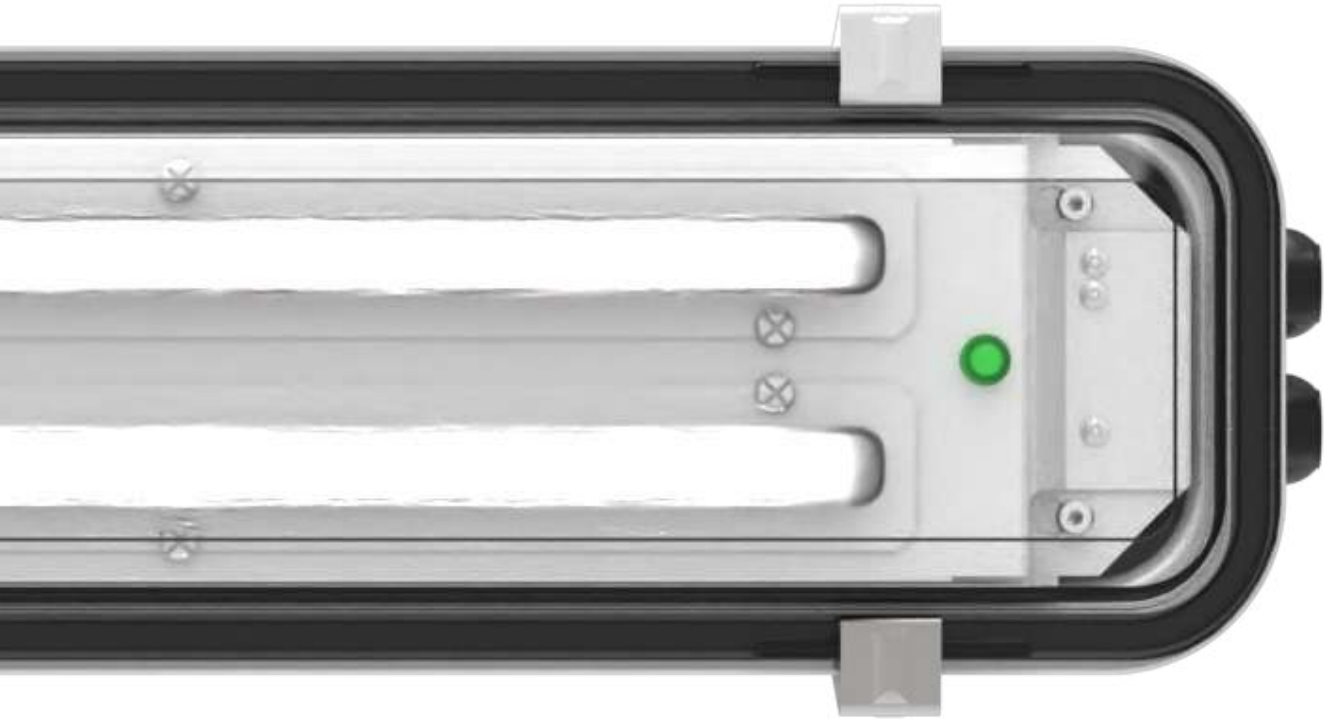
ZONE 1,21&2,22



EMERGENCY LIGHT FIXTURE

EXF300LED-A3

ATM lighting

KDB 15ATEX0049X
IECEx KDB 20.0003X

EMERGENCY 3h | IECEx | ATEX | ZONE 1,21 & 2,22 | 0°C *-20°C | +45°C | IK10 | IP66 | IP67 | CONTROL SYSTEM DALI 2

** - check the operating conditions of the luminaire at sub-zero temperatures on page 5.*

EX MARKING: II 2G Ex eb mb IIC T5 Gb
II 2D Ex tb IIIC T55°C Db or T70°C Db

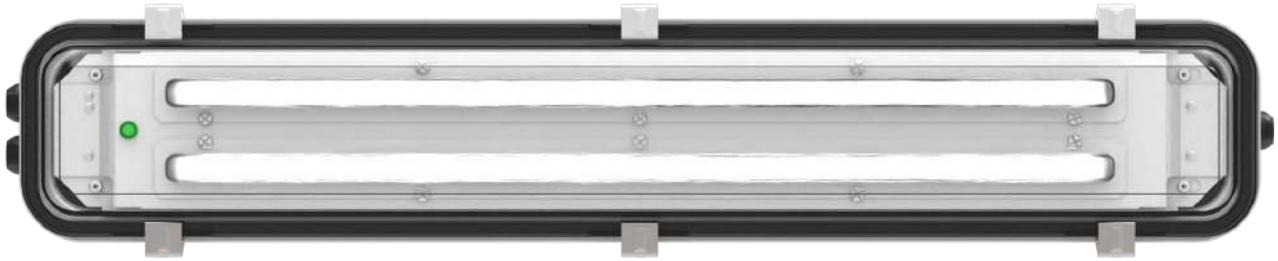
EXEMPLARY APPLICATIONS

REFINERIES | OFFSHORE | CHEMICAL PLANTS | CHEMICAL WAREHOUSES | PASSAGEWAYS IN EX ZONES

Explosionproof light fitting with **LED modules** for suspended coffered ceilings or to be mounted on the ceiling surface. Designed to work in the zone **1.21 & 2.22** of the explosion hazard of gases, vapors and mists of flammable liquids with air, as well as of flammable dusts and fibers. The housing is made of powder coated steel or stainless steel.

Optional version with autonomous **A3** power source.
Optionally the luminaire can be equipped with DALI-2 driver **DA**.

FEATURES



MECHANICAL PARAMETERS

housing	powder coated stainless steel (NIRO)
diffuser	UV stabilised polycarbonate (PC)
ingress protection	IP67
protection class	I
impact resistance	IK10
mounting	using brackets *check: mountings*

ELECTRICAL PARAMETERS

connection terminals	2,5 mm²
input voltage	**34E:** 220-240V 50-60Hz, **25E:** 110-254V 50-60Hz, 220-250V 0Hz
light source	intrisically safe LED modules
power factor	>0,95
cable inlets	Ø20 *(wire 6-13mm)* Ø25 - *optionally (wire 9-17mm)*
overvoltage protection	1kV (L-N) 2kV (L-PE)

WORK PARAMETERS

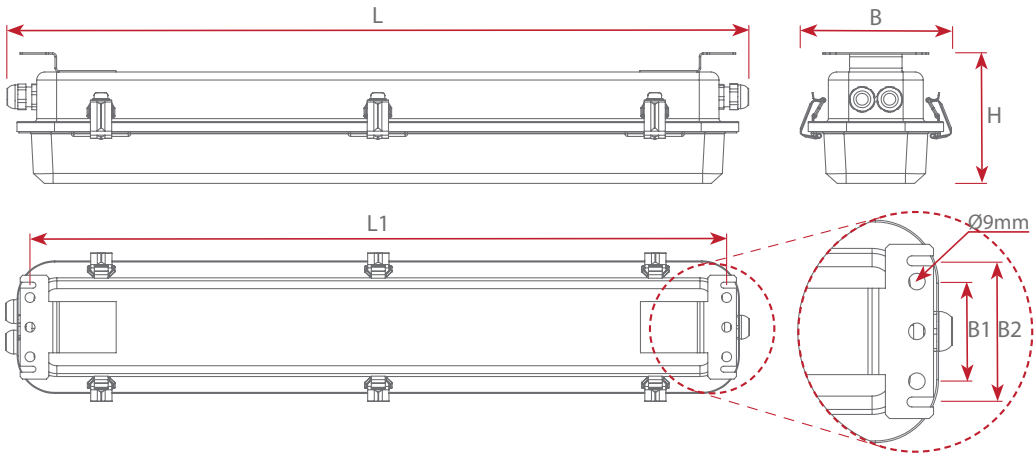
ambient temperature	0°C (*-20°C) to +45°C ** - check the operating conditions of the luminaire at sub-zero temperatures on page 5.*
lifetime	>100.000h L_{80} B_{50}

PHOTOMETRICAL PARAMETERS

CRI	>85
colour temperature	4000K 6500K - *option*

As a standard, the housing is equipped with a 21 gland system (two glands on one side and one on the other side of the housing). This housing can be used both as a terminal and a cross-type (both sides or one side).
The glands are equipped with sealing plugs, which should be left in place if the glands are not used.
For luminaire type 0600, the gland arrangement 20 is available for glands with a size of Ø20.
For glands with a size of Ø25 and luminaire type 0600, the gland arrangement 10 should be used.

DIMENSIONS



TYPE	L [mm]	L1 [mm]	B [mm]	B1 [mm]	B2 [mm]	H [mm]	weight [kg]
EXF300LED-0600	730	704	150	60	85	134	5,3
EXF300LED-1200	1340	1314	150	60	85	134	8,5

STANDARD TYPES COMPARISON

Voltage 220-240V 50-60Hz (34E) A3

II 2G Ex eb mb IIC T5 Gb
II 2D Ex tb IIIC T55°C Db

TYPE	LUMINOUS FLUX [lm]	POWER CONSUMP. [W]	EFFICIENCY [lm/W]	MAX. TEMP. [°C]
EXF300LED-0600-FX1	2806	21,2	132	45
EXF300LED-0600-FX2	5435	38,6	141	45
EXF300LED-1200-FX2	5561	38,6	144	45
EXF300LED-1200-FX4	10837	74,0	146	45

II 2G Ex eb mb IIC T5 Gb
II 2D Ex tb IIIC T70°C Db

TYPE	LUMINOUS FLUX [lm]	POWER CONSUMP. [W]	EFFICIENCY [lm/W]	MAX. TEMP. [°C]
EXF300LED-0600-GX2	3507	25,3	139	45
EXF300LED-1200-GX2	3560	25,3	141	45
EXF300LED-1200-GX4	6969	47,0	148	45

OPTIONAL TYPES COMPARISON

Voltage 110-254V 50-60Hz; 220-250V 0Hz (25E) A3

II 2G Ex eb mb IIC T5 Gb
II 2D Ex tb IIIC T55°C Db

TYPE	LUMINOUS FLUX [lm]	POWER CONSUMP. [W]	EFFICIENCY [lm/W]	MAX. TEMP. [°C]
EXF300LED-0600-FX1	2806	21,2	132	45
EXF300LED-0600-FX2	5435	38,0	143	45
EXF300LED-1200-FX2	5561	38,5	144	45
EXF300LED-1200-FX4	10837	75,6	143	45

II 2G Ex eb mb IIC T5 Gb
II 2D Ex tb IIIC T70°C Db

TYPE	LUMINOUS FLUX [lm]	POWER CONSUMP. [W]	EFFICIENCY [lm/W]	MAX. TEMP. [°C]
EXF300LED-0600-GX2	3507	25,3	139	45
EXF300LED-1200-GX2	3560	25,3	141	45
EXF300LED-1200-GX4	6969	47,0	148	45

Luminous flux tolerance +/- 10%
Power tolerance +/- 10%
The parameters given in the following data sheet has been determined for the temperature Ta=25°C.

Luminous flux, light intensity distribution and efficiency has been tested on the basis of the standards EN ISO 17025:2005, norm series EN13032 and LM-79.

The actual data and General Warranty Conditions are available on our website **www.atmlighting.pl**

EMERGENCY VERSION

3h

Emergency power module:

Version with 3h emergency power module. **A3**

During the battery charging, the power consumption increases by 3W.

MEAN EMERGENCY LUMINOUS FLUX 34E

TYPE	LUMINOUS FLUX [lm]
EXF300LED-0600-FX1	600
EXF300LED-0600-FX2	679
EXF300LED-0600-GX2	769
EXF300LED-1200-FX2	697
EXF300LED-1200-FX4	479
EXF300LED-1200-GX2	772
EXF300LED-1200-GX4	638

MEAN EMERGENCY LUMINOUS FLUX 25E

TYPE	LUMINOUS FLUX [lm]
EXF300LED-0600-FX1	361
EXF300LED-0600-FX2	351
EXF300LED-0600-GX2	385
EXF300LED-1200-FX2	342
EXF300LED-1200-FX4	352
EXF300LED-1200-GX2	386
EXF300LED-1200-GX4	219

Note: For the 34E power supply and the 0600 luminaire version and the version with an emergency power supply module, the possible arrangement of glands is 10 (Ø25) or 20 (Ø20).

The luminaire can operate within a temperature range of -20°C to 0°C, provided that the following conditions are met:

- Battery charging must always take place at temperatures above 0°C,
- Within the ambient temperature range of -20°C to 0°C, the luminaire must remain continuously on to prevent loss of battery capacity,
- When the battery is fully charged, the luminaire may switch to emergency mode at ambient temperatures from -20°C to 0°C.

The operating duration of the emergency modules is specified for Ta = 25°C.

For ambient temperatures between 40°C and 45°C, the operating time of the emergency module is reduced to 2 hours and 30 minutes.

OPTIONAL VERSIONS

3F

3-phase:

Version with terminals L1, L2, L3, PE, N powered from L and N with voltage of 230V **3F**

DALI-2 driver:

Version equipped with DALI-2 driver **DA**

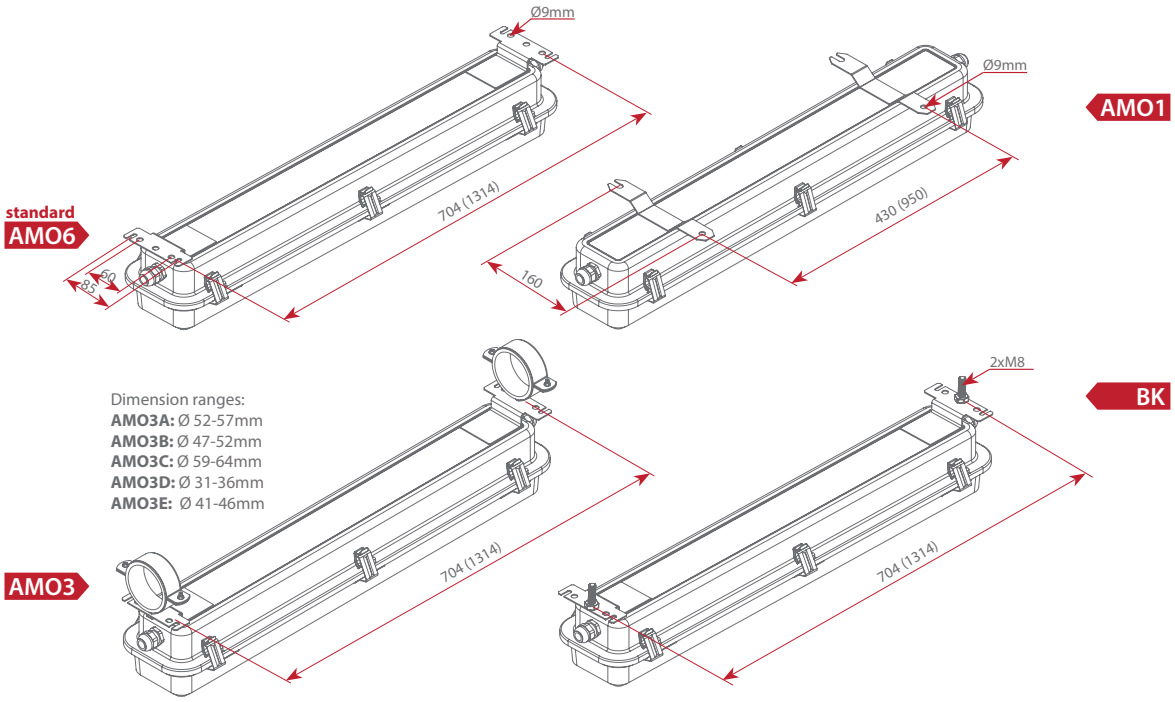
Optionally, the housing can be equipped with an integrated power supply with a DALI-2 interface, which allows monitoring the operation of the fixture and controlling the lighting using data directly from motion sensors or from the building management system (BMS). A properly configured lighting control system can significantly reduce electricity costs and improve user ergonomics.
The DALI-2 power supply is available only for the 34E power version (220-240V, 50-60Hz). Power at the terminal > 12V.

MAXIMUM NUMBER OF FIXTURES CONNECTED IN LINE

MAXIMUM NUMBER OF LINE CONNECTED LUMINAIRES DEPENDING ON THE USED CIRCUIT BREAKERS

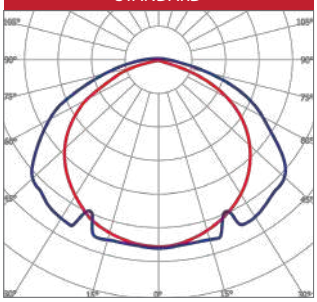
Power supply	B16	C16	Max. starting current	Starting time
25E	24	40	24A	< 250 µs
34E	27	45	14A	< 1300 µs

MOUNTINGS



PHOTOMETRY

STANDARD



CONFIGURATION

E	X	F	3	0	0	L	E	D	-				-			-	34E	-	44	-	21*	P	20	-	NIRO	-	PC	-	A3	-		-	AMO6
										0	6	0	0	FX	1		25E		40		10	M	25						DA		AMO1
										1	2	0	0	GX	2				60		11										BK
															4				66		20*										AMO3
																					22*										

group
explosionproof light fittings
type
type 300

source of light
LED modules

approximate length
~ 600mm, 1200mm

LED module type

LED module quantity

power supply
34E - 220-240V 50-60Hz,
25E - 110-254V 50-60Hz, 220-250V 0Hz

wiring
40 - single 4-pole terminal → 4
44 - double 4-pole terminal → 4 4 ←
60 - single 6-pole terminal → 6
66 - double 6-pole terminal → 6 6 ←

cable inlets - quantity
10 - one cable inlet on one side → 1 0
11 - one cable inlets on both sides → 1 1 ←
20 - two cable inlets on one side → 2 0 *only for M20 and P20
21 - two cable inlets on one side and one on the other side → 2 1 ← *only for M20 and P20
22 - two cable inlets on both sides → 2 2 ← *only for M20 and P20

cable inlets - material
P - plastic
M - metal

cable inlets - size
20 - Ø20
25 - Ø25

housing material
NIRO - powder coated stainless steel

diffuser material
PC - UV stabilized polycarboate

emergency version
A3 - version with 3-hour emergency power supply module.
Available only with gland system 20 for luminaire version 0600 and gland size Ø20. For gland size Ø25, system 10 should be used.

optional version
DA - version equipped with integrated DALI-2 power supply. Version available only for 34E power supply (220-240V, 50-60Hz).

mountings
check: mountings on page 5.

DOWNLOADS

LDT ATEX IECEx