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A company of MARECHAL ELECTRIC GROUP

**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 explosive 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

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

## CONTROL STATIONS

Increased safety // Flameproof

## JUNCTION BOXES

Increased safety // Flameproof

## FLAMEPROOF ENCLOSURES

Explosion group IIB + H<sub>2</sub> // Explosion group IIC

## EARTHING SYSTEMS

## VISUAL SIGNAL

## CABLE GLANDS & FITTINGS

Unarmoured cable // Armoured cable // Cable glands accessories // Fittings

## PLUGS AND SOCKET-OUTLETS

## MARECHAL ELECTRIC PRODUCTS

Explosion proof range // Industrial range



## 60 years of expertise and know-how

MARECHAL ELECTRIC GROUP (MEG) has been a major actor, over the past 60 years, for industrial electrical connections adapted to suit all areas of the industry: general manufacturing and process industry, premises and set-ups for the general service industry, all infrastructures as well as the specific oil and gas industry or those premises presenting a risk of explosion, referred-to as hazardous areas. The Group's know-how and technology permanently optimise the performance and life expectancy of MARECHAL® and TECHNOR® products. The certification of our ranges complies with the existing requirements and standards in the different markets and enables the Group to position itself as a leading supplier for any type of industry activity throughout the world.



### → INTERNATIONAL COVERAGE

Via its production sites, its commercial subsidiaries and a workforce of more than 440 employees, MEG has built up close relationships with its customers.

More than one third of the staff includes Sales Teams mainly dedicated to consulting and to support our customers with their projects and technical constraints.

- 10 production sites: France, Germany, Italy, Singapore, South-Africa, Australia and the United States.
- Daily commercial presence in more than 20 countries: a network of subsidiaries and Exclusive partnerships all around the globe.
- 5% of our turnover is invested in R&D every year.



5% of the turnover is ploughed back into R&D every year to imagine, design, develop and adapt our several ranges to suit the needs of our customers all around the globe. The MEG product portfolio reflects the needs of its customers: combination of safety and reliability, broad package of technical solutions in compliance with the world's different market requirements and regulations. The breakdown of the product portfolio articulates around the fields of industry, activity and per power and current ranges.

## 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

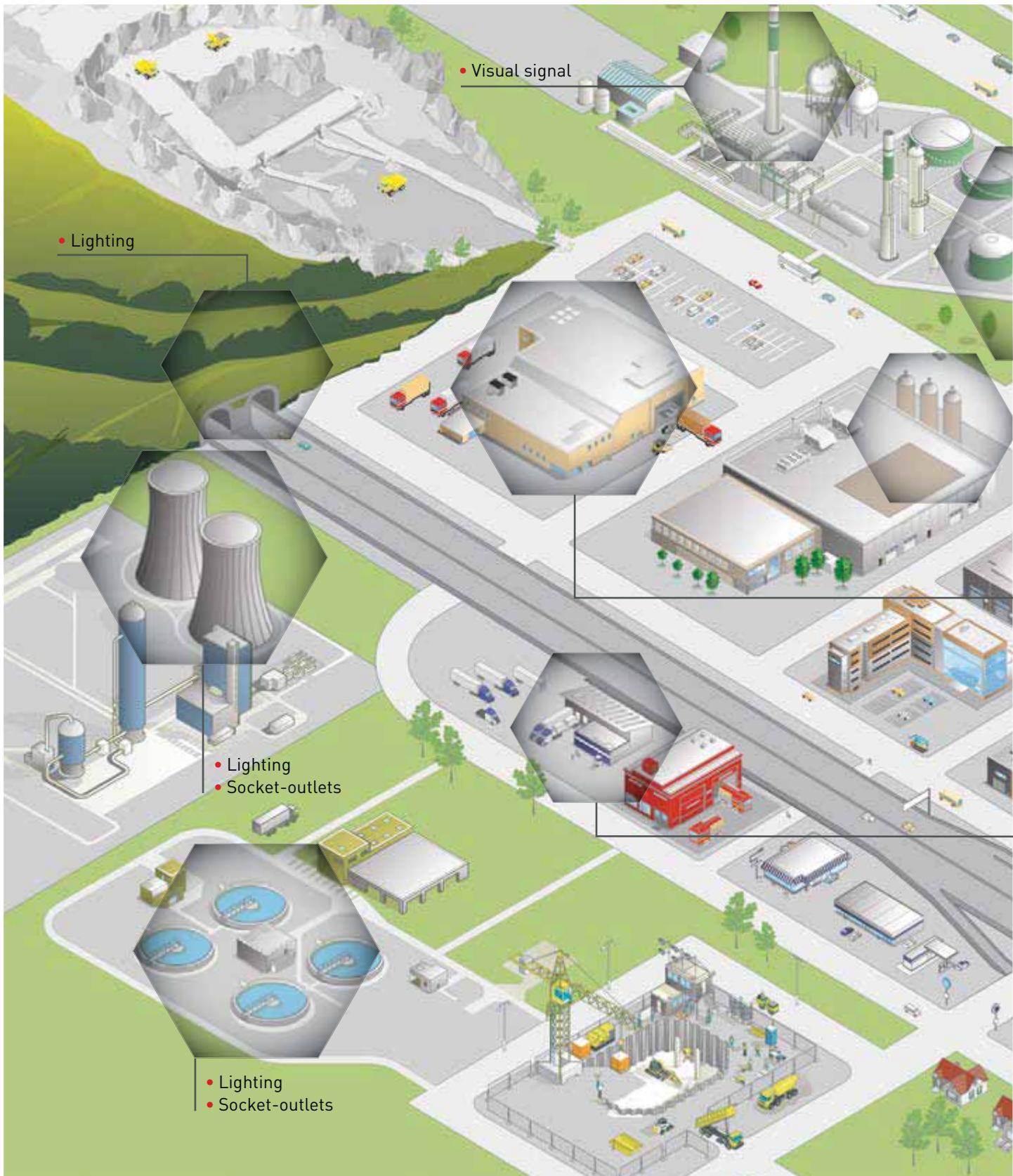
MEG is present on turnkey markets and the close partnerships developed with all market actors enables us to grow and to continuously develop our product portfolio. We are therefore constantly improving the performances and functions of our products to exceed our customers' expectations.

### → COMPLYING WITH INTERNATIONAL REGULATIONS

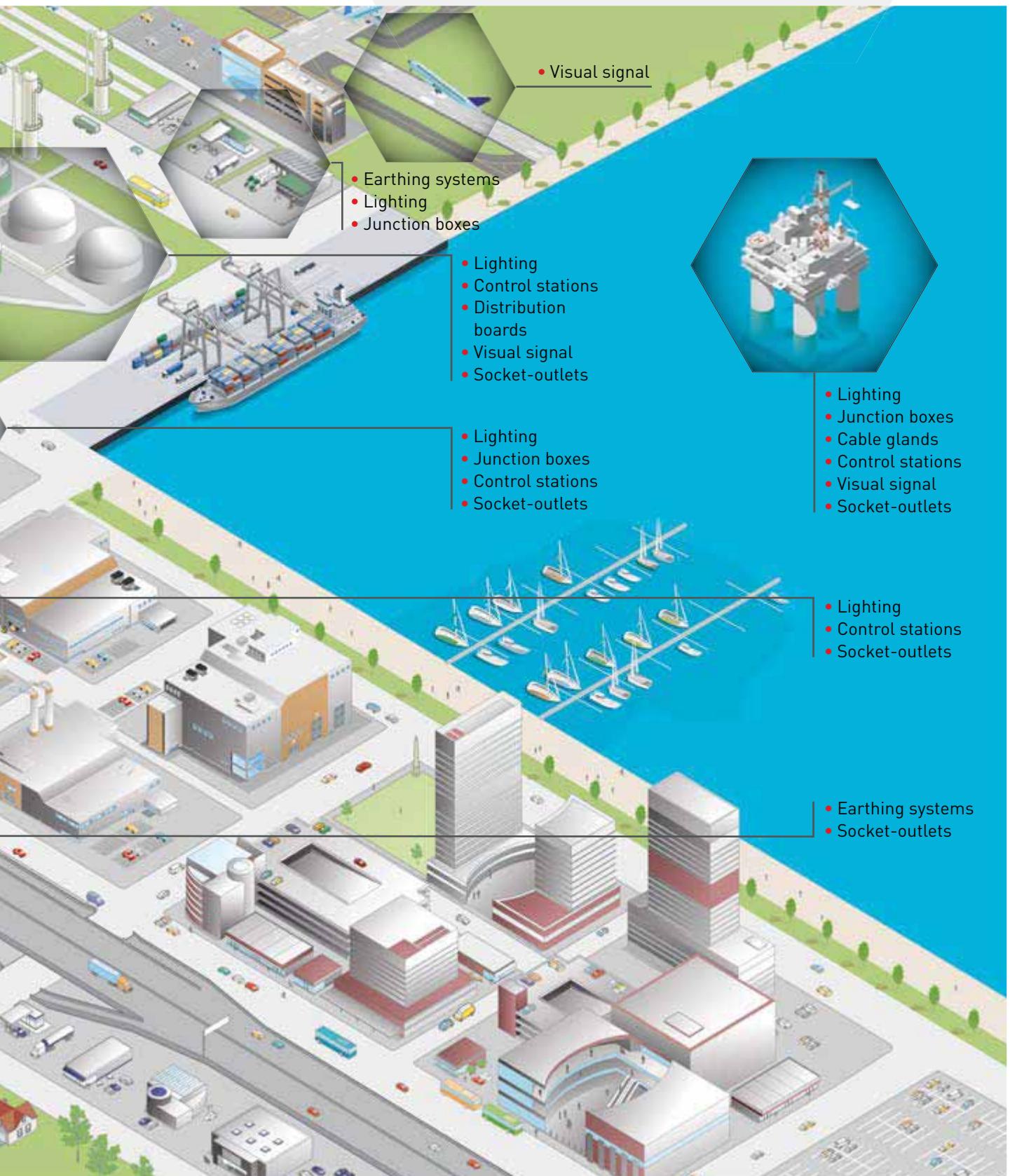


# TECHNOR APPLICATIONS FIELDS

## Safety of people, equipment & infrastructure



# in potentially explosive atmosphere



# Ex REGULATIONS

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# European ATEX Directive

## → EUROPEAN DIRECTIVE 94/9/EC

ATEX Directive 94/9/EC 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 devices, control and adjustments necessary for the safe operation of this equipment and protective systems. As a "new approach" directive, the 94/9/EC 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 responding 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 potentially at risk from 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 and 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 harmful 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 equipment only for use in explosive atmospheres.

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

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.

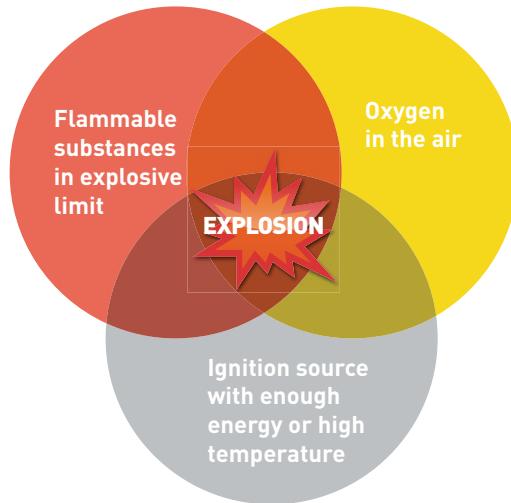
## → A POTENTIALLY EXPLOSIVE ATMOSPHERE

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
<b>Definition</b>	Location where an explosive atmosphere is permanently present for long periods or often.	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).
<b>Zoning for gas &amp; vapors (1999/92/EC)</b>	Zone 0	Zone 1	Zone 2
<b>Zoning for dust &amp; fiber (1999/92/EC)</b>	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 VAPORS 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 VAPORS CLASSIFICATION AND TEMPERATURE CLASSIFICATION

Gases are divided into

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

The IEC also defines different groups of gases and vapors.

The IEC and North American groups are viewed as fundamentally the same, see following table.

Gas group		Typical gas
En / IEC	North America	
IIC	A	Acetylene
IIC	B	Hydrogen
IIB	C	Ethylene, Ethyl ether, Cyclopropane, Butadene 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 <sup>3</sup> Ω.m
IIIC	conductive dust	≤ 500 µm	≤ 10 <sup>3</sup> 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 acide	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 cianide, 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

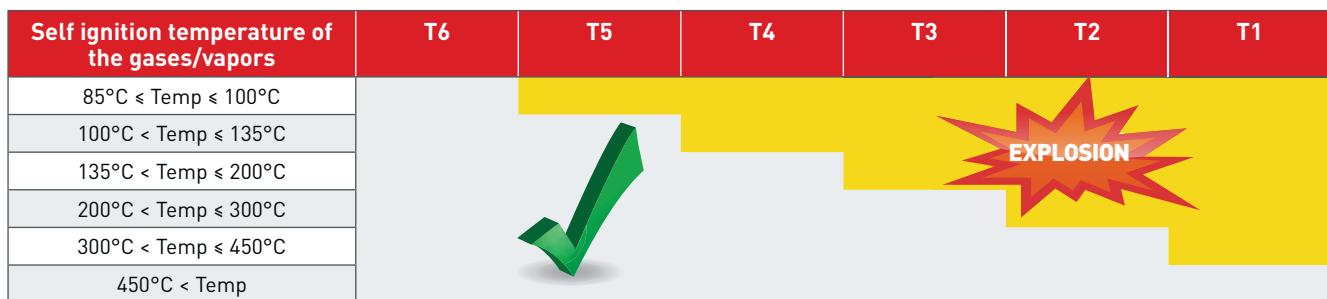
Gas/Vapors	Boiling temperature	Flash point	Self-ignition temperature	Ideal conditions for explosion LEL - UEL	Temperature class	Gas group
n- Octane	126°C	13°C	206°C	0.8%-6.5%	T3	IIA
Tetramethylene cyanide	295°C	93°C	550°C	1.7%-5%	T1	
Ethylene glycol monobutyl ether	171°C	61°C	238°C	1.1%-12.7%	T3	
Nonane (= 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-IIB-IIC	IIA-IIB-IIC	IIA-IIB-IIC
B	IIB-IIC	IIB-IIC	IIB-IIC
C	IIC	IIC	IIC

## → TEMPERATURE CLASSES



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

# Ex REGULATIONS

## Explanation of marking

Manufacturer identification:

- Name and trademark
- Address

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

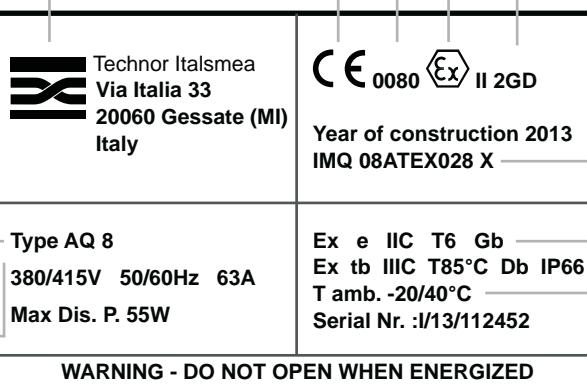
Mark for product in the scope of directive  
94/9/EC and in compliance with ERSH

Conformity to all  
relevant European  
directives

Directive 94/9/EC marking:  
**II**: Equipment group = surface industry  
**2**: Equipment category  
**GD**: Gas or Dust atmosphere

Product type

Electrical parameters for a  
safe use of equipment



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 (\*\*)

Safety WARNING

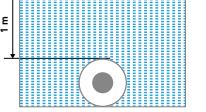
Ambient temperature  
range which shall be  
marked when different  
than -20°C / +40°C

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

ERSH : essential requirements for the safety and health

# 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	
<b>0</b>	No protection		<b>0</b>	No protection	
<b>1</b>		Protected against solid bodies larger than 50 mm (e.g. accidental contact with the hand)	<b>1</b>		Protected against vertically-falling drops of water (condensation)
<b>2</b>		Protected against solid bodies larger than 12.5 mm (e.g. finger of the hand)	<b>2</b>		Protected against drops of water falling at up to 15° from the vertical
<b>3</b>		Protected against solid bodies larger than 2.5 mm (tools, wires)	<b>3</b>		Protected against drops of rainwater at up to 60° from the vertical
<b>4</b>		Protection against solid bodies larger than 1mm (fine tools, small wires)	<b>4</b>		Protected against projections of water from all directions
<b>5</b>		Protected against dust (no harmful deposit)	<b>5</b>		Protected against jets of water from all directions
<b>6</b>		Completely protected	<b>6</b>		Completely protected against jets of water of similar force to heavy seas
			<b>7</b>		Protected against the effects of temporary immersion
			<b>8</b>		Protected against effects of prolonged immersion under specified conditions
			<b>9k</b>		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
<b>Shocks energy (in Joules)</b>	0	0,15	0,20	0,35	0,50	0,70	1	2	5	10	20
<b>Corresponds to</b>	0 g	200 g	200 g	200 g	200 g	200 g	500 g	500 g	1700 g	5 kg	5 kg
<b>Dropped to</b>	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 enclosure is an enclosure in which the parts which can ignite an explosive gas atmosphere are placed and which can withstand the pressure developed during an internal explosion of an explosive mixture, and which prevents the transmission of the explosion to the explosive gas atmosphere surrounding the enclosure.

A flameproof enclosure must be able to fulfil three criteria:

- Contain an internal explosion without permanent distortion.
- Guarantee that the explosion cannot be transmitted to the surrounding atmosphere.
- Exhibit a temperature at all points on the surface which is lower than the spontaneous ignition temperature of the surrounding gases or vapors.

There are 2 construction values which make impossible for an explosion to answer to the 3 criteria:

- the flange length (L)
- the gap (i)

These values depends of gas group and the authorized maximum gap depends on the flange length.

It is necessary to lubricate the thread and to ensure that at least 5 threads are engaged for metric thread and at least 3.5 threads are engaged 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 joint flanges lubricated. When the equipment is installed, the path must be lubricated to keep them 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 for GUB enclosure that the blocking device is well screwed.
- 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 are created 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 index of at least IP 54; it is therefore important to ensure that the weatherproof seal 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 well positioning 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 »

Equipment excepted Ex d enclosures have a combined protection type « d » and « e » technologies are the most commonly used.

Certain appliances such as power sockets, lampholders, etc, whose design creates arcs and sparks in normal operation, cannot be produced with protection mode « e » only.

- 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.

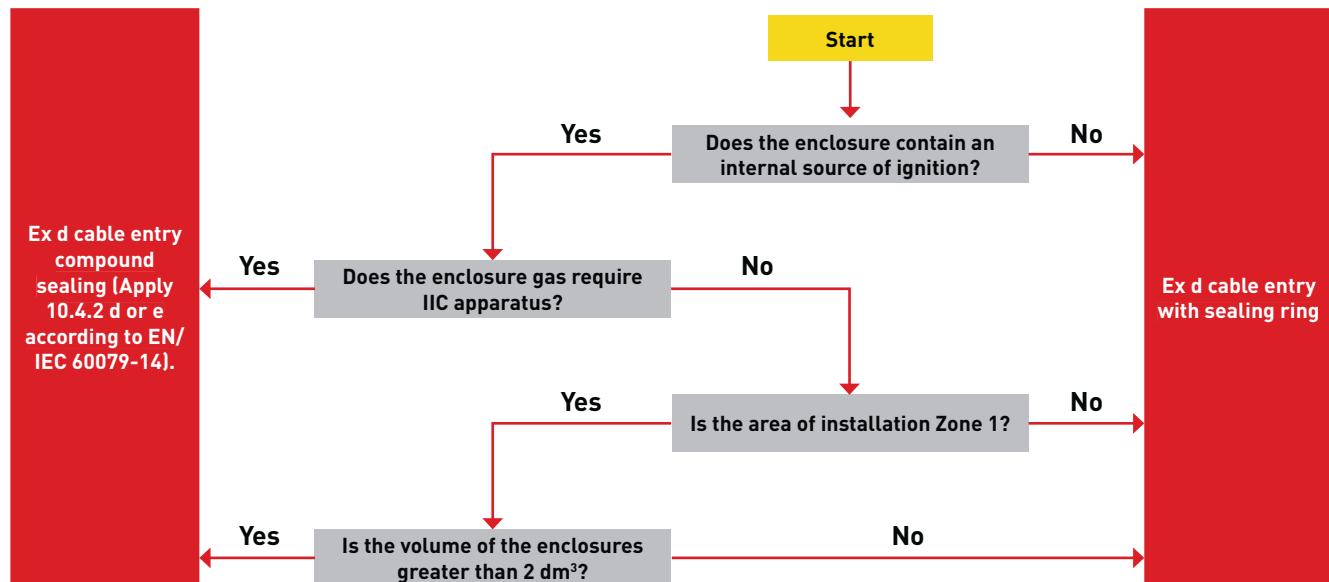
## Cables entries

The connection of cables to the electrical equipment shall maintain the explosion protection integrity of the relevant type of protection. Where the certificate for the cable gland has an 'X' marking, this cable gland shall be only used for fixed installations. Where the equipment is portable only 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
For use in Zones 1, 2	Increased safety		Ex e
For use in Zones 0, 1, 2, 20, 21, 22	Intrinsic safety		Ex i
For use in Zones 1, 2	Pressurisation		Ex p
For use in Zones 0, 1, 2, 20, 21, 22	Encapsulation		Ex m
For use in Zones 1, 2	Oil immersion		Ex o
For use in Zones 1, 2	Powder filling		Ex q
For use in Zone 2	"Non sparking"		Ex n
For use in Zones 20, 21, 22	Dust atmospheres		Ex t

# 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

# Ex REGULATIONS

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 luminaires: 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
<b>EQUIPMENT</b>				
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	●	●	●	
<b>INSTALLATION</b>				
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		●	●	●
<b>ENVIRONMENT</b>				
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 aluminium
- RMS 560 Series - Zones 1, 2, 21 & 22 - Stainless steel AISI 304
- RMS 550 Series - Zones 2 & 22 - Stainless steel AISI 304
- RMS 540 Series - Safe area - Stainless steel AISI 304
- G2X Fluo
- GRL Series - Fluorescent lighting fixtures



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## Wellglass

- EVde HID Series - Lighting fixtures for HID lamps - Copper free aluminium
- EVA HID Series - Lighting fixtures for HID lamps - Copper free aluminium
- EVcc HID Series - Lighting fixtures for HID lamps - Copper free aluminium
- EVde Series - Lighting fixtures for fluorescent compact/halogen lamps - Copper free aluminium
- EVA Series - Lighting fixtures for fluorescent compact/halogen lamps - Copper free aluminium
- EVCC Series - Lighting fixtures for fluorescent compact/halogen lamps - Copper free aluminium
- EVde-PT Series - Spotlight - Copper free aluminium
- EVcc-PT Series - Spotlight - Copper free aluminium
- EVA Series - Hand lamps for incandescent lamps - Copper free aluminium
- EVcc-PR Series - Tank lighting fixtures - Copper free aluminium

Spares & Accessories

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## LED lighting

- EVde-LED Series - Spotlight - Copper free aluminium
- EVcc-PR-LED Series - Tank lighting fixtures - Copper free aluminium
- EVA-LED Series - Hand lamps for incandescent lamps - Copper free aluminium
- FL-LED Series - Floodlight - Copper free aluminium
- G2X LED

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## Floodlights

- FL Series - Copper free aluminium or Stainless steel AISI 316L
- Spares & Accessories

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## Lamps/Spare parts

## FLUORESCENT LIGHTING

# EVF-P.. Series - Fluorescent lighting fixtures



EVF-P lighting fixtures are manufactured with an high resistance cylindrical polycarbonate lamp housing and with end cups made of corrosion resistant copper free aluminium. Polycarbonate lamp housing is a three layers-extrusion UV resistant able to grant the best protection against sun rays and related yellowing effect.

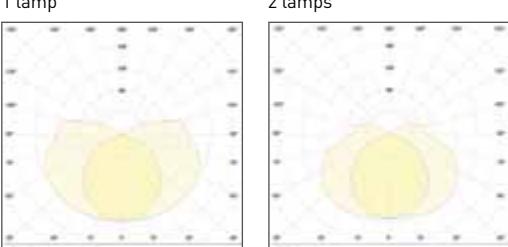
Circular shape grants the best possible "CX" factor, therefore it is less affected by wind-dusts, no flat surfaces to avoid pollution and dirty bunching.

Components and design make EVF-P lighting fixtures suitable for high corrosion environments.

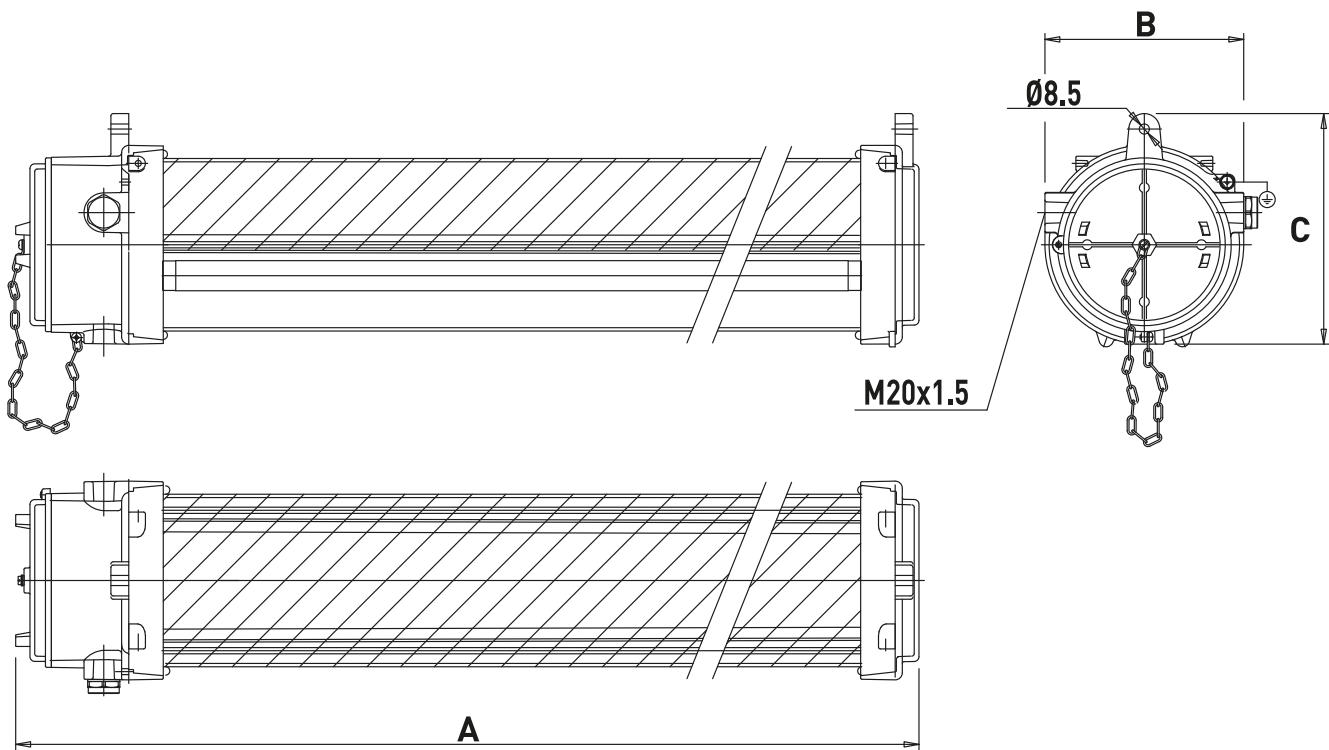
To increase further surface protection, upon request it is possible to apply an OFF-SHORE painting cycle suitable for marine environments.

All lighting fixtures are supplied ready for LOOP IN-LOOP OUT facility with 4sqmm cable.

## TECHNICAL FEATURES

<b>Material</b>	End cups in aluminium with low content of copper / Light housing in polycarbonate
<b>IP rating</b>	IP66
<b>Ambient temperature range</b>	-20°C to +55°C
<b>Approvals</b>	INERIS 02ATEX0039 (standard) / TR CU (marking upon request, ordering code to be required)
<b>Marking</b>	II 2 GD Ex e mb IIC T4 Gb (Normal service) / Ex d e mb IIC T4 Gb (Emergency service) EX de IIC T4 Gb (available upon request) Ex tb IIIC T85°C Db IP66
<b>Gaskets</b>	O-ring made of Nitrile Rubber (NBR)
<b>Surface treatment</b>	End cups painted by green colour polyurethane painting cycle RAL6003 (other colour available upon request)
<b>Entries</b>	N° 2 entries M20x1,5. One plugged-off by Ex d brass nickel chrome plated plug and relevant gasket.
<b>Hardware and screws</b>	AISI304 Stainless steel external hardware and screws
<b>Lamps</b>	EVF-P series lighting fixtures are suitable for two pins fluorescent lamps G13 socket Philips TL-D or equivalent (lamps excluded)
<b>Ballast</b>	High frequency electronic ballast conforming with EN 60079 – 18 and IEC 60079 – 18
<b>Rated operation voltage (UE)</b>	110 – 240 (normal service) - 230- 240 (Emergency service)
<b>Frequency</b>	0/50 – 60 Hz
<b>Power factor</b>	> 0,95
<b>Accessories available upon request</b>	AISI304 Pole mounting kit / AISI304 Ceiling / Wall mounting kit / AISI304 Suspension mounting kit / 3° bottom entry M20x1,5 / AISI304 protection guard / Mounting kit in stainless steel AISI316
<b>Operating principles</b>	Available EVF-P lighting fixtures for emergency service of one tube: - 90 minutes; guarantees 60' duration with constant flux (emergency lumen factor 17%) and 30' with decreasing flux - 120 minutes (emergency lumen factor 10%) - 180 minutes; constant flux (emergency lumen factor 9%)
<b>Photometric light curves</b>	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-Ex emb	A0301.500001	1X18	764	176	194	6.50
EVF-P 218-Ex emb	A0301.500002	2X18	764	176	194	6.50
EVF-P 136-Ex emb	A0301.500003	1X36	1374	176	194	8.50
EVF-P 236-Ex emb	A0301.500004	2X36	1374	176	194	8.50
EVF-P 158-Ex emb	A0301.500005	1X58	1680	176	194	9.50
EVF-P 258-Ex emb	A0301.500006	2X58	1680	176	194	10.50

### (EVF-P) Lighting fixtures for emergency service

TYPE	CODE	POWER [W]	EMERGENCY DURATION	DIMENSIONS [mm]			WEIGHT [kg]
				A	B	C	
EVF-P 118 LE-P-90 Ex demb	A0302.500007	1X18	90'	764	176	194	9.00
EVF-P 118 LE-P-120 EX demb	A0302.500008	1X18	120'	764	176	194	10.00
EVF-P 218 LE-P-90 Ex demb	A0302.500011	2X18	90'	764	176	194	9.00
EVF-P 218 LE-P-120 Ex demb	A0302.500012	2X18	120'	764	176	194	10.00
EVF-P 136 LE-P-90 Ex demb	A0302.500009	1X36	90'	1374	176	194	11.00
EVF-P 136 LE-P-120 Ex demb	A0302.500013	1X36	120'	1374	176	194	12.00
EVF-P 136 LE-P-180 Ex demb	A0302.500014	1X36	180'	1374	176	194	12.50
EVF-P 236 LE-P-90 Ex demb	A0302.500010	2X36	90'	1374	176	194	11.00
EVF-P 236 LE-P-120 Ex demb	A0302.500015	2X36	120'	1374	176	194	12.00
EVF-P 236 LE-P-180 Ex demb	A0302.500016	2X36	180'	1374	176	194	12.50
EVF-P 158 LE-P-90 Ex demb	A0302.500050	1X58	90'	1680	176	194	12.00
EVF-P 158 LE-P-120 Ex demb	A0302.500051	1X58	120'	1680	176	194	13.00
EVF-P 158 LE-P-180 Ex demb	A0302.500052	1X58	180'	1680	176	194	13.50
EVF-P 258 LE-P-90 Ex demb	A0302.500053	2X58	90'	1680	176	194	12.00
EVF-P 258 LE-P-120 Ex demb	A0302.500054	2X58	120'	1680	176	194	13.00
EVF-P 258 LE-P-180 Ex demb	A0302.500055	2X58	180'	1680	176	194	13.50

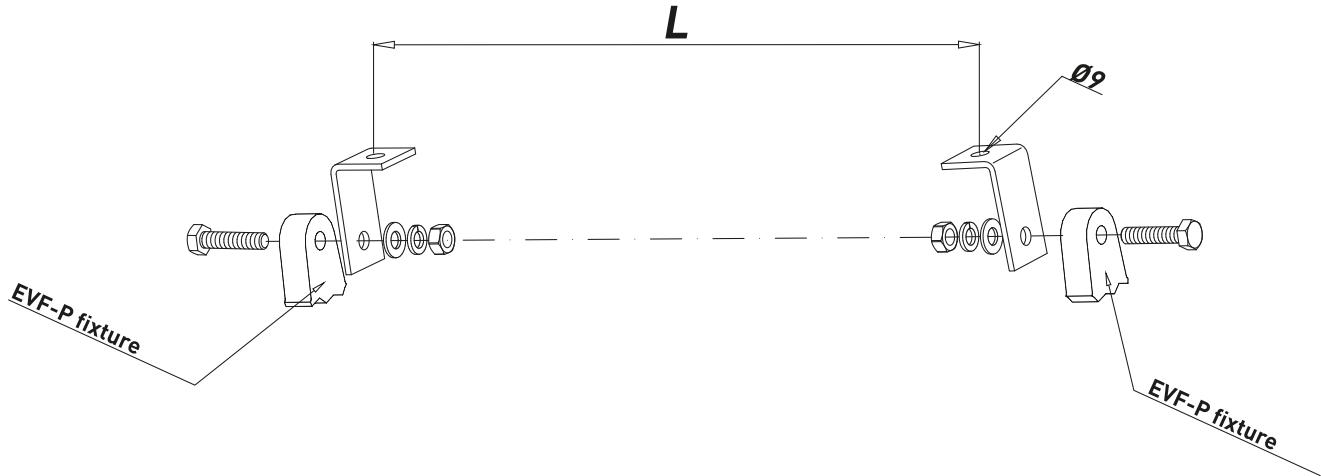
## FLUORESCENT LIGHTING

# EVF-P.. Series - Fluorescent lighting fixtures

## SPARES & ACCESSORIES

CODE	TYPE
A0A03.000002	P14 KIT - 1" 1/2 AISI304 POLE MOUNTING KIT
A0A03.000004	P14 KIT - 2" AISI304 POLE MOUNTING KIT
A0A03.000001	G3 KIT - AISI304 CEILING MOUNTING KIT
A0A03.000017	G4 KIT - AISI304 SUSPENSION MOUNTING KIT

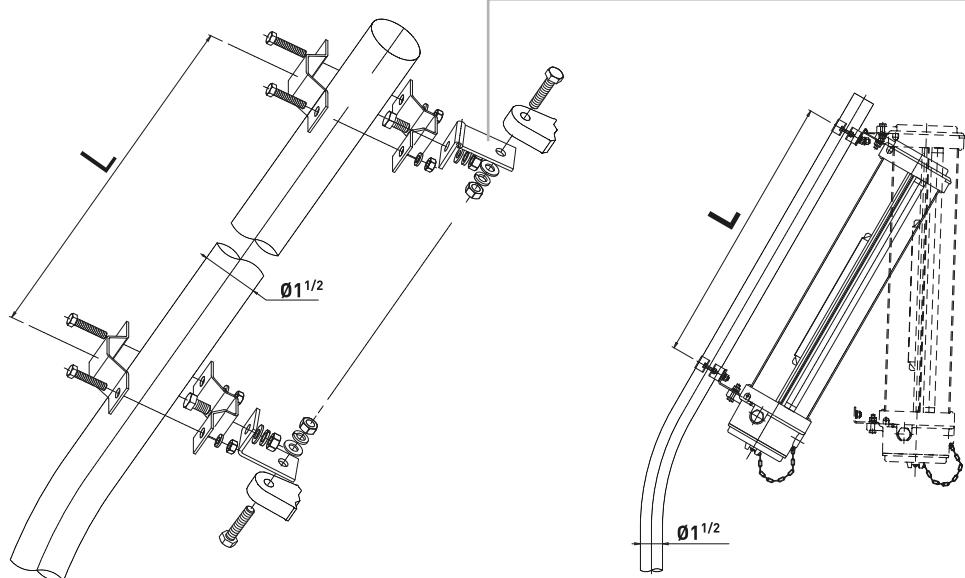
### G3 - Ceiling mounting kit



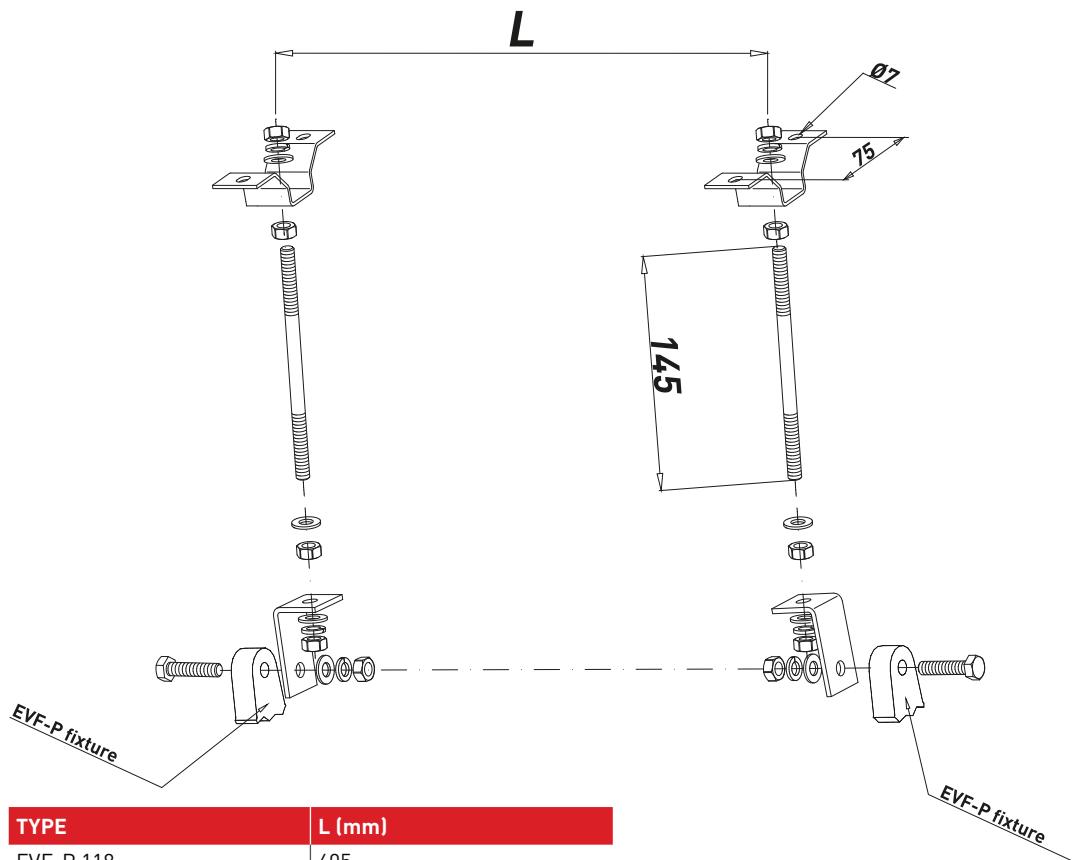
TYPE	L (mm)
EVF-P 118	605
EVF-P 218	605
EVF-P 136	1215
EVF-P 236	1215
EVF-P 158	1520
EVF-P 258	1520

**P14 - Pole mounting kit**

- Hinge for easy maintenance



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

**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

# RMS-560.. Series - Fluorescent lighting fixtures



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 stainless steel AISI304 and manufactured from a single sheet of steel with no invasive mounting holes, to minimize the risk of water ingress through the housing. Out of holes for power supply cable, whatever protected by a suitable cable gland (available upon request), there are no passing through holes between inside and outside of luminaire. Therefore during the time there is no risk of IP rating decrease as it would be possible where, for fixing devices, there are through holes and relevant gaskets. 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; only components and insulation of single core wires need some more care.

## TECHNICAL FEATURES

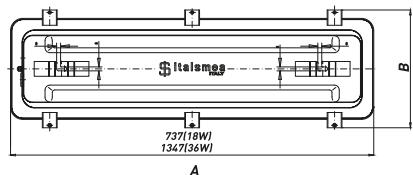
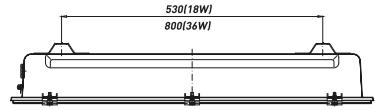
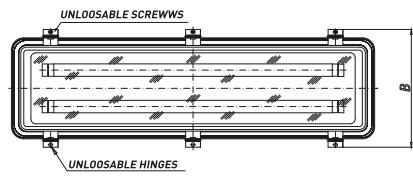
<b>Material</b>	AISI304 stainless steel, 0,8mm thickness and transparent part in tempered glass (AISI316L version available upon request)
<b>IP rating</b>	IP65 (IP66 on request)
<b>Ambient temperature range</b>	-20°C to +60°C
<b>Approvals</b>	INERIS 01ATEX0060 (standard) TR CU (marking upon request, ordering code to be required)
<b>Marking</b>	II 2 GD Ex de IIC T(**) Ex td A21 IP65 T(**) ** T6/T85°C, T5/T100°C, T4/T135°C
<b>Gaskets</b>	Special cross-section tightness gasket, silicon rubber made (closed cell), located in housing channel between body and window frame.
<b>Entries</b>	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.
<b>Hardware and screws</b>	AISI304 Stainless steel external hardware and screws
<b>Lamps</b>	RMS series lighting fixtures are suitable for two pins fluorescent lamps G13 socket Philips TL-D or equivalent (lamps excluded)
<b>Ballast</b>	High frequency electronic ballast conforming with EN 60079 – 15 and IEC 60079 – 15
<b>Rated operation voltage (UE)</b>	220-240 V
<b>Frequency</b>	50-60 Hz
<b>Power factor</b>	> 0,95
<b>Accessories available upon request</b>	Pole mounting kit / Ceiling mounting kit / Suspension mounting kit / Wall mounting kit 3°- 4° through holes opposite side
<b>Operating principles</b>	Available RMS.. lighting fixtures for emergency service of one tube: - 90 minutes ; guarantees 60' duration with constant flux (emergency lumen factor 18%) and 30' with decreasing flux
<b>Photometric light curves</b>	

## Dimensions RMS-560

RMS-560

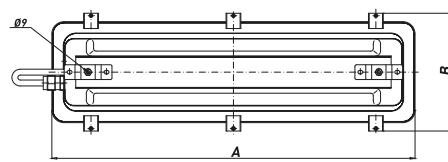
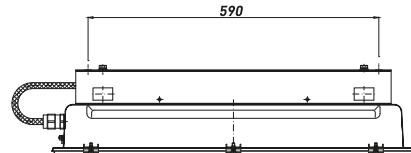
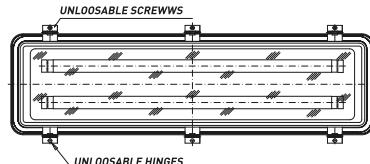
(18W)

(36W)



RMS-560 EM

(18W)



### (RMS-560) Lighting fixtures for normal service

TYPE	CODE	POWER [W]	TEMPERATURE CLASS	AMBIENT TEMPERATURE	DIMENSIONS [mm]			WEIGHT [kg]
					A	B	C	
RMS-560-03	A0201.311111	1X18	GAS T5 DUST T100°C	[−20°;+55°]**	737	239	123	5.60
RMS-560-04	A0201.311211	2X18	GAS T5 DUST T100°C	[−20°;+55°]**	737	239	123	5.70
RMS-560-01	A0201.311311	1X36	GAS T5 DUST T100°C	[−20°;+55°]**	1347	239	123	8.90
RMS-560-02	A0201.311411	2X36	GAS T5 DUST T100°C	[−20°;+55°]**	1347	239	123	9.10
RMS-560-03/MS*	A0201.312111	1X18	GAS T5 DUST T100°C	[−20°;+55°]**	737	239	123	5.65
RMS-560-04/MS*	A0201.312211	2X18	GAS T5 DUST T100°C	[−20°;+55°]**	737	239	123	5.75
RMS-560-01/MS*	A0201.312311	1X36	GAS T5 DUST T100°C	[−20°;+55°]**	1347	239	123	8.95
RMS-560-02/MS*	A0201.312411	2X36	GAS T5 DUST T100°C	[−20°;+55°]**	1347	239	123	9.15

\* With micro-switch

\*\* In case of maximum ambient temperature reach +60°C, temperature class changes into T4/T105°C (ordering code to be required).

In case of maximum ambient temperature reach +40°C, temperature class changes into T6/T85°C (ordering code to be required).

### (RMS-560) Lighting fixtures for emergency service

TYPE	CODE	POWER [W]	TEMPERATURE CLASS	AMBIENT TEMPERATURE	EMERGENCY DURATION	DIMENSIONS [mm]			WEIGHT [kg]
						A	B	C	
RMS-560-03 LE-P-90	A0202.313112	1X18	GAS T5 DUST T100°C	[−20°;+55°]*	90'	737	239	183	9.50
RMS-560-04 LE-P-90	A0202.313212	2X18	GAS T5 DUST T100°C	[−20°;+55°]*	90'	737	239	183	9.60
RMS-560-01 LE-P-90	A0202.313312	1X36	GAS T5 DUST T100°C	[−20°;+55°]*	90**	1347	239	123	14.10
RMS-560-02 LE-P-90	A0202.313412	2X36	GAS T5 DUST T100°C	[−20°;+55°]*	90**	1347	239	123	14.30

\* In case of maximum ambient temperature reach +60°C, temperature class changes into T4/T105°C (ordering code to be required).

In case of maximum ambient temperature reach +40°C, temperature class changes into T6/T85°C (ordering code to be required).

\*\* 120' version available upon request (ordering code to be required).

## FLUORESCENT LIGHTING

# RMS-550.. Series - Fluorescent lighting fixtures



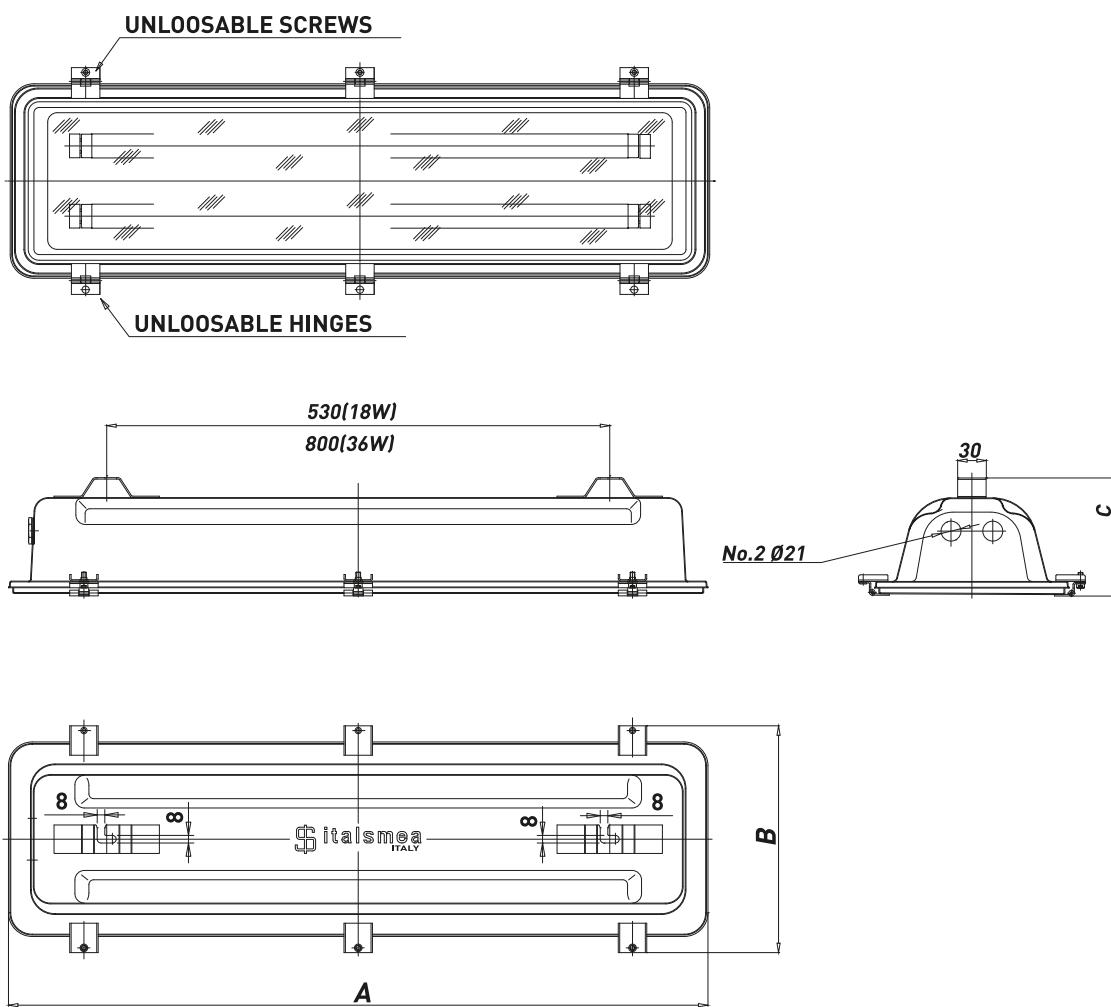
RMS.. series lighting fixtures are ideally suited for ON and OFF-SHORE applications and all kinds of industries where there is an high level of corrosion.

Both body and glass frame are made of stainless steel AISI304 and manufactured from a single sheet of steel with no invasive mounting holes, to minimize the risk of water ingress through the housing. Out of holes for power supply cable, whatever protected by a suitable cable gland (available upon request), there are no passing through holes between inside and outside of luminaire. Therefore during the time there is no risk of IP rating decrease as it would be possible where, for fixing devices, there are through holes and relevant gaskets. 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; only components and insulation of single core wires need some more care.

## TECHNICAL FEATURES

<b>Material</b>	AISI304 stainless steel, 0,8mm thickness and transparent part in tempered glass (AISI316L version available upon request)
<b>IP rating</b>	IP65 (IP66 on request)
<b>Ambient temperature range</b>	-20°C to +55°C
<b>Approvals</b>	INERIS 01ATEX3002X (standard) TR CU (marking upon request, ordering code to be required)
<b>Marking</b>	II 3 GD Ex nA II T(**) Ex TD A22 IP66 T(**)
<b>Gaskets</b>	Special cross-section tightness gasket, silicon rubber made (closed cell), located in housing channel between body and window frame.
<b>Entries</b>	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.
<b>Hardware and screws</b>	AISI304 Stainless steel external hardware and screws
<b>Lamps</b>	RMS series lighting fixtures are suitable for two pins fluorescent lamps G13 socket Philips TL-D or equivalent (lamps excluded)
<b>Ballast</b>	High frequency electronic ballast conforming with EN 60079 – 15 and IEC 60079 – 15
<b>Rated operation voltage (UE)</b>	220-240 V
<b>Frequency</b>	50-60 Hz
<b>Power factor</b>	> 0,95
<b>Accessories available upon request</b>	Pole mounting kit / Ceiling mounting kit / Suspension mounting kit / Wall mounting kit / 3°- 4° through holes opposite side
<b>Operating principles</b>	Available RMS.. lighting fixtures for emergency service of one tube: - 90 minutes; guarantees 60' duration with constant flux (emergency lumen factor 18%) and 30' with decreasing flux
<b>Photometric light curves</b>	A diagram illustrating the photometric light curve of the fixture, showing a circular area with concentric intensity contours, indicating the distribution of light output.

## Dimensions RMS-550



### (RMS-550) Lighting fixtures for normal service

TYPE	CODE	POWER [W]	TEMPERATURE CLASS	AMBIENT TEMPERATURE	DIMENSIONS [mm]			WEIGHT [kg]
					A	B	C	
RMS-550-03	A0201.211111	1X18	GAS T5 DUST T100°C	(-20°;+50°)**	737	239	123	5.10
RMS-550-04	A0201.211211	2X18	GAS T5 DUST T100°C	(-20°;+50°)**	737	239	123	5.20
RMS-550-01	A0201.211311	1X36	GAS T5 DUST T100°C	(-20°;+50°)**	1347	239	123	8.40
RMS-550-02	A0201.211411	2X36	GAS T5 DUST T100°C	(-20°;+50°)**	1347	239	123	8.60

\* In case of maximum ambient temperature reach +55°C, temperature class changes into T4/T105°C (ordering code to be required).

### (RMS-550) Lighting fixtures for emergency service

TYPE	CODE	POWER [W]	TEMPERATURE CLASS	AMBIENT TEMPERATURE	EMERGENCY DURATION	DIMENSIONS [mm]			WEIGHT [kg]
						A	B	C	
RMS-550-03 LE-P-90	A0202.213112	1X18	GAS T5 DUST T100°C	(-20°;+50°)**	90'	737	239	123	5.80
RMS-550-04 LE-P-90	A0202.213212	2X18	GAS T5 DUST T100°C	(-20°;+50°)**	90'	737	239	123	5.90
RMS-550-01 LE-P-90	A0202.213312	1X36	GAS T5 DUST T100°C	(-20°;+50°)**	90**	1347	239	123	9.10
RMS-550-02 LE-P-90	A0202.213412	2X36	GAS T5 DUST T100°C	(-20°;+50°)**	90**	1347	239	123	9.30

\* In case of maximum ambient temperature reach +55°C, temperature class changes into T4/T105°C (ordering code to be required).

\*\* 120' version available upon request (ordering code to be required).

## FLUORESCENT LIGHTING

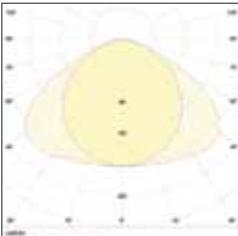
# RMS-540.. Series - Fluorescent lighting fixtures



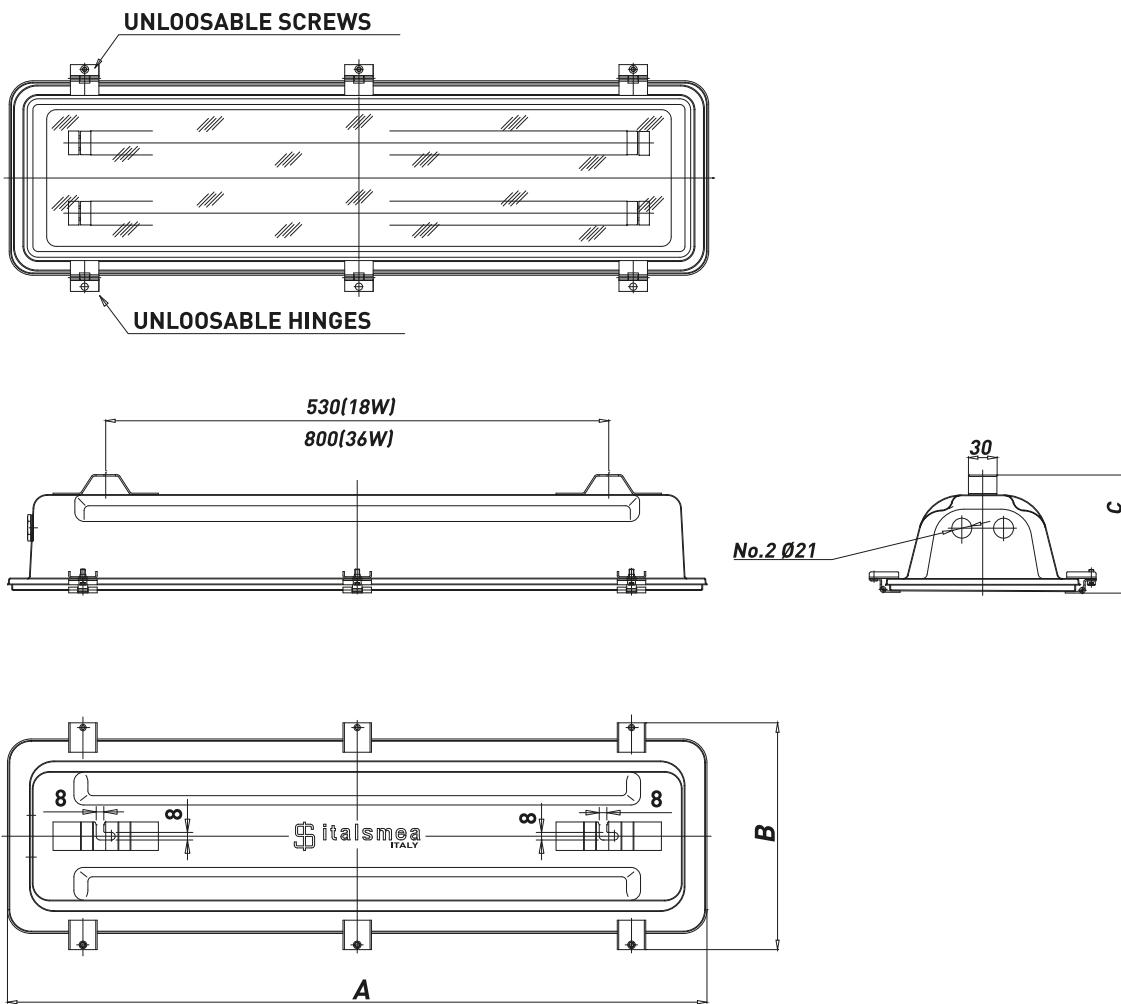
RMS.. series lighting fixtures are ideally suited for ON and OFF-SHORE applications and all kinds of industries where there is an high level of corrosion.

Both body and glass frame are made of stainless steel AISI304 and manufactured from a single sheet of steel with no invasive mounting holes, to minimize the risk of water ingress through the housing. Out of holes for power supply cable, whatever protected by a suitable cable gland (available upon request), there are no passing through holes between inside and outside of luminaire. Therefore during the time there is no risk of IP rating decrease as it would be possible where, for fixing devices, there are through holes and relevant gaskets. 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; only components and insulation of single core wires need some more care.

## TECHNICAL FEATURES

<b>Material</b>	AISI304 stainless steel, 0,8mm thickness and transparent part in tempered glass (AISI316L version available upon request)
<b>IP rating</b>	IP66
<b>Ambient temperature range</b>	-20°C to +60°C
<b>Standards</b>	Compliance with Electromagnetic Compatibility (EMC) according to European Directive 2004/108/CE
<b>Gaskets</b>	Special cross-section tightness gasket, silicon rubber made (closed cell), located in housing channel between body and window frame.
<b>Entries</b>	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.
<b>Hardware and screws</b>	AISI304 Stainless steel external hardware and screws
<b>Lamps</b>	RMS series lighting fixtures are suitable for two pins fluorescent lamps G13 socket Philips TL-D or equivalent (lamps excluded)
<b>Ballast</b>	Electromechanical ballast with starter and capacitor
<b>Rated operation voltage (UE)</b>	230 V
<b>Frequency</b>	50 Hz
<b>Power factor</b>	> 0,9
<b>Accessories available upon request</b>	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
<b>Operating principles</b>	Available RMS.. lighting fixtures for emergency service of one tube: - 90 minutes; guarantees 60' duration with constant flux (emergency lumen factor 18%) and 30' with decreasing flux
<b>Photometric light curves</b>	

## Dimensions RMS 540



### (RMS-540) Lighting fixtures for normal service

TYPE	CODE	POWER [W]	DIMENSIONS [mm]			WEIGHT [kg]
			A	B	C	
RMS-540-03	A0201.111112	1X18	737	239	123	5.10
RMS-540-04	A0201.111212	2X18	737	239	123	5.20
RMS-540-01	A0201.111312	1X36	1347	239	123	8.40
RMS-540-02	A0201.111412	2X36	1347	239	123	8.60

### (RMS-540) Lighting fixtures for emergency service

TYPE	CODE	POWER [W]	AMBIENT TEMPERATURE	EMERGENCY DURATION	DIMENSIONS [mm]			WEIGHT [kg]
					A	B	C	
RMS-540-03 LE-P-90	A0202.113112	1X18	(-20°;+60°)	737	239	123	5.80	5.80
RMS-540-04 LE-P-90	A0202.113212	1X18	(-20°;+60°)	737	239	123	5.90	5.90
RMS-540-01 LE-P-90	A0202.113312	1X36	(-20°;+60°)	1347	239	123	9.10	9.10
RMS-540-02 LE-P-90	A0202.113412	2X36	(-20°;+60°)	1347	239	123	9.30	9.30

# FLUORESCENT LIGHTING

## G2X Fluo

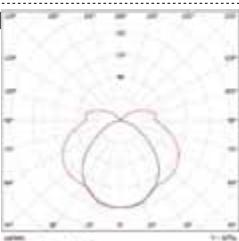
Luminaires G2X are suited for hazardous areas of industrial plants and space included in Zone 2 and 22.



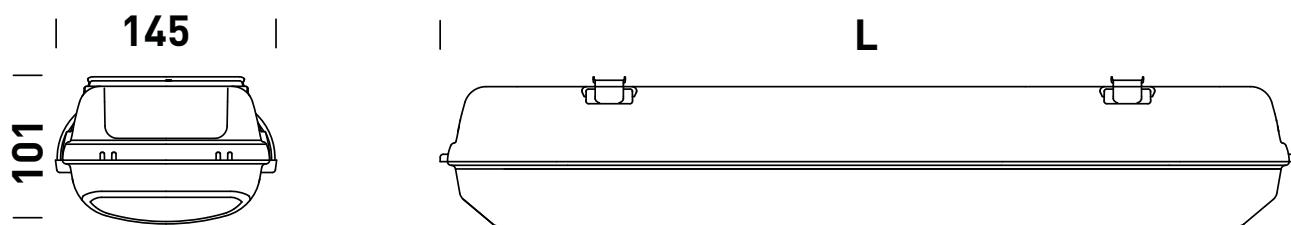
The advantages of this luminaires series:

- 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

<b>Material</b>	GRP + 2 gear tray holders in white lacquered steel plate Transparent diffuser in PC with UV protection and high impact resistance
<b>IP rating</b>	IP66
<b>Ambient temperature range</b>	-20°C to +40°C
<b>Approvals</b>	OBAC 13 CZ/ATEX 0163
<b>Marking</b>	II 3 G Ex nA IIC T6 Gc II 3 D Ex tc IIIC T85°C Dc IP66
<b>Standards</b>	EN 60079-0, EN 60079-15, EN 60079-31
<b>Zones</b>	Zone 2 , 22
<b>Gaskets</b>	Gasket in polyurethane (to obtain IP66 rating)
<b>Entries</b>	N° 2 entries M20 on each side
<b>Hardware and screws</b>	Fixing springs and closing clips in stainless steel
<b>Lamps</b>	T8 lamps , with power 18W , 36W, 58W T5, with a power 14W, 24W,28W, 35W, 49W,54W,80W
<b>Ballast</b>	Electronic
<b>Rated operation voltage (UE)</b>	230 V AC/DC 50-60[0]Hz, 110V (by performances)
<b>Frequency</b>	50-60 Hz
<b>Standard accessories</b>	Polyamide ATEX cable gland M20x1,5 or M25x1,5 IP66
<b>Maximum number of terminals</b>	3x2,5mm <sup>2</sup>
<b>Colour</b>	GRP housing in graphite black ( RAL 9011) , gray (RAL 7035) , yellow (RAL 1003)
<b>Options</b>	Emergency kit 1h or 3h
<b>Note</b>	

## Dimensions G2X FLUO



### G2X Fluo

COD	ORDERING	DIMENSIONS	POWER [W]	WEIGHT [KG]	POWER SUPPLY
A1101.100002	G2X 2-118 E PC INOX	665X145X101	1 X 18	3,3	
A1101.100001	G2X 2-136 E PC INOX	1282X145X101	1 X 36	3,8	
A1101.100004	G2X 2-158 E PC INOX	1578X145X101	1 X 58	5	
A1101.100003	G2X 218 E PC INOX	665X145X101	2 X 18	3,3	
A1101.100000	G2X 236 E PC INOX	1282X145X101	2 X 36	3,8	
A1101.100005	G2X 258 E PC INOX	1578X145X101	2 X 58	5	
A1102.000000	G2X 236 E EB1H PC INOX	1578X145X101	2 X 36	4,385	Electronic 230V AC/DC
A1102.000003	G2X 236 E EB3H PC INOX	1578X145X101	2 X 36	4,385	
A1102.000001	G2X 258 E EB1H PC INOX	1578X145X101	2 X 58	4,385	
A1102.000004	G2X 258 E EB3H PC INOX	1578X145X101	2 X 58	4,385	

# FLUORESCENT LIGHTING

## GRL Series - Fluorescent lighting fixtures

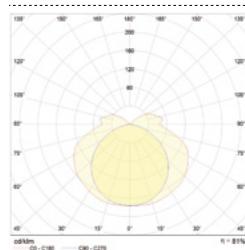


GRL – Glassfiber Reinforced Lighting series for fluorescent bi-pin tubes are normally used in hazardous areas of industrial plants, chemical and petrochemical ones in particular.

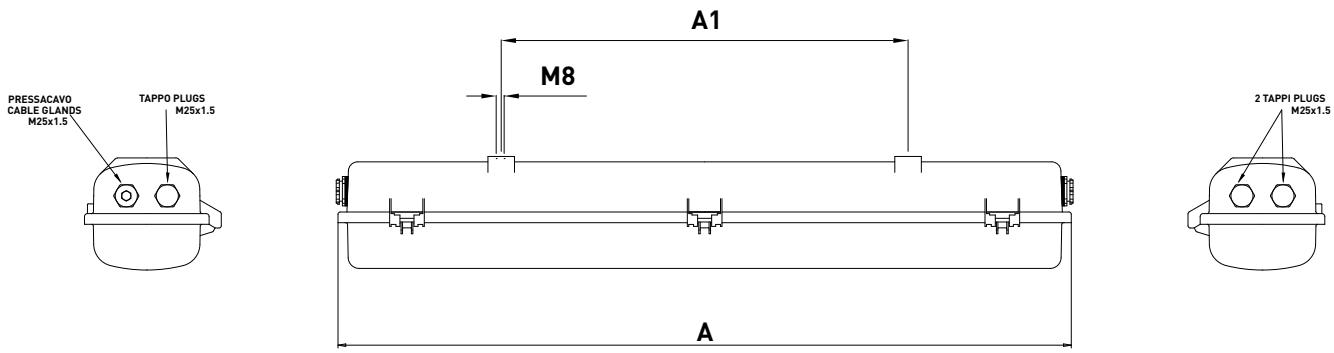
- Resistance to salt water corrosion
- Low costs maintenance
- Bright lighting
- Ideal to illuminate homogeneously settings

## TECHNICAL FEATURES

<b>Material</b>	Body in antistatic GRP (glass reinforced polyester) black colour. V0 (UL94) guaranteed self-extinguishing and UV resistant transparent polycarbonate cup. Internal frame in extruded aluminum. White internal reflector in PVC coated aluminum.
<b>IP rating</b>	IP66
<b>Ambient temperature range</b>	-20°C to +55°C (battery in separate housing) -40°C to +55°C (normal operation) -20°C to +50°C (emergency operation)
<b>Approvals</b>	CESI 15ATEX015 IECEx CES 15.0007
<b>Marking</b>	Ex de IIC T4 Gb Ex de mb IIC T4 Gb Ex tb IIC T70°C/T80°C Db IP66
<b>Gaskets</b>	Silicon rubber
<b>Entries</b>	Body complete of four M25x1,5 Ø through holes (two on both sides) for cable entry, three complete of metallic M25 plugs and the other one with resin cable gland M25X1,5
<b>Hardware and screws</b>	Screws and accessories in stainless steel AISI 316L
<b>Lamps</b>	1 or 2 fluorescent tubes T8 with G13 socket
<b>Ballast</b>	Electronic
<b>Rated operation voltage (UE)</b>	110 - 240 V
<b>Frequency</b>	50/60 Hz
<b>Power factor</b>	>0,96
<b>Accessories available upon request</b>	Lamp Installation kit (pole, ceiling and suspension mountings)
<b>Operating principles</b>	Available GRL lighting fixture for emergency with one tube: -90 minutes with a luminous flux of about 250 lm (18W) -120 minutes with a luminous flux of about 800 lm (36W-High Flux)



## Dimensions GRL



### GRL Series - Fluorescent lighting fixtures for emergency service

TYPE	CODE	POWER [W]	EMERGENCY DURATION	DIMENSIONS [mm]				WEIGHT [kg]
				A	A1	B	C	
GRL-118 LE-P90	A 1002.000005	1X18	90'	785	420	185	155	6,80
GRL-218 LE-P90	A 1002.000006	2X18	90'	785	420	185	155	7,00
GRL-136 LE-P90	A 1002.000007	1X36	90'	1370	720	185	155	10,00
GRL-236 LE-P90	A 1002.000008	2X36	90'	1370	720	185	155	10,20
GRL-118 LE-P120	A 1002.000001	1X18	120'	785	420	185	155	6,80
GRL-218 LE-P120	A 1002.000002	2X18	120'	785	420	185	155	7,00
GRL-136 LE-P120	A 1002.000003	1X36	120'	1370	720	185	155	10,00
GRL-236 LE-P120	A 1002.000004	2X36	120'	1370	720	185	155	10,20

### GRL Series - Fluorescent lighting fixtures for normal service

TYPE	CODE	POWER [W]	DIMENSIONS [mm]				WEIGHT [kg]
			A	A1	B	C	
GRL-118	A 1001.000001	1X18	785	420	185	155	5,30
GRL-218	A 1001.000002	2X18	785	420	185	155	5,30
GRL-136	A 1001.000003	1X36	1370	720	185	155	7,90
GRL-236	A 1001.000004	2X36	1370	720	185	155	7,90

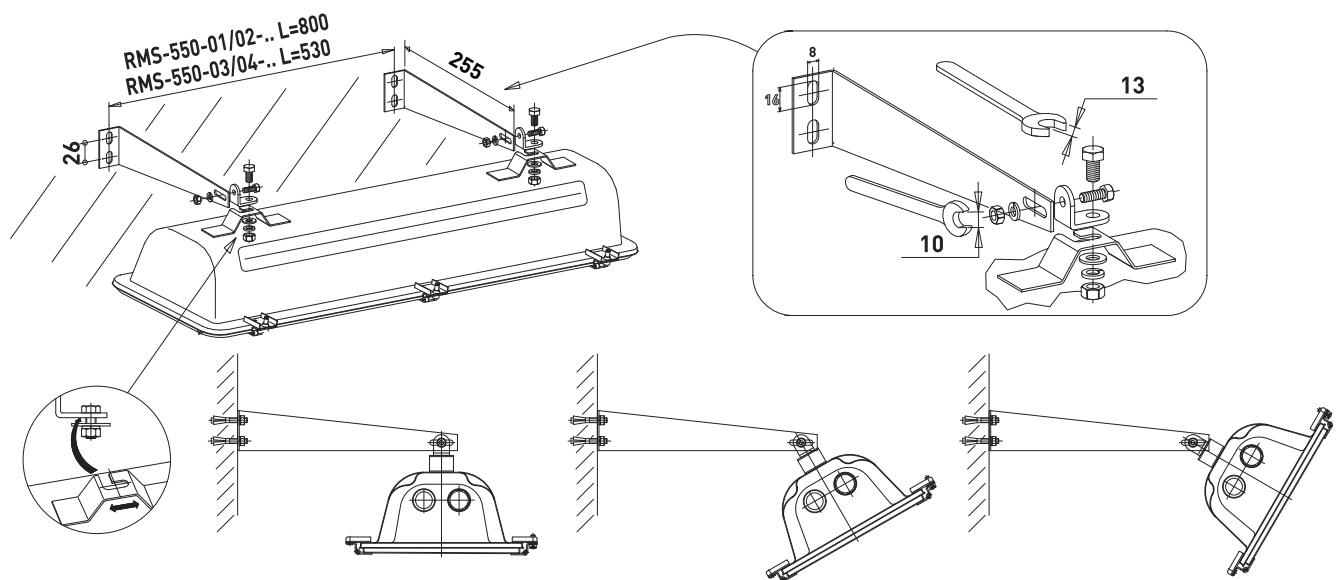
## FLUORESCENT LIGHTING

# RMS 560 Series / RMS 550 Series / RMS 540 Series

## SPARES & ACCESSORIES

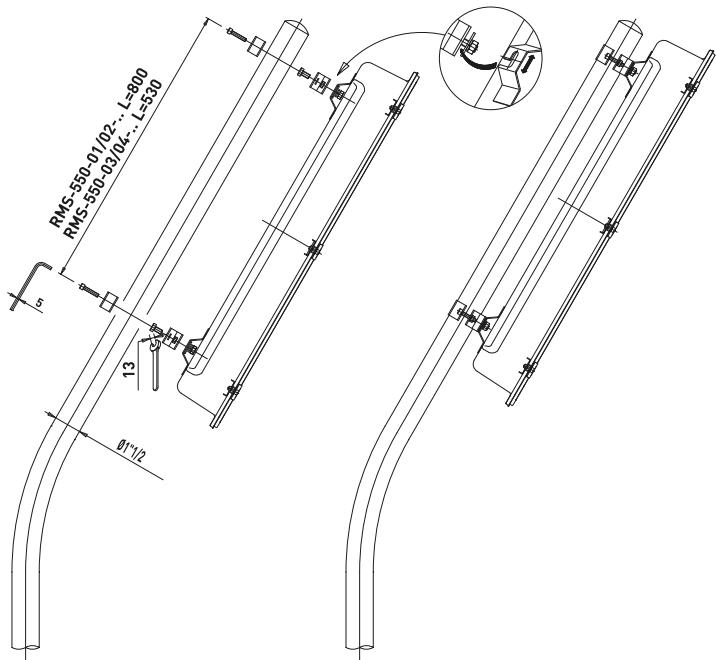
CODE	TYPE	Fixture
AOA02.053070	H1 - AISI304 WALL MOUNTING KIT FOR RMS-540-550-560	RMS-540/550/560
AOA02.053071	P12 - 1" 1/2 AISI304 POLE MOUNTING KIT FOR RMS-540-550-560	RMS-540/550/560
AOA02.053075	G1 - AISI304 SUSPENSION MOUNTING KIT FOR RMS-540-550-560	RMS-540/550/560
AOA02.053076	H3 - AISI304 WALL MOUNTING KIT FOR RMS-560 EMERGENCY 18W	RMS-560 LE-P 18W
AOA02.053074	P13 - 1" 1/2 AISI304 POLE MOUNTING KIT FOR RMS-560 EMERGENCY 18W	RMS-560 LE-P 18W
AOA02.053072	G2 - AISI304 SUSPENSION MOUNTING KIT FOR RMS-560 EMERGENCY 18W	RMS-560 LE-P 18W

### H1 - Wall mounting kit

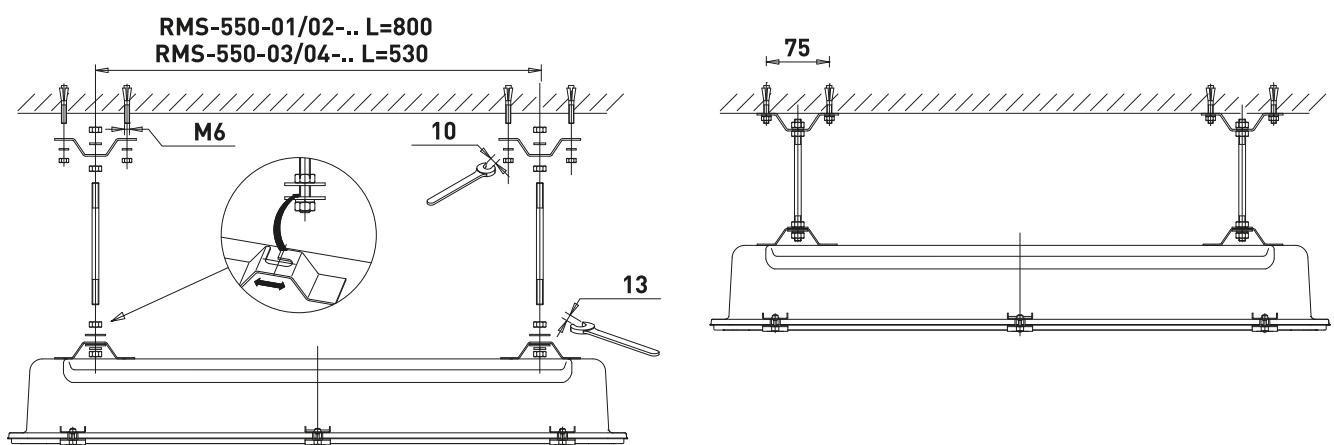


Note: Expansion bolts (for concrete) or bolts (for steel frame) are not included in our kit.

## P12 - Pole mounting kit

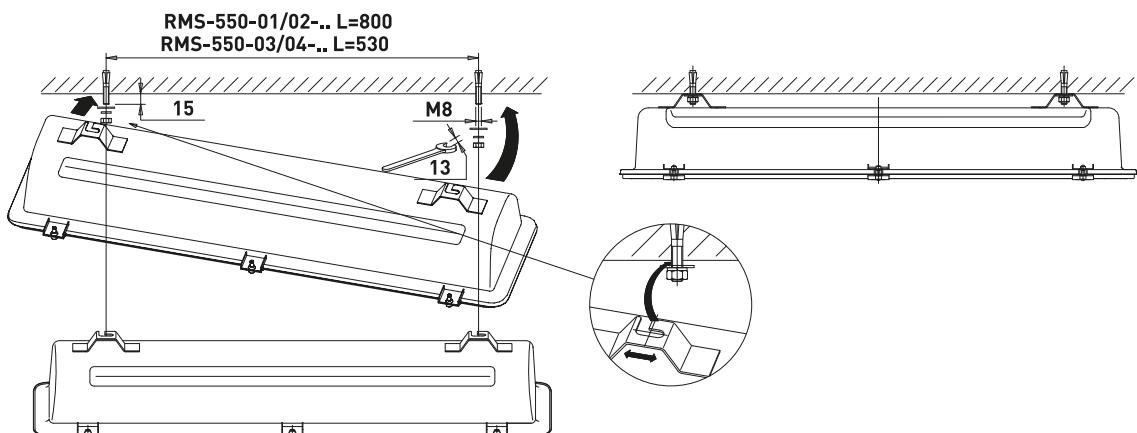


## G1 - Suspension mounting kit



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.

# WELLGLASS

# EV.. Series - H.I.D. well glass lighting fixture



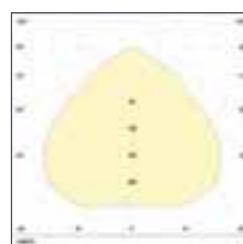
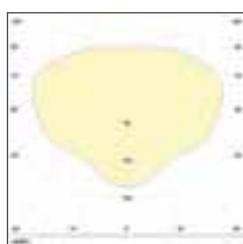
EV.. series well glass lighting fixtures are suitable for hazardous areas of industrial plants for lighting of indoor and outdoor structures, for which narrow or wide beam lighting is needed.

These luminaries have been designed to house built-in control gears for high intensity discharge lamps, mercury vapour, metal halide and high pressure sodium; light source can be driven where required by way of suitable reflectors.

EV.. H.I.D. luminaries, provided in a wide range of wattage, have an excellent corrosion resistance due to the body made of aluminium with low content of copper and tempered glass of lamp compartment.

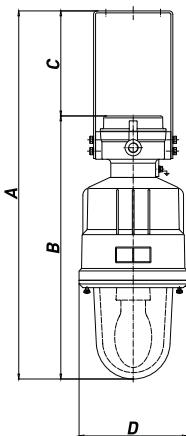
## TECHNICAL FEATURES

<b>Material</b>	Aluminium with low content of copper	
<b>IP rating</b>	IP66	
<b>Ambient temperature range</b>	-52°C to +60°C	
<b>Approvals</b>	INERIS 01ATEX0019X, IECEx INE 15.0031X, CoC TR CU 012/2011 (marking upon request, ordering code to be required)	
<b>Marking</b>	<b>ATEX</b> 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	<b>IEC-Ex</b> Ex db IIC T(**) Gb Ex db e IIC T(**) Gb Ex tb IIIC T(**) Db IP66
<b>Gaskets</b>	O-ring made of Nitrile Rubber (NBR)	
<b>Surface treatment</b>	Green colour polyurethane painting cycle RAL6003 (other colour available upon request)	
<b>Entries</b>	N° 2 entries M25x1,5 (EVde and EVCC version) / N° 1 entry M25x1,5 (EVA version) / (plugs and cable glands excluded)	
<b>Hardware and screws</b>	AISI304 Stainless steel external hardware and screws	
<b>Lamps</b>	Included	
<b>Ballast</b>	Electromechanical ballast	
<b>Rated operation voltage (UE)</b>	230 V (standard) / 220 V, 240 V, 250 V, 277 V (upon request)	
<b>Frequency</b>	50 Hz (standard) / 60 Hz (upon request)	
<b>Accessories available upon request</b>	Protection guard / Reflector / Pole mounting kit (EVde version)	
<b>Options upon request</b>	<p>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.</p> <p>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)</p>	
<b>Photometric light curves</b>	EV..2/3/4 with REV reflector	EV..-4/5 with REVD reflector

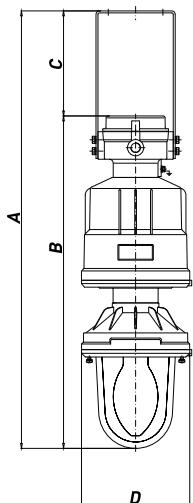


## Dimensions EVde (H.I.D.)

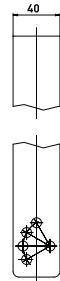
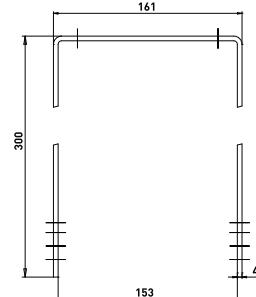
TAB. A-1



TAB. A-2



Bracket details



• Adjustable fixing facility

Bracket fixing details

## 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.

### (NA) High pressure sodium

TYPE	CODE	LAMP [W]	WEIGHT [Kg]	TEMP. CLASS	VOLTAGE	AMBIENT TEMPERATURE	DIMENSIONS [mm]				DRAWING
							A	B	C	D	
EVDE-2/NA-B 50	A0401.021010	50**	6.00	T3/T4*	230V 50HZ	[-52°;+60°]	680	466	214	162	TAB. A-1
EVDE-3/NA-B 50	A0401.031010	50	6.00	T3/T4*	230V 50HZ	[-52°;+60°]	686	472	214	194	TAB. A-1
EVDE-2/NA-B 70	A0401.022010	70**	6.00	T3/T4*	230V 50HZ	[-52°;+60°]	680	466	214	162	TAB. A-1
EVDE-3/NA-B 70	A0401.032010	70	7.40	T3/T4*	230V 50HZ	[-52°;+60°]	686	472	214	194	TAB. A-1
EVDE-4/NA-B 100	A0401.043010	100	7.60	T3/T4*	230V 50HZ	[-52°;+60°]	748	533	214	220	TAB. A-1
EVDE-4/NA-B 150	A0401.044010	150	8.40	T3/T4*	230V 50HZ	[-52°;+60°]	748	533	214	220	TAB. A-1
EVDE-4/NA-B-250	A0401.045010	250	15.00	T3	230V 50HZ	[-52°;+60°]	890	676	214	220	TAB. A-2
EVDE-5/NA-B 250	A0401.055010	250	16.70	T3/T4*	230V 50HZ	[-52°;+60°]	970	756	214	281	TAB. A-2
EVDE-5/NA-B 400	A0401.056010	400	18.00	T3	230V 50HZ	[-52°;+60°]	970	756	214	281	TAB. A-2

\* T4 applicable up to +55°C, except for light/bulb oriented on top (topward). In case of ambient temperature over +55°C, temperature class changes into T3 (ordering code to be required).

\*\*Lamp with built-in glow discharge ignitor.

### (HG) Mercury vapour

TYPE	CODE	LAMP [W]	WEIGHT [Kg]	TEMP. CLASS	VOLTAGE	AMBIENT TEMPERATURE	DIMENSIONS [mm]				DRAWING
							A	B	C	D	
EVDE-2/HG-B 50	A0402.021010	50	6.00	T3/T4*	230V 50HZ	[-52°;+60°]	680	466	214	162	TAB. A-1
EVDE-2/HG-B 80	A0402.022010	80	6.00	T3/T4*	230V 50HZ	[-52°;+60°]	680	466	214	162	TAB. A-1
EVDE-3/HG-B 125	A0402.033010	125	7.40	T3/T4*	230V 50HZ	[-52°;+40°]**	686	472	214	194	TAB. A-1
EVDE-4/HG-B 250	A0402.044010	250	14.80	T3	230V 50HZ	[-52°;+60°]	890	676	214	220	TAB. A-2
EVDE-5/HG-B 250	A0402.054010	250	15.70	T3/T4*	230V 50HZ	[-52°;+60°]	970	756	214	281	TAB. A-2
EVDE-5/HG-B 400	A0402.055010	400	16.50	T3	230V 50HZ	[-52°;+60°]	970	756	214	281	TAB. A-2

\* T4 applicable up to +55°C, except for light/bulb oriented on top (topward). In case of ambient temperature over +55°C, temperature class changes into T3 (ordering code to be required).

\*\*Maximum admissible ambient temperature. Below -20°C, the mercury vapour light can be used, providing they are switched on 24 hours a day.

### (IM) Metal halide

TYPE	CODE	LAMP [W]	WEIGHT [Kg]	TEMP. CLASS	VOLTAGE	AMBIENT TEMPERATURE	DIMENSIONS [mm]				DRAWING
							A	B	C	D	
EVDE-3/IM-B 70	A0403.031010	70	7.40	T3/T4*	230V 50HZ	{-52°;+60°}	686	472	214	194	TAB. A-1
EVDE-4/IM-B 100	A0403.042010	100	7.60	T3/T4*	230V 50HZ	{-52°;+60°}	748	533	214	220	TAB. A-1
EVDE-4/IM-B 150	A0403.043010	150	8.40	T3/T4*	230V 50HZ	{-52°;+60°}	748	533	214	220	TAB. A-1
EVDE-4/IM-B 250	A0403.044010	250	15.00	T3	230V 50HZ	{-52°;+60°}	890	676	214	220	TAB. A-2
EVDE-5/IM-B 250	A0403.054010	250	16.70	T3/T4*	230V 50HZ	{-52°;+60°}	890	676	214	220	TAB. A-2
EVDE-5/IM-B 400	A0403.055010	400	16.70	T3	230V 50HZ	{-52°;+60°}	970	756	214	281	TAB. A-2

\* T4 applicable up to +55°C, except for light/bulb oriented on top (topward). In case of ambient temperature over +55°C, temperature class changes into T3 (ordering code to be required).

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

### EVCC well glass lighting fixtures

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

### (NA) High pressure sodium

TYPE	CODE	LAMP [W]	WEIGHT [Kg]	TEMP. CLASS	VOLTAGE	AMBIENT TEMPERATURE	DIMENSIONS [mm]		DRAWING
							A	B	
EVCC-2/NA-B 50	A0401.060100	50**		T3/T4*	230V 50HZ	{-52°;+60°}	406	162	TAB. B
EVCC-3/NA-B 50	A0401.061100	50		T3/T4*	230V 50HZ	{-52°;+60°}	411	194	TAB. B
EVCC-2/NA-B 70	A0401.062100	70**		T3/T4*	230V 50HZ	{-52°;+60°}	406	162	TAB. B
EVCC-3/NA-B 70	A0401.063100	70		T3/T4*	230V 50HZ	{-52°;+60°}	411	194	TAB. B
EVCC-4/NA-B 100	A0401.064100	100		T3/T4*	230V 50HZ	{-52°;+60°}	474	220	TAB. B
EVCC-4/NA-B 150	A0401.065100	150		T3/T4*	230V 50HZ	{-52°;+60°}	474	220	TAB. B

\* T4 applicable up to +55°C, except for light/bulb oriented on top (topward). In case of ambient temperature over +55°C, temperature class changes into T3 (ordering code to be required).

\*\*Lamp with built-in glow discharge ignitor

### (HG) Mercury vapour

TYPE	CODE	LAMP [W]	WEIGHT [Kg]	TEMP. CLASS	VOLTAGE	AMBIENT TEMPERATURE	DIMENSIONS [mm]		DRAWING
							A	B	
EVCC-2/HG-B 50	A0402.060100	50		T3/T4*	230V 50HZ	{-52°;+60°}	406	162	TAB. B
EVCC-2/HG-B 80	A0402.061100	80		T3/T4*	230V 50HZ	{-52°;+60°}	406	162	TAB. B
EVCC-3/HG-B 125	A0402.062100	125		T3/T4*	230V 50HZ	{-52°;+40°}**	411	194	TAB. B

\* T4 applicable up to +55°C, except for light/bulb oriented on top (topward). In case of ambient temperature over +55°C, temperature class changes into T3 (ordering code to be required).

\*\*Maximum admissible ambient temperature. Below -20°C, the mercury vapour light can be used, providing they are switched on 24 hours a day.

### (IM) Metal halide

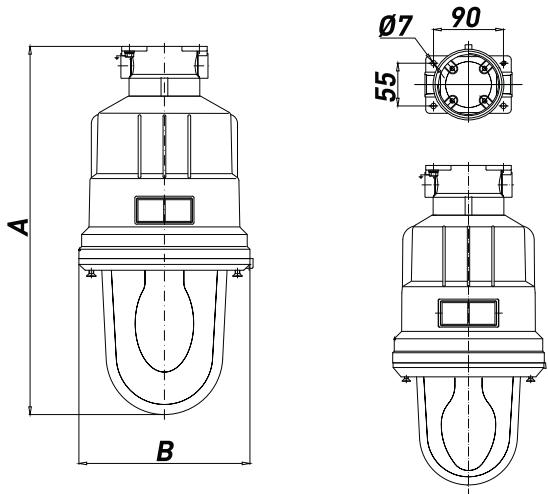
TYPE	CODE	LAMP [W]	WEIGHT [Kg]	TEMP. CLASS	VOLTAGE	AMBIENT TEMPERATURE	DIMENSIONS [mm]		DRAWING
							A	B	
EVCC-3/IM-B 70	A0403.060100	70		T3/T4*	230V 50HZ	{-52°;+60°}	411	194	TAB. B
EVCC-4/IM-B 100	A0403.061100	100		T3/T4*	230V 50HZ	{-52°;+60°}	474	220	TAB. B
EVCC-4/IM-B 150	A0403.062100	150		T3/T4*	230V 50HZ	{-52°;+60°}	474	220	TAB. B

\* T4 applicable up to +55°C, except for light/bulb oriented on top (topward). In case of ambient temperature over +55°C, temperature class changes into T3 (ordering code to be required).

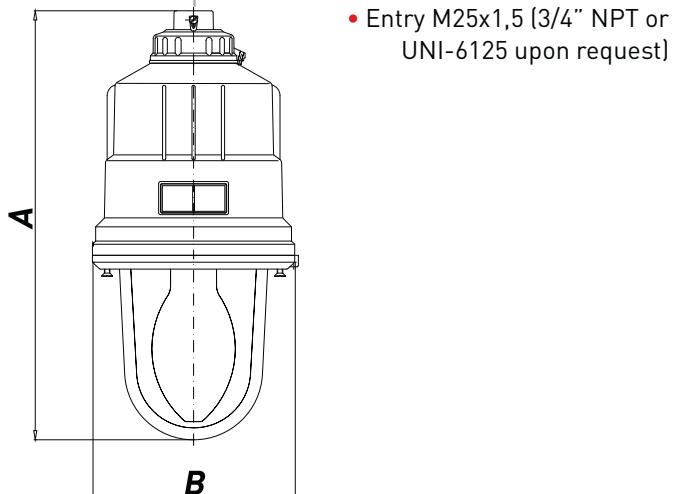
Below -20°C, the metal halide light can be used, providing they are switched on 24 hours a day.

**Dimensions EVCC (H.I.D.)**

TAB. B

**Dimensions EVA (H.I.D.)**

TAB. C



## EVA well glass lighting fixtures

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

**(NA) High pressure sodium**

TYPE	CODE	LAMP [W]	TEMP. CLASS	VOLTAGE	AMBIENT TEMPERATURE	DIMENSIONS [mm]		DRAWING
						A	B	
EVA-2/NA-B 50	A0401.070100	50**	T3/T4*	230V 50HZ	(-52°;+60°)	400	162	TAB. C
EVA-3/NA-B 50	A0401.071100	50	T3/T4*	230V 50HZ	(-52°;+60°)	404	194	TAB. C
EVA-2/NA-B 70	A0401.072100	70**	T3/T4*	230V 50HZ	(-52°;+60°)	400	162	TAB. C
EVA-3/NA-B 70	A0401.073100	70	T3/T4*	230V 50HZ	(-52°;+60°)	404	194	TAB. C
EVA-4/NA-B 100	A0401.074100	100	T3/T4*	230V 50HZ	(-52°;+60°)	467	220	TAB. C
EVA-4/NA-B 150	A0401.075100	150	T3/T4*	230V 50HZ	(-52°;+60°)	467	220	TAB. C

\* T4 applicable up to +55°C, except for light/bulb oriented on top (topward). In case of ambient temperature over +55°C, temperature class changes into T3 (ordering code to be required).

\*\*Lamp with built-in glow discharge ignitor

**(HG) Mercury vapour**

TYPE	CODE	LAMP [W]	TEMP. CLASS	VOLTAGE	AMBIENT TEMPERATURE	DIMENSIONS [mm]		DRAWING
						A	B	
EVA-2/HG-B 50	A0402.070100	50	T3/T4*	230V 50HZ	(-52°;+60°)	400	162	TAB. C
EVA-2/HG-B 80	A0402.071100	80	T3/T4*	230V 50HZ	(-52°;+60°)	400	162	TAB. C
EVA-3/HG-B 125	A0402.072100	125	T3/T4*	230V 50HZ	(-52°;+40°)**	404	194	TAB. C

\* T4 applicable up to +55°C, except for light/bulb oriented on top (topward). In case of ambient temperature over +55°C, temperature class changes into T3 (ordering code to be required).

\*\*Maximum admissible ambient temperature. Below -20°C, the mercury vapour light can be used, providing they are switched on 24 hours a day.

**(IM) Metal halide**

TYPE	CODE	LAMP [W]	TEMP. CLASS	VOLTAGE	AMBIENT TEMPERATURE	DIMENSIONS [mm]		DRAWING
						A	B	
EVA-3/IM-B 70	A0403.070100	70	T3/T4*	230V 50HZ	(-52°;+60°)	404	194	TAB. C
EVA-4/IM-B 100	A0403.071100	100	T3/T4*	230V 50HZ	(-52°;+60°)	467	220	TAB. C
EVA-4/IM-B 150	A0403.072100	150	T3/T4*	230V 50HZ	(-52°;+60°)	467	220	TAB. C

\* T4 applicable up to +55°C, except for light/bulb oriented on top (topward). In case of ambient temperature over +55°C, temperature class changes into T3 (ordering code to be required).

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

## **WELLGLASS**

# **EV.. Series well glass lighting fixture for halogen and fluorescent lamps**



EV.. series well glass lighting fixtures are suitable for hazardous areas of industrial plants for lighting of indoor and outdoor structures, for which narrow or wide beam lighting is needed.

These luminaries have been designed to house energy saving lamps; light source can be driven where required by way of suitable reflectors.

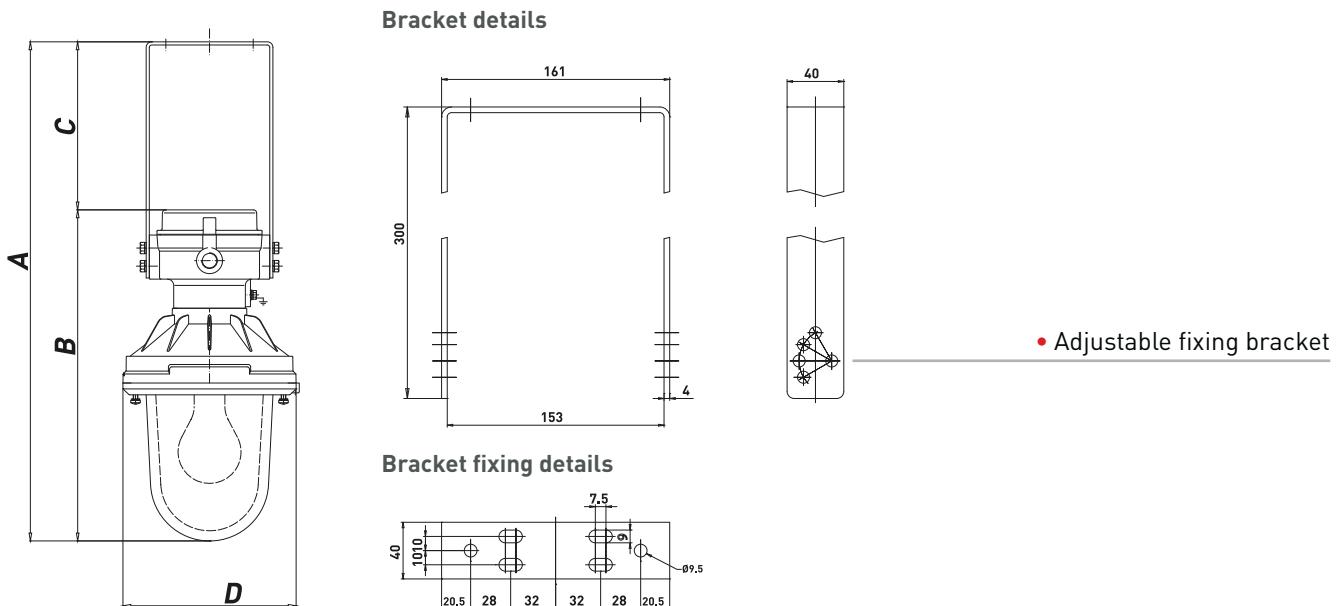
EV.. luminaries, provided in a wide range of wattage, have an excellent corrosion resistance due to the body made of aluminium with low content of copper and tempered glass of lamp compartment.

## **TECHNICAL FEATURES**

<b>Material</b>	Aluminium with low content of copper
<b>IP rating</b>	IP66
<b>Ambient temperature range</b>	-52°C to +60°C
<b>Approvals</b>	INERIS 01ATEX0019X (standard) IECEx INE 15.0031X CoC TR CU 012/2011 (marking upon request, ordering code to be required)
<b>Marking</b>	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, T3/200°C
<b>Gaskets</b>	O-ring made of Nitrile Rubber (NBR)
<b>Surface treatment</b>	Green colour polyurethane painting cycle RAL6003 (other colour available upon request)
<b>Entries</b>	Nº 2 entries M25x1,5 (EVde and EVCC version) Nº 1 entry M25x1,5 (EVA version) (plugs and cable glands excluded)
<b>Hardware and screws</b>	AISI304 Stainless steel external hardware and screws
<b>Lamps</b>	Included
<b>Rated operation voltage (UE)</b>	HALOGEN LAMPS 230V (standard) 220V, 240V (upon request) FLUORESCENT LAMPS 220/240V
<b>Frequency</b>	50/60 Hz
<b>Accessories available upon request</b>	Protection guard Reflector Pole mounting kit (EVde version)



## 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.

### (HA) Halogen – Energy saving

TYPE	CODE	LAMP [W]	WEIGHT [Kg]	TEMP. CLASS	AMBIENT TEMPERATURE	DIMENSIONS [mm]			
						A	B	C	D
EVDE-1/HA 42	A0406.020010	42 (OLD 60W INC)	2.90	T3*	(-52°;+60°)	505	291	214	146
EVDE-2/HA 42	A0406.021010	42 (OLD 60W INC)	3.10	T3*	(-52°;+60°)	550	336	214	163
EVDE-2/HA 70	A0406.022010	70 (OLD 100W INC)	3.10	T3*	(-52°;+60°)	550	336	214	163
EVDE-2/HA 105	A0406.023010	105 (OLD 150W INC)	3.10	T3*	(-52°;+60°)	550	336	214	163
EVDE-3/HA 140	A0406.034010	140 (OLD 200W INC)	4.40	T3*	(-52°;+60°)	584	370	214	194

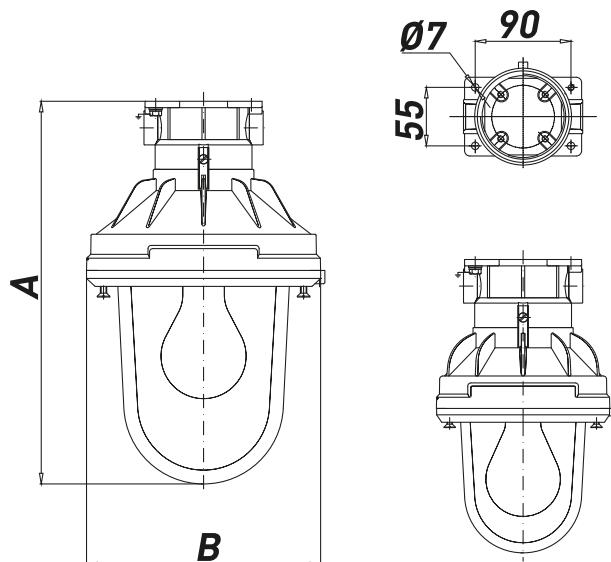
\* In case of maximum ambient temperature reach +40°C, temperature class changes into T4 (ordering code to be required)

### (FC) Fluorescent compact – Energy saving long life (8000h)

TYPE	CODE	LAMP [W]	WEIGHT [Kg]	TEMP. CLASS	AMBIENT TEMPERATURE	DIMENSIONS [mm]			
						A	B	C	D
EVDE-4/FC 45	A0406.041110	45 (OLD 200W INC)	7.00	T5	(-52°;+60°)	635	421	214	220
EVDE-4/FC 65	A0406.042110	65 (OLD 300W INC)	7.00	T4	(-52°;+60°)	635	421	214	220
EVDE-5/FC 75	A0406.053110	75 (OLD 400W INC)	9.00	T4	(-52°;+60°)	715	501	214	281

\* In case of maximum ambient temperature reach +40°C, temperature class changes into T4 (ordering code to be required). Below -20°C, fluorescent lamp can be used, providing they are switched on 24 hours a day.

## Dimensions EVCC



## EVCC well glass lighting fixtures

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

### (HA) Halogen – Energy saving

TYPE	CODE	LAMP [W]	TEMP. CLASS	AMBIENT TEMPERATURE	DIMENSIONS [mm]	
					A	B
EVCC-1/HA 42	A0406.060100	42 (OLD 60W INC)	T3*	(-52°;+60°)	230	146
EVCC-2/HA 42	A0406.061100	42 (OLD 60W INC)	T3*	(-52°;+60°)	276	162
EVCC-2/HA 70	A0406.222103	70 (OLD 100W INC)	T3*	(-52°;+60°)	276	162
EVCC-2/HA 105	A0406.222105	105 (OLD 150W INC)	T3*	(-52°;+60°)	276	162
EVCC-3/HA 140	A0406.062100	140 (OLD 200W INC)	T3*	(-52°;+60°)	309	194

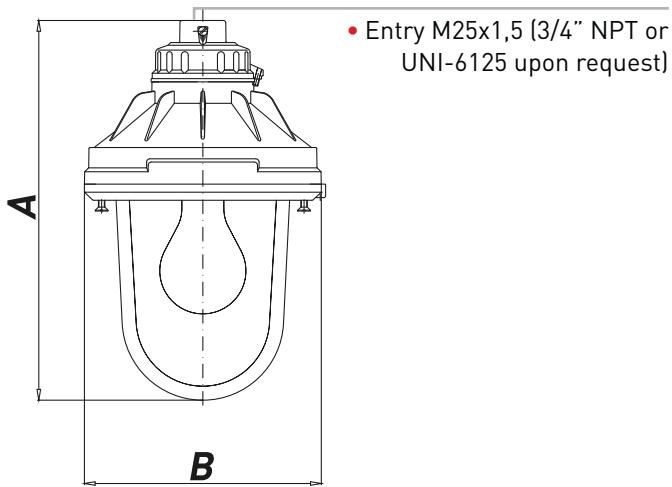
\* In case of maximum ambient temperature reach +40°C, temperature class changes into T4 (ordering code to be required)

### (FC) Fluorescent compact – Energy saving long life (8000h)

TYPE	CODE	LAMP [W]	TEMP. CLASS	AMBIENT TEMPERATURE	DIMENSIONS [mm]	
					A	B
EVCC-4/FC 45	A0406.070100	45 (OLD 200W INC)	T5	(-52°;+60°)	360	220
EVCC-4/FC 65	A0406.071100	65 (OLD 300W INC)	T4	(-52°;+60°)	360	220
EVCC-5/FC 75	A0406.072100	75 (OLD 400W INC)	T4	(-52°;+60°)	440	281

Below -20°C, fluorescent lamp can be used, providing they are switched on 24 hours a day.

## Dimensions EVA



## EVA well glass lighting fixtures

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

### (HA) Halogen – Energy saving

TYPE	CODE	LAMP [W]	TEMP. CLASS	AMBIENT TEMPERATURE	DIMENSIONS [mm]	
					A	B
EVA-1/HA 42	A0406.080100	42 (OLD 60W INC)	T3*	(-52°;+60°)	223	146
EVA-2/HA 42	A0406.081100	42 (OLD 60W INC)	T3*	(-52°;+60°)	269	162
EVA-2/HA 70	A0406.082100	70 (OLD 100W INC)	T3*	(-52°;+60°)	269	162
EVA-2/HA 105	A0406.083100	105 (OLD 150W INC)	T3*	(-52°;+60°)	269	162
EVA-3/HA 140	A0406.084100	140 (OLD 200W INC)	T3*	(-52°;+60°)	302	194

\* In case of maximum ambient temperature reach +40°C, temperature class changes into T4 (ordering code to be required)

### (FC) Fluorescent compact – Energy saving long life (8000h)

TYPE	CODE	LAMP [W]	TEMP. CLASS	AMBIENT TEMPERATURE	DIMENSIONS [mm]	
					A	B
EVA-4/FC 45	A0406.090100	45 (OLD 200W INC)	T5	(-52°;+60°)	353	220
EVA-4/FC 65	A0406.091100	65 (OLD 300W INC)	T4	(-52°;+60°)	353	220
EVA-5/FC 75	A0406.092100	75 (OLD 400W INC)	T4	(-52°;+60°)	462	281

Below -20°C, fluorescent lamp can be used, providing they are switched on 24 hours a day.

# **WELLGLASS**

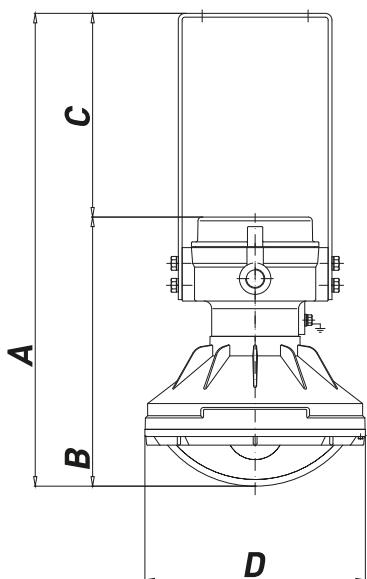
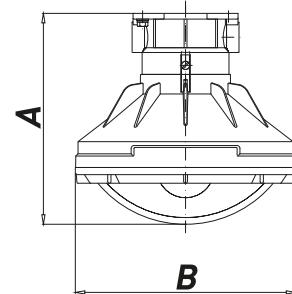
## **EV.. PT Series spot lights**



Spot lights are used where a high illumination is required, without causing neither dazzling nor light pollution.

### **TECHNICAL FEATURES**

<b>Material</b>	Aluminium with low content of copper
<b>IP rating</b>	IP66
<b>Ambient temperature range</b>	-52°C to +60°C
<b>Approvals</b>	INERIS 01ATEX0019X (standard) TR CU (marking upon request, ordering code to be required)
<b>Marking</b>	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 ** T4/135°C, T3/200°C
<b>Gaskets</b>	O-ring made of Nitrile Rubber (NBR)
<b>Surface treatment</b>	Green colour polyurethane painting cycle RAL6003 (other colour available upon request)
<b>Entries</b>	Nº 2 entries M25x1,5 (EVde and EVCC version) (plugs and cable glands excluded)
<b>Hardware and screws</b>	AISI304 Stainless steel external hardware and screws
<b>Lamps</b>	Included
<b>Rated operation voltage (UE)</b>	230V (standard) 220V, 240V (marking upon request)
<b>Frequency</b>	50/60 Hz
<b>Power factor</b>	> 0,95

**Dimensions EVde PT****Dimensions EVCC PT****(EVde PT) Spot lights**

TYPE	CODE	LAMP [W]	LAMP. TYPE	TEMP. CLASS	VOLTAGE	DIMENSIONS [mm]				AMBIENT TEMPERATURE
						A	B	C	D	
EVDE-PT/HA	A0406.022002	70	HALOGEN	T3*	230V 50/60HZ	496	282	214	231	{-52°;+60°}

\* In case of maximum ambient temperature reach +40°C, temperature class changes into T4 (ordering code to be required)

**(EVCC PT) Spot lights**

TYPE	CODE	LAMP [W]	LAMP. TYPE	TEMP. CLASS	VOLTAGE	DIMENSIONS [mm]		AMBIENT TEMPERATURE
						A	B	
EVCC-PT/HA	A0406.222006	70	HALOGEN	T3*	230V 50/60HZ	221	231	{-52°;+60°}

\* In case of maximum ambient temperature reach +40°C, temperature class changes into T4 (ordering code to be required)

# **WELLGLASS**

## **EV.. Series portable**

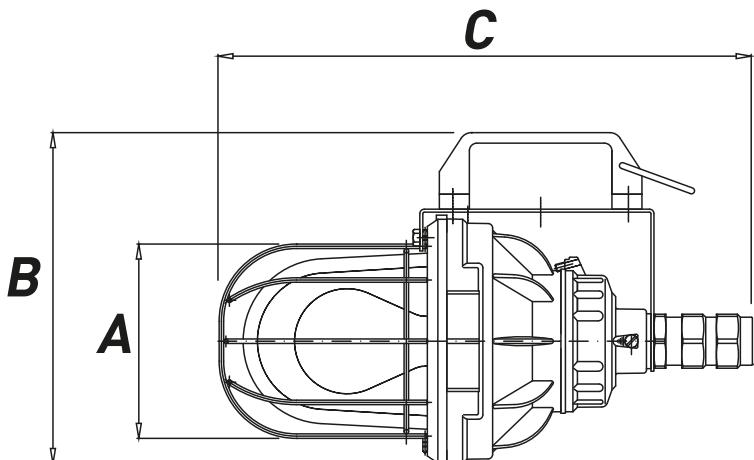


Portable lights with insulated handle and protection guard made of aluminium with low content of copper.

### **TECHNICAL FEATURES**

<b>Material</b>	Aluminium with low content of copper
<b>IP rating</b>	IP66
<b>Ambient temperature range</b>	-52°C to +60°C
<b>Approvals</b>	INERIS 01ATEX0019X (standard) TR CU (marking upon request, ordering code to be required)
<b>Marking</b>	II 2 GD Ex d IIC T(**) Gb Ex tb IIIC T(**) Db IP66 ** T4/135°C, T3/200°C
<b>Gaskets</b>	O-ring made of Nitrile Rubber (NBR)
<b>Surface treatment</b>	Green colour polyurethane painting cycle RAL6003 (other colour available upon request)
<b>Entries</b>	Nº 1 entry M25x1,5 complete with brass nickel chrome plated cable gland PAP type
<b>Hardware and screws</b>	AISI304 Stainless steel external hardware and screws
<b>Lamps</b>	Included
<b>Rated operation voltage (UE)</b>	230V (standard) 220V, 240V (marking upon request)
<b>Frequency</b>	50/60 Hz
<b>Accessories included</b>	Protection guard Brass nickel chrome plated cable gland PAP type complete with set of inner and outer seals

## Dimensions EVA



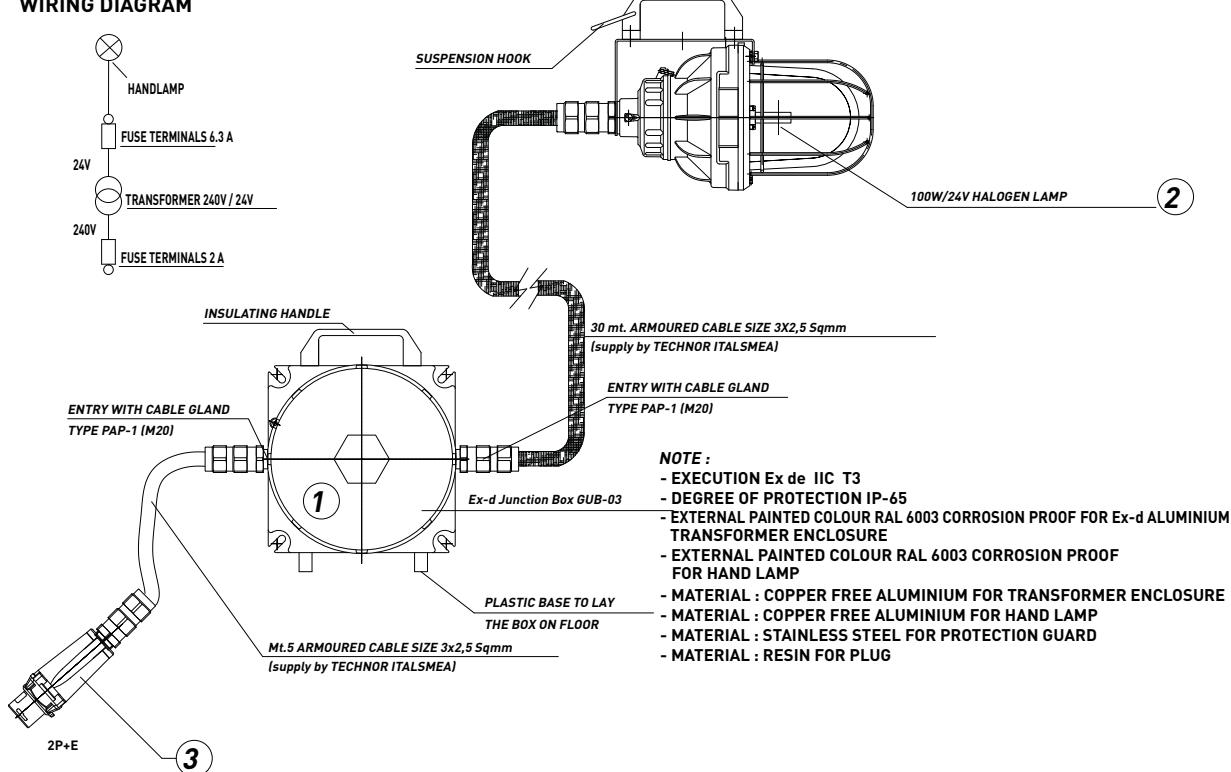
## EV.. Portable lights

TYPE	CODE	LAMP [W]	LAMP TYPE	TEMP. CLASS	VOLTAGE	DIMENSIONS [mm]			AMBIENT TEMPERATURE
						A	B	C	
EVA-1/HA 42 (EVP-60)	A0406.121001	42	HALOGEN	T3*	230V 50/60HZ	212	123	318	{-52°;+60°}
EVA-2/HA 70 (EVP-100)	A0406.122001	70	HALOGEN	T3*	230V 50/60HZ	220	130	355	{-52°;+60°}

\* In case of maximum ambient temperature reach +40°C, temperature class changes into T4 (ordering code to be required)

## Dimensions EVA

### WIRING DIAGRAM



## EVA.. Hand lights with portable transformer unit

TYPE	ASSEMBLY CODE	LAMP [W]	LAMP TYPE	TEMP.	VOLTAGE	AMBIENT TEMPERATURE
EVA-2 / HA 100 WITH GUB -03 TRANSFORMER BOX , PLUS CABLE AND FPR... PLUG	A0406.123004	100	HALOGEN	T3	240VAC	{-40°C TO +60°C}

**WELLGLASS**

# Serie EVCC-PR tank inspection lights

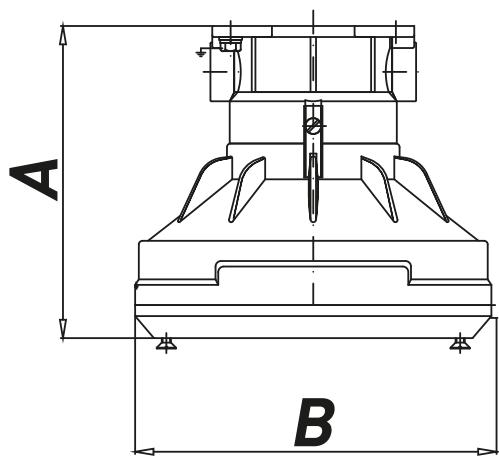


Tank inspection lights suitable for ON-SHORE and OFF-SHORE application by suitable painting cycle (upon request).

## TECHNICAL FEATURES

<b>Material</b>	Aluminium with low content of copper
<b>IP rating</b>	IP66
<b>Ambient temperature range</b>	-52°C to +40°C
<b>Approvals</b>	INERIS 01ATEX0019X (standard) IECEx INE 15.0031X CoC TR CU 012/2011 (marking upon request, ordering code to be required)
<b>Marking</b>	II 2 GD Ex d IIC T3 Gb Ex tb IIIC T200°C Db IP66
<b>Gaskets</b>	O-ring made of Nitrile Rubber (NBR)
<b>Surface treatment</b>	Green colour polyurethane painting cycle RAL6003 (other colour available upon request)
<b>Entries</b>	Nº 2 entries M25x1,5 (plugs and cable glands excluded)
<b>Hardware and screws</b>	AISI304 Stainless steel external hardware and screws
<b>Lamps</b>	Included
<b>Rated operation voltage (UE)</b>	230V (standard) 220V, 240V (marking upon request)
<b>Frequency</b>	50/60 Hz
<b>Accessories available upon request</b>	Fixing flange for porthole

## Dimensions EVCC-PR



## (EVCC-PR) Tank inspection lights

TYPE	CODE	LAMP [W]	LAMP. TYPE	TEMP. CLASS	VOLTAGE	DIMENSIONS [mm]		AMBIENT TEMPERATURE
						A	B	
EVCC-PR2/HA	A0406.222008	53	HALOGEN	T3	230V 50/60HZ	153	165	(-52°;+40°)*
EVCC-PR3/HA	A0406.222009	70	HALOGEN	T3	230V 50/60HZ	170	195	(-52°;+40°)*

\* Maximum admissible ambient temperature

**WELLGLASS**

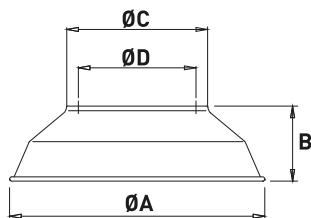
EVde HID Series / EVA HID Series / EVcc HID Series / EVde Series / EVA Series / EVCC Series / EVde-PT Series / EVcc-PT Series / EVA Series / EVcc-PR Series

## SPARES & ACCESSORIES

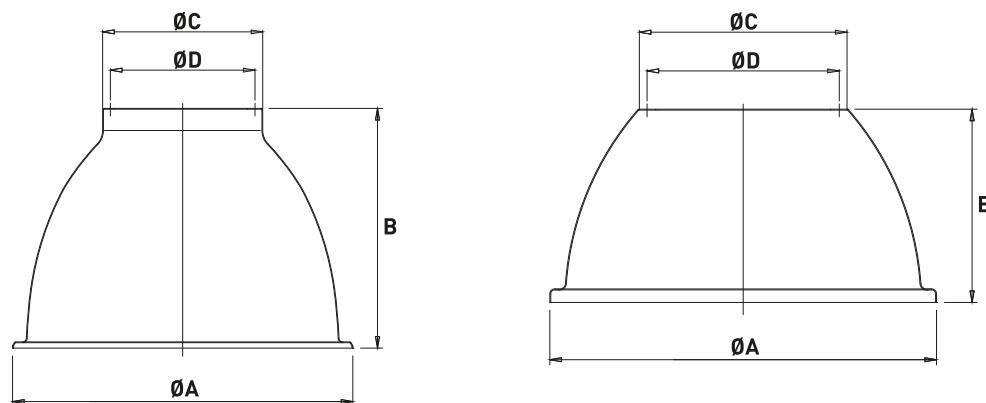
### Reflectors

CODE	TYPE	DIMENSIONS (mm)				WEIGHT [Kg]
		A	B	C	D	
AOA04.000007	REV-1 STANDARD REFLECTOR FOR EV..-1 RAL9003 PAINTED	330	97	183	123	0,260
AOA04.000008	REV-2 STANDARD REFLECTOR FOR EV..-2 RAL9003 PAINTED	330	97	183	138	0,260
AOA04.000009	REV-3 STANDARD REFLECTOR FOR EV..-3 RAL9003 PAINTED	330	97	183	160	0,260
AOA04.000010	REV-4 STANDARD REFLECTOR FOR EV..-4 RAL9003 PAINTED	400	90	263	188	0,360
AOA04.000011	REVD-4 POLISHED AND ANODIZED DOME REFLECTOR FOR EV..-4	440	310	207	188	0,800
AOA04.000043	REVD-5 POLISHED AND ANODIZED DOME REFLECTOR FOR EV..-5	500	250	271	252	0,800

### Dimensions REV



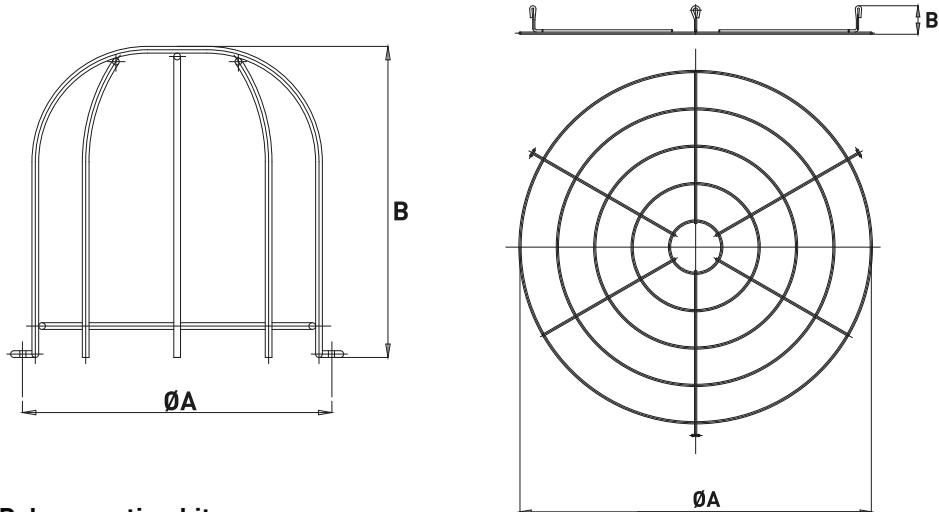
### Dimensions REVD



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

CODE	TYPE	DIMENSIONS AxB (mm)	WEIGHT [Kg]
A0A04.0000017	GEV-1 PROTECTION GUARD FOR EV..-1 - AISI 304	123X103	0.160
A0A04.0000018	GEV-2 PROTECTION GUARD FOR EV..-2 - AISI 304	138X139	0.230
A0A04.0000046	GEV-3 PROTECTION GUARD FOR EV..-3 - AISI 304	151X152	0.240
A0A04.0000016	GEV-4 PROTECTION GUARD FOR EV..-4 - AISI 304	178X200	0.370
A0A04.0000047	GEV-5 PROTECTION GUARD FOR EV..-5 - AISI 304	252X233	0.400
A0A04.0000044	GEV-5-P PROTECTION GUARD FOR EV..-5 C/W REVD - AISI 304	470 X38	0.310

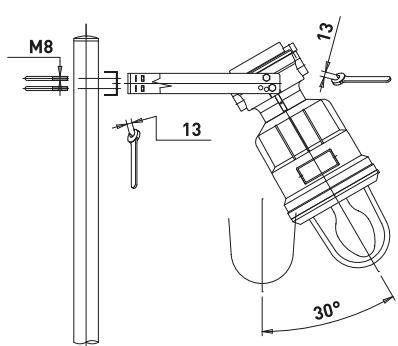
### Dimensions GEV



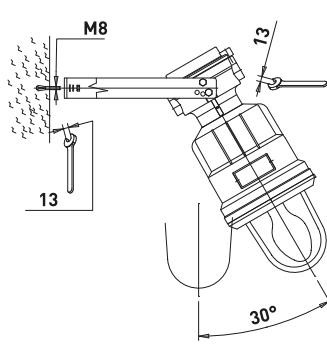
### Pole mounting kit

CODE	TYPE
A0A04.000001	P4 KIT - 1" 1/2 POLE MOUNTING KIT
A0A04.000002	P5 KIT - 2" POLE MOUNTING KIT

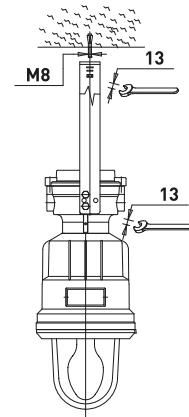
### Pole mounting



### 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.

## LED LIGHTING

# LED EV.. Series spot lights



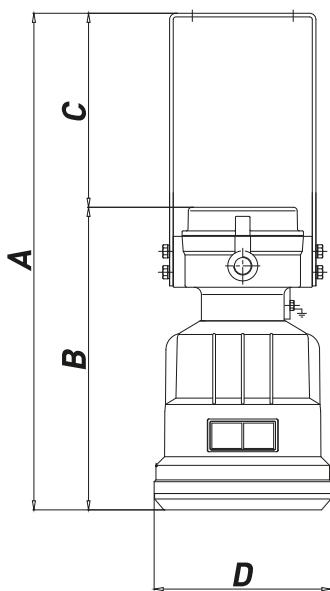
Spot lights are used where a high illumination is required, without causing neither dazzling nor light pollution.

Due to LED technology, these luminaires are especially resistant to shock or vibration and free from infrared and ultraviolet wavelengths.

## TECHNICAL FEATURES

<b>Material</b>	Aluminium with low content of copper
<b>IP rating</b>	IP66
<b>Ambient temperature range</b>	-52°C to +60°C
<b>Approvals</b>	INERIS 01ATEX0019X (standard) IECEx INE 15.0031X CoC TR CU 012/2011 (marking upon request, ordering code to be required)
<b>Marking</b>	II 2 GD Ex de IIC T(**) Gb Ex tb IIIC T(**) Db IP66 ** T5/T100°C, T4/T135°C
<b>Gaskets</b>	O-ring made of Nitrile Rubber (NBR)
<b>Surface treatment</b>	Green colour polyurethane painting cycle RAL6003 (other colour available upon request)
<b>Entries</b>	Nº 2 entries M25x1,5 (plugs and cable glands excluded)
<b>Hardware and screws</b>	AISI304 Stainless steel external hardware and screws
<b>Lamps</b>	Included
<b>Rated operation voltage (UE)</b>	115/240V, 24Vdc
<b>Frequency</b>	50/60 Hz

## Dimensions LED EV



## LED EV.. Spot lights

TYPE	CODE	LAMP [W]	LAMP. TYPE	TEMP. CLASS	VOLTAGE	DIMENSIONS [mm]				AMBIENT TEMPERATURE
						A	B	C	D	
EVDE-3/LED	A0404.031003	18	LED	T4*	115/240V 50/60HZ	547	333	214	195	(-52°;+60°)
EVDE-3/LED	A0404.031010	18	LED	T4*	24VDC	547	333	214	195	(-52°;+60°)

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

## **LED LIGHTING**

# **LED EVCC-PR Series tank inspection lights**

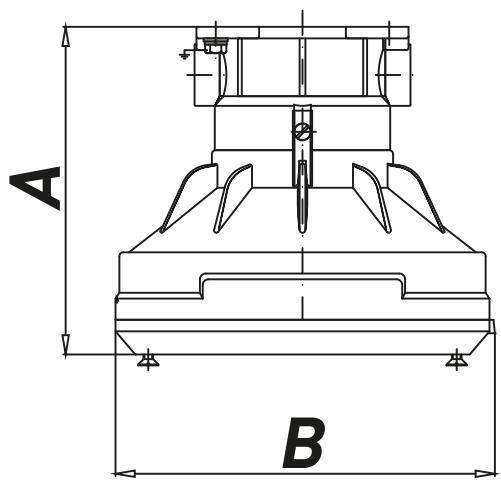


Tank inspection lights suitable for ON-SHORE and OFF-SHORE application by suitable painting cycle (upon request); LED version.

## **TECHNICAL FEATURES**

<b>Material</b>	Aluminium with low content of copper
<b>IP rating</b>	IP66
<b>Ambient temperature range</b>	-52°C to +40°C
<b>Approvals</b>	INERIS 01ATEX0019X (standard) TR CU (marking upon request, ordering code to be required)
<b>Marking</b>	II 2 GD Ex d IIC T5 Gb Ex tb IIIC T200°C Db IP66
<b>Gaskets</b>	O-ring made of Nitrile Rubber (NBR)
<b>Surface treatment</b>	Green colour polyurethane painting cycle RAL6003 (other colour available upon request)
<b>Entries</b>	N° 2 entries M25x1,5 (plugs and cable glands excluded)
<b>Hardware and screws</b>	AISI304 Stainless steel external hardware and screws
<b>Lamps</b>	Included
<b>Rated operation voltage (UE)</b>	230 V
<b>Frequency</b>	50/60 Hz
<b>Accessories available upon request</b>	Fixing flange for porthole

## Dimensions LED EVCC



## LED EVCC-PR tank inspection lights

TYPE	CODE	LAMP [W]	TEMP. CLASS	VOLTAGE	DIMENSIONS [mm]		AMBIENT TEMPERATURE
					A	B	
EVCC-PR3/LED	A0404.300006	7	T5	230V 50/60HZ	170	195	(-52°;+40°)*

\* Maximum admissible ambient temperature

# **LED LIGHTING**

## **LED EV.. Series portable**

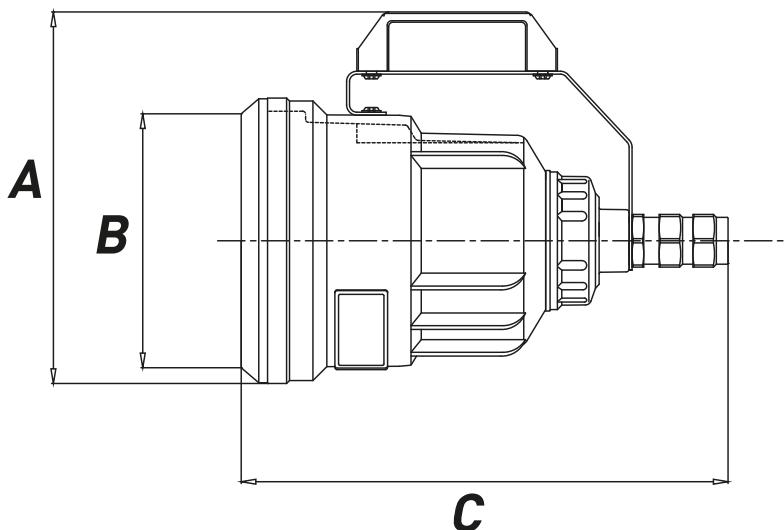


Portable lights with insulated handle and protection guard made of aluminium with low content of copper, LED version.

### **TECHNICAL FEATURES**

<b>Material</b>	Aluminium with low content of copper
<b>IP rating</b>	IP66
<b>Ambient temperature range</b>	-52°C to +60°C
<b>Approvals</b>	INERIS 01ATEX0019X (standard) TR CU (marking upon request, ordering code to be required)
<b>Marking</b>	II 2 GD Ex d IIC T(**) Gb Ex tb IIIC T(**) Db IP66 ** T5/T100°C, T4/T135°C
<b>Gaskets</b>	O-ring made of Nitrile Rubber (NBR)
<b>Surface treatment</b>	Green colour polyurethane painting cycle RAL6003 (other colour available upon request)
<b>Entries</b>	N° 1 entry M25x1,5 complete with brass nickel chrome plated cable gland PAP type
<b>Hardware and screws</b>	AISI304 Stainless steel external hardware and screws
<b>Lamps</b>	Included
<b>Rated operation voltage (UE)</b>	115/240V, 24Vdc
<b>Frequency</b>	50/60 Hz
<b>Accessories</b>	Brass nickel chrome plated cable gland PAP type complete with set of inner and outer seals

## Dimensions LED EVA



## LED EV.. Portable lights

TYPE	CODE	LAMP [W]	TEMP. CLASS	VOLTAGE	DIMENSIONS [mm]			AMBIENT TEMPERATURE
					A	B	C	
EVA-3/18 LED (EVP-18)	A0404.131001	18	T4**	115/240V 50/60HZ	254	173	333	(-52°;+60°)
EVA-3/18 LED (EVP-18)	A0404.131101	18	T4**	24VDC	254	173	333	(-52°;+60°)

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

## LED LIGHTING

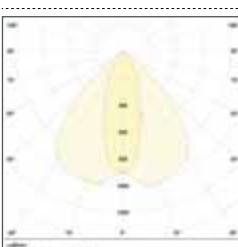
# FL-LED.. Series floodlights

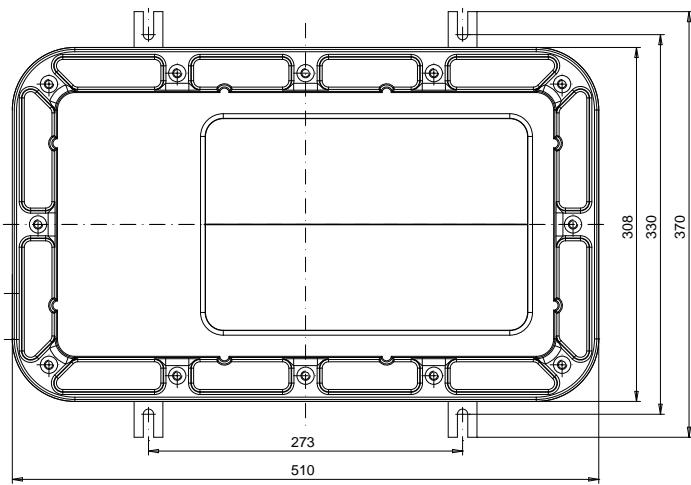
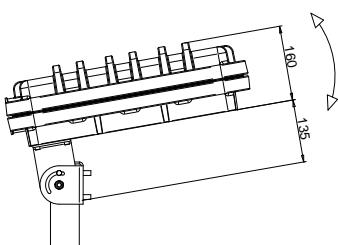
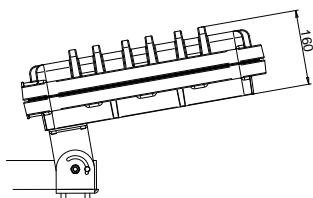
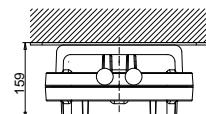
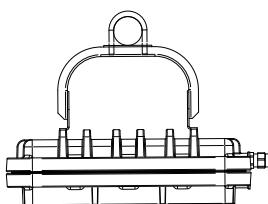
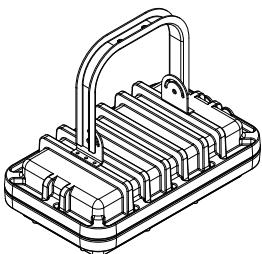
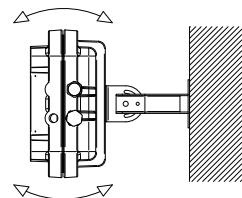


LED FL.. floodlights have been design for street and sidewalk lighting.

Due to the body made of aluminium with low content of copper and tempered glass, these floodlights have an excellent corrosion resistance.

## TECHNICAL FEATURES

<b>Material</b>	Aluminium with low content of copper
<b>IP rating</b>	IP66
<b>Ambient temperature range</b>	-50°C to +55°C
<b>Approvals</b>	INERIS 00ATEX0023X (standard) / INERIS 01ATEX0059 (battery pack) CoC TR CU 012/2011: n° B.01067 (marking upon request, ordering code to be required)
<b>Marking</b>	Standard: II 2 GD Ex d IIB+H2 T6 Gb Ex tb IIIC T85°C Db IP66
	Battery pack: II 2 GD Ex d IIC T6 Gb Ex tb IIIC T85°C Db IP66
<b>Gaskets</b>	Gasket made of Nitrile Rubber (NBR) on flat joint
<b>Entries</b>	Suitable for LOOP-IN LOOP-OUT UP TO 4mm <sup>2</sup>
<b>Hardware and screws</b>	AISI316L Stainless steel external hardware and screws
<b>Lamps</b>	Included
<b>Rated operation voltage (UE)</b>	110V/264V (standard version) 220V/240V (emergency version)
<b>Frequency</b>	50/60Hz
<b>Accessories</b>	Ceiling mounting : N° 1 brass nickel chrome plated plug + N° 1 brass nickel chrome plated cable gland PNA type c/w set of inner seals Pole mounting : N°1 brass nickel chrome plated cable gland PNA type c/w set of inner seals Adjustable mounting bracket: : N°1 brass nickel chrome plated cable gland PNA type c/w set of inner seals
<b>Operating principles</b>	FL.. floodlight for emergency service : 180 minutes; with constant flux 650 lm (other emergency duration available upon request)
<b>Photometric light curves</b>	

**Dimension FL -LED – Standard version 10W/30W/60W/95W**
**Front view/  
ceiling mounting**
**Straight bracket****Curved bracket****Ceiling/direct  
wall mounting****Adjustable pipe****Adjustable pendant****Adjustable wall**
**LED FL.. Floodlights - Standard version**

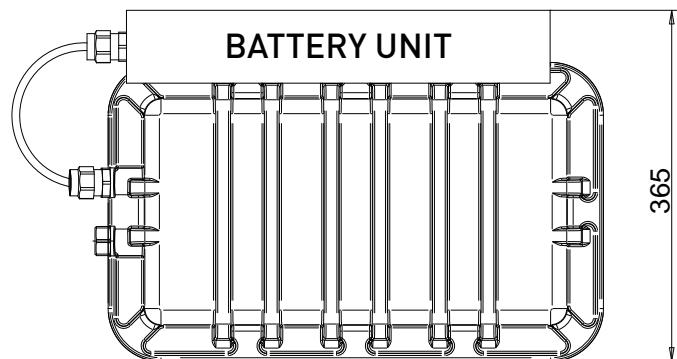
TYPE	CODE	LAMP [W]	VOLTAGE	FREQUENCY	AMBIENT TEMPERATURE
FL-LED 30	A0105.500000	95W	110/264V	50/60HZ	(-50°C;+55°C)
FL-LED 30	A0105.500001	60W	110/264V	50/60HZ	(-50°C;+55°C)
FL-LED 30	A0105.500002	30W	110/264V	50/60HZ	(-50°C;+55°C)
FL-LED 30	A0105.500003	10W	110/264V	50/60HZ	(-50°C;+55°C)

**LED FL.. Coventional efficiency comparison table**

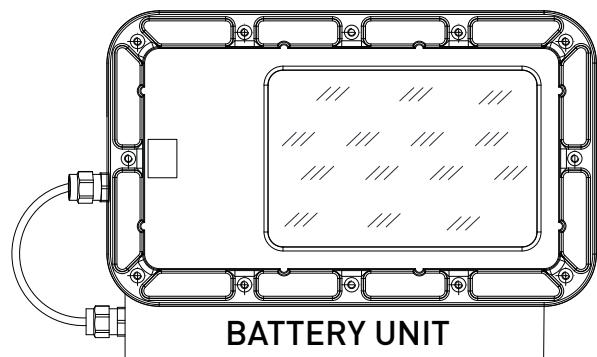
LED ->	FLUORESCENT ->	HID
FL-LED 30 W	2X18 W	50 W HPSV / 80W HPMV
FL-LED 60 W	2X36 W	100 W HPSV / 125 HPMV
FL-LED 95 W	2X58 W	150 W HPSV / 250 HPMV

## Dimension FL..LED – Emergency version

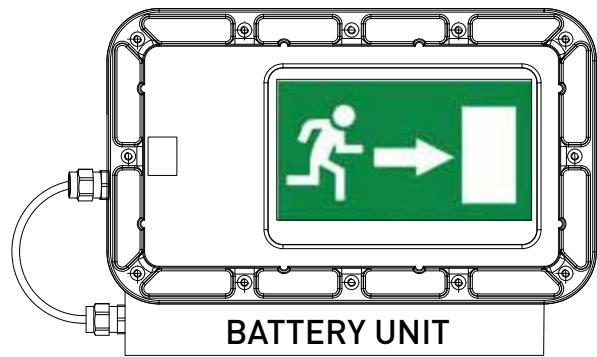
Top view



Front view



EXIT version



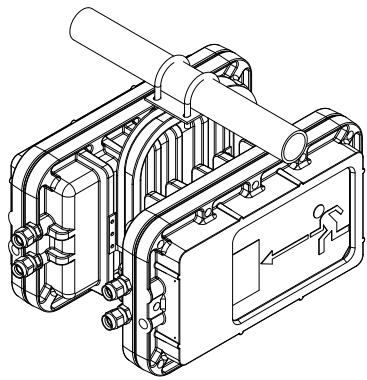
## LED FL.. Floodlights – Emergency version / 3 hours duration with 650 lm output in emergency

TYPE	CODE	LAMP [W]	VOLTAGE	FREQUENCY	AMBIENT TEMPERATURE
FL-LED 30	A0105.600000	95W	220/240V	50/60HZ	(-50°C;+55°C)
FL-LED 30	A0105.600001	60W	220/240V	50/60HZ	(-50°C;+55°C)
FL-LED 30	A0105.600002	30W	220/240V	50/60HZ	(-50°C;+55°C)
FL-LED 30	A0105.600003	10W	220/240V	50/60HZ	(-50°C;+55°C)
FL-LED 30 (DOUBLE SIDE)	A0105.700000	2X10W	220/240V	50/60HZ	(-50°C;+55°C)

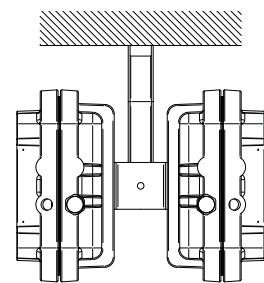
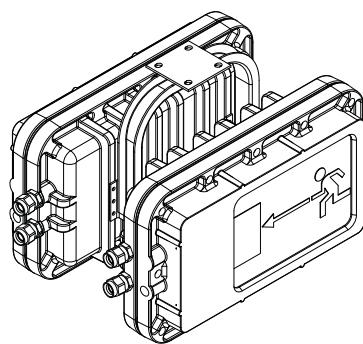
Note: 1300 lm available in emergency condition (upon request)

**FL-LED 30 (double side for emergency exit application)**

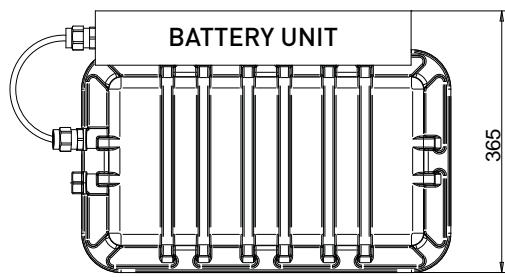
Pipe/pendant mounting



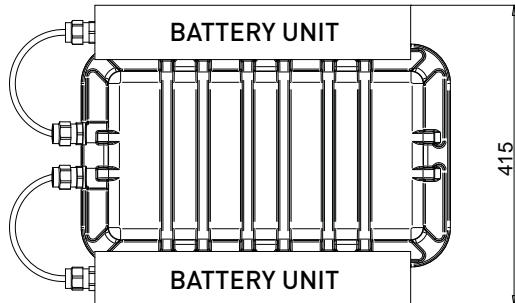
Ceiling mounting

**Top view of the emergency floodlight version**

650lm/EMERGENCY



1300lm/EMERGENCY



# LED LIGHTING

## G2X LED

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

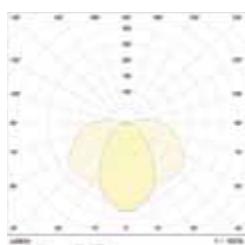


The advantages of this luminaires series:

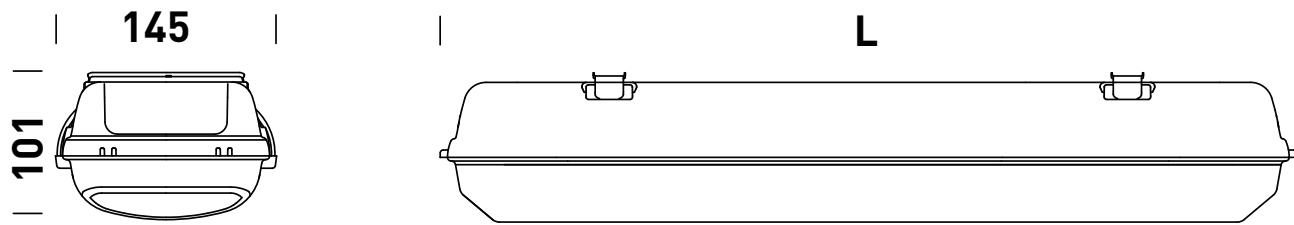
- Simple, easy and quick installation
- High resistance to corrosive industrial environment
- High luminous efficiency
- Quality ignition systems
- UV resistant.
- Easy maintenance
- A high-quality LED source with high colour rendering

## TECHNICAL FEATURES

<b>Material</b>	GRP + 2 gear tray holders in white lacquered steel plate Transparent diffuser in PC with UV protection
<b>IP rating</b>	IP66
<b>Ambient temperature range</b>	From -20°C TO +40°C
<b>Approvals</b>	OBAC 13 CZ/ATEX 0163X
<b>Marking</b>	II 3 G Ex nA IIC T6 Gc II 3 D Ex tc IIIC T85°C Dc IP66
<b>Standards</b>	EN 60079-0, EN 60079-15, EN 60079-31
<b>Zones</b>	Zone 2 , 22
<b>Gaskets</b>	Gasket in polyurethane (to obtain IP66 rating)
<b>Entries</b>	N° 2 entries M20 on each side
<b>Hardware and screws</b>	Fixing springs and closing clips in stainless steel
<b>Lamps</b>	LED lamps
<b>Rated operation voltage (UE)</b>	230 V AC/DC 50-60(0)Hz, 110V (by performances)
<b>Frequency</b>	50 ÷ 60 Hz
<b>Standard accessories</b>	Polyamide ATEX cable gland M20x1,5 or M25x1,5 IP66
<b>Maximum number of terminals</b>	3x2,5mm <sup>2</sup>
<b>Colour</b>	GRP housing in graphite black ( RAL 9011 ),gray (RAL 7035), yellow (RAL 1003)
<b>Note</b>	Impact resistance IK08
<b>Options</b>	Emergency kit 3h



## Dimensions G2X LED



## G2X LED

COD	ORDERING	DIMENSIONS	POWER [W]	WEIGHT [KG]	POWER SUPPLY
A1101.100006	G2X LED 600 PC INOX	665X145X101	21	2.0	
A1101.100007	G2X LED 1200 PC INOX	1282X145X101	36	2.5	
A1101.100008	G2X LED 1500 PC INOX	1578X145X101	44	2.9	
A1102.000005	G2X LED EB 1200 PC INOX	1282X145X101	36	2.7	Electronic 230V AC/DC
A1102.000006	G2X LED EB 1500 PC INOX	1578X145X101	44	3.1	

# FLOODLIGHTS

## FL.. Series floodlights



Due to the body made of aluminium with low content of copper and tempered glass, FL.. Series floodlights, provided in a wide range of wattage and power, are ideally suited for ON and OFF-SHORE applications and all kinds of industries where there is a high level of corrosion, mainly for lighting wide areas.

To increase further surface protection, upon request it is possible to apply an OFF-SHORE painting cycle suitable for marine environments.

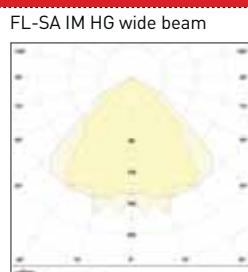
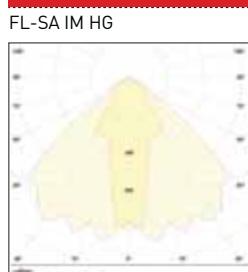
Standard floodlights are manufactured with symmetrical narrow beam reflector and symmetrical wide beam reflector upon request (ordering codes upon request).

For ease of installation and maintenance, the luminaire features an integral Ex e connection box and AISI304 stainless steel universal mounting bracket.

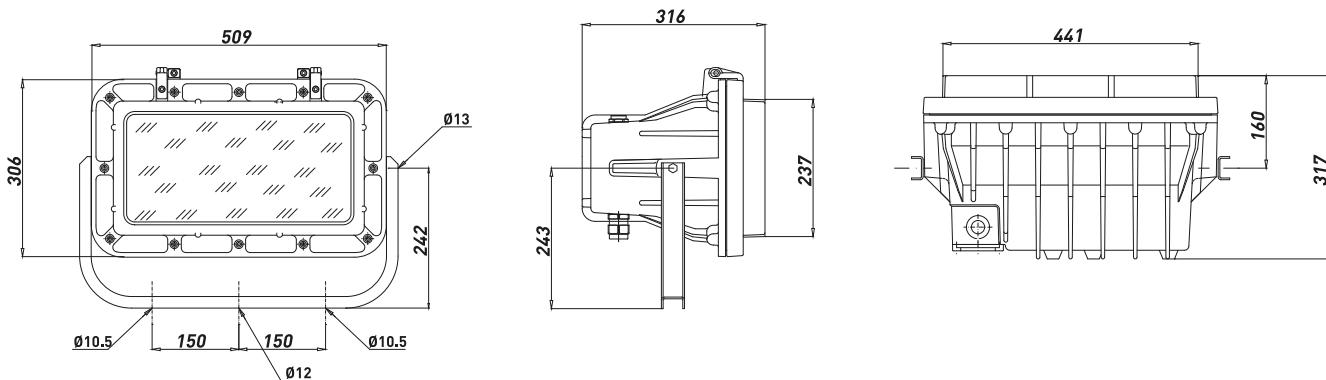
## TECHNICAL FEATURES

<b>Material</b>	Aluminium with low content of copper Stainless steel AISI316L (ordering codes upon request)
<b>IP rating</b>	IP66
<b>Ambient temperature range</b>	-50°C to +55°C
<b>Approvals</b>	INERIS 00ATEX0023X (standard) / TR CU (marking upon request, ordering code to be required)
<b>Marking</b>	II 2 GD Ex de IIB+H2 T3 Gb Ex tb IIIC T200°C Db IP66
<b>Gaskets</b>	Gasket made of Nitrile Rubber (NBR) on flat joint
<b>Surface treatment</b>	Painted by green colour polyurethane painting cycle RAL6003 (other colour available upon request) / Internal anticondensate painting / AISI316L version unpainted
<b>Entries</b>	N° 2 entries M25x1,5
<b>Hardware and screws</b>	AISI316L Stainless steel screws and AISI304 Stainless steel adjustable bracket
<b>Lamps</b>	Included
<b>Rated operation voltage (UE)</b>	See table
<b>Frequency</b>	See table
<b>Power factor</b>	> 0,95
<b>Accessories</b>	N° 1 brass nickel chrome plated plug + N° 1 brass nickel chrome plated cable gland PNA type c/w set of inner seals
<b>Accessories available upon request</b>	Protection guard (not to be sold separately unless as a spare part) Special brackets fo pole mounting
<b>Options upon request</b>	<p>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.</p> <p>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)</p>

### Photometric light curves



## Dimensions FL



## (FL..) Floodlights

TYPE	CODE	LAMP [W]	LAMP. TYPE	WEIGHT [kg]	VOLTAGE	FREQUENCY	AMBIENT TEMPERATURE
FL-15SA	A0101.111110	150	HPS	22.70	230V*	50HZ***	(-50°;+55°)
FL-25SA	A0101.111210	250	HPS	23.80	230V*	50HZ***	(-50°;+55°)
FL-40SA	A0101.411311	400	HPS	25.00	230V*	50HZ***	(-50°;+55°)
FL-25IM	A0102.111210	250	METAL HALIDE	23.80	230V*	50HZ***	(-50°;+55°)
FL-40IM	A0102.111314	400	METAL HALIDE	22.80	230V*	50HZ***	(-50°;+55°)
FL-25HG	A0103.111210	250	MERCURY VAPOUR	23.70	230V*	50HZ***	(-50°;+55°)
FL-40HG	A0103.111310	400	MERCURY VAPOUR	20.90	230V*	50HZ***	(-50°;+55°)
FL-14HA	A0104.111512	2X70	HALOGEN	20	24VDC	-	(-50°;+55°)
FL-14HA	A0104.111511	2X70	HALOGEN	20	48VDC	-	(-50°;+55°)
FL-50HA	A0104.111410	500	HALOGEN	19	230V**	50/60HZ	(-50°;+55°)

\* 220 V and 240 V versions available upon request

\*\* 220 V, 240 V (marking upon request)

\*\*\* 60 Hz available upon request

Below -20°C, mercury vapour and metal halid floodlight can be used, providing they are switched on 24 hours a day.

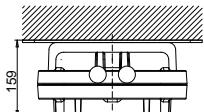
# FLOODLIGHTS

## FL-LED Series

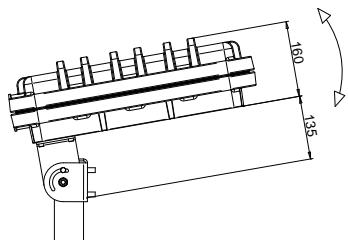
### SPARES & ACCESSORIES

CODE	TYPE
AOA01.000020	2" POLE MOUNTING KIT FOR FL-LED
AOA01.000021	180° ADJUSTABLE POLE/WALL/FRAME MOUNTING KIT /2" PIPE, FOR FL- LED
AOA01.000022	90° ADJUSTABLE POLE/WALL/FRAME MOUNTING KIT/2" FOR FL-LED
AOA01.000024	DIRECT CEILING/WALL MOUNTING KIT FOR FL-LED
AOA02.000001	KIT OF THREE SAFETY SIGN/PICTOGRAMME
AOA01.000017	STAINLESS STEEL SAFETY GUARD

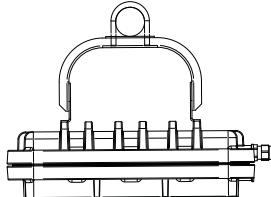
AOA01.000024



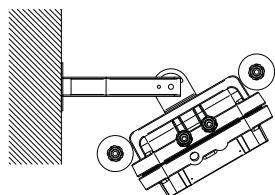
AOA01.000020



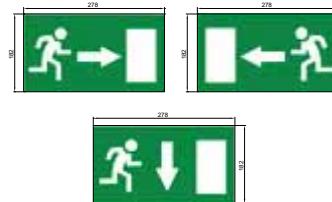
AOA01.000022



AOA01.000021 with longer bracket for emergency version



AOA02.000001



# LAMPS / SPARE PARTS

## Lighting section

PRODUCT NAME	SHAPE	POWER [W]	CAP	VOLTAGE	FLUX [lm]	CODE	WHERE IT IS USED
FLUORESCENT COMPACT		45	E27	230 VAC	3000	A5004.000087	EVDE-4/FC 45 / EVCC-4/FC 45 / EVA-4/FC 45
		60	E27	230 VAC	4200	A5004.000088	EVDE-4/FC 65 / EVCC-4/FC 65 / EVA-4/FC 65
		75	E27	230 VAC	5600	A5004.000089	EVDE-5/FC 75 / EVCC-5/FC 75 / EVA-5/FC 75
HALOGEN BULB		42	E27	230 VAC	630	A5004.000083	EVDE-1/HA 42 / EVDE-2/HA 42 / EVCC-1/HA 42 / EVCC-2/HA 42 / EVA-1/HA 42 / EVA-2/HA 42
		53	E27	230 VAC	850	A5004.000084	EVCC-PR2/HA 53
		70	E27	230 VAC	1200	A5004.000085	EVDE-2/HA 70 / EVDE-PT/HA 70 / EVDE-WAR / EVCC-PR2/HA 70 / EVCC-PR3/HA 70 / EVCC-PT/HA 70 / EVCC-WAR / EVA-1/HA 70 / EVA-2/HA 70 / EVA-WAD
		105	E27	230 VAC	1980	A5004.000086	EVDE-2/HA 105 / EVCC-2/HA 105 / EVA-2/HA 105
		140	E27	230 VAC	2840	A5004.000128	EVDE-3/HA 140 / EVCC-3/HA 140 / EVA-3/HA 140
HIGH PRESSURE SODIUM BULB + IGNITER		70	E27	220/240 VAC	5900	A5004.000044	EVDE-2/NA-B 70 / EVCC-2/NA-B 70 / EVA-2/NA-B 70
HIGH PRESSURE SODIUM BULB		50	E27	220/240 VAC		A5004.000043	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	A5004.000064	EVDE-3/NA-B 70 / EVCC-3/NA-B 70 / EVA-3/NA-B 70
		100	E40	220/240 VAC	10000	A5004.000062	EVDE-4/NA-B 100 / EVCC-4/NA-B 100 / EVA-4/NA-B 100
		150	E40	220/240 VAC	16100	A5004.000045	EVDE-4/NA-B 150 / EVCC-4/NA-B 150 / EVA-4/NA-B 150
		250	E40	220/240 VAC	30900	A5004.000046	EVDE-4/NA-B 250 / EVDE-5/NA-B 250
		400	E40	220/240 VAC	55400	A5004.000047	EVDE-5/NA-B 400
MERCURY VAPOUR BULB		50	E27	220/240 VAC	1770	A5004.000039	EVDE-2/HG-B 50 / EVCC-2/HG-B 50 / EVA-2/HG-B 50
		80	E27	220/240 VAC	3600	A5004.000040	EVDE-2/HG-B 80 / EVCC-2/HG-B 80 / EVA-2/HG-B 80
		125	E27	220/240 VAC	6200	A5004.000041	EVDE-3/HG-B 125 / EVCC-3/HG-B 125 / EVA-3/HG-B 125
		250	E40	220/240 VAC	12700	A5004.000042	EVDE-4/HG-B 250 / EVDE-4/HG-B 250 / FL-25HG
		400	E40	220/240 VAC	22000	A5004.000029	EVDE-5/HG-B 400
METAL HALIDE BULB		70	E27	220/240 VAC	7230	A5005.000003	EVDE-3/IM-B 70 / EVCC-3/IM-B 70 / EVA-3/IM-B 70
		100	E40	220/240 VAC	9400	A5005.000004	EVDE-4/IM-B 100 / EVCC-4/IM-B 100 / EVA-4/IM-B 100
		150	E40	220/240 VAC	15100	A5005.000005	EVDE-4/IM-B 150 / EVCC-4/IM-B 150 / EVA-4/IM-B 150
		250	E40	220/240 VAC	18000	A5004.000030	EVDE-4/IM-B 250 / EVDE-5/IM-B 250
		400	E40	220/240 VAC	32500	A5004.000032	EVDE-5/IM-B 400
LED		7	E27	230 VAC	430	A5006.000121	EVCC-PR3/LED 7
HIGH PRESSURE SODIUM TUBE		150	E40	230 VAC	18000	A5004.000068	FL-15SA
		250	E40	230 VAC	33000	A5004.000069	FL-25SA
		400	E40	230 VAC	55800	A5004.000070	FL-40SA
METAL HALIDE TUBE		250	E40	230 VAC	20500	A5004.000053	FL-25IM
		400	E40	230 VAC	41000	A5004.000054	FL-40IM
HALOGEN		70	H3	24 VDC	1750	A5004.000061	FL-14HA
HALOGEN TUBE		500	E40	230 VAC	10250	A5004.000059	FL-50HA
FLUORESCENT TUBE		18	G13	220/240 VAC	1300	A5004.000112	EVF-P 118 / EVF-P 218 / RMS-540 / RMS-550 / RMS-560
		36	G13	220/240 VAC	3250	A5004.000113	EVF-P 236 / RMS-540 / RMS-550 / RMS-560
		58	G13	220/240 VAC	5240	A5004.000111	EVF-P 258
MERCURY VAPOUR TUBE		400	E40	230VAC	21000	A5004.000058	FL-40HG



# CONTROL STATIONS

CONTROL STATIONS



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## Increased safety

- EFXE Series - Stainless steel AISI 316L
  - EFXE Series - Copper free aluminium
  - EFE Series - GRP
- Spares & Accessories

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## Flameproof

- CP.../EFDCN Series - Copper free aluminium
  - CP.../EFSRC Series - Copper free aluminium
  - EPKMZ Series - Circuit breaker enclosure - Copper free aluminium
- Spares & Accessories

## INCREASED SAFETY

# Push Button Stations EFXE Series - AISI316L



Push button stations EFXE Series, made of stainless steel AISI316L, are manufactured by using enclosures AQ../AR.. and SB Series.

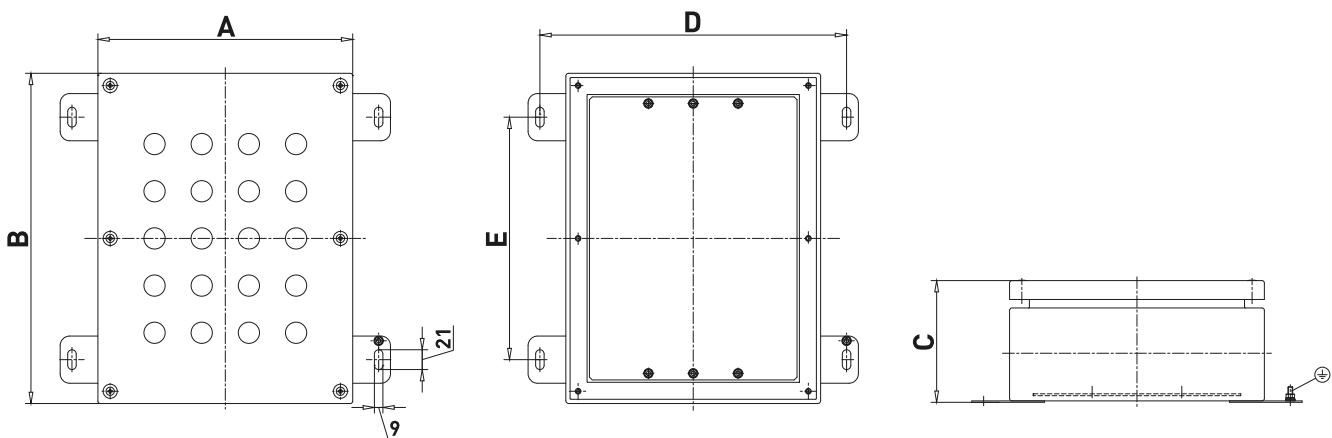
They are designed to meet the requirements for use ON and OFF-SHORE, in petrochemical and marine applications and for any other industry where an explosive atmosphere may be present.

They can be equipped with following Ex de certified components:

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

## TECHNICAL FEATURES

<b>Material</b>	Stainless steel AISI-316L
<b>IP rating</b>	IP66/IP67
<b>Ambient temperature range</b>	-50°C to +60°C (ATEX) -50°C to +95°C (IECEx)
<b>Approvals</b>	IMQ 08 ATEX 028X IECEx IMQ 15.0002X TR CU
<b>Marking</b>	II 2 GD Ex de IIC T[**] Gb / Ex mb IIC T[**] Gb Ex tb IIIC T[**] Db IP66/67 ** T6/T85°C, T5/T100°C, T4/T135°C
<b>Surface treatment</b>	Acid treatment
<b>Standard certificate label</b>	Made by self adhesive UV and corrosion resistant polyester, approved by INERIS Laboratory
<b>Accessories available upon request</b>	Electropolish treatment Side gland plates Hinges Drain/breather valve Taffolyte/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-2727	270	270	130	325	177	4,5
EFXE-3535	350	350	160	405	257	5,6
EFXE-1320	137	200	130	192	-	4
EFXE-2027	200	270	130	255	177	7
EFXE-2735	270	350	130	325	257	9,5
EFXE-3550	350	500	160	405	407	13
EFXE-5050	500	500	160	555	407	14,5

\* For complete push button stations is necessary to ask to the Sales Office.

**Maximum number of entries on sides and cover**

TYPE	EFXE-2727		EFXE-3535		EFXE-1320		EFXE-2027		EFXE-2735		EFXE-3550		EFXE-5050	
	A	B	A	B	A	B	A	B	A	B	A	B	A	B
M20 / 1/2"	12	12	24	24	6	10	10	12	12	16	24	36	36	36
M25 / 3/4"	10	10	14	14	4	8	8	10	10	14	14	20	20	20
M32 / 1"	4	4	12	12	2	3	3	4	4	6	12	18	18	18
M40 / 1" 1/4	4	4	5	5	2	3	3	4	4	5	5	7	7	7
M50 / 1" 1/2	3	3	4	4	1	2	2	3	3	4	4	6	6	6
M63 / 2"	3	3	3	3	1	2	2	3	3	3	3	5	5	5
M75 / 2" 1/2	-	-	3	3	-	-	-	-	-	-	3	4	4	2
M80 / 3"	-	-	2	2	-	-	-	-	-	-	4	4	4	4
COVER ENTRIES	16		25		6		12		20		40		64	

## INCREASED SAFETY

# Push Button Stations EFXE Series - Aluminium



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

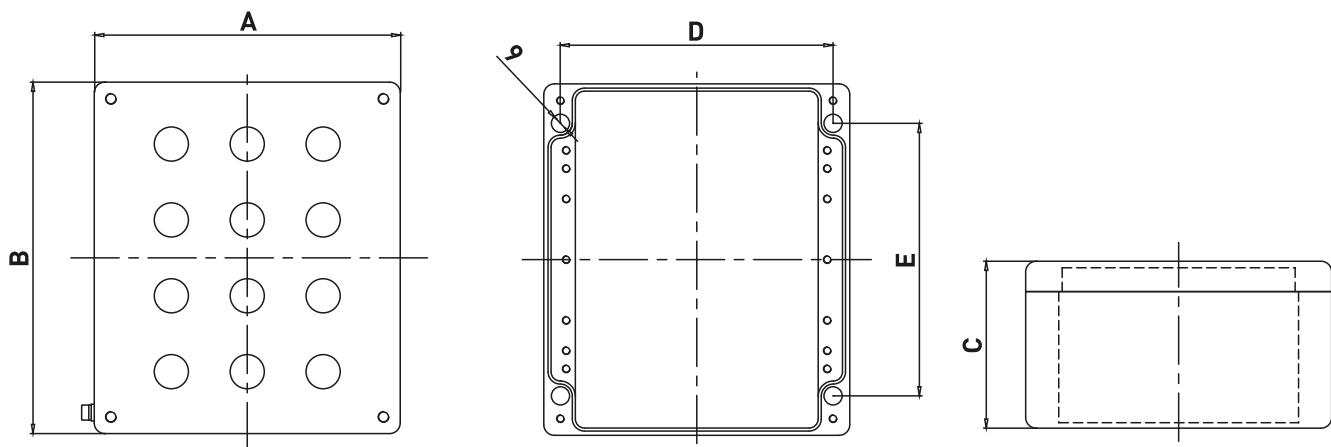
They are designed to meet the requirements for use ON and OFF-SHORE, in petrochemical and marine applications and for any other industry where an explosive atmosphere may be present.

They can be equipped with following Ex de certified components:

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

## TECHNICAL FEATURES

<b>Material</b>	Aluminium with low content of copper
<b>IP rating</b>	IP66/IP67
<b>Ambient temperature range</b>	-50°C to +60°C (ATEX) -50°C to +95°C (IECEx)
<b>Approvals</b>	IMQ 08 ATEX 028X IECEx IMQ 15.0002X TR CU
<b>Marking</b>	II 2 GD Ex de IIC T[**] Gb / Ex mb IIC T[**] Gb Ex tb IIIC T[**] Db IP66/67 ** T6/T85°C, T5/T100°C, T4/T135°C
<b>Surface treatment</b>	Standard with polyester powder coating RAL 7001
<b>Standard certificate label</b>	Made by self adhesive UV and corrosion resistant polyester, approved by INERIS Laboratory.
<b>Accessories available upon request</b>	Hinges Drain/breather valve Traffolyte/Stainless steel certificate label Internal mounting plate Passing through earth bolt

**Dimensions EFXE****EFXE Series - Aluminium push button stations**

CODE	TYPE	DIMENSIONS				
		A	B	C	E	F
B0201.081809	EFXE-0818	80	175	80	52	162
B0201.082506	EFXE-0825	80	250	80	51	237
B0201.101609	EFXE-1015	100	150	80	64	134
B0201.101009	EFXE-1010	100	100	81	66	86
B0201.121210	EFXE-1212	120	122	81	83	106
B0201.122211	EFXE-1222	120	220	90	82	204
B0201.161610	EFXE-1616	160	160	90	110	140
B0201.165610	EFXE-1624	160	240	100	123	225
B0201.163610	EFXE-1636	160	360	91	110	340
B0201.232012	EFXE-2023	202	232	110	180	180
B0201.232812	EFXE-2328	230	280	110	181	261
B0201.233314	EFXE-2333	231	331	120	177	311

## INCREASED SAFETY

# Push Button Stations EFE Series – Glassfiber reinforced polyester



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

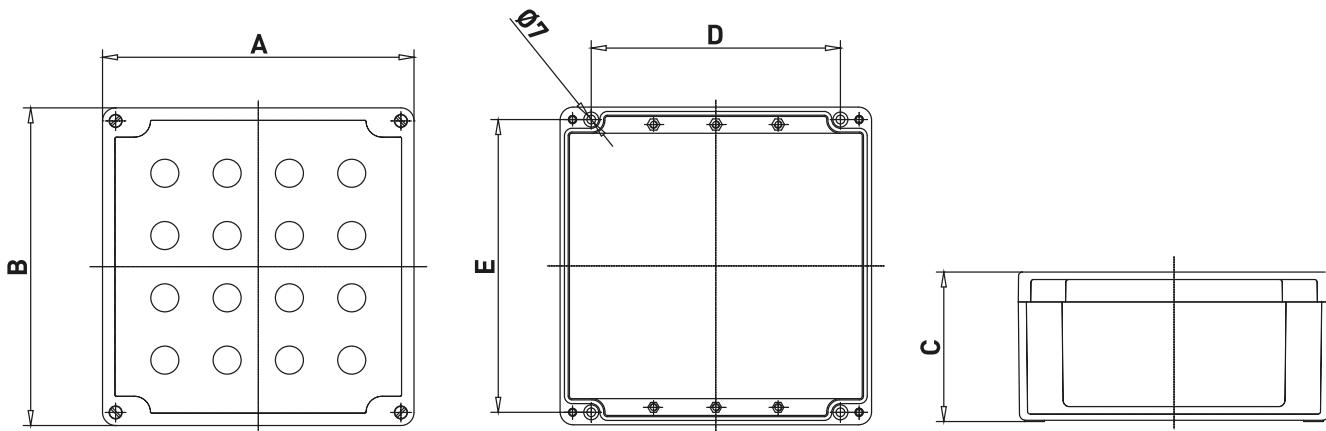
They are designed to meet the requirements for use ON and OFF-SHORE, in petrochemical and marine applications and for any other industry where an explosive atmosphere may be present.

They can be equipped with following Ex de certified components:

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

## TECHNICAL FEATURES

<b>Material</b>	GRP (Glassfiber reinforced polyester)
<b>IP rating</b>	IP66/IP67
<b>Ambient temperature range</b>	-50°C to +60°C (ATEX) -50°C to +95°C (IECEx)
<b>Approvals</b>	IMQ 08 ATEX 028X IECEx IMQ 15.0002X TR CU
<b>Marking</b>	II 2 GD Ex de IIC T(**) Gb / Ex mb IIC T(**) Gb Ex tb IIIC T(**) Db IP66/67 ** T6/T85°C, T5/T100°C, T4/T135°C
<b>Standard certificate label</b>	Made by self adhesive UV and corrosion resistant polyester, approved by INERIS Laboratory.
<b>Accessories available upon request</b>	Hinges Drain/breather valve Taffolyte/Stainless steel certificate label Internal mounting plate Earth continuity plates Passing through earth bolt

**Dimensions EFE****EFE Series - GRP push button stations**

TYPE	DIMENSIONS					WEIGHT [kg]
	A	B	C	D	E	
EFE-1212	120	122	90	82	106	0.75
EFE-1222	120	220	90	82	204	1,06
EFE-1616	160	160	90	110	140	1,29
EFE-1626	160	260	90	110	240	1.71
EFE-1636	160	360	90	110	340	2.15
EFE-2526	250	255	120	200	235	2.65
EFE-2540	250	400	120	200	380	3,65
EFE-2560	250	600	120	200	580	5,235
EFE-4140	405	400	120	355	380	5.58

\* For complete push button stations is necessary to ask to the Sales Office.

**Maximum number of entries on sides and cover**

TYPE	M20 / 1/2"		M25 / 3/4"		M32 / 1"		M40 / 1" 1/4		M50 / 1" 1/2		M63 / 2"		COVER ENTRIES
	A	B	A	B	A	B	A	B	A	B	A	B	
EFE-1212	2	2	1	2	1	1	1	1	-	-	-	-	2
EFE-1222	2	5	1	4	1	3	1	3	-	-	-	-	6
EFE-1616	3	3	2	3	1	2	1	1	-	-	-	-	4
EFE-1626	3	5	2	5	1	4	1	3	-	3	-	-	8
EFE-1636	3	8	2	7	1	6	1	5	-	4	-	-	10
EFE-2526	8	10	8	10	3	7	3	4	2	3	2	2	16
EFE-2540	8	18	8	16	3	5	3	5	3	5	2	4	24
EFE-2560	8	25	8	24	3	10	3	8	2	6	2	6	40
EFE-4140	16	18	6	14	5	6	5	5	4	5	3	6	42

# INCREASED SAFETY

## Harmatex components

The Harmatex components range features large push button selection, with a choice of momentary or push-push actuation modes; pilot lamps and selector switches, with plastic or metal bezel.

Harmatex range offers unrivalled flexibility with a modular design accommodating up to 6 contacts per operator head.

## SPARES & ACCESSORIES

<b>Material</b>	Metal and plastic
<b>IP rating</b>	IP66
<b>Ambient temperature range</b>	-20°C TO 65°C -20°C TO 75°C
<b>Approvals</b>	INERIS 02ATEX9007U (contact blocks) INERIS 04ATEX9003U (pilot lamps)
<b>Marking</b>	II 2 GD Ex d e IIC Gb (contact blocks) Ex e mb IIC Gb (pilot lamps) Ex tb IIIC Db

### Flush push buttons

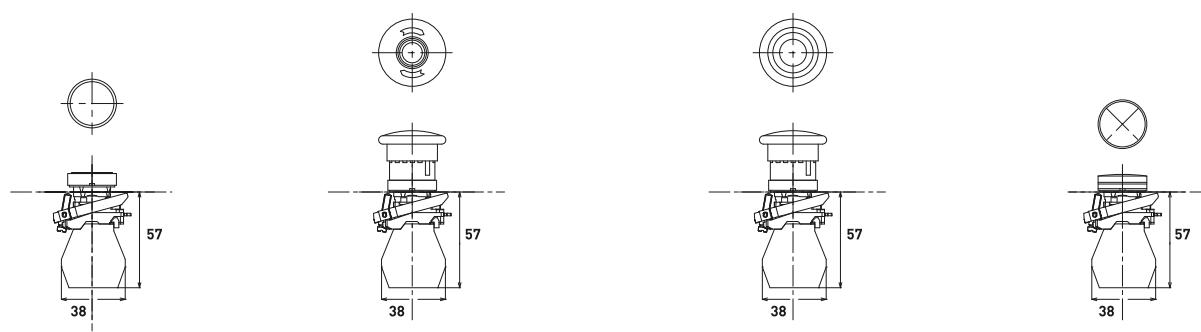
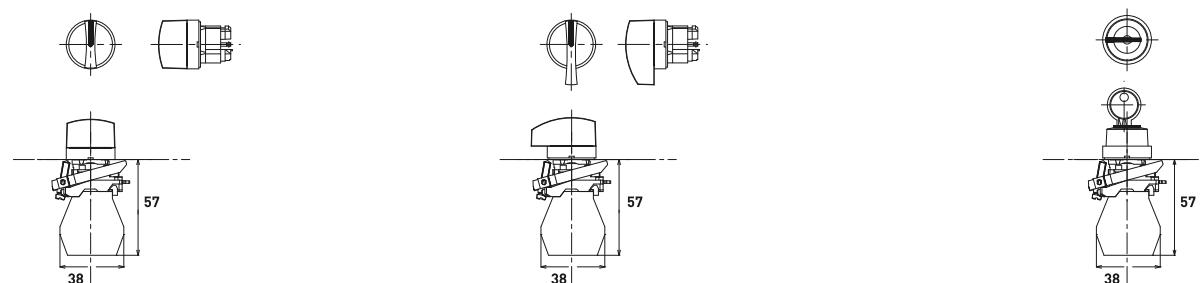


CODE	TYPE	BEZEL	COLOUR	CONTACT
B1301.500001	XBW4BA11 - MOMENTARY PUSH BUTTON	METAL	WHITE	1NO
B1301.500002	XBW4BA21 - MOMENTARY PUSH BUTTON	METAL	BLACK	1NO
B1301.500007	XBW4BA22 - MOMENTARY PUSH BUTTON	METAL	BLACK	1NC
B1301.500003	XBW4BA31 - MOMENTARY PUSH BUTTON	METAL	GREEN	1NO
B1301.500008	XBW4BA41 - MOMENTARY PUSH BUTTON	METAL	RED	1NO
B1301.500004	XBW4BA42 - MOMENTARY PUSH BUTTON	METAL	RED	1NC
B1301.500005	XBW4BA51 - MOMENTARY PUSH BUTTON	METAL	YELLOW	1NO
B1301.500006	XBW4BA61 - MOMENTARY PUSH BUTTON	METAL	BLUE	1NO

### Projecting push buttons



CODE	TYPE	BEZEL	COLOUR	CONTACT
B1301.517001	XBW4BL11 - MOMENTARY PUSH BUTTON	METAL	WHITE	1NO
B1301.517002	XBW4BL21 - MOMENTARY PUSH BUTTON	METAL	BLACK	1NO
B1301.517003	XBW4BL31 - MOMENTARY PUSH BUTTON	METAL	GREEN	1NO
B1301.517004	XBW4BL42 - MOMENTARY PUSH BUTTON	METAL	RED	1NC
B1301.517005	XBW4BL51 - MOMENTARY PUSH BUTTON	METAL	YELLOW	1NO
B1301.517006	XBW4BL61 - MOMENTARY PUSH BUTTON	METAL	BLUE	1NO

**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****Push buttons with silicone boot**

CODE	TYPE	BEZEL	COLOUR	CONTACT
B1301.518001	XBW4BP11S - MOMENTARY PUSH BUTTON	METAL	WHITE	1NO
B1301.518002	XBW4BP21S - MOMENTARY PUSH BUTTON	METAL	BLACK	1NO
B1301.000002	XBW4BP31S - MOMENTARY PUSH BUTTON	METAL	GREEN	1NO
B1301.000001	XBW4BP42S - MOMENTARY PUSH BUTTON	METAL	RED	1NC
B1301.518005	XBW4BP51S - MOMENTARY PUSH BUTTON	METAL	YELLOW	1NO
B1301.518006	XBW4BP61S - MOMENTARY PUSH BUTTON	METAL	BLUE	1NO



B1301.518013	XBW5AP11S - MOMENTARY PUSH BUTTON	PLASTIC	WHITE	1NO
B1301.518014	XBW5AP21S - MOMENTARY PUSH BUTTON	PLASTIC	BLACK	1NO
B1301.518016	XBW5AP31S - MOMENTARY PUSH BUTTON	PLASTIC	GREEN	1NO
B1301.518019	XBW5AP42S - MOMENTARY PUSH BUTTON	PLASTIC	RED	1NC
B1301.518024	XBW5AP51S - MOMENTARY PUSH BUTTON	PLASTIC	YELLOW	1NO
B1301.518023	XBW5AP61S - MOMENTARY PUSH BUTTON	PLASTIC	BLUE	1NO

**Stop mushroom push button**

CODE	TYPE	BEZEL	COLOUR	CONTACT
B1301.501001	XBW4BC21 - MOMENTARY MUSHROOM	METAL	BLACK	1NO
B1301.501002	XBW4BC31 - MOMENTARY MUSHROOM	METAL	GREEN	1NO
B1301.501003	XBW4BC42 - MOMENTARY MUSHROOM	METAL	RED	1NC
B1301.501004	XBW4BC51 - MOMENTARY MUSHROOM	METAL	YELLOW	1NO
B1301.501005	XBW4BC61 - MOMENTARY MUSHROOM	METAL	BLUE	1NO

B1301.522002	XBW5AC21 - MOMENTARY MUSHROOM	PLASTIC	BLACK	1NO
B1301.522003	XBW5AC31 - MOMENTARY MUSHROOM	PLASTIC	GREEN	1NO
B1301.522004	XBW5AC42 - MOMENTARY MUSHROOM	PLASTIC	RED	1NC
B1301.522005	XBW5AC51 - MOMENTARY MUSHROOM	PLASTIC	YELLOW	1NO
B1301.522006	XBW5AC61 - MOMENTARY MUSHROOM	PLASTIC	BLUE	1NO

### Emergency stop mushroom push buttons



CODE	TYPE	BEZEL	CONTACT
B1301.519001	XBW4BS142 - MUSHROOM TWIST T.R. WITH KEY	METAL	1NC
B1301.520001	XBW4BS542 - MUSHROOM TWIST T.R.	METAL	1NC



B1301.522007	XBW5AS142 - MUSHROOM TWIST T.R. WITH KEY	PLASTIC	1NC
B1301.522009	XBW5AS542 - MUSHROOM TWIST T.R.	PLASTIC	1NC

### Pilot lights 24V to 245V AC/DC



CODE	TYPE	BEZEL	COLOUR
B1301.526001	XLW4BV013 - PILOT LIGHT	METAL	WHITE
B1301.526002	XLW4BV033 - PILOT LIGHT	METAL	GREEN
B1301.526003	XLW4BV043 - PILOT LIGHT	METAL	RED
B1301.526004	XLW4BV053 - PILOT LIGHT	METAL	YELLOW
B1301.526005	XLW4BV063 - PILOT LIGHT	METAL	BLUE



B1301.526006	XLW5AV013 - PILOT LIGHT	PLASTIC	WHITE
B1301.526008	XLW5AV033 - PILOT LIGHT	PLASTIC	GREEN
B1301.526010	XLW5AV043 - PILOT LIGHT	PLASTIC	RED
B1301.526012	XLW5AV053 - PILOT LIGHT	PLASTIC	YELLOW
B1301.526014	XLW5AV063 - PILOT LIGHT	PLASTIC	BLUE

### Selector switches with standard handle



CODE	TYPE	BEZEL	POSITIONS	CONTACT
B1301.502001	XBW4BD21 - STAY PUT	METAL	2	1NO
B1301.506001	XBW4BD41 - SPRING RETURN	METAL	2	1NO
B1301.504001	XBW4BD33 - STAY PUT	METAL	3	1NO+1NO
B1301.508001	XBW4BD53 - SPRING RETURN TO CENTER	METAL	3	1NO+1NO
B1301.510001	XBW4BD73 - SPRING RETURN FROM LEFT	METAL	3	1NO+1NO
B1301.512001	XBW4BD83 - SPRING RETURN FROM RIGHT	METAL	3	1NO+1NO

B1301.516008	XBW5AD21 - STAY PUT	PLASTIC	2	1NO
B1301.516014	XBW5AD41 - SPRING RETURN	PLASTIC	2	1NO
B1301.500009	XBW5AD33 - STAY PUT	PLASTIC	3	1NO+1NO
B1301.516016	XBW5AD53 - SPRING RETURN TO CENTER	PLASTIC	3	1NO+1NO
B1301.516019	XBW5AD73 - SPRING RETURN FROM LEFT	PLASTIC	3	1NO+1NO
B1301.516021	XBW5AD83 - SPRING RETURN FROM RIGHT	PLASTIC	3	1NO+1NO

### Selector switches with long handle



CODE	TYPE	BEZEL	POSITIONS	CONTACT
B1301.516001	XBW4BJ21 - STAY PUT	METAL	2	1NO
B1301.516003	XBW4BJ41 - SPRING RETURN	METAL	2	1NO
B1301.516002	XBW4BJ33 - STAY PUT	METAL	3	1NO+1NO
B1301.516004	XBW4BJ53 - SPRING RETURN TO CENTER	METAL	3	1NO+1NO
B1301.516005	XBW4BJ73 - SPRING RETURN FROM LEFT	METAL	3	1NO+1NO
B1301.516006	XBW4BJ83 - SPRING RETURN FROM RIGHT	METAL	3	1NO+1NO

**Key selector switches**

CODE	TYPE	BEZEL	POSITIONS	KEY WITHDRAWAL	CONTACT
B1301.514005	XBW4BG21 - STAY PUT	METAL	2	LEFT	1NO
B1301.514007	XBW4BG41 - STAY PUT	METAL	2	LEFT – RIGHT	1NO
B1301.514020	XBW4BG61 - SPRING RETURN FROM RIGHT	METAL	2	LEFT	1NO
B1301.514001	XBW4BG03 - STAY PUT	METAL	3	LEFT – 0 – RIGHT	1NO+1NO
B1301.514006	XBW4BG33 - STAY PUT	METAL	3	0	1NO+1NO
B1301.514008	XBW4BG53 - STAY PUT	METAL	3	LEFT – RIGHT	1NO+1NO
B1301.514012	XBW4BG93 - STAY PUT	METAL	3	LEFT	1NO+1NO
B1301.514003	XBW4BG093 - STAY PUT	METAL	3	RIGHT	1NO+1NO
B1301.514004	XBW4BG13 - SPRING RETURN FROM LEFT	METAL	3	0	1NO+1NO
B1301.514010	XBW4BG73 - SPRING RETURN TO CENTER	METAL	3	0	1NO+1NO
B1301.514011	XBW4BG83 - SPRING RETURN FROM RIGHT	METAL	3	0	1NO+1NO
B1301.514002	XBW4BG083 - SPRING RETURN FROM RIGHT	METAL	3	LEFT	1NO+1NO

**Contacts**

CODE	TYPE	CONTACT
B1307.000369	ZBWE101 – NORMALLY OPEN CONTACT	NO
B1307.000366	ZBWE102 – NORMALLY CLOSE CONTACT	NC

**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	

**Lamps**

CODE	TYPE
B1307.000244	ZBWV1 SPARE PILOT LIGHT BODY WHITE, RED, YELLOW, BLUE
B1307.000245	ZBWV3 SPARE PILOT LIGHT BODY FOR GREEN



# **FLAMEPROOF**

## **CP../EFDCN.. Series push button stations**



The CP../EFDCN.. range of control stations are based on the features of our CP../CPS.. enclosures, offer an Ex d IIC mode of protection and they can be equipped with different components (push button, selector switches, potentiometers, signal lamps, rotary handles, ammeters, voltmeters, etc.) Boxes are manufactured in aluminium with low content of copper 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.

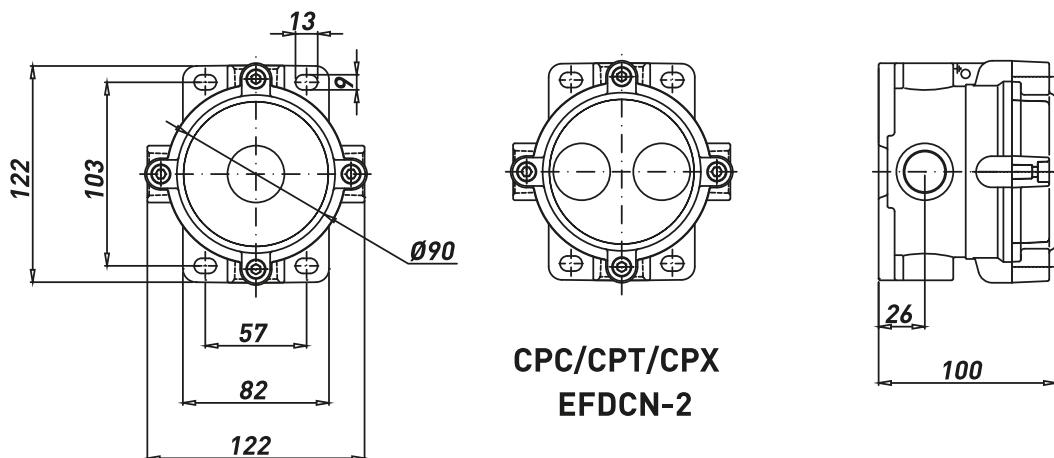
This series is taylor made on the base of customer specification, including quantity and type of operators.

Based on the customer's needs and certificate requirements, our technical department will advise and select the most suitable combination.

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

### **TECHNICAL FEATURES**

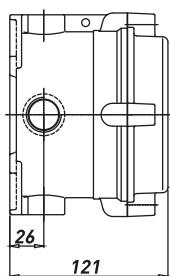
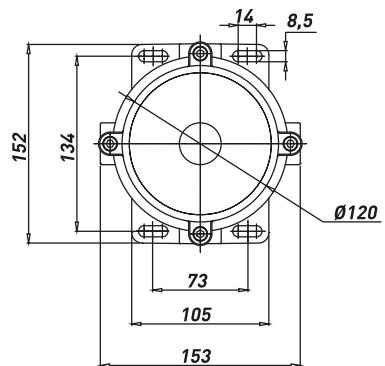
<b>Material</b>	Aluminium with low content of copper
<b>IP rating</b>	IP66
<b>Ambient temperature range</b>	-50°C to +60°C (ATEX) -60°C to +60°C (IECEx)
<b>Approvals</b>	INERIS 03ATEX0009 IECEX BKI 15.0002 TR CU
<b>Marking</b>	II 2 GD Ex d IIC T(*) Gb Ex t IIIC T(*) Db IP66 Ex db IIC T6/T5/T4 Ex tb IIIC T85°C/T100°C/T135°C Db IP66 * T6/T85°C, T5/T100°C, T4/T135°C
<b>Surface treatment</b>	Painted by green colour polyurethane painting cycle RAL6003 (other colour available upon request)
<b>Thread</b>	Metric pitch 1.5, ANSI B1.20.1 NPT, UNI-6125
<b>Standard certificate label</b>	Made by self adhesive UV and corrosion resistant polyester, approved by INERIS Laboratory.
<b>Accessories available upon request</b>	Internal anticondensate painting Taffolyte/Stainless steel certificate label Hot deep galvanized steel or Stainless Steel AISI316 stand / canopy.

**Dimensions CP../EFDCN****CPC/CPT/CPX  
EFDCN-2****CPC/CPT/CPX  
EFDCN-1****CP../EFDCN Series push button stations (Selection table - empty boxes)**

Nº OF ENTRIES	TYPE	COLOUR
2	CPC-26 2XM25	RAL6003
	CPC-26 2X3/4"GK	RAL6003
	CPC-26 2X3/4"NPT	RAL6003
3	CPT-26 3XM25	RAL6003
	CPT-26 3X3/4"GK	RAL6003
	CPT-26 3X3/4"NPT	RAL6003
4	CPX-26 4XM25	RAL6003
	CPX-26 4X3/4"GK	RAL6003
	CPX-26 4X3/4"NPT	RAL6003

\* For complete push button stations is necessary to ask to the Sales Office.

## Dimensions CPS../EFDCN



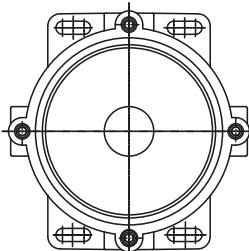
CPSG

CPSC/CPST/CPSX

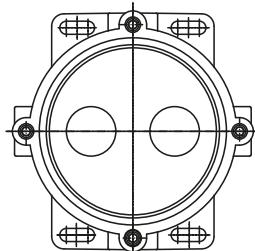
## CPS../EFDCN Series push button stations (Selection table - empty boxes)

Nº OF ENTRIES	TYPE
2	CPSC 2XM25 CPSC 2XM32 CPSC 2X3/4" GK CPSC 2X3/4" NPT CPSC 2X1" GK CPSC 2X1" NPT
3	CPST 3XM25 CPST 3XM32 CPST 3X3/4" GK CPST 3X3/4" NPT CPST 3X1" GK CPST 3X1" NPT
3	CPSG 3XM25 CPSG 3XM32 CPSG 3X3/4" GK CPSG 3X3/4" NPT CPSG 3X1" GK CPSG 3X1" NPT
4	CPSX 4XM25 CPSX 4XM32 CPSX 4X3/4" GK CPSX 4X3/4" NPT CPSX 4X1" GK CPSX 4X1" NPT

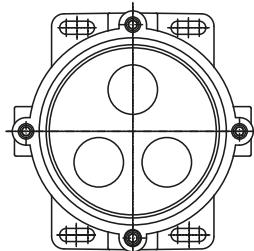
\* For complete push button stations is necessary to ask to the Sales Office.

**Dimensions CP../CPS.. EFDCN**

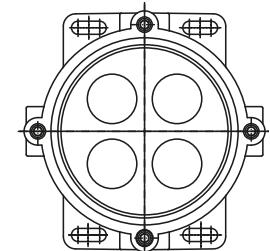
EFDCN-1



EFDCN-2



EFDCN-3



EFDCN-4

**CP../CPS.. EFDCN Series complete push button stations**

TYPE	CODE	ENTRIES	WEIGHT [kg]	AMBIENT TEMPERATURE	COLOUR	DIAGRAM
CPC-26/EFDCN-PE(1NO/1NC) - FOOT SWITCH	B0803.000046	M25X1,5	3.20	[-20°;+40°]	RAL-6003	
CPC-26/EFDCN-PE(1NO/1NC) - FOOT SWITCH	B0803.000085	3/4" NPT	3.20	[-20°;+40°]	RAL-6003	
CPC-26/EFDCN-PE(1NO/1NC) - FOOT SWITCH	B0803.000069	3/4" UNI-6125	3.20	[-20°;+40°]	RAL-6003	
CPC-26/EFDCN-PP - BLACK P.B. 1NO / RED P.B. 1NC	B0803.000039	M25X1,5	1.22	[-20°;+40°]	RAL-6003	
CPC-26/EFDCN-PP - BLACK P.B. 1NO / RED P.B. 1NC	B0803.000040	3/4" NPT	1.22	[-20°;+40°]	RAL-6003	
CPC-26/EFDCN-PP - BLACK P.B. 1NO / RED P.B. 1NC	B0803.000086	3/4" UNI-6125	1.22	[-20°;+40°]	RAL-6003	
CPC-26/EFDCN-P - BLACK P.B. 1NO/1NC	B0803.000036	M25X1,5	1.10	[-20°;+40°]	RAL-6003	
CPC-26/EFDCN-P - BLACK P.B. 1NO/1NC	B0803.000038	3/4" NPT	1.10	[-20°;+40°]	RAL-6003	
CPC-26/EFDCN-P - BLACK P.B. 1NO/1NC	B0803.000070	3/4" UNI-6125	1.10	[-20°;+40°]	RAL-6003	
CPSC-26/EFDCN-PPL - BLACK P.B. 1NO / RED P.B. 1NC / RED P.L.	B0803.000041	M25X1,5	1.70	[-20°;+40°]	RAL-6003	
CPSC-26/EFDCN-PPL - BLACK P.B. 1NO / RED P.B. 1NC / RED P.L.	B0803.000042	3/4" NPT	1.70	[-20°;+40°]	RAL-6003	
CPSC-26/EFDCN-PPL - BLACK P.B. 1NO / RED P.B. 1NC / RED P.L.	B0803.000087	3/4" UNI-6125	1.70	[-20°;+40°]	RAL-6003	
CPC-26/EFDCN-EM - BLACK P.B. 1NO/1NC	B0803.000043	M25X1,5	1.20	[-20°;+40°]	RAL-6003	
CPC-26/EFDCN-EM - BLACK P.B. 1NO/1NC	B0803.000044	3/4" NPT	1.20	[-20°;+40°]	RAL-6003	
CPC-26/EFDCN-EM - BLACK P.B. 1NO/1NC	B0803.000078	3/4" UNI-6125	1.20	[-20°;+40°]	RAL-6003	
CPC-26/EFDCN-EM - BLACK P.B. 1NO/1NC PRESSED	B0803.000045	M25X1,5	1.20	[-20°;+40°]	RAL-6003	
CPC-26/EFDCN-EM - RED P.B. 1NO/1NC	B0803.000096	M25X1,5	1.20	[-20°;+40°]	RAL-6003	

## **FLAMEPROOF**

# **CP.. / EFSRC.. Series selector switches**



The CP.. / EFSRC.. range of control stations are based on the features of our CP.. / CPS.. enclosures, offer an Ex d IIC mode of protection and they can be equipped with different components (push button, selector switches, potentiometers, signal lamps, rotary handles, ammeters, voltmeters, etc.)

Boxes are manufactured in aluminium with low content of copper and complete with threaded hubs suitable for cable glands or conduit, connection does not affect the internal void, which remains available for terminals wiring.

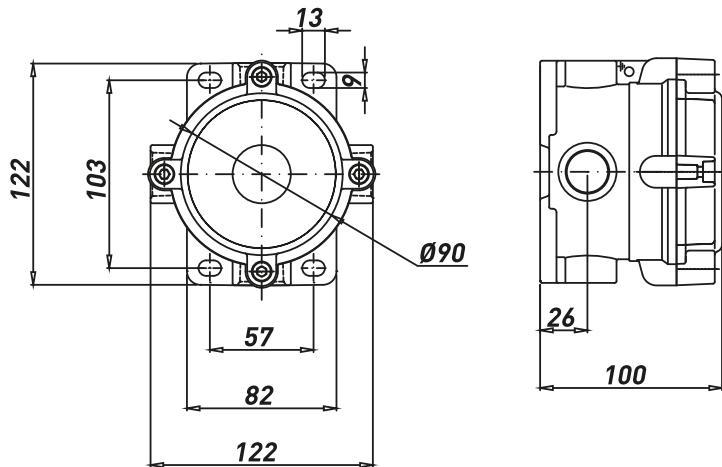
Internal and external screws are made of AISI316 stainless steel.

This series is taylor made on the base of customer specification, including quantity and type of operators. Based on the customer's needs and certificate requirements, our technical department will advise and select the most suitable combination.

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

## **TECHNICAL FEATURES**

<b>Material</b>	Aluminium with low content of copper
<b>IP rating</b>	IP66
<b>Ambient temperature range</b>	-50°C to +60°C (ATEX) -60°C to +60°C (IECEx)
<b>Approvals</b>	INERIS 03ATEX0009 IECEx BKI 15.0002 TR CU
<b>Marking</b>	II 2 GD Ex d IIC T(*) Gb Ex t IIIC T(*) Db IP66 Ex db IIC T6/T5/T4 Ex tb IIIC T85°C/T100°C/T135°C Db IP66 * T6/T85°C, T5/T100°C, T4/T135°C
<b>Surface treatment</b>	Painted by green colour polyurethane painting cycle RAL6003 (other colour available upon request)
<b>Thread</b>	Metric pitch 1.5, ANSI B1.20.1 NPT, UNI-6125
<b>Standard certificate label</b>	Made by self adhesive UV and corrosion resistant polyester, approved by INERIS Laboratory.
<b>Accessories available upon request</b>	Internal anticondensate painting Taffolyte/Stainless steel certificate label Hot deep galvanized steel or Stainless Steel AISI316 stand / canopy.

**Dimensions CP../EFSRC**

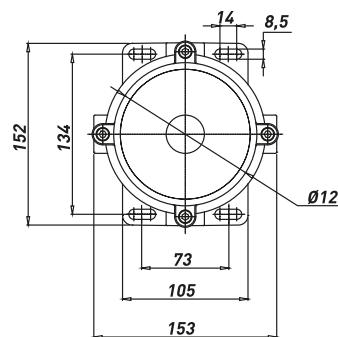
**CPC/CPT/CPX**  
**EFSRC-1**

**CP../EFSRC Series push button stations (Selection table - empty boxes)**

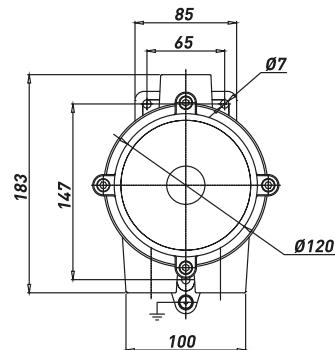
Nº OF ENTRIES	TYPE	COLOUR
2	CPC-26 2XM25	RAL6003
	CPC-26 2X3/4"GK	RAL6003
	CPC-26 2X3/4"NPT	RAL6003
3	CPT-26 3XM25	RAL6003
	CPT-26 3X3/4"GK	RAL6003
	CPT-26 3X3/4"NPT	RAL6003
4	CPX-26 4XM25	RAL6003
	CPX-26 4X3/4"GK	RAL6003
	CPX-26 4X3/4"NPT	RAL6003

\* For complete push button stations is necessary to ask to the Sales Office.

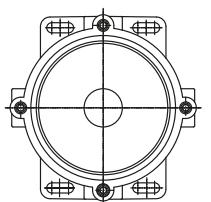
## Dimensions CPS../EFSRC



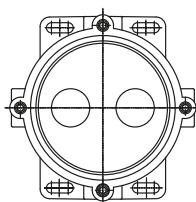
Cpsc/CPST/CPSX



CPSG



EFSRC-1



EFSRC-2

## CPS../EFSRC Series push button stations (Selection table - empty boxes)

Nº OF ENTRIES	TYPE
2	CPSC 2XM25 CPSC 2XM32 CPSC 2X3/4" GK CPSC 2X3/4" NPT CPSC 2X1" GK CPSC 2X1" NPT
3	CPST 3XM25 CPST 3XM32 CPST 3X3/4" GK CPST 3X3/4" NPT CPST 3X1" GK CPST 3X1" NPT
3	CPSG 3XM25 CPSG 3XM32 CPSG 3X3/4" GK CPSG 3X3/4" NPT CPSG 3X1" GK CPSG 3X1" NPT
4	CPSX 4XM25 CPSX 4XM32 CPSX 4X3/4" GK CPSX 4X3/4" NPT CPSX 4X1" GK CPSX 4X1" NPT

\* For complete push button stations is necessary to ask to the Sales Office.

Boxes takes following suffix:

- EFDCN; if assembled with push buttons, pilot lamps, potentiometer, etc.
- EFSRC; if assembled with step, change-over or selector switches.

## CP../CPS.. EFSRC Series complete selector switches

TYPE	CODE	DIAGRAM	ENTRIES	WEIGHT [kg]	AMBIENT TEMPERATURE	COLOUR
CPC-26/EFSRC-220	B0803.000001		M25X1,5	1.10	[-20°;+40°]	RAL-6003
CPC-26/EFSRC-220	B0803.000005		3/4" NPT	1.10	[-20°;+40°]	RAL-6003
CPC-26/EFSRC-220	B0803.000088		3/4" UNI-6125	1.10	[-20°;+40°]	RAL-6003
CPC-26/EFSRC-320	B0803.000090		M25X1,5	1.15	[-20°;+40°]	RAL-6003
CPC-26/EFSRC-320	B0803.000089		3/4" NPT	1.15	[-20°;+40°]	RAL-6003
CPC-26/EFSRC-320	B0803.000075		3/4" UNI-6125	1.15	[-20°;+40°]	RAL-6003
CPC-26/EFSRC-420	B0803.000002		M25X1,5	1.15	[-20°;+40°]	RAL-6003
CPC-26/EFSRC-420	B0803.000006		3/4" NPT	1.15	[-20°;+40°]	RAL-6003
CPC-26/EFSRC-420	B0803.000037		3/4" UNI-6125	1.15	[-20°;+40°]	RAL-6003
CPSC-26/EFSRC-432	B0803.000013		M25X1,5	1.30	[-20°;+40°]	RAL-6003
CPSC-26/EFSRC-432	B0803.000016		3/4" NPT	1.30	[-20°;+40°]	RAL-6003
CPSC-26/EFSRC-432	B0803.000107		3/4" UNI-6125	1.30	[-20°;+40°]	RAL-6003
CPC-26/EFSRC-D-220	B0803.000030		M25X1,5	1.15	[-20°;+40°]	RAL-6003
CPC-26/EFSRC-D-220	B0803.000032		3/4" NPT	1.15	[-20°;+40°]	RAL-6003
CPC-26/EFSRC-D-220	B0803.000076		3/4" UNI-6125	1.15	[-20°;+40°]	RAL-6003
CPSC-26/EFSRC-D-320	B0803.000031		M25X1,5	1.20	[-20°;+40°]	RAL-6003
CPSC-26/EFSRC-D-320	B0803.000119		3/4" NPT	1.20	[-20°;+40°]	RAL-6003
CPSC-26/EFSRC-D-320	B0803.000121		3/4" UNI-6125	1.20	[-20°;+40°]	RAL-6003
CPC-26/EFSRC-C-220	B0803.000033		M25X1,5	1.15	[-20°;+40°]	RAL-6003
CPC-26/EFSRC-C-220	B0803.000035		3/4" NPT	1.15	[-20°;+40°]	RAL-6003
CPC-26/EFSRC-C-220	B0803.000077		3/4" UNI-6125	1.15	[-20°;+40°]	RAL-6003
CPSC-26/EFSRC-C-320	B0803.000034		M25X1,5	1.30	[-20°;+40°]	RAL-6003
CPSC-26/EFSRC-C-320	B0803.000122		3/4" NPT	1.30	[-20°;+40°]	RAL-6003
CPSC-26/EFSRC-C-320	B0803.000127		3/4" UNI-6125	1.30	[-20°;+40°]	RAL-6003

# **FLAMEPROOF**

## EPKZM Series enclosures

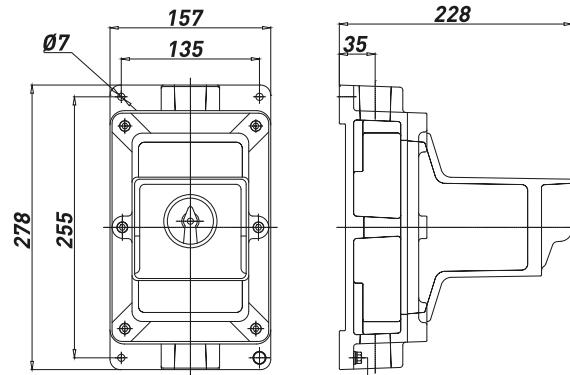
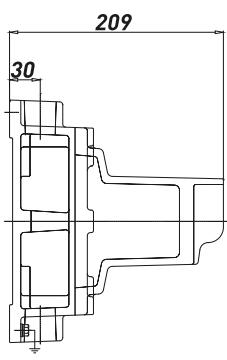
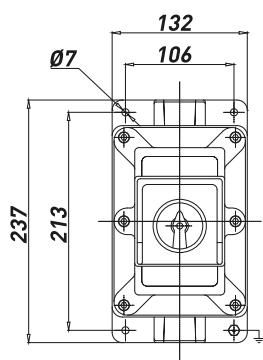


EPKMZ Series enclosures, made of aluminium with low content of copper RAL6003 painted, are used to house motor protector circuit breakers up to 63A.

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

## TECHNICAL FEATURES

<b>Material</b>	Aluminium with low content of copper
<b>IP rating</b>	IP66, IP67 with flanged joint coated with silicone grease
<b>Ambient temperature range</b>	-30°C to +55°C
<b>Approvals</b>	INERIS 02ATEX0027X TR CU
<b>Marking</b>	II 2 GD Ex d IIB T6 Gb Ex tb IIIC T85°C Db IP66/IP67
<b>Surface treatment</b>	Painted by green colour polyurethane painting cycle RAL6003 (other colour available upon request)
<b>Thread</b>	N° 2 entries Metric pitch 1.5, ANSI B1.20.1 NPT, UNI-6125
<b>Standard certificate label</b>	Made by self adhesive UV and corrosion resistant polyester, approved by INERIS Laboratory.
<b>Accessories available upon request</b>	Internal anticondensate painting Traffolyte/Stainless steel certificate label Hot deep galvanized steel or Stainless Steel AISI316 stand / canopy.

**Dimensions EPKMZ****EPKMZ-3****EPKMZ-4****EPKMZ Series enclosures**

TYPE	CODE	ENTRIES	WEIGHT [kg]	AMBIENT TEMPERATURE	COLOUR
EPKMZ-3 - RED/YELLOW HANDLE 55X55	B0103.000302*	1" UNI-6125	3.25	{-30°;+55°}	RAL-6003
EPKMZ-3 - BLACK HANDLE	B0103.000301*	1" UNI-6125	3.25	{-30°;+55°}	RAL-6003
EPKMZ-3 - RED/YELLOW HANDLE 55X55	B0103.070830*	1" NPT	3.25	{-30°;+55°}	RAL-6003
EPKMZ-3 - BLACK HANDLE	B0103.070824*	1" NPT	3.25	{-30°;+55°}	RAL-6003
EPKMZ-3 - RED/YELLOW HANDLE 55X55	B0103.070832*	M32X1,5	3.25	{-30°;+55°}	RAL-6003
EPKMZ-3 - BLACK HANDLE	B0103.070833*	M32X1,5	3.25	{-30°;+55°}	RAL-6003
EPKMZ-4 - RED/YELLOW HANDLE 72X72	B0103.000402*	1" UNI-6125	4.60	{-30°;+55°}	RAL-6003
EPKMZ-4 - BLACK HANDLE	B0103.000401*	1" UNI-6125	4.60	{-30°;+55°}	RAL-6003
EPKMZ-4 - RED/YELLOW HANDLE 72X72	B0103.070828*	1" NPT	4.60	{-30°;+55°}	RAL-6003
EPKMZ-4 - BLACK HANDLE	B0103.070827*	1" NPT	4.60	{-30°;+55°}	RAL-6003
EPKMZ-4 - RED/YELLOW HANDLE 72X72	B0103.070829*	M32X1,5	4.60	{-30°;+55°}	RAL-6003
EPKMZ-4 - BLACK HANDLE	B0103.070825*	M32X1,5	4.60	{-30°;+55°}	RAL-6003

\* Above codes refer to standard empty boxes. For complete motor protector circuit breakers is necessary to ask to the Sales Office.

# FLAMEPROOF Ex d Components

Ex d components are available in a wide range of operators/pilot lights PL series and selectors PSRC series; allow numerous combinations with our CP./CPS.. EFDCN/EFSRC 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

<b>IP rating</b>	IP66/IP67
<b>Ambient temperature range</b>	-50°C to +60°C
<b>Approvals</b>	IMQ 09ATEX0019U TR CU
<b>Marking</b>	II 2 GD Ex d IIC Ex td A21 IP66/IP67
<b>Barrel thread</b>	Metric M32x1,5

**PL.. Series momentary push buttons**



CODE SPARE PART	CODE COMPONENT CERTIFICATE	TYPE	COLOUR	WEIGHT (Kg)
B1302.000100	B1302.000101	PLA-10 PUSH BUTTON	BLACK	0.15
B1302.000200	B1302.000201	PLA-20 PUSH BUTTON	RED	0.15
B1302.000300	B1302.000301	PLA-30 PUSH BUTTON	GREEN	0.15
B1302.000400	B1302.000401	PLA-40 PUSH BUTTON	BLUE	0.15
B1302.000900	B1302.000902	PLA-50 PUSH BUTTON	YELLOW	0.15
B1302.000901	B1302.000903	PLA-60 PUSH BUTTON	WHITE	0.15

Contacts are not included

**PL.. Series lockable momentary push buttons**



CODE SPARE PART	CODE COMPONENT CERTIFICATE	TYPE	COLOUR	WEIGHT (Kg)
B1309.000100	B1309.000101	PLB-10 PIN-LOCKABLE PUSH BUTTON	BLACK	0.18
B1309.000200	B1309.000201	PLB-20 PIN-LOCKABLE PUSH BUTTON	RED	0.18
B1309.000300	B1309.000301	PLB-30 PIN-LOCKABLE PUSH BUTTON	GREEN	0.18

Contacts are not included

**PL.. Series Mushroom push buttons**

CODE SPARE PART	CODE COMPONENT CERTIFICATE	TYPE	COLOUR	WEIGHT (Kg)
B1310.000201	B1310.000205	PLC-S NC/NO MUSHROOM PUSH BUTTON TWIST TO RELEASE	RED	0.21
B1310.000202	B1310.000206	PLC-S NO/NO MUSHROOM PUSH BUTTON TWIST TO RELEASE	RED	0.21
B1310.000203	B1310.000207	PLC-S NC/NC MUSHROOM PUSH BUTTON TWIST TO RELEASE	RED	0.21
B1310.000301	B1310.000302	PLC-S-F NC/NO MUSHROOM PUSH BUTTON WITH KEY	RED	0.15
B1310.000303	B1310.000304	PLC-S-F NC/NC MUSHROOM PUSH BUTTON WITH KEY	RED	0.15
B1310.000305	B1310.000306	PLC-S-F NO/NO MUSHROOM PUSH BUTTON WITH KEY	RED	0.15
B1310.000101	B1310.000102	PLC-I MOMENTARY MUSHROOM PUSH BUTTON	RED	0.15

Contacts are not included

**PL.. Series Key selector switches**

CODE SPARE PART	CODE COMPONENT CERTIFICATE	TYPE	COLOUR	KEY WITHDRAWAL	WEIGHT (Kg)
B1305.001012	B1305.001014	PLF-10 NO/NC KEY SELECTOR SWITCH	-	0	0.20
B1305.001011	B1305.001016	PLF-10 NO/NO KEY SELECTOR SWITCH	-	0	0.20
B1305.001022	B1305.001023	PLF-10 NC/NC KEY SELECTOR SWITCH	-	0	0.20
B1305.001015	B1305.001028	PLF-10 NO/NO KEY SELECTOR SWITCH	-	0-1	0.20
B1305.001024	B1305.001025	PLF-10 NC/NC KEY SELECTOR SWITCH	-	0-1	0.20
B1305.001029	B1305.001020	PLF-10 NO/NC KEY SELECTOR SWITCH	-	0-1	0.20

Contacts are not included

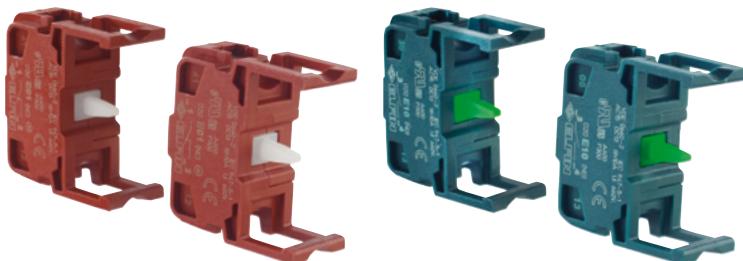
**PL.. Series mechanical operators**

CODE SPARE PART	CODE COMPONENT CERTIFICATE	TYPE	COLOUR	WEIGHT (Kg)
B1310.000500	B1310.000504	PLC RESTORE PUSH BUTTON - M32X1,5	GREEN	0.10
B1310.000502	B1310.000505	PLC RESTORE PUSH BUTTON - M32X1,5	RED	0.10
B1310.000503	B1310.000506	PLC RESTORE PUSH BUTTON - M32X1,5	BLACK	0.10
B1310.000600	B1310.000603	PLC RESET PUSH BUTTON - M12X1,75	-	0.10

Contacts are not included

## PL.. Series Contacts

CODE	TYPE	WEIGHT (Kg)
B1307.000099	NC CONTACT - PL.. SERIES	0.006
B1307.000100	NO CONTACT - PL.. SERIES	0.006



### Rated operational characteristic

ITH MAX. 6A	UE (V)	AC-15 Ie max. (A)	DC-13 Ie max. (A)	Ui max. (V)
6A	24	10	2,5	660
	48	8	1,4	
	60	6	1	
	110	6	0,6	
	220	3	0,3	
	380	2		
	400	1,5		
	500	1,5		
	600	1,2		

## PL.. Series Pilot lights



CODE SPARE PART	CODE COMPONENT CERTIFICATE	TYPE	COLOUR
B1303.000100	B1303.000101	PLD-10 PILOT LIGHT	WHITE
B1303.000200	B1303.000201	PLD-20 PILOT LIGHT	RED
B1303.000300	B1303.000301	PLD-30 PILOT LIGHT	GREEN
B1303.000400	B1303.000401	PLD-40 PILOT LIGHT	YELLOW
B1303.000500	B1303.000501	PLD-50 PILOT LIGHT	BLUE

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

## PL.. series Lamps



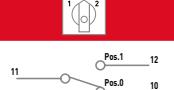
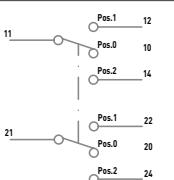
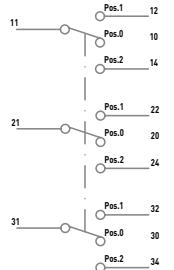
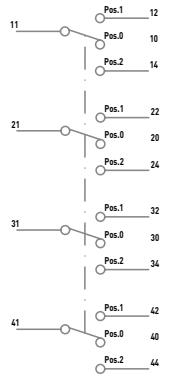
CODE	TYPE	VOLTAGE	COLOUR
B1307.000025	LED LAMP 12V-R	12V	RED
B1307.000026	LED LAMP 12V-V		GREEN
B1307.000027	LED LAMP 12V-G		YELLOW
B1307.000028	LED LAMP 12V-B		WHITE
B1307.000029	LED LAMP 24V-R	24V	RED
B1307.000030	LED LAMP 24V-V		GREEN
B1307.000031	LED LAMP 24V-G		YELLOW
B1307.000032	LED LAMP 24V-B		WHITE
B1307.0000291	LED LAMP 24V-BL	48V	BLUE
B1307.000043	LED LAMP 48V-R		RED
B1307.000042	LED LAMP 48V-V		GREEN
B1307.000044	LED LAMP 48V-G		YELLOW
B1307.000041	LED LAMP 48V-B		WHITE
B1307.000033	LED LAMP 110V-R	110V	RED
B1307.000034	LED LAMP 110V-V		GREEN
B1307.000035	LED LAMP 110V-G		YELLOW
B1307.000036	LED LAMP 110V-B		WHITE
B1307.000045	LED LAMP 110V-BL		BLUE
B1307.000037	LED LAMP 220V-R	220V	RED
B1307.000038	LED LAMP 220V-V		GREEN
B1307.000039	LED LAMP 220V-G		YELLOW
B1307.000040	LED LAMP 220V-B		WHITE
B1307.000333	LED LAMP 220V-BL		BLUE



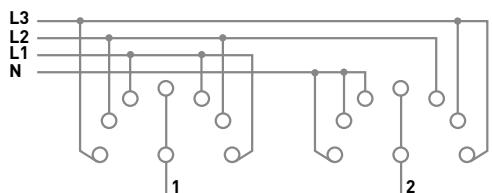
### PSRC.. Series On-load switches

CODE SPARE PART	CODE COMPONENT CERTIFICATE	TYPE	Nº OF POLES	AMPERE A	WEIGHT (Kg)	DIAGRAM
B1304.001200	B1304.001202	PSRC-120 - ON LOAD SWITCH	1	20	0.13	
B1304.002200	B1304.002201	PSRC-220 - ON LOAD SWITCH	2	20	0.16	
B1304.003200	B1304.003201	PSRC-320 - ON LOAD SWITCH	3	20	0.20	
B1304.004200	B1304.004201	PSRC-420 - ON LOAD SWITCH	4	20	0.20	
B1304.001320	B1304.001322	PSRC-132 - ON LOAD SWITCH	1	32	0.20	
B1304.002250	B1304.002251	PSRC-232 - ON LOAD SWITCH	2	32	0.20	
B1304.003320	B1304.003321	PSRC-332 - ON LOAD SWITCH	3	32	0.25	
B1304.004320	B1304.004321	PSRC-432 - ON LOAD SWITCH	4	32	0.25	

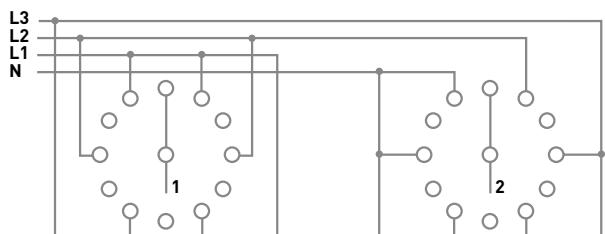
## PSRC.. Series Step switch

CODE SPARE PART	CODE COMPONENT CERTIFICATE	TYPE	Nº OF POLES	AMPERE A	WEIGHT (Kg)	DIAGRAM
B1304.021200	B1304.021201	PSRC-C 120 - STEP SWITCH	1	20	0.13	
B1304.022200	B1304.023201	PSRC-C 220 - STEP SWITCH	2	20	0.20	
B1304.023200	B1304.023203	PSRC-C 320 - STEP SWITCH	3	20	0.25	
B1304.023205	B1304.023206	PSRC-C 420 - STEP SWITCH	4	20	0.30	
B1304.023500	B1304.023502	PSRC-C VOLTMETER 7 POS.	-	-		SEE BELOW
B1304.023501	B1304.023503	PSRC-C VOLTMETER 12 POS.	-	-		SEE BELOW
B1304.023510	B1304.023511	PSRC-C AMPERMETER 4 POS.	-	-		SEE BELOW

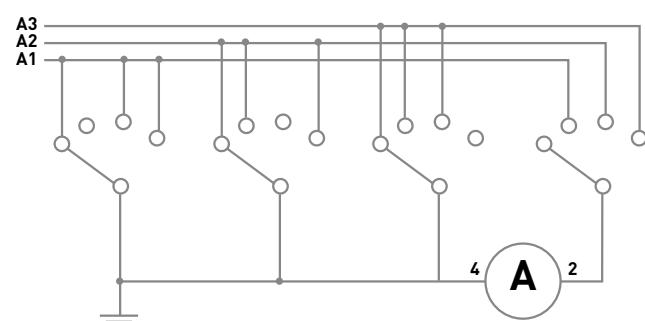
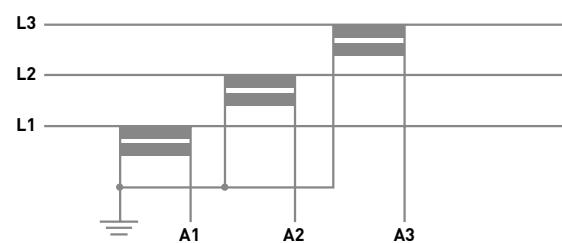
Voltmeter selector switch 7 pos.



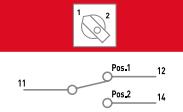
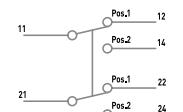
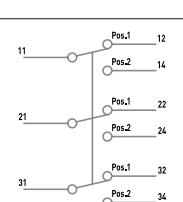
Voltmeter selector switch 12 pos.



Ammeter selector switch 4 pos.



**PSRC.. Series Change-over switch**

CODE SPARE PART	CODE COMPONENT CERTIFICATE	TYPE	Nº OF POLES	AMPERE A	WEIGHT (Kg)	DIAGRAM
B1304.011200	B1304.011201	PSRC-D 120 - CHANGE OVER SWITCH	1	20	0.13	
B1304.012200	B1304.012201	PSRC-D 220 - CHANGE OVER SWITCH	2	20	0.20	
B1304.013200	B1304.013201	PSRC-D 320 - CHANGE OVER SWITCH	3	20	0.25	

**PSRC.. Series SPECIAL rotating switches**

CODE SPARE PART	CODE COMPONENT CERTIFICATE	TYPE	Nº OF POLES	AMPERE A	WEIGHT (Kg) AVERAGE
B1304.002001	B1304.002101	PSRC-20-R		20	0,3
B1304.002002	B1304.002102	PSRC-20-Y1		20	0,3
B1304.002003	B1304.002103	PSRC-20-Y2		20	0,3
B1304.002004	B1304.002104	PSRC-20-X STD AGIP		20	0,3
B1304.002005	B1304.002105	PSRC-20-R STD AGIP		20	0,3
B1304.002006	B1304.002106	PSRC-220-W2	2	20	0,3
B1304.002007	B1304.002107	PSRC-20-X	1	20	0,3
B1304.001201	B1304.001203	PSRC-120-W1		20	0,3

**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



# JUNCTION BOXES



JUNCTION  
BOXES

P.102

## Increased safety

- AQ-AR Series - GRP
- AQ-AR Series - Copper free aluminium LOW thickness
- AQ-AR Series - Copper free aluminium HIGH thickness
- SB Series - AISI316L Stainless Steel
- AQ../AR.. Stainless Steel AISI316L
- AQR Series - Stainless steel AISI316L

P.114

## Flameproof

- CP... Series - Copper free aluminium Components & Accessories
- ECR-3

## **INCREASED SAFETY**

# AQ../AR.. Series junction boxes - Glassfiber reinforced polyester



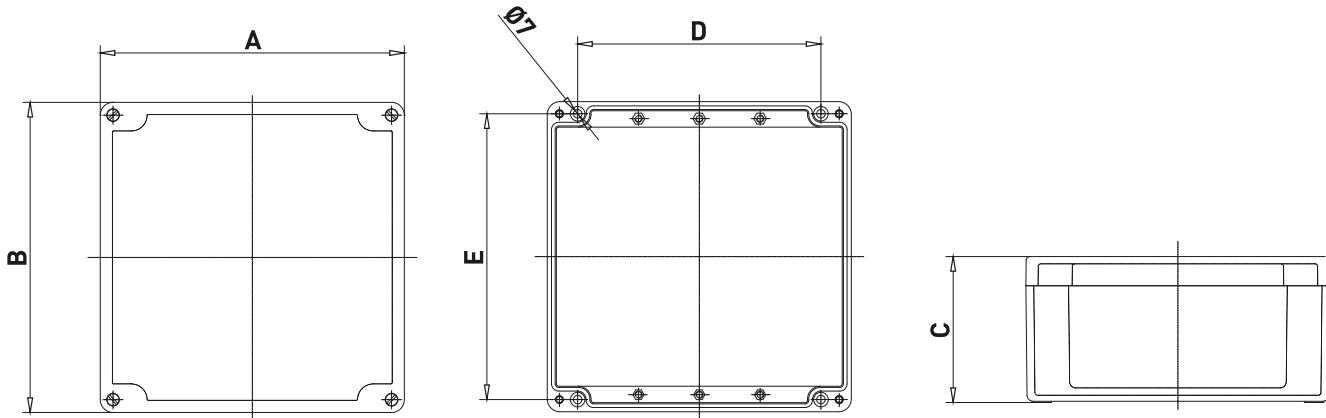
AQ../AR.. Series are used to house Ex e and Ex i terminals. Maximum number of terminals changes on the base of terminals section, enclosure operating temperature and required temperature class. They are ideally suited for chemical agents environments. Sea water corrosion resistance and extremes of low and high temperatures. EFE prefix is used for Ex de push button station execution and enclosure can be equipped with:

- Standard and emergency push buttons;
- Selector switches;
- Pilot lights;
- Measurement instruments;
- Electric and electronic equipment Ex de certified.

## **TECHNICAL FEATURES**

<b>Material</b>	GRP (Glassfiber reinforced polyester)
<b>IP rating</b>	IP66/IP67
<b>Ambient temperature range</b>	-50°C to +60°C (ATEX) -50°C to +60°C (IECEx - up to +95°C for some "special" models)
<b>Approvals</b>	IMQ 08 ATEX 028X IECEx IMQ 15.0002X TR CU
<b>Marking</b>	II 2 GD Ex e IIC Gb / Ex ia Ga IIC T(**) Ex tb IIIC T(**) Db IP66/67 ** T6/T85°C, T5/T100°C, T4/T135°C
<b>Standard certificate label</b>	Made by self adhesive UV and corrosion resistant polyester, approved by INERIS Laboratory.
<b>Accessories available upon request</b>	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

TYPE	DIMENSIONS					WEIGHT [kg]
	A	B	C	D	E	
AQ-080806P	75	80	55	45	48	0,23
AR-081106P	75	110	55	45	98	0,295
AQ-121209P	120	122	90	82	106	0,75
AR-122209P	120	220	90	82	204	1,06
AQ-161609P	160	160	90	110	140	1,29
AR-162609P	160	260	90	110	240	1,71
AR-163609P	160	360	90	110	340	2,15
AQ-252612P	250	255	120	200	235	2,65
AR-254012P	250	400	120	200	380	3,65
AR-256012P	250	600	120	200	580	5,235
AQ-414012P	405	400	120	355	380	5,58

For complete junction boxes is necessary to ask to the Sales Office.  
Other sizes available.

### 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
AR-254012P	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

## INCREASED SAFETY

# AQ../AR.. Series junction boxes – Aluminium low thickness



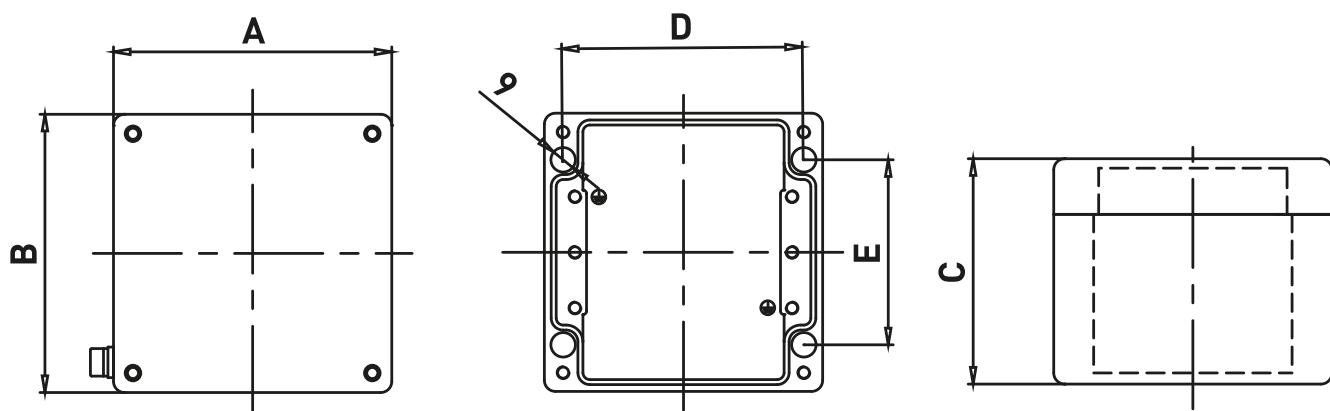
AQ../AR.. Series are used to house Ex e and Ex i terminals. Maximum number of terminals changes on the base of terminals section, enclosure operating temperature and required temperature class. They are ideally suited for chemical agents environments. Sea water corrosion resistance and extremes of low and high temperatures. EFXE prefix is used for Ex de push button station execution and enclosure can be equipped with:

- Standard and emergency push buttons;
- Selector switches;
- Pilot lights;
- Measurement instruments;
- Electric and electronic equipment Ex de certified.

## TECHNICAL FEATURES

<b>Material</b>	Aluminium with low content of copper
<b>IP rating</b>	IP66/IP67
<b>Ambient temperature range</b>	-50°C to +60°C (ATEX) -50°C to +60°C (IECEx - up to +95°C for some "special" models)
<b>Approvals</b>	IMQ 08 ATEX 028X IECEx IMQ 15.0002X TR CU
<b>Marking</b>	II 2 GD Ex e IIC Gb / Ex ia Ga IIC T(**) Ex tb IIIC T(**) Db IP66/67 ** T6/T85°C, T5/T100°C, T4/T135°C
<b>Standard certificate label</b>	Made by self adhesive UV and corrosion resistant polyester, approved by INERIS Laboratory.
<b>Surface treatment</b>	Standard with polyester powder coating RAL 7001
<b>Accessories available upon request</b>	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

CODE	TYPE	DIMENSIONS				
		A	B	C	E	F
B0201.080807	AQ-080806AL	80	75	57	52	63
B0201.081305	AR-081306AL	80	125	57	51	112
B0201.081807	AR-081806AL	80	175	57	52	162
B0201.081809	AR-081808AL	80	175	80	52	162
B0201.082506	AR-082508AL	80	250	80	51	237
B0201.101609	AR-101508AL	100	150	80	64	134
B0201.101009	AQ-101008AL	100	100	81	66	86
B0201.121210	AQ-121208AL	120	122	81	83	106
B0201.122211	AR-122209AL	120	220	90	82	204
B0201.161610	AQ-161609AL	160	160	90	110	140
B0201.165610	AR-162410AL	160	240	100	123	225
B0201.163610	AR-163609AL	160	360	91	110	340
B0201.232012	AR-202311AL	202	232	110	180	180
B0201.232812	AR-232811AL	230	280	110	181	261
B0201.233314	AR-233312AL	231	331	120	178	311

For complete junction boxes is necessary to ask to the Sales Office.

## **INCREASED SAFETY**

# AQ../AR.. Series junction boxes – Aluminium high thickness

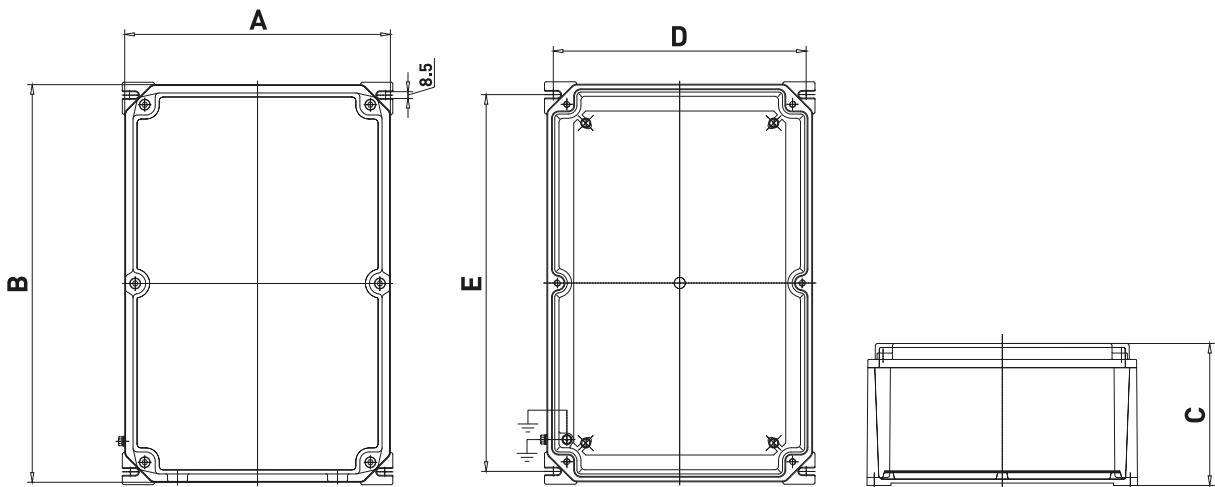


AQ../AR.. Series are used to house Ex e and Ex i terminals. Maximum number of terminals changes on the base of terminals section, enclosure operating temperature and required temperature class. They are ideally suited for chemical agents environments. Sea water corrosion resistance and extremes of low and high temperatures. EFXE prefix is used for Ex de push button station execution and enclosure can be equipped with:

- Standard and emergency push buttons;
- Selector switches;
- Pilot lights;
- Measurement instruments;
- Electric and electronic equipment Ex de certified.

## **TECHNICAL FEATURES**

<b>Material</b>	Aluminium with low content of copper
<b>IP rating</b>	IP66/IP67
<b>Ambient temperature range</b>	-50°C to +60°C
<b>Approvals</b>	IMQ 08 ATEX 028X TR CU
<b>Marking</b>	II 2 GD Ex e IIC Gb / Ex ia Ga IIC T(**) Ex tb IIIC T(**) Db IP66/67 ** T6/T85°C, T5/T100°C, T4/T135°C
<b>Standard certificate label</b>	Made by self adhesive UV and corrosion resistant polyester, approved by INERIS Laboratory.
<b>Surface treatment</b>	Green colour polyurethane painting cycle RAL6003 (other colour available upon request)
<b>Entries</b>	Metric pitch 1.5, ANSI B1.20.1 NPT, UNI-6125
<b>Hardware and screws</b>	AISI304 Stainless steel external hardware and screws
<b>Accessories available upon request</b>	Hinges Drain/breather valve Traffolyte/Stainless steel certificate label Internal mounting plate Passing through earth bolt

**Dimensions AQ../AR..****AQ../AR.. Series junction boxes**

TYPE	DIMENSIONS					WEIGHT [kg]
	A	B	C	D	E	
AR-8A AL S	330	660	177	305	635	16,7
AR-8A AL L	580	840	205	560	810	36
AR-8A AL (HTH)	495	495	171	470	470	17,3
AR-8 AL (HTH)	330	495	171	320	470	12,4
AQ-8 AL A (HTH)	332	332	178	310	315	8

For complete junction boxes is necessary to ask to the Sales Office.

**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
AR-8A AL S	34	50	20	28	17	25	7	10	6	8	4	7
AR-8A AL L	48	76	30	48	24	39	14	22	12	20	5	8
AR-8A AL (HTH)	36	36	20	20	18	18	7	7	6	6	5	5
AR-8 AL (HTH)	24	36	14	20	12	18	5	7	4	6	3	5
AQ-8 AL (HTH)	31	31	18	18	16	16	7	7	5	5	4	4

## INCREASED SAFETY

# SB Series - AISI316L Stainless steel

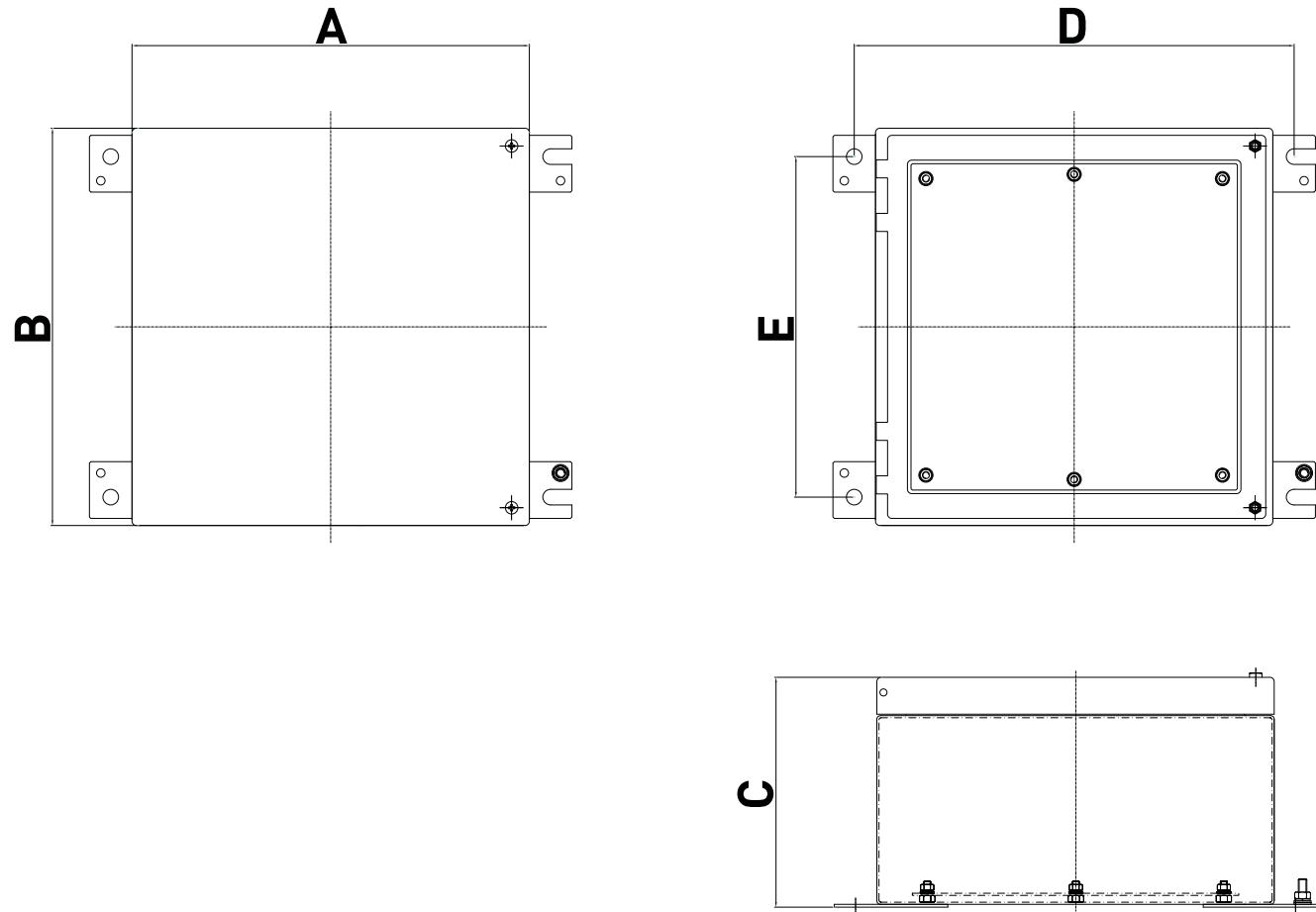


- SB are used to house Ex e and Ex i terminals, breather/drain device and pass-trough earth terminal, standard enclosure mounts hinges on the vertical side.
- Maximum numbers of terminals changes on the base of the terminals section and current, enclosure operating temperature and required temperature class.
- They are ideally suited for chemical agents environments, ON and OFF-SHORE applications and any other industries where an explosive atmosphere may be present.
- The only range full custom size from 200x200x100mm to 910x1140x500mm.
- Off shelf sizes: the best lead time on the market at competitive pricing.
- Our internal workshop allows flexibility in meeting any customer requirements.
- Optional polycarbonate windows to display indoor devices.
- Max ambient temperature up to +95 °C (IECEx).

## TECHNICAL FEATURES

<b>Material</b>	Stainless steel AISI 316L with thickness 1,5 mm
<b>IP rating</b>	IP66/IP67
<b>Shock resistance</b>	IK10
<b>Ambient temperature range</b>	From -50°C to +60°C (ATEX) From -50°C to +95°C (IECEx)
<b>Approvals</b>	IMQ 08 ATEX 028X IECEx IMQ 15.0002X TR CU
<b>Marking</b>	II 2GD Ex e IIC T4/T5/T6 Gb Ex ia IIC T4/T5/T6 Gb - Ex ib IIC T4/T5/T6 Gb Ex tb IIIC T135°C /T100°C/T85°C Db IP67
<b>Compliance</b>	IECEx / Atex: IEC/EN : 60079-0 / 60079-1 / 60079-7 / 60079-11 / 60079-18 / 60079-31
<b>Gaskets</b>	Silicon rubber (suitable for use between -70°C+200°C)
<b>Surface treatment</b>	Acid treatment (pickling)
<b>Standard certificate label</b>	Made by self adhesive UV and corrosion resistant polyester.
<b>Entries</b>	From M20x1.5mm to M80x1.5mm
<b>Hardware and screws</b>	Screws and accessories in stainless steel AISI 316L
<b>Accessories available upon request</b>	Electropolish treatment / Side gland plate / Without hinges / Drain/Breather valve / Traffolyte / stainless steel certificate label / Internal mounting plate / Locking facility / Passing trough earth bolt / Other material thickness starting from 1,2 mm

## Dimensions SB



## SB Series - AISI316L Stainless steel

TYPE	DIMENSIONS					CABLE ENTRIES W/O FLANGES		CABLE ENTRIES W. FLANGES		MAX N° TERMINALS		WEIGHT [kg]
	A	B	C	D	E	SIDE A	SIDE B	SIDE A	SIDE B	2,5 mm <sup>2</sup>	4 mm <sup>2</sup>	
SB-101210	100	120	100	150	-	4	4	-	-	7	6	1,5
SB-151510	150	150	100	180	-	6	6	-	-	13	11	2,5
SB-202010	200	200	100	230	160	9	9	-	-	22	19	3,0
SB-202016	200	200	160	230	160	15	15	8	8	22	19	3,5
SB-204016	200	400	160	230	360	15	30	8	18	66	57	4,8
SB-282816	280	280	160	310	240	21	21	12	12	76	64	5,2
SB-282827	280	280	270	310	240	46	46	33	33	76	64	7,5
SB-302016	300	200	160	330	160	21	15	12	8	44	38	5,0
SB-383816	380	380	160	410	340	30	30	18	18	114	96	8,1
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-385716	380	570	160	410	530	30	45	18	28	228	192	16,4
SB-575716	570	570	160	600	530	45	45	28	28	372	312	16,4
SB-575730	570	570	300	600	530	116	116	95	95	372	312	21,4
SB-577620	570	760	200	600	720	73	98	54	74	558	468	21,7
SB-769520	760	950	200	790	910	98	125	74	94	990	834	32,9
SB-272713	270	270	130	300	230	14	14	6	6	36	30	4,5
SB-353516	350	350	160	380	310	27	27	16	16	102	86	5,6
SB-142013	140	200	130	170	160	6	10	2	4	11	9	4,0
SB-202713	200	270	130	230	230	10	14	4	6	36	30	7,0
SB-273513	270	350	130	300	310	14	18	6	8	72	60	9,5
SB-355016	350	500	160	380	460	27	39	16	24	160	134	13,0
SB-505016	500	500	160	530	460	39	39	24	24	240	201	14,5

All the dimension can be +/- 20% upon request.

Consequently, any dimension between 10x12x10 and 910x1140x500 can be produced.

## INCREASED SAFETY

# AQ../AR.. Series junction boxes - AISI316 L Stainless steel

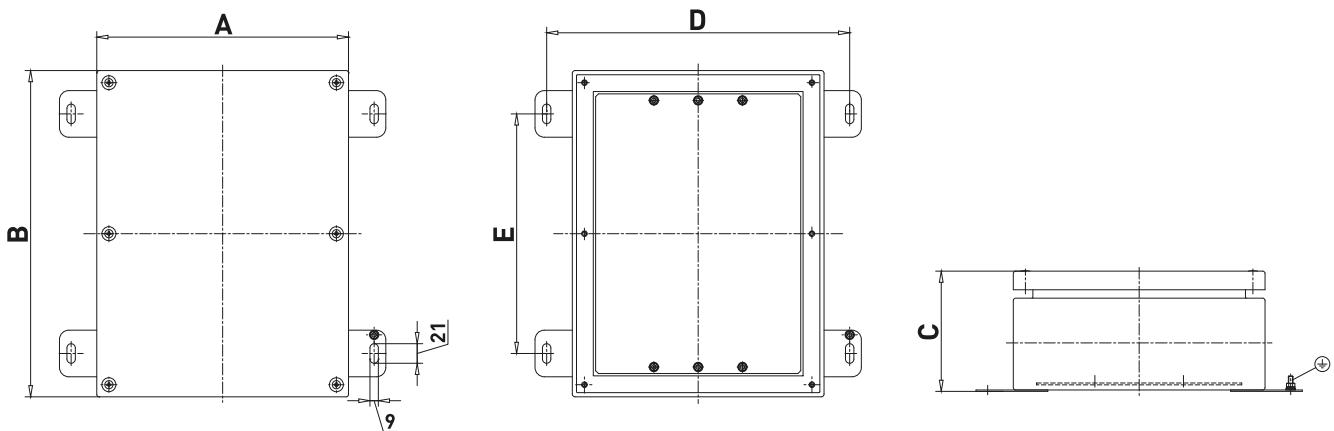


AQ../AR.. Series are used to house Ex e and Ex i terminals. Maximum number of terminals changes on the base of terminals section, enclosure operating temperature and required temperature class. They are ideally suited for chemical agents environments. Sea water corrosion resistance and extremes of low and high temperatures. EFXE prefix is used for Ex de push button station execution and enclosure can be equipped with:

- Standard and emergency push buttons;
- Selector switches;
- Pilot lights;
- Measurement instruments;
- Electric and electronic equipment Ex de certified.

## TECHNICAL FEATURES

<b>Material</b>	AISI316 L Stainless steel
<b>IP rating</b>	IP66/IP67
<b>Ambient temperature range</b>	-50°C to +60°C
<b>Approvals</b>	IMQ 08 ATEX 028X TR CU
<b>Marking</b>	II 2 GD Ex e IIC Gb / Ex ia Ga IIC T(**) Ex tb IIIC T(**) Db IP66/67 ** T6/T85°C, T5/T100°C, T4/T135°C
<b>Standard certificate label</b>	Made by self adhesive UV and corrosion resistant polyester, approved by INERIS Laboratory.
<b>Surface treatment</b>	Acid treatment
<b>Accessories available upon request</b>	Electropolish treatment Side gland plates Hinges Drain/breather valve Taffolyte/Stainless steel certificate label Internal mounting plate Locking facility Passing through earth bolt

**Dimensions AQ../AR..****AQ../AR.. Series junction boxes**

TYPE	DIMENSIONS					WEIGHT [kg]	
	A	B	C	D	E		
AQ-6	270	270	130	325	177		4,5
AQ-8	350	350	160	405	257		5,6
AR-2	137	200	130	192	-		4
AR-4	200	270	130	255	177		7
AR-6	270	350	130	325	257		9,5
AR-8	350	500	160	405	407		13
AR-8A	500	500	160	555	407		14,5

For complete junction boxes is necessary to ask to the Sales Office.

**Maximum number of entries on sides**

TYPE	AQ-6		AQ-8		AR-2		AR-4		AR-6		AR-8		AR-8A	
	A	B	A	B	A	B	A	B	A	B	A	B	A	B
M20 / 1/2"	12	12	24	24	6	10	10	12	12	16	24	36	36	36
M25 / 3/4"	10	10	14	14	4	8	8	10	10	14	14	20	20	20
M32 / 1"	4	4	12	12	2	3	3	4	4	6	12	18	18	18
M40 / 1" 1/4	4	4	5	5	2	3	3	4	4	5	5	7	7	7
M50 / 1" 1/2	3	3	4	4	1	2	2	3	3	4	4	6	6	6
M63 / 2"	3	3	3	3	1	2	2	3	3	3	3	5	5	5
M75 / 2" 1/2	-	-	3	3	-	-	-	-	-	-	3	4	4	2
M80 / 3"	-	-	2	2	-	-	-	-	-	-	4	4	4	4

**AQ../AR.. Series junction boxes with gland plates**

TYPE	DIMENSIONS					WEIGHT [kg]	
	A	B	C	D	E		
AQ-6/FR4	286	286	130	325	177		5
AQ-8/FR4	366	366	160	405	257		6,5
AR-4/FR4	286	216	130	255	177		7,3
AR-6/FR4	366	286	130	325	257		10
AR-8/FR4	516	366	160	405	407		13,7
AR-8A/FR4	516	516	160	555	407		15,2

For complete junction boxes is necessary to ask to the Sales Office.

**Maximum number of entries on sides**

TYPE	AQ-6/FR4		AQ-8/FR4		AR-4/FR4		AR-6/FR4		AR-8/FR4		AR-8A/FR4	
	A	B	A	B	A	B	A	B	A	B	A	B
M20 / 1/2"	5	5	14	14	4	5	5	7	14	22	22	22
M25 / 3/4"	5	5	6	6	3	5	5	6	6	10	10	10
M32 / 1"	4	4	5	5	2	4	4	5	5	8	8	8
M40 / 1" 1/4	3	3	4	4	2	3	3	4	4	7	7	7
M50 / 1" 1/2	-	-	4	4	-	-	-	-	4	6	6	6
M63 / 2"	-	-	3	3	-	-	-	-	3	5	5	5

## **INCREASED SAFETY**

# AQR.. Series junction boxes - AISI316 L Stainless steel



AQ../AR.. Series are used to house Ex e and Ex i terminals.

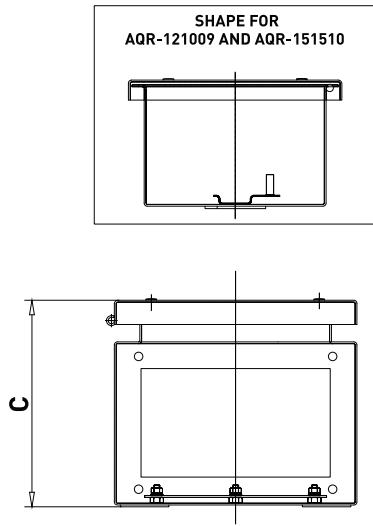
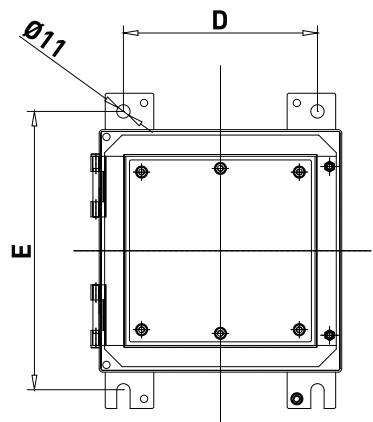
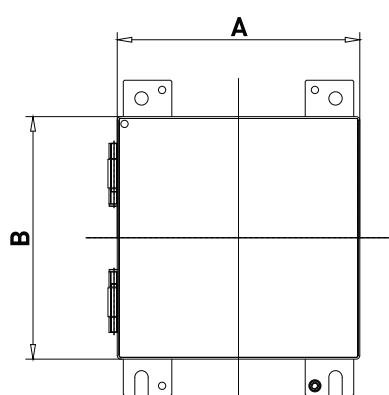
Maximum number of terminals changes on the base of terminals section, enclosure operating temperature and required temperature class.

Dimensions can be customized up to 1000mm x 2000mm x (depth upon request). Below codes are our standard production available in our stock.

They are ideally suited for chemical agents environments. Sea water corrosion resistance and extremes of low and high temperatures.

## **TECHNICAL FEATURES**

<b>Material</b>	AISI316 L Stainless steel
<b>IP rating</b>	IP66
<b>Ambient temperature range</b>	-50°C to +60°C
<b>Approvals</b>	DNV 10 ATEX 83561 IECEx DNV 10.0008 TR CU
<b>Marking</b>	II 2 GD Ex e II T(**) Ex td A21 IP66/68 T(***) ** T5, T4 *** T85°C, T110°C T6/T85°C only Ex ia protection
<b>Standard certificate label</b>	Made by self adhesive UV and corrosion resistant polyester, approved by INERIS Laboratory.
<b>Surface treatment</b>	Acid treatment
<b>Accessories available upon request</b>	Electropolish treatment Side gland plates Hinges Drain/breather valve Traffolyte/Stainless steel certificate label Internal mounting plate Locking facility Passing through earth bolt

**Dimensions AQR..****AQR Series junction boxes**

TYPE	DIMENSIONS					WEIGHT [kg]
	A	B	C	D	E	
AQR-121009 <sup>(1)</sup> <sup>(2)</sup>	120	100	100	150	-	1,5
AQR-151510 <sup>(1)</sup> <sup>(3)</sup>	150	150	106	180	-	2,5
AQR-202010	200	200	125	160	230	3
AQR-202015	200	200	170	160	230	3,5
AQR-282815	280	280	170	240	310	5,2
AQR-302015	300	200	170	260	230	5
AQR-383815	380	380	170	340	410	8,1
AQR-384515	380	450	170	340	480	8,9
AQR-385715	380	570	170	340	600	10,7
AQR-575715	570	570	170	530	600	16,4
AQR-575730	570	570	320	530	600	21,4
AQR-577620	570	760	220	530	790	21,7
AQR-769520	760	950	220	720	980	32,9

For complete junction boxes is necessary to ask to the Sales Office.

(1) Without hinges. Welded internal rail

(2) AQR 121009 cover external dimension 160x120mm

(3) AQR 151510 cover external dimension 187x176 mm

**Maximum number of entries on sides**

TYPE	AQR-121009		AQR-151510		AQR-202010		AQR-202015		AQR-282815		AQR-302015		AQR-383815	
	A	B	A	B	A	B	A	B	A	B	A	B	A	B
M20 / 1/2"	6	4	6	6	10	10	12	12	18	18	21	12	24	24
M25 / 3/4"	4	2	4	4	7	7	8	8	12	12	14	8	16	16
M32 / 1"	3	2	3	3	4	4	6	6	9	9	10	6	12	12
M40 / 1" 1/4	2	1	2	2	2	2	5	5	8	8	9	5	10	10
M50 / 1" 1/2	2	1	2	2	2	2	4	4	7	7	8	4	9	9
M63 / 2"	1	1	1	1	2	2	3	3	4	4	5	3	6	6
M75 / 2" 1/2	-	-	-	-	-	-	2	2	4	4	4	2	5	5
M80 / 3"	-	-	-	-	-	-	2	2	3	3	3	2	4	4

**Maximum number of entries on sides**

TYPE	AQR-384515		AQR-385715		AQR-575715		AQR-575730		AQR-577620		AQR-769520	
	A	B	A	B	A	B	A	B	A	B	A	B
M20 / 1/2"	30	24	39	24	39	39	88	88	68	52	88	68
M25 / 3/4"	20	16	26	16	26	26	58	58	45	34	58	45
M32 / 1"	15	12	19	12	19	19	44	44	34	26	44	34
M40 / 1" 1/4	13	10	17	10	17	17	39	39	30	23	39	30
M50 / 1" 1/2	12	9	15	9	15	15	35	35	27	20	35	27
M63 / 2"	7	6	9	6	9	9	22	22	17	13	22	17
M75 / 2" 1/2	6	5	8	5	8	8	19	19	15	11	19	15
M80 / 3"	5	4	6	4	6	6	14	14	11	8	14	11

## **FLAMEPROOF**

# **CP../CPS.. Series junction boxes**



The CP../CPS.. range of enclosures, used for terminals wiring, grants Ex d or Ex e mode of protection.

Boxes are manufactured in aluminium with low content of copper 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.

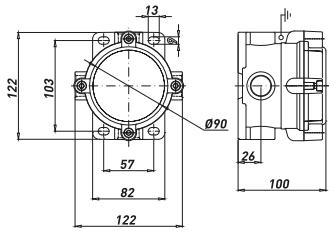
This series is taylor made on the base of customer specification, including quantity and type of operators.

Based on the customer's needs and certificate requirements, our technical department will advise and select the most suitable combination.

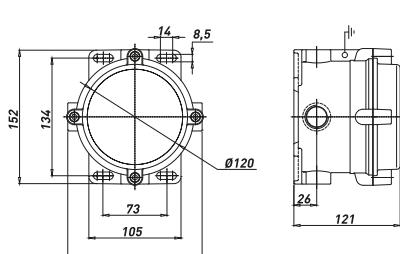
These boxes are suitable for hazardous areas of industrial plants for indoor and outdoor applications.

## **TECHNICAL FEATURES**

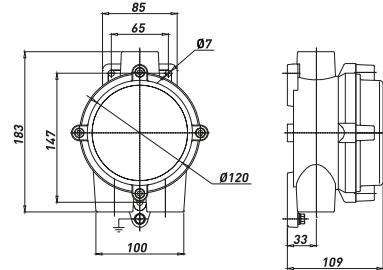
<b>Material</b>	Aluminium with low content of copper
<b>IP rating</b>	IP66
<b>Ambient temperature range</b>	-50°C to +60°C (ATEX) -60°C to +60°C (IECEx)
<b>Approvals</b>	INERIS 03ATEX0009 IECEx BKI 15.0002 TR CU
<b>Marking</b>	STANDARD II 2 GD Ex d IIC T(*) Gb Ex tb IIIC T(*) Db IP66 Ex db IIC T6/T5/T4 * T6/T85°C, T5/T100°C, T4/T135°C  II 2 GD Ex e IIC T(*) Gb Ex t IIIC T(*) Db IP66 * T6/T85°C, T5/T100°C
<b>Surface treatment</b>	Painted by green colour polyurethane painting cycle RAL6003 (other colour available upon request)
<b>Thread</b>	Metric pitch 1.5, ANSI B1.20.1 NPT, UNI-6125
<b>Standard certificate label</b>	Made by self adhesive UV and corrosion resistant polyester, approved by INERIS Laboratory.
<b>Accessories available upon request</b>	Internal anticondensate painting Taffolyte/Stainless steel certificate label Terminals
<b>Maximum number of terminals</b>	(15 x 2,5 mm <sup>2</sup> / 12 x 4 mm <sup>2</sup> / 8 x 6 mm <sup>2</sup> )

**Dimensions CP../CPS..**

CPC/CPT/CPX



CPSC/CPST/CPSX



CPSG

**CP.. Series (Selection table)**

Nº OF ENTRIES	TYPE	COLOUR
2	CPC-26 2XM25	RAL6003
	CPC-26 2X3/4"GK	RAL6003
	CPC-26 2X3/4"NPT	RAL6003
3	CPT-26 3XM25	RAL6003
	CPT-26 3X3/4"GK	RAL6003
	CPT-26 3X3/4"NPT	RAL6003
4	CPX-26 4XM25	RAL6003
	CPX-26 4X3/4"GK	RAL6003
	CPX-26 4X3/4"NPT	RAL6003

For complete junction boxes is necessary to ask to the Sales Office.

**CPS.. Series (Selection table)**

Nº OF ENTRIES	TYPE	COLOUR
2	CPSC 2XM25	RAL6003
	CPSC 2XM32	RAL6003
	CPSC 2X3/4" GK	RAL6003
	CPSC 2X3/4" NPT	RAL6003
	CPSC 2X1" GK	RAL6003
	CPSC 2X1" NPT	RAL6003
3	CPST 3XM25	RAL6003
	CPST 3XM32	RAL6003
	CPST 3X3/4" GK	RAL6003
	CPST 3X3/4" NPT	RAL6003
	CPST 3X1" GK	RAL6003
	CPST 3X1" NPT	RAL6003
3	CPSG 3XM25	RAL6003
	CPSG 3XM32	RAL6003
	CPSG 3X3/4" GK	RAL6003
	CPSG 3X3/4" NPT	RAL6003
	CPSG 3X1" GK	RAL6003
	CPSG 3X1" NPT	RAL6003
4	CPSX 4XM25	RAL6003
	CPSX 4XM32	RAL6003
	CPSX 4X3/4" GK	RAL6003
	CPSX 4X3/4" NPT	RAL6003
	CPSX 4X1" GK	RAL6003
	CPSX 4X1" NPT	RAL6003

For complete junction boxes is necessary to ask to the Sales Office.

# **FLAMEPROOF**

## **ECR-3 - Drain valve**



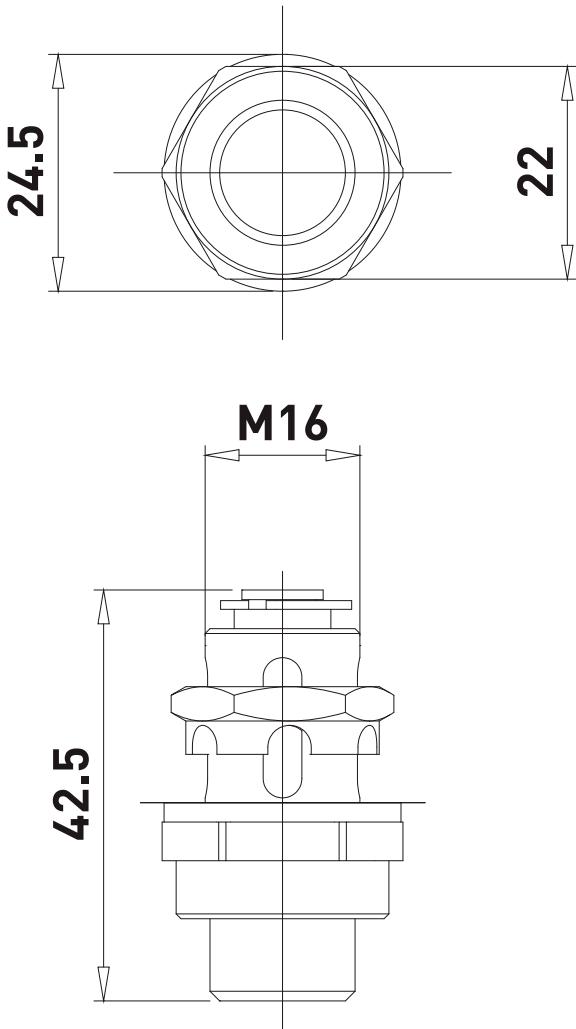
- Drain valve ECR3 is a device intended for use to evacuate the water generated due to condensation inside the enclosure.
- Drain valve is assembled in the lowest part or side part of the enclosure because the water is accumulated in bottom part of enclosure.
- Water will come out with the presence of 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 technical note and instruction note

## **TECHNICAL FEATURES**

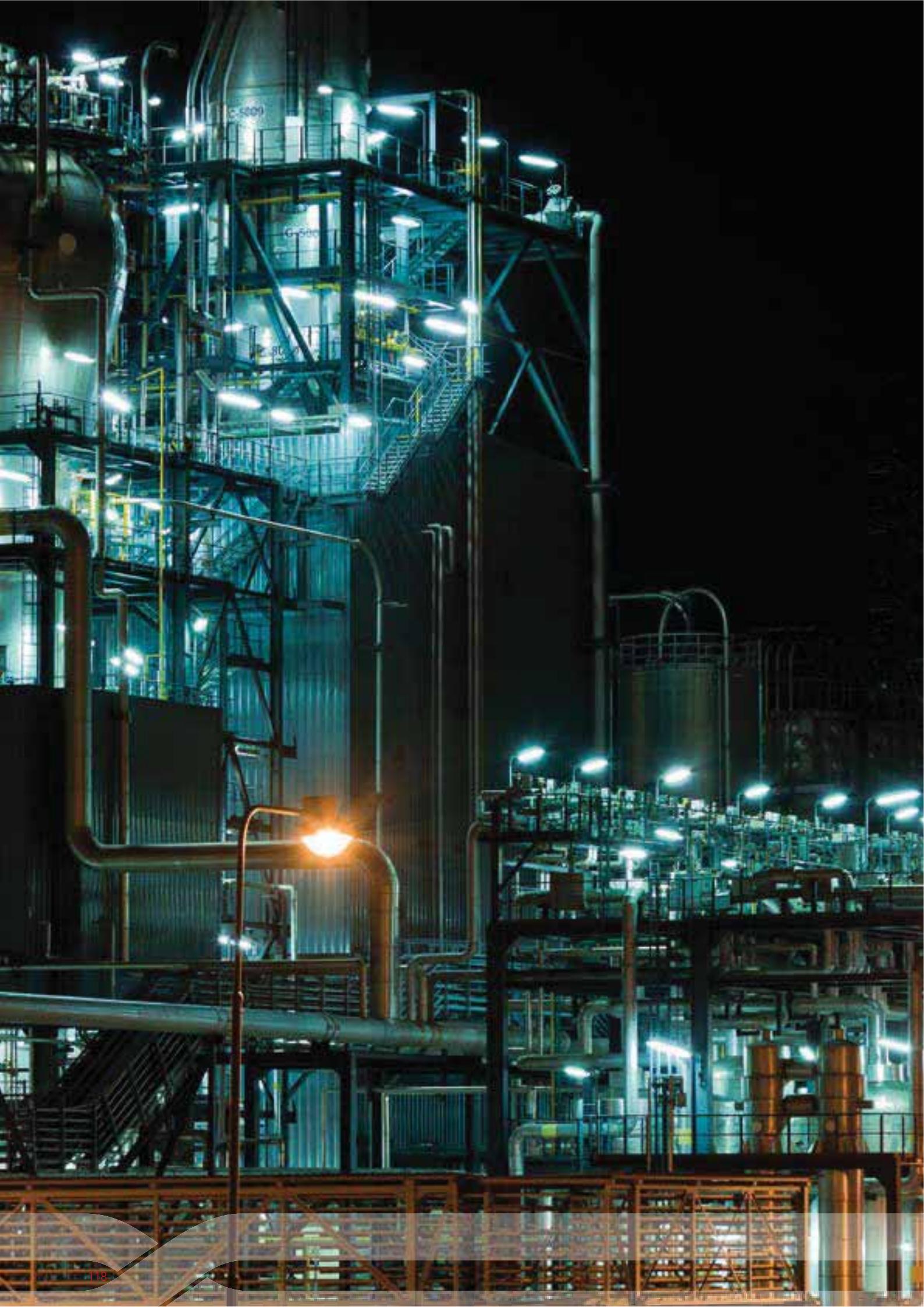
<b>Material</b>	Stainless steel AISI316
<b>IP rating</b>	IP66/IP67 in closed position and IP44 in open position.
<b>Ambient temperature range</b>	-50°C +105°C
<b>Approvals</b>	IMQ 14 ATEX 019U – IECEx IMQ 14.0008U
<b>Marking</b>	Ex II 2GD – Ex e IIC Gb – Ex tb IIIC IP66/67
<b>Standard compliance</b>	EN60079-0:2012; EN60079-7:2007; EN60079-31:2009 IEC60079-0:2011; IEC60079-7:2006-07; IEC60079-31:2008
<b>Zones</b>	1; 21
<b>Gaskets</b>	Silicone gasket (continuous use temperature -60 ° C + 220 ° C)
<b>Entries</b>	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
C0102.012005	ECR 3 DRAIN VALVE



# ENCLOSURES SPECIFICATIONS



P.120

## Pressurized cabinets

- QPREX Series

P.122

## Explosion group IIB + H<sub>2</sub>

- EJB Series - Copper free aluminium
  - EJB Series - Stainless steel AISI 316L
  - EJB Series - Galvanized carbon steel
- Spares & Accessories

P.130

## Explosion group IIC

- GUB Series - Copper free aluminium or Stainless steel AISI 316L
  - GUB/QL Series - Copper free aluminium
  - GUB/EMH Series with window - Copper free aluminium
- Spares & Accessories
- CPS/EMH Series with window - Copper free aluminium
- Spares & Accessories (See Flameproof Control Station range on page 92)

# PRESSURIZED CABINETS

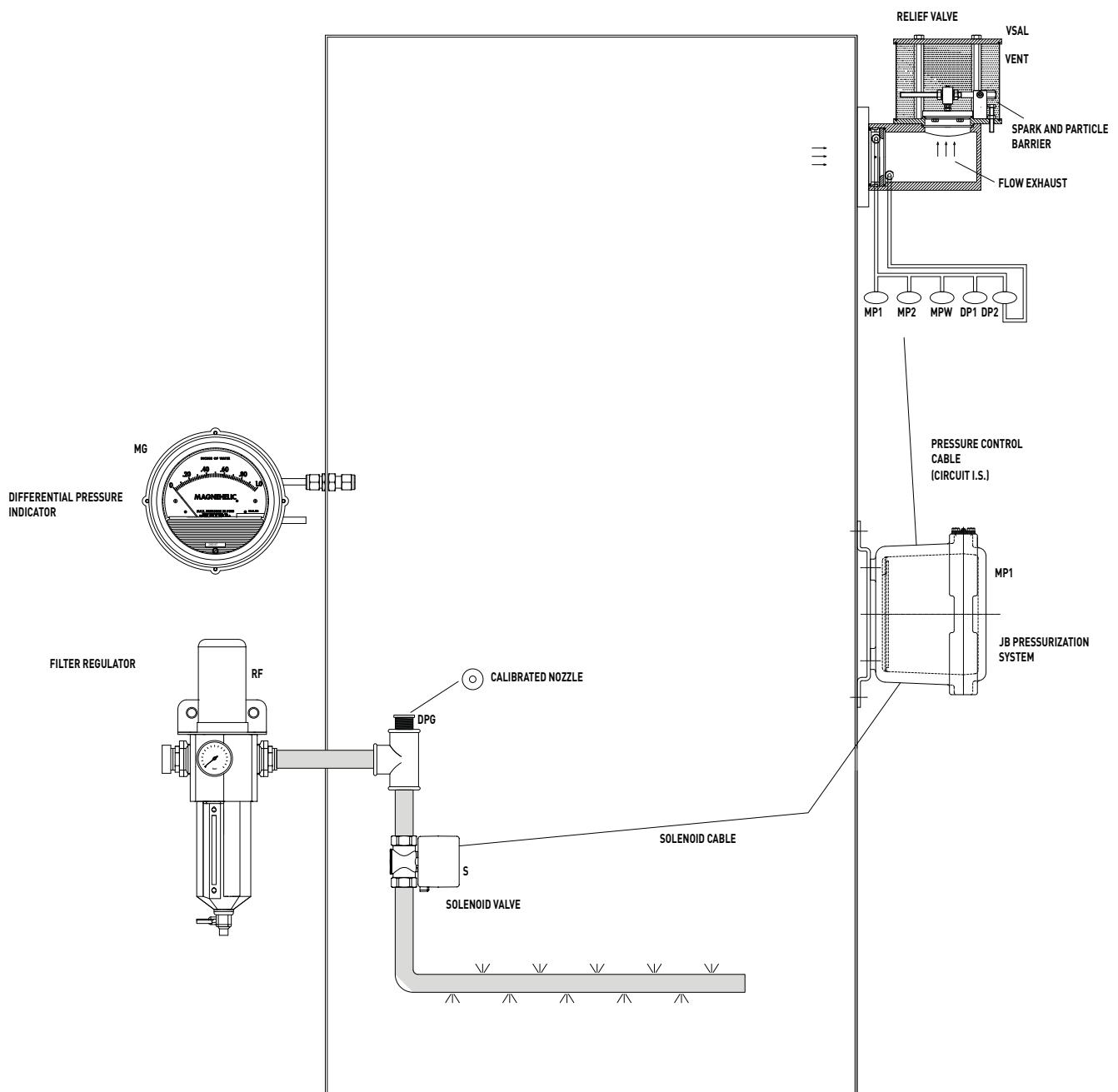
## QPREX series



- Modular building system allows to realize customized volume up to 10m<sup>3</sup>. 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

<b>Material</b>	AISI316L, INOX 304 or painted sendzimir steel
<b>IP rating</b>	IP65
<b>Ambient temperature range</b>	From -50°C to +60°C
<b>Approvals</b>	TÜV 15 ATEX 158015 (pxb type of protection) TÜV 15 ATEX 158016 (pzc type of protection) IECEx TUN 15.0019 (pxb and pzc types of protection)
<b>Marking</b>	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
<b>Gaskets</b>	EPDM or SILICONE
<b>Dimensions</b>	From 0,6 m <sup>3</sup> to 10 m <sup>3</sup>
<b>Tension</b>	Up to 24 kVac / 1500 Vdc
<b>Frequency</b>	Up to 1000Hz
<b>Power</b>	Up to 1250kva
<b>Pressurisation system</b>	Technor Italsmea TEX1 (zone 1- SIL2 *) or TEX 2 (Zone 2) . Available with component certificate
<b>Climatization</b>	Vortex, Air conditioner, Cooling/heating water systems, Anticondensate heater.
<b>Note</b>	* SIL: Safety Integrity Level



# **EXPLOSION GROUP IIB + H<sub>2</sub>** EJB.. Series enclosures - 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

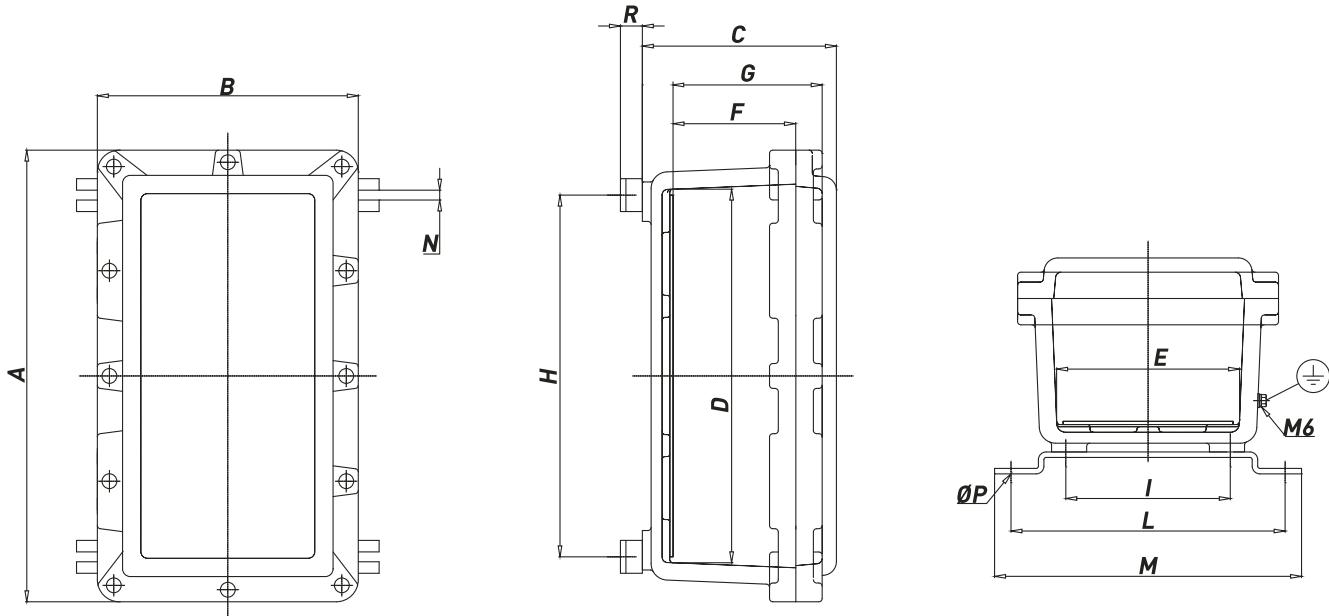
They can be equipped with following components:

- 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

<b>Material</b>	Aluminium with low content of copper
<b>IP rating</b>	IP65, IP66, IP67 with flanged joint coated with silicone grease
<b>Ambient temperature range</b>	-50 °C up to +60 °C
<b>Approvals</b>	INERIS 00ATEX0021X TR CU IECEx INE 10.0015X INMETRO
<b>Marking</b>	II 2 GD Ex d IIB T(**) Gb or Ex d IIB+H2 T(**) Gb Ex tb IIIC T(**) Db IP65 or 66 or 67 ** T6/T85°C, T5/T100°C, T4/T135°C, T3/T200°C  II 2(1) GD Ex d [ia Ga] IIB T6 Gb or Ex d [ia Ga] IIB+H2 T6 Gb Ex tb [ia Da] IIIC T85°C Db IP65 or 66 or 67  II 2(2) GD Ex d [ib] IIB T6 Gb or Ex d [ib] IIB+H2 T6 Gb Ex tb [ib] IIIC T85°C Db IP65 or 66 or 67
<b>Surface treatment</b>	Green colour polyurethane painting cycle RAL6003 (other colour available upon request)
<b>Entries</b>	Metric pitch 1.5, ANSI B1.20.1 NPT, UNI-6125
<b>Hardware and screws</b>	AISI316 Stainless steel external screws
<b>Standard certificate label</b>	Made by self adhesive UV and corrosion resistant polyester, approved by INERIS Laboratory.
<b>Accessories available upon request</b>	Mounting brackets Drain/breather valve Hinges Door handle Internal anticondensate painting Taffolyte/Stainless steel certificate label

## Dimensions EJB Aluminium



### EJB.. Series enclosures c/w internal mounting plate - ALUMINIUM

TYPE	DIMENSIONS													WEIGHT [KG]	AA**	PLATE	
	A	B	C	D	E	F	G	H	I	L	M	N	ØP	R			
EJB-2	298	238	174	230	168	95	135	205	140	250	280	9	M6	20	10.07	12	160 X 220
EJB-3	412	238	177	340	167	85	136	330	150	250	280	9	M8	20	13.40	18	155 X 330
EJB-3A	412	238	199	340	167	85	158	330	150	250	280	9	M8	20	13.50	9	155 X 330
EJB-4	418	302	175	335	220	90	132	300	190	300	320	9	M8	20	17.50	20	210 X 325
EJB-5	480	300	232	392	209	125	182	350	185	300	320	9	M8	20	20.50	22	200 X 385
EJB-6	483	408	238	387	310	130	186	355	280	390	420	9	M8	20	33.00	28	300 X 380
EJB-8	634	365	254	530	262	140	204	495	225	340	370	9	M8	20	36.05	36	250 X 520
EJB-9	535	468	257	426	363	140	204	410	340	440	470	12	M10	20	40.00	34	350 X 420
EJB-10	750	366	292	630	250	185	234	580	205	330	360	12	M10	20	48.50	34	240 X 620
EJB-11	596	505	267	483	394	130	204	445	360	480	510	12	M10	20	53.30	44	380 X 470
EJB-12	805	455	310	690	335	170	243	640	285	425	450	14	M12	20	73.00	54	325 X 625
EJB-13	832	607	314	723	500	115	236	630	405	580	620	14	M12	20	106.00	76	463 X 683
EJB-13A	832	607	400	723	500	205	322	630	405	580	620	14	M12	20	124.00	76	463 X 683

\*\*Maximum quantity of operators on door.

For complete junction boxes is necessary to ask to the Sales Office.

Note: For installations in either Zone 1 or volume up to 2dm<sup>3</sup>, barrier glands are required. Please refer to EN-60079-14.

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

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
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
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
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
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
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
M75 / 2" 1/2	-	-	-	-	3/1	3/2	4/2	3/3	5/2	4/3	6/3	6/4	6/4
M80 / 3"	-	-	-	-	2/1	2/2	3/1	2/2	4/1	3/2	4/2	5/3	5/3

# **EXPLOSION GROUP IIB + H<sub>2</sub>**

## EJB.. Series enclosures - Stainless steel AISI316L



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:

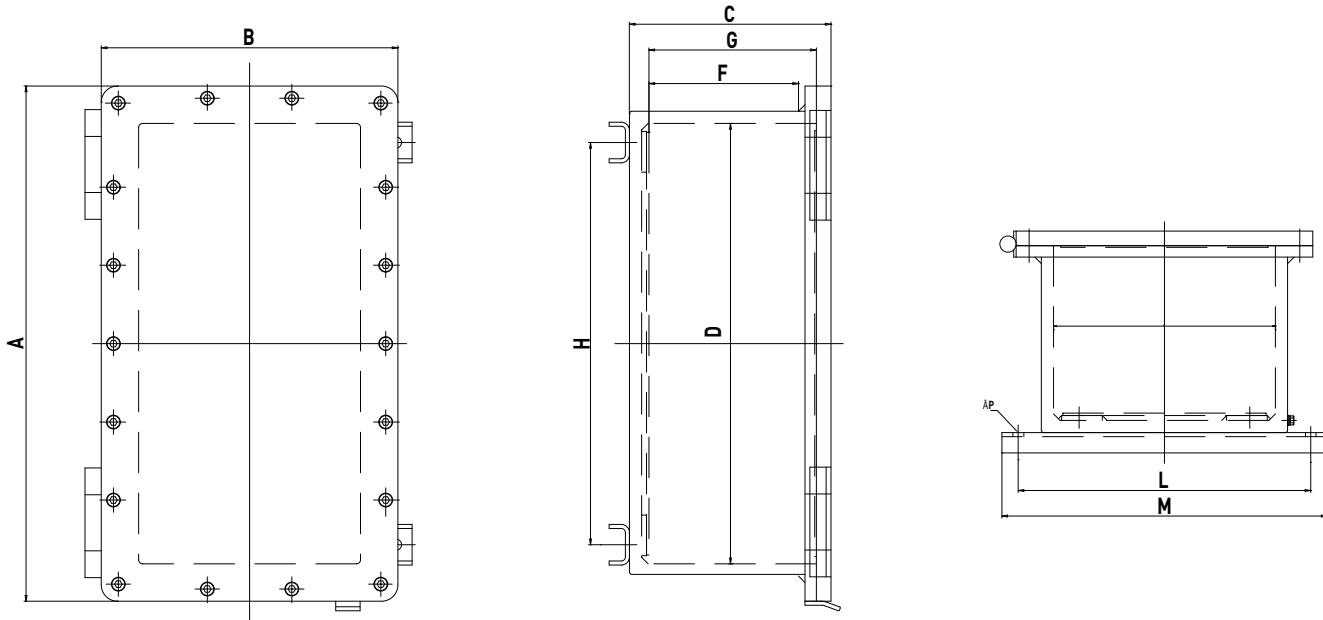
- Push buttons and mechanical operators PL.. Series;
- Rotating switches PSRC Series;
- Signalling lamps PL.. Series;
- Potentiometers;
- Rotating handles SRC-1 or SRC-10;
- Measurement instruments;
- Electric and electronic equipment;
- Windows made of tempered glass.

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

<b>Material</b>	Stainless steel AISI316L
<b>IP rating</b>	IP65, IP66, IP67 with flanged joint coated with silicone grease
<b>Ambient temperature range</b>	-50 °C up to +60 °C
<b>Approvals</b>	INERIS 00ATEX0021X TR CU IECEx INE 10.0015X INMETRO
<b>Marking</b>	II 2 GD Ex d IIB T(**) Gb or Ex d IIB+H2 T(**) Gb Ex tb IIIC T(**) Db IP65 or 66 or 67 ** T6/T85°C, T5/T100°C, T4/T135°C, T3/T200°C  II 2(1) GD Ex d [ia Ga] IIB T6 Gb or Ex d [ia Ga] IIB+H2 T6 Gb Ex tb [ia Da] IIIC T85°C Db IP65 or 66 or 67  II 2(2) GD Ex d [ib] IIB T6 Gb or Ex d [ib] IIB+H2 T6 Gb Ex tb [ib] IIIC T85°C Db IP65 or 66 or 67
<b>Surface treatment</b>	Unpainted
<b>Entries</b>	Metric pitch 1.5, ANSI B1.20.1 NPT, UNI-6125
<b>Hardware and screws</b>	AISI316 Stainless steel external screws
<b>Standard certificate label</b>	Made by self adhesive UV and corrosion resistant polyester, approved by INERIS Laboratory.
<b>Accessories available upon request</b>	Drain/breather valve Door handle External polyurethane painting cycle Internal anticondensate painting Traffolyte/Stainless steel certificate label

## Dimensions EJB Stainless steel



**EJB.. Series enclosures c/w internal mounting plate, mounting brackets, hinges - AISI316L**

TYPE	DIMENSIONS												WEIGHT [KG]	AA** ATEX	AA** IECEx	EE
	A	B	C	D	E	F	G	H	L	M	ØP	R				
EJB-2	298	238	174	238	178	110	135	205	250	280	M6	20	35	12	8	160 X 220
EJB-3	412	238	177	350	176	110	136	330	250	280	M8	20	45	18	10	155 X 330
EJB-4	418	302	175	345	230	110	132	300	300	320	M8	20	55	20	12	210 X 325
EJB-5	480	300	232	405	225	160	182	350	300	320	M8	20	70	22	14	200 X 385
EJB-6	483	408	238	395	324	165	186	355	390	420	M8	20	93	28	16	300 X 380
EJB-8	634	365	254	542	273	175	204	495	340	370	M8	20	114	36	-	250 X 520
EJB-9	535	468	257	443	376	175	204	410	440	470	M10	20	118	34	18	350 X 420
EJB-11	596	505	267	496	405	175	204	445	490	510	M10	20	139	44	20	380 X 470
EJB-12	805	455	310	705	355	225	243	640	425	450	M12	20	181	54	24	325 X 625
EJB-13	832	607	314	732	507	220	236	630	580	620	M12	20	235	76	28	470 X 690
EJB-13A	832	607	400	732	507	305	322	630	580	620	M12	20	262	76	28	470 X 690

\*\* maximum quantity of M32 operators on the lid

\*\*\*mounting plate dimension

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

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
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
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
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
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
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
M75 / 2" 1/2	-	-	-	-	3/1	3/2	4/2	3/3	5/2	4/3	6/3	6/4	6/4
M80 / 3"	-	-	-	-	2/1	2/2	3/1	2/2	4/1	3/2	4/2	5/3	5/3

# **EXPLOSION GROUP IIB + H<sub>2</sub>**

## EJB.. Series enclosures – Galvanized carbon steel (iron)



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:

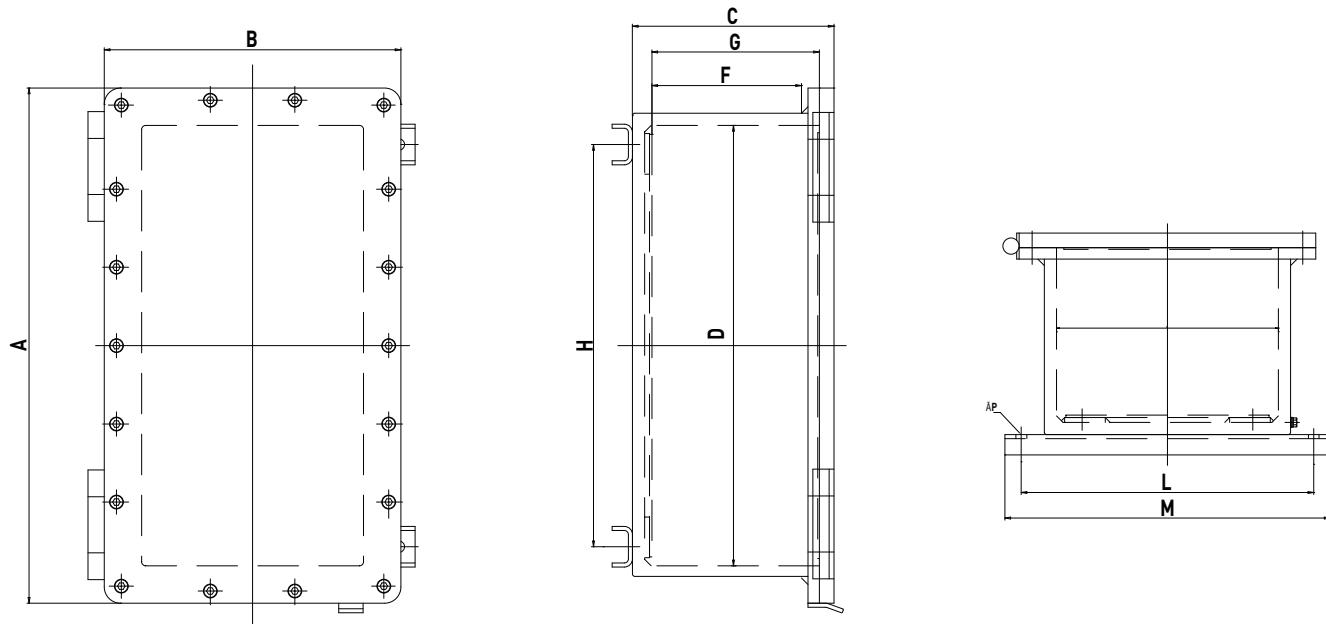
- Push buttons and mechanical operators PL.. Series;
- Rotating switches PSRC Series;
- Signalling lamps PL.. Series;
- Potentiometers;
- Rotating handles SRC-1 or SRC-10;
- Measurement instruments;
- Electric and electronic equipment;
- Windows made of tempered glass.

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

<b>Material</b>	Galvanized carbon steel
<b>IP rating</b>	IP65, IP66, IP67 with flanged joint coated with silicone grease
<b>Ambient temperature range</b>	-50 °C up to +60 °C
<b>Approvals</b>	INERIS 00ATEX0021X TR CU IECEx INE 10.0015X INMETRO
<b>Marking</b>	II 2 GD Ex d IIB T(**) Gb or Ex d IIB+H2 T(**) Gb Ex tb IIIC T(**) Db IP65 or 66 or 67 ** T6/T85°C, T5/T100°C, T4/T135°C, T3/T200°C  II 2(1) GD Ex d [ia Ga] IIB T6 Gb or Ex d [ia Ga] IIB+H2 T6 Gb Ex tb [ia Da] IIIC T85°C Db IP65 or 66 or 67  II 2(2) GD Ex d [ib] IIB T6 Gb or Ex d [ib] IIB+H2 T6 Gb Ex tb [ib] IIIC T85°C Db IP65 or 66 or 67
<b>Surface treatment</b>	Hot dip galvanization
<b>Entries</b>	Metric pitch 1.5, ANSI B1.20.1 NPT, UNI-6125
<b>Hardware and screws</b>	AISI316 Stainless steel external screws
<b>Standard certificate label</b>	Made by self adhesive UV and corrosion resistant polyester, approved by INERIS Laboratory.
<b>Accessories available upon request</b>	Drain/breather valve Door handle External polyurethane painting cycle Internal anticondensate painting Traffolyte/Stainless steel certificate label

## Dimensions EJB Galvanized carbon steel



### EJB.. Series enclosures c/w internal mounting plate, mounting brackets, hinges – Galvanized carbon steel

TYPE	DIMENSIONS												WEIGHT [KG]	AA** ATEX	AA** IECEx	EE
	A	B	C	D	E	F	G	H	L	M	ØP	R				
EJB-2	298	238	174	238	178	110	135	205	250	280	M6	20	35	12	8	160 X 220
EJB-3	412	238	177	350	176	110	136	330	250	280	M8	20	45	18	10	155 X 330
EJB-4	418	302	175	345	230	110	132	300	300	320	M8	20	55	20	12	210 X 325
EJB-5	480	300	232	405	225	160	182	350	300	320	M8	20	70	22	14	200 X 385
EJB-6	483	408	238	395	324	165	186	355	390	420	M8	20	93	28	16	300 X 380
EJB-8	634	365	254	542	273	175	204	495	340	370	M8	20	114	36	-	250 X 520
EJB-9	535	468	257	443	376	175	204	410	440	470	M10	20	118	34	18	350 X 420
EJB-11	596	505	267	496	405	175	204	445	480	510	M10	20	139	44	20	380 X 470
EJB-12	805	455	310	705	355	225	243	640	425	450	M12	20	181	54	24	325 X 625
EJB-13	832	607	314	732	507	220	236	630	580	620	M12	20	235	76	28	470 X 690
EJB-13A	832	607	400	732	507	305	322	630	580	620	M12	20	262	76	28	470 X 690

\*\* maximum quantity of M32 operators on the lid

\*\*\*mounting plate dimension

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

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
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
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
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
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
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
M75 / 2" 1/2	-	-	-	-	3/1	3/2	4/2	3/3	5/2	4/3	6/3	6/4	6/4
M80 / 3"	-	-	-	-	2/1	2/2	3/1	2/2	4/1	3/2	4/2	5/3	5/3

# **EXPLOSION GROUP IIB + H2**

## EJB.. Series

### SPARES & ACCESSORIES

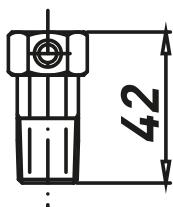
#### **Wall mounting brackets**

CODE	TYPE
B0A01.000020	MOUNTING BRACKETS FOR EJB-2 + SCREWS (STF-2)
B0A01.000021	MOUNTING BRACKETS FOR EJB-3 + SCREWS (STF-3)
B0A01.000022	MOUNTING BRACKETS FOR EJB-4/5 + SCREWS (STF-4/5)
B0A01.000023	MOUNTING BRACKETS FOR EJB-6 + SCREWS (STF-6)
B0A01.000024	MOUNTING BRACKETS FOR EJB-8 + SCREWS (STF-8)
B0A01.000025	MOUNTING BRACKETS FOR EJB-9 + SCREWS (STF-9)
B0A01.000026	MOUNTING BRACKETS FOR EJB-10 + SCREWS (STF-10)
B0A01.000027	MOUNTING BRACKETS FOR EJB-11 + SCREWS (STF-11)
B0A01.000028	MOUNTING BRACKETS FOR EJB-12 + SCREWS (STF-12)
B0A01.000029	MOUNTING BRACKETS FOR EJB-13 + SCREWS (STF-13)

Available upon request AISI316L made version

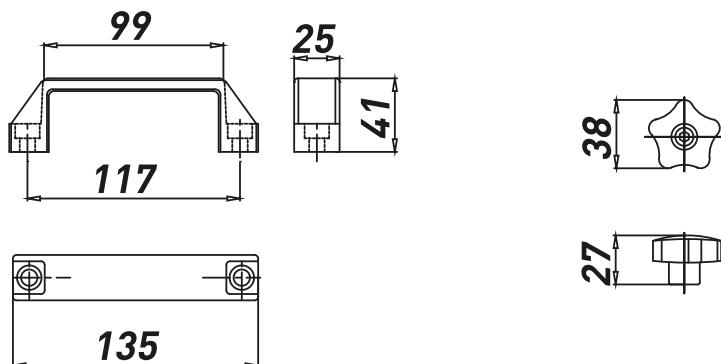
#### **Drain/Breather valve**

CODE	TYPE
C0102.000051	ECR 1 VALVE



**Door handles**

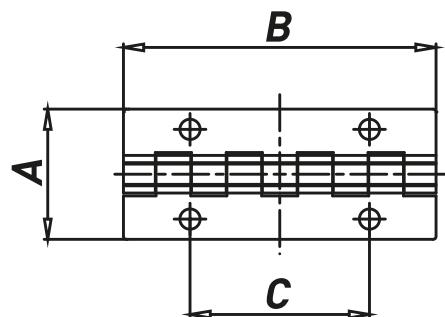
CODE	TYPE
B0A01.000049	HANDLE FOR EJB (FROM 7 TO 13A) + SCREWS
B0A01.000048	KNOB FOR EJB (UP TO 6) + SCREWS

**Hinges (for aluminium EJB Series)**

CODE	TYPE
B0A01.000053	AISI304 HINGES L=60X38MM + SCREWS
B0A01.000052	AISI316L HINGES L=60X38MM + SCREWS
B0A01.000044	AISI304 HINGES L=60X45MM + SCREWS
B0A01.000043	AISI316L HINGES L=60X45MM + SCREWS
B0A01.000046	AISI304 HINGES L=108X45MM + SCREWS
B0A01.000045	AISI316L HINGES L=108X45MM + SCREWS

**Selection table**

HINGES L=60X38MM	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-5	EJB-11	

**Windows**

The windows may have square, rectangular, circular shape with following dimensions:

- Square shape: side dimension from 40 to 400mm
- Rectangular shape: long side dimension from 70 to 400mm; short side dimension from 40 to 200mm
- Circular shape: diameter from 70 to 250mm

As standard sizes we propose:

- Rectangular shape type B; 40mm x 70mm
- Rectangular shape type C; 40mm x 200mm
- Rectangular shape type D; 100mm x 270mm
- Rectangular shape type E; 175mm x 380mm
- Circular shape Ø 70mm, 85mm, 100mm, 120mm, 150mm, 170mm, 190mm, 230mm

For more informations, please ask to the Sales Office.

NOTE: Windows are not IECEx certified.

# **EXPLOSION GROUP IIC**

## GUB.. Series enclosures - Aluminium



GUB.. series enclosures offers Ex d 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:

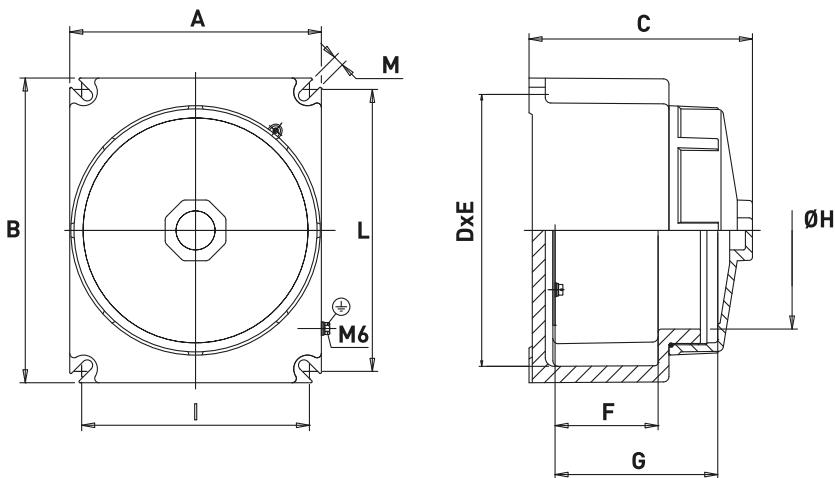
- Push buttons and mechanical operators PL.. Series;
- Rotating switches PSRC Series;
- Signalling lamps PL.. Series;
- Potentiometers;
- Rotating handles SRC-1 or SRC-10;
- Measurement instruments;
- Electric and electronic equipment;
- Windows made of tempered glass (EMH version).

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

<b>Material</b>	Aluminium with low content of copper Stainless steel AISI316L (upon request)
<b>IP rating</b>	IP66
<b>Ambient temperature range</b>	-50°C to +55°C (ATEX) -60°C to +60°C (IECEx)
<b>Approvals</b>	INERIS 00ATEX0033X IECEx BKI 15.0003 TR CU
<b>Marking</b>	II 2 GD Ex d IIC T(*) Gb Ex tb IIIC T(*) Db IP66 * T6/T85°C, T5/T100°C, T4/T135°C  II 2(1) GD Ex d [ia Ga] IIC T6 Gb Ex tb [ia Da] IIIC T85°C Db IP66  II 2(2) GD Ex d [ib] IIC T6 Gb Ex tb [ib] IIIC T85°C Db IP66
<b>Surface treatment</b>	Green colour polyurethane painting cycle RAL6003 (other colour available upon request)
<b>Entries</b>	Metric pitch 1.5, ANSI B1.20.1 NPT, UNI-6125
<b>Standard certificate label</b>	Made by self adhesive UV and corrosion resistant polyester, approved by INERIS Laboratory.
<b>Accessories available upon request</b>	Drain/breather valve Internal anticondensate painting Taffolyte/Stainless steel certificate label Stainless steel construction

## Dimensions GUB..



### GUB Series enclosures c/w internal mounting plate - Aluminium

TYPE	DIMENSIONS										WEIGHT [kg] ALLUMINIUM	
	A	B	C	D	E	F	G	ØH	I	L	M	
GUB-01	169	169	152	139	139	62	105	125	150	150	7	3.60
GUB-02	190	190	164	160	160	63	113	144	170	170	8	4.70
GUB-03	210	210	179	180	180	78	127	167	190	190	8	6.00
GUB-04	232	281	206	202	251	97	152	183	210	260	8	8.90
GUB-05	257	298	222	227	268	106	163	206	235	275	8	11.90
GUB-06	295	330	248	259	295	140	203	242	270	305	10	15.80

For complete junction boxes is necessary to 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.

### Maximum number of entries on sides A/B

TYPE	GUB-01	GUB-02	GUB-03	GUB-04	GUB-05	GUB-06
M20 / 1/2"	3/3	5/5	5/5	5/7	7/9	7/9
M25 / 3/4"	3/3	5/5	5/5	5/7	7/9	7/9
M32 / 1"	2/2	3/3	3/3	5/5	5/7	5/7
M50 / 1" 1/2	1/1	1/1	2/2	2/3	2/3	3/5
M63 / 2"	1/1	1/1	1/1	2/2	2/2	2/3
M75 / 2" 1/2	-	-	-	1/2	1/2	2/2
M80 / 3"	-	-	-	1/1	1/2	1/2

# **EXPLOSION GROUP IIC**

# GUB../QL Series enclosures - Aluminium



GUB.. series enclosures offers Ex d 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:

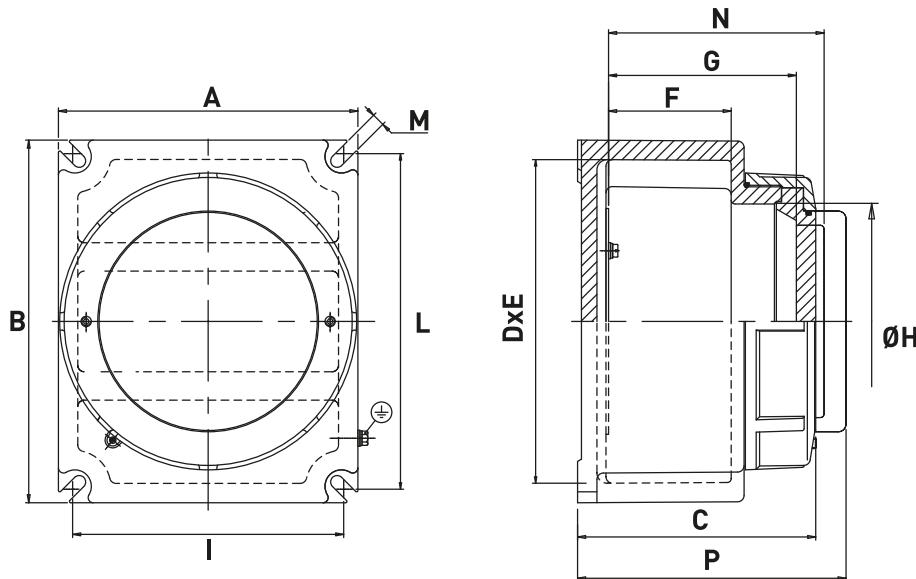
- Push buttons and mechanical operators PL.. Series;
- Rotating switches PSRC Series;
- Signalling lamps PL.. Series;
- Potentiometers;
- Rotating handles SRC-1 or SRC-10;
- Measurement instruments;
- Electric and electronic equipment;
- Windows made of tempered glass (EMH version).

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

<b>Material</b>	Aluminium with low content of copper
<b>IP rating</b>	IP66
<b>Ambient temperature range</b>	-50°C to +55°C (ATEX) -60°C to +60°C (IECEx)
<b>Approvals (Complete enclosures)</b>	INERIS 00ATEX0033X IECEx BKI 15.0003 TR CU
<b>Marking</b>	II 2 GD Ex d IIC T(*) Gb Ex tb IIIC T(*) Db IP66 * T6/T85°C, T5/T100°C, T4/T135°C  II 2(1) GD Ex d [ia Ga] IIC T6 Gb Ex tb [ia Da] IIIC T85°C Db IP66  II 2(2) GD Ex d [ib] IIC T6 Gb Ex tb [ib] IIIC T85°C Db IP66
<b>Surface treatment</b>	Green colour polyurethane painting cycle RAL6003 (other colour available upon request)
<b>Entries</b>	Metric pitch 1.5, ANSI B1.20.1 NPT, UNI-6125
<b>Standard certificate label</b>	Made by self adhesive UV and corrosion resistant polyester, approved by INERIS Laboratory.
<b>Accessories available upon request</b>	Drain/breather valve Internal anticondensate painting Taffolyte/Stainless steel certificate label Stainless steel construction

## Dimensions GUB../QL



### GUB../QL Series enclosures c/w internal mounting plate - Aluminium

TYPE	DIMENSIONS												WEIGHT [kg]	AA** ATEX	
	A	B	C	D	E	F	G	ØH	I	L	M	N	P		
GUB-02 QL	190	190	139	160	160	63	104	144	170	170	8	143	179	4.70	3
GUB-03 QL	210	210	160	180	180	78	119	167	190	190	8	139	174	6.00	4
GUB-06 QL	295	330	236	259	195	140	186	242	270	305	10	-	-	15.80	10

\*\*Maximum quantity of operators on door.

For complete junction boxes is necessary to 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.

### Maximum number of entries on sides A/B

TYPE	GUB-02	GUB-03	GUB-06
M20 / 1/2"	5/5	5/5	7/9
M25 / 3/4"	5/5	5/5	7/9
M32 / 1"	3/3	3/3	5/7
M50 / 1" 1/2	1/1	2/2	3/5
M63 / 2"	1/1	1/1	2/3
M75 / 2" 1/2	-	-	2/2
M80 / 3"	-	-	1/2

# **EXPLOSION GROUP IIC**

# GUB/EMH.. Series enclosures - Aluminium



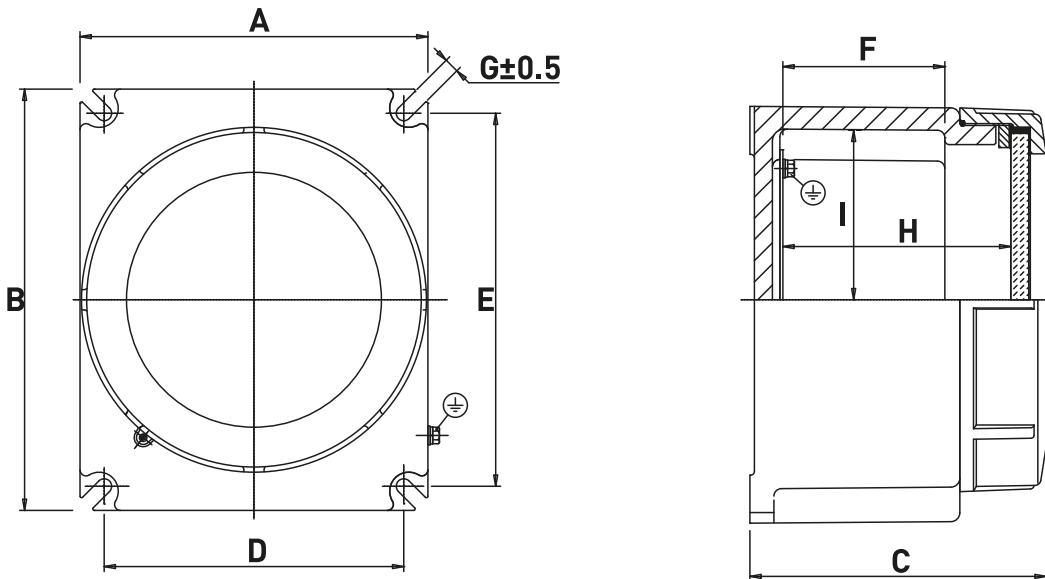
GUB/EMH.. series instrument housings are based on the features of our GUB.. enclosures and offer Ex d IIC mode of protection.

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

## TECHNICAL FEATURES

<b>Material</b>	Aluminium with low content of copper
<b>IP rating</b>	IP66
<b>Ambient temperature range</b>	-50°C to +55°C (ATEX) -60°C to +60°C (IECEx)
<b>Approvals (Complete enclosures)</b>	INERIS 00ATEX0033X IECEx BKI 15.0003 TR CU
<b>Marking</b>	II 2 GD Ex d IIC T(*) Gb Ex tb IIIC T(*) Db IP66 * T6/T85°C, T5/T100°C, T4/T135°C
<b>Surface treatment</b>	Green colour polyurethane painting cycle RAL6003 (other colour available upon request)
<b>Entries</b>	Metric pitch 1.5, ANSI B1.20.1 NPT, UNI-6125
<b>Standard certificate label</b>	Made by self adhesive UV and corrosion resistant polyester, approved by INERIS Laboratory.
<b>Accessories available upon request</b>	Drain/breather valve Internal anticondensate painting Taffolyte/Stainless steel certificate label

## Dimensions GUB/EMH..



### GUB/EMH.. Series enclosures c/w internal mounting plate - Aluminium

TYPE	DIMENSIONS							WINDOW DIAMETER	WEIGHT [kg]
	A	B	C	D	E	F	H		
EMH-160 + PS	210	210	160	180	180	78	115	155	6.00
EMH-175 + PS	232	281	185	202	251	97	141	170	8.90
EMH-200 + PS	257	298	200	227	268	106	150	195	11.90
EMH-230 + PS	295	330	236	259	295	140	189	230	15.80

For complete junction boxes is necessary to ask to the Sales Office.

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

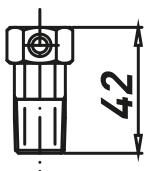
TYPE	EMH-160	EMH-175	EMH-200	EMH-230
M20 / 1/2"	5/5	5/7	7/9	7/9
M25 / 3/4"	5/5	5/7	7/9	7/9
M32 / 1"	3/3	5/5	5/7	5/7
M50 / 1" 1/2	2/2	2/3	2/3	3/5
M63 / 2"	1/1	2/2	2/2	2/3
M75 / 2" 1/2	-	1/2	1/2	2/2
M80 / 3"	-	1/1	1/2	1/2

# GUB.. Series

## SPARES & ACCESSORIES

### Drain/Breather valve

CODE	TYPE
C0102.000051	ECR 1 VALVE



# **EXPLOSION GROUP IIC**

## CPS../EMH.. Series enclosures - Aluminium



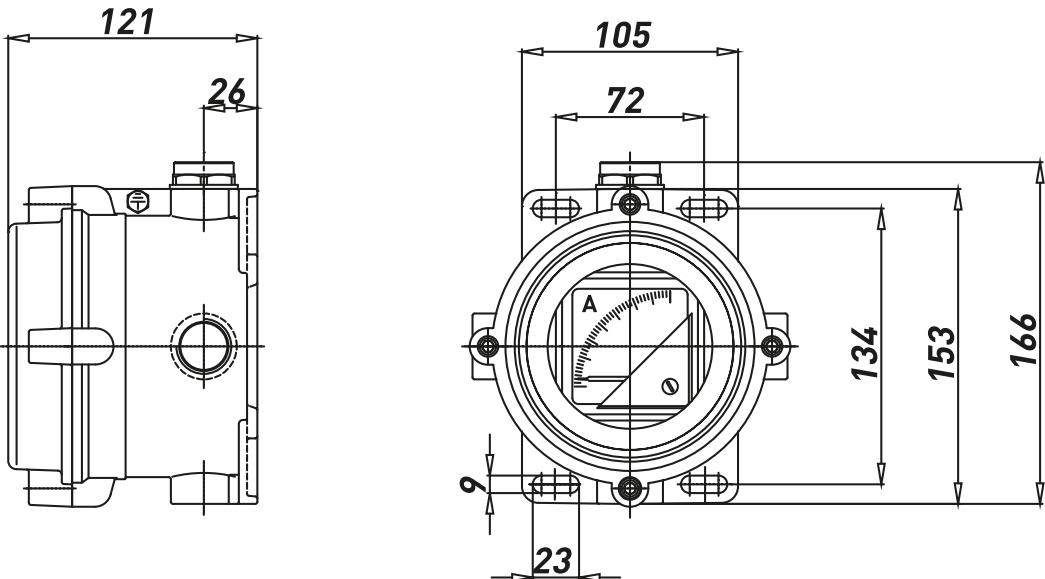
CPS/EMH.. series instrument housings are based on the features of our CPS.. boxes and offer Ex d IIC mode of protection.

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

### TECHNICAL FEATURES

<b>Material</b>	Aluminium with low content of copper
<b>IP rating</b>	IP66
<b>Ambient temperature range</b>	-50°C to + 55°C (ATEX) -60°C to +60°C (IECEx)
<b>Approvals</b>	INERIS 03ATEX0009 IECEx BKI 15.0002 TR CU
<b>Marking</b>	II 2 GD Ex d IIC T(*) Gb Ex tb IIIC T(*) Db IP66 Ex db IIC T6/T5/T4 * T6/T85°C, T5/T100°C, T4/T135°C
<b>Surface treatment</b>	Green colour polyurethane painting cycle RAL6003 (other colour available upon request)
<b>Entries</b>	Metric pitch 1.5, ANSI B1.20.1 NPT, UNI-6125
<b>Standard certificate label</b>	Made by self adhesive UV and corrosion resistant polyester, approved by INERIS Laboratory.

## Dimensions CPS../EMH..



## CPS../EMH.. enclosures

TYPE	CODE RAL6003	WINDOW DIAMETER	WEIGHT [kg]
EMH-90 M25X1,5	B0701.000001	90	1.40
EMH-90 3/4"NPT	B0701.000006	90	1.40

Ammeter / Voltmeter available on request.



# EARTHING SYSTEMS



P.140

- GUMT - Earthing control system - Copper free aluminium
- PTA... Earthing clamp

## **EARTHING SYSTEMS**

# GUMT earthing control system

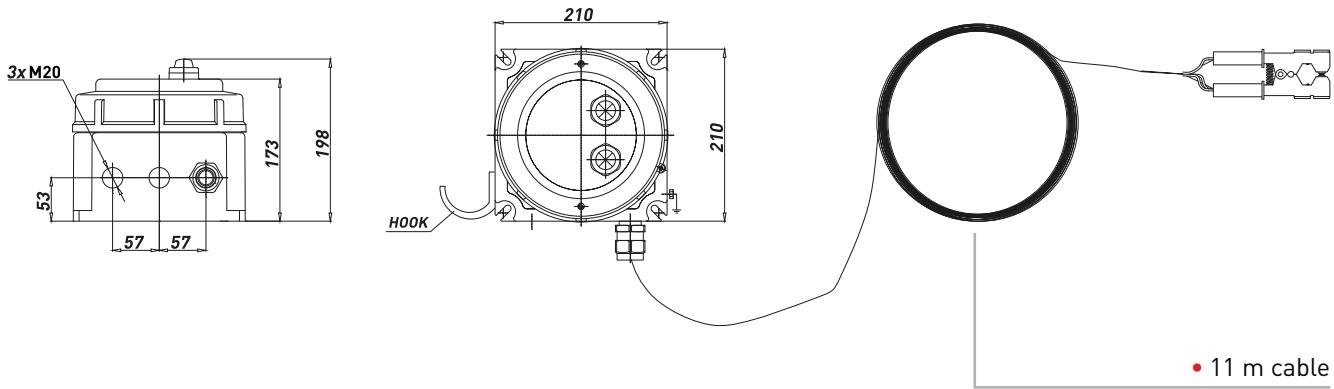


Control and discharge system for electrostatic charges suitable for road tankers, rail tankers and any movable tanker for dangerous items, ready for one/two double circuit clamps PTA ISEO-2. System is complete with arrest/consensus optical warning and changeover contact free from output voltage. The need to transfer from one place to another dangerous flammable fuels and liquids as gasoline and diesel highlighted the serious risk due to uncontrolled discharge of static charges cumulated on movable tanker-units during transfers following the well known natural phenomena when connected to loading / downloading tools (fixed). Following the natural tendency to the equilibrium of electrical potential a loading harm of a fuel depot, being connected to general earth circuit, will act as a discharge preferential path of all static charges cumulated on a next road tanker to load for instance gasoline. Very probably the same road tanker should have inside the residual vapours of previous load. Therefore the discharges of static following the insert of loading harm in the tanker will generate a spark with an energy enough to ignite the mixer gasoline – air present inside. Therefore to cause an explosion with all terrible consequences that can effect on humans and apparatus. The same condition can happen on rail tankers as well as movable barrels in use in paint manufacturing process, for instance between the harm of a mixer and the barrel of paint. The solution of the problem is to control the discharge of static charges driving it thought a dedicated and safe path. Safe because Explosion proof.

## TECHNICAL FEATURES

<b>Material</b>	Aluminium with low content of copper
<b>IP rating</b>	IP65/IP66
<b>Ambient temperature range</b>	-20°C to +55°C
<b>Approvals</b>	GUMT INERIS 00ATEX0033X TR CU
	PTA CESI 03 ATEX 101 X
<b>Marking</b>	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
<b>Surface treatment</b>	Green colour polyurethane painting cycle RAL6003 (other colour available upon request)
<b>Entries</b>	nº 3 entries M20x1,5, one complete with brass nickel chrome plated plug
<b>Rated nominal current (PTA)</b>	6 mA
<b>Rated nominal voltage (PTA)</b>	0,25 V
<b>Changeover contact rating (GUMT)</b>	5 A
<b>Standard certificate label</b>	Made by self adhesive UV and corrosion resistant polyester, approved by INERIS Laboratory.
<b>Accessories available upon request</b>	Cable reel Drain/breather valve Internal anticondensate painting Traffolyte/Stainless steel certificate label

## Dimensions GUMT



## GUMT earthing control system

TYPE	CODE	VOLTAGE
GUMT-325	B0601.000001	110Vac o 220Vac +/-10%
GUMT-325 + 1 CLAMP PTA	B0601.000012	110Vac o 220Vac +/-10%
GUMT-325 + 2 CLAMPS PTA	B0601.000013	110Vac o 220Vac +/-10%
GUMT-325	B0601.000009	24Vdc
GUMT-325 + 1 CLAMP PTA	B0601.000014	24Vdc

# **EARTHING SYSTEMS**

## **PTA Series clamp**



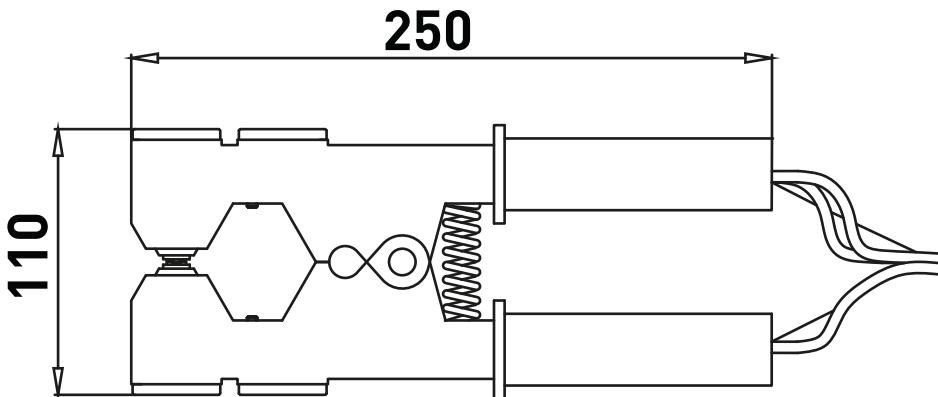
Reliable, robust, handy and easy to use, PTA Series clamps are the ideal tool for tanker loading platform equipped with electronic devices to signal correct grounding. They can be easily connected to any grip, even rusty ones.

They are made of 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**

<b>Material</b>	Aluminium with low content of copper
<b>IP rating</b>	IP65
<b>Ambient temperature range</b>	-20°C to +55°C
<b>Approvals</b>	CESI 03 ATEX 101 X
<b>Marking</b>	II 2 GD Ex d IIC T6 Ex td A21 IP65 T85°C
<b>Nominal current In</b>	10 A
<b>Insulation voltage</b>	3 kV
<b>Accessories available upon request</b>	Cable reel

## Dimensions PTA



### PTA Series clamps

TYPE	CODE	DIMENSIONS [mm]			WEIGHT [kg]	CLAMP OPENING [mm]	CABLE TYPE	CABLE LENGTH [mt]
		LENGTH	WIDTH	HEIGHT				
PTA ISEO-1	B0602.000001	250	110	35	1.56	3-20	1x6mm <sup>2</sup> PUR	11
PTA ISEO-2	B0602.000002	250	110	35	3.36	3-20	3x3mm <sup>2</sup> 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 SIGNAL



**P.146**

- EVde-ROT 4 Series - Rotating lights - Copper free aluminium
  - EVde-XN / EVde-MXN / EVcc-MXN Series - Flashing lights - Copper free aluminium
  - WA... Series – LIOL (Low intensity obstruction lighting) - Copper free aluminium
  - EVcc-5 / LED Series - MIOL (Medium intensity obstruction lighting) - Copper free aluminium
  - EVCC-PT/LED Traffic light
- Spares & Accessories

VISUAL  
SIGNAL

**P.159**

Lamps/Spare parts

## VISUAL SIGNAL

# Serie EV../ROT Series Visual signals



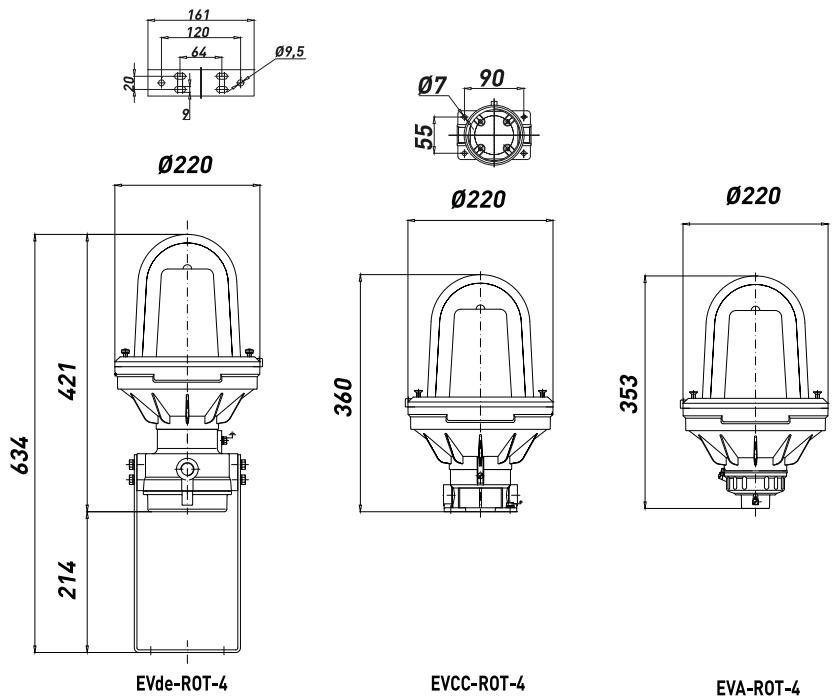
Range of rotating lamp visual signals, available in two versions, 25W and 45W. They have an excellent corrosion resistance due to the body made of aluminium with low content of copper and tempered glass of lamp compartment.

EVCC and EVA version available upon request.

## TECHNICAL FEATURES

<b>Material</b>	Aluminium with low content of copper
<b>IP rating</b>	IP66
<b>Ambient temperature range</b>	-52°C to +60°C
<b>Approvals</b>	INERIS 01ATEX0019X TR CU (marking upon request)
<b>Marking</b>	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
<b>Gaskets</b>	O-ring made of Nitrile Rubber (NBR)
<b>Surface treatment</b>	Green colour polyurethane painting cycle RAL6003 (other colour available upon request)
<b>Entries</b>	Nº 2 entries M25x1,5 (EVde and EVCC version) Nº 1 entry M25x1,5 (EVA version) (plugs and cable glands excluded)
<b>Hardware and screws</b>	AISI304 Stainless steel external hardware and screws
<b>Lamps</b>	Included
<b>Colour</b>	Red (other colours available upon request)
<b>Rated operation voltage (UE)</b>	240Vac, 12Vdc, 24Vdc 12Vac, 24Vac, 48Vac, 48Vdc, 110Vac (available upon request)
<b>Frequency (AC version)</b>	50/60Hz
<b>Accessories available upon request</b>	Protection guard

## Dimensions EV../ROT



## EV../ROT Visual signals

TYPE	CODE	LAMP [W]	WEIGHT [kg]	TEMP. CLASS	VOLTAGE	AMBIENT TEMP.
EVDE-ROT-4	A0408.000006	45	8.50	T4*	12VDC	{-52°;+60°}
EVDE-ROT-4	A0408.000008	45	8.50	T4*	24VDC	{-52°;+60°}
EVDE-ROT-4	A0408.000010	25	8.50	T4*	240V 50/60HZ	{-52°;+60°}

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

## VISUAL SIGNAL

# EV../XN-MXN Series Visual signals



Range of xenoflash visual signals complete with Fresnel lens, available in different luminous intensities, 2J , 6J and 15J.

They have an excellent corrosion resistance due to the body made of aluminium with low content of copper and tempered glass of lamp compartment.

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.

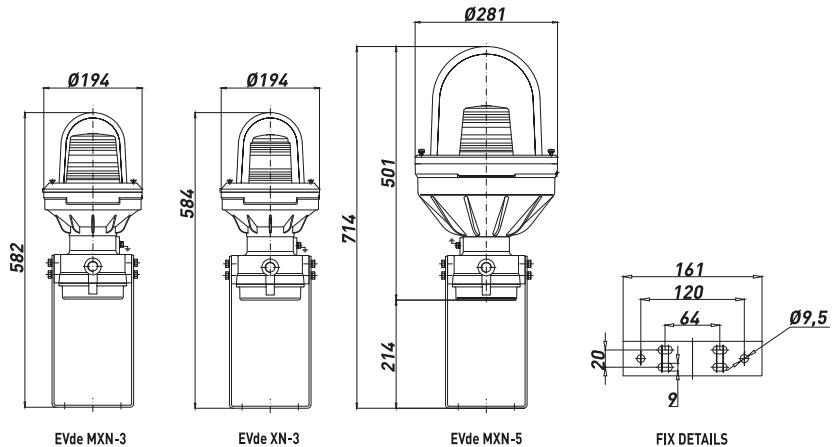
EVCC version, without integrated Ex e junction box, allows standard ceiling installation (available upon request).

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

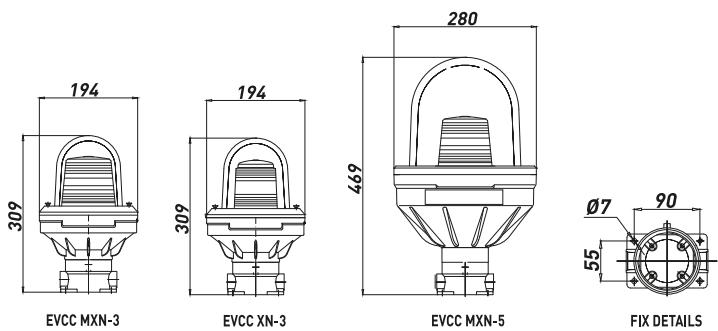
## TECHNICAL FEATURES

<b>Material</b>	Aluminium with low content of copper
<b>IP rating</b>	IP66
<b>Ambient temperature range</b>	-52°C to +60°C
<b>Approvals</b>	INERIS 01ATEX0019X TR CU (marking upon request)
<b>Marking</b>	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
<b>Gaskets</b>	O-ring made of Nitrile Rubber (NBR)
<b>Surface treatment</b>	Green colour polyurethane painting cycle RAL6003 (other colour available upon request)
<b>Entries</b>	Nº 2 entries M25x1,5 (EVde and EVCC version) Nº 1 entry M25x1,5 (EVA version) (plugs and cable glands excluded)
<b>Hardware and screws</b>	AISI304 Stainless steel external hardware and screws
<b>Lamps</b>	Included
<b>Colour</b>	Red (other colours available upon request)
<b>Rated operation voltage (UE)</b>	240Vac, 12/24Vac/dc 110Vac (available upon request)
<b>Frequency (AC version)</b>	50/60Hz
<b>Accessories available upon request</b>	Protection guard

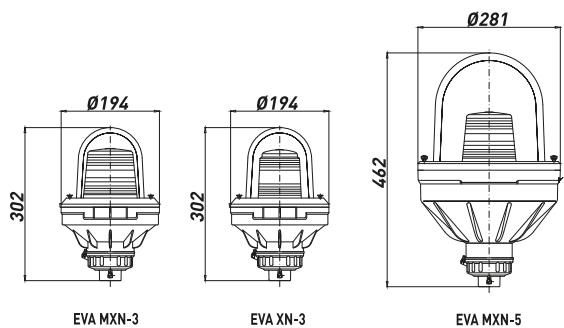
## Dimensions EVde..../XN-MXN



## Dimensions EVCC..../XN-MXN)



## Dimensions EVA..../XN-MXN)



VISUAL  
SIGNAL

## EV..../XN-MXN Series Visual Signals

TYPE	CODE	LAMP [W]	LUMINOUS INTENSITY	WEIGHT [kg]	TEMP. CLASS	VOLTAGE	AMBIENT TEMP.
EVDE-XN-3	A0405.031002	10	2J	5.10	T4*	240VAC 50/60Hz	(-52°;+60°)
EVDE-MXN-3	A0405.031014	25	6J	5.10	T4*	240VAC 50/60Hz	(-52°;+60°)
EVCC-MXN-5	A0405.051104	50	15J	5.10	T4*	240VAC 50/60Hz	(-52°;+60°)
EVDE-XN-3	A0405.031007	10	2J	5.10	T4*	12/24VAC/DC	(-52°;+60°)
EVDE-MXN-3	A0405.031015	25	6J	5.10	T4*	12/24VAC/DC	(-52°;+60°)
EVCC-MXN-5	A0405.051111	50	15J	5.10	T4*	12/24VAC/DC	(-52°;+60°)

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

## VISUAL SIGNAL

# EV../WA.. series - Low intensity aircraft obstruction lights (LIOL)

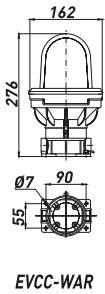
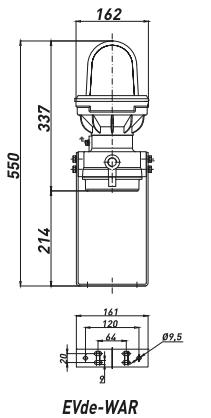
Range of low intensity aircraft warning lights, for structures below 45mt.



## TECHNICAL FEATURES

<b>Material</b>	Aluminium with low content of copper
<b>IP rating</b>	IP66
<b>Ambient temperature range</b>	-52°C to +60°C
<b>Approvals</b>	INERIS 01ATEX0019X TR CU (marking upon request)
<b>Marking</b>	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
<b>Gaskets</b>	O-ring made of Nitrile Rubber (NBR)
<b>Surface treatment</b>	Green colour polyurethane painting cycle RAL6003 (other colour available upon request)
<b>Entries</b>	Nº 2 entries M25x1,5 (EVde and EVCC version) Nº 1 entry M25x1,5 (EVA version) (plugs and cable glands excluded)
<b>Hardware and screws</b>	AISI304 Stainless steel external hardware and screws
<b>Lamps</b>	Included
<b>Colour</b>	Red (other colours available upon request)
<b>Rated operation voltage (UE)</b>	HALOGEN LAMP 230V (standard) 220V, 240V (marking upon request)
	LED LAMP 230V (standard) 24V, 110V, 90-264V (available upon request)
<b>Frequency (AC version)</b>	50/60Hz
<b>Note</b>	Halogen versions supplied with red metacrilate dome

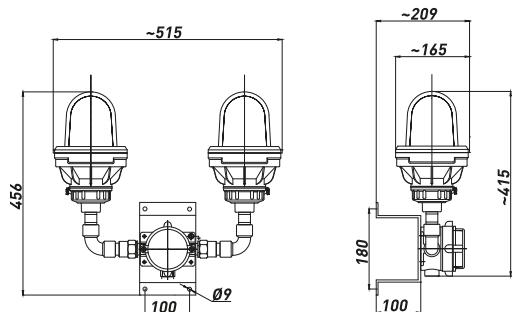
## Dimensioni EVde/EVCC (WAR)



Metacrilate Dome

## Dimensioni EVA (WAD)

EVA-WAD



## EV../WA.. Series Aircraft warning lights

TYPE	CODE	LAMP [W]	LAMP. TYPE	WEIGHT [kg]	TEMP. CLASS	VOLTAGE	AMBIENT TEMP.
EVCC-WAR	A0406.232003	70	HALOGEN	3.00	T3*	230V 50/60HZ	{-52°;+60°}
EVDE-WAR	A0406.032003	70	HALOGEN	3.35	T3*	230V 50/60HZ	{-52°;+60°}
EVA-WAD	A0406.132103	2X70	HALOGEN	5.80	T3*	230V 50/60HZ	{-52°;+60°}
EVCC-WAR	A0404.291002	6	LED	3.00	T4**	230V 50/60HZ	{-52°;+60°}***
EVDE-WAR	A0404.091001	6	LED	3.35	T4**	230V 50/60HZ	{-52°;+60°}***
EVA-WAD	A0404.122001	2X6	LED	5.80	T4**	230V 50/60HZ	{-52°;+60°}***

\* In case of maximum ambient temperature reach +40°C, temperature class changes into T4 (ordering code to be required)

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

\*\*\* LED lamp maximum working temperature is 50°C; in case ambient temperature exceed this limit, we suggest overnight ignition

## VISUAL SIGNAL

# EVCC.. series - Medium intensity aircraft obstruction lights (MIOL)

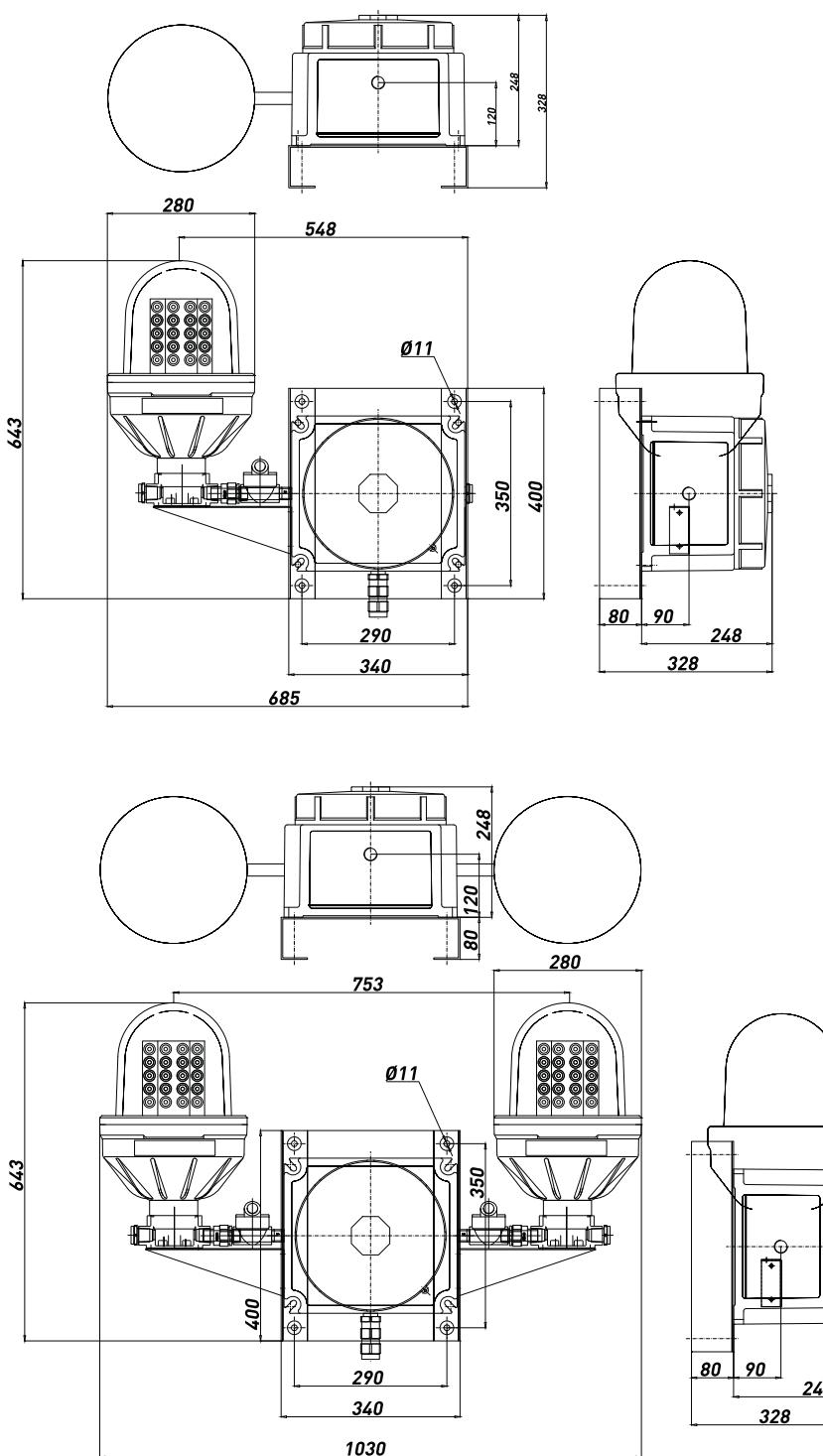


The EVCC-5/...LED range of Medium Intensity Obstruction Lighting products represents the top of technology , utilizes LED technology to deliver low heat dissipation, low watt consumption and up to 100.000/hours maintenance free operation. Aircraft warning lighting fixtures EVCC-5/...LED are multi-light source utilizing 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 light colour RED, WHITE or RED and WHITE.

## TECHNICAL FEATURES

<b>Material</b>	Aluminium with low content of copper
<b>IP rating</b>	IP66
<b>Ambient temperature range</b>	-50°C to +55°C
<b>Approvals</b>	INERIS 01ATEX0019X TR CU (marking upon request)
<b>Marking</b>	II 2 GD Ex d IIC T(**) Gb Ex tb IIIC T(**) Db IP66
	III 3 G Ex nA IIC T3 Gc
<b>Compliance</b>	ICAO / FAA (upon request)
<b>Gaskets</b>	O-ring made of Nitrile Rubber (NBR)
<b>Surface treatment</b>	Green colour polyurethane painting cycle RAL6003 (other colour available upon request)
<b>Entries</b>	Nº 1 entry ¾" UNI-6125 complete with nickel chrome plated brass PAP type (Old version) Nº 1 entry M20x1,5 complete with nickel chrome plated brass PAP type (New version Ex d)
<b>Hardware and screws</b>	AISI304 Stainless steel external hardware and screws
<b>Lamps</b>	LED Included
<b>Colour</b>	RED, WHITE or RED and WHITE
<b>Rated operation voltage (UE)</b>	230Vac 220/240Vac 24Vdc
<b>Frequency (AC version)</b>	50/60Hz

## Dimensions EVCC.. (MIOL) - OLD VERSION



## EVCC.. (MIOL) Medium intensity aircraft warning lights (OLD VERSION)

TYPE	CODE	LAMP [W]	MIOL TYPE	WEIGHT [kg]	TEMP. CLASS	VOLTAGE	AMBIENT TEMP.
EVCC-5/LED	A0404.250112	60 (RED) <sup>[1]</sup>	B	25	T4 <sup>[3]</sup>	110V 50/60HZ <sup>[4]</sup>	(-50°;+55°)
EVCC-5/LED	A0404.251003	60 (RED) <sup>[1]</sup>	B	25	T4 <sup>[3]</sup>	220/240V 50/60HZ <sup>[4]</sup>	(-50°;+55°)
EVCC-5/LED	A0404.252001	2X60 (RED) <sup>[2]</sup>	B	35	T4 <sup>[3]</sup>	220/240V 50/60HZ <sup>[4]</sup>	(-50°;+55°)

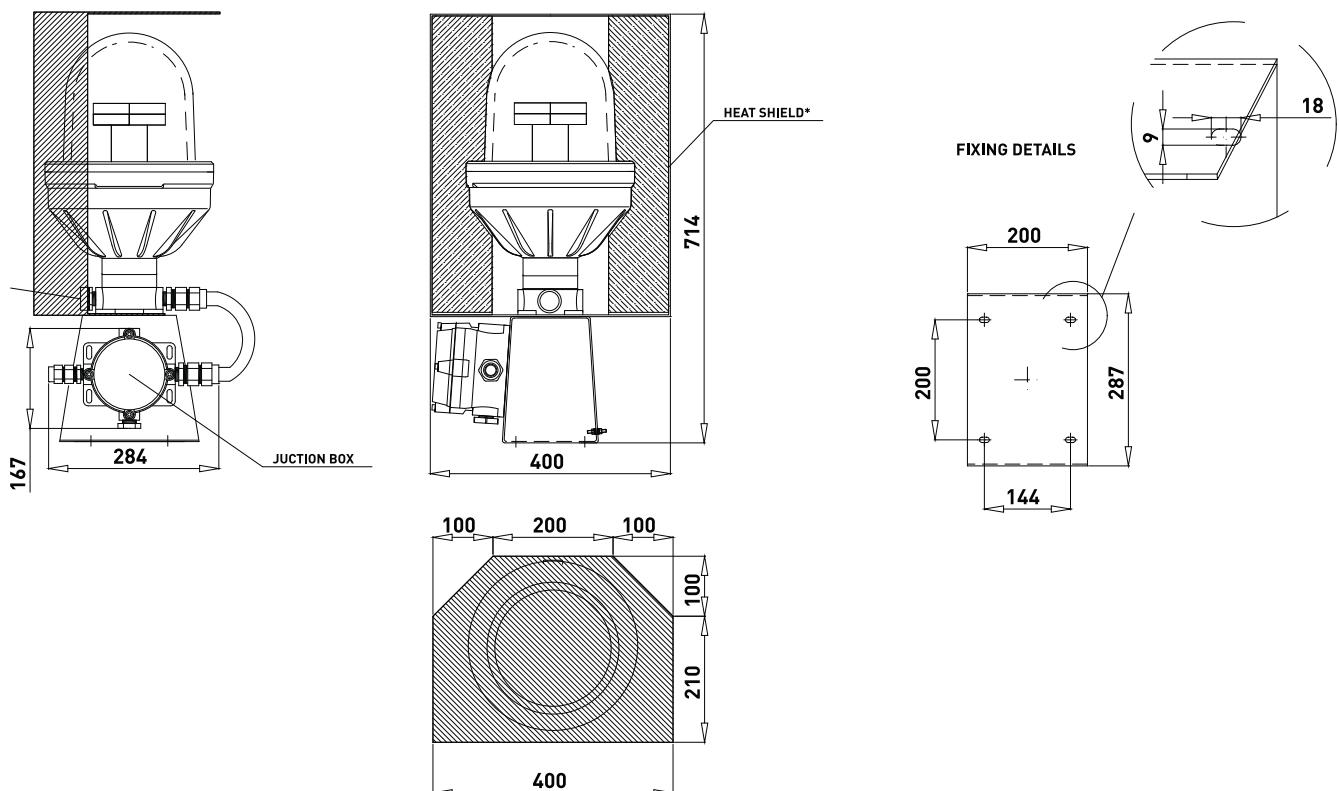
(1) Flashing red light; 2000cd night mode.

(2) Flashing red light; 2000cd night mode; twin execution.

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

(4) By control panel to be ordered separately.

## Dimensions EVCC.. (MIOL) - Ex d version



\* Heat shield suggested for ambient temperature over +45°C

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

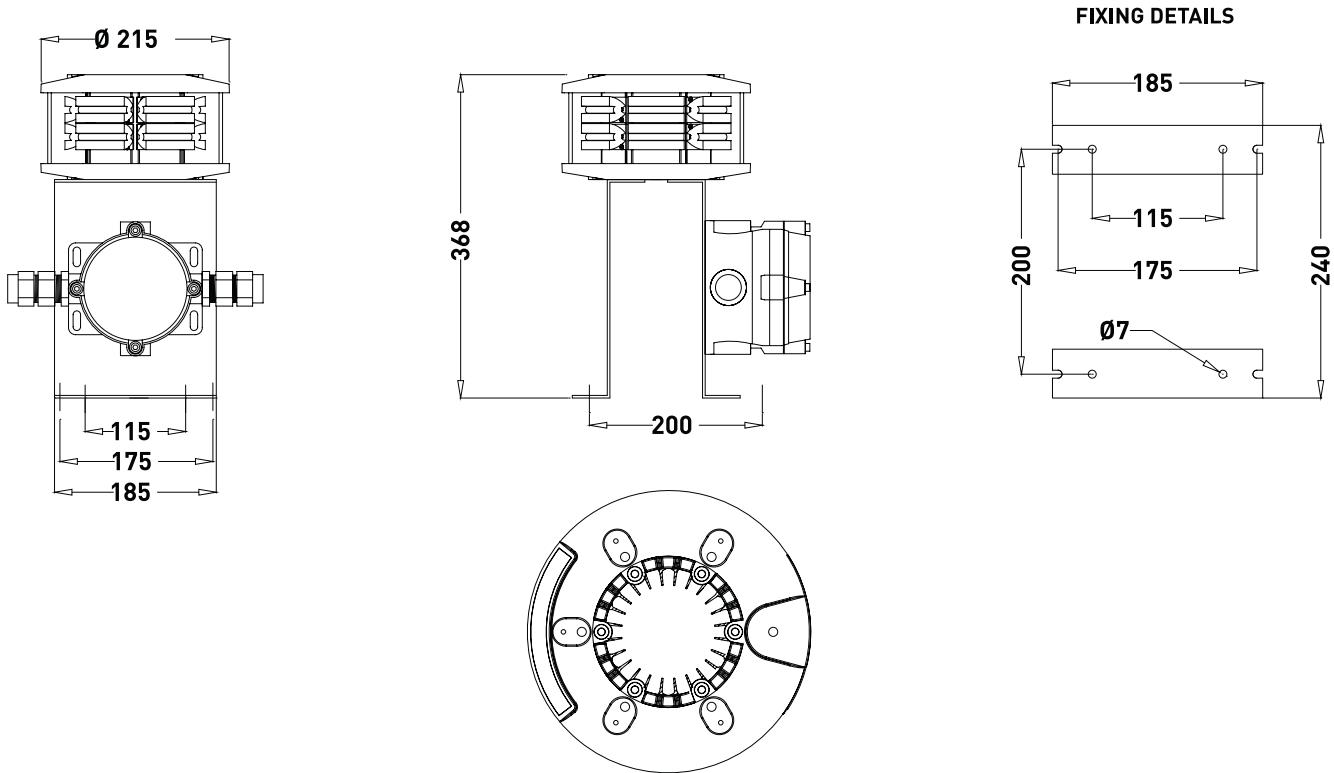
TYPE	CODE	LAMP [W]	MIOL TYPE	WEIGHT [kg]	TEMP. CLASS	PROTECTION	VOLTAGE	AMBIENT TEMP.
EVCC-5/LED	A0404.002600	(RED) <sup>(1)</sup>	B	11	T3	Ex d	<sup>(4)</sup>	(-50°;+55°)
EVCC-5/LED	A0404.002610	(WHITE) <sup>(2)</sup>	A	11	T3	Ex d	<sup>(4)</sup>	(-50°;+55°)
EVCC-5/LED	A0404.002620	(RED AND WHITE) <sup>(3)</sup>	AB	11	T3	Ex d	<sup>(4)</sup>	(-50°;+55°)

(1) Flashing, 20W Nigh mode (peak of 100W); 2000cd

(2) Flashing, 70W Day mode (peak of 400W); 20W Nigh mode (peak of 100W) / 20.000cd day mode / 2.000cd night mode

(3) Flashing, 70W Day mode (peak of 400W) White color; 20W Nigh mode (peak of 100W) Red color / 20.000cd day mode / 2.000cd night mode  
 (4) By control panel to be ordered separately.

## 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	AMBIENT TEMP.
EVCC-5/LED	A0404.002630	(RED) <sup>[1]</sup>	B	3	T3	Ex nA	230V 50/60HZ <sup>[5]</sup>	(-50°;+55°)
EVCC-5/LED	A0404.002640	(RED) <sup>[2]</sup>	B	3	T3	Ex nA	24VDC <sup>[5]</sup>	(-50°;+55°)
EVCC-5/LED	A0404.002650	(WHITE) <sup>[3]</sup>	A	3,7	T3	Ex nA	<sup>[5]</sup>	(-50°;+55°)
EVCC-5/LED	A0404.002660	(RED AND WHITE) <sup>[4]</sup>	AB	4,9	T3	Ex nA	<sup>[5]</sup>	(-50°;+55°)

[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-PT/LED Traffic light

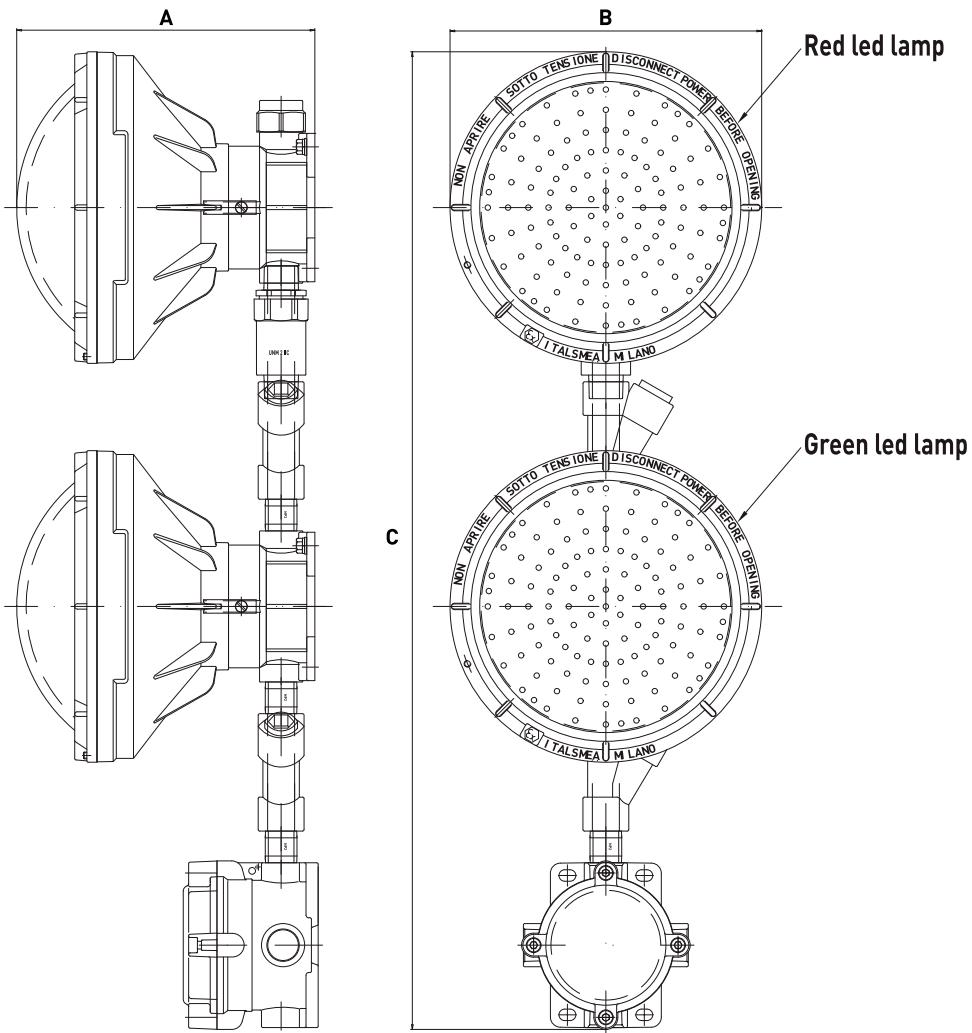


- Spot lights are used where an high illumination is required, without causing neither dazzling nor light pollution.
- Traffic light with red and green lamps
- LED technology
- Zero maintenance

## TECHNICAL FEATURES

<b>Material</b>	Aluminium with low content of copper
<b>IP rating</b>	IP66
<b>Ambient temperature range</b>	-20°C to +60°C
<b>Approvals</b>	INERIS 01ATEX0019X (standard) TR CU (marking upon request, ordering code to be required)
<b>Marking</b>	Ex d IIC T(**) Gb Ex tb IIIC T(**) Db IP66 **T4/T135°C, T5/100°C
<b>Gaskets</b>	O-ring made of EPDM rubber
<b>Surface treatment</b>	Green colour polyurethane painting cycle RAL6003 (other colour available upon request)
<b>Entries</b>	N° 1 entry M25x1,5
<b>Screws</b>	AISI304 Stainless steel external screws
<b>Lamps</b>	Included
<b>Rated operation voltage (UE)</b>	24V AC/DC 90/264 VAC
<b>Frequency</b>	50/60 Hz
<b>Power factor</b>	> 0,95

## Dimensions EVCC-PT/LED



## (EVCC-PT/LED) Traffic light

TYPE	CODE	LAMP [W]	LAMP. TYPE	TEMP. CLASS	VOLTAGE	DIMENSIONS [mm]			AMBIENT TEMPERATURE
						A	B	C	
TRAFFIC LIGHT 2XEVCC-PT/LED	A0404.500000	20 (RED / GREEN)	LED	T4*	24VAC/DC 50/60HZ	225	235	725	{-20°;+60°}
TRAFFIC LIGHT 2XEVCC-PT/LED	A0404.500001	20 (RED / GREEN)	LED	T4*	90/264 VAC 50/60HZ	225	235	725	{-20°;+60°}

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

## VISUAL SIGNAL

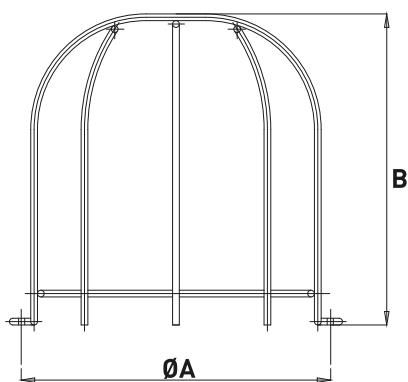
# Serie EV../ROT / EV../XN-MXN Series / EV../WA.. series / EVCC.. series

## SPARES & ACCESSORIES

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

CODE	TYPE	DIMENSIONS AxB (mm)	WEIGHT [Kg]
A0A04.000017	GEV-1 PROTECTION GUARD FOR EV..-1 - AISI 304	123X103	0.160
A0A04.000018	GEV-2 PROTECTION GUARD FOR EV..-2 - AISI 304	138X139	0.230
A0A04.000046	GEV-3 PROTECTION GUARD FOR EV..-3 - AISI 304	151X152	0.240
A0A04.000016	GEV-4 PROTECTION GUARD FOR EV..-4 - AISI 304	178X200	0.370
A0A04.000047	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
XENOFFLASH (RED)		10 (2J)	E27	220/240 VAC	/	A5004.000011	EVDE-XN-3
		10 (2J)	E27	12/24 VAC/VDC	/	A5004.000013	EVDE-XN-3 / 12/24 VAC/VDC
XENOFFLASH (RED)		25 (6J)	E27	220/240 VAC	/	A5004.000012	EVDE-MXN-3
		25 (6J)	E27	12/24 VAC/VDC	/	A5004.000016	EVDE-MXN-3 / 12/24 VAC/VDC
STROBOFLASH (RED)		50 (15J)	/	220/240 VAC	/	A5004.000009	EVCC-MXN-5 1X50 / EVCC-MXN-5 2X50
		50 (15J)	/	12/24 VAC/VDC	/	A5004.000098	EVCC-MXN-5 1X50 / EVCC-MXN-5 2X50 / 12/24 VAC/VDC
ROTOALARM		45	/	12 VDC	/	A5004.000007	EVDE-ROT-4
		45	/	24 VDC	/	A5004.000004	EVDE-ROT-4
		25	/	240 VAC	/	A5004.000001	EVDE-ROT-4
LED (RED)		6	E27	230 VAC	/	A5004.000090	EVDE-WAR 1X6W / EVCC-WAR 6W



# CABLE GLANDS & FITTINGS

**P.162**

## Unarmoured cable

- PNS Series - Single seal - Nickel brass or Stainless steel AISI316 L
- PND Series - Double seal - Nickel brass or Stainless steel AISI316 L
- PBS Series - Single seal - Lead sheath - Nickel brass or Stainless steel AISI316 L
- PBD Series - Double seal - Lead sheath - Nickel brass or Stainless steel AISI316 L
- PMS Series - Single seal – Barrier type - Nickel brass or Stainless steel AISI316 L
- PSM Series - Single seal - Male-Male - Nickel brass or Stainless steel AISI316 L
- PMD Series - Double seal - Barrier type - Nickel brass or Stainless steel AISI316 L
- PSF Series - Single seal - Male-Female - Nickel brass or Stainless steel AISI316 L
- UN Series - Single seal - Polyamide

**P.180**

## Armoured cable

- PDB Series - Double seal - Lead sheath - Nickel brass or Stainless steel AISI316 L
- PNA Series - Single seal - Nickel brass or Stainless steel AISI316 L
- PAP Series - Double seal - Nickel brass or Stainless steel AISI316 L
- PSB Series - Single seal - Lead sheath - Nickel brass or Stainless steel AISI316 L
- PB AX Series - Single seal – Barrier type - Nickel brass or Stainless steel AISI316 L
- PAB AX Series - Double seal - Barrier type - Nickel brass or Stainless steel AISI316 L



**P.192**

## Cable glands accessories

- Inner & Outer seals
- Other accessories

**P.196**

## Fittings

- BMF / BFF / BMM Series - Three pieces unions
- EYS-EZS Series - Sealing fittings
- NP Series - Nipples
- EM Series - Unions
- ELF Series - Elbows
- LBH Series - Open elbows
- DB Series - Aluminium bushings
- PLG Series - Recessed exagonal plugs
- PLG Series - Resin exagonal plugs
- T Series - Exagonal plugs
- RE / REB Series - Reductions and adaptors
- A.. / F.. / M.. / R.. Series - Reductions and adaptors

# **UNARMoured CABLE**

## PNS metallic cable gland

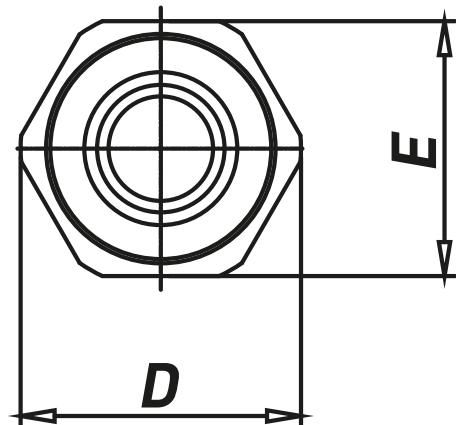
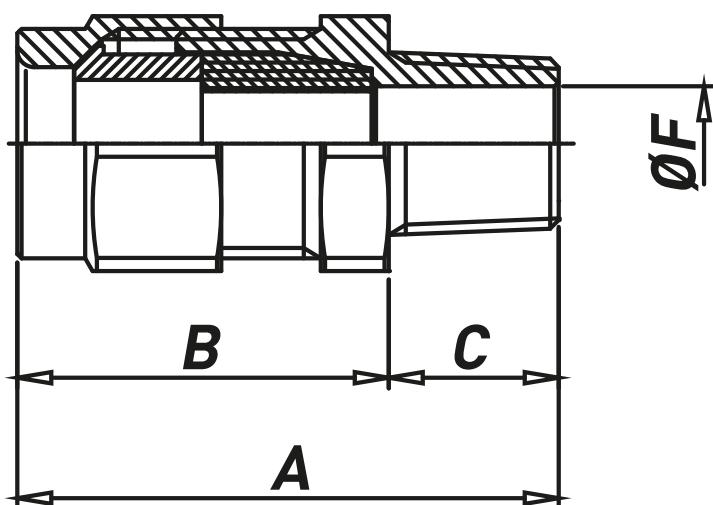


Single seal cable gland suitable for unarmoured cables.  
Suitable for Zone 1 / 2 and Zone 21 / 22.

## TECHNICAL FEATURES

<b>Material</b>	Nickel chrome plated brass AISI316L Stainless steel (other materials upon request)
<b>IP rating</b>	IP66
<b>Operating temperature range</b>	-52°C to +110°C
<b>Approvals</b>	INERIS 02ATEX0084 (standard) TR CU (marking upon request, ordering code to be required) IECEx INE 14.0046X
<b>Marking*</b>	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.	
<b>Internal seals</b>	EPDM
<b>Threads</b>	Metric, NPT, UNI-6125 (other thread upon request)
<b>Accessories available upon request</b>	Locknut, sealing gasket, earthing ring, star washer, protective shroud
<b>Note</b>	<ol style="list-style-type: none"><li>1. Catalogue codes are without inner/outer rubber seals, that can be ordered separately (for selection please refer to page 176). For ordering cable glands complete with internal seals, codes will be issued by Sales departments.</li><li>2. Armouring rings are usually supplied made of nickel chrome plated brass. Other materials are available upon request.</li><li>3. 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.</li><li>4. M40x1,5 e 1" 1/4 thread available for our cable glands size 5</li></ol>

## Dimensions PNS



TYPE	INNER SEAL	THREAD	CODE		Ø EXTERNAL CABLE	DIMENSIONS [mm]				
			BRASS	AISI316L		F	A	B	C	D
PNS-1	SIZE 1	M20X1,5	B1401.200102	UPON REQUEST	18	62	42	20	33	30
PNS-2	SIZE 2	M25X1,5	B1401.200202		24	62	42	20	40	36
PNS-3	SIZE 3	M32X1,5	B1401.200302		30	70	45	25	49	44
PNS-5	SIZE 5	M50X1,5	B1401.200502		43	70	45	25	62	56
PNS-6	SIZE 6	M63X1,5	B1401.200602		57	72	46	25	78	70
PNS-7	SIZE 7	M75X1,5	B1401.200702		69	78	46	32	92	83
PNS-8	SIZE 8	M80X1,5	B1401.200802		79	78	46	32	103	93
PNS-1	SIZE 1	NPT 1/2"	B1401.200103		18	62	42	20	33	30
PNS-2	SIZE 2	NPT 3/4"	B1401.200203	UPON REQUEST	24	62	42	20	40	36
PNS-3	SIZE 3	NPT 1"	B1401.200303		30	70	45	25	49	44
PNS-5	SIZE 5	NPT 1" 1/2	B1401.200503		43	70	45	25	62	56
PNS-6	SIZE 6	NPT 2"	B1401.200603		57	72	46	25	78	70
PNS-7	SIZE 7	NPT 2" 1/2	B1401.200703		69	78	46	32	92	83
PNS-8	SIZE 8	NPT 3"	B1401.210803		79	78	46	32	103	93
PNS-1	SIZE 1	UNI-6125 1/2"	B1401.200101		18	62	42	20	33	30
PNS-2	SIZE 2	UNI-6125 3/4"	B1401.200201	UPON REQUEST	24	62	42	20	40	36
PNS-3	SIZE 3	UNI-6125 1"	B1401.200301		30	70	45	25	49	44
PNS-5	SIZE 5	UNI-6125 1" 1/2	B1401.200501		43	70	45	25	62	56
PNS-6	SIZE 6	UNI-6125 2"	B1401.200601		57	72	46	25	78	70
PNS-7	SIZE 7	UNI-6125 2" 1/2	B1401.200701		69	78	46	32	92	83
PNS-8	SIZE 8	UNI-6125 3"	B1401.200801		79	78	46	32	103	93

For gland seal, please see on page 176

Note: Size M40 and 1"1/4 available on request.

# **UNARMoured CABLE**

## PND metallic cable gland

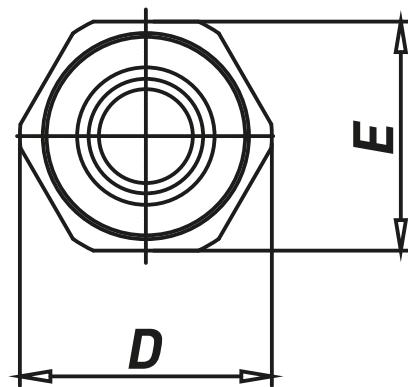
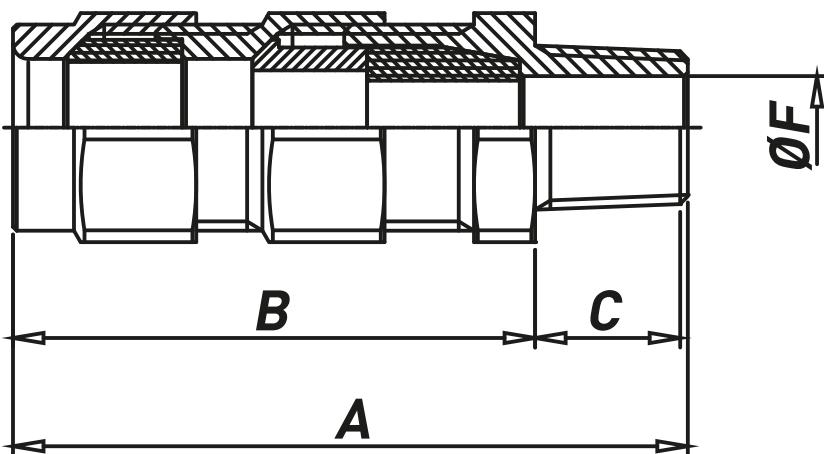


Double seal cable gland suitable for unarmoured cables.  
Suitable for Zone 1 / 2 and Zone 21 / 22.

## TECHNICAL FEATURES

<b>Material</b>	Nickel chrome plated brass AISI316L Stainless steel (other materials upon request)
<b>IP rating</b>	IP66
<b>Operating temperature range</b>	-52°C to +110°C
<b>Approvals</b>	INERIS 02ATEX0084 (standard) TR CU (marking upon request, ordering code to be required) IECEx INE 14.0046X
<b>Marking*</b>	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.	
<b>Internal seals</b>	EPDM
<b>Threads</b>	Metric, NPT, UNI-6125 (other thread upon request)
<b>Accessories available upon request</b>	Locknut, sealing gasket, earthing ring, star washer, protective shroud
<b>Note</b>	<ol style="list-style-type: none"><li>1. Catalogue codes are without inner/outer rubber seals, that can be ordered separately (for selection please refer to page 176). For ordering cable glands complete with internal seals, codes will be issued by Sales departments.</li><li>2. Armouring rings are usually supplied made of nickel chrome plated brass. Other materials are available upon request.</li><li>3. 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.</li><li>4. M40x1,5 e 1" 1/4 thread available for our cable glands size 5</li></ol>

## Dimensions PND



TYPE	INNER SEAL	THREAD	CODE		Ø EXTERNAL CABLE	DIMENSIONS [mm]				
			BRASS	AISI316L		A	B	C	D	E
PND-1	SIZE 1	M20X1,5	UPON REQUEST	UPON REQUEST	18	85	65	20	33	30
PND-2	SIZE 2	M25X1,5			24	85	65	20	33	36
PND-3	SIZE 3	M32X1,5			30	93	68	25	49	44
PND-5	SIZE 5	M50X1,5			43	93	68	25	62	56
PND-6	SIZE 6	M63X1,5			57	95	71	25	78	70
PND-7	SIZE 7	M75X1,5			69	100	71	32	92	83
PND-8	SIZE 8	M80X1,5			79	100	71	32	103	93
PND-1	SIZE 1	NPT 1/2"	UPON REQUEST	UPON REQUEST	18	85	65	20	33	30
PND-2	SIZE 2	NPT 3/4"			24	85	65	20	33	36
PND-3	SIZE 3	NPT 1"			30	93	68	25	49	44
PND-5	SIZE 5	NPT 1" 1/2			43	93	68	25	62	56
PND-6	SIZE 6	NPT 2"			57	95	71	25	78	70
PND-7	SIZE 7	NPT 2" 1/2			69	100	71	32	92	83
PND-8	SIZE 8	NPT 3"			79	100	71	32	103	93
PND-1	SIZE 1	UNI-6125 1/2"	UPON REQUEST	UPON REQUEST	18	85	65	20	33	30
PND-2	SIZE 2	UNI-6125 3/4"			24	85	65	20	33	36
PND-3	SIZE 3	UNI-6125 1"			30	93	68	25	49	44
PND-5	SIZE 5	UNI-6125 1" 1/2			43	93	68	25	62	56
PND-6	SIZE 6	UNI-6125 2"			57	95	71	25	78	70
PND-7	SIZE 7	UNI-6125 2" 1/2			69	100	71	32	92	83
PND-8	SIZE 8	UNI-6125 3"			79	100	71	32	103	93

For gland seal, please see on page 176

Note: Size M40 and 1"1/4 available on request.

# **UNARMoured CABLE**

## PBS metallic cable gland

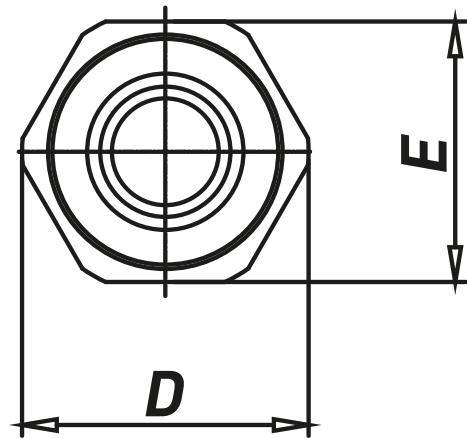
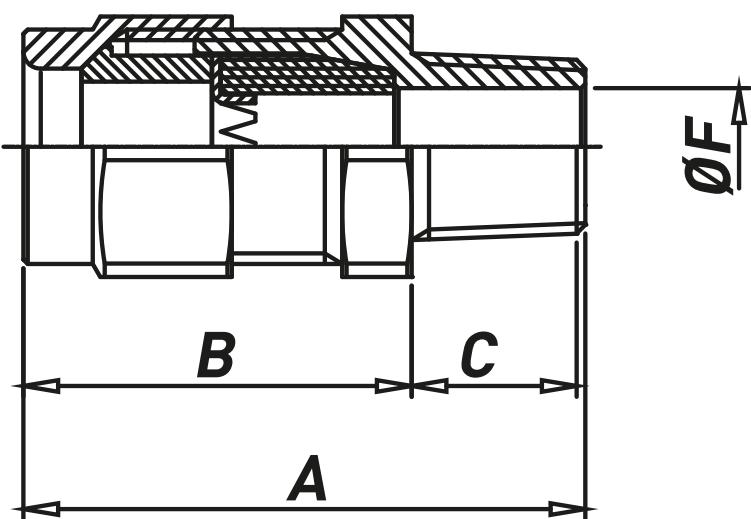


Single seal cable gland for lead sheet suitable for unarmoured cables.  
Suitable for Zone 1 / 2 and Zone 21 / 22.

### TECHNICAL FEATURES

<b>Material</b>	Nickel chrome plated brass AISI316L Stainless steel (other materials upon request)
<b>IP rating</b>	IP66
<b>Operating temperature range</b>	-52°C to +110°C
<b>Approvals</b>	INERIS 02ATEX0084 (standard) TR CU (marking upon request, ordering code to be required) IECEx INE 14.0046X
<b>Marking*</b>	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.
<b>Internal seals</b>	EPDM
<b>Threads</b>	Metric, NPT, UNI-6125 (other thread upon request)
<b>Accessories available upon request</b>	Locknut, sealing gasket, earthing ring, star washer, protective shroud
<b>Note</b>	<ol style="list-style-type: none"><li>1. Catalogue codes are without inner/outer rubber seals, that can be ordered separately (for selection please refer to page 176). For ordering cable glands complete with internal seals, codes will be issued by Sales departments.</li><li>2. Armouring rings are usually supplied made of nickel chrome plated brass. Other materials are available upon request.</li><li>3. 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.</li><li>4. M40x1,5 e 1" 1/4 thread available for our cable glands size 5</li></ol>

## Dimensions PBS



TYPE	INNER SEAL	THREAD	CODE		Ø EXTERNAL CABLE	DIMENSIONS [mm]				
			BRASS	AISI316L		A	B	C	D	E
PBS-1	SIZE 1	M20X1,5	UPON REQUEST	UPON REQUEST	18	62	42	20	33	30
PBS-2	SIZE 2	M25X1,5			24	62	42	20	33	36
PBS-3	SIZE 3	M32X1,5			30	70	45	25	49	44
PBS-5	SIZE 5	M50X1,5			43	70	45	25	62	56
PBS-6	SIZE 6	M63X1,5			57	72	46	25	78	70
PBS-7	SIZE 7	M75X1,5			69	78	46	32	78	70
PBS-8	SIZE 8	M80X1,5			79	78	46	32	103	93
PBS-1	SIZE 1	NPT 1/2"	UPON REQUEST	UPON REQUEST	18	62	42	20	33	30
PBS-2	SIZE 2	NPT 3/4"			24	62	42	20	33	36
PBS-3	SIZE 3	NPT 1"			30	70	45	25	49	44
PBS-5	SIZE 5	NPT 1" 1/2			43	70	45	25	62	56
PBS-6	SIZE 6	NPT 2"			57	72	46	25	78	70
PBS-7	SIZE 7	NPT 2" 1/2			69	78	46	32	78	70
PBS-8	SIZE 8	NPT 3"			79	78	46	32	103	93
PBS-1	SIZE 1	UNI-6125 1/2"	UPON REQUEST	UPON REQUEST	18	62	42	20	33	30
PBS-2	SIZE 2	UNI-6125 3/4"			24	62	42	20	33	36
PBS-3	SIZE 3	UNI-6125 1"			30	70	45	25	49	44
PBS-5	SIZE 5	UNI-6125 1" 1/2			43	70	45	25	62	56
PBS-6	SIZE 6	UNI-6125 2"			57	72	46	25	78	70
PBS-7	SIZE 7	UNI-6125 2" 1/2			69	78	46	32	78	70
PBS-8	SIZE 8	UNI-6125 3"			79	78	46	32	103	93

For gland seal, please see on page 176

Note: Size M40 and 1"1/4 available on request.

# **UNARMoured CABLE**

## PBD metallic cable gland

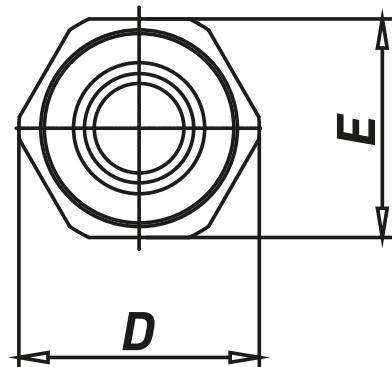
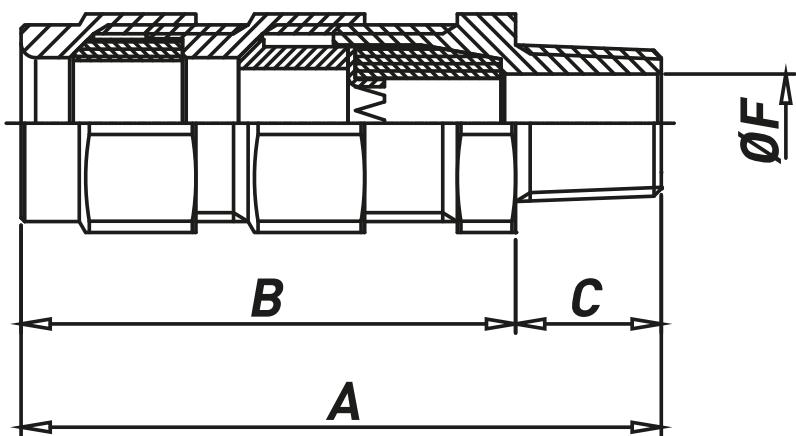


Double seal cable gland for lead sheet suitable for unarmoured cables.  
Suitable for Zone 1 / 2 and Zone 21 / 22.

## TECHNICAL FEATURES

<b>Material</b>	Nickel chrome plated brass AISI316L Stainless steel (other materials upon request)
<b>IP rating</b>	IP66
<b>Operating temperature range</b>	-52°C to +110°C
<b>Approvals</b>	INERIS 02ATEX0084 (standard) TR CU (marking upon request, ordering code to be required) IECEx INE 14.0046X
<b>Marking*</b>	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.
<b>Internal seals</b>	EPDM
<b>Threads</b>	Metric, NPT, UNI-6125 (other thread upon request)
<b>Accessories available upon request</b>	Locknut, sealing gasket, earthing ring, star washer, protective shroud
<b>Note</b>	<ol style="list-style-type: none"><li>1. Catalogue codes are without inner/outer rubber seals, that can be ordered separately (for selection please refer to page 176). For ordering cable glands complete with internal seals, codes will be issued by Sales departments.</li><li>2. Armouring rings are usually supplied made of nickel chrome plated brass. Other materials are available upon request.</li><li>3. 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.</li><li>4. M40x1,5 e 1" 1/4 thread available for our cable glands size 5</li></ol>

## Dimensions PBD



TYPE	INNER SEAL	THREAD	CODE		AISI316L	Ø EXTERNAL CABLE	DIMENSIONS [mm]					
			BRASS	AISI316L			F	A	B	C	D	E
PBD-1	SIZE 1	M20X1,5	B1401.800102	UPON REQUEST	18	85	65	20	33	30		
PBD-2	SIZE 2	M25X1,5	B1401.800202		24	85	65	20	33	36		
PBD-3	SIZE 3	M32X1,5	B1401.800302		30	93	68	25	49	44		
PBD-5	SIZE 5	M50X1,5	B1401.800502		43	93	68	25	62	56		
PBD-6	SIZE 6	M63X1,5	B1401.800602		57	95	71	25	78	70		
PBD-7	SIZE 7	M75X1,5	B1401.800702		69	100	71	32	92	83		
PBD-8	SIZE 8	M80X1,5	B1401.800802		79	100	71	32	103	93		
PBD-1	SIZE 1	NPT 1/2"	B1401.800103	UPON REQUEST	18	85	65	20	33	30		
PBD-2	SIZE 2	NPT 3/4"	B1401.800203		24	85	65	20	33	36		
PBD-3	SIZE 3	NPT 1"	B1401.800303		30	93	68	25	49	44		
PBD-5	SIZE 5	NPT 1" 1/2	B1401.800503		43	93	68	25	62	56		
PBD-6	SIZE 6	NPT 2"	B1401.800603		57	95	71	25	78	70		
PBD-7	SIZE 7	NPT 2" 1/2	B1401.800703		69	100	71	32	92	83		
PBD-8	SIZE 8	NPT 3"	B1401.800803		79	100	71	32	103	93		
PBD-1	SIZE 1	UNI-6125 1/2"	B1401.800101	UPON REQUEST	18	85	65	20	33	30		
PBD-2	SIZE 2	UNI-6125 3/4"	B1401.800201		24	85	65	20	33	36		
PBD-3	SIZE 3	UNI-6125 1"	B1401.800301		30	93	68	25	49	44		
PBD-5	SIZE 5	UNI-6125 1" 1/2	B1401.800501		43	93	68	25	62	56		
PBD-6	SIZE 6	UNI-6125 2"	B1401.800601		57	95	71	25	78	70		
PBD-7	SIZE 7	UNI-6125 2" 1/2	B1401.800701		69	100	71	32	92	83		
PBD-8	SIZE 8	UNI-6125 3"	B1401.800801		79	100	71	32	103	93		

For gland seal, please see on page 176

Note: Size M40 and 1"1/4 available on request.

# **UNARMOURED CABLE**

## PMS metallic cable gland

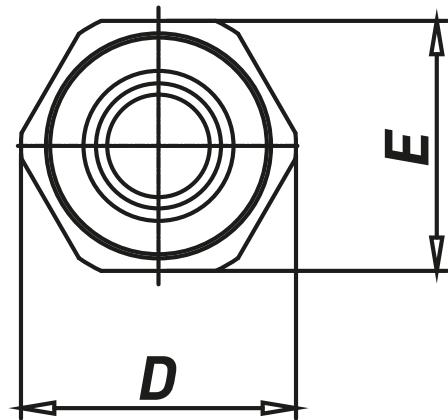
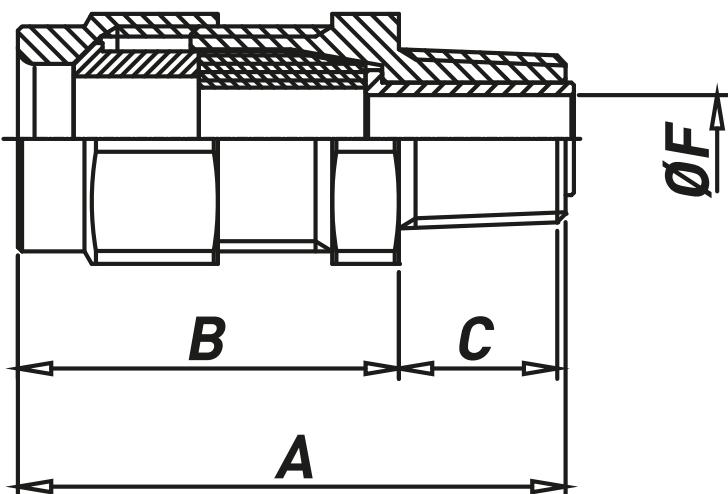


Single seal barrier type cable gland suitable for unarmoured cables. Sealing compound to be ordered separately.  
Suitable for Zone 1 / 2 and Zone 21 / 22.

## TECHNICAL FEATURES

<b>Material</b>	Nickel chrome plated brass AISI316L Stainless steel (other materials upon request)
<b>IP rating</b>	IP66
<b>Operating temperature range</b>	-52°C to +110°C
<b>Approvals</b>	INERIS 02ATEX0084 (standard) TR CU (marking upon request, ordering code to be required) IECEx INE 14.0046X
<b>Marking*</b>	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.
<b>Internal seals</b>	EPDM
<b>Threads</b>	Metric, NPT, UNI-6125 (other thread upon request)
<b>Accessories available upon request</b>	Locknut, sealing gasket, earthing ring, star washer, protective shroud
<b>Note</b>	<ol style="list-style-type: none"><li>1. Catalogue codes are without inner/outer rubber seals, that can be ordered separately (for selection please refer to page 176). For ordering cable glands complete with internal seals, codes will be issued by Sales departments.</li><li>2. Armouring rings are usually supplied made of nickel chrome plated brass. Other materials are available upon request.</li><li>3. 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.</li><li>4. M40x1,5 e 1" 1/4 thread available for our cable glands size 5</li></ol>

## Dimensions PMS



TYPE	INNER SEAL	THREAD	CODE		Ø EXTERNAL CABLE	DIMENSIONS [mm]				
			BRASS	AISI316L		A	B	C	D	E
PMS-1	SIZE 1	M20X1,5			18	62	42	20	33	30
PMS-2	SIZE 2	M25X1,5			24	62	42	20	40	36
PMS-3	SIZE 3	M32X1,5			30	70	45	25	49	44
PMS-5	SIZE 5	M50X1,5	UPON REQUEST	UPON REQUEST	43	70	45	25	62	56
PMS-6	SIZE 6	M63X1,5			57	72	46	25	78	70
PMS-7	SIZE 7	M75X1,5			69	78	46	25	78	70
PMS-8	SIZE 8	M80X1,5			79	78	46	32	103	93

PMS-1	SIZE 1	NPT 1/2"	UPON REQUEST	UPON REQUEST	18	62	42	20	33	30
PMS-2	SIZE 2	NPT 3/4"			24	62	42	20	40	36
PMS-3	SIZE 3	NPT 1"			30	70	45	25	49	44
PMS-5	SIZE 5	NPT 1" 1/2			43	70	45	25	62	56
PMS-6	SIZE 6	NPT 2"			57	72	46	25	78	70
PMS-7	SIZE 7	NPT 2" 1/2			69	78	46	25	78	70
PMS-8	SIZE 8	NPT 3"			79	78	46	32	103	93

PMS-1	SIZE 1	UNI-6125 1/2"	UPON REQUEST	UPON REQUEST	18	62	42	20	33	30
PMS-2	SIZE 2	UNI-6125 3/4"			24	62	42	20	40	36
PMS-3	SIZE 3	UNI-6125 1"			30	70	45	25	49	44
PMS-5	SIZE 5	UNI-6125 1" 1/2			43	70	45	25	62	56
PMS-6	SIZE 6	UNI-6125 2"			57	72	46	25	78	70
PMS-7	SIZE 7	UNI-6125 2" 1/2			69	78	46	25	78	70
PMS-8	SIZE 8	UNI-6125 3"			79	78	46	32	103	93

For gland seal, please see on page 176

Note: Size M40 and 1"1/4 available on request.

# **UNARMoured CABLE**

## PSM metallic cable gland

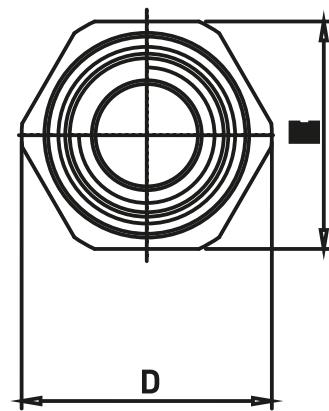
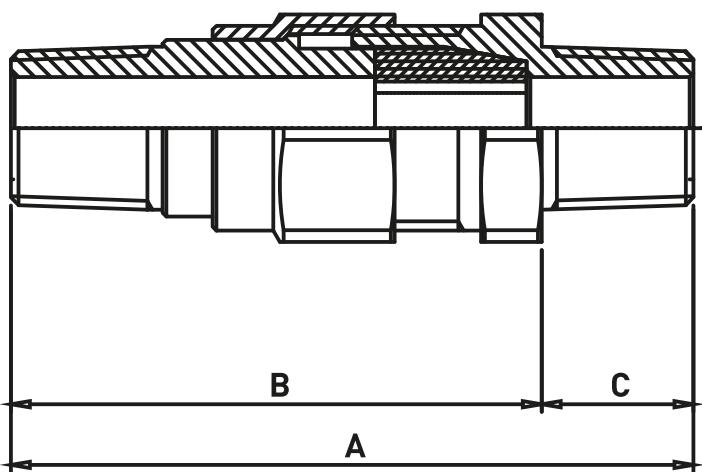


Single seal through "male-male" cable gland suitable for unarmoured cables.  
Suitable for Zone 1 / 2 and Zone 21 / 22.

## TECHNICAL FEATURES

<b>Material</b>	Nickel chrome plated brass AISI316L Stainless steel (other materials upon request)
<b>IP rating</b>	IP66
<b>Operating temperature range</b>	-52°C to +110°C
<b>Approvals</b>	INERIS 02ATEX0084 (standard) TR CU (marking upon request, ordering code to be required) IECEx INE 14.0046X
<b>Marking*</b>	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.	
<b>Internal seals</b>	EPDM
<b>Threads</b>	Metric, NPT, UNI-6125 (other thread upon request)
<b>Accessories available upon request</b>	Locknut, sealing gasket, earthing ring, star washer, protective shroud
<b>Note</b>	<ol style="list-style-type: none"><li>1. Catalogue codes are without inner/outer rubber seals, that can be ordered separately (for selection please refer to page 176). For ordering cable glands complete with internal seals, codes will be issued by Sales departments.</li><li>2. Armouring rings are usually supplied made of nickel chrome plated brass. Other materials are available upon request.</li><li>3. 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.</li><li>4. M40x1,5 e 1" 1/4 thread available for our cable glands size 5</li></ol>

## Dimensions PSM



TYPE	INNER SEAL	THREAD	FREE NIPPLE THREAD*	CODE		DIMENSIONS [mm]				
				BRASS	AISI316L	A	B	C	D	E
PSM-1	SIZE 1	M20X1,5	NPT 1/2"	B1401.711102	B1403.730102	90	70	20	33	30
PSM-2	SIZE 2	M25X1,5	NPT 3/4"	B1401.711202	B1403.730202	90	70	20	40	36
PSM-3	SIZE 3	M32X1,5	NPT 1"	B1401.710302	B1403.730302	104	79	25	49	44
PSM-5	SIZE 5	M50X1,5	NPT 1" 1/2	B1401.710502	UPON REQUEST	104	79	25	65	58
PSM-6	SIZE 6	M63X1,5	NPT 2"	B1401.710602	UPON REQUEST	109	84	25	65	58
PSM-7	SIZE 7	M75X1,5	NPT 2" 1/2	UPON REQUEST	UPON REQUEST	/	/	/	/	/
PSM-8	SIZE 8	M80X1,5	NPT 3"	UPON REQUEST	UPON REQUEST	/	/	/	/	/
PSM-1	SIZE 1	NPT 1/2"	NPT 1/2"	B1401.700104	B1403.730103	90	70	20	33	30
PSM-2	SIZE 2	NPT 3/4"	NPT 3/4"	B1401.700203	B1403.730203	90	70	20	40	36
PSM-3	SIZE 3	NPT 1"	NPT 1"	B1401.700303	B1403.730303	104	79	25	49	44
PSM-5	SIZE 5	NPT 1" 1/2	NPT 1" 1/2	B1401.700503	UPON REQUEST	104	79	25	65	58
PSM-6	SIZE 6	NPT 2"	NPT 2"	B1401.700603	UPON REQUEST	109	84	25	65	58
PSM-7	SIZE 7	NPT 2" 1/2	NPT 2" 1/2	UPON REQUEST	UPON REQUEST	/	/	/	/	/
PSM-8	SIZE 8	NPT 3"	NPT 3"	UPON REQUEST	UPON REQUEST	/	/	/	/	/
PSM-1	SIZE 1	UNI-6125 1/2"	NPT 1/2"	B1401.710101	B1403.730101	90	70	20	33	30
PSM-2	SIZE 2	UNI-6125 3/4"	NPT 3/4"	B1401.710201	B1403.730201	90	70	20	40	36
PSM-3	SIZE 3	UNI-6125 1"	NPT 1"	B1401.710301	B1403.730301	104	79	25	49	44
PSM-5	SIZE 5	UNI-6125 1" 1/2	NPT 1" 1/2	B1401.710501	UPON REQUEST	104	79	25	65	58
PSM-6	SIZE 6	UNI-6125 2"	NPT 2"	B1401.710601	UPON REQUEST	109	84	25	65	58
PSM-7	SIZE 7	UNI-6125 2" 1/2	NPT 2" 1/2	UPON REQUEST	UPON REQUEST	/	/	/	/	/
PSM-8	SIZE 8	UNI-6125 3"	NPT 3"	UPON REQUEST	UPON REQUEST	/	/	/	/	/

\* Other threads upon request

**For gland seal, please see on page 176**

Note: Size M40 and 1"1/4 available on request.

# **UNARMoured CABLE**

## PMD metallic cable gland

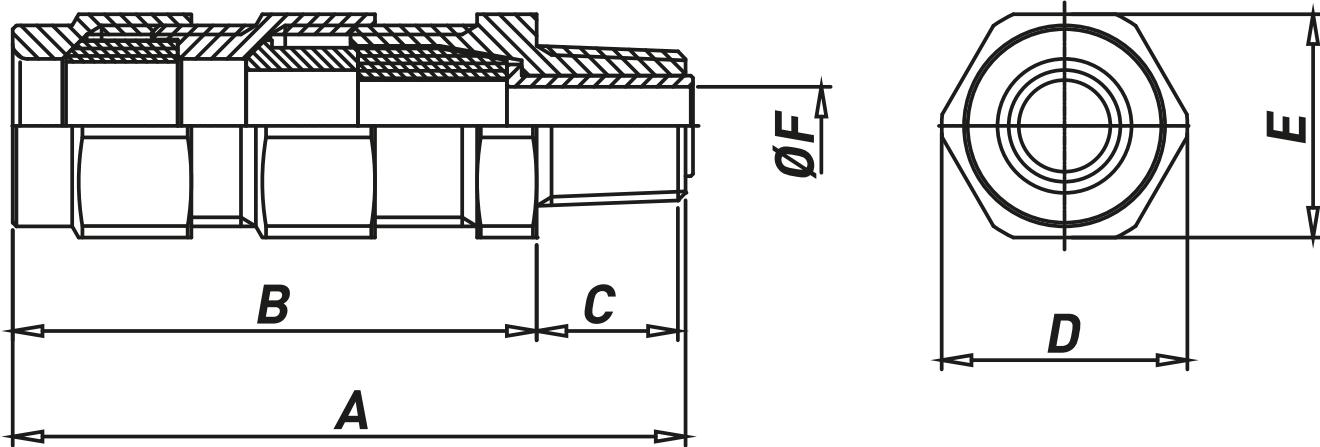


Double seal cable barrier type gland suitable for unarmoured cables. Sealing compound to be ordered separately.  
Suitable for Zone 1 / 2 and Zone 21 / 22.

### TECHNICAL FEATURES

<b>Material</b>	Nickel chrome plated brass AISI316L Stainless steel (other materials upon request)
<b>IP rating</b>	IP66
<b>Operating temperature range</b>	-52°C to +110°C
<b>Approvals</b>	INERIS 02ATEX0084 (standard) TR CU (marking upon request, ordering code to be required) IECEx INE 14.0046X
<b>Marking*</b>	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.
<b>Internal seals</b>	EPDM
<b>Threads</b>	Metric, NPT, UNI-6125 (other thread upon request)
<b>Accessories available upon request</b>	Locknut, sealing gasket, earthing ring, star washer, protective shroud
<b>Note</b>	<ol style="list-style-type: none"><li>1. Catalogue codes are without inner/outer rubber seals, that can be ordered separately (for selection please refer to page 176). For ordering cable glands complete with internal seals, codes will be issued by Sales departments.</li><li>2. Armouring rings are usually supplied made of nickel chrome plated brass. Other materials are available upon request.</li><li>3. 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.</li><li>4. M40x1,5 e 1" 1/4 thread available for our cable glands size 5</li></ol>

## Dimensions PMD



TYPE	INNER SEAL	THREAD	CODE		Ø EXTERNAL CABLE	DIMENSIONS [mm]				
			BRASS	AISI316L		A	B	C	D	E
PMS-1	SIZE 1	M20X1,5	UPON REQUEST	UPON REQUEST	18	85	65	20	33	30
PMS-2	SIZE 2	M25X1,5			24	85	65	20	33	36
PMS-3	SIZE 3	M32X1,5			30	93	68	25	49	44
PMS-5	SIZE 5	M50X1,5			43	93	68	25	62	56
PMS-6	SIZE 6	M63X1,5			57	95	71	25	78	70
PMS-7	SIZE 7	M75X1,5			69	100	71	32	92	83
PMS-8	SIZE 8	M80X1,5			79	100	71	32	103	93
PMS-1	SIZE 1	NPT 1/2"	UPON REQUEST	UPON REQUEST	18	85	65	20	33	30
PMS-2	SIZE 2	NPT 3/4"			24	85	65	20	33	36
PMS-3	SIZE 3	NPT 1"			30	93	68	25	49	44
PMS-5	SIZE 5	NPT 1" 1/2			43	93	68	25	62	56
PMS-6	SIZE 6	NPT 2"			57	95	71	25	78	70
PMS-7	SIZE 7	NPT 2" 1/2			69	100	71	32	92	83
PMS-8	SIZE 8	NPT 3"			79	100	71	32	103	93
PMS-1	SIZE 1	UNI-6125 1/2"	UPON REQUEST	UPON REQUEST	18	85	65	20	33	30
PMS-2	SIZE 2	UNI-6125 3/4"			24	85	65	20	33	36
PMS-3	SIZE 3	UNI-6125 1"			30	93	68	25	49	44
PMS-5	SIZE 5	UNI-6125 1" 1/2			43	93	68	25	62	56
PMS-6	SIZE 6	UNI-6125 2"			57	95	71	25	78	70
PMS-7	SIZE 7	UNI-6125 2" 1/2			69	100	71	32	92	83
PMS-8	SIZE 8	UNI-6125 3"			79	100	71	32	103	93

**For gland seal, please see on page 176**

Note: Size M40 and 1"1/4 available on request.

# **UNARMoured CABLE**

## PSF metallic cable gland

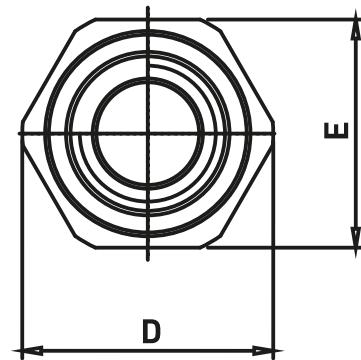
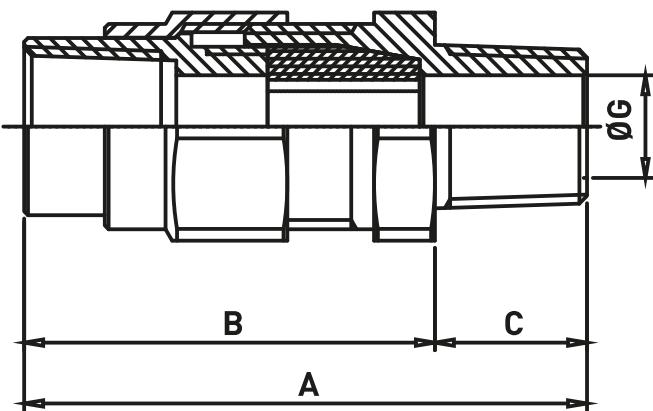


Single seal through "male-female" cable gland suitable for unarmoured cables.  
Suitable for Zone 1 / 2 and Zone 21 / 22.

## TECHNICAL FEATURES

<b>Material</b>	Nickel chrome plated brass AISI316L Stainless steel (other materials upon request)
<b>IP rating</b>	IP66
<b>Operating temperature range</b>	-52°C to +110°C
<b>Approvals</b>	INERIS 02ATEX0084 (standard) TR CU (marking upon request, ordering code to be required) IECEx INE 14.0046X
<b>Marking*</b>	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.	
<b>Internal seals</b>	EPDM
<b>Threads</b>	Metric, NPT, UNI-6125 (other thread upon request)
<b>Accessories available upon request</b>	Locknut, sealing gasket, earthing ring, star washer, protective shroud
<b>Note</b>	<ol style="list-style-type: none"><li>1. Catalogue codes are without inner/outer rubber seals, that can be ordered separately (for selection please refer to page 176). For ordering cable glands complete with internal seals, codes will be issued by Sales departments.</li><li>2. Armouring rings are usually supplied made of nickel chrome plated brass. Other materials are available upon request.</li><li>3. 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.</li><li>4. M40x1,5 e 1" 1/4 thread available for our cable glands size 5</li></ol>

## Dimensions PSF



TYPE	INNER SEAL	THREAD	FREE COUPLING THREAD*	CODE		DIMENSIONS [mm]				
				BRASS	AISI316L	A	B	C	D	E
PSF-1	SIZE 1	M20X1,5	NPT 1/2"	B1401.600102	B1403.600102	73	53	20	33	30
PSF-2	SIZE 2	M25X1,5	NPT 3/4"	B1401.600202	B1403.600202	73	53	20	40	36
PSF-3	SIZE 3	M32X1,5	NPT 1"	B1401.600302	B1403.600302	88	63	25	49	44
PSF-5	SIZE 5	M50X1,5	NPT 1" 1/2	B1401.600502	UPON REQUEST	89	64	25	65	58
PSF-6	SIZE 6	M63X1,5	NPT 2"	B1401.600602	UPON REQUEST	92	67	25	65	58
PSF-7	SIZE 7	M75X1,5	NPT 2" 1/2	UPON REQUEST	UPON REQUEST	\	\	\	\	\
PSF-8	SIZE 8	M80X1,5	NPT 3"	UPON REQUEST	UPON REQUEST	\	\	\	\	\
PSF-1	SIZE 1	NPT 1/2"	NPT 1/2"	B1401.600103	B1403.600113	73	53	20	33	30
PSF-2	SIZE 2	NPT 3/4"	NPT 3/4"	B1401.600203	B1403.600203	73	53	20	40	36
PSF-3	SIZE 3	NPT 1"	NPT 1"	B1401.600303	B1403.600303	88	63	25	49	44
PSF-5	SIZE 5	NPT 1" 1/2	NPT 1" 1/2	B1401.600503	UPON REQUEST	89	64	25	65	58
PSF-6	SIZE 6	NPT 2"	NPT 2"	B1401.600603	UPON REQUEST	92	67	25	65	58
PSF-7	SIZE 7	NPT 2" 1/2	NPT 2" 1/2	UPON REQUEST	UPON REQUEST	\	\	\	\	\
PSF-8	SIZE 8	NPT 3"	NPT 3"	UPON REQUEST	UPON REQUEST	\	\	\	\	\
PSF-1	SIZE 1	UNI-6125 1/2"	NPT 1/2"	B1401.600101	B1403.600101	73	53	20	33	30
PSF-2	SIZE 2	UNI-6125 3/4"	NPT 3/4"	B1401.600201	B1403.600201	73	53	20	40	36
PSF-3	SIZE 3	UNI-6125 1"	NPT 1"	B1401.600301	B1403.600301	88	63	25	49	44
PSF-5	SIZE 5	UNI-6125 1" 1/2	NPT 1" 1/2	B1401.600501	UPON REQUEST	89	64	25	65	58
PSF-6	SIZE 6	UNI-6125 2"	NPT 2"	B1401.600601	UPON REQUEST	92	67	25	65	58
PSF-7	SIZE 7	UNI-6125 2" 1/2	NPT 2" 1/2	UPON REQUEST	UPON REQUEST	\	\	\	\	\
PSF-8	SIZE 8	UNI-6125 3"	NPT 3"	UPON REQUEST	UPON REQUEST	\	\	\	\	\

For gland seal, please see on page 176

Note: Size M40 and 1"1/4 available on request.

## **UNARMoured CABLE**

# UN.. Series polyamide cable glands

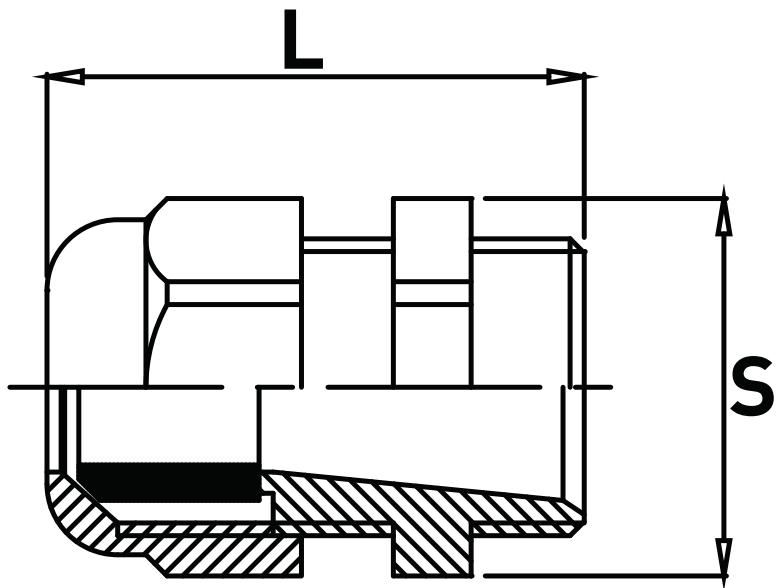


Single seal cable gland suitable for unarmoured  
Suitable for Zone 1 / 2 and Zone 21 / 22.

## TECHNICAL FEATURES

<b>Material</b>	Polyamide
<b>IP rating</b>	IP66/IP68
<b>Ambient temperature range</b>	-20°C to +80°C
<b>Approvals</b>	CESI 03 ATEX 305X
<b>Marking</b>	II 2 GD Ex e II / Ex i II Ex tD A21 IP66/68
<b>Gasket</b>	Neoprene
<b>Threads</b>	Metric, PG
<b>Accessories available upon request</b>	Locknut, Gasket

## Dimensions UN



### UN.. polyamide cable glands

TYPE	THREAD	CODE	COLOUR	Ø CABLE
UNI01XE - POLYAMIDE CABLE GLAND	M16X1,5	B1410.200160	BLACK	6-10MM
UNI1XE - POLYAMIDE CABLE GLAND	M20X1,5	B1410.200200	BLACK	7-12MM
UNI2XE - POLYAMIDE CABLE GLAND	M25X1,5	B1410.200250	BLACK	13-18MM
UNI3XE - POLYAMIDE CABLE GLAND	M32X1,5	B1410.200320	BLACK	18-25MM
UNI4XE - POLYAMIDE CABLE GLAND	M40X1,5	B1410.100400	BLACK	22-32MM
UNI5XE - POLYAMIDE CABLE GLAND	M50X1,5	B1410.200500	BLACK	30-38MM
UNI6XE - POLYAMIDE CABLE GLAND	M63X1,5	B1410.200630	BLACK	34-44MM
UNI01XI - POLYAMIDE CABLE GLAND	M16X1,5	B1410.400160	BLUE	6-10MM
UNI1XI - POLYAMIDE CABLE GLAND	M20X1,5	B1410.400200	BLUE	7-12MM
UNI2XI - POLYAMIDE CABLE GLAND	M25X1,5	B1410.400250	BLUE	13-18MM
UNI3XI - POLYAMIDE CABLE GLAND	M32X1,5	B1410.400320	BLUE	18-25MM
UNI4XI - POLYAMIDE CABLE GLAND	M40X1,5	B1410.400400	BLUE	22-32MM
UNI5XI - POLYAMIDE CABLE GLAND	M50X1,5	B1410.400500	BLUE	30-38MM

For gland seal, please see on page 176

### UNP polyamide cable glands

TYPE	THREAD	CODE	COLOUR	Ø CABLE
UNP1XE - POLYAMIDE CABLE GLAND	PG7	B1410.100070	BLACK	4-6,5MM
UNP2XE - POLYAMIDE CABLE GLAND	PG9	B1410.100090	BLACK	4-8MM
UNP3XE - POLYAMIDE CABLE GLAND	PG11	B1410.100110	BLACK	5-10MM
UNP4XE - POLYAMIDE CABLE GLAND	PG13,5	B1410.100135	BLACK	6-12MM
UNP5XE - POLYAMIDE CABLE GLAND	PG16	B1410.100160	BLACK	10-14MM
UNP6XE - POLYAMIDE CABLE GLAND	PG21	B1410.100210	BLACK	13-18MM
UNP7XE - POLYAMIDE CABLE GLAND	PG29	B1410.100290	BLACK	18-825MM
UNP8XE - POLYAMIDE CABLE GLAND	PG36	B1410.100360	BLACK	22-32MM
UNP9XE - POLYAMIDE CABLE GLAND	PG42	B1410.100420	BLACK	30-38MM
UNP10XE - POLYAMIDE CABLE GLAND	PG48	B1410.100480	BLACK	34-44MM
UNP1XI - POLYAMIDE CABLE GLAND	PG7	B1410.300700	BLUE	4-6,5MM
UNP2XI - POLYAMIDE CABLE GLAND	PG9	B1410.300900	BLUE	4-8MM
UNP3XI - POLYAMIDE CABLE GLAND	PG11	B1410.300110	BLUE	5-10MM
UNP4XI - POLYAMIDE CABLE GLAND	PG13,5	B1410.300135	BLUE	6-12MM
UNP5XI - POLYAMIDE CABLE GLAND	PG16	B1410.300160	BLUE	10-14MM
UNP6XI - POLYAMIDE CABLE GLAND	PG21	B1410.300210	BLUE	13-18MM
UNP7XI - POLYAMIDE CABLE GLAND	PG29	B1410.300290	BLUE	18-825MM
UNP8XI - POLYAMIDE CABLE GLAND	PG36	B1410.300360	BLUE	22-32MM
UNP9XI - POLYAMIDE CABLE GLAND	PG42	B1410.300420	BLUE	30-38MM
UNP10XI - POLYAMIDE CABLE GLAND	PG48	B1410.300480	BLUE	34-44MM

For gland seal, please see on page 176

# ARMoured CABLE

## PDB metallic cable gland

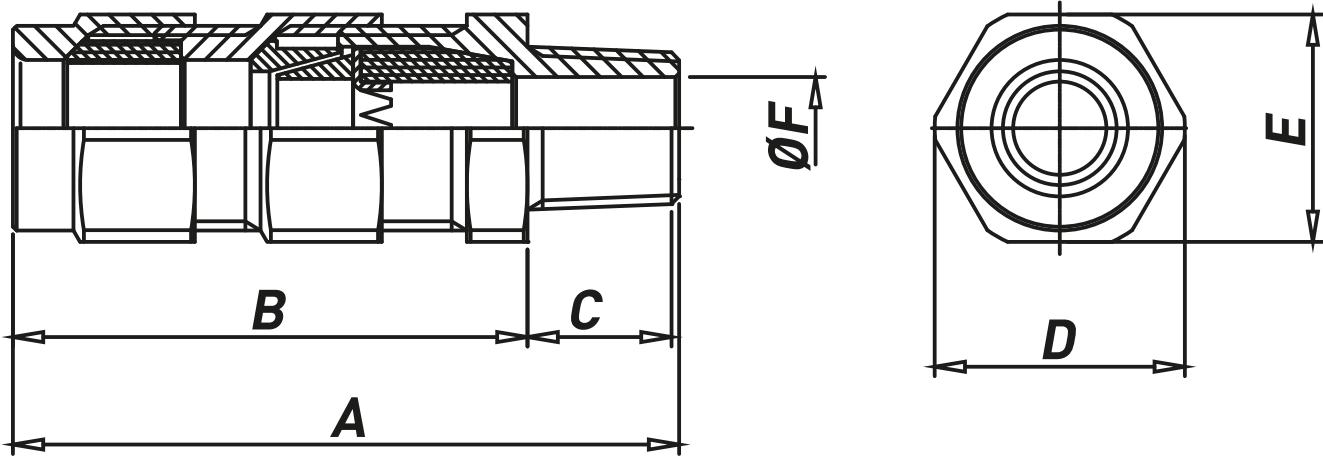


Double seal cable gland for lead sheet suitable for armoured cables.  
Suitable for Zone 1 / 2 and Zone 21 / 22.

## TECHNICAL FEATURES

<b>Material</b>	Nickel chrome plated brass AISI316L Stainless steel (other materials upon request)
<b>IP rating</b>	IP66
<b>Operating temperature range</b>	-52°C to +110°C
<b>Approvals</b>	INERIS 02ATEX0084 (standard) TR CU (marking upon request, ordering code to be required) IECEx INE 14.0046X
<b>Marking*</b>	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.	
<b>Internal seals</b>	EPDM
<b>Threads</b>	Metric, NPT, UNI-6125 (other thread upon request)
<b>Accessories available upon request</b>	Locknut, sealing gasket, earthing ring, star washer, protective shroud
<b>Note</b>	<ol style="list-style-type: none"><li>1. Catalogue codes are without inner/outer rubber seals, that can be ordered separately (for selection please refer to page 176). For ordering cable glands complete with internal seals, codes will be issued by Sales departments.</li><li>2. Armouring rings are usually supplied made of nickel chrome plated brass. Other materials are available upon request.</li><li>3. 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.</li><li>4. M40x1,5 e 1" 1/4 thread available for our cable glands size 5</li></ol>

## Dimensions PDB



TYPE	INNER SEAL	THREAD	CODE		Ø EXTERNAL CABLE	DIMENSIONS [mm]				
			BRASS	AISI316L		F	A	B	C	D
PDB-1	SIZE 1	M20X1,5	B1401.400102	UPON REQUEST	18	85	65	20	33	30
PDB-2	SIZE 2	M25X1,5	B1401.400202		24	85	65	20	33	36
PDB-3	SIZE 3	M32X1,5	B1401.400302		30	93	68	25	49	44
PDB-5	SIZE 5	M50X1,5	B1401.400502		43	93	68	25	62	56
PDB-6	SIZE 6	M63X1,5	B1401.400612		57	95	71	25	78	70
PDB-7	SIZE 7	M75X1,5	B1401.400702		69	100	71	32	92	83
PDB-8	SIZE 8	M80X1,5	B1401.400802		79	100	71	32	103	93
PDB-1	SIZE 1	NPT 1/2"	B1401.400113	UPON REQUEST	18	85	65	20	33	30
PDB-2	SIZE 2	NPT 3/4"	B1401.400213		24	85	65	20	33	36
PDB-3	SIZE 3	NPT 1"	B1401.400313		30	93	68	25	49	44
PDB-5	SIZE 5	NPT 1" 1/2	B1401.400513		43	93	68	25	62	56
PDB-6	SIZE 6	NPT 2"	B1401.400613		57	95	71	25	78	70
PDB-7	SIZE 7	NPT 2" 1/2	B1401.400713		69	100	71	32	92	83
PDB-8	SIZE 8	NPT 3"	B1401.400813		79	100	71	32	103	93
PDB-1	SIZE 1	UNI-6125 1/2"	B1401.400101	UPON REQUEST	18	85	65	20	33	30
PDB-2	SIZE 2	UNI-6125 3/4"	B1401.400201		24	85	65	20	33	36
PDB-3	SIZE 3	UNI-6125 1"	B1401.400311		30	93	68	25	49	44
PDB-5	SIZE 5	UNI-6125 1" 1/2	B1401.400511		43	93	68	25	62	56
PDB-6	SIZE 6	UNI-6125 2"	B1401.400611		57	95	71	25	78	70
PDB-7	SIZE 7	UNI-6125 2" 1/2	B1401.400701		69	100	71	32	92	83
PDB-8	SIZE 8	UNI-6125 3"	B1401.400801		79	100	71	32	103	93

For gland seal, please see on page 176

Note: Size M40 and 1"1/4 available on request.

# ARMoured CABLE

## PNA metallic cable gland

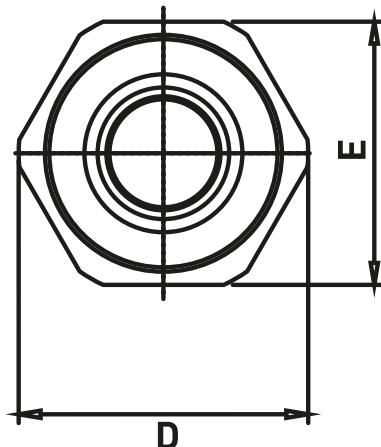
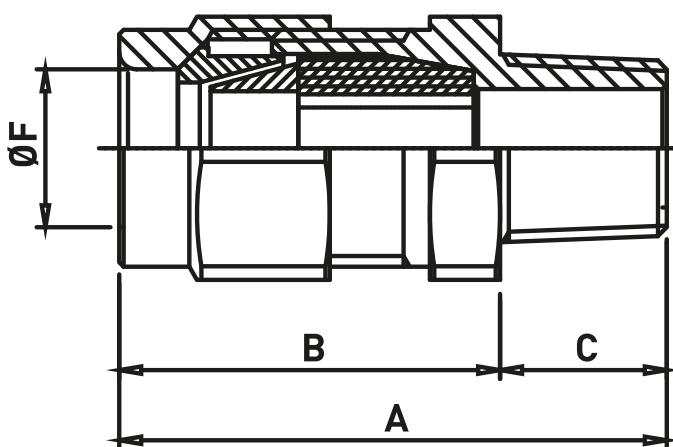


Single seal cable gland suitable for armoured cables.  
Suitable for Zone 1 / 2 and Zone 21 / 22.

### TECHNICAL FEATURES

<b>Material</b>	Nickel chrome plated brass AISI316L Stainless steel (other materials upon request)
<b>IP rating</b>	IP66
<b>Operating temperature range</b>	-52°C to +110°C
<b>Approvals</b>	INERIS 02ATEX0084 (standard) TR CU (marking upon request, ordering code to be required) IECEx INE 14.0046X
<b>Marking*</b>	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.
<b>Internal seals</b>	EPDM
<b>Threads</b>	Metric, NPT, UNI-6125 (other thread upon request)
<b>Accessories available upon request</b>	Locknut, sealing gasket, earthing ring, star washer, protective shroud
<b>Note</b>	<ol style="list-style-type: none"><li>1. Catalogue codes are without inner/outer rubber seals, that can be ordered separately (for selection please refer to page 176). For ordering cable glands complete with internal seals, codes will be issued by Sales departments.</li><li>2. Armouring rings are usually supplied made of nickel chrome plated brass. Other materials are available upon request.</li><li>3. 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.</li><li>4. M40x1,5 e 1" 1/4 thread available for our cable glands size 5</li></ol>

## Dimensions PNA



TYPE	INNER SEAL	OUTER SEAL	THREAD	CODE		Ø EXTERNAL CABLE	DIMENSIONS [mm]				
				BRASS	AISI316L		A	B	C	D	E
PNA-1	SIZE 1	SIZE 1	M20X1,5	B1401.100102	B1403.100102	18	62	42	20	33	30
PNA-2	SIZE 2	SIZE 2	M25X1,5	B1401.100202	B1403.100202	24	62	42	20	40	36
PNA-3	SIZE 3	SIZE 3	M32X1,5	B1401.100302	B1403.100302	30	70	45	25	49	44
PNA-5	SIZE 5	SIZE 5	M50X1,5	B1401.100502	B1403.100502	43	70	45	25	62	56
PNA-6	SIZE 6	SIZE 6	M63X1,5	B1401.100602	B1403.100602	57	72	46	25	78	70
PNA-7	SIZE 7	SIZE 7	M75X1,5	B1401.100702	UPON REQUEST	69	78	46	32	92	83
PNA-8	SIZE 8	SIZE 8	M80X1,5	B1401.100802	UPON REQUEST	79	88	46	32	103	93
PNA-1	SIZE 1	SIZE 1	NPT 1/2"	B1401.100103	B1403.100103	18	62	42	20	33	30
PNA-2	SIZE 2	SIZE 2	NPT 3/4"	B1401.100203	B1403.100203	24	62	42	20	40	36
PNA-3	SIZE 3	SIZE 3	NPT 1"	B1401.100303	B1403.100303	30	70	45	25	49	44
PNA-5	SIZE 5	SIZE 5	NPT 1" 1/2	B1401.100503	B1403.100503	43	70	45	25	62	56
PNA-6	SIZE 6	SIZE 6	NPT 2"	B1401.100603	B1403.100603	57	72	46	25	78	70
PNA-7	SIZE 7	SIZE 7	NPT 2" 1/2	B1401.100703	UPON REQUEST	69	78	46	32	92	83
PNA-8	SIZE 8	SIZE 8	NPT 3"	B1401.100803	UPON REQUEST	79	88	46	32	103	93
PNA-1	SIZE 1	SIZE 1	UNI-6125 1/2"	B1401.100101	B1403.100101	18	62	42	20	33	30
PNA-2	SIZE 2	SIZE 2	UNI-6125 3/4"	B1401.100201	B1403.100201	24	62	42	20	40	36
PNA-3	SIZE 3	SIZE 3	UNI-6125 1"	B1401.100301	B1403.100301	30	70	45	25	49	44
PNA-5	SIZE 5	SIZE 5	UNI-6125 1" 1/2	B1401.100501	B1403.100501	43	70	45	25	62	56
PNA-6	SIZE 6	SIZE 6	UNI-6125 2"	B1401.100601	B1403.100601	57	72	46	25	78	70
PNA-7	SIZE 7	SIZE 7	UNI-6125 2" 1/2	B1401.100701	UPON REQUEST	69	78	46	32	92	83
PNA-8	SIZE 8	SIZE 8	UNI-6125 3"	B1401.100803	UPON REQUEST	79	88	46	32	103	93

For gland seal, please see on page 176

Note: Size M40 and 1"1/4 available on request.

# ARMoured CABLE

## PAP metallic cable gland

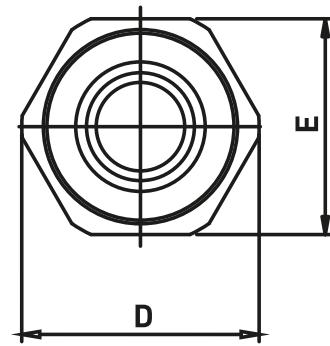
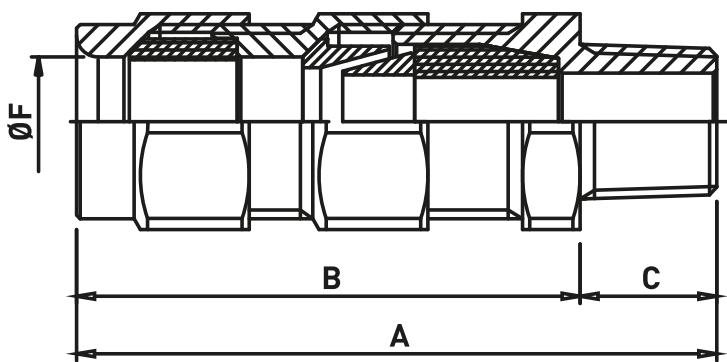


Double seal cable gland suitable for armoured cables.  
Suitable for Zone 1 / 2 and Zone 21 / 22.

### TECHNICAL FEATURES

<b>Material</b>	Nickel chrome plated brass AISI316L Stainless steel (other materials upon request)
<b>IP rating</b>	IP66
<b>Operating temperature range</b>	-52°C to +110°C
<b>Approvals</b>	INERIS 02ATEX0084 (standard) TR CU (marking upon request, ordering code to be required) IECEx INE 14.0046X
<b>Marking*</b>	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.	
<b>Internal seals</b>	EPDM
<b>Threads</b>	Metric, NPT, UNI-6125 (other thread upon request)
<b>Accessories available upon request</b>	Locknut, sealing gasket, earthing ring, star washer, protective shroud
<b>Note</b>	<ol style="list-style-type: none"><li>1. Catalogue codes are without inner/outer rubber seals, that can be ordered separately (for selection please refer to page 176). For ordering cable glands complete with internal seals, codes will be issued by Sales departments.</li><li>2. Armouring rings are usually supplied made of nickel chrome plated brass. Other materials are available upon request.</li><li>3. 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.</li><li>4. M40x1,5 e 1" 1/4 thread available for our cable glands size 5</li></ol>

## Dimensions PAP



TYPE	INNER SEAL	OUTER SEAL	THREAD	CODE		Ø EXTERNAL CABLE	DIMENSIONS [mm]				
				BRASS	AISI316L		A	B	C	D	E
PAP-1	SIZE 1	SIZE 1	M20X1,5	B1401.300102	B1403.300102	18	85	65	20	33	30
PAP-2	SIZE 2	SIZE 2	M25X1,5	B1401.300202	B1403.300202	24	85	65	20	33	36
PAP-3	SIZE 3	SIZE 3	M32X1,5	B1401.300302	B1403.300302	30	93	68	25	49	44
PAP-5	SIZE 5	SIZE 5	M50X1,5	B1401.300502	B1403.300502	43	93	68	25	62	56
PAP-6	SIZE 6	SIZE 6	M63X1,5	B1401.300602	B1403.300602	57	95	71	25	78	70
PAP-7	SIZE 7	SIZE 7	M75X1,5	B1401.300702	UPON REQUEST	69	100	71	32	92	83
PAP-8	SIZE 8	SIZE 8	M80X1,5	B1401.300802	UPON REQUEST	79	100	71	32	103	93
PAP-1	SIZE 1	SIZE 1	NPT 1/2"	B1401.300103	B1403.300103	18	85	65	20	33	30
PAP-2	SIZE 2	SIZE 2	NPT 3/4"	B1401.300203	B1403.300203	24	85	65	20	33	36
PAP-3	SIZE 3	SIZE 3	NPT 1"	B1401.300303	B1403.300303	30	93	68	25	49	44
PAP-5	SIZE 5	SIZE 5	NPT 1" 1/2	B1401.300503	B1403.300503	43	93	68	25	62	56
PAP-6	SIZE 6	SIZE 6	NPT 2"	B1401.300603	B1403.300603	57	95	71	25	78	70
PAP-7	SIZE 7	SIZE 7	NPT 2" 1/2	B1401.300703	UPON REQUEST	69	100	71	32	92	83
PAP-8	SIZE 8	SIZE 8	NPT 3"	B1401.300803	UPON REQUEST	79	100	71	32	103	93
PAP-1	SIZE 1	SIZE 1	UNI-6125 1/2"	B1401.300101	B1403.300101	18	85	65	20	33	30
PAP-2	SIZE 2	SIZE 2	UNI-6125 3/4"	B1401.300201	B1403.300201	24	85	65	20	33	36
PAP-3	SIZE 3	SIZE 3	UNI-6125 1"	B1401.300301	B1403.300301	30	93	68	25	49	44
PAP-5	SIZE 5	SIZE 5	UNI-6125 1" 1/2	B1401.300501	B1403.300501	43	93	68	25	62	56
PAP-6	SIZE 6	SIZE 6	UNI-6125 2"	B1401.300601	B1403.300601	57	95	71	25	78	70
PAP-7	SIZE 7	SIZE 7	UNI-6125 2" 1/2	B1401.300701	UPON REQUEST	69	100	71	32	92	83
PAP-8	SIZE 8	SIZE 8	UNI-6125 3"	B1401.300801	UPON REQUEST	79	100	71	32	103	93

**For gland seal, please see on page 176**

Note: Size M40 and 1"1/4 available on request.

# ARMoured CABLE

## PSB metallic cable gland

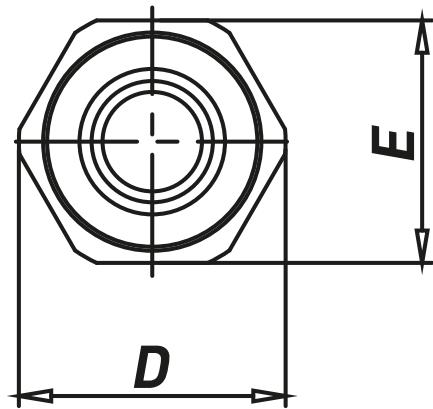
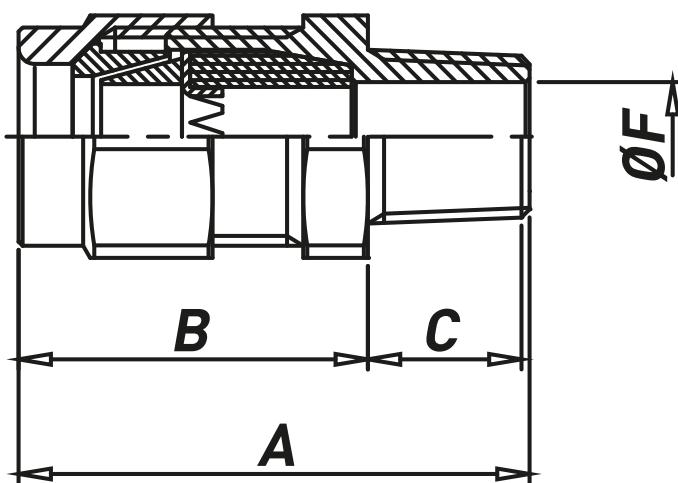


Single seal cable gland for lead sheet suitable for armoured cables.  
Suitable for Zone 1 / 2 and Zone 21 / 22.

### TECHNICAL FEATURES

<b>Material</b>	Nickel chrome plated brass AISI316L Stainless steel (other materials upon request)
<b>IP rating</b>	IP66
<b>Operating temperature range</b>	-52°C to +110°C
<b>Approvals</b>	INERIS 02ATEX0084 (standard) TR CU (marking upon request, ordering code to be required) IECEx INE 14.0046X
<b>Marking*</b>	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.	
<b>Internal seals</b>	EPDM
<b>Threads</b>	Metric, NPT, UNI-6125 (other thread upon request)
<b>Accessories available upon request</b>	Locknut, sealing gasket, earthing ring, star washer, protective shroud
<b>Note</b>	<ol style="list-style-type: none"><li>1. Catalogue codes are without inner/outer rubber seals, that can be ordered separately (for selection please refer to page 176). For ordering cable glands complete with internal seals, codes will be issued by Sales departments.</li><li>2. Armouring rings are usually supplied made of nickel chrome plated brass. Other materials are available upon request.</li><li>3. 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.</li><li>4. M40x1,5 e 1" 1/4 thread available for our cable glands size 5</li></ol>

## Dimensions PSB



TYPE	INNER SEAL	OUTER SEAL	THREAD	CODE		Ø EXTERNAL CABLE	DIMENSIONS [mm]				
				BRASS	AISI316L		F	A	B	C	D
PSB-1	SIZE 1	SIZE 1	M20X1,5	UPON REQUEST	UPON REQUEST	18	62	42	20	33	30
PSB-2	SIZE 2	SIZE 2	M25X1,5			24	62	42	20	40	36
PSB-3	SIZE 3	SIZE 3	M32X1,5			30	70	45	25	49	44
PSB-5	SIZE 5	SIZE 5	M50X1,5			43	70	45	25	49	44
PSB-6	SIZE 6	SIZE 6	M63X1,5			57	72	46	25	78	70
PSB-7	SIZE 7	SIZE 7	M75X1,5			69	78	46	32	92	83
PBS-8	SIZE 8	SIZE 8	M80X1,5			79	78	46	32	103	93
PSB-1	SIZE 1	SIZE 1	NPT 1/2"	UPON REQUEST	UPON REQUEST	18	62	42	20	33	30
PSB-2	SIZE 2	SIZE 2	NPT 3/4"			24	62	42	20	40	36
PSB-3	SIZE 3	SIZE 3	NPT 1"			30	70	45	25	49	44
PSB-5	SIZE 5	SIZE 5	NPT 1" 1/2			43	70	45	25	49	44
PSB-6	SIZE 6	SIZE 6	NPT 2"			57	72	46	25	78	70
PSB-7	SIZE 7	SIZE 7	NPT 2" 1/2			69	78	46	32	92	83
PBS-8	SIZE 8	SIZE 8	NPT 3"			79	78	46	32	103	93
PSB-1	SIZE 1	SIZE 1	UNI-6125 1/2"	UPON REQUEST	UPON REQUEST	18	62	42	20	33	30
PSB-2	SIZE 2	SIZE 2	UNI-6125 3/4"			24	62	42	20	40	36
PSB-3	SIZE 3	SIZE 3	UNI-6125 1"			30	70	45	25	49	44
PSB-5	SIZE 5	SIZE 5	UNI-6125 1" 1/2			43	70	45	25	49	44
PSB-6	SIZE 6	SIZE 6	UNI-6125 2"			57	72	46	25	78	70
PSB-7	SIZE 7	SIZE 7	UNI-6125 2" 1/2			69	78	46	32	92	83
PBS-8	SIZE 8	SIZE 8	UNI-6125 3"			79	78	46	32	103	93

For gland seal, please see on page 176

Note: Size M40 and 1"1/4 available on request.

## ARMoured CABLE

# PB AX metallic cable gland



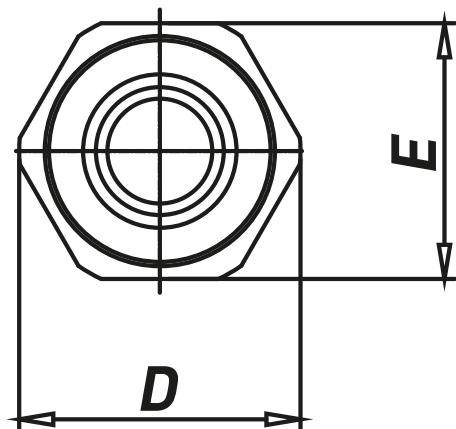
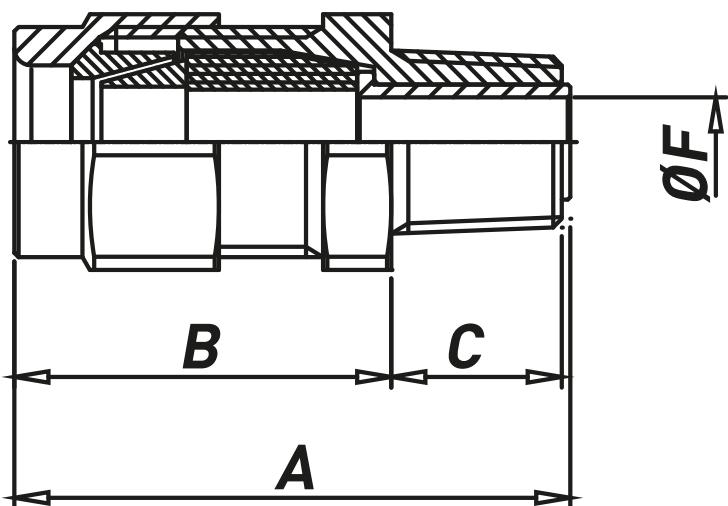
Single seal barrier type cable gland suitable for armoured cables. Sealing compound to be ordered separately.

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

## TECHNICAL FEATURES

<b>Material</b>	Nickel chrome plated brass AISI316L Stainless steel (other materials upon request)
<b>IP rating</b>	IP66
<b>Operating temperature range</b>	-52°C to +110°C
<b>Approvals</b>	INERIS 02ATEX0084 (standard) TR CU (marking upon request, ordering code to be required) IECEx INE 14.0046X
<b>Marking*</b>	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.
<b>Internal seals</b>	EPDM
<b>Threads</b>	Metric, NPT, UNI-6125 (other thread upon request)
<b>Accessories available upon request</b>	Locknut, sealing gasket, earthing ring, star washer, protective shroud
<b>Note</b>	<ol style="list-style-type: none"><li>1. Catalogue codes are without inner/outer rubber seals, that can be ordered separately (for selection please refer to page 176). For ordering cable glands complete with internal seals, codes will be issued by Sales departments.</li><li>2. Armouring rings are usually supplied made of nickel chrome plated brass. Other materials are available upon request.</li><li>3. 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.</li><li>4. M40x1,5 e 1" 1/4 thread available for our cable glands size 5</li></ol>

## Dimensions PB AX



TYPE	INNER SEAL	OUTER SEAL	THREAD	CODE		Ø EXTERNAL CABLE	DIMENSIONS [mm]				
				BRASS	AISI316L		F	A	B	C	D
PB AX-1	SIZE 1	SIZE 1	M20X1,5	B1401.900102	UPON REQUEST	18	62	42	20	33	30
PB AX-2	SIZE 2	SIZE 2	M25X1,5	B1401.900202		24	62	42	20	40	36
PB AX-3	SIZE 3	SIZE 3	M32X1,5	B1401.900302		30	70	45	25	49	44
PB AX-5	SIZE 5	SIZE 5	M50X1,5	B1401.900502		43	70	45	25	62	56
PB AX-6	SIZE 6	SIZE 6	M63X1,5	B1401.900602		57	72	46	25	78	70
PB AX-7	SIZE 7	SIZE 7	M75X1,5	B1401.900702		69	78	46	25	78	70
PB AX-8	SIZE 8	SIZE 8	M80X1,5	B1401.900802		79	78	46	32	103	93
PB AX-1	SIZE 1	SIZE 1	NPT 1/2"	B1401.900103	UPON REQUEST	18	62	42	20	33	30
PB AX-2	SIZE 2	SIZE 2	NPT 3/4"	B1401.900203		24	62	42	20	40	36
PB AX-3	SIZE 3	SIZE 3	NPT 1"	B1401.900303		30	70	45	25	49	44
PB AX-5	SIZE 5	SIZE 5	NPT 1" 1/2	B1401.900503		43	70	45	25	62	56
PB AX-6	SIZE 6	SIZE 6	NPT 2"	B1401.900603		57	72	46	25	78	70
PB AX-7	SIZE 7	SIZE 7	NPT 2" 1/2	B1401.900703		69	78	46	25	78	70
PB AX-8	SIZE 8	SIZE 8	NPT 3"	B1401.900803		79	78	46	32	103	93
PB AX-1	SIZE 1	SIZE 1	UNI-6125 1/2"	B1401.900101	UPON REQUEST	18	62	42	20	33	30
PB AX-2	SIZE 2	SIZE 2	UNI-6125 3/4"	B1401.900201		24	62	42	20	40	36
PB AX-3	SIZE 3	SIZE 3	UNI-6125 1"	B1401.900301		30	70	45	25	49	44
PB AX-5	SIZE 5	SIZE 5	UNI-6125 1" 1/2	B1401.900501		43	70	45	25	62	56
PB AX-6	SIZE 6	SIZE 6	UNI-6125 2"	B1401.900601		57	72	46	25	78	70
PB AX-7	SIZE 7	SIZE 7	UNI-6125 2" 1/2	B1401.900701		69	78	46	25	78	70
PB AX-8	SIZE 8	SIZE 8	UNI-6125 3"	B1401.900801		79	78	46	32	103	93

For gland seal, please see on page 176

Note: Size M40 and 1"1/4 available on request.

## ARMoured CABLE

# PAB AX metallic cable gland



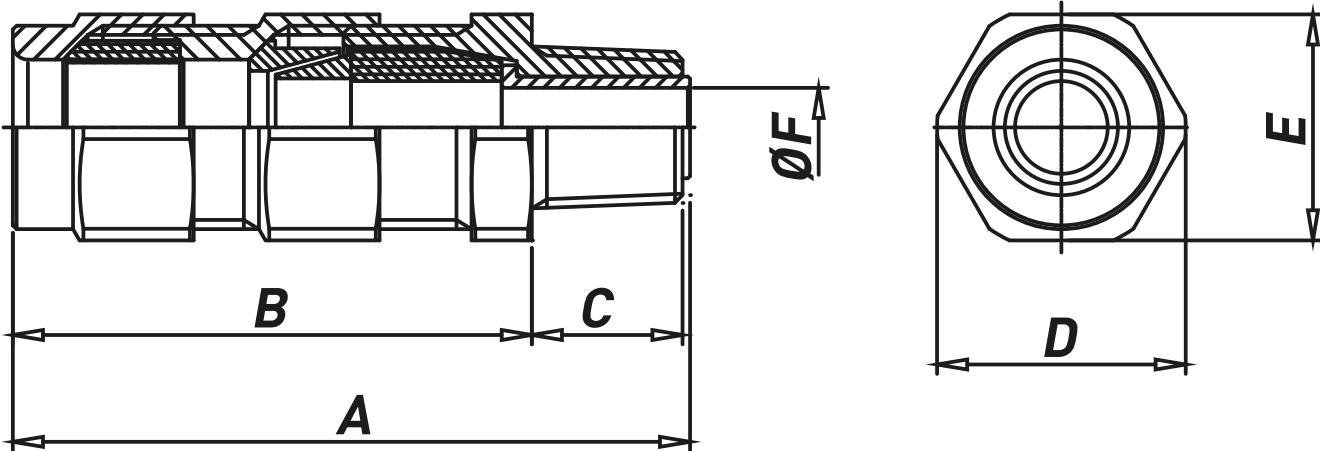
Double seal barrier type cable gland suitable for armoured cables. Sealing compound to be ordered separately.

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

## TECHNICAL FEATURES

<b>Material</b>	Nickel chrome plated brass AISI316L Stainless steel (other materials upon request)
<b>IP rating</b>	IP66
<b>Operating temperature range</b>	-52°C to +110°C
<b>Approvals</b>	INERIS 02ATEX0084 (standard) TR CU (marking upon request, ordering code to be required) IECEx INE 14.0046X
<b>Marking*</b>	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.
<b>Internal seals</b>	EPDM
<b>Threads</b>	Metric, NPT, UNI-6125 (other thread upon request)
<b>Accessories available upon request</b>	Locknut, sealing gasket, earthing ring, star washer, protective shroud
<b>Note</b>	<ol style="list-style-type: none"><li>1. Catalogue codes are without inner/outer rubber seals, that can be ordered separately (for selection please refer to page 176). For ordering cable glands complete with internal seals, codes will be issued by Sales departments.</li><li>2. Armouring rings are usually supplied made of nickel chrome plated brass. Other materials are available upon request.</li><li>3. 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.</li><li>4. M40x1,5 e 1" 1/4 thread available for our cable glands size 5</li></ol>

## Dimensions PAB AX



TYPE	INNER SEAL	OUTER SEAL	THREAD	CODE		Ø EXTERNAL CABLE	DIMENSIONS [mm]				
				BRASS	AISI316L		F	A	B	C	D
PAB AX-1	SIZE 1	SIZE 1	M20X1,5	B1401.G00102	UPON REQUEST	18	85	65	20	33	30
PAB AX-2	SIZE 2	SIZE 2	M25X1,5	B1401.G00202		24	85	65	20	33	36
PAB AX-3	SIZE 3	SIZE 3	M32X1,5	B1401.G00302		30	93	68	25	49	44
PAB AX-5	SIZE 5	SIZE 5	M50X1,5	B1401.G00502		43	93	68	25	62	56
PAB AX-6	SIZE 6	SIZE 6	M63X1,5	B1401.G00602		57	95	71	25	78	70
PAB AX-7	SIZE 7	SIZE 7	M75X1,5	B1401.G00702		69	100	71	32	92	83
PAB AX-8	SIZE 8	SIZE 8	M80X1,5	B1401.G00802		79	100	71	32	103	93
PAB AX-1	SIZE 1	SIZE 1	NPT 1/2"	B1401.G00103	UPON REQUEST	18	85	65	20	33	30
PAB AX-2	SIZE 2	SIZE 2	NPT 3/4"	B1401.G00203		24	85	65	20	33	36
PAB AX-3	SIZE 3	SIZE 3	NPT 1"	B1401.G00303		30	93	68	25	49	44
PAB AX-5	SIZE 5	SIZE 5	NPT 1" 1/2	B1401.G00503		43	93	68	25	62	56
PAB AX-6	SIZE 6	SIZE 6	NPT 2"	B1401.G00603		57	95	71	25	78	70
PAB AX-7	SIZE 7	SIZE 7	NPT 2" 1/2	B1401.G00703		69	100	71	32	92	83
PAB AX-8	SIZE 8	SIZE 8	NPT 3"	B1401.G00803		79	100	71	32	103	93
PAB AX-1	SIZE 1	SIZE 1	UNI-6125 1/2"	B1401.G00101	UPON REQUEST	18	85	65	20	33	30
PAB AX-2	SIZE 2	SIZE 2	UNI-6125 3/4"	B1401.G00201		24	85	65	20	33	36
PAB AX-3	SIZE 3	SIZE 3	UNI-6125 1"	B1401.G00301		30	93	68	25	49	44
PAB AX-5	SIZE 5	SIZE 5	UNI-6125 1" 1/2	B1401.G00501		43	93	68	25	62	56
PAB AX-6	SIZE 6	SIZE 6	UNI-6125 2"	B1401.G00601		57	95	71	25	78	70
PAB AX-7	SIZE 7	SIZE 7	UNI-6125 2" 1/2	B1401.G00701		69	100	71	32	92	83
PAB AX-8	SIZE 8	SIZE 8	UNI-6125 3"	B1401.G00801		79	100	71	32	103	93

For gland seal, please see on page 176

Note: Size M40 and 1"1/4 available on request.

## INNER & OUTER SEALS

PNS Series / PND Series / PBS Series /  
PBD Series / PDB Series / PMS Series /  
PSM Series / PSF Series / PMD Series /  
UN Series / PNA Series / PAP Series /  
PSB Series / PBAX Series / PABAX Series

## SPARES & ACCESSORIES



**Set of inner seals (under armour)**

CODE	TYPE	Ø CABLE
B1407.0000A1	SET OF INNER SEALS - C.G. SIZE 1	6-12MM
B1407.0000A2	SET OF INNER SEALS - C.G. SIZE 2	6-17MM
B1407.0000A3	SET OF INNER SEALS - C.G. SIZE 3	14-23MM
B1407.0000A5	SET OF INNER SEALS - C.G. SIZE 5	20-36MM
B1407.0000A6	SET OF INNER SEALS - C.G. SIZE 6	36-46MM
B1407.0000A7	SET OF INNER SEALS - C.G. SIZE 7	44-60MM
B1407.0000A8	SET OF INNER SEALS - C.G. SIZE 8	56-71MM



**Set outer seals (external)**

CODE	TYPE	Ø CABLE
B1407.0000B1	SET OF OUTER SEALS - C.G. SIZE 1	8-17MM
B1407.0000B2	SET OF OUTER SEALS - C.G. SIZE 2	14-23MM
B1407.0000B3	SET OF OUTER SEALS - C.G. SIZE 3	20-29MM
B1407.0000B5	SET OF OUTER SEALS - C.G. SIZE 5	29-42MM
B1407.0000B6	SET OF OUTER SEALS - C.G. SIZE 6	44-56MM
B1407.0000B7	SET OF OUTER SEALS - C.G. SIZE 7	55-67MM
B1407.0000B8	SET OF OUTER SEALS - C.G. SIZE 8	63-77MM

### Single inner seals

CODE	TYPE	CABLE GLAND SIZE	Ø CABLE
B1407.0001A1	1A1 INNER SEAL	SIZE 1	6-9MM
B1407.0001A2	1A2 INNER SEAL	SIZE 1	9-12MM
B1407.0002A1	2A1 INNER SEAL	SIZE 2	6-9MM
B1407.0002A2	2A2 INNER SEAL	SIZE 2	9-12MM
B1407.0002A3	2A3 INNER SEAL	SIZE 2	11-14MM
B1407.0002A4	2A4 INNER SEAL	SIZE 2	14-17MM
B1407.0003A1	3A1 INNER SEAL	SIZE 3	14-17MM
B1407.0003A2	3A2 INNER SEAL	SIZE 3	17-20MM
B1407.0003A3	3A3 INNER SEAL	SIZE 3	20-23MM
B1407.0005A2	5A2 INNER SEAL	SIZE 5	23-26MM
B1407.0005A3	5A3 INNER SEAL	SIZE 5	26-29MM
B1407.0005A4	5A4 INNER SEAL	SIZE 5	29-32MM
B1407.0005A5	5A5 INNER SEAL	SIZE 5	32-36MM
B1407.0006A2	6A2 INNER SEAL	SIZE 6	36-39MM
B1407.0006A3	6A3 INNER SEAL	SIZE 6	39-42MM
B1407.0006A4	6A4 INNER SEAL	SIZE 6	42-46MM
B1407.0007A2	7A2 INNER SEAL	SIZE 7	44-48MM
B1407.0007A3	7A3 INNER SEAL	SIZE 7	48-52MM
B1407.0007A4	7A4 INNER SEAL	SIZE 7	52-56MM
B1407.0007A5	7A5 INNER SEAL	SIZE 7	56-60MM
B1407.0008A4	8A4 INNER SEAL	SIZE 8	56-60MM
B1407.0008A5	8A5 INNER SEAL	SIZE 8	59-63MM
B1407.0008A6	8A6 INNER SEAL	SIZE 8	63-67MM
B1407.0008A7	8A7 INNER SEAL	SIZE 8	67-71MM

### Single outer seals

CODE	TYPE	CABLE GLAND SIZE	Ø CABLE
B1407.0001B1	1B1 OUTER SEAL	SIZE 1	8-11MM
B1407.0001B2	1B2 OUTER SEAL	SIZE 1	11-14MM
B1407.0001B3	1B3 OUTER SEAL	SIZE 1	14-17MM
B1407.0002B1	2B1 OUTER SEAL	SIZE 2	14-17MM
B1407.0002B2	2B2 OUTER SEAL	SIZE 2	17-20MM
B1407.0002B3	2B3 OUTER SEAL	SIZE 2	20-23MM
B1407.0003B1	3B1 OUTER SEAL	SIZE 3	20-23MM
B1407.0003B2	3B2 OUTER SEAL	SIZE 3	23-26MM
B1407.0003B3	3B3 OUTER SEAL	SIZE 3	26-29MM
B1407.0005B2	5B2 OUTER SEAL	SIZE 5	29-32MM
B1407.0005B3	5B3 OUTER SEAL	SIZE 5	32-36MM
B1407.0005B4	5B4 OUTER SEAL	SIZE 5	36-39MM
B1407.0005B5	5B5 OUTER SEAL	SIZE 5	39-42MM
B1407.0006B2	6B2 OUTER SEAL	SIZE 6	44-48MM
B1407.0006B3	6B3 OUTER SEAL	SIZE 6	48-52MM
B1407.0006B4	6B4 OUTER SEAL	SIZE 6	52-56MM
B1407.0007B2	7B2 OUTER SEAL	SIZE 7	55-59MM
B1407.0007B3	7B3 OUTER SEAL	SIZE 7	59-63MM
B1407.0007B4	7B4 OUTER SEAL	SIZE 7	63-67MM
B1407.0008B4	8B4 OUTER SEAL	SIZE 8	63-67MM
B1407.0008B5	8B5 OUTER SEAL	SIZE 8	65-69MM
B1407.0008B6	8B6 OUTER SEAL	SIZE 8	69-73MM
B1407.0008B7	8B7 OUTER SEAL	SIZE 8	73-77MM

## OTHER ACCESSORIES

PNS Series / PND Series / PBS Series /  
PBD Series / PDB Series / PMS Series /  
PSM Series / PSF Series / PMD Series /  
UN Series / PNA Series / PAP Series /  
PSB Series / PBAX Series / PABAX Series

## SPARES & ACCESSORIES

### Protective shroud EPDM-55

CODE	TYPE	Ø CABLE
B1409.000034	PGA-1	SIZE 1
B1409.000035	PGA-2	SIZE 2
B1409.000036	PGA-3	SIZE 3
B1409.000037	PGA-5	SIZE 5
B1409.000038	PGA-6	SIZE 6
B1409.000039	PGA-7	SIZE 7
B1409.000040	PGA-8	SIZE 8

### Sealants for barrier type cable glands

CODE	TYPE
B1713.029910	MANUAL APPLICATOR FOR 200 ML CARTRIDGE, TYPE 2012/1
B1713.029915	SINGLE 200 ML CARTRIDGE WITH MIXING NOOZLE, TYPE 2012
B1713.201206	PACKAGE OF N° 6 CARTRIDGES 200 ML WITH MIXING NOOZLE, TYPE 2012
B1601.010003	SINGLE 310ML CARTRIDGE WITH NOOZLE SILICONE 7091
B1601.010030	MANUAL APPLICATOR FOR 200 ML CARTRIDGE, TYPE SILICONE 7091

### Gasket

CODE	TYPE	THREAD
B1411.000001	GK-1	M20X1,5
B1411.000003	GK-2	M25X1,5
B1411.000005	GK-3	M32X1,5
B1411.000009	GK-5	M50X1,5
B1411.000011	GK-6	M63X1,5
B1411.000013	GK-7	M75X1,5
B1411.000015	GK-8	M80X1,5
B1411.000002	GK-1	NPT/UNI-6125 1/2"
B1411.000004	GK-2	NPT/UNI-6125 3/4"
B1411.000006	GK-3	NPT/UNI-6125 1"
B1411.000010	GK-5	NPT/UNI-6125 1" 1/2
B1411.000012	GK-6	NPT/UNI-6125 2"
B1411.000014	GK-7	NPT/UNI-6125 2" 1/2
B1411.000016	GK-8	NPT/UNI-6125 3"

Note: Size M40 and 1"1/4 available on request.

## Locknut

CODE	TYPE	THREAD	
BRASS	AISI316L		
B1409.000005	B1408.000014	DL-0	M16X1,5
B1409.000002	B1408.000002	DL-1	M20X1,5
B1409.000006	B1408.000004	DL-2	M25X1,5
B1409.000009	B1408.000006	DL-3	M32X1,5
B1409.000017	B1408.000008	DL-5	M50X1,5
B1409.000020	B1408.000009	DL-6	M63X1,5
B1409.000023	B1408.000010	DL-7	M75X1,5
B1409.000026	B1408.000011	DL-8	M80X1,5
B1409.000004	B1408.000022	DL-1	NPT 1/2"
B1409.000008	B1408.000027	DL-2	NPT 3/4"
B1409.000011	B1408.000029	DL-3	NPT 1"
B1409.000019	B1408.000023	DL-5	NPT 1" 1/2
B1409.000022	B1408.000024	DL-6	NPT 2"
B1409.000025	B1408.000026	DL-7	NPT 2" 1/2
B1409.000027	UPON REQUEST	DL-8	NPT 3"
B1409.000061	UPON REQUEST	DL-1	UNI-6125 1/2"
B1409.000062		DL-2	UNI-6125 3/4"
B1409.000063		DL-3	UNI-6125 1"
B1409.000070		DL-5	UNI-6125 1" 1/2
		DL-6	UNI-6125 2"
		DL-7	UNI-6125 2" 1/2
UPON REQUEST		DL-8	UNI-6125 3"

## Earthing rings

CODE	TYPE		CABLE GLAND SIZE
BRASS	AISI316L		
B1409.000033	B1408.000015	PT-1	SIZE 1
B1409.000042	B1408.000016	PT-2	SIZE 2
B1409.000043	B1408.000017	PT-3	SIZE 3
B1409.000044	B1408.000018	PT-5	SIZE 5
B1409.000045	B1408.000019	PT-6	SIZE 6
B1409.000046	B1408.000020	PT-7	SIZE 7
B1409.000047	B1408.000021	PT-8	SIZE 8

## Star washers

CODE	TYPE	THREAD SIZE
C0102.000714	STAR WASHER Ø22	M20
C0102.000730	STAR WASHER Ø27	M25
C0102.000729	STAR WASHER Ø33	M32
C0102.000728	STAR WASHER Ø52	M50
C0102.000283	STAR WASHER Ø65	M63
UPON REQUEST	STAR WASHER Ø77	M75
UPON REQUEST	STAR WASHER Ø82	M80

Note: Size M40 and 1"1/4 available on request.

## FITTINGS

# Three pieces unions



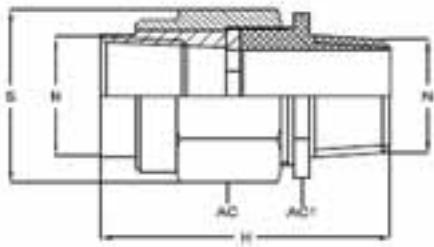
Three pieces unions for gas group IIB enable an independent rotation and the connection between pipes of an electrical equipment and enclosures or different devices of an explosion-proof equipment.

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

## TECHNICAL FEATURES

<b>Material</b>	Galvanised steel (other materials upon request)
<b>IP rating</b>	IP66/IP67
<b>Ambient temperature range</b>	-55°C to +150°C
<b>Approvals</b>	CESI 99 ATEX 034U IECEx CES 10.0002U TR CU
<b>Marking</b>	II 2 GD Ex d IIB Ex td A21 IP66/67
<b>Thread</b>	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	B1709.000323	1/2"	UNI-6125	58	35	30	27	0,150
BMF-2	B1709.000324	3/4"	UNI-6125	58	40	35	32	0,185
BMF-3	B1709.000325	1"	UNI-6125	70	48	42	40	0,300
BMF-4	B1709.000326	1" 1/4	UNI-6125	87	60	55	59	0,760
BMF-5	B1709.000327	1" 1/2	UNI-6125	87	75	70	67	1,000
BMF-6	B1709.000328	2"	UNI-6125	87	90	84	77	1,400
BMF-7	B1709.000329	2" 1/2	UNI-6125	98	117	108	99	2,350
BMF-8	B1709.000330	3"	UNI-6125	98	132	121	108	2,800
BMF-1	B1709.000336	1/2"	NPT	58	35	30	27	0,150
BMF-2	B1709.000337	3/4"	NPT	58	40	35	32	0,185
BMF-3	B1709.000338	1"	NPT	70	48	42	40	0,300
BMF-4	B1709.000339	1" 1/4	NPT	87	60	55	59	0,760
BMF-5	B1709.000340	1" 1/2	NPT	87	75	70	67	1,000
BMF-6	B1709.000341	2"	NPT	87	90	84	77	1,400
BMF-7	B1709.000342	2" 1/2	NPT	98	117	108	99	2,350
BMF-8	B1709.000343	3"	NPT	98	132	121	108	2,800

## FITTINGS

# Three pieces unions



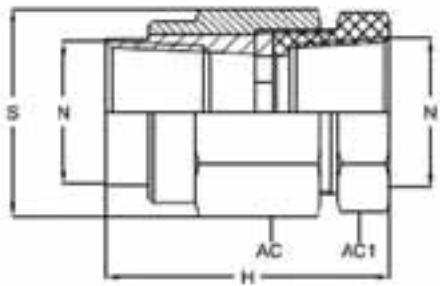
Three pieces unions for gas group IIB enable an independent rotation and the connection between pipes of an electrical equipment and enclosures or different devices of an explosion-proof equipment.

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

## TECHNICAL FEATURES

<b>Material</b>	Galvanised steel (other materials upon request)
<b>IP rating</b>	IP66/IP67
<b>Ambient temperature range</b>	-55°C to +150°C
<b>Approvals</b>	CESI 99 ATEX 034U IECEx CES 10.0002U TR CU
<b>Marking</b>	II 2 GD Ex d IIB Ex td A21 IP66/67
<b>Thread</b>	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	B1709.000356	1/2"	UNI-6125	46	35	30	27	0,125
BFF-2	B1709.000357	3/4"	UNI-6125	46	40	35	32	0,150
BFF-3	B1709.000358	1"	UNI-6125	56	48	42	40	0,235
BFF-4	B1709.000359	1" 1/4	UNI-6125	63	60	55	59	0,640
BFF-5	B1709.000360	1" 1/2	UNI-6125	66	75	70	67	0,960
BFF-6	B1709.000361	2"	UNI-6125	66	90	84	77	1,220
BFF-7	B1709.000362	2" 1/2	UNI-6125	71	117	108	99	2,240
BFF-8	B1709.000363	3"	UNI-6125	71	132	121	108	2,600
BFF-1	B1709.000367	1/2"	NPT	46	35	30	27	0,125
BFF-2	B1709.000368	3/4"	NPT	46	40	35	32	0,150
BFF-3	B1709.000369	1"	NPT	56	48	42	40	0,235
BFF-4	B1709.000370	1" 1/4	NPT	63	60	55	59	0,640
BFF-5	B1709.000371	1" 1/2	NPT	66	75	70	67	0,960
BFF-6	B1709.000372	2"	NPT	66	90	84	77	1,220
BFF-7	B1709.000373	2" 1/2	NPT	71	117	108	99	2,240
BFF-8	B1709.000374	3"	NPT	71	132	121	108	2,600

## FITTINGS

# Three pieces unions



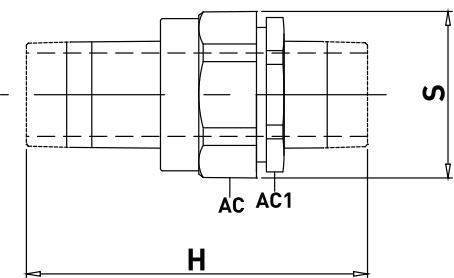
Three pieces unions for gas group IIB enable an independent rotation and the connection between pipes of an electrical equipment and enclosures or different devices of an explosion-proof equipment.

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

## TECHNICAL FEATURES

<b>Material</b>	Galvanised steel (other materials upon request)
<b>IP rating</b>	IP66/IP67
<b>Ambient temperature range</b>	-55°C to +150°C
<b>Approvals</b>	CESI 99 ATEX 034U IECEx CES 10.0002U TR CU
<b>Marking</b>	II 2 GD Ex d IIB Ex td A21 IP66/67
<b>Thread</b>	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	B1709.000375	1/2"	UNI-6125	86	35	30	27	0,175
BMM-2	B1709.000376	3/4"	UNI-6125	86	40	35	32	0,230
BMM-3	B1709.000377	1"	UNI-6125	99	48	42	40	0,350
BMM-4	B1709.000378	1" 1/4	UNI-6125	115	60	55	59	0,910
BMM-5	B1709.000379	1" 1/2	UNI-6125	115	75	70	67	1,220
BMM-6	B1709.000380	2"	UNI-6125	115	90	84	77	1,620
BMM-7	B1709.000381	2" 1/2	UNI-6125	126	117	108	99	2,900
BMM-8	B1709.000382	3"	UNI-6125	126	132	121	108	3,350
BMM-1	B1709.000392	1/2"	NPT	86	35	30	27	0,175
BMM-2	B1709.000393	3/4"	NPT	86	40	35	32	0,230
BMM-3	B1709.000394	1"	NPT	99	48	42	40	0,350
BMM-4	B1709.000395	1" 1/4	NPT	115	60	55	59	0,910
BMM-5	B1709.000396	1" 1/2	NPT	115	75	70	67	1,220
BMM-6	B1709.000397	2"	NPT	115	90	84	77	1,620
BMM-7	B1709.000398	2" 1/2	NPT	126	117	108	99	2,900
BMM-8	B1709.000399	3"	NPT	126	132	121	108	3,350

## FITTINGS

# Sealing fittings EYS



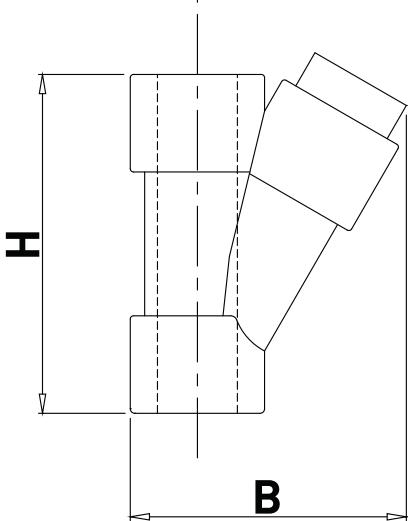
Sealing fittings prevent the passage of gas, vapors or flames through pipes system. EYS series vertical fittings are available in two different dimensions: the first up to 1"; the second up to 3" with an additional lateral opening for easy insertion of glass-fiber. EZS series are used for both vertical 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

<b>Material</b>	Aluminium with low content of copper
<b>IP rating</b>	IP66
<b>Ambient temperature range</b>	-20°C to +80°C
<b>Approvals</b>	CESI 03 ATEX 085 TR CU
<b>Marking</b>	II 2 GD Ex d IIC Ex td A21 IP66
<b>Thread</b>	NPT, UNI-6125 (other threads upon request)
<b>Accessories available upon request</b>	CRV420 sealing compound, fiber.

## Dimensions EYS



## Vertical sealing fittings EYS

TYPE	CODE	SIZE	THREAD	DIMENSIONS [mm]		RESIN QUANTITY	WEIGHT [Kg]
				H	B		
EYS-1	B1709.000411	1/2"	UNI-6125	77	56	35 GR.	0,175
EYS-2	B1709.000412	3/4"	UNI-6125	87	66	50 GR.	0,230
EYS-3	B1709.000413	1"	UNI-6125	105	82	100 GR.	0,350
EYS-4	B1709.000414	1" 1/4	UNI-6125	145	84	240 GR.	0,910
EYS-5	B1709.000415	1" 1/2	UNI-6125	145	84	240 GR.	1,220
EYS-6	B1709.000416	2"	UNI-6125	150	95	380 GR.	1,620
EYS-7	B1709.000417	2" 1/2	UNI-6125	200	134	1250 GR.	2,900
EYS-8	B1709.000418	3"	UNI-6125	200	134	1250 GR.	3,350
EYS-1	B1709.000421	1/2"	NPT	77	56	35 GR.	0,175
EYS-2	B1709.000422	3/4"	NPT	87	66	50 GR.	0,230
EYS-3	B1709.000423	1"	NPT	105	82	100 GR.	0,350
EYS-4	B1709.000424	1" 1/4	NPT	145	84	240 GR.	0,910
EYS-5	B1709.000425	1" 1/2	NPT	145	84	240 GR.	1,220
EYS-6	B1709.000426	2"	NPT	150	95	380 GR.	1,620
EYS-7	B1709.000427	2" 1/2	NPT	200	134	1250 GR.	2,900
EYS-8	B1709.000428	3"	NPT	200	134	1250 GR.	3,350

## Sealing fittings accessories

TYPE	CODE	WEIGHT
CRV 420/300 SEALING COMPOUND 300 GR.	B1713.420300	300 GR.
CRV 420/400 SEALING COMPOUND 400 GR.	B1713.420400	400 GR.
CRV 420/1000 SEALING COMPOUND 1000 GR.	B1713.420100	1000 GR.
FAB 25 FIBER 25 GR.	B1713.000250	250 GR.
FAB 50 FIBER 50 GR.	B1713.000251	500 GR.

## FITTINGS

# Sealing fittings EZS



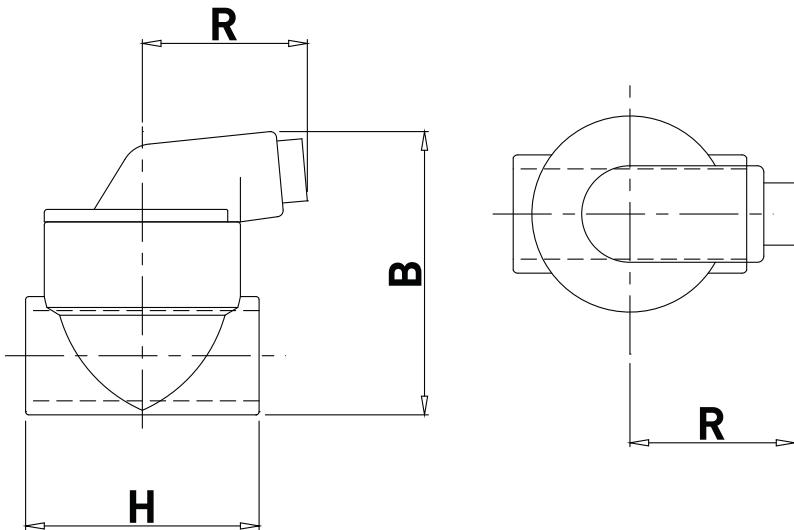
Sealing fittings prevent the passage of gas, vapors or flames through pipes system. EYS series vertical fittings are available in two different dimensions: the first up to 1"; the second up to 3" with an additional lateral opening for easy insertion of glass-fiber. EZS series are used for both vertical 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

<b>Material</b>	Aluminium with low content of copper
<b>IP rating</b>	IP66
<b>Ambient temperature range</b>	-20°C to +80°C
<b>Approvals</b>	CESI 03 ATEX 085 TR CU
<b>Marking</b>	II 2 GD Ex d IIC Ex td A21 IP66
<b>Thread</b>	NPT, UNI-6125 (other threads upon request)
<b>Accessories available upon request</b>	CRV420 sealing compound, fiber.

## Dimensions EZS



## Horizontal sealing fittings EZS

TYPE	CODE	SIZE	THREAD	DIMENSIONS [mm]			RESIN QUANTITY	WEIGHT [Kg]
				H	B	R		
EZS-1	B1709.000430	1/2"	UNI-6125	72	83	50	140 GR.	0.26
EZS-2	B1709.000431	3/4"	UNI-6125	72	83	50	140 GR.	0.25
EZS-3	B1709.000432	1"	UNI-6125	74	92	50	140 GR.	0.27
EZS-4	B1709.000433	1" 1/4	UNI-6125	98	110	60	390 GR.	0.52
EZS-5	B1709.000434	1" 1/2	UNI-6125	98	110	60	390 GR.	0.48
EZS-6	B1709.000435	2"	UNI-6125	130	120	60	570 GR.	0.70
EZS-7	B1709.000436	2" 1/2	UNI-6125	142	160	90	1000 GR.	1.50
EZS-8	B1709.000437	3"	UNI-6125	142	160	90	1000 GR.	1.74
EZS-1	B1709.000543	1/2"	NPT	72	83	50	140 GR.	0.26
EZS-2	B1709.000509	3/4"	NPT	72	83	50	140 GR.	0.25
EZS-3	B1709.000544	1"	NPT	74	92	50	140 GR.	0.27
EZS-4	B1709.000438	1" 1/4	NPT	98	110	60	390 GR.	0.52
EZS-5	B1709.000488	1" 1/2	NPT	98	110	60	390 GR.	0.48
EZS-6	B1709.000531	2"	NPT	130	120	60	570 GR.	0.70
EZS-7	B1709.000440	2" 1/2	NPT	142	160	90	1000 GR.	1.50
EZS-8	B1709.000545	3"	NPT	142	160	90	1000 GR.	1.74

## Sealing fittings accessories

TYPE	CODE	WEIGHT
CRV 420/300 SEALING COMPOUND 300 GR.	B1713.420300	300 GR.
CRV 420/400 SEALING COMPOUND 400 GR.	B1713.420400	400 GR.
CRV 420/1000 SEALING COMPOUND 1000 GR.	B1713.420100	1000 GR.
FAB 25 FIBER 25 GR.	B1713.000250	250 GR.
FAB 50 FIBER 50 GR.	B1713.000251	500 GR.

# FITTINGS

## Nipples - NP

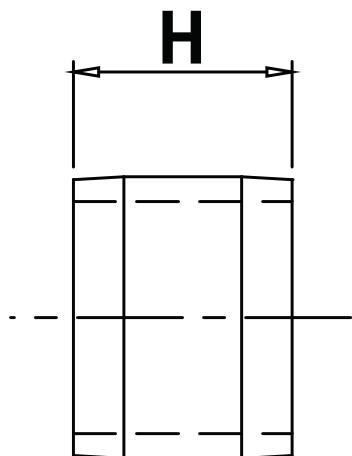


NP series nipples are used to connect equipment or other unions with female hub.

### TECHNICAL FEATURES

<b>Material</b>	Galvanised steel (other materials upon request)
<b>IP rating</b>	IP66/IP67
<b>Ambient temperature range</b>	-55°C to +150°C
<b>Approvals</b>	CESI 01 ATEX 104U IECEx CES 10.0001X TR CU
<b>Marking</b>	II 2 GD Ex d IIC - Ex e IIC Ex td A21 IP66/67
<b>Thread</b>	NPT, UNI-6125 (other thread upon request)

## Dimensions NP



## Nipples - NP

TYPE	CODE	SIZE	THREAD	LENGTH H	WEIGHT [Kg]
NP-1	B1709.000263	1/2"	UNI-6125	48	0,050
NP-2	B1709.000264	3/4"	UNI-6125	60	0,060
NP-3	B1709.000265	1"	UNI-6125	55	0,100
NP-4	B1709.000266	1" 1/4	UNI-6125	55	0,140
NP-5	B1709.000267	1" 1/2	UNI-6125	55	0,150
NP-6	B1709.000268	2"	UNI-6125	55	0,200
NP-7	B1709.000269	2" 1/2	UNI-6125	68	0,450
NP-8	B1709.000270	3"	UNI-6125	68	0,700
NP-1	B1709.000273	1/2"	NPT	48	0,050
NP-2	B1709.000283	3/4"	NPT	60	0,060
NP-3	B1709.000275	1"	NPT	55	0,100
NP-4	B1709.000276	1" 1/4	NPT	55	0,140
NP-5	B1709.000277	1" 1/2	NPT	55	0,150
NP-6	B1709.000278	2"	NPT	55	0,200
NP-7	B1709.000279	2" 1/2	NPT	68	0,450
NP-8	B1709.000280	3"	NPT	68	0,700

# FITTINGS

## Coupling - EM

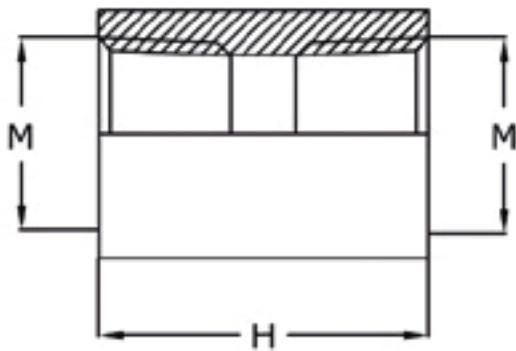


EM series couplings are used for connection of pipes with threaded male ends.

### TECHNICAL FEATURES

<b>Material</b>	Galvanised steel (other materials upon request)
<b>IP rating</b>	IP66/IP67
<b>Ambient temperature range</b>	-55°C to +150°C
<b>Approvals</b>	CESI 01 ATEX 104U IECEx CES 10.0001X TR CU
<b>Marking</b>	II 2 GD Ex d IIC - Ex e IIC Ex td A21 IP66/67
<b>Thread</b>	NPT, UNI-6125 (other thread upon request)

## Dimensions EM



## Coupling - EM

TYPE	CODE	SIZE	THREAD	LENGTH H	WEIGHT [Kg]
EM-1	B1709.000243	1/2"	UNI-6125	39	0,090
EM-2	B1709.000244	3/4"	UNI-6125	39	0,080
EM-3	B1709.000245	1"	UNI-6125	51	0,150
EM-4	B1709.000246	1" 1/4	UNI-6125	51	0,270
EM-5	B1709.000247	1" 1/2	UNI-6125	51	0,270
EM-6	B1709.000248	2"	UNI-6125	51	0,450
EM-7	B1709.000249	2" 1/2	UNI-6125	65	0,650
EM-8	B1709.000250	3"	UNI-6125	65	0,800
EM-1	B1709.000253	1/2"	NPT	39	0,090
EM-2	B1709.000254	3/4"	NPT	39	0,080
EM-3	B1709.000255	1"	NPT	51	0,150
EM-4	B1709.000256	1" 1/4	NPT	51	0,270
EM-5	B1709.000257	1" 1/2	NPT	51	0,270
EM-6	B1709.000258	2"	NPT	51	0,450
EM-7	B1709.000259	2" 1/2	NPT	65	0,650
EM-8	B1709.000260	3"	NPT	65	0,800

## FITTINGS

# Female-Female elbow - ELF

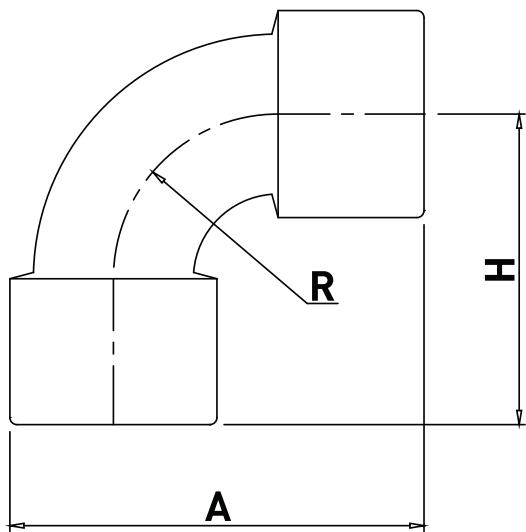


90° non-inspectable elbows are used in conduit system of electrical equipment.

## TECHNICAL FEATURES

<b>Material</b>	Aluminium with low content of copper
<b>IP rating</b>	IP66/IP67
<b>Ambient temperature range</b>	-55°C to +150°C
<b>Approvals</b>	CESI 01 ATEX 104U TR CU
<b>Marking</b>	II 2 GD Ex d IIC - Ex e II Ex td A21 IP66/67
<b>Thread</b>	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	B1709.000208	1/2"	UNI-6125	60	45	30	0.12
ELF-2	B1709.000209	3/4"	UNI-6125	75	55	30	0.10
ELF-3	B1709.000210	1"	UNI-6125	85	65	35	0.20
ELF-4	B1709.000211	1" 1/4	UNI-6125	100	75	50	0.39
ELF-5	B1709.000212	1" 1/2	UNI-6125	110	87	50	0.37
ELF-6	B1709.000213	2"	UNI-6125	135	98	60	0.62
ELF-7	B1709.000214	2" 1/2	UNI-6125	175	135	65	0.88
ELF-8	B1709.000215	3"	UNI-6125	210	160	85	1.48
ELF-1	B1709.000218	1/2"	NPT	60	45	30	0.12
ELF-2	B1709.000219	3/4"	NPT	75	55	30	0.10
ELF-3	B1709.000220	1"	NPT	85	65	35	0.20
ELF-4	B1709.000221	1" 1/4	NPT	100	75	50	0.39
ELF-5	B1709.000222	1" 1/2	NPT	110	87	50	0.37
ELF-6	B1709.000223	2"	NPT	135	98	60	0.62
ELF-7	B1709.000224	2" 1/2	NPT	175	135	65	0.88
ELF-8	B1709.000225	3"	NPT	210	160	85	1.48

## FITTINGS

# Open elbows LBH

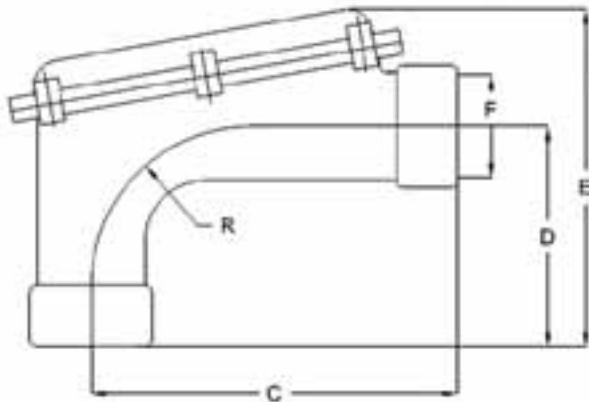


LBH and LBHS series L shaped open elbows are used for the cables run in conduit system of electrical installations.  
The flanged opening enables easy inspection and insertion of electrical cables.

## TECHNICAL FEATURES

<b>Material</b>	Aluminium with low content of copper
<b>IP rating</b>	
<b>Ambient temperature range</b>	-20°C to +60°C
<b>Approvals</b>	CESI 03 ATEX 141U TR CU
<b>Marking</b>	II 2 G Ex d IIB
<b>Thread</b>	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	B1709.000401	1/2"	UNI-6125	70	165	132	45	95	21	0.434
LBH-2	B1709.000402	3/4"	UNI-6125	70	165	132	45	95	21	0.404
LBH-3	B1709.000403	1"	UNI-6125	70	168	132	60	112	30	0.455
LBH-4	B1709.000404	1" 1/4	UNI-6125	100	230	175	83	155	50	1.277
LBH-5	B1709.000405	1" 1/2	UNI-6125	110	265	220	83	132	70	1.142
LBH-6	B1709.000406	2"	UNI-6125	110	265	220	80	132	70	1.024
LBH-7	B1709.000407	2" 1/2	UNI-6125	136	363	267	140	250	96	3.569
LBH-8	B1709.000408	3"	UNI-6125	136	363	267	140	250	96	3.171
LBH-1	B1709.000501	1/2"	NPT	70	165	132	45	95	21	0.434
LBH-2	B1709.000502	3/4"	NPT	70	165	132	45	95	21	0.404
LBH-3	B1709.100503	1"	NPT	70	168	132	60	112	30	0.455
LBH-4	B1709.000504	1" 1/4	NPT	100	230	175	83	155	50	1.277
LBH-5	B1709.000503	1" 1/2	NPT	110	265	220	83	132	70	1.142
LBH-6	B1709.100506	2"	NPT	110	265	220	80	132	70	1.024
LBH-7	B1709.100507	2" 1/2	NPT	136	363	267	140	250	96	3.569
LBH-8	B1709.100508	3"	NPT	136	363	267	140	250	96	3.171

## FITTINGS

# Aluminium bushings - DB



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**

<b>TYPE</b>	<b>CODE</b>	<b>SIZE</b>	<b>THREAD</b>	<b>WEIGHT [Kg]</b>
DB-1	C0102.000006	1/2"	ISO-228	0.012
DB-2	C0102.000007	3/4"	ISO-228	0.014
DB-3	C0102.000008	1"	ISO-228	0.020
DB-4	C0102.000009	1" 1/4	ISO-228	0.025
DB-5	C0102.000010	1" 1/2	ISO-228	0.032
DB-6	C0102.000011	2"	ISO-228	0.046
DB-7	C0102.000012	2" 1/2	ISO-228	0.062
DB-8	C0102.000013	3"	ISO-228	0.071
DB-1	C0102.000026	1/2"	NPT	0.012
DB-2	C0102.000027	3/4"	NPT	0.014
DB-3	C0102.000028	1"	NPT	0.020
DB-4	C0102.000029	1" 1/4	NPT	0.025
DB-5	C0102.000030	1" 1/2	NPT	0.032
DB-6	C0102.000031	2"	NPT	0.046
DB-7	C0102.000032	2" 1/2	NPT	0.062
DB-8	C0102.000033	3"	NPT	0.071

## FITTINGS

# Recessed hexagonal plugs - PLG

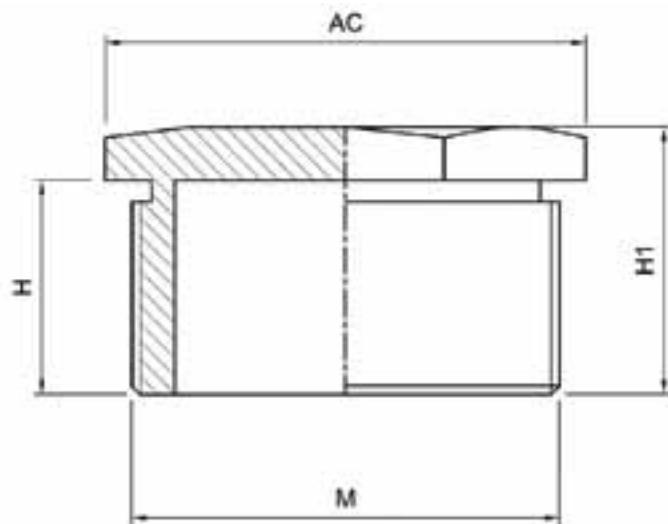


PLG series plugs are used to close the unused entries. They have an hexagonal head so that they can be opened with proper tools only.

## TECHNICAL FEATURES

<b>Material</b>	Galvanized steel , Aluminium with low content of copper
<b>IP rating</b>	IP66/IP67
<b>Ambient temperature range</b>	-40°C to +150°C
<b>Approvals</b>	CESI 02 ATEX 049 TR CU
<b>Marking</b>	II 2 GD Ex d IIC - Ex e II Ex td A21 IP66/67
<b>Thread</b>	NPT, UNI-6125 (other threads upon request)

## Dimensions PLG



### Recessed hexagonal plugs - PLG

TYPE	CODE	SIZE	THREAD	MATERIAL	DIMENSIONS [mm]		WEIGHT [Kg]
					A	H	
PLG-1	B1707.005801	1/2"	UNI-6125	GALV. STEEL	13	18	0.034
PLG-2	B1707.005802	3/4"	UNI-6125	GALV. STEEL	17	18	0.054
PLG-3	B1707.005803	1"	UNI-6125	GALV. STEEL	19	24	0.124
PLG-4	B1707.005804	1" 1/4	UNI-6125	ALUMINIUM	24	24	0.061
PLG-5	B1707.005805	1" 1/2	UNI-6125	ALUMINIUM	35	24	0.063
PLG-6	B1707.005806	2"	UNI-6125	ALUMINIUM	36	24	0.109
PLG-7	B1707.005807	2" 1/2	UNI-6125	ALUMINIUM	50	30	0.169
PLG-8	B1707.005808	3"	UNI-6125	ALUMINIUM	50	30	0.242
PLG-1	B1707.005861	1/2"	NPT	GALV. STEEL	13	18	0.034
PLG-2	B1707.005862	3/4"	NPT	GALV. STEEL	17	18	0.054
PLG-3	B1707.005863	1"	NPT	GALV. STEEL	19	24	0.124
PLG-4	B1707.005864	1" 1/4	NPT	ALUMINIUM	24	24	0.061
PLG-5	B1707.005865	1" 1/2	NPT	ALUMINIUM	35	24	0.063
PLG-6	B1707.005866	2"	NPT	ALUMINIUM	36	24	0.109
PLG-7	B1707.005867	2" 1/2	NPT	ALUMINIUM	50	30	0.169
PLG-8	B1707.005868	3"	NPT	ALUMINIUM	50	30	0.242

## FITTINGS

# Hexagonal head plugs PLG - polyamide

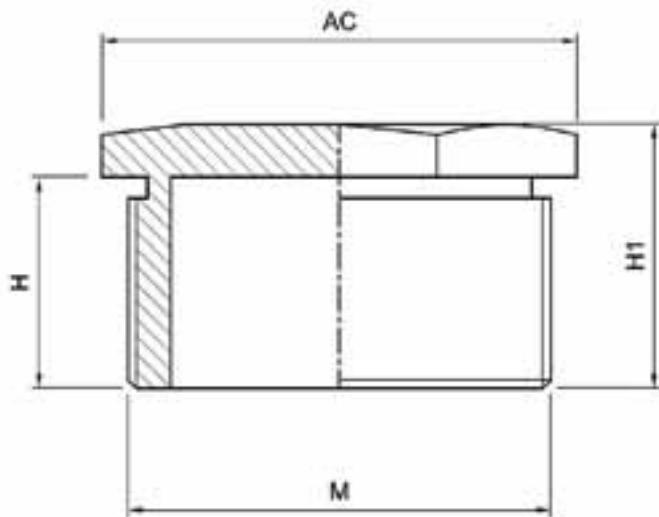


PLG series polyamide plugs are used to close the unused entries in case of Ex e / Ex i certified enclosures (for intrinsically safe circuits, plugs can be supplied blue coloured).

## TECHNICAL FEATURES

<b>Material</b>	Black polyamide
<b>IP rating</b>	IP66/IP68
<b>Ambient temperature range</b>	-20°C to +80°C
<b>Approvals</b>	CESI 03 ATEX 305X
<b>Marking</b>	II 2 GD Ex e II - Ex i II Ex td A21 IP66/68
<b>Thread</b>	Metric pitch 1,5, PG
<b>Accessories available upon request</b>	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	B1706.000016	M16X1,5	12	16	19
PLG-1IXE	B1706.000025	M20X1,5	15	20	23
PLG-2IXE	B1706.000020	M25X1,5	15	20	28
PLG-3IXE	B1706.000030	M32X1,5	15	23	36
PLG-4IXE	B1706.000040	M40X1,5	18	27	45
PLG-5IXE	B1706.000050	M50X1,5	18	27	55
PLG-6IXE	B1706.000060	M63X1,5	18	27	69
PLG-2PXE	B1706.201109	PG9			
PLG-3PXE	B1706.201111	PG11			
PLG-4PXE	B1706.201113	PG13,5			
PLG-5PXE	B1706.201116	PG16			
PLG-6PXE	B1706.201121	PG21			
PLG-7PXE	B1706.201129	PG29			
PLG-8PXE	B1706.201136	PG36			

## FITTINGS

# T.. Series Hexagonal head plugs

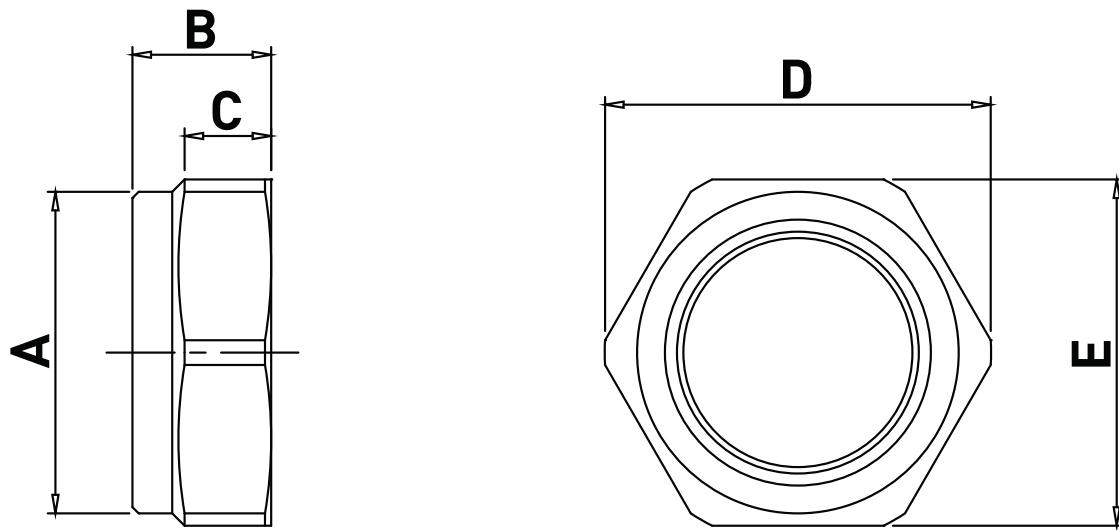


T.. series hexagonal plugs are used to close the unused entries, they have both Ex d and Ex e mode of protection.

## TECHNICAL FEATURES

<b>Material</b>	Nickel chrome plated brass AISI316L Stainless steel (other materials upon request)
<b>IP rating</b>	IP66/IP67
<b>Ambient temperature range</b>	-52°C to +110°C
<b>Approvals</b>	INERIS 04ATEX9006U (standard) TR CU (marking upon request)
<b>Marking</b>	II 2 GD (standard) Ex d IIC Gb / Ex e IIC Gb Ex tb IIIC Db IP66/67  I M2 Ex d I Mb / Ex e I Mb (marking upon request)
<b>Thread</b>	Metric pitch 1,5, NPT, UNI-6125 (other threads upon request)
<b>Accessories available upon request</b>	Locknut, Gasket (for selection please refer to page 178)

## Dimensions T.. Series



## T.. Series Hexagonal head plugs

TYPE	CODE		SIZE	THREAD	DIMENSIONS [mm]				
	BRASS	AISI316L			A	B	C	D	E
T20	B1701.122100	B1702.142100	M20X1,5	METRIC	23	27	16	26	24
T25	B1701.122200	B1702.142200	M25X1,5	METRIC	29	27	16	33	30
T32	B1701.122300	B1702.142300	M32X1,5	METRIC	35	27	16	40	36
T40	B1701.122400	B1702.142400	M40X1,5	METRIC	45	30	18	51	46
T50	B1701.122500	B1702.142500	M50X1,5	METRIC	55	30	18	62	56
T63	B1701.122600	B1702.142600	M63X1,5	METRIC	69	31	18	77	70
T75	B1701.122700	B1702.142700	M75X1,5	METRIC	81	32	18	90	82
T80	B1701.122800	UPON REQUEST	M80X1,5	METRIC	86	32	18	96	87
T1	B1701.121100	B1702.141100	1/2"	UNI-6125	26	30	19	30	27
T2	B1701.121200	B1702.141200	3/4"	UNI-6125	31	30	19	35	32
T3	B1701.121300	B1702.141300	1"	UNI-6125	37	36	25	42	38
T4	B1701.121400	B1702.141400	1" 1/4	UNI-6125	47	37	25	53	48
T5	B1701.121500	B1702.141500	1" 1/2	UNI-6125	55	37	25	62	56
T6	B1701.121600	UPON REQUEST	2"	UNI-6125	66	38	25	74	67
T7	B1701.121700	UPON REQUEST	2" 1/2	UNI-6125	81	46	32	90	82
T8	B1701.121800	UPON REQUEST	3"	UNI-6125	95	46	32	106	96
T1N	B1701.123100	B1702.143100	1/2"	NPT	26	30	19	30	27
T2N	B1701.123200	B1702.143200	3/4"	NPT	31	30	19	35	32
T3N	B1701.123300	B1702.143300	1"	NPT	37	36	25	42	38
T4N	B1701.123400	B1702.143400	1" 1/4	NPT	47	37	25	53	48
T5N	B1701.123500	B1702.143500	1" 1/2	NPT	55	37	25	62	56
T6N	B1701.123600	B1702.143600	2"	NPT	66	38	25	74	67
T7N	B1701.123700	UPON REQUEST	2" 1/2	NPT	81	46	32	90	82
T8N	B1701.123800	UPON REQUEST	3"	NPT	95	46	36	106	96

## FITTINGS

# Reductions RE and adaptors REB

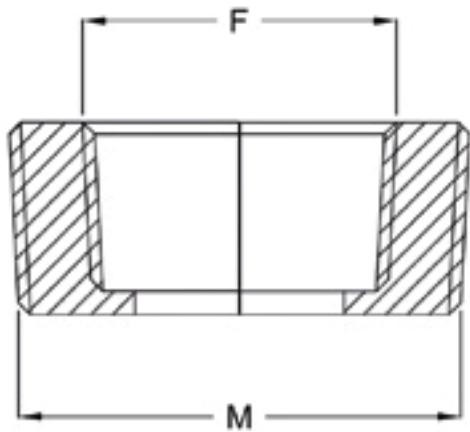


Reductions and adaptors are used to connect pipes of an electrical equipment and enclosures or different devices of an explosion-proof equipment with different entries sizes.

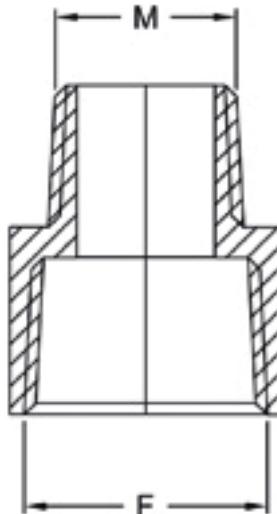
## TECHNICAL FEATURES

<b>Material</b>	Galvanized steel, aluminium with low content of copper
<b>IP rating</b>	IP66/IP67
<b>Ambient temperature range</b>	-40°C to +150°C
<b>Approvals</b>	CESI 02 ATEX 049 TR CU
<b>Marking</b>	II 2 GD Ex d IIC - Ex e II Ex td A21 IP66/67
<b>Thread</b>	NPT, UNI-6125 (other threads upon request)

## Dimensions RE



## Dimensions REB



## Reductions RE

TYPE	CODE	THREAD	MATERIAL	MALE M	FEMALE F	WEIGHT [Kg]
RE-21	B1709.000001	UNI-6125	GALV. STEEL	3/4"	1/2"	0.038
RE-31	B1709.000002	UNI-6125	GALV. STEEL	1"	1/2"	0.089
RE-32	B1709.000003	UNI-6125	GALV. STEEL	1"	3/4"	0.058
RE-41	B1709.000004	UNI-6125	ALUMINIUM	1" 1/4	1/2"	0.064
RE-42	B1709.000005	UNI-6125	ALUMINIUM	1" 1/4	3/4"	0.053
RE-43	B1709.000006	UNI-6125	ALUMINIUM	1" 1/4	1"	0.034
RE-51	B1709.000007	UNI-6125	ALUMINIUM	1" 1/2	1/2"	0.092
RE-52	B1709.000008	UNI-6125	ALUMINIUM	1" 1/2	3/4"	0.079
RE-53	B1709.000009	UNI-6125	ALUMINIUM	1" 1/2	1"	0.061
RE-54	B1709.000010	UNI-6125	ALUMINIUM	1" 1/2	1" 1/4	0.029
RE-61	B1709.000011	UNI-6125	ALUMINIUM	2"	1/2"	0.153
RE-62	B1709.000012	UNI-6125	ALUMINIUM	2"	3/4"	0.148
RE-63	B1709.000013	UNI-6125	ALUMINIUM	2"	1"	0.124
RE-64	B1709.000014	UNI-6125	ALUMINIUM	2"	1" 1/4	0.095
RE-65	B1709.000015	UNI-6125	ALUMINIUM	2"	1" 1/2	0.068
RE-71	B1709.000016	UNI-6125	ALUMINIUM	2" 1/2	1/2"	0.244
RE-72	B1709.000017	UNI-6125	ALUMINIUM	2" 1/2	3/4"	0.243
RE-73	B1709.000018	UNI-6125	ALUMINIUM	2" 1/2	1"	0.272
RE-74	B1709.000019	UNI-6125	ALUMINIUM	2" 1/2	1" 1/4	0.238
RE-75	B1709.000020	UNI-6125	ALUMINIUM	2" 1/2	1" 1/2	0.198
RE-76	B1709.000021	UNI-6125	ALUMINIUM	2" 1/2	2"	0.136
RE-81	B1709.000022	UNI-6125	ALUMINIUM	3"	1/2"	0.416
RE-82	B1709.000023	UNI-6125	ALUMINIUM	3"	3/4"	0.355
RE-83	B1709.000024	UNI-6125	ALUMINIUM	3"	1"	0.323
RE-84	B1709.000025	UNI-6125	ALUMINIUM	3"	1" 1/4	0.302
RE-85	B1709.000026	UNI-6125	ALUMINIUM	3"	1" 1/2	0.318
RE-86	B1709.000027	UNI-6125	ALUMINIUM	3"	2"	0.249
RE-87	B1709.000028	UNI-6125	GALV. STEEL	3"	2" 1/2	0.578
RE-21	B1709.000036	NPT	GALV. STEEL	3/4"	1/2"	0.038
RE-31	B1709.000037	NPT	GALV. STEEL	1"	1/2"	0.089

## 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	THREAD	MATERIAL	MALE M	FEMALE F	WEIGHT [Kg]
REB-21	B1709.000059	UNI-6125	GALV. STEEL	1/2"	3/4"	0.069
REB-31	B1709.000060	UNI-6125	GALV. STEEL	1/2"	1"	0.108
REB-32	B1709.000061	UNI-6125	GALV. STEEL	3/4"	1"	0.109
REB-41	B1709.000062	UNI-6125	ALUMINIUM	1/2"	1" 1/4	0.187
REB-42	B1709.000063	UNI-6125	ALUMINIUM	3/4"	1" 1/4	0.171
REB-43	B1709.000064	UNI-6125	ALUMINIUM	1"	1" 1/4	0.209
REB-51	B1709.000065	UNI-6125	ALUMINIUM	1/2"	1" 1/2	0.352
REB-52	B1709.000066	UNI-6125	ALUMINIUM	3/4"	1" 1/2	0.323
REB-53	B1709.000067	UNI-6125	ALUMINIUM	1"	1" 1/2	0.337
REB-54	B1709.000068	UNI-6125	ALUMINIUM	1" 1/4	1" 1/2	0.359
REB-61	B1709.000069	UNI-6125	ALUMINIUM	1/2"	2"	0.459
REB-62	B1709.000070	UNI-6125	ALUMINIUM	3/4"	2"	0.417
REB-63	B1709.000071	UNI-6125	ALUMINIUM	1"	2"	0.489
REB-64	B1709.000072	UNI-6125	ALUMINIUM	1" 1/4	2"	0.436
REB-65	B1709.000073	UNI-6125	ALUMINIUM	1" 1/2	2"	0.463
REB-71	B1709.000074	UNI-6125	ALUMINIUM	1/2"	2" 1/2	0.597
REB-72	B1709.000075	UNI-6125	ALUMINIUM	3/4"	2" 1/2	0.611
REB-73	B1709.000076	UNI-6125	ALUMINIUM	1"	2" 1/2	0.601
REB-74	B1709.000077	UNI-6125	ALUMINIUM	1" 1/4	2" 1/2	0.663
REB-75	B1709.000078	UNI-6125	ALUMINIUM	1" 1/2	2" 1/2	0.667
REB-76	B1709.000079	UNI-6125	ALUMINIUM	2"	2" 1/2	0.531
REB-81	B1709.000080	UNI-6125	ALUMINIUM	1/2"	3"	0.674
REB-82	B1709.000081	UNI-6125	ALUMINIUM	3/4"	3"	0.687
REB-83	B1709.000082	UNI-6125	ALUMINIUM	1"	3"	0.900
REB-84	B1709.000083	UNI-6125	ALUMINIUM	1" 1/4	3"	0.864
REB-85	B1709.000084	UNI-6125	ALUMINIUM	1" 1/2	3"	0.884
REB-86	B1709.000085	UNI-6125	ALUMINIUM	2"	3"	0.767
REB-87	B1709.000086	UNI-6125	GALV. STEEL.	2" 1/2	3"	1.055
REB-21	B1709.000107	NPT	GALV. STEEL	1/2"	3/4"	0.069
REB-31	B1709.000089	NPT	GALV. STEEL	1/2"	1"	0.108
REB-32	B1709.000109	NPT	GALV. STEEL	3/4"	1"	0.109
REB-42	B1709.000111	NPT	ALUMINIUM	3/4"	1" 1/4	0.171
REB-43	B1709.000112	NPT	ALUMINIUM	1"	1" 1/4	0.209
REB-52	B1709.000113	NPT	ALUMINIUM	3/4"	1" 1/2	0.323
REB-53	B1709.000114	NPT	ALUMINIUM	1"	1" 1/2	0.337
REB-54	B1709.000087	NPT	ALUMINIUM	1" 1/4	1" 1/2	0.359
REB-62	B1709.000108	NPT	ALUMINIUM	3/4"	2"	0.417
REB-63	B1709.000090	NPT	ALUMINIUM	1"	2"	0.489
REB-64	B1709.000110	NPT	ALUMINIUM	1" 1/4	2"	0.436
REB-65	B1709.000091	NPT	ALUMINIUM	1" 1/2	2"	0.463
REB-73	B1709.000092	NPT	ALUMINIUM	1"	2" 1/2	0.601
REB-75	B1709.000115	NPT	ALUMINIUM	1" 1/2	2" 1/2	0.667
REB-76	B1709.000116	NPT	ALUMINIUM	2"	2" 1/2	0.531
REB-83	B1709.000117	NPT	ALUMINIUM	1"	3"	0.900
REB-85	B1709.000118	NPT	ALUMINIUM	1" 1/2	3"	0.884
REB-86	B1709.000119	NPT	ALUMINIUM	2"	3"	0.767
REB-87	B1709.000120	NPT	GALV. STEEL	2" 1/2	3"	1.055

## FITTINGS

# Adaptors A..-F..-M..



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

<b>Material</b>	Nickel chrome plated brass AISI316L Stainless steel
<b>IP rating</b>	IP66/IP67
<b>Ambient temperature range</b>	-40°C to +150°C
<b>Approvals</b>	CESI 02 ATEX 049 TR CU
<b>Marking</b>	II 2 GD (standard) Ex d IIC Gb / Ex e IIC Gb Ex tb IIIC Db IP66/67  I M2 Ex d I Mb / Ex e I Mb (marking upon request)
<b>Thread</b>	ISO METRIC pitch 1,5, NPT, UNI-6125 (other thread upon request)

Codification tables

**B 1 7 0 .**

Brass Nickel Chrome	4	Material
Stainless Steel AISI 316	5	

Adaptor Male / Male	2	Type
Adaptor Male / Female	3	
Adaptor Female / Female	4	
Adaptor Female / Male	5	

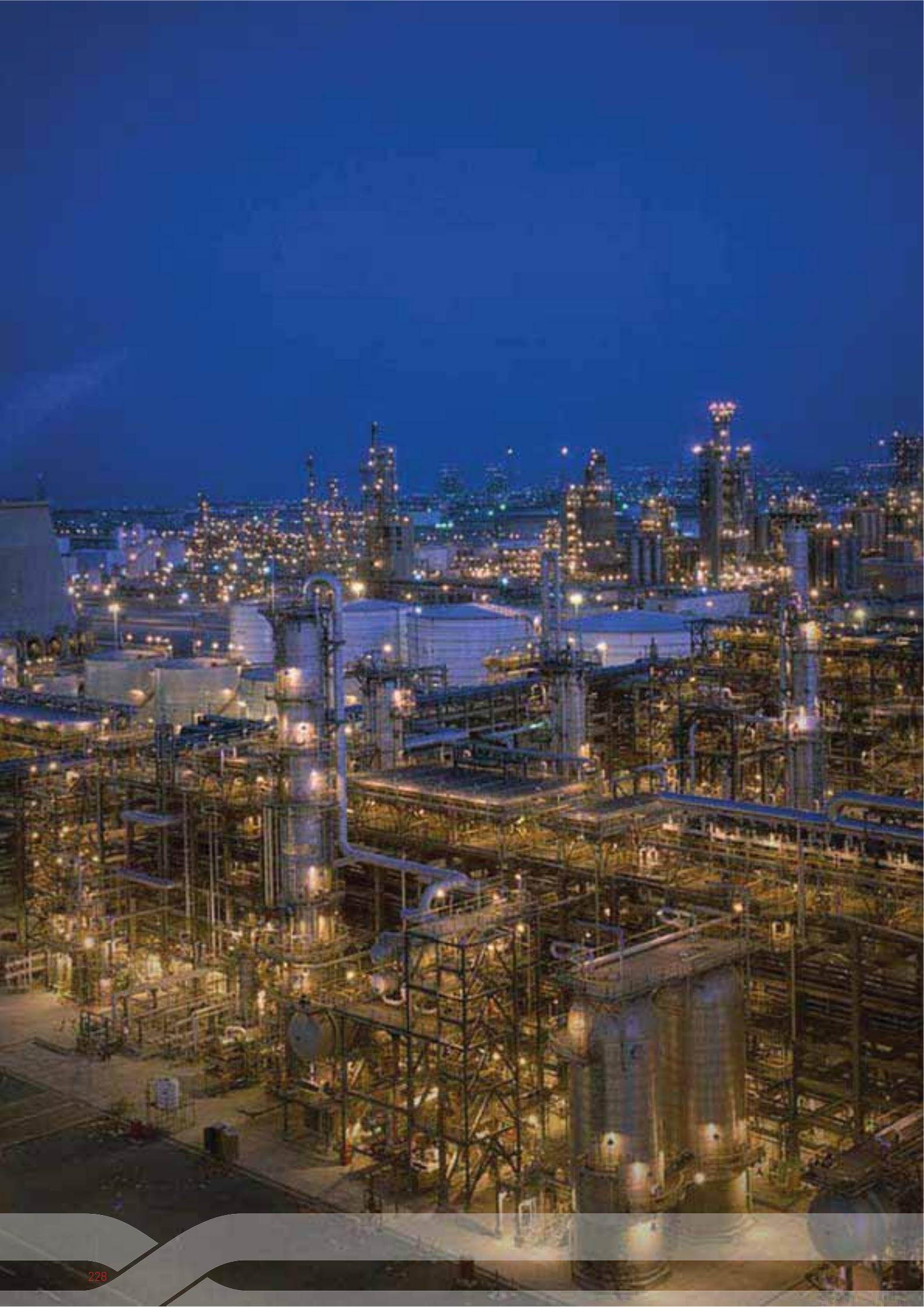
Brass Nickel Chrome	2	Material
Stainless Steel AISI 316	4	

GK UNI 6125	1	1° Thread
ISO Metric "M"	2	
NPT ANSI B.20.1	3	
PG DIN 40430	5	

PG	NPT	ISO "M"	GK	
-	-	16	-	0
16	1/2"	20	1/2"	1
21	3/4"	25	3/4"	2
29	1"	32	1"	3
-	1" 1/4	40	1" 1/4	4
36	1" 1/2	50	1" 1/2	5
42	2"	63	2"	6
48	2"1/2	75	2"1/2	7
-	3"	80	3"	8

GK UNI 6125	1	2° Thread
ISO Metric "M"	2	
NPT ANSI B.20.1	3	
PG DIN 40430	5	

PG	NPT	ISO "M"	GK	
-	-	16	-	0
16	1/2"	20	1/2"	1
21	3/4"	25	3/4"	2
29	1"	32	1"	3
-	1" 1/4	40	1" 1/4	4
36	1" 1/2	50	1" 1/2	5
42	2"	63	2"	6
48	2"1/2	75	2"1/2	7
-	3"	80	3"	8



# PLUGS & SOCKET-OUTLETS



**P.230**

- FSX - Socket-outlet & welding receptacle - Stainless steel AISI 316L
- FSAL - Socket-outlet & welding receptacle - Copper free aluminium
- FSR - Socket-outlet & welding receptacle - GRP
- FPR - Plugs - GRP

# PLUGS & SOCKET-OUTLETS

## Receptacles - FSX



Stainless steel AISI 316L housing and glass fiber reinforced polyester block contacts.

Thanks to the design of block contact turning on suitable hinges, FS.. socket outlets & welding receptacles allow an easy wiring and maintenance.

When open, all space corresponding to surface O.D. of apparatus is available for wiring operation.

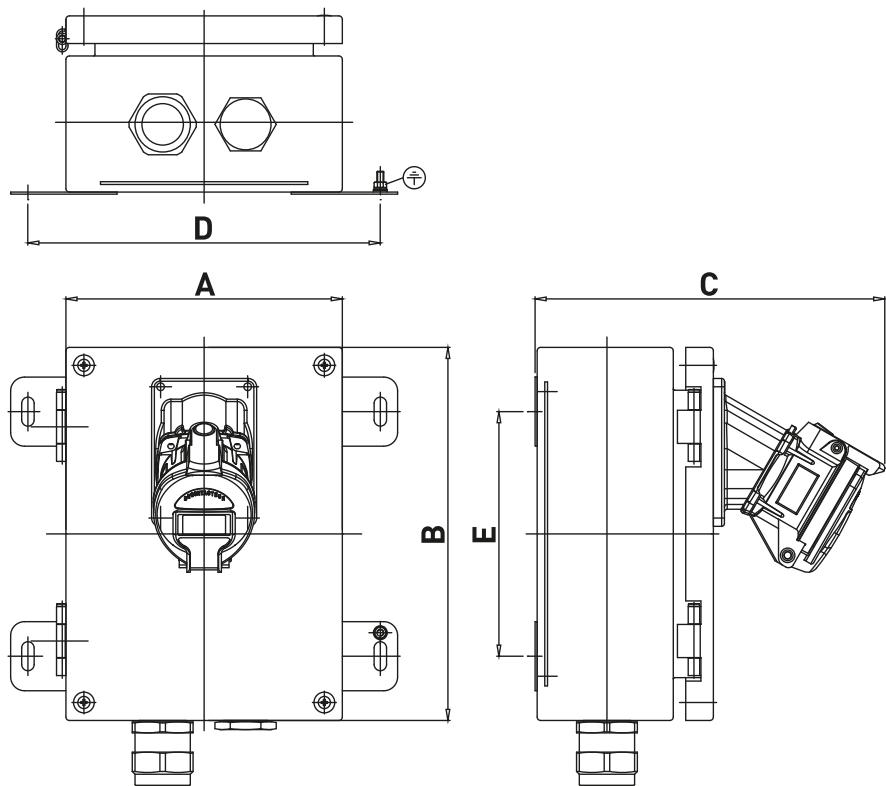
Also, by the twin terminal for each polarity, foreseen it is possible the loop of power cable, saving therefore the costs of one extra junction box, two cable glands and man power cost for wiring in between junction box and socket outlet.

Cross section of looping terminal strip allows use of cable size over the socket full load.

## TECHNICAL FEATURES

<b>Material</b>	Enclosure: AISI316L Stainless steel Socket: GRP
<b>IP rating</b>	IP66
<b>Ambient temperature range</b>	-40°C to +60°C
<b>Approvals</b>	INERIS 06ATEX0015 (standard) TR CU (marking upon request)
<b>Marking</b>	II 2 GD EEx ed IIC T(**) EEx tD A21 IP66 T(**) ** T6/T85°C, T5/T100°C
<b>Frequency</b>	50Hz
<b>Connection terminals cross section flexible cores/rigid cores</b>	For 20 A = 10 / 10 sqmm For 32 A = 16 / 16 sqmm For 63 A = 35 / 35 sqmm Smaller or bigger terminal sizes available on request.
<b>Standard certificate label</b>	Made by self adhesive UV and corrosion resistant polyester, approved by INERIS Laboratory.
<b>Standard accessories</b>	Nº1 AISI316L Stainless steel cable gland PNA type Nº1 AISI316L Stainless steel plug
<b>Accessories available upon request</b>	Drain/breather valve Traffolyte/Stainless steel certificate label Plug

## Dimensions FSX



## Receptacles - FSX

TYPE	CODE	COLOUR CODE	VOLTAGE [V]	CONTACT ARRANGEMENT	CURRENT [A]	ENTRIES	DIMENSIONS ENCLOSURE [mm]				
							A	B	C	D	E
FSX-2-20-24-50	B0401.201010		24	2P	20	2XM25	137	200	240	192	
FSX-3-20-110-50	B0401.301020		110-130	1P+N+E	20	2XM25	137	200	240	192	
FSX-3-20-230-50	B0401.301030		220-250	1P+N+E	20	2XM25	137	200	240	192	
FSX-4-20-400-50	B0401.401040		380-440	3P+E	20	2XM25	200	270	240	255	177
FSX-5-20-400-50	B0401.501040		380-440	3P+N+E	20	2XM25	200	270	240	255	177
FSX-2-32-24-50	B0401.202010		24	2P	32	2XM32	200	270	255	255	177
FSX-3-32-110-50	B0401.302020		110-130	1P+N+E	32	2XM32	200	270	255	255	177
FSX-3-32-230-50	B0401.302030		220-250	1P+N+E	32	2XM32	200	270	255	255	177
FSX-4-32-400-50	B0401.402040		380-440	3P+E	32	2XM32	200	270	255	255	177
FSX-5-32-400-50	B0401.502040		380-440	3P+N+E	32	2XM32	200	270	255	255	177
FSX-2-63-24-50	B0401.203010		24	2P	63	2XM50	270	350	265	325	257
FSX-3-63-110-50	B0401.303020		110-130	1P+N+E	63	2XM50	270	350	265	325	257
FSX-3-63-230-50	B0401.303030		220-250	1P+N+E	63	2XM50	270	350	265	325	257
FSX-4-63-400-50	B0401.403040		380-440	3P+E	63	2XM50	270	350	265	325	257
FSX-5-63-400-50	B0401.503040		380-440	3P+N+E	63	2XM50	270	350	265	325	257

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

# PLUGS & SOCKET-OUTLETS

## Receptacles - FSAL



Aluminium with low content of copper housing and glass fiber reinforced polyester block contacts.

Thanks to the design of block contact turning on suitable hinges, FS.. socket outlets & welding receptacles allow an easy wiring and maintenance.

When open, all space corresponding to surface O.D. of apparatus is available for wiring operation.

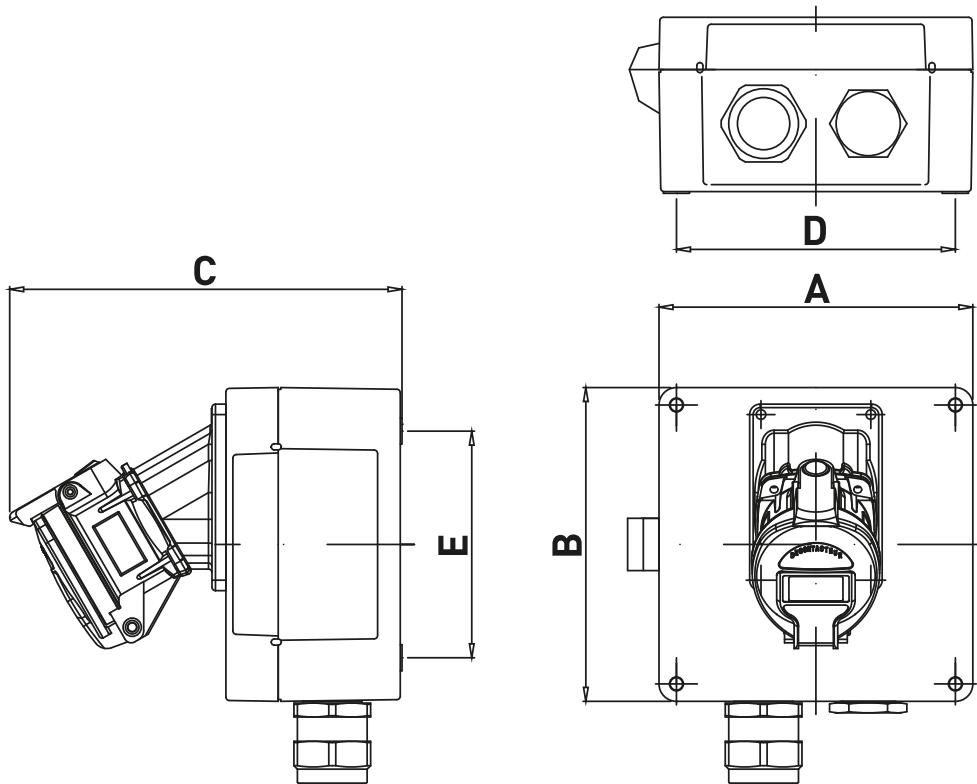
Also, by the twin terminal for each polarity, foreseen it is possible the loop of power cable, saving therefore the costs of one extra junction box, two cable glands and man power cost for wiring in between junction box and socket outlet.

Cross section of looping terminal strip allows use of cable size over the socket full load.

## TECHNICAL FEATURES

<b>Material</b>	Enclosure: Aluminium with low content of copper Socket: GRP
<b>IP rating</b>	IP66
<b>Ambient temperature range</b>	-40°C to +60°C
<b>Approvals</b>	INERIS 06ATEX0015 (standard) TR CU (marking upon request)
<b>Marking</b>	II 2 GD EEx ed IIC T(**) EEx tD A21 IP66 T(**) ** T6/T85°C, T5/T100°C
<b>Frequency</b>	50Hz
<b>Connection terminals cross section flexible cores/rigid cores</b>	For 20 A = 10 / 10 sqmm For 32 A = 16 / 16 sqmm For 63 A = 35 / 35 sqmm Smaller or bigger terminal sizes available on request.
<b>Standard certificate label</b>	Made by self adhesive UV and corrosion resistant polyester, approved by INERIS Laboratory.
<b>Standard accessories</b>	Nº1 Nickel chrome plated brass cable gland PNA type Nº1 Nickel chrome plated brass plug
<b>Accessories available upon request</b>	Drain/breather valve Taffolyte/Stainless steel certificate label Plug

## Dimensions FSAL



### Receptacles - FSAL

TYPE	CODE	COLOUR CODE	VOLTAGE [V]	CONTACT ARRANGEMENT	CURRENT [A]	ENTRIES	DIMENSIONS ENCLOSURE [mm]				
							A	B	C	D	E
FSAL-2-20-24-50	B0402.201010		24	2P	20	2XM25	122	120	200	106	82
FSAL-3-20-110-50	B0402.301020		110-130	1P+N+E	20	2XM25	122	120	200	106	82
FSAL-3-20-230-50	B0402.301030		220-250	1P+N+E	20	2XM25	122	120	200	106	82
FSAL-4-20-400-50	B0402.401040		380-440	3P+E	20	2XM25	160	160	200	140	110
FSAL-5-20-400-50	B0402.501040		380-440	3P+N+E	20	2XM25	160	160	200	140	110
FSAL-2-32-24-50	B0402.202010		24	2P	32	2XM32	180	180	230	160	130
FSAL-3-32-110-50	B0402.302020		110-130	1P+N+E	32	2XM32	180	180	230	160	130
FSAL-3-32-230-50	B0402.302030		220-250	1P+N+E	32	2XM32	180	180	230	160	130
FSAL-4-32-400-50	B0402.402040		380-440	3P+E	32	2XM32	202	232	240	180	180
FSAL-5-32-400-50	B0402.502040		380-440	3P+N+E	32	2XM32	202	232	240	180	180
FSAL-2-63-24-50	B0402.203010		24	2P	63	2XM50	202	232	250	180	180
FSAL-3-63-110-50	B0402.303020		110-130	1P+N+E	63	2XM50	202	232	250	180	180
FSAL-3-63-230-50	B0402.303030		220-250	1P+N+E	63	2XM50	202	232	250	180	180
FSAL-4-63-400-50	B0402.403040		380-440	3P+E	63	2XM50	313	404	250	262	383
FSAL-5-63-400-50	B0402.503040		380-440	3P+N+E	63	2XM50	313	404	250	262	383

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

# PLUGS & SOCKET-OUTLETS

## Receptacles - FSR



Glass fiber reinforced polyester housing and block contacts.

Thanks to the design of block contact turning on suitable hinges, FS.. socket outlets & welding receptacles allow an easy wiring and maintenance.

When open, all space corresponding to surface O.D. of apparatus is available for wiring operation.

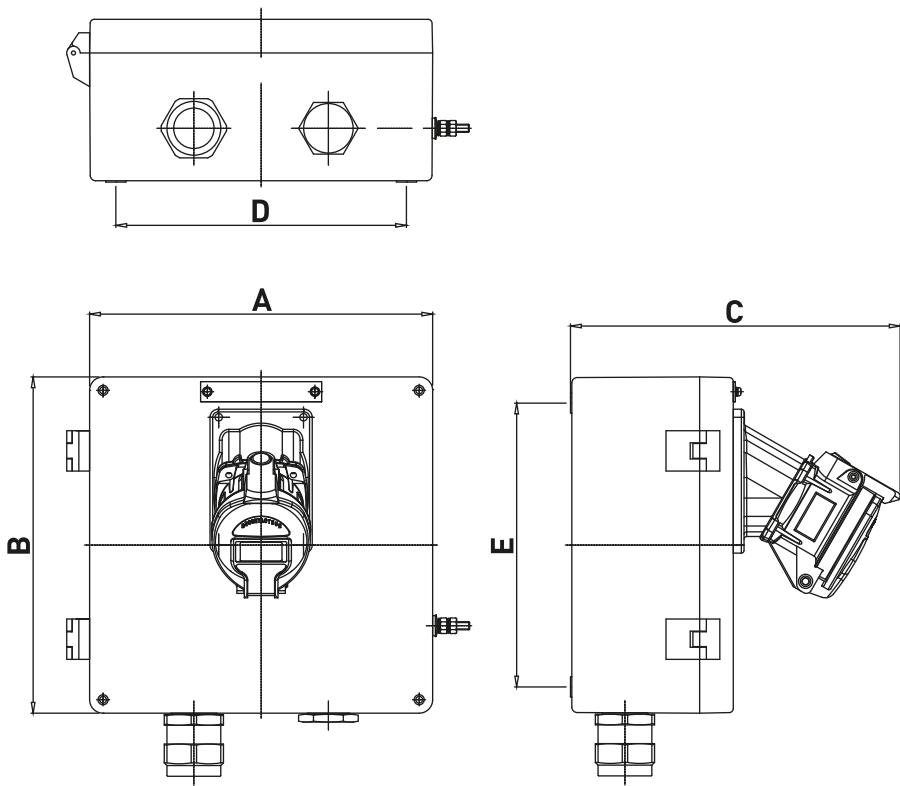
Also, by the twin terminal for each polarity, foreseen it is possible the loop of power cable, saving therefore the costs of one extra junction box, two cable glands and man power cost for wiring in between junction box and socket outlet.

Cross section of looping terminal strip allows use of cable size over the socket full load.

## TECHNICAL FEATURES

<b>Material</b>	Enclosure: GRP Socket: GRP
<b>IP rating</b>	IP66
<b>Ambient temperature range</b>	-40°C to +60°C
<b>Approvals</b>	INERIS 06ATEX0015 (standard) TR CU (marking upon request)
<b>Marking</b>	II 2 GD EEx ed IIC T(**) EEx tD A21 IP66 T(**) ** T6/T85°C, T5/T100°C
<b>Frequency</b>	50Hz
<b>Connection terminals cross section flexible cores/rigid cores</b>	For 20 A = 10 / 10 sqmm For 32 A = 16 / 16 sqmm For 63 A = 35 / 35 sqmm Smaller or bigger terminal sizes available on request.
<b>Standard certificate label</b>	Made by self adhesive UV and corrosion resistant polyester, approved by INERIS Laboratory.
<b>Standard accessories</b>	Nº1 Nickel chrome plated brass cable gland PNA type Nº1 Nickel chrome plated brass plug
<b>Accessories available upon request</b>	Drain/breather valve Taffolyte/Stainless steel certificate label Plug

## Dimensions FSR



## Receptacles - FSR

TYPE	CODE	COLOUR CODE	VOLTAGE [V]	CONTACT ARRANGEMENT	CURRENT [A]	ENTRIES	DIMENSIONS ENCLOSURE [mm]				
							A	B	C	D	E
FSR-2-20-24-50	B0403.201010		24	2P	20	2XM25	122	120	200	106	82
FSR-3-20-110-50	B0403.301020		110-130	1P+N+E	20	2XM25	122	120	200	106	82
FSR-3-20-230-50	B0403.301030		220-250	1P+N+E	20	2XM25	122	102	200	106	82
FSR-4-20-400-50	B0403.401040		380-440	3P+E	20	2XM25	160	160	200	140	110
FSR-5-20-400-50	B0403.501040		380-440	3P+N+E	20	2XM25	160	160	200	140	110
FSR-2-32-24-50	B0403.202010		24	2P	32	2XM32	225	250	245	235	200
FSR-3-32-110-50	B0403.302020		110-130	1P+N+E	32	2XM32	225	250	245	235	200
FSR-3-32-230-50	B0403.302030		220-250	1P+N+E	32	2XM32	255	250	245	235	200
FSR-4-32-400-50	B0403.402040		380-440	3P+E	32	2XM32	225	250	245	235	200
FSR-5-32-400-50	B0403.502040		380-440	3P+N+E	32	2XM32	225	250	245	235	200
FSR-2-63-24-50	B0403.203010		24	2P	63	2XM50	225	250	245	235	200
FSR-3-63-110-50	B0403.303020		110-130	1P+N+E	63	2XM50	225	250	245	235	200
FSR-3-63-230-50	B0403.303030		220-250	1P+N+E	63	2XM50	225	250	245	235	200
FSR-4-63-400-50	B0403.403040		380-440	3P+E	63	2XM50	225	250	245	235	200
FSR-5-63-400-50	B0403.503040		380-440	3P+N+E	63	2XM50	225	250	245	235	200

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

## PLUGS & SOCKET-OUTLETS

# Plugs FPR



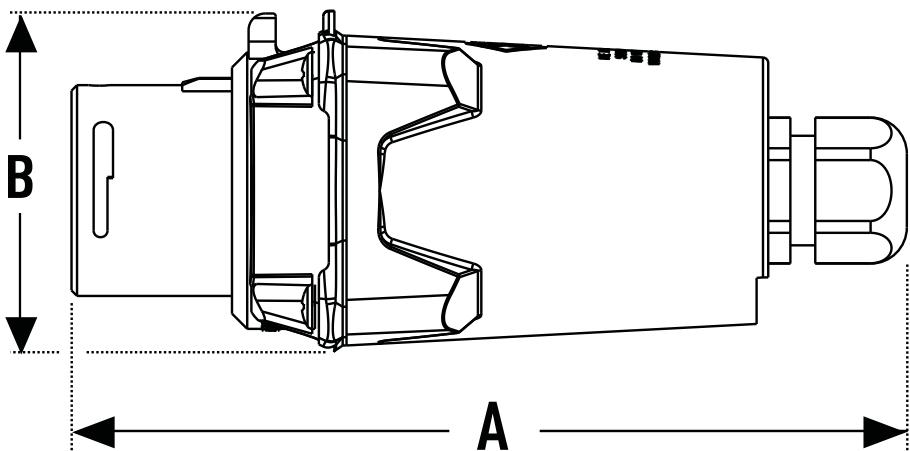
Plugs based on DXN technology, compatible with socket outlet & welding receptacles series: FSR, FSX, FSAL.

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

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

## Dimensions FPR



## Plugs FPR

TYPE	CODE	COLOUR CODE	CABLE GLAND	VOLTAGE [V]	CONTACT ARRANGEMENT	CURRENT [A]	DIMENSIONS [mm]	
							A	B
FPR-2-20-24-50	B0404.000025		M20 (8÷13)	24	2P	20	127	51
FPR-2-20-24-50	B0404.000027		M25 (13÷19)	24	2P	20	127	51
FPR-3-20-110-50	B0404.000035		M20 (8÷13)	110-130	1P+N+E	20	127	51
FPR-3-20-110-50	B0404.000039		M25 (13÷19)	110-130	1P+N+E	20	127	51
FPR-3-20-230-50	B0404.000036		M20 (8÷13)	220-250	1P+N+E	20	127	51
FPR-3-20-230-50	B0404.000033		M25 (13÷19)	220-250	1P+N+E	20	127	51
FPR-4-20-400-50	B0404.000051		M20 (8÷13)	380-440	3P+E	20	127	51
FPR-4-20-400-50	B0404.000049		M25 (13÷19)	380-440	3P+E	20	127	51
FPR-5-20-400-50	B0404.000061		M20 (8÷13)	380-440	3P+N+E	20	127	51
FPR-5-20-400-50	B0404.000057		M25 (13÷19)	380-440	3P+N+E	20	127	51
FPR-2-32-24-50	B0404.000026		M20 (8÷13)	24	2P	32	128	68
FPR-2-32-24-50	B0404.000028		M25 (13÷19)	24	2P	32	128	68
FPR-2-32-24-50	B0404.000030		M32 (17÷25)	24	2P	32	128	68
FPR-3-32-110-50	B0404.000037		M20 (8÷13)	110-130	1P+N+E	32	128	68
FPR-3-32-110-50	B0404.000040		M25 (13÷19)	110-130	1P+N+E	32	128	68
FPR-3-32-110-50	B0404.000044		M32 (17÷25)	110-130	1P+N+E	32	128	68
FPR-3-32-230-50	B0404.000038		M20 (8÷13)	220-250	1P+N+E	32	128	68
FPR-3-32-230-50	B0404.000041		M25 (13÷19)	220-250	1P+N+E	32	128	68
FPR-3-32-230-50	B0404.000034		M32 (17÷25)	220-250	1P+N+E	32	128	68
FPR-4-32-400-50	B0404.000052		M20 (8÷13)	380-440	3P+E	32	128	68
FPR-4-32-400-50	B0404.000053		M25 (13÷19)	380-440	3P+E	32	128	68
FPR-4-32-400-50	B0404.000055		M32 (17÷25)	380-440	3P+E	32	128	68
FPR-5-32-400-50	B0404.000062		M20 (8÷13)	380-440	3P+N+E	32	128	68
FPR-5-32-400-50	B0404.000083		M25 (13÷19)	380-440	3P+N+E	32	128	68
FPR-5-32-400-50	B0404.000058		M32 (17÷25)	380-440	3P+N+E	32	128	68
FPR-2-63-24-50	B0404.000029		M25 (13÷19)	24	2P	63	149	83
FPR-2-63-24-50	B0404.000031		M32 (17÷25)	24	2P	63	149	83
FPR-2-63-24-50	B0404.000032		M40 (24÷32)	24	2P	63	149	83
FPR-3-63-110-50	B0404.000042		M25 (13÷19)	110-130	1P+N+E	63	149	83
FPR-3-63-110-50	B0404.000045		M32 (17÷25)	110-130	1P+N+E	63	149	83
FPR-3-63-110-50	B0404.000047		M40 (24÷32)	110-130	1P+N+E	63	149	83
FPR-3-63-230-50	B0404.000043		M25 (13÷19)	220-250	1P+N+E	63	149	83
FPR-3-63-230-50	B0404.000046		M32 (17÷25)	220-250	1P+N+E	63	149	83
FPR-3-63-230-50	B0404.000048		M40 (24÷32)	220-250	1P+N+E	63	149	83
FPR-4-63-400-50	B0404.000054		M25 (13÷19)	380-440	3P+E	63	149	83
FPR-4-63-400-50	B0404.000056		M32 (17÷25)	380-440	3P+E	63	149	83
FPR-4-63-400-50	B0404.000050		M40 (24÷32)	380-440	3P+E	63	149	83
FPR-5-63-400-50	B0404.000084		M25 (13÷19)	380-440	3P+N+E	63	149	83
FPR-5-63-400-50	B0404.000087		M32 (17÷25)	380-440	3P+N+E	63	149	83
FPR-5-63-400-50	B0404.000059		M40 (24÷32)	380-440	3P+N+E	63	149	83



# MARECHAL ELECTRIC PRODUCTS



P.240

## Explosion-proof products

- DXN
- DX
- PNCX
- MULTICONTACTS
- SPEX
- MXBS
- B2X

P.242

## Industrial products

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

# **EXPLOSION-PROOF PRODUCTS**

## **DXN / DX / PNCX / MULTICONTACTS / SPeX**

## **MXBS / B2X**

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 94/9/EC 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

### MULTICONTACTS 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



## MXBS / B2X

### SOCKET BOXES & JUNCTION BOXES

#### Up to 350 A

#### II2 G D Ex e IIC

- IP66 water- and dust-tight
- Combination of multi-contact connectors and socket-outlets on the same distribution box
- Glass reinforced, graphite-filled polyester resin enclosures



## PNCX

### COMPACT CONNECTOR - 10 A

#### II 3 G D Ex nAc IIC

- Zones 2 (gas) and 22 (dust)
- Compact and easy to use
- IP66/IP67 watertight (IP68 according to specification)
- Long life



## 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 700 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 90 A**

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



## SELF-EJECTING

### 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.



# CORRESPONDENCES OLD → NEW REFERENCES

OLD CODE	NEW CODE	PRODUCT	OLD CODE	NEW CODE	PRODUCT
A.0421.14	A0101.111111	FL-15SA - 230V 50Hz [-20°;+55°] - RAL6003	A.0423.21	A0302.124101	EVF-P 118 LE-NP-90-220/240V [-20°;+50°]-RAL6003
A.0421.15	A0101.111211	FL-25SA - 230V 50Hz [-20°;+55°] - RAL6003	A.0424.21	A0302.124301	EVF-P 136 LE-NP-90-220/240V [-20°;+50°]-RAL6003
A.0421.19	A0101.111311	FL-40SA - 230V 50Hz [-20°;+55°] - RAL6003	A.0425.21	A0302.124501	EVF-P 158 LE-NP-90-220/240V [-20°;+50°]-RAL6003
NEW CODE	A0101.411311	FL-40SA - 230V 50Hz [-50°;+55°] - RAL6003	A.0435.61	A0401.022000	EVde-2/NA-B 70 -230V 50Hz [-20°;+60°]T3-RAL6003
A.0421.20	A0102.111211	FL-25IM - 230V 50Hz [-20°;+55°] - RAL6003	9.0801.55	A0401.032000	EVde-3/NA-B 70 -230V 50Hz [-20°;+60°]T4-RAL6003
A.0421.25	A0102.111311	FL-40IM - 230V 50Hz [-20°;+55°] - RAL6003	A.0435.62	A0401.043000	EVde-4/NA-B 100 -230V 50Hz [-20°;+60°]T3-RAL6003
NEW CODE	A0102.111314	FL-40IM - 230V 50Hz [-50°;+55°] - RAL6003	A.0435.63	A0401.044000	EVde-4/NA-B 150 -230V 50Hz [-20°;+60°]T3-RAL6003
A.0421.30	A0103.111211	FL-25HG - 230V 50Hz [-20°;+55°] - RAL6003	A.0435.64	A0401.045000	EVde-4/NA-B 250 -230V 50Hz [-20°;+60°]T3-RAL6003
A.0421.35	A0103.111311	FL-40HG - 230V 50Hz [-20°;+55°] - RAL6003	A.0435.66	A0401.055000	EVde-5/NA-B 250 -230V 50Hz [-20°;+60°]T3-RAL6003
A.0421.40	A0104.111411	FL-50HA - 230V 50/60Hz [-20°;+55°] - RAL6003	A.0435.67	A0401.056000	EVde-5/NA-B 400 -230V 50Hz [-20°;+60°]T3-RAL6003
A.0421.45	A0104.111513	FL-14HA - 24Vcc [-20°;+55°] - RAL6003	A.0435.51	A0402.021000	EVde-2/HG-B 50 -230V 50Hz [-20°;+60°]T3-RAL6003
A.0421.46	A0104.111514	FL-14HA - 48Vcc [-20°;+55°] - RAL6003	A.0435.52	A0402.022000	EVde-2/HG-B 80 -230V 50Hz [-20°;+60°]T3-RAL6003
A.2213.00	A0201.111112	RMS-540-03/IND - 1x18W - [+50°]	A.0435.54	A0402.033000	EVde-3/HG-B 125 -230V 50Hz [-20°;+60°]T4-RAL6003
A.2211.00	A0201.111212	RMS-540-04/IND - 2x18W - [+50°]	A.0435.56	A0402.044000	EVde-4/HG-B 250 -230V 50Hz [-20°;+60°]T3-RAL6003
A.2214.00	A0201.111312	RMS-540-01/IND - 1x36W - [+50°]	A.0435.58	A0402.054000	EVde-5/HG-B 250 -230V 50Hz [-20°;+60°]T3-RAL6003
A.2212.00	A0201.111412	RMS-540-02/IND - 2x36W - [+50°]	A.0435.59	A0402.055000	EVde-5/HG-B 400 -230V 50Hz [-20°;+60°]T3-RAL6003
A.2205.00	A0201.211111	RMS-550-03/PNL - 1x18W - [-20°;+50°] T5	NEW CODE	A0402.100003	EVCC-3/HG-B 125 -230V 50Hz [-20°;+40°]T3-RAL6003
A.2201.00	A0201.211211	RMS-550-04/PNL - 2x18W - [-20°;+50°] T5	A.0405.77	A0403.043000	EVde-4/IM-B 150 -230V 50Hz [-20°;+60°]T3-RAL6003
A.2206.00	A0201.211311	RMS-550-01/PNL - 1x36W - [-20°;+50°] T5	A.0435.71	A0403.044000	EVde-4/IM-B 250 -230V 50Hz [-20°;+60°]T3-RAL6003
A.2202.00	A0201.211411	RMS-550-02/PNL - 2x36W - [-20°;+50°] T5	A.0435.73	A0403.054000	EVde-5/IM-B 250 -230V 50Hz [-20°;+60°]T3-RAL6003
A.2227.01	A0201.311111	RMS-560-03/PNL - 1x18W - [-20°;+55°] T5	A.0435.74	A0403.055000	EVde-5/IM-B 400 -230V 50Hz [-20°;+60°]T3-RAL6003
A.2230.01	A0201.311211	RMS-560-04/PNL - 2x18W - [-20°;+55°] T5	NEW CODE	A0404.031003	EVde-3/LED 18 -115/240V 50/60Hz [-50°;+60°]T4-RAL6003
A.2231.01	A0201.311311	RMS-560-01/PNL - 1x36W - [-20°;+55°] T5	A.0436.54	A0404.031010	EVde-3/LED 18 -24Vdc [-50°;+60°]T4-RAL6003
A.2232.01	A0201.311411	RMS-560-02/PNL - 2x36W - [-20°;+55°] T5	A.0422.13	A0404.091000	EVde-WAR -230V 50/60Hz [-20°;+60°]T3-RAL6003-LED 1x6W RED
A.2227.00	A0201.312111	RMS-560-03/PNL/MS - 1x18W - [-20°;+55°] T5	A.0422.15	A0404.122000	EVA-WAD 2x6W -230V 50/60Hz [-20°;+60°]T3-RAL6003-CAP RED
A.2230.00	A0201.312211	RMS-560-04/PNL/MS - 2x18W - [-20°;+55°] T5	A.0413.14	A0404.131000	EVA-3/18 LED (EVP18) -115/240V 50/60Hz [-20°;+60°]T4-RAL6003
A.2231.00	A0201.312311	RMS-560-01/PNL/MS - 1x36W - [-20°;+55°] T5	A.0413.15	A0404.131100	EVA-3/18 LED (EVP-18) -24Vdc [-20°;+60°]T4-RAL6003
A.2232.00	A0201.312411	RMS-560-02/PNL/MS - 2x36W - [-20°;+55°] T5	A.0434.45	A0404.251000	EVCC-5/LED 1x60W -220/240V 50/60Hz [-20°;+40°]T5-RAL6003
A.2221.00	A0202.111312	RMS-540-03/IND LE-P-90 - 1x18W - [+50°]	NEW CODE	A0404.251003	EVCC-5/LED 1x60W -220/240V 50/60Hz [-50°;+60°]T4-RAL6003
A.2222.00	A0202.111321	RMS-540-04/IND LE-P-90 - 2x18W - [+50°]	A.0434.46	A0404.252000	EVCC-5/LED 2x60W -220/240V 50/60Hz [-20°;+40°]T5-RAL6003
A.2223.00	A0202.113312	RMS-540-01/IND LE-P-90 - 1x36W - [+50°]	A.0422.14	A0404.291000	EVCC-WAR 6W -230V 50/60Hz [-20°;+60°]T3-RAL6003-CAP RED
A.2224.00	A0202.113412	RMS-540-02/IND LE-P-90 - 2x36W - [+50°]	NEW CODE	A0405.031002	EVde-XN-3 240V 50/60Hz [-50°;+60°]T4-RAL6003-10W RED
A.2236.00	A0202.213112	RMS-550-03/PNL LE-P-90 - 1x18W - [-20°;+50°] T5	A.0414.32	A0405.031010	EVde-MXN-3 -230/240V 50/60Hz [-20°;+60°]T4-RAL6003-25W RED
A.2233.00	A0202.213212	RMS-550-04/PNL LE-P-90 - 2x18W - [-20°;+50°] T5	A.0400.41	A0406.021000	EVde-2/HA 42 -230V 50Hz [-20°;+60°]T3-RAL6003
A.2235.00	A0202.213312	RMS-550-01/PNL LE-P-90 - 1x36W - [-20°;+50°] T5	A.0400.42	A0406.022000	EVde-2/HA 70 -230V 50Hz [-20°;+60°]T3-RAL6003
A.2234.00	A0202.213412	RMS-550-02/PNL LE-P-90 - 2x36W - [-20°;+50°] T5	A.0416.61	A0406.022001	EVde-PT/HA 70 -230V 50Hz [-20°;+60°]T3-RAL6003
A.2227.02	A0202.313112	RMS-560-03/PNL LE-P-90 - 1x18W - [-20°;+55°] T5	NEW CODE	A0406.022010	EVde-2/HA 70 -230V 50Hz [-50°;+60°]T3-RAL6003
A.2230.02	A0202.313212	RMS-560-04/PNL LE-P-90 - 2x18W - [-20°;+55°] T5	A.0400.43	A0406.023000	EVde-2/HA 105 -230V 50Hz [-20°;+60°]T3-RAL6003
A.2231.02	A0202.313312	RMS-560-01/PNL LE-P-90 - 1x36W - [-20°;+55°] T5	NEW CODE	A0406.023010	EVde-2/HA 105 -230V 50Hz [-50°;+60°]T3-RAL6003
A.2232.02	A0202.313412	RMS-560-02/PNL LE-P-90 - 2x36W - [-20°;+55°] T5	A.0421.12	A0406.032001	EVde-WAR -230V 50Hz [-20°;+60°]T3-RAL6003-1x70W RED
A.0423.01	A0301.121101	EVF-P 118-220/240V [-20°;+50°]-RAL6003	A.0400.44	A0406.034000	EVde-3/HA 140 -230V 50Hz [-20°;+60°]T3-RAL6003
A.0426.01	A0301.121201	EVF-P 218-220/240V [-20°;+50°]-RAL6003	A.0400.45	A0406.041100	EVde-4/FC 45 -230V 50/60Hz [-20°;+60°]T5-RAL6003
A.0424.02	A0301.121301	EVF-P 136-220/240V [-20°;+50°]-RAL6003	A.0400.46	A0406.042100	EVde-4/FC 65 -230V 50/60Hz [-20°;+60°]T5-RAL6003
A.0427.01	A0301.121401	EVF-P 236-220/240V [-20°;+50°]-RAL6003	A.0413.12	A0406.121100	EVA-1/HA 42 (EVP-60) -230V 50Hz [-20°;+60°]T3-RAL6003
A.0425.01	A0301.121501	EVF-P 158-220/240V [-20°;+50°]-RAL6003	A.0413.13	A0406.122000	EVA-2/HA 70 (EVP-100) -230V 50Hz [-20°;+60°]T3-RAL6003
A.0428.01	A0301.121601	EVF-P 258-220/240V [-20°;+50°]-RAL6003	A.0422.12	A0406.132101	EVA-WAD 2x70W -230V 50/60Hz [-20°;+60°]T3-RAL6003- RED
A.0423.20	A0302.122101	EVF-P 118 LE-P-90-220/240V [-20°;+50°]-RAL6003	A.0414.53	A0406.222000	EVCC-PR3/HA 70 -230V 50Hz [-20°;+40°]T3-RAL6003
A.0426.20	A0302.122201	EVF-P 218 LE-P-90-220/240V [-20°;+50°]-RAL6003	A.0416.11	A0406.222001	EVCC-PT/HA 70 -230V 50Hz [-20°;+60°]T4-RAL6003
A.0424.20	A0302.122301	EVF-P 136 LE-P-90-220/240V [-20°;+50°]-RAL6003	NEW CODE	A0406.222003	EVCC-2/HA 70 -230V 50Hz [-20°C;+60°C]T3-RAL6003
A.0427.20	A0302.122401	EVF-P 236 LE-P-90-220/240V [-20°;+50°]-RAL6003	A.0420.12	A0406.232001	EVCC-WAR 1x70W -230V 50Hz [-20°;+60°]T3-RAL6003- RED
A.0425.20	A0302.122501	EVF-P 158 LE-P-90-220/240V [-20°;+50°]-RAL6003	P.0418.54	A0A01.000004	PROTECTION GUARD FOR FL floodlight - A2
A.0428.20	A0302.122601	EVF-P 258 LE-P-90-220/240V [-20°;+50°]-RAL6003	A.0530.70	A0A02.053070	MOUNTING KIT H1 FOR RMS-540-550-560
A.0428.60	A0302.123601	EVF-P 258 LE-P-180-220/240V [-20°;+50°]-RAL6003	A.0530.71	A0A02.123601	MOUNTING KIT P12 FOR RMS-540-550-560

OLD CODE	NEW CODE	PRODUCT
A.0530.72	A0A02.053072	MOUNTING KIT G2 FOR RMS-560 EM.
A.0530.74	A0A02.053074	MOUNTING KIT P13 FOR RMS-560 EM
A.0530.75	A0A02.053075	MOUNTING KIT G1 FOR RMS-540-550-560
A.0530.76	A0A02.053076	MOUNTING KIT H3 FOR RMS-560 (18W)
A.0423.60	A0A03.000001	MOUNTING KIT G3 FOR EVFP
A.0423.61	A0A03.000002	MOUNTING KIT P14 FOR EVFP - POLE 1"1/2
A.0423.62	A0A03.000004	MOUNTING KIT P14 FOR EVFP - POLE 2"
A.0530.44	A0A04.000001	MOUNTING KIT P4 FOR EVDE - POLE 1" 1/2
A.0530.45	A0A04.000002	MOUNTING KIT P5 FOR EVDE - POLE 2"
A.0504.02	A0A04.000008	REV-2 REFLECTOR FOR EV..-2 PAINTED RAL9003
A.0504.03	A0A04.000009	REV-3 REFLECTOR FOR EV..-3 PAINTED RAL9003
A.0504.04	A0A04.000010	REV-4 REFLECTOR FOR EV..-4 PAINTED RAL9003
A.0504.10	A0A04.000011	REVD-4 REFLECTOR FOR EV..-4 BRILLANTATO
P.0505.06	A0A04.000016	GEV-4 PROTECTION GUARD FOR EV..-4 - AISI 304
P.0505.12	A0A04.000018	GEV-2 PROTECTION GUARD FOR EV..-2 - AISI 304
A.0530.79	A0A04.000043	REVD-5 REFLECTOR
A.0530.80	A0A04.000044	GEV-5-P PROTECTION GUARD FOR EV..-5 WITH REVD - AISI 304
A.0530.81	A0A04.000045	GEV-5 PROTECTION GUARD FOR EV..-5 - AISI 304
P.0505.13	A0A04.000046	GEV-3 PROTECTION GUARD FOR EV..-3 - AISI 304
A.0259.10	B0101.000020	EJB-2AL NV+PS
A.0259.01	B0101.000021	EJB-2AL RAL6003+PS
A.0260.10	B0101.000030	EJB-3AL NV+PS
A.0260.01	B0101.000031	EJB-3AL RAL6003+PS
A.0261.10	B0101.000040	EJB-4AL NV+PS
A.0261.01	B0101.000041	EJB-4AL RAL6003+PS
A.0262.10	B0101.000050	EJB-5AL NV+PS
A.0262.01	B0101.000051	EJB-5AL RAL6003+PS
A.0263.10	B0101.000060	EJB-6AL NV+PS
A.0263.01	B0101.000061	EJB-6AL RAL6003+PS
A.0265.10	B0101.000080	EJB-8AL NV+PS
A.0265.01	B0101.000081	EJB-8AL RAL6003+PS
A.0266.10	B0101.000090	EJB-9AL NV+PS
A.0266.01	B0101.000091	EJB-9AL RAL6003+PS
A.0267.10	B0101.000100	EJB-10AL NV+PS
A.0267.01	B0101.000101	EJB-10AL RAL6003+PS
A.0268.10	B0101.000110	EJB-11AL NV+PS
A.0268.01	B0101.000111	EJB-11AL RAL6003+PS
A.0269.10	B0101.000120	EJB-12AL NV+PS
A.0269.01	B0101.000121	EJB-12AL RAL6003+PS
A.0270.10	B0101.000130	EJB-13AL NV+PS
A.0270.01	B0101.000131	EJB-13AL RAL6003+PS
A.0260.13	B0101.100030	EJB-3AAL NV+PS
A.0260.03	B0101.100031	EJB-3AAL RAL6003+PS
A.0270.13	B0101.100130	EJB-13AAL NV+PS
A.0270.03	B0101.100131	EJB-13AAL RAL6003+PS
A.0244.10	B0102.000010	GUB-01AL NV+PS
A.0244.01	B0102.000011	GUB-01AL RAL6003+PS
A.0245.10	B0102.000020	GUB-02AL NV+PS
A.0245.01	B0102.000021	GUB-02AL RAL6003+PS
A.0246.10	B0102.000030	GUB-03AL NV+PS
A.0246.01	B0102.000031	GUB-03AL RAL6003+PS
A.0247.10	B0102.000040	GUB-04AL NV+PS
A.0247.01	B0102.000041	GUB-04AL RAL6003+PS

OLD CODE	NEW CODE	PRODUCT
A.0248.10	B0102.000050	GUB-05AL NV+PS
A.0248.01	B0102.000051	GUB-05AL RAL6003+PS
A.0249.10	B0102.000060	GUB-06AL NV+PS
A.0249.01	B0102.000061	GUB-06AL RAL6003+PS
A.0602.00	B0102.000120	GUB-02AL/QL RAL6003+PS
A.0603.01	B0102.000130	GUB-03AL/QL NV+PS
A.0603.00	B0102.000131	GUB-03AL/QL RAL6003+PS
A.0606.01	B0102.000160	GUB-06AL/QL NV+PS
A.0606.00	B0102.000161	GUB-06AL/QL RAL6003+PS
A.0708.20	B0103.000301	EPKZM-3 - 1" GK - RAL6003 - BLACK HANDLE
A.0708.23	B0103.000302	EPKZM-3 - 1" GK - RAL6003 - YELLOW/RED HANDLE 55x55
NEW CODE	B0103.000401	EPKZM-4 - 1" GK - RAL6003 - BLACK HANDLE
NEW CODE	B0103.000402	EPKZM-4 - 1" GK - RAL6003 - YELLOW/RED HANDLE 72x72
NEW CODE	B0201.080807	AQ-080806AL - Aluminium enclosure CERTIFIED
NEW CODE	B0201.081305	AR-081306AL - Aluminium enclosure CERTIFIED
NEW CODE	B0201.081807	AR-081806AL - Aluminium enclosure CERTIFIED
NEW CODE	B0201.082506	AR-082508AL - Aluminium enclosure CERTIFIED
NEW CODE	B0201.101009	AQ-101008AL - Aluminium enclosure CERTIFIED
NEW CODE	B0201.101609	AR-101508AL - Aluminium enclosure CERTIFIED
NEW CODE	B0201.121210	AQ-121208AL - Aluminium enclosure CERTIFIED
NEW CODE	B0201.122211	AR-122209AL - Aluminium enclosure CERTIFIED
NEW CODE	B0201.161610	AQ-161609AL - Aluminium enclosure CERTIFIED
NEW CODE	B0201.163610	AR-163609AL - Aluminium enclosure CERTIFIED
NEW CODE	B0201.165610	AR-162410AL - Aluminium enclosure CERTIFIED
NEW CODE	B0201.180100	AR-8A AI S - Aluminium enclosure RAL6003 CERTIFIED
NEW CODE	B0201.181100	AR-8A AI L - Aluminium enclosure RAL6003 CERTIFIED
NEW CODE	B0201.182100	AR-8A AI (Hth) - Aluminium enclosure RAL6003 CERTIFIED
NEW CODE	B0201.183100	AR-8 A1 (Hth) - Aluminium enclosure RAL6003 CERTIFIED
NEW CODE	B0201.184100	AQ-8A AI (Hth) - Aluminium enclosure RAL6003 CERTIFIED
NEW CODE	B0201.232012	AR-202311AL - Aluminium enclosure CERTIFIED
NEW CODE	B0201.232812	AR-232811AL - Aluminium enclosure CERTIFIED
NEW CODE	B0201.233314	AR-233312AL - Aluminium enclosure CERTIFIED
NEW CODE	B0301.000887	AQ-080806P - GRP enclosure CERTIFIED
NEW CODE	B0301.121212	AQ-121209P - GRP enclosure CERTIFIED
NEW CODE	B0301.122210	AR-122209P - GRP enclosure CERTIFIED
NEW CODE	B0301.161610	AQ-161609P - GRP enclosure CERTIFIED
NEW CODE	B0301.162610	AR-162609P - GRP enclosure CERTIFIED
NEW CODE	B0301.163610	AR-163609P - GRP enclosure CERTIFIED
NEW CODE	B0301.252613	AQ-252612P - GRP enclosure CERTIFIED
NEW CODE	B0301.254013	AR-254012P - GRP enclosure CERTIFIED
NEW CODE	B0301.256013	AR-256012P - GRP enclosure CERTIFIED
NEW CODE	B0301.414013	AQ-414012P - GRP enclosure CERTIFIED
A.4300.26	B0401.201010	FSX-2p-20A-24V-50Hz
A.4300.31	B0401.202010	FSX-2-32-24-50 -
A.4300.36	B0401.203010	FSX-2-63-24-50 -
A.4300.27	B0401.301020	FSX-3-20-110-50 -
A.4300.28	B0401.301030	FSX-3-20-230-50 -
A.4300.32	B0401.302020	FSX-3-32-110-50 -
A.4300.33	B0401.302030	FSX-3-32-230-50 -
A.4300.37	B0401.303020	FSX-3-63-110-50 -
A.4300.38	B0401.303030	FSX-3-63-230-50 -
A.4300.29	B0401.401040	FSX-4-20-400-50 -

# CORRESPONDENCES OLD → NEW REFERENCES

OLD CODE	NEW CODE	PRODUCT
A.4300.34	B0401.402040	FSX-4-32-400-50 -
A.4300.39	B0401.403040	FSX-4-63-400-50 -
A.4300.30	B0401.501040	FSX-5-20-400-50 -
A.4300.35	B0401.502040	FSX-5-32-400-50 -
A.4300.40	B0401.503040	FSX-5-63-400-50 -
A.4300.50	B0402.201010	FSAL-2-20-24-50 -
A.4300.55	B0402.202010	FSAL-2-32-24-50 -
A.4300.60	B0402.203010	FSAL-2-63-24-50 -
A.4300.51	B0402.301020	FSAL-3-20-110-50 -
A.4300.52	B0402.301030	FSAL-3-20-230-50 -
A.4300.56	B0402.302020	FSAL-3-32-110-50 -
A.4300.57	B0402.302030	FSAL-3-32-230-50 -
A.4300.61	B0402.303020	FSAL-3-63-110-50 -
A.4300.62	B0402.303030	FSAL-3-63-230-50 -
A.4300.53	B0402.401040	FSAL-4-20-400-50 -
A.4300.58	B0402.402040	FSAL-4-32-400-50 -
A.4300.63	B0402.403040	FSAL-4-63-400-50 -
A.4300.54	B0402.501040	FSAL-5-20-400-50 -
A.4300.59	B0402.502040	FSAL-5-32-400-50 -
A.4300.64	B0402.503040	FSAL-5-63-400-50 -
A.4300.01	B0403.201010	FSR-2-20-24-50
A.4300.06	B0403.202010	FSR-2-32-24-50
A.4300.11	B0403.203010	FSR-2-63-24-50
A.4300.02	B0403.301020	FSR-3-20-110-50
A.4300.03	B0403.301030	FSR-3-20-230-50
A.4300.07	B0403.302020	FSR-3-32-110-50
A.4300.08	B0403.302030	FSR-3-32-230-50
A.4300.12	B0403.303020	FSR-3-63-110-50
A.4300.13	B0403.303030	FSR-3-63-230-50
A.4300.04	B0403.401040	FSR-4-20-400-50
A.4300.09	B0403.402040	FSR-4-32-400-50
A.4300.14	B0403.403040	FSR-4-63-400-50
A.4300.05	B0403.501040	FSR-5-20-400-50
A.4300.10	B0403.502040	FSR-5-32-400-50
A.4300.15	B0403.503040	FSR-5-63-400-50
A.4100.02	B0501.000200	AR-2 - AISI316 enclosure
A.4101.02	B0501.000201	AR-2 - AISI316 enclosure with hinges LS
NEW CODE	B0501.000205	AR-2 - AISI316 enclosure with hinges LLS CERTIFIED
A.4100.04	B0501.000400	AR-4 - AISI316 enclosure
A.4101.04	B0501.000401	AR-4 - AISI316 enclosure with hinges LLS
NEW CODE	B0501.000405	AR-4/FR - AISI316 enclosure - 1FLC
NEW CODE	B0501.000409	AR-4 - AISI316 enclosure with hinges LLS CERTIFIED
A.4100.06	B0501.000600	AR-6 - AISI316 enclosure
A.4101.06	B0501.000601	AR-6 - AISI316 enclosure with hinges
NEW CODE	B0501.000603	AR-6 - AISI316 enclosure CERTIFIED
NEW CODE	B0501.000606	AR-6/FR - AISI316 enclosure - 4FL
NEW CODE	B0501.000607	AR-6/FR - AISI316 enclosure - 4FL CERTIFIED
A.4100.08	B0501.000800	AR-8 - AISI316 enclosure
A.4101.08	B0501.000801	AR-8 - AISI316 enclosure with hinges
A.4100.18	B0501.000810	AR-8A - AISI316 enclosure
A.4101.18	B0501.000811	AR-8A - AISI316 enclosure with hinges LS
NEW CODE	B0501.000813	AR-8A/FR - AISI316 enclosure with hinges - 3FL
NEW CODE	B0501.000919	AR-8 - AISI316 enclosure CERTIFIED

OLD CODE	NEW CODE	PRODUCT
A.4110.06	B0501.001600	AQ-6 - AISI316 enclosure
A.4111.06	B0501.001601	AQ-6 - AISI316 enclosure with hinges
NEW CODE	B0501.001603	AQ-6/FR - AISI316 enclosure 1FLI
A.4110.08	B0501.001800	AQ-8 - AISI316 enclosure
A.4111.08	B0501.001801	AQ-8 - AISI316 enclosure with hinges LS
NEW CODE	B0501.001803	AQ-8 - Cassetta CERTIFIED
NEW CODE	B0501.001804	AQ-8 - Cassetta con cerniere LS CERTIFIED
A.4111.56	B0501.411601	AQ-6/FR - AISI316 enclosure with hinges - 4FL
NEW CODE	B0502.100000	AQR-121009 - AISI316 enclosure CERTIFIED
NEW CODE	B0502.100001	AQR-151510 - AISI316 enclosure CERTIFIED
NEW CODE	B0502.100002	AQR-202010 - AISI316 enclosure CERTIFIED
NEW CODE	B0502.100003	AQR-202015 - AISI316 enclosure CERTIFIED
NEW CODE	B0502.100004	AQR-282815 - AISI316 enclosure CERTIFIED
NEW CODE	B0502.100005	AQR-302015 - AISI316 enclosure CERTIFIED
NEW CODE	B0502.100006	AQR-383815 - AISI316 enclosure CERTIFIED
NEW CODE	B0502.100007	AQR-384515 - AISI316 enclosure CERTIFIED
NEW CODE	B0502.100008	AQR-204015 - AISI316 enclosure CERTIFIED
NEW CODE	B0502.100009	AQR-383820 - AISI316 enclosure CERTIFIED
Z.0100.01	B0601.000001	GUMT-325 EARTHING SYSTEM
A.0079.31	B0602.000001	PTA ISEO-1 SINGLE CIRCUIT + 11 MT. CABLE 1X6MMQ
A.0079.10	B0602.000002	PTA ISEO-2 DOUBLE CIRCUIT + 11 MT. CABLE 3X3MMQ
A.0496.01	B0701.000001	EMH-90AL RAL6003-M25x1,5
A.0497.01	B0701.000002	EMH-160AL RAL6003+PS
A.0498.01	B0701.000003	EMH-175AL RAL6003+PS
A.0499.01	B0701.000004	EMH-200AL RAL6003+PS
A.0500.01	B0701.000005	EMH-230AL RAL6003+PS
A.0496.02	B0701.000006	EMH-90AL RAL6003-3/4"NPT
NEW CODE	B0801.000025	CPST-26 3/4"NPT RAL6003
NEW CODE	B0801.000026	CPSX-26 M25x1,5 RAL6003
NEW CODE	B0801.000027	CPX-26 3/4"NPT RAL6003
NEW CODE	B0801.000028	CPX-26 M25x1,5 RAL6003
NEW CODE	B0801.000030	CPSG-36 1"NPT RAL6003
NEW CODE	B0801.000031	CPSX-26 3/4"NPT RAL6003
NEW CODE	B0801.000032	CPSX-36 1"NPT RAL6003
NEW CODE	B0801.000034	CPC-26 M25x1,5 RAL6003
NEW CODE	B0801.000036	CPSC-36 1"GK RAL6003
NEW CODE	B0801.000037	CPC-26 3/4"GK RAL6003
NEW CODE	B0801.000100	CPSC-26 3/4"NPT RAL6003
A.0451.02	B0803.000001	CPC-26/EFSRC-220 M25x1,5 - [-20°;+40°] - RAL6003
A.0451.04	B0803.000002	CPC-26/EFSRC-420 M25x1,5 - [-20°;+40°] - RAL6003
A.0451.11	B0803.000004	CPC-26/EFDCN-1-90 M25x1,5-RAL6003
A.0451.12	B0803.000005	CPC-26/EFSRC-220 3/4"NPT - [-20°;+40°] - RAL6003
A.0451.14	B0803.000006	CPC-26/EFSRC-420 3/4"NPT - [-20°;+40°] - RAL6003
A.0451.21	B0803.000008	CPC-26/EFDCN-2-90 M25X1,5-RAL6003
A.0452.04	B0803.000013	CPSC-26/EFSRC-432 M25x1,5 - [-20°;+40°] - RAL6003
A.0452.06	B0803.000015	CPSC-26/EFDCN-1-120 M25X1,5 RAL6003
A.0452.14	B0803.000016	CPSC-26/EFSRC-432 3/4"NPT - [-20°;+40°] - RAL6003
A.0452.21	B0803.000018	CPSC-26/EFDCN-2-120 M25X1,5 RAL6003
A.0452.31	B0803.000020	CPSC-36/EFDCN-3-120 M32x1,5 RAL6003
A.0452.41	B0803.000023	CPSC-36/EFDCN-4-120 M32x1,5 RAL6003
A.0453.02	B0803.000030	CPC-26/EFSRC-D-220 M25x1,5 - [-20°;+40°] - RAL6003
A.0453.03	B0803.000031	CPSC-26/EFSRC-D-320 M25x1,5 - [-20°;+40°] - RAL6003
A.0453.13	B0803.000032	CPC-26/EFSRC-D-220 3/4"NPT - [-20°;+40°] - RAL6003

OLD CODE	NEW CODE	PRODUCT
A.0454.02	B0803.000033	CPC-26/EFSRC-C-220 M25x1,5 - [-20°;+40°] - RAL6003
A.0454.03	B0803.000034	CPS-26/EFSRC-C-320 M25x1,5 - [-20°;+40°] - RAL6003
A.0454.12	B0803.000035	CPC-26/EFSRC-C-220 3/4"NPT - [-20°;+40°] - RAL6003
A.0460.01	B0803.000036	CPC-26/EFDCN-P M25x1,5-RAL6003-PULS.BLACK 1NO/1NC
A.0460.11	B0803.000038	CPC-26/EFDCN-P 3/4"NPT - [-20°;+40°] - RAL6003
A.0461.11	B0803.000039	CPC-26/EFDCN-PP M25X1,5 - [-20°;+40°]-RAL6003
A.0461.31	B0803.000040	CPC-26/EFDCN-PP 3/4"NPT - [-20°;+40°] - RAL6003
A.0462.15	B0803.000041	CPS-26/EFDCN-PPL M25x1,5 - RAL6003-PB.1NO-PR.1NC-L.R.
A.0462.25	B0803.000042	CPS-26/EFDCN-PPL 3/4"NPT - RAL6003-PB.1NO-PR.1NC-L.R.
A.0493.01	B0803.000043	CPC-26/EFDCN-EM M25x1,5 -[-20°;+40°]-RAL6003-P.BLACK
A.0493.11	B0803.000044	CPC-26/EFDCN-EM 3/4"NPT {-20°;+40°}-RAL6003-P.BLACK
A.0493.21	B0803.000045	CPC-26/EFDCN-EMM25x1,5 -[-20°;+40°]-RAL6003-PBLACKPRESSED
A.0494.01	B0803.000046	CPC-26/EFDCN-PE M25x1,5 - [-20°;+40°] - RAL6003
NEW CODE	B0803.000096	CPC-26/EFDCN-EM M25x1,5 -[-20°;+40°]-RAL6003-P.RED
A.0275.28	BOA01.000020	STF-2 GALV-EJB-2 [COPPIA]
A.0275.29	BOA01.000021	STF-3 GALV-EJB-3 [COPPIA]
A.0275.30	BOA01.000022	STF-5 GALV-EJB-5 [COPPIA]
A.0275.32	BOA01.000023	STF-6 GALV-EJB-6 [COPPIA]
A.0275.34	BOA01.000024	STF-8 GALV-EJB-8 [COPPIA]
A.0275.35	BOA01.000025	STF-9 GALV-EJB-9 [COPPIA]
A.0275.36	BOA01.000026	STF-10 GALV-EJB-10 [COPPIA]
A.0275.37	BOA01.000027	STF-11 GALV-EJB-11 [COPPIA]
A.0275.38	BOA01.000028	STF-12 GALV-EJB-12 [COPPIA]
A.0275.39	BOA01.000029	STF-13 GALV-EJB-13 [COPPIA]
A.5000.01	B1301.500001	XBW4BA11 P.B. WHITE WITH NO CONTACT BCK
A.5000.02	B1301.500002	XBW4BA21 P.B. BLACK WITH NO CONTACT BCK
A.5000.03	B1301.500003	XBW4BA31 P.B. GREEN WITH NO CONTACT BCK
A.5000.04	B1301.500004	XBW4BA42 P.B. RED WITH NC CONTACT BCK
A.5000.05	B1301.500005	XBW4BA51 P.B. YELLOW WITH NO CONTACT BC
A.5000.06	B1301.500006	XBW4BA61 P.B. BLUE WITH NO CONTACT BCK
A.5000.07	B1301.500007	XBW4BA22 PUSH BUTTON BLACK+NC CONTACT
A.5000.08	B1301.500008	XBW4BA41 PUSH BUTTON RED+NO CONTACT
A.5000.09	B1301.500009	XBW5AD33 SELECTOR SWITCH 3 STAYPUT POS.
A.5010.01	B1301.501001	XBW4BC21 Mushroom Head Spring Return BL
A.5010.02	B1301.501002	XBW4BC31 SPRING RETURN MUSHROOM P.B. GR
A.5010.03	B1301.501003	XBW4BC42 SPRING RETURN MUSHROOM P.B. RE
A.5010.04	B1301.501004	XBW4BC51 SPRING RETURN MUSHROOM P.B. YE
A.5010.05	B1301.501005	XBW4BC61 SPRING RETURN MUSHROOM P.B. BL
A.5020.01	B1301.502001	XBW4BD21 STANDARD HANDLE SELECTOR SWITCH
A.5040.01	B1301.504001	XBW4BD33 STANDARD HANDLE SELECTOR SWITC
A.5060.01	B1301.506001	XBW4BD41 STANDARD HANDLE SELECTOR SWITC
A.5080.01	B1301.508001	XBW4BD53 STANDARD HANDLE SELECTOR SWITC
A.5100.01	B1301.510001	XBW4BD73 STANDARD HANDLE SELECTOR SWITC
A.5120.01	B1301.512001	XBW4BD83 STANDARD HANDLE SELECTOR SWITC
A.5140.01	B1301.514001	XBW4BG03 KEY SWITCH WITH KEY No 455 3
A.5140.02	B1301.514002	XBW4BG083 KEY SWITCH WITH KEY No 455 3 P
NEW CODE	B1301.514003	XBW4BG093 KEY SWITCH WITH KEY No 455 3
A.5140.04	B1301.514004	XBW4BG13 KEY SWITCH WITH KEY No 455 3 P
A.5140.05	B1301.514005	XBW4BG21 KEY SWITCH WITH KEY No 455 2 F
A.5140.06	B1301.514006	XBW4BG33 KEY SWITCH WITH KEY No 455 3
A.5140.07	B1301.514007	XBW4BG41 KEY SWITCH WITH KEY No 455 2 F
NEW CODE	B1301.514008	XBW4BG53 KEY SWITCH WITH KEY No 455 3
A.5140.10	B1301.514010	XBW4BG73 KEY SWITCH WITH KEY No 455 3 P

OLD CODE	NEW CODE	PRODUCT
A.5140.11	B1301.514011	XBW4BG83 KEY SWITCH WITH KEY No 455 3 P
A.5160.01	B1301.516001	XBW4BJ21 LONG HANDLE SELECTOR SWITCH 2
A.5160.02	B1301.516002	XBW4BJ33 LONG HANDLE SELECTOR SWITCH 3
A.5160.04	B1301.516004	XBW4BJ53 LONG HANDLE SELECTOR SWITCH 3
A.5160.05	B1301.516005	XBW4BJ73 LONG HANDLE SELECTOR SWITCH 3
A.5160.06	B1301.516006	XBW4BJ83 LONG HANDLE SELECTOR SWITCH 3
A.5160.08	B1301.516008	XBW5AD21 Selector Switch 2 stayput posi
A.5160.14	B1301.516014	XBW5AD41 Selector Switch 2 pos.spring r
A.5160.16	B1301.516016	XBW5AD53 Selector Switch 3 pos.spring r
A.5160.19	B1301.516019	XBW5AD73 Selector Switch 3 pos.spring r
A.5160.21	B1301.516021	XBW5AD83 Selector Switch 3 pos.spring r
A.5170.01	B1301.517001	XBW4BL11 PROJECTING P.B. WHITE WITH NO
A.5170.02	B1301.517002	XBW4BL21 PROJECTING P.B. BLACK WITH NO
A.5170.03	B1301.517003	XBW4BL31 PROJECTING P.B. GREEN WITH NO
A.5170.04	B1301.517004	XBW4BL42 PROJECTING P.B. RED WITH NC CO
A.5170.05	B1301.517005	XBW4BL51 PROJECTING P.B. YELLOW WITH NO
A.5170.06	B1301.517006	XBW4BL61 PROJECTING P.B. BLUE WITH NO C
A.5180.01	B1301.518001	XBW4BP11 BOOTED P.B. WHITE WITH NO CONT
A.5180.02	B1301.518002	XBW4BP21 BOOTED P.B. BLACK WITH NO CONT
A.5180.05	B1301.518005	XBW4BP51 BOOTED P.B. YELLOW WITH NO CON
A.5180.06	B1301.518006	XBW4BP61 BOOTED P.B. BLUE WITH NO CONTA
A.5180.13	B1301.518013	XBW5AP11 Push button WHITE + NO Contact
A.5180.14	B1301.518014	XBW5AP21 Push button BLACK + NO Contact
A.5180.16	B1301.518016	XBW5AP31 Push button GREEN + NO Contact
A.5180.19	B1301.518019	XBW5AP42 Push button RED + NC Contact
A.5180.23	B1301.518023	XBW5AP61 Push button BLUE + NO Contact
A.5180.24	B1301.518024	XBW5AP515 PUSH BUTTON
A.5190.01	B1301.519001	XBW4BS142 KEY MUSHROOM P.B. TURN TO RELE
A.5200.01	B1301.520001	XBW4BS542 MUSHROOM P.B. TURN TO RELEASE
A.5220.02	B1301.522002	XBW5AC21 Mushroom Head Spring Return BL
A.5220.03	B1301.522003	XBW5AC31 Mushroom Head Spring Return GR
A.5220.04	B1301.522004	XBW5AC41 Mushroom Head Spring Return RE
A.5220.05	B1301.522005	XBW5AC51 Mushroom Head Spring Return YE
A.5220.06	B1301.522006	XBW5AC61 Mushroom Head Spring Return BL
A.5220.07	B1301.522007	XBW5AS142 Mushroom Head turn to release
A.5220.09	B1301.522009	XBW5AS542 Mushroom Head turn to release
A.5260.01	B1301.526001	XLW4BV013 LED MULTIVOLTAGE P. L. 2 WHITE
A.5260.02	B1301.526002	XLW4BV033 LED MULTIVOLTAGE P.L. 2 GREEN
A.5260.03	B1301.526003	XLW4BV043 LED MULTIVOLTAGE P. L. 2 RED
A.5260.04	B1301.526004	XLW4BV053 LED MULTIVOLTAGE P.L. 2 ORANGE
A.5260.05	B1301.526005	XLW4BV063 LED MULTIVOLTAGE P. L. 2 BLUE
A.5260.06	B1301.526006	XLW5AV013 WHITE Pilot light Multivoltage
A.5260.08	B1301.526008	XLW5AV033 GREEN Pilot light Multivoltage
A.5260.10	B1301.526010	XLW5AV043 RED Pilot light Multivoltage 2
A.5260.12	B1301.526012	XLW5AV053 YELLOW Pilot light Multivoltag
A.5260.14	B1301.526014	XLW5AV063 BLUE Pilot light Multivoltage
A.0276.11	B1302.000100	PLA-10 BLACK
NEW CODE	B1302.000101	PLA-10 BLACK COMPONENT.CERT.
A.0276.12	B1302.000200	PLA-20 RED
NEW CODE	B1302.000201	PLA-20 RED COMPONENT.CERT.
A.0276.13	B1302.000300	PLA-30 GREEN
NEW CODE	B1302.000301	PLA-30 GREEN COMPONENT.CERT.
A.0276.24	B1302.000400	PLA-40 BLUE

# CORRESPONDENCES OLD → NEW REFERENCES

OLD CODE	NEW CODE	PRODUCT	OLD CODE	NEW CODE	PRODUCT
A.0276.90	B1302.000900	PLA-50 YELLOW	A.1506.00	B1401.100601	PNA-6 BNK-2" GK
A.0277.11	B1303.000100	PLD-10 WHITE	A.1506.63	B1401.100602	PNA-6 BNK-M63
A.0277.12	B1303.000200	PLD-20 RED	A.1506.50	B1401.100603	PNA-6 BNK-2" NPT
A.0277.13	B1303.000300	PLD-30 GREEN	A.1507.00	B1401.100701	PNA-7 BNK-2" 1/2 GK
A.0277.14	B1303.000400	PLD-40 YELLOW	A.1507.75	B1401.100702	PNA-7 BNK-M75
A.0277.15	B1303.000500	PLD-50 BLUE	A.1507.50	B1401.100703	PNA-7 BNK-2" 1/2 NPT
A.0542.51	B1304.001200	PSRC-120 ON-LOAD SWITCH	A.1508.00	B1401.100801	PNA-8 BNK-3" GK
A.0543.51	B1304.001320	PSRC-132 ON-LOAD SWITCH	A.1508.80	B1401.100802	PNA-8 BNK-M80
A.0542.52	B1304.002200	PSRC-220 ON-LOAD SWITCH	A.1508.50	B1401.100803	PNA-8 BNK-3" NPT
A.0543.62	B1304.002250	PSRC-232 ON-LOAD SWITCH	A.1504.40	B1401.101502	PNA-5 BNK-M40
A.0542.53	B1304.003200	PSRC-320 ON-LOAD SWITCH	NEW CODE	B1401.110102	PNA-1 BNK-M20 A1
A.0543.53	B1304.003320	PSRC-332 ON-LOAD SWITCH	NEW CODE	B1401.110103	PNA-1 BNK-1/2" NPT A1
A.0542.54	B1304.004200	PSRC-420 ON-LOAD SWITCH	NEW CODE	B1401.120103	PNA-1 BNK-1/2" NPT A2
A.0543.54	B1304.004320	PSRC-432 ON-LOAD SWITCH	NEW CODE	B1401.120202	PNA-2 BNK-M25 A2
A.0544.51	B1304.011200	PSRC-D 120 CHANGE OVER SWITCH	NEW CODE	B1401.120203	PNA-2 BNK-3/4" NPT A2
A.0544.52	B1304.012200	PSRC-D 220 CHANGE OVER SWITCH	NEW CODE	B1401.120302	PNA-3 BNK-M32 A2
A.0544.53	B1304.013200	PSRC-D 320 CHANGE OVER SWITCH	NEW CODE	B1401.130203	PNA-2 BNK-M25 A3
A.0545.51	B1304.021200	PSRC-C 120 STEP BY STEP SWITCH	A.1701.00	B1401.200101	PNS-1 BNK-1/2" GK
A.0545.52	B1304.022200	PSRC-C 220 STEP BY STEP SWITCH	A.1701.20	B1401.200102	PNS-1 BNK-M20
A.0545.53	B1304.023200	PSRC-C 320 STEP BY STEP SWITCH	A.1701.50	B1401.200103	PNS-1 BNK-1/2" NPT
NEW CODE	B1304.023500	PSRC-C STEP BY STEP SWITCH VOLT. 7 POS. (BLACK HANDLE)	A.1702.00	B1401.200201	PNS-2 BNK- 3/4" GK
NEW CODE	B1304.023501	PSRC-C STEP BY STEP SWITCH VOLT. 12 POS. (BLACK HANDLE)	A.1702.25	B1401.200202	PNS-2 BNK-M25
NEW CODE	B1304.023510	PSRC-C STEP BY STEP SWITCH AMP. 4 POS. (BLACK HANDLE)	A.1702.50	B1401.200203	PNS-2 BNK- 3/4" NPT
A.0279.31	B1305.001011	PLF-10 NO/NO KEY WITHDRAWAL IN 0	A.1703.00	B1401.200301	PNS-3 BNK-1" GK
A.0279.21	B1305.001012	PLF-10 NO/NC KEY WITHDRAWAL IN 0	A.1703.32	B1401.200302	PNS-3 BNK-M32
A.0279.11	B1305.001022	PLF-10 NC/NC KEY WITHDRAWAL IN 0	A.1703.50	B1401.200303	PNS-3 BNK-1" NPT
NEW CODE	B1305.001024	PLF-10 NC/NC KEY WITHDRAWAL IN 0-1	A.1704.00	B1401.200401	PNS-5 BNK- 1" 1/4 GK
A.2002.15	B1307.000099	New Elfin_020E01_CONTACT 1NC X PLA	NEW CODE	B1401.200402	PNS-5 BNK-M40
A.2002.16	B1307.000100	New Elfin_020E10_CONTACT 1NO X PLA	A.1705.00	B1401.200501	PNS-5 BNK-1" 1/2 GK
A.5300.01	B1307.000244	ZBWV1 SPARE PILOT LIGHT BODY WHITE,	A.1705.50	B1401.200502	PNS-5 BNK-M50
A.5300.02	B1307.000245	ZBWV3 SPARE PILOT LIGHT BODY FOR GRE	A.1705.60	B1401.200503	PNS-5 BNK-1" 1/2 NPT
A.0276.14	B1309.000100	PLB-10 BLACK LOCKABLE PUSH BUTTON	A.1706.00	B1401.200601	PNS-6 BNK-2" GK
A.0276.15	B1309.000200	PLB-20 RED LOCKABLE PUSH BUTTON	A.1707.00	B1401.200701	PNS-7 BNK-2" 1/2 GK
A.0276.16	B1309.000300	PLB-30 GREEN LOCKABLE PUSH BUTTON	A.1707.75	B1401.200702	PNS-7 BNK-M75
A.0276.17	B1310.000101	PLC-I MUSHROOM MOMENTARY	NEW CODE	B1401.200703	PNS-7 BNK-2" 1/2 NPT
A.0276.18	B1310.000201	PLC-S NC/NO MUSHROOM STEADY	A.1708.00	B1401.200801	PNS-8 BNK-3" GK
A.0276.48	B1310.000202	PLC-S NO/NO MUSHROOM STEADY	A.1708.80	B1401.200802	PNS-8 BNK-M80
A.0276.38	B1310.000203	PLC-S NC/NC MUSHROOM STEADY	NEW CODE	B1401.210102	PNS-1 BNK-M20 A1
A.0276.19	B1310.000301	PLC-S-F KEY MUSHROOM	NEW CODE	B1401.210803	PNS-8 BNK-3" NPT
A.0276.22	B1310.000500	PLC-RIP-M32 GREEN	NEW CODE	B1401.220102	PNS-1 BNK-M20 A2
A.1501.00	B1401.100101	PNA-1 BNK-1/2" GK	NEW CODE	B1401.220103	PNS-1 BNK-1/2" NPT A2
A.1501.20	B1401.100102	PNA-1 BNK-M20	NEW CODE	B1401.220302	PNS-3 BNK-M32 A2
A.1501.50	B1401.100103	PNA-1 BNK-1/2" NPT	NEW CODE	B1401.220403	"PNS-4 BNK-1"" 1/4 NPT A3
A.1502.00	B1401.100201	PNA-2 BNK-3/4" GK	NEW CODE	B1401.230303	PNS-3 BNK-1" NPT A3
A.1502.25	B1401.100202	PNA-2 BNK-M25	NEW CODE	B1401.240202	PNS-2 BNK-3/4" NPT A4
A.1502.50	B1401.100203	PNA-2 BNK-3/4" NPT	A.1801.00	B1401.300101	PAP-1 BNK-1/2" GK
A.1503.00	B1401.100301	PNA-3 BNK- 1" GK	A.1800.20	B1401.300102	PAP-1 BNK-M20
A.1503.32	B1401.100302	PNA-3 BNK-M32	A.1801.50	B1401.300103	PAP-1 BNK-1/2" NPT
A.1503.50	B1401.100303	PNA-3 BNK- 1" NPT	A.1802.00	B1401.300201	PAP-2 BNK-3/4" GK
A.1504.00	B1401.100401	PNA-5 BNK-1*1/4 GK	A.1800.26	B1401.300202	PAP-2 BNK-M25
A.1505.00	B1401.100501	PNA-5 BNK- 1" 1/2 GK	A.1802.50	B1401.300203	PAP-2 BNK-3/4" NPT
A.1505.50	B1401.100502	PNA-5 BNK-M50	NEW CODE	B1401.300205	PAP-2 BNK-M25 A1B1
A.1505.10	B1401.100503	PNA-5 BNK-1" 1/2 NPT	NEW CODE	B1401.300215	PAP-2 BNK-M25 A2B1

OLD CODE	NEW CODE	PRODUCT
A.1803.00	B1401.300301	PAP-3 BNK-1" GK
A.1800.32	B1401.300302	PAP-3 BNK-M32
A.1803.50	B1401.300303	PAP-3 BNK-1" NPT
A.1800.34	B1401.300312	PAP-3 BNK-M32-EB
A.1805.00	B1401.300501	PAP-5 BNK-1" 1/2 GK
A.1800.50	B1401.300502	PAP-5 BNK-M50
A.1805.50	B1401.300503	PAP-5 BNK-1" 1/2 NPT
A.1806.00	B1401.300601	PAP-6 BNK-2" GK
A.1800.63	B1401.300602	PAP-6 BNK-M63
A.1806.50	B1401.300603	PAP-6 BNK-2" NPT
A.1800.64	B1401.300612	PAP-6 BNK-M63-EB
A.1807.00	B1401.300701	PAP-7 BNK-2" 1/2 GK
A.1800.75	B1401.300702	PAP-7 BNK-M75
A.1807.50	B1401.300703	PAP-7-BNK-2" 1/2 NPT
A.1800.76	B1401.300712	PAP-7 BNK-M75-EB
A.1808.00	B1401.300801	PAP-8 BNK-3" GK
A.1800.80	B1401.300802	PAP-8 BNK-M80
A.1808.50	B1401.300803	PAP-8 BNK-3" NPT
A.1805.40	B1401.301502	PAP-5 BNK-M40
NEW CODE	B1401.310101	PAP-1 BNK-1/2" GK A1B2
NEW CODE	B1401.310102	PAP-1 BNK-M20 A1B1
NEW CODE	B1401.310103	PAP-1 BNK-1/2" NPT A1B1
NEW CODE	B1401.310502	PAP-5 BNK-M50 A4B4
NEW CODE	B1401.310602	PAP-6 BNK-M63 A2B2
NEW CODE	B1401.310603	PAP-6 BNK-2" NPT A4B4
NEW CODE	B1401.311502	PAP-5 BNK-M40 A2B2
NEW CODE	B1401.320102	PAP-1 BNK-M20 A1B2
NEW CODE	B1401.320202	PAP-2 BNK-M25 A3B1
NEW CODE	B1401.320302	PAP-3 BNK-M32 A2B2
NEW CODE	B1401.330102	PAP-1 BNK-M20 A2B3
NEW CODE	B1401.330202	PAP-2 BNK-M25 A3B2
NEW CODE	B1401.330203	PAP-2 BNK-3/4" NPT A3B2
NEW CODE	B1401.340102	PAP-1 BNK-M20 A2B2
NEW CODE	B1401.340202	PAP-2 BNK-M25 A4B2
NEW CODE	B1401.350203	PAP-2 BNK-1/2" NPT A3B1
A.1810.51	B1401.400113	PDB-1 BNK-1/2" NPT
A.1810.02	B1401.400201	PDB-2 BNK-3/4" GK
A.1822.25	B1401.400202	PDB-2 BNK-M25
A.1810.52	B1401.400213	PDB-2 BNK- 3/4" NPT
A.1810.03	B1401.400311	PDB-3 BNK-1" GK
A.1810.53	B1401.400313	PDB-3 BNK-1" NPT
A.1815.50	B1401.400502	PDB-5 BNK-M50
A.1810.05	B1401.400511	PDB-5 BNK- 1" 1/2 GK
A.1810.55	B1401.400513	PDB-5 BNK-1" 1/2 NPT
NEW CODE	B1401.400516	PDB-5 BNK-1" 1/4 NPT
A.1810.06	B1401.400611	PDB-6 BNK-2" GK
A.1810.56	B1401.400613	PDB-6 BNK-2" NPT
A.1810.07	B1401.400701	PDB-7 BNK-2" 1/2 GK
A.1810.57	B1401.400713	PDB-7 BNK-2" 1/2 NPT
A.1810.08	B1401.400801	PDB-8 BNK-3" GK
A.1810.58	B1401.400813	PDB-8 BNK-3" NPT
A.1872.25	B1401.500202	PBS-2 BNK-M25
A.1873.00	B1401.500301	PBS-3 BNK-1" GK

OLD CODE	NEW CODE	PRODUCT
A.1873.32	B1401.500302	PBS-3 BNK-M32
A.2801.00	B1401.600101	PSF-1 BNK-1/2" GK - FREE COUPLING NPT
A.2801.20	B1401.600102	PSF-1 BNK-M20 - FREE COUPLING NPT
A.2801.50	B1401.600103	PSF-1 BNK-1/2" NPT - FREE COUPLING NPT
A.2802.00	B1401.600201	PSF-2 BNK-3/4" GK - FREE COUPLING NPT
A.2802.25	B1401.600202	PSF-2 BNK-M25 - FREE COUPLING NPT
A.2802.50	B1401.600203	PSF-2 BNK-3/4" NPT - FREE COUPLING NPT
A.2803.00	B1401.600301	PSF-3 BNK-1" GK - FREE COUPLING NPT
A.2803.32	B1401.600302	PSF-3 BNK-M32 - FREE COUPLING NPT
A.2803.50	B1401.600303	PSF-3 BNK-1" NPT - FREE COUPLING NPT
A.2805.00	B1401.600501	PSF-5 BNK-1" 1/2 GK - FREE COUPLING NPT
A.2805.50	B1401.600502	PSF-5 BNK-M50 - FREE COUPLING NPT
A.2805.50	B1401.600503	PSF-5 BNK-1" 1/2 NPT - FREE COUPLING NPT
A.2806.00	B1401.600601	PSF-6 BNK-2" GK - FREE COUPLING NPT
NEW CODE	B1401.600602	PSF-6 BNK-M63 - FREE COUPLING NPT
A.2806.50	B1401.600603	PSF-6 BNK-2" NPT - FREE COUPLING NPT
NEW CODE	B1401.601303	PSF AX-3 BNK-1" NPT - FREE COUPLING NPT
NEW CODE	B1401.601503	PSF AX-5 BNK-1" 1/2 NPT - FREE COUPLING NPT
NEW CODE	B1401.610112	PSF-1 BNK-M20 A1 - FREE COUPLING M20
NEW CODE	B1401.610122	PSF-1 BNK-M20 A1 - FREE COUPLING GK
NEW CODE	B1401.610123	PSF-1 BNK-1/2" NPT A1 - FREE COUPLING GK
NEW CODE	B1401.611303	PSF-3 BNK-M32 A1 - FREE COUPLING M32
NEW CODE	B1401.620112	PSF-1 BNK-M20 A2 - FREE COUPLING M20
NEW CODE	B1401.630602	PSF-6 BNK-M63 A4 - FREE COUPLING NPT
NEW CODE	B1401.630603	PSF-2 BNK-M25 - FREE COUPLING M25
NEW CODE	B1401.630613	PSF-2 BNK-M25 A3 - FREE COUPLING M25
A.2901.00	B1401.700101	PSM-1 BNK-1/2" GK - FREE NIPPLE GK
A.2901.20	B1401.700102	PSM-1 BNK-M20 - FREE NIPPLE GK
A.2901.50	B1401.700103	PSM-1 BNK-1/2" NPT - FREE NIPPLE GK
A.2902.00	B1401.700201	PSM-2 BNK-3/4" GK - FREE NIPPLE GK
A.2902.25	B1401.700202	PSM-2 BNK-M25 - FREE NIPPLE GK
A.2902.50	B1401.700203	PSM-2 BNK-3/4" NPT - FREE NIPPLE NPT
A.2903.00	B1401.700301	PSM-3 BNK-1" GK - FREE NIPPLE GK
A.2903.32	B1401.700302	PSM-3 BNK-M32 - FREE NIPPLE GK
A.2913.00	B1401.700303	PSM-3 BNK-1" NPT - FREE NIPPLE NPT
A.2905.00	B1401.700501	PSM-5 BNK-1" 1/2 GK - FREE NIPPLE GK
A.2905.50	B1401.700502	PSM-5 BNK-M50 - FREE NIPPLE GK
A.2905.60	B1401.700503	PSM-5 BNK-1" 1/2 NPT - FREE NIPPLE NPT
NEW CODE	B1401.700505	PSM-5 BNK-1" 1/2 GK - FREE NIPPLE M40
NEW CODE	B1401.700507	PSF-3 BNK-M32 - FREE COUPLING M32
NEW CODE	B1401.701203	PSM-2 BNK-3/4" NPT A1 - FREE NIPPLE NPT
NEW CODE	B1401.701303	PSM AX-3 BNK-1" NPT - FREE NIPPLE NPT
NEW CODE	B1401.701503	PSM AX-5 BNK-1" 1/2 NPT - FREE NIPPLE NPT
NEW CODE	B1401.710123	PSM-1 BNK-1/2" NPT A1 - FREE NIPPLE GK
A.2922.22	B1401.710202	PSM-2 BNK-M25 - FREE NIPPLE M25
NEW CODE	B1401.720312	PSM-3 BNK-1" NPT A1 - FREE NIPPLE M32
A.5001.00	B1401.800101	PBD-1 BNK-1/2" GK
A.5001.20	B1401.800102	"PBD-1 BNK-M20
A.5001.50	B1401.800103	PBD-1 BNK-1/2" NPT
A.5002.00	B1401.800201	PBD-2 BNK-3/4" GK
A.5002.25	B1401.800202	PBD-2 BNK-M25
A.5002.50	B1401.800203	PBD-2 BNK-3/4" NPT
A.5003.00	B1401.800301	PBD-3 BNK-1" GK

# CORRESPONDENCES OLD → NEW REFERENCES

OLD CODE	NEW CODE	PRODUCT	OLD CODE	NEW CODE	PRODUCT
A.5003.32	B1401.800302	PBD-3 BNK-M32	NEW CODE	B1401.F10203	PND-2 BNK- 3/4""NPT A1B1
A.5003.50	B1401.800303	PBD-3 BNK- 1" NPT	NEW CODE	B1401.F20203	PND-2 BNK-3/4""NPT A2B1
A.5005.00	B1401.800501	PBD-5 BNK-1" 1/2 GK	NEW CODE	B1401.F30203	PND-2 BNK-3/4""NPT A3B2
A.5005.50	B1401.800502	PBD-5 BNK-M50	NEW CODE	B1401.F40203	PND-2 BNK- 3/4""NPT A4B3
A.5005.01	B1401.800503	PBD-5 BNK-1" 1/2 NPT	A.5520.00	B1401.G00101	PAB AX-1 BNK-1/2"GK
A.5006.00	B1401.800601	PBD-6 BNK-2" GK	A.5520.20	B1401.G00102	PAB AX-1 BNK-M20
A.5006.63	B1401.800602	PBD-6 BNK-M63	A.5520.01	B1401.G00103	PAB AX-1 BNK-1/2"NPT
A.5006.50	B1401.800603	PBD-6 BNK-2" NPT	NEW CODE	B1401.G00122	PAB AX-1 BNK-M20 A1B2
A.5007.00	B1401.800701	PBD-7 BNK-2" 1/2 GK	NEW CODE	B1401.G00131	PAB AX-1 BNK-1/2""NPT A1B2
A.5007.75	B1401.800702	PBD-7 BNK-M75	NEW CODE	B1401.G00201	PAB AX-2 BNK-3/4" GK
A.5007.50	B1401.800703	PBD-7 BNK- 2" 1/2 NPT	A.5502.25	B1401.G00202	PAB AX-2 BNK-M25
A.5008.00	B1401.800801	PBD-8 BNK-3" GK	A.5502.00	B1401.G00203	PAB AX-2 BNK-3/4" NPT
A.5008.80	B1401.800802	PBD-8 BNK-M80	NEW CODE	B1401.G00232	PAB AX-2 BNK-M25 A2B1
A.5008.50	B1401.800803	PBD-8 BNK-3" NPT	NEW CODE	B1401.G00242	PAB AX-2 BNK-M25 A3B2
A.5004.00	B1401.801501	PBD-5 BNK-1" 1/4 GK	NEW CODE	B1401.G00243	PAB AX-2 BNK-3/4" NPT A3B2
A.5004.40	B1401.801502	PBD-5 BNK-M40	NEW CODE	B1401.G00252	PAB AX-2 BNK-M25 A4B3
A.5004.50	B1401.801503	PBD-5 BNK-1"" 1/4 NPT	A.5503.00	B1401.G00301	PAB AX-3 BNK-1"GK
A.5301.00	B1401.900101	PB AX-1 BNK-1/2"" GK	A.5503.32	B1401.G00302	PAB AX-3 BNK-M32
A.5301.20	B1401.900102	PB AX-1 BNK-M20	NEW CODE	B1401.G00303	PAB AX-3 BNK-1""NPT
NEW CODE	B1401.900112	PB AX-1 BNK-M20 A1	NEW CODE	B1401.G00312	PAB AX-3 BNK-M32 A2B1
NEW CODE	B1401.900122	PB AX-1 BNK-M20 A2	NEW CODE	B1401.G00313	PAB AX-3 BNK-1""NPT A2B2
A.5302.00	B1401.900201	PB AX-2 BNK- 3/4" GK	NEW CODE	B1401.G00322	PAB AX-3 BNK-M32 A2B2
A.5302.25	B1401.900202	PB AX-2 BNK-M25	A.5505.00	B1401.G00501	PAB AX-5 BNK-1" 1/2 GK
A.5302.50	B1401.900203	PB AX-2 BNK-N	A.5505.50	B1401.G00502	PAB AX-5 BNK-M50
NEW CODE	B1401.900232	PB AX-2 BNK-M25 A3	A.5505.60	B1401.G00503	PAB AX-5 BNK-1" 1/2 NPT
NEW CODE	B1401.900232	PB AX-2 BNK-M25 A3	A.1502.21	B1401.G00505	PAB AX-5 BNK-1" 1/4 NPT
A.5303.00	B1401.900301	PB AX-3 BNK-1" GK	NEW CODE	B1401.G30103	PAB AX-1 BNK-1/2""NPT A2B3
A.5303.32	B1401.900302	PB AX-3 BNK-M32	NEW CODE	B1401.G30303	PAB AX-3 BNK-1""NPT A3B3
A.5305.50	B1401.900502	PB AX-5 BNK-M50	A.1551.00	B1403.100101	PNA-1 AISI316-1/2" GK
A.5602.00	B1401.B00201	PMD-2 BNK-1/2" GK	A.1551.20	B1403.100102	PNA-1 AISI316-M20
A.5603.00	B1401.B00301	PMD-3 BNK-1" GK	A.1551.60	B1403.100103	PNA-1 AISI316-1/2" NPT
A.5401.00	B1401.D00101	PMS-1 BNK-1/2" GK	A.1552.00	B1403.100201	PNA-2 AISI316-3/4" GK
A.5401.20	B1401.D00102	PMS-1 BNK-M20	A.1552.25	B1403.100202	PNA-2 AISI316-M25
A.5401.50	B1401.D00103	PMS-1 BNK-1/2" NPT	A.1552.60	B1403.100203	PNA-2 AISI316-3/4" NPT
A.5402.00	B1401.D00201	PMS-2 BNK- 3/4" GK	A.1553.00	B1403.100301	PNA-3 AISI316-1" GK
A.5402.25	B1401.D00202	PMS-2 BNK-M25	A.1553.32	B1403.100302	PNA-3 AISI316-M32
A.5402.50	B1401.D00203	PMS-2 BNK-3/4" NPT	A.1553.60	B1403.100303	PNA-3 AISI316- 1" NPT
A.5403.00	B1401.D00301	PMS-3 BNK- 1" GK	A.1555.00	B1403.100501	PNA-5 AISI316- 1" 1/2 GK
A.5403.32	B1401.D00302	PMS-3 BNK-M32	A.1555.50	B1403.100502	PNA-5 AISI316-M50
A.5403.50	B1401.D00303	PMS-3 BNK-1"" NPT	A.1555.60	B1403.100503	PNA-5 AISI316-1" 1/2 NPT
A.5405.60	B1401.D00503	PMS-5 BNK-1" 1/2 NPT	A.1556.00	B1403.100601	PNA-6 AISI316-2" GK
NEW CODE	B1401.D10102	PMS-1 BNK-M20 A1	A.1556.63	B1403.100602	PNA-6 AISI316-M63
NEW CODE	B1401.D10202	PMS-2 BNK-M25 A1	A.1556.60	B1403.100603	PNA-6 AISI316-2" NPT
NEW CODE	B1401.D20102	PMS-1 BNK-M20 A2	A.1731.20	B1403.220102	PNS-1 AISI 316-M20
NEW CODE	B1401.D20302	PMS-3 BNK-M32 A2	A.1702.75	B1403.220202	PNS-2 AISI316-M25
NEW CODE	B1401.D30202	PMS-2 BNK-M25 A3	NEW CODE	B1403.220102	PNS-1 AISI 316-M20 A2
NEW CODE	B1401.D40202	PMS-2 BNK-M25 A4	NEW CODE	B1403.220302	PNS-3 AISI316-M32 A2
A.5102.00	B1401.E00201	PSB-2 BNK-3/4"" GK	NEW CODE	B1403.240202	PNS-2 AISI 316-M25 A4
A.5123.32	B1401.E00302	PSB-3 BNK-M32	A.1651.00	B1403.300101	PAP-1 AISI316-1/2" GK
A.5201.20	B1401.F00102	PND-1 BNK-M20	A.1651.20	B1403.300102	PAP-1 AISI316-M20
NEW CODE	B1401.F00112	PND-1 BNK-M20 A1B2	A.1651.60	B1403.300103	PAP-1 AISI316-1/2" NPT
NEW CODE	B1401.F00113	PND-1 BNK-1/2" NPT A1B1	A.1652.00	B1403.300201	PAP-2 AISI316-3/4" GK
NEW CODE	B1401.F00203	PND-2 BNK-3/4" NPT	A.1652.25	B1403.300202	PAP-2 AISI316-M25

OLD CODE	NEW CODE	PRODUCT
A.1652.60	B1403.300203	PAP-2 AISI316-3/4" NPT
A.1653.00	B1403.300301	PAP-3 AISI316-1" GK
A.1653.32	B1403.300302	PAP-3 AISI316-M32
A.1653.60	B1403.300303	PAP-3 AISI316-1" NPT
A.1655.00	B1403.300501	PAP-5 AISI316-1" 1/2 GK
A.1655.50	B1403.300502	PAP-5 AISI316-M50
A.1655.60	B1403.300503	PAP-5 AISI316-1" 1/2 NPT
A.1656.00	B1403.300601	PAP-6 AISI316-2" GK
A.1656.63	B1403.300602	PAP-6 AISI316-M63
A.1656.60	B1403.300603	PAP-6 AISI316-2" NPT
A.1657.00	B1403.300701	PAP-7 AISI316-2" 1/2 GK
A.1657.75	B1403.300702	PAP-7 AISI316-M75
A.1657.60	B1403.300703	PAP-7 AISI316-2" 1/2 NPT
A.1658.00	B1403.300801	PAP-8 AISI316-3" GK
A.1658.60	B1403.300803	PAP-8 AISI316-3" NPT
NEW CODE	B1403.300804	PAP-8 AISI316-M80
A.1654.40	B1403.301502	PAP-5 AISI316-M40
A.1654.60	B1403.301503	PAP-5 AISI316-1" 1/4 NPT
NEW CODE	B1403.320102	PAP-1 AISI316-M20 A1B2
NEW CODE	B1403.320202	PAP-2 AISI316-M25 A2B1
NEW CODE	B1403.320302	PAP-3 AISI316-M32 A2B2
NEW CODE	B1403.330102	PAP-1 AISI316-M20 A2B3
NEW CODE	B1403.330202	PAP-2 AISI316-M25 A3B2
NEW CODE	B1403.340102	PAP-1 AISI316-M20 A1B1
NEW CODE	B1403.340202	PAP-2 AISI316-M25 A4B3
NEW CODE	B1403.500102	PBS-1 AISI316-M20
NEW CODE	B1403.500202	PBS-2 AISI316-M25
NEW CODE	B1403.500302	PBS-3 AISI316-M32
NEW CODE	B1403.520302	PBS-3 AISI316-M32 A2
NEW CODE	B1403.520303	PBS-3 AISI316-M32 A2
A.2841.20	B1403.600102	PSF-1 AISI316-M20 - FREE COUPLING NPT
NEW CODE	B1403.600103	PSF-1 AISI316-1/2" NPT A1 - FREE COUPLING NPT
A.2842.00	B1403.600201	PSF-2 AISI316-3/4" GK - FREE COUPLING NPT
A.2842.25	B1403.600202	PSF-2 AISI316-M25 - FREE COUPLING NPT
A.2842.50	B1403.600203	PSF-2 AISI316-3/4" NPT - FREE COUPLING NPT
A.2843.32	B1403.600302	PSF-3 AISI316-M32 - FREE COUPLING NPT
NEW CODE	B1403.600512	PSF-5 AISI316-M50 - FREE COUPLING M40
NEW CODE	B1403.620212	PSF-2 AISI316-M25 A3 - FREE COUPLING M25
NEW CODE	B1403.620312	PSF-3 AISI316-M32 A3 - FREE COUPLING M32
NEW CODE	B1403.620322	PSF-3 AISI316-M32 A1 - FREE COUPLING M32
NEW CODE	B1403.630313	PSF-3 AISI316-1" NPT A3 - FREE COUPLING NPT
NEW CODE	B1403.630323	PSF-3 AISI316-1" NPT A1 - FREE COUPLING NPT
A.3902.25	B1403.700202	PSM-2 AISI316-M25 - FREE NIPPLE GK
A.3902.50	B1403.700203	PSM-2 AISI316-3/4" NPT - FREE NIPPLE GK
A.2943.32	B1403.700302	PSM-3 AISI316-M32 - FREE NIPPLE GK
A.2943.50	B1403.700303	PSM-3 AISI316-1" NPT - FREE NIPPLE GK
NEW CODE	B1403.700512	PSM-5 AISI316-M50 - FREE NIPPLE M40
NEW CODE	B1403.720212	PSM-2 AISI316-M25 A3 - FREE NIPPLE M25
NEW CODE	B1403.720312	PSM-3 AISI316-M32 A3 - FREE NIPPLE M32
NEW CODE	B1403.720322	PSM-3 AISI316-M32 A1 - FREE NIPPLE M32
NEW CODE	B1403.730302	PSM-3 AISI316-M32 - FREE NIPPLE NPT
NEW CODE	B1403.730313	PSM-3 AISI316-1" NPT A3 - FREE NIPPLE NPT
NEW CODE	B1403.730323	PSM-3 AISI316-1" NPT A1 - FREE NIPPLE NPT

OLD CODE	NEW CODE	PRODUCT
A.5342.25	B1403.900202	PB AX-2 AISI316-M25
A.5642.00	B1403.B00201	PMD-2 AISI316-3/4" GK
A.5442.50	B1403.D00203	PMS-2 AISI316-3/4" NPT
A.6521.20	B1403.G00102	PAB AX-1 AISI316-M20
A.6525.25	B1403.G00202	PAB AX-2 AISI316-M25
A.6532.32	B1403.G00302	PAB AX-3 AISI316-M32
A.6525.40	B1403.G00502	PAB AX-5 AISI316-M50
NEW CODE	B1403.G10102	PAB AX-1 AISI316-M20 A1B2
NEW CODE	B1403.G20202	PAB AX-2 AISI316-M25 A3B2
D.1900.01	B1407.0000A1	SET OF INNER SEALS SIZE 1
D.1900.02	B1407.0000A2	SET OF INNER SEALS SIZE 2
D.1900.03	B1407.0000A3	SET OF INNER SEALS SIZE 3
D.1900.05	B1407.0000A5	SET OF INNER SEALS SIZE 5
D.1900.06	B1407.0000A6	SET OF INNER SEALS SIZE 6
D.1900.07	B1407.0000A7	SET OF INNER SEALS SIZE 7
D.1900.08	B1407.0000A8	SET OF INNER SEALS SIZE 8
D.2000.01	B1407.0000B1	SET OF OUTER SEALS SIZE 1
D.2000.02	B1407.0000B2	SET OF OUTER SEALS SIZE 2
D.2000.03	B1407.0000B3	SET OF OUTER SEALS SIZE 3
D.2000.05	B1407.0000B5	SET OF OUTER SEALS SIZE 5
D.2000.06	B1407.0000B6	SET OF OUTER SEALS SIZE 6
D.2000.07	B1407.0000B7	SET OF OUTER SEALS SIZE 7
D.2000.08	B1407.0000B8	SET OF OUTER SEALS SIZE 8
A.1900.11	B1407.0001A1	1A1 [6-9] INNER SEAL
A.1900.12	B1407.0001A2	1A2 [9-12] INNER SEAL
A.2000.11	B1407.0001B1	1B1 [8-11] OUTER SEAL
A.2000.12	B1407.0001B2	1B2 [11-14] OUTER SEAL
A.2000.13	B1407.0001B3	1B3 [14-17] OUTER SEAL
A.1900.21	B1407.0002A1	2A1 [6-9] INNER SEAL
A.1900.22	B1407.0002A2	2A2 [9-12] INNER SEAL
A.1900.23	B1407.0002A3	2A3 [11-14] INNER SEAL
A.1900.24	B1407.0002A4	2A4 [14-17] INNER SEAL
A.2000.21	B1407.0002B1	2B1 [14-17] OUTER SEAL
A.2000.22	B1407.0002B2	2B2 [17-20] OUTER SEAL
A.2000.23	B1407.0002B3	2B3 [20-23] OUTER SEAL
A.1900.31	B1407.0003A1	3A1 [14-17] INNER SEAL
A.1900.32	B1407.0003A2	3A2 [17-20] INNER SEAL
A.1900.33	B1407.0003A3	3A3 [20-23] INNER SEAL
A.2000.31	B1407.0003B1	3B1 [20-23] OUTER SEAL
A.2000.32	B1407.0003B2	3B2 [23-26] OUTER SEAL
A.2000.33	B1407.0003B3	3B3 [26-29] OUTER SEAL
A.1900.52	B1407.0005A2	5A2 [23-26] INNER SEAL
A.1900.53	B1407.0005A3	5A3 [26-29] INNER SEAL
A.1900.54	B1407.0005A4	5A4 [29-32] INNER SEAL
A.1900.55	B1407.0005A5	5A5 [32-36] INNER SEAL
A.2000.52	B1407.0005B2	5B2 [29-32] OUTER SEAL
A.2000.53	B1407.0005B3	5B3 [32-36] OUTER SEAL
A.2000.54	B1407.0005B4	5B4 [36-39] OUTER SEAL
A.2000.55	B1407.0005B5	5B5 [39-42] OUTER SEAL
A.1900.62	B1407.0006A2	6A2 [36-39] INNER SEAL
A.1900.63	B1407.0006A3	6A3 [39-42] INNER SEAL
A.1900.64	B1407.0006A4	6A4 [42-46] INNER SEAL
A.2000.62	B1407.0006B2	6B2 [44-48] OUTER SEAL

# CORRESPONDENCES OLD → NEW REFERENCES

OLD CODE	NEW CODE	PRODUCT	OLD CODE	NEW CODE	PRODUCT
A.2000.63	B1407.0006B3	6B3 [48-52] OUTER SEAL	A.2301.53	B1410.400250	EX-V-M25-BL CABLE GLAND M25 EEX-I
A.2000.64	B1407.0006B4	6B4 [52-56] OUTER SEAL	A.2301.54	B1410.400320	EX-V-M32-BL CABLE GLAND M32 EEX-I
A.1900.72	B1407.0007A2	7A2 [44-48] INNER SEAL	A.2301.55	B1410.400500	EX-V-M50-BL CABLE GLAND M50 EEX-I
A.1900.73	B1407.0007A3	7A3 [48-52] INNER SEAL	P.2201.14	B1411.000001	GK-20 - GASCKET
A.1900.74	B1407.0007A4	7A4 [52-56] INNER SEAL	P.8620.12	B1411.000002	GK-1 - GASCKET 1/2"
A.1900.75	B1407.0007A5	7A5 [56-60] INNER SEAL	P.2201.51	B1411.000003	GK-25 - GASCKET
A.2000.72	B1407.0007B2	7B2 [55-59] OUTER SEAL	P.8620.13	B1411.000004	GK-2 - GASCKET 3/4"
A.2000.73	B1407.0007B3	7B3 [59-63] OUTER SEAL	P.8650.13	B1411.000005	GK-32 - GASCKET
A.2000.74	B1407.0007B4	7B4 [63-67] OUTER SEAL	P.8620.14	B1411.000006	GK-3 - GASCKET 1"
A.1900.84	B1407.0008A4	8A4 [56-60] INNER SEAL	P.8650.14	B1411.000007	GK-40 - GASCKET
A.1900.85	B1407.0008A5	8A5 [59-63] INNER SEAL	P.8620.15	B1411.000008	GK-4 - GASCKET 1" 1/4
A.1900.86	B1407.0008A6	8A6 [63-67] INNER SEAL	P.8650.15	B1411.000009	GK-50 - GASCKET
A.1900.87	B1407.0008A7	8A7 [67-71] INNER SEAL	P.8620.16	B1411.000010	GK-5 - GASCKET 1" 1/2
A.2000.84	B1407.0008B4	8B4 [63-67] OUTER SEAL	P.8650.16	B1411.000011	GK-63 - GASCKET
A.2000.85	B1407.0008B5	8B5 [65-69] OUTER SEAL	P.8620.17	B1411.000012	GK-6 - GASCKET 2"
A.2000.86	B1407.0008B6	8B6 [69-73] OUTER SEAL	P.8650.17	B1411.000013	GK-75 - GASCKET
A.2000.87	B1407.0008B7	8B7 [73-77] OUTER SEAL	P.8620.18	B1411.000014	GK-7 - GASCKET 2" 1/2
A.1500.10	B1409.000002	DL-1 BNK-M20	P.8650.18	B1411.000015	GK-80 - GASCKET
A.0061.61	B1409.000004	DL-1 BNK-NPT	P.8620.19	B1411.000016	GK-8 - GASCKET 3"
A.1500.09	B1409.000005	DL-0 BNK-M	H.0100.03	B1601.010003	SILICONE 7091 - 310ML
A.1500.11	B1409.000006	DL-2 BNK-M25	H.0100.30	B1601.010030	MANUAL APPLICATOR FOR SILICONE 7091
A.0061.62	B1409.000008	DL-2 BNK-NPT	G.1211.00	B1701.121100	T1 BNK-1/2" GK
A.1500.12	B1409.000009	DL-3 BNK-M32	G.1212.00	B1701.121200	T2 BNK-3/4" GK
A.0061.63	B1409.000011	DL-3 BNK-N	G.1213.00	B1701.121300	T3 BNK-G
A.1500.13	B1409.000013	DL-4 BNK-M40	G.1214.00	B1701.121400	T4 BNK-1" 1/4 GK
A.1500.14	B1409.000017	DL-5 BNK-M50	G.1215.00	B1701.121500	T5 BNK-G
A.0061.65	B1409.000019	DL-5 BNK-N	G.1216.00	B1701.121600	T6 BNK-G
A.1500.15	B1409.000020	DL-6 BNK-M63	G.1217.00	B1701.121700	T7 BNK-G
A.0061.66	B1409.000022	DL-6 BNK-N	G.1218.00	B1701.121800	T8 BNK-G
A.1500.16	B1409.000023	DL-7 BNK-M	G.1220.00	B1701.122000	T16 BNK-M
A.0061.67	B1409.000025	DL-7 BNK-N	G.1221.00	B1701.122100	T20 BNK-M20
E.0101.00	B1409.000033	PT-1 EARTHING RING	G.1222.00	B1701.122200	T25 BNK-M25
2.0001.01	B1409.000034	PGA 1 EPDM 55 PROTECTIVE SHROUD M20/1"UNI6125/NPT	G.1223.00	B1701.122300	T32 BNK-M32
2.0001.02	B1409.000035	PGA 2 EPDM 55 PROTECTIVE SHROUD M25/3/4"UNI6125/NPT	G.1224.00	B1701.122400	T40 BNK-M40
2.0001.03	B1409.000036	PGA 3 EPDM 55 PROTECTIVE SHROUD M32/1"UNI6125/NPT	G.1225.00	B1701.122500	T50 BNK-M
2.0001.05	B1409.000037	PGA5EPDM 55 PROTECTIVE SHROUD M50/M40/1 1/2"UNI6125/NPT	G.1226.00	B1701.122600	T63 BNK-M
2.0001.06	B1409.000038	PGA 6 EPDM 55 PROTECTIVE SHROUD M63/2"UNI6125/NPT	G.1227.00	B1701.122700	T75 BNK-M
2.0001.07	B1409.000039	PGA 7 EPDM 55 PROTECTIVE SHROUD M75/2 1/2"UNI6125/NPT	G.1228.00	B1701.122800	T80 BNK-M
2.0001.08	B1409.000040	PGA 8 EPDM 55 PROTECTIVE SHROUD M80/3"UNI6125/NPT	G.1231.00	B1701.123100	T1N BNK- 1/2" NPT
E.0102.00	B1409.000042	PT-2 EARTHING RING	G.1232.00	B1701.123200	T2N BNK- 3/4" NPT
E.0103.00	B1409.000043	PT-3 EARTHING RING	G.1233.00	B1701.123300	T3N BNK-N
E.0105.00	B1409.000044	PT-5 EARTHING RING	G.1234.00	B1701.123400	T4N BNK-N
E.0106.00	B1409.000045	PT-6 EARTHING RING	G.1235.00	B1701.123500	T5N BNK-1" 1/2 NPT
E.0107.00	B1409.000046	PT-7 EARTHING RING	G.1236.00	B1701.123600	T6N BNK-N
E.0108.00	B1409.000047	PT-8 EARTHING RING	G.1237.00	B1701.123700	T7N BNK-N
E.0104.00	B1409.000048	PT-4 EARTHING RING	G.1238.00	B1701.123800	T8N BNK-N
A.2300.51	B1410.200160	EX-V-M16-SW CABLE GLAND M16 EEX-E	G.1411.00	B1702.141100	T1 AISI316-G
A.2300.52	B1410.200200	EX-V-M20-SW CABLE GLAND M20 EEX-E	G.1412.00	B1702.141200	T2 AISI316-3/4" GK
A.2300.53	B1410.200250	EX-V-M25-SW CABLE GLAND M25 EEX-E	G.1413.00	B1702.141300	T3 AISI316-G
A.2300.54	B1410.200320	EX-V-M32-SW CABLE GLAND M32 EEX-E	G.1415.00	B1702.141500	T5 AISI316-G
A.2300.55	B1410.200500	EX-V-M50-SW CABLE GLAND M50 EEX-E	G.1421.00	B1702.142100	T20 AISI316-M20
A.2301.51	B1410.400160	EX-V-M16-BL CABLE GLAND M16 EEX-I	G.1422.00	B1702.142200	T25 AISI316-M25
A.2301.52	B1410.400200	EX-V-M20-BL CABLE GLAND M20 EEX-I	G.1423.00	B1702.142300	T32 AISI316-M

OLD CODE	NEW CODE	PRODUCT
G.1424.00	B1702.142400	T40 AISI316-M
G.1425.00	B1702.142500	T50 AISI316-M
G.1426.00	B1702.142600	T63 AISI316-M
G.1427.00	B1702.142700	T75 AISI316-M
G.1431.00	B1702.143100	T1N AISI316-1/2" NPT
G.1432.00	B1702.143200	T2N AISI316- 3/4" NPT
G.1433.00	B1702.143300	T3N AISI316-N
G.1435.00	B1702.143500	T5N AISI316-N
A.2011.52	B1706.000020	M25-FN445EN-BSW PLUG EX-E RESIN
A.2011.53	B1706.000030	M32-FN445EN-BSW PLUG EX-E RESIN
A.2011.54	B1706.000040	M40-FN445EN-BSW PLUG EX-E RESIN
A.2011.55	B1706.000050	M50-FN445EN-BSW PLUG EX-E RESIN
A.0058.61	B1707.005861	PLG 1 NPT PLUG 1/2"NPT
A.0058.62	B1707.005862	PLG 2 NPT PLUG 3/4" NPT
A.0058.63	B1707.005863	PLG 3 NPT PLUG 1 NPT
A.0058.65	B1707.005865	PLG 5 NPT PLUG 1 1/2" NPT
A.0058.66	B1707.005866	PLG 6 NPT PLUG 2 NPT
A.0058.67	B1707.005867	PLG 7 NPT PLUG 2 1/2" NPT
A.0058.68	B1707.005868	PLG 8 NPT PLUG 3 NPT
A.0050.01	B1709.000001	RE-21 GALV-G
A.0050.02	B1709.000002	RE-31 GALV-G
A.0050.03	B1709.000003	RE-32 GALV-G
A.0050.07	B1709.000007	RE-51 ALL-G
A.0050.08	B1709.000008	RE-52 ALL-G
A.0050.09	B1709.000009	RE-53 ALL-G
A.0050.12	B1709.000012	RE-62 ALL-G
A.0050.13	B1709.000013	RE-63 ALL-G
A.0050.15	B1709.000015	RE-65 ALL-G
A.0050.17	B1709.000017	RE-72 ALL-G
A.0050.18	B1709.000018	RE-73 ALL-G
A.0050.20	B1709.000020	RE-75 ALL-G
A.0050.21	B1709.000021	RE-76 ALL-G
A.0050.23	B1709.000023	RE-82 ALL-G
A.0050.24	B1709.000024	RE-83 ALL-G
A.0050.26	B1709.000026	RE-85 ALL-G
A.0050.27	B1709.000027	RE-86 ALL-G
A.0050.28	B1709.000028	RE-87 GALV-G
A.0050.61	B1709.000036	RE-21N GALV-G
A.0050.62	B1709.000037	RE-31N GALV-G
A.0050.63	B1709.000038	RE-32N GALV-G
A.0050.67	B1709.000042	RE-51N ALL-G
A.0050.68	B1709.000043	RE-52N ALL-G
A.0050.69	B1709.000044	RE-53N ALL-G
A.0050.72	B1709.000047	RE-62N ALL-G
A.0050.73	B1709.000048	RE-63N ALL-G
A.0050.75	B1709.000050	RE-65N ALL-G
A.0050.78	B1709.000051	RE-73N ALL-G
A.0050.80	B1709.000052	RE-75N ALL-G
A.0050.81	B1709.000053	RE-76N ALL-G
A.0050.84	B1709.000054	RE-83N ALL-G
A.0050.86	B1709.000055	RE-85N ALL-G
A.0050.87	B1709.000056	RE-86N ALL-G
A.0051.01	B1709.000059	REB-21 GALV-G

OLD CODE	NEW CODE	PRODUCT
A.0051.02	B1709.000060	REB-31 GALV-G
A.0051.03	B1709.000061	REB-32 GALV-G
A.0051.07	B1709.000065	REB-51 ALL-G
A.0051.08	B1709.000066	REB-52 ALL-G
A.0051.09	B1709.000067	REB-53 ALL-G
A.0051.12	B1709.000070	REB-62 ALL-G
A.0051.13	B1709.000071	REB-63 ALL-G
A.0051.15	B1709.000073	REB-65 ALL-G
A.0051.17	B1709.000075	REB-72 ALL-G
A.0051.18	B1709.000076	REB-73 ALL-G
A.0051.20	B1709.000078	REB-75 ALL-G
A.0051.21	B1709.000079	REB-76 ALL-G
A.0051.23	B1709.000081	REB-82 ALL-G
A.0051.24	B1709.000082	REB-83 ALL-G
A.0051.26	B1709.000084	REB-85 ALL-G
A.0051.27	B1709.000085	REB-86 ALL-G
A.0051.28	B1709.000086	REB-87 GALV-G
A.0051.40	B1709.000089	REB-31N GALV-N
A.0051.41	B1709.000090	REB-63N ALL-N
A.0051.42	B1709.000091	REB-65N ALL-N
A.0051.43	B1709.000092	REB-73N ALL-N
A.0051.71	B1709.000107	REB-21N GALV-N
A.0051.72	B1709.000108	REB-62N ALL-N
A.0051.73	B1709.000109	REB-32N GALV-N
A.0051.78	B1709.000113	REB-52N ALL-N
A.0051.79	B1709.000114	REB-53N ALL-N
A.0051.80	B1709.000115	REB-75N ALL-N
A.0051.81	B1709.000116	REB-76N ALL-N
A.0051.84	B1709.000117	REB-83N ALL-N
A.0051.86	B1709.000118	REB-85N ALL-N
A.0051.87	B1709.000119	REB-86N ALL-N
A.0051.88	B1709.000120	REB-87N GALV-N
A.0055.11	B1709.000208	ELF-1 ALL-G
A.0055.12	B1709.000209	ELF-2 ALL-G
A.0055.13	B1709.000210	ELF-3 ALL-G
A.0055.15	B1709.000212	ELF-5 ALL-G
A.0055.16	B1709.000213	ELF-6 ALL-G
A.0055.17	B1709.000214	ELF-7 ALL-G
A.0055.18	B1709.000215	ELF-8 ALL-G
A.0055.61	B1709.000218	ELF-1N ALL-N
A.0055.62	B1709.000219	ELF-2N ALL-N
A.0055.63	B1709.000220	ELF-3N ALL-N
A.0055.65	B1709.000222	ELF-5N ALL-N
A.0055.66	B1709.000223	ELF-6N ALL-N
A.0055.67	B1709.000224	ELF-7N ALL-N
A.0057.01	B1709.000243	EM-1 GALV-G
A.0057.02	B1709.000244	EM-2 GALV-G
A.0057.03	B1709.000245	EM-3 GALV-G
A.0057.05	B1709.000247	EM-5 GALV-G
A.0057.06	B1709.000248	EM-6 GALV-G
A.0057.07	B1709.000249	EM-7 GALV-G
A.0057.08	B1709.000250	EM-8 GALV-G
A.0057.61	B1709.000253	EM-1 GALV-N

# CORRESPONDENCES OLD → NEW REFERENCES

OLD CODE	NEW CODE	PRODUCT
A.0057.62	B1709.000254	EM-2 GALV-N
A.0057.63	B1709.000255	EM-3 GALV-N
A.0057.65	B1709.000257	EM-5 GALV-N
A.0057.66	B1709.000258	EM-6 GALV-N
A.0057.67	B1709.000259	EM-7 GALV-N
A.0057.68	B1709.000260	EM-8 GALV-N
A.0060.01	B1709.000263	NP-1 GALV-G
A.0060.02	B1709.000264	NP-2 GALV-G
A.0060.03	B1709.000265	NP-3 GALV-G
A.0060.05	B1709.000267	NP-5 GALV-G
A.0060.06	B1709.000268	NP-6 GALV-G
A.0060.07	B1709.000269	NP-7 GALV-G
A.0060.08	B1709.000270	NP-8 GALV-G
A.0060.11	B1709.000273	NP-1 GALV-N
A.0060.13	B1709.000275	NP-3 GALV-N
A.0060.15	B1709.000277	NP-5 GALV-N
A.0060.16	B1709.000278	NP-6 GALV-N
A.0060.17	B1709.000279	NP-7 GALV-N
A.0060.18	B1709.000280	NP-8 GALV-N
A.0068.01	B1709.000323	UNY-1 GALV-G
A.0068.02	B1709.000324	UNY-2 GALV-G
A.0068.03	B1709.000325	UNY-3 GALV-G
A.0068.05	B1709.000327	UNY-5 GALV-G
A.0068.06	B1709.000328	UNY-6 GALV-G
A.0068.07	B1709.000329	UNY-7 GALV-G
A.0068.08	B1709.000330	UNY-8 GALV-G
A.0068.61	B1709.000336	UNY-1 GALV-N
A.0068.62	B1709.000337	UNY-2 GALV-N
A.0068.63	B1709.000338	UNY-3 GALV-N
A.0068.65	B1709.000340	UNY-5 GALV-N
A.0068.66	B1709.000341	UNY-6 GALV-N
A.0068.67	B1709.000342	UNY-7 GALV-N
A.0068.68	B1709.000343	UNY-8 GALV-N
A.0069.01	B1709.000356	UNF-1 GALV-G
A.0069.02	B1709.000357	UNF-2 GALV-G
A.0069.03	B1709.000358	UNF-3 GALV-G
A.0069.05	B1709.000360	UNF-5 GALV-G
A.0069.06	B1709.000361	UNF-6 GALV-G
A.0069.07	B1709.000362	UNF-7 GALV-G
A.0069.08	B1709.000363	UNF-8 GALV-G
A.0069.61	B1709.000367	UNF-1 GALV-N
A.0069.62	B1709.000368	UNF-2 GALV-N
A.0069.63	B1709.000369	UNF-3 GALV-N
A.0069.65	B1709.000371	UNF-5 GALV-N
A.0069.66	B1709.000372	UNF-6 GALV-N
A.0069.67	B1709.000373	UNF-7 GALV-N
A.0069.68	B1709.000374	UNF-8 GALV-N
A.0291.01	B1709.000401	LBH-1 ALL-G
A.0291.02	B1709.000402	LBH-2 ALL-G
A.0291.03	B1709.000403	LBH-3 ALL-G
A.0291.04	B1709.000404	LBH-4 ALL-G
A.0291.05	B1709.000405	LBH-5 ALL-G
A.0291.06	B1709.000406	LBH-6 ALL-G

OLD CODE	NEW CODE	PRODUCT
A.0291.07	B1709.000407	LBH-7 ALL-G
A.0291.08	B1709.000408	LBH-8 ALL-G
A.0293.01	B1709.000411	EYS-1 ALL-G
A.0293.02	B1709.000412	EYS-2 ALL-G
A.0293.03	B1709.000413	EYS-3 ALL-G
A.0293.04	B1709.000414	EYS-4 ALL-G
A.0293.05	B1709.000415	EYS-5 ALL-G
A.0293.06	B1709.000416	EYS-6 ALL-G
A.0293.07	B1709.000417	EYS-7 ALL-G
A.0293.08	B1709.000418	EYS-8 ALL-G
A.0293.11	B1709.000421	EYS-1 ALL-N
A.0293.12	B1709.000422	EYS-2 ALL-N
A.0293.13	B1709.000423	EYS-3 ALL-N
A.0293.14	B1709.000424	EYS-4 ALL-N
A.0293.15	B1709.000425	EYS-5 ALL-N
A.0293.16	B1709.000426	EYS-6 ALL-N
A.0293.17	B1709.000427	EYS-7 ALL-N
A.0293.18	B1709.000428	EYS-8 ALL-N
A.0294.01	B1709.000430	EZS-1 ALL-G
A.0294.02	B1709.000431	EZS-2 ALL-G
A.0294.03	B1709.000432	EZS-3 ALL-G
A.0294.04	B1709.000433	EZS-4 ALL-G
A.0294.05	B1709.000434	EZS-5 ALL-G
A.0294.06	B1709.000435	EZS-6 ALL-G
A.0294.07	B1709.000436	EZS-7 ALL-G
A.0294.08	B1709.000437	EZS-8 ALL-G
A.0294.17	B1709.000440	EZS-7 ALL-N
NEW CODE	B1709.000504	LBH-4 ALL-N
A.0300.01	B1713.000250	FAB 25 FIBER 250 GR
A.0299.10	B1713.029910	2012/PT MANUAL APPLICATOR
A.0299.15	B1713.029915	2012/1 RESIN SINGLE CARTRIDGE
A.0299.20	B1713.201206	2012/6 RESIN 6 CARTRIDGE
A.0293.93	B1713.420100	CRV 420/1000
A.0293.91	B1713.420300	CRV 420/300
A.0062.02	C0102.000007	DB-2 ALL
A.0062.03	C0102.000008	DB-3 ALL
A.0062.04	C0102.000009	DB-4 ALL
A.0062.05	C0102.000010	DB-5 ALL
A.0062.06	C0102.000011	DB-6 ALL
A.0062.07	C0102.000012	DB-7 ALL
A.0062.08	C0102.000013	DB-8 ALL
A.0062.61	C0102.000026	DB-1N ALL-N
A.0062.62	C0102.000027	DB-2N ALL-N
A.0062.63	C0102.000028	DB-3N ALL-N
A.0062.64	C0102.000029	DB-4N ALL-N
A.0062.65	C0102.000030	DB-5N ALL-N
A.0062.66	C0102.000031	DB-6N ALL-N
A.0062.67	C0102.000032	DB-7N ALL-N
A.0062.68	C0102.000033	DB-8N ALL-N
A.0297.01	C0102.000051	ECR 1 DRAIN VALVE



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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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