPX316E250	Plug	3P+PE	220-250V	20	M20 - 8-13	209	162	68	90	36	78	—	4.5	0.16
DRX316E250	Socket	3P+PE	220-250V	20	M20 - 8-13	—	—	—	—	—	—	—	—	0.16
DPX316E415	Plug	3P+PE	380-440V	20	M20 - 8-13	209	162	68	90	36	78	—	4.5	0.16
DRX316E415	Socket	3P+PE	380-440V	20	M20 - 8-13	—	—	—	—	—	—	—	—	0.16
DPX416E250	Plug	3P+N+PE	220-250V	20	M20 - 8-13	209	162	68	90	36	78	—	4.5	0.16
DRX416E250	Socket	3P+N+PE	220-250V	20	M20 - 8-13	—	—	—	—	—	—	—	—	0.16
DPX416E415	Plug	3P+N+PE	380-440V	20	M20 - 8-13	209	162	68	90	36	78	—	4.5	0.16
DRX416E415	Socket	3P+N+PE	380-440V	20	M20 - 8-13	—	—	—	—	—	—	—	—	0.16



Aluminium plug & socket - 125A



Dimensional drawing

Technical specifications

Type	Version	Poles	Rated Voltage V	Current A 230V	Cable Gland	Dimensions mm								Weight kg
						A1	B1	CA	D	E1	E2	L	ø	
Aluminium plug & socket - 125A														
DPX3125E415	Plug	3P+T	380-440V	125	M50 -27-41	173	511	221	195	130	173	—	9.5	2.60
DRX3125E415	Socket	3P+T	380-440V	125	M50 -27-41	—	—	—	—	—	—	—	—	2.60
DPX4125E415	Plug	3P+N+T	380-440V	125	M50 -27-41	173	511	221	195	130	173	—	9.5	2.60
DRX4125E415	Socket	3P+N+T	380-440V	125	M50 -27-41	—	—	—	—	—	—	—	—	2.60

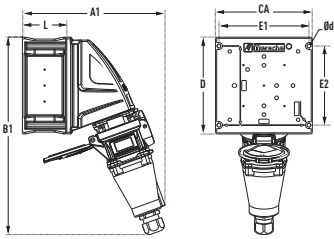
Plug & socket

Polyester/ Aluminium Plug & socket (safe disconnect)

DPX/ DRX - Zones 1,2 & 21, 22



GRP plug & socket - 32A & 63A



Dimensional drawing

Technical specifications

Type	Version	Poles	Rated Voltage V	Current A 230V	Cable Gland	Dimensions mm								Weight kg
						A1	B1	CA	D	E1	E2	L	ø	
GRP plug & socket - 32A & 63A														
DPX132E250	Plug	1P+N+PE	220-250V	32	M25 -13-19	219	277	128	128	116	96	78	6.5	0.24
DRX132E250	Socket	1P+N+PE	220-250V	32	M25 -13-19	—	—	—	—	—	—	—	—	0.24
DPX232E24	Plug	2P+PE	24V	32	M25 -13-19	219	277	128	128	116	96	78	6.5	0.24
DRX232E24	Socket	2P+PE	24V	32	M25 -13-19	—	—	—	—	—	—	—	—	0.24
DPX232X24	Plug	2P	20-24V	32	M25 -13-19	219	277	128	128	116	96	78	6.5	0.24
DRX232X24	Socket	2P	20-24V	32	M25 -13-19	—	—	—	—	—	—	—	—	0.24
DPX232E250	Plug	2P+PE	220-250V	32	M25 -13-19	219	277	128	128	116	96	78	6.5	0.24
DRX232E250	Socket	2P+PE	220-250V	32	M25 -13-19	—	—	—	—	—	—	—	—	0.24
DPX232E415	Plug	2P+PE	380-440V	32	M25 -13-19	219	277	128	128	116	96	78	6.5	0.24
DRX232E415	Socket	2P+PE	380-440V	32	M25 -13-19	—	—	—	—	—	—	—	—	0.24
DPX332E250	Plug	3P+PE	220-250V	32	M25 -13-19	219	277	128	128	116	96	78	6.5	0.24
DRX332E250	Socket	3P+PE	220-250V	32	M25 -13-19	—	—	—	—	—	—	—	—	0.24
DPX332E415	Plug	3P+PE	380-440V	32	M25 -13-19	219	277	128	128	116	96	78	6.5	0.24
DRX332E415	Socket	3P+PE	380-440V	32	M25 -13-19	—	—	—	—	—	—	—	—	0.24
DPX432E250	Plug	3P+N+PE	220-250V	32	M25 -13-19	219	277	128	128	116	96	78	6.5	0.24
DRX432E250	Socket	3P+N+PE	220-250V	32	M25 -13-19	—	—	—	—	—	—	—	—	0.24
DPX432E415	Plug	3P+N+PE	380-440V	32	M25 -13-19	219	277	128	128	116	96	78	6.5	0.24
DRX432E415	Socket	3P+N+PE	380-440V	32	M25 -13-19	—	—	—	—	—	—	—	—	0.42
DPX163E250	Plug	1P+N+PE	220-250V	63	M32 -17-25	251	347	170	170	158	139	78	6.5	0.42
DRX163E250	Socket	1P+N+PE	220-250V	63	M32 -17-25	—	—	—	—	—	—	—	—	0.42
DPX263X24	Plug	2P	20-24V	63	M32 -17-25	251	347	170	170	158	139	78	6.5	0.42
DRX263X24	Socket	2P	20-24V	63	M32 -17-25	—	—	—	—	—	—	—	—	0.42
DPX363E415	Plug	3P+PE	380-440V	63	M32 -17-25	251	347	170	170	158	139	78	6.5	0.42
DRX363E415	Socket	3P+PE	380-440V	63	M32 -17-25	—	—	—	—	—	—	—	—	0.42
DPX463E415	Plug	3P+N+PE	380-440V	63	M32 -17-25	251	347	170	170	158	139	78	6.5	0.42
DRX463E415	Socket	3P+N+PE	380-440V	63	M32 -17-25	—	—	—	—	—	—	—	—	0.42

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XFPL220V-00000	2\14	XSF150P-00000	4\10
XFPL240-00000	2\14	XSF150P-0A000	4\10
XFPL240V-00000	2\14	XSF150P-0C000	4\10
XFPL265-00000	2\14	XSF150P-0D000	4\10
XFPL265V-00000	2\14	XSF250G-00000	4\10
XFR120-0G000	2\8	XSF250G-0A000	4\10
XFR120EM-0G000	2\9	XSF250G-0C000	4\10
XFR120V-0G000	2\8	XSF250G-0D000	4\10
XFR120VEM-0G000	2\9	XSF250P-00000	4\10
XFR136-0G000	2\8	XSF250P-0A000	4\10
XFR136V-0G000	2\8	XSF250P-0C000	4\10
XFR140-0G000	2\8	XSF250P-0D000	4\10
XFR140EM-0G000	2\9	XSF400G-00000	4\10
XFR140V-0G000	2\8	XSF400G-0A000	4\10
XFR140VEM-0G000	2\9	XSF400G-0B000	4\10
XFR155-0G000	2\8	XSF400G-0C000	4\10
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XFRL140-00000	2\4	XSF400P-0F000	4\10
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XFRL165-00000	2\4	XSF70G-0A000	4\10
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XLF105G-00000	4\4	XSF70G-0D000	4\10
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XQF250G-00000	4\11	XSF70P-0D000	4\10
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XQF250G-0C000	4\11		
XQF250G-0D000	4\11		
XQF250P-00000	4\11		
XQF250P-0A000	4\11		
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XQF400G-00000	4\11		
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XQF400P-0D000	4\11		
XQF400P-0F000	4\11		
XSF150G-00000	4\10		

Index & useful information

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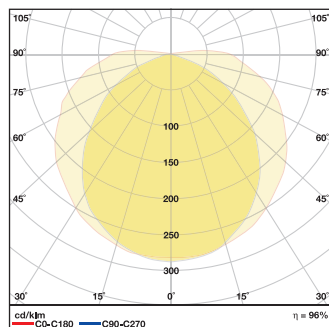
T&B® Cable Tray

Color-Keyed®



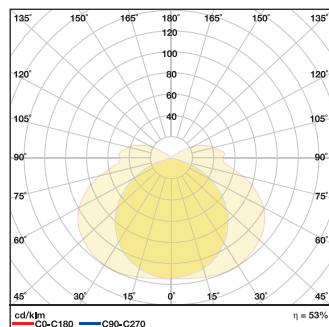
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Photometric data



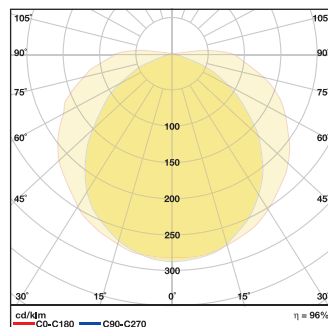
Tubular LED fitting

XFLL, XFPL or FFL – 1x56W



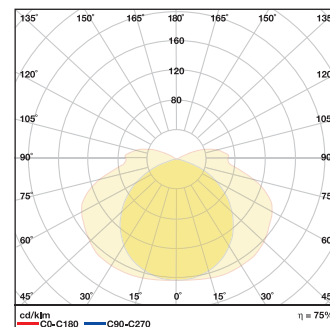
Tubular fluorescent fitting

XFF, XFP or FF – 2x36W



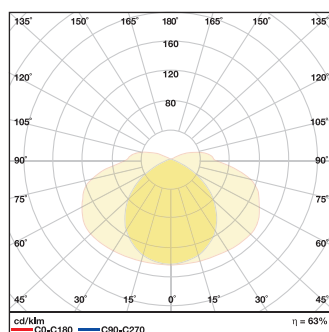
LED linear fitting

EVNL, EVDL or EVTL – 1x56W



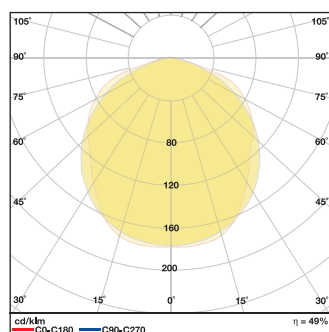
Fluorescent linear fitting

EVN, EVD, EVT or EVS – 2x36W



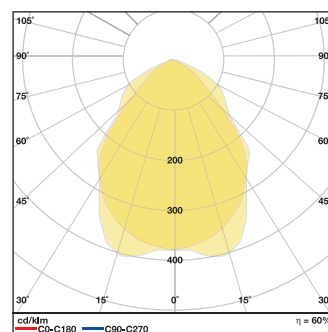
Miniature tubular fluorescent fitting

XEL, XEP or EL – 2x8W



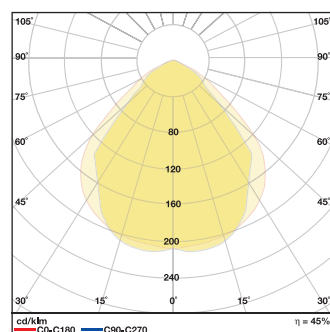
Recessed fluorescent fitting

ESB or EST – 2x36W



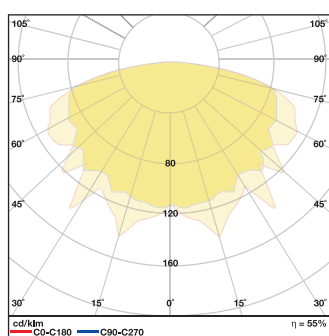
HP Sodium floodlight fitting

XSF wide beam – 250W



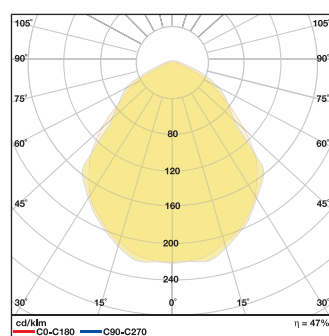
Metal Halide floodlight fitting

XQF wide beam – 250W



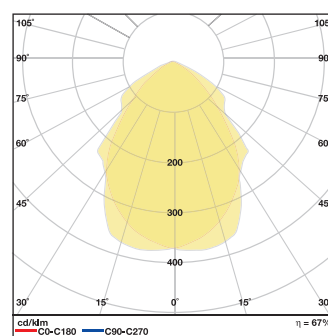
Wellglass fitting

EVX, EVH300 – 250W



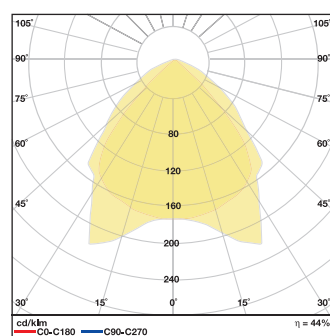
Floodlight fitting

XSF – Wide beam – 150W



HP Sodium floodlight fitting

XSF wide beam – 400W



Metal Halide floodlight fitting

XQF wide beam – 400W

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