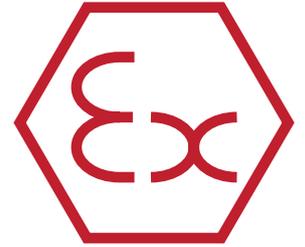
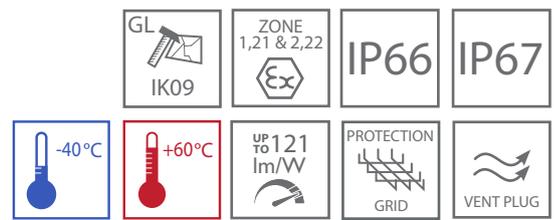


ZONE 1,21 & 2,22



# EXF450LED

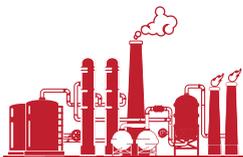




EX MARKING:  II 2G Ex eb mb IIC T4/T5 Gb  
II 2D Ex tb IIIC T85...115°C Db

CERTIFICATES: OBAC 23 ATEX 0129

## EXEMPLARY APPLICATIONS



REFINERIES



OFFSHORE



CHEMICAL  
PLANTS



CHEMICAL  
WAREHOUSES

Explosion-proof floodlight with **LED** modules with very high luminous flux. Designed to be used in the zones **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 anodized aluminum. The diffuser is made of tempered glass.

Versions **3F** compatible with 3-phase network.

Additional accessories as protection grid **PRG** or vent plugs **VENT** can be installed optionally.

FEATURES

MECHANICAL PARAMETERS

	housing	anodized aluminum (ALU)
	diffuser	tempered glass (GL)
	ingress protection	IP66, IP67
	protection class	I
	shock resistance	IK09
	mounting	on the bracket
	mounting accessories	check: <i>mountings</i>
	optional accessories	protection grid (PRG)
	wires between the fitting modules	halogen-free high temperature resistant silicone wires

WORK PARAMETERS

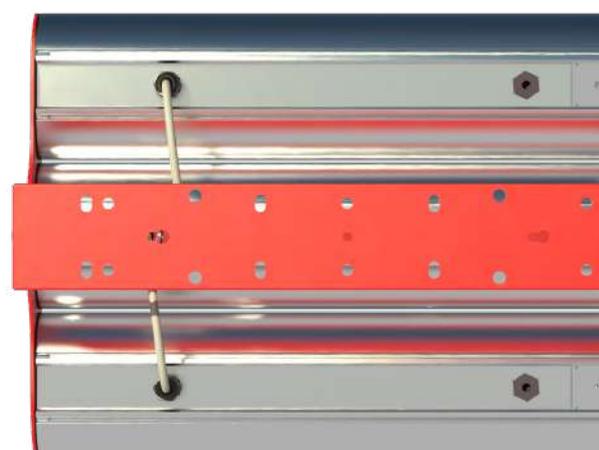
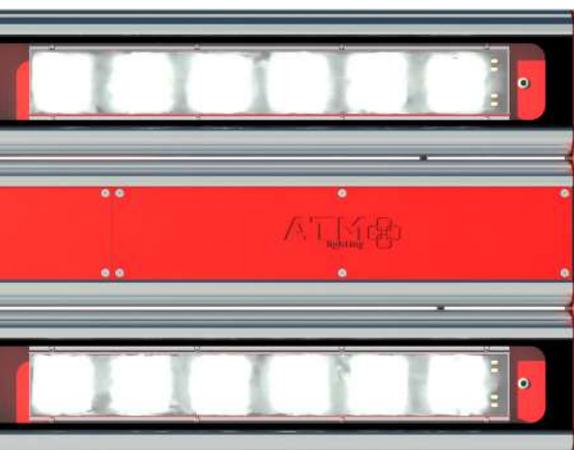
	ambient temperature	-40°C up to +60°C check: <i>types comparison</i>
	lifetime	>50.000h L <sub>80</sub> B <sub>10</sub> >70.000h L <sub>70</sub> B <sub>10</sub>

ELECTRICAL PARAMETERS

2,5 mm <sup>2</sup> 6,0 mm <sup>2</sup> - <i>optionally</i>	connection terminals	
100-277 V, 50-60 Hz voltage ± 10%	input voltage	
intrinsically safe LED modules	light source	
>0,98	power factor	
Ø20 (wire 6-13mm) Ø25 - <i>opcja</i> (wire 9-17mm)	cable inlets	
L-N 6kV, L-PE 10kV	overvoltage protection	

PHOTOMETRICAL PARAMETERS

>80 >90 - <i>optionally</i>	CRI	
4000K 6000K - <i>optionally</i>	colour temperature	
SVM < 0,01 <i>acc. with IEC TR 61547-1:2020</i>	light pulsation	
PstLM < 0,3 <i>acc. with IEC TR 61547-1:2020</i>	flicker indicator	



## TYPES COMPARISON

TYPE OF THE FITTING	LUMINOUS FLUX* [lm]	POWER CONSUMP. [W]	EFFICIENCY [lm/W]	AMBIENT TEMPERATURE [°C]	TEMP. CLASS / MAX. AMBIENT TEMPERATURE
EXF450LED-EY2-1	12500	103	121	-40°C ÷ +60 -40°C ÷ +50	T4 / T90 °C T5 / T80 °C
EXF450LED-EY2-2	17500	158	111	-40°C ÷ +50	T4 / T95 °C
EXF450LED-EY3-1	19000	160	119	-40°C ÷ +55 -40°C ÷ +50	T4 / T85 °C T5 / T80 °C
EXF450LED-EY3-2	22500	198	114	-40°C ÷ +55 -40°C ÷ +45	T4 / T100 °C T5 / T90 °C
EXF450LED-EY3-3	26100	238	110	-40°C ÷ +50	T4 / T115 °C
EXF450LED-EY4-1	25000	207	121	-40°C ÷ +55 -40°C ÷ +45	T4 / T90 °C T5 / T80 °C

\* - Luminous flux is indicated for LED modules CRI 80 and STD optics.



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](http://www.atmlighting.pl)

## MAXIMAL NUMBER OF LUMINAIRES CONNECTED IN LINE

MAXIMAL QUANTITY OF FITTINGS THAT MAY BE CONNECTED ACCORDING TO THE USED CIRCUIT BRAKER

LUMINOUS FLUX	B16	C16	Max. starting current	Starting time
EXF450LED-EY2-1	6	11	112A	<140µs
EXF450LED-EY2-2	3	6	177A	<140µs
EXF450LED-EY3-1	3	6	177A	<140µs
EXF450LED-EY3-2	4	7	171A	<140µs
EXF450LED-EY3-3	4	7	171A	<140µs
EXF450LED-EY4-1	4	7	171A	<140µs

Above values are indicated for the power supply voltage 230 VAC.

## OPTIONAL VERSION

3F

3-phase power supply:

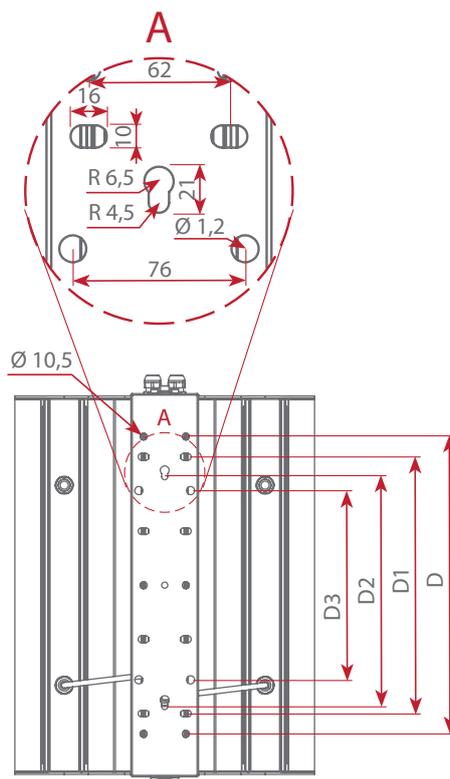
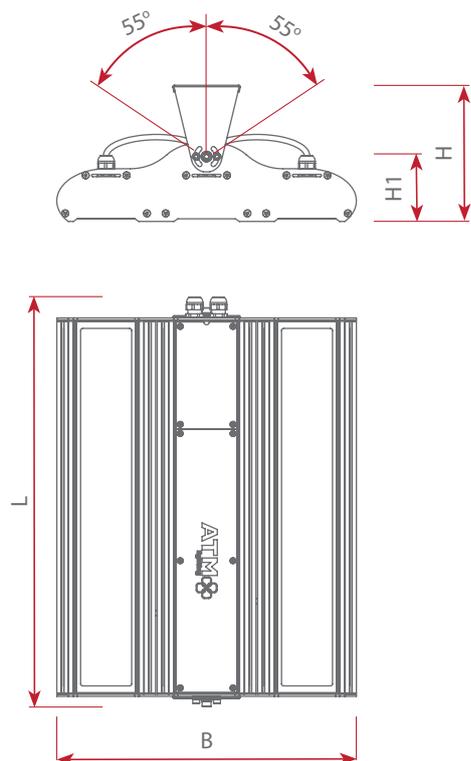
Optional version adapted to 3-phase power supply

3F

DIMENSIONS

**VERSION EY2**

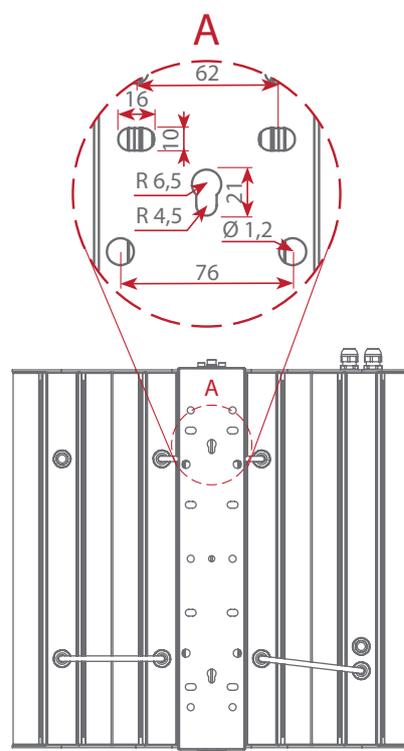
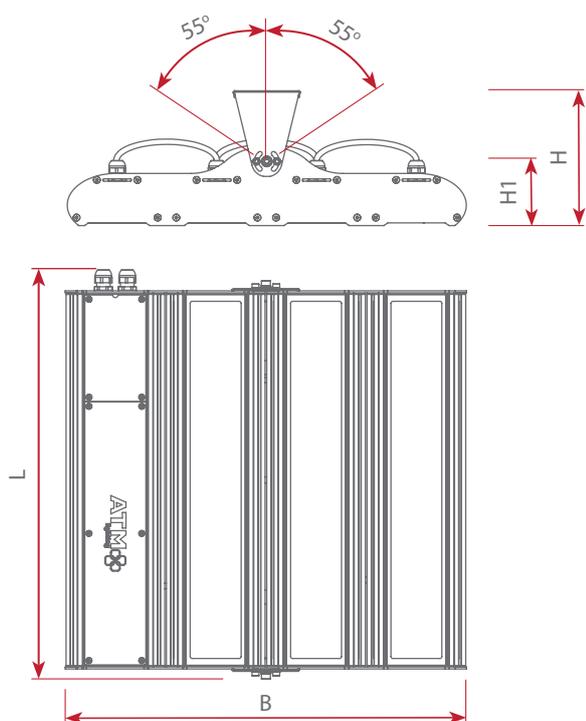
standard bracket AMO90



TYP	L	B	H	H1	D	D1	D2	D3	Weight
EXF450LED-EY2	656	435	202	97	490	430	390	330	11 kg

**VERSION EY3**

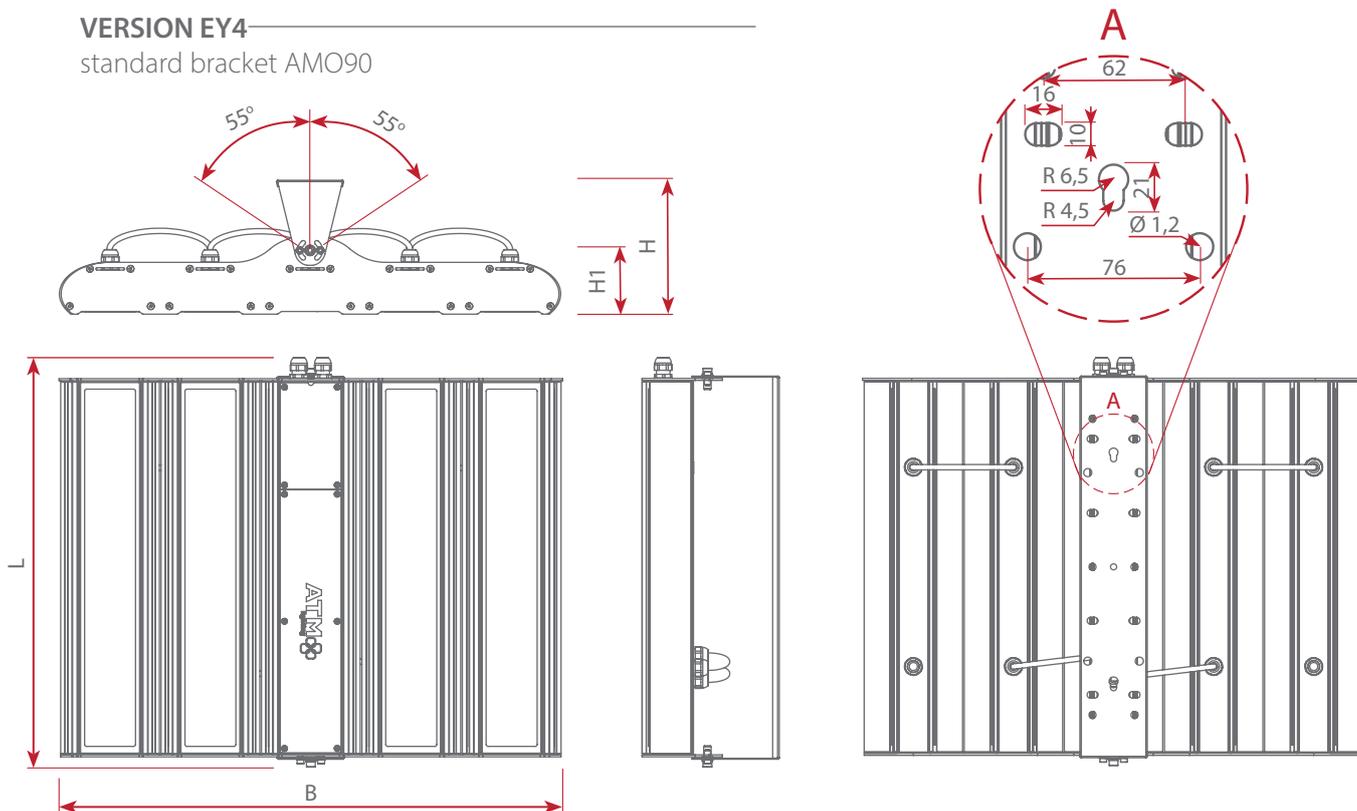
standard bracket AMO90



TYPE	L	B	H	H1	D	D1	D2	D3	Weight
EXF450LED-EY3	656	585	202	97	490	430	390	330	14 kg

**VERSION EY4**

standard bracket AMO90



TYPE	L	B	H	H1	D	D1	D2	D3	Weight
EXF450LED-EY4	656	735	202	97	490	430	390	330	17 kg

**ADDITIONAL EQUIPMENT**



Additional equipment:

Additional protection grid protecting from unexpected damages

**PRG**



Additional equipment:

Additional ventilated plug for every module of the lighting fixture

**VENT**

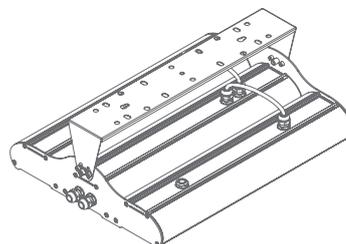
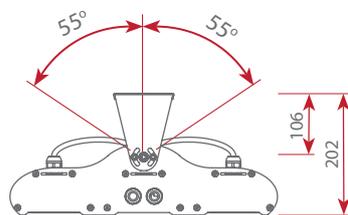


The ventilated plug prevents from the condensation of water vapor inside the fitting. This version is recommended for external use of the fitting.

MOUNTING

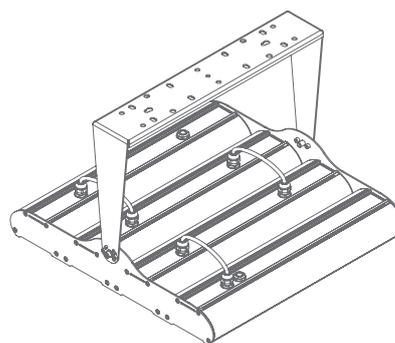
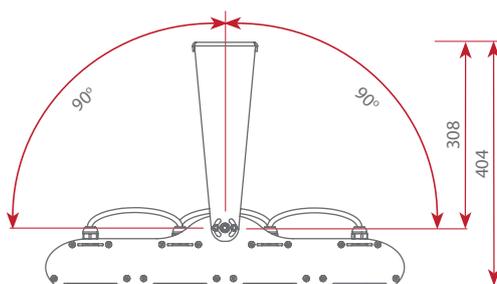
AMO90

standard



AMO180

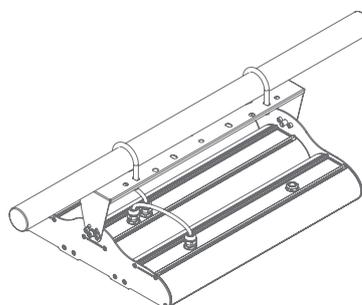
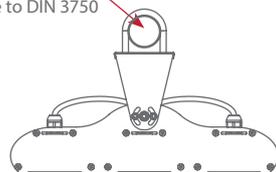
optional



AMO360

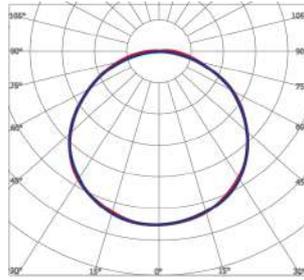
optional

adaptable diameter  
due to DIN 3750



## PHOTOMETRY

STD (Standard)  
no additional optics



## CONFIGURATIONS

EXF450LED-EY	-	-	24E	-	30	-	20	P	20	-	ALU	-	GL	-	STD	-	-	-	AMO90
group explosion-proof lighting	2	1			50		10	M	25								3F	PRG	AMO180
type type 450	3	2																VENT	AMO360
light source LED modules	4	3																	
LED modules type																			
LED modules quantity																			
version																			
power supply 24E - 100÷277V, 50-60Hz																			
wiring 30 - single 3-pole terminal → 3 standard 50 - single 5-pole terminal → 5 version 3F																			
cable inlets - quantity 10 - one cable inlet on the side of the housin → 1 0 20 - two cable inlets on the side of the housing → 2 0																			
cable inlets - material M - metal P - plastic																			
cable inlets - size 20 - Ø20 25 - Ø25																			
housing material ALU - anodized aluminum																			
diffuser material GL - tempered glass																			
optics STD - standard beam																			
additional versions 3F - version adated to work in 3-phase network - 5x2,5mm <sup>2</sup> (L1, L2, L3, PE, N)																			
additional equipment PRG - protection grid on the diffuser VENT - version equipped with explosionproof ventilated plugs (recommended in external use of the fitting)																			
mounting check: mountings																			

## DOWNLOADS

LDT



CE

ATEX