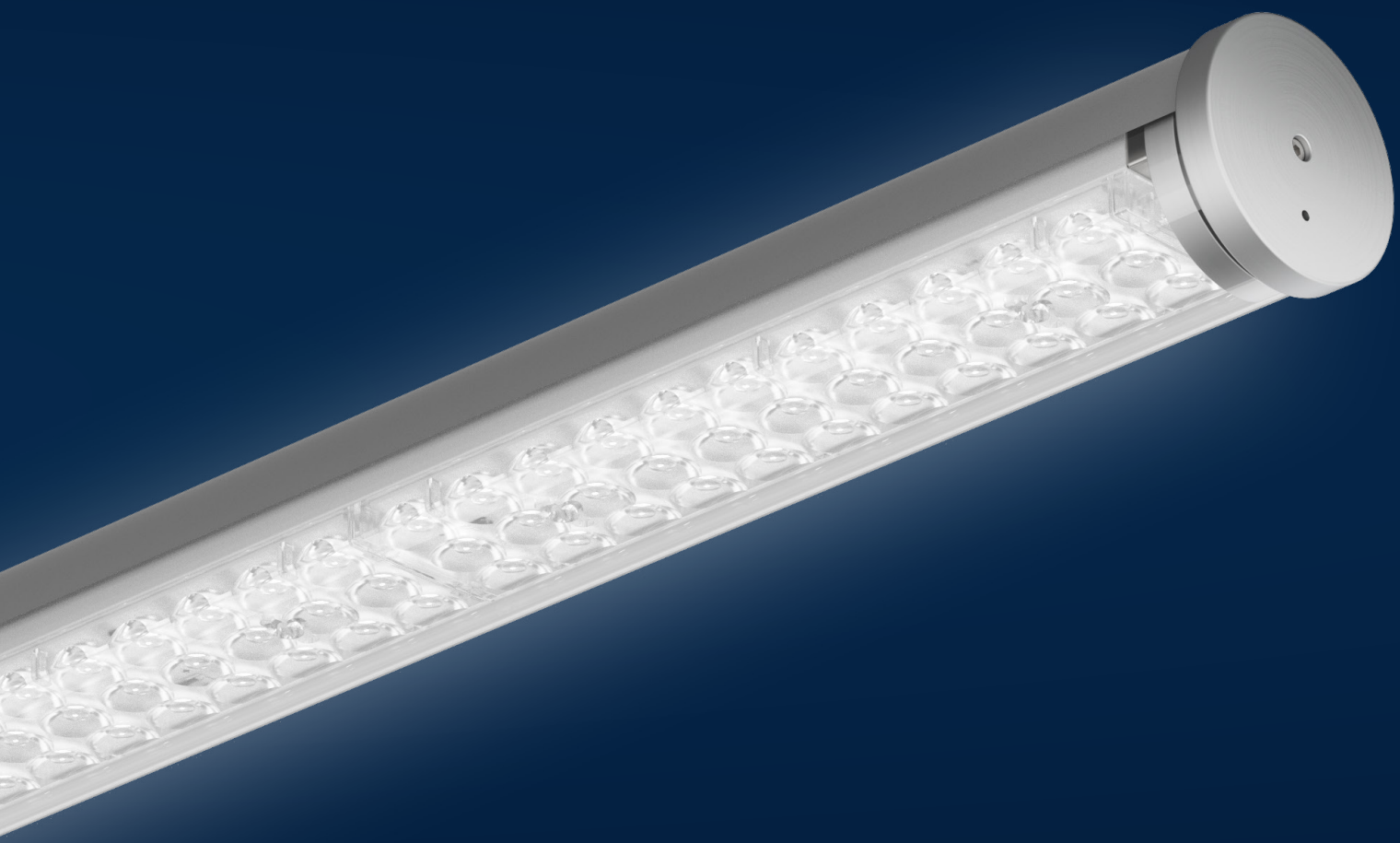
3F Tank ATEX

Uncompromising
protection

3F Filippi



EN

www.3F-Filippi.com

3F Tank ATEX

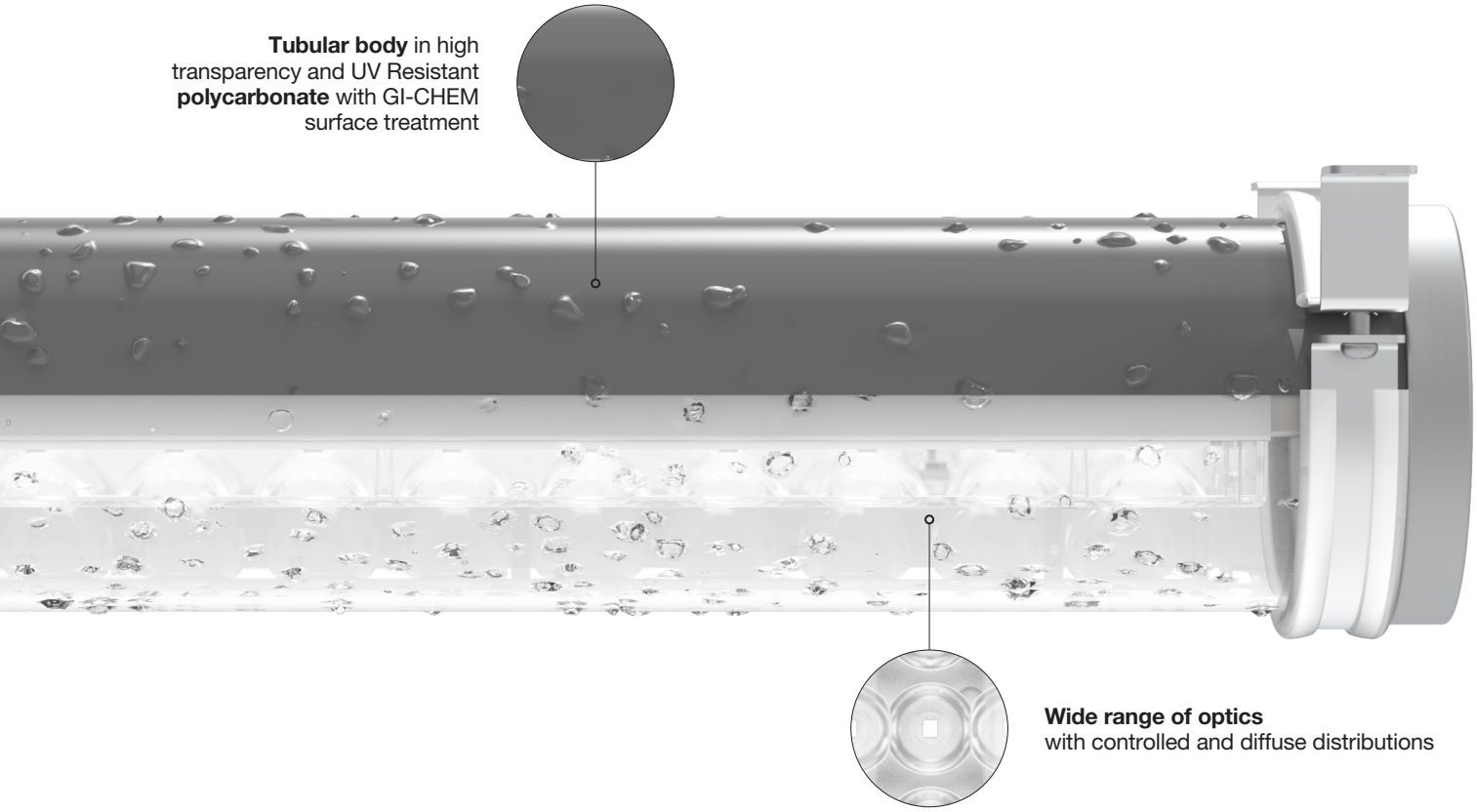
Safety is important in every workplace, but in high-risk production contexts it is fundamental.

3F Filippi has created 3F Tank ATEX, the light fixture that ensures maximum safety for workers and provides quality lighting at the same time.

The state-of-the-art LED sources are protected by a polycarbonate cylinder that is resistant to UV rays and ensures maximum protection from dust, water and impact.

3F Tank ATEX
Busbar installation

Product advantages



This fixture is the ultimate answer for those looking for the safest lighting solution for more challenging industrial contexts thanks to its IK10 maximum mechanical resistance and IP69K (IP66 ATEX applications) protection rating, that makes it suitable for contexts where equipment is cleaned intensely with high-pressure water or steam.

Exceptional results are obtained by paying attention to the smallest details.

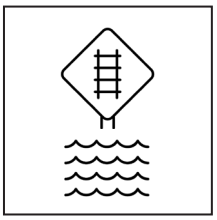
To develop 3F Tank ATEX and offer it as the ultimate solution we considered every single detail of the fixture very carefully.

Above:
The screws and the brackets to install the fixture are made of stainless steel to avoid oxidation and wear over time.

To the left:
A very thick polycarbonate cylinder with a high performance silicone seal ensure it is completely watertight.

Challenging environments

Fixture suitable for **environments with explosive atmospheres ATEX**, group II, category 3D, Ex tc IIIC T85°C Dc. Compliant with directive 2014/34/EU and standard IEC/EN 60079. IP66 protection degree.



Good **resistance in the marine environment and railway applications** thanks to the 6082-T6 aluminium head and AISI 316 stainless steel brackets/screws.

Fixture with an **IP69K protection** rating designed for environments where cleaning of work areas is carried out intensely with high pressure water or steam.

Fixture **suitable** from a hygiene point of view to be used i**n production plants in the food industry** (HACCP, IFS, BRC Standard).

Fixture made of polycarbonate resistant to UV rays with a HS (Hard Skin) finish that guarantees high **resistance in environments where aggressive chemical agents are present** (high resistance especially to ammonia NH3).

3F Tank ATEX meets the compliance requirements listed in two EU ATEX directives, the acronym of “ATmosphere EXplosive” relating to equipment intended for environments with explosive atmospheres and the safety conditions for those working in these particular contexts.

3F Tank ATEX is a fixture that is designed to be installed on horizontal/vertical surfaces that, thanks to its dust proof body ensures a very high level of protection in areas where explosive atmospheres may be present in the air (for short periods) in the form of flammable dust clouds.

3F Tank ATEX
Busbar installation


NP.302
NP.272

Explosive atmospheres (ATEX)

Dust	Gas
1D Suitability in zones 20, 21 and 22	**1G** Suitability in zones 0, 1 and 2
2D Suitability in zones 21 and 22	**2G** Suitability in zones 1 and 2
3D Suitability in zones 22	**3G** Suitability in zones 2

ATEX is the French acronym for “ATmosphères EXplosives”, which means “explosive atmospheres”.
The risk arising from explosive atmospheres derives from a concentration of flammable substances such as gas, vapours, mists and dust and their exposure to ignition sources like sparks, electric arcs, static electricity, optical radiation, high temperatures and hot surfaces.
The ATEX 2014/34/EU Directive (relating to protective equipment and systems intended to be used in potentially explosive atmospheres), published by the Official Journal of the European Union (n° OJ EU L96) on 29th of March 2014 and implemented on the 30 March 2014, pursuant to article 43, ratified the repeal of the previous Directive 94/9/CE with effect from the 20 April 2016, without a transitional period.
This applies to all electrical and mechanical products intended for potentially dangerous places.
The general requirements for fixtures are outlined in EN IEC 60079-0 that defines the general requirements relating to the manufacture of electrical equipment intended to be used in environments with explosive atmospheres given the presence of flammable gas, vapours, mists and dust.
Classification of explosive atmospheres is carried out based on the recommendations of legislation EN 60079-10-1 (gas), EN 60079-10-2 (dust) that divides dangerous areas into zones based on the probability of the formation and persistence of the explosive atmosphere.
Electrical products must be ATEX certified to be used in environments with dangerous atmospheres.

Above:
Products that meet the necessary requirements and standards bear the **Ex** mark, specific for explosion protection.

Directive 2014/34/EU classifies and divides **ATEX** equipment into two groups:

Group I: equipment for work in mines with the presence of mine gas and/or combustible dust is included in this group.

Group I in turn is divided into **2 categories:**

• **M1** - equipment or systems of protection that guarantee a very high level of protection; they must remain operational in the presence of explosive atmospheres.

• **M2** - equipment or systems of protection that guarantee a high level of protection; they must be de-energised in the presence of gas.

Group II: equipment for work on the surface is included in this group.

Group II in turn is divided into **3 categories** on the basis of the level of protection (area of use); the categories are identified as number 1, 2, 3 followed by the letter G (Gas) or D (Dust).

• **Category 1** - equipment or systems of protection that guarantee a very high level of protection; for areas in which explosive atmospheres caused by mixtures of air and gases, vapours or mists or by air/dust mixtures are present continuously, for long periods or frequently. Equipment in this category must ensure the requisite level of protection, even in the event of rare incidents relating to equipment.

• **Category 2** - equipment or systems of protection that guarantee a high level of protection; for use in areas in which explosive atmospheres caused by gases, vapours, mists or air/dust mixtures are likely to occur occasionally. Equipment in this category must ensure the requisite level of protection, even in the event of frequently occurring disturbances or equipment faults which normally have to be taken into account.

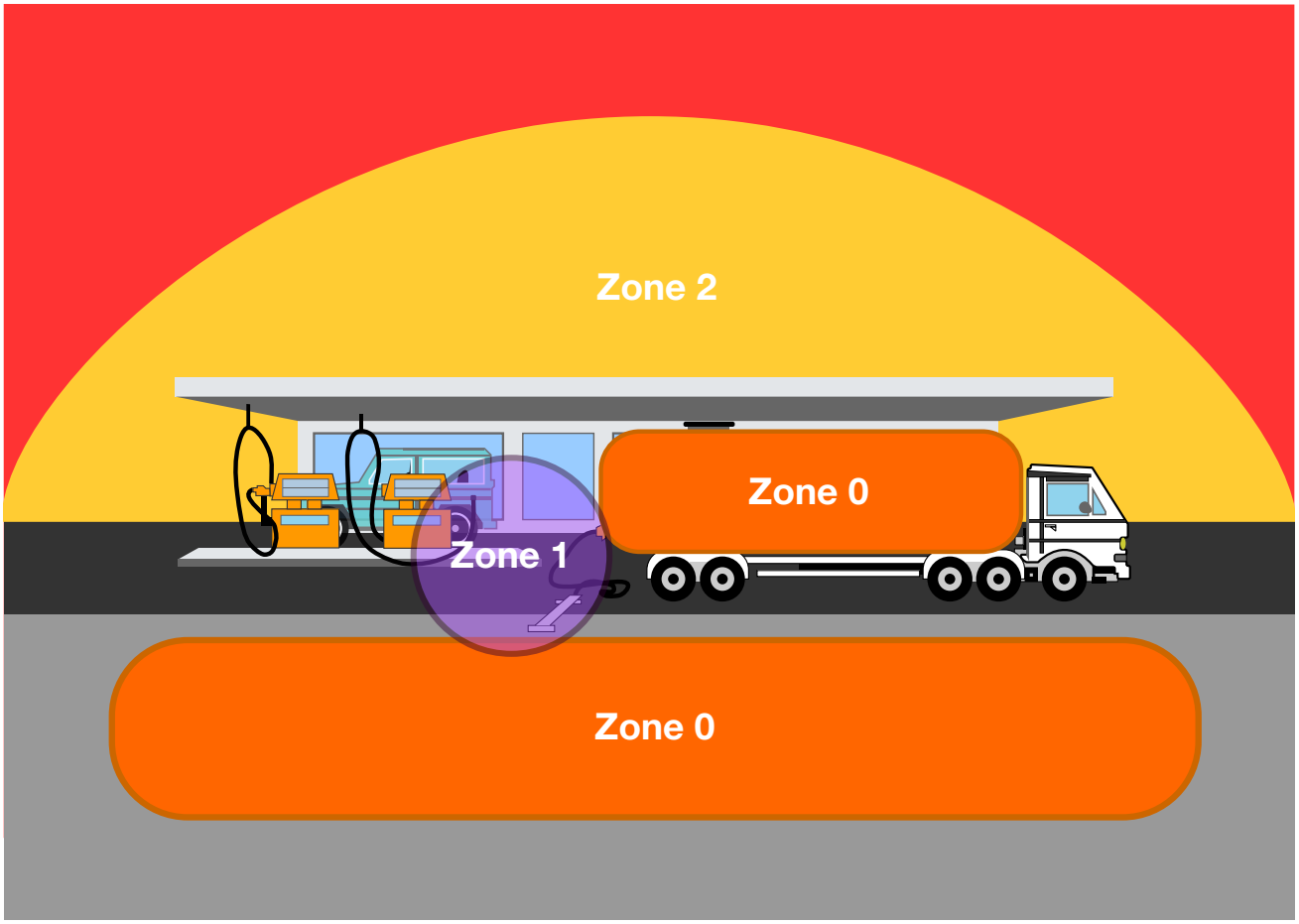
• **Category 3** - equipment or systems of protection that guarantee a normal level of protection; for use in areas in which explosive atmospheres caused by gases, vapours, mists, or air/dust mixtures are unlikely to occur or, if they do occur, are likely to do so only infrequently and for a short period only. Equipment in this category must ensure the requisite level of protection during normal operation.

For equipment to be marked there are various compliance procedures according to the product function and the category they belong to.

• All electrical equipment in Category 1 and Category 2 must mandatorily be certified by ATEX (Notified Bodies), or bodies to which the national authority has assigned the task of verifying conformity with the Directive.
Companies that manufacture electrical equipment in Category 1 and Category 2 are obliged to report and audit the quality systems and the identification number of the body must be displayed on the data plate label alongside the CE marking.

• All electrical equipment in Category 3 can be self-certified by the manufacturer (CE marking), with internal manufacturing controls.

ATEX (G) for zones with GAS



The fault conditions for which the device is safe, indicated in the marking, are the following:

Ga: Equipment for explosive atmospheres due to the presence of gas, with a “very high” level of protection which is not a source of ignition during normal operation or in the event of an expected failure or when subject to a rare failure.

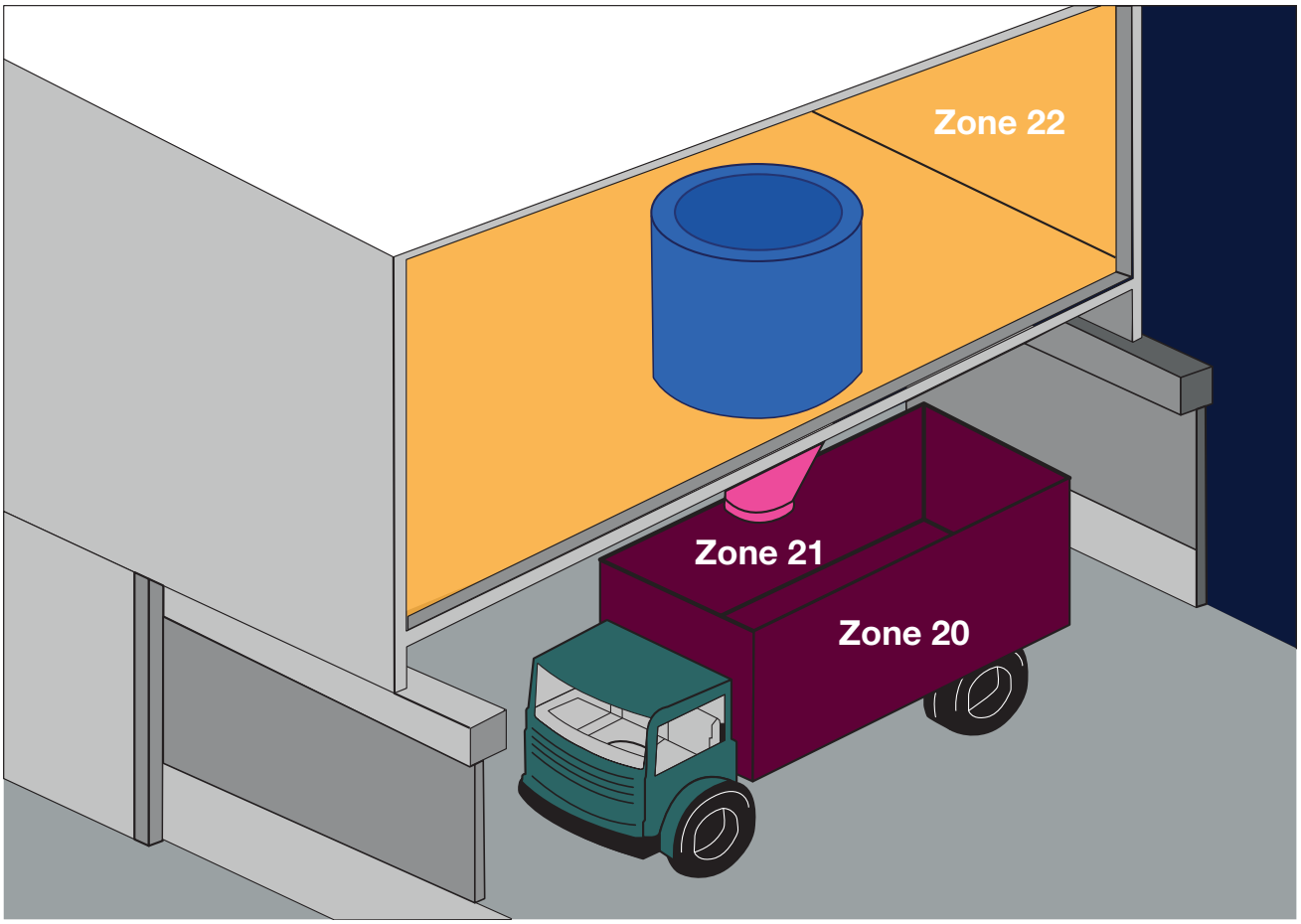
Gb: Equipment for use in explosive atmospheres due to the presence of gas, with a “high” level of protection that is not a source of ignition during normal operation or when subject to expected malfunctions, although not on a regular basis.

Gc: Equipment for use in explosive atmospheres due to the presence of gas, with an “increased” level of protection, which is not a source of ignition during normal operation and which has some additional protective measures to ensure that it remains a source ignition not active in the event of regularly expected events (for example for a lamp failure).

Above:
Areas classified for the presence of gas, mists or vapours on the basis of the probability of the existence of the explosive atmosphere are divided into three zones:

Zone 0	Zone 1	Zone 2
An area in which an explosive mixture of gas is continuously present or frequently present for long periods.	An area in which an explosive mixture is likely to occur occasionally in normal operation.	An area in which an explosive mixture is not likely to occur in normal operation and if it occurs it will exist only for a short time.

ATEX (D) for zones with Dust



The fault conditions for which the device is safe, indicated in the marking, are the following:

Da: Equipment for explosive atmospheres due to the presence of combustible dusts, which has a "very high" level of protection and which is not a source of ignition in normal operation or when subject to rare failures.

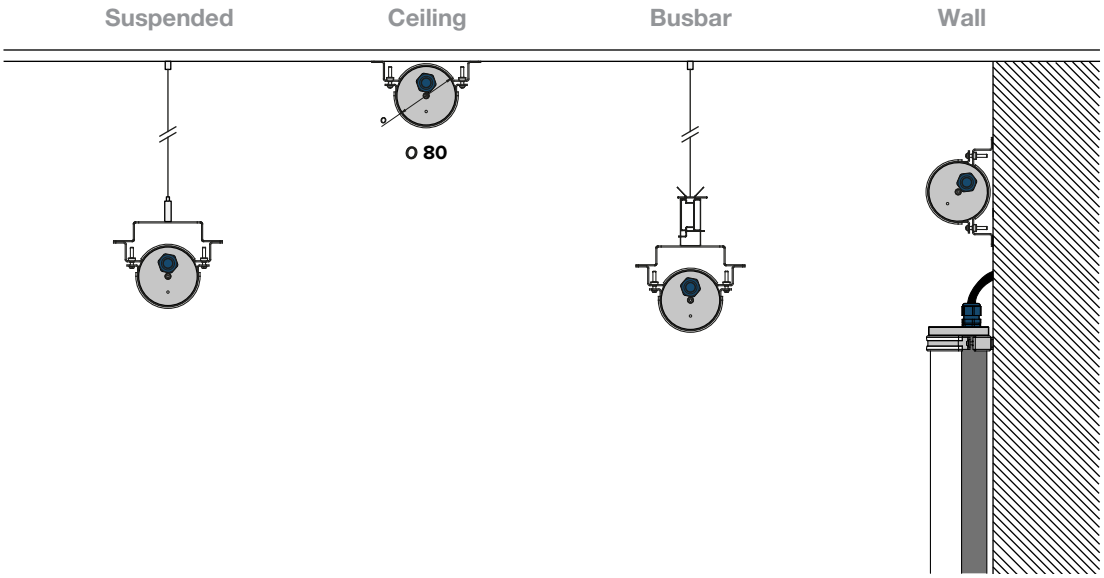
Db: Equipment for explosive atmospheres due to the presence of combustible dusts, which has a "high" level of protection and which does not constitute a source of ignition in normal operation or when subject to expected failures, although not in a regular manner.

Dc: Equipment for explosive atmospheres due to the presence of dust, with an "increased" level of protection which does not constitute a source of ignition during normal operation and which may have additional protections to ensure that it remains inactive as a source of ignition in the event of faults regular and expected.

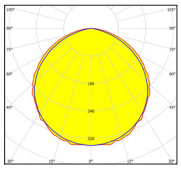
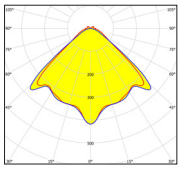
Above:
In areas classified for the presence of dust the zones are identified on the basis of the frequency and duration of the formation of an explosive atmosphere:

Zone 20	Zone 21	Zone 22
An area in which an explosive mixture of dust in the form of a dust cloud is continuously present or frequently present for long periods.	An area in which an explosive mixture of dust in the form of a dust cloud, is likely to occur occasionally in normal operation.	An area in which an explosive mixture of dust in the form of a dust cloud, is not likely to occur in normal operation and if it occurs it will exist only for a short time.

3F Tank ATEX



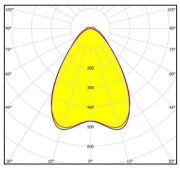
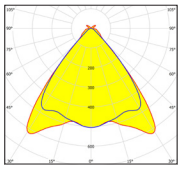
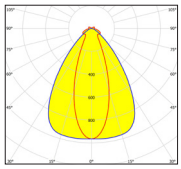
3F Tank ATEX

Model	Lite	Wide
Average luminance for angles> 65 (cd / m²)	>3000	>3000
UGR	<21	<21
ATEX Certification	**Group II, Categoy 3D, Ex tc IIIC T85°C Dc.**	
Photometric distribution		
Power level	2x29 2x18 2x22	13 45 55 70

3F Tank ATEX Lite

3F Tank ATEX

3F Tank ATEX

Model	Medium	UGR	Concentrated
Average luminance for angles> 65 (cd / m²)	>3000	<3000	>3000
UGR	<21	<19	<21
ATEX Certification	**Group II, Categoy 3D, Ex tc IIIC T85°C Dc.**		
Photometric distribution			
Power level	13 45 55 70	35 40	13 45 55 70

3F Tank ATEX

Construction characteristics

Illuminotechnical characteristics
Direct symmetric distribution.
Lifetime (L93/B10): 30000 h. (tq+25°C)
Lifetime (L90/B10): 50000 h. (tq+25°C)
Lifetime (L85/B10): 80000 h. (tq+25°C)
Lifetime (L80/B10): 100000 h. (tq+25°C)
Lifetime (L85/B10): 50000 h. (tq+40°C)
Photobiological safety in compliance with IEC/TR 62778: RG0 risk exempt, (IEC 62471)

Mechanical characteristics
High thickness tubular body in high transparency and UV Resistant polycarbonate with GI-CHEM surface treatment, which guarantees resistance to aggressive chemical agents.
Aluminium 6082-T6 end caps.
NBR sealing gasket.
Gear-holder reflector in hot-dip galvanised steel, painted with white polyester base.
Fixing brackets and screws in AISI 316 stainless steel.

Electrical characteristics
In compliance with EN 60598-1.
Compliance with the EN S60598-2-22 standard for power supply from a centralised CPSS emergency system must be verified in the technical data sheets of each individual device on our website.
Quick connection via M20x1.5 cable gland in fibreglass reinforced polyamide with 2m H07RN-F 3/5G1.5mm² cable.

Source characteristics

- Linear LED modules.
- Colour initial tolerance (MacAdam): SDCM 3.

On request

- different light distributions
- different power levels, colour rendering indices and colour temperatures
- wiring: CLO

- AISI 316 stainless steel end caps
- emergency versions

Applications

Environments with ATEX explosive atmosphere, group II, category 3D, T85°C, Zone 22 Dc (compliance with directive 2014/34 / EU and IEC / EN 60079 standard), severe industrial, food and agri-food industries, scientific and food processing laboratories, environments with high humidity, swimming pools, railway, aeronautical and port applications.
Hygienically suitable product for installation in food production plants (HACCP), IFS (Food Version 6), BRC (GSFS Food Version 7).
In environments with temperature from -20°C to +40°C, except the ones where the luminaire materials are unsuitable.
Body resistant to the following substances: Ethyl alcohol (24 hours at 20°C), aqueous detergents, hydrochloric acid (produces a slight halo), DOT4 brake oil, sulfuric acid (produces a slight halo), ammonia.
When using this data, remember that it is the result of laboratory tests, and therefore valid only under those test conditions: the data is to be considered approximate and, in the absence of practical experience, it is advisable to carry out tests under actual operating conditions.
Temperature and concentration of the chemical agent can have a decisive impact on the materials and influence the LED technology.
For specific applications please contact our technical offices.

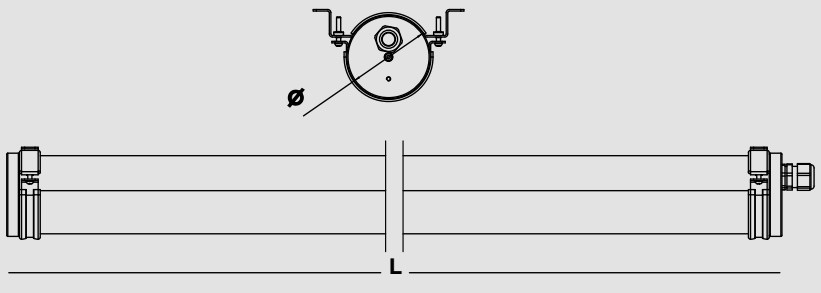
Installation

Ceiling, suspension or wall installation.

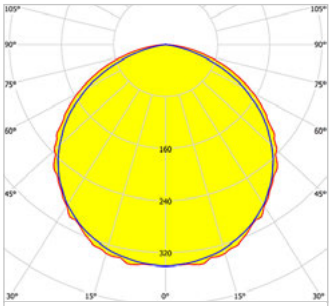
Light Management

The device, equipped with DALI driver, can be controlled manually with 3F Easy Dim technology or automatically / manually with 3F Smart Dimming technology.

Dimensions



3F Tank ATEX Lite



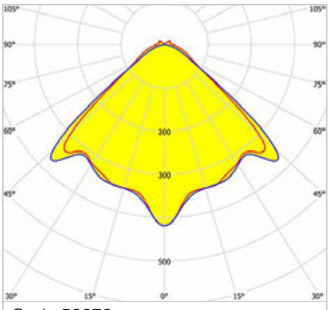
Code 56662

850°C | IP69K | IP66 ATEX | IK10 | Driver/LED SELV | HACCP

Diffuse distribution.

Code	Item	Absorbed power (W)	Output flux (lm)	CCT (K)	CRI	Dimensions L x ø
ON/OFF electronic wiring 230V-50/60Hz						
56660 NEW	3F Tank Lite 2x9W/840 L675	20	3056	4000	>80	676x80
56661 NEW	3F Tank Lite 2x18W/840 L1265	40	6203	4000	>80	1264x80
56662 NEW	3F Tank Lite 2x22W/840 L1560	49	7761	4000	>80	1558x80
56668 NEW	3F Tank Lite 2x9W/865 L675	20	3010	6500	>80	676x80
56669 NEW	3F Tank Lite 2x18W/865 L1265	40	6110	6500	>80	1264x80
56670 NEW	3F Tank Lite 2x22W/865 L1560	49	7644	6500	>80	1558x80
DALI electronic wiring 230V-50/60Hz						
56664 NEW	3F Tank Lite 2x9W/840 DALI L675	20	3056	4000	>80	676x80
56665 NEW	3F Tank Lite 2x18W/840 DALI L1265	40	6203	4000	>80	1264x80
56666 NEW	3F Tank Lite 2x22W/840 DALI L1560	49	7761	4000	>80	1558x80
56672 NEW	3F Tank Lite 2x9W/865 DALI L675	20	3010	6500	>80	676x80
56673 NEW	3F Tank Lite 2x18W/865 DALI L1265	40	6110	6500	>80	1264x80
56674 NEW	3F Tank Lite 2x22W/865 DALI L1560	49	7644	6500	>80	1558x80

3F Tank ATEX Wide



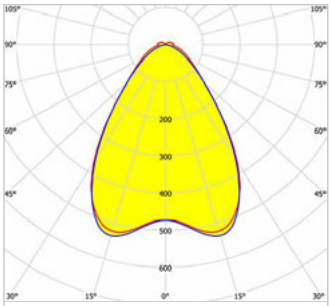
Code 56678

850°C | IP69K | IP66 ATEX | IK10 | HACCP | A++ A+ A

Wide distribution.
PMMA lenses with external flat surface.

Code	Item	Absorbed power (W)	Output flux (lm)	CCT (K)	CRI	Dimensions L x ø
ON/OFF electronic wiring 230V-50/60Hz						
56676 NEW	3F Tank 13W/840 WIDE L675	15	1856	4000	>80	676x80
56677 NEW	3F Tank 45W/840 WIDE L1265	50	6459	4000	>80	1264x80
56678 NEW	3F Tank 55W/840 WIDE L1560	62	8073	4000	>80	1558x80
56679 NEW	3F Tank 70W/840 WIDE L1850	74	9688	4000	>80	1852x80
56684 NEW	3F Tank 13W/865 WIDE L675	15	1828	6500	>80	676x80
56685 NEW	3F Tank 45W/865 WIDE L1265	50	6362	6500	>80	1264x80
56686 NEW	3F Tank 55W/865 WIDE L1560	62	7952	6500	>80	1558x80
56687 NEW	3F Tank 70W/865 WIDE L1850	74	9543	6500	>80	1852x80
DALI electronic wiring 230V-50/60Hz						
56680 NEW	3F Tank 13W/840 DALI WIDE L675	15	1856	4000	>80	676x80
56681 NEW	3F Tank 45W/840 DALI WIDE L1265	50	6459	4000	>80	1264x80
56682 NEW	3F Tank 55W/840 DALI WIDE L1560	62	8073	4000	>80	1558x80
56683 NEW	3F Tank 70W/840 DALI WIDE L1850	74	9688	4000	>80	1852x80
56688 NEW	3F Tank 13W/865 DALI WIDE L675	15	1828	6500	>80	676x80
56689 NEW	3F Tank 45W/865 DALI WIDE L1265	50	6362	6500	>80	1264x80
56690 NEW	3F Tank 55W/865 DALI WIDE L1560	62	7952	6500	>80	1558x80
56691 NEW	3F Tank 70W/865 DALI WIDE L1850	74	9543	6500	>80	1852x80

3F Tank ATEX Medium



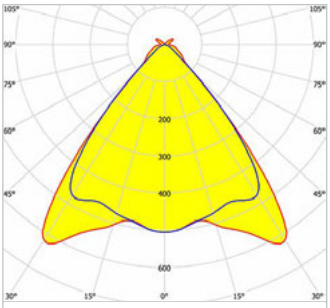
Code 56694

850°C | IP69K | IP66 ATEX | IK10 | HACCP

Medium distribution.
PMMA lenses with external flat surface.

Code	Item	Absorbed power (W)	Output flux (lm)	CCT (K)	CRI	Dimensions L x ø
ON/OFF electronic wiring 230V-50/60Hz						
56692 NEW	3F Tank 13W/840 MEDIUM L675	15	1847	4000	>80	676x80
56693 NEW	3F Tank 45W/840 MEDIUM L1265	50	6429	4000	>80	1264x80
56694 NEW	3F Tank 55W/840 MEDIUM L1560	62	8035	4000	>80	1558x80
56695 NEW	3F Tank 70W/840 MEDIUM L1850	74	9643	4000	>80	1852x80
56700 NEW	3F Tank 13W/865 MEDIUM L675	15	1820	6500	>80	676x80
56701 NEW	3F Tank 45W/865 MEDIUM L1265	50	6332	6500	>80	1264x80
56702 NEW	3F Tank 55W/865 MEDIUM L1560	62	7915	6500	>80	1558x80
56703 NEW	3F Tank 70W/865 MEDIUM L1850	74	9498	6500	>80	1852x80
DALI electronic wiring 230V-50/60Hz						
56696 NEW	3F Tank 13W/840 DALI MEDIUM L675	15	1847	4000	>80	676x80
56697 NEW	3F Tank 45W/840 DALI MEDIUM L1265	50	6429	4000	>80	1264x80
56698 NEW	3F Tank 55W/840 DALI MEDIUM L1560	62	8035	4000	>80	1558x80
56699 NEW	3F Tank 70W/840 DALI MEDIUM L1850	74	9643	4000	>80	1852x80
56704 NEW	3F Tank 13W/865 DALI MEDIUM L675	15	1820	6500	>80	676x80
56705 NEW	3F Tank 45W/865 DALI MEDIUM L1265	50	6332	6500	>80	1264x80
56706 NEW	3F Tank 55W/865 DALI MEDIUM L1560	62	7915	6500	>80	1558x80
56707 NEW	3F Tank 70W/865 DALI MEDIUM L1850	74	9498	6500	>80	1852x80

3F Tank ATEX UGR



Code 56712 L<3000 cd/m² 65°

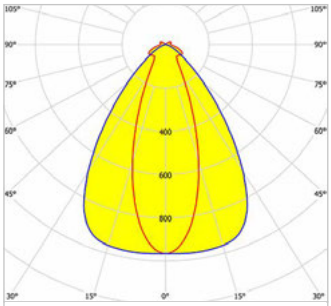
850°C IP69K IP66 ATEX IK10 HACCP

A++ A+ A

Controlled distribution.
Average luminance <3000 cd/m² for radial angles >65°.
PMMA lenses with external flat surface.

Code	Item	Absorbed power (W)	Output flux (lm)	CCT (K)	CRI	Dimensions L x ø
ON/OFF electronic wiring 230V-50/60Hz						
56708 NEW	3F Tank 35W/840 UGR L1560	39	5258	4000	>80	1558x80
56709 NEW	3F Tank 40W/840 UGR L1850	47	6311	4000	>80	1852x80
56712 NEW	3F Tank 35W/865 UGR L1560	39	5179	6500	>80	1558x80
56713 NEW	3F Tank 40W/865 UGR L1850	47	6217	6500	>80	1852x80
DALI electronic wiring 230V-50/60Hz						
56710 NEW	3F Tank 35W/840 DALI UGR L1560	39	5258	4000	>80	1558x80
56711 NEW	3F Tank 40W/840 DALI UGR L1850	47	6311	4000	>80	1852x80
56714 NEW	3F Tank 35W/865 DALI UGR L1560	39	5179	6500	>80	1558x80
56715 NEW	3F Tank 40W/865 DALI UGR L1850	47	6217	6500	>80	1852x80

3F Tank ATEX Concentrated



Code 56718

850°C | IP69K | IP66 ATEX | IK10 | HACCP

Concentrated distribution.
PMMA lenses with external flat surface.

Code	Item	Absorbed power (W)	Output flux (lm)	CCT (K)	CRI	Dimensions L x ø
ON/OFF electronic wiring 230V-50/60Hz						
56716 NEW	3F Tank 13W/840 CONC L675	15	1871	4000	>80	676x80
56717 NEW	3F Tank 45W/840 CONC L1265	50	6511	4000	>80	1264x80
56718 NEW	3F Tank 55W/840 CONC L1560	62	8139	4000	>80	1558x80
56719 NEW	3F Tank 70W/840 CONC L1850	74	9767	4000	>80	1852x80
56724 NEW	3F Tank 13W/865 CONC L675	15	1843	6500	>80	676x80
56725 NEW	3F Tank 45W/865 CONC L1265	50	6414	6500	>80	1264x80
56726 NEW	3F Tank 55W/865 CONC L1560	62	8016	6500	>80	1558x80
56727 NEW	3F Tank 70W/865 CONC L1850	74	9620	6500	>80	1852x80
DALI electronic wiring 230V-50/60Hz						
56720 NEW	3F Tank 13W/840 DALI CONC L675	15	1871	4000	>80	676x80
56721 NEW	3F Tank 45W/840 DALI CONC L1265	50	6511	4000	>80	1264x80
56722 NEW	3F Tank 55W/840 DALI CONC L1560	62	8139	4000	>80	1558x80
56723 NEW	3F Tank 70W/840 DALI CONC L1850	74	9767	4000	>80	1852x80
56728 NEW	3F Tank 13W/865 DALI CONC L675	15	1843	6500	>80	676x80
56729 NEW	3F Tank 45W/865 DALI CONC L1265	50	6414	6500	>80	1264x80
56730 NEW	3F Tank 55W/865 DALI CONC L1560	62	8016	6500	>80	1558x80
56731 NEW	3F Tank 70W/865 DALI CONC L1850	74	9620	6500	>80	1852x80

3F Tank ATEX | Accessories

Pair of AISI 316 stainless steel brackets for suspended installation.

Code	Item
A0305 NEW	Pair of suspension brackets

Pair of mounting brackets and hooks for wall-mounting, with nuts and bolts for luminaire fastening, everything in stainless steel.

Code	Item
A0835	Pair brack.+hooks for wall

This accessory must always be used in combination with pair of suspension brackets.

Suspension with regulator, galvanised steel cable 1.5 mm diameter, load 15 kg.

Code	Item
A0660	Suspension with adjustment - 1m
A0661	Suspension with adjustment - 2 m
A0662	Suspension with adjustment - 3 m
A0663	Suspension with adjustment - 4 m
A0664	Suspension with adjustment - 5 m
A0665	Suspension with adjustment - 6 m

Attention: each product requires two suspensions with regulator.

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