

GENERAL CATALOGUE

SOLUTIONS THROUGH TECHNOLOGY



EDITO

TECHNOR® is a worldwide technology company of MARECHAL ELECTRIC GROUP, with operational businesses in Italy, United Arab Emirates and Singapore, and is leader in the **design and manufacture of luminaires, enclosures and electrical panels for potentially explosive atmospheres.**

TECHNOR® has a high level of experience in developing and designing Ex equipment for most applications.

These include offshore oil installations, refineries, petrochemical plants, ships and FPSOs, chemical, pharmaceutical, food industries as well as other industries in which explosible dusts might represent a hazard, such as foodstuffs manufacture grain silos and textile.

Products enable safe transport and application of electric signals and power in hazardous areas. The core business is in the electrical, instrumentation and electronics fields.

All the equipment for use in explosive atmosphere satisfy the requirements of international and national regulations (Atex, IECEx and Gost) and each individual systems' component is certified in accordance with specific Ex-certification requirements.

TECHNOR®'s product range and geographic locations nicely complement those of the MARECHAL ELECTRIC GROUP, providing significant product and distribution channel synergies.

LIGHTING FIXTURES

Fluorescent lighting//Wellglass//LED lighting//Floodlights

CONTROL STATIONS

Increased safety//Flameproof

JUNCTION BOXES

Increased safety//Flameproof

FLAMEPROOF ENCLOSURES & Ex-P CABINETS

Gas Group IIB + H₂//Gas Group IIC

EARTHING SYSTEMS

VISUAL SIGNALS

CABLE GLANDS & FITTINGS

Metallic//Plastic//Accessories//Fittings

PLUGS AND SOCKET-OUTLETS

MARECHAL ELECTRIC PRODUCTS

Explosion proof range//Safe area range

65 Years of expertise in the industrial electrical equipment

Founded in 1952, the MARECHAL ELECTRIC Group counts among the major players in Low Voltage LT electrical connection systems in industrial environments with or without the presence of an ATEX explosive atmosphere. With a consolidated turnover of nearly €100 million, its operational and/or sales subsidiaries in Europe, America, Asia, the Middle East, Africa and Australia, offer the best products and local services to the most demanding customers. A workforce of nearly 500 worldwide includes R&D, manufacturing and commercial development skills. The product range is intended for all sectors of industrial activity where safety and endurance are required.

→ INTERNATIONAL COVERAGE

The MARECHAL ELECTRIC Group has an international presence with its own sales forces in more than 20 countries and a strong network of global partners and distributors. Its production, assembly and sales subsidiaries allow MARECHAL® to maintain a close relationship with its customers in more than 100 countries.

10 subsidiaries at your service:

MARECHAL ELECTRIC S.A.S (Head office - France)

MELTRIC Corporation (USA)

MARECHAL ELECTRIC Africa (Pty) Limited (South Africa)

MARECHAL ELECTRIC Asia Pte Ltd (Asia)

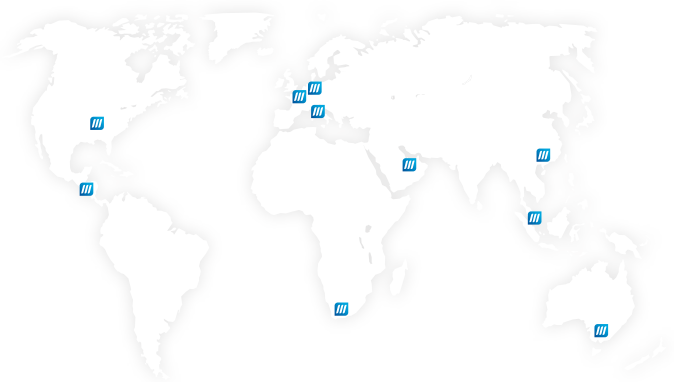
MARECHAL AUSTRALIA Pty Ltd (Australia)

TECHNOR Italsmea (Italy)

MARECHAL GmbH (Germany)

TECHNOR Middle East DMCC (Middle East).

MARECHAL CHINA



Our history

Since its creation in 1952, MARECHAL ELECTRIC is a French family business, independent, committed to its customers, its employees and its suppliers.

The company is specialized in the manufacture of low voltage electrical connectors from 5A to 700A, as well as electrical solutions for potentially explosive atmospheres through the TECHNOR® brand.

Our customers benefit from MARECHAL® products designed to ensure safety, durability, performance, ease of use and energy efficiency.

The company offers products under two complementary brands MARECHAL® and TECHNOR® with the same level of quality requirement worldwide. Committed to this approach, MARECHAL ELECTRIC has remained since 1952 an example of success, offering products of unrivalled quality, resulting from the research and development that make the reputation of the French electrical industry. The principles of MARECHAL ELECTRIC The principles of MARECHAL ELECTRIC stands also for collaboration based on trust, proximity with partners, suppliers, customers and employees.

Our research strategy revolves around 4 main approaches:

→ THE SAFETY AND RELIABILITY OF OUR PRODUCTS

Boasting of a unique level of know-how, MEG first and foremost prioritises the safety of the individuals in the facilities and during the use and maintenance of its equipments. Their design goes hand in hand with sustainability and performance over the long-term, irrelevant of the number of operations, outer environment or conditions of use.

→ OPTIMISING THE MODULAR DESIGN

MEG offers its customers the possibility of customising the functions and modular assembly options for its products. For large-scale projects, a dedicated Specific Equipments Technical Team is available to support the customer for their projects so as to offer a comprehensive solution.

→ ENRICHING PARTNERSHIP DEVELOPMENTS WITH ITS CUSTOMERS

MEG is present on turnkey markets and the close partnerships developed with all market actors enables us to grow and to continuously develop our product portfolio. We are therefore constantly improving the performances and functions of our products to exceed our customers' expectations.

→ COMPLYING WITH INTERNATIONAL REGULATIONS

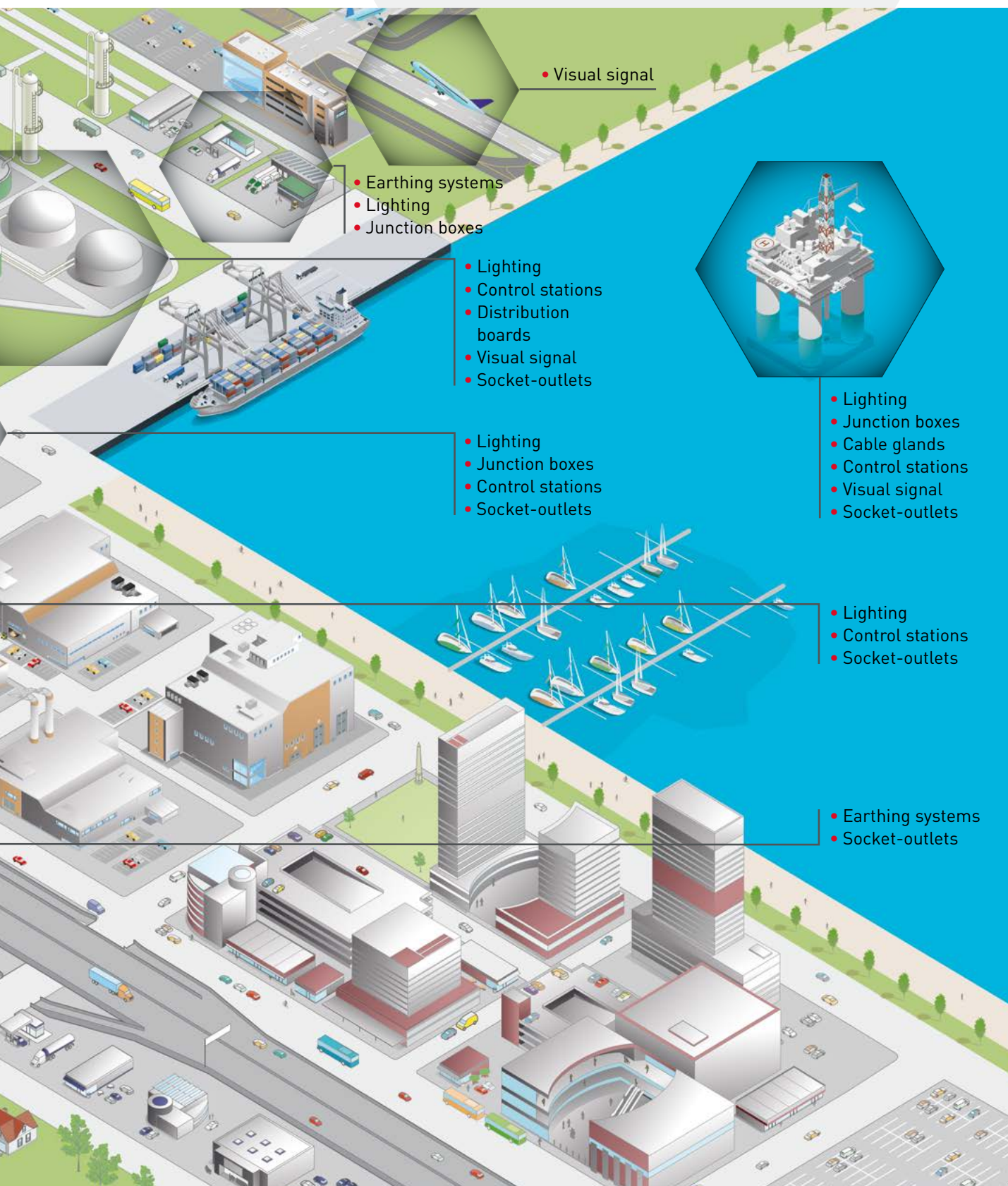


TECHNOR® APPLICATIONS FIELDS

Safety of people, equipment & infrastructure



in potentially explosive atmosphere



Ex REGULATIONS

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European ATEX Directive

→ EUROPEAN DIRECTIVE 2014/34/EU

ATEX Directive 2014/34/EU is a "new approach" directive that applies to protective systems against explosions as well as all equipment used in or related to explosive atmospheres, such as electrical and non-electrical equipment, components and safety, control and adjusting devices that are necessary for the safe operation of those equipment and protective systems. As a "new approach" directive, the 2014/34/EU Directive defines the essential requirements for the safety and health which shall be respected by all manufacturers. Devices falling within the scope of the European Directive and answering to the essential requirements for the safety and health are identified by a marking plate on which the  logo appears.

→ EUROPEAN DIRECTIVE 1999/92/EC

- The 1999/92/EC Directive aims to improve the safety and health protection of workers who may be exposed to potentially explosive atmospheres.
- The site manager has the obligation:
- to prevent the formation of explosive atmospheres or if this is not possible, prevent ignition of explosive atmospheres,
- to assess the specific risks arising from explosive atmospheres ; to draw up and keep up to date an explosion protection document,
- to classify places where explosive atmospheres may occur into zones,
- to mitigate the detrimental effects of an explosion to protect the health and safety of workers (install appropriate equipment, take organizational measures such as staff training, ...).

International scheme : IECEx

IECEx Scheme: A voluntary certification scheme complying with international standards for electrical and non-electrical equipment for use in explosive atmospheres.

Its aim is to facilitate the international flow of equipment intended to be used in potentially explosive atmospheres (in compliance with one or more international standards

defining the type of protection against the risk of explosion) and thus avoiding multiple national certifications and at the same time ensuring an appropriate level of safety. The IECEx certification scheme allows the manufacturers of "Ex proof" equipment to obtain a Certificate of Conformity that would be accepted in Member States in which this certification scheme is recognized.

Hazardous areas

→ EXPLOSION

An explosion is a release of energy (mechanical, chemical...) in a sudden and often violent manner with high temperature and high pressure due to oxidation or another exothermic reaction.

→ EXPLOSIVE ATMOSPHERE

An explosive atmosphere is a result of the mixture with air, under atmospheric conditions, and flammable substances in the form of gas, vapor, dust, fibers or flyings which, after ignition, permits self-sustaining propagation.

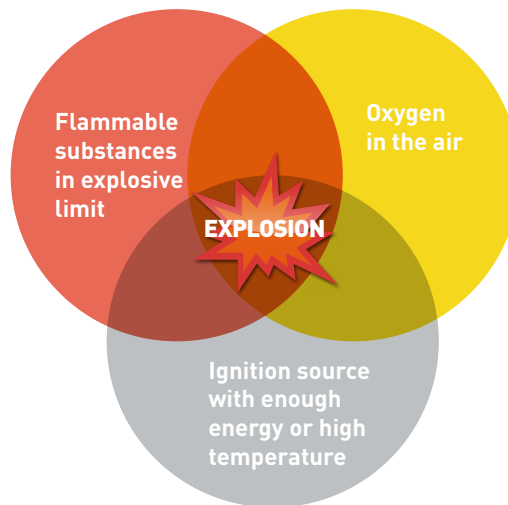
→ A POTENTIALLY EXPLOSIVE ATMOSPHERE

An atmosphere is defined as potentially explosive when its usual composition is not explosive, but due to unforeseen circumstances, it can vary to such an extent that it becomes explosive (the danger exists as a potential state). Main foreseeable circumstances are as follow:

- various stages of a manufacturing process,
- incidents or accidents (rupture of a pipe-line, leak, supply loss),
- meteorological conditions (high ambient temperature, air movements).

Ex REGULATIONS

→ CONDITIONS FOR EXPLOSION



→ AREAS CLASSIFICATION DEFINED BY DIRECTIVE 1999/92/EC

Probability of ATEX presence	Very High	High and Normal	Low
Definition	Location where an explosive atmosphere is present continuously or for a long period or frequently.	Location in which an explosive atmosphere occurs occasionally during normal operation.	Location where an explosive atmosphere is not liable to occur during normal operation or, if it does, is only short-lived (foreseeable abnormal operation).
Zoning for gas & vapours (1999/92/EC)	Zone 0	Zone 1	Zone 2
Zoning for dust & fiber (1999/92/EC)	Zone 20	Zone 21	Zone 22

→ ATEX/IECEX CLASSIFICATION

ATEX Category	IEC protection Level (EPL)	Zone of installation	Atmosphere
1G	Ga	0	GAS
2G	Gb	1	
3G	Gc	2	
1D	Da	20	DUST
2D	Db	21	
3D	Dc	22	
M1	Ma	MINING	COAL DUST METHANE
M2	Mb		

→ GAS AND VAPOURS EXPLOSION

In general, the substances, gases, liquids or vapors which can be at the origin of explosion are:

- heating gas,
- hydrocarbons,
- glue and adhesive solvents,
- varnishes and resins,
- manufacturing additives for pharmaceutical products, artificial dyes, aromas and perfumes,
- manufacturing agents for the following materials : plastics, rubbers, man-made textiles and chemical cleaning products,
- products used in the treatment and manufacturing of alcohols and derivatives...

→ DUST EXPLOSION

Organic and metallic products which create powder and dust form can also in certain conditions become active agents of an explosion.

These are powders and dust of:

- magnesium,
- aluminum,
- sulfur,
- cellulose,
- corn starch,
- epoxy resins,
- polystyrenes,
- dust of plastic,
- coal,
- wood,
- medics,
- sugar (icing sugar),
- flour...

→ GAS AND VAPOURS CLASSIFICATION AND TEMPERATURE CLASSIFICATION

Gases are divided into

- three groups by IEC/EN standards
- four groups by the CEC (Canadian Electrical Code) and the NEC (National Electrical Code - US) standards.

The groups defined in European, International and North American standards are fundamentally the same, as illustrated by the following table.

Gas group		Typical gas
En/IEC	North America	
IIC	A	Acetylene
IIC	B	Hydrogen
IIB	C	Ethylene, Ethyl ether, Cyclopropane, Butadiene 1-3
IIA	D	Propane, Ethane, Butane, Heptane, Acetone, Ethyl Alcohol

IEC/EN defined a temperature classification for materials used in hazardous areas. CEC and NEC have also been modified to include a temperature classification.

Temperatures (°C)	Temperature Classification	
	For IEC/EN	For North America
450	T1	T1
300	T2	T2
280	T2	T2A
260	T2	T2B
230	T2	T2C
215	T2	T2D
200	T3	T3
180	T3	T3A
165	T3	T3B
160	T3	T3C
135	T4	T4
120	T4	T4A
100	T5	T5
85	T6	T6

Ex REGULATIONS

→ DUST CLASSIFICATION

IEC/EN defined a classification of dust:

Dust group	Definition		
	Dust type	Size	Resistivity
IIIA	combustible flyings	> 500 µm	-
IIIB	non-conductive dust	≤ 500 µm	> 10 ³ Ω.m
IIIC	conductive dust	≤ 500 µm	≤ 10 ³ Ω.m

→ EXAMPLES OF FLAMMABLE SUBSTANCES

Gas/Vapors	Boiling temperature	Flash point	Self-ignition temperature	Ideal conditions for explosion LEL - UEL	Temperature class	Gas group
Formaldehyde (= Methanal)	-6°C	60°C	424°C	7% - 73%	T2	IIB
Ether	35°C	-45°C	175°C	1.7%-39.2%	T4	IIB
Aniline Oil	184°C	75°C	615°C	1.2%-11%	T1	IIA
Ethanol (= Ethyl alcohol)	78°C	12°C	400°C	3,1% - 19,0% @ 60°C 3.1 %- 27,7% @ 100°C	T2	IIB
Formic acid	101°C	42°C	525°C	18%-57%	T2	IIA
Acetic acid	118°C	39°C	510°C	4%19.9%	T1	IIA
Diethyl sulfate	208°C	104°C	360°C		T2	IIA
Methanol	65°C	9°C	440°C	6%-36% @ 60°C 6%-50% @ 100°C	T2	IIA
Isopropyl alcohol	83°C	12°C	399°C	2%-12.7%	T2	IIA
Acetone	56°C	<-20°C	539°C	2.5%-14.3% @100°C	T1	IIA
n propyl alcohol	97°C	15°C	385°C	2.1%-17.5%	T2	IIB
n butyl alcohol	118°C	35°C	343°C	1.4%-12%	T2	IIA
n amyl alcohol	138°C	42°C	320°C	1.06%-10.5%	T2	IIA
Benzene	80°C	-11°C	498°C	1.2%-8.6%	T1	IIA
Natural gas	-162°C	gas	600°C	4.4%-17%	T1	IIA
Ethane	-86°C	gas	515°C	2.4%-15.5%	T1	IIA
Ethylene	-104°C	gas	440°C	2.3%-36%	T2	IIB
Acetylene		gas	305°C	2.3%-100%	T2	IIC
Methyl chloride	-24°C	gas	625°C	7.6%-19%	T1	IIA
Methylamine	-6°C	gas	430°C	4.2%-20.7%	T2	IIA
Bromoethane	38°C		511°C	6.7%-11.3%	T1	IIA
Propane	-42°C	gas	450°C	1.7%-10.9%	T2	IIA
Vinyl Chloride	-14°C	gas	415°C	3.6%-33%	T2	IIA
Methyl cyanide	82°C	2°C	523°C	3%-16%	T1	IIA
Acetaldehyde	20°C	-38°C	155°C	4%-60%	T4	IIA
carbon disulphide	46°C	-30°C	90°C	0.6%-60%	T6	IIC
Cyclopropane	-33°C	gas	500°C	2.4%-10.4%	T1	IIA
ethylene oxide	20°C	gas	429°C	2.6%-100%	T2	IIB
Iso Butane	-12°C	gas	460°C	1.3%-9.8%	T1	IIA
Vinydene fluoride	-86°C	gas	380°C	3.9%-25.1%	T2	IIA
Nitromethane	101°C	35°C	414°C	7.3%-63%	T2	IIA
propylene oxide	34°C	-37°C	430°C	1.9%-37%	T2	IIB
Isobutanol	108°C	28°C	408°C	1.4%-11%	T2	IIA
Isobutanal	64°C	-22°C	165°C	1.6%-11%	T4	IIA
s-butyle chloride	68°C	-21°C	415°C	2%-8.8%	T2	IIA
Propylene dichloride	96°C	15°C	557°C	3.4%-14.5%	T1	IIA
s-butyl alcohol	99°C	24°C	406°C	1.7%-9.8%	T2	IIA
Acrylic acid	141°C	55°C	406°C	2.4%-8%	T2	IIB

Gas/Vapors	Boiling temperature	Flash point	Self-ignition temperature	Ideal conditions for explosion LEL - UEL	Temperature class	Gas group
Nitroethane	114°C	27°C	412°C	3.4%	T2	IIB
Diisopropyl	58°C	<-20°C	396°C	1%	T2	IIA
Isobutyric acid	155°C	58°C	443°C	2%-10%	T2	IIA
Naphthalene	218°C	77°C	540°C	0.6% to 150°C – 5.9%	T1	IIA
Methylcyclopentane	72°C	<-10°C	258°C	1%-8.4%	T3	IIA
Mirbane Oil	211°C	88°C	481°C	1.4%-40%	T1	IIA
Isopropyltoluene	177°C	47°C	436°C	0.7%-5.6%	T2	IIA
Styrene	145°C	30°C	490°C	1%-8%	T1	IIA
s-butac	112°C	-18°C	422°C	1.3%-7.5%	T2	
Diethyl carbonate	126°C	24°C	450°C	1.4%-11.7%	T2	IIB
Dichloride	174°C	66°C	648°C	2.2%-9.2%	T1	IIA
Oxirane (chloromethyl)	116°C	28°C	385°C	2.3%-34.4%	T2	IIB
Allyl glycidyl ether	154°C	45°C	249°C		T3	IIB
Bromo propyne	89°C	10°C	324°C	3%	T2	
Allyle chloride	45°C	-32°C	390°C	2.9%-11.2%	T2	IIA
Ethylene chloride	84°C	13°C	438°C	6.2%-16%	T2	IIA
Ethylene chlorohydrin	128°C	55°C	425°C	4.9%-16%	T2	IIA
Vinyl cyanide, VCN	77°C	-5°C	480°C	2.8%-28%	T1	IIB
Allylic Alcohol	97°C	21°C	378°C	2.5%-18%	T2	IIB
Propargyl Alcohol	115°C	33°C	346°C	2.4%	T2	IIB
Chloromethoxyl methane	59°C	-8°C				IIA
Methylformate	32°C	-20°C	525°C	5%-23%	T2	IIA
Vinyl acetate	72°C	-7°C	385°C	2.6%-13.4%	T2	IIA
Iso acetone propyl	116°C	16°C	475°C	1.2%-8%	T1	IIA
Ether diisopropyle	69°C	-28°C	405°C	1%-21%	T2	IIA
iso-propyl acetate	90°C	1°C	425°C	1.7%-8.1%	T2	IIA
acetic anhydride	140°C	49°C	316°C	2%-10.3%	T2	IIA
methylcyclohexane	101°C	-4°C	250°C	1-6%.7%	T3	IIA
toluene	111°C	4°C	530°C	1-7%.8%	T1	IIA
Chlorobenzene	132°C	28°C	593°C	1,3%-11,0%	T1	IIA
Cyclohexylamine	134°C	27°C	275°C	1,1%-9,4%	T3	IIA
Cyclohexanol	161°C	61°C	300 °C	1,2%-11,1%	T3	IIA
Cyclohexanone	156°C	43°C	419°C	1,3%-9,4%	T2	IIA
Phenol	182°C	75°C	595°C	1,3%-9,5%	T1	IIA
n- propyl acetate acid	102°C	10°C	430°C	1.7%-8%	T2	IIA
n-Pentane	36°C	-40°C	243°C	1.1%-8.7%	T3	IIA
ethylene glycol monomethyl ether	104°C	39°C	285°C	1.8%-20.6%	T3	IIB
dimethoxymethane	43°C	-21°C	235°C	2.2%-19.9%	T3	IIB
diethamine	56°C	-23°C	312°C	1.7%-10.1%	T2	IIA
Formic acid ethyl ester	54°C	-20°C	440°C	2.7%-16.5%	T2	IIA
Ethyl ester of nitrous acid	17°C	-35°C	95°C	3%-50%	T6	IIA
Oxolan	64°C	-14°C	230°C	1.5%-12.4%	T3	IIB
Furane	32°C	<-20°C	390°C	2.3%-14.3%	T2	IIB
Tetrahydrothiophene	121°C	13°C	200°C	1.1%-12.3%	T4	IIA
divenylenesulfide	84°C	-9°C	395°C	1.5%-12.5%	T2	IIA
Formal butyl	103°C	6°C	206°C	1.4%-9.5%	T3	
Cyclohexane	81°C	-17°C	244°C	1%-8%	T3	IIA
Cyclohexene	83°C	-17°C	244°C	1.1%-8.3%	T3	IIA
Pyridine	116°C	18°C	482°C	1.7%-12.4%	T1	IIA
morpholins	129°C	33°C	275°C	1.4%-15.2%	T3	IIA
Diisobutylamine	139°C	26°C	256°C	0.8%-3.6%	T3	IIA
Azepane	135°C to 137°C	23°C	279°C		T3	IIA

Ex REGULATIONS

Gas/Vapors	Boiling temperature	Flash point	Self-ignition temperature	Ideal conditions for explosion LEL - UEL	Temperature class	Gas group
n- Octane	126°C	13°C	206°C	0.8%-6.5%	T3	IIA
Tetramethylene cyanide	295°C	93°C	550°C	1.7%-5%	T1	
Ethylene glycol monobutyl ether	171°C	61°C	238°C	1.1%-12.7%	T3	
Nonane (= nonyl hydride)	151°C	30°C	205°C	0.7%-5.6%	T3	IIA
Decyl Alcohol	230°C	82°C	288°C	0.7%-5.5%	T3	
Dihéxyl ether	227°C	75°C	187°C		T4	IIA
Propene	-48°C	Gas	455°C	2-11.1%	T1	IIA
Wood Ether	-25°C	Gas	240°C	2.7-32%	T3	IIB
Isobutylene	-7°C	Gas	483°C	1.6-10%	T1	IIA
tetrafluoroethylene	-76°C	Gas	255°C	10-59%	T3	IIB
triethylamine	89°C	-8°C	215°C	1.2-8%	T3	IIA
diacetone	166°C	58°C	680°C	1.8-6.9%	T1	IIA
Isoamyl Alcohol	131°C	42°C	339°C	1.3-10.5%	T2	IIA
acetylacetone	140°C	34°C	340°C	1.7%	T2	IIA
n butylester acetic acid	127°C	22°C	390°C	1.2%-8.5%	T2	IIA
Octanal	171°C	52°C	200°C		T4	IIA
Dimethylamine	7°C	Gas	400°C	2.8%-14.4%	T2	IIA
Chloroprene	60°C	-29°C	320°C	1.9%-20%	T2	
Ethyl esters of acrylic acid	100°C	9°C	350°C	1.4%-14%	T2	IIB
aminoethane-2	172°C	85°C	410°C		T2	IIA
Ethyl esters of acetic acid	77°C	-4°C	470°C	2%-12.8%	T1	IIA
Ether dibutyl	141°C	25°C	175°C	0.9%-8.5%	T4	IIB
Cyclobutane	13°C	Gas		1.8%		IIA
Cyclopentane	49°C	-37°C	320°C	1.4%	T2	IIA
Cycloheptane	119°C	6°C		1.1%-6.7%		IIA
Piperylene	41°C	<-31°C	361°C	1.2%-9.4%	T2	IIA
Amylene	38°C	-53°C	290°C	1.3%-6.6%	T3	IIA
phenylacetylene	142°C	41°C	420°C		T2	IIB
iso-Octane	99°C	-12°C	413°C	0.7%-6%	T2	IIA
Acetyl fluoride	21°C	<-17°C	434°C	5.6%-19.9%	T2	IIA
carbon monoxide (in 18% water vapor-saturated air)		Gas	607°C	10.9%-74%	T1	IIB
Acetyl ketene	127°C	33°C	262°C		T3	IIB
acryloyl chloride	74°C	-8°C	463°C	2.68%-18%	T1	IIA
Decene 1	172°C	47°C	235°C	0.55%-5.7%	T3	
xylidene (isomers mixture)		90°C to 98°C	500°C to 545°C	1%-7%	T1	
Cresol (isomers mixture)		81°C	557°C	1.1%	T1	IIA
Hydrogen	-253°C	Gas	560°C	4%-77%	T1	IIC
Ester isopropyl of nitric acid	101°C	11°C	175°C	2.0%-100%	T4	IIB
anhydrous ammonia	-33°C	Gas	630°C	15%-33.6%	T1	IIA
hydrogen sulphide	-60°C	Gas	260°C	4%-45.5%	T3	IIB
Petrol (= Fuel)		-46°C	280°C	1.4%-7.6%	T3	
Turpentine oil	154°C to 170°C	35°C	253°C	0.8%	T3	IIA
Kerosene (= Gas oil No. 1) (= Oil No. 1)		38°C to 72°C	210°C	0.7%-5%	T3	IIA
Phenol hexahydroxymethyl	155°C to 180°C	68°C	295°C		T3	IIA
paraformaldehyde		70°C	380°C	7%-73%	T2	IIB
Diesel No. 2 (= Gas oil No. 2) (= Oil No. 2)		52°C to 96°C	254°C to 285°C	0.6%-6.5%	T3	
crude gas		Gas				IIB or IIC
Oil -6		66°C to 132°C				

How chose the equipment?

→ GAS/VAPOR

Gas/vapor Subdivision	Equipment groups (according type of protection) which can be used		
	Increased safety "e"	Flameproof enclosure "d"	Associated type of protection "d" + "e"
A	IIA-IIIB-IIC	IIA-IIIB-IIC	IIA-IIIB-IIC
B	IIB-IIC	IIB-IIC	IIB-IIC
C	IIC	IIC	IIC

→ TEMPERATURE CLASSES

Self ignition temperature of the gases/vapors	T6	T5	T4	T3	T2	T1
85°C ≤ Temp ≤ 100°C						
100°C < Temp ≤ 135°C						
135°C < Temp ≤ 200°C						
200°C < Temp ≤ 300°C						
300°C < Temp ≤ 450°C						
450°C < Temp						

Equipment must never be used in an atmosphere capable of ignition at the temperature indicated on the marking (temperature class).

Application area	IIA																IIB			IIC			Self-ignition temp + gas group + temp class								
	T1 539 °C	T1 600 °C	T2 470 °C	T2 440 °C	T2 372 °C	T2 450 °C	T3 225 °C	T1 630 °C	T1 607 °C	T3 243 °C	T3 204 °C	T2 413 °C	T3 235 °C	T1 498 °C	T1 470 °C	T3 244 °C	T2 404 °C	T1 505 °C	T2 450 °C	T2 422 °C	T2 360 °C	T2 343 °C		T6 90 °C	T2 423 °C	T2 420 °C	T2 429 °C	T1 560 °C	T6 90 °C	T2 305 °C	
Cleaning product industry	•		•											•	•	•	•	•							•						244 °C – T3 – IIB
Pharmaceutical industry		•	•	•															•	•				•				•			90 °C – T6 – IIC
Dye industry		•		•										•	•		•	•													404 °C – T2 – IIA
Artificial rubber industry		•	•											•						•				•	•					•	305 °C – T2 – IIC
Perfumery	•		•	•										•	•							•									360 °C – T2 – IIA
Spirits 375				•																		•									360 °C – T2 – IIA
Artificial fruit flavourings			•																			•		•							90 °C – T6 – IIA
Artificial textile manufacture			•						•					•		•								•		•		•	•		90 °C – T6 – IIC
Paint manufacture	•		•											•			•	•		•	•	•					•				343 – T2 – IIB
Varnish manufacture	•		•											•			•	•		•	•	•				•					343 – T2 – IIB
Grease solvent	•							•						•																	498 °C – T1 – IIA
Resin solvent	•			•													•	•					•								343 °C – T2 – IIA
Plastic manufacture	•	•																		•			•		•			•		•	305 °C – T2 – IIC
Hydrocarbons		•			•	•	•			•	•	•	•	•	•	•												•			90 °C – T6 – IIC
Gas used as a fuel		•		•	•	•																					•		•		305 °C – T2 – IIC
Fertiliser manufacture								•																			•				560 °C – T1 – IIC
Conclusion to the site																															

Ex REGULATIONS

Explanation of marking

Manufacturer identification:

- Name and trademark
- Address

Identification of notify body
in charge of the quality
surveillance (ex: **0080** =
certified and **0081** = LCIE)

Mark for product in the scope of directive
2014/34/EU and in compliance with EHSR

Mark for product in the scope of
directive 2014/34/EU and in compliance
with EHSR

Conformity to all
relevant European
directives

 Technor Italsmea Via Italia 33 20060 Gessate (MI) Italy	 0080  II 2GD Year of construction 2013 IMQ 08ATEX028 X
Type AQ 8 380/415 V 50/60Hz 63A Max Dis. P. 55W	Ex e IIC T6 Gb Ex tb IIIC T85°C Db IP66 T amb. -20/40°C Serial Nr. :I/13/112452
WARNING - DO NOT OPEN WHEN ENERGIZED	

European certificate number
(which can be follow by IECEx
certificate number ex: IECEx
INE 10.0015X)

Marking for Gas
according standards (*)

Marking for Dust
according standards (**)

Ambient temperature
range which shall be
marked when different
than -20°C/+40°C

Safety WARNING

* : Gas details	** : Dust details
Ex: Electrical apparatus intended to be installed in hazardous location e: type of protection (e = increased safety) IIC: Gas group/Subdivision C T6: temperature class Gb: Equipment protection level b (use in zone 1 and 2)	Ex: Electrical apparatus intended to be installed in hazardous location tb: type of protection (tb = protection by enclosure) IIIC: Dust group/Subdivision C T85°C: Maximum surface temperature Db: Equipment protection level b (use in zone 21 and 22) IP66: degree of protection provided by the enclosure

EHSR : Essential Health and Safety Requirements

IP table (IEC/EN 60529)

Protection against ingress of solid foreign objects and against harmful effects due to the ingress of water.

1st digit : protection against ingress of solid objects			2nd digit: protection against the ingress of water		
IP	Explanation		IP	Explanation	
0	No protection		0	No protection	
1		Protected against solid bodies larger than 50 mm (e.g. accidental contact with the hand)	1		Protected against vertically-falling drops of water (condensation)
2		Protected against solid bodies larger than 12.5 mm (e.g. finger of the hand)	2		Protected against drops of water falling at up to 15° from the vertical
3		Protected against solid bodies larger than 2.5 mm (tools, wires)	3		Protected against drops of rainwater at up to 60° from the vertical
4		Protection against solid bodies larger than 1mm (fine tools, small wires)	4		Protected against projections of water from all directions
5		Protected against dust (no harmful deposit)	5		Protected against jets of water from all directions
6		Completely protected	6		Completely protected against jets of water of similar force to heavy seas
			7		Protected against the effects of temporary immersion
			8		Protected against effects of prolonged immersion under specified conditions
			9k		Protected against jets of water from all directions with significantly increased pressure (vapors)

IK table (IEC/EN 62262)

Protection provided by enclosures for electrical equipment against external mechanical impacts.

Code	IK 00	IK 01	IK 02	IK 03	IK 04	IK 05	IK 06	IK 07	IK 08	IK 09	IK 10
Shocks energy (in Joules)	0	0,15	0,20	0,35	0,50	0,70	1	2	5	10	20
Corresponds to	0 g	200 g	200 g	200 g	200 g	200 g	500 g	500 g	1700 g	5 kg	5 kg
Dropped to	0 cm	2,5 cm	10 cm	17,5 cm	25 cm	35 cm	20 cm	40 cm	29,5 cm	20 cm	40 cm

Presentation of most common types of protection

→ FLAMEPROOF « Ex d » EQUIPMENT

A flameproof equipment offers an enclosure in which the parts which can ignite an explosive gas atmosphere can be placed. It withstands the pressure developed during an internal explosion of an explosive mixture, and prevents the transmission of the explosion to the explosive gas atmosphere surrounding the enclosure.

A flameproof enclosure must meet three criteria:

- Contain an internal explosion without permanent distortions.
- Guarantee that the explosion cannot be transmitted to the surrounding atmosphere.
- Have a temperature at any points on the surface that is lower than the self ignition temperature of the surrounding gases or vapours.

There are two construction values which are essential for a flameproof equipment to answer to the 3 criteria:

- the length of flameproof gasket (L)
- the gap (i)

These values depend on gas group and the maximum allowed gap depends on the length of flameproof gasket.

It is necessary to lubricate the thread and to ensure that at least 5 threads are engaged for metric thread and that 5 threads are present on each parts for NPT threads.

Holes which are not used for cable entries must be blanked using the appropriate blanking plugs.

The equipment is supplied with the lubricated gasket. When the equipment is installed, the flamespaths must be lubricated to keep it in good condition. Use a non-hardening, anti-corrosive grease (see technical note).

In order to successfully retain the flameproof character of the equipment:

- Care must be taken before starting up to ensure that all the screws for closing the covers and cable entries are firmly tightened and that the blocking device is well screwed, if necessary.
- Modification of the original predrilled holes is prohibited.

→ INCREASED SAFETY « Ex e » EQUIPMENT

Method of protection applicable to electrical equipment such as light fittings, sockets, switches, etc, which consists of preventing the occurrence of any accidental ignition.

The construction principles for increased safety « e » equipment are as follows:

- Use of high-quality insulation materials
- Specially dimensioned clearance and creepage distance
- Electrical connection which cannot become loose
- Minimum IP54 weatherproof protection of the enclosure
- Respect of the temperature classes
- Conformity of cable entries
- Labelling.

These principles are respected by screwing the cable gland directly onto the enclosure or, for untapped holes, by fixing with a locknut. Holes which are not used for cable entries must be blanked using the appropriate blanking plugs.

The equipment has a protection level of at least IP 54; it is therefore important to ensure that the sealing gasket is in good condition when the product is installed.

Defective seals must be systematically replaced.

It is important to be sure that the gasket is properly positioned for the plugs and sockets and for all the luminaries before connecting the male and female parts (for plugs and sockets) and before closing the light transmitting part of the lighting fixture.

For the connection, all technical note or instruction sheet shall be followed.

→ PRODUCTS MARKED « Ex de »

Except «Ex d» enclosure, equipment having a combined protection type « d » and « e » are the most commonly used. Some apparatuses such as power sockets, lampholders, etc, which create arcs and sparks in normal operation, can't be designed only with protection mode « e ».

- The part where the electric arc is produced is enclosed in a small flameproof chamber.
- The connection terminals are « e » increased safety.
- The assembly is mounted in an « e » increased safety enclosure.

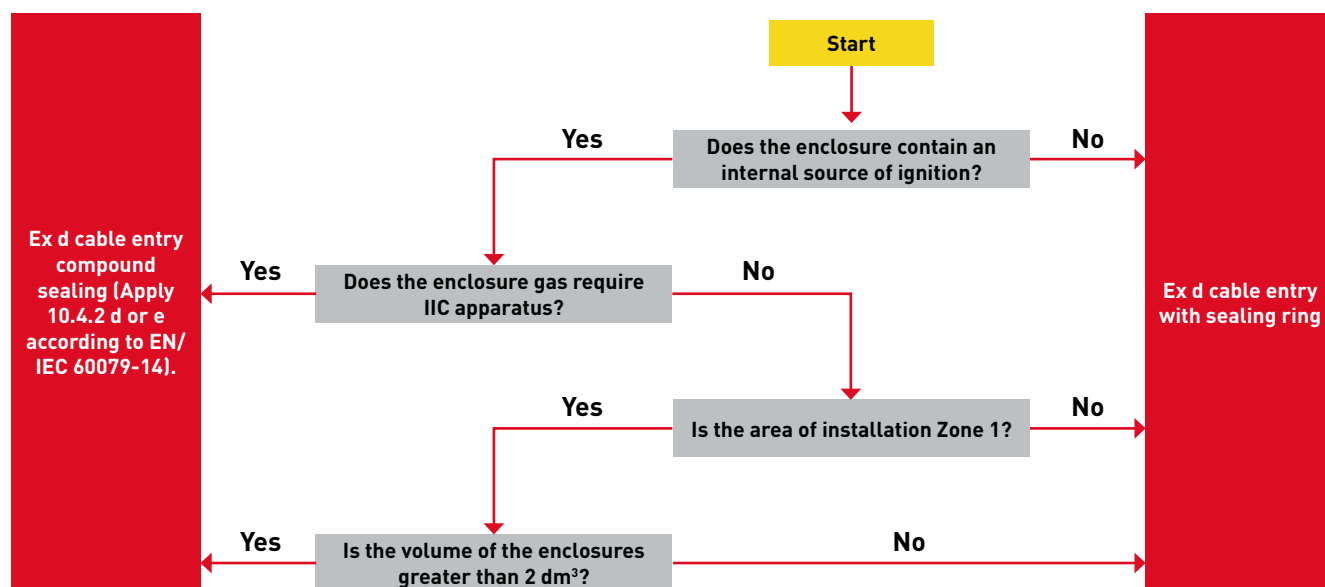
Cables entries

The connection of cables to the electrical equipment shall maintain the explosion protection integrity of the relevant type of protection. When the cable gland certificate has an 'X' marking, this cable gland shall only be used for fixed installations. When the equipment is only portable, cable glands without 'X' marking shall be used.

Cable Entries into Ex d Enclosures

Two situations can be considered, direct cable entry (Ex d enclosures) and indirect cable entry (Ex d e enclosures - on Ex e part).

For the direct cable entry, to choose the correct cable gland the scheme shall be followed if it is not tested with the equipment.



Installation recommendation

→ GENERAL REQUIREMENTS

Electrical installations for explosive atmosphere must comply with the requirements concerning installations in both non hazardous and hazardous locations:

- national rules (Example NFC 15-100 + condition BE3 for France),
- EN/IEC 60079-14,
- IEC/EN 60079-17.

→ EQUIPMENT SELECTION (EXCEPT CABLE ENTRIES)

Zones	Type of protection		Marking	EN/IEC standard
-	General requirements		-	60079-0
For use in Zones 1, 2	Flameproof enclosure		Ex d	60079-1
For use in Zones 1, 2	Increased safety		Ex e	60079-7
For use in Zones 0, 1, 2, 20, 21, 22	Intrinsic safety		Ex i	60079-11
For use in Zones 1, 2	Pressurisation		Ex p	60079-2
For use in Zones 0, 1, 2, 20, 21, 22	Encapsulation		Ex m	60079-18
For use in Zones 1, 2	Oil immersion		Ex o	60079-6
For use in Zones 1, 2	Powder filling		Ex q	60079-5
For use in Zone 2	"Non sparking"		Ex n	60079-15
For use in Zones 20, 21, 22	Dust atmospheres		Ex t	60079-31

Ex REGULATIONS

→ EXTERNAL INFLUENCES

The material must be selected and installed so that it is protected against external, chemical, mechanical, thermal and electrical influences, vibrations, humidity, etc., which are likely to counteract the protection modes provided.

→ PROTECTION AGAINST DANGEROUS SPARKS

Limitation of earth fault currents. It is difficult to cover all systems, but the methods presented in EN/IEC 60079-14 represent general cases.

These systems can be used in Zones 1 and 2 up to 1 000 V~/1 500 V. (Low voltage equipment).

Nota: the equipment intended to be used in explosive atmosphere are not in the scope of LVD 2006/95/EC dated 12/12/2006.

→ EQUALIZATION OF POTENTIALS

All exposed conductive parts and all extraneous metallic parts must be connected to the equipotential connection system.

The connection system may comprise protective conductors,

metal pipes in metal cable ducts and metallic structural elements, but must not include the neutral conductor.

It must be impossible for connections to come loose by themselves.

→ CABLES

Cables and accessories should be installed such that they are not exposed to mechanical damage, vibration and corrosive or chemical influences, for example due to solvents, and the effects of heat.

When this type of exposure is inevitable, protective measures must be taken to install or to select appropriate cables (using reinforced cables with shielding inside a seamless aluminum conduit, cables with a mineral insulation casing, a semi-rigid metal casing ...).

→ CABLE JOINTING

Whenever possible, complete cable lengths shall be installed in hazardous locations. Where this is impossible, a cable joint must be made to the mechanical, electrical or chemical constraints; it must also be enclosed in an enclosure in which the protection mode is appropriate for the Zone like junction boxes (AQR, EJB, GUB,...).

→ ADDITIONAL REQUIREMENTS FOR TYPE OF PROTECTION 'd' – FLAMEPROOF ENCLOSURES

Solid obstacles

When installing equipment, care shall be exercised to prevent the flameproof flange joint approaching nearer than the distance specified in table below to any solid obstacle which is not part of the equipment, such as steelwork, walls, weather guards, mounting brackets, pipes or other electrical equipment.

Minimum distance of obstruction from the flameproof flange joints related to the gas group of the hazardous area	
Gas group	Minimum distance (mm)
IIA	10
IIB	30
IIC	40

Protection of flameproof joints

Flameproof joints shall be protected against corrosion. Flameproof joints shall not be painted. (WARNING: Painting of the enclosure after complete assembly is permitted. The application of grease to the flameproof joint faces will reduce, but not eliminate, the quantity of paint penetrating the gap (Silicone based greases are often suitable for this purpose) – see § ELECTRICAL INSTALLATIONS INSPECTION AND MAINTENANCE).

Cable glands shall:

- be appropriate to the type of cable employed,
- maintain the type of protection,
- be in accordance with § CABLE GLANDS.

Thread engagement shall be at least five full threads (5 threads engaged for metric threaded, 3.5 threads engaged for NPT). Suitable grease may be used provided it is non setting, non-metallic and non-combustible and any earthing between the two is maintained.

Where the threaded entry or hole size is different to that of the cable gland, a flameproof threaded adapter complying with IEC 60079-1 shall be fitted which complies with thread engagement requirements detailed above.

Only one adapter is authorized.

Unused cable entries shall be sealed with a flameproof blanking element complying with IEC 60079-1.

Conduit systems

Conduit sealing devices shall be provided, either as part of the flameproof enclosure or immediately or as close as practical to the entry to the flameproof enclosure using a minimum number of fittings.

Conduit sealing devices, having parallel threads may be fitted with a sealing washer between the device and the flameproof enclosure providing that after the washer has been fitted, the applicable thread engagement is still achieved. Thread engagement shall be at least five full threads. (5 threads engaged for metric threaded, 3.5 threads engaged for NPT). Suitable grease may be used provided it is non-setting and any earthing between the two is maintained.

→ ADDITIONAL REQUIREMENTS FOR TYPE OF PROTECTION 'e' – INCREASED SAFETY

Enclosures containing bare live parts shall have a degree of ingress protection of at least IP54, whereas enclosures containing insulated parts shall only have a degree of ingress protection of at least IP44.

The connection of cables to increased safety equipment shall be effected by means of cable glands appropriate to the type of cable used. Cable entries shall also respect « e » protection mode and must incorporate an appropriate sealing element in order to obtain a minimum degree of protection at least equal to IP54 at the enclosure connection. Some terminals (e.g. slot types) may permit the entry of more than one conductor. Where more than one conductor is connected to the same terminal, care shall be taken to ensure that each conductor is adequately clamped.

Unless authorized by the documentation supplied with the equipment, two conductors with different diameters must not be connected to the same terminal, unless they have

firstly been fixed by means of a single compression sleeve. To avoid the risk of short-circuits between adjacent conductors in terminal blocks, the insulation of each conductor shall be maintained up to the metal of the terminal.

Combination of terminals and conductors in connection boxes and junction boxes: Care shall be taken to ensure that the heat dissipated within the enclosure does not result in temperatures in excess of the required equipment temperature class. This can be achieved by:

- a) following the guidance technical note given relating to the permissible number of terminals, the conductor size and the maximum current, or
- b) contacting us.

→ ADDITIONAL REQUIREMENTS FOR TYPES OF PROTECTION 'i' – INTRINSIC SAFETY AND 'nL' TYPE OF PROTECTION – ENERGY-LIMITED CIRCUITS

The aim of the installation rules for intrinsically safe circuits is to maintain separation from other circuits.

Requirements of EPL 'Gb' or 'Gc'

In installations to meet the requirements of EPL 'Gb', the intrinsically safe apparatus and the intrinsically safe parts of associated apparatus shall comply at least to level of protection 'ib'.

In installations to meet the requirements of EPL 'Gc', the intrinsically safe apparatus and the intrinsically safe parts of associated apparatus shall comply at least to level of protection 'ic'.

Simple apparatus need not be marked, but shall comply with the requirements of IEC 60079-0 and IEC 60079-11, in so far as intrinsic safety is dependent on them. No certification is required for a simple apparatus.

Associated apparatus should preferably be located outside the hazardous area or, if installed inside a hazardous area, shall be provided with another appropriate type of protection in like inside a EJB enclosures.

All apparatus forming part of an intrinsically safe system should, where reasonably practicable, be identifiable as being part of an intrinsically safe system. If sheaths or coverings are marked by a colour, the colour used for cables containing intrinsically safe circuits shall be light blue. Where intrinsically safe circuits have been identified by the use of light blue covered cable, then light blue covered cable shall not be used for other purposes in a manner or location which could lead to confusion or detract from the effectiveness of the identification of intrinsically safe circuits. If all intrinsically safe circuit cables or all cables of circuits which are not intrinsically safe are armoured,

metal sheathed or screened, then marking of intrinsically safe circuit cables is not required.

Alternative marking measures shall be taken inside control cabinets:

- combining the cores in a common light blue harness,
- labelling,
- clear arrangement and spatial separation.

The installation shall ensure that intrinsically safe circuit cables cannot be inadvertently connected to circuit cables which are not intrinsically safe. This may be achieved by:

- a) separating the different types of circuit cables, or
- b) placing the cables so as to protect against the risk of mechanical damage, or
- c) using cables which are armoured, metal sheathed or screened for specific types of circuits (e.g. all circuits which are not intrinsically safe are run in armoured cable or all intrinsically safe circuits are armoured).

Terminals for intrinsically safe circuits shall be separated from terminals of circuits which are not intrinsically safe:

- a) When separation is accomplished by distance, then the clearance between terminals shall be at least 50 mm,
- b) When separation is accomplished by use of an insulating partition or earthed metal partition, the partitions used shall extend to within 1,5 mm of the walls of the enclosure, or alternatively provide a minimum measurement of 50 mm between the terminals when taken in any direction around the partition.

The minimum clearances between the bare conducting parts of external conductors connected to terminals and earthed metal or other conducting parts shall be 3 mm.

The clearance between the bare conducting parts of field wiring terminals of separate intrinsically safe circuits shall be such that there is at least 6 mm between the bare conducting parts of connected external conductors.

The terminals of the intrinsically safe circuits shall be marked as such. This marking may be by the use of colour, in which case it shall be light blue.

Electrical installations inspection and maintenance

Standard EN/IEC 60079-17 covers factors directly related to the inspection and maintenance of electrical installations within hazardous areas only, where the hazard may be caused by flammable gases, vapours, mists, dusts, fibers or flyings. This standard stipulates that the inspection and maintenance of installations shall be carried out only by experienced personnel, whose training has included instruction on the various types of protection and installation practices, the requirements of this standard, the relevant national regulations/company rules applicable to the installation and on the general principles of area classification.

Three inspections are normally requested:

- initial inspection before plant or equipment is brought into service,
- regular inspections in time,
- inspection following any adjustment, maintenance, repair, reclamation, modification or replacement.

Frequency of inspection

The determination of the time interval between inspections shall be taken into account the process and the factors effecting the deterioration of equipment (susceptibility to corrosion, exposure to chemicals or solvents, likelihood of accumulation of dust or dirt, likelihood of water ingress, exposure to excessive ambient temperature, risk of mechanical damage, exposure to undue vibration, training and experience of personnel, likelihood of unauthorized modifications or adjustments and likelihood of inappropriate maintenance, for example that which is not in accordance with the manufacturer's recommendation).

But the interval between periodic inspections shall not exceed three years without seeking expert advice.

Degree of inspection

- Visual inspection: faults directly visible such as missing buttons or missing gasket, not well screw cable entries,...
- Close inspection: visual inspection and in addition detection faults (Close inspection does not normally require the enclosure to be opened, nor the equipment switched off).
- Detailed inspection: such as loose connections, detected after opening the enclosure.

→ SPECIFIC REQUIREMENTS

“Ex d” equipment:

It is preferable to obtain new parts from the manufacturer. Particular attention shall be paid to the correct assembly of flameproof enclosures after repair or overhaul, in order to ensure that the flameproof joints comply with the requirements of the standard. The flameproof enclosure are not gasketed thus they may be **protected by the use of grease, non-setting sealing compound or non-hardening tape** applied externally in accordance with IEC 60079-14. **The drilling of holes into a flameproof enclosure is forbidden.** No re-cement or repair light-transmitting parts shall be made and only complete replacement assemblies, as specified by the manufacturer, shall be used. **No modification affecting the explosion protection shall be carried out on parts of a flameproof enclosure.**

“Ex n” or “Ex e” equipment:

Care shall be taken when refurbishing terminations to maintain clearance and creepage distances. Any replacement

terminals, bushings or parts should be obtained from us or shall conform to the relevant certification documents only for the enclosure. It is preferable to obtain new parts from the manufacturer to guarantee the preservation of the degree of ingress protection and temperature classification as stipulated on the certification label.

All equipment:

For equipment with a gasket, replacements shall be of the same materials and dimensions as the original. Any proposed change of material shall be referred to the equipment manufacturer, user or certification authority. For luminaries: Light-transmitting or other parts made from plastics shall not be cleaned with solvents. Household detergents are recommended for this purpose. The maximum wattage of lamps specified shall not be exceeded. Care shall be taken when changing surface finish, paint, etc., as this may affect the surface temperature of the enclosure and thus the temperature classification. Care shall be taken to ensure that the specified type of protection and degree of ingress protection are maintained.

→ INSPECTION PROGRAM

Check that	Ex d	Ex e	Ex n	Ex t
EQUIPMENT				
Equipment is appropriate to the EPL/Zone requirements of the location	•	•	•	•
Apparatus group is correct	•	•	•	•
IP grade of equipment is appropriate to conductivity of dust				•
Equipment temperature class is correct	•	•	•	
Equipment maximum surface temperature is correct				•
Equipment circuit identification is correct	•	•	•	•
Equipment circuit identification is available		•	•	•
Enclosure, glass parts and glass-to-metal sealing gaskets and/or compounds are satisfactory	•	•	•	•
There are no unauthorized modifications	•	•	•	•
There are no visible unauthorized modifications	•	•	•	•
Bolts, cable entry devices (direct and indirect) and blanking elements are of the correct type and are complete and tight	•	•	•	•
Flange faces are clean and undamaged and gaskets, if any, are satisfactory	•			
Lamp rating, type and position are correct	•	•	•	•
Breathing and draining devices are satisfactory	•	•	•	
INSTALLATION				
The installation is such as to minimize the risk of dust accumulations				•
Type of cable is appropriate	•	•	•	•
There is no obvious damage to cables	•	•	•	•
Sealing of trunking, ducts, pipes and/or conduits is satisfactory	•	•	•	•
Stopping boxes and cable boxes are correctly filled	•	•	•	•
Earthing connections, including any supplementary earthing bonding connections are satisfactory (for example connections are tight and conductors are of sufficient cross-section)	•	•	•	•
Insulation resistance is satisfactory	•	•	•	•
Specific conditions of use (if applicable) are complied with	•	•	•	•
Obstructions adjacent to flameproof flanged joints are in accordance with IEC 60079-14	•			
Variable voltage/frequency installation in accordance with documentation	•	•	•	•
Cables not in use are correctly terminated		•	•	•
ENVIRONMENT				
Equipment is adequately protected against corrosion, weather, vibration and other adverse factors	•	•	•	•
No undue accumulation of dust and dirt	•	•	•	•
Electrical insulation is clean and dry	•	•	•	

LIGHTING

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Fluorescent lighting

- EVF-P.. Series - Zones 1, 2, 21 & 22 - End-cups in Copper-free aluminium26
- Spares & Accessories28
- EVF-F.. Series - Zones 1, 2, 21 & 22, end-cups in GRP30
- EVF2-PF/FF.. Series - Zone 2, 22 - Copper-free aluminum or GRP34
- RMS-560.. Series - Zones 1, 2, 21 & 22 - Stainless steel AISI 304.....38
- RMS-550.. Series - Zones 2 & 22 - Stainless steel AISI 304.....40
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Conventional lighting fixtures - wellglass

- EV.. Series - H.I.D./Fluorescent compact - Copper-free aluminium48
- Spares & Accessories52

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Conventional lighting fixtures - floodlights

- FL.. Series - Copper free aluminium or Stainless steel AISI 316 L54

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LED lighting

- EV LED.. Series - Spotlight - Copper free aluminium.....56

- EVde-PR../LED Series – Wellglass - Copper-free aluminium58
- EVCC-PR LED Series - Tank lighting fixtures - Copper-free aluminium60
- EVA Series - Hand lamp – Copper-free aluminium62
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- EVF-P TL LED.. Series - Zones 1, 2, 21, 22 - Copper-free aluminium66
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Lamps/spare parts

FLUORESCENT LIGHTING

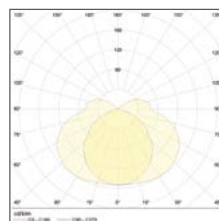
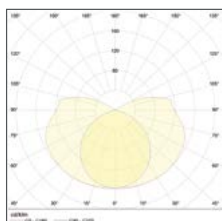
EVF-P.. Series - Zones 1, 2, 21 & 22 - End-cups in Copper-free aluminium



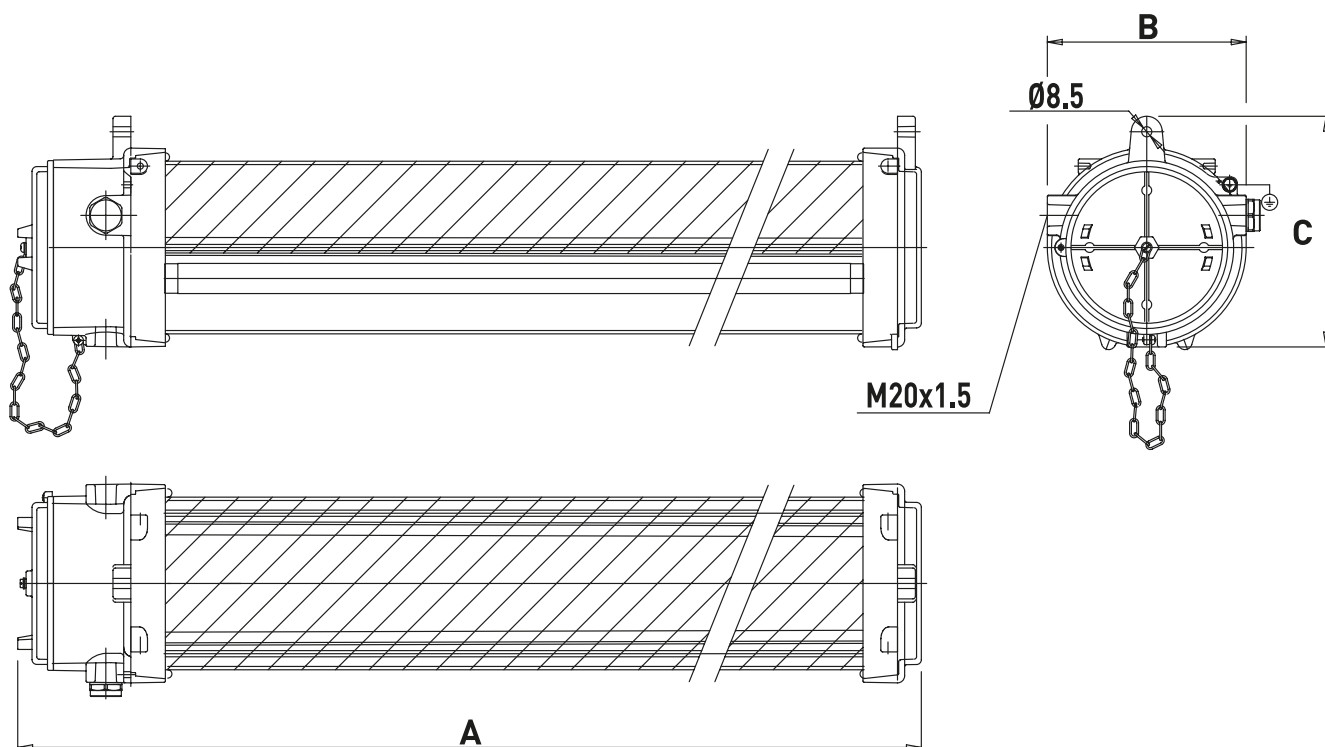
- Complete range of explosion-proof linear lighting fixtures available with single or double lamp and ideal for applications where a continuous row of lighting is needed to ensure a uniform illumination of production sites and machinery.
- Three layers-extrusion lamp housing:
 - Polycarbonate layer;
 - Top side reflecting layer which protects inner electrical and electronic apparatus from direct sun heating/radiation effect;
 - Filter layer which protects inner polycarbonate layer against UV radiation and related yellowing effect.
- Circular shape grants the best possible "CX" factor, therefore it is less affected by wind-dusts, pollution and dirty bunching.
- Possibility to apply an OFF-SHORE painting cycle suitable for marine environments.
- All lighting fixtures are supplied ready for LOOP IN-LOOP OUT facility with cable up to 4 sqmm.

TECHNICAL FEATURES

Material	End cups in aluminium with low content of copper/Light housing in polycarbonate		
IP/IK rating	IP66/IK10 according to EN 62262:2002		
Ambient temperature range	-20°C to +50°C		
Approvals	ATEX: INERIS 02ATEX0039X - IECEx : INE 15.0032X - EAC: RU C-IT.BH02.B.00616/20		
Marking	II 2 GD Ex db e IIC T4 Gb (Normal service) Ex db e mb IIC T4 Gb (Emergency service) and Ex tb IIIC T85°C Db IP66 (Normal & Emergency service)		
Gaskets	O-ring made of Nitrile Rubber (NBR)		
Surface treatment	Polyurethane painting cycle C4 - Blue RAL5014 (Other colours available upon request)		
Entries	N° 2 entries M20x1,5. One plugged-off by Ex d brass nickel chrome plated plug and relevant gasket.		
Included accessories	AISI304 Stainless steel external hardware and screws		
Lamps	EVF-P series lighting fixtures are suitable for two pins fluorescent lamps G13 socket Philips TL-D or equivalent (lamps excluded)		
Ballast	High frequency electronic ballast conforming with EN 60079 – 18 and IEC 60079 – 18		
Rated operation voltage (UE)	198-264 VDC/220-240 V - Normal service/230-240 V - Emergency service		
Frequency	50-60 Hz		
Power factor	> 0,95cos[Φ]		
Optional accessories	AISI316 Pole mounting kit/AISI316 Ceiling/Wall mounting kit/AISI316 Suspension mounting kit/3° bottom entry M20x1,5/AISI316 protection guard/Cable glands in BNK and/or AISI316		
Emergency unit:	18W:	36W:	58W:
Operating time	90' at 19% of flux	90' at 17% of flux	90' at 12% of flux
	120' at 12% of flux	120' at 10% of flux	120' at 9% of flux
		180' at 11% of flux	180' at 9% of flux
Photometric light curves	1 lamp 2 lamps		



Dimensions EVF-P



EVF-P - Lighting fixtures for normal service

TYPE	CODE	POWER [W]	DIMENSIONS [mm]			WEIGHT [kg]
			A	B	C	
EVF-P 118	A020541830006	1X18	760	167	194	7.00
EVF-P 218	A020541810002	2X18	760	167	194	7.00
EVF-P 136	A020543610001	1X36	1370	167	194	9.50
EVF-P 236	A020543610003	2X36	1370	167	194	9.50
EVF-P 158	A020545810001	1X58	1675	167	194	10.50
EVF-P 258	A020545810005	2X58	1675	167	194	10.50

EVF-P - Lighting fixtures for emergency service

TYPE PERMANENT	CODE	POWER [W]	EMERGENCY DURATION	DIMENSIONS [mm]			WEIGHT [kg]
				A	B	C	
EVF-P 136 LE-P-90	A020643610007	1X36	90'	1370	167	194	10.00
EVF-P 136 LE-P-120	A020643610008	1X36	120'	1370	167	194	11.00
EVF-P 136 LE-P-180	A020643610009	1X36	180'	1370	167	194	11.50
EVF-P 236 LE-P-90	A020643610011	2X36	90'	1370	167	194	10.00
EVF-P 236 LE-P-120	A020643610002	2X36	120'	1370	167	194	11.00
EVF-P 236 LE-P-180	A020643610013	2X36	180'	1370	167	194	11.50
EVF-P 158 LE-P-90	A020645810001	1X58	90'	1675	167	194	12.00
EVF-P 158 LE-P-120	A020645810002	1X58	120'	1675	167	194	13.00
EVF-P 158 LE-P-180	A020645810003	1X58	180'	1675	167	194	13.50
EVF-P 258 LE-P-90	A020645810005	2X58	90'	1675	167	194	12.00
EVF-P 258 LE-P-120	A020645810006	2X58	120'	1675	167	194	13.00
EVF-P 258 LE-P-180	A020645810007	2X58	180'	1675	167	194	13.50

EVF-P - Lighting fixtures for emergency service

TYPE NON PERMANENT	CODE	POWER [W]	EMERGENCY DURATION	DIMENSIONS [mm]			WEIGHT [kg]
				A	B	C	
EVF-P 118 LE-NP 90	A020641810008	1X18	90'	760	167	194	7.50
EVF-P 118 LE-NP 120	A020641810012	1X18	120'	760	167	194	7.50
EVF-P 136 LE-NP-90	A020643610010	1X36	90'	1370	167	194	10.00
EVF-P 136 LE-NP-120	A020643610019	1X36	120'	1370	167	194	11.00
EVF-P 136 LE-NP-180	A020643610016	1X36	180'	1370	167	194	11.50
EVF-P 158 LE-NP-90	A020645810004	1X58	90'	1675	167	194	12.00
EVF-P 158 LE-NP-120	A020645810012	1X58	120'	1675	167	194	13.00
EVF-P 158 LE-NP-180	A020645810010	1X58	180'	1675	167	194	13.50

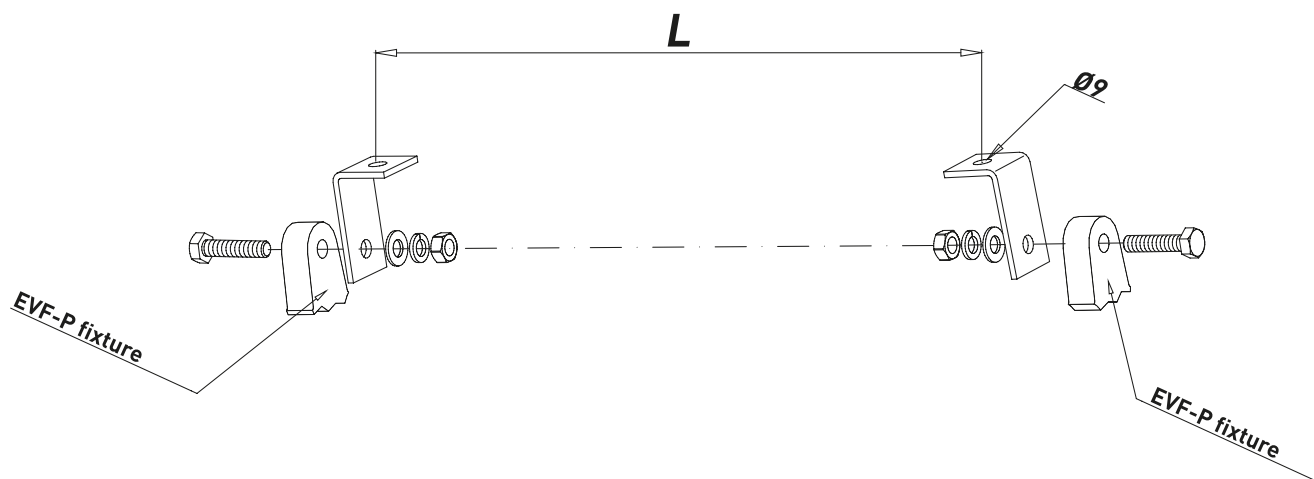
FLUORESCENT LIGHTING

EVF-P.. Series - Zones 1, 2, 21 & 22 - End-cups in Copper free aluminium

SPARES & ACCESSORIES

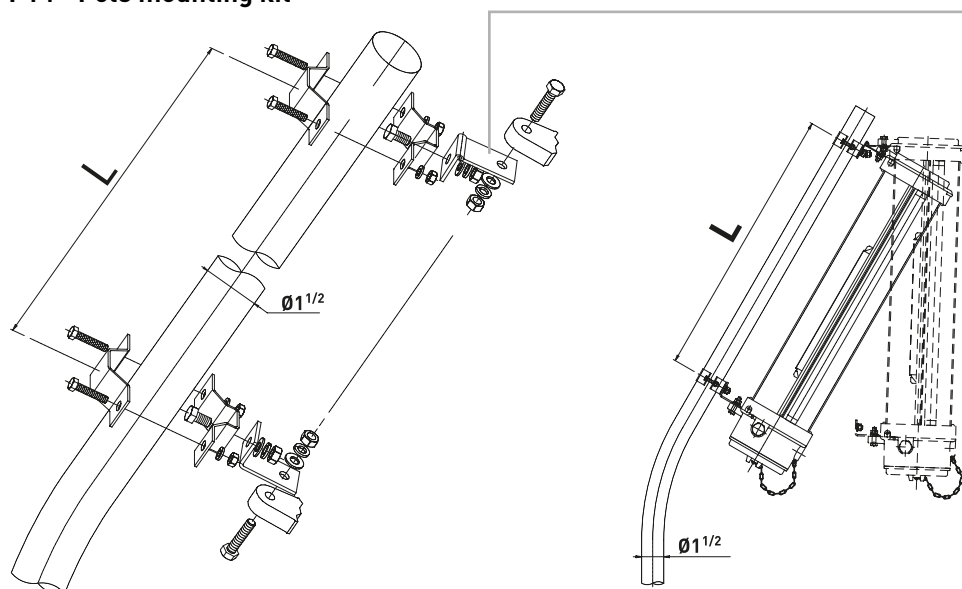
CODE	TYPE
A601102010009	1"1/2 POLE MOUNTING KIT P14 AISI316L
A601102010008	2" POLE MOUNTING KIT P14 AISI316L
A601102010005	CEILING MOUNTING KIT G3 AISI316L
A601102010012	SUSPENSION MOUNTING KIT G4 AISI316

G3 - Ceiling mounting kit

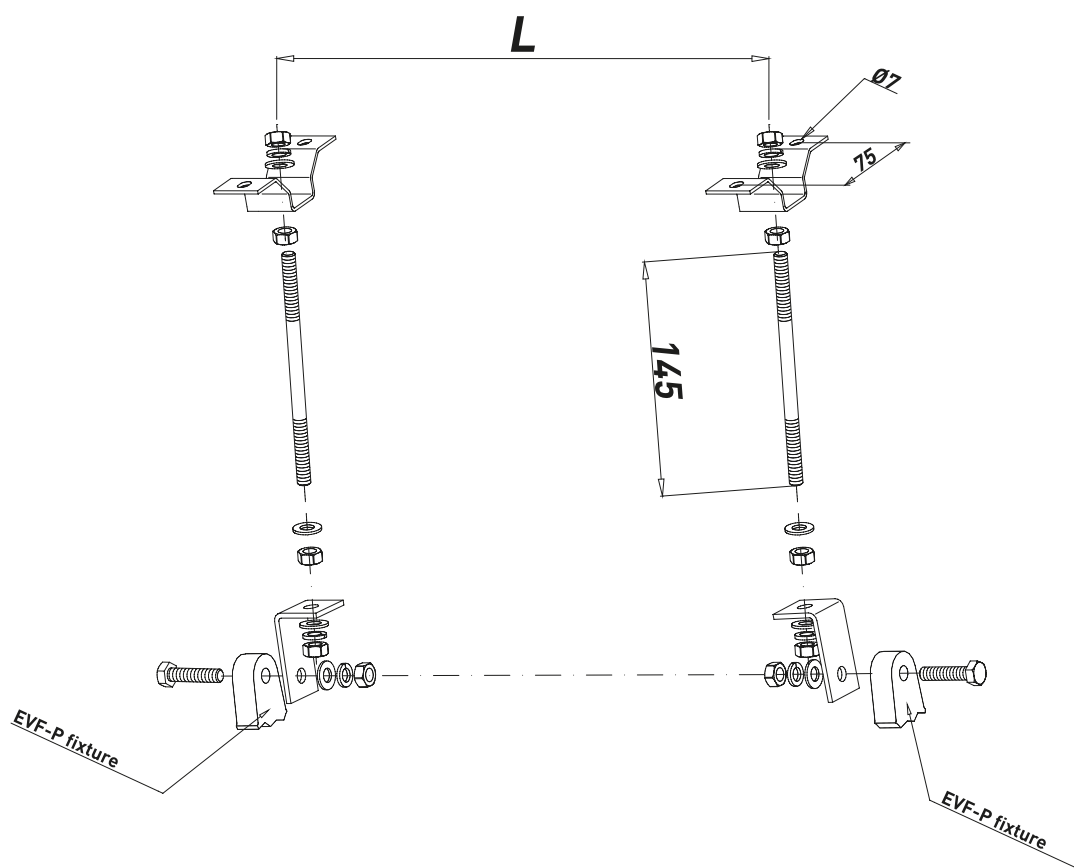


P14 - Pole mounting kit

• Hinge for easy maintenance



G4 - Suspension mounting kit



TYPE	L (mm)
EVF-P 118	605
EVF-P 218	605
EVF-P 136	1215
EVF-P 236	1215
EVF-P 158	1520
EVF-P 258	1520

FLUORESCENT LIGHTING

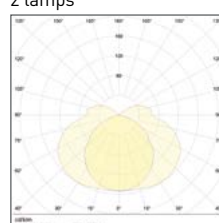
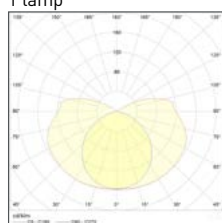
EVF-F.. Series - Zones 1, 2, 21 & 22, end-cups in GRP



- Complete range of explosion-proof linear lighting fixtures available with single or double lamp and ideal for applications where a continuous row of lighting is needed to ensure a uniform illumination of production sites and machinery.
- EVF-F lighting fixtures are manufactured with a high resistance cylindrical polycarbonate lamp housing and with end cups made of corrosion resistant and high mechanical resistance GRP.
- Threelayers-extrusion lamp housing: Polycarbonate layer; Top side reflecting layer which protects inner electrical and electronic apparatus from direct sun heating/radiation effect; Filter layer which protects inner polycarbonate layer against UV radiation and related yellowing effect.
- Circular shape grants the best possible "CX" factor, therefore it is less affected by wind dusts, no flat surfaces to avoid pollution and dirty bunching.
- All lighting fixtures are supplied ready for LOOP IN-LOOP OUT facility.

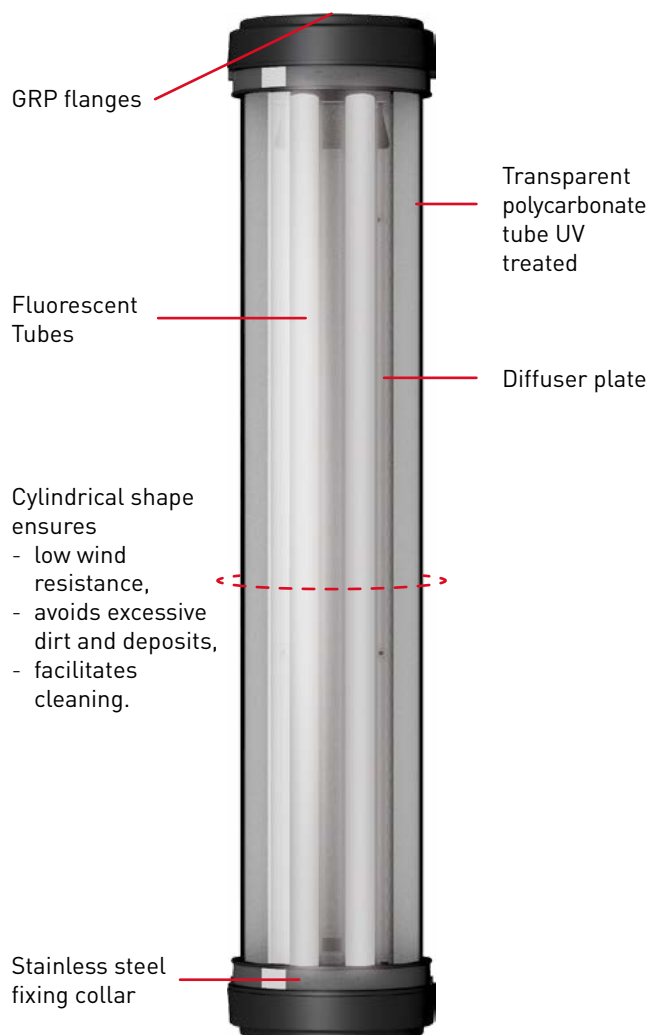
TECHNICAL FEATURES

Material	- Transparent polycarbonate envelope UV protected - GRP flanges - Stainless steel fastening collar - White lacquered steel plate for increased reflectivity - Stainless steel screws		
IP, IK rating	IP66/IP 69K - IK 10		
Ambient temperature range	-20 °C to + 60 °C		
Approval	ATEX: LCIE 17 ATEX 3035 X - IECEx: IECEx LCIE 17.0064X EAC: RU C-IT.BH02.B.00616/20 (Not available for versions with Microswitch)		
Markings	II 2 G Ex db eb IIC T6 to T3 Gb (type of protection and temp. class depend on electrical equipment) II 2 D Ex tb IIIC T80 °C to T140 °C Db Standards compliance IEC/EN 60079-0, 60079-1, 60079-7, 60079-18 and 60079-31		
Zones	Gas and Dust: zones 1&2, 21 & 22		
Cable entries	PNCX connector for cable diameters 7 to 14 mm. On request: - 1 polyamide cable gland and 1 plug M20 for cable diameters 7 to 14 mm - 1 polyamide cable gland and 1 plug M25 for cable diameters 10 to 18 mm - Metal cable gland for armoured or unarmoured cable - Loop In/Loop Out - Through wiring - + 2 PNCX loop In/loop Out		
Lamps	EVF-F series lighting fixtures are suitable for two pins fluorescent lamps G13 socket Philips TL-D or equivalent (lamps excluded)		
Ballast	Possibility to have High frequency electronic ballast in compliance with IEC/EN 60079-18		
Electrical specifications			
Voltage	220-240 Vac (normal and emergency service)/198-278 Vdc (normal service)		
Frequency	0/50-60 Hz		
Power factor	> 0,95cos(Φ)		
Emergency unit:	18W:	36W:	58W:
Operating time	90' at 19% of flux	90' at 17% of flux	90' at 12% of flux
	120' at 12% of flux	120' at 10% of flux	120' at 9% of flux
		180' at 11% of flux	180' at 9% of flux
Optional accessories	AISI316 Pole mounting kit/AISI316 Ceiling/Wall mounting kit/AISI316 Suspension mounting kit/3° bottom entry M20x1,5/AISI316 protection guard		
Photometric light curves	1 lamp	2 lamps	



The EVF-F luminaries have a very high mechanical resistance to shocks IK10 and corrosion while being particularly bright. Thus they meet all requirements of aggressive environments (humidity, corrosion, pollution) for industrial areas at risk of explosion.

EVF-F LUMINARIES



Two opening switches allow the light source and the battery to be switched off automatically when the luminaire flange is open.

MODULAR CONNEXION WAY

Through PNCX connector

- easier and quicker installation & maintenance
- easier loop in loop out, you can keep lighting throughout other lightings during maintenance operations.



**LOOP IN/LOOP OUT
1 SOCKET + 1 PLUG
PNCX VERSION**

With cable gland

- Metric threads M20 or M25
- Loop in loop out facility
- Available for armoured cables or unarmoured.

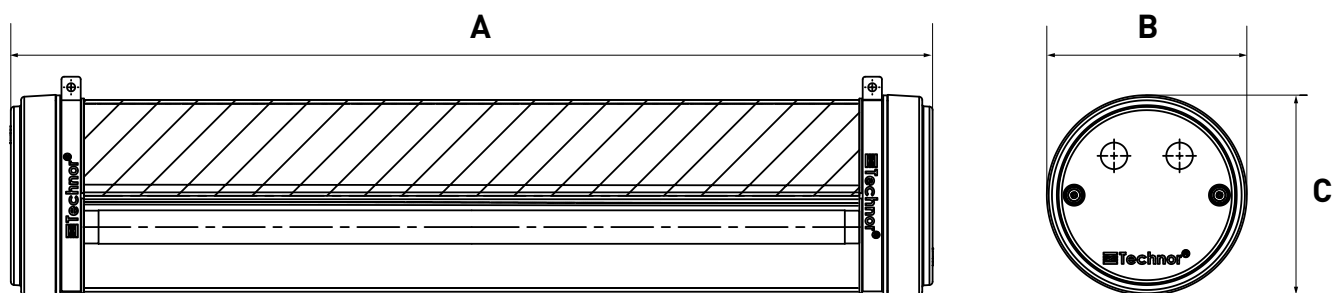


**LOOP IN/LOOP OUT
POLY GLAND VERSION**



**ARMOURED CABLE GLAND
VERSION**

Dimensions – EVF-F



EVF-F.. Ex db eb - Lighting fixtures for normal service

TYPE	CODE	LAMP [W]	DIMENSIONS [mm]			WEIGHT [kg]
			A	B	C	
EVF-F 118	A020741810001	1X18	745	153	166	4.50
EVF-F 218	A020741810003	2X18	745	153	166	4.50
EVF-F 136	A020743610001	1X36	1342	153	166	6.50
EVF-F 236	A020743610003	2X36	1342	153	166	6.50
EVF-F 158	A020745810001	1X58	1642	153	166	8.50
EVF-F 258	A020745810003	2X58	1642	153	166	8.50
EVF-F 118 - with Microswitch	A020741810002	1X18	745	153	166	4.50
EVF-F 218 - with Microswitch	A020741810004	2X18	745	153	166	4.50
EVF-F 136 - with Microswitch	A020743610002	1X36	1342	153	166	6.50
EVF-F 236 - with Microswitch	A020743610004	2X36	1342	153	166	6.50
EVF-F 158 - with Microswitch	A020745810002	1X58	1642	153	166	8.50
EVF-F 258 - with Microswitch	A020745810004	2X58	1642	153	166	8.50

EVF-F.. Ex db eb - Lighting fixtures for emergency service

TYPE PERMANENT	CODE	POWER [W]	EMERGENCY DURATION	DIMENSIONS [mm]			WEIGHT [kg]
				A	B	C	
EVF-F 136 LE P 90	A020843610004	1X36	90'	1342	153	166	9.00
EVF-F 136 LE P 120	A020843610019	1X36	120'	1342	153	166	10.00
EVF-F 136 LE P 180	A020843610020	1X36	180'	1342	153	166	10.50
EVF-F 236 LE P 90	A020843610002	2X36	90'	1342	153	166	9.00
EVF-F 236 LE P 120	A020843610021	2X36	120'	1342	153	166	10.00
EVF-F 236 LE P 180	A020843610022	2X36	180'	1342	153	166	10.50
EVF-F 158 LE P 90	A020845810001	1X58	90'	1642	153	166	10.00
EVF-F 158 LE P 120	A020845810019	1X58	120'	1642	153	166	11.00
EVF-F 158 LE P 180	A020845810020	1X58	180'	1642	153	166	11.50
EVF-F 258 LE P 90	A020845810003	2X58	90'	1642	153	166	10.00
EVF-F 258 LE P 120	A020845810021	2X58	120'	1642	153	166	11.00
EVF-F 258 LE P 180	A020845810022	2X58	180'	1642	153	166	11.50
EVF-F 136 LE P 90 - with Microswitch	A020843610001	1X36	90'	1342	153	166	9.00
EVF-F 136 LE P 120 - with Microswitch	A020843610023	1X36	120'	1342	153	166	10.00
EVF-F 136 LE P 180 - with Microswitch	A020843610024	1X36	180'	1342	153	166	10.50
EVF-F 236 LE P 90 - with Microswitch	A020843610003	2X36	90'	1342	153	166	9.00
EVF-F 236 LE P 120 - with Microswitch	A020843610025	2X36	120'	1342	153	166	10.00
EVF-F 236 LE P 180 - with Microswitch	A020843610026	2X36	180'	1342	153	166	10.50
EVF-F 158 LE P 90 - with Microswitch	A020845810002	1X58	90'	1642	153	166	10.00
EVF-F 158 LE P 120 - with Microswitch	A020845810023	1X58	120'	1642	153	166	11.00
EVF-F 158 LE P 180 - with Microswitch	A020845810024	1X58	180'	1642	153	166	11.50
EVF-F 258 LE P 90 - with Microswitch	A020845810004	2X58	90'	1642	153	166	10.00
EVF-F 258 LE P 120 - with Microswitch	A020845810025	2X58	120'	1642	153	166	11.00
EVF-F 258 LE P 180 - with Microswitch	A020845810026	2X58	180'	1642	153	166	11.50

EVF-F.. Ex db eb - Lighting fixtures for emergency service

TYPE NON PERMANENT	CODE	POWER [W]	EMERGENCY DURATION	DIMENSIONS [mm]			WEIGHT [kg]
				A	B	C	
EVF-F 118 LE-NP 90	A020841810005	1X18	90'	745	153	166	7.00
EVF-F 118 LE-NP 120	A020841810013	1X18	120'	745	153	166	8.00
EVF-F 136 LE-NP 90	A020843610015	1X36	90'	1342	153	166	9.00
EVF-F 136 LE-NP 120	A020843610027	1X36	120'	1342	153	166	10.00
EVF-F 136 LE-NP 180	A020843610028	1X36	180'	1342	153	166	10.50
EVF-F 158 LE-NP 90	A020845810013	1X58	90'	1642	153	166	10.00
EVF-F 158 LE-NP 120	A020845810027	1X58	120'	1642	153	166	11.00
EVF-F 158 LE-NP 180	A020845810028	1X58	180'	1642	153	166	11.50
EVF-F 118 LE-NP 90 - with Microswitch	A020841810006	1X18	90'	745	153	166	7.00
EVF-F 118 LE-NP 120 - with Microswitch	A020841810014	1X18	120'	745	153	166	8.00
EVF-F 136 LE-NP 90 - with Microswitch	A020843610014	1X36	90'	1342	153	166	9.00
EVF-F 136 LE-NP 120 - with Microswitch	A020843610029	1X36	120'	1342	153	166	10.00
EVF-F 136 LE-NP 180 - with Microswitch	A020843610030	1X36	180'	1342	153	166	10.50
EVF-F 158 LE-NP 90 - with Microswitch	A020845810014	1X58	90'	1642	153	166	10.00
EVF-F 158 LE-NP 120 - with Microswitch	A020845810029	1X58	120'	1642	153	166	11.00
EVF-F 158 LE-NP 180 - with Microswitch	A020845810030	1X58	180'	1642	153	166	11.50

FLUORESCENT LIGHTING

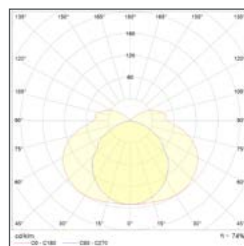
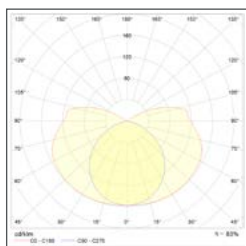
EVF2-PF/FF.. Series - Zone 2, 22 - Copper-free aluminum or GRP



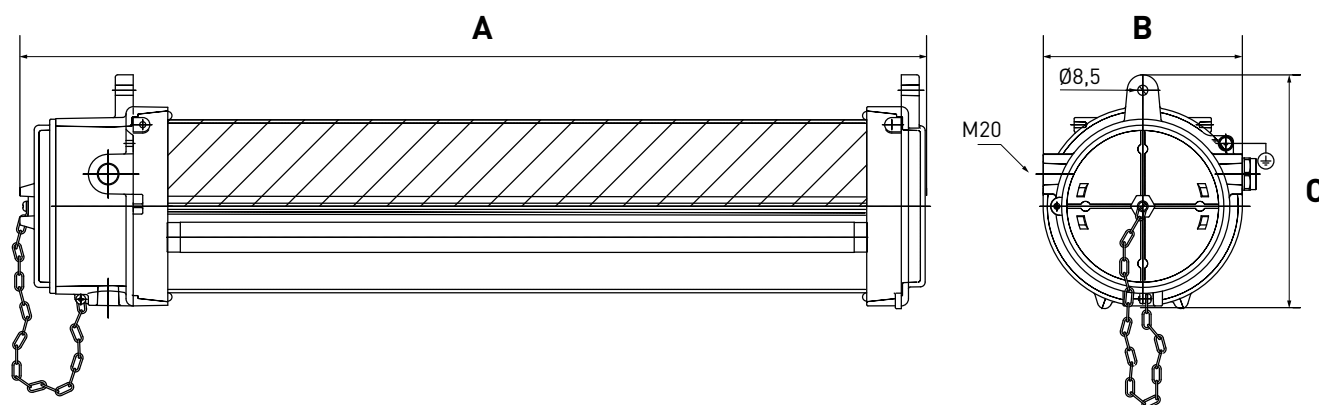
- Complete range of explosion-proof linear lighting fixtures available with single or double lamp and ideal for applications where a continuous row of lighting is needed to ensure a uniform illumination of production sites and machinery.
- End-cups made in copper-free aluminium or GRP.
- Three layers-extrusion lamp housing: Polycarbonate layer; Top side reflecting layer which protects inner electrical and electronic apparatus from direct sun heating/radiation effect; Filter layer which protects inner polycarbonate layer against UV radiation and related yellowing effect.
- Circular shape grants the best possible "CX" factor, therefore it is less affected by wind- dusts, pollution and dirty bunching.
- All lighting fixtures are supplied ready for LOOP IN-LOOP OUT facility with cable up to 4sqmm.

TECHNICAL FEATURES

Material	EVF2-FF = End-cups in GRP/Light housing in polycarbonate EVF2-PF = End-cups in copper-free aluminium/Light housing in polycarbonate
IP, IK rating	IP66/IK10 according to EN 62262:2002
Ambient temperature range	-20°C to + 55°C
Approval	FIDI 20 ATEX 0026X IECEX FIDI 20.0004X
Markings	II 3 G Ex ec IIC T4...T3 Gc (normal service) II 3 G Ex db ec IIC T4...T3 Gc (emerg. service)* II 3 G Ex db ec mb IIC T4...T3 Gc (emerg. service)** II 3 D Ex tc IIIC T85°C Dc *Microswitch upon request **Microswitch and pilot light upon request
Hardware and screws	AISI304 Stainless steel external hardware and screws
Surface treatment	EVF2-FF = Unpainted EVF2-PF = End-cups painted by polyurethane painting cycle - Blue RAL5014 (other colours on request)
Entries	EVF2-FF = N. 2 entries M20/M25 EVF2-PF = N. 2 entries M20 One plugged-off by Ex d brass nickel chrome plated plug and relevant gasket
Lamp & Power	1 or 2 pins fluorescent lamps x 18W, 26W, 58W
Power factor	> 0,95 cosΦ
Ballast	High frequency electronic ballast
Rated operational voltage	220-240 Vac (normal service) 230-240 Vac (emerg. service) Upon request: 110-277 Vac
Frequency	50-60 Hz
Accessories on request	AISI316L Pole mounting kit; AISI316L Ceiling/Wall mounting kit; AISI316L Suspension mounting kit; 3° bottom entry; Brass NiCr/AISI316L single seal cable gland for unarmoured cable c/w set of sealing rings, gasket, locknut; Brass NiCr/AISI316L double seal cable gland for armoured cable c/w set of sealing rings, gasket, locknut.
Photometric light curves	1 lamp 2 lamps



Dimensions EVF2-PF - Copper-free aluminium



EVF2-PF.. - Fluorescent lighting fixture for normal service - Copper-free aluminium

TYPE	CODE	POWER [W]	DIMENSIONS [mm]			WEIGHT [kg]
			A	B	C	
EVF2-PF 118	A021341830001	1X18	764	176	194	6.50
EVF2-PF 218	A021341830002	2X18	764	176	194	6.50
EVF2-PF 136	A021343630001	1X36	1374	176	194	8.50
EVF2-PF 236	A021343630002	2X36	1374	176	194	8.50
EVF2-PF 158	A021345830001	1X58	1680	176	194	9.50
EVF2-PF 258	A021345830002	2X58	1680	176	194	9.50

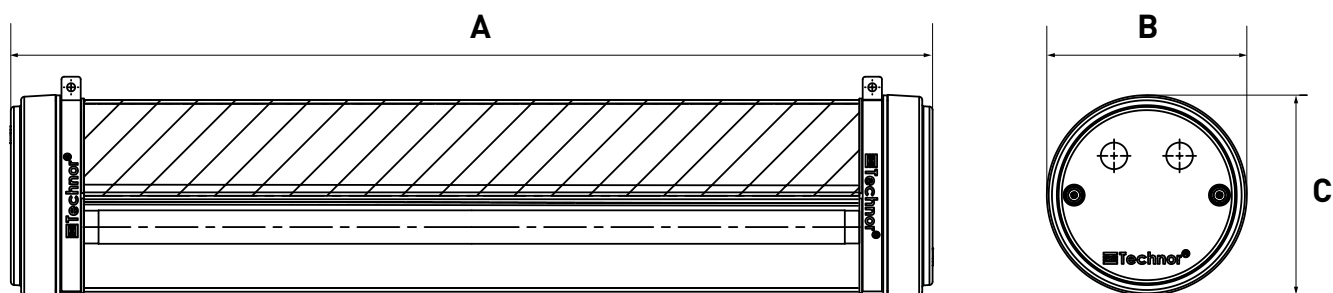
EVF2-PF.. - Fluorescent lighting fixture for emergency service - Copper-free aluminium

TYPE PERMANENT	CODE	POWER [W]	EMERGENCY DURATION	DIMENSIONS [mm]			WEIGHT [kg]
				A	B	C	
EVF2-PF 118 LE-P 90	A021341830003	1X18	90'	764	176	194	10.00
EVF2-PF 118 LE-P 120	A021341830005	1X18	120'	764	176	194	10.00
EVF2-PF 218 LE-P 90	A021341830004	2X18	90'	764	176	194	10.00
EVF2-PF 218 LE-P 120	A021341830006	2X18	120'	764	176	194	10.00
EVF2-PF 136 LE-P 90	A021343630003	1X36	90'	1374	176	194	11.00
EVF2-PF 136 LE-P 120	A021343630005	1X36	120'	1374	176	194	11.00
EVF2-PF 136 LE-P 180	A021343630007	1X36	180'	1374	176	194	11.00
EVF2-PF 236 LE-P 90	A021343630004	2X36	90'	1374	176	194	11.00
EVF2-PF 236 LE-P 120	A021343630006	2X36	120'	1374	176	194	11.00
EVF2-PF 236 LE-P 180	A021343630008	2X36	180'	1374	176	194	11.00
EVF2-PF 158 LE-P 90	A021345830003	1X58	90'	1680	176	194	12.00
EVF2-PF 158 LE-P 120	A021345830005	1X58	120'	1680	176	194	12.00
EVF2-PF 158 LE-P 180	A021345830007	1X58	180'	1680	176	194	12.00
EVF2-PF 258 LE-P 90	A021345830004	2X58	90'	1680	176	194	12.00
EVF2-PF 258 LE-P 120	A021345830006	2X58	120'	1680	176	194	12.00
EVF2-PF 258 LE-P 180	A021345830008	2X58	180'	1680	176	194	12.00

EVF2-PF.. - Fluorescent lighting fixture for emergency service - Copper-free aluminium

TYPE PERMANENT	CODE	POWER [W]	EMERGENCY DURATION	DIMENSIONS [mm]			WEIGHT [kg]
				A	B	C	
EVF2-PF 118 LE-NP 90	A021341830007	1X18	90'	764	176	194	10.00
EVF2-PF 118 LE-NP 120	A021341830008	1X18	120'	764	176	194	10.00
EVF2-PF 136 LE-NP 90	A021343630009	1X36	90'	1374	176	194	11.00
EVF2-PF 136 LE-NP 120	A021343630010	1X36	120'	1374	176	194	11.00
EVF2-PF 136 LE-NP 180	A021343630011	1X36	180'	1374	176	194	11.00
EVF2-PF 158 LE-NP 90	A021345830009	1X58	90'	1680	176	194	12.00
EVF2-PF 158 LE-NP 120	A021345830010	1X58	120'	1680	176	194	12.00
EVF2-PF 158 LE-NP 180	A021345830011	1X58	180'	1680	176	194	12.00

Dimensions EVF2-FF - GRP



EVF2-FF.. -Fluorescent lighting fixture for normal service -GRP

TYPE	CODE	POWER [W]	DIMENSIONS [mm]			WEIGHT [kg]
			A	B	C	
EVF2-FF 118	A021441830003	1X18	745	153	166	4.50
EVF2-FF 218	A021441830004	2X18	745	153	166	4.50
EVF2-FF 136	A021443630003	1X36	1342	153	166	6.50
EVF2-FF 236	A021443630004	2X36	1342	153	166	6.50
EVF2-FF 158	A021445830003	1X58	1642	153	166	8.50
EVF2-FF 258	A021445830004	2X58	1642	153	166	8.50

EVF2-FF.. - Fluorescent lighting fixture for emergency service - GRP

TYPE PERMANENT	CODE	POWER [W]	EMERGENCY DURATION	DIMENSIONS [mm]			WEIGHT [kg]
				A	B	C	
EVF2-FF 118 LE-P 90	A021641830001	1X18	90'	745	153	166	7.00
EVF2-FF 118 LE-P 120	A021641830003	1X18	120'	745	153	166	7.00
EVF2-FF 218 LE-P 90	A021641830002	2X18	90'	745	153	166	7.00
EVF2-FF 218 LE-P 120	A021641830004	2X18	120'	745	153	166	7.00
EVF2-FF 136 LE-P 90	A021643630001	1X36	90'	1342	153	166	9.00
EVF2-FF 136 LE-P 120	A021643630003	1X36	120'	1342	153	166	9.00
EVF2-FF 136 LE-P 180	A021643630005	1X36	180'	1342	153	166	9.00
EVF2-FF 236 LE-P 90	A021643630002	2X36	90'	1342	153	166	9.00
EVF2-FF 236 LE-P 120	A021643630004	2X36	120'	1342	153	166	9.00
EVF2-FF 236 LE-P 180	A021643630006	2X36	180'	1342	153	166	9.00
EVF2-FF 158 LE-P 90	A021645830001	1X58	90'	1642	153	166	10.00
EVF2-FF 158 LE-P 120	A021645830003	1X58	120'	1642	153	166	10.00
EVF2-FF 158 LE-P 180	A021645830005	1X58	180'	1642	153	166	10.00
EVF2-FF 258 LE-P 90	A021645830002	2X58	90'	1642	153	166	10.00
EVF2-FF 258 LE-P 120	A021645830004	2X58	120'	1642	153	166	10.00
EVF2-FF 258 LE-P 180	A021645830005	2X58	180'	1642	153	166	10.00

EVF2-FF.. - Fluorescent lighting fixture for emergency service - GRP

TYPE - NON PERMANENT	CODE	POWER [W]	EMERGENCY DURATION	DIMENSIONS [mm]			WEIGHT [kg]
				A	B	C	
EVF2-FF 118 LE-NP 90	A021641830005	1X18	90'	745	153	166	7.00
EVF2-FF 118 LE-NP 120	A021641830006	1X18	120'	745	153	166	7.00
EVF2-FF 136 LE-NP 90	A021643630007	1X36	90'	1342	153	166	9.00
EVF2-FF 136 LE-NP 120	A021643630008	1X36	120'	1342	153	166	9.00
EVF2-FF 136 LE-NP 180	A021643630009	1X36	180'	1342	153	166	9.00
EVF2-FF 158 LE-NP 90	A021645830006	1X58	90'	1642	153	166	10.00
EVF2-FF 158 LE-NP 120	A021645830007	1X58	120'	1642	153	166	10.00
EVF2-FF 158 LE-NP 180	A021645830008	1X58	180'	1642	153	166	10.00

Note: EVF2-FF Series (normal service, emergency service - permanent & non-permanent) is available also for weatherproof application. Contact our sales dept. for more information.



FLUORESCENT LIGHTING

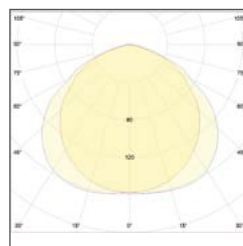
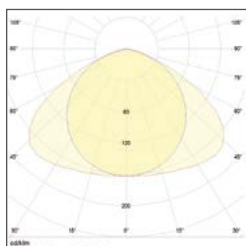
RMS-560.. Series - Zones 1, 2, 21 & 22 - Stainless steel AISI 304



- RMS.. series lighting fixtures are suitable for ON and OFF-SHORE applications
- Both body and glass frame are made of AISI304 stainless steel and manufactured from a single sheet of steel with no invasive mounting holes, to minimize the risk of water ingress through the housing
- Design has been studied to allow operator working with free hands and no need to support any part of lighting fixture. One person can take care of start-up or maintenance without any aid and assistance
- RMS-560 Series is available also with Microswitch in order to facilitate maintenance operations
- Due to inorganic materials like stainless steel and glass, RMS.. series lighting fixtures are 95% recyclable.

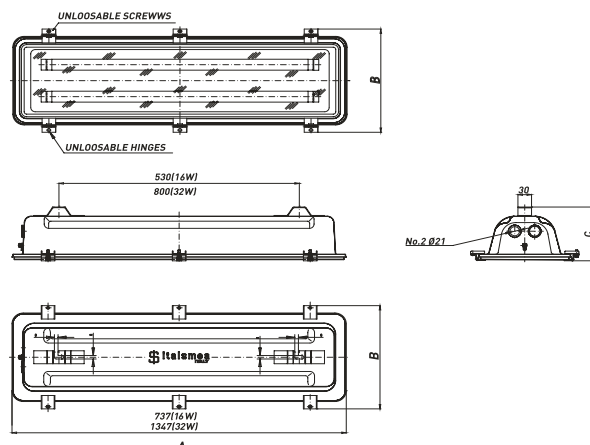
TECHNICAL FEATURES

Material	AISI304 stainless steel, 0,8mm thickness and transparent part in tempered glass	
IP rating	IP65	
Ambient temperature range	-20°C to +60°C	
Approvals	ATEX: 01ATEX0060 EAC: RU C-IT.BH02.B.00616/20 (Not available for versions with Microswitch)	
Marking	II 2 G Ex de IIC T6/T5/T4	T6 up to +40°C; T5 up to +55°C
	II 2 D Ex tD A21 T85°C/T100°C/T135°C	T85°C up to +40°C; T100°C up to +55°C
Gaskets	Special cross-section tightness gasket, silicon rubber made (closed cell), located in housing channel between body and window frame.	
Entries	Body complete of two 21mm Ø through holes (on one side) for cable entry, one complete of metallic plug with M20 locknut and gasket and the other one with temporary plastic plug to prevent dust ingress.	
Included accessories	AISI304 Stainless steel external hardware and screws	
Lamps	RMS series lighting fixtures are suitable for two pins fluorescent lamps G13 socket Philips TL-D or equivalent (lamps excluded)	
Ballast	High frequency electronic ballast conforming with EN 60079 – 1 and IEC 60079 – 1	
Rated operation voltage (UE)	220-240 V	
Frequency	50-60 Hz	
Power factor	> 0,98Cos Ø	
Optional accessories	Pole mounting kit/Ceiling mounting kit/Suspension mounting kit/Wall mounting kit 3°- 4° through holes opposite side	
Emergency unit:	18W: 36W:	
Operating time	90' at 19% of flux	90' at 17% of flux
	120' at 12% of flux	120' at 10% of flux
Photometric light curves	1 lamp	2 lamps

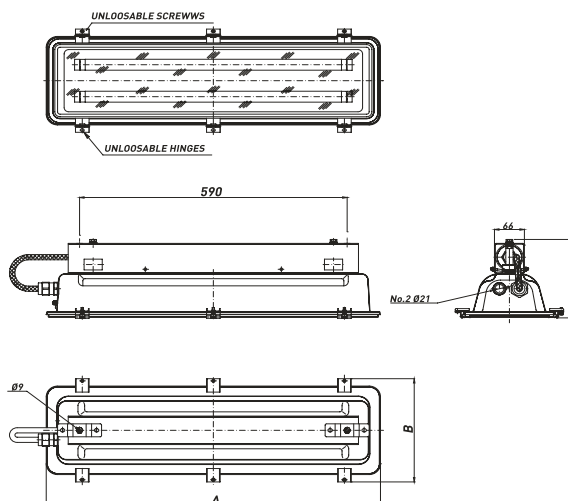


Dimensions RMS-560

RMS-560 NORMAL SERVICE



RMS-560 EMERGENCY



RMS-560 - Lighting fixtures for normal service

TYPE	CODE	POWER [W]	TEMP. CLASS	AMBIENT TEMPERATURE	DIMENSIONS [mm]			WEIGHT [kg]
					A	B	C	
RMS-560-03/PNL	A020141810003	1X18	T4 - T135°C	-20°C/+60 °C**	737	239	124	5,50
RMS-560-04/PNL	A020141810002	2X18	T4 - T135°C	-20°C/+60 °C**	737	239	124	5,50
RMS-560-01/PNL	A020143610001	1X36	T4 - T135°C	-20°C/+60 °C**	1347	239	124	10,50
RMS-560-02/PNL	A020143610003	2X36	T4 - T135°C	-20°C/+60 °C**	1347	239	124	10,50
RMS-560-03/PNL - MS*	A020141810005	1X18	T4 - T135°C	-20°C/+60 °C**	737	239	124	5,50
RMS-560-04/PNL - MS*	A020141810004	2X18	T4 - T135°C	-20°C/+60 °C**	737	239	124	5,50
RMS-560-01/PNL - MS*	A020143610002	1X36	T4 - T135°C	-20°C/+60 °C**	1347	239	124	10,50
RMS-560-02/PNL - MS*	A020143610004	2X36	T4 - T135°C	-20°C/+60 °C**	1347	239	124	10,50

RMS-560 - Lighting fixtures for emergency permanent service

TYPE - PERMANENT	CODE	POWER [W]	TEMP. CLASS	AMBIENT TEMPERATURE	EMERGENCY DURATION	DIMENSIONS [mm]			WEIGHT [kg]
						A	B	C	
RMS-560-03/PNL LE-P 90	A020241810001	1X18	T4 - T135°C	-20°C/+60 °C**	90' - 19% of flux	737	239	124	9.50
RMS-560-03/PNL LE-P 120	A020241810004	1X18	T4 - T135°C	-20°C/+60 °C**	120' - 12% of flux	737	239	124	10.50
RMS-560-04/PNL LE-P 90	A020241810002	2X18	T4 - T135°C	-20°C/+60 °C**	90' - 19% of flux	737	239	124	9.50
RMS-560-04/PNL LE-P 120	A020241810005	2X18	T4 - T135°C	-20°C/+60 °C**	120' - 12% of flux	737	239	124	10.50
RMS-560-01/PNL LE-P 90	A020243610001	1X36	T4 - T135°C	-20°C/+60 °C**	90' - 17% of flux	1347	239	124	14.00
RMS-560-01/PNL LE-P 120	A020243610004	1X36	T4 - T135°C	-20°C/+60 °C**	120' - 10% of flux	1347	239	124	15.00
RMS-560-02/PNL LE-P 90	A020243610002	2X36	T4 - T135°C	-20°C/+60 °C**	90' - 17% of flux	1347	239	124	14.00
RMS-560-02/PNL LE-P 120	A020243610003	2X36	T4 - T135°C	-20°C/+60 °C**	120' - 10% of flux	1347	239	124	15.00
RMS-560-03/PNL LE-P 90 - MS*	A020241810008	1X18	T4 - T135°C	-20°C/+60 °C**	90' - 19% of flux	737	239	124	9.50
RMS-560-03/PNL LE-P 120 - MS*	A020241810003	1X18	T4 - T135°C	-20°C/+60 °C**	120' - 12% of flux	737	239	124	10.50
RMS-560-04/PNL LE-P 90 - MS*	A020241810009	2X18	T4 - T135°C	-20°C/+60 °C**	90' - 19% of flux	737	239	124	9.50
RMS-560-04/PNL LE-P 120 - MS*	A020241810010	2X18	T4 - T135°C	-20°C/+60 °C**	120' - 12% of flux	737	239	124	10.50
RMS-560-01/PNL LE-P 90 - MS*	A020243610007	1X36	T4 - T135°C	-20°C/+60 °C**	90' - 17% of flux	1347	239	124	14.00
RMS-560-01/PNL LE-P 120 - MS*	A020243610008	1X36	T4 - T135°C	-20°C/+60 °C**	120' - 10% of flux	1347	239	124	15.00
RMS-560-02/PNL LE-P 90 - MS*	A020243610009	2X36	T4 - T135°C	-20°C/+60 °C**	90' - 17% of flux	1347	239	124	14.00
RMS-560-02/PNL LE-P 120 - MS*	A020243610010	2X36	T4 - T135°C	-20°C/+60 °C**	120' - 10% of flux	1347	239	124	15.00

RMS-560 - Lighting fixtures for emergency non-permanent service

TYPE - NON-PERMANENT	CODE	POWER [W]	TEMP. CLASS	AMBIENT TEMPERATURE	EMERGENCY DURATION	DIMENSIONS [mm]			WEIGHT [kg]
						A	B	C	
RMS-560-03/PNL LE-NP 90	A020241810006	1X18	T4 - T135°C	-20°C/+60 °C**	90' - 19% of flux	737	239	124	9.50
RMS-560-03/PNL LE-NP 120	A020241810007	1X18	T4 - T135°C	-20°C/+60 °C**	120' - 12% of flux	737	239	124	10.50
RMS-560-01/PNL LE-NP 90	A020243610005	1X36	T4 - T135°C	-20°C/+60 °C**	90' - 17% of flux	1347	239	124	14.00
RMS-560-01/PNL LE-NP 120	A020243610006	1X36	T4 - T135°C	-20°C/+60 °C**	120' - 10% of flux	1347	239	124	15.00
RMS-560-03/PNL LE-NP 90 - MS*	A020241810011	1X18	T4 - T135°C	-20°C/+60 °C**	90' - 19% of flux	737	239	124	9.50
RMS-560-03/PNL LE-NP 120 - MS*	A020241810012	1X18	T4 - T135°C	-20°C/+60 °C**	120' - 12% of flux	737	239	124	10.50
RMS-560-01/PNL LE-NP 90 - MS*	A020243610011	1X36	T4 - T135°C	-20°C/+60 °C**	90' - 17% of flux	1347	239	124	14.00
RMS-560-01/PNL LE-NP 120 - MS*	A020243610012	1X36	T4 - T135°C	-20°C/+60 °C**	120' - 10% of flux	1347	239	124	15.00

*With Microswitch

** In case of max. amb. temp. reaches +40°C, Tclass T6/T85°C - In case of max. amb. temp. reaches +55°C, Tclass T5/T100°C

FLUORESCENT LIGHTING

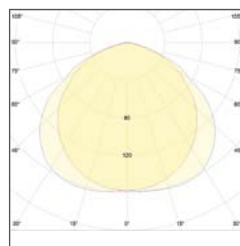
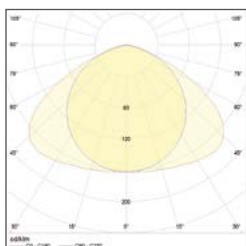
RMS-550.. Series - Zones 2 & 22 - Stainless steel AISI 304



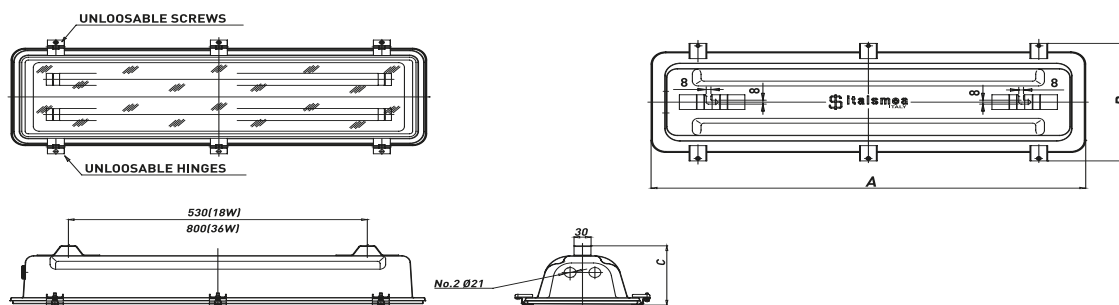
- RMS.. series lighting fixtures are suitable for ON and OFF-SHORE applications
- Both body and glass frame are made of AISI304 stainless steel and manufactured from a single sheet of steel with no invasive mounting holes, to minimize the risk of water ingress through the housing
- Design has been studied to allow operator working with free hands and no need to support any part of lighting fixture. One person can take care of start-up or maintenance without any aid and assistance
- RMS-550 Series is available also with Microswitch in order to facilitate maintenance operations
- Due to inorganic materials like stainless steel and glass, RMS.. series lighting fixtures are 95% recyclable.

TECHNICAL FEATURES

Material	AISI304 stainless steel, 0,8mm thickness and transparent part in tempered glass	
IP rating	IP65	
Ambient temperature range	-30°C to +60°C	
Approvals	ATEX: 01ATEX3002X EAC: RU C-IT.BH02.B.00616/20 (Not available for versions with Microswitch)	
Marking	II 3 G Ex nA II T5/T4 II 3 D Ex tD A22 T90°C/T100°C/T105°C	T5 up to +50°C T90°C up to +40°C; T100°C up to +50°C
Gaskets	Special cross-section tightness gasket, silicon rubber made (closed cell), located in housing channel between body and window frame.	
Entries	Body complete of two 21mm Ø through holes (on one side) for cable entry, one complete of metallic plug with M20 locknut and gasket and the other one with temporary plastic plug to prevent dust ingress.	
Included accessories	AISI304 Stainless steel external hardware and screws	
Lamps	RMS series lighting fixtures are suitable for two pins fluorescent lamps G13 socket Philips TL-D or equivalent (lamps excluded)	
Ballast	High frequency electronic ballast conforming with EN 60079 – 15 and IEC 60079 – 15	
Rated operation voltage (UE)	220-240 V	
Frequency	50-60 Hz	
Power factor	> 0,98Cos Ø	
Optional accessories	Pole mounting kit/Ceiling mounting kit/Suspension mounting kit/Wall mounting kit 3°- 4° through holes opposite side	
Emergency unit:	18W:	36W:
Operating time	90' at 19% of flux 120' at 12% of flux	90' at 17% of flux 120' at 10% of flux 180' at 11% of flux
Photometric light curves	1 lamp	2 lamps



Dimensions RMS-550



RMS-550 - Lighting fixtures for normal service

TYPE	CODE	POWER [W]	TEMP. CLASS	AMBIENT TEMPERATURE	DIMENSIONS [mm]			WEIGHT [kg]
					A	B	C	
RMS-550-03/PNL	A020341810002	1X18	T4 - T105°C	-30 °C; +60 °C**	737	239	124	5,50
RMS-550-04/PNL	A020341810001	2X18	T4 - T105°C	-30 °C; +60 °C**	737	239	124	5,50
RMS-550-01/PNL	A020343610001	1X36	T4 - T105°C	-30 °C; +60 °C**	1347	239	124	10,50
RMS-550-02/PNL	A020343610002	2X36	T4 - T105°C	-30 °C; +60 °C**	1347	239	124	10,50
RMS-550-03/PNL - MS*	A020341810003	1X18	T4 - T105°C	-30 °C; +60 °C**	737	239	124	5,50
RMS-550-04/PNL - MS*	A020341810004	2X18	T4 - T105°C	-30 °C; +60 °C**	737	239	124	5,50
RMS-550-01/PNL - MS*	A020343610003	1X36	T4 - T105°C	-30 °C; +60 °C**	1347	239	124	10,50
RMS-550-02/PNL - MS*	A020343610004	2X36	T4 - T105°C	-30 °C; +60 °C**	1347	239	124	10,50

RMS-550 - Lighting fixtures for emergency permanent service

TYPE - PERMANENT	CODE	POWER [W]	TEMP. CLASS	AMBIENT TEMPERATURE	EMERGENCY DURATION	DIMENSIONS [mm]			WEIGHT [kg]
						A	B	C	
RMS-550-03/PNL LE-P 90	A020441810001	1X18	T4 - T105°C	-30 °C; +60 °C**	90' - 19% of flux	737	239	124	9.50
RMS-550-03/PNL LE-P 120	A020441810003	1X18	T4 - T105°C	-30 °C; +60 °C**	120' - 12% of flux	737	239	124	10.50
RMS-550-04/PNL LE-P 90	A020441810002	2X18	T4 - T105°C	-30 °C; +60 °C**	90' - 19% of flux	737	239	124	9.50
RMS-550-04/PNL LE-P 120	A020441810004	2X18	T4 - T105°C	-30 °C; +60 °C**	120' - 12% of flux	737	239	124	10.50
RMS-550-01/PNL LE-P 90	A020443610001	1X36	T4 - T105°C	-30 °C; +60 °C**	90' - 17% of flux	1347	239	124	14.00
RMS-550-01/PNL LE-P 120	A020443610003	1X36	T4 - T105°C	-30 °C; +60 °C**	120' - 10% of flux	1347	239	124	15.00
RMS-550-01/PNL LE-P 180	A020443610004	1X36	T4 - T105°C	-30 °C; +60 °C**	180' - 11% of flux	1347	239	124	16.00
RMS-550-02/PNL LE-P 90	A020443610002	2X36	T4 - T105°C	-30 °C; +60 °C**	90' - 17% of flux	1347	239	124	14.00
RMS-550-02/PNL LE-P 120	A020443610005	2X36	T4 - T105°C	-30 °C; +60 °C**	120' - 10% of flux	1347	239	123	15.00
RMS-550-02/PNL LE-P 180	A020443610006	2X36	T4 - T105°C	-30 °C; +60 °C**	180' - 11% of flux	1347	239	123	16.00
RMS-550-03/PNL LE-P 90 - MS*	A020441810007	1X18	T4 - T105°C	-30 °C; +60 °C**	90' - 19% of flux	737	239	124	9.50
RMS-550-03/PNL LE-P 120 - MS*	A020441810008	1X18	T4 - T105°C	-30 °C; +60 °C**	120' - 12% of flux	737	239	124	10.50
RMS-550-04/PNL LE-P 90 - MS*	A020441810009	2X18	T4 - T105°C	-30 °C; +60 °C**	90' - 19% of flux	737	239	124	9.50
RMS-550-04/PNL LE-P 120 - MS*	A020441810010	2X18	T4 - T105°C	-30 °C; +60 °C**	120' - 12% of flux	737	239	124	10.50
RMS-550-01/PNL LE-P 90 - MS*	A020443610010	1X36	T4 - T105°C	-30 °C; +60 °C**	90' - 17% of flux	1347	239	124	14.00
RMS-550-01/PNL LE-P 120 - MS*	A020443610011	1X36	T4 - T105°C	-30 °C; +60 °C**	120' - 10% of flux	1347	239	124	15.00
RMS-550-01/PNL LE-P 180 - MS*	A020443610012	1X36	T4 - T105°C	-30 °C; +60 °C**	180' - 11% of flux	1347	239	124	16.00
RMS-550-02/PNL LE-P 90 - MS*	A020443610013	2X36	T4 - T105°C	-30 °C; +60 °C**	90' - 17% of flux	1347	239	124	14.00
RMS-550-02/PNL LE-P 120 - MS*	A020443610014	2X36	T4 - T105°C	-30 °C; +60 °C**	120' - 10% of flux	1347	239	124	15.00
RMS-550-02/PNL LE-P 180 - MS*	A020443610015	2X36	T4 - T105°C	-30 °C; +60 °C**	180' - 11% of flux	1347	239	124	16.00

RMS-550 - Lighting fixtures for emergency non-permanent service

TYPE - NON PERMANENT	CODE	POWER [W]	TEMP. CLASS	AMBIENT TEMPERATURE	EMERGENCY DURATION	DIMENSIONS [mm]			WEIGHT [kg]
						A	B	C	
RMS-550-03/PNL LE-NP 90	A020441810005	1X18	T4 - T105°C	-30 °C; +60 °C**	90' - 19% of flux	737	239	124	9.50
RMS-550-03/PNL LE-NP 120	A020441810006	1X18	T4 - T105°C	-30 °C; +60 °C**	120' - 12% of flux	737	239	124	10.50
RMS-550-01/PNL LE-NP 90	A020443610007	1X36	T4 - T105°C	-30 °C; +60 °C**	90' - 17% of flux	1347	239	124	14.00
RMS-550-01/PNL LE-NP 120	A020443610008	1X36	T4 - T105°C	-30 °C; +60 °C**	120' - 10% of flux	1347	239	124	15.00
RMS-550-01/PNL LE-NP 180	A020443610009	1X36	T4 - T105°C	-30 °C; +60 °C**	180' - 11% of flux	1347	239	124	16.00
RMS-550-03/PNL LE-NP 90 - MS*	A020441810011	1X18	T4 - T105°C	-30 °C; +60 °C**	90' - 19% of flux	737	239	124	9.50
RMS-550-03/PNL LE-NP 120 - MS*	A020441810012	1X18	T4 - T105°C	-30 °C; +60 °C**	120' - 12% of flux	737	239	124	10.50
RMS-550-01/PNL LE-NP 90 - MS*	A020443610016	1X36	T4 - T105°C	-30 °C; +60 °C**	90' - 17% of flux	1347	239	124	14.00
RMS-550-01/PNL LE-NP 120 - MS*	A020443610017	1X36	T4 - T105°C	-30 °C; +60 °C**	120' - 10% of flux	1347	239	124	15.00
RMS-550-01/PNL LE-NP 180 - MS*	A020443610018	1X36	T4 - T105°C	-30 °C; +60 °C**	180' - 11% of flux	1347	239	124	16.00

*With Microswitch

** In case of max. amb. temp. reaches +50°C, Tclass T5/T100°C - In case of max. amb. temp. reaches +40°C, Tclass T5/T90°C

FLUORESCENT LIGHTING

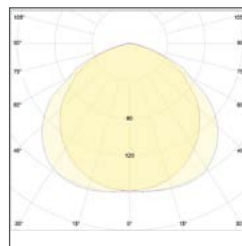
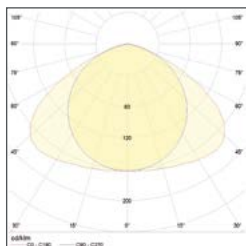
RMS-540.. Series - Safe area - Stainless steel AISI 304



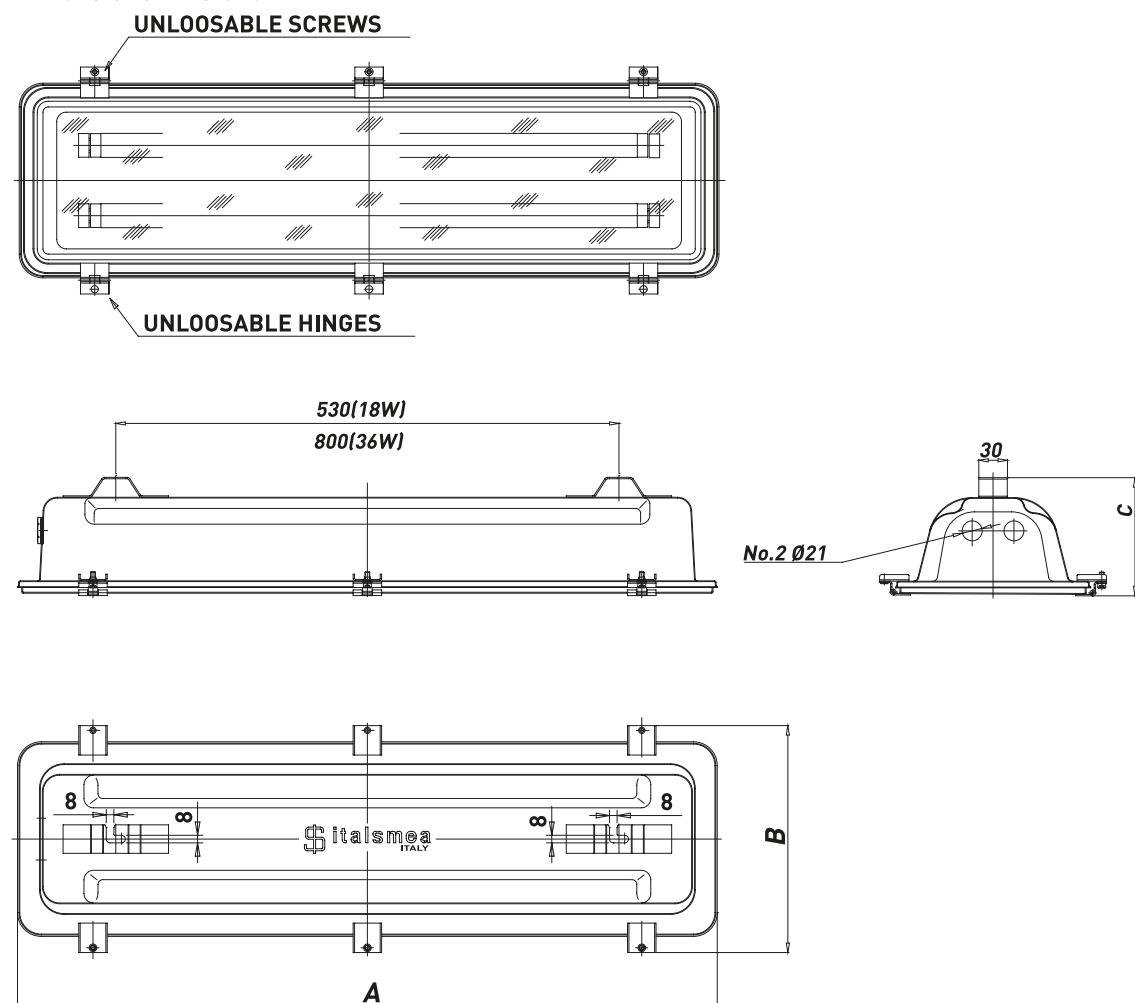
- RMS.. series lighting fixtures are suitable for ON and OFF-SHORE applications
- Both body and glass frame are made of AISI304 stainless steel and manufactured from a single sheet of steel with no invasive mounting holes, to minimize the risk of water ingress through the housing
- Design has been studied to allow operator working with free hands and no need to support any part of lighting fixture. One person can take care of start-up or maintenance without any aid and assistance
- Due to inorganic materials like stainless steel and glass, RMS.. series lighting fixtures are 95% recyclable.

TECHNICAL FEATURES

Material	AISI304 stainless steel, 0,8mm thickness and transparent part in tempered glass	
IP rating	IP65	
Ambient temperature range	-20°C to +60°C	
Standards	Compliance with Electromagnetic Compatibility (EMC) according to European Directive 2004/108/CE	
Gaskets	Special cross-section tightness gasket, silicon rubber made (closed cell), located in housing channel between body and window frame.	
Entries	Body complete of two 21mm Ø through holes (on one side) for cable entry, one complete of metallic plug with M20 locknut and gasket and the other one with temporary plastic plug to prevent dust ingress.	
Included accessories	AISI304 Stainless steel external hardware and screws	
Lamps	RMS series lighting fixtures are suitable for two pins fluorescent lamps G13 socket Philips TL-D or equivalent (lamps excluded)	
Ballast	Electromechanical ballast with starter and capacitor	
Rated operation voltage (UE)	230 V	
Frequency	50 Hz	
Optional accessories	Wiring with High frequency electronic ballast (220-240 V 50-60 Hz)/Pole mounting kit/Ceiling mounting kit/Suspension mounting kit/Wall mounting kit/3°- 4° through holes opposite side	
Emergency unit:	18W:	36W:
Operating time	90' at 19% of flux	90' at 17% of flux
	120' at 12% of flux	120' at 10% of flux
		180' at 11% of flux
Photometric light curves	1 lamp	2 lamps



Dimensions RMS 540



RMS-540 - Lighting fixtures for normal service

TYPE	CODE	POWER [W]	DIMENSIONS [mm]			WEIGHT [kg]
			A	B	C	
RMS 540-03/PNL	A028141820001	1X18	737	239	124	5,50
RMS-540-04/PNL	A028141820002	2X18	737	239	124	5,50
RMS-540-01/PNL	A028143620002	1X36	1347	239	124	10,50
RMS-540-02/PNL	A028143620001	2X36	1347	239	124	10,50

RMS-540 - Lighting fixtures for emergency permanent service

TYPE - PERMANENT	CODE	POWER [W]	AMBIENT TEMPERATURE	EMERGENCY DURATION	DIMENSIONS [mm]			WEIGHT [kg]
					A	B	C	
RMS 540-03/PNL LE-P 90	A028241820002	1X18	-20 °C; +60 °C	90' - 19% of flux	737	239	124	9.50
RMS 540-03/PNL LE-P 120	A028241820003	1X18	-20 °C; +60 °C	120' - 12% of flux	737	239	124	10.50
RMS 540-04/PNL LE-P 90	A028241820001	2X18	-20 °C; +60 °C	90' - 19% of flux	737	239	124	9.50
RMS 540-04/PNL LE-P 120	A028241820004	2X18	-20 °C; +60 °C	120' - 12% of flux	737	239	124	10.50
RMS 540-01/PNL LE-P 90	A028243620001	1X36	-20 °C; +60 °C	90' - 17% of flux	1347	239	124	14.00
RMS 540-01/PNL LE-P 120	A028243620003	1X36	-20 °C; +60 °C	120' - 10% of flux	1347	239	124	15.00
RMS 540-01/PNL LE-P 180	A028243620004	1X36	-20 °C; +60 °C	180' - 11% of flux	1347	239	124	16.00
RMS 540-02/PNL LE-P 90	A028243620002	2X36	-20 °C; +60 °C	90' - 17% of flux	1347	239	124	14.00
RMS 540-02/PNL LE-P 120	A028243620005	2X36	-20 °C; +60 °C	120' - 10% of flux	1347	239	124	15.00
RMS 540-02/PNL LE-P 180	A028243620006	2X36	-20 °C; +60 °C	180' - 11% of flux	1347	239	124	16.00

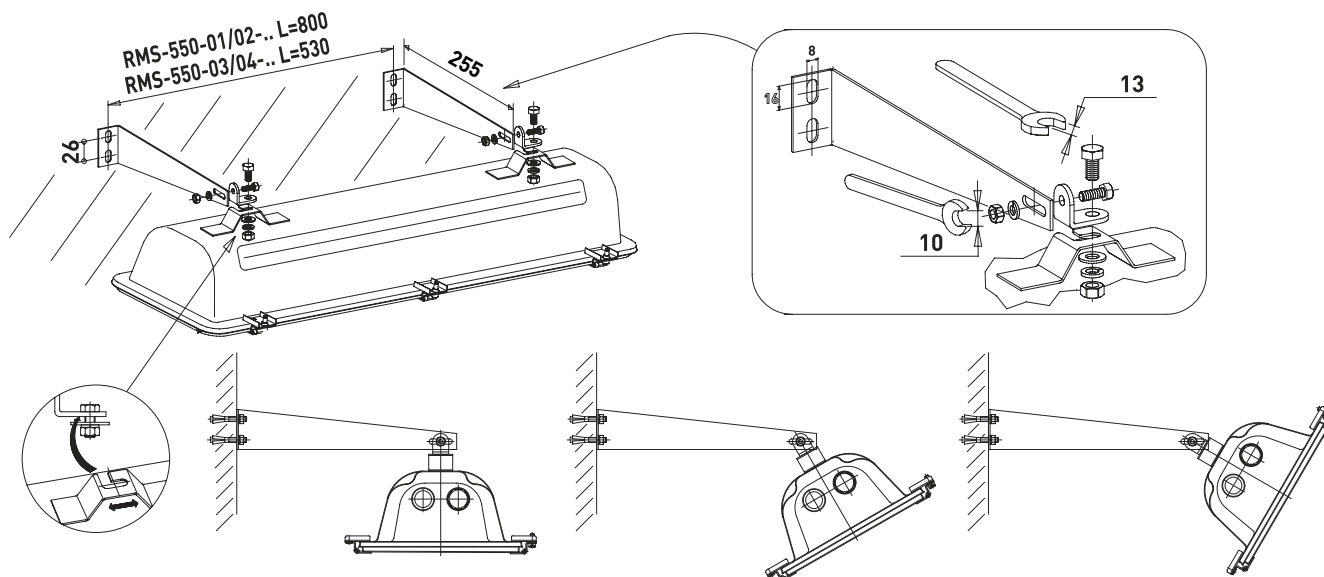
RMS-540 - Lighting fixtures for emergency non-permanent service

TYPE - NON PERMANENT	CODE	POWER [W]	AMBIENT TEMPERATURE	EMERGENCY DURATION	DIMENSIONS [mm]			WEIGHT [kg]
					A	B	C	
RMS 540-03/PNL LE-NP 90	A028241820005	1X18	-20 °C; +60 °C	90' - 19% of flux	737	239	124	9.50
RMS 540-03/PNL LE-NP 120	A028241820006	1X18	-20 °C; +60 °C	120' - 12% of flux	737	239	124	10.50
RMS 540-01/PNL LE-NP 90	A028243620007	1X36	-20 °C; +60 °C	90' - 17% of flux	1347	239	124	14.00
RMS 540-01/PNL LE-NP 120	A028243620008	1X36	-20 °C; +60 °C	120' - 10% of flux	1347	239	124	15.00
RMS 540-01/PNL LE-NP 180	A028243620009	1X36	-20 °C; +60 °C	180' - 11% of flux	1347	239	124	16.00

SPARES & ACCESSORIES

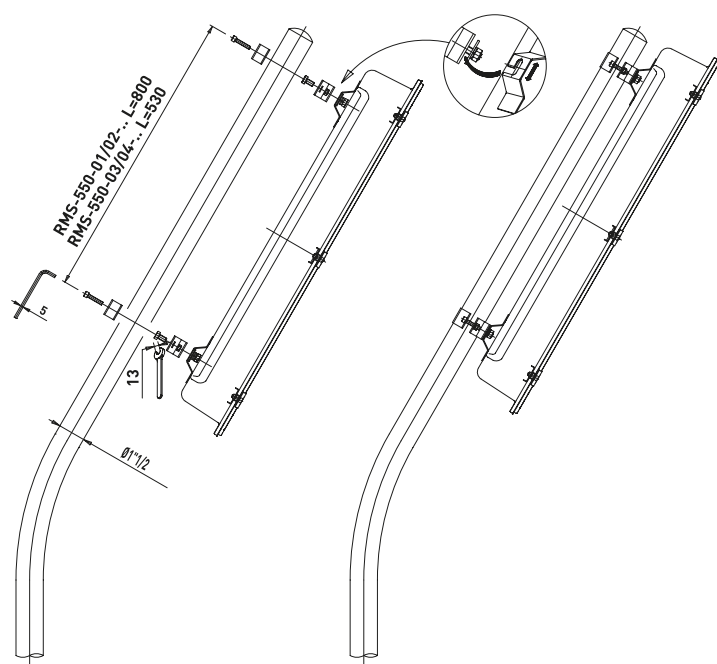
CODE	TYPE
A601102010003	1"1/2 POLE MOUNTING KIT P12 AISI316L
A601102010004	WALL MOUNTING KIT H1 AISI316
A601102010010	SUSPENSION MOUNTING KIT G1 AISI316

H1 - Wall mounting kit

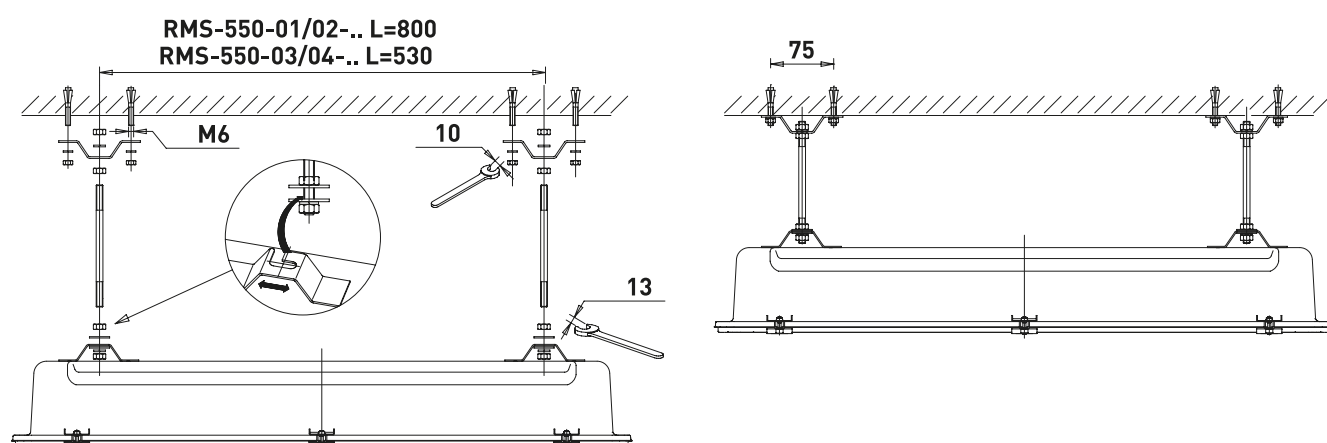


Note: Expansion bolts (for concrete) or bolts (for steel frame) are not included in our kit.

P12 - Pole mounting kit

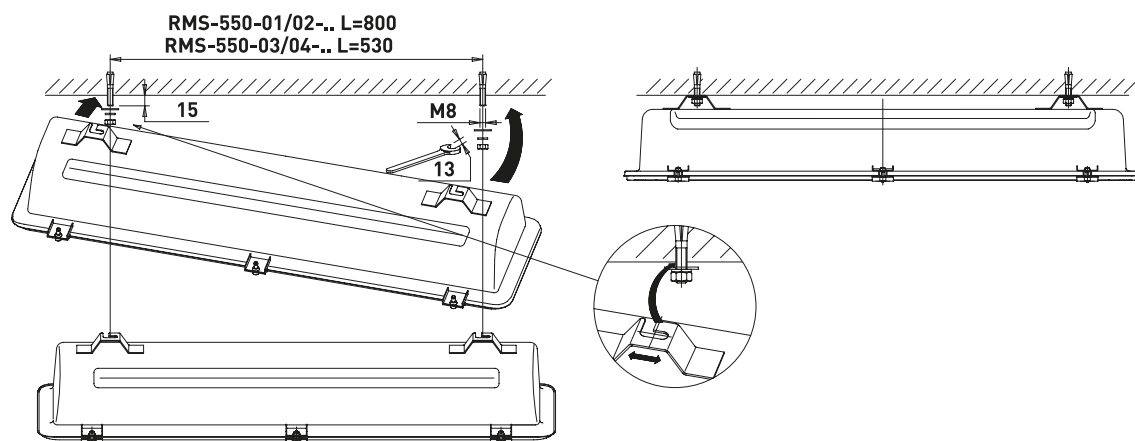


G1 - Suspension mounting kit



Note: Expansion bolts (for concrete) or bolts (for steel frame) are not included in our kit.

Ceiling mounting (STANDARD VERSION)



Note: Expansion bolts (for concrete) or bolts (for steel frame) are not included in our kit.

FLUORESCENT LIGHTING

G2X Series - Zones 2 & 22



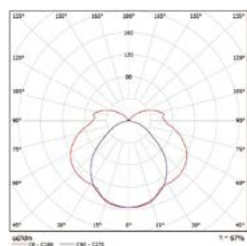
Luminaires G2X are suited for hazardous areas of industrial plants and space included in Zone 2 and 22.

The advantages of this luminaires series:

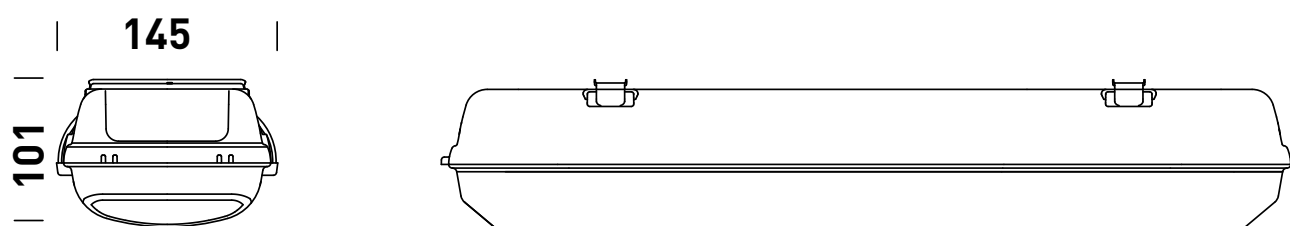
- Solid & compact structure
- Simple , easy and quick installation
- Possibility to suspend the lens hinge when replacing fluorescent lamps
- High resistance to corrosive industrial environment
- High luminous efficiency
- Quality ignition systems
- UV resistant
- Easy maintenance
- Transparent diffuser in PC with UV protection.

TECHNICAL FEATURES

Material	GRP + 2 gear tray holders in white lacquered steel plate Transparent diffuser in PC with UV protection and high impact resistance
IP/IK rating	IP66/IK08
Ambient temperature range	-20°C to +40°C
Approvals	ATEX: TNI 20ATEX0014 X - IECEx: OBAC18.0004X
Marking	II 3G Ex nA IIC T6 Gc II 3D Ex tc IIIC T85°C Dc IP66
Standards	EN 60079-0, EN 60079-15, EN 60079-31
Zones	Zone 2 , 22
Gaskets	Gasket in polyurethane
Entries	N° 1 passing entry M20
Included accessories	Fixing springs and closing clips in stainless steel
Lamps	T8 lamps , with power 18W , 36W, 58W T5, with power 14W
Ballast	Electronic
Rated operation voltage (UE)	230 V AC/DC (normal service); 230 V AC (emergency service); 110 V according to execution
Frequency	50-60Hz in AC
Accessories upon request	Polyamide ATEX cable gland M20x1,5
Maximum number of terminals	3x2,5mm ²
Colour	GRP housing in graphite (RAL 7035)
Options	Emergency kit 1h or 3h, Black GRP housing RAL9011, Yellow GRP housing RAL1003
Photometric light curves	



Dimensions G2X FLUO



G2X - Lighting fixtures for normal service

TYPE	CODE	POWER [W]	DIMENSIONS [MM]	WEIGHT [kg]	POWER SUPPLY
G2X-2-114	A021441400001	1X14W	665 X 145 X 101	1.80	230 V AC/DC
G2X-214	A021441400002	2X14W	665 X 145 X 101	1.80	
G2X-2-118	A021441800001	1X18W	665 X 145 X 101	3.30	
G2X-218	A021441800002	2X18W	665 X 145 X 101	3.30	
G2X-2-136	A021443600001	1X36W	1282 X 145 X 101	3.80	
G2X-236	A021443600002	2X36W	1282 X 145 X 101	3.80	
G2X-2-158	A021445800001	1X58W	1578 X 145 X 101	5.00	
G2X-258	A021445800002	1X58W	1578 X 145 X 101	5.00	

G2X - Lighting fixtures for emergency service

TYPE - PERMANENT	CODE	POWER [W]	EMERGENCY DURATION	DIMENSIONS [MM]	WEIGHT [kg]	POWER SUPPLY
G2X-214 LE-P 60	A021441400003	2X14W	60'	665 X 145 X 101	2.60	230 V AC
G2X-214 LE-P 180	A021441400004	2X14W	180'	665 X 145 X 101	2.60	
G2X-218 LE-P 60	A021441800003	2X18W	60'	665 X 145 X 101	2.60	
G2X-218 LE-P 180	A021541800001	2X18W	180'	665 X 145 X 101	2.60	
G2X-136 LE-P 60	A021443600004	1X36W	60'	1282 X 145 X 101	3.70	
G2X-136 LE-P 180	A021543600003	1X36W	180'	1282 X 145 X 101	3.70	
G2X-236 LE-P 60	A021543600001	2X36W	60'	1282 X 145 X 101	3.70	
G2X-236 LE-P 180	A021543600002	2X36W	180'	1282 X 145 X 101	3.70	
G2X-258 LE-P 60	A021545800001	2X58W	60'	1578 X 145 X 101	4.80	
G2X-258 LE-P 180	A021545800002	2X58W	180'	1578 X 145 X 101	4.80	

Note: G2X Series (normal service, emergency service) is available also for weatherproof application. Contact our sales dept. for more information.

CONVENTIONAL LIGHTING FIXTURES - WELLGLASS

EV.. Series - H.I.D./Fluorescent compact - Copper-free aluminium

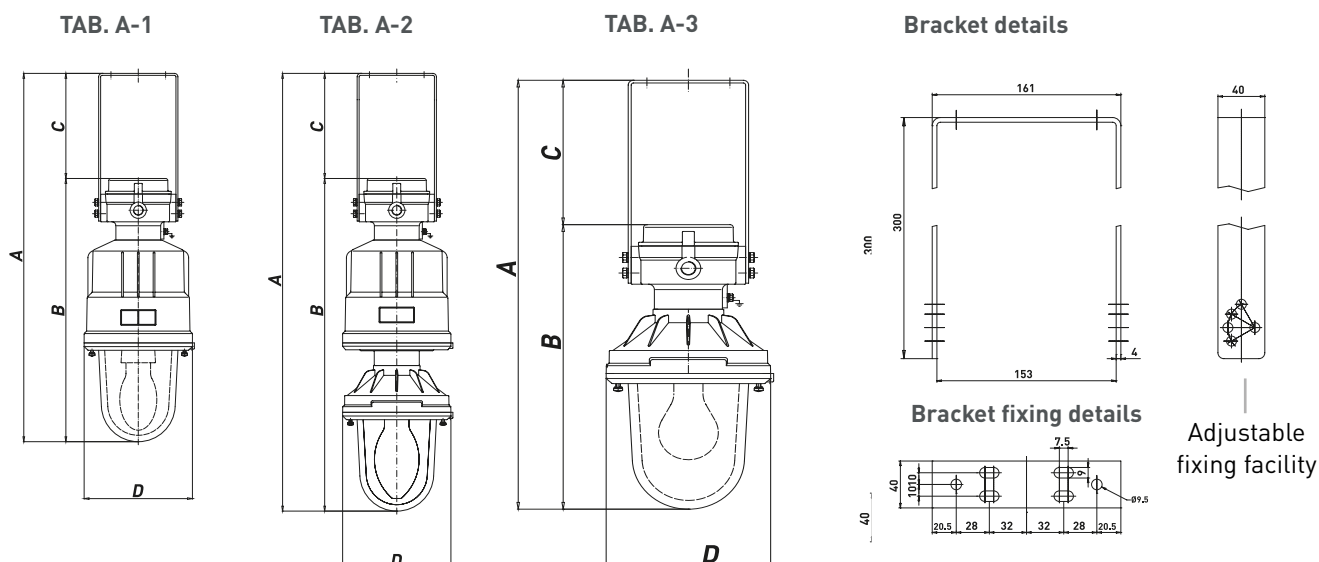


- EV.. series wellglass lighting fixtures are available in a wide range of wattage and are suitable for hazardous areas of industrial plants for lighting indoor and outdoor structures, for which narrow or wide beam lighting is needed.
- Copper-free aluminium body and tempered glass lamp compartment make this lighting fixtures suitable for applications where an excellent corrosion resistance is required.
- Available light sources: fluorescent compact and H.I.D: metal halide and high pressure sodium.
- Possibility to install reflectors able to drive light source.

TECHNICAL FEATURES

Material	Copper-free aluminium	
IP rating	IP66	
Ambient temperature range	-52°C to +60°C	
Approvals	ATEX: INERIS 01ATEX0019X - IECEx: INE 15.0031X EAC: RU C-IT.BH02.B.00616/20 – ECAS: 21-04-10282 E21-04-021858	
Marking	ATEX II 2 GD Ex d IIC T(**) Gb Ex de IIC T(**) Gb Ex tb IIIC T(**) Db IP66 ** T4/T135 °C ; T3/200°C	IEC-Ex Ex db IIC T(**) Gb Ex db e IIC T(**) Gb Ex tb IIIC T(**) Db IP66
Gaskets	O-ring made of Nitrile Rubber (NBR)	
Surface treatment	Polyurethane painting cycle C4 - Blue RAL5014 (Other colours available upon request)	
Entries	N° 2 entries M25x1,5 (EVde and EVCC version) N° 1 entry M25x1,5 (EVA version)/(plugs and cable glands excluded) M20 entries available upon request	
Included accessories	AISI304 Stainless steel external hardware and screws	
Lamps	Included	
Ballast	Electromechanical ballast	
Rated operation voltage (UE)	230 V (standard)/220 V, 240 V, 250 V, 277 V (upon request)	
Frequency	50 Hz (standard)/60 Hz (upon request)	
Optional accessories	Protection guard/Reflector/Pole mounting kit (EVde version)	
Options upon request	HOT INSTANT RESTRIKE solution available via twin-arc lamp assuring immediate hot instant restrike ignition with flux that will reach 80% of the nominal lamp flux in about 3 minutes. HOT INSTANT RESTRIKE solution also available via INSTANT RESTRIKE BALLAST, assuring immediate hot instant restrike ignition with 80% of the lamp nominal flux in 7 seconds. (for high pressure sodium version)	
Photometric light curves	EV..2/3/4 with REV reflector 	EV..-4/5 with REVD reflector

Dimensions EVde



EVde well glass lighting fixtures

EVde version, with integrated Ex e junction box, allows end users and contractors the possibility to save one junction box, two cable glands and a minimum of 30 minutes of labour during installation process. This version is supplied complete with an adjustable AISI304 stainless steel mounting bracket suitable for ceiling, wall and suspension installation.

EVde - Lighting fixtures with High Pressure Sodium lamp (NA)

TYPE - EVde HPS	CODE	LAMP [W]	WEIGHT [kg]	TEMP. CLASS	DIMENSIONS [mm]				DRAWING
					A	B	C	D	
EVDE-2/NA-B 50	A030205010001	50**	6.00	T3*	680	466	214	162	TAB. A-1
EVDE-3/NA-B 50	A030305010004	50	6.00	T3*	686	472	214	194	TAB. A-1
EVDE-2/NA-B 70	A030207010011	70**	6.00	T3*	680	466	214	162	TAB. A-1
EVDE-3/NA-B 70	A030207010018	70	7.40	T3*	686	472	214	194	TAB. A-1
EVDE-4/NA-B 150	A03040A010009	100	7.60	T3*	748	533	214	220	TAB. A-1
EVDE-4/NA-B 150	A03040A510006	150	8.40	T3*	748	533	214	220	TAB. A-1
EVDE-4/NA-B 250	A03040B510004	250	15.00	T3	890	676	214	220	TAB. A-1
EVDE-5/NA-B 250	A03050B510001	250	16.70	T3*	970	756	214	281	TAB. A-2
EVDE-5/NA-B 400	A03050D010009	400	18.00	T3	970	756	214	281	TAB. A-2

* In case of maximum ambient temperature reaches +40°C and except for light/bulb oriented on top (topward), temperature class changes into T4 (ordering code to be required)

** Lamp with built-in glow discharge ignitor

EVde - Lighting fixtures with Metal Halide lamp (IM)

TYPE - EVde IM	CODE	LAMP [W]	WEIGHT [kg]	TEMP. CLASS	DIMENSIONS [mm]				DRAWING
					A	B	C	D	
EVDE-3/IM-B 70	A030317010001	70	6.00	T3*	686	472	214	194	TAB. A-1
EVDE-4/IM-B 100	A03041A010004	100	6.00	T3*	748	533	214	220	TAB. A-1
EVDE-4/IM-B 150	A03041A510006	150	7.40	T3*	748	533	214	220	TAB. A-1
EVDE-4/IM-B 230	A03041B510007	250	14.80	T3	890	676	214	220	TAB. A-2
EVDE-5/IM-B 230	A03051B510001	250	15.70	T3*	890	676	214	220	TAB. A-2
EVDE-5/IM-B 360	A03051D010004	400	16.50	T3	970	756	214	281	TAB. A-2

* In case of maximum ambient temperature reaches +40°C and except for light/bulb oriented on top (topward), temperature class changes into T4 (ordering code to be required)

Notes: Below -20°C, the metal halide light can be used, providing they are switched on 24 hours a day

EVde - Lighting fixtures with fluorescent compact lamp (FC) – Energy saving long life (8000h)

TYPE EVde FC	CODE	LAMP [W]	WEIGHT [kg]	TEMP. CLASS	DIMENSIONS [mm]				DRAWING
					A	B	C	D	
EVDE-3/FC 45	A032044510002	45	4.40	T4*	584	370	214	194	TAB. A-3
EVDE-4/FC 60	A030445310002	60	7.00	T4**	635	421	214	220	TAB. A-3
EVDE-5/FC 75	A030545310001	75	9.00	T4**	715	501	214	281	TAB. A-3

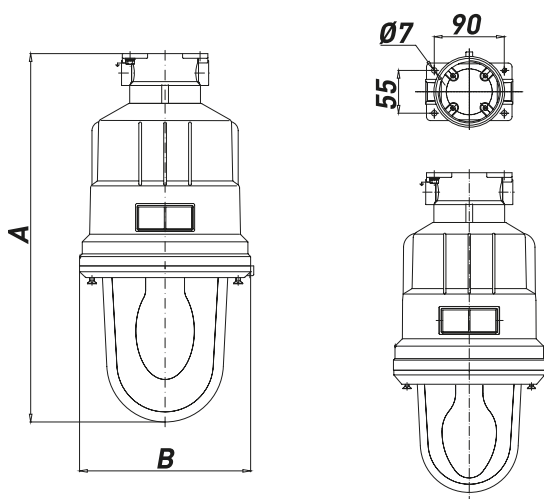
*In case of maximum ambient temperature reaches +40°C, temperature class changes into T5 (ordering code to be required)

**In case of maximum ambient temperature reaches +40°C, temperature class changes into T6 (ordering code to be required)

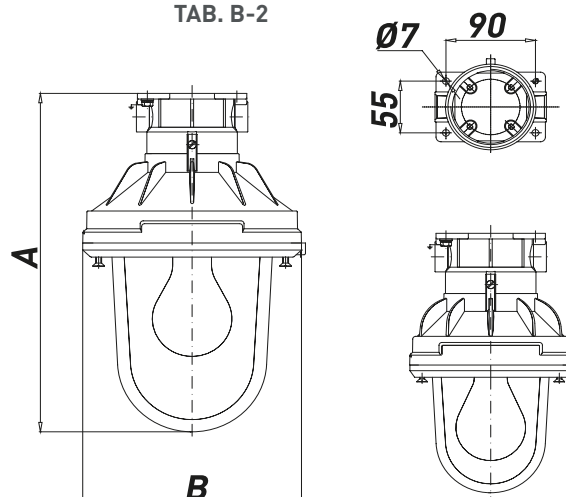
Notes: Below -20°C, the fluorescent compact light can be used, providing they are switched on 24 hours a day

Dimensions EVCC

TAB. B-1



TAB. B-2



EVCC well glass lighting fixtures

EVCC version, without integrated Ex e junction box, allows standard ceiling installation.

EVCC - Lighting fixtures with High Pressure Sodium lamp (NA)

TYPE EVCC NA	CODE	LAMP [W]	WEIGHT [kg]	TEMP. CLASS	DIMENSIONS [mm]		DRAWING
					A	B	
EVCC-2/NA-B 50	A030205010004	50**	5.50	T3*	406	162	TAB. B-1
EVCC-3/NA-B 50	A030305010005	50	6.90	T3*	411	194	TAB. B-1
EVCC-2/NA-B 70	A030207010015	70**	5.50	T3*	406	162	TAB. B-1
EVCC-3/NA-B 70	A030307010002	70	6.90	T3*	411	194	TAB. B-1
EVCC-4/NA-B 150	A03040A010007	100	7.10	T3*	474	220	TAB. B-1
EVCC-4/NA-B 150	A03040A510009	150	7.90	T3*	474	220	TAB. B-1
EVCC-4/NA-B 250	A03040B510007	250	7.90	T3*	474	220	TAB. B-1
EVCC-5/NA-B 250	A03040B510008	250	7.90	T3*	474	220	TAB. B-1
EVCC-5/NA-B 400	A03050D010010	400	7.90	T3*	474	220	TAB. B-1

* In case of maximum ambient temperature reaches +40°C and except for light/bulb oriented on top (topward), temperature class changes into T4 (ordering code to be required)

** Lamp with built-in glow discharge ignitor

EVCC - Lighting fixtures with Metal Halide lamp (IM)

TYPE EVCC IM	CODE	LAMP [W]	WEIGHT [kg]	TEMP. CLASS	DIMENSIONS [mm]		DRAWING
					A	B	
EVCC-3/IM-B 70	A030317010002	70	6.90	T3*	411	194	TAB. B-1
EVCC-4/IM-B 100	A03041A010005	100	7.10	T3*	474	220	TAB. B-1
EVCC-4/IM-B 150	A03041A510008	150	7.90	T3*	474	220	TAB. B-1
EVCC-4/IM 230	A03041B500002	230	7.90	T3*	474	220	TAB. B-1
EVCC-5/IM 230	A03041B510009	230	7.90	T3*	474	220	TAB. B-1
EVCC-5/IM 360	A03051D010005	360	7.90	T3*	474	220	TAB. B-1

* In case of maximum ambient temperature reaches +40°C and except for light/bulb oriented on top (topward), temperature class changes into T4 (ordering code to be required)

Notes:

- Below -20°C, the metal halide light can be used, providing they are switched on 24 hours a day

EVCC - Lighting fixtures with fluorescent compact lamp (FC) – Energy saving long life (8000h)

TYPE EVCC FC	CODE	LAMP [W]	WEIGHT [kg]	TEMP. CLASS	DIMENSIONS [mm]		DRAWING
					A	B	
EVCC-3/FC 45	A030344510001	45	3.90	T4*	309	194	TAB. B-2
EVCC-4/FC 60	A030446010001	60	6.50	T4**	360	220	TAB. B-2
EVCC-5/FC 75	A030545310002	75	8.50	T4**	440	281	TAB. B-2

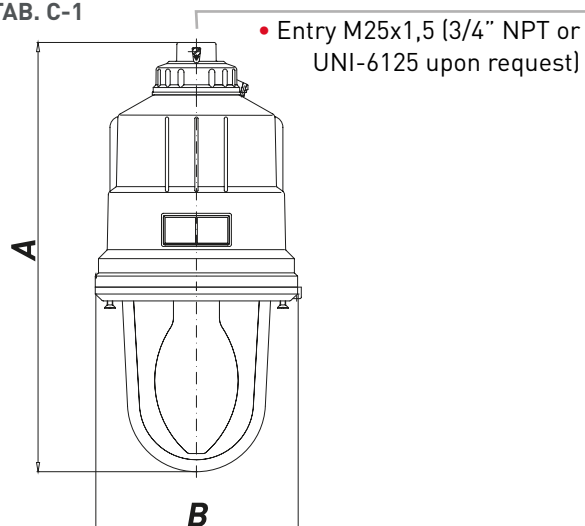
*In case of maximum ambient temperature reaches +40°C , temperature class changes into T5 (ordering code to be required)

**In case of maximum ambient temperature reaches +40°C , temperature class changes into T6 (ordering code to be required)

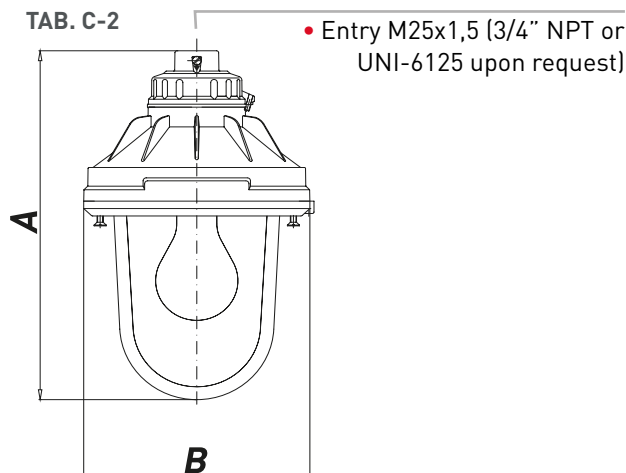
Notes: Below -20°C, the fluorescent compact light can be used, providing they are switched on 24 hours a day

Dimensions EVA (H.I.D.)

TAB. C-1



TAB. C-2



EVA well glass lighting fixtures

EVA version, without integrated Ex e junction box, allows standard suspension installation by conduit system and pastoral pole.

EVA - Lighting fixtures with High Pressure Sodium lamp (NA)

TYPE EVA NA	CODE	LAMP [W]	WEIGHT [kg]	TEMP. CLASS	DIMENSIONS [mm]		DRAWING
					A	B	
EVA-2/NA-B 50	A030205010005	50**	5.50	T3*	400	162	TAB. C-1
EVA-3/NA-B 50	A030305010006	50	6.90	T3*	404	194	TAB. C-1
EVA-2/NA-B 70	A030207010019	70**	5.50	T3*	400	162	TAB. C-1
EVA-4/NA-B 150	A03040A010008	100	7.10	T3*	467	220	TAB. C-1
EVA-4/NA-B 150	A03040A510010	150	7.90	T3*	467	220	TAB. C-1
EVA-4/NA-B 250	A03040B510009	250	7.90	T3*	467	220	TAB. C-1

*In case of maximum ambient temperature reaches +40°C and except for light/bulb oriented on top (topward), temperature class changes into T4 (ordering code to be required)

** Lamp with built-in glow discharge ignitor

EVA - Lighting fixtures with Metal Halide lamp (IM)

TYPE EVA IM	CODE	LAMP [W]	WEIGHT [kg]	TEMP. CLASS	DIMENSIONS [mm]		DRAWING
					A	B	
EVA-3/IM-B 70	A030317010003	70	6.90	T3*	404	194	TAB. C-1
EVA-4/IM-B 100	A03041A010006	100	7.10	T3*	467	220	TAB. C-1
EVA-4/IM-B 150	A03041A510009	150	7.90	T3*	467	220	TAB. C-1
EVA-4/IM-B 230	A03041B510010	230	7.90	T3*	467	220	TAB. C-1

*In case of maximum ambient temperature reaches +40°C and except for light/bulb oriented on top (topward), temperature class changes into T4 (ordering code to be required)

Notes: Below -20°C, the metal halide light can be used, providing they are switched on 24 hours a day

EVA - Lighting fixtures with fluorescent compact lamp (FC) – Energy saving long life (8000h)

TYPE EVA FC	CODE	LAMP [W]	WEIGHT [kg]	TEMP. CLASS	DIMENSIONS [mm]		DRAWING
					A	B	
EVA-3/FC 45	A030344510002	45	3.90	T4*	309	194	TAB. C-2
EVA-4/FC 60	A030446010002	60	6.50	T4**	360	220	TAB. C-2
EVA-5/FC 75	A030547510001	75	8.50	T4**	440	281	TAB. C-2

*In case of maximum ambient temperature reaches +40°C , temperature class changes into T5 (ordering code to be required)

**In case of maximum ambient temperature reaches +40°C , temperature class changes into T6 (ordering code to be required)

Notes: Below -20°C, the fluorescent compact light can be used, providing they are switched on 24 hours a day

WELLGLASS

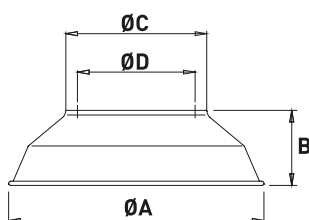
EV.. Lighting fixtures -

SPARES & ACCESSORIES

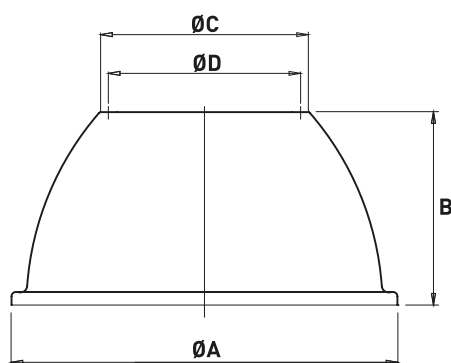
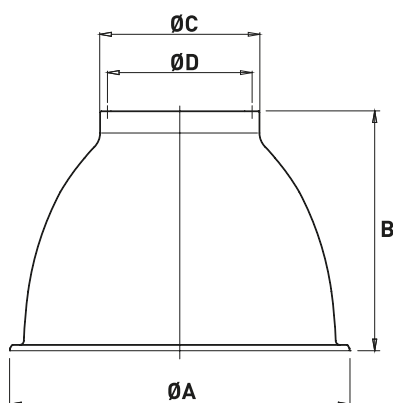
Reflectors

CODE	TYPE	DIMENSIONS (mm)				WEIGHT [kg]
		A	B	C	D	
A600903020002	REV-1 STANDARD REFLECTOR FOR EV..-1 RAL9003 PAINTED	330	97	183	123	0,260
A600903020004	REV-2 STANDARD REFLECTOR FOR EV..-2 RAL9003 PAINTED	330	97	183	138	0,260
A600903020006	REV-3 STANDARD REFLECTOR FOR EV..-3 RAL9003 PAINTED	330	97	183	160	0,260
A600903020008	REV-4 STANDARD REFLECTOR FOR EV..-4 RAL9003 PAINTED	400	90	263	188	0,360
A600903020009	REVD-4 POLISHED AND ANODIZED DOME REFLECTOR FOR EV..-4	440	310	207	188	0,800
A600903020010	REVD-5 POLISHED AND ANODIZED DOME REFLECTOR FOR EV..-5	500	250	271	252	0,800

Dimensions REV

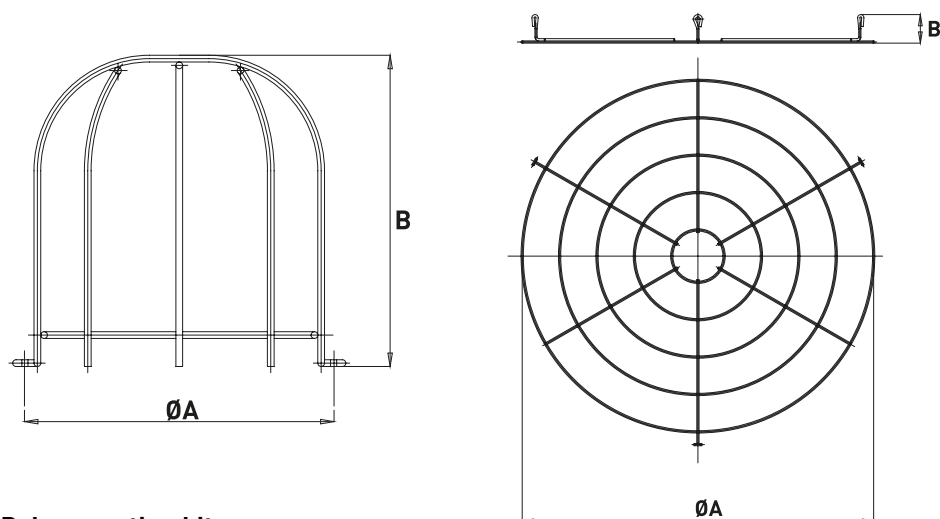


Dimensions REVD

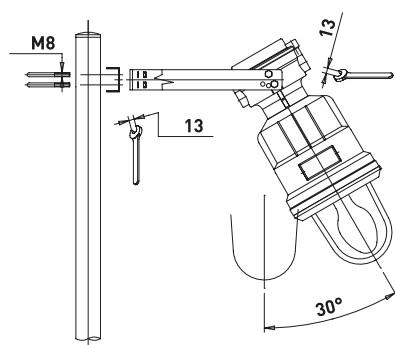
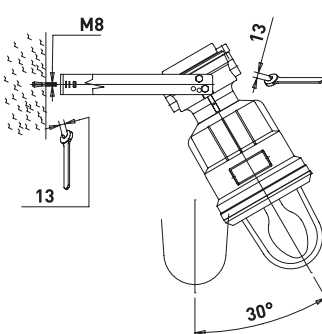
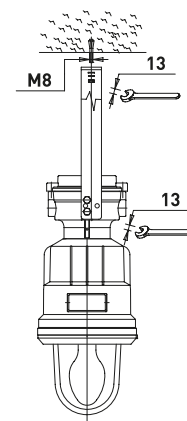


Protection guard (Stainless Steel AISI316 L version available upon request)

CODE	TYPE	DIMENSIONS AxB (mm)	WEIGHT [kg]
A600903030001	GEV-1 PROTECTION GUARD FOR EV..-1 - AISI 304	123X103	0.160
A600903030003	GEV-2 PROTECTION GUARD FOR EV..-2 - AISI 316	138X139	0.230
A600903030005	GEV-3 PROTECTION GUARD FOR EV..-3 - AISI 316	151X152	0.240
A600903030007	GEV-4 PROTECTION GUARD FOR EV..-4 - AISI 316	178X200	0.370
A600903030009	GEV-5 PROTECTION GUARD FOR EV..-5 - AISI 316	252X233	0.400

Dimensions GEV

Pole mounting kit

CODE	TYPE
A601103010001	P4 KIT - 1" 1/2 POLE MOUNTING KIT
A601103010002	P5 KIT - 2" POLE MOUNTING KIT

Pole mounting

Wall mounting

Ceiling mounting


Note: Pole mounting kit to be ordered separately and as additional accessories out of the standard adjustable stainless steel fixing bracket. Expansion bolts (for concrete) or bolts (for steel frame) are not included in our kit.

CONVENTIONAL LIGHTING FIXTURES - FLOODLIGHTS

FL.. Series - Copper free aluminium or Stainless steel AISI 316 L



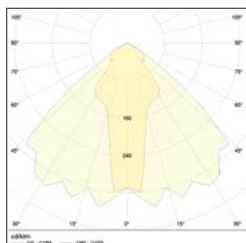
- Available in a wide range of wattage, FL-Series can host high pressure sodium or metal halide lamps and can be equipped with symmetrical narrow or wide beam reflector to satisfy different application requirements
- FL- Floodlights are ideally suited for large-scale areas and street, sidewalk or perimeter illumination
- Possibility to apply an OFF-SHORE painting cycle which increases the surface protection of floodlights making them suitable also for marine environments
- Manufactured in copper-free aluminium or AISI316L stainless steel, FL.. Series have an excellent corrosion resistance
- To simplify installation and maintenance, floodlights are supplied complete with an integral Ex e connection box and AISI304 stainless steel universal mounting bracket.

TECHNICAL FEATURES

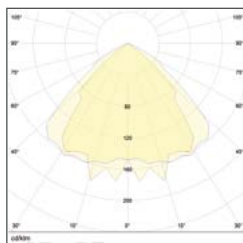
Material	Copper-free aluminium Stainless steel AISI 316 L (ordering codes upon request)
IP rating	IP66
Ambient temperature range	-50°C to + 55°C
Approvals	ATEX: 00ATEX0023X - IECEx: INE 16.0038X EAC: RU C-IT.BH02.B.00616/20 – ECAS 21-04-10283 E21-04-021857
Marking	II 2 GD Ex de IIB+H2 T(**) Gb Ex tb IIIC T(**) Db IP66 ** T4/T135°C, T3/T200°C, T2/T205°-240°C
Gaskets	Gasket made of Nitrile Rubber (NBR) on flat joint
Surface treatment	Polyurethane painting cycle - Blue RAL5014 (other colour available upon request) Internal anticondensate painting/AISI 316 L version unpainted
Entries	N° 2 entries M25x1,5
Included accessories	AISI 316 L Stainless steel screws and AISI304 Stainless steel adjustable bracket
Lamps	Included
Rated operation voltage (UE)	See table
Frequency	See table
Power factor	> 0,95
Accessories	N° 1 brass nickel chrome plated plug + N° 1 brass nickel chrome plated cable gland PNA type c/w set of inner seals
Optional accessories	Protection guard/Special brackets for pole mounting
Options upon request	HOT INSTANT RESTRIKE solution available via twin-arc lamp assuring immediate hot instant restrike ignition with flux that will reach 80% of the nominal lamp flux in about 3 minutes. HOT INSTANT RESTRIKE solution also available via INSTANT RESTRIKE BALLAST, assuring immediate hot instant restrike ignition with 80% of the lamp nominal flux in 7 seconds. (for high pressure sodium version)

Photometric light curves

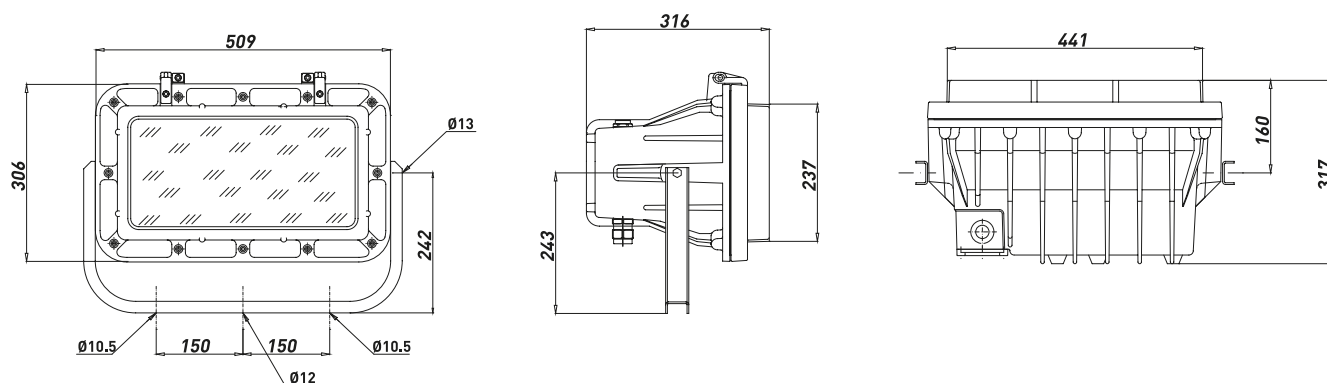
FL-SA IM HG



FL-SA IM HG wide beam



Dimensions FL



FL.. Floodlights wide beam

TYPE - WIDE BEAM	CODE	LAMP [W]	LAMP. TYPE	WEIGHT [kg]	VOLTAGE	FREQUENCY	AMBIENT TEMPERATURE	T.CLASS
FL-15SA	A01010A510003	150	HPS	22.70	230 V*	50HZ**	(-50 °C;+55 °C)	T3
FL-25SA	A01010B510003	250	HPS	23.80	230 V*	50HZ**	(-50 °C;+55 °C)	T3
FL-40SA	A01010D010002	400	HPS	25.00	230 V*	50HZ**	(-50 °C;+55 °C)	T3
FL-25IM	A01011B510003	250	METAL HALIDE	23.80	230 V*	50HZ**	(-50 °C;+55 °C)	T3
FL-40IM	A01011D010003	400	METAL HALIDE	22.80	230 V*	50HZ**	(-50 °C;+55 °C)	T3

* 220 V and 240 V versions available upon request
 ** 60 Hz available upon request

FL.. Floodlights narrow beam

TYPE - NARROW BEAM	CODE	LAMP [W]	LAMP TYPE	WEIGHT [kg]	VOLTAGE	FREQUENCY	AMBIENT TEMPERATURE	T. CLASS
FL-15SA	A01010A510002	150	HPS	22,7	230 V*	50HZ**	(-50 °C;+55 °C)	T3
FL-25SA	A01010B510002	250	HPS	23,8	230 V*	50HZ**	(-50 °C;+55 °C)	T3
FL-40SA	A01010D010004	400	HPS	25	230 V*	50HZ**	(-50 °C;+55 °C)	T3
FL-25IM	A01011B510002	250	METAL HALIDE	23,8	230 V*	50HZ**	(-50 °C;+55 °C)	T3
FL-40IM	A01011D010002	400	METAL HALIDE	22,8	230 V*	50HZ**	(-50 °C;+55 °C)	T3

* 220 V and 240 V version available upon request
 ** 60 Hz available upon request

LED LIGHTING

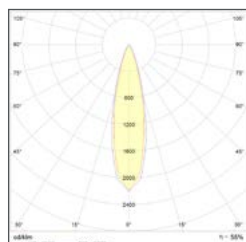
EV LED.. Series - Spotlight - Copper free aluminium



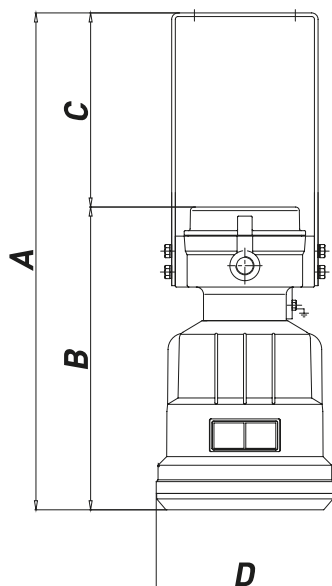
- Spotlights are ideally suited for applications where high luminous performances are required without causing neither dazzling nor light pollution.
- Manufactured in copper-free aluminium and suitable for LED lamp

TECHNICAL FEATURES

Material	Copper-free aluminium
IP rating	IP66
Ambient temperature range	-52°C to +60°C
Approvals	ATEX: INERIS 01ATEX0019X - IECEx: INE 15.0031X EAC: RU C-IT.BH02.B.00616/20 – ECAS: 21-04-10282 E21-04-021858
Marking	II 2 GD Ex de IIC T(**) Gb Ex tb IIIC T(**) Db IP66 ** T5/T100°C, T4/T135°C
Gaskets	O-ring made of Nitrile Rubber (NBR)
Surface treatment	Polyurethane painting cycle - Blue RAL5014 (other colour available upon request)
Entries	N° 2 entries M25x1,5 (plugs and cable glands excluded)
Included accessories	AISI304 Stainless steel external hardware and screws
Lamps	Included
Rated operation voltage (UE)	110/240 V
Frequency	50/60 Hz
Photometric light curves	



Dimensions LED EV



LED EV.. Spot lights

TYPE	CODE	LAMP [W]	WEIGHT [kg]	TEMP. CLASS	DIMENSIONS [mm]				VOLTAGE
					A	B	C	D	
EVDE-3/LED 18	A0303618D0001	18	6.00	T4*	547	333	214	195	110-24 V

* In case of maximum ambient temperature reaches +40°C, temperature class changes into T5 (ordering code to be required)

LED LIGHTING

EVde-PR../LED Series – Wellglass - Copper-free aluminium

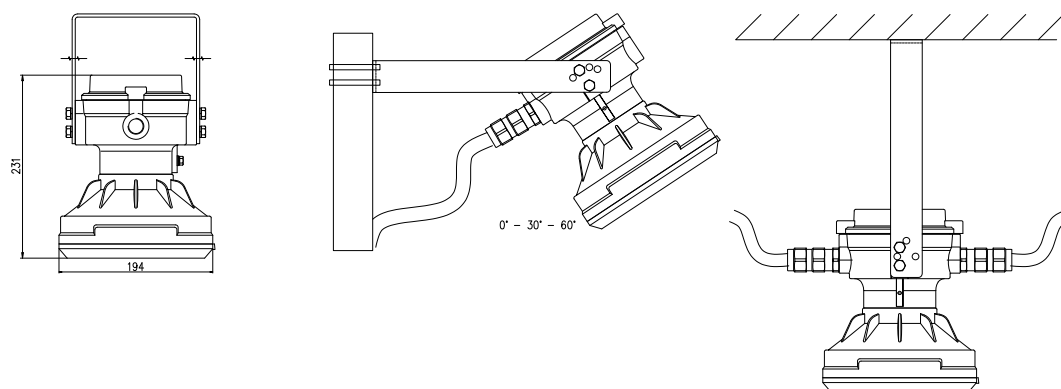


- Explosion-proof wellglass lighting fixture made in copper-free aluminium and tempered glass; provided with AISI304 or AISI316L stainless steel hardware and screws;
- LED lifetime-saving technology and overvoltage protection system;
- High resistance to corrosion and designed for the harshest temperatures.

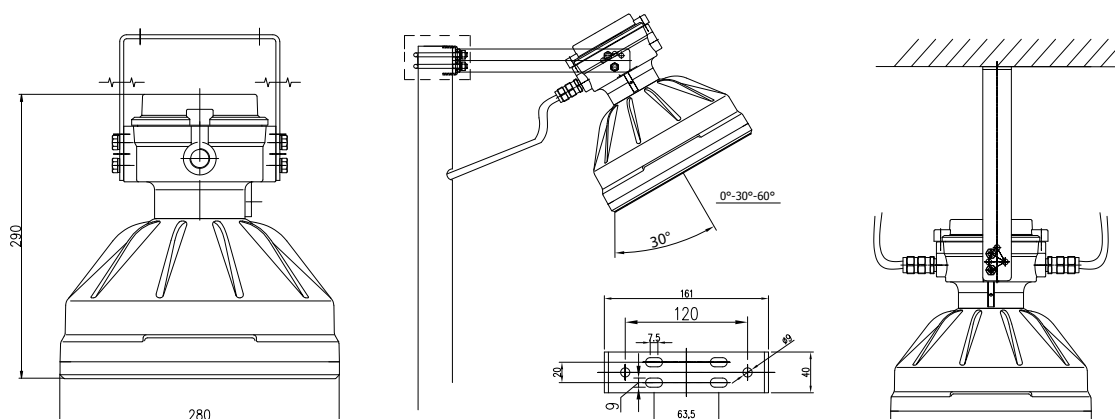
TECHNICAL FEATURES

Material	Copper-free aluminium and tempered glass
IP rating	IP66
Ambient temperature range	-60°C to +60°C (Operating at 60°C, provided that the luminaire is switched on above 40°C)
Approvals	ATEX: INERIS 01ATEX0019X - IECEx: INE 15.0031X EAC: RU C-IT.BH02.B.00616/20 – ECAS: 21-04-10282 E21-04-021858
Marking	II 2 G Ex db eb IIC T5/T4/T3 Gb II 2 D Ex tb IIIC T100°C/T135°C/T200°C Db Standards compliance IEC/EN 60079-0, IEC/EN 60079-1, IEC/EN 60079-7, IEC/EN 60079-31
Zones	Gas Zone: 1, 2 Dust Zone: 21, 22
Rated voltage	220-240 VAC (+/-10%)
Frequency	50-60 Hz
Flux	Up to 22.000 lm
Colour rendering index	70 CRI
Colour temperature	4.000 K
Power factor	$\cos \varphi \geq 0,98$
Surge protection	8 kV
Driver	Integrated - Equipped with thermal guard protection to prevent overtemperature
LED Lifetime (L70) Ta +25°C	> 54.000 h - L70 according to IES LM-80-08
Hardware and screws	AISI304 or AISI316L stainless steel
Coating	Polyurethane with epoxy base, Blue RAL5014 (Other colours on request)
Entries	n°2 entries Ø 25mm
Through wiring	Loop-in/Loop-out
Plug	n° 1 x M25 brass nickel chromed (gasket + M25 lock nut included)
Accessories upon request	AISI316L Pole mounting kit 2"; Brass Nicr/AISI316L cable glands for armoured/unarmoured cable (seal gasket + set of seal + M25 lock nut included); Shroud for cable gland; Brass nickel chromed/AISI316L M25 plug (gasket + M25 lock nut included)
Photometric curve	

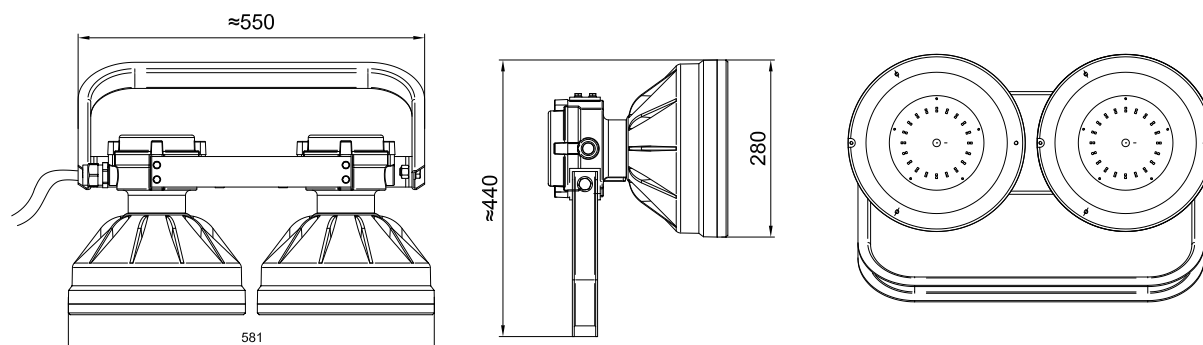
Dimensions – EVde-PR4/LED L6K



Dimensions – EVde-PR5/LED L11K



Dimensions – EVde-PR5/LED L22K



EVde-PR../LED – Wellglass lighting fixtures

TYPE	CODE	LAMP [W]	LUMEN [lm]	LUM. EFF. [lm/W]	Weight [kg.]
EVDE-PR4/LED L6K	A030464510001	45	7.950	135	5,00
EVDE-PR5/LED L11K	A030568010001	84	11.000	131	10,50
EVDE-PR5/LED L22K	A03Y121195002	84*2	22.000	131	27,00

LED LIGHTING

EVCC-PR LED Series - Tank lighting fixtures - Copper-free aluminium

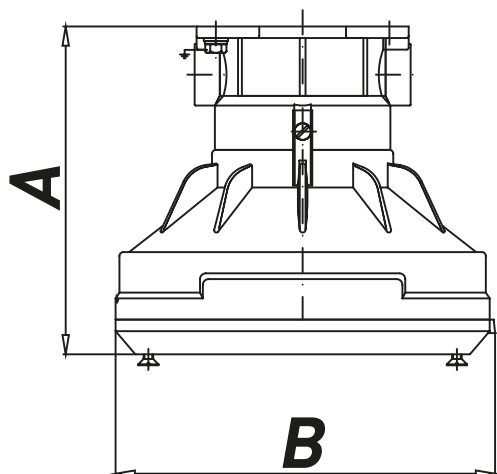


- Tank inspection lighting fixtures are recommended for applications where high luminous performances are required to light extreme dark spaces such as tanks and/or water towers.
- Manufactured in copper-free aluminium and suitable for LED lamp.
- Possibility to apply an OFF-SHORE painting cycle (upon request).

TECHNICAL FEATURES

Material	Copper-free aluminium
IP rating	IP66
Ambient temperature range	-60°C to +60°C
Approvals	ATEX: INERIS 01ATEX0019X - IECEx: INE 15.0031X EAC: RU C-IT.BH02.B.00616/20 - ECAS: 21-04-10282 E21-04-021858
Marking	II 2 G Ex db IIC T3 Gb II 2 D Ex tb IIIC T200°C Db IP66
Gaskets	O-ring made of Nitrile Rubber (NBR)
Surface treatment	Polyurethane painting cycle - Blue RAL5014 (other colour available upon request)
Entries	N° 2 entries M25x1,5 (plugs and cable glands excluded)
Included accessories	AISI304 stainless steel external hardware and screws LED bulb: 1.100 lm
Rated operation voltage (UE)	220-240 V
Frequency	50/60 Hz
Optional accessories	MOUNTING KIT in AISI316L stainless steel: Pole mounting kit, from 1 1/2" up to 2" CABLE GLAND KIT in brass nichel chrome and AISI316L stainless steel: M25 single seal cable gland for unarmoured cable c/w set of sealing rings, gasket, locknut - PNS-2 M25 single seal cable gland for armoured cable c/w set of sealing rings, gasket, locknut - PNA-2 M25 double seal cable gland for armoured cable c/w set of sealing rings, gasket, locknut - PAP-2
Photometric curve	

Dimensions LED EVCC



LED EVCC-PR tank inspection lights

TYPE	CODE	LAMP [W]	WEIGHT [kg]	TEMP. CLASS	DIMENSIONS [mm]	
					A	B
EVCC-PR3/LED 9	A031660710001	9	4.40	T3	170	195

LED LIGHTING

EVA Series - Hand lamp – Copper-free aluminium

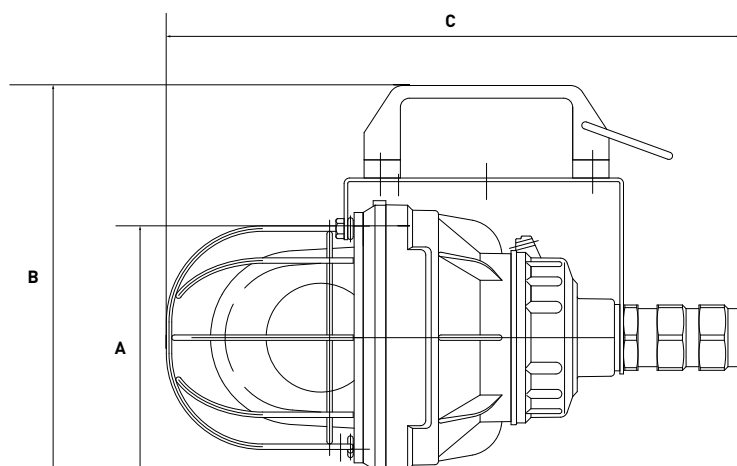


- Portable lights provided with insulated handle to assure safety working conditions for operators.
- Made of copper-free aluminium and suitable for LED lamp.
- Possibility to install a protection guard.

TECHNICAL FEATURES

Material	Copper-free aluminium
IP rating	IP66
Ambient temperature range	-52°C to +60°C
Approvals	ATEX 01ATEX0019X - IECEx INE 15.0031X TR CU RA RU BH02 616 - ECAS 21-04-10282 E21-04-021858
Marking	II 2 G Ex db IIC T3 Gb Ex tb IIIC T200°C Db IP66
Gaskets	O-ring made of Nitrile Rubber (NBR)
Surface treatment	Polyurethane painting cycle - Blue RAL5014 (other colours on request)
Entries	N° 1 entry M25x1,5 complete with brass nickel chrome plated cable gland PAP type
Included accessories	AISI304 Stainless steel external hardware and screws
Lamps	Included
Rated operation voltage (UE)	230 V (standard) 220 V, 240 V (upon request)
Frequency	50/60 Hz
Optional accessories	Protection guard Brass nickel chrome plated cable gland PAP type complete with set of inner and outer seals
Photometric curve	

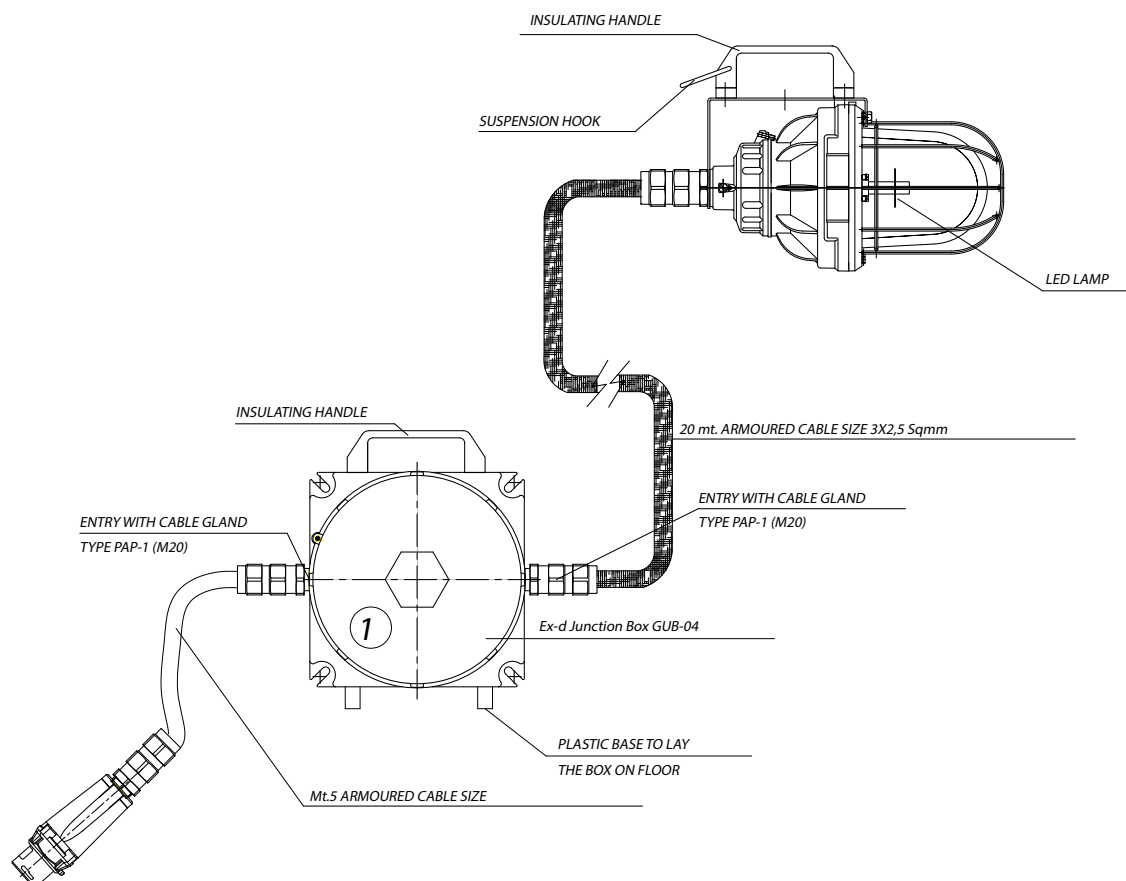
Dimensions EVA



EVA LED – Hand lamp

TYPE	CODE	LAMP [W]	WEIGHT [kg]	TEMP. CLASS	DIMENSIONS [mm]		
					A	B	C
EVA-1	A030160710001	8	2.90	T3	123	212	312

Optional: with portable transformer unit



NOTE :

EXECUTION Ex de IIC T3
 DEGREE OF PROTECTION IP-65
 EXTERNAL PAINTED COLOUR RAL 5014 CORROSION PROOF FOR Ex-d ALUMINIUM TRANSFORMER ENCLOSURE
 EXTERNAL PAINTED COLOUR RAL 5014 CORROSION PROOF FOR HAND LAMP
 MATERIAL : COPPER FREE ALUMINIUM FOR TRANSFORMER ENCLOSURE
 MATERIAL : COPPER FREE ALUMINIUM FOR HAND LAMP
 MATERIAL : STAINLESS STEEL FOR PROTECTION GUARD
 MATERIAL : RESIN FOR PLUG

LED LIGHTING

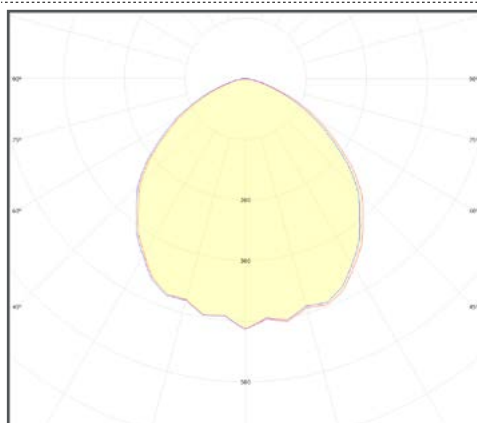
FL1.. Series - Zones 1, 2, 21, 22 – Copper-free aluminium



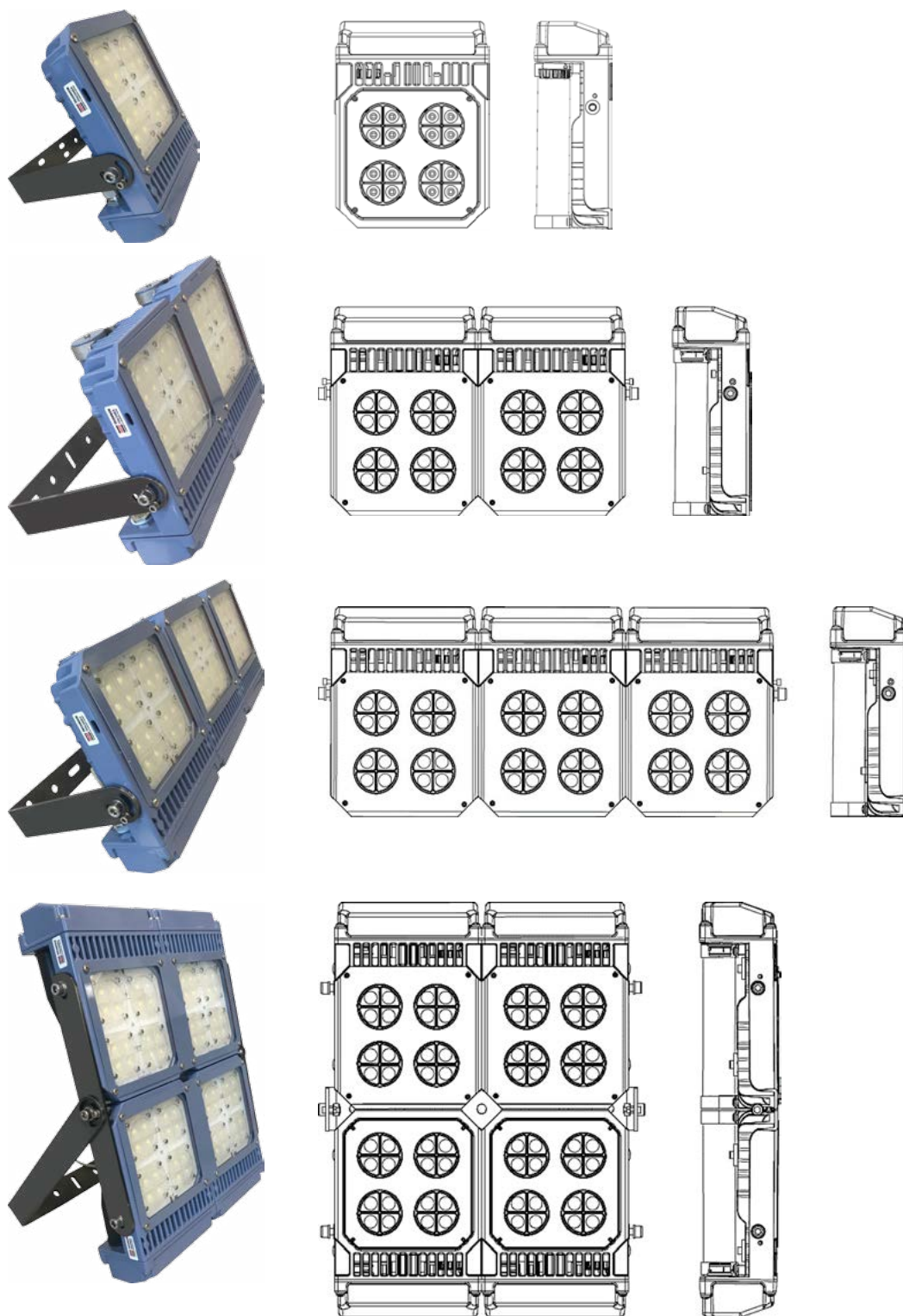
- LED explosion-proof floodlights ideal for large-scale areas and street lighting, sidewalk-lighting or perimeter illumination
- Manufactured in copper-free aluminium and tempered glass, FL1 Series have an excellent corrosion resistance
- Provided with adjustable bracket in AISI316L stainless steel for wall/ceiling and pole-mounting
- Modular design: up to 4 units
- Very high lumen output: up to 32.000 lm.

TECHNICAL FEATURES

Material	Body: copper-free aluminium
IP rating	IP66
Ambient temperature range	-30°C to +60°C
Approval	ATEX: INERIS 20ATEX0063X IECEX: IECEX INE 20.0074X
Markings	II 2 G Ex db eb mb IIC T4 Gb II 2 D Ex mb tb IIIC T90°C Db
Surface treatment	Painted by polyurethane painting cycle - Blue RAL 5014 (other colours on request)
Entries	2 x entries M25 x 1,5
Hardware and screws	AISI316L stainless steel
LED lumen output	Available versions: 8.000 lm, 16.000 lm, 24.000 lm, 32.000 lm
Frequency	50-60 Hz
Power	Available versions: 64 W, 128 W, 192 W, 256 W
Luminous efficiency	Up to 125 lm/W
Ballast	Electronic
Rated operation voltage (UE)	220-240 V
Frequency	50 – 60 Hz
Power factor	$\cos\phi \geq 0.98$
Optional accessories	AISI316L Pole mounting kit; Brass NiCr/AISI316L single or double seal cable gland for armoured or unarmoured cable c/w set of sealing rings, gasket, locknut; MARECHAL® 5 Amps PNCX connector
Emergency version	Emergency version service available with the 2-module version (128 W) with a 3-hour duration (180 mn)
Photometric curve	



Dimensions FL1



FL1 LED-Floodlight for normal service

TYPE	CODE	POWER [W]	DIMENSIONS [mm]			WEIGHT [kg]
			Length	Height	Depth	
FL1-LED 64 W	A0101610B0004	64 W	207	290	110	5
FL1-LED 128 W	A0101610B0006	128 W	414	290	110	10
FL1-LED 192 W	A0101610B0007	192 W	620	290	110	16
FL1-LED 256 W	A0101610B0008	256 W	414	578	110	21
FL1-LED-LE- 128 W Emergency version 3-hour duration	A0102610C0005	128 W	414	290	190	13,5

LED LIGHTING

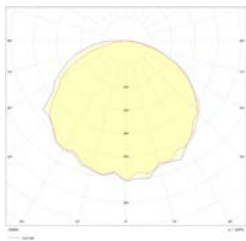
EVF-P* TL* LED.. Series - Zones 1, 2, 21, 22 - Copper-free aluminium



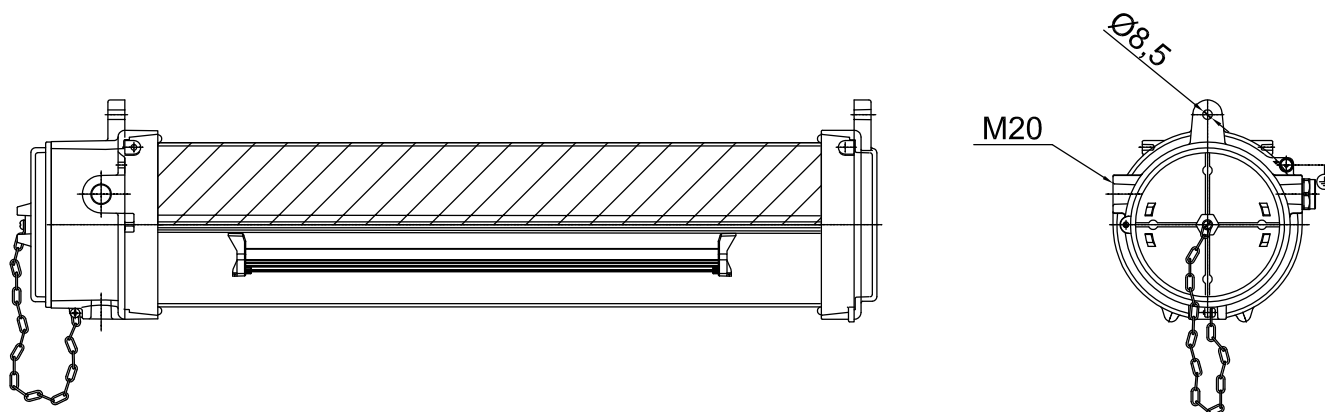
- Complete range of explosion-proof linear lighting fixtures available with strip led up to 4 led and ideal for applications where a continuous row of lighting is needed to ensure a uniform illumination of production sites and machinery.
- Threelayers-extrusion lamp housing: Polycarbonate layer; Top side reflecting layer which protects inner electrical and electronic apparatus from direct sun heating/radiation effect; Filter layer which protects inner polycarbonate layer against UV radiation and related yellowing effect.
- Circular shape grants the best possible "CX" factor, therefore it is less affected by wind- dusts, pollution and dirty bunching.
- Possibility to apply an OFF-SHOREpainting cycle suitable for marine environments.
- All lighting fixtures are supplied ready for LOOP IN-LOOP OUT facility with cable up to 4 sqmm.

TECHNICAL FEATURES

Material	End cups in aluminium with low content of copper/Light housing in polycarbonate
IP/IK rating	IP66 according to EN 60529 IK10 according to EN 62262:2002
Ambient temperature range	-20°C to + 55°C (normal & emergency service)
Approvals	INERIS 20ATEX0036X IECEX INE 20.0038X
Marking	II 2 G Ex db eb mb IIC T4 Gb II 2 D Ex tb IIIC T85°C Db IP66
Gaskets	O-ring made of Nitrile Rubber (NBR)
Surface treatment	End cups painted by polyurethane painting cycle - Blue RAL5014 (other colours on request)
Entries	2 x entries M20. One plugged-off by Ex d brass nickel chrome plated plug and c/w gasket
Hardware and screws	AISI304 stainless steel
LED lumen output	Available versions: 3,225lm, 6,450lm, 9,800lm, 13,065lm
Power	Available versions: 1x19W, 2x19W, 3x19W, 4x19W
Luminous efficiency	Up to 172 lm/W
Colour Temperature	6,500K
Colour Rendering Index	> 80
Ballast	Integral electronic - Equipped with thermal guard protection to prevent overtemperature
Rated operation voltage (UE)	220-240 Vac (normal & emergency service)
Frequency	50 – 60 Hz
Power factor	≥ 0.98 CosØ
Optional accessories	AISI316L Pole mounting kit; AISI316L Ceiling mounting kit; AISI316L Suspension mounting kit; Brass NiCr/AISI316L single seal cable gland for unarmoured cable c/w set of sealing rings, gasket, locknut; Brass NiCr/AISI316L double seal cable gland for armoured cable c/w set of sealing rings, gasket, locknut.
Photometric light curves	



EVF-P* TL* LED - Lighting fixture for normal and emergency service



CODE	TYPE	POWER [W]	LUMEN [LM]	LUM. EFF [LM/W]	COLOR TEMP. [K]	DIMENSION [MM]			WEIGHT [KG]
						A	B	C	
A020562210003	EVF-P 1TL2 1X19W	19	3 225	170	6 500	760	167	194	6,00
A020562210004	EVF-P 2TL2 2X19W	2X19	6 450	170	6 500	760	167	194	6,00
A020562210005	EVF-P 3TL2 3X19W	3X19	9 800	172	6 500	1 370	167	194	9,00
A020562210006	EVF-P 4TL2 4X19W	4X19	13 065	172	6 500	1 370	167	194	9,00
A020662210001	EVF-P 1TL2 LE-P 60 1X19W EMERGENCY SERVICE: 60'	19	3.225 500	170	6 500	760	167	194	7,00
A020662210005	EVF-P 1TL2 LE-P 180 1X19W EMERGENCY SERVICE: 180'	19	3.225 500	170	6 500	760	167	194	7,00
A020662210002	EVF-P 2TL2 LE-P 60 2X19W EMERGENCY SERVICE: 60'	2X19	6.450 500"	170	6 500	760	167	194	7,00
A020662210006	EVF-P 2TL2 LE-P 180 2X19W EMERGENCY SERVICE: 180'	2X19	6.450 500"	170	6 500	760	167	194	7,00
A020662210003	EVF-P 3TL2 LE-P 60 3X19W EMERGENCY SERVICE: 60'	3X19	9.800 500"	172	6 500	1 370	167	194	10,00
A020662210007	EVF-P 3TL2 LE-P 180 3X19W EMERGENCY SERVICE: 180'	3X19	9.800 500"	172	6 500	1 370	167	194	10,00
A020662210004	EVF-P 4TL2 LE-P 60 4X19W EMERGENCY SERVICE: 60'	4X19	13.065 500"	172	6 500	1 370	167	194	10,00
A020662210008	EVF-P 4TL2 LE-P 180 4X19W EMERGENCY SERVICE: 180'	4X19	"13.065 500"	172	6 500	1 370	167	194	10,00

LED LIGHTING

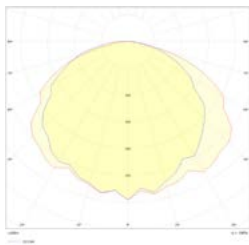
EVF-L* TL*LED.. Series - Zones 1, 2, 21, 22 - GRP



- Complete range of explosion-proof linear lighting fixtures available with strip led up to 4 led and ideal for applications where a continuous row of lighting is needed to ensure a uniform illumination of production sites and machinery.
- Threelayers-extrusion lamp housing: Polycarbonate layer; Top side reflecting layer which protects inner electrical and electronic apparatus from direct sun heating/ radiation effect; Filter layer which protects inner polycarbonate layer against UV radiation and related
- yellowing effect.
- Circular shape grants the best possible "CX" factor, therefore it is less affected by wind- dusts, pollution and dirty bunching.
- All lighting fixtures are supplied ready for LOOP IN-LOOP OUT facility with cable up to 4 sqmm.

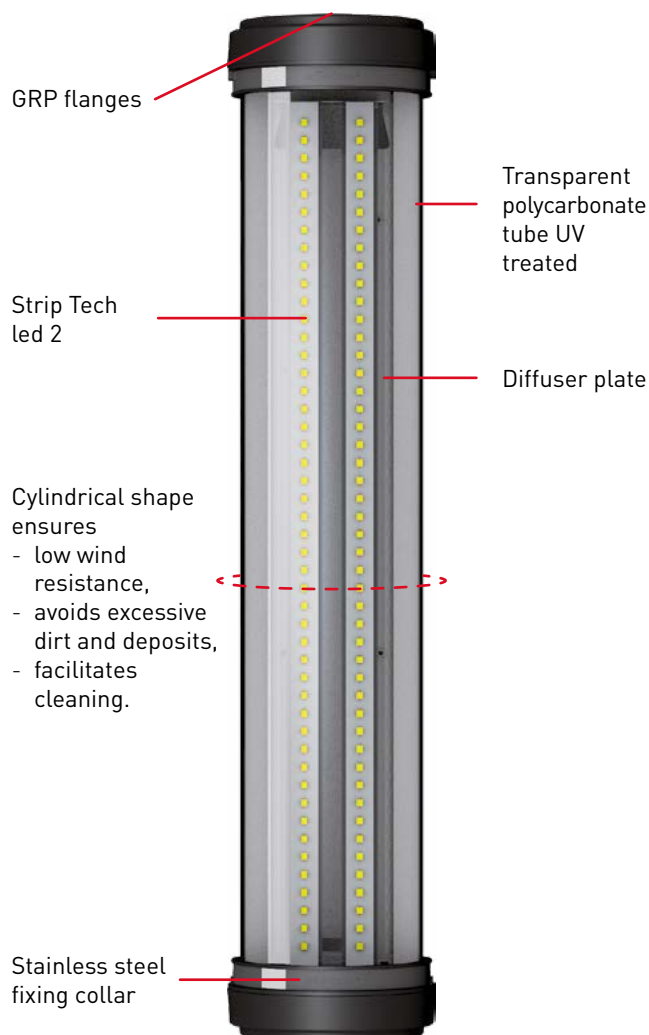
TECHNICAL FEATURES

Material	End cups in GRP/Light housing in polycarbonate
IP/IK rating	IP66 according to EN 60529 K10 according to EN 62262:2002
Ambient temperature range	-20°C to + 60°C (normal & emergency service)
Approvals	INERIS 20ATEX0036X ECEX INE 20.0038X
Marking	II 2 G Ex db eb mb IIC T (*) Gb II 2 D Ex tb IIIC T85°C Db IP66 *T4 up to + 55 °C
Gaskets	O-ring made of Nitrile Rubber (NBR)
Surface treatment	Unpainted
Entries	2 x entries M20. One plugged-off by Ex d brass nickel chrome plated plug and c/w gasket Upon request: M25 entries or PNCX connector
Hardware and screws	AISI304 stainless steel
LED lumen output	Available versions: 3,225lm, 6,450lm, 9,800lm, 13,065lm
Power	Available versions: 1x19W, 2x319W, 3x19W, 4x19W
Luminous efficiency	Up to 172lm/W
Colour Temperature	6,500 K
Colour Rendering Index	> 80
Ballast	Integral electronic - Equipped with thermal guard protection to prevent overtemperature
Rated operation voltage (UE)	220-240 Vac (normal & emergency service)
Frequency	50 – 60 Hz
Power factor	≥ 0.98 CosØ
Optional accessories	AISI316L Pole mounting kit; AISI316L Ceiling mounting kit; AISI316L Suspension mounting kit; Brass NiCr/AISI316L single seal cable gland for unarmoured cable c/w set of sealing rings, gasket, locknut; Brass NiCr/AISI316L double seal cable gland for armoured cable c/w set of sealing rings, gasket, locknut.
Photometric curves	



The EVF-L luminaries have a very high mechanical resistance to shocks IK10 and corrosion while being particularly bright. Thus they meet all requirements of aggressive environments (humidity, corrosion, pollution) for industrial areas at risk of explosion.

EVF-L LUMINARIES



Two opening switches allow the light source and the battery to be switched off automatically when the luminaire flange is open.

MODULAR CONNEXION WAY

Through PNCX connector

- easier and quicker installation & maintenance
- easier loop in loop out, you can keep lighting throughout other lightings during maintenance operations.



**LOOP IN/LOOP OUT
1 SOCKET + 1 PLUG
PNCX VERSION**

With cable gland

- Metric threads M20 or M25
- Loop in loop out facility
- Available for armoured cables or unarmoured.

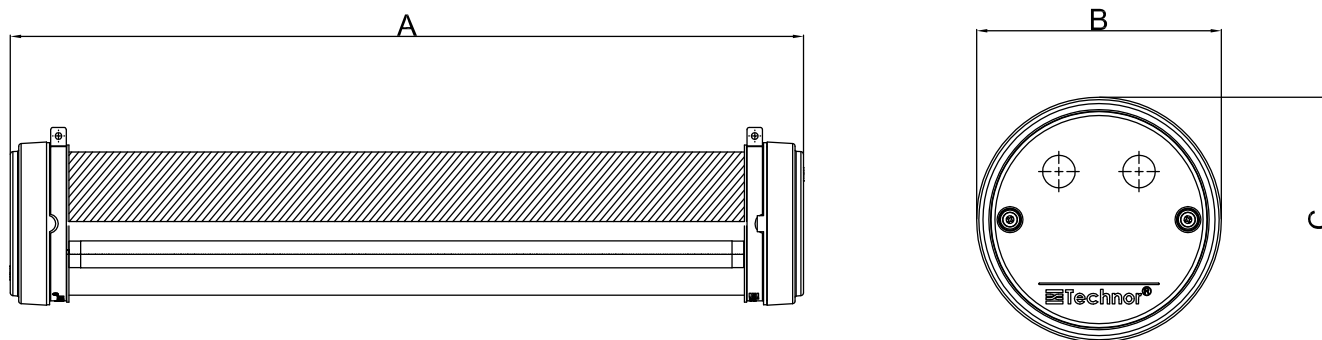


**LOOP IN/LOOP OUT
POLY GLAND VERSION**



**ARMOURED CABLE GLAND
VERSION**

EVF-L*TL* LED - Lighting fixture for normal and emergency service



CODE	TYPE	POWER [W]	LUMEN [LM]	LUM. EFF [LM/W]	COLOR TEMP. [K]	DIMENSION [MM]			WEIGHT [KG]
						A	B	C	
A020962210001	EVF-L 1TL2 1X19W	19	3 225	170	6 500	745	153	166	5,00
A020962210002	EVF-L 2TL2 2X19W	2X19	6 450	170	6 500	745	153	166	5,00
A020962210003	EVF-L 3TL2 3X19W	3X19	9 800	172	6 500	1 342	153	166	8,00
A020962210004	EVF-L 4TL2 4X19W	4X19	13 065	172	6 500	1 342	153	166	8,00
A021062210001	EVF-L 1TL2 LE-P 60 1X19W EMERGENCY SERVICE: 60'	19	3.225 500	170	6 500	745	153	166	6,00
A021062210005	EVF-L 1TL2 LE-P 180 1X19W EMERGENCY SERVICE: 180'	19	3.225 500	170	6 500	745	153	166	6,00
A021062210002	EVF-L 2TL2 LE-P 60 2X19W EMERGENCY SERVICE: 60'	2X19	6.450 500	170	6 500	745	153	166	6,00
A021062210006	EVF-L 2TL2 LE-P 180 2X19W EMERGENCY SERVICE: 180'	2X19	6.450 500	170	6 500	745	153	166	6,00
A021062210003	EVF-L 3TL2 LE-P 60 3X19W EMERGENCY SERVICE: 60'	3X19	9.800 500	172	6 500	1 342	153	166	9,00
A021062210007	EVF-L 3TL2 LE-P 180 3X19W EMERGENCY SERVICE: 180'	3X19	9.800 500	172	6 500	1 342	153	166	9,00
A021062210004	EVF-L 4TL2 LE-P 60 4X19W EMERGENCY SERVICE: 60'	4X19	13.065 500	172	6 500	1 342	153	166	9,00
A021062210008	EVF-L 4TL2 LE-P 180 4X19W EMERGENCY SERVICE: 180'	4X19	13.065 500	172	6 500	1 342	153	166	9,00



LED LIGHTING

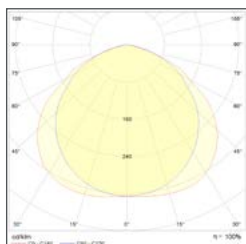
RMS-560 LED.. Series - Zones 1, 2, 21 & 22 - Stainless steel AISI 304



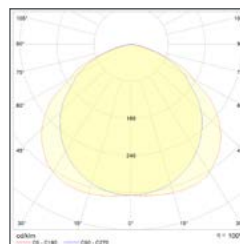
- RMS.. series lighting fixtures are ideally suited for ON and OFF-SHORE applications and all kinds of industries where there is an high level of corrosion.
- Both body and glass frame are made of AISI304 stainless steel and manufactured from a single sheet of steel with no invasive mounting holes, to minimize the risk of water ingress through the housing.
- Design has been studied to allow operator working with free hands and no need to support any part of lighting fixture. One person can take care of start-up or maintenance without any aid and assistance.
- Due to inorganic materials like stainless steel and glass, RMS.. series lighting fixtures are 95% recyclable.

TECHNICAL FEATURES

Material	AISI304 stainless steel, 0,8mm thickness and transparent part in tempered glass
IP rating	IP65
Ambient temperature range	-20°C to + 50°C (Normal & Standard Emergency models) -20°C to + 40°C (Emergency models with charging status pilot light)
Approvals	ATEX: TÜV CY 17 ATEX 0205847 X EAC: RU C-IT.BH02.B.00616/20 (Not available for versions with Microswitch)
Marking	II 2 GD Ex eb db mb op is IIC T4 Gb Ex tb IIIC T135°C Db IP65
Gaskets	Special cross-section tightness gasket, silicon rubber made (closed cell), located in housing channel between body and window frame.
Entries	Body complete of two 21mm Ø through holes (on one side) for cable entry, one complete of metallic plug with M20 locknut and gasket and the other one with temporary plastic plug to prevent dust ingress.
Included accessories	AISI304 Stainless steel external hardware and screws
Lamps	Extended long life new LED technology with CRI > 85
Ballast	Electronic
Rated operation voltage (UE)	220-240Vac (normal and emergency service) 198-278Vdc (normal service)
Frequency	50-60 Hz
Power factor	> 0,95
Optional accessories	Pole mounting kit; Ceiling/Wall mounting kit; Suspension mounting kit; 3°- 4° entries on opposite side
Photometric curve	1 strip

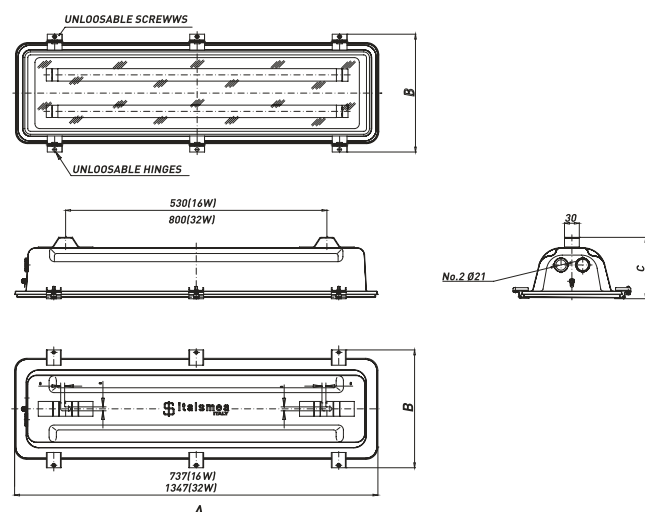


2 strips

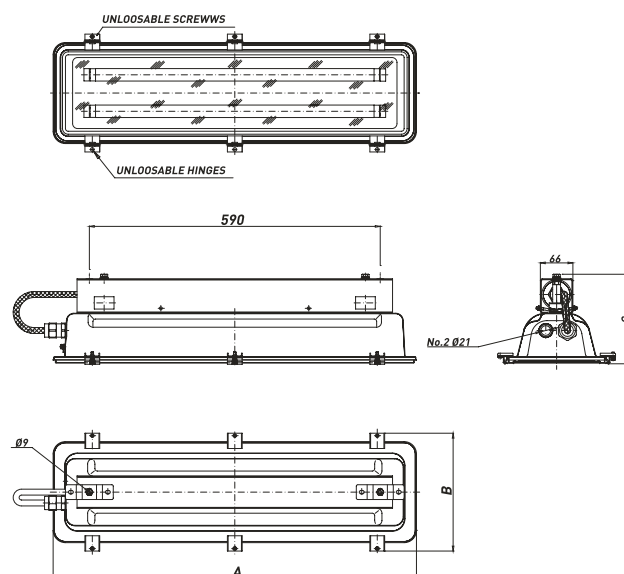


Dimensions RMS-560

RMS-560 (16W) (32W)



RMS-560 EM (16W)



RMS-560 LED - Lighting fixtures for normal service

TYPE	CODE	LAMP [W]	DIMENSIONS [mm]			WEIGHT [kg]
			A	B	C	
RMS-560 116	A020161610001	1 X 16	737	239	123	5.60
RMS-560 216	A020161610002	2 X 16	737	239	123	5.70
RMS-560 132	A020163210001	1 X 32	1347	239	123	8.90
RMS-560 232	A020163210002	2 X 32	1347	239	123	9.10

RMS-560 LED - Lighting fixtures for normal service

TYPE WITH MICROSWITCH	CODE	LAMP [W]	DIMENSIONS [mm]			WEIGHT [kg]
			A	B	C	
RMS-560 116/MS	A020161610004	1 X 16	737	239	123	5.65
RMS-560 216/MS	A020161610003	2 X 16	737	239	123	5.75
RMS-560 132/MS	A020163210004	1 X 32	1347	239	123	8.95
RMS-560 232/MS	A020163210003	2 X 32	1347	239	123	9.15

RMS-560 LED - Lighting fixtures for emergency service

TYPE PERMANENT	CODE	LAMP [W]	EMERGENCY DURATION	DIMENSIONS [mm]			WEIGHT [kg]
				A	B	C	
RMS-560 116 LE P 90*	A020261610004**	1 X 16	90'	737	239	183	9.50
RMS-560 116 LE P 180*	A020261610005	1 X 16	180'	737	239	183	10.50
RMS-560 216 LE P 90*	A020261610006**	2 X 16	90'	737	239	183	9.60
RMS-560 216 LE P 180*	A020261610007	2 X 16	180'	737	239	183	10.60
RMS-560 132 LE P 90*	A020263210009	1 X 32	90'	1347	239	123	12.50
RMS-560 132 LE P 180*	A020263210010	1 X 32	180'	1347	239	123	13.70
RMS-560 232 LE P 90*	A020263210011	2 X 32	90'	1347	239	123	12.50
RMS-560 232 LE P 180*	A020263210012	2 X 32	180'	1347	239	123	13.70

* Microswitch available upon request

**External battery unit protected by stainless steel cover

RMS-560 LED - Lighting fixtures for emergency service

TYPE NON PERMANENT	CODE	LAMP [W]	EMERGENCY DURATION	DIMENSIONS [mm]			WEIGHT [kg]
				A	B	C	
RMS-560 116 LE NP 90*	A020261610010**	1 X 16	90'	737	239	123	9.50
RMS-560 116 LE NP 180*	A020261610011	1 X 16	180'	737	239	123	10.50
RMS-560 132 LE NP 90*	A020263210013	1 X 32	90'	1347	239	123	12.50
RMS-560 232 LE NP 180*	A020263210014	1 X 32	180'	1347	239	123	13.70

* Microswitch available upon request

**External battery unit protected by stainless steel cover

LED LIGHTING

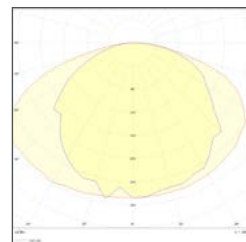
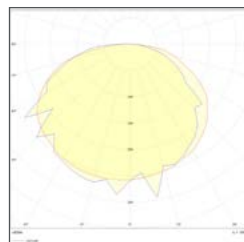
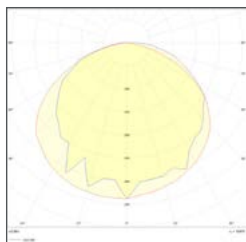
EVF2-PL/FL... Series - Zone 2, 22 - Copper-free aluminum or GRP

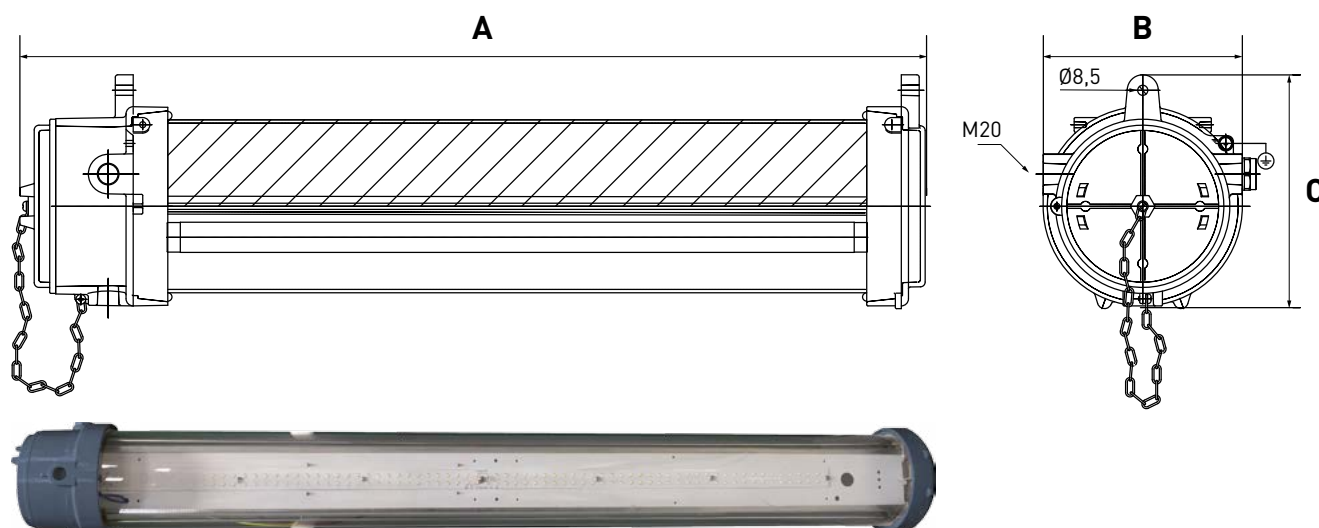


- Complete range of explosion-proof linear lighting fixtures available with single strip led and ideal for applications where a continuous row of lighting is needed to ensure a uniform illumination of production sites and machinery.
- End-cups made in copper-free aluminium or GRP.
- Three layers-extrusion lamp housing: Polycarbonate layer; Top side reflecting layer which protects inner electrical and electronic apparatus from direct sun heating/radiation effect; Filter layer which protects inner polycarbonate layer against UV radiation and related yellowing effect.
- Circular shape grants the best possible "CX" factor, therefore it is less affected by wind-dusts, pollution and dirty bunching.
- All lighting fixtures are supplied ready for LOOP IN-LOOP OUT facility with cable upto 4sqmm.

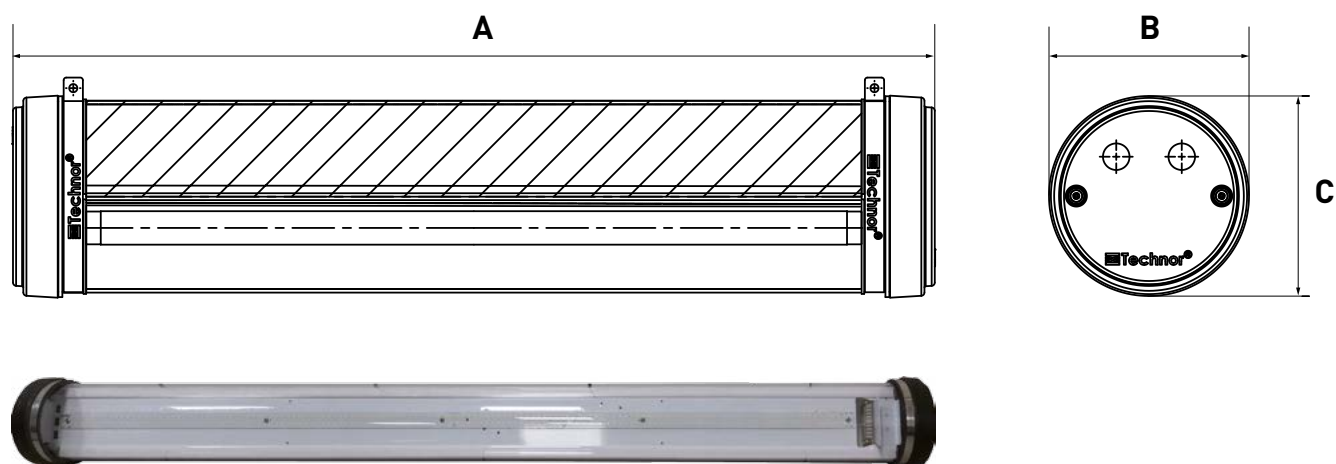
TECHNICAL FEATURES

Material	EVF2-FL = End-cups in GRP/Light housing in polycarbonate EVF2-PL = End-cups in copper-free aluminium Light housing in polycarbonate
IP/IK rating	IP66 according to EN 60529 IK10 according to EN 62262:2002
Ambient temperature range	-20°C to + 55°C
Approvals	FIDI 20 ATEX 0026X IECEX FIDI20.0004X
Marking	II 3 G Ex ec IIC T4 Gc (normal service) II 3 D Ex tc IIIC T85°C Dc
Hardware and screws	AISI304 Stainless steel external hardware and screws
Surface treatment	EVF2-FL = Unpainted EVF2-PL = End-cups painted by polyurethane painting cycle - Blue RAL5014 (other colour on request)
Entries	EVF2-FL = N. 2 entries M20 EVF2-PL = N. 2 entries M20 One plugged-off by Ex d brass nickel chrome plated plug and relevant gasket.
LED Lumen output	3,825lm, 7,650 lm, 14.300lm
Power	1x29W, 1x55W, 1x95W
Luminous efficiency	Up to 150lm/W
Colour Temperature	4.000K
Colour Rendering Index	80 CRI
Power factor	0,98 cosΦ
Ballast	Integral electronic - Equipped with thermal guard protection to prevent overtemperature
Rated operational voltage	220-240 Vac (normal service) - 50-60 Hz
Accessories on request	AISI316L Pole mounting kit; AISI316L Ceilingmounting kit; AISI316L Suspension mounting kit; Brass NiCr/AISI316L single seal cable gland for unarmoured cable c/w set of sealing rings, gasket, locknut; Brass NiCr/AISI316L double seal cable gland for armoured cable c/w set of sealing rings, gasket, locknut.
Photometric curves	1 strip - 29W 1 strip - 55W 1 strip - 95W



EVF2- PL.. - LED lighting fixture for normal service - Copper-free aluminium


CODE	TYPE	POWER [W]	LUMEN [LM]	LUM. EFF [LM/W]	COLOR TEMP. [K]	DIMENSION [MM]			WEIGHT [KG]
						A	B	C	
A021462630001	EVF2-FL - 129	29	3 825	132	4 000	745	153	166	6,50
A021465230001	EVF2-FL - 155	55	7 650	140	4 000	1 342	153	166	8,50
A021469530001	EVF2-FL - 195	95	14 300	150	4 000	1 642	153	166	9,50

EVF2-FL.. - LED lighting fixture for normal service - GRP


CODE	TYPE	POWER [W]	LUMEN [LM]	LUM. EFF [LM/W]	COLOR TEMP. [K]	DIMENSION [MM]			WEIGHT [KG]
						A	B	C	
A021362630001	EVF2-PL - 129	29	3 825	132	4 000	760	167	194	6,50
A021365230001	EVF2-PL - 155	55	7 650	140	4 000	1 370	167	194	8,50
A021369530001	EVF2-PL - 195	95	14 300	150	4 000	1 675	167	194	9,50

Note: EVF2-FL Series is available also for weatherproof application. Contact our sales dept. for more information.

LED LIGHTING

TL2.. Series – LED lighting fixture – Copper-free aluminium



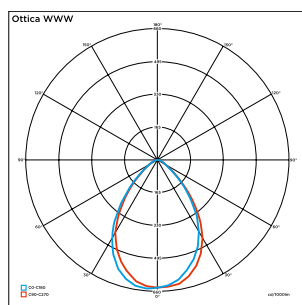
- Complete range of lighting fixtures manufactured of copper-free aluminium and tempered glass; provided with AISI316L stainless steel hardware and screws.
- TL2 Series can mount different lens over LEDs to be suitable for many applications: floodlights, wellglass lighting fixtures, linear lighting fixtures.
- Increased LED lifetime: up to 100.000 hours of maintenance free operation, with a luminous flux that reaches up to 50.220 lm.
- Provided with overvoltage protection system, flicker free and dimmable.

TECHNICAL FEATURES

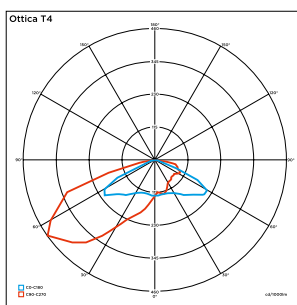
Material	Copper-free aluminium and tempered glass
IP rating	IP66
Ambient temperature range	-40 °C to + 55 °C
Approval	FIDI 20ATEX0010X/FIDI 20ATEX0011X FIDI 20.0002X/RU C-IT.BH02.B.00616/20
Markings	II 2 D Ex tb IIIA T80°C Db II 3 G Ex ec IIC T3 Gc II 3 D Ex tc IIIB T80°C Dc Standards compliance IEC/EN 60079-0, IEC/EN 60079-7/A1, and EN 60079-31
Zones	Gas Zone: 2 Dust Zone: 21, 22
Rated voltage	220-240 VAC (+/- 10%)
Frequency	50-60 Hz
Flux	Up to 50.220 lm
Colour rendering index	70 CRI
Colour temperature	4.000/5.700 K
Power factor	cos φ $\geq$ 0,95
Surge protection	6 kV
Driver	Electronic - Equipped with thermal guard protection to prevent overtemperature
LED Lifetime (L90B10) Ta +25°C	> 100.000 h – L90 according to IES LM-80-08
Hardware and screws	AISI316 stainless steel
Coating	Epoxy - Blue colour (RAL5014) - Other colours upon request
Entries	n°4 entries Ø 20mm
Through wiring	Loop-in/Loop-out
Plug	n° 1 x M20 brass nickel chromed (gasket + M20 lock nut included)
Accessories on request	AISI316L stainless steel pole mounting kit 2"; Brass Nicr/AISI316L stainless steel cable glands for armoured/unarmoured cable (seal gasket + set of seal + M20 lock nut included); Shroud for cable gland; Brass nickel chromed plug M20 (gasket + M20 lock nut included)

Photometric curves - TL2 Series

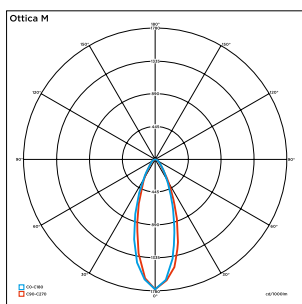
The same chassis with different lens over LEDs will make this lighting fixture suitable for many different applications: floodlight, streetlight, linear and wellglass lighting fixtures.



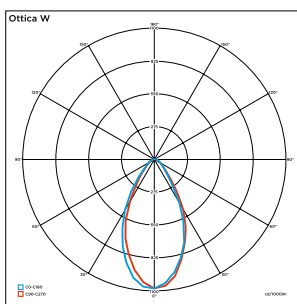
Wellglass/Linear



Streetlight



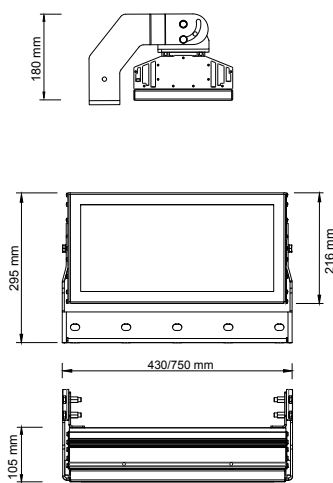
Floodlight wide beam



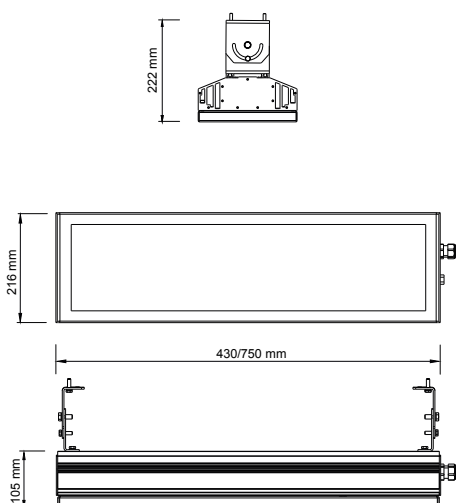
Floodlight narrow beam

Dimensions

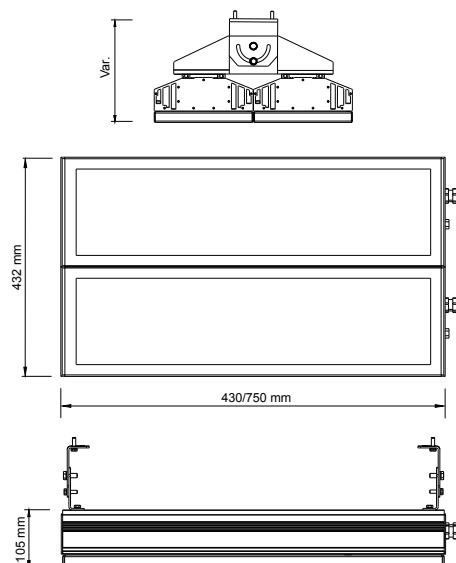
Pole/Wall mounting



Single module -
Ceiling mounting



Double module -
Ceiling mounting



TL2 Series – Linear/Wellglass lighting fixtures

TYPE	CODE	LAMP [W]	LUMEN [lm]	LUM. EFF. [lm/W]	N°LED/ma	DIMENSIONS [mm]			Weight [kg.]
						Length [mm]	Height [mm]	Width [mm]	
TL2-LL-06	A0260354000001	35	5.640	161	16/350	430	216	105	8
TL2-LL-13	A0260794000001	79	12.940	164	40/320	430	216	105	8
TL2-WG-16	A0361144000001	114	16.120	141	24/700	430	216	105	8
TL2-WG-25	A0361724000001	172	25.110	146	40/650	750	216	105	17
TL2-WG-50	A0363444000001	344	50.220	146	[40/650]*2	750	432	105	35

TL2 Series – Streetlight

TYPE	CODE	LAMP [W]	LUMEN [lm]	LUM. EFF. [lm/W]	N°LED/ma	DIMENSIONS [mm]			Weight [kg.]
						Length [mm]	Height [mm]	Width [mm]	
TL2-SL-06	A0560354000001	35	5.640	161	16/350	430	216	105	8
TL2-SL-13	A0560794000001	79	12.940	164	40/320	430	216	105	8
TL2-SL-16	A0561144000001	114	16.120	141	24/700	430	216	105	8
TL2-SL-25	A0561724000001	172	25.110	146	40/650	750	216	105	17
TL2-SL-50	A0563444000001	344	50.220	146	[40/650]*2	750	432	105	35

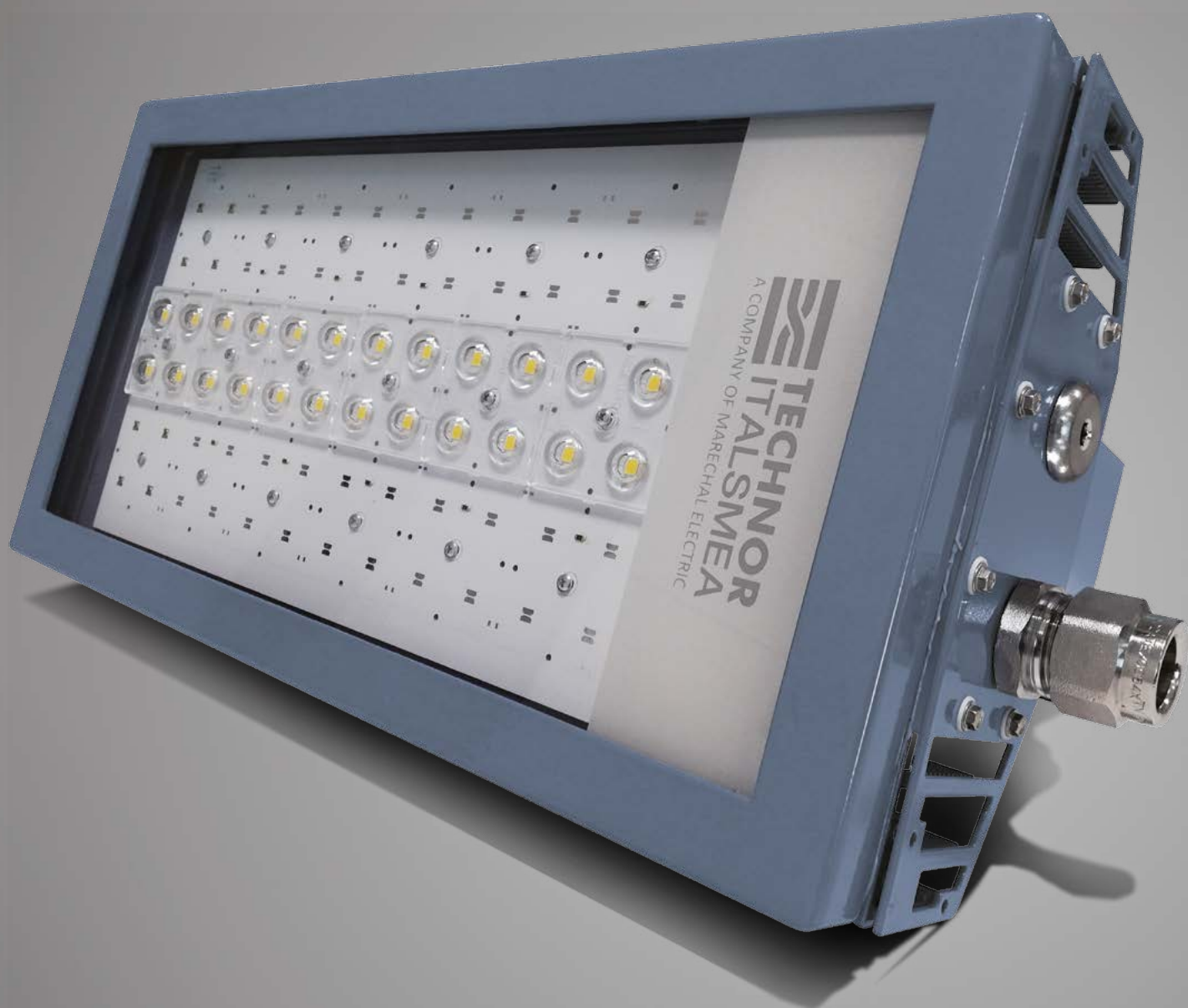
TL2 Series – Floodlight wide beam

TYPE	CODE	LAMP [W]	LUMEN [lm]	LUM. EFF. [lm/W]	N°LED/ma	DIMENSIONS [mm]			Weight [kg.]
						Length [mm]	Height [mm]	Width [mm]	
TL2-FW-06	A0160354000001	35	5.640	161	16/350	430	216	105	8
TL2-FW-13	A0160794000001	79	12.940	164	40/320	430	216	105	8
TL2-FW-16	A0161144000001	114	16.120	141	24/700	430	216	105	8
TL2-FW-25	A0161724000001	172	25.110	146	40/650	750	216	105	17
TL2-FW-50	A0163444000001	344	50.220	146	[40/650]*2	750	432	105	35

TL2 Series – Floodlight narrow beam

TYPE	CODE	LAMP [W]	LUMEN [lm]	LUM. EFF. [lm/W]	N°LED/ma	DIMENSIONS [mm]			Weight [kg.]
						Length [mm]	Height [mm]	Width [mm]	
TL2-FN-06	A0160354000002	35	5.640	161	16/350	430	216	105	8
TL2-FN-13	A0160794000002	79	12.940	164	40/320	430	216	105	8
TL2-FN-16	A0161144000002	114	16.120	141	24/700	430	216	105	8
TL2-FN-25	A0161724000002	172	25.110	146	40/650	750	216	105	17
TL2-FN-50	A0163444000002	344	50.220	146	[40/650]*2	750	432	105	35

Note: TL2 Series (linear/wellglass; streetlight, floodlight wide/narrow beam) is available also for weatherproof application. Contact our sales dept. for more information



LED LIGHTING

G2X LED Series - Zones 2 & 22



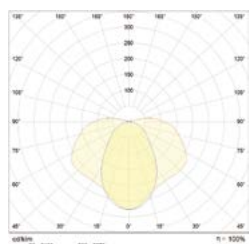
Luminaires G2X LED are suited for hazardous areas of industrial plants and space included in Zone 2 and 22.

The advantages of this luminaires series:

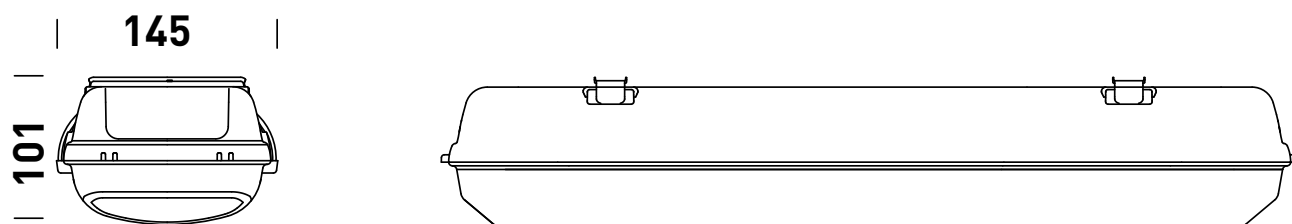
- Simple, easy and quick installation
- High resistance to corrosive industrial environment
- High luminous efficiency
- Quality ignition systems
- UV resistant.
- Easy maintenance
- A high-quality LED source with high colour rendering

TECHNICAL FEATURES

Material	GRP + 2 gear tray holders in white lacquered steel plate Transparent diffuser in PC with UV protection
IP rating	IP66
Ambient temperature range	From -20°C TO +40°C
Approvals	ATEX: TNI 20ATEX0014 X - IECEx: OBAC18.0004X
Marking	II 3 G Ex nA IIC T6 Gc II 3 D Ex tc IIIC T85°C Dc IP66
Standards	EN 60079-0, EN 60079-15, EN 60079-31
Zones	Zone 2 , 22
Gaskets	Gasket in polyurethane (to obtain IP66 rating)
Entries	N° 1 passing entry M20
Included accessories	Fixing springs and closing clips in stainless steel
Lamps	LED lamps
Rated operation voltage (UE)	230 V AC/DC (normal service); 230 V AC (emergency service); 110 V according to execution
Frequency	50-60Hz in AC
Accessories upon request	Polyamide ATEX cable gland M20x1,5
Maximum number of terminals	3x2,5mm ²
Colour	GRP housing in graphite (RAL 7035)
Options	Emergency kit 3h, Black GRP housing RAL9011, Yellow GRP housing RAL1003
Photometric curve	



Dimensions G2X LED



G2X LED - Lighting fixture for normal service

TYPE - NORMAL SERVICE	CODE	POWER [W]	DIMENSION [mm]	WEIGHT [kg]	POWER SUPPLY
G2X LED 600 PC INOX	A021462200001	22W	665 X 145 X 101	2	230 V AC/DC
G2X LED 1200 PC INOX	A021464000001	40W	1282 X 145 X 101	3,25	230 V AC/DC
G2X LED 1500 PC INOX	A021464500001	45W	1578 X 145 X 101	3,6	230 V AC/DC

G2X LED - Lighting fixture for emergency service

TYPE - PERMANENT SERVICE	CODE	POWER [W]	EMERGENCY DURATION	DIMENSION [mm]	WEIGHT [kg]	POWER SUPPLY
G2X LED EB 1200 PC INOX	A021564000001	40W	180'	1282 X 145 X 101	3,45	230 V AC
G2X LED EB 1500 PC INOX	A021564500001	45W	180'	1578 X 145 X 101	3,8	230 V AC

Note: G2X LED Series (normal service, emergency service) is available also for weatherproof application. Contact our sales dept. for more information.

LAMPS/SPARE PARTS

Lighting section

SPARES & ACCESSORIES

PRODUCT NAME	SHAPE	POWER [W]	CAP	VOLTAGE	FLUX [lm]	CODE	WHERE IT IS USED
FLUORESCENT COMPACT		45	E27	230 VAC	3000	A500144500001	EVDE-3/FC 45/EVCC-3/FC 45/EVA-3/FC 45
		60	E27	230 VAC	4300	A500146000002	EVDE-4/FC-60/EVCC-4/FC 60/EVA-4/FC 60
		75	E27	230 VAC	5550	A500147500002	EVDE-5/FC-75/EVCC-5/FC 75/EVA-5/FC 75
HIGH PRESSURE SODIUM BULB + IGNITER		70	E27	220/240 VAC	5900	A500117000009	EVDE-2/NA-B 70/EVCC-2/NA-B 70/EVA-2/NA-B 70
HIGH PRESSURE SODIUM BULB		50	E27	220/240 VAC	3900	A500115000002	EVDE-2/NA-B 50/EVCC-2/NA-B 50/EVCC-3/NA-B 50/EVA-2/NA-B 50/EVA-3/NA-B 50
		70	E27	220/240 VAC	5900	A500117000008	EVDE-3/NA-B 70/EVCC-3/NA-B 70/EVA-3/NA-B 70
		100	E40	220/240 VAC	10000	A50011A000003	EVDE-4/NA-B 100/EVCC-4/NA-B 100/EVA-4/NA-B 100
		150	E40	220/240 VAC	16100	A50011A500005	EVDE-4/NA-B 150/EVCC-4/NA-B 150/EVA-4/NA-B 150
		250	E40	220/240 VAC	30900	A50011B500006	EVDE-4/NA-B 250/EVDE-5/NA-B 250
		400	E40	220/240 VAC	55400	A50011D000007	EVDE-5/NA-B 400
METAL HALIDE BULB		70	E27	220/240 VAC	7230	A500127000002	EVDE-3/IM-B 70/EVCC-3/IM-B 70/EVA-3/IM-B 70
		100	E40	220/240 VAC	9400	A50012A000001	EVDE-4/IM-B 100/EVCC-4/IM-B 100/EVA-4/IM-B 100
		150	E40	220/240 VAC	15100	A500500005000	EVDE-4/IM-B 150/EVCC-4/IM-B 150/EVA-4/IM-B 150
		250	E40	220/240 VAC	18000	A50012B500004	EVDE-4/IM-B 250/EVDE-5/IM-B 250
		400	E40	220/240 VAC	32500	A50012D000004	EVDE-5/IM-B 400
LED		7	E27	230 VAC	430	A500150000001	EVCC-PR3/LED 7
HIGH PRESSURE SODIUM TUBE		150	E40	230 VAC	18000	A50011A500005	FL-15SA
		250	E40	230 VAC	33000	A50011B500006	FL-25SA
		400	E40	230 VAC	55800	A50011D000007	FL-40SA

PRODUCT NAME	SHAPE	POWER [W]	CAP	VOLTAGE	FLUX [lm]	CODE	WHERE IT IS USED
METAL HALIDE TUBE		250	E40	230 VAC	20 500	A50012B500004	FL-25IM
		400	E40	230 VAC	41000	A50012D000004	FL-40IM
FLUORESCENT TUBE		14	G5	230 VAC	1350	A500141400002	G2X-2-114/G2X-214
		18	G13	220/240 VAC	1300	A500141800003	EVF-P/EVF-F/RMS-560/RMS-550/RMS-540/ EVF2-PF/EVF2-FF/G2X
		36	G13	220/240 VAC	3250	A500143600004	EVF-P/EVF-F/RMS-560/RMS-550/RMS-540/ EVF2-PF/EVF2-FF/G2X
		58	G13	220/240 VAC	5240	A500145800002	EVF-P/EVF-F/RMS-560/RMS-550/RMS-540/ EVF2-PF/EVF2-FF/G2X

ль

COMPRESSOR
RUNNING
РАБОТАЮЩИЙ
КОМПРЕССОР



NITROGEN
RUN
РАБОТАЮЩИЙ
АЗОТ



PROCESS
RUN
РАБОТАЮЩИЙ
ПРОЦЕСС



COMPRESSOR
READY TO START
КОМПРЕССОР
ГОТОВ ДЛЯ ЗАПУСКА



COMMON
ALARMS
ОБЩИЕ
ТРЕВОГИ



COMMON
SHUTDOWN
ОБЩИЙ
ОСТАНОВ



COMPRESSOR
START
ЗАПУСК
КОМПРЕССОРА



COMPRESSOR
STOP
ОСТАНОВ
КОМПРЕССОРА



LOAD STEP
DECREASE
СНИЖЕНИЕ ЭТАПА
НАГРУЖЕНИЯ



ALARMS
RESET
СБРОС
ТРЕВОГ



LAMP
TEST
ИСПЫТАНИЕ
ЛАМПИ



CONTROL STATIONS



P. 86

Increased safety

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INCREASED SAFETY

EFXE Series - Stainless steel AISI 316 L



Control stations EFXE Series, made of stainless steel AISI 316 L, are manufactured by using enclosures SB Series.

They are designed to meet the requirements for use ON and OFF-SHORE, in petrochemical and marine applications and for any other industry where an explosive atmosphere may be present.

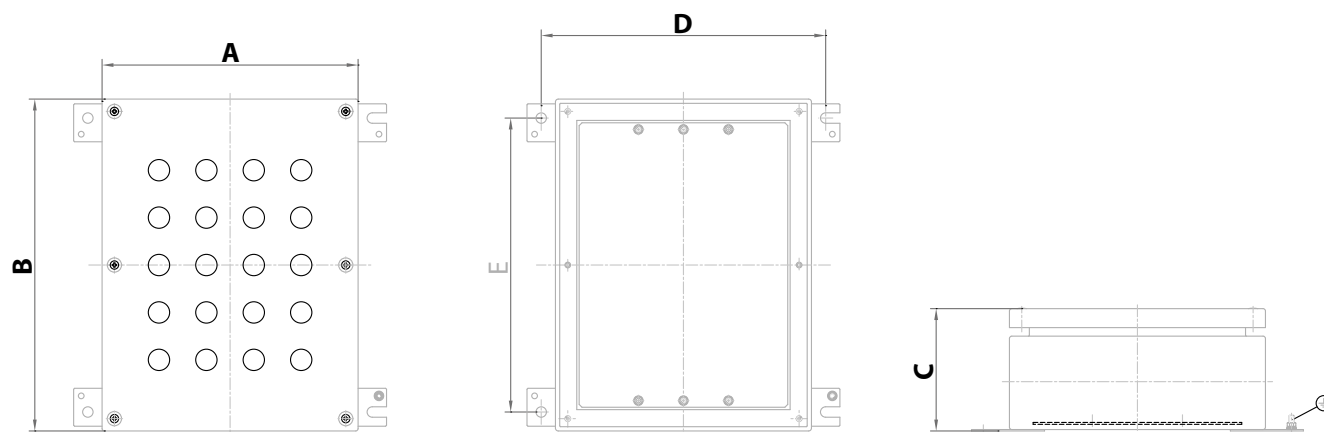
They can be equipped with following Ex de certified components:

- Standard and emergency push buttons,
- Rotating switches,
- Signalling lamps,
- Measurement instruments.

TECHNICAL FEATURES

Material	Stainless steel AISI-316L
IP rating	IP65*/IP66 *Depending on the type of components installed on
Ambient temperature range	-50°C to +95°C
Approvals	FIDI21ATEX0090X IECEX FIDI21.0015X EAC RUC-IT.BH02.B.00593/20
Marking	II 1 G Ex ia IIC/IIB T6/T5/T4 Ga II 2 GD Ex db eb ia/ib mb* IIC/IIB T6/T5/T4 Gb and/or Ex tb IIIC T85°C/T100°C/T135°C Db *Associated equipment protection depending on the components actually mounted
Surface treatment	Acid treatment
Standard certificate label	Made by self adhesive UV and corrosion resistant polyester, approved by certified Laboratory
Optional accessories	Electropolish treatment Side gland plates Hinges Drain/breather valve Traffolyte/Stainless steel certificate label Internal mounting plate Locking facility Passing through earth bolt

Dimensions EFXE



EFXE Series - Stainless steel push button stations

TYPE	DIMENSIONS [mm]					WEIGHT [kg]
	A	B	C	D	E	
EFXE-101210 SB*	100	120	100	150	-	2,4
EFXE-142013 SB	140	200	130	170	-	4
EFXE-151510 SB**	150	150	100	180	-	3
EFXE-202016 SB	200	200	160	230	160	5
EFXE-202713 SB	200	270	130	230	230	6
EFXE-202716 SB	200	270	160	230	230	6,4
EFXE-272713 SB	270	270	130	300	230	7
EFXE-273513 SB	270	350	130	300	310	8,1
EFXE-273516 SB	270	350	160	300	310	8,7
EFXE-282816 SB	280	280	160	310	240	7,8
EFXE-282827 SB	280	280	270	310	240	9,7
EFXE-353516 SB	350	350	160	380	310	10,2
EFXE-353520 SB	350	350	200	380	310	11
EFXE-355016 SB	350	500	160	380	460	12,9
EFXE-355020 SB	350	500	200	380	460	13,9
EFXE-383816 SB	380	380	160	410	340	11,2
EFXE-383820 SB	380	380	200	410	340	12,2
EFXE-383827 SB	380	380	270	410	340	13,9
EFXE-384516 SB	380	450	160	410	410	13,2
EFXE-384520 SB	380	450	200	410	410	13,6
EFXE-385716 SB	380	570	160	410	530	15,3
EFXE-505016 SB	500	500	160	530	460	16,6
EFXE-505020 SB	500	500	200	530	460	18
EFXE-575716 SB	570	570	160	600	530	20
EFXE-575720 SB	570	570	200	600	530	21,4
EFXE-575730 SB	570	570	300	600	530	25
EFXE-577620 SB	570	760	200	600	720	26,5
EFXE-769520 SB	760	950	200	790	910	38,5
EFXE-8012540 SB	800	1250	400	830	1210	84

* The enclosure is without hinges and complete with TS35x5 Omega rail welded on a removable mounting plate

** The enclosure is without hinges and complete with TS35x7,5 Omega rail welded on the back

For complete push button stations contact our Sales Dept.

INCREASED SAFETY

EFXE Series - Copper free aluminium low thickness



Control stations EFXE Series, made of aluminium with low content of copper, are manufactured by using aluminium enclosures AQ../AR..Series.

They are designed to meet the requirements for use ON and OFF-SHORE, in petrochemical and marine applications and for any other industry where an explosive atmosphere may be present.

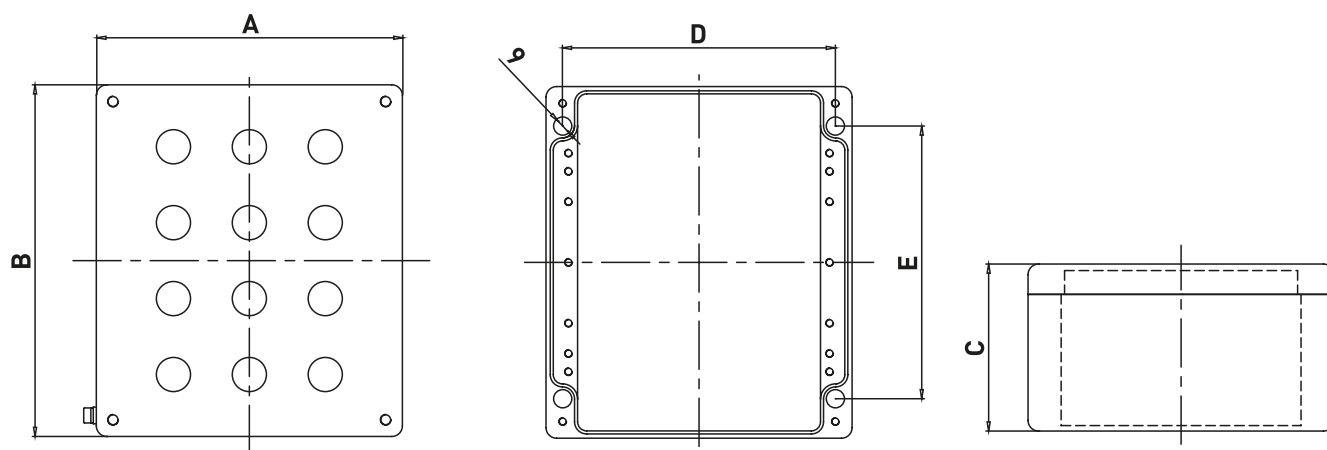
They can be equipped with following certified components:

- Standard and emergency push buttons;
- Rotating switches;
- Signalling lamps;
- Measurement instruments.

TECHNICAL FEATURES

Material	Aluminium with low content of copper
IP rating	IP65/IP66
Ambient temperature range	-50°C to +95°C
Approvals	FIDI 21ATEX 0090X IECEX FIDI21.0015X EAC RUC-IT.BH02.B.00593/20
Marking	II 1G Ex ia IIC/IIB T6/T5/T4 Ga II 2GD Ex db eb ia/ibmb* IIC/IIB T6/T5/T4 Gb and/or Ex tb IIIC T85°C/T100°C/T135°C Db *Associated equipment protection depending on the components actually mounted
Surface treatment	Standard with polyester powder coating RAL 7001
Standard certificate label	Made by self adhesive UV and corrosion resistant polyester, approved by certified Laboratory.
Optional accessories	Hinges Drain/breather valve Traffolyte/Stainless steel certificate label Internal mounting plate Passing through earth bolt

Dimensions EFXE



EFXE Series - Aluminium push button stations

TYPE	DIMENSIONS [mm]					WEIGHT [kg]
	A	B	C	D	E	
EFXE-080806AL	80	80	60	52	63	0,30
EFXE-121208AL	120	120	80	83	106	0,94
EFXE-121209AL	120	120	90	83	106	1,00
EFXE-122209AL	120	220	90	83	204	1,43
EFXE-161609AL	160	160	90	110	140	1,50
EFXE-162609AL	160	260	90	110	240	1,78
EFXE-181810AL	180	180	100	130	160	1,68
EFXE-202311AL	200	230	110	150	200	2,44
EFXE-232811AL	230	280	110	180	260	2,99
EFXE-233312AL	230	330	120	180	305	3,15
EFXE-233318AL - HT	230	330	180	180	305	3,21
EFXE-234011AL - HT	230	400	110	180	380	3,23
EFXE-314011AL - HT	310	400	110	260	380	3,29
EFXE-314014AL - HT	310	400	140	260	380	3,31
EFXE-316011AL - HT	310	600	110	260	580	3,97
EFXE-316018AL - HT	310	600	180	260	580	4,00
EFXE-606020AL - HT	600	600	200	550	580	4,55

For complete push button stations contact our Sales Dept.

INCREASED SAFETY

EFE Series - GRP



Control stations EFE Series, made of GRP, are manufactured by using enclosure AQ../AR.. Series.

They are designed to meet the requirements for use ON and OFF-SHORE, in petrochemical and marine applications and for any other industry where an explosive atmosphere may be present.

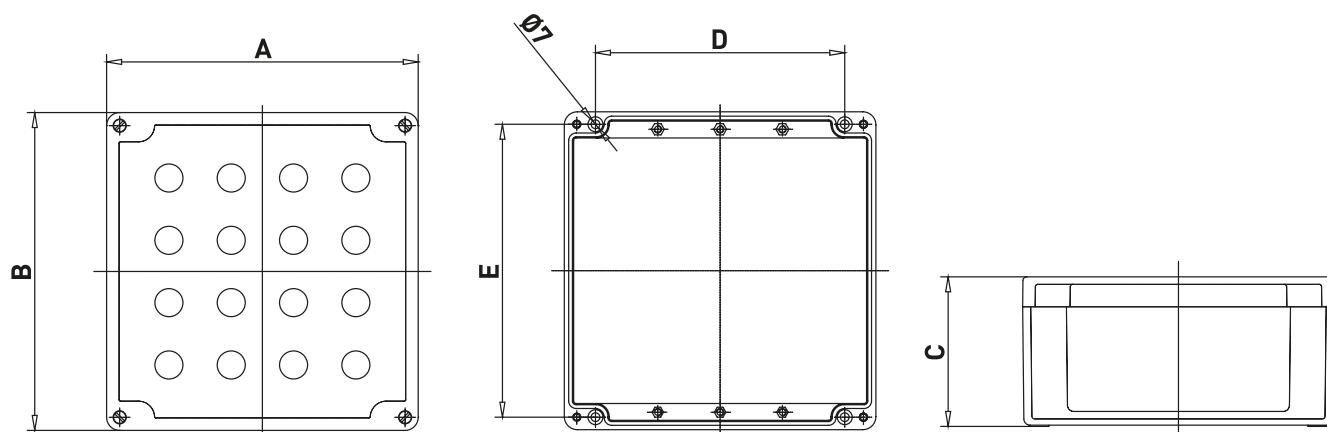
They can be equipped with following certified components:

- Standard and emergency push buttons;
- Rotating switches;
- Signalling lamps;
- Measurement instruments.

TECHNICAL FEATURES

Material	GRP (Glassfiber reinforced polyester)
IP rating	IP65/IP66
Ambient temperature range	-50°C to +95°C
Approvals	Full Conformity Certificate: FIDI 21ATEX 0090X IECEX FIDI21.0015X EAC RUC-IT.BH02.B.00593/20
Marking	II 1 G Ex ia IIC/IIB T6/T5/T4 Ga II 2 GD Ex db eb ia/ib mb* IIC/IIB T6/T5/T4 Gb and/or Ex tb IIIC T85°C/T100°C/T135°C Db *Associated equipment protection depending on the components actually mounted
Standard certificate label	Made by self adhesive UV and corrosion resistant polyester, approved by certified Laboratory.
Optional accessories	Hinges Drain/breather valve Traffolyte/Stainless steel certificate label Internal mounting plate Earth continuity plates Passing through earth bolt

Dimensions EFE



EFE Series - GRP push button stations

TYPE	DIMENSIONS [mm]					WEIGHT [kg]
	A	B	C	D	E	
EFE-080806	75	80	55	45	48	0,23
EFE-081106	80	110	60	45	98	0,29
EFE-121209	120	120	90	82	106	0,75
EFE-122209	120	220	90	82	204	1,06
EFE-161609	160	160	90	110	140	1,29
EFE-162609	160	260	90	110	240	1,71
EFE-163609	160	360	90	110	340	2,15
EFE-252612	250	260	120	200	235	2,65
EFE-252616	250	260	160	200	235	2,85
EFE-254012	250	400	120	200	380	3,65
EFE-254016	250	400	160	200	380	3,85
EFE-256012	250	600	120	200	580	5,23
EFE-414012	410	400	120	355	380	5,58
EFE-406025 - HT	400	600	250	350	580	6,15

For complete push button stations contact our Sales Dept.

Maximum number of entries on sides

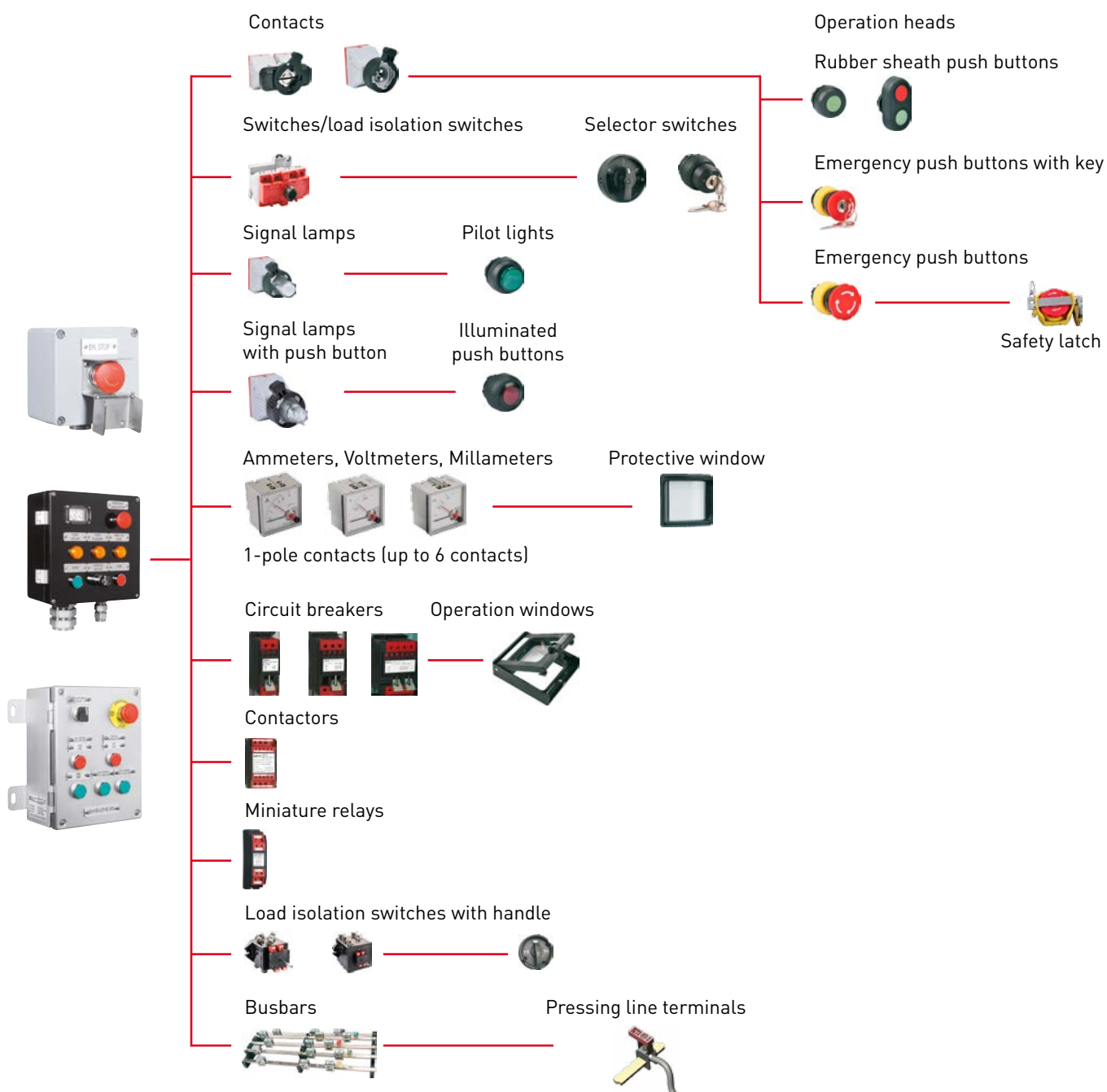
TYPE	M20/1/2"		M25/3/4"		M32/1"		M40/1" 1/4		M50/1" 1/2		M63/2"	
	A	B	A	B	A	B	A	B	A	B	A	B
EFE-080806	1	1	-	1	-	-	-	-	-	-	-	-
EFE-081106	1	2	-	2	-	-	-	-	-	-	-	-
EFE-121209	2	2	1	2	1	1	1	1	-	-	-	-
EFE-122209	2	5	1	4	1	3	1	3	-	-	-	-
EFE-161609	3	3	2	3	1	2	1	1	-	-	-	-
EFE-162609	3	5	2	5	1	4	1	3	-	3	-	-
EFE-163609	3	8	2	7	1	6	1	5	-	4	-	-
EFE-252612	8	10	8	10	3	7	3	4	2	3	2	2
EFE-252616	8	10	8	10	3	7	3	4	2	3	2	2
EFE-254012	8	18	8	16	3	5	3	5	3	5	2	4
EFE-254016	8	18	8	16	3	5	3	5	3	5	2	4
EFE-256012	8	25	8	24	3	10	3	8	2	6	2	6
EFE-414012	16	18	6	14	5	6	5	5	4	5	3	6
EFE-406025 - HT	15	25	5	24	4	10	4	8	3	6	2	4

INCREASED SAFETY - TI SERIES

TI Series* offers a large selection of certified components suitable for Ex e enclosures:

- Contacts & standard and emergency push buttons (up to 16A);
- Signalling lamps with or without push button;
- Measurement instruments: ammeters, voltmeters, millimeters;
- Circuit breaker, contactors, miniature relays, busbars;
- Load isolation switches with handle;
- Extended operating temperature: from -55°C up to +90°C.

TI SERIES – COMPLETE RANGE OF ACCESSORIES



*TI Series refers to the brand name of our range of accessories

TI SERIES - CONTACTS

Material	Silver										
IP rating	IP20										
Operating temperature range	-55°C/+90°C										
Approvals	IECEX CML 19.0053U Presafe 16 ATEX 9096U										
Marking	II 2 G Ex db eb IIC Gb										
Terminals	2 x 2.5 mm ²										
Electrical data	<table><tr><th>AC-12</th><th>AC-15</th><th>DC-13</th><th>AC-3</th><th>AC-23</th></tr><tr><td>400 V/16A</td><td>400 V/10A</td><td>110 V/1A</td><td>400 V/16A</td><td>400 V/16A</td></tr></table>	AC-12	AC-15	DC-13	AC-3	AC-23	400 V/16A	400 V/10A	110 V/1A	400 V/16A	400 V/16A
AC-12	AC-15	DC-13	AC-3	AC-23							
400 V/16A	400 V/10A	110 V/1A	400 V/16A	400 V/16A							
Rated impulse withstand voltage	6kV										
Rated short-time withstand current	10kV										
Rated short-circuit making capacity	17kA										
Short-circuit protection	16A/500 V										

TI-0201.. Series specifications



TYPE	CODE	CONTACT	WEIGHT (kg.)
TI-0201-70SH - CONTACT	B090601020005	1NO + 1NC	0.080
TI-0201-71SH - CONTACT	B090601020003	2NC	0.080
TI-0201-72SH - CONTACT	B090601020021	2NO	0.080
TI-0201-B750SH - CONTACT	B090601020006	2NO + 2NC	0.166
TI-0201-H601SH - SWITCH	B090601020022	4NO	0.211
TI-0201-H602SH - SWITCH - TWO POSITIONS	B090601020026	2NO + 2NC	0.211
TI-0201-H606SH - SWITCH - THREE POSITIONS	B090601020027	2NO + 2NC	0.211
TI-0201-H607SH - SWITCH - SPRING TO RETURN FROM RIGHT TO CENTRE	B090601020028	2NO + 2NC	0.211
TI-0201-H610SH - SWITCH - SPRING RETURN TO CENTRE	B090601020004	2NO + 2NO	0.211
TI-0201-H698SH - LOAD ISOLATION SWITCH	B090601020029	4NO	0.211

TI SERIES - CONTACTS

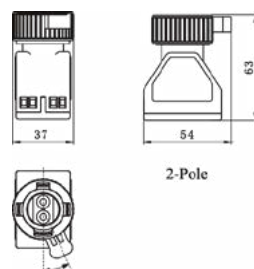
Dimensions

2-POLE CONTACT

Board back mounting

Two separate pressing rods, controlling a group of contacts each.

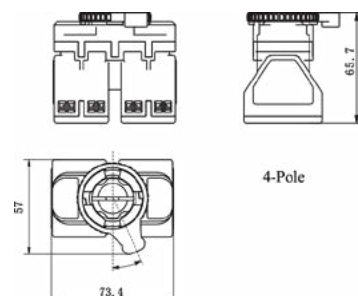
One group or two groups of contacts can be controlled by different operation heads to have different functions.



4-POLE CONTACT

Board back mounting

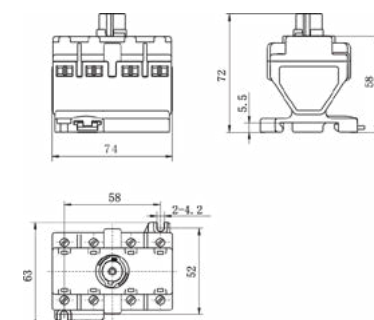
Two separate metal pressing elements, controlling two group of contacts each. Two groups or four groups of contacts can be controlled by different operation heads to have different functions.



4-POLE SWITCH/LOAD ISOLATION SWITCH

Board front mounting rail

Various contact diagrams available. Max. 4 groups of contacts



TI SERIES - SIGNAL LAMP (AVAILABLE WITH PUSH BUTTON)

Material	Silver
IP rating	IP20
Operating temperature range	-55°C/+90°C
Marking	II 2 G Ex db eb IIC Gb
Terminals	2 x 2.5mm ²
Signal lamp	
Approvals	IECEX CML 19.0052U CML 19ATEX1176U
Rated voltage	20 V – 250 V AC/DC
Light source	Long life LED source
Colour	White
Power consumption	Max. 1W
Signal lamp with push button	
Approvals	IECEX CML 19.0054U CML 19ATEX1178U
Rated voltage	AC 250 V/10A DC 24 V/1A
Short-circuit protection	16A/500 V
Mechanical life	300 thousand times



TI-0202../0212.. Series specifications

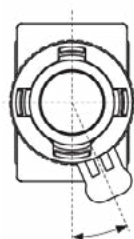
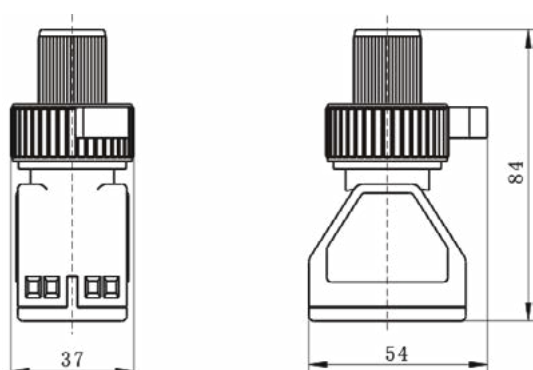
TYPE	CODE	POLES	CONTACT	WEIGHT (kg.)
TI-0202-701H - SIGNAL LAMP	B090602020002	-	-	0.070
TI-0212-7401H - SIGNAL LAMP WITH PUSH BUTTON	B090601020007	1	NO	0.083

INCREASED SAFETY

TI SERIES - SIGNAL LAMP (AVAILABLE WITH PUSH BUTTON)

Dimensions

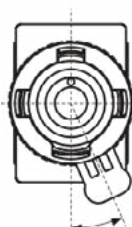
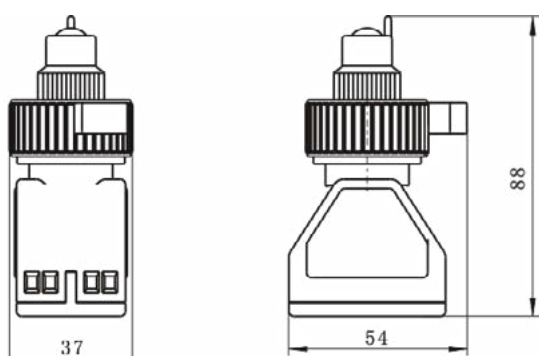
TI-0202-701L - Signal lamp - Board back mounting



Board back type



TI-0212-7404L - Signal lamp with push button - Board back mounting



Board back type



TI SERIES - OPERATION HEADS

Material	Polyamide
IP rating	IP66
Operating temperature range	-55°C/+65°C
Approvals	IECEX CML 19.0056U Sira 15ATEX3333U
Marking	II 2 G Ex eb IIC Gb II 2 D Ex tb IIIC Db
Compliant with low voltage electrical standards	IEC 60947-5-1, EN 60947-5-1 IEC 60947-5-5, EN 60947-5-5

Rubber sheath buttons



TYPE	CODE	DESCRIPTION	COLOUR
TI-4000-P101	B090601020009	RUBBER SHEATH BUTTON	GREEN
TI-4000-P121	B090601020001	RUBBER SHEATH BUTTON	RED
TI-4000-P141	B090601020023	RUBBER SHEATH BUTTON	WHITE
TI-4000-P161	B090601020019	RUBBER SHEATH BUTTON	YELLOW
TI-4000-P181	B090601020012	RUBBER SHEATH BUTTON	BLACK
TI-4000-P191	B090601020018	RUBBER SHEATH BUTTON	BLUE
TI-4000-P200	B090601020013	RUBBER SHEATH DOUBLE BUTTON	GREEN-RED

Pilot lights



TYPE	CODE	DESCRIPTION	COLOUR
TI-4000-LR	B090602020003	PILOT LIGHT	RED
TI-4000-LG	B090602020004	PILOT LIGHT	GREEN
TI-4000-LY	B090602020001	PILOT LIGHT	YELLOW
TI-4000-LB	B090602020010	PILOT LIGHT	BLUE
TI-4000-LW	B090602020005	PILOT LIGHT	WHITE

Pilot lights with push button



TYPE	CODE	DESCRIPTION	COLOUR
TI-4000-PR	B090601020024	PILOT LIGHT WITH PUSH BUTTON	RED
TI-4000-PG	B090601020025	PILOT LIGHT WITH PUSH BUTTON	GREEN
TI-4000-PY	B090601020010	PILOT LIGHT WITH PUSH BUTTON	YELLOW
TI-4000-PB	B090601020011	PILOT LIGHT WITH PUSH BUTTON	BLUE
TI-4000-PW	B090601020002	PILOT LIGHT WITH PUSH BUTTON	WHITE

INCREASED SAFETY

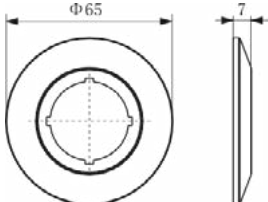
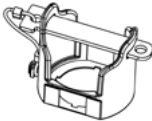
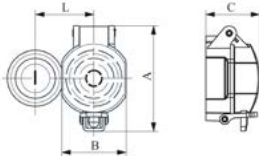
TI SERIES - OPERATION HEADS



Emergency mushroom push buttons

TYPE	CODE	DESCRIPTION	COLOUR
TI-4000-P6E	B090601020008	EMERGENCY STOP/TWIST TO RELEASE BUTTON	RED-YELLOW

Accessories for TI-4000-P6E Series

TYPE	CODE	DESCRIPTION	DIMENSIONAL DRAWINGS	COLOUR	
TI-4000-4003/10	B090100S00012	LABEL – FOR OPERATION HEADS OF Ø40MM, Ø55MM (10 UNITS PER PACKAGE)		YELLOW	
TI-4000-4019/2-7	B082309000008	SAFETY LATCH (FOR PANEL MOUNTING)		YELLOW	
		DIMENSIONS (MM)			
		A	B		C
		82	44	45	≥40



Emergency mushroom push buttons with key

TYPE	CODE	DESCRIPTION	COLOUR
TI-4000-Y22E	B090601020020	EMERGENCY STOP KEY - RELEASING BUTTON	RED-YELLOW

Key selector switches



TYPE	CODE	DESCRIPTION	KEY WITHDRAWAL	POSITIONS
TI-4000-Y31GS10	B090603020006	SPRING RETURN FROM RIGHT TO LEFT	LEFT	2
TI-4000-Y61GS01	B090603020007	SPRING RETURN FROM RIGHT TO LEFT	ALL	2
TI-4000-Y42GS04	B090603020008	SPRING RETURN TO CENTER	CENTRE	3
TI-4000-Y52GS04	B090603020009	SPRING RETURN TO CENTER	ALL	3

Selector switches



TYPE	CODE	DESCRIPTION	LOCKABLE POS.	POSITIONS
TI-4000-SB4204	B090603020004	SPRING RETURN TO CENTER	ALL	3
TI-4000-SB5204	B090603020002	STAY PUT	ALL	3
TI-4000-SB6201	B090603020003	STAY PUT	ALL	2
TI-4000-SB8205	B090603020010	SPRING RETURN FROM RIGHT TO CENTER	ALL	3

Stopping plug



TYPE	CODE	DESCRIPTION	COLOUR
TI-4000-B1	B090605020001	STOPPING PLUG: FOR UNUSED HOLE OF THE PANEL TO BE PLUGGED	BLACK

TI SERIES - AMMETER/MILLAMMETER/VOLTMETER

Operating temperature range -40°C/+95°C

Approvals IECEx CML 19.0136U
CML 19ATEX3395U

Marking II 2 G
Ex eb IIC Gb (Ammeter)
Ex eb mb IIC Gb (Millammeter/Voltmeter)

Terminals 2 x 2,5mm²

Framework Electromagnetic

Overload scale 5 times

Outline dimensions L x W x H = 70.5 x 66 x 47.5mm

Other information Equipped with warning pointer which can be regulated

Ammeter



Voltmeter



Millammeter



INCREASED SAFETY

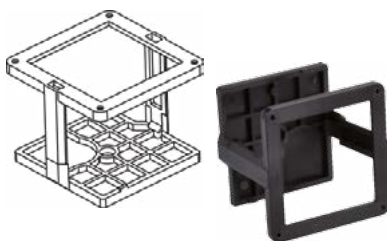
TI SERIES - AMMETER/MILLAMETER/VOLTMETER

TI-0205.. Series specifications – Ammeter/Voltmeter/Millameter

TYPE	CODE	CURRENT	SCALE RANGE*/OVERLOAD SCALE	WEIGHT (kg.)
AMMETER				
TI-0205-A 50/15	B090107020001	1A	0 - 50/250A	0.125
TI-0205-A 50/55	B090107020003	5A	0 - 50/250A	0.125
TI-0205-A 60/15	B090107020004	1A	0 - 60/300A	0.125
TI-0205-A 60/55	B090107020005	5A	0 - 60/300A	0.125
TI-0205-A 75/15	B090107020006	1A	0 - 75/375A	0.125
TI-0205-A 75/55	B090107020007	5A	0 - 75/375A	0.125
TI-0205-A 100/15	B090107020008	1A	0 - 100/500A	0.125
TI-0205-A 100/55	B090107020009	5A	0 - 100/500A	0.125
TI-0205-A 150/15	B090107020010	1A	0 - 150/750A	0.125
TI-0205-A 150/55	B090107020011	5A	0 - 150/750A	0.125
VOLTMETER/MILLAMETER				
TI-0205-V 500	B090107020013	0 - 500 V	TO BE DEFINED	0.125
TI-0205-MA 12/60	B090107020012	4 - 20/40MA	0 - 60MA	0.125

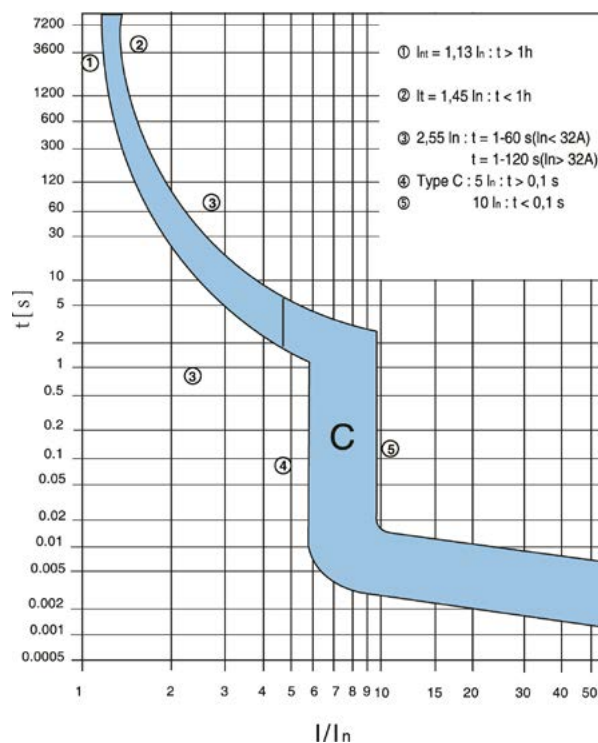
*Scale range may vary upon request

Accessories specifications

ACCESSORIES	ILLUSTRATION	DESCRIPTION
MOUNTING BRACKETS		SUITABLE FOR AMMETER PANEL MOUNTING WEIGHT: 0.027kg
CALOTTE: PROTECTIVE WINDOW		TI-4000-M1 WITH LABEL (UPON REQUEST) WEIGHT: 0.071kg

TI SERIES - CIRCUIT BREAKERS

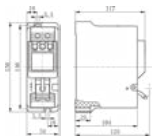
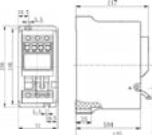
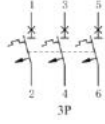
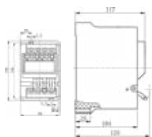
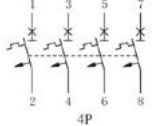
Material	Unsaturated resin
Operating temperature range	-20°C/+110°C (II C) -40°C/+110°C (II B)
Approvals	IECEX CML 19.0057U CML 19ATEX1181U
Marking	II 2 G Ex d e IIC Gb Ex d e IIB Gb
Terminals	Main contacts 1 – 10 mm ² (6 – 10mm ² used in connection with compression lug). Auxiliary contact 1 – 2.5 mm ²
Rated voltage	Main contacts: 230 V/400 V, 50/60Hz; 250 V DC Auxiliary contact: 250 V/400 V, 50/60Hz, 4A; 110 V DC 0.5A
Rated current	10A; 16A; 25A; 32A (40A upon request)
Rated ON-OFF capacity	10kA (6kA upon request)
Series available	TI-0511-BL.. Series TI-0511-BFL.. Series TI-0511-BF.. Series
Trip character	"C" Characteristic curve Ambient temperature 30°C



INCREASED SAFETY

TI SERIES - CIRCUIT BREAKERS

TI-0511-BL.. Series - dimensions & principal electrical diagrams

2-POLE CIRCUIT BREAKER	DIMENSIONS	WEIGHT	ELECTRICAL DIAGRAM
		1.07 kg.	
3-POLE CIRCUIT BREAKER	DIMENSIONS	WEIGHT	ELECTRICAL DIAGRAM
		1.43 kg.	
4-POLE CIRCUIT BREAKER	DIMENSIONS	WEIGHT	ELECTRICAL DIAGRAM
		1.90 kg.	

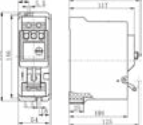
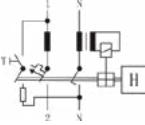
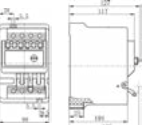
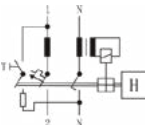
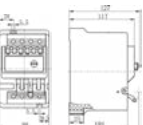
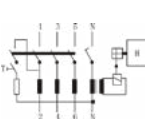
TI-0511-BL.. Series specifications

TYPE	CODE	RATED CURRENT (A)	POLES	AUXILIARY CONTACTS
TI-0511-BL/10/2/C/10	B090309020002	10	2	-
TI-0511-BL/10/2/C/10-0	B090309020003	10	2	1NO + 1NC
TI-0511-BL/16/2/C/10	B090309020004	16	2	-
TI-0511-BL/16/2/C/10-0	B090309020005	16	2	1NO + 1NC
TI-0511-BL/25/2/C/10	B090309020006	25	2	-
TI-0511-BL/25/2/C/10-0	B090309020007	25	2	1NO + 1NC
TI-0511-BL/32/2/C/10	B090309020008	32	2	-
TI-0511-BL/32/2/C/10-0	B090309020009	32	2	1NO + 1NC
TI-0511-BL/10/3/C/10	B090309020010	10	3	-
TI-0511-BL/10/3/C/10-0	B090309020011	10	3	1NO + 1NC
TI-0511-BL/16/3/C/10	B090309020012	16	3	-
TI-0511-BL/16/3/C/10-0	B090309020013	16	3	1NO + 1NC
TI-0511-BL/25/3/C/10	B090309020014	25	3	-
TI-0511-BL/25/3/C/10-0	B090309020015	25	3	1NO + 1NC
TI-0511-BL/32/3/C/10	B090309020016	32	3	-
TI-0511-BL/32/3/C/10-0	B090309020017	32	3	1NO + 1NC
TI-0511-BL/10/4/10	B090309020018	10	4	-
TI-0511-BL/10/4/C/10-0	B090309020019	10	4	1NO + 1NC
TI-0511-BL/16/4/10	B090309020020	16	4	-
TI-0511-BL/16/4/C/10-0	B090309020021	16	4	1NO + 1NC
TI-0511-BL/25/4/10	B090309020022	25	4	-
TI-0511-BL/25/4/C/10-0	B090309020023	25	4	1NO + 1NC
TI-0511-BL/32/4/10	B090309020024	32	4	-
TI-0511-BL/32/4/C/10-0	B090309020025	32	4	1NO + 1NC



TI SERIES - CIRCUIT BREAKERS

TI-0511-BFL../BF.. SERIES - DIMENSIONS & PRINCIPAL ELECTRICAL DIAGRAMS

1P+N CIRCUIT BREAKER	DIMENSIONS	WEIGHT	ELECTRICAL DIAGRAM
		0.85 kg.	
1P+N+AUX. CONTACTS CIRCUIT BREAKER	DIMENSIONS	WEIGHT	ELECTRICAL DIAGRAM
		1.90 kg.	
4-POLE CIRCUIT BREAKER	DIMENSIONS	WEIGHT	ELECTRICAL DIAGRAM
		1.90 kg.	

TI-0511-BFL.. Series specifications

TYPE	CODE	RATED CURRENT (A)	RATED LEAKAGE CURRENT (mA)	POLES	AUXILIARY CONTACTS
TI-0511-BFL/10/1N/C/30/10	B090309020026	10	30	2 (1P+N)	-
TI-0511-BFL/10/1N/C/300/10	B090309020027	10	300	2 (1P+N)	-
TI-0511-BFL/16/1N/C/30/10	B090309020028	16	30	2 (1P+N)	-
TI-0511-BFL/16/1N/C/300/10	B090309020029	16	300	2 (1P+N)	-
TI-0511-BFL/25/1N/C/30/10	B090309020030	25	30	2 (1P+N)	-
TI-0511-BFL/25/1N/C/300/10	B090309020031	25	300	2 (1P+N)	-
TI-0511-BFL/32/1N/C/30/10	B090309020032	32	30	2 (1P+N)	-
TI-0511-BFL/32/1N/C/300/10	B090309020033	32	300	2 (1P+N)	-
TI-0511-BFL/10/1N/C/30/10-0	B090309020034	10	30	2 (1P+N)	1NO + 1NC
TI-0511-BFL/10/1N/C/300/10-0	B090309020035	10	300	2 (1P+N)	1NO + 1NC
TI-0511-BFL/16/1N/C/30/10-0	B090309020036	16	30	2 (1P+N)	1NO + 1NC
TI-0511-BFL/16/1N/C/300/10-0	B090309020037	16	300	2 (1P+N)	1NO + 1NC
TI-0511-BFL/25/1N/C/30/10-0	B090309020038	25	30	2 (1P+N)	1NO + 1NC
TI-0511-BFL/25/1N/C/300/10-0	B090309020039	25	300	2 (1P+N)	1NO + 1NC
TI-0511-BFL/32/1N/C/30/10-0	B090309020040	32	30	2 (1P+N)	1NO + 1NC
TI-0511-BFL/32/1N/C/300/10-0	B090309020041	32	300	2 (1P+N)	1NO + 1NC

TI-0511-BF.. Series specifications

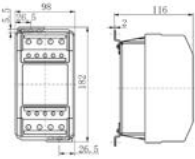
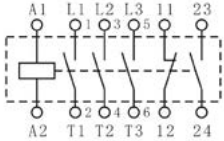
TYPE	CODE	RATED CURRENT (A)	RATED LEAKAGE CURRENT (mA)	POLES	
TI-0511-BF/25/3N/C/30	B090309020042	25	30	4 (3P+N)	
TI-0511-BF/25/3N/C/300	B090309020043	25	300	4 (3P+N)	
TI-0511-BF/40/3N/C/30	B090309020044	40	30	4 (3P+N)	
TI-0511-BF/40/3N/C/300	B090309020045	40	300	4 (3P+N)	

INCREASED SAFETY

TI SERIES - CONTACTORS

Material	Unsaturated resin
Operating temperature range	-20°C/+110°C (II C) -40°C/+110°C (II B)
Ambient temperature range	-20°C/+60°C (II C) -40°C/+60°C (II B)
Approvals	IECEx CML 19.0058U CML 19ATEX1182U
Marking	II 2 G Ex db e IIC Gb Ex db e IIB Gb
Terminals	Main contacts 1 – 10 mm ² (6 – 10 mm ² used in connection with compression lug). Auxiliary contact 1 – 2.5 mm ²
Rated voltage	24 V, 240 V
Rated current	25A

TI-0512-BDI.. Series - Dimensions & principal electrical diagrams

3-POLE CONTACTOR	DIMENSIONS	WEIGHT	ELECTRICAL DIAGRAM
		1.75 kg.	



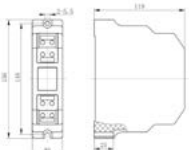
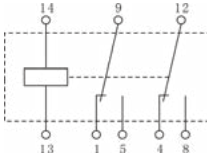
TI-0512-BDI.. Series specifications

TYPE	CODE	RATED VOLTAGE (V)	POLES	AUXILIARY CONTACTS
TI-0512-BDI/25/01-0	B090309020046	24	3	1NO + 1NC
TI-0512-BDI/25/07-0	B090309020047	230	3	1NO + 1NC

TI SERIES - MINIATURE RELAYS

Material	Unsaturated resin	
Operating temperature range	-20°C/+110°C (II C) -40°C/+110°C (II B)	
Ambient temperature range	-20°C/+60°C (II C) -40°C/+60°C (II B)	
Approvals	IECEX CML 19.0058U CML 19ATEX1182U	
Marking	II 2 G Ex db e IIC Gb Ex db e IIB Gb	
Power supply voltage	Up to 240 V	
Contact capacity	5A 220 V AC	5A 24 V DC
Cross section of terminals	2 x 1 ~ 2.5mm ²	

TI-0512-BMY.. Series - Dimensions & principal electrical diagrams

RELAY	DIMENSIONS	WEIGHT	ELECTRICAL DIAGRAM
		0.8 kg.	



TI-0512-BMY.. Series specifications

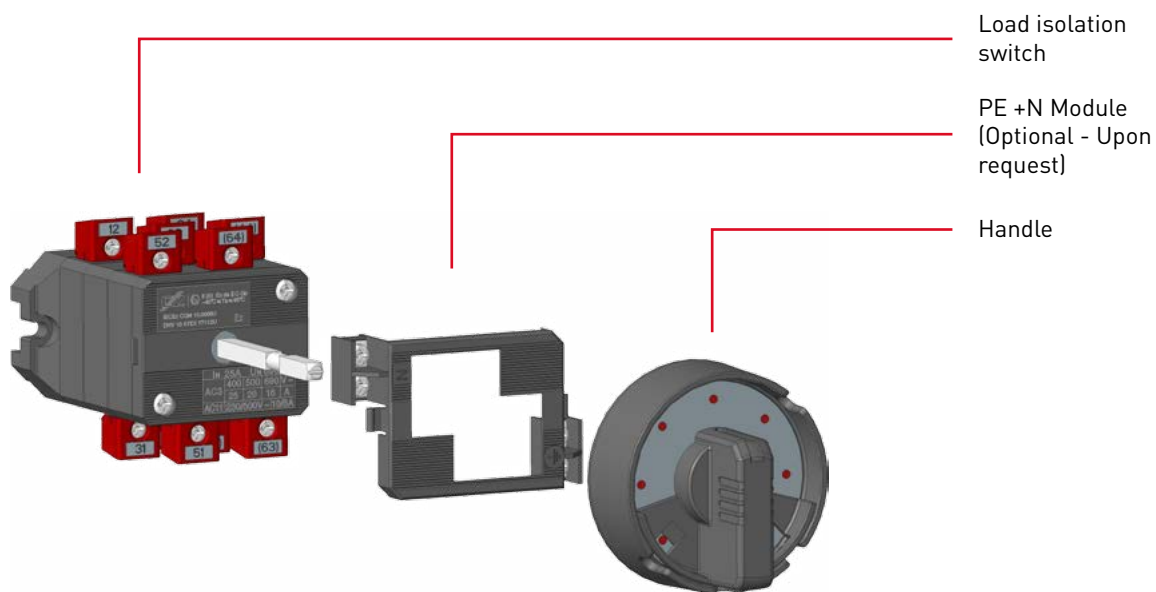
CODE	TYPE	SUPPLY VOLTAGE
B090712020001	TI-0512-BMY/01	AC 24V
B090712020002	TI-0512-BMY/05	AC 220/240V
B090712020003	TI-0512-BMY/11	DC 24V

INCREASED SAFETY

TI SERIES - LOAD ISOLATION SWITCHES WITH HANDLE

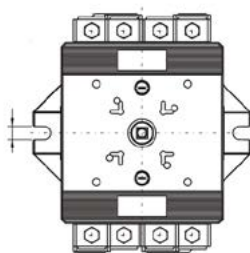
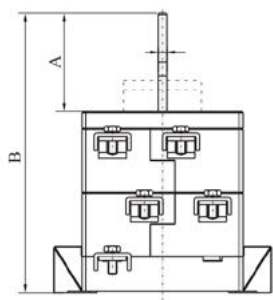
Material	Unsaturated resin (Switch) Black polyamide (Handle)				
Operating temperature range	-40°C/+55°C				
Approvals	IECEx CML 19.0055U CML 19ATEX1179U				
Marking	II 2 G Ex db e IIC Gb				
Conformity to Standards	IEC/EN 60079-0, IEC/EN 60079-1, IEC/EN 60079-7				
Utilization category	AC-23, AC-3, AC-11				
Switch capacity		230V	400V	500V	690V
	TI-0513-25A	25A	25A	20A	16A
	TI-0513-40A	40A	40A	40A	32A
	TI-0513-80A	80A	80A	80A	63A
	TI-0513-180A	180A	180A	150A	125A
Rated insulation voltage	800V				
Rated impulse withstand voltage	6kV				
Rated short-time withstand current	3kV (25A, 40A) 10kV (80A, 180A)				
Rated short-time marking capacity	4kV (25A, 40A) 17kV (80A, 180A)				
Short-circuit protection of fuse	20kA	500V/35A (25A)			
	20kA	500V/63A (40A)			
	50kA	500V/160A (80A)			
	50kA	500V/250A (180A)			
Terminal cross-section area	25A:	2 x 1,5 ~ 4mm ²			
	40A:	2 x 10mm ²			
	80A:	2 x 16 ~ 25mm ²			
	180A:	2 x 50 ~ 95mm ²			

TI SERIES - LOAD ISOLATION SWITCHES WITH HANDLE

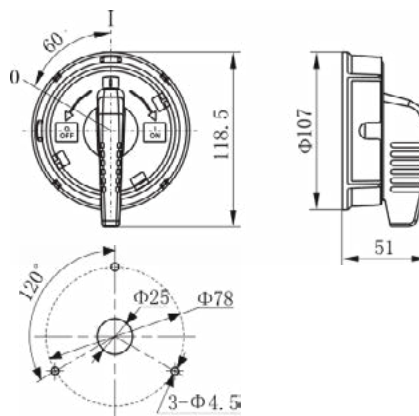


Dimensions

Load isolation switch



Handle



TI-0513../3DB1 Series specifications



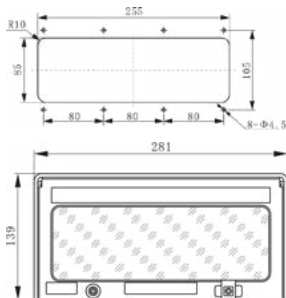
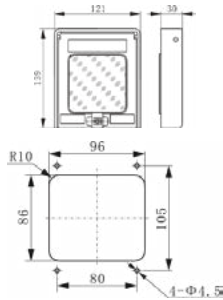
TYPE	CODE	RATED CURRENT (A)	POLES	DIMENSIONS (MM)		WEIGHT (kg.)
				A	B	
TI-0513-25A/4P-3DB1	B090603020011	25	4	41	105	0.37
TI-0513-40A/4P-3DB1	B090603020012	40	4	83	171	1.12
TI-0513-80A/4P-3DB1	B090603020001	80	4	71	201	3.91
TI-0513-180A/4P-3DB1	B090603020013	180	4	84	241	7.60

INCREASED SAFETY

TI SERIES - OPERATION WINDOWS

Material	GRP (anti-static glass fiber reinforced polyester SMC) Polyamide
IP rating	IP66
Operating temperature range	-55°C/+80°C
Approvals	IECEX CML 17.0042U CML 17ATEX3102U
Marking	II 2 G Ex eb IIC Gb II 2 D Ex tb IIIC Db

TI-8000-8002/.. Series specifications

TI-8000-8002/1	CODE	DIMENSIONS	WEIGHT (kg)
	B081409000002		1.152
TI-8000-8002/2	CODE	DIMENSIONS	WEIGHT
	B081409000003		0.569

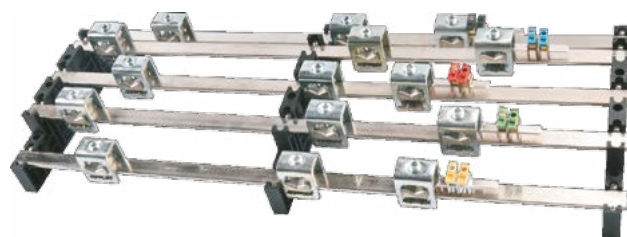
TI SERIES - BUSBARS

Material Copper

Operating temperature range -55°C/+80°C

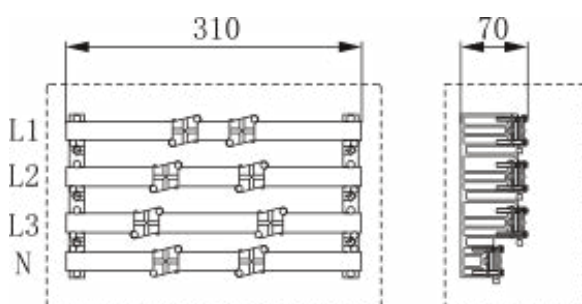
Approvals IECEx CML 17.0042U
CML 17ATEX3102U

Marking II 2 G
Ex eb IICGb
II 2 D
Ex tb IIICDb

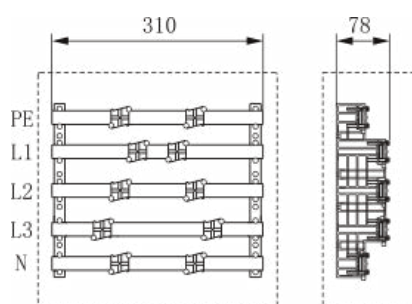


Dimensions

4-pole busbar



5-pole busbar



TI-8000-MX.. Series specifications*

TYPE	CODE	RATED CURRENT (A)	SHORT CIRCUIT CURRENT (KA)	POLES	COPPER BAR SIZE (MM.)			WEIGHT (kg.)
					L1, L2, L3	N	PE	
TI-8000-MX11/80	F010200000040	80	5	4	10 X 3	10 X 3	-	0.63
TI-8000-MX11/250	F010200000044	250	17	4	20 X 5	20 X 5	-	2.74
TI-8000-MX21/250	F010200000041	250	17	5	20 X 5	20 X 5	20 X 5	1.42
TI-8000-MX21/400	F010200000042	400	34	5	20 X 10	20 X 5	20 X 5	2.12
TI-8000-MX21/630	F010200000045	630	52	5	20 X 15	20 X 10	20 X 10	3.45

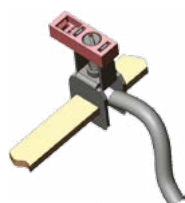
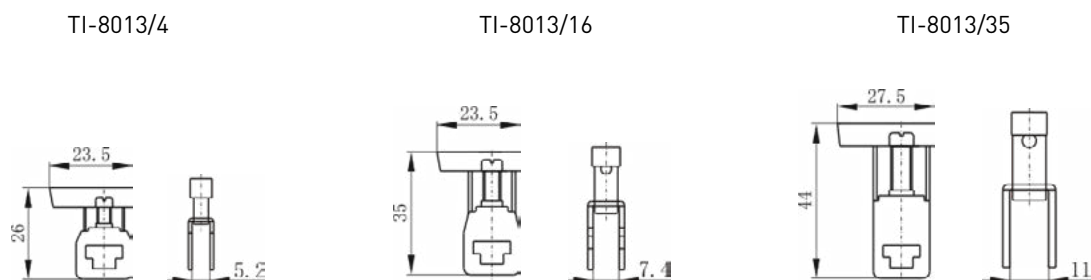
*Standard versions: 310 mm length. Upon request: 664 mm, 1018 mm, 1372 mm

INCREASED SAFETY

TI SERIES - PRESSING LINE TERMINALS

Material	Copper
Operating temperature range	-55°C/+80°C
Approvals	IECEX CML 17.0042U CML 17ATEX3102U
Marking	II 2 G Ex eb IIC Gb II 2 D Ex tb IIIC Db

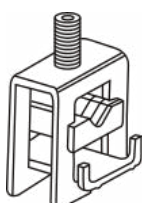
Dimensions



Pressing line terminals – TI-8013.. Series specifications

TYPE	CODE	COPPER BAR SIZE	CONDUCTOR SECTION (mm²)	COLOUR
TI-8013/4D	B090208020001	10 X 3	4	Black*
TI-8013/16D	B090208020002	10 X 3	16	Black*
TI-8013/35D	B090208020003	10 X 3	35	Black*

*Other colours available upon request



TI-K20.. Series specifications

TYPE	CODE	COPPER BAR SIZE	CONDUCTOR SECTION (mm²)
TI-K20/10	B090208020004	20 X 5	35 ~ 240
		20 X 10	35 ~ 185
		20 X 15	35 ~ 95

INCREASED SAFETY - HARMATEX SERIES

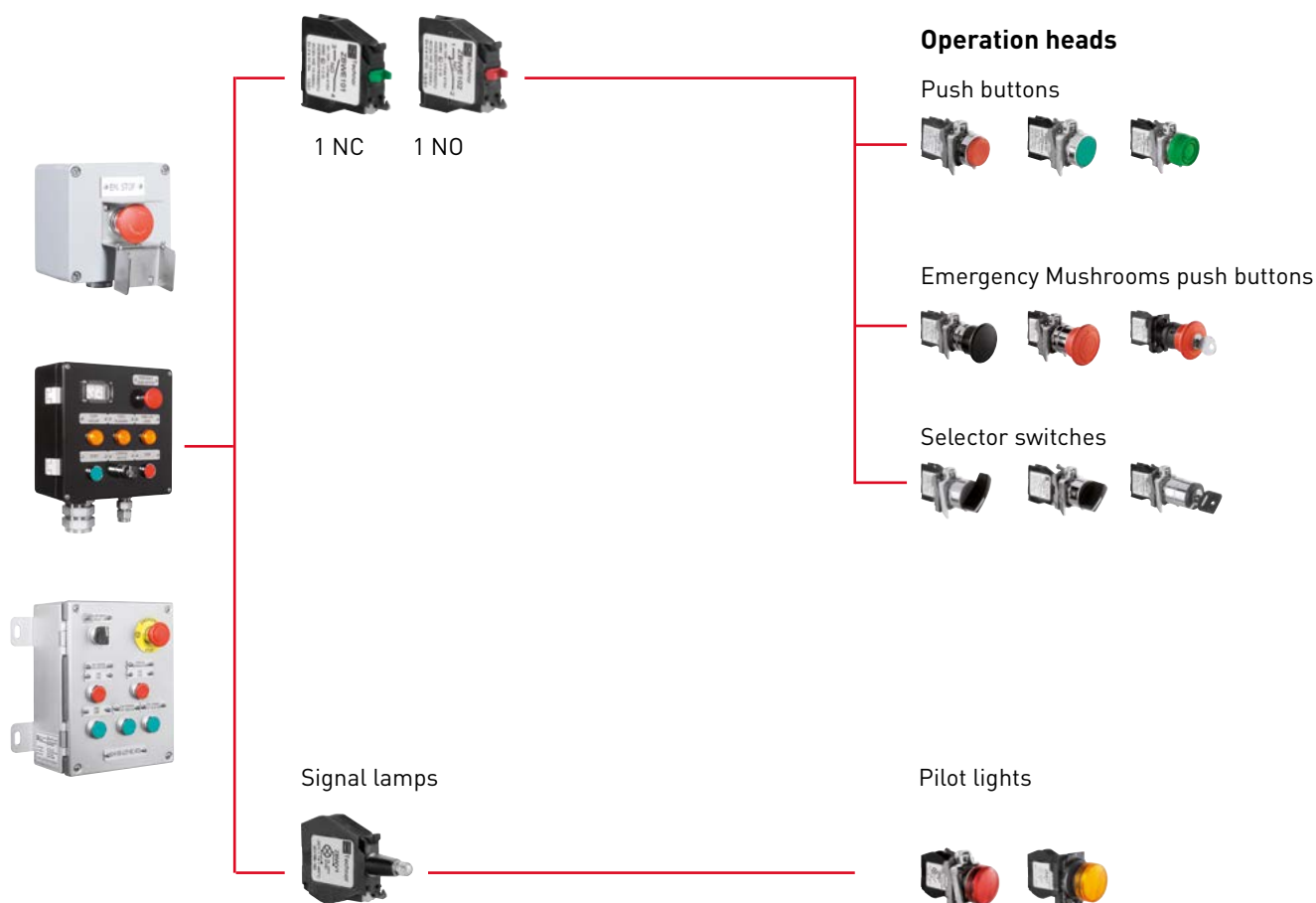
The Harmatex Series offers a large selection of contacts & operation heads suitable for Ex d enclosures:

- Momentary and push-push actuation modes;
- Standard and emergency push buttons;
- Selector switches;
- Pilot lights.

Unrivalled flexibility thanks to its modular design:

- Up to 6 contacts per operation head;
- Operating temperature: from -20°C up to +75°C

HARMATEX SERIES – CONTACTS & OPERATION HEADS



Material

Metal and plastic

IP rating

IP65/IP66

Ambient temperature range

-20°C TO 65°C

-20°C TO 75°C

Approvals

Certified 02ATEX9007U (contact blocks)

Certified 04ATEX9003U (pilot lamps)

IECEx INE 13.0063U

Marking

II 2 GD

Ex d e IIC Gb (contact blocks)

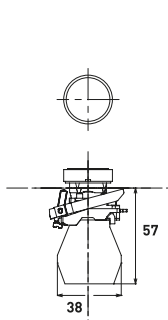
Ex e mb IIC Gb (pilot lamps)

Ex tb IIIC Db

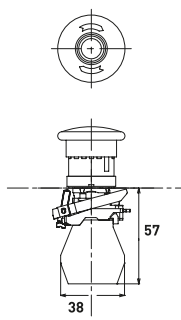
INCREASED SAFETY

HARMATEX SERIES – CONTACTS & OPERATION HEADS

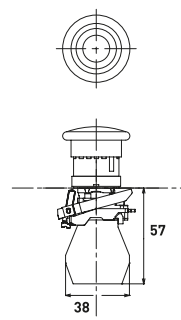
Dimensions HARMATEX



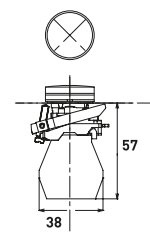
Pushbutton



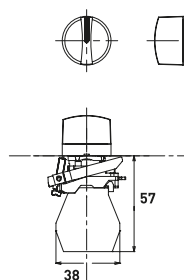
**Mushroom Pushbutton
Twist to release**



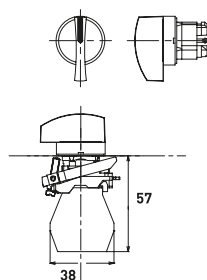
**Emergency Stop
Mushroom Pushbutton**



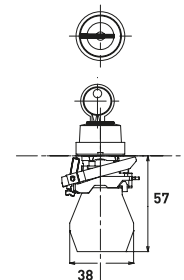
Pilot light



**Selector switches
with standard handle**



**Selector switches
with long handle**



Key selector switches

Flush push buttons



TYPE	CODE	BEZEL	COLOUR	CONTACT
XBW4BA11 - MOMENTARY PUSH BUTTON	B090601040015	METAL	WHITE	1NO
XBW4BA21 - MOMENTARY PUSH BUTTON	B090601040016	METAL	BLACK	1NO
XBW4BA22 - MOMENTARY PUSH BUTTON	B090601040020	METAL	BLACK	1NC
XBW4BA31 - MOMENTARY PUSH BUTTON	B090601040012	METAL	GREEN	1NO
XBW4BA41 - MOMENTARY PUSH BUTTON	B090601040021	METAL	RED	1NO
XBW4BA42 - MOMENTARY PUSH BUTTON	B090601040017	METAL	RED	1NC
XBW4BA51 - MOMENTARY PUSH BUTTON	B090601040018	METAL	YELLOW	1NO
XBW4BA61 - MOMENTARY PUSH BUTTON	B090601040019	METAL	BLUE	1NO

Projecting push buttons



TYPE	CODE	BEZEL	COLOUR	CONTACT
XBW4BL11 - MOMENTARY PUSH BUTTON	B090601040044	METAL	WHITE	1NO
XBW4BL21 - MOMENTARY PUSH BUTTON	B090601040031	METAL	BLACK	1NO
XBW4BL31 - MOMENTARY PUSH BUTTON	B090601040032	METAL	GREEN	1NO
XBW4BL42 - MOMENTARY PUSH BUTTON	B090601040033	METAL	RED	1NC
XBW4BL51 - MOMENTARY PUSH BUTTON	B090601040045	METAL	YELLOW	1NO
XBW4BL61 - MOMENTARY PUSH BUTTON	B090601040046	METAL	BLUE	1NO

HARMATEX SERIES – CONTACTS & OPERATION HEADS

Push buttons with silicone boot



TYPE	CODE	BEZEL	COLOUR	CONTACT
XBW4BP11S - MOMENTARY PUSH BUTTON	B090601040001	METAL	WHITE	1NO
XBW4BP21S - MOMENTARY PUSH BUTTON	B090601040002	METAL	BLACK	1NO
XBW4BP31S - MOMENTARY PUSH BUTTON	B090601040003	METAL	GREEN	1NO
XBW4BP42S - MOMENTARY PUSH BUTTON	B090601040011	METAL	RED	1NC
XBW4BP51S - MOMENTARY PUSH BUTTON	B090601040047	METAL	YELLOW	1NO
XBW4BP61S - MOMENTARY PUSH BUTTON	B090601040048	METAL	BLUE	1NO



XBW5AP11S - MOMENTARY PUSH BUTTON	B090601040004	PLASTIC	WHITE	1NO
XBW5AP21S - MOMENTARY PUSH BUTTON	B090601040005	PLASTIC	BLACK	1NO
XBW5AP31S - MOMENTARY PUSH BUTTON	B090601040006	PLASTIC	GREEN	1NO
XBW5AP42S - MOMENTARY PUSH BUTTON	B090601040007	PLASTIC	RED	1NC
XBW5AP51S - MOMENTARY PUSH BUTTON	B090601040009	PLASTIC	YELLOW	1NO
XBW5AP61S - MOMENTARY PUSH BUTTON	B090601040008	PLASTIC	BLUE	1NO

Stop mushroom push button



TYPE	CODE	BEZEL	COLOUR	CONTACT
XBW4BC21 - MOMENTARY MUSHROOM	B090601040042	METAL	BLACK	1NO
XBW4BC31 - MOMENTARY MUSHROOM	B090601040034	METAL	GREEN	1NO
XBW4BC42 - MOMENTARY MUSHROOM	B090601040010	METAL	RED	1NC
XBW4BC51 - MOMENTARY MUSHROOM	B090601040043	METAL	YELLOW	1NO
XBW4BC61 - MOMENTARY MUSHROOM	B090601040052	METAL	BLUE	1NO

XBW5AC21 - MOMENTARY MUSHROOM	B090601040038	PLASTIC	BLACK	1NO
XBW5AC31 - MOMENTARY MUSHROOM	B090601040039	PLASTIC	GREEN	1NO
XBW5AC42 - MOMENTARY MUSHROOM	B090601040036	PLASTIC	RED	1NC
XBW5AC51 - MOMENTARY MUSHROOM	B090601040040	PLASTIC	YELLOW	1NO
XBW5AC61 - MOMENTARY MUSHROOM	B090601040041	PLASTIC	BLUE	1NO

Emergency stop mushroom push buttons



TYPE	CODE	BEZEL	CONTACT
XBW4BS9442 - MUSHROOM TWIST T.R. WITH KEY	B090601040035	METAL	1NC
XBW4BS8442 - MUSHROOM TWIST T.R.	B090601040010	METAL	1NC



XBW5AS142 - MUSHROOM TWIST T.R. WITH KEY	B090601040050	PLASTIC	1NC
XBW5AS542 - MUSHROOM TWIST T.R.	B090601040049	PLASTIC	1NC

HARMATEX SERIES – CONTACTS & OPERATION HEAD

Pilot lights 24V to 254V AC/DC (current from 2 to 10mA)



TYPE	CODE	BEZEL	COLOUR
XLW4BV013 - PILOT LIGHT	B090602040001	METAL	WHITE
XLW4BV033 - PILOT LIGHT	B090602040004	METAL	GREEN
XLW4BV043 - PILOT LIGHT	B090602040003	METAL	RED
XLW4BV053 - PILOT LIGHT	B090602040005	METAL	YELLOW
XLW4BV063 - PILOT LIGHT	B090602040006	METAL	BLUE



XLW5AV013 - PILOT LIGHT	B090602040007	PLASTIC	WHITE
XLW5AV033 - PILOT LIGHT	B090602040008	PLASTIC	GREEN
XLW5AV043 - PILOT LIGHT	B090602040009	PLASTIC	RED
XLW5AV053 - PILOT LIGHT	B090602040002	PLASTIC	YELLOW
XLW5AV063 - PILOT LIGHT	B090602040012	PLASTIC	BLUE

Selector switches with standard handle



TYPE	CODE	BEZEL	POSITIONS	CONTACT
XBW4BD21 - STAY PUT	B090603040003	METAL	2	1NO
XBW4BD41 - SPRING RETURN	B090603040007	METAL	2	1NO
XBW4BD33 - STAY PUT	B090603040006	METAL	3	1NO+1NO
XBW4BD53 - SPRING RETURN TO CENTER	B090603040008	METAL	3	1NO+1NO
XBW4BD73 - SPRING RETURN FROM LEFT	B090601040009	METAL	3	1NO+1NO
XBW4BD83 - SPRING RETURN FROM RIGHT	B090603040030	METAL	3	1NO+1NO

XBW5AD21 - STAY PUT	B090603040027	PLASTIC	2	1NO
XBW5AD41 - SPRING RETURN	B090601040036	PLASTIC	2	1NO
XBW5AD33 - STAY PUT	B090603040002	PLASTIC	3	1NO+1NO
XBW5AD53 - SPRING RETURN TO CENTER	B090603040022	PLASTIC	3	1NO+1NO
XBW5AD73 - SPRING RETURN FROM LEFT	B090603040009	PLASTIC	3	1NO+1NO
XBW5AD83 - SPRING RETURN FROM RIGHT	B090601040037	PLASTIC	3	1NO+1NO

Selector switches with long handle



TYPE	CODE	BEZEL	POSITIONS	CONTACT
XBW4BJ21 - STAY PUT	B090603040017	METAL	2	1NO
XBW4BJ41 - SPRING RETURN	B090603040019	METAL	2	1NO
XBW4BJ33 - STAY PUT	B090603040018	METAL	3	1NO+1NO
XBW4BJ53 - SPRING RETURN TO CENTER	B090603040020	METAL	3	1NO+1NO
XBW4BJ73 - SPRING RETURN FROM LEFT	B090601040035	METAL	3	1NO+1NO
XBW4BJ83 - SPRING RETURN FROM RIGHT	B090603040031	METAL	3	1NO+1NO



Key selector switches

TYPE	CODE	BEZEL	POSITIONS	KEY WITHDRAWAL	CONTACT
XBW4BG21 - STAY PUT	B090603040012	METAL	2	LEFT	1NO
XBW4BG41 - STAY PUT	B090603040014	METAL	2	LEFT - RIGHT	1NO
XBW4BG61 - SPRING RETURN FROM RIGHT	B090603040016	METAL	2	LEFT	1NO
XBW4BG03 - STAY PUT	B090603040010	METAL	3	LEFT - 0 - RIGHT	1NO+1NO
XBW4BG33 - STAY PUT	B090603040013	METAL	3	0	1NO+1NO
XBW4BG53 - STAY PUT	UPON REQUEST	METAL	3	LEFT - RIGHT	1NO+1NO
XBW4BG93 - STAY PUT	UPON REQUEST	METAL	3	LEFT	1NO+1NO
XBW4BG093 - STAY PUT	UPON REQUEST	METAL	3	RIGHT	1NO+1NO
XBW4BG13 - SPRING RETURN FROM LEFT	B090603040011	METAL	3	0	1NO+1NO
XBW4BG73 - SPRING RETURN TO CENTER	B090601040034	METAL	3	0	1NO+1NO
XBW4BG83 - SPRING RETURN FROM RIGHT	B090603040015	METAL	3	0	1NO+1NO
XBW4BG083 - SPRING RETURN FROM RIGHT	B090601040033	METAL	3	LEFT	1NO+1NO



Contacts

TYPE	CODE	CONTACT
ZBWE101 - NORMALLY OPEN CONTACT	B090601040030	NO
ZBWE102 - NORMALLY CLOSE CONTACT	B090601040029	NC



Signal lamps

TYPE	CODE
ZBWV1 SPARE PILOT LIGHT BODY WHITE, RED, YELLOW, BLUE	B090602040010
ZBWV3 SPARE PILOT LIGHT BODY FOR GREEN	B090602040011



Rated operational characteristics

ITH MAX. 10A	AC-15		DC-13		Ui max. (V)
	Ue (V)	Ie max. (A)	Ue (V)	Ie max. (A)	
	120	6	24	2,87	415
	240	3	125	0,55	
	380	1,9	250	0,27	

FLAMEPROOF

CP../EFDCN.. Series - Copper-free aluminium

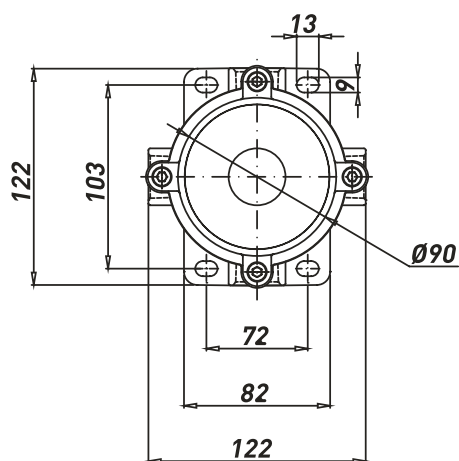


- CP../EFDCN.. Series is suitable for indoor and outdoor application and are used as push-button stations, switches, motor control stations...;
- The enclosures are made of copper-free aluminium and complete with threaded hubs suitable for cable glands or conduit, connection does not affect the internal void, which remains available for terminals wiring;
- The enclosures offer an Ex d IIC mode of protection and can be equipped with different components (up to 4) such as: push buttons, selector switches, potentiometers, signal lamps, rotary handles, ammeters, voltmeters...;
- This series is tailor made according to customer specifications in terms of quantity and type of operators. Our technical department will select the most suitable solution within the limits allowed by the certificate.

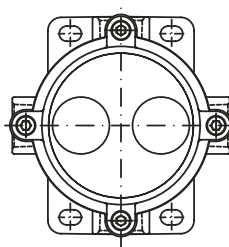
TECHNICAL FEATURES

Material	Copper-free aluminium
IP rating	IP66
Ambient temperature range	-50°C to +60°C (ATEX) -60°C to +60°C (IECEX)
Approvals	ATEX: 03ATEX0009 IECEX: BKI 15.0002 EAC: RU C-IT.BH02.B.00588/20
Marking	II 2 GD Ex d IIC T(*) Gb Ex t IIIC T(*) Db IP66 * T6/T85°C, T5/T100°C, T4/T135°C
Surface treatment	Polyurethane painting cycle - Blue RAL5014 (other colour available upon request)
Thread	Metric pitch 1.5 ANSI B1.20.1 NPT
Standard certificate label	Made by self adhesive UV and corrosion resistant polyester, approved by certified Laboratory.
Optional accessories	Internal anticondensate painting Traffolyte/Stainless steel certificate label Hot deep galvanized steel or Stainless Steel AISI316 stand/canopy.

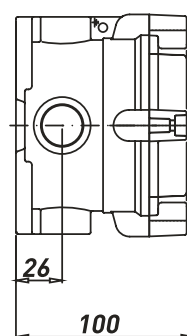
Dimensions CP../EFDCN



**CPC/CPT/CPX
EFDCN-1**



**CPC/CPT/CPX
EFDCN-2**

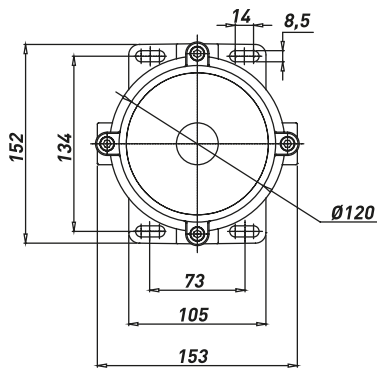


CP../EFDCN.. Series - Push button stations - Available versions

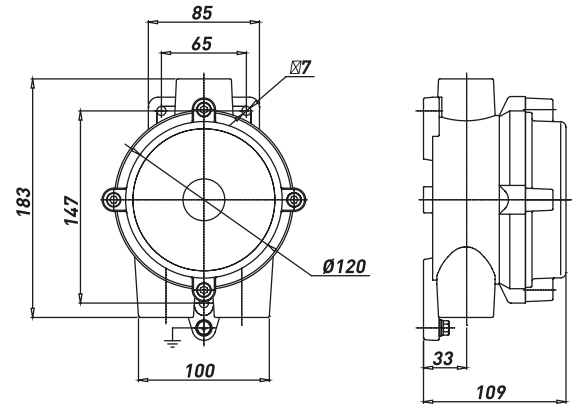
TYPE	AVAILABLE ENTRIES		CONFIGURATION OF ENTRIES	MAX. N° OF OPERATORS	ENCLOSURE DIAMETER [mm]
	METRIC	NPT			
CPC-26/EFDCN..	2 X M25	2 X 3/4"NPT		2	90
CPT-26/EFDCN..	3 X M25	3 X 3/4"NPT		2	90
CPX-26/EFDCN..	4 X M25	4 X 3/4"NPT		2	90

For complete push button stations, ask to the Sales Dept.

Dimensions CPS../EFDCN



CPSC/CPST/CPSX



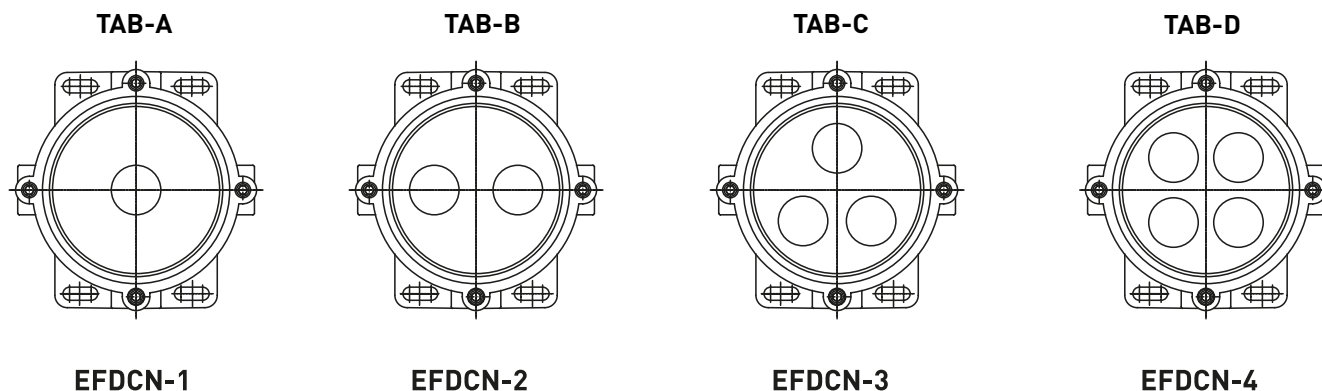
CPSG

CPS../EFDCN.. Series - Push button stations - Available versions

TYPE	AVAILABLE ENTRIES				CONFIGURATION OF ENTRIES	MAX. N° OF OPERATORS	ENCLOSURE DIAMETER [mm]
	METRIC		NPT				
CPSC-../EFDCN..	2 X M25	2 X M32	2 X 3/4"NPT	2 X 1" NPT		4	120
CPST-../EFDCN..	3 X M25	3 X M32	3 X 3/4"NPT	3 X 1" NPT		4	120
CPSG-../EFDCN..	3 X M25	3 X M32	3 X 3/4"NPT	3 X 1" NPT		4	120
CPSX-../EFDCN..	4 X M25	4 X M32	4 X 3/4"NPT	4 X 1" NPT		4	120

For complete push button stations, ask to the Sales Dept.

Dimensions CP../CPS.. EFDCN



CP../CPS.. EFDCN Series - Standard versions*

TYPE	CODE**	ENTRIES	N° OF HOLES ON COVER	DRAWING	ENCLOSURE DIAMETER [mm]	WEIGHT [kg]
CPC-26/EFDCN-1-90	B012074010149	2 X M25 	1	TAB-A	90	1.10
CPC-26/EFDCN-2-90	B012074010134		2	TAB-B	90	1.10
CPSC-26/EFDCN-1-120	B012074010152		1	TAB-A	120	1.70
CPSC-26/EFDCN-2-120	B012074010154		2	TAB-B	120	1.70
CPSC-26/EFDCN-3-120	B012074010156		3	TAB-C	120	1.70
CPSC-26/EFDCN-4-120	B012074010158		4	TAB-D	120	1.70
CPC-26/EFDCN-1-90	B012074010150	2 X 3/4"NPT 	1	TAB-A	90	1.10
CPC-26/EFDCN-2-90	B012074010151		2	TAB-B	90	1.10
CPSC-26/EFDCN-1-120	B012074010153		1	TAB-A	120	1.70
CPSC-26/EFDCN-2-120	B012074010155		2	TAB-B	120	1.70
CPSC-26/EFDCN-3-120	B012074010157		3	TAB-C	120	1.70
CPSC-26/EFDCN-4-120	B012074010159		4	TAB-D	120	1.70

*CP../EFDCN Series are supplied ATEX/TR-CU certified. For IECEx certificate, ask to our Sales Dept.

*CP../EFDCN Series are supplied painted. Standard painting cycle: C4 - Colour: Blue RAL5014 (Other colours available upon request)

**Codes refer to drilled enclosures without operators & components. To be ordered separately, refer to "Spare & Accessories" section.

For different customized configurations, ask to our Sales. Dept.

FLAMEPROOF

CP../EFSRC.. Series - Copper-free aluminium

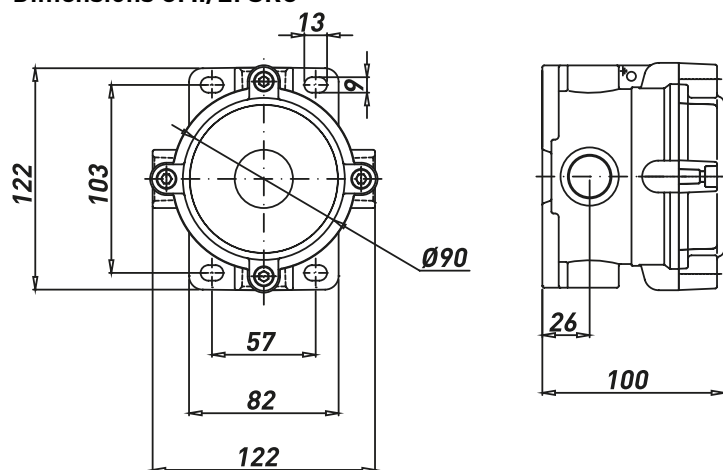


- CP../EFSRC.. Series is suitable for indoor and outdoor application and are used as push-button stations, switches, motor control stations...;
- The enclosures are made of copper-free aluminium and complete with threaded hubs suitable for cable glands or conduit, connection does not affect the internal void, which remains available for terminals wiring;
- The enclosures offer an Ex d IIC mode of protection and can be equipped with different components such as: step, change-over, selector switches...
- This series is tailor made according to customer specifications in terms of quantity and type of operators. Our technical department will select the most suitable solution within the limits allowed by the certificate.

TECHNICAL FEATURES

Material	Copper-free aluminium
IP rating	IP66
Ambient temperature range	-50°C to +60°C (ATEX) -60°C to +60°C (IECEX)
Approvals	ATEX: 03ATEX0009 IECEX: BKI 15.0002 EAC: RU C-IT.BH02.B.00588/20
Marking	II 2 GD Ex d IIC T(*) Gb Ex t IIIC T(*) Db IP66 * T6/T85°C, T5/T100°C, T4/T135°C
Surface treatment	Polyurethane painting cycle - Blue RAL5014 (other colour available upon request)
Thread	Metric pitch 1.5, ANSI B1.20.1 NPT
Standard certificate label	Made by self adhesive UV and corrosion resistant polyester, approved by certified Laboratory.
Optional accessories	Internal anticondensate painting Traffolyte/Stainless steel certificate label Hot deep galvanized steel or Stainless Steel AISI316 stand/canopy.

Dimensions CP../EFSRC



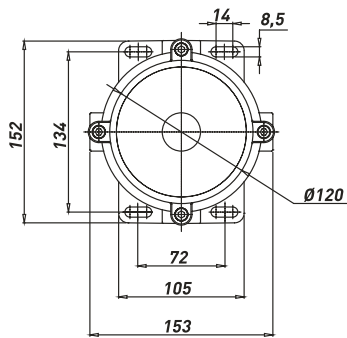
CPC/CPT/CPX EFSRC-1

CP../EFSRC.. Series - Push button stations - Available versions

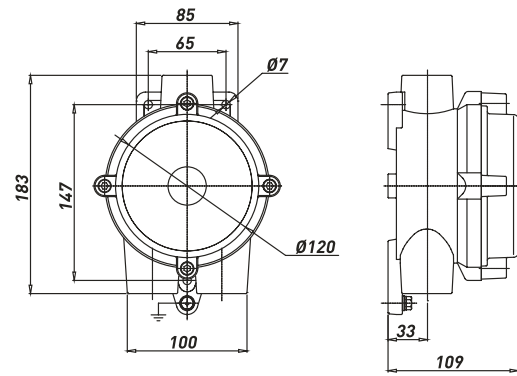
TYPE	AVAILABLE ENTRIES		CONFIGURATION OF ENTRIES	MAX. N° OF OPERATORS	ENCLOSURE DIAMETER [mm]
	METRIC	NPT			
CPC-26/EFSRC-1	2 X M25	2 X 3/4"NPT		1	90
CPT-26/EFSRC-1	3 X M25	3 X 3/4"NPT		1	90
CPX-26/EFSRC-1	4 X M25	4 X 3/4"NPT		1	90

For complete push button stations, ask to the Sales Dept.

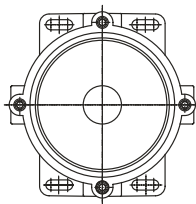
Dimensions CPS../EFSRC



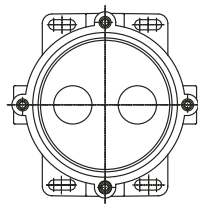
CPSC/CPST/CPSX



CPSG



EFSRC-1



EFSRC-2

CPS../EFSRC.. Series - Push button stations - Available versions

TYPE	AVAILABLE ENTRIES				CONFIGURATION OF ENTRIES	MAX. N° OF OPERATORS	ENCLOSURE DIAMETER [mm]
	METRIC		NPT				
CPSC-../EFSRC..	2 X M25	2 X M32	2 X 3/4"NPT	2 X 1" NPT		2	120
CPST-../EFSRC..	3 X M25	3 X M32	3 X 3/4"NPT	3 X 1" NPT		2	120
CPSG-../EFSRC..	3 X M25	3 X M32	3 X 3/4"NPT	3 X 1" NPT		2	120
CPSX-../EFSRC..	4 X M25	4 X M32	4 X 3/4"NPT	4 X 1" NPT		2	120

For complete push button stations, ask to the Sales Dept.

CP../CPS.. EFDCN Series - Standard versions*

TYPE	CODE**	ENTRIES	OPERATOR	ENCLOSURE DIAMETER [mm]	WEIGHT [kg]
CPC-26/EF SRC-220	B012074010135	2 X M25 X 1,5 	DISCONNECTOR SWITCH, 2 POLE, 20A	90	1.10
CPC-26/EF SRC-D-220	B012074010160		DEVIATOR SWITCH, 2 POLE, 20A	90	1.15
CPC-26/EF SRC-C-220	B012074010161		COMMUTATOR SWITCH, 2 POLE, 20A	90	1.15
CPSC-26/EF SRC-320	B012074010166		DISCONNECTOR SWITCH, 3 POLE, 20A	120	1.15
CPSC-26/EF SRC-D-320	B012074010167		DEVIATOR SWITCH, 3 POLE, 20A	120	1.20
CPSC-26/EF SRC-C-320	B012074010168		COMMUTATOR SWITCH, 3 POLE, 20A	120	1.20
CPC-26/EF SRC-220	B012074010162	2 X 3/4"NPT 	DISCONNECTOR SWITCH, 2 POLE, 20A	90	1.10
CPC-26/EF SRC-D-220	B012074010163		DEVIATOR SWITCH, 2 POLE, 20A	90	1.15
CPC-26/EF SRC-C-220	B012074010164		COMMUTATOR SWITCH, 2 POLE, 20A	90	1.15
CPSC-26/EF SRC-320	B012074010169		DISCONNECTOR SWITCH, 3 POLE, 20A	120	1.15
CPSC-26/EF SRC-D-320	B012074010170		DEVIATOR SWITCH, 3 POLE, 20A	120	1.20
CPSC-26/EF SRC-C-320	B012074010171		COMMUTATOR SWITCH, 3 POLE, 20A	120	1.20

*CP../EF SRC Series are supplied ATEX/TR-CU certified. For IECEx certificate, ask to our Sales Dept.

*CP../EF SRC Series are supplied painted. Standard painting cycle: C4. Colour: Blue RAL5014 (Other colours are available upon request)

**Codes refer to drilled enclosures with 1 standard operator.

For different customized configurations, ask to our Sales. Dept.

FLAMEPROOF

EPKZM Series - Circuit breaker enclosure - Copper-free aluminium



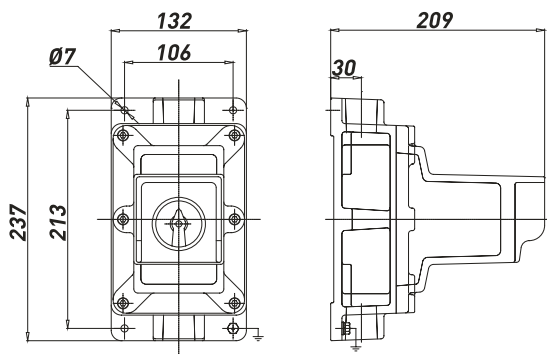
- EPKZM Series enclosures are designed to house motor protector circuit breakers up to 63A.
- Made of copper-free aluminium, EPKZM are suitable for indoor and outdoor plants

TECHNICAL FEATURES

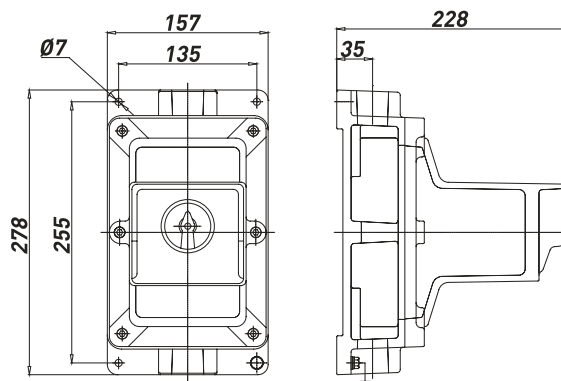
Material	Copper-free aluminium
IP rating	IP66/IP67
Ambient temperature range	-30°C to +55°C
Approvals	ATEX: 02ATEX0027X EAC: RU C-IT.BH02.B.00588/20
Marking	II 2 GD Ex d IIB T6 Gb Ex tb IIIC T85°C Db IP66/67
Surface treatment	Polyurethane painting cycle - Blue RAL5014 (other colour available upon request)
Thread	N° 2 entries Metric pitch 1.5, ANSI B1.20.1 NPT
Standard certificate label	Made by self adhesive UV and corrosion resistant polyester, approved by certified Laboratory.
Optional accessories	Internal anticondensate painting Traffolyte/Stainless steel certificate label Hot deep galvanized steel or Stainless Steel AISI316 stand/canopy.

Dimensions EPKZM

TAB-A



TAB-B



EPKZM-3

EPKZM-4

EPKZM Series enclosures - Standard versions*

TYPE	CODE	ENTRIES	WEIGHT [kg]	DRAWING
EPKZM-3 - GREY/BLACK HANDLE 55X55	B012104010004	2 X M32	3.25	TAB-A
EPKZM-3 - SRC BLACK HANDLE	B012104010006	2 X M32	3.25	TAB-A
EPKZM-4 - YELLOW/RED HANDLE 72X72	B012104010008	2 X M32	4.60	TAB-B
EPKZM-4 - SRC BLACK HANDLE	B012104010010	2 X M32	4.60	TAB-B
EPKZM-3 - GREY/BLACK HANDLE 55X55	B012104010005	2 X 1"NPT	3.25	TAB-A
EPKZM-3 - SRC BLACK HANDLE	B012104010007	2 X 1"NPT	3.25	TAB-A
EPKZM-4 - YELLOW/RED HANDLE 72X72	B012104010009	2 X 1"NPT	4.60	TAB-B
EPKZM-4 - SRC BLACK HANDLE	B012104010011	2 X 1"NPT	4.60	TAB-B

Above codes refer to empty enclosures. For complete motor protector circuit breakers, ask to our Sales Dept.

*Standard enclosures EPKZM Series are supplied ATEX/TR-CU certified. For IECEx certificate, ask to our Sales Dept.

*Standard enclosures EPKZM Series are supplied painted. Standard painting cycle: C4 - Colour: Blue RAL5014 (Other colours upon request)

FLAMEPROOF - PL../PSRC.. SERIES

Ex d components are available in a wide range of operators/pilot lights PL.. Series and selectors PSRC.. Series allowing numerous combinations with our CP../CPS.. EFDCN/EF SRC series.

PL.. Series includes standard push buttons, emergency push buttons, key selector switches, pilot lights; mechanical operators allow the assembling of a maximum of four contacts.

PSRC.. Series includes on-load switches, change over switches, step switches and selector customized upon request on the base of customer specification.

SPARES & ACCESSORIES

IP rating	IP66/IP67
Ambient temperature range	-50°C to +60°C
Approvals	IMQ 09ATEX0019U
Marking	II 2 GD Ex d IIC Ex tD A21 IP66/IP67
Barrel thread	Metric M32x1,5
Option	Version with AISI 316 L external hexagonal ring



PL.. Series momentary push buttons

CODE SPARE PART	TYPE	COLOUR	WEIGHT (kg)
B090601000014	PLA-10 PUSH BUTTON	BLACK	0.15
B090601000015	PLA-20 PUSH BUTTON	RED	0.15
B090601000016	PLA-30 PUSH BUTTON	GREEN	0.15
B090601000017	PLA-40 PUSH BUTTON	BLUE	0.15
B090601000018	PLA-50 PUSH BUTTON	YELLOW	0.15
B090601000019	PLA-60 PUSH BUTTON	WHITE	0.15

Contacts are not included



PL.. Series lockable momentary push buttons

CODE SPARE PART	TYPE	COLOUR	WEIGHT (kg)
B090601000001	PLB-10 PIN-LOCKABLE PUSH BUTTON	BLACK	0.18
B090601000002	PLB-20 PIN-LOCKABLE PUSH BUTTON	RED	0.18
B090601000003	PLB-30 PIN-LOCKABLE PUSH BUTTON	GREEN	0.18

Contacts are not included



PL.. Series Mushroom push buttons

CODE SPARE PART	TYPE	COLOUR	WEIGHT (kg)
B090601000004	PLC-S NC/NO MUSHROOM PUSH BUTTON TWIST TO RELEASE	RED	0.21
B090601000005	PLC-S NO/NO MUSHROOM PUSH BUTTON TWIST TO RELEASE	RED	0.21
B090601000006	PLC-S NC/NC MUSHROOM PUSH BUTTON TWIST TO RELEASE	RED	0.21
B090601000007	PLC-S-F NC/NO MUSHROOM PUSH BUTTON WITH KEY	RED	0.15
B090601000032	PLC-S-F NC/NC MUSHROOM PUSH BUTTON WITH KEY	RED	0.15
B090601000008	PLC-S-F NO/NO MUSHROOM PUSH BUTTON WITH KEY	RED	0.15
B090601000009	PLC-I MOMENTARY MUSHROOM PUSH BUTTON	RED	0.15

Contacts are not included

PL.. Series Key selector switches



CODE SPARE PART	TYPE	KEY WITHDRAWAL	WEIGHT (kg)
B090603000025	PLF-10 NO/NC - KEY SELECTOR SWITCH	0	0.20
B090603000027	PLF-10 NO/NO - KEY SELECTOR SWITCH	0	0.20
B090603000023	PLF-10 NC/NC - KEY SELECTOR SWITCH	0	0.20
B090603000026	PLF-10 NO/NC - KEY SELECTOR SWITCH	0-1	0.20
B090603000028	PLF-10 NO/NO - KEY SELECTOR SWITCH	0-1	0.20
B090603000024	PLF-10 NC/NC - KEY SELECTOR SWITCH	0-1	0.20

Contacts are not included

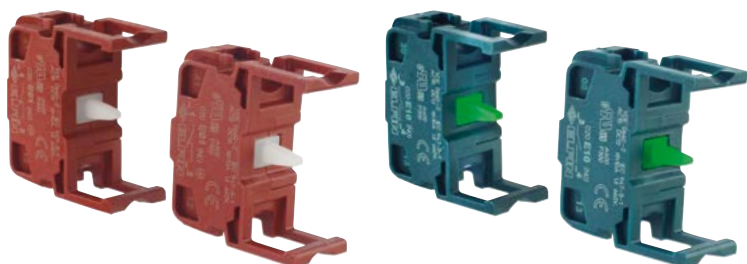
PL.. Series mechanical operators



CODE SPARE PART	TYPE	COLOUR	WEIGHT (kg)
B090601000011	PLC-RIP - RESTORE PB M32X1,5	BLACK	0.10
B090601000012	PLC-RIP - RESTORE PB M32X1,5	RED	0.10
B090601000022	PLC-RIP - RESTORE PB M32X1,5	GREEN	0.10
B090601000010	PLC-R - RESET PB M12X1,75	-	0.10

PL.. Series Contacts

CODE	TYPE	WEIGHT (kg)
B130700099000	NC CONTACT - PL.. SERIES	0.006
B130700100000	NO CONTACT - PL.. SERIES	0.006



Rated insulated voltage: 660 V AC/DC

Rated thermal current (ith): 6 A

Rated output power:

CAT AC15										CAT DC13							
Tension Ue	V	24	48	60	110	220	380	400	500	600	Tension Ue	V	24	48	60	110	220
Current Ie	A	10	8	6	6	3	2	1,5	1,5	1,2	Current Ie	A	2,5	1,4	1	0,6	0,3



PL.. Series Pilot lights

CODE SPARE PART	TYPE	COLOUR
B090602000021	PLD-10 PILOT LIGHT	WHITE
B090602000030	PLD-20 PILOT LIGHT	RED
B090602000026	PLD-30 PILOT LIGHT	GREEN
B090602000027	PLD-40 PILOT LIGHT	YELLOW
B090602000028	PLD-50 PILOT LIGHT	BLUE

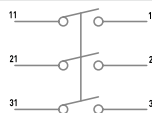
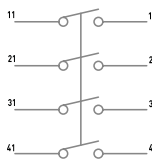
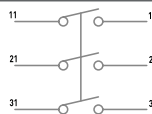
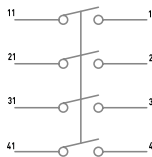
Suitable for LED lamp 3W max. or incandescent lamp 5W max., Vmax.DC 220 V, Vmax.AC 380 V

PL.. series Lamps

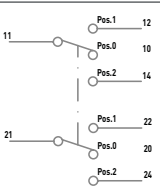
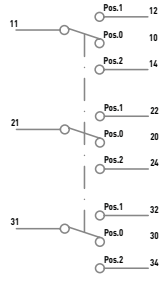
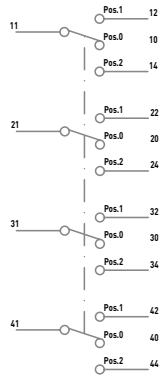
CODE	TYPE	VOLTAGE	COLOUR
B090602000001	LED LAMP 12 V-R	12 V	RED
B090602000002	LED LAMP 12 V-V		GREEN
B090602000003	LED LAMP 12 V-G		YELLOW
B090602000004	LED LAMP 12 V-B		WHITE
B090602000006	LED LAMP 24 V-R	24 V	RED
B090602000005	LED LAMP 24 V-V		GREEN
B090602000007	LED LAMP 24 V-G		YELLOW
B090602000008	LED LAMP 24 V-B		WHITE
B090602000024	LED LAMP 24 V-BL		BLUE
B090602000019	LED LAMP 48 V-R	48 V	RED
B090602000018	LED LAMP 48 V-V		GREEN
B090602000020	LED LAMP 48 V-G		YELLOW
B090602000017	LED LAMP 48 V-B		WHITE
B090602000009	LED LAMP 110 V-R	110 V	RED
B090602000010	LED LAMP 110 V-V		GREEN
B090602000011	LED LAMP 110 V-G		YELLOW
B090602000012	LED LAMP 110 V-B		WHITE
B090602000022	LED LAMP 110 V-BL		BLUE
B090602000013	LED LAMP 220 V-R	220 V	RED
B090602000014	LED LAMP 220 V-V		GREEN
B090602000015	LED LAMP 220 V-G		YELLOW
B090602000016	LED LAMP 220 V-B		WHITE
B090602000025	LED LAMP 220 V-BL		BLUE
B090602000038	LED LAMP 400 V-R	400 V	RED
B090100S00762	LED LAMP 400 V-V		GREEN
B090602000039	LED LAMP 400 V-G		YELLOW
B090100S00836	LED LAMP 400 V-B		WHITE
B090602000040	LED LAMP 400 V-BL		BLUE



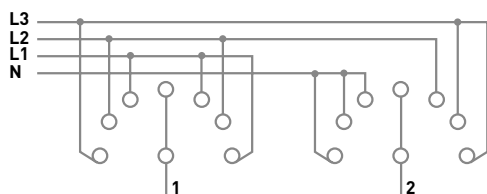
PSRC.. Series On-load switches

CODE SPARE PART	TYPE	N° OF POLES	AMPERE A	WEIGHT (kg)	DIAGRAM 
B090603000013	PSRC-120 - ON LOAD SWITCH	1	20	0.13	
B090603000015	PSRC-220 - ON LOAD SWITCH	2	20	0.16	
B090603000017	PSRC-320 - ON LOAD SWITCH	3	20	0.20	
B090603000020	PSRC-420 - ON LOAD SWITCH	4	20	0.20	
B090603000014	PSRC-132 - ON LOAD SWITCH	1	32	0.20	
B090603000016	PSRC-232 - ON LOAD SWITCH	2	32	0.20	
B090603000018	PSRC-332 - ON LOAD SWITCH	3	32	0.25	
B090603000012	PSRC-432 - ON LOAD SWITCH	4	32	0.25	

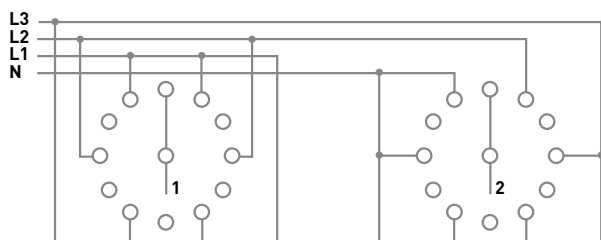
PSRC.. Series Step switch

CODE SPARE PART	TYPE	N° OF POLES	AMPERE A	WEIGHT (kg)	DIAGRAM 
B090603000021	PSRC-C 120 - STEP SWITCH	1	20	0.13	
B090603000022	PSRC-C 220 - STEP SWITCH	2	20	0.20	
B090603000007	PSRC-C 320 - STEP SWITCH	3	20	0.25	
B090603000008	PSRC-C 420 - STEP SWITCH	4	20	0.30	
B090603000003	PSRC-C VOLTMETER 7 POS.	-	-		SEE BELOW
B090603000004	PSRC-C VOLTMETER 12 POS.	-	-		SEE BELOW
B090100S00760	PSRC-C AMPERMETER 4 POS.	-	-		SEE BELOW

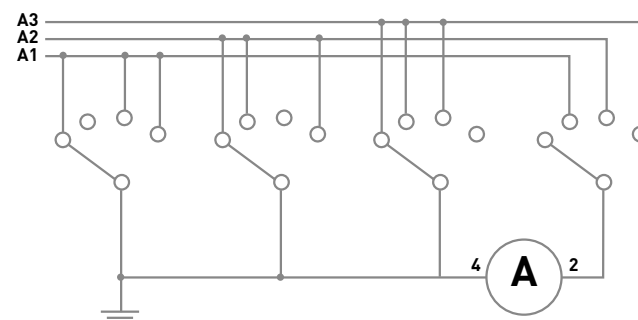
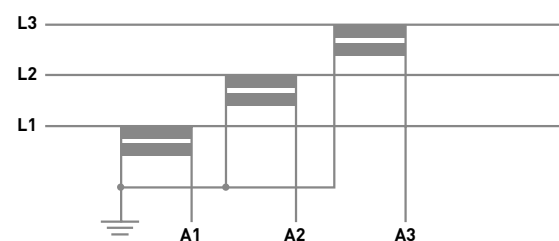
Voltmeter selector switch 7 pos.



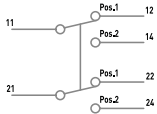
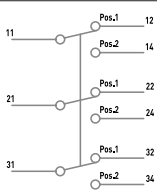
Voltmeter selector switch 12 pos.



Ammeter selector switch 4 pos.



PSRC.. Series Change-over switch

CODE SPARE PART	TYPE	N° OF POLES	AMPERE A	WEIGHT (kg)	DIAGRAM 
B090603000009	PSRC-D 120 - CHANGE OVER SWITCH	1	20	0.13	
B090603000010	PSRC-D 220 - CHANGE OVER SWITCH	2	20	0.20	
B090603000029	PSRC-D 320 - CHANGE OVER SWITCH	3	20	0.25	

PSRC Series Rated operational characteristic

AMPERE A	AC-1 Ie MAX. (A)	AC-3 Ie MAX. (A)	AC-11 Ie MAX. (A)	Ui max. (V)
20	25	12	9	690
32	36	22	16	690

Special versions can be manufactured upon request. For further information contact our Sales Office.



JUNCTION BOXES



P. 134

Increased safety

- AQ../AR.. Series -
Glassfiber reinforced polyester 134
- AQ../AR.. Series - Copper free
aluminium low thickness..... 136
- SB Series - AISI 316 L
Stainless steel..... 138
- B2X Series -
Glassfiber reinforced polyester 140

P. 142

Flameproof

- CP../CPS.. Series -
Copper-free aluminium 142
- ECR-3 - Drain valve..... 144

INCREASED SAFETY

AQ../AR.. Series - Glassfiber reinforced polyester

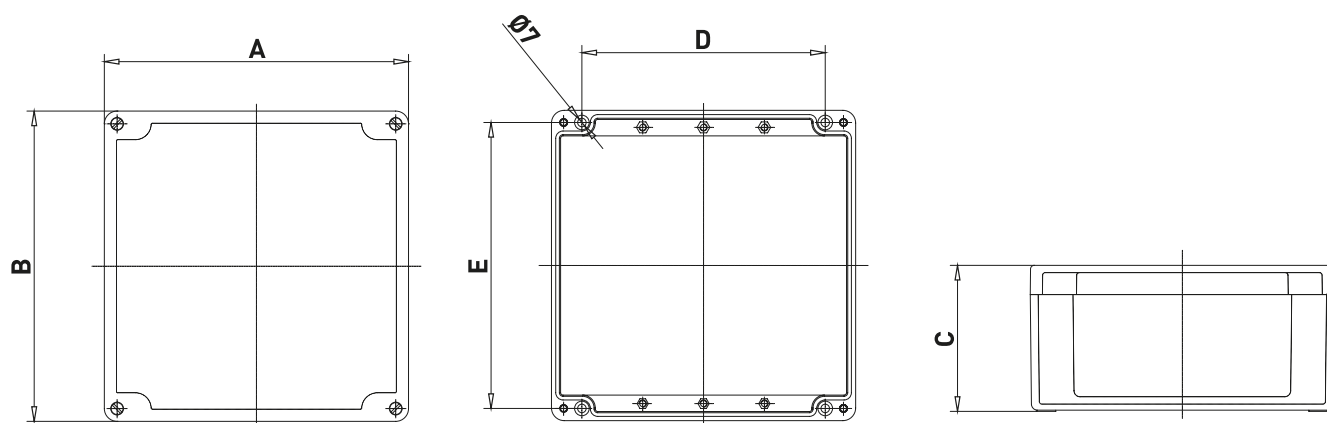


- AQ../AR.. Series enclosures are ideally suited for chemical and petrochemical environments;
- Made of GRP (Glassfiber reinforced polyester), AQ../AR.. enclosures guaranteed high resistance to sea water corrosion and can withstand the harshest temperatures;
- Used to house Ex e and Ex i terminals. Maximum number of terminals changes according to: terminals section, enclosure operating temperature and required temperature class.

TECHNICAL FEATURES

Material	GRP (Glassfiber reinforced polyester)	
IP rating	IP66	
Ambient temperature range	Ambient -50°C to +95°C	Service -50°C to +105°C
Approvals	<u>Full Conformity Certificate:</u> FIDI 21 ATEX 0090X IECEX FIDI21.0015X EAC: RUC-IT.BH02.B.00593/20	<u>Component Certificate:</u> FIDI21ATEX0075U IECEX FIDI21.0012U EAC:RUC-IT.BH02.B.00593/20
Marking	II 1 G Ex ia IIC/IIB T6/T5/T4 Ga II 2GD Ex eb IIC/IIB T6/T5/T4 Gb or Ex tb IIIC T85°C/T100°C/T135°C Db	II 2GD Ex eb IIC Gb Ex tb IIIC Db
Standard certificate label	Made by self adhesive UV and corrosion resistant polyester, approved by certified Laboratory.	
Optional accessories	Hinges Drain/breather valve Traffolyte/Stainless steel certificate label Internal mounting plate Earth continuity plates Passing through earth bolt	

Dimensions AQ../AR..



AQ../AR.. Series - Junction boxes - Standard versions*

TYPE	CODE	DIMENSIONS [mm]					WEIGHT [kg]
		A	B	C	D	E	
AQ-080806P	B011041010001	75	80	55	45	48	0,23
AR-081106P	B011031010001	80	110	60	45	98	0,29
AQ-121209P	B011041010002	120	120	90	82	106	0,75
AR-122209P	B011031010002	120	220	90	82	204	1,06
AQ-161609P	B011041010003	160	160	90	110	140	1,29
AR-162609P	B011031010003	160	260	90	110	240	1,71
AR-163609P	B011031010004	160	360	90	110	340	2,15
AQ-252612P	B011041010004	250	260	120	200	235	2,65
AQ-252616P	B011041010005	250	260	160	200	235	2,85
AR-254012P	B011031010006	250	400	120	200	380	3,65
AR-254016P	B011031010007	250	400	160	200	380	3,85
AR-256012P	B011031010008	250	600	120	200	580	5,23
AQ-414012P	B011041010006	410	400	120	355	380	5,58
AR-406025P - HT	B011031010005	400	600	250	350	580	6,15

*The codes refer to the empty and undrilled enclosures, sold under component certificate.
For complete junction boxes is necessary to ask to the Sales Office.
Other sizes are available upon request.

Maximum number of entries on sides

TYPE	M20/1/2"		M25/3/4"		M32/1"		M40/1" 1/4		M50/1" 1/2		M63/2"	
	A	B	A	B	A	B	A	B	A	B	A	B
AQ-080806P	1	1	-	1	-	-	-	-	-	-	-	-
AR-081106P	1	2	-	2	-	-	-	-	-	-	-	-
AQ-121209P	2	2	1	2	1	1	1	1	-	-	-	-
AR-122209P	2	5	1	4	1	3	1	3	-	-	-	-
AQ-161609P	3	3	2	3	1	2	1	1	-	-	-	-
AR-162609P	3	5	2	5	1	4	1	3	-	3	-	-
AR-163609P	3	8	2	7	1	6	1	5	-	4	-	-
AQ-252612P	8	10	8	10	3	7	3	4	2	3	2	2
AQ-252616P	8	10	8	10	3	7	3	4	2	3	2	2
AR-254012P	8	18	8	16	3	5	3	5	3	5	2	4
AR-254016P	8	18	8	16	3	5	3	5	3	5	2	4
AR-256012P	8	25	8	24	3	10	3	8	2	6	2	6
AQ-414012P	16	18	6	14	5	6	5	5	4	5	3	6
AR-406025P - HT	15	25	5	24	4	10	4	8	3	6	2	4

INCREASED SAFETY

AQ../AR.. Series - Copper free aluminium low thickness

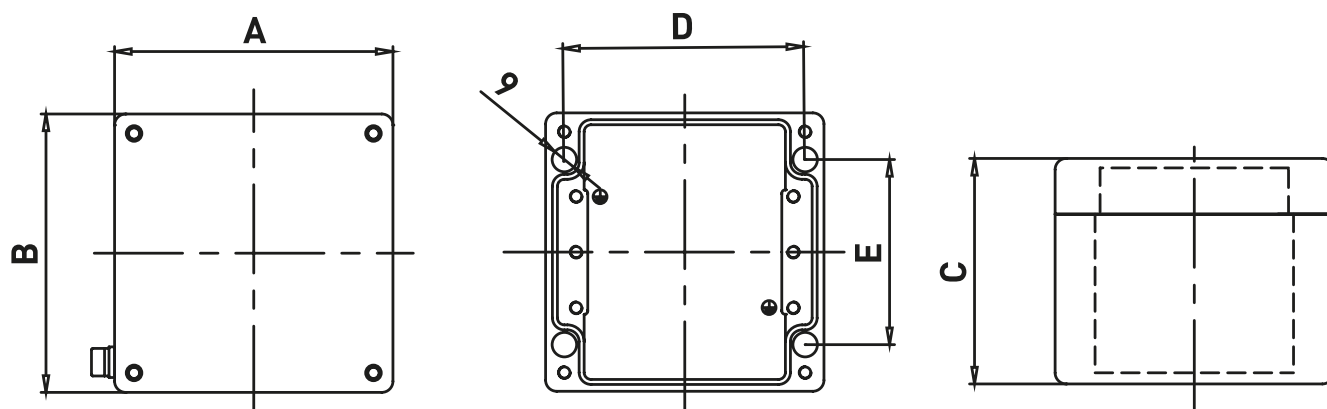


- AQ../AR.. Series enclosures are ideally suited for chemical and petrochemical environments;
- Made of copper-free aluminium, AQ../AR.. enclosures guaranteed high resistance to sea water corrosion and can withstand the harshest temperatures;
- Used to house Ex e and Ex i terminals. Maximum number of terminals changes according to: terminals section, enclosure operating temperature and required temperature class.

TECHNICAL FEATURES

Material	Copper-free aluminium	
IP rating	IP66	
Ambient temperature range	Ambient -50°C to +95°C	Service -50°C to +105°C
Approvals	<u>Full Conformity Certificate:</u> FIDI 21 ATEX 0090X IECEX FIDI21.0015X EAC: RUC-IT.BH02.B.00593/20	<u>Component Certificate:</u> FIDI21ATEX0075U IECEX FIDI21.0012U EAC:RUC-IT.BH02.B.00593/20
Marking	II 1 G Ex ia IIC/IIB T6/T5/T4 Ga II 2GD Ex eb IIC/IIB T6/T5/T4 Gb or Ex tb IIIC T85°C/T100°C/T135°C Db	II 2GD Ex eb IIC Gb Ex tb IIIC Db
Standard certificate label	Made by self adhesive UV and corrosion resistant polyester, approved by certified Laboratory.	
Surface treatment	Standard: polyester powder coating RAL7001	
Optional accessories	Hinges Drain/breather valve Traffolyte/Stainless steel certificate label Internal mounting plate Earth continuity plates Passing through earth bolt	

Dimensions AQ../AR..



AQ../AR.. Series - Junction boxes - Standard versions*

TYPE	CODE	DIMENSIONS [mm]					WEIGHT [kg]
		A	B	C	D	E	
AQ-080806AL	B011044010001	80	80	60	52	63	0,30
AQ-121208AL	B011044010003	120	120	80	83	106	0,94
AQ-121209AL	B011044010009	120	120	90	83	106	1,00
AR-122209AL	B011034010005	120	220	90	83	204	1,43
AQ-161609AL	B011044010005	160	160	90	110	140	1,50
AR-162609AL	B011034010007	160	260	90	110	240	1,78
AQ-181810AL	B011044010006	180	180	100	130	160	1,68
AR-202311AL	B011034010010	200	230	110	150	200	2,44
AR-232811AL	B011034010019	230	280	110	180	260	2,99
AR-233312AL	B011034010013	230	330	120	180	305	3,15
AR-233318AL	B011034010014	230	330	180	180	305	3,21
AR-234011AL - HT	B011034010021	230	400	110	180	380	3,23
AR-314011AL - HT	B011034010020	310	400	110	260	380	3,29
AR-314014AL - HT	B011034010023	310	400	140	260	380	3,31
AR-316011AL - HT	B010800S00001	310	600	110	260	580	3,97
AR-316018AL - HT	B011034010024	310	600	180	260	580	4,00
AQ-606020AL - HT	B010800S00002	600	600	200	550	580	4,55

*The codes refer to the empty and undrilled enclosures, sold under component certificate.
For complete junction boxes is necessary to ask to the Sales Office.
Other sizes are available upon request.

INCREASED SAFETY

SB Series - AISI 316 L Stainless steel

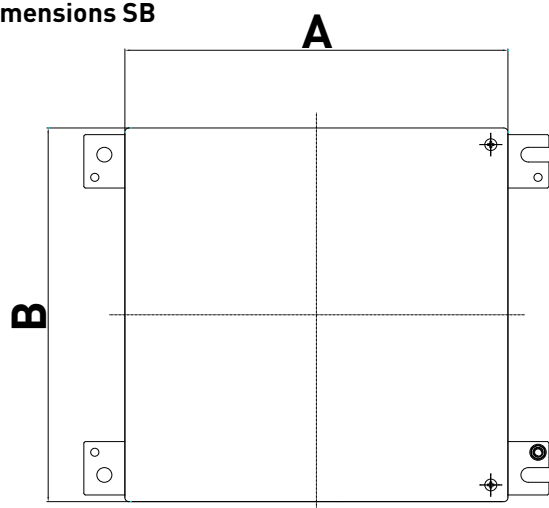


- SB../SBHT.. Series enclosures are suitable for housing Ex e and Ex i terminals and can be provided with internal mounting plate to facilitate terminal board mounting.
- Maximum numbers of terminals varies according to: terminals section and current, enclosure size, operating temperature and required temperature class.
- Suitable for installation in ON/OFF-SHORE plants, in the presence of chemical agents and in any other highly corrosive environment.
- Full customization from 100x120x100 mm to 1500x960x500 mm: our technical department will support you in designing the best solution according to your needs and within the limits of the certificate.
- Full range of off-the-shelf solutions to ensure the best lead time on the market at a competitive pricing.

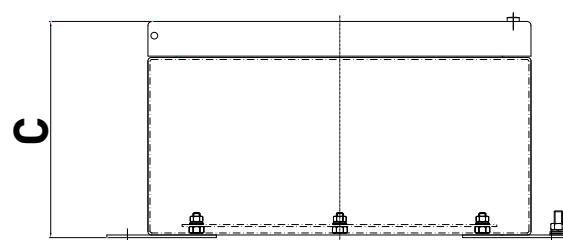
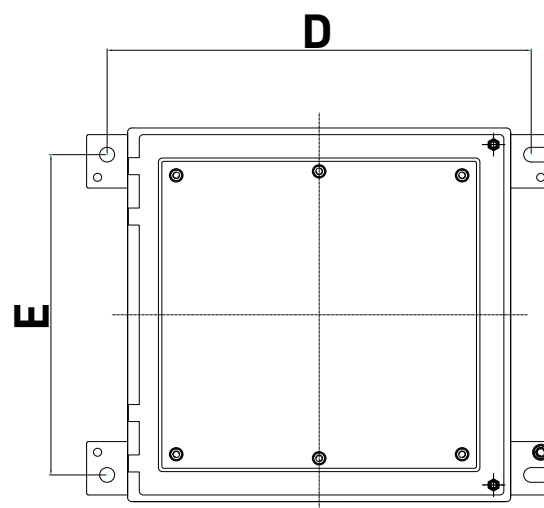
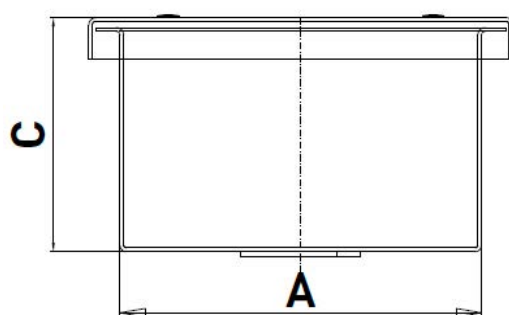
TECHNICAL FEATURES

Material	AISI316L stainless steel - with thickness 1,5 mm		
IP rating	IP66/IP67	IP66/IP67	IP55/IP66 (SBHT.. Series -high temperature)
Shock resistance	IK10	IK10	IK10
Ambient temperature range	Ambient From -50°C to +95°C	Service From -50°C to +105°C	SBHT.. Series: From -60°C to +150°C (-50°C to +50°C for junction boxes with locking device)
Approvals	<u>Full conformity Certificate:</u> FIDI 21 ATEX 0090X IECEX FIDI 21.0015X EAC: RU C-IT.BH02.B.00593/20	<u>Component Certificate:</u> FIDI 21 ATEX 0075U IECEX FIDI 21.0012U EAC: RU C-IT.BH02.B.00593/20 EAC: RU C-IT	<u>SBHT.. Series - high temperature:</u> TÜV CY18ATEX0206009 IECEX EXA18.0001 EAC: RU C-IT. BH02.B.00593/20
Marking	II 1G Ex ia IIC/IIB T6...T4 Ga II 2G Ex eb IIC/IIB T6...T4 Gb II 2G Ex eb ia/ib IIC/IIB T6/T5/T4 Gb II 2D Ex tb IIIC T85°C...T135°C Db	II 2 GD Ex eb IIC Gb Ex tb IIIC Db	II 1G Ex ia IIC T* Ga II 2 G Ex ib IIC T* Gb or Ex eb IIC T* Gb or Ex eb ia ib IICT* Gb *Gas: T6/T5/T4/T3
Additional approval	UL listed: NEMA TYPE 1, 4, 4X, 12 UL 508A-CSAC22.2No.14-13 KC: KA4BO-0382X; KA4BO-0383X; KA4BO-0384X; KA4BO-0385X; KA4BO-0386X; KA4BO-0387X		
Surface treatment	Acid treatment (pickling)		
Standard certificate label	Made by self adhesive UV and corrosion resistant polyester.		
Included accessories	Screws and accessories in stainless steel AISI 316 L		
Optional accessories	Electro-polishing treatment Side gland plate Without hinges Drain/Breather valve Lid-mounted components (SB..Series only) Traffolyte/Stainless steel certificate label Internal mounting plate Locking facility Passing through earth bolt Other material thickness starting from 1,2 mm		

Dimensions SB



SHAPE FOR SB-101210 AND 151510



SB Series - AISI 316 L stainless steel

TYPE	DIMENSIONS [mm]					CABLE ENTRIES W/O FLANGES		CABLE ENTRIES W. FLANGES		MAX N° TERMINALS [mm²]		WEIGHT [kg]
	A	B	C	D	E	SIDE A	SIDE B	SIDE A	SIDE B	2,5	4	
SB-101210**	100	120	100	150	-	7	6	-	-	7	6	1,5
SB-142013	140	200	130	170	-	6	10	2	4	20	16	5
SB-151510***	150	150	100	180	-	6	6	-	-	20	20	3
SB-202016	200	200	160	230	160	14	14	8	8	20	20	6
SB-202713	200	270	130	230	230	10	14	4	6	36	30	7
SB-202716	200	270	160	230	230	14	18	8	10	36	30	7
SB-272713	270	270	130	300	230	14	14	6	6	36	30	4,5
SB-273513	270	350	130	300	310	14	18	6	8	72	60	9,5
SB-273516	270	350	160	300	310	17	24	10	14	102	43	11
SB-282816	280	280	160	310	240	20	20	12	12	76	64	10
SB-282827	280	280	270	310	240	46	46	33	33	76	64	7,5
SB-353516	350	350	160	380	310	27	27	16	16	102	86	5,6
SB-353520	350	350	200	380	310	31	31	21	21	102	43	15
SB-355016	350	500	160	380	460	27	39	16	24	160	134	13
SB-355020	350	500	200	380	460	31	46	21	33	240	136	20
SB-383816	380	380	160	410	340	30	30	18	18	114	96	8,1
SB-383820	380	380	200	410	340	34	34	24	24	110	96	16
SB-383827	380	380	270	410	340	67	67	51	51	114	96	10,1
SB-384516	380	450	160	410	410	30	36	18	20	171	144	10,7
SB-384520	380	450	200	410	410	34	42	24	30	140	120	20
SB-385716	380	570	160	410	530	30	45	18	28	228	192	16,4
SB-505016	500	500	160	530	460	39	39	24	24	240	201	14,5
SB-505020	500	500	200	530	460	46	46	33	33	240	201	24
SB-575716	570	570	160	600	530	45	45	28	28	372	312	16,4
SB-575720	570	570	200	600	530	54	54	39	39	372	312	29
SB-575730	570	570	300	600	530	116	116	95	95	372	312	21,4
SB-577620	570	760	200	600	720	54	74	39	51	558	468	36
SB-769520	760	950	200	790	910	98	125	74	94	990	834	32,9

*Codes refer to empty enclosures

**The enclosure is without hinges and complete with TS35x5 Omega rail welded on a removable mounting plate

***The enclosure is without hinges and complete with TS35x7,5 Omega rail welded on the back

INCREASED SAFETY

B2X Series - Glassfiber reinforced polyester

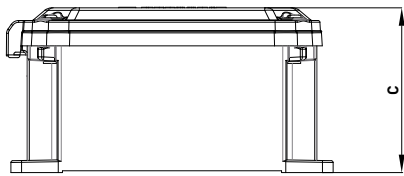


- New high resistance GRP Enclosures, developed and specially designed to host wide range of terminals, multiple power sockets and disconnectors. Tested and certified to be installed and used in extreme site conditions, offshore applications and hazardous areas (Zones 1, 2, 21 & 22 under ATEX and IECEx).
- Their smart and compact design make them easy to install and use in small and hard access spaces.
- B2X certification offers different kind of protection modes in order to satisfy wide range of application (increased safety Ex e, intrinsically safe Ex ia, Explosion proof Ex de in case of Socket junction box combination).

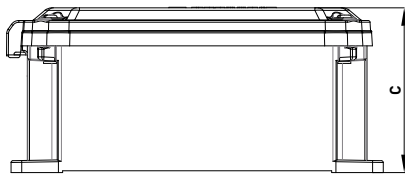
TECHNICAL FEATURES

Material	GRP (Glassfiber reinforced polyester)
IP rating	IP66/IP67
Ambient temperature range	-55°C to +60°C
Approvals	ATEX: LCIE 16 ATEX 3057 X IECEX :LCIE 16.0046X EAC: RU C-IT.BH02.B.00593/20
Marking	II 2 GD Ex e/Ex ia or ib/Ex e ia or e ib IIC T(**) Gb Ex tb IIIC T** °C Db IP66/67 ** T6/T80°C, T5/T95°C, T4/T105°C
Standard certificate label	Made by self adhesive UV and corrosion resistant polyester, approved by certified Laboratory
Accessories in standard	Moulded hinges

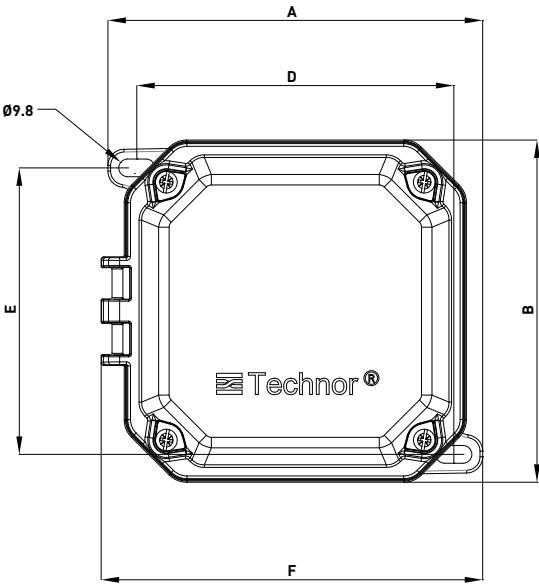
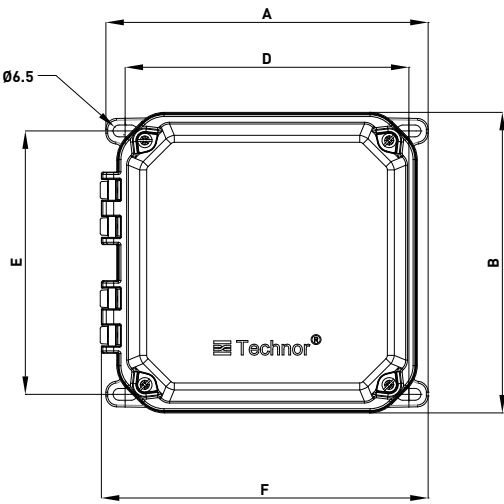
Dimensions B2X



DRAWING A



DRAWING B



CODE	TYPE	DIMENSIONS [mm]						DRAWING
		A	B	C	D	E	F	
B011051010001	B2X - 1212	120	120	91	117	105,5	141	A
B011051010002	B2X - 1616	160	160	91	157	145,5	181	B

FLAMEPROOF

CP../CPS.. Series - Copper-free aluminium

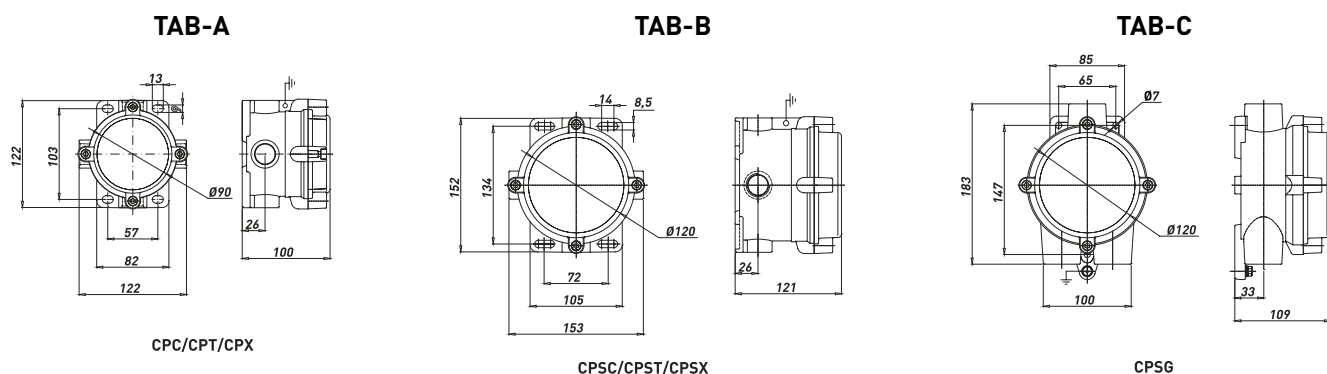


- The CP../CPS.. range of enclosures, used for terminals wiring, grants Ex d or Ex e mode of protection and is suitable for hazardous areas of industrial plants for indoor and outdoor applications.
- Made of copper-free aluminium and complete with threaded hubs suitable for cable glands or conduit, connection does not affect the internal void, which remains available for terminals wiring
- Internal and external screws are made of AISI316 stainless steel.
- This series is tailor made according to customer specifications in terms of quantity and type of operators. Our technical department will select the most suitable solution within the limits allowed by the certificate.

TECHNICAL FEATURES

Material	Copper-free aluminium
IP rating	IP66
Ambient temperature range	-50°C to +60°C (ATEX) -60°C to +60°C (IECEX)
Approvals	ATEX: 03ATEX0009 IECEX: BKI 15.0002 EAC: RU C-IT.BH02.B.00588/20
Marking	STANDARD II 2 GD Ex d IIC T(*) Gb Ex tb IIIC T(*) Db IP66 * T6/T85°C, T5/T100°C, T4/T135°C
Surface treatment	Polyurethane painting cycle - Blue RAL5014 (other colour available upon request)
Thread	Metric pitch 1.5, ANSI B1.20.1 NPT
Standard certificate label	Made by self adhesive UV and corrosion resistant polyester, approved by certified Laboratory.
Optional accessories	Internal anticondensate painting Traffolyte/Stainless steel certificate label Terminals
Maximum number of terminals	(15 x 2,5 mm ² /12 x 4 mm ² /8 x 6 mm ²)

Dimensions CP../CPS..



CP../CPS.. Series - Available versions

TYPE	AVAILABLE ENTRIES				CONFIGURATION OF ENTRIES	ENCLOSURE DIAMETER [mm]	DRAWING
	METRIC		NPT				
CPC-..	2 X M20	2 X M25	2 X 1/2" NPT	2 3/4" NPT		90	TAB-A
CPSC-..	2 X M25	2 X M32	2 X 3/4"NPT	2 X 1" NPT		120	TAB-B
CPT-..	3 X M20	3 X M25	3 X 1/2" NPT	3 X 3/4" NPT		90	TAB-A
CPST-..	3 X M25	3 X M32	3 X 3/4"NPT	3 X 1" NPT		120	TAB-B
CPSG-..	3 X M25	3 X M32	3 X 3/4"NPT	3 X 1" NPT		120	TAB-C
CPX-..	4 X M20	4 X M25	4 X 1/2" NPT	4 X 3/4" NPT		90	TAB-A
CPSX-..	4 X M25	4 X M32	4 X 3/4"NPT	4 X 1" NPT		120	TAB-B

CP../CPS.. Series - Standard versions*

TYPE	CODE**	N° OF ENTRIES	TYPE OF ENTRIES	CONFIGURATION OF ENTRIES	WEIGHT [kg]	ENCLOSURE DIAMETER [mm]
CPC-16 2XM20	B011074010080	2	M20		1,00	90
CPC-16 2X1/2" NPT	B011074010071	2	1/2" NPT		1,00	90
CPC-26 2XM25	B011074010081	2	M25		1,10	90
CPC-26 2X3/4" NPT	B011074010072	2	3/4" NPT		1,10	90
CPT-16 3XM20	B011074010082	3	M20		1,00	90
CPT-16 3X1/2" NPT	B011074010077	3	1/2" NPT		1,00	90
CPT-26 3XM25	B011074010083	3	M25		1,10	90
CPT-26 3X3/4" NPT	B011074010075	3	3/4" NPT		1,10	90
CPX-16 4XM20	B011074010076	4	M20		1,00	90
CPX-26 4XM25	B011074010084	4	M25		1,10	90
CPX-26 4X3/4" NPT	B011074010085	4	3/4" NPT		1,10	90
CPSC-26 2XM25	B011074010086	2	M25		1,70	120
CPSC-26 2X3/4" NPT	B011074010087	2	3/4" NPT		1,70	120
CPSC-36 2XM32	B011074010088	2	M32		1,80	120
CPSC-36 2X1" NPT	B011074010073	2	1" NPT		1,80	120
CPSG-26 3XM25	B011074010089	3	M25		1,70	120
CPSG-26 3X3/4" NPT	B011074010090	3	3/4" NPT		1,70	120
CPSG-36 3XM32	B011074010091	3	M32		1,80	120
CPSG-36 3X1" NPT	B011074010092	3	1" NPT		1,80	120
CPST-26 3XM25	B011074010093	3	M25		1,70	120
CPST-26 3X3/4" NPT	B011074010094	3	3/4" NPT		1,70	120
CPST-36 3XM32	B011074010095	3	M32		1,80	120
CPST-36 3X1" NPT	B011074010074	3	1" NPT		1,80	120
CPSX-26 4XM25	B011074010096	4	M25		1,70	120
CPSX-26 4X3/4" NPT	B011074010097	4	3/4" NPT		1,70	120
CPSX-36 4XM32	B011074010098	4	M32		1,80	120
CPSX-36 4X1" NPT	B011074010099	4	1" NPT		1,80	120

Codes refer to empty enclosures. For complete junction boxes ask to our Sales Dept.

*CP.. Series are supplied ATEX/TR-CU certified. For IECEx certificate, ask to our Sales Dept.

**CP.. Series are supplied painted. Standard painting cycle: C4 - Colour: Blue RAL5014 (Other colours are available upon request)

FLAMEPROOF

ECR-3 - Drain valve

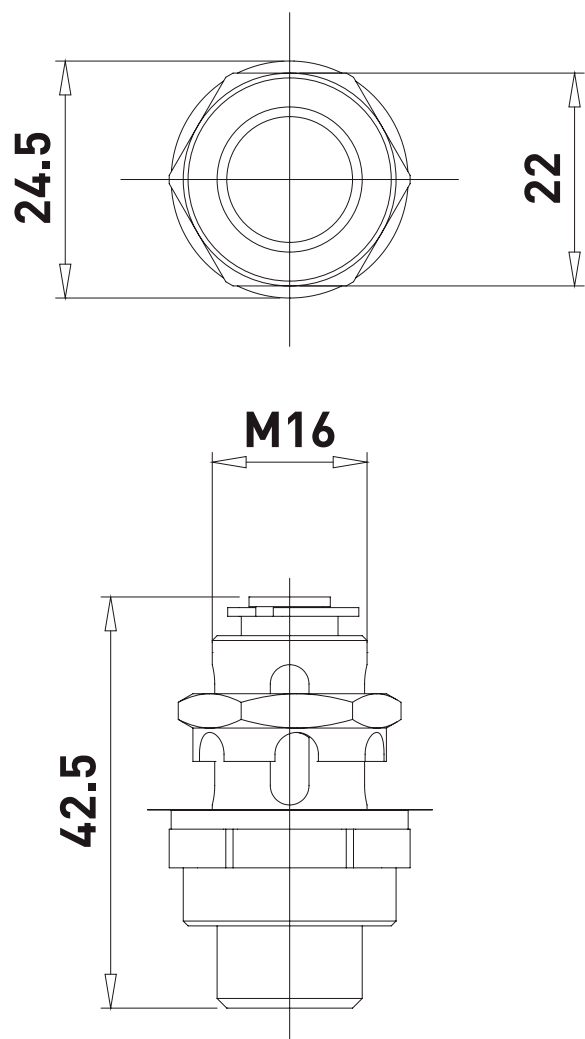


- Drain valve ECR3 is a device intended for use to evacuate the water generated due to condensation inside the enclosure.
 - Drain valve is assembled in the lowest part or side part of the enclosure because the water is accumulated in bottom part of enclosure.
 - Water will come out with the presence of drain valve device.
 - Made of stainless steel or galvanized steel.
 - Gasket is in aluminium.
 - O-ring is in silicon rubber.
 - IP66/IP67 in closed position (IP44 when installed on the bottom or on the side of enclosure*)
- *for detail see instruction note

TECHNICAL FEATURES

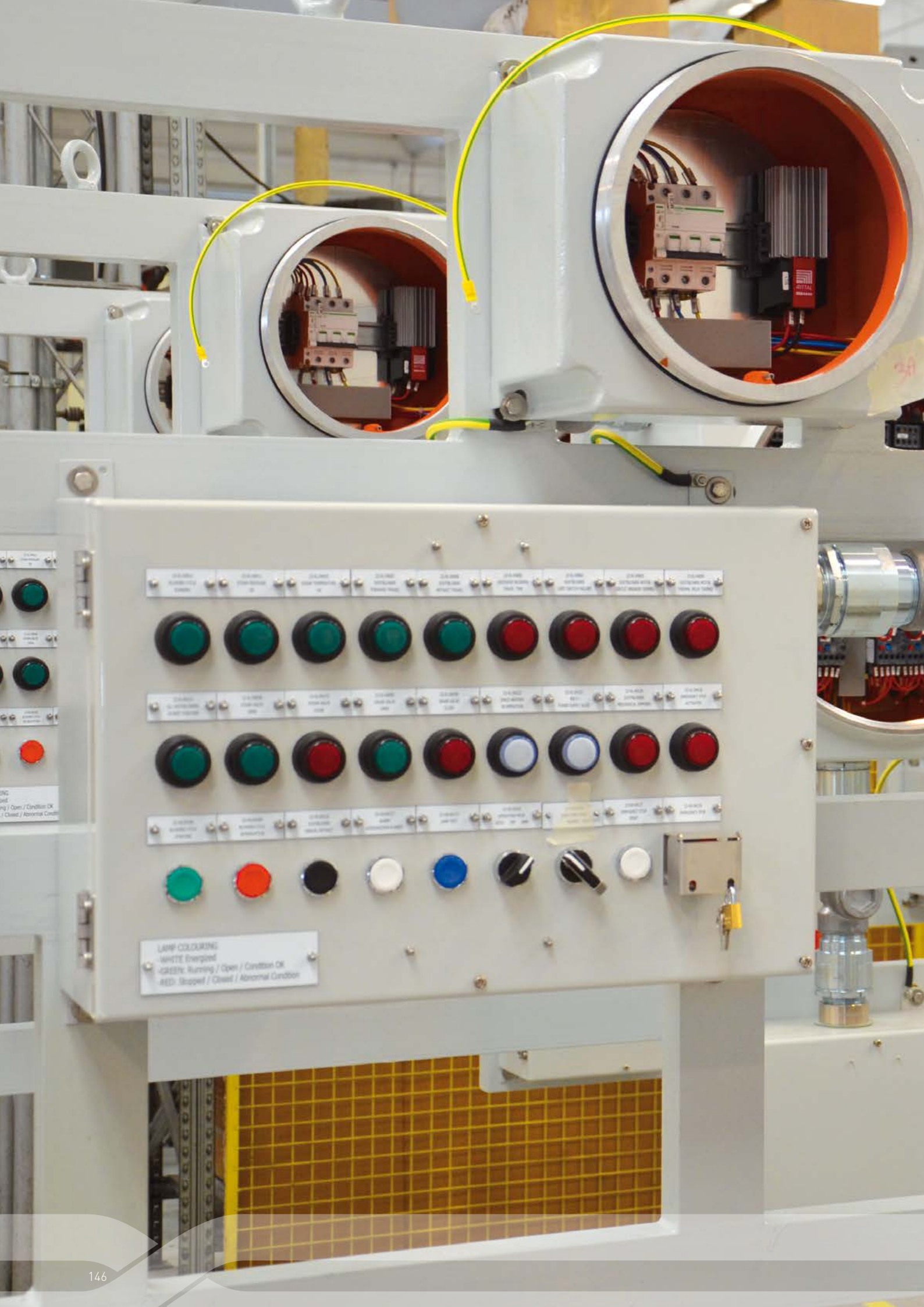
Material	Stainless steel AISI 316 L
IP rating	IP66/IP67 in closed position and IP44 in open position.
Ambient temperature range	-50°C +105°C
Approvals	ATEX: IMQ 14 ATEX 019U – IECEx: IMQ 14.0008U - EAC: RU C-IT.BH02.B.00593/20
Marking	Ex II 2GD – Ex e IIC Gb – Ex tb IIIC IP66/67
Standard compliance	EN60079-0:2012; EN60079-7:2007; EN60079-31:2009 IEC60079-0:2011; IEC60079-7:2006-07; IEC60079-31:2008
Zones	1; 21
Gaskets	Silicone gasket (continuous use temperature -60 ° C + 220 ° C)
Entries	Need to hole M16 x 1.5 6H or diameter from 16 mm to 16.5 mm and seal metal aluminum EN-AW 1050.

Dimensions ECR-3



Drain valve ECR-3

CODE	TYPE
B080909000006	ECR 3 DRAIN VALVE



FLAMEPROOF ENCLOSURES



P. 148

Pressurized cabinets

- QPREX Series -
Stainless steel AISI 316 L..... 148

P. 150

Gas Group IIB + H₂

- EJB.. Series -
Copper-free aluminium 150
- EJB.. Series -
Stainless steel AISI 316 L/Galvanized
Carbon Steel 152
- Spares & Accessories 154

P. 156

Gas Group IIC

- GUB.. Series - Copper free aluminium
or Stainless steel AISI 316 L 156
- GUB../QL Series - Copper-free aluminium
or Stainless Steel AISI 316 L 158
- GUB/EMH.. Series with window -
Copper-free aluminium or
Stainless Steel AISI 316 L 160
- CPS../EMH.. Series with window -
Copper-free aluminium 162

PRESSURIZED CABINETS

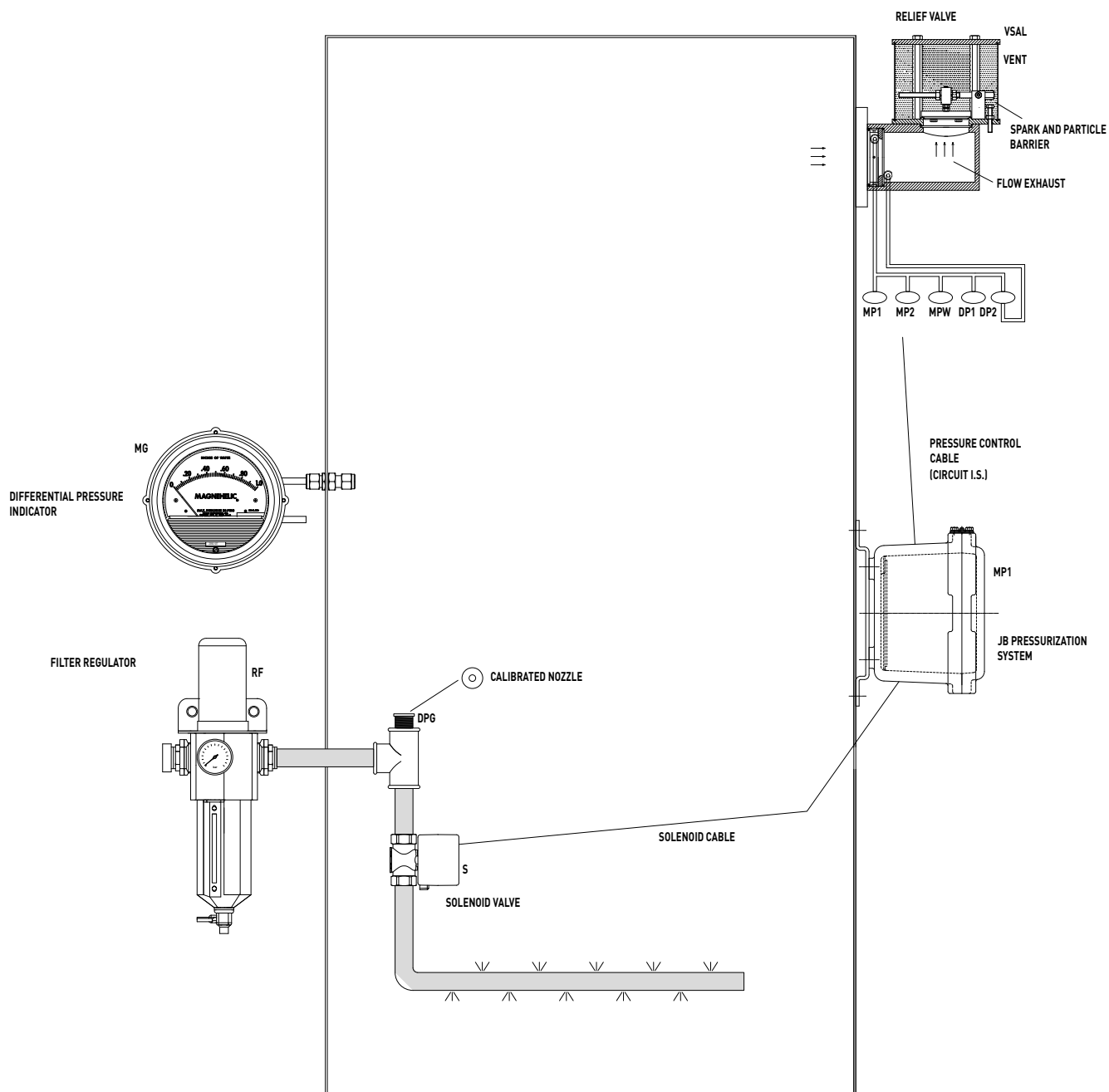
QPREX Series - Stainless steel AISI 316 L



- Modular building system allows to realize customized volume up to 10m³. One of the system that offers the widest possibilities on the market. A single system of pressurization and washing can manage multiple modules in series.
- New gasket technology minimizes the dispersion of inactive gas, increasing efficiency of pressurized system and reduce operating costs
- QPREX pressurized panels, because of the continuous influx of purging gas, prevents the build up of heat and moisture and provide a greater life cycle of the equipment.
- Quick access: easy opening and maintenance, when the doors open the system disconnects; when the doors are closed again, after the washing cycle, the system will start again automatically.
- In QPREX can be mounted non Ex components.
- Logic TEX1 first company with SIL2 (Safety Integrity Level).

TECHNICAL FEATURES

Material	AISI 316 L, AISI 304 or painted sendzimir steel
IP rating	IP65
Ambient temperature range	From -50°C to +60°C
Approvals	ATEX: TÜV 15 ATEX 158015 (pxb type of protection) ATEX: TÜV 15 ATEX 158016 (pzc type of protection) IECEX :TUN 15.0019 (pxb and pzc types of protection)
Marking	ATEX : Ex px/pz [ia Ga] IIC T6 or T5 or T4 Gb/Gc Ex px/pz [ia Ga] IIIC T85°C or T135°C Db/Dc IECEX Ex pxb/pzc [ia Ga] IIC T6 or T5 or T4 Gb/Gc Ex pxb/pzc [ia Ga] IIIC T85°C or T100°C or T135°C Db/Dc
Gaskets	EPDM or SILICONE
Dimensions	From 0,6 m ³ to 10 m ³
Tension	Up to 24 kVac/1500 Vdc
Frequency	Up to 1000Hz
Power	Up to 1250kva
Pressurisation system	Technor Italsmea TEX1 (zone 1- SIL2 *) or TEX 2 (Zone 2) . Available with component certificate
Climatization	Vortex, Air conditioner, Cooling/heating water systems, Antic condensate heater.
Note	* SIL: Safety Integrity Level



GAS GROUP IIB + H₂

EJB.. Series - Copper-free aluminium



EJB.. series enclosures offers Ex d IIB or IIB+H₂ mode of protection. They are suitable for hazardous areas of industrial plants for indoor and outdoor applications

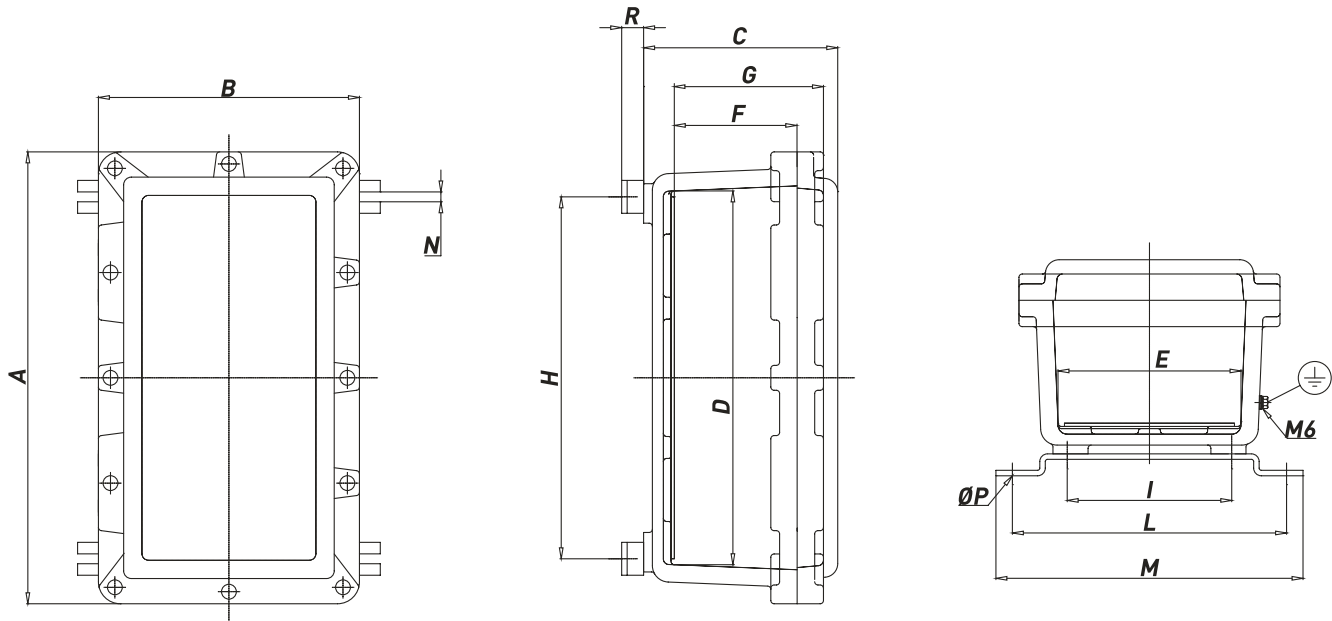
They can be equipped with following components:

- Push buttons and mechanical operators PL.. Series;
- Rotating switches PSRC Series;
- Signalling lamps PL.. Series;
- Potentiometers;
- Rotating handles SRC-1 or SRC-10;
- Measurement instruments;
- Electric and electronic equipment;
- Windows made of tempered glass.

TECHNICAL FEATURES

Material	Copper-free aluminium	
IP rating	IP65, IP66	
Ambient temp. range	-60 °C up to +60 °C (without window)/-50°C up to +60°C (with window)	
Approvals	<u>Full Conformity Certificate:</u> ATEX: INERIS 00ATEX0021X IECEX: INE 10.0015X EAC: RU C-IT.BH02.B.00588/20	<u>Component Certificate:</u> ATEX: INERIS 21 ATEX 9004U IECEX: INE 21.0006U EAC: RU C-IT.BH02.B.00588/20
Marking	<u>Full Conformity Certificate:</u> II 2 G Ex db IIB T(*) Gb or II 2 G Ex db IIB+H ₂ T(*) Gb or II 2 G Ex db ia/ib IIB T(*) Gb or II 2 G Ex db ia/ib IIB+H ₂ T(*) Gb and/or II 2 D Ex tb IIIC T(*) Db *T6/T85°C, T5/T100°C, T4/T135°C, T3/T200°C II 2(1) G Ex db [ia Ga] IIB T6 Gb or II 2(1) G Ex db [ia Ga] IIB+H ₂ T6 Gb and/or II 2(1) D Ex tb [ia Da] IIIC T85°C Db II 2(2) G Ex db [ib] IIB T6 Gb or II 2(2) G Ex db [ib] IIB+H ₂ T6 Gb and/or II 2(2) D Ex tb [ib] IIIC T85°C Db II 2(1) G Ex db ia/ib [ia Ga] IIB T6 Gb or II 2(1) G Ex db ia/ib [ia Ga] IIB+H ₂ T6 Gb and/or II 2(1) D Ex tb [ia Da] IIIC T85°C Db II 2(2) G Ex db ia/ib [ib] IIB T6 Gb or II 2(2) G Ex db ia/ib [ib] IIB+H ₂ T6 Gb and/or II 2(2) D Ex tb [ib] IIIC T85°C Db I M2 Ex db T(**) I Mb I M2(M1) Ex db [ia Ma] T(**) I Mb I M2(M2) Ex db [ib] T(**) I Mb **T150°C or T450°C	
Surface treatment	Polyurethane painting cycle - Blue colour RAL5014 (other colour available upon request)	
Entries	Metric pitch 1.5, ANSI B1.20.1 NPT	
Included accessories	Galvanized steel internal mounting plate, galvanized steel mounting brackets, AISI316 stainless steel external screws, hinges, door handle, acrylic laminate certificate label	
Optional accessories	A4-80 stainless steel mounting brackets, AISI316 stainless steel certificate label, Drain/breather valve, internal anticondensate painting.	

Dimensions EJB Aluminium



EJB.. Series - Standard versions are supplied painted and complete with: mounting plate, mounting brackets, hinges, screws and handle.

TYPE	DIMENSIONS [MM]														WEIGHT [kg]	COVER ENTRIES	MOUNTING PLATE(S)
	A	B	C	D	E	F	G	H	I	L	M	N	ØP	R			
EJB-2	298	238	163	230	168	116	135	205	140	250	280	9	M6	20	10.07	12	160 X 220
EJB-3	410	236	167	340	167	115	136	330	150	250	280	9	M8	20	13.40	18	155 X 330
EJB-3A	410	236	191	340	167	115	158	330	150	250	280	9	M8	20	13.50	9	155 X 330
EJB-4	415	300	165	335	220	116	132	300	190	300	320	9	M8	20	17.50	20	210 X 325
EJB-5	477	297	221	392	209	157	182	350	185	300	320	9	M8	20	20.50	22	200 X 385
EJB-6	478	404	226	387	310	160	186	355	280	390	420	9	M8	20	33.00	28	300 X 380
EJB-8	630	361	246	530	262	173,5	204	495	225	340	370	9	M8	20	36.05	36	250 X 520
EJB-9	532	465	252	426	363	177	204	410	340	440	470	12	M10	20	40.00	34	350 X 420
EJB-10	754	366	294	630	250	217	234	580	205	330	360	12	M10	20	48.50	34	240 X 620
EJB-11	592	501	257	483	394	174	204	445	360	480	510	12	M10	20	53.30	44	380 X 470
EJB-12	801	450	300	690	335	206,5	243	640	285	425	450	14	M12	20	73.00	54	325 X 675
EJB-13	830	604	298	723	500	160	236	630	405	580	620	14	M12	20	106.00	76	463 X 683
EJB-13A	830	604	404	723	500	265	322	630	405	580	620	14	M12	20	124.00	76	463 X 683
EJB-14	970	770	478	795	595	343	404	765	565	710	770	16	M14	25	245.00	0	795x595 745x545
EJB-14*	970	770	461	795	595	343	367	765	565	710	770	16	M14	25	310.00	57	795x595 745x545

**Copper-free aluminium body and galvanized steel cover

Standard painting cycle: C4 - Colour: Blue RAL5014. For a different colour, ask to our Sales Dept.

Hinges are mounted on long left side of the enclosure. For a different configuration, ask to our Sales Dept.

For complete junction boxes, ask to our Sales Dept.

Note: For installations in either Zone 1 or volume up to 2dm³, barrier glands are required. Please refer to EN-60079-14.

Maximum number of entries on sides A/B

TYPE	EJB-2	EJB-3 EJB-3A	EJB-4	EJB-5	EJB-6	EJB-8	EJB-9	EJB-10	EJB-11	EJB-12	EJB-13	EJB-13A	EJB-14*
M20 - 1/2"	9/7	14/7	14/9	27/13	24/18	35/16	27/24	57/21	32/27	61/28	48/32	81/54	111/110
M25 - 3/4"	9/5	7/3	7/4	14/7	14/10	29/13	24/18	46/18	21/27	40/18	27/18	54/36	71/70
M32 - 1"	4/3	6/3	6/4	12/5	12/9	18/8	12/10	29/10	14/12	32/16	23/16	35/24	43/43
M50 - 1 1/2"	3/2	4/2	4/3	5/2	5/4	7/3	9/9	14/5	6/5	16/7	9/6	18/10	17/17
M63 - 2"	2/1	3/1	3/2	4/2	4/3	6/2	4/4	12/4	5/4	12/5	8/5	14/9	11/11
M75 - 2 1/2"	-	-	-	3/1	3/2	4/2	3/3	5/2	4/3	6/3	6/4	6/4	7/7
M80 - 3"	-	-	-	2/1	2/2	3/1	2/2	4/1	3/2	4/2	5/3	5/3	6/6
M90 - 3 1/2"	-	-	-	2/1	2/2	3/1	2/2	4/1	3/2	4/2	5/3	5/3	6/5
M100 - 4"	-	-	-	2/1	2/2	2/1	2/2	4/1	3/2	4/2	4/3	5/3	5/4

GAS GROUP IIB + H₂

EJB.. Series - Stainless steel AISI 316 L/Galvanized Carbon Steel



EJB.. series enclosures offers Ex d IIB or IIB+H₂ mode of protection. They are suitable for hazardous areas of industrial plants for indoor and outdoor applications. They can be equipped with following components:

- Push buttons and mechanical operators PL.. Series;
- Rotating switches PSRC Series;
- Signalling lamps PL.. Series;
- Potentiometers;
- Rotating handles SRC-1 or SRC-10;
- Measurement instruments;
- Electric and electronic equipment;
- Windows made of tempered glass.

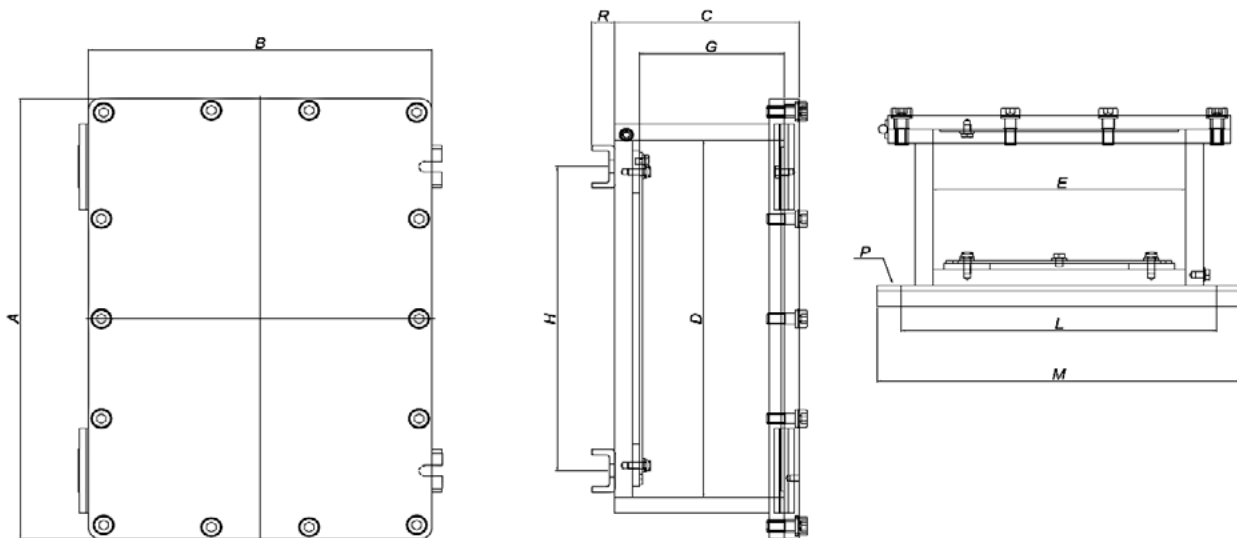
They can be used in different applications such as push button stations, instrument housing, lighting distribution panels, power distribution panels, heat tracing panels, motor protection, etc.

TECHNICAL FEATURES

Material	Stainless steel AISI 316 L or Galvanized carbon steel	
IP rating	IP65, IP66	
Ambient temp. range	-60°C to +60°C (without window)/-50°C to +60°C (with window)	
Approvals	<u>Full Conformity Certificate:</u> ATEX: INERIS 00ATEX0021X IECEx: INE 10.0015X EAC: RU C-IT.BH02.B.00588/20	<u>Component Certificate:</u> ATEX: INERIS 21 ATEX 9004U IECEx: INE 21.0006U EAC: RU C-IT.BH02.B.00588/20
Marking	<u>Full Conformity Certificate:</u> II 2 G Ex db IIB T(*) Gb or II 2 G Ex db IIB+H ₂ T(*) Gb or II 2 G Ex db ia/ib IIB T(*) Gb or II 2 G Ex db ia/ib IIB+H ₂ T(*) Gb and/or II 2 D Ex tb IIIC T(*) Db *T6/T85°C, T5/T100°C, T4/T135°C, T3/T200°C II 2(1) G Ex db [ia Ga] IIB T6 Gb or II 2(1) G Ex db [ia Ga] IIB+H ₂ T6 Gb and/or II 2(1) D Ex tb [ia Da] IIIC T85°C Db II 2(2) G Ex db [ib] IIB T6 Gb or II 2(2) G Ex db [ib] IIB+H ₂ T6 Gb and/or II 2(2) D Ex tb [ib] IIIC T85°C Db II 2(1) G Ex db ia/ib [ia Ga] IIB T6 Gb or II 2(1) G Ex db ia/ib [ia Ga] IIB+H ₂ T6 Gb and/or II 2(1) D Ex tb [ia Da] IIIC T85°C Db II 2(2) G Ex db ia/ib [ib] IIB T6 Gb or II 2(2) G Ex db ia/ib [ib] IIB+H ₂ T6 Gb and/or II 2(2) D Ex tb [ib] IIIC T85°C Db I M2 Ex db T(**) I Mb I M2(M1) Ex db [ia Ma] T(**) I Mb I M2(M2) Ex db [ib] T(**) I Mb **T150°C or T450°C	
Surface treatment	Stainless steel enclosures: Unpainted Galv. steel enclosures: Hot dip galvanization. Colour: Blue RAL5014 (other colours on request)	
Entries	Metric pitch 1.5, ANSI B1.20.1 NPT	
Included accessories	Galvanized steel internal mounting plate, galvanized steel mounting brackets, AISI316 stainless steel external screws, hinges, door handle, acrylic laminate certificate label	
Optional accessories	A4-80 stainless steel mounting brackets, AISI316 stainless steel certificate label, Drain/breather valve, internal anticondensate painting.	

Dimensions EJB

The sides A, B & C of our EJB enclosures can be increased/decrease of 15% covering the dimensions from 298 x 238 x 175mm up to 950 x 690 x 440mm provided that internal volume does not increase/decrease of more than 1%.



EJB.. Series - Standard versions are supplied in AISI316 stainless steel, unpainted and complete with: mounting plate, mounting brackets, hinges, screws and handle.

TYPE	CODE	DIMENSIONS [mm]											WEIGHT [kg]	COVER ENTRIES	INT. MOUNTING PLATE
		A	B	C	D	E	G	H	L	M	ØP	R			
EJB-2	B011013010002	296	234	158	230	168	132	205	250	280	10	20	35	12	160 X 220
EJB-3	B011013010004	408	235	161	340	167	130	330	250	280	10	20	45	18	155 X 330
EJB-4	B011013010006	414	298	160	336	220	126	300	305	340	12	20	55	20	210 X 325
EJB-5	B011013010008	472	289	210	392	209	176	350	295	330	12	20	70	22	200 X 385
EJB-6	B011013010010	489	414	224	399	324	190	355	410	450	14	25	93	28	300 X 380
EJB-8	B011013010012	617	348	237	531	162	198	495	360	400	14	25	114	36	250 X 520
EJB-9	B011013010014	516	453	237	426	363	198	400	460	500	14	25	118	34	350 X 420
EJB10	B011013010025	726	344	267	630	248	228	580	340	380	14	25	125	40	560X178
EJB-11	B011013010016	585	496	236	483	394	215	445	490	530	14	25	139	44	380 X 470
EJB-12	B011013010018	809	459	299	705	355	256	640	440	480	16	30	181	54	325 X 675
EJB-13	B011013010020	825	602	269	723	500	226	667	605	650	18	30	235	76	463 X 683
EJB-13A	B011013010021	825	602	355	723	500	330	667	605	650	18	30	262	76	463 X 683
EJB-13XL	B011013010026	940	650	404	840	550	356	775	650	690	18	30	300	80	793 X 509
EJB-14	B011013010024	970	770	436	850	650	378	790	760	800	20	30	530	57	795X595

Hinges are mounted on long left side of the enclosure. For a different configuration, ask to our Sales Dept.

For galvanized carbon steel enclosures, ask to our Sales Dept.

For complete junction boxes, ask to our Sales Dept.

Maximum number of entries on sides A/B

TYPE	EJB-2	EJB-3	EJB-3A	EJB-4	EJB-5	EJB-6	EJB-8	EJB-9	EJB-10	EJB-11	EJB-12	EJB-13	EJB-13A	EJB-13XL	EJB-14*
M20 - 1/2"	9/7	14/7	14/7	14/9	27/13	24/18	35/16	27/24	57/21	32/27	61/28	48/32	81/54	96/110	110/110
M25 - 3/4"	9/5	7/3	7/3	7/4	14/7	14/10	29/13	24/18	46/18	21/27	40/18	27/18	54/36	62/70	71/70
M32 - 1"	4/3	6/3	6/3	6/4	12/5	12/9	18/8	12/10	29/10	14/12	32/16	23/16	35/24	39/43	43/43
M50 - 1 1/2"	3/2	4/2	4/2	4/3	5/2	5/4	7/3	9/9	14/5	6/5	16/7	9/6	18/10	17/17	17/17
M63 - 2"	2/1	3/1	3/1	3/2	4/2	4/3	6/2	4/4	12/4	5/4	12/5	8/5	14/9	12/11	11/11
M75 - 2 1/2"	-	-	-	-	3/1	3/2	4/2	3/3	5/2	4/3	6/3	6/4	6/4	7/7	7/7
M80 - 3"	-	-	-	-	2/1	2/2	3/1	2/2	4/1	3/2	4/2	5/3	5/3	6/6	6/6
M90 - 3 1/2"	-	-	-	-	2/1	2/2	3/1	2/2	4/1	3/2	4/2	5/3	5/3	5/4	6/5
M100 - 4"	-	-	-	-	2/1	2/2	3/1	2/2	4/1	3/2	4/2	4/3	4/3	4/3	5/4

*Max. number of entries can increase for EJB-14 if T.amb = -20°C

SPARES & ACCESSORIES

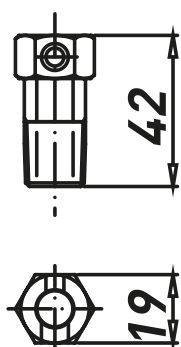
Wall mounting brackets

CODE	TYPE
B080200100035	MOUNTING BRACKETS FOR EJB-2/3/3A + SCREWS (STF-2/3/3A)
B080200100011	MOUNTING BRACKETS FOR EJB-4/5 + SCREWS (STF-4/5)
B080200100030	MOUNTING BRACKETS FOR EJB-6 + SCREWS (STF-6)
B080200100032	MOUNTING BRACKETS FOR EJB-8 + SCREWS (STF-8)
B080200100012	MOUNTING BRACKETS FOR EJB-9 + SCREWS (STF-9)
B080200100013	MOUNTING BRACKETS FOR EJB-10 + SCREWS (STF-10)
B080200100014	MOUNTING BRACKETS FOR EJB-11 + SCREWS (STF-11)
B080200100015	MOUNTING BRACKETS FOR EJB-12 + SCREWS (STF-12)
B080200100016	MOUNTING BRACKETS FOR EJB-13 + SCREWS (STF-13)

Available upon request AISI 316 L made version

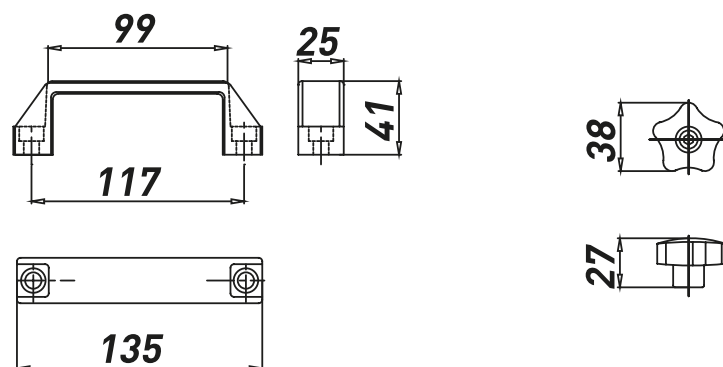
Drain/Breather valve

CODE	TYPE
B080909000001	ECR 1 VALVE



Door handles

CODE	TYPE
B0A0100049000	HANDLE FOR EJB (FROM 8 TO 14) + SCREWS
B0A0100048000	KNOB FOR EJB (UP TO 6) + SCREWS

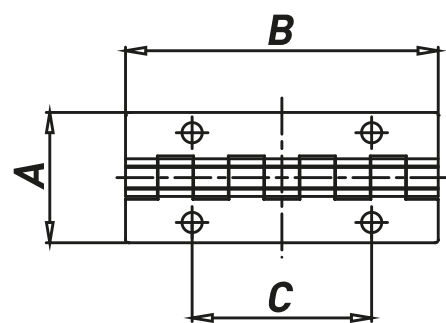


Hinges (for aluminium EJB Series)

CODE	TYPE
B080300100003	AISI 316 L HINGES 56X38MM + SCREWS
B080300100001	AISI 316 L HINGES 60X45MM + SCREWS
B080300100002	AISI 316 L HINGES 108X45MM + SCREWS

Selection table

HINGES L=56X38MM	HINGES L=60X45MM	HINGES L=108X45MM
EJB-2	EJB-6	EJB-12
EJB-3	EJB-8	EJB-13
EJB-3A	EJB-9	EJB-13A
EJB-4	EJB-10	EJB-13 XL
EJB-5	EJB-11	EJB-14



Windows

Our windows may have multiple shape options and different sizes according to customers' requirements. Our technical department will support you in choosing the suitable window to meet your specifications within the technical limits allowed by the certificate.

Standard shape: Rectangular

Standard dimensions (mm): 45x70; 100x170; 100x270; 110x290

Customization is available upon request

GAS GROUP IIC

GUB.. Series - Copper free aluminium or Stainless steel AISI 316 L



GUB.. series enclosures offers Ex db IIC mode of protection.

They are suitable for hazardous areas of industrial plants for indoor and outdoor applications.

GUB version can be equipped with following components:

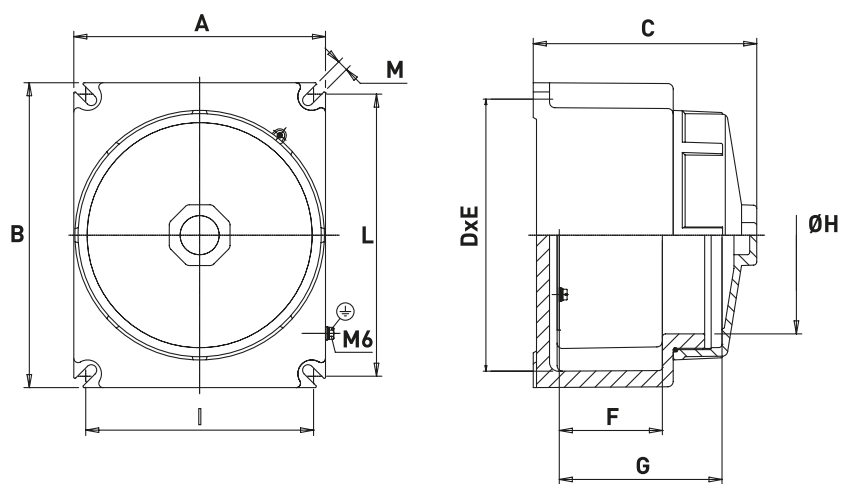
- Signalling lamps PL.. Series;
- Measurement instruments (weight; pressure; damp; level; temperature and capacity);
- Electric and electronic equipment;
- Instruments of measure of electric parameters;
- Electronic thermoregulation units;
- Radio communication and telephony units;
- PLC and multiplexer;
- Controlling device;
- Automatic and/or earth leakage circuit breakers.

They can be used in different applications such as push button stations, instrument housing, lighting distribution panels, power distribution panels, heat tracing panels, motor protection, etc.

TECHNICAL FEATURES

Material	Copper-free aluminium Stainless steel AISI 316 L (different sizes than the standard indicated)	
IP rating	IP66	
Ambient temperature range	-60°C to +80°C (ATEX) -60°C to +80°C (IECEX)	
Approvals	<u>Full conformity certificate:</u> INERIS 22 ATEX 0008X IECEX INE 22.0012X EAC: RU C-IT.BH02.B.00588/20	<u>Component certificate:</u> INERIS 22 ATEX 9002U IECEX INE 22.0010U EAC: RU C-IT.BH02.B.00588/20
Marking	II 2 G Ex db IIC T(**) Gb or II 2 G Ex db ia/ib IIC T(**) Gb and/or II 2 D Ex tb IIIC T(**) Db II 2 D Ex tb ia/ib IIIC T(**) Db ** T6/T85°C, T5/T100°C, T4/T135°C, T3/T200°C II 2(1) G Ex db [ia Ga] IIC T6 Gb and/or II 2(2) G Ex db [ib] IIC T6 Gb and/or II 2(1) G Ex db ia/ib [ia Ga] IIC T6 Gb and/or II 2(2) G Ex db ia/ib [ib] IIC T6 Gb and/or II 2(1) D Ex tb [ia Da] IIIC T85°C Db II 2(2) D Ex tb [ib] IIIC T85°C Db II 2(1) D Ex tb ia/ib [ia Da] IIIC T85°C Db II 2(2) D Ex tb ia/ib [ib] IIIC T85°C Db I M2 Ex db I Mb I M2 Ex db ia/ib I Mb I M2(M1) Ex db [ia Ma] I Mb I M2(M2) Ex db [ib] I Mb I M2(M1) Ex db ia/ib [ia Ma] I Mb I M2(M2) Ex db ia/ib [ib] I Mb	
Surface treatment	Polyurethane painting cycle - Blue colour RAL5014 (other colour available upon request)	
Entries	Metric pitch 1.5, ANSI B1.20.1 NPT	
Standard certificate label	Made by self adhesive UV and corrosion resistant polyester; approved by certified Laboratory.	
Optional accessories	Drain/breather valve Internal anticondensate painting Traffolyte/Stainless steel certificate label Stainless steel construction	

Dimensions GUB Series enclosures in Copper-free aluminium



GUB Series enclosures c/w internal mounting plate - Copper-free aluminium - Standard versions*

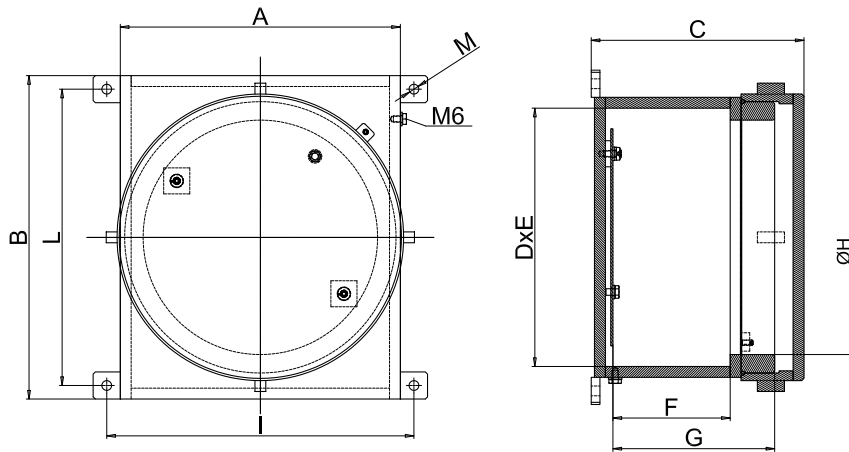
TYPE	CODE	DIMENSIONS [mm]											WEIGHT [kg]
		A	B	C	D	E	F	G	ØH	I	L	M	
GUB-01	B011024010029	169	169	152	139	139	64	115	126	150	150	8	3.60
GUB-02	B011024010030	190	190	164	160	160	65	125	144	170	170	8	4.70
GUB-03	B011024010031	210	210	179	180	180	80	139	167	179	179	8	6.00
GUB-04	B011024010032	281	232	206	202	291	99	160	183	260	210	10	8.90
GUB-05	B011024010033	298	257	222	227	268	108	178	206	275	235	8	11.90
GUB-06	B011024010034	329	293	248	259	295	141	211	242	270	305	10,5	15.80
GUB-07	B011024010035	545	545	248	490	490	195	229	457	475	475	14,5	81.5

*Standard enclosures are supplied painted - painting cycle: C4 - Colour: Blue RAL5014.

For complete junction boxes, ask to the Sales Office.

Note: For installations in either Zone 1 or in the presence of Group IIC gases, barrier glands are required. Please refer to EN-60079-14.

Dimensions GUB Series in Stainless steel



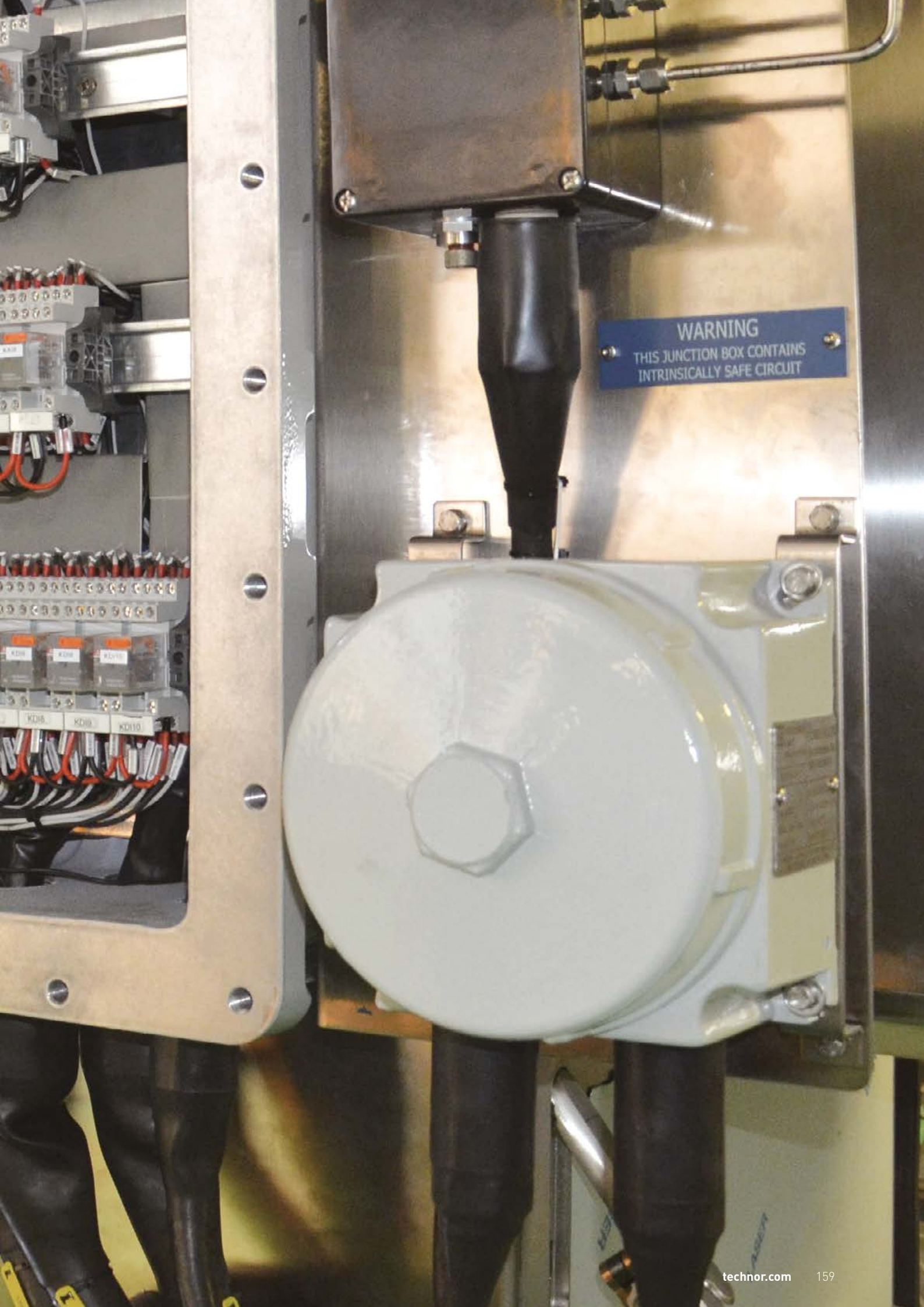
GUB Series enclosures c/w internal mounting plate – Stainless steel- Standard versions

TYPE	CODE	DIMENSIONS [mm]											WEIGHT [kg]
		A	B	C	D	E	F	G	ØH	I	L	ØM	
GUB-01	B011023010002	170	170	135	154	154	68	112	124,5	145	195	9	9.5
GUB-02	B011023010004	191	191	149	70	163	163	120	144	166	216	9	12.5
GUB-03	B011023010006	210	210	157	190	190	80	129	173	185	235	9	16.5
GUB-04	B011023010008	232	281	183	212	262	101	155	18	256	257	9	23.5
GUB-05	B011023010010	258	298	196	238	278	110	166	216	273	283	9	30
GUB-06	B011023010012	295	330	240	310	275	151	210	257	305	320	9	40.5
GUB-07	B012023010003	545	545	341	515	515	205	290	443	595	495	16	169

Maximum number of entries on sides A/B

TYPE	GUB-01	GUB-02	GUB-03	GUB-04	GUB-05	GUB-06	GUB-07
M16/3/8"	6/6	8/8	10/10	15/18	18/21	32/36	84/84
M20/1/2"	3/3	5/5	5/5	5/7	7/9	7/9	50/50
M25/3/4"	3/3	5/5	5/5	5/7	7/9	7/9	40/40
M32/1"	2/2	3/3	3/3	5/5	5/7	5/7	24/24
M50/1" 1/2	1/1	1/1	2/2	2/3	2/3	3/5	18/18
M63/2"	1/1	1/1	1/1	2/2	2/2	2/3	10/10
M75/2" 1/2	-	-	-	1/2*	1/2*	2/2*	5/5
M80/3"	-	-	-	1/1*	1/2*	1/2*	4/4
M90/3 1/2 "	-	-	-	-	-	-	4/4
M100/4"	-	-	-	-	-	-	3/3

* For Aluminium version, an adaptor is necessary.



WARNING
THIS JUNCTION BOX CONTAINS
INTRINSICALLY SAFE CIRCUIT

GAS GROUP IIC

GUB../QL Series - Copper-free aluminium or Stainless Steel AISI 316 L



GUB.. series enclosures offers Ex db IIC mode of protection.

They are suitable for hazardous areas of industrial plants for indoor and outdoor applications. GUB.. QL version can be equipped with following components:

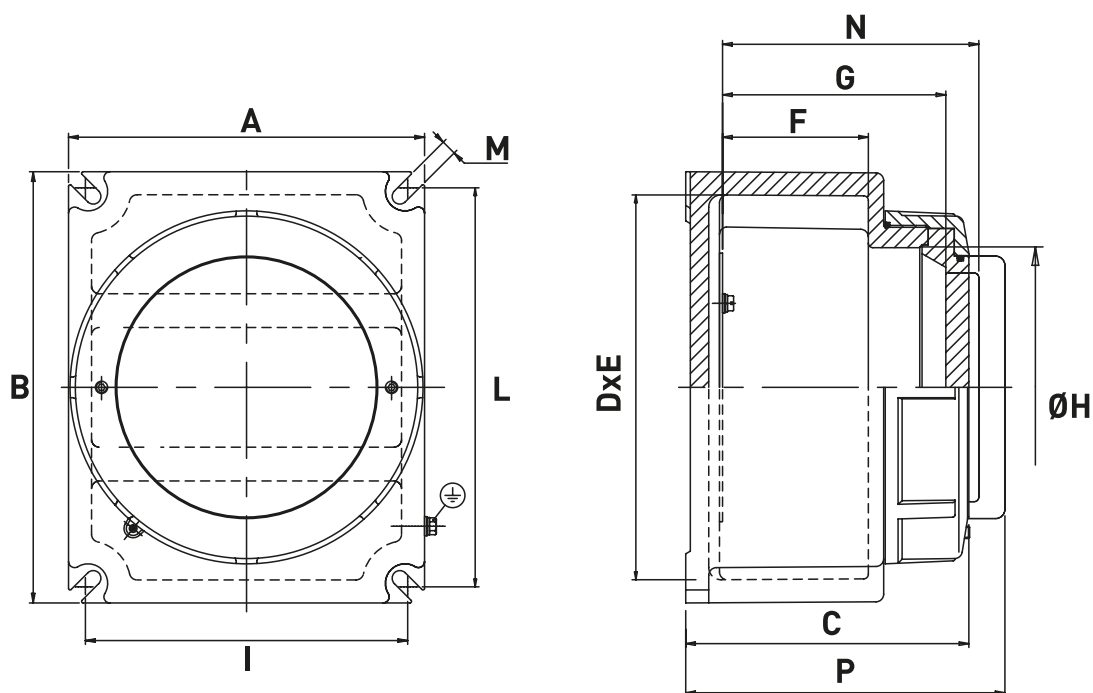
- Push buttons and mechanical operators PL.. Series;
- Rotating switches PSRC Series;
- Signalling lamps PL.. Series;
- Potentiometers;
- Rotating handles SRC-1 or SRC-10;
- Measurement instruments;
- Electric and electronic equipment;
- Windows made of tempered glass (GUB-QL07).

They can be used in different applications such as push button stations, instrument housing, lighting distribution panels, power distribution panels, heat tracing panels, motor protection, etc.

TECHNICAL FEATURES

Material	Copper-free aluminium Stainless steel AISI 316 L (different sizes than the standard indicated)	
IP rating	IP66	
Ambient temperature range	-60°C to +60°C (ATEX) -60°C to +60°C (IECEX)	
Approvals	<u>Full conformity certificate:</u> INERIS 22 ATEX 0008X IECEX INE 22.0012X EAC: RU C-IT.BH02.B.00588/20	<u>Component certificate:</u> INERIS 22 ATEX 9002U IECEX INE 22.0010U EAC: RU C-IT.BH02.B.00588/20
Marking	II 2 G Ex db IIC T(**) Gb or II 2 G Ex db ia/ib IIC T(**) Gb and/or II 2 D Ex tb IIIC T(**) Db II 2 D Ex tb ia/ib IIIC T(**) Db ** T6/T85°C, T5/T100°C, T4/T135°C, T3/T200°C II 2(1) G Ex db [ia Ga] IIC T6 Gb and/or II 2(2) G Ex db [ib] IIC T6 Gb and/or II 2(1) G Ex db ia/ib [ia Ga] IIC T6 Gb and/or II 2(2) G Ex db ia/ib [ib] IIC T6 Gb and/or II 2(1) D Ex tb [ia Da] IIIC T85°C Db II 2(2) D Ex tb [ib] IIIC T85°C Db II 2(1) D Ex tb ia/ib [ia Da] IIIC T85°C Db II 2(2) D Ex tb ia/ib [ib] IIIC T85°C Db I M2 Ex db I Mb I M2 Ex db ia/ib I Mb I M2(M1) Ex db [ia Ma] I Mb I M2(M2) Ex db [ib] I Mb I M2(M1) Ex db ia/ib [ia Ma] I Mb I M2(M2) Ex db ia/ib [ib] I Mb	
Surface treatment	Polyurethane painting cycle - Blue colour RAL5014 (other colour available upon request)	
Entries	Metric pitch 1.5, ANSI B1.20.1 NPT	
Standard certificate label	Made by self adhesive UV and corrosion resistant polyester; approved by certified Laboratory.	
Optional accessories	Drain/breather valve Internal anticondensate painting Traffolyte/Stainless steel certificate label Stainless steel construction	

Dimensions GUB../QL Series in Copper-free aluminium



GUB../QL Series enclosures c/w internal mounting plate - Copper-free aluminium - Standard versions*

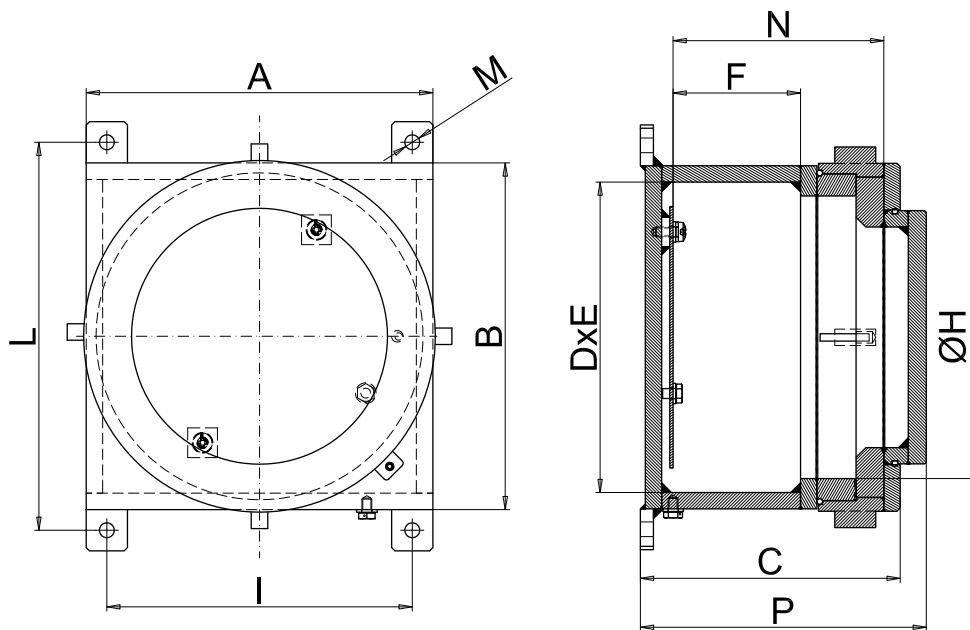
TYPE	CODE	DIMENSIONS [mm]													WEIGHT [kg]
		A	B	C	D	E	F	G	ØH	I	L	ØM	N	P	
GUB-QL 01	B012024010020	169	169	139	139	139	62	103	126	150	150	8	-	-	3.60
GUB-QL 02	B012024010014	190	190	144	160	160	64	114	144	170	170	8	143	179	4.70
GUB-QL 03	B012024010015	210	210	158	180	180	78	129	167	179	179	8	140	174	6.00
GUB-QL 04	B012024010021	281	232	185	202	291	97	148	183	260	210	10	-	-	8.90
GUB-QL 05	B012024010022	298	257	199	227	268	108	161	206	275	235	8	-	-	11.90
GUB-QL 06	B012024010016	330	295	236	259	295	140	195,5	242	270	305	10,5	-	-	15.80
GUB-QL 07	B012024010019	545	545	348	490	490	197	285	457	475	475	14,5	-	-	81.5

*Standard enclosures are supplied painted - painting cycle: C4 - Colour: Blue RAL5014.

For complete junction boxes, ask to the Sales Office.

Note: For installations in either Zone 1 or in the presence of Group IIC gases, barrier glands are required. Please refer to EN-60079-14.

Dimensions GUB../QL Series in Stainless steel



GUB../QL Series enclosures c/w internal mounting plate – Stainless steel- Standard versions

TYPE	CODE	DIMENSIONS [mm]													WEIGHT [KG]
		A	B	C	D	E	F	G	ØH	I	L	ØM	N	P	
GUB-QL 03	B012023010002	210	210	157	190	190	80	129	173	185	235	9	144	175	20
GUB-QL 06	B012023010001	295	330	238	310	275	151	210	257	305	320	9	-	-	43
GUB-QL 07	B012023010003	545	545	341	515	515	205	290	443	595	495	16	-	-	169

Maximum number of entries on sides A/B

TYPE	GUB-QL 01	GUB-QL 02	GUB-QL 03	GUB-QL 04	GUB-QL 05	GUB-QL 06	GUB-QL-07
M16/3/8"	6/6	8/8	10/10	15/18	18/21	32/36	84/84
M20/1/2"	3/3	5/5	5/5	7/9	7/9	7/9	50/50
M25/3/4"	3/3	5/5	5/5	7/9	7/9	7/9	40/40
M32/1"	2/2	3/3	3/3	5/7	5/7	5/7	24/24
M50/1" 1/2	1/1	1/1	2/2	2/3	2/3	3/5	18/18
M63/2"	1/1	1/1	1/1	2/2	2/2	2/3	10/10
M75/2" ½	-	-	-	1/2*	2/2*	2/2*	5/5
M80/3"	-	-	-	1/2*	1/2*	1/2*	4/4
M90/3 ½ "	-	-	-	-	-	-	4/4
M100/4"	-	-	-	-	-	-	3/3

* For Aluminium version, an adaptor is necessary.



GAS GROUP IIC

GUB/EMH... Series with window - Copper-free aluminium or Stainless Steel AISI 316 L



GUB/EMH... series enclosures offers Ex dB IIC mode of protection.

They are suitable for hazardous areas of industrial plants for indoor and outdoor applications. GUB/EMH version is equipped with window made of tempered glass and with following components:

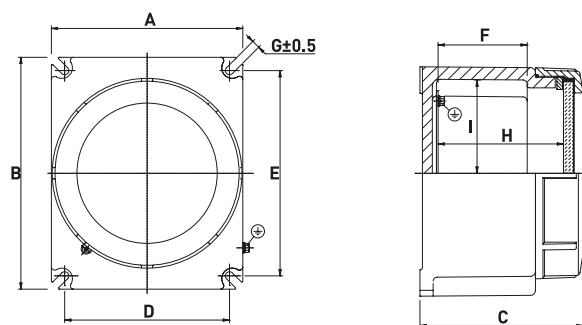
- Push buttons and mechanical operators PL... Series;
- Rotating switches PSRC Series;
- Potentiometers;
- Rotating handles SRC-1 or SRC-10;
- Measurement instruments;
- Electric and electronic equipment;
- Windows made of tempered glass.

They can be used in different applications such as push button stations, instrument housing, lighting distribution panels, power distribution panels, heat tracing panels, motor protection, etc.

TECHNICAL FEATURES

Material	Copper-free aluminium Stainless steel AISI 316 L (different sizes than the standard indicated)	
IP rating	IP66	
Ambient temperature range	-55°C to +80°C (ATEX) -55°C to +80°C (IECEX)	
Approvals	<u>Full conformity certificate:</u> INERIS 22 ATEX 0008X IECEx INE 22.0012X EAC: RU C-IT.BH02.B.00588/20	<u>Component certificate:</u> INERIS 22 ATEX 9002U IECEx INE 22.0010U EAC: RU C-IT.BH02.B.00588/20
Marking	II 2 G Ex db IIC T(**) Gb or II 2 G Ex db ia/ib IIC T(**) Gb and/or II 2 D Ex tb IIIC T(**) Db II 2 D Ex tb ia/ib IIIC T(**) Db ** T6/T85°C, T5/T100°C, T4/T135°C, T3/T200°C II 2(1) G Ex db [ia Ga] IIC T6 Gb and/or II 2(2) G Ex db [ib] IIC T6 Gb and/or II 2(1) G Ex db ia/ib [ia Ga] IIC T6 Gb and/or II 2(2) G Ex db ia/ib [ib] IIC T6 Gb and/or II 2(1) D Ex tb [ia Da] IIIC T85°C Db II 2(2) D Ex tb [ib] IIIC T85°C Db II 2(1) D Ex tb ia/ib [ia Da] IIIC T85°C Db II 2(2) D Ex tb ia/ib [ib] IIIC T85°C Db I M2 Ex db I Mb I M2 Ex db ia/ib I Mb I M2(M1) Ex db [ia Ma] I Mb I M2(M2) Ex db [ib] I Mb I M2(M1) Ex db ia/ib [ia Ma] I Mb I M2(M2) Ex db ia/ib [ib] I Mb	
Surface treatment	Polyurethane painting cycle - Blue colour RAL5014 (other colour available upon request)	
Entries	Metric pitch 1.5, ANSI B1.20.1 NPT	
Standard certificate label	Made by self adhesive UV and corrosion resistant polyester, approved by certified Laboratory.	
Optional accessories	Drain/breather valve Internal anticondensate painting Traffolyte/Stainless steel certificate label	

Dimensions GUB/EMH Series in Copper-free aluminium



GUB/EMH.. Series enclosures c/w internal mounting plate - Copper-free aluminium - Standard versions*

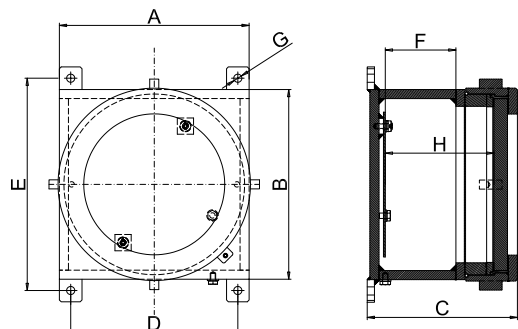
TYPE	CODE	DIMENSIONS [mm]								WINDOW Ø [mm]	WEIGHT [kg]
		A	B	C	D	E	F	ØG	H		
EMH-160	B016084010003	210	210	160	180	180	78	8	115	155	6.00
EMH-175	B016084010005	281	232	185	202	251	97	8	141	170	8.90
EMH-200	B016084010006	298	257	200	227	268	106	8	150	195	11.90
EMH-230	B016084010009	329	293	236	259	295	140	10	189	230	15.80

*Standard enclosures are supplied painted - painting cycle: C4 - Colour: Blue RAL5014.

For complete junction boxes, ask to the Sales Office.

Note: For installations in either Zone 1 or in the presence of Group IIC gases, barrier glands are required. Please refer to EN-60079-14.

Dimensions GUB/EMH Series in Stainless steel



GUB/EMH.. Series enclosures c/w internal mounting plate - Stainless steel- Standard versions

TYPE	CODE	DIMENSIONS [mm]								WINDOW Ø [mm]	WEIGHT [kg]
		A	B	C	D	E	F	ØG	H		
EMH-160	B016083010002	210	210	166	185	235	80	9	115	156	17.00

Maximum number of entries on sides A/B under ATEX directive

TYPE	GUB-03/EMH-160	GUB-04/EMH-175	GUB-05/EMH-200	GUB-06/EMH-200
M16/3/8"	10/10	15/18	18/21	32/36
M20/1/2"	5/5	5/7	7/9	7/9
M25/3/4"	5/5	5/7	7/9	7/9
M32/1"	3/3	5/5	5/7	5/7
M50/1" 1/2	2/2	2/3	2/3	3/5
M63/2"	1/1	2/2	2/2	2/3
M75/2" 1/2	-	1/2*	1/2*	2/2*
M80/3"	-	1/1*	1/1*	1/2*
M90/3 1/2 "	-	-	-	-
M100/4"	-	-	-	-

* For Aluminium version, an adaptor is necessary

GAS GROUP IIC

CPS../EMH.. Series with window - Copper-free aluminium

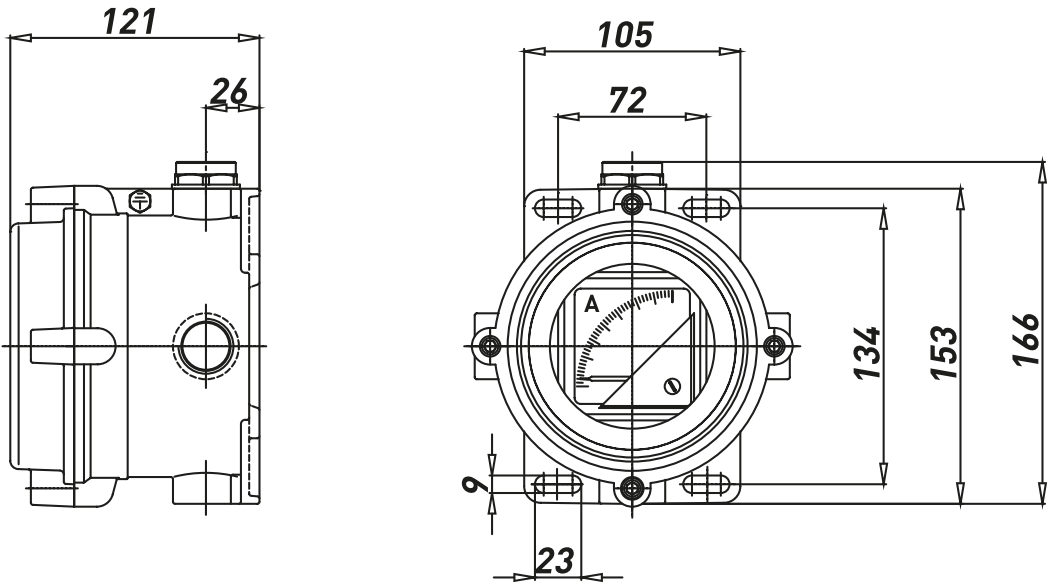


CPS/EMH.. series instrument housings offer Ex d IIC mode of protection. They are suitable for hazardous areas of industrial plants for indoor and outdoor applications.

TECHNICAL FEATURES

Material	Copper-free aluminium
IP rating	IP66
Ambient temperature range	-50°C to + 55°C (ATEX) -60°C to +60°C (IECEX)
Approvals	ATEX: 03ATEX0009 IECEX: BKI 15.0002 EAC: RU C-IT.BH02.B.00588/20
Marking	II 2 GD Ex d IIC T[*] Gb Ex tb IIC T[*] Db IP66 Ex db IIC T6/T5/T4 * T6/T85°C, T5/T100°C, T4/T135°C
Surface treatment	Polyurethane painting cycle - Blue colour RAL5014 (other colour available upon request)
Entries	Metric pitch 1.5, ANSI B1.20.1 NPT
Standard certificate label	Made by self adhesive UV and corrosion resistant polyester, approved by certified Laboratory.

Dimensions CPS../EMH..



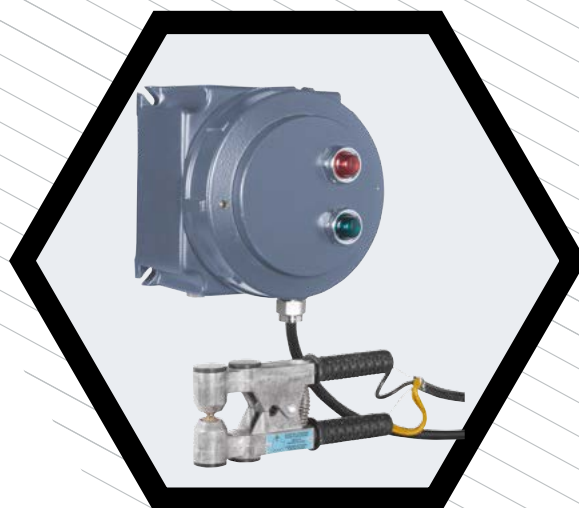
CPS../EMH.. enclosures - Copper-free aluminium - Standard versions*

CODE	TYPE	WINDOW DIAMETER	WEIGHT [kg]
B016084010010	EMH-90 M25X1,5	90	1.40
B016084010012	EMH-90 3/4" NPT	90	1.40

*Standard enclosures are supplied painted - painting cycle: C4 - Colour: Blue RAL5014
Note: Ammeter/Voltmer available upon request.



EARTHING SYSTEMS



P.166

Earthing systems

- GUMT - Earthing control system - Copper-free aluminium 166
- PTA Earthing clamp 168

EARTHING SYSTEMS

GUMT - Earthing control system - Copper-free aluminium

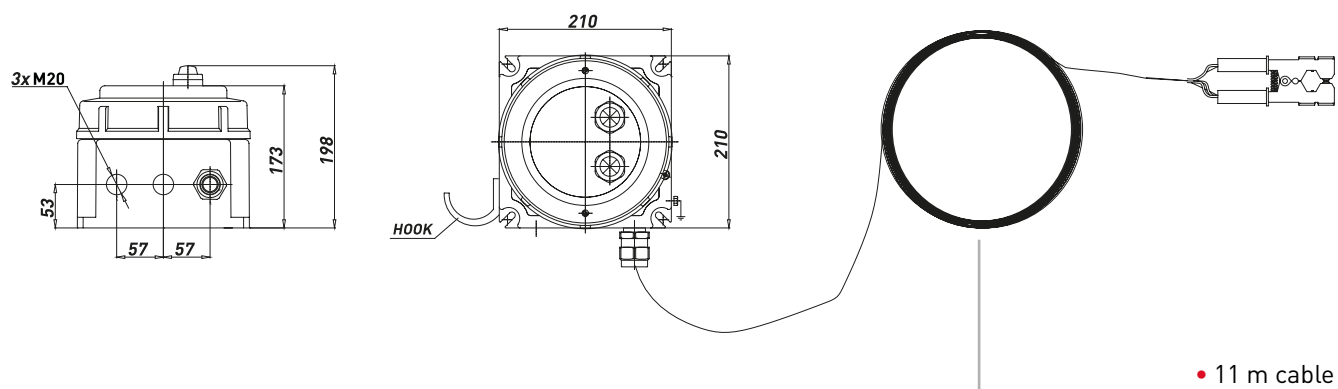


- Control and discharge system for electrostatic charges suitable for road tankers, rail tankers and any movable tanker for dangerous items
- Ready for one/two double circuit clamps PTA ISE0-2
- The system is complete with arrest/consensus optical warning and changeover contact free from output voltage.
- This solution is able to control the discharge of static charges driving it through a dedicated and safe path, safe because Explosion proof.

TECHNICAL FEATURES

Material	Copper-free aluminium
IP rating	IP65/IP66
Ambient temperature range	-20°C to +55°C
Approvals	<u>GUMT</u> ATEX: 00ATEX0033X
Marking	<u>PTA</u> ATEX: CESA 03 ATEX 101 X GUMT II 2 GD Ex d IIC T5 Gb Ex tb IIIC T100°C Db IP66 PTA II 2 GD Ex d IIC T6 Ex tD A21 IP65 T85°C
Surface treatment	Polyurethane painting cycle - Blue colour RAL5014 (other colour available upon request)
Entries	n° 3 entries M20x1,5, one complete with brass nickel chrome plated plug
Rated nominal current (PTA)	6 mA
Rated nominal voltage (PTA)	0,25 V
Changeover contact rating (GUMT)	5 A
Standard certificate label	Made by self adhesive UV and corrosion resistant polyester, approved by certified Laboratory.
Optional accessories	Cable reel Drain/breather valve Internal anticondensate painting Traffolyte/Stainless steel certificate label

Dimensions GUMT



GUMT.. Series - Earthing control system - Copper-free aluminium

TYPE	CODE	VOLTAGE
GUMT-325	B013094010014	110Vac or 220Vac +/-10%
GUMT-325 + 1 CLAMP PTA	B013094010013	110Vac or 220Vac +/-10%
GUMT-325 + 2 CLAMPS PTA	B013094010011	110Vac or 220Vac +/-10%
GUMT-325	UPON REQUEST	24Vdc
GUMT-325 + 1 CLAMP PTA	B013094010012	24Vdc

EARTHING SYSTEMS

PTA Earthing clamp

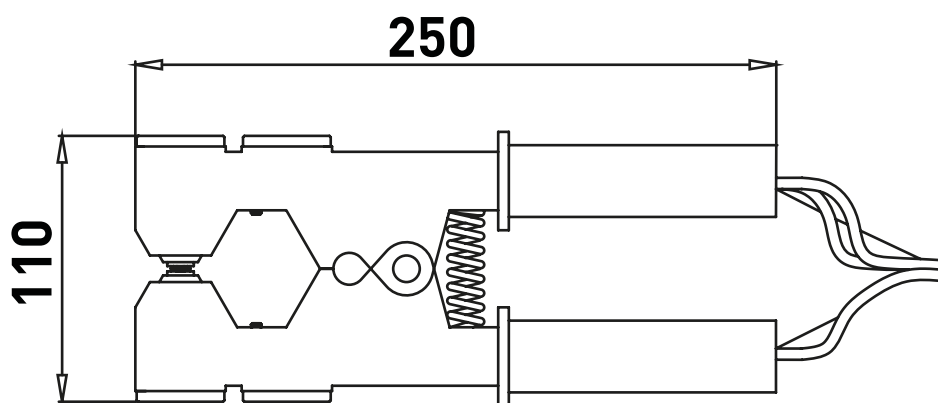


- Reliable, robust, handy and easy to use, PTA Series clamps are the ideal tool for tanker loading platform equipped with electronic devices to signal correct grounding
- They can be easily connected to any grip, even rusty ones
- PTA Series is made of copper-free aluminium and the electrical continuity is ensured by the carbonitrided steel contact tips, which make a firm connection to any foothold having a thickness between 2 and 20 mm.

TECHNICAL FEATURES

Material	Copper-free aluminium
IP rating	IP65
Ambient temperature range	-20°C to +55°C
Approvals	ATEX: CESA 03 ATEX 101 X
Marking	II 2 GD Ex d IIC T6 Ex tD A21 IP65 T85°C
Nominal current In	10 A
Insulation voltage	3 kV
Optional accessories	Cable reel

Dimensions PTA



PTA.. Series - Clamps

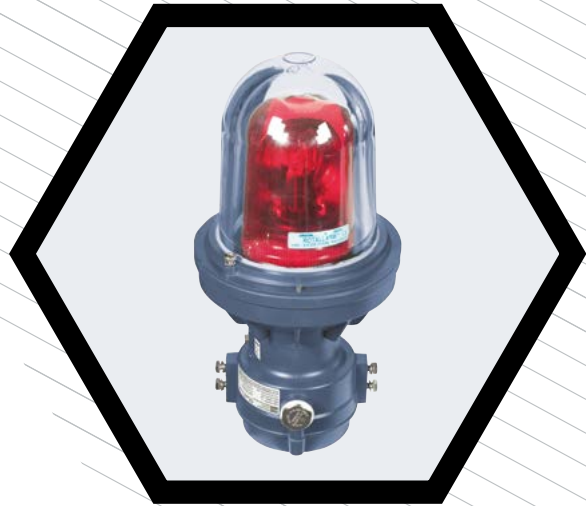
TYPE	CODE	DIMENSIONS [mm]			WEIGHT [kg]	CLAMP OPENING [mm]	CABLE TYPE	CABLE LENGHT [mt]
		LENGHT	WIDTH	HEIGHT				
PTA ISEO-1	B091015160001	250	110	35	1.56	3-20	1x6mm ² PUR	11
PTA ISEO-2	B091015160002	250	110	35	3.36	3-20	3x3mm ² PUR	11

PTA ISEO-1: Simply Earth clamp with yellow/green cable.

PTA ISEO-2: Double circuit Earth clamp, suitable to be combined with our Earth control system GUMT-325.



VISUAL SIGNALS



P.172

Visual signal

- EV../ROT Series - Rotating lights - Copper-free aluminium172
- EV../XN-MXN Series - Flashing lights - Copper-free aluminium174
- EV../WA.. series - LIOL (Low intensity obstruction lighting) - Copper free aluminium176
- EVCC.. series - MIOL (Medium intensity obstruction lighting) - Copper free aluminium ..178
- EVCC-TRAFFIC LIGHT182
- Spares & Accessories184

P.185

Lamps/spare parts

- Visual signal section185

VISUAL SIGNAL

EV../ROT Series - Rotating lights - Copper-free aluminium

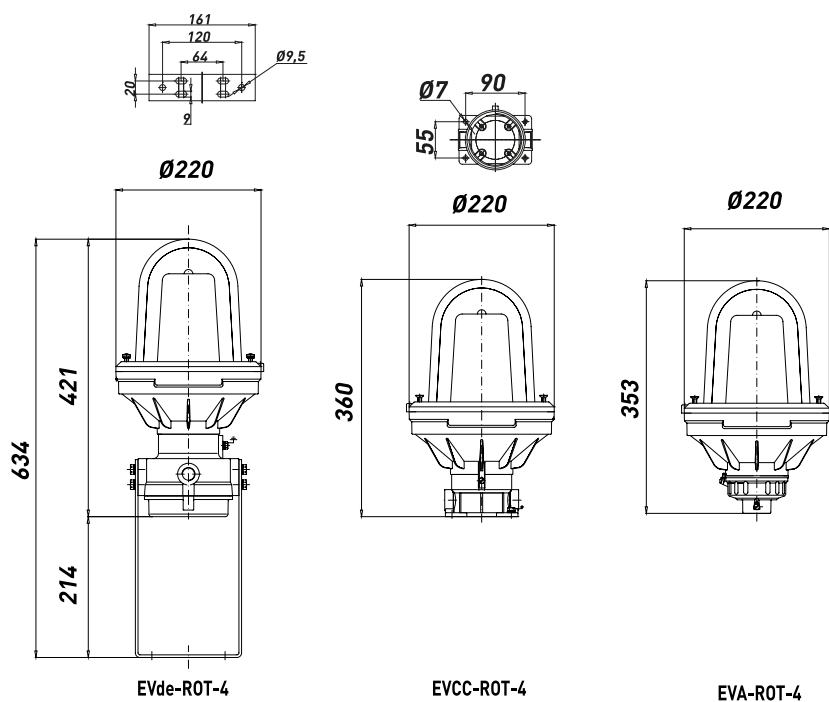


- Range of rotating lamp visual signals, available in two versions, 25W and 45W
- Copper-free aluminium body and tempered glass lamp compartment ensure an excellent corrosion resistance
- EVCC and EVA version available upon request.

TECHNICAL FEATURES

Material	Copper-free aluminium body Tempered glass lamp compartment
IP rating	IP66
Ambient temperature range	-52°C to +60°C
Approvals	ATEX: INERIS 01ATEX0019X - IECEx: INE 15.0031X EAC: RU C-IT.BH02.B.00616/20 – ECAS: 21-04-10282 E21-04-021858
Marking	II 2 GD Ex d IIC T(**) Gb for all EV.. Ex de IIC T(**) Gb for all Evde.. Ex tb IIIC T(**) Db IP66 ** T5/T100°C, T4/T135°C
Gaskets	O-ring made of Nitrile Rubber (NBR)
Surface treatment	Polyurethane painting cycle - Blue colour RAL5014 (other colour available upon request)
Entries	N° 2 entries M25x1,5 (EVde and EVCC version) N° 1 entry M25x1,5 (EVA version) (plugs and cable glands excluded)
Included accessories	AISI304 Stainless steel external hardware and screws
Lamps	Included
Colour	Red (other colours available upon request)
Rated operation voltage (UE)	240Vac, 12Vdc, 24Vdc 12Vac, 24Vac, 48Vac, 48Vdc, 110Vac (available upon request)
Frequency (AC version)	50/60Hz
Optional accessories	Protection guard

Dimensions EV../ROT



EV../ROT Visual signals

TYPE	CODE	LAMP [W]	WEIGHT [kg]	TEMP. CLASS	VOLTAGE
EVde-4/ROT	A04B111C51B1D	25	8.50	T4*	48Vac 50/60Hz
EVde-4/ROT	A040435500001	25	8.50	T4*	240Vac 50/60Hz
EVde-4/ROT	A04B111C51D1D	25	8.50	T4*	24Vac 50/60Hz
EVde-4/ROT	A040435300001	25	8.50	T4*	110Vac 50/60Hz
EVde-4/ROT	A040435900001	45	8.50	T4*	12Vdc
EVde-4/ROT	A040435A00001	45	8.50	T4*	24Vdc

*In case of maximum ambient temperature reaches +40°C, temperature class changes into T5 (ordering code to be required)

VISUAL SIGNAL

EV../XN-MXN Series - Flashing lights - Copper-free aluminium

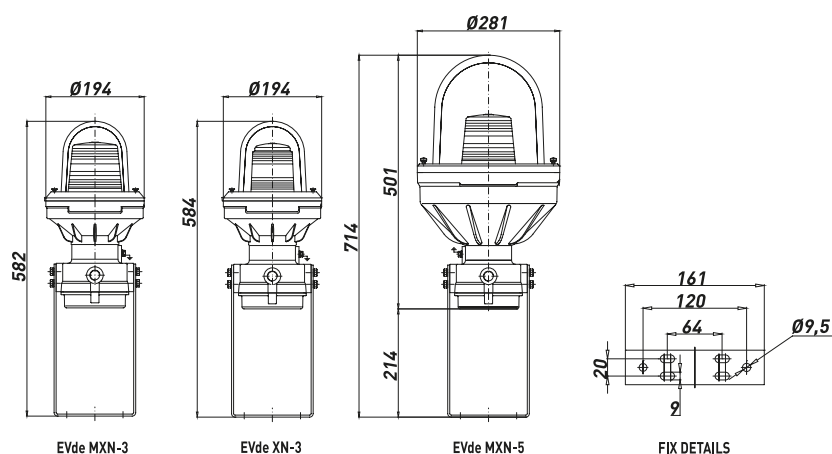


- Range of xenoflash visual signals complete with Fresnel lens, available in different luminous intensities, 2J , 6J and 15J
- Copper-free aluminium body and tempered glass lamp compartment ensure an excellent corrosion resistance
- EVde version, with integrated Ex e junction box, allows end users and contractors the possibility to save one junction box, two cable glands and a minimum of 30 minutes of labour during installation process. This version is supplied complete with an adjustable AISI304 stainless steel mounting bracket suitable for ceiling, wall and suspension installation.
- EVCC version, without integrated Ex e junction box, allows standard ceiling installation (available upon request).
- EVA version, without integrated Ex e junction box, allows standard suspension installation by conduit system and pastoral pole (available upon request).

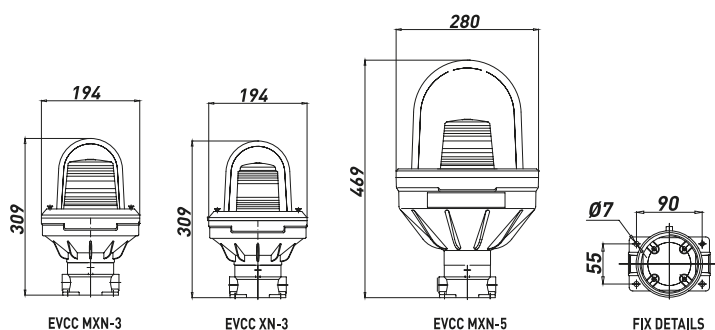
TECHNICAL FEATURES

Material	Copper-free aluminium
IP rating	IP66
Ambient temperature range	-52°C to +60°C
Approvals	ATEX: INERIS 01ATEX0019X - IECEx: INE 15.0031X EAC: RU C-IT.BH02.B.00616/20 – ECAS: 21-04-10282 E21-04-021858
Marking	II 2 GD Ex d IIC T(**) Gb for all EV.. Ex de IIC T(**) Gb for all Evde.. Ex tb IIIC T(**) Db IP66 ** T5/T100°C, T4/T135°C
Gaskets	O-ring made of Nitrile Rubber (NBR)
Surface treatment	Polyurethane painting cycle - Blue colour RAL5014 (other colour available upon request)
Entries	N° 2 entries M25x1,5 (EVde and EVCC version) N° 1 entry M25x1,5 (EVA version) (plugs and cable glands excluded)
Included accessories	AISI304 Stainless steel external hardware and screws
Lamps	Included
Colour	Red (other colours available upon request)
Rated operation voltage (UE)	240Vac, 12/24Vac/dc 110Vac (available upon request)
Frequency (AC version)	50/60Hz
Optional accessories	Protection guard

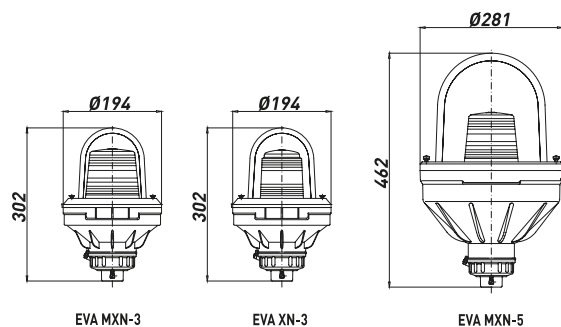
Dimensions EVde../XN-MXN



Dimensions EVCC../XN-MXN)



Dimensions EVA../XN-MXN)



EV../XN-MXN Series Visual Signals

TYPE	CODE	LAMP [W]	LUMINOUS INTENSITY	WEIGHT [kg]	TEMP. CLASS	VOLTAGE
EVDE-XN-3	A040384500001	10	2J	4.50	T4*	240 V 50/60HZ
EVDE-MXN-3	A040384500003	25	6J	4.50	T4*	240 V 50/60HZ
EVCC-MXN-5	A040584500001	50	15J	6.00	T4*	240 V 50/60HZ
EVDE-XN-3	A040384C00001	10	2J	4.50	T4*	12/24 V AC/DC
EVDE-MXN-3	A040384C00002	25	6J	4.50	T4*	12/24 V AC/DC
EVCC-MXN-5	A040584C00001	50	15J	6.00	T4*	12/24 V AC/DC

*In case of maximum ambient temperature reaches +40°C, temperature class changes into T5 (ordering code to be required)

VISUAL SIGNAL

EV../WA.. series - LIOL (Low intensity obstruction lighting) - Copper free aluminium

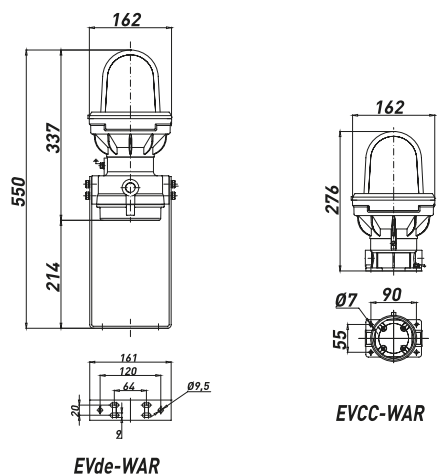


- Range of low intensity aircraft warning lights suitable for structures below 45mt.

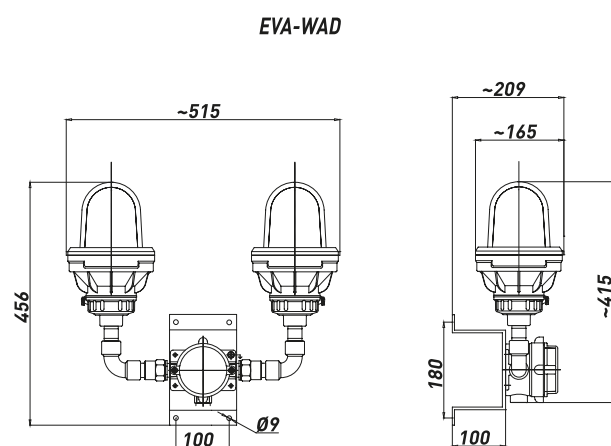
TECHNICAL FEATURES

Material	Copper-free aluminium
IP rating	IP66
Ambient temperature range	-52°C to +60°C
Approvals	ATEX: INERIS 01ATEX0019X - IECEx: INE 15.0031X EAC: RU C-IT.BH02.B.00616/20 – ECAS: 21-04-10282 E21-04-021858
Marking	II 2 GD Ex d IIC T(**) Gb for all EV.. Ex de IIC T(**) Gb for all Evde.. Ex tb IIIC T(**) Db IP66 ** T5/T100°C, T4/T135°C
Gaskets	O-ring made of Nitrile Rubber (NBR)
Surface treatment	Polyurethane painting cycle - Blue colour RAL5014 (other colour available upon request)
Entries	N° 2 entries M25x1,5 (EVde and EVCC version) N° 1 entry M25x1,5 (EVA version) (plugs and cable glands excluded)
Included accessories	AISI304 Stainless steel external hardware and screws
Lamps	Included
Colour	Red (other colours available upon request)
Rated operation voltage (UE)	230 V (standard) 24 V, 110 V, 90-264 V (available upon request)
Frequency (AC version)	50/60Hz

Dimensioni EVde/EVCC (WAR)



Dimensioni EVA (WAD)



EV../WA.. Series Aircraft warning lights

TYPE	CODE	LAMP [W]	LAMP. TYPE	WEIGHT [kg]	TEMP. CLASS
EVCC-WAR LED 6	A040160400002	6	LED - SINGLE	2.50	T4*
EVDE-WAR LED 6	A040160400001	6	LED - SINGLE	3.50	T4*
EVA-WAD LED 6	A040160400003	2X6	LED - DOUBLE	5.80	T4*

* In case of maximum ambient temperature reaches +40°C, temperature class changes into T5 (ordering code to be required)

VISUAL SIGNAL

EVCC.. series - MIOL (Medium intensity obstruction lighting) - Copper free aluminium



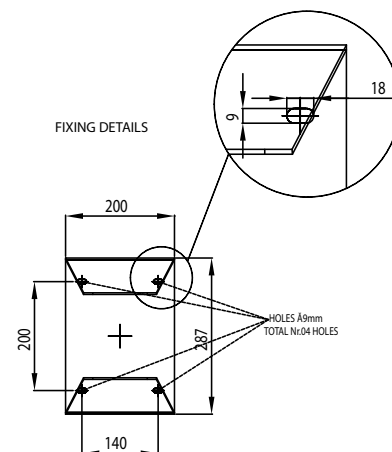
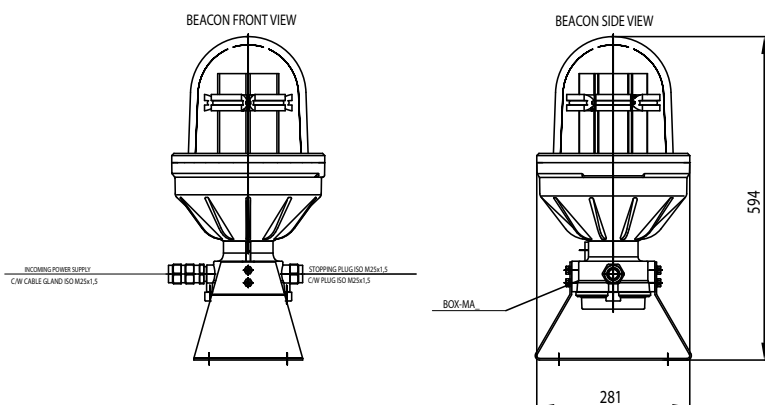
- The EVCC-5/...LED range of medium intensity obstruction lighting represents the top of technology, using LED technology to deliver low heat dissipation, low watt consumption and up to 100.000/hours maintenance free operation.
- Aircraft warning lighting fixtures EVCC-5/...LED are multi-light source using high-power LEDs with wide beam.
- The product is fully compliant with ICAO Annex 14, which requires that structures over 45m should incorporate medium intensity lighting fixtures
- Available LED colours: RED, WHITE or RED and WHITE.

TECHNICAL FEATURES

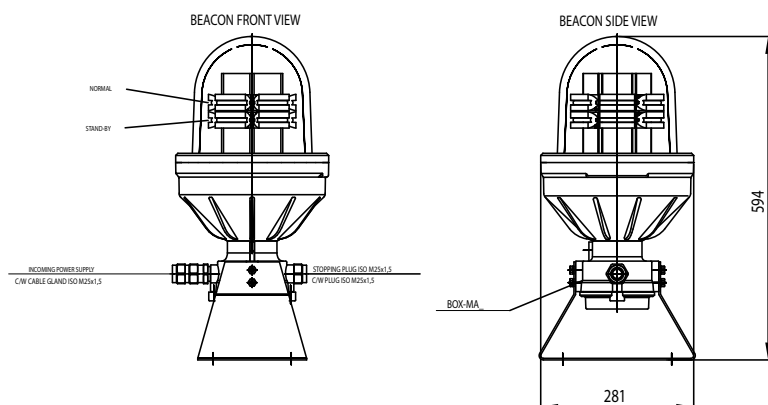
Material	Copper-free aluminium
IP rating	IP66
Ambient temperature range	-50°C to +55°C
Approvals	ATEX: INERIS 01ATEX0019X - IECEx: INE 15.0031X EAC: RU C-IT.BH02.B.00616/20 – ECAS: 21-04-10282 E21-04-021858
Marking	II 2 GD Ex d IIC T(**) Gb Ex tb IIIC T(**) Db IP66 ** T4/T135°C III 3 G Ex nA IIC T3 Gc
Compliance	ICAO/FAA (upon request)
Gaskets	O-ring made of Nitrile Rubber (NBR)
Surface treatment	Polyurethane painting cycle - Blue colour RAL5014 (other colour available upon request)
Entries	N° 1 entry 3/4" UNI-6125 complete with nickel chrome plated brass PAP type (Old version) N° 1 entry M20x1,5 complete with nickel chrome plated brass PAP type (New version Ex d)
Included accessories	AISI304 Stainless steel external hardware and screws
Lamps	LED Included
Colour	RED, WHITE or RED and WHITE
Rated operation voltage (UE)	230Vac 220/240Vac 24Vdc
Frequency (AC version)	50/60Hz



SINGLE MIOL



TWIN MIOL



EVCC.. (MIOL) Medium intensity aircraft warning lights (NEW VERSION)

TYPE	CODE	LAMP [W]	MIOL TYPE	WEIGHT [kg]	TEMP. CLASS	PROTECTION	VOLTAGE
EVDE-5/LED	A04E121AW1K1D	RED ^[1]	B - SINGLE	11 kg	T4	EX-DE	BY CONTROL PANEL ^[5]
EVDE-5/LED	A04F121AW6K1D	WHITE ^[2]	A - SINGLE	11 kg	T4	EX-DE	BY CONTROL PANEL ^[5]
EVDE-5/LED	A04H121AW1K1D	RED ^[1]	B - TWIN	11,5 kg	T4	EX-DE	BY CONTROL PANEL ^[5]
EVDE-5/LED	A04I121AW6K1D	WHITE ^[2]	A - TWIN	11,5 kg	T4	EX-DE	BY CONTROL PANEL ^[5]
EVDE-5/LED	A04L121AW8K1D	RED & WHITE ^[3]	AB - SINGLE ^[4]	11,5 kg	T4	EX-DE	BY CONTROL PANEL ^[5]

[1] 2.000cd night mode, RED flashing

[2] 20.000cd day mode, WHITE flashing/2.000cd night mode, WHITE flashing

[3] 20.000cd day mode, WHITE flashing/2.000cd night mode, RED flashing

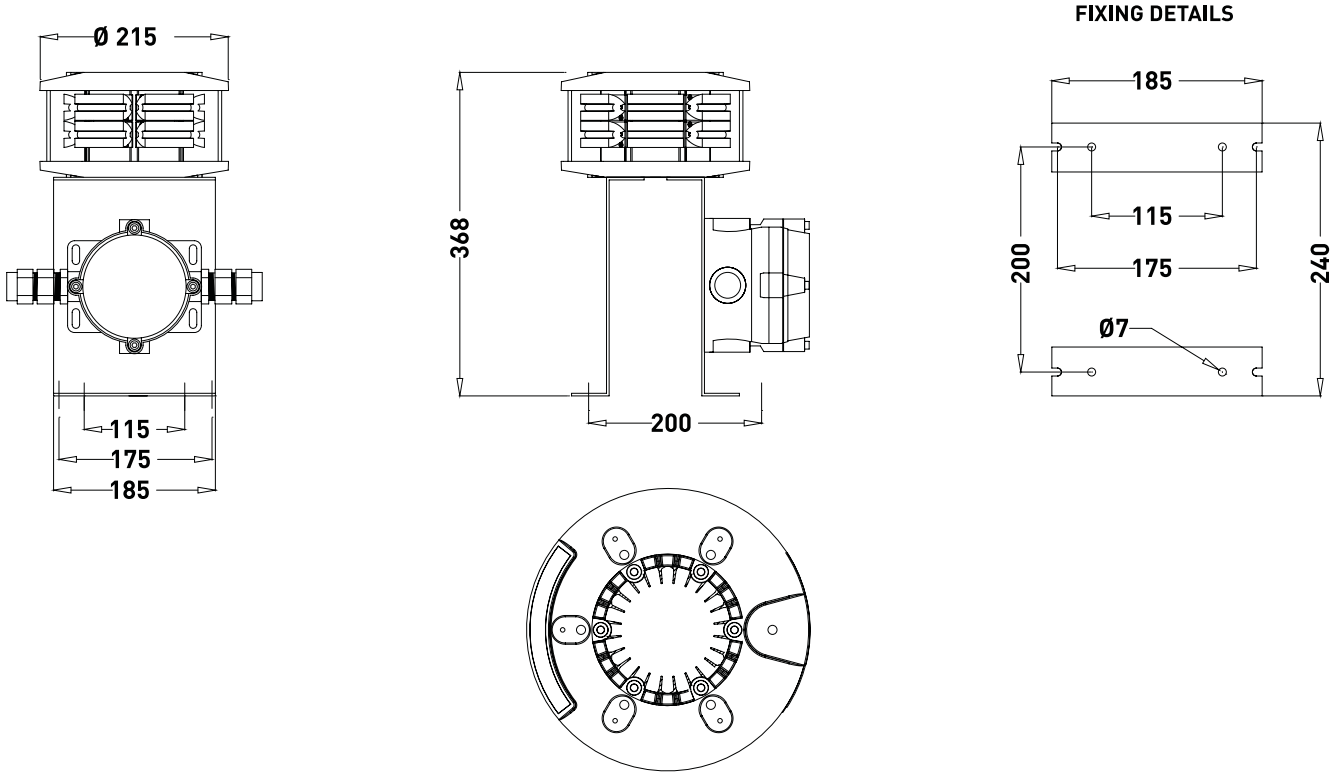
[4] TWIN model available upon request

[5] to be ordered separately

Additional features:

- the AWL system consists of lighting fixtures and respective panel board (custom made on the base of the system design)
- flashing is given by electronic card housed inside the control panel
- heat shield suggested for ambient temperature over +45°C

Dimensions EVCC.. (MIOL) – Ex nA version



EVCC.. (MIOL) Medium intensity aircraft warning lights (NEW VERSION)

TYPE	CODE	LAMP [W]	MIOL TYPE	WEIGHT [kg]	TEMP. CLASS	PROTECTION	VOLTAGE
EVCC-5/LED		(RED) ⁽¹⁾	B	3	T3	Ex-nA	⁽⁵⁾
EVCC-5/LED		(RED) ⁽²⁾	B	3	T3	Ex-nA	⁽⁵⁾
EVCC-5/LED		(WHITE) ⁽³⁾	A	3,7	T3	Ex-nA	⁽⁵⁾
EVCC-5/LED		(RED & WHITE) ⁽⁴⁾	AB	4,9	T3	Ex-nA	⁽⁵⁾

(1) 9,3W (@20fpm)/12,9 (@20fpm); 2000cd

(2) 3,1W (@20fpm)/5,7 (@20fpm); 2000cd

(3) 51W Day mode/12,9W Nigh mode (@20fpm)/90W Day mode/23W Nigh mode (@40fpm)/20.000cd Day mode/2.000cd Nigh mode

(4) 57W Day mode/21W Nigh mode (@20fpm)/96W Day mode/24W Nigh mode (@40fpm)/20.000cd Day mode/2.000cd Nigh mode

(5) By control panel to be ordered separately

VISUAL SIGNAL

EVCC-TRAFFIC LIGHT

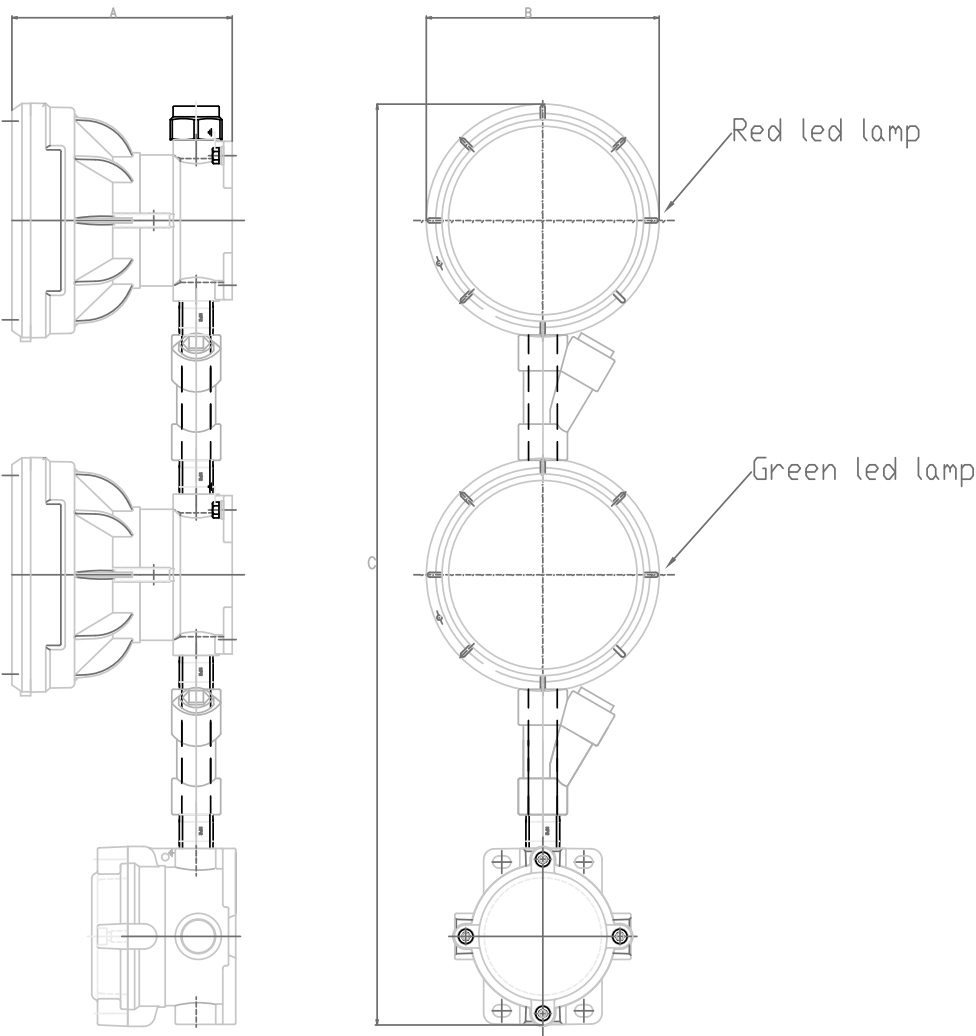


- Traffic light with red and green lamps (customized configurations available upon request)
- LED technology
- Zero maintenance

TECHNICAL FEATURES

Material	Copper-free aluminium
IP rating	IP66
Ambient temperature range	-20°C to +60°C (lower temperatures available upon request)
Approvals	ATEX: INERIS 01ATEX0019X - IECEx: INE 15.0031X EAC: RU C-IT.BH02.B.00616/20 – ECAS: 21-04-10282 E21-04-021858
Marking	II 2GD Ex-d IIC T3 Gb EX-tb IIIC T200°C Db IP66
Gaskets	O-ring made of nitrile rubber (NBR)
Surface treatment	Polyurethane painting cycle - Blue colour RAL5014 (other colour available upon request)
Entries	N° 1 entry M25x1,5
Screws	AISI304 Stainless steel external screws
Lamps	Included
Rated operation voltage (UE)	110/230 V AC 24 V AC/DC
Frequency	50/60 Hz
Power factor	> 0,95

Dimensions EVCC-PR/LED



EVCC-PR/LED Traffic light

TYPE	CODE	LAMP [W]	LAMP. TYPE	TEMP. CLASS	VOLTAGE	DIMENSIONS [mm]			AMBIENT TEMPERATURE
						A	B	C	
TRAFFIC LIGHT 2XEVCC-PR/LED	A040266700001	5 (RED/GREEN)	LED	T3	110/230 V AC	153	162	640	(-20°C;+60°C)
TRAFFIC LIGHT 2XEVCC-PR/LED	A04K221A57I12	5 (RED/GREEN)	LED	T3	24 V AC/DC	153	162	640	(-20°C;+60°C)

VISUAL SIGNAL

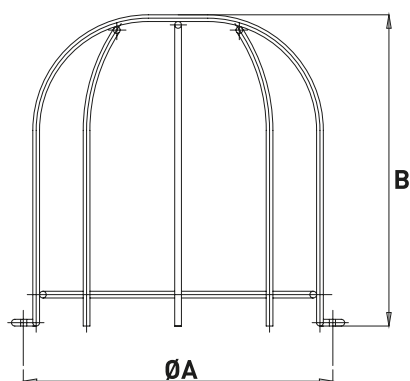
Serie EV../ROT/EV../XN-MXN Series/EV../
WA.. series/EVCC.. series

SPARES & ACCESSORIES

Protection guard (Stainless Steel AISI316 L version available upon request)

CODE	TYPE	DIMENSIONS AxB (mm)	WEIGHT [kg]
A600903030001	GEV-1 PROTECTION GUARD FOR EV..-1 - AISI 304	123X103	0.160
A600903030002	GEV-2 PROTECTION GUARD FOR EV..-2 - AISI 304	138X139	0.230
A600903030004	GEV-3 PROTECTION GUARD FOR EV..-3 - AISI 304	151X152	0.240
A600903030010	GEV-4 PROTECTION GUARD FOR EV..-4 - AISI 304	178X200	0.370
A600903030008	GEV-5 PROTECTION GUARD FOR EV..-5 - AISI 304	252X233	0.400

Dimensions GEV



LAMPS/SPARE PARTS

Visual signal section

PRODUCT NAME	SHAPE	POWER [W]	CAP	VOLTAGE	FLUX [lm]	CODE	WHERE IT IS USED
XENOFASH (RED)		10 (2J)	E27	220/240 VAC	/	A500400011000	EVDE-XN-3
		10 (2J)	E27	12/24 VAC/VDC	/	A500400013000	EVDE-XN-3/12/24 VAC/VDC
XENOFASH (RED)		25 (6J)	E27	220/240 VAC	/	A500400012000	EVDE-MXN-3
		25 (6J)	E27	12/24 VAC/VDC	/	A500400016000	EVDE-MXN-3/12/24 VAC/VDC
STROBOFLASH (RED)		50 (15J)	/	220/240 VAC	/	A500400009000	EVCC-MXN-5 1X50/EVCC-MXN-5 2X50
		50 (15J)	/	12/24 VAC/VDC	/	A5004000098000	EVCC-MXN-5 1X50/EVCC-MXN-5 2X50/12/24 VAC/VDC
ROTOALARM		45	/	12 VDC	/	A500400007000	EVDE-ROT-4
		45	/	24 VDC	/	A500400004000	EVDE-ROT-4
		25	/	240 VAC	/	A500400001000	EVDE-ROT-4
LED (RED)		6	E27	230 VAC	/	A500150600002	EVDE-WAR 1X6W/EVCC-WAR 6W



CABLE GLANDS & FITTINGS



P.188

Metallic cable glands

- Single seal..... 188
- Double seal 192
- PSM (Male-Male) 196
- PSF (Male-Female) 200

P.204

Plastic cable glands

- Polyamide..... 204
- Spares & Accessories 206

P.210

Fittings

- BMF/BFF/BMM Series - Three pieces unions210
- BMF/BFF/BMM Series - Three pieces unions212
- BMF/BFF/BMM Series - Three pieces unions214
- EYS Series - Sealing fittings216
- EZS Series - Sealing fittings218
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- EM Series - Unions222
- ELF Series - Elbows224
- LBH Series - Open elbows226
- DB Series - Aluminium bushings228
- PLG Series - Recessed exagonal plugs230
- PLG Series - Resin exagonal plugs232
- T Series - Exagonal plugs234
- RE/REB Series - Reductions and adaptors236
- A../F../M../R.. Series - Reductions and adaptors240

METALLIC CABLE GLANDS

Single seal



A large range of single seal cable glands

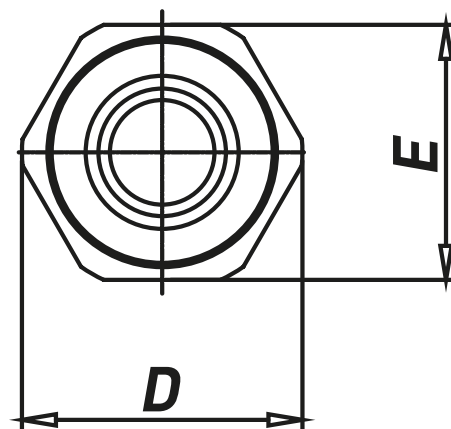
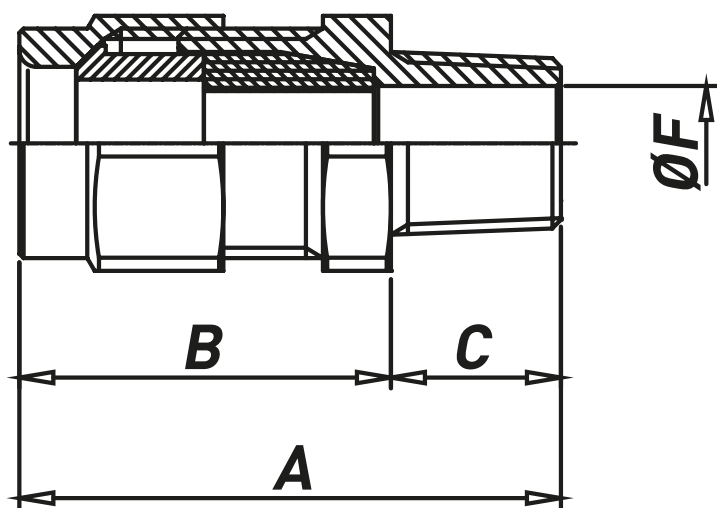
- Armoured & unarmoured cable
- Lead sheathed cable
- Barrier type

Suitable for Zone 1/2 and Zone 21/22.

TECHNICAL FEATURES

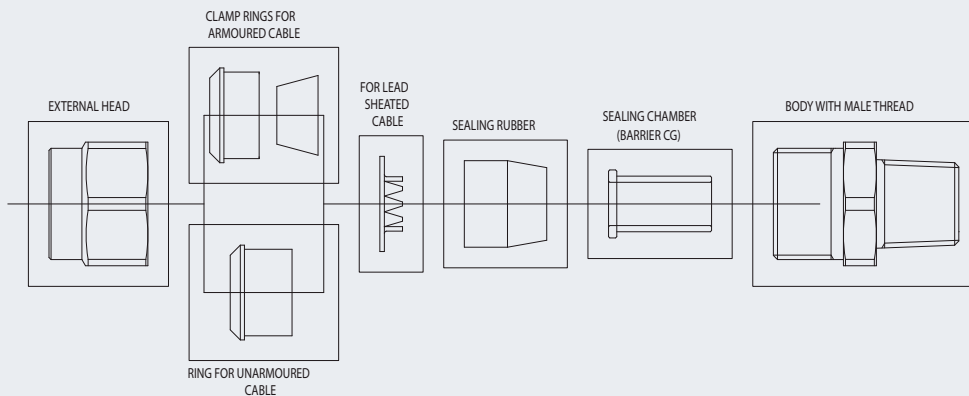
Material	Nickel chrome plated brass AISI 316 L Stainless steel (other materials upon request)
IP rating	IP66
Operating temperature range	-52°C to +110°C
Approvals	ATEX: 02ATEX0084 IECEX INE 14.0046X EAC: RU C-IT.BH02.B.00596/20
Marking*	II 2 GD Ex db/eb IIC Ex db/eb I Ex tb IIIC IP66 I M2 Ex db/eb I * For group I certification is up to size 6.
Internal seals	EPDM
Threads	Metric, NPT, UNI-6125 (other thread upon request)
Optional accessories	Locknut, sealing gasket, earthing ring, star washer, protective shroud
Note	1. Armouring rings are usually supplied made of nickel chrome plated brass. Other materials are available upon request. 2. Our standard cable gland are suitable for armour clamping up to 1,25 mm thickness. In case of higher armour thickness please revert to our Sales department.

Dimensions



	METRIC	NPT UNI-6125	SEAL	CABLE RANGE (mm)	Ø EXTERNAL CABLE (mm)	DIMENSIONS (mm)				
					F	A	B	C	D	E
SIZE 1	M20X1,5	1/2"	1A1	6 - 9	18	62	42	20	33	30
			1A2	9 - 12						
SIZE 2	M25X1,5	3/4"	2A1	6 - 9	24	62	42	25	40	36
			2A2	9 - 12						
			2A3	11 - 14						
			2A4	14 - 17						
SIZE 3	M32X1,5	1"	3A1	14 - 17	30	70	45	25	49	44
			3A2	17 - 20						
			3A3	20 - 23						
SIZE 5S	M40X1,5	1" 1/4	5A2	23 - 26	43	70	45	25	62	56
			5A3	26 - 29						
			5A4	29 - 32						
			5A5	32 - 36						
SIZE 5	M50X1,5	1" 1/2	5A2	23 - 26	43	70	45	25	62	56
			5A3	26 - 29						
			5A4	29 - 32						
			5A5	32 - 36						
SIZE 6	M63X1,5	2"	6A2	36 - 39	57	72	46	25	78	70
			6A3	39 - 42						
			6A4	42 - 46						
SIZE 7	M75X1,5	2" 1/2	7A2	44 - 48	69	78	46	32	92	83
			7A3	48 - 52						
			7A4	52 - 56						
			7A5	56 - 60						
SIZE 8	M80X1,5	3"	8A4	56 - 60	79	78	46	32	103	93
			8A5	59 - 63						
			8A6	63 - 67						
			8A7	67 - 71						

Assembly diagram



CODIFICATION TABLE

[illegible]



METALLIC CABLE GLANDS

Double seal



A large range of double seal cable glands

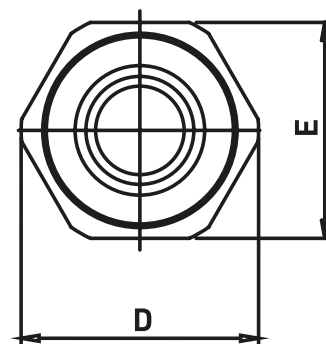
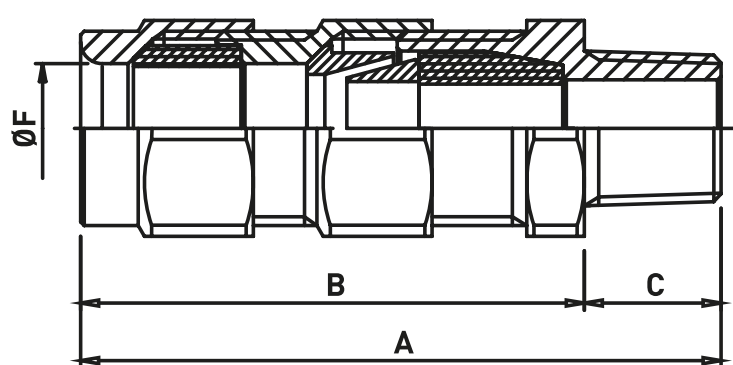
- Armoured & unarmoured cable
- Lead sheathed cable
- Barrier type

Suitable for Zone 1/2 and Zone 21/22.

TECHNICAL FEATURES

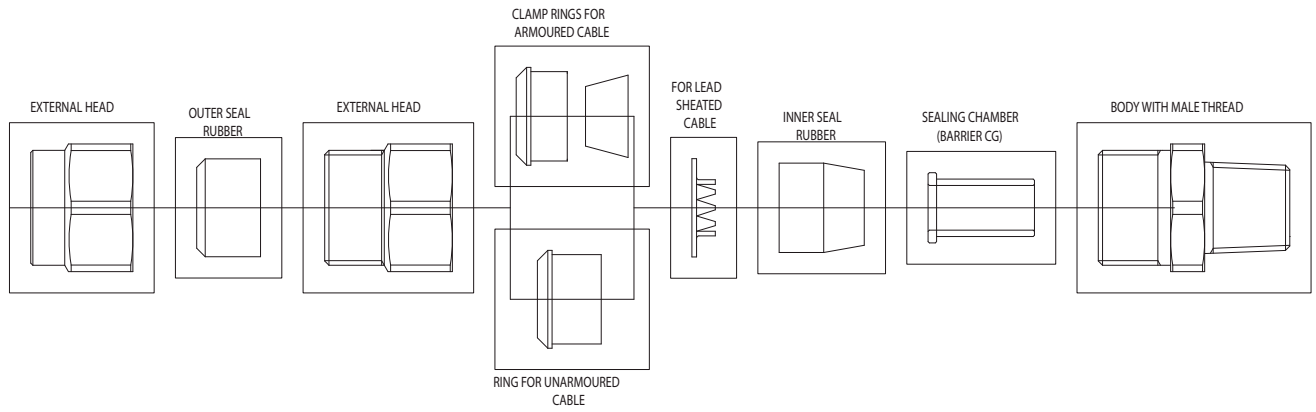
Material	Nickel chrome plated brass AISI 316 L Stainless steel (other materials upon request)
IP rating	IP66
Operating temperature range	-52°C to +110°C
Approvals	ATEX: 02ATEX0084 IECEX INE 14.0046X EAC: RU C-IT.BH02.B.00596/20
Marking*	II 2 GD Ex db/eb IIC Ex db/eb I Ex tb IIIC IP66 I M2 Ex db/eb I * For group I certification is up to size 6.
Internal seals	EPDM
Threads	Metric, NPT, UNI-6125 (other thread upon request)
Optional accessories	Locknut, sealing gasket, earthing ring, star washer, protective shroud
Note	1. Armouring rings are usually supplied made of nickel chrome plated brass. Other materials are available upon request. 2. Our standard cable gland are suitable for armour clamping up to 1,25mm thickness. In case of higher armour thickness please revert to our Sales department.

Dimensions

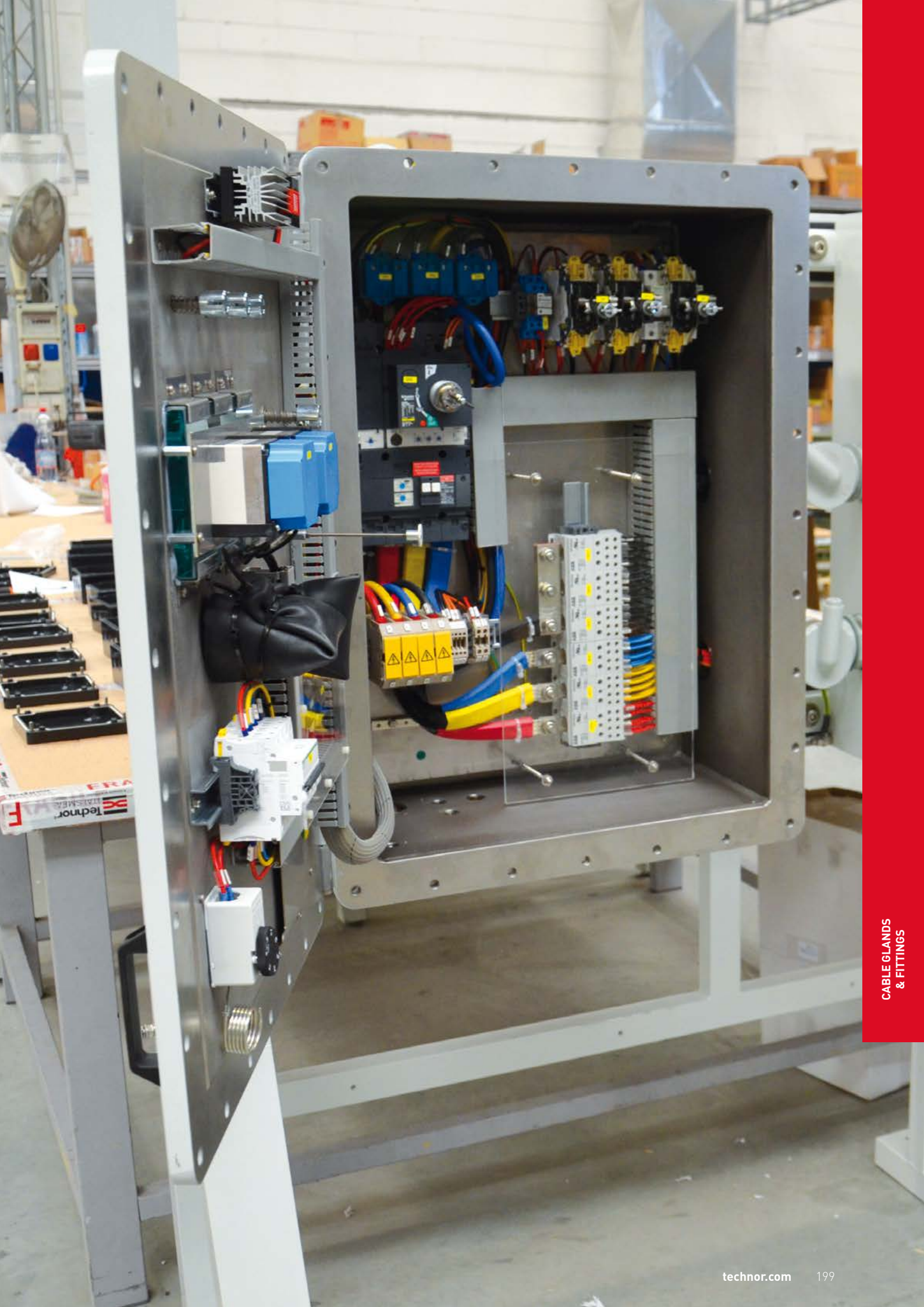


	METRIC	NPT UNI-6125	INNER SEAL	CABLE RANGE (mm)	OUTER SEAL	CABLE RANGE (mm)	Ø EXTERNAL CABLE (mm)	EXTDIMENSIONS (mm)				
							F	A	B	C	D	E
SIZE 1	M20X1,5	1/2"	1A1	6 - 9	1B1	8 - 11	18	85	65	20	33	30
			1A2	9 - 12	1B2	11 - 14						
					1B3	14 - 17						
SIZE 2	M25X1,5	3/4"	2A1	6 - 9	2B1	14 - 17	24	85	65	20	40	36
			2A2	9 - 12	2B2	17 - 20						
			2A3	11 - 14	2B3	20 - 23						
			2A4	14 - 17								
SIZE 3	M32X1,5	1"	3A1	14 - 17	3B1	20 - 23	30	93	68	25	49	44
			3A2	17 - 20	3B2	23 - 26						
			3A3	20 - 23	3B3	26 - 29						
SIZE 5S	M40X1,5	1" 1/4	5A2	23 - 26	5B2	29 - 32	43	93	68	25	62	56
			5A3	26 - 29	5B3	32 - 36						
			5A4	29 - 32	5B4	36 - 39						
			5A5	32 - 36	5B5	39 - 42						
SIZE 5	M50X1,5	1" 1/2	5A2	23 - 26	5B2	29 - 32	43	93	68	25	62	56
			5A3	26 - 29	5B3	32 - 36						
			5A4	29 - 32	5B4	36 - 39						
			5A5	32 - 36	5B5	39 - 42						
SIZE 6	M63X1,5	2"	6A2	36 - 39	6B2	44 - 48	57	95	71	25	78	70
			6A3	39 - 42	6B3	48 - 52						
			6A4	42 - 46	6B4	52 - 56						
SIZE 7	M75X1,5	2" 1/2	7A2	44 - 48	7B2	55 - 59	69	100	71	32	92	83
			7A3	48 - 52	7B3	59 - 63						
			7A4	52 - 56	7B4	63 - 67						
			7A5	56 - 60								
SIZE 8	M80X1,5	3"	8A4	56 - 60	8B4	63 - 67	79	100	71	32	103	93
			8A5	59 - 63	8B5	67 - 69						
			8A6	63 - 67	8B6	69 - 73						
			8A7	67 - 71	8B7	73 - 77						

Assembly diagram



B14	#	#	#	#	#	#	#	#	
									N - WITHOUT SEAL S - WITH SET SEALS 1 - OUTER SEAL RUBBER B1 2 - OUTER SEAL RUBBER B2 3 - OUTER SEAL RUBBER B3 4 - OUTER SEAL RUBBER B4 5 - OUTER SEAL RUBBER B5 6 - OUTER SEAL RUBBER B6 7 - OUTER SEAL RUBBER B7
									N - WITHOUT SEAL S - WITH SET SEALS 1 - INNER SEAL RUBBER A1 2 - INNER SEAL RUBBER A2 3 - INNER SEAL RUBBER A3 4 - INNER SEAL RUBBER A4 5 - INNER SEAL RUBBER A5 6 - INNER SEAL RUBBER A6 7 - INNER SEAL RUBBER A7
									1 - ATEX/IECEX - GROUP II 2 - ATEX/IECEX- GROUP I 5 - TR CU - GROUP II 6 - TR CU - GROUP I
									1 - METRIC 2 - NPT 3 - UNI-6125
									0 - STANDARD 1 - EXTENDED BODY (IN CASE OF ARMOUR THICKNESS HIGHER THAN 1,25mm)
									1 - SIZE 1 2 - SIZE 2 3 - SIZE 3 4 - SIZE 5S 5 - SIZE 5 6 - SIZE 6 7 - SIZE 7 8 - SIZE 8
									01 - PAP _ DOUBLE SEAL, ARMoured CABLE 03 - PAB AX _ DOUBLE SEAL, ARMoured CABLE, BARRIER TYPE 11 - PBD _ DOUBLE SEAL, UNARMoured CABLE, LEAD SHEET 13 - PDB _ DOUBLE SEAL, ARMoured CABLE, LEAD SHEET 15 - PND _ DOUBLE SEAL, UNARMoured CABLE 18 - PMD _ DOUBLE SEAL, UNARMoured CABLE, BARRIER TYPE
									01 - BNK BRASS NICKEL CHROME PLATED 03 - STAINLESS STEEL AISI316



METALLIC CABLE GLANDS

PSM (Male-Male)

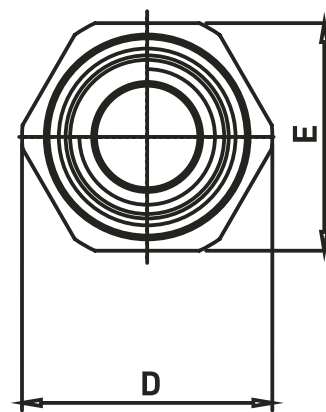
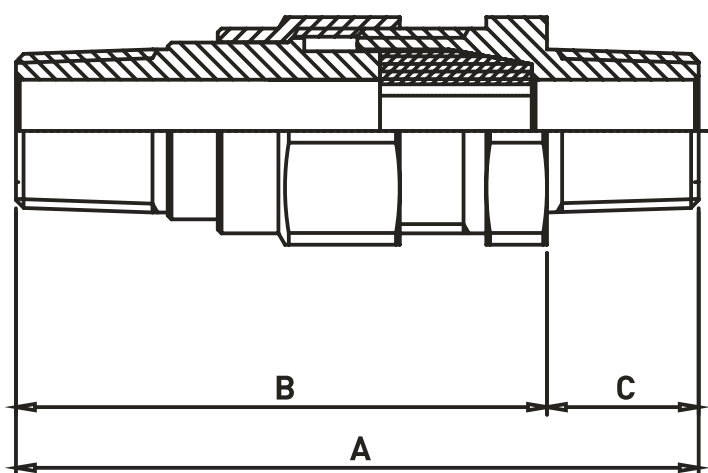


Single seal through "male-male" cable gland suitable for unarmoured cables.
Suitable for Zone 1/2 and Zone 21/22.

TECHNICAL FEATURES

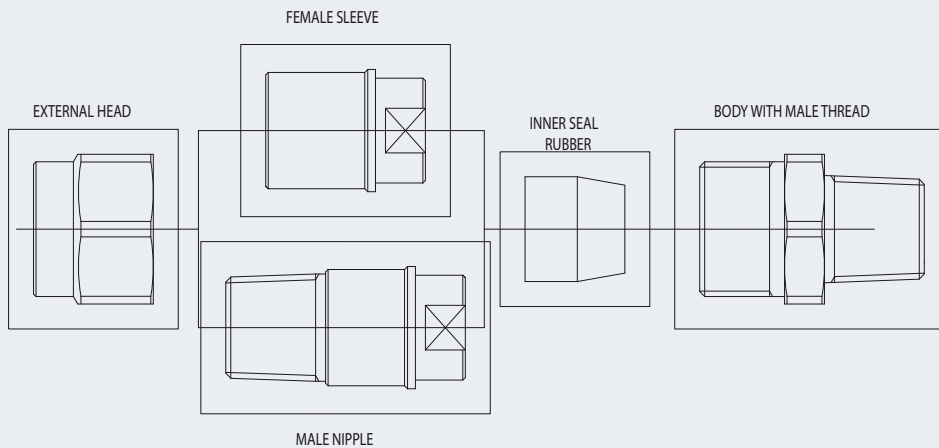
Material	Nickel chrome plated brass AISI 316 L Stainless steel (other materials upon request)
IP rating	IP66
Operating temperature range	-52°C to +110°C
Approvals	ATEX: 02ATEX0084 IECEX INE 14.0046X EAC: RU C-IT.BH02.B.00596/20
Marking*	II 2 GD Ex db/eb IIC Ex db/eb I Ex tb IIIC IP66 I M2 Ex db/eb I * For group I certification is up to size 6.
Internal seals	EPDM
Threads	Metric, NPT, UNI-6125 (other thread upon request)
Optional accessories	Locknut, sealing gasket, earthing ring, star washer, protective shroud
Note	The Free Nipple thread can be provided Metric, NPT or UNI-6125

Dimensions



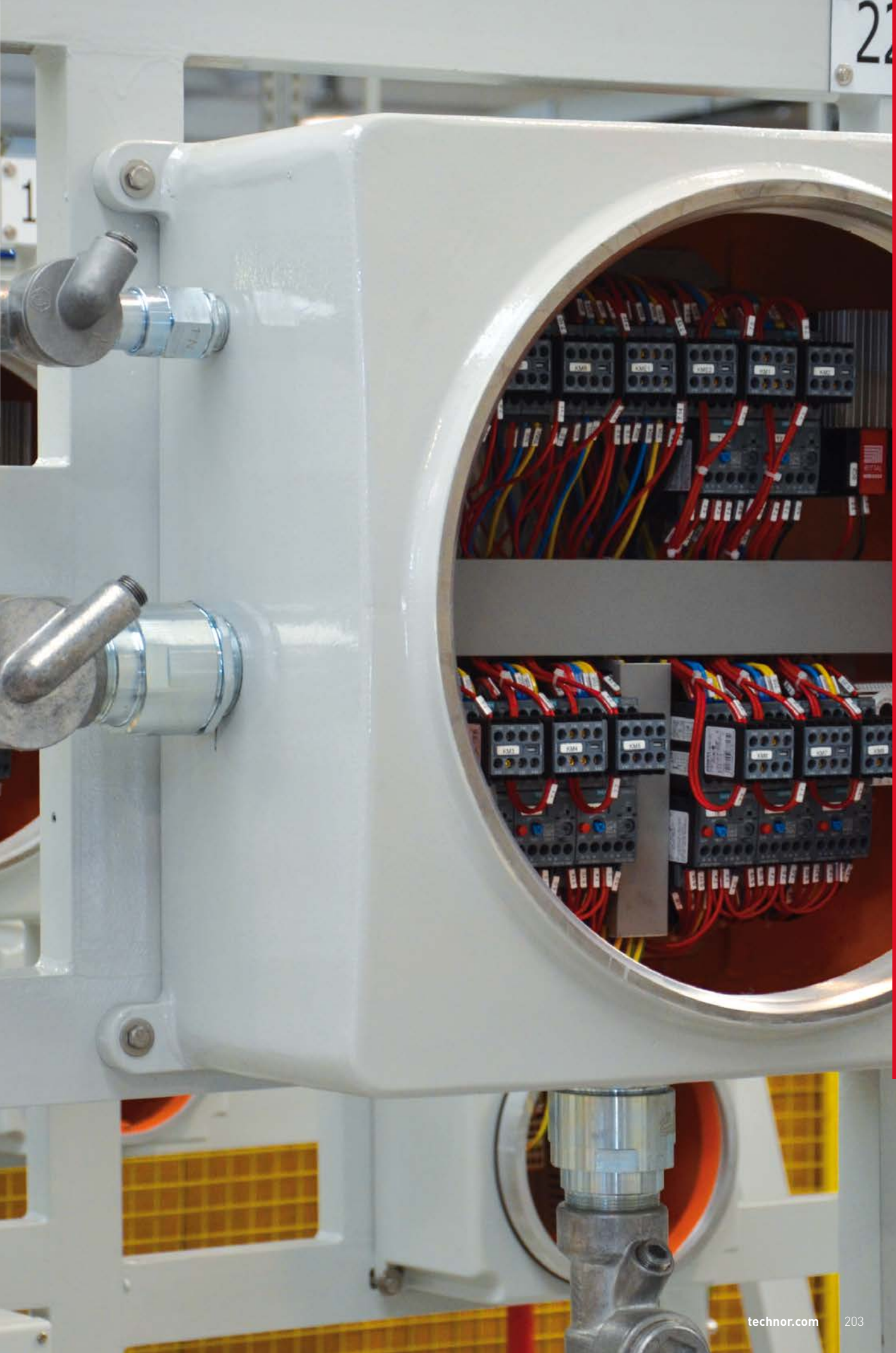
	METRIC	NPT UNI- 6125	SEAL	CABLE RANGE (mm)	Ø EXTERNAL CABLE (mm)	EXTDIMENSIONS (mm)				
					F	A	B	C	D	E
SIZE 1	M20X1,5	1/2"	1A1	6 - 9	18	90	70	20	33	30
			1A2	9 - 12						
SIZE 2	M25X1,5	3/4"	2A1	6 - 9	24	90	70	20	40	36
			2A2	9 - 12						
			2A3	11 - 14						
			2A4	14 - 17						
SIZE 3	M32X1,5	1"	3A1	14 - 17	30	104	79	25	49	44
			3A2	17 - 20						
			3A3	20 - 23						
SIZE 5S	M40X1,5	1" 1/4	5A2	23 - 26	43	104	79	25	65	58
			5A3	26 - 29						
			5A4	29 - 32						
			5A5	32 - 36						
SIZE 5	M50X1,5	1" 1/2	5A2	23 - 26	43	104	79	25	65	58
			5A3	26 - 29						
			5A4	29 - 32						
			5A5	32 - 36						
SIZE 6	M63X1,5	2"	6A2	36 - 39	57	109	84	25	65	58
			6A3	39 - 42						
			6A4	42 - 46						
SIZE 7	M75X1,5	2" 1/2	7A2	44 - 48	-	-	-	-	-	-
			7A3	48 - 52						
			7A4	52 - 56						
			7A5	56 - 60						
SIZE 8	M80X1,5	3"	8A4	56 - 60	-	-	-	-	-	-
			8A5	59 - 63						
			8A6	63 - 67						
			8A7	67 - 71						

Assembly diagram



CODIFICATION TABLE

B14	#	#	#	0	#	#	#	N
								N - WITHOUT SEAL S - WITH SET SEALS 1 - INNER RUBBER SEAL A1 2 - INNER RUBBER SEAL A2 3 - INNER RUBBER SEAL A3 4 - INNER RUBBER SEAL A4 5 - INNER RUBBER SEAL A5 6 - INNER RUBBER SEAL A6 7 - INNER RUBBER SEAL A7
SEALS								1 - ATEX/IECEX - GROUP II 2 - ATEX/IECEX- GROUP I 5 - TR CU - GROUP II 6 - TR CU - GROUP I
CERTIFICATE								1 - METRIC 2 - NPT 3 - UNI-6125
THREAD								1 - SIZE 1 2 - SIZE 2 3 - SIZE 3 4 - SIZE 4 5 - SIZE 5S 6 - SIZE 6 7 - SIZE 7 8 - SIZE 8
SIZE								08 - PSM FREE NIPPLE METRIC 09 - PSM FREE NIPPLE NPT 22 - PSM AX FREE NIPPLE METRIC _ BARRIER TYPE 23 - PSM AX FREE NIPPLE NPT _ BARRIER TYPE
TYPE								01 - BNK BRASS NICKEL CHROME PLATED 03 - STAINLESS STEEL AISI316
MATERIAL								



METALLIC CABLE GLANDS

PSF (Male-Female)

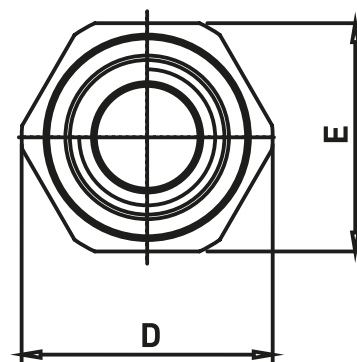
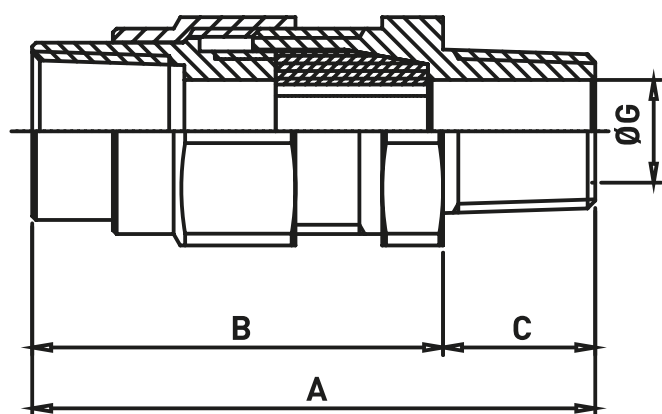


Single seal through "male-female" cable gland suitable for unarmoured cables.
Suitable for Zone 1/2 and Zone 21/22.

TECHNICAL FEATURES

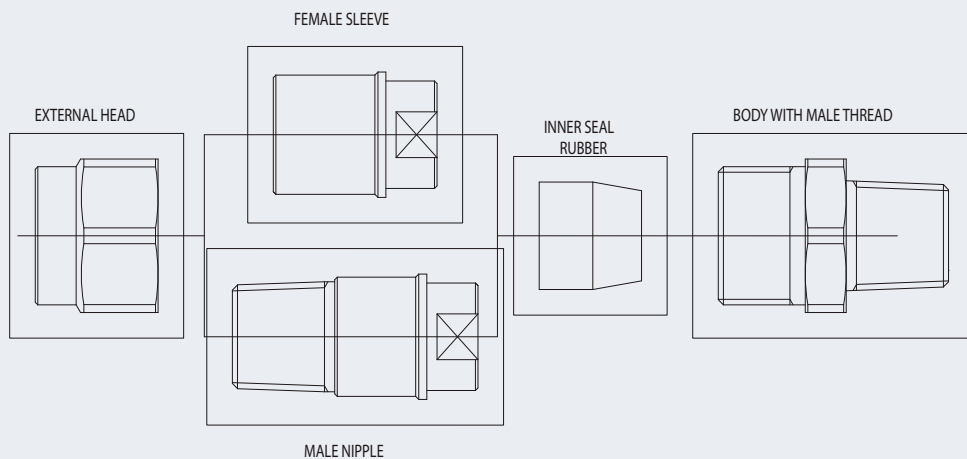
Material	Nickel chrome plated brass AISI 316 L Stainless steel (other materials upon request)
IP rating	IP66
Operating temperature range	-52°C to +110°C
Approvals	ATEX: 02ATEX0084 IECEX INE 14.0046X EAC: RU C-IT.BH02.B.00596/20
Marking*	II 2 GD Ex db/eb IIC Ex db/eb I Ex tb IIIC IP66 I M2 Ex db/eb I * For group I certification is up to size 6.
Internal seals	EPDM
Threads	Metric, NPT, UNI-6125 (other thread upon request)
Optional accessories	Locknut, sealing gasket, earthing ring, star washer, protective shroud
Note	The Free Coupling thread can be provided Metric, NPT or UNI-6125

Dimensions



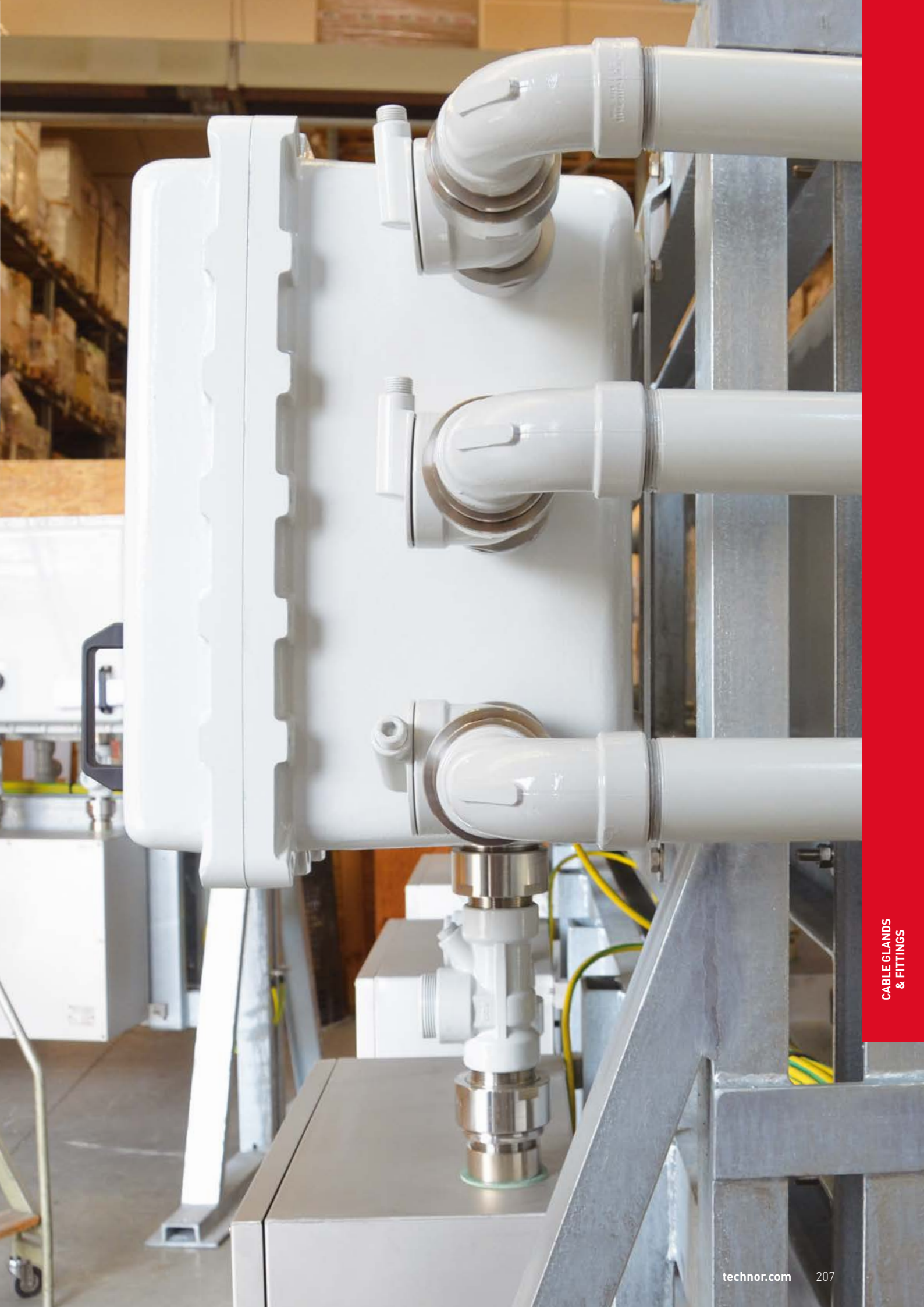
	METRIC	NPT UNI-6125	SEAL	CABLE RANGE (mm)	Ø EXTERNAL CABLE (mm)	EXTDIMENSIONS (mm)				
						G	A	B	C	E
SIZE 1	M20X1,5	1/2"	1A1	6 - 9	18	73	53	20	33	30
			1A2	9 - 12						
SIZE 2	M25X1,5	3/4"	2A1	6 - 9	24	73	53	20	40	36
			2A2	9 - 12						
			2A3	11 - 14						
			2A4	14 - 17						
SIZE 3	M32X1,5	1"	3A1	14 - 17	30	88	63	25	49	44
			3A2	17 - 20						
			3A3	20 - 23						
SIZE 5S	M40X1,5	1" 1/4	5A2	23 - 26	43	89	64	25	65	58
			5A3	26 - 29						
			5A4	29 - 32						
			5A5	32 - 36						
SIZE 5	M50X1,5	1" 1/2	5A2	23 - 26	43	89	64	25	65	58
			5A3	26 - 29						
			5A4	29 - 32						
			5A5	32 - 36						
SIZE 6	M63X1,5	2"	6A2	36 - 39	57	92	67	25	65	58
			6A3	39 - 42						
			6A4	42 - 46						
SIZE 7	M75X1,5	2" 1/2	7A2	44 - 48	-	-	-	-	-	-
			7A3	48 - 52						
			7A4	52 - 56						
			7A5	56 - 60						
SIZE 8	M80X1,5	3"	8A4	56 - 60	-	-	-	-	-	-
			8A5	59 - 63						
			8A6	63 - 67						
			8A7	67 - 71						

Assembly diagram



CODIFICATION TABLE

B14	#	#	#	0	#	#	N
						SEALS	N - WITHOUT SEAL S - WITH SET SEALS 1 - INNER RUBBER SEAL A1 2 - INNER RUBBER SEAL A2 3 - INNER RUBBER SEAL A3 4 - INNER RUBBER SEAL A4 5 - INNER RUBBER SEAL A5 6 - INNER RUBBER SEAL A6 7 - INNER RUBBER SEAL A7
					CERTIFICATE		1 - ATEX/IECEX - GROUP II 2 - ATEX/IECEX- GROUP I 5 - TR CU - GROUP II 6 - TR CU - GROUP I
					THREAD		1 - METRIC 2 - NPT 3 - UNI-6125
						SIZE	1 - SIZE 1 2 - SIZE 2 3 - SIZE 3 4 - SIZE 5S 5 - SIZE 5 6 - SIZE 6 7 - SIZE 7 8 - SIZE 8
							05 - PSF FREE COUPLING METRIC 06 - PSF FREE COUPLING NPT 19 - PSF AX FREE COUPLING METRIC _ BARRIER TYPE 20 - PSF AX FREE COUPLING NPT _ BARRIER TYPE
						MATERIAL	01 - BNK BRASS NICKEL CHROME PLATED 03 - STAINLESS STEEL AISI316



PLASTIC CABLE GLANDS

Polyamide

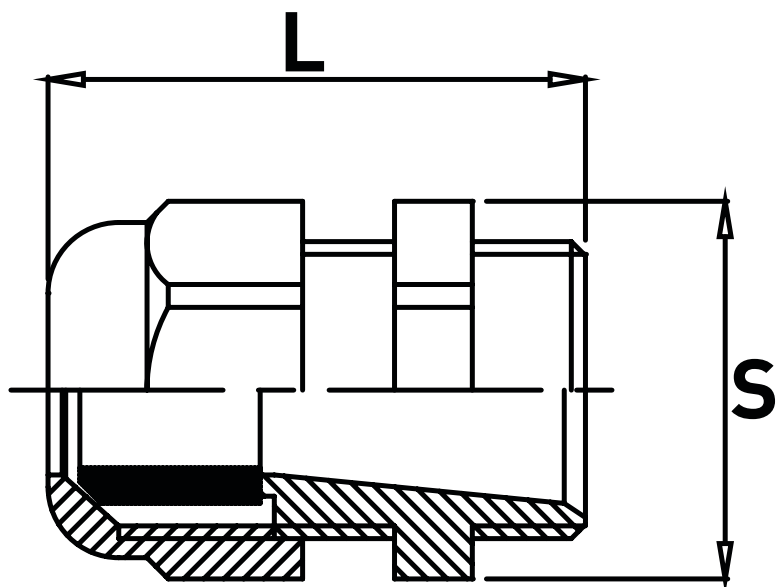


Single seal cable gland suitable for unarmoured
Suitable for Zone 1/2 and Zone 21/22.

TECHNICAL FEATURES

Material	Polyamide
IP rating	IP66/IP68
Ambient temperature range	-20°C to +80°C
Approvals	ATEX: CESA 03 ATEX 305X
Marking	II 2 GD Ex e II/Ex i II Ex tD A21 IP66/68
Gasket	Neoprene
Threads	Metric, PG
Optional accessories	Locknut, Gasket

Dimensions



UN.. polyamide cable glands

TYPE	CODE	THREAD	COLOUR	Ø CABLE (mm)
UNI01XE - POLYAMIDE CABLE GLAND	C011301300001	M16X1,5	BLACK	6 - 10
UNI1XE - POLYAMIDE CABLE GLAND	C011311300001	M20X1,5	BLACK	7 - 12
UNI2XE - POLYAMIDE CABLE GLAND	C011321300001	M25X1,5	BLACK	13 - 18
UNI3XE - POLYAMIDE CABLE GLAND	C011331300001	M32X1,5	BLACK	18 - 25
UNI4XE - POLYAMIDE CABLE GLAND	C011341300001	M40X1,5	BLACK	22 - 32
UNI5XE - POLYAMIDE CABLE GLAND	C011351300001	M50X1,5	BLACK	30 - 38
UNI6XE - POLYAMIDE CABLE GLAND	UPON REQUEST	M63X1,5	BLACK	34 - 44
UNI01XI - POLYAMIDE CABLE GLAND	C011301300002	M16X1,5	BLUE	6 - 10
UNI1XI - POLYAMIDE CABLE GLAND	C011311300002	M20X1,5	BLUE	7 - 12
UNI2XI - POLYAMIDE CABLE GLAND	C011321300002	M25X1,5	BLUE	13 - 18
UNI3XI - POLYAMIDE CABLE GLAND	C011331300002	M32X1,5	BLUE	18 - 25
UNI4XI - POLYAMIDE CABLE GLAND	C011341300002	M40X1,5	BLUE	22 - 32
UNI5XI - POLYAMIDE CABLE GLAND	C011351300002	M50X1,5	BLUE	30 - 38
UNI6XI - POLYAMIDE CABLE GLAND	C011361300001	M63X1,5	BLUE	34 - 44

SPARES & ACCESSORIES



Set of inner seals (under armour)

CODE	TYPE	Ø CABLE (mm)
C070700000014	SET OF INNER SEALS - C.G. SIZE 1	6-12
C070700000003	SET OF INNER SEALS - C.G. SIZE 2	6-17
C070700000005	SET OF INNER SEALS - C.G. SIZE 3	14-23
C070700000007	SET OF INNER SEALS - C.G. SIZE 5	23-36
C070700000009	SET OF INNER SEALS - C.G. SIZE 6	36-46
C070700000010	SET OF INNER SEALS - C.G. SIZE 7	44-60
C070700000012	SET OF INNER SEALS - C.G. SIZE 8	56-71



Set outer seals (external)

CODE	TYPE	Ø CABLE (mm)
C070700000002	SET OF OUTER SEALS - C.G. SIZE 1	8-17
C070700000004	SET OF OUTER SEALS - C.G. SIZE 2	14-23
C070700000006	SET OF OUTER SEALS - C.G. SIZE 3	20-29
C070700000008	SET OF OUTER SEALS - C.G. SIZE 5	29-42
C070700000015	SET OF OUTER SEALS - C.G. SIZE 6	44-56
C070700000011	SET OF OUTER SEALS - C.G. SIZE 7	55-67
C070700000013	SET OF OUTER SEALS - C.G. SIZE 8	63-77

Inner seals

CABLE GLAND SIZE	CODE	TYPE	Ø CABLE (mm)
SIZE 1	C070200000002	1A1 RUBBER SEAL	6 - 9
	C070200000003	1A2 RUBBER SEAL	9 - 12
SIZE 2	C070200000004	2A1 RUBBER SEAL	6 - 9
	C070200000005	2A2 RUBBER SEAL	9 - 12
	C070200000025	2A3 RUBBER SEAL	11 - 14
	C070200000006	2A4 RUBBER SEAL	14 - 17
SIZE 3	C070200000007	3A1 RUBBER SEAL	14 - 17
	C070200000008	3A2 RUBBER SEAL	17 - 20
SIZE 5/5S	C070200000010	5A2 RUBBER SEAL	23 - 26
	C070200000011	5A3 RUBBER SEAL	26 - 29
	C070200000012	5A4 RUBBER SEAL	29 - 32
	C070200000013	5A5 RUBBER SEAL	32 - 36
SIZE 6	C070200000014	6A2 RUBBER SEAL	36 - 39
	C070200000015	6A3 RUBBER SEAL	39 - 42
	C070200000016	6A4 RUBBER SEAL	42 - 46
SIZE 7	C070200000017	7A2 RUBBER SEAL	44 - 48
	C070200000018	7A3 RUBBER SEAL	48 - 52
	C070200000019	7A4 RUBBER SEAL	52 - 56
	C070200000020	7A5 RUBBER SEAL	56 - 60
SIZE 8	C070200000021	8A4 RUBBER SEAL	56 - 60
	C070200000022	8A5 RUBBER SEAL	59 - 63
	C070200000023	8A6 RUBBER SEAL	63 - 67
	C070200000024	8A7 RUBBER SEAL	67 - 71

Outer seals

CABLE GLAND SIZE	CODE	TYPE	Ø CABLE (mm)
SIZE 1	C070300000002	1B1 RUBBER SEAL	8 - 11
	C070300000003	1B2 RUBBER SEAL	11 - 14
	C070300000004	1B3 RUBBER SEAL	14 - 17
SIZE 2	C070300000005	2B1 RUBBER SEAL	14 - 17
	C070300000023	2B2 RUBBER SEAL	17 - 20
	C070300000006	2B3 RUBBER SEAL	20 - 23
SIZE 3	C070300000007	3B1 RUBBER SEAL	20 - 23
	C070300000008	3B2 RUBBER SEAL	23 - 26
	C070300000009	3B3 RUBBER SEAL	26 - 29
SIZE 5/5S	C070300000010	5B2 RUBBER SEAL	29 - 32
	C070300000011	5B3 RUBBER SEAL	32 - 36
	C070300000012	5B4 RUBBER SEAL	36 - 39
	C070300000013	5B5 RUBBER SEAL	39 - 42
SIZE 6	C070300000024	6B2 RUBBER SEAL	44 - 48
	C070300000014	6B3 RUBBER SEAL	48 - 52
	C070300000015	6B4 RUBBER SEAL	52 - 56
SIZE 7	C070300000016	7B2 RUBBER SEAL	55 - 59
	C070300000017	7B3 RUBBER SEAL	59 - 63
	C070300000018	7B4 RUBBER SEAL	63 - 67
SIZE 8	C070300000019	8B4 RUBBER SEAL	63 - 67
	C070300000020	8B5 RUBBER SEAL	65 - 69
	C070300000021	8B6 RUBBER SEAL	69 - 73
	C070300000022	8B7 RUBBER SEAL	73 - 77

SPARES & ACCESSORIES

Protective shroud EPDM-55

CODE	TYPE	CABLE GLAND SIZE
C070400050002	PGA-1 PVC SHROUD	SIZE 1
C070400050012	PGA-2 PVC SHROUD	SIZE 2
C070400050003	PGA-3 PVC SHROUD	SIZE 3
C070400050004	PGA-5 PVC SHROUD	SIZE 5/5S
C070400050005	PGA-6 PVC SHROUD	SIZE 6
C070400050006	PGA-7 PVC SHROUD	SIZE 7
C070400050007	PGA-8 PVC SHROUD	SIZE 8

Sealants for barrier type cable glands

CODE	TYPE
E012699000003	MANUAL APPLICATOR FOR 200ML CARTRIDGE, TYPE 2012/1
E012699000001	200ML CARTRIDGE WITH MIXING NOOZLE, TYPE 2012
E012699000002	PACKAGE OF N. 6 200ML CARTRIDGE WITH MIXING NOOZLE, TYPE 2012
E012699000004	MANUAL APPLICATOR FOR 310ML CARTRIDGE, TYPE 7091
E012699000005	SINGLE 310ML CARTRIDGE WITH NOOZLE, TYPE 7091

CODE	TYPE	THREAD
C070800040003	GK-16 - AMF GASKET	METRIC M16
C070800040005	GK-20 - AMF GASKET	METRIC M20
C070800040006	GK-25 - AMF GASKET	METRIC M25
C070800040009	GK-32 - AMF GASKET	METRIC M32
C070800040010	GK-40 - AMF GASKET	METRIC M40
C070800040013	GK-50 - AMF GASKET	METRIC M50
C070800040015	GK-63 - AMF GASKET	METRIC M63
C070800040017	GK-75 - AMF GASKET	METRIC M75
C070800040019	GK-80 - AMF GASKET	METRIC M80
C070800040001	GK-1 - AMF GASKET	INCHES 1/2"
C070800040004	GK-2 - AMF GASKET	INCHES 3/4"
C070800040007	GK-3 - AMF GASKET	INCHES 1"
C070800040012	GK-5 - AMF GASKET	INCHES 1" 1/4
C070800040011	GK-5 - AMF GASKET	INCHES 1" 1/2
C070800040014	GK-6 - AMF GASKET	INCHES 2"
C070800040016	GK-7 - AMF GASKET	INCHES 2" 1/2
C070800040018	GK-8 - AMF GASKET	INCHES 3"

CODE		TYPE	THREAD
BRASS	AISI 316 L		
C070120110001	C070120120001	DL-1 - M20 LOCKNUT	M20X1,5
C070125110001	C070125120001	DL-2 - M25 LOCKNUT	M25X1,5
C070132110001	C070132120001	DL-3 - M32 LOCKNUT	M32X1,5
C070140110001	C070140120001	DL-4 - M40 LOCKNUT	M40X1,5
C070150110001	C070150120001	DL-5 - M50 LOCKNUT	M50X1,5
C070163110001	C070163120001	DL-6 - M63 LOCKNUT	M63X1,5
C070175110001	C070175120001	DL-7 - M70 LOCKNUT	M75X1,5
C070180110001	C070180120001	DL-8 - M80 LOCKNUT	M80X1,5

C0701A1210001	C0701A1220001	DL-1 - LOCKNUT	1/2"	NPT
C0701A2210001	C0701A2220001	DL-2 - LOCKNUT	3/4"	NPT
C0701A3210001	C0701A3220001	DL-3 - LOCKNUT	1"	NPT
C0701A4210001	C0701A4220001	DL-4 - LOCKNUT	1" 1/4	NPT
C0701A5210001	C0701A5220001	DL-5 - LOCKNUT	1" 1/2	NPT
C0701A6210001	C0701A6220001	DL-6 - LOCKNUT	2"	NPT
C0701A7210001	UPON REQUEST	DL-7 - LOCKNUT	2" 1/2	NPT
C0701A8210001	UPON REQUEST	DL-8 - LOCKNUT	3"	NPT

C0701A1310001	UPON REQUEST	DL-1 - LOCKNUT	1/2"	UNI-6125
C0701A2310001	UPON REQUEST	DL-2 - LOCKNUT	3/4"	UNI-6125
C0701A3310001	UPON REQUEST	DL-3 - LOCKNUT	1"	UNI-6125
C0701A4310001	UPON REQUEST	DL-4 - LOCKNUT	1" 1/4	UNI-6125
C0701A5310001	UPON REQUEST	DL-5 - LOCKNUT	1" 1/2	UNI-6125
UPON REQUEST	UPON REQUEST	DL-6 - LOCKNUT	2"	UNI-6125
UPON REQUEST	UPON REQUEST	DL-7 - LOCKNUT	2" 1/2	UNI-6125
UPON REQUEST	UPON REQUEST	DL-8 - LOCKNUT	3"	UNI-6125

CODE	TYPE	CABLE GLAND SIZE
C070500010001	PT-1 EARTHING RING	SIZE 1
C070500010002	PT-2 EARTHING RING	SIZE 2
C070500010003	PT-3 EARTHING RING	SIZE 3
C070500010004	PT-4 EARTHING RING	SIZE 4/5S
C070500010005	PT-5 EARTHING RING	SIZE 5
C070500010006	PT-6 EARTHING RING	SIZE 6
C070500010007	PT-7 EARTHING RING	SIZE 7
C070500010008	PT-8 EARTHING RING	SIZE 8

CODE	TYPE	THREAD SIZE
C070600020003	STAR WASHER Ø22	M20
C070600020001	STAR WASHER Ø27	M25
C070600020004	STAR WASHER Ø33	M32
C070600020005	STAR WASHER Ø42	M40
C070600020006	STAR WASHER Ø52	M50
C070600020007	STAR WASHER Ø63	M65
C070600020008	STAR WASHER Ø77	M75

FITTINGS

BMF/BFF/BMM Series - Three pieces unions



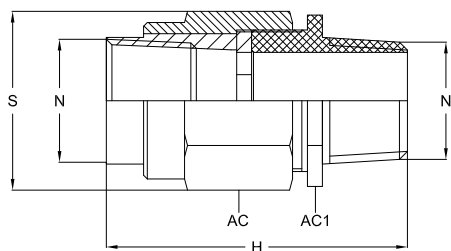
Three pieces unions for gas group IIB enable an independent rotation and the connection between pipes of an electrical equipment and enclosures or different devices of an explosion-proof equipment.

- BFF series (female/female)
- BMF series (male/female)
- BMM series (male/male)

TECHNICAL FEATURES

Material	Galvanised steel (other materials upon request)
IP rating	IP66/IP67
Ambient temperature range	ATEX Galvanised steel: -20°C to +60°C with EPDM gasket Stainless Steel: -55°C to +60°C with SI/50 gasket (upon request)
	IEC Ex Galvanised steel: -20°C to +60°C with SILICON gasket (upon request) Stainless Steel: -50°C to +60°C with SILICON gasket (upon request)
Approvals	Special version suitable for high temperature +150°C is available upon request (the suffix become RBMF...) CESI 99 ATEX 034U IECEX CES 10.0002U EAC
Marking	II 2GD Ex d IIB Gb Ex tb IIIC Db IP66/67
Thread	Special version suitable for IIC group of gases is available upon request NPT, UNI-6125 (other thread upon request)

Dimensions BMF



BMF - Male/Female three pieces unions

TYPE	CODE	SIZE	THREAD	DIMENSIONS [mm]				WEIGHT [kg]
				H	S	AC	AC1	
BMF-1	C040124130201	1/2"	UNI-6125	58	35	30	27	0,150
BMF-2	C040124230201	3/4"	UNI-6125	58	40	35	32	0,185
BMF-3	C040124330201	1"	UNI-6125	70	48	42	40	0,300
BMF-4	C040124430201	1" 1/4	UNI-6125	87	60	55	59	0,760
BMF-5	C040124530202	1" 1/2	UNI-6125	87	75	70	67	1,000
BMF-6	C040124630202	2"	UNI-6125	87	90	84	77	1,400
BMF-7	C040124730201	2" 1/2	UNI-6125	98	117	108	99	2,350
BMF-8	C040124830201	3"	UNI-6125	98	132	121	108	2,800
BMF-1N	C040124120201	1/2"	NPT	58	35	30	27	0,150
BMF-2N	C040124220201	3/4"	NPT	58	40	35	32	0,185
BMF-3N	C040124320201	1"	NPT	70	48	42	40	0,300
BMF-4N	C040124420201	1" 1/4	NPT	87	60	55	59	0,760
BMF-5N	C040124520201	1" 1/2	NPT	87	75	70	67	1,000
BMF-6N	C040124620201	2"	NPT	87	90	84	77	1,400
BMF-7N	C040124720201	2" 1/2	NPT	98	117	108	99	2,350
BMF-8N	C040124820201	3"	NPT	98	132	121	108	2,800

FITTINGS

BMF/BFF/BMM Series - Three pieces unions



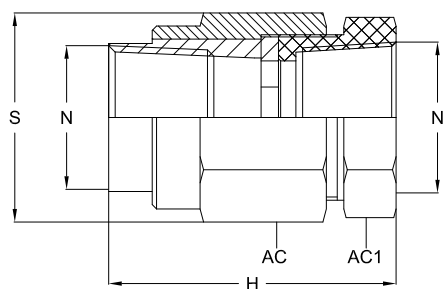
Three pieces unions for gas group IIB enable an independent rotation and the connection between pipes of an electrical equipment and enclosures or different devices of an explosion-proof equipment.

- BFF series (female/female)
- BMF series (male/female)
- BMM series (male/male)

TECHNICAL FEATURES

Material	Galvanised steel (other materials upon request)
IP rating	IP66/IP67
Ambient temperature range	ATEX Galvanised steel: -20°C to +60°C with EPDM gasket Stainless Steel: -55°C to +60°C with SI/50 gasket (upon request)
Approvals	IEC Ex Galvanised steel: -20°C to +60°C with SILICON gasket (upon request) Stainless Steel: -50°C to +60°C with SILICON gasket (upon request) Special version suitable for high temperature +150°C is available upon request (the suffix become RBFF...)
Marking	CESI 99 ATEX 034U IECEX CES 10.0002U EAC
Thread	II 2GD Ex d IIB Gb Ex tb IIIC Db IP66/67 Special version suitable for IIC group of gases is available upon request NPT, UNI-6125 (other thread upon request)

Dimensions BFF



BFF - Female/Female three pieces unions

TYPE	CODE	SIZE	THREAD	DIMENSIONS [mm]				WEIGHT [kg]
				H	S	AC	AC1	
BFF-1	C040134130201	1/2"	UNI-6125	46	35	30	27	0,125
BFF-2	C040134230201	3/4"	UNI-6125	46	40	35	32	0,150
BFF-3	C040134330201	1"	UNI-6125	56	48	42	40	0,235
BFF-4	UPON REQUEST	1" 1/4	UNI-6125	63	60	55	59	0,640
BFF-5	C040134530201	1" 1/2	UNI-6125	66	75	70	67	0,960
BFF-6	C040134630201	2"	UNI-6125	66	90	84	77	1,220
BFF-7	UPON REQUEST	2" 1/2	UNI-6125	71	117	108	99	2,240
BFF-8	UPON REQUEST	3"	UNI-6125	71	132	121	108	2,600
BFF-1N	C040134120201	1/2"	NPT	46	35	30	27	0,125
BFF-2N	C040134220201	3/4"	NPT	46	40	35	32	0,150
BFF-3N	C040134320201	1"	NPT	56	48	42	40	0,235
BFF-4N	UPON REQUEST	1" 1/4	NPT	63	60	55	59	0,640
BFF-5N	C040134520201	1" 1/2	NPT	66	75	70	67	0,960
BFF-6N	C040134620201	2"	NPT	66	90	84	77	1,220
BFF-7N	UPON REQUEST	2" 1/2	NPT	71	117	108	99	2,240
BFF-8N	UPON REQUEST	3"	NPT	71	132	121	108	2,600

FITTINGS

BMF/BFF/BMM Series - Three pieces unions



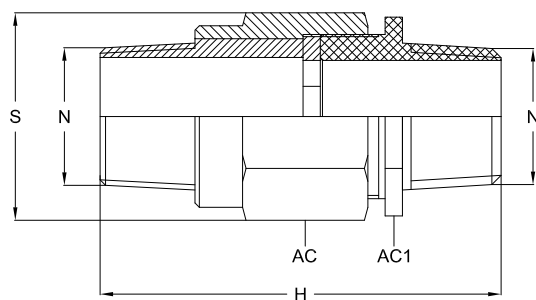
Three pieces unions for gas group IIB enable an independent rotation and the connection between pipes of an electrical equipment and enclosures or different devices of an explosion-proof equipment.

- BFF series (female/female)
- BMF series (male/female)
- BMM series (male/male)

TECHNICAL FEATURES

Material	Galvanised steel (other materials upon request)
IP rating	IP66/IP67
Ambient temperature range	ATEX Galvanised steel: -20°C to +60°C with EPDM gasket Stainless Steel: -55°C to +60°C with SI/50 gasket (upon request)
	IEC Ex Galvanised steel: -20°C to +60°C with SILICON gasket (upon request) Stainless Steel: -50°C to +60°C with SILICON gasket (upon request)
	Special version suitable for high temperature +150°C is available upon request (the suffix become RBMM...)
Approvals	CESI 99 ATEX 034U IECEX CES 10.0002U EAC
Marking	II 2GD Ex d IIB Gb Ex tb IIIC Db IP66/67
	Special version suitable for IIC group of gases is available upon request
Thread	NPT, UNI-6125 (other thread upon request)

Dimensions BMM



BMM - Male/Male three pieces unions

TYPE	CODE	SIZE	THREAD	DIMENSIONS [mm]				WEIGHT [kg]
				H	S	AC	AC1	
BMM-1	C040114130201	1/2"	UNI-6125	86	35	30	27	0,175
BMM-2	C040114230201	3/4"	UNI-6125	86	40	35	32	0,230
BMM-3	C040114330201	1"	UNI-6125	99	48	42	40	0,350
BMM-4	UPON REQUEST	1" 1/4	UNI-6125	115	60	55	59	0,910
BMM-5	C040114530201	1" 1/2	UNI-6125	115	75	70	67	1,220
BMM-6	C040114630201	2"	UNI-6125	115	90	84	77	1,620
BMM-7	C040114730201	2" 1/2	UNI-6125	126	117	108	99	2,900
BMM-8	UPON REQUEST	3"	UNI-6125	126	132	121	108	3,350
BMM-1N	C040114120201	1/2"	NPT	86	35	30	27	0,175
BMM-2N	C040114220201	3/4"	NPT	86	40	35	32	0,230
BMM-3N	C040114320203	1"	NPT	99	48	42	40	0,350
BMM-4N	UPON REQUEST	1" 1/4	NPT	115	60	55	59	0,910
BMM-5N	C040114520201	1" 1/2	NPT	115	75	70	67	1,220
BMM-6N	C040114620201	2"	NPT	115	90	84	77	1,620
BMM-7N	C040114720201	2" 1/2	NPT	126	117	108	99	2,900
BMM-8N	UPON REQUEST	3"	NPT	126	132	121	108	3,350

FITTINGS

EYS Series - Sealing fittings

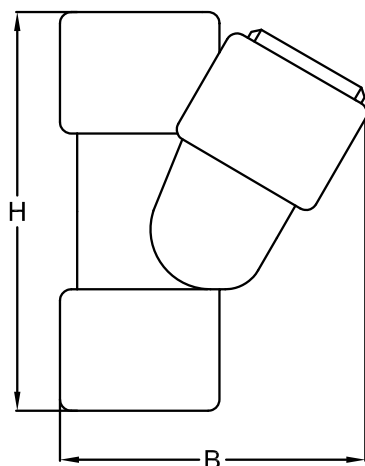


Sealing fittings prevent the passage of gas, vapors or flames through pipes system. EYS series vertical fittings are available in two different dimensions: the first up to 1"; the second up to 3" with an additional lateral opening for easy insertion of glass-fiber. EZS series are used for both vertical and horizontal mounting. The fittings must be installed as close as possible to the Ex d junction box and must be filled using CRV 420 approved resin. The sealing compound is supplied, in the quantity indicated in the table below, along with the sealing fitting. Other sealing compounds are not allowed.

TECHNICAL FEATURES

Material	Aluminium with low content of copper
IP rating	IP66
Ambient temperature range	-20°C to +100°C
Approvals	IECEX CES 14.0019X CESI 03 ATEX 085 EAC
Marking	II 2GD Ex db IIC Gb Ex tb IIIC Db IP66
Thread	NPT, UNI-6125 (other threads upon request)
Optional accessories	CRV420 sealinig compound, fiber.

Dimensions EYS



Vertical sealing fittings EYS

TYPE	CODE	SIZE	THREAD	DIMENSIONS [mm]		RESIN QUANTITY	WEIGHT [kg]
				H	B		
EYS-1	C040701130201	1/2"	UNI-6125	77	56	35 GR.	0,175
EYS-2	C040701230201	3/4"	UNI-6125	87	66	50 GR.	0,230
EYS-3	C040701330201	1"	UNI-6125	105	82	100 GR.	0,350
EYS-4	UPON REQUEST	1" 1/4	UNI-6125	145	84	240 GR.	0,910
EYS-5	C040701530201	1" 1/2	UNI-6125	145	84	240 GR.	1,220
EYS-6	C040701630201	2"	UNI-6125	150	95	380 GR.	1,620
EYS-7	C040701730201	2" 1/2	UNI-6125	200	134	1250 GR.	2,900
EYS-8	C040701830201	3"	UNI-6125	200	134	1250 GR.	3,350
EYS-1N	C040701120201	1/2"	NPT	77	56	35 GR.	0,175
EYS-2N	C040701220201	3/4"	NPT	87	66	50 GR.	0,230
EYS-3N	C040701320201	1"	NPT	105	82	100 GR.	0,350
EYS-4N	UPON REQUEST	1" 1/4	NPT	145	84	240 GR.	0,910
EYS-5N	C040701520201	1" 1/2	NPT	145	84	240 GR.	1,220
EYS-6N	C040701620201	2"	NPT	150	95	380 GR.	1,620
EYS-7N	C040701720201	2" 1/2	NPT	200	134	1250 GR.	2,900
EYS-8N	C040701820201	3"	NPT	200	134	1250 GR.	3,350

Sealing fittings accessories

TYPE	CODE	WEIGHT
CRV 420/300 SEALING COMPOUND 300 GR.	UPON REQUEST	300 GR.
CRV 420/400 SEALING COMPOUND 400 GR.	C040800A00201	400 GR.
CRV 420/1000 SEALING COMPOUND 1000 GR.	B090100S00156	1000 GR.
FAB 25 FIBER 25 GR.	C040900A00201	250 GR.
FAB 50 FIBER 50 GR.	C040900A00202	500 GR.

FITTINGS

EZS Series - Sealing fittings

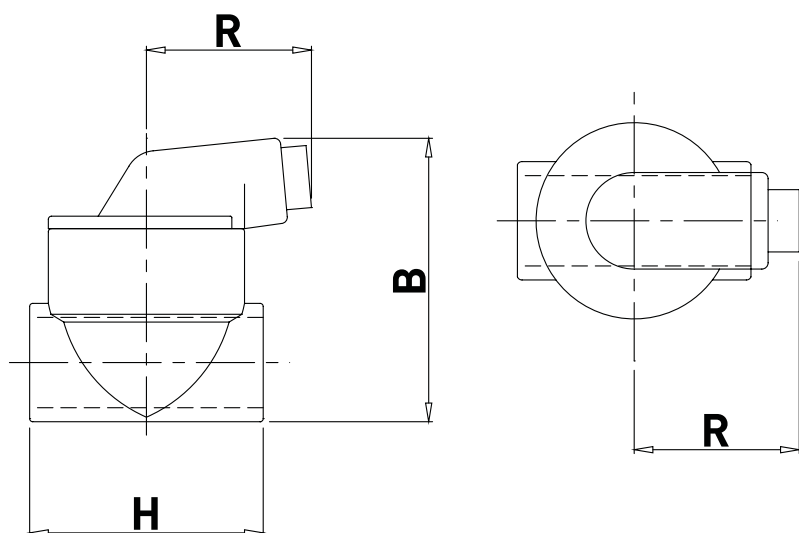


Sealing fittings prevent the passage of gas, vapors or flames through pipes system. EYS series vertical fittings are available in two different dimensions: the first up to 1"; the second up to 3" with an additional lateral opening for easy insertion of glass-fiber. EZS series are used for both vertical and horizontal mounting. The fittings must be installed as close as possible to the Ex d junction box and must be filled using CRV 420 approved resin. The sealing compound is supplied, in the quantity indicated in the table below, along with the sealing fitting. Other sealing compounds are not allowed.

TECHNICAL FEATURES

Material	Aluminium with low content of copper
IP rating	IP66
Ambient temperature range	-20°C to +100°C
Approvals	IECEX CES 14.0019X CESI 03 ATEX 085 EAC
Marking	II 2GD Ex db IIC Gb Ex tb IIIC Db IP66
Thread	NPT, UNI-6125 (other threads upon request)
Optional accessories	CRV420 sealinig compound, fiber.

Dimensions EZS



Horizontal sealing fittings EZS

TYPE	CODE	SIZE	THREAD	DIMENSIONS [mm]			RESIN QUANTITY	WEIGHT [kg]
				H	B	R		
EZS-1	C040601130201	1/2"	UNI-6125	72	83	50	140 GR.	0.26
EZS-2	C040601230201	3/4"	UNI-6125	72	83	50	140 GR.	0.25
EZS-3	C040601330201	1"	UNI-6125	74	92	50	140 GR.	0.27
EZS-4	UPON REQUEST	1" 1/4	UNI-6125	98	110	60	390 GR.	0.52
EZS-5	C040601530201	1" 1/2	UNI-6125	98	110	60	390 GR.	0.48
EZS-6	C040601630201	2"	UNI-6125	130	120	60	570 GR.	0.70
EZS-7	C040601730201	2" 1/2	UNI-6125	142	160	90	1000 GR.	1.50
EZS-8	C040601830201	3"	UNI-6125	142	160	90	1000 GR.	1.74
EZS-1N	C040601120201	1/2"	NPT	72	83	50	140 GR.	0.26
EZS-2N	C040601220201	3/4"	NPT	72	83	50	140 GR.	0.25
EZS-3N	C040601320201	1"	NPT	74	92	50	140 GR.	0.27
EZS-4N	UPON REQUEST	1" 1/4	NPT	98	110	60	390 GR.	0.52
EZS-5N	C040601520201	1" 1/2	NPT	98	110	60	390 GR.	0.48
EZS-6N	C040601620201	2"	NPT	130	120	60	570 GR.	0.70
EZS-7N	C040601720201	2" 1/2	NPT	142	160	90	1000 GR.	1.50
EZS-8N	UPON REQUEST	3"	NPT	142	160	90	1000 GR.	1.74

Sealing fittings accessories

TYPE	CODE	WEIGHT
CRV 420/300 SEALING COMPOUND 300 GR.	UPON REQUEST	300 GR.
CRV 420/400 SEALING COMPOUND 400 GR.	C040800A00201	400 GR.
CRV 420/1000 SEALING COMPOUND 1000 GR.	B090100S00156	1000 GR.
FAB 25 FIBER 25 GR.	C040900A00201	250 GR.
FAB 50 FIBER 50 GR.	C040900A00202	500 GR.

FITTINGS

NP Series - Nipples

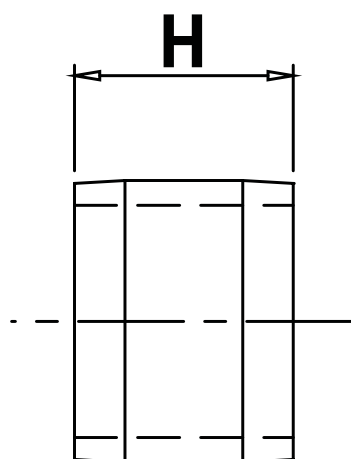


NP series nipples are used to connect equipment or other unions with female hub.

TECHNICAL FEATURES

Material	Galvanised steel (other materials upon request)
IP rating	IP66/IP67
Ambient temperature range	ATEX Galvanised steel: -40°C to +150°C Stainless Steel: -55°C to +150°C (upon request)
Approvals	IEC Ex Galvanised steel: -40°C to +150°C (upon request) Stainless Steel: -50°C to +150°C (upon request)
Marking	CESI 01 ATEX 104U IECEX CES 15.0005U EAC
Thread	II 2GD Ex d/e IIC Gb Ex tb IIIC Db IP66/67
	NPT, UNI-6125 (other thread upon request)

Dimensions NP



Nipples - NP

TYPE	CODE	SIZE	THREAD	LENGHT H	WEIGHT [kg]
NP-1	C040214130201	1/2"	UNI-6125	48	0,050
NP-2	C040214230201	3/4"	UNI-6125	60	0,060
NP-3	C040214330201	1"	UNI-6125	55	0,100
NP-4	C040214430201	1" 1/4	UNI-6125	55	0,140
NP-5	C040214530201	1" 1/2	UNI-6125	55	0,150
NP-6	C040214630201	2"	UNI-6125	55	0,200
NP-7	C040214730201	2" 1/2	UNI-6125	68	0,450
NP-8	UPON REQUEST	3"	UNI-6125	68	0,700
NP-1N	C040214120201	1/2"	NPT	48	0,050
NP-2N	C040214220201	3/4"	NPT	60	0,060
NP-3N	C040214320201	1"	NPT	55	0,100
NP-4N	C040214420201	1" 1/4	NPT	55	0,140
NP-5N	C040214520201	1" 1/2	NPT	55	0,150
NP-6N	C040215620201	2"	NPT	55	0,200
NP-7N	C040214720201	2" 1/2	NPT	68	0,450
NP-8N	C040214820201	3"	NPT	68	0,700

FITTINGS

EM Series - Unions

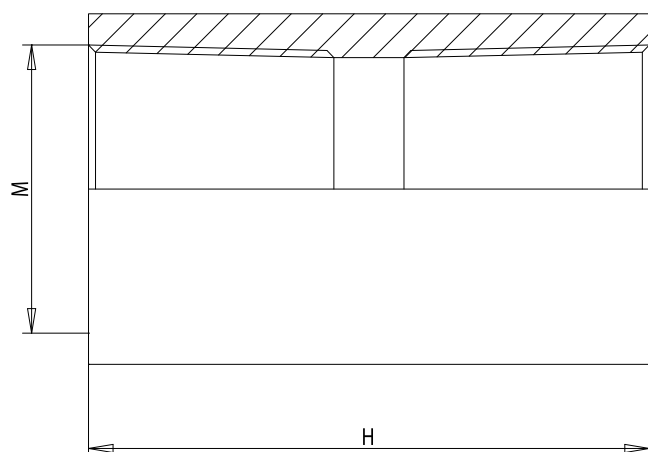


EM series couplings are used for connection of pipes with threaded male ends.

TECHNICAL FEATURES

Material	Galvanised steel (other materials upon request)
IP rating	IP66/IP67
Ambient temperature range	ATEX Galvanised steel: -40°C to +150°C Stainless Steel: -55°C to +150°C (upon request) IEC Ex Galvanised steel: -40°C to +150°C (upon request) Stainless Steel: -50°C to +150°C (upon request)
Approvals	CESI 01 ATEX 104U IECEX CES 15.0005U EAC
Marking	II 2GD Ex d/e IIC Gb Ex tb IIIC Db IP66/67
Thread	NPT, UNI-6125 (other thread upon request)

Dimensions EM



Coupling - EM

TYPE	CODE	SIZE	THREAD	LENGTH H	WEIGHT [kg]
EM-1	C040434130201	1/2"	UNI-6125	39	0,090
EM-2	C040434230201	3/4"	UNI-6125	39	0,080
EM-3	C040434330201	1"	UNI-6125	51	0,150
EM-4	UPON REQUEST	1" 1/4	UNI-6125	51	0,270
EM-5	C040434530201	1" 1/2	UNI-6125	51	0,270
EM-6	C040434630201	2"	UNI-6125	51	0,450
EM-7	C040434730201	2" 1/2	UNI-6125	65	0,650
EM-8	UPON REQUEST	3"	UNI-6125	65	0,800
EM-1N	C040434120201	1/2"	NPT	39	0,090
EM-2N	C040434220201	3/4"	NPT	39	0,080
EM-3N	C040434320201	1"	NPT	51	0,150
EM-4N	C040434420201	1" 1/4	NPT	51	0,270
EM-5N	C040434520201	1" 1/2	NPT	51	0,270
EM-6N	C040434620201	2"	NPT	51	0,450
EM-7N	C040434720201	2" 1/2	NPT	65	0,650
EM-8N	UPON REQUEST	3"	NPT	65	0,800

FITTINGS
ELF Series - Elbows

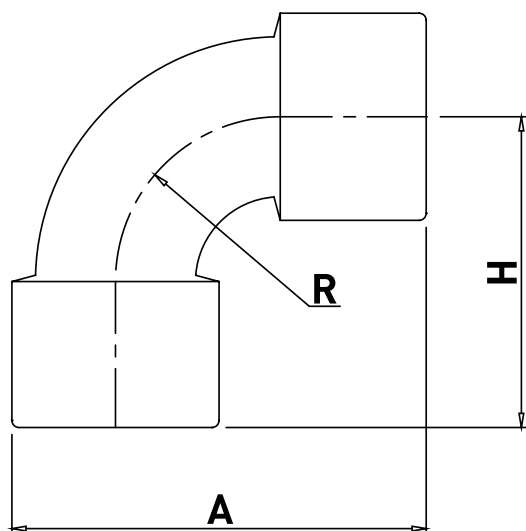


90° non-inspectable elbows are used in conduit system of electrical equipment.

TECHNICAL FEATURES

Material	Aluminium with low content of copper
IP rating	IP66/IP67
Ambient temperature range	ATEX -55°C to +150°C IEC Ex -50°C to +150°C (upon request)
Approvals	IECEX CES 15.0005U CESI 01 ATEX 104U EAC
Marking	II 2GD Ex d/e IIC Gb Ex tb IIIC Db IP66/67
Thread	NPT, UNI-6125 (other thread upon request)

Dimensions ELF



Female-Female elbow - ELF

TYPE	CODE	SIZE	THREAD	DIMENSIONS [mm]			WEIGHT [kg]
				A	H	R	
ELF-1	C040331130201	1/2"	UNI-6125	60	45	30	0.12
ELF-2	C040331230201	3/4"	UNI-6125	75	55	30	0.10
ELF-3	C040331330201	1"	UNI-6125	85	65	35	0.20
ELF-4	C040331430201	1" 1/4	UNI-6125	100	75	50	0.39
ELF-5	C040331530201	1" 1/2	UNI-6125	110	87	50	0.37
ELF-6	C040331630201	2"	UNI-6125	135	98	60	0.62
ELF-7	C040331730201	2" 1/2	UNI-6125	175	135	65	0.88
ELF-8	UPON REQUEST	3"	UNI-6125	210	160	85	1.48
ELF-1	C040331120201	1/2"	NPT	60	45	30	0.12
ELF-2	C040331220201	3/4"	NPT	75	55	30	0.10
ELF-3	C040331320201	1"	NPT	85	65	35	0.20
ELF-4	C040331420201	1" 1/4	NPT	100	75	50	0.39
ELF-5	C040331520201	1" 1/2	NPT	110	87	50	0.37
ELF-6	C040331620201	2"	NPT	135	98	60	0.62
ELF-7	C040331720201	2" 1/2	NPT	175	135	65	0.88
ELF-8	UPON REQUEST	3"	NPT	210	160	85	1.48

FITTINGS

LBH Series - Open elbows

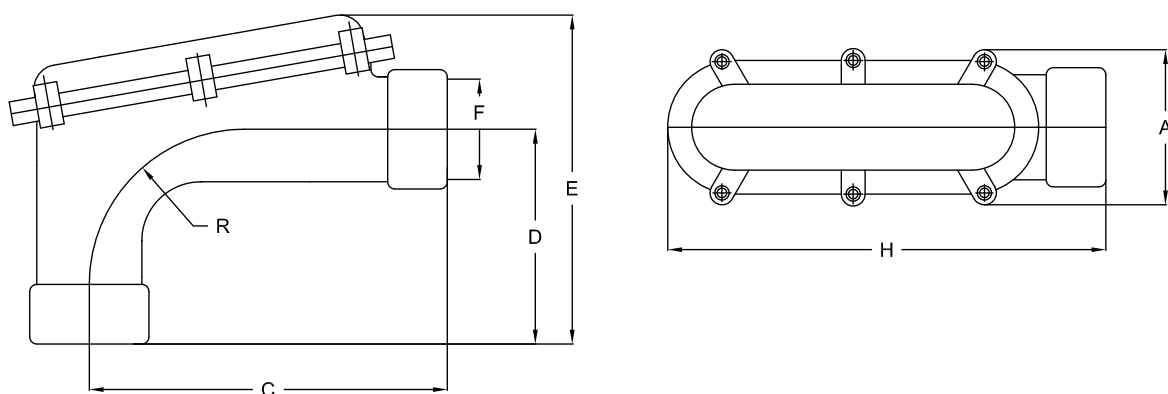


LBH and LBHS series L shaped open elbows are used for the cables run in conduit system of electrical installations.
The flanged opening enables easy inspection and insertion of electrical cables.

TECHNICAL FEATURES

Material	Aluminium with low content of copper
IP rating	IP66/IP67
Ambient temperature range	ATEX [-20°C,+60°C]
Approvals	CESI 03 ATEX 141U EAC
Marking	II 2 G Ex d IIB
Thread	NPT, UNI-6125 (other threads upon request)

Dimensions LBH



Open elbows LBH

TYPE	CODE	SIZE	THREAD	DIMENSIONS [mm]						WEIGHT [kg]
				A	H	C	D	E	R	
LBH-1	B170814130020	1/2"	UNI-6125	70	165	132	45	95	21	0.434
LBH-2	B170814230020	3/4"	UNI-6125	70	165	132	45	95	21	0.404
LBH-3	B170814330020	1"	UNI-6125	70	168	132	60	112	30	0.455
LBH-4	B170814430020	1" 1/4	UNI-6125	100	230	175	83	155	50	1.277
LBH-5	B170814530020	1" 1/2	UNI-6125	110	265	220	83	132	70	1.142
LBH-6	B170814630020	2"	UNI-6125	110	265	220	80	132	70	1.024
LBH-7	B170814730020	2" 1/2	UNI-6125	136	363	267	140	250	96	3.569
LBH-8	B170814830020	3"	UNI-6125	136	363	267	140	250	96	3.171
LBH-1	B170814120020	1/2"	NPT	70	165	132	45	95	21	0.434
LBH-2	B170814220020	3/4"	NPT	70	165	132	45	95	21	0.404
LBH-3	B170814320020	1"	NPT	70	168	132	60	112	30	0.455
LBH-4	B170814420020	1" 1/4	NPT	100	230	175	83	155	50	1.277
LBH-5	B170814520020	1" 1/2	NPT	110	265	220	83	132	70	1.142
LBH-6	B170814620020	2"	NPT	110	265	220	80	132	70	1.024
LBH-7	B170814720020	2" 1/2	NPT	136	363	267	140	250	96	3.569
LBH-8	B170814820020	3"	NPT	136	363	267	140	250	96	3.171

FITTINGS

DB Series - Aluminium bushings



DB...A series bushings are made of aluminium. They are screwed to the pipe and they work as a cable guard. They prevent the cable from rubbing on any pipe burr/edge which could damage its sheath.

TECHNICAL FEATURES

Material

Aluminium with low content of copper

Thread

NPT, UNI-6125 (other thread upon request)

Aluminium bushings - DB

TYPE	CODE	SIZE	THREAD	WEIGHT [kg]
DB-1	C040501150201	1/2"	ISO-228	0.012
DB-2	C040501250201	3/4"	ISO-228	0.014
DB-3	C040501350201	1"	ISO-228	0.020
DB-4	C040501450201	1" 1/4	ISO-228	0.025
DB-5	C040501550201	1" 1/2	ISO-228	0.032
DB-6	C040501650201	2"	ISO-228	0.046
DB-7	C040501750201	2" 1/2	ISO-228	0.062
DB-8	C040501850201	3"	ISO-228	0.071
DB-1	C040501120201	1/2"	NPT	0.012
DB-2	C040501220201	3/4"	NPT	0.014
DB-3	C040501320201	1"	NPT	0.020
DB-4	C040501420201	1" 1/4	NPT	0.025
DB-5	C040501520201	1" 1/2	NPT	0.032
DB-6	C040501620201	2"	NPT	0.046
DB-7	C040501720201	2" 1/2	NPT	0.062
DB-8	C040501850201	3"	NPT	0.071

FITTINGS

PLG Series - Recessed exagonal plugs

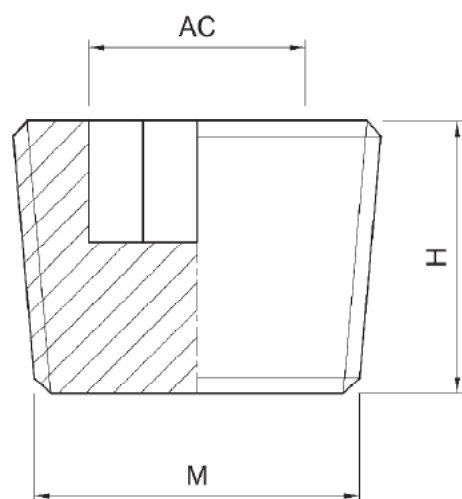


PLG series plugs are used to close the unused entries. They have an hexagonal head so that they can be opened with proper tools only.

TECHNICAL FEATURES

Material	Galvanized steel , Aluminium with low content of copper
IP rating	IP66/IP67
Ambient temperature range	-20°C +80°C - galvanized steel, with Silicone gasket -40°C +150°C - brass nk or aluminum, with Silicone gasket -50°C +150°C - stainless steel, with Silicone gasket
Approvals	CESI 02 ATEX 049 X IECEX CES 10.0001X EAC
Marking	II 2GD Ex d IIC Gb/Ex e IIC Gb Ex tb IIIC Db IP66/67
Thread	NPT, UNI-6125 (other threads upon request)

Dimensions PLG



Recessed hexagonal plugs - PLG

TYPE	CODE	SIZE	THREAD	MATERIAL	DIMENSIONS [mm]		WEIGHT [kg]
					AC	H	
PLG-1	C020213302001	1/2"	UNI-6125	GALV. STEEL	13	18	0.034
PLG-2	C020223302001	3/4"	UNI-6125	GALV. STEEL	17	18	0.054
PLG-3	C020233302001	1"	UNI-6125	GALV. STEEL	19	24	0.124
PLG-4	C020243102001	1" 1/4	UNI-6125	ALUMINIUM	24	24	0.061
PLG-5	C020253102001	1" 1/2	UNI-6125	ALUMINIUM	35	24	0.063
PLG-6	C020263102001	2"	UNI-6125	ALUMINIUM	36	24	0.109
PLG-7	C020273102001	2" 1/2	UNI-6125	ALUMINIUM	50	30	0.169
PLG-8	C020283102001	3"	UNI-6125	ALUMINIUM	50	30	0.242
PLG-1	C020212302001	1/2"	NPT	GALV. STEEL	13	18	0.034
PLG-2	C020222302001	3/4"	NPT	GALV. STEEL	17	18	0.054
PLG-3	C020232302001	1"	NPT	GALV. STEEL	19	24	0.124
PLG-4	C020242102001	1" 1/4	NPT	ALUMINIUM	24	24	0.061
PLG-5	C020252102001	1" 1/2	NPT	ALUMINIUM	35	24	0.063
PLG-6	C020262102001	2"	NPT	ALUMINIUM	36	24	0.109
PLG-7	C020272102001	2" 1/2	NPT	ALUMINIUM	50	30	0.169
PLG-8	C020282102001	3"	NPT	ALUMINIUM	50	30	0.242

FITTINGS

PLG Series - Resin exagonal plugs

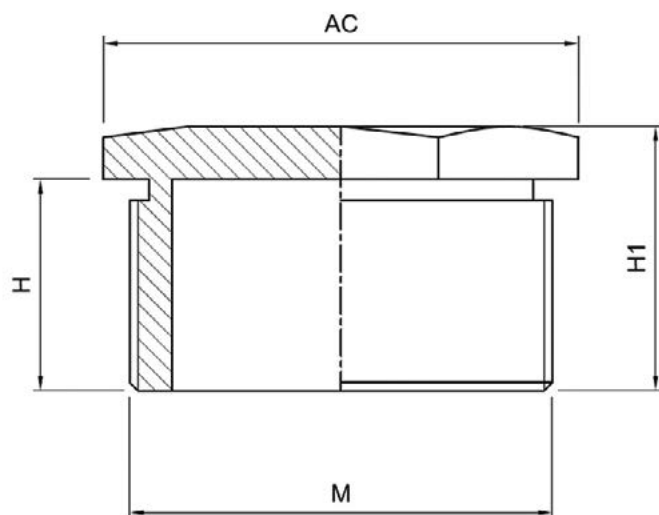


PLG series polyamide plugs are used to close the unused entries in case of Ex e/Ex i certified enclosures (for intrinsically safe circuits, plugs can be supplied blue coloured).

TECHNICAL FEATURES

Material	Black polyamide
IP rating	IP66/IP68
Ambient temperature range	-20°C to +80°C
Approvals	CESI 03 ATEX 305X
Marking	II 2 GD Ex e II - Ex i II Ex tD A21 IP66/68
Thread	Metric pitch 1,5, PG
Optional accessories	Locknut, Gasket (for selection please refer to page 178)

Dimensions PLG



Hexagonal head plugs - PLG

TYPE	CODE	THREAD	DIMENSIONS [mm]		
			H	H1	AC
PLG-01IXE	C020201502001	M16X1,5	12	16	19
PLG-1IXE	C020211502001	M20X1,5	15	20	23
PLG-2IXE	C020221502001	M25X1,5	15	20	28
PLG-3IXE	C020231502001	M32X1,5	15	23	36
PLG-4IXE	C020241502001	M40X1,5	18	27	45
PLG-5IXE	C020251502001	M50X1,5	18	27	55
PLG-6IXE	C020261502001	M63X1,5	18	27	69
PLG-2PXE	B170211040030	PG9			
PLG-3PXE	B170211140030	PG11			
PLG-4PXE	B170210040030	PG13,5			
PLG-5PXE	B170210140030	PG16			
PLG-6PXE	B170210240030	PG21			
PLG-7PXE	B170210340030	PG29			
PLG-8PXE	B170210540030	PG36			

FITTINGS

T Series - Exagonal plugs

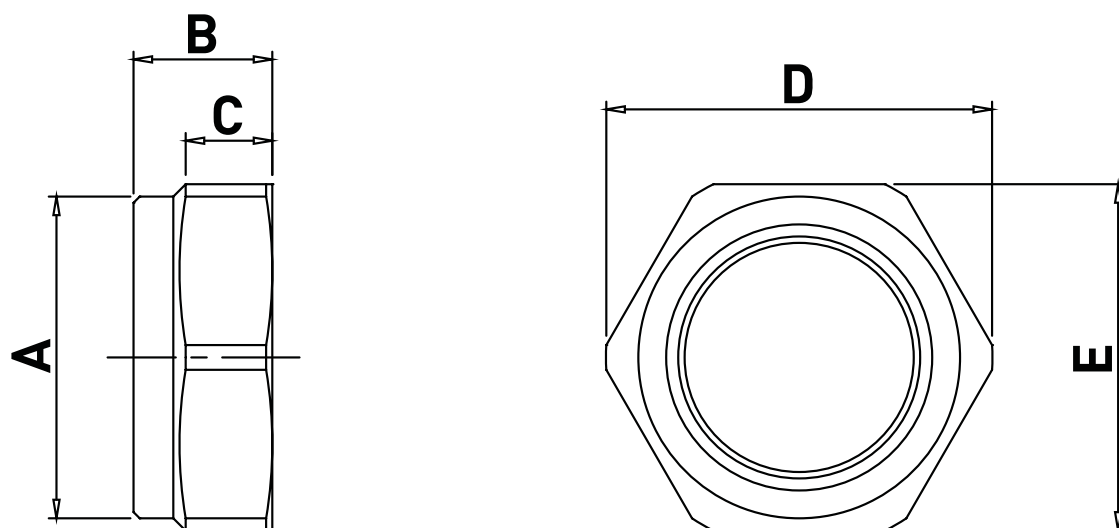


T.. series hexagonal plugs are used to close the unused entries, they have both Ex d and Ex e mode of protection.

TECHNICAL FEATURES

Material	Nickel chrome plated brass AISI 316 L Stainless steel (other materials upon request)
IP rating	IP66/IP68
Ambient temperature range	-40°C +100°C with EPDM or Nylon gaskets -65°C +220°C with Silicone gaskets -65°C +400°C without gaskets
Approvals	Certified 12ATEX 0089X IEC Ex INE 10.0014X EAC
Marking	II 2GD Ex d/e IIC Gb Ex tb IIIC Db IP66/68 I M2 Ex d/e I Mb
Thread	Metric pitch 1,5, NPT (other threads upon request)
Optional accessories	Locknut, Gasket

Dimensions T.. Series



T.. Series Hexagonal head plugs

TYPE	CODE		SIZE	THREAD	DIMENSIONS [mm]				
	BRASS	AISI 316 L			A	B	C	D	E
T20	C020111203001	C020111403001	M20 X 1,5	METRIC	23	27	16	26	24
T25	C020121203001	C020121403001	M25 X 1,5	METRIC	29	27	16	33	30
T32	C020131203001	C020131403001	M32 X 1,5	METRIC	35	27	16	40	36
T40	C020141203001	C020141403001	M40 X 1,5	METRIC	45	30	18	51	46
T50	C020151203001	C020151403001	M50 X 1,5	METRIC	55	30	18	62	56
T63	C020161203001	C020161403001	M63 X 1,5	METRIC	69	31	18	77	70
T75	C020171203001	C020171403001	M75 X 1,5	METRIC	81	32	18	90	82
T80	C020181203001	C020181403001	M80 X 1,5	METRIC	86	32	18	96	87
T1N	C020112203001	C020112403001	1/2"	NPT	26	30	19	30	27
T2N	C020122203001	C020122403001	3/4"	NPT	31	30	19	35	32
T3N	C020132203002	C020132403001	1"	NPT	37	36	25	42	38
T4N	C020142201001	C020142403001	1" 1/4	NPT	47	37	25	53	48
T5N	C020152203001	C020152403001	1" 1/2	NPT	55	37	25	62	56
T6N	C020162203001	UPON REQUEST	2"	NPT	66	38	25	74	67
T7N	UPON REQUEST	UPON REQUEST	2" 1/2	NPT	81	46	32	90	82
T8N	UPON REQUEST	UPON REQUEST	3"	NPT	95	46	36	106	96

FITTINGS

RE/REB Series - Reductions and adaptors

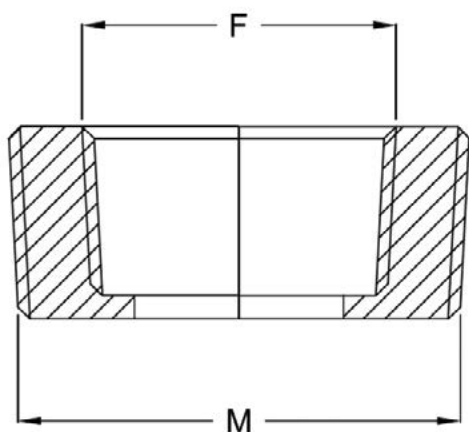


Reductions and adaptors are used to connect pipes of an electrical equipment and enclosures or different devices of an explosion-proof equipment with different entries sizes.

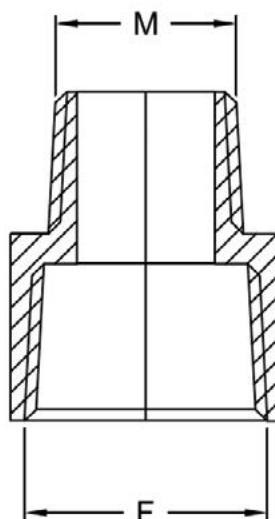
TECHNICAL FEATURES

Material	Galvanized steel, aluminium with low content of copper
IP rating	IP66/IP67
Ambient temperature range	-20°C +80°C - galvanized steel, with Silicone gasket -40°C +150°C - brass nk or aluminum, with Silicone gasket -50°C +150°C - stainless steel, with Silicone gasket
Approvals	CESI 02 ATEX 049 X IECEX CES 10.0001X EAC
Marking	II 2GD Ex d IIC Gb/Ex e IIC Gb Ex tb IIIC Db IP66/67
Thread	NPT, UNI-6125 (other threads upon request)

Dimensions RE



Dimensions REB



Reductions RE

TYPE	CODE		MATERIAL	MALE M	FEMALE F	WEIGHT [kg]
	UNI-6125	NPT				
RE-21	B171213213020	B171213212020	GALV. STEEL	3/4"	1/2"	0.038
RE-31	C054133130101	B171213312020	GALV. STEEL	1"	1/2"	0.089
RE-32	B171213323020	B171213322020	GALV. STEEL	1"	3/4"	0.058
RE-41	B171214413020	B171214412020	ALUMINIUM	1" 1/4	1/2"	0.064
RE-42	B171214423020	B171214422020	ALUMINIUM	1" 1/4	3/4"	0.053
RE-43	B171214433020	B171214432020	ALUMINIUM	1" 1/4	1"	0.034
RE-51	B171214513020	B171214512020	ALUMINIUM	1" 1/2	1/2"	0.092
RE-52	B171214523020	B171214522020	ALUMINIUM	1" 1/2	3/4"	0.079
RE-53	B171214533020	B171214532020	ALUMINIUM	1" 1/2	1"	0.061
RE-54	B171214543020	B171214542020	ALUMINIUM	1" 1/2	1" 1/4	0.029
RE-61	B171214613020	B171214612020	ALUMINIUM	2"	1/2"	0.153
RE-62	B171214623020	B171214622020	ALUMINIUM	2"	3/4"	0.148
RE-63	B171214633020	B171214632020	ALUMINIUM	2"	1"	0.124
RE-64	B171214643020	B171214642020	ALUMINIUM	2"	1" 1/4	0.095
RE-65	B171214653020	B171214652020	ALUMINIUM	2"	1" 1/2	0.068
RE-71	B171214713020	B171214712020	ALUMINIUM	2" 1/2	1/2"	0.244
RE-72	B171214723020	B171214722020	ALUMINIUM	2" 1/2	3/4"	0.243
RE-73	B171214733020	B171214732020	ALUMINIUM	2" 1/2	1"	0.272
RE-74	B171214743020	B171214742020	ALUMINIUM	2" 1/2	1" 1/4	0.238
RE-75	B171214753020	B171214752020	ALUMINIUM	2" 1/2	1" 1/2	0.198
RE-76	B171214763020	B171214762020	ALUMINIUM	2" 1/2	2"	0.136
RE-81	B171214813020	B171214812020	ALUMINIUM	3"	1/2"	0.416
RE-82	B171214823020	B171214822020	ALUMINIUM	3"	3/4"	0.355
RE-83	B171214833020	B171214832020	ALUMINIUM	3"	1"	0.323
RE-84	B171214843020	B171214842020	ALUMINIUM	3"	1" 1/4	0.302
RE-85	B171214853020	B171214852020	ALUMINIUM	3"	1" 1/2	0.318
RE-86	B171214863020	B171214862020	ALUMINIUM	3"	2"	0.249
RE-87	B171213873020	B171213872020	GALV. STEEL	3"	2" 1/2	0.578

Reductions RE

TYPE	CODE	THREAD	MATERIAL	MALE M	FEMALE F	WEIGHT [kg]
RE-32	B1709.000038	NPT	GALV. STEEL	1"	3/4"	0.058
RE-41	B1709.000039	NPT	ALUMINIUM	1" 1/4	1/2"	0.064
RE-42	B1709.000040	NPT	ALUMINIUM	1" 1/4	3/4"	0.053
RE-43	B1709.000041	NPT	ALUMINIUM	1" 1/4	1"	0.034
RE-51	B1709.000042	NPT	ALUMINIUM	1" 1/2	1/2"	0.092
RE-52	B1709.000043	NPT	ALUMINIUM	1" 1/2	3/4"	0.079
RE-53	B1709.000044	NPT	ALUMINIUM	1" 1/2	1"	0.061
RE-54	B1709.000045	NPT	ALUMINIUM	1" 1/2	1" 1/4	0.029
RE-61	B1709.000046	NPT	ALUMINIUM	2"	1/2"	0.153
RE-62	B1709.000047	NPT	ALUMINIUM	2"	3/4"	0.148
RE-63	B1709.000048	NPT	ALUMINIUM	2"	1"	0.124
RE-64	B1709.000049	NPT	ALUMINIUM	2"	1" 1/4	0.095
RE-65	B1709.000050	NPT	ALUMINIUM	2"	1" 1/2	0.068
RE-73	B1709.000051	NPT	ALUMINIUM	2" 1/2	1"	0.272
RE-75	B1709.000052	NPT	ALUMINIUM	2" 1/2	1" 1/2	0.198
RE-76	B1709.000053	NPT	ALUMINIUM	2" 1/2	2"	0.136
RE-83	B1709.000054	NPT	ALUMINIUM	3"	1"	0.323
RE-85	B1709.000055	NPT	ALUMINIUM	3"	1" 1/2	0.318
RE-86	B1709.000056	NPT	ALUMINIUM	3"	2"	0.249
RE-87	B1709.000057	NPT	GALV. STEEL	3"	2" 1/2	0.578

Adaptors REB

TYPE	CODE		MATERIAL	MALE M	FEMALE F	WEIGHT [kg]
	UNI-6125	NPT				
REB-21	B171223123020	B171223122020	GALV. STEEL	1/2"	3/4"	0.069
REB-31	B171223133020	B171223132020	GALV. STEEL	1/2"	1"	0.108
REB-32	B171223233020	B171223232020	GALV. STEEL	3/4"	1"	0.109
REB-41	B171223143020	B171223142020	ALUMINIUM	1/2"	1" 1/4	0.187
REB-42	B171223243020	B171223242020	ALUMINIUM	3/4"	1" 1/4	0.171
REB-43	B171223343020	B171223342020	ALUMINIUM	1"	1" 1/4	0.209
REB-51	B171223153020	B171223152020	ALUMINIUM	1/2"	1" 1/2	0.352
REB-52	B171223253020	B171223252020	ALUMINIUM	3/4"	1" 1/2	0.323
REB-53	B171223353020	B171223352020	ALUMINIUM	1"	1" 1/2	0.337
REB-54	B171223453020	B171223452020	ALUMINIUM	1" 1/4	1" 1/2	0.359
REB-61	B171223163020	B171223162020	ALUMINIUM	1/2"	2"	0.459
REB-62	B171223263020	B171223262020	ALUMINIUM	3/4"	2"	0.417
REB-63	B171223363020	B171223362020	ALUMINIUM	1"	2"	0.489
REB-64	B171223463020	B171223462020	ALUMINIUM	1" 1/4	2"	0.436
REB-65	B171223563020	B171223562020	ALUMINIUM	1" 1/2	2"	0.463
REB-71	B171223173020	B171223172020	ALUMINIUM	1/2"	2" 1/2	0.597
REB-72	B171223273020	B171223272020	ALUMINIUM	3/4"	2" 1/2	0.611
REB-73	B171223373020	B171223372020	ALUMINIUM	1"	2" 1/2	0.601
REB-74	B171223473020	B171223472020	ALUMINIUM	1" 1/4	2" 1/2	0.663
REB-75	B171223573020	B171223572020	ALUMINIUM	1" 1/2	2" 1/2	0.667
REB-76	B171223673020	B171223672020	ALUMINIUM	2"	2" 1/2	0.531
REB-81	B171223183020	B171223182020	ALUMINIUM	1/2"	3"	0.674
REB-82	B171223283020	B171223282020	ALUMINIUM	3/4"	3"	0.687
REB-83	B171223383020	B171223382020	ALUMINIUM	1"	3"	0.900
REB-84	B171223483020	B171223482020	ALUMINIUM	1" 1/4	3"	0.864
REB-85	B171223583020	B171223582020	ALUMINIUM	1" 1/2	3"	0.884
REB-86	B171223683020	B171223682020	ALUMINIUM	2"	3"	0.767
REB-87	B171223783020	B171223782020	GALV. STEEL	2" 1/2	3"	1.055

FITTINGS

A../F../M../R.. Series - Reductions and adaptors



Reductions and adaptors are used to connect pipes of an electrical equipment and enclosures or different devices of an explosion-proof equipment with different entries sizes.

TECHNICAL FEATURES

Material	Nickel chrome plated brass AISI 316 L Stainless steel
IP rating	IP66/IP68
Ambient temperature range	-40°C +100°C with EPDM or Nylon gaskets -65°C +220°C with Silicone gaskets -65°C +400°C without gaskets
Approvals	Certified 12ATEX 0089X IEC Ex INE 10.0014X EAC
Marking	II 2GD Ex d/e IIC Gb Ex tb IIIC Db IP66/68 I M2 Ex d/e I Mb
Thread	ISO METRIC pitch 1,5, NPT, UNI-6125 (other thread upon request)

Assembly diagram

B17
1
#
#
#
#
#
#
0
#
0
-
CERTIFICATE
2 - ATEX GROUP II 3 - IECEX GROUP II
-
2ND THREAD
0 - SIZE 0 (M16) 1 - SIZE 1 (M20, 1/2") 2 - SIZE 2 (M25, 3/4") 3 - SIZE 3 (M32, 1") 4 - SIZE 4 (M40, 1" 1/4) 5 - SIZE 5 (M50, 1" 1/2) 6 - SIZE 6 (M63, 2") 7 - SIZE 7 (M75, 2" 1/2) 8 - SIZE 8 (M80, 3")
2ND THREAD
1 - UNI 6125 2 - METRIC 3 - NPT 5 - PG
1ST THREAD
0 - SIZE 0 (M16) 1 - SIZE 1 (M20, 1/2") 2 - SIZE 2 (M25, 3/4") 3 - SIZE 3 (M32, 1") 4 - SIZE 4 (M40, 1" 1/4) 5 - SIZE 5 (M50, 1" 1/2) 6 - SIZE 6 (M63, 2") 7 - SIZE 7 (M75, 2" 1/2) 8 - SIZE 8 (M80, 3")
1ST THREAD
1 - UNI 6125 2 - METRIC 3 - NPT 5 - PG
TYPE
2 - MALE/MALE 3 - MALE/FEMALE 4 - FEMALE/FEMALE 5 - FEMALE/MALE
MATERIAL
0 - BNK BRASS NICKEL CHROME PLATED 1 - STAINLESS STEEL AISI316
-

PLUGS & SOCKET-OUTLETS



P.244

- MXBS - Socket outlet combination boxes..... 244
- FPR - Plugs - GRP 246

PLUGS & SOCKET-OUTLETS

MXBS - Socket outlet combination boxes



These socket outlet combination boxes, available in different materials and sizes, are designed for making electrical connections in hazardous areas. They can be equipped with 5 to 680A Marechal decontactors and/or 10 A Marechal multicontact connectors, offering from 12 to 37 contacts. They provide increased and intrinsic safety, allowing them to be used in zones 1 & 2 (gas), 21 & 22 (dust).

This comprehensive range is perfect for wet and corrosive environments, such as food and beverage or chemical industries, thanks to its specific and high quality materials. It is possible to mount both socket-outlets and multicontact connectors on the same box: DXN1, DXN3, DXN6, PXN12C, DXN25C, DXN37C, SPeX, DXA1 and PNCX.

TECHNICAL FEATURES

Material	Enclosure: Stainless steel AISI316L, GRP or Aluminium Socket: GRP and/or Aluminium
IP rating	IP66
Ambient temperature range	-55°C to +60°C
Approvals	LCIE 17 ATEX 3005 X (Standard) IECEX LCIE 17.0003X (marking upon request) EAC (available for certificate INERIS 06 ATEX 0015)
Marking	II 2 GD Ex eb IIC T(**) Gb or Ex ia or ib IIC T(**) Gb or Ex eb ia or eb ib IIC T(**) Gb Ex tb IIIC T(**) Db IP66 ** T6/T80°C, T5/T95°C, T4/T105°C, T127°C, T130°C
Frequency	50 and/or 60Hz in AC
Electrical parameters	Ex eb: U _{max} =1000 V AC/DC; I _{max} =376A* (wiring with terminals); I _{max} =680A* (direct wiring) Ex ia/Ex ib: U _i ≤750 V; I _i ≤400A* Ex eb ia/Ex eb ib: U _i ≤750 V; U _m ≤750 V; I _i ≤400A*
Standard certificate label	* The electrical parameters must be reduced, if relevant, according to the limitations of certified equipments used. Made by self adhesive UV and corrosion resistant polyester, approved by certified Laboratory.
Optional accessories	Drain/breather valve Traffolyte/Stainless steel certificate label Cable glands Terminals Plug



PLUGS & SOCKET-OUTLETS

FPR - Plugs - GRP



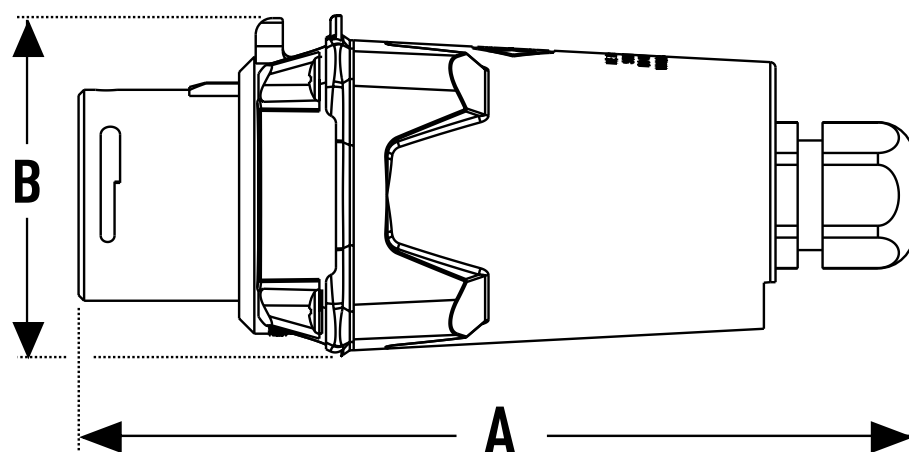
Plugs based on DXN technology, compatible with socket outlet & welding receptacles series: FSR, FSX, FSAL.

Made of self-extinguishing non-static glass reinforced polyester (PBT), DXN DECONTACTOR™ can withstand heavy duty, severe mechanical stress and presence chemical aggressive products .

TECHNICAL FEATURES

Material	GRP
IP rating	IP66
Ambient temperature range	-40°C to +60°C
Approvals	Certified 06ATEX0015 (standard) EAC (marking upon request)
Marking	II 2 GD EEx ed IIC T{**} EEx tD A21 IP66 T{**} ** T6/T85°C, T5/T100°C
Frequency	50Hz
Connection terminals cross section flexible cores/rigid cores	For 20 A = 4/6 sqmm For 32 A = 10/16 sqmm For 63 A = 16/25 sqmm
Standard certificate label	Made by self adhesive UV and corrosion resistant polyester, approved by certified Laboratory.
Standard accessories	N°1 polyamide cable gland for unarmoured cable
Optional accessories	Metallic cable gland

Dimensions FPR



Plugs FPR

TYPE	CODE	COLOUR CODE	VOLTAGE [V]	CONTACT ARRANGEMNT	CURRENT [A]	CABLE GLAND	DIMENSIONS [mm]	
							A	B
FPR 2-20-24-50	B040401125113		24	2P	20	M20 (8÷13)	127	51
	B040401125123					M25 (13÷19)		
FPR 3-20-110-50	B040401335113		110-130	1P+N+E	20	M20 (8÷13)	127	51
	B040401335123					M25 (13÷19)		
FPR 3-20-230-50	B040401435113		220-250	1P+N+E	20	M20 (8÷13)	127	51
	B040C10385002					M25 (13÷19)		
FPR 4-20-400-50	B040401545113		380-440	3P+E	20	M20 (8÷13)	127	51
	B040401545123					M25 (13÷19)		
FPR 5-20-400-50	B040401555113		380-440	3P+N+E	20	M20 (8÷13)	127	51
	B040401555123					M25 (13÷19)		
FPR 2-32-24-50	B040402125113		24	2P	32	M20 (8÷13)	128	68
	B040402125123					M25 (13÷19)		
	B040402125133					M32 (17÷25)		
FPR 3-32-110-50	B040402335113		110-130	1P+N+E	32	M20 (8÷13)	128	68
	B040402335123					M25 (13÷19)		
	B040402335133					M32 (17÷25)		
FPR 3-32-230-50	B040402435113		220-250	1P+N+E	32	M20 (8÷13)	128	68
	B040402435123					M25 (13÷19)		
	B040402435133					M32 (17÷25)		
FPR 4-32-400-50	B040402545113		380-440	3P+E	32	M20 (8÷13)	128	68
	B040402545123					M25 (13÷19)		
	B040402545133					M32 (17÷25)		
FPR 5-32-400-50	B040402555113		380-440	3P+N+E	32	M20 (8÷13)	128	68
	B040402555123					M25 (13÷19)		
	B040402555133					M32 (17÷25)		
FPR 2-63-24-50	B040403125123		24	2P	63	M25 (13÷19)	149	83
	B040403125133					M32 (17÷25)		
	B040403125143					M40 (24÷32)		
FPR 3-63-110-50	B040403335123		110-130	1P+N+E	63	M25 (13÷19)	149	83
	B040403335133					M32 (17÷25)		
	B040403335143					M40 (24÷32)		
FPR 3-63-230-50	B040403435123		220-250	1P+N+E	63	M25 (13÷19)	149	83
	B040403435133					M32 (17÷25)		
	B040403435143					M40 (24÷32)		
FPR 4-63-400-50	B040403545123		380-440	3P+E	63	M25 (13÷19)	149	83
	B040403545133					M32 (17÷25)		
	B040403545143					M40 (24÷32)		
FPR 5-63-400-50	B040403555123		380-440	3P+N+E	63	M25 (13÷19)	149	83
	B040403555133					M32 (17÷25)		
	B040403555143					M40 (24÷32)		



Fire point

Highly flammable
No smoking
No naked lights

Highly flammable
No smoking
No naked lights

Highly flammable
No smoking
No naked lights

FLAMBANK

FLAMBANK

FLAMBANK

Caution

Danger

Danger

Caution

Danger

MARECHAL ELECTRIC PRODUCTS



P.250

Explosion-proof products

- DXN/DX/PNCX/MULTICONTACTS/SPeX 250

P.252

Safe area products

- Industrial power supply/Signal & control/High current/High Temperature/
Self-ejecting systems/Boxes 252

EXPLOSION-PROOF PRODUCTS

DXN/DX/PNCX/MULTICONTACT/SPeX

The plugs and sockets as well as socket-outlet boxes and junction boxes in this range are meant for use in hazardous areas in compliance with the ATEX 2014/34/EU Directive and as per the IECEx in zones 1 and 2 (Gas) and zones 21 and 22 (Dust).

TECHNICAL FEATURES



DXN

DECONTACTOR™ - 20 A/32 A/63 A

II2 G D Ex de IIC Gb

- IP66/IP67 water- and dust-tight
- Integrated load-break switch
- Robust and compact design
- High performance poly casing
- Self-ejecting version available



DX

DECONTACTOR™ - 20 A/32 A/63 A/125 A/200 A

II2 G D Ex de IIC Gb

- IP65 water- and dust-tight
- Integrated load-break switch
- Locking in on/off positions by keying axis





PXN12C/DXN25C/ DXN37C

MULTICONTACT CONNECTORS - 10 A

II2 G D Ex e IIC

- From 12 to 37 contacts
- Locking in connected or disconnected position
- Corrosion-free metal casing



SPeX

SINGLE POLE POWER CONNECTOR 680 A

II2 G D Ex e IIC

- IP65/IP66 water- and dust-tight
- Electromechanical interlocking system
- Mechanic and visual keying
- High performance poly casing

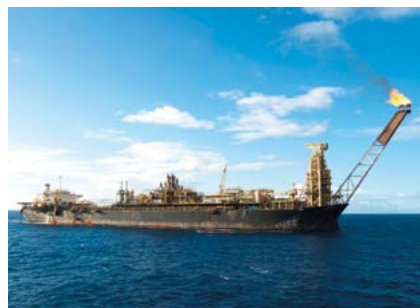


DXA1

DECONTACTOR™ MÉTAL Up to 20 A

II2 G D Ex de IIC, Ex tb IIIC

- Integrated load-break switch
- IP66/67 water and dust tight
- Corrosion-free metal casing
- Lockable in connected or disconnected position with optional lockout shaft
- Low temperature rating of -55°C



PNCX

COMPACT CONNECTOR - 5 A

II2 G D Ex e IIC, Ex tb IIIC

- Can be used in zones 1 and 2 (gas), 21 and 22 (dust)
- Compact and easy to use
- Standard IP66/IP67
- Long life, 2000 operations



INDUSTRIAL PRODUCTS

Industrial power supply/Signal & control/ High current/High Temperature/Self- ejecting systems/Boxes

This extensive and comprehensive product range covers all industrial applications. With sizes varying from 5 A to 700 A, it offers a wide range of options.

TECHNICAL FEATURES



INDUSTRIAL POWER SUPPLY

DECONTACTOR™ & CONNECTORS 16 A to 250 A

The DSN, DS and DN DECONTACTOR™ ranges cover applications from 20 A to 250 A making them the most versatile for industry. PNC and PN are compact 16 A and 30 A connectors design for all type of environment (humidity, corrosion, pollution ...) found in many industrial sectors. DB disconnectable motor switches combine the function of an AC-3 motor switch with the convenience of a plug and socket.



SIGNAL & CONTROL

MULTICONTACT CONNECTORS 5 to 37 contacts - 5 A to 30 A Low currents: 4 mA to 20 mA, 16 A

Our multicontact connectors Can hook up equipment to a power supply and transmit data. The silver-nickel alloy used for the butt contacts provides exceptional conductivity and longevity (can withstand several thousands of operations). The casing is available in GRP or metal to ensure excellent resistance – even in harsh conditions. And because the contacts are crimped, the connectors can be mounted and demounted quickly and easily.





HIGH CURRENT

PLUGS & SOCKETS AND CONNECTORS

Up to 750 A - 1 000 V

MARECHAL® high-current plugs offer a reliable solution for connections even under the harshest environments.



HIGH TEMPERATURE

DECONTACTOR™ & CONNECTORS

25 A to 125 A

This range of power connectors and signal & control connectors, provides excellent connection quality in high-temperature environments, up to 400 °C.



SELF-EJECTION

DECONTACTOR™ & RETTBOX®/ RETTBOX®-AIR

Mechanical ejection up to 150 A

Electromechanical ejection boxes up to 32 A - 13 bars

Self-ejecting systems avoid the need to disconnect electrical equipment, allowing a mobile device to be moved without unplugging it, or where equipment is located in high-risk areas.



BOXES

SOCKET-OUTLETS WITH PROTECTION UP TO 63 A TUNNEL APPLICATIONS BOXES

MARECHAL® offers a wide range of boxes for all industrial applications and a large choice of products designed specifically for power-supply in tunnels.



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NON CONTRACTUAL DOCUMENT AND PICTURES

All the indications appearing in this catalogue are indicative and could not constitute a commitment on our part.

we reserve the right to alter specifications of our products without any prior notice in our efforts to continuously improve our products features.

For your information, the most updated version is the one of our website **technor.com**.

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