



Explosion Proof lighting solutions

Designing your lighting solutions





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Applications

They can be used as fixed lighting in places with potentially explosive atmospheres, such as:

- Petrochemical plants
- Oil platforms
- Oil pump housing
- Transit stations

Gas & Dust explosive zone environments:

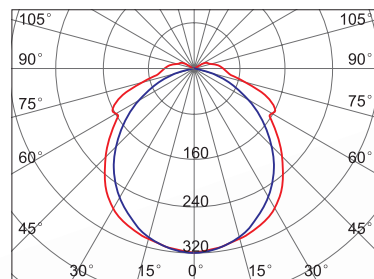
Group IIA, IIB, IIC

Zone 1, Zone 2, Zone 21, Zone 22

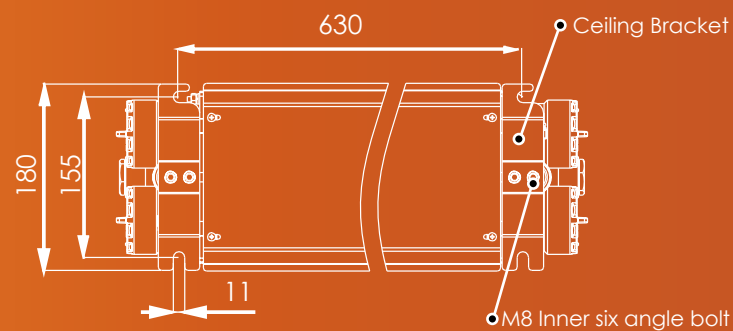
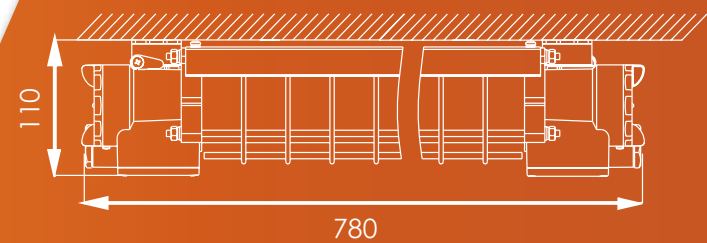
Characteristics

- Made with a special aluminum housing, suitable for long-term exposure in the highly corrosive environment of offshore platforms, chlor-alkali, hydrogen sulfide, etc.
- The derrick mounting fixtures are made of anti-corrosive aluminum and include locking angle equipment, so they can be safely used in drilling platforms and high-vibration environment.
- The anti corrosion, abrasion proof, dust proof and water proof powder coated housings make these lights an excellent choice for usage in high pressure environments.
- Bracket, reflector, guard and all exposed fasteners are made of type 304 stainless steel (customizable to type 316), which can effectively guarantee the durability and strong anti-corrosion performance of the lamp.
- Elimination of junction boxes and installation costs. A variety of installation methods are available: ceiling, side walls, curved rods, with boom, etc.

Fixed Explosion Proof Light

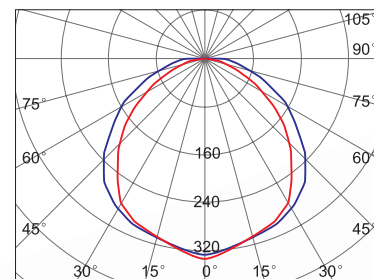


— 0°
— 90°
Distance High: 1.5

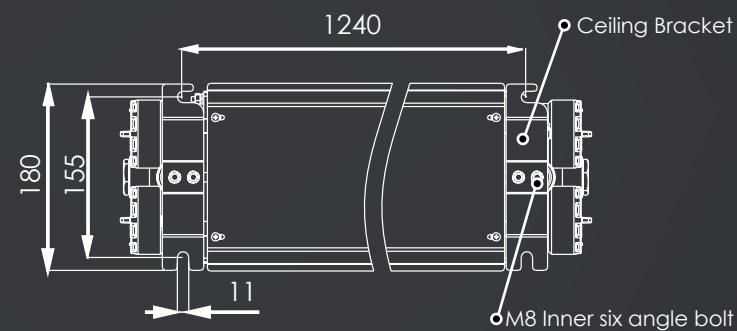
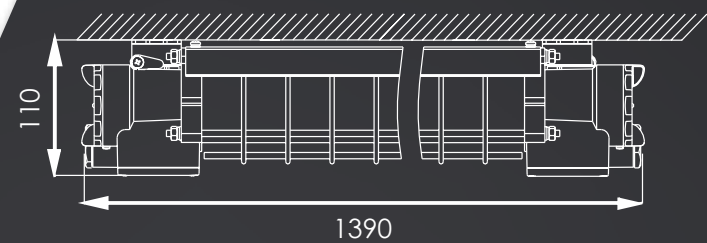


Item No.	Power (W)	Luminous Flux	CCT	CRI	Voltage	Line Frequency (Hz)	Beam Angle	IP	PF	Lifetime	Dimensions (mm)
29411	20W	1800lm	5000K	70	AC100-240V	50/60Hz	120°	66	0.96	50,000hrs	780x180x110

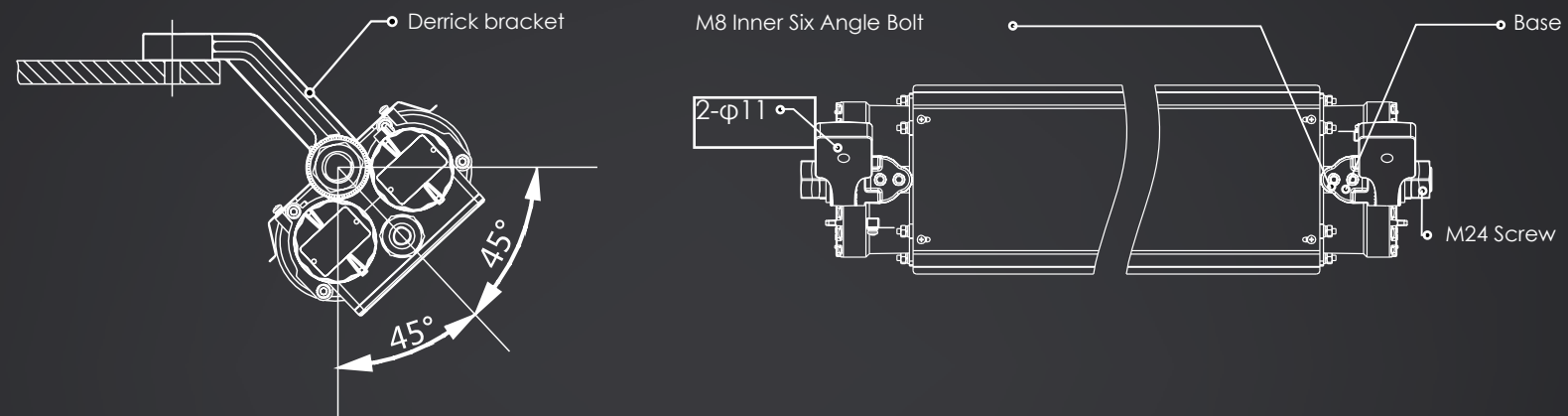
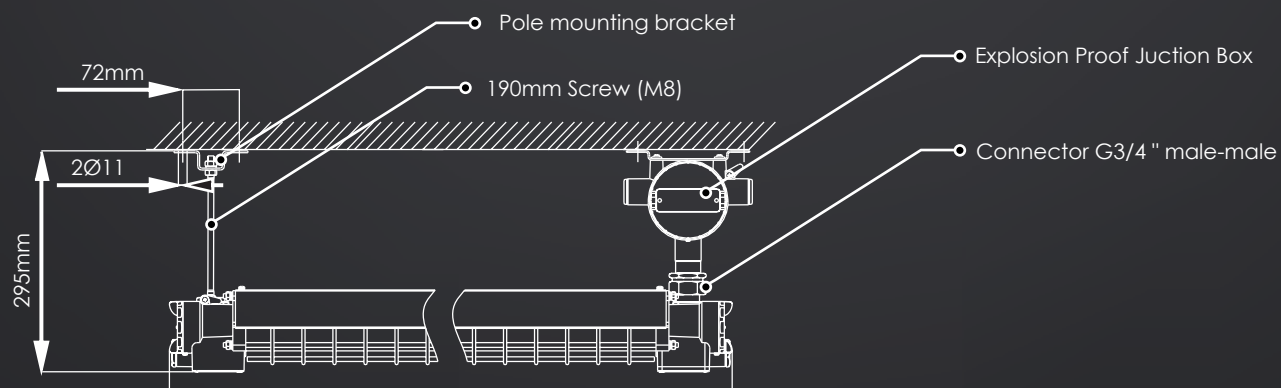
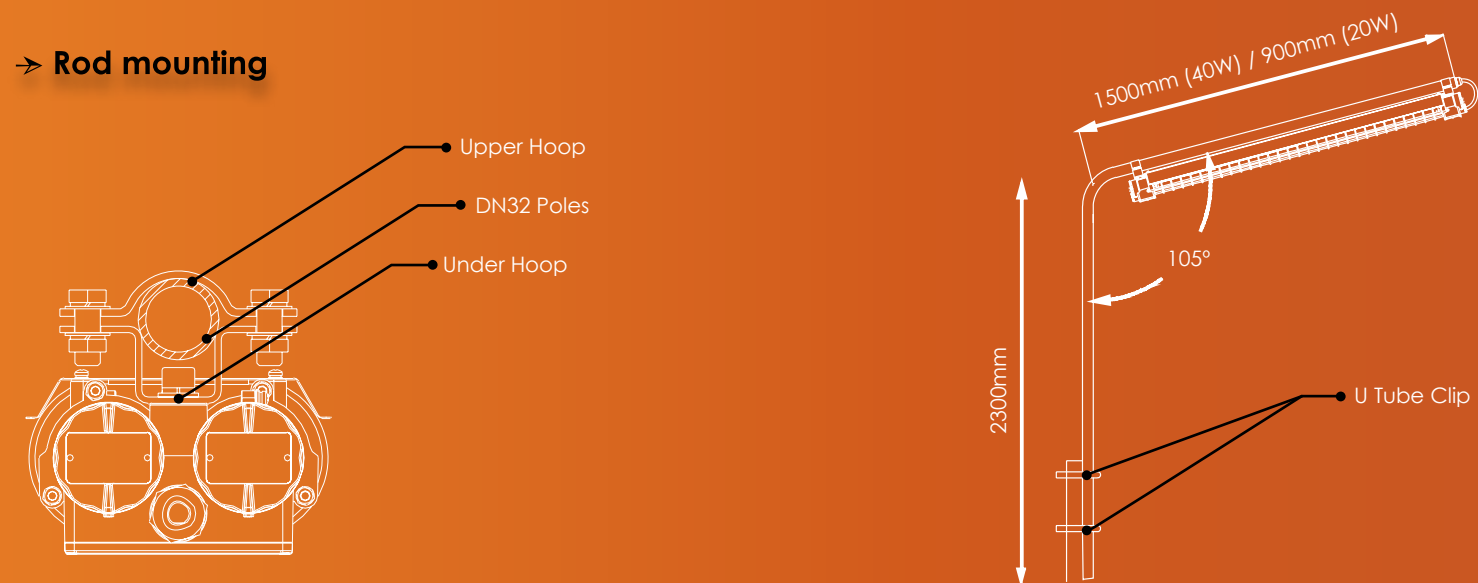
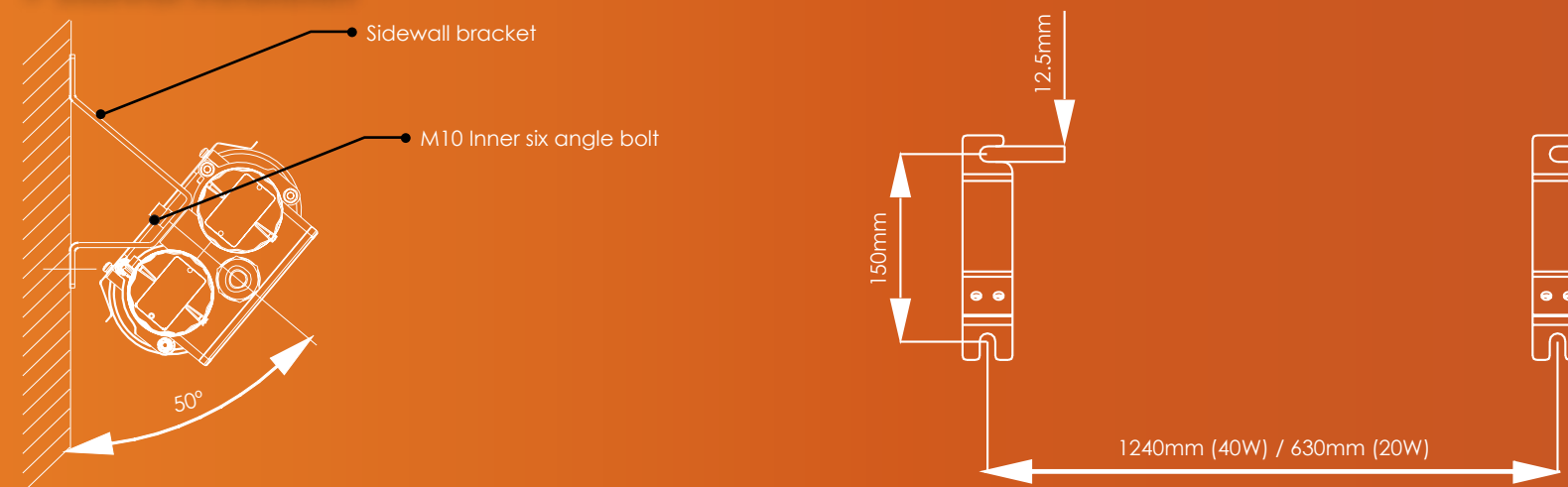
Fixed Explosion Proof Light



— 0°
— 90°
Distance High: 1.5



Item No.	Power (W)	Luminous Flux	CCT	CRI	Voltage	Line Frequency (Hz)	Beam Angle	IP	PF	Lifetime	Dimensions (mm)
88168	40W	3300lm	5000K	70	AC100-240V	50/60Hz	120°	66	0.96	50,000hrs	1240x155x110

→ **Derrick Installation**→ **Pole mounting**→ **Rod mounting**→ **Sidewall Installation**

Classification and labelling of hazardous locations

Flammable medium	Hazardous locations Probability of a potentially explosive atmosphere occurring	Classification of hazardous locations	Product classification		Equipment protection level (EPL)		
			Product group	Product category			
Gases, mists, vapours	Continuously, for long periods or frequently	Zone 0	II				
	Likely to occur	Zone 1	II	1G		Ga	Gb
	Infrequently and for short periods only	Zone 2	II		2G	3G	Gc
Dusts	Continuously, for long periods or frequently	Zone 20	II				
	Likely to occur	Zone 21	II	1D		Da	Db
	Infrequently and for short periods only	Zone 22	II		2D	3D	Dc
Official Institutes							
code number	Institute Notified Body						
0080	INERIS						

CE

0080

Ex

II 2G Ex de op IIC T5 Gb

II 2D Ex op tb IIIC T95°C Db

Classification Explosion groups & Temperature classes

Explosion group	Examples depending on explosion group temperature class						
IIA	IIB	IIIC	Ammonia	Ethanol	Petrol		
			Methane	Cyclohe-xene	Diesel fuel		
			Ethane	n-Butane	Fuel oil	n-	Acetal -dehyde
			Propane		Hexane		
			City gas	Ethylene	Ethyl-glycol		
			Acrylic nitrile	Ethylene-oxide	Carbon hydrogen	Ethyl-ether	
			Hydrogen	Acetylene			Carbon disulphide
			T1 < 450°C				
			T2 < 300°C				
			T3 < 200°C				
			T4 < 135°C				
			T5 < 100°C				
			T6 < 85°C				
Product use depending on temperature class (T1 -T6). The temperature class indicates the max. temperature of the exposed surface of the product. For dust explosion proof, the max. surface temperature is directly shown (e.g. T80°C)							
Temperature class							

III A

IIB

IIIC

flammable fibres

IIB

IIIC

non conductive dust

IIB

IIIC

conductive dust

Code

Dust classification

8	-	long periods of immersion
7	-	the effects of temporary immersion
6	totally protected against dust	strong jets of water
5	dust-limited ingress	low pressure jets from all directions
4	solids objects >1mm	sprays from all directions
3	solids objects >2.5mm	direct sprays up to°60 from vertical
2	solids objects >12.5mm	direct sprays up to°15 from vertical
1	solids objects >50mm	vertical falling drops of water
0	no protection	no protection
IP	Protection against solids/dust	Protection against water

Protection principle - Type of protection - EN 60079-0 General Requirements

(1) ia (zone 0,1,2) ib (zone 1,2) ic (zone 2)	(3) ma (zone 0,1,2) mb (zone 1,2) mc (zone 2)	(5) ta (zone 20,21,22) tb (zone 21,22) tc (zone 2)
(2) iaD (zone 20,21,22) ibD (zone 21,22) icD (zone 2)	(4) maD (zone 20,21,22) mbD (zone 21,22) mcD (zone 2)	(6) Highest possible application areas

Ingress Protection EN 60529

8	-	long periods of immersion
7	-	the effects of temporary immersion
6	totally protected against dust	strong jets of water
5	dust-limited ingress	low pressure jets from all directions
4	solids objects >1mm	sprays from all directions
3	solids objects >2.5mm	direct sprays up to°60 from vertical
2	solids objects >12.5mm	direct sprays up to°15 from vertical
1	solids objects >50mm	vertical falling drops of water
0	no protection	no protection
IP	Protection against solids/dust	Protection against water

Further information

For common use	-
For use under special conditions	X
This product is an Ex-certified component for use in a complete system	U
Application	Code



Applications

They can be used as fixed lighting in hazardous areas such as:

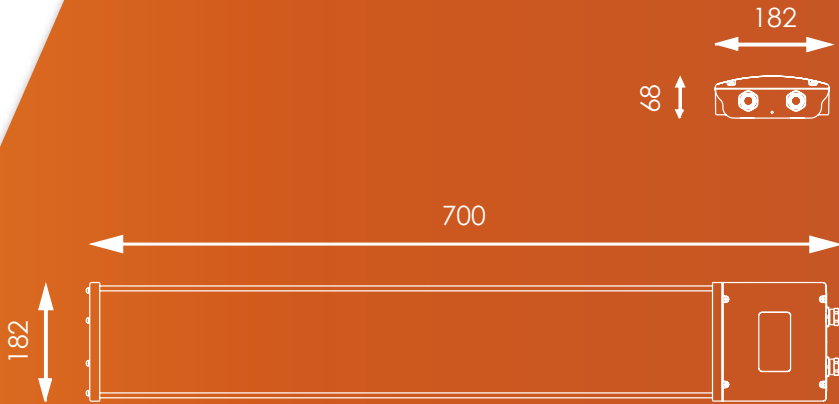
- Oil refineries
- Oil platforms
- Chemical tankers
- Chemical's warehouses

Gas & Dust explosive zone environments:
Group IIC
Zone 2, Zone 22

Characteristics

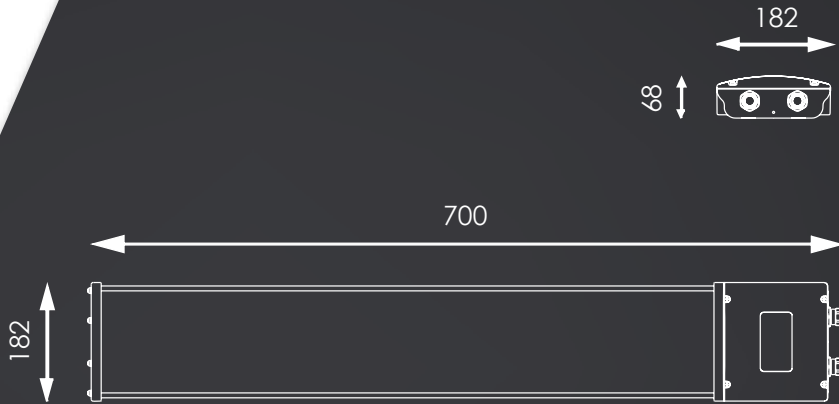
- All exposed fasteners are made of type 304 stainless steel (customizable to type 316), which can effectively guarantee the durability and strong anti-corrosion performance of the luminaire.
- The housing is made from water and corrosion resistant anodized aluminum and includes locking angle equipment, so it can be safely used in drilling platforms and high-vibration environments.
- The light has a luminous efficiency that can reach up to 110lm/W, saving up to 60% in energy costs, compared with Metal Halide lamps.
- Anti-vibration tested.
- Independent junction box for easy installation and maintenance.

Fixed Explosion Proof Light

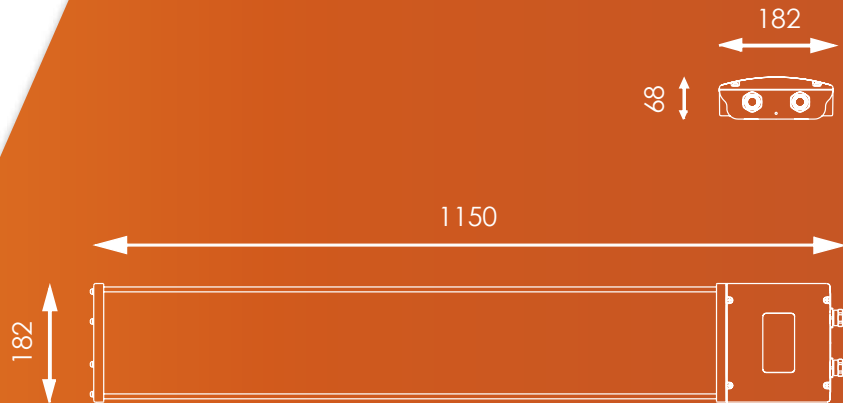


Item No.	Power (W)	Luminous Flux	CCT	CRI	Voltage	Line Frequency (Hz)	Beam Angle	IP	PF	Lifetime	Dimensions (mm)
843976	20W	2200lm	5000K	70	AC108-264V	50/60Hz	115°	66	0.96	100,000hrs	700x182x68
843978	30W	3300lm	5000K	70	AC108-264V	50/60Hz	115°	66	0.96	100,000hrs	700x182x68

Fixed Explosion Proof Light

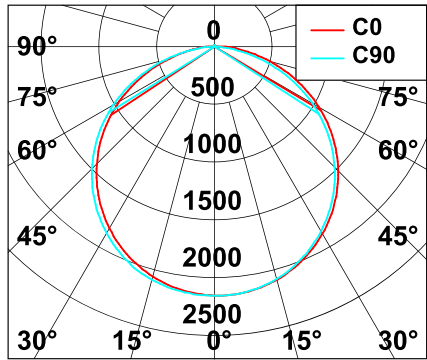


Item No.	Power (W)	Luminous Flux	CCT	CRI	Voltage	Line Frequency (Hz)	Beam Angle	IP	PF	Lifetime	Dimensions (mm)
843980	40W	4400lm	5000K	70	AC108-264V	50/60Hz	115°	66	0.96	100,000hrs	700x182x68



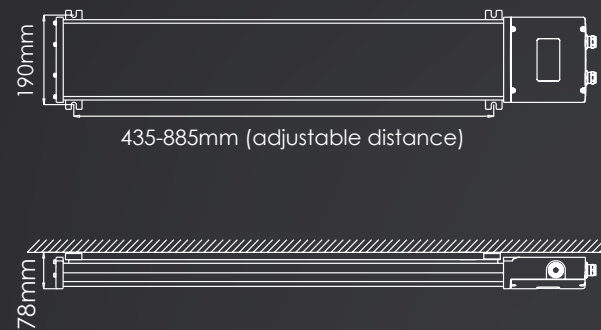
Item No.	Power (W)	Luminous Flux	CCT	CRI	Voltage	Line Frequency (Hz)	Beam Angle	IP	PF	Lifetime	Dimensions (mm)
843982	60W	6600lm	5000K	70	AC108-264V	50/60Hz	115°	66	0.96	100,000hrs	1150x182x68
843984	80W	8800lm	5000K	70	AC108-264V	50/60Hz	115°	66	0.96	100,000hrs	1150x182x68

For 115°:

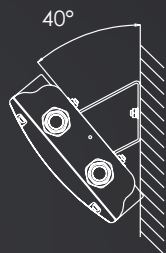


Fixed Explosion Proof Light / Installation types

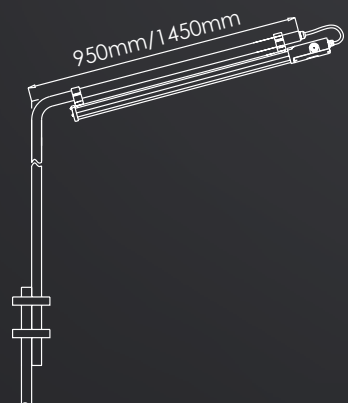
→ Bracket mounted (Standard)



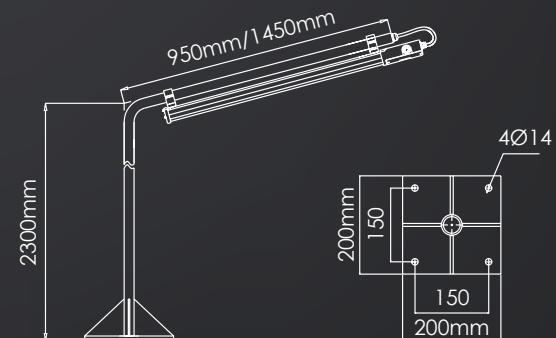
→ Bracket mounted (40° tilted)



→ Guardrail installation



→ Flange-pole mounted



Labelling of explosion proof equipment according to ATEX (2014/34/EU)

Classification and labelling of hazardous locations

Flammable medium	Hazardous locations Probability of a potentially explosive atmosphere occuring	Classification of hazardous locations	Product classification		Equipment protection level (EPL)	
			Product group	Product category		
Gases, mists, vapours	Continuously, for long periods or frequently	Zone 0	II			
	Likely to occur	Zone 1	II	1G		Ga
	Infrequently and for short periods only	Zone 2	II		3G	Gc
Dusts	Continuously, for long periods or frequently	Zone 20	II			
	Likely to occur	Zone 21	II	1D		Da
	Infrequently and for short periods only	Zone 22	II		3D	Dc
Official Institutes						
code number	Institute					
0477	Eurofins Product Testing Italy					

Explosion groups & Temperature classes

Explosion group	Examples depending on explosion group					-	
	temperature class					-	
IIA	IIB	Ammonia	Ethanol	Petrol	Acetal -dehyde		
		Methane	Cyclohe-xene	Diesel fuel			
		Ethane	n-Butane	Fuel oil			
		Propane	Hexane				
	IIC	City gas	Ethylene	Ethyl-glycol	Ethyl-ether		
		Acrylic nitrile	nitride-oxide	Carbon hydrogen			
		Hydrogen	Acetylene			Carbon disulphide	
		T1< 450°C					
		T2< 300°C					
		T3< 200°C					
		T4< 135°C					
		T5< 100°C					
		T6< 85°C					
		Product use depending on temperature class (T1 -T6). The temperature class indicates the max. temperature of the exposed surface of the product. For dust explosion proof, the max. surface temperature is directly shown (e.g. T80°C)					
		Temperature class					

CE

0477

Ex

II 3G Ex nR IIC T6 Gc

II 3D Ex tc IIIC T80°C Dc

Tamb = -40°C to +55°C

Prevents transmission of the explosion outside	flameproof enclosure	Ex d		1,2	EN 60079-1
Prevents high temperatures and sparks	increased safety	Ex e		1,2	EN 60079-7
Low current / voltage supply	intrinsic safety	Ex I (1) Ex iD (2)		0,1,2, 20,21,22	EN 60079-11
Positive pressure device	pressurized apparatus	Ex p Ex pD		1,2, 21,22	EN 60079-2
Encapsulated	moulding	Ex m (3) Ex mD (4)		0,1,2, 20,21,22	EN 60079-18
Parts immersed in oil to isolate from explosive atmosphere	oil immersion	Ex o		1,2	EN 60079-6
Prevents transmission of explosion outside	powder filling	Ex q		1,2	EN 60079-5
As above, but for use in zone 2	protection "n"	Ex n		2	EN 60079-15
Dust explosion proof	protection "tD"	Ex t (5)		20,21,22	EN 60079-31
Protection principle	Type of protection	Code	Symbol	Zones to use in (4)	CENELEC

Protection principle - Type of protection - EN 60079-0 General Requirements

(1) ia (zone 0,1,2)	ib (zone 1,2)	ic (zone 2)	(3) ma (zone 0,1,2)	mb (zone 1,2)	mc (zone 2)	(5) ta (zone 20,21,22)	tb (zone 21,22)	tc (zone 2)
(2) iaD (zone 20,21,22)	ibD (zone 21,22)	icD (zone 2)	(4) maD (zone 20,21,22)	mbD (zone 21,22)	mcD (zone 2)	(6) Highest possible application areas		

Classification

Explosion group	Examples depending on explosion group		-				
	temperature class		-				
IIA	IIB	Ammonia	Ethanol	Petrol	Acetal -dehyde		
		Methane	Cyclohe-xene	Diesel fuel			
		Ethane	n-Butane	Fuel oil			
		Propane	Hexane				
	IIC	City gas	Ethylene	Ethyl-glycol	Ethyl-ether		
		Acrylic nitrile	nitride-oxide	Carbon hydrogen			
		Hydrogen	Acetylene			Carbon disulphide	
		T1< 450°C					
		T2< 300°C					
		T3< 200°C					
		T4< 135°C					
		T5< 100°C					
		T6< 85°C					
		Product use depending on temperature class (T1 -T6). The temperature class indicates the max. temperature of the exposed surface of the product. For dust explosion proof, the max. surface temperature is directly shown (e.g. T80°C)					
		Temperature class					

Code

8	-	long periods of immersion
7	-	the effects of temporary immersion
6	totally protected against dust	strong jets of water
5	dust-limited ingress	low pressure jets from all directions
4	solids objects >1mm	sprays from all directions
3	solids objects >2.5mm	direct sprays up to 60 from vertical
2	solids objects >12.5mm	direct sprays up to 15 from vertical
1	solids objects >50mm	vertical falling drops of water
0	no protection	no protection
IP	Protection against solids/dust	Protection against water

For common use

-

For use under special conditions

X

This product is an Ex-certified component for use in a complete system

U

Application

Code

Ingress Protection EN 60529

8	-	long periods of immersion
7	-	the effects of temporary immersion
6	totally protected against dust	strong jets of water
5	dust-limited ingress	low pressure jets from all directions
4	solids objects >1mm	sprays from all directions
3	solids objects >2.5mm	direct sprays up to 60 from vertical
2	solids objects >12.5mm	direct sprays up to 15 from vertical
1	solids objects >50mm	vertical falling drops of water
0	no protection	no protection
IP	Protection against solids/dust	Protection against water

Further information

(1) ia (zone 0,1,2)	ib (zone 1,2)	ic (zone 2)	(3) ma (zone 0,1,2)	mb (zone 1,2)	mc (zone 2)	(5) ta (zone 20,21,22)	tb (zone 21,22)	tc (zone 2)
(2) iaD (zone 20,21,22)	ibD (zone 21,22)	icD (zone 2)	(4) maD (zone 20,21,22)	mbD (zone 21,22)	mcD (zone 2)	(6) Highest possible application areas		



Applications

Ideal for environments with flammable gases, mists, vapors or dusts.

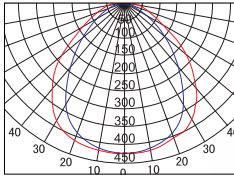
- Petrochemical plants
- Chemical plants
- Pharmaceutical Factories

**Gas & Dust explosive zone environments:
Class 1, Zone 1, Zone 2, Zone 21, Zone 22**

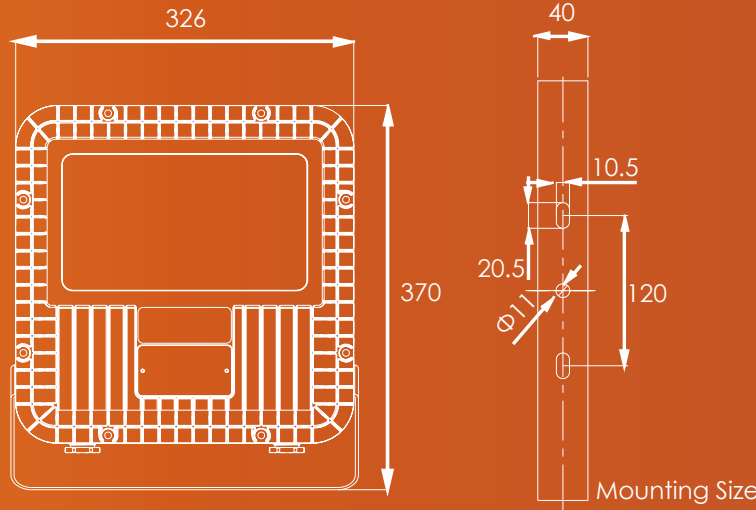
Characteristics

- The reflector design offers many beam angle options, which provide efficient light utilization in various cases. The glare-free and uniform luminance doesn't cause eye strain.
- A range of highly conductive materials accelerate the heat convection in the cooling structure, which guarantees good performance after long-term use in high temperature environments.
- The light source provided by CREE LEDs emits no dark spots and can offer energy savings over 60%, in comparison with a Metal Halide lamp.
- Taiwan Meanwell drivers, with power factor over 0.98, ensure a long lifespan and high reliability.
- The adjustable locking device on the bracket can tightly fix the lamp to any desirable angle, making the lamp tolerant to harsh vibrations.
- The aluminum housing and type 304 stainless steel fasteners are treated with a high-tech anti-corrosion technology, thus making the fixtures suitable for use in hazardous areas.
- Intelligent lighting control functions are also available.

Fixed Explosion Proof Light



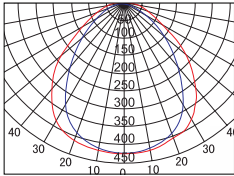
cd/1000lm
— 0°
— 90°



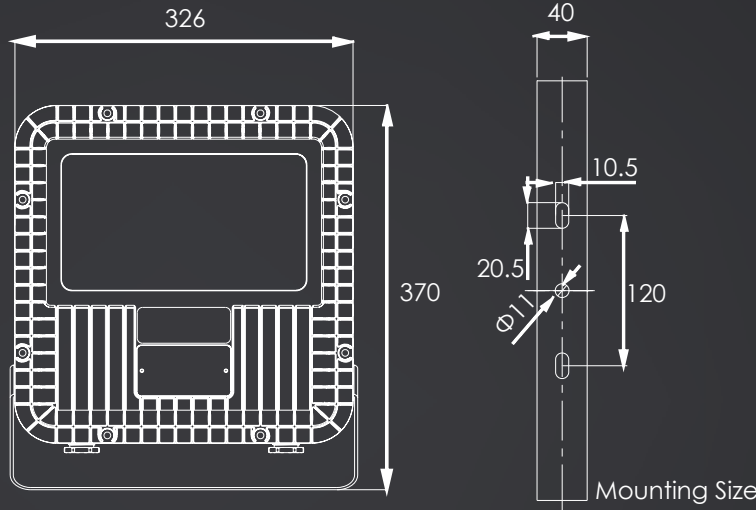
Item No.	Power (W)	Luminous Flux	CCT	CRI	Voltage	Line Frequency (Hz)	Beam Angle	IP	PF	Lifetime	Dimensions (mm)
88158	25W	2750lm	5000K	70	AC90-305V	50/60Hz	120°x140°	66	0.98	100,000hrs	370x326x88

88159	40W	4200lm	5000K	70	AC90-305V	50/60Hz	120°x140°	66	0.98	100,000hrs	370x326x88
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Fixed Explosion Proof Light



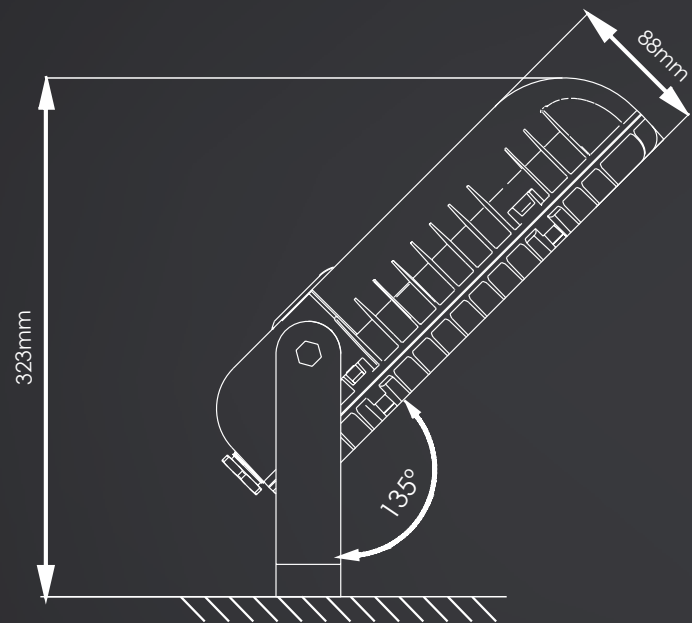
cd/1000lm
— 0°
— 90°



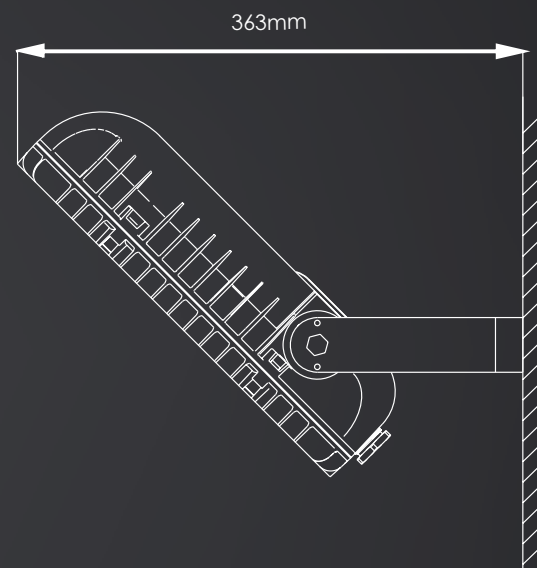
Item No.	Power (W)	Luminous Flux	CCT	CRI	Voltage	Line Frequency (Hz)	Beam Angle	IP	PF	Lifetime	Dimensions (mm)
88160	60W	5850lm	5000K	70	AC90-305V	50/60Hz	120°x140°	66	0.98	100,000hrs	370x326x88

88161	80W	6900lm	5000K	70	AC90-305V	50/60Hz	120°x140°	66	0.98	100,000hrs	370x326x88
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→ Seat-mounting



→ Side Wall-mounting



Classification and labelling of hazardous locations

Flammable medium	Hazardous locations Probability of a potentially explosive atmosphere occurring	Classification of hazardous locations	Product classification		Equipment protection level (EPL)		
			Product group	Product category			
Gases, mists, vapours	Continuously, for long periods or frequently	Zone 0	II				
	Likely to occur	Zone 1	II	1G	2G	Ga	Gb
	Infrequently and for short periods only	Zone 2	II		3G		Gc
Dusts	Continuously, for long periods or frequently	Zone 20	II				
	Likely to occur	Zone 21	II	1D	2D	Da	Db
	Infrequently and for short periods only	Zone 22	II		3D		Dc

Official Institutes

code number	Institute Notified Body
0080	INERIS

CE

0080

Ex

II 2G Ex d IIB T6 Gb

II 2D Ex tb IIIC T80°C Db

Tamb = -40°C to +40°C

Prevents transmission of the explosion outside	flameproof enclosure	Ex d		1,2	EN 60079-1
Prevents high temperatures and sparks	increased safety	Ex e		1,2	EN 60079-7
Low current / voltage supply	intrinsic safety	Ex i (1) Ex iD (2)		0,1,2, 20,21,22	EN 60079-11
Positive pressure device	pressurized apparatus	Ex p Ex pD		1,2, 21,22	EN 60079-2
Encapsulated	moulding	Ex m (3) Ex mD (4)		0,1,2, 20,21,22	EN 60079-18
Parts immersed in oil to isolate from explosive atmosphere	oil immersion	Ex o		1,2	EN 60079-6
Prevents transmission of explosion outside	powder filling	Ex q		1,2	EN 60079-5
As above, but for use in zone 2	protection "n"	Ex n		2	EN 60079-15
Dust explosion proof	protection "tD"	Ex t (5)		20,21,22	EN 60079-31
Protection principle	Type of protection	Code	Symbol	Zones to use in (6)	CENELEC

Protection principle - Type of protection - EN 60079-0 General Requirements

(1) ia (zone 0,1,2) ib (zone 1,2) ic (zone 2)	(3) ma (zone 0,1,2) mb (zone 1,2) mc (zone 2)	(5) ta (zone 20,21,22) tb (zone 21,22) tc (zone 2)
(2) iaD (zone 20,21,22) ibD (zone 21,22) icD (zone 2)	(4) maD (zone 20,21,22) mbD (zone 21,22) mcD (zone 2)	(6) Highest possible application areas

Classification Explosion groups & Temperature classes

Explosion group	Examples depending on explosion group temperature class						-	
	IIA	IIB	Ammonia Methane Ethane Propane	Ethanol Cyclohe-xene n-Butane	Petrol Diesel fuel Fuel oil Hexane	Acetal - dehyde		
			City gas Acrylic nitrile	Ethylene Ethylene-oxide	Ethyl-glycol Carbon hydrogen	Ethyl-ether		
			Hydrogen	Acetylene			Carbon disulphide	
			T1< 450°C					
			T2< 300°C					
			T3< 200°C					
			T4< 135°C					
			T5< 100°C					
			T6< 85°C					
			Product use depending on temperature class (T1 -T6). The temperature class indicates the max. temperature of the exposed surface of the product. For dust explosion proof, the max. surface temperature is directly shown (e.g. T80°C)					
			Temperature class					

IIIA	IIB	IIIC	flammable fibres
			non conductive dust
			conductive dust
Code			Dust classification

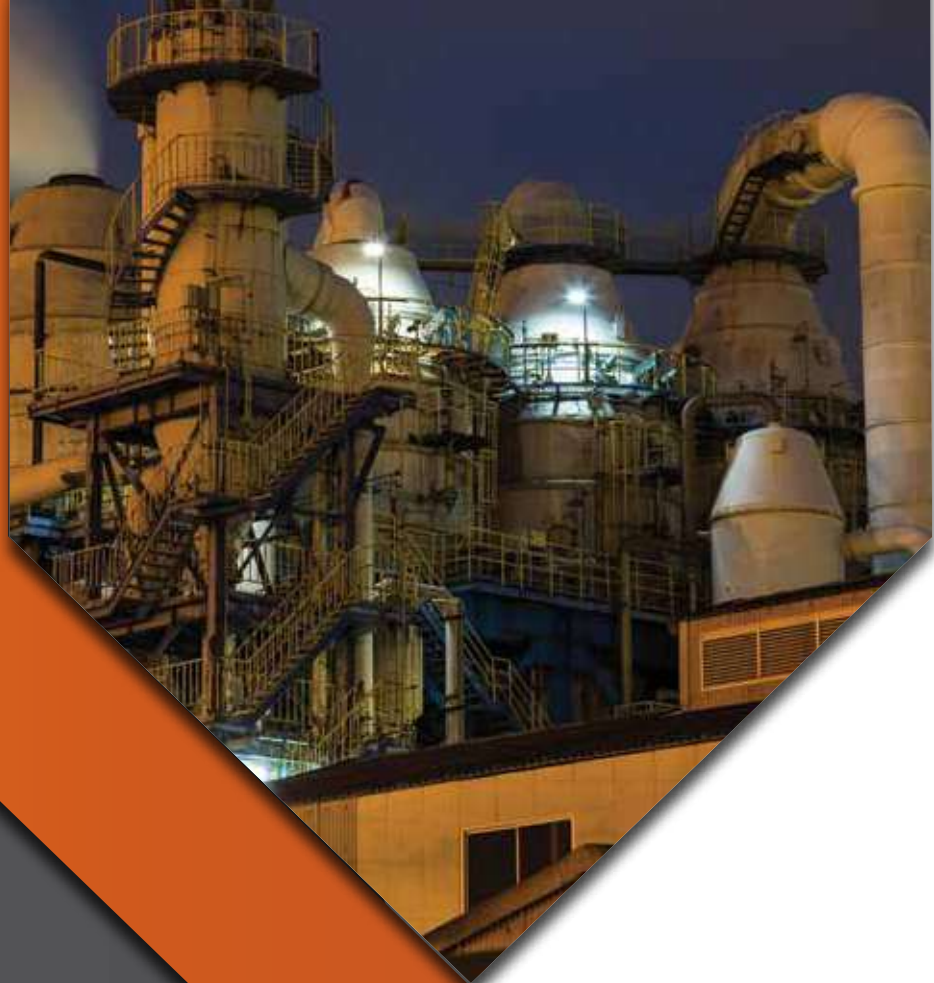
8	-	long periods of immersion
7	-	the effects of temporary immersion
6	totally protected against dust	strong jets of water
5	dust-limited ingress	low pressure jets from all directions
4	solids objects >1mm	sprays from all directions
3	solids objects >2.5mm	direct sprays up to 60° from vertical
2	solids objects >12.5mm	direct sprays up to 15° from vertical
1	solids objects >50mm	vertical falling drops of water
0	no protection	no protection

IP	Protection against solids/dust	Protection against water
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For common use	-
For use under special conditions	X
This product is an Ex-certified component for use in a complete system	U
Application	Code

Further information





Ideal for harsh and humid environments with flammable gases.

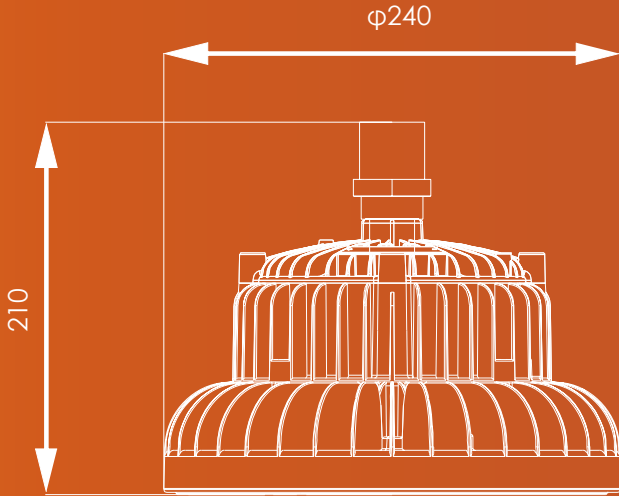
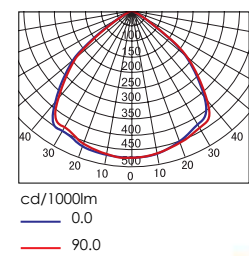
- Petrochemical plants
- Oilfield industry
- Chemical industry
- Ports
- Petroleum

Gas & Dust explosive zone environments:
Zone 1, Zone 2, Zone 21, Zone 22

Characteristics

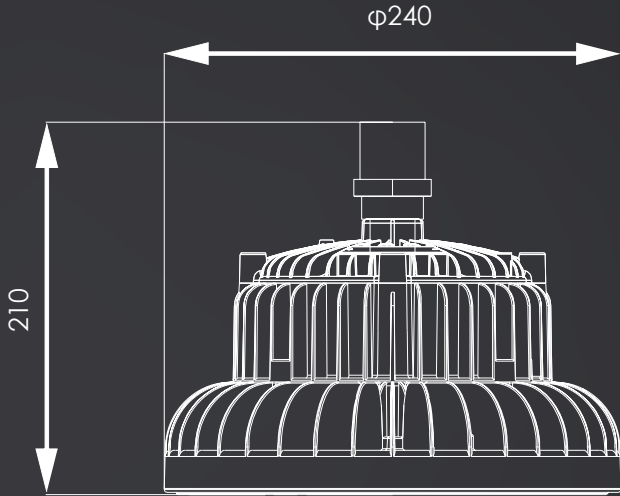
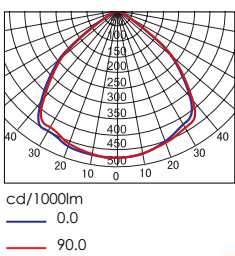
- The various mounting and light distribution types offered by these luminaires are specially designed for optimal lighting performance on oil platforms.
- The light source provided by CREE LEDs emits no dark spots and can offer energy savings over 60%, in comparison with a Metal Halide lamp.
- The housing design offers optimal heat dissipation, a factor which increases the efficiency and lifespan of the LED chips, so that a lifetime of 100,000hrs is ensured.
- Equipped with the world's top ranking Taiwan Meanwell LED driver, with power factor over 0.98, the luminaire's high performance, efficiency and long lifespan are guaranteed.
- The anti corrosion, abrasion proof, dust and water proof powder coated cover ensures the lamps excellent performance in all kinds of hazardous environments.
- Alternative input voltage options such as AC18~43V or DC18~55V are available for the 25W and 40W models upon request.

Fixed Explosion Proof Light



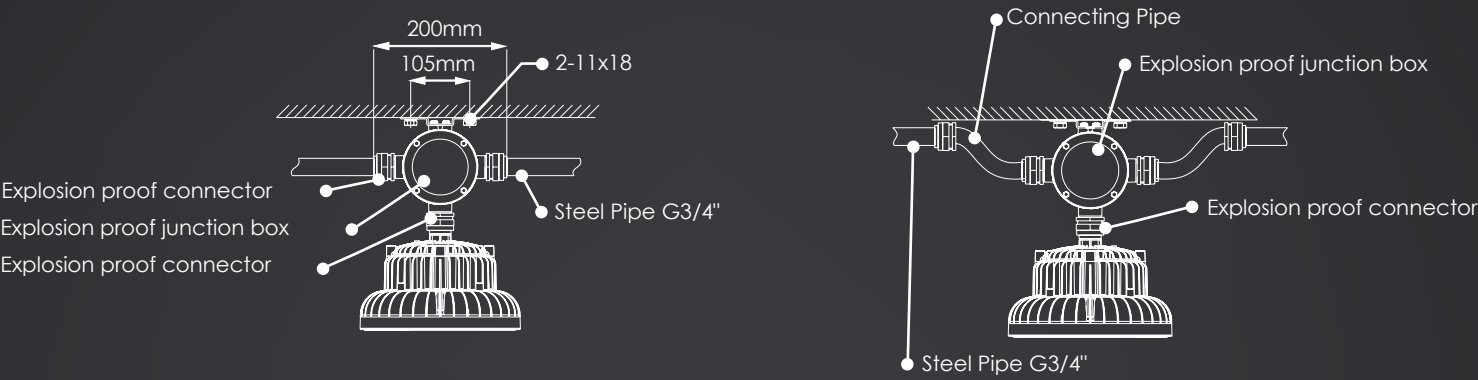
Item No.	Power (W)	Luminous Flux	CCT	CRI	Voltage	Line Frequency (Hz)	Beam Angle	IP	PF	Lifetime	Dimensions (mm)
88165	25W	2800lm	5000K	70	AC90-264V	50/60Hz	140°	66	0.9	100,000hrs	D240x160
88166	40W	4850lm	5000K	70	AC90-264V	50/60Hz	140°	66	0.9	100,000hrs	D240x160

Fixed Explosion Proof Light

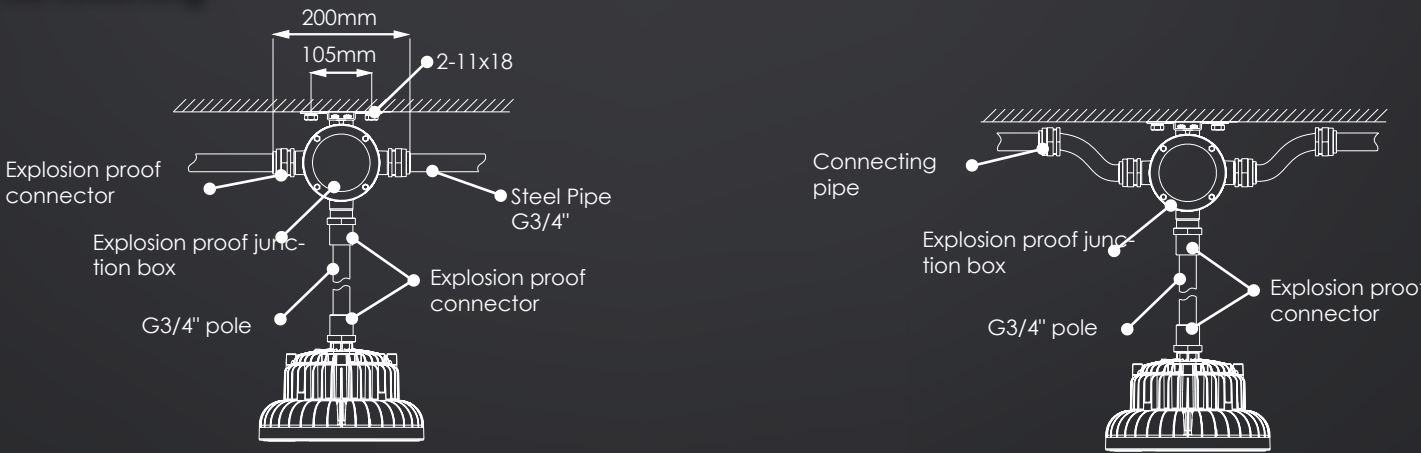


Item No.	Power (W)	Luminous Flux	CCT	CRI	Voltage	Line Frequency (Hz)	Beam Angle	IP	PF	Lifetime	Dimensions (mm)
23172	60W	6000lm	5000K	70	AC90-264V	50/60Hz	140°	66	0.9	100,000hrs	D240x160

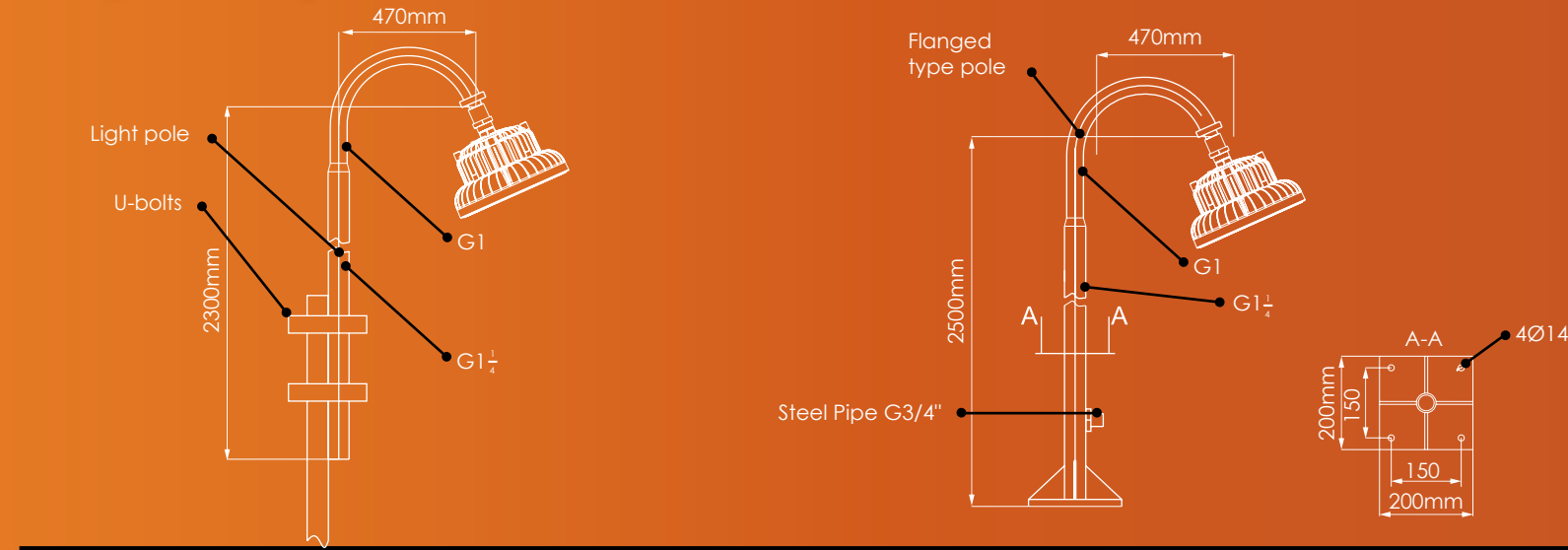
→ Ceiling Mounting



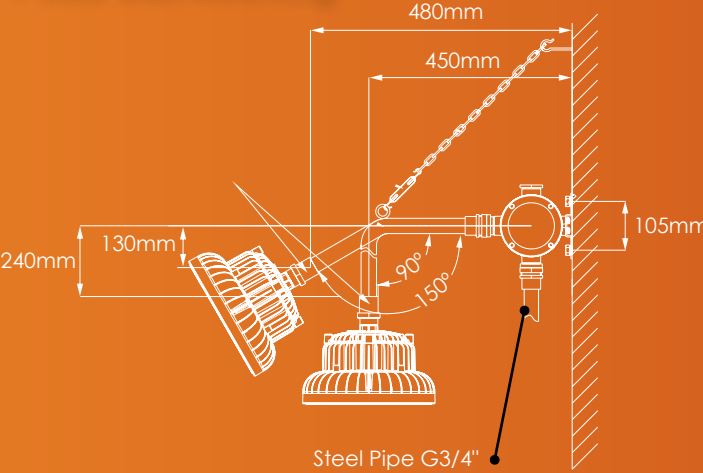
→ Pole Mounting



→ Flanged Mounting



→ Side Wall Mounting



Classification and labelling of hazardous locations

Flammable medium	Hazardous locations Probability of a potentially explosive atmosphere occurring	Classification of hazardous locations	Product classification		Equipment protection level (EPL)	
			Product group	Product category		
Gases, mists, vapours	Continuously, for long periods or frequently	Zone 0	II			
	Likely to occur	Zone 1	II	1G	Ga	Gb
	Infrequently and for short periods only	Zone 2	II		3G	Gc
Dusts	Continuously, for long periods or frequently	Zone 20	II			
	Likely to occur	Zone 21	II	1D	Da	Db
	Infrequently and for short periods only	Zone 22	II		3D	Dc
Official Institutes						
code number	Institute Notified Body					
0080	INERIS					

Explosion groups & Temperature classes

Explosion group	Examples depending on explosion group temperature class					
	IIA	IIB	Ammonia Methane Ethane Propane	Ethanol Cyclohe-xene n-Butane	Petrol Diesel fuel Fuel oil Hexane	Acetal - dehyde
			IIC	City gas Acrylic nitrile	Ethylene-oxide	Ethyl-glycol Carbon hydrogen
			Hydrogen	Acetylene		Carbon disulphide
T1 < 450°C						
T2 < 300°C						
T3 < 200°C						
T4 < 135°C						
T5 < 100°C						
T6 < 85°C						
Product use depending on temperature class (T1 -T6). The temperature class indicates the max. temperature of the exposed surface of the product. For dust explosion proof, the max. surface temperature is directly shown (e.g. 180°C)						
Temperature class						

CE 0080

Ex

II 2G Ex d IIB T6 Gb

II 2D Ex tb IIIC T80°C Db

Tamb = -40°C to +50°C

Prevents transmission of the explosion outside	flameproof enclosure	Ex d		1,2	EN 60079-1
Prevents high temperatures and sparks	increased safety	Ex e		1,2	EN 60079-7
Low current / voltage supply	intrinsic safety	Ex I (1) Ex iD (2)		0,1,2, 20,21,22	EN 60079-11
Positive pressure device	pressurized apparatus	Ex p Ex pD		1,2, 21,22	EN 60079-2
Encapsulated	moulding	Ex m (3) Ex mD (4)		0,1,2, 20,21,22	EN 60079-18
Parts immersed in oil to isolate from explosive atmosphere	oil immersion	Ex o		1,2	EN 60079-6
Prevents transmission of explosion outside	powder filling	Ex q		1,2	EN 60079-5
As above, but for use in zone 2	protection "n"	Ex n		2	EN 60079-15
Dust explosion proof	protection "ID"	Ex t (5)		20,21,22	EN 60079-31
Protection principle	Type of protection	Code	Symbol	Zones to use in (6)	CENELEC
Protection principle - Type of protection - EN 60079-0 General Requirements					
(1) ia (zone 0,1,2) ib (zone 1,2) ic (zone 2) (3) ma (zone 0,1,2) mb (zone 1,2) mc (zone 2)					
(2) iaD (zone 20,21,22) ibD (zone 21,22) icD (zone 2) (4) maD (zone 20,21,22) mbD (zone 21,22) mcD (zone 2)					

III A	IIB	IIIC	flammable fibres
			non conductive dust
			conductive dust
Code			Dust classification
8	-	long periods of immersion	
7	-	the effects of temporary immersion	
6	totally protected against dust	strong jets of water	
5	dust-limited ingress	low pressure jets from all directions	
4	solids objects >1 mm	sprays from all directions	
3	solids objects >2.5mm	direct sprays up to*60° from vertical	
2	solids objects >12.5mm	direct sprays up to*15° from vertical	
1	solids objects >50mm	vertical falling drops of water	
0	no protection	no protection	
IP	Protection against solids/dust	Protection against water	
Ingress Protection EN 60529			

For common use	-
For use under special conditions	X
This product is an Ex-certified component for use in a complete system	U
Application	Code
Further information	



Applications

Ideal for harsh and humid environments with flammable gases.

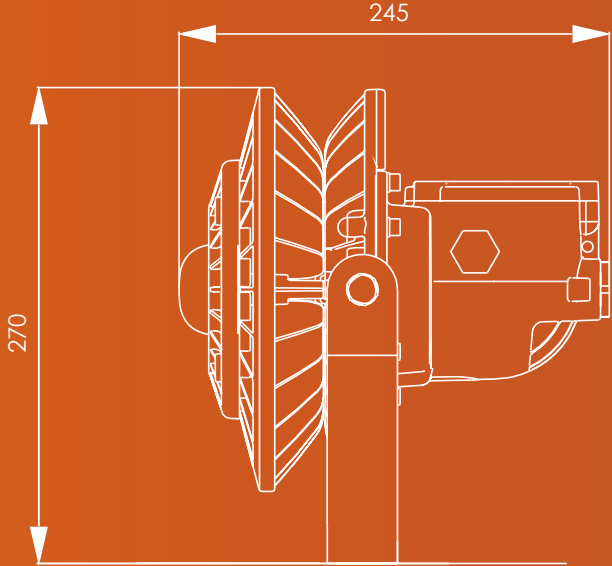
- Oilfield industry
- Chemical industry
- Offshore drilling platform
- Steel industry
- Petroleum

**Gas & Dust explosive zone environments:
Group IIA,IIB, IIC, Zone1, Zone2,
Zone21, Zone22**

Characteristics

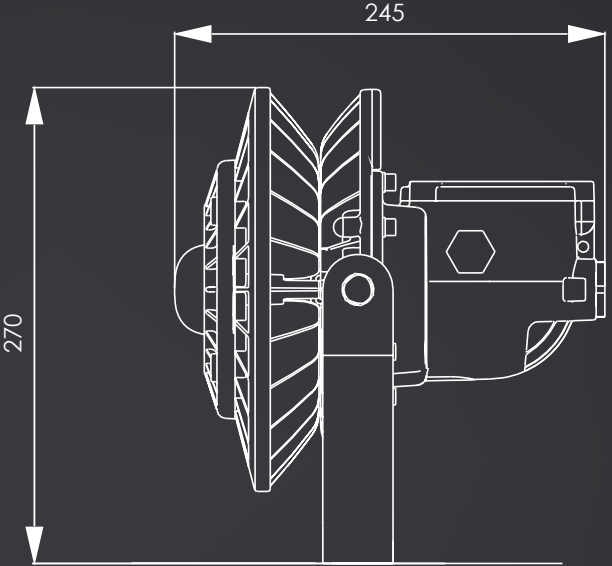
- The aluminum housing and type 304 stainless steel fasteners and brackets are treated with a high-tech anti-corrosion technology, thus making the fixtures suitable for hazardous working areas.
- A range of highly conductive materials accelerate the heat convection in the cooling structure, which guarantees good performance after long-term use in high temperature environments.
- The various light distribution and installation types, aim towards offering attractive and effective lighting solutions to workshops and platforms.
- The shell is treated with a high-tech surface coating technology which renders it resistant to corrosion, waterproof, dust proof and therefore highly suitable for harsh environments.
- Optoelectronic technology that is dark spot free, doesn't create glare and has a luminous efficiency that can reach up to 120lm/W, saving up to 60% in energy costs, compared with Metal Halide lamps.
- Taiwan Meanwell drivers, with power factor over 0.98, ensure long lifespan and high reliability.
- Independent wiring chamber for easy installation and maintenance.
- Easy replacement of light source, without the use of any welding tools.
- Intelligent control functions are also available. (Dimming: 1-10VDC, PWM, Carrier, DALI)

Fixed Explosion Proof Light

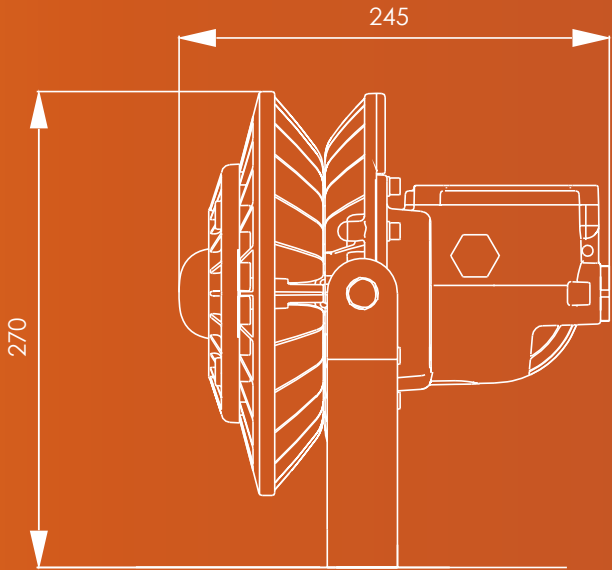


Item No.	Power (W)	Luminous Flux	CCT	CRI	Voltage	Line Frequency (Hz)	Beam Angle	IP	PF	Lifetime	Dimensions (mm)
29412	30W	3600lm	5000K	70	AC100-277V	50/60Hz	40°/60°/80°/100°/ 200°/60°x80°/ 90°x110°	66	0.98	100,000hrs	245x260x270
29413	40W	4700lm	5000K	70	AC100-277V	50/60Hz	40°/60°/80°/100°/ 200°/60°x80°/ 90°x110°	66	0.98	100,000hrs	245x260x270

Fixed Explosion Proof Light

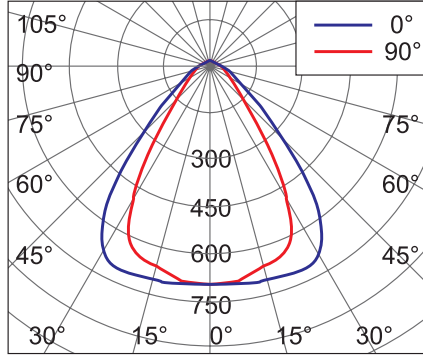


Item No.	Power (W)	Luminous Flux	CCT	CRI	Voltage	Line Frequency (Hz)	Beam Angle	IP	PF	Lifetime	Dimensions (mm)
29414	50W	6500lm	5000K	70	AC100-277V	50/60Hz	40°/60°/80°/100°/ 200°/60°x80°/ 90°x110°	66	0.98	100,000hrs	245x260x270
29415	60W	7600lm	5000K	70	AC100-277V	50/60Hz	40°/60°/80°/100°/ 200°/60°x80°/ 90°x110°	66	0.98	100,000hrs	245x260x270

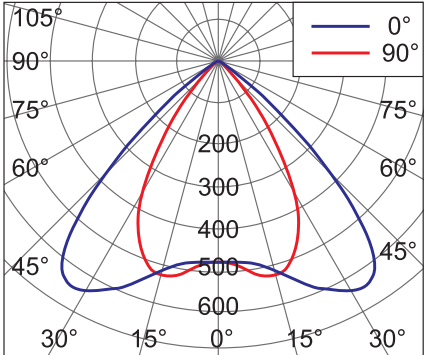


Item No.	Power (W)	Luminous Flux	CCT	CRI	Voltage	Line Frequency (Hz)	Beam Angle	IP	PF	Lifetime	Dimensions (mm)
29416	80W	9000lm	5000K	70	AC100-277V	50/60Hz	40°/60°/80°/100°/ 200°/60°x80°/ 90°x110°	66	0.98	100,000hrs	245x260x270

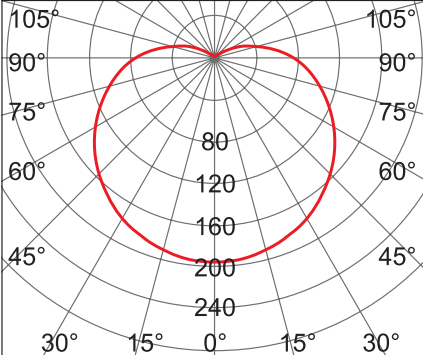
For 60°x80°:



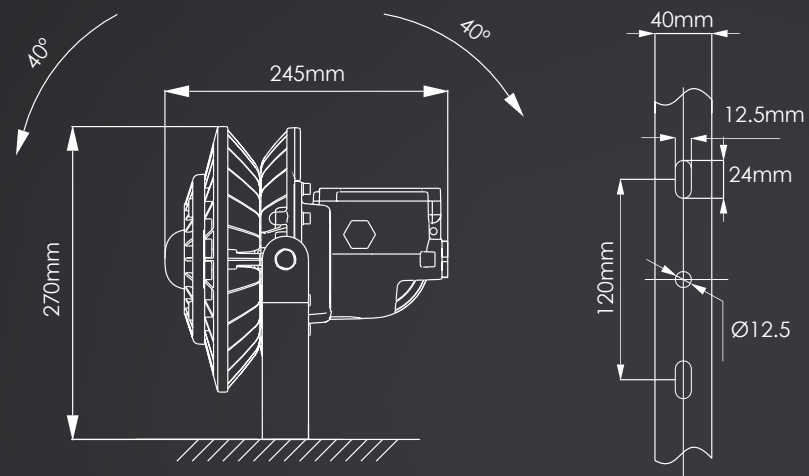
For 90°x110°:



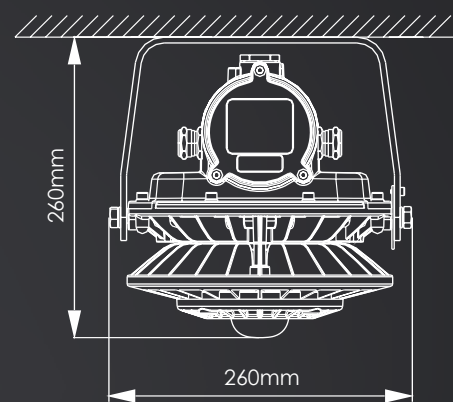
For 200°:



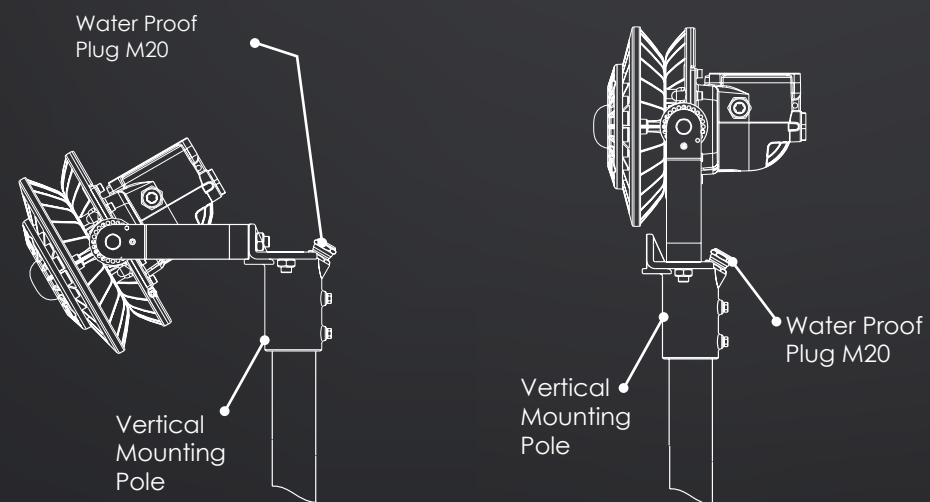
→ Seat Mounting



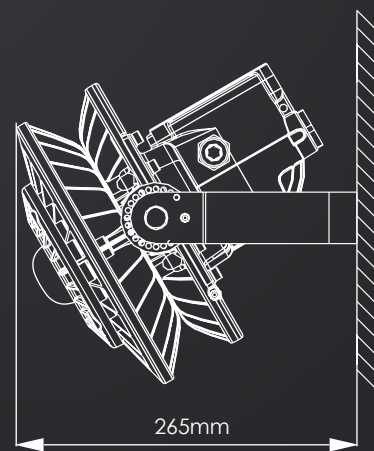
→ Ceiling Mounting



→ Pole Mounting



→ Side Wall Mounting



Classification Explosion groups & Temperature classes

[illegible]

Prevents transmission of the explosion outside	flameproof enclosure	Ex d		1,2	EN 60079-1	<div><div>IIIA</div><div>IIIB</div><div>IIIC</div></div> <div>Code</div> <div>flammable fibres</div> <div>non conductive dust</div> <div>conductive dust</div> <div>Dust classification</div>	For common use	-								
Prevents high temperatures and sparks	increased safety	Ex e		1,2	EN 60079-7		<div><div>IIIA</div><div>IIIB</div><div>IIIC</div></div> <div>Code</div> <div>flammable fibres</div> <div>non conductive dust</div> <div>conductive dust</div> <div>Dust classification</div>	For use under special conditions	X							
Low current / voltage supply	intrinsic safety	Ex i (1) Ex iD (2)		0,1,2, 20,21,22	EN 60079-11					<div><div>IIIA</div><div>IIIB</div><div>IIIC</div></div> <div>Code</div> <div>flammable fibres</div> <div>non conductive dust</div> <div>conductive dust</div> <div>Dust classification</div>						
Positive pressure device	pressurized apparatus	Ex p Ex pD		1,2, 21,22	EN 60079-2						<div><div>IIIA</div><div>IIIB</div><div>IIIC</div></div> <div>Code</div> <div>flammable fibres</div> <div>non conductive dust</div> <div>conductive dust</div> <div>Dust classification</div>					
Encapsulated	moulding	Ex m (3) Ex mD (4)		0,1,2, 20,21,22	EN 60079-18							<div><div>IIIA</div><div>IIIB</div><div>IIIC</div></div> <div>Code</div> <div>flammable fibres</div> <div>non conductive dust</div> <div>conductive dust</div> <div>Dust classification</div>				
Parts immersed in oil to isolate from explosive atmosphere	oil immersion	Ex o		1,2	EN 60079-6	<div><div>IIIA</div><div>IIIB</div><div>IIIC</div></div> <div>Code</div> <div>flammable fibres</div> <div>non conductive dust</div> <div>conductive dust</div> <div>Dust classification</div>										
Prevents transmission of explosion outside	powder filling	Ex q		1,2	EN 60079-5		<div><div>IIIA</div><div>IIIB</div><div>IIIC</div></div> <div>Code</div> <div>flammable fibres</div> <div>non conductive dust</div> <div>conductive dust</div> <div>Dust classification</div>	This product is an Ex-certified component for use in a complete system	U							
As above, but for use in zone 2	protection "n"	Ex n		2	EN 60079-15					<div><div>IIIA</div><div>IIIB</div><div>IIIC</div></div> <div>Code</div> <div>flammable fibres</div> <div>non conductive dust</div> <div>conductive dust</div> <div>Dust classification</div>						
Dust explosion proof	protection "tD"	Ex t (5)		20,21,22	EN 60079-31						<div><div>IIIA</div><div>IIIB</div><div>IIIC</div></div> <div>Code</div> <div>flammable fibres</div> <div>non conductive dust</div> <div>conductive dust</div> <div>Dust classification</div>		Application	Code		
Protection principle	Type of protection	Code	Symbol	Zones to use in (6)	CENELEC							<div><div>IIIA</div><div>IIIB</div><div>IIIC</div></div> <div>Code</div> <div>flammable fibres</div> <div>non conductive dust</div> <div>conductive dust</div> <div>Dust classification</div>			Further information	
Protection principle - Type of protection - EN 60079-0 General Requirements						<div><div>IIIA</div><div>IIIB</div><div>IIIC</div></div> <div>Code</div> <div>flammable fibres</div> <div>non conductive dust</div> <div>conductive dust</div> <div>Dust classification</div>										
(1) ia (zone 0,1,2) ib (zone 1,2) ic (zone 2)		(3) ma (zone 0,1,2) mb (zone 1,2) mc (zone 2)		(5) ta (zone 20,21,22) tb (zone 21,22) tc (zone 2)			<div><div>IIIA</div><div>IIIB</div><div>IIIC</div></div> <div>Code</div> <div>flammable fibres</div> <div>non conductive dust</div> <div>conductive dust</div> <div>Dust classification</div>									
(2) iD (zone 20,21,22) iD (zone 21,22) iD (zone 2)		(4) mD (zone 20,21,22) mD (zone 21,22) mD (zone 2)		(6) Highest possible application areas					<div><div>IIIA</div><div>IIIB</div><div>IIIC</div></div> <div>Code</div> <div>flammable fibres</div> <div>non conductive dust</div> <div>conductive dust</div> <div>Dust classification</div>							
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Applications

Ideal for harsh and humid environments with flammable gases.

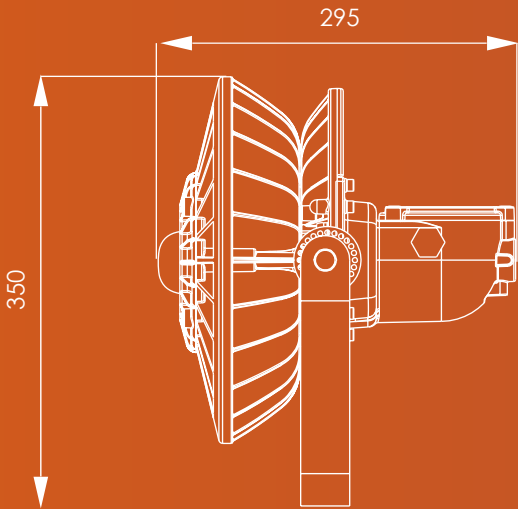
- Chemical industry
- Oilfield industry
- Offshore drilling platform
- Steel industry
- Petroleum

**Gas & Dust explosive zone environments:
Group IIA,IIB, IIC, Zone1, Zone2,
Zone21, Zone22**

Characteristics

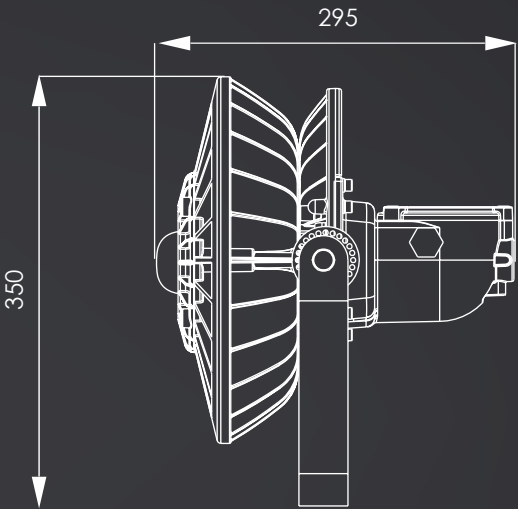
- The aluminum housing and type 304 stainless steel fasteners and brackets are treated with a high-tech anti-corrosion technology, thus making the fixtures suitable for hazardous working areas.
- A range of highly conductive materials accelerate the heat convection in the cooling structure, which guarantees good performance after long-term use in high temperature environments.
- The various light distribution and installation types, aim towards offering attractive and effective lighting solutions to workshops and platforms.
- The shell is treated with a high-tech surface coating technology which renders it resistant to corrosion, waterproof, dust proof and therefore highly suitable for harsh environments.
- Optoelectronic technology that is dark spot free, doesn't create glare and has a luminous efficiency that can reach up to 120lm/W, saving up to 60% in energy costs, compared with Metal Halide lamps.
- Taiwan Meanwell drivers, with power factor over 0.98, ensure long lifespan and high reliability.
- Independent wiring chamber for easy installation and maintenance.
- Easy replacement of light source, without the use of any welding tools.
- Intelligent control functions are also available. (Dimming: 1-10VDC, PWM, Carrier, DALI)

Fixed Explosion Proof Light

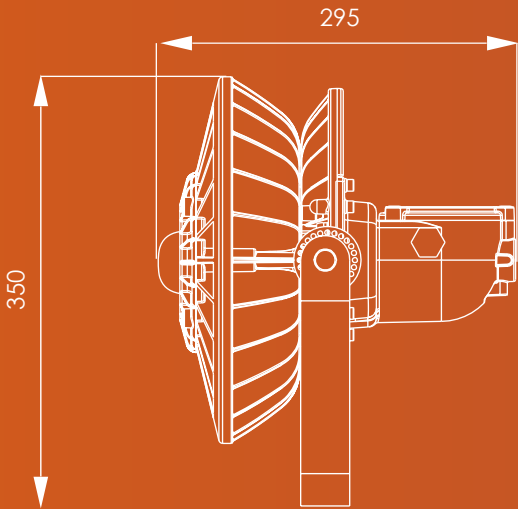


Item No.	Power (W)	Luminous Flux	CCT	CRI	Voltage	Line Frequency (Hz)	Beam Angle	IP	PF	Lifetime	Dimensions (mm)
29417	100W	11700lm	5000K	70	AC100-277V	50/60Hz	40°/60°/80°/100°/ 200°/60°x80°/ 90°x110°	66	0.98	100,000hrs	295x330x350
29418	120W	13500lm	5000K	70	AC100-277V	50/60Hz	40°/60°/80°/100°/ 200°/60°x80°/ 90°x110°	66	0.98	100,000hrs	295x330x350

Fixed Explosion Proof Light

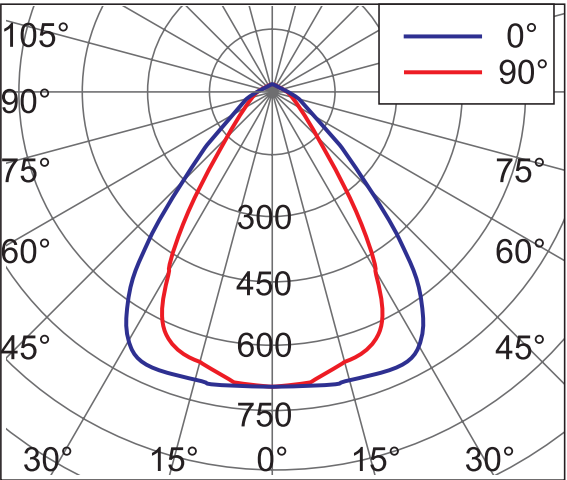


Item No.	Power (W)	Luminous Flux	CCT	CRI	Voltage	Line Frequency (Hz)	Beam Angle	IP	PF	Lifetime	Dimensions (mm)
29419	150W	17200lm	5000K	70	AC100-277V	50/60Hz	40°/60°/80°/100°/ 200°/60°x80°/ 90°x110°	66	0.98	100,000hrs	295x330x350
29420	180W	20000lm	5000K	70	AC100-277V	50/60Hz	40°/60°/80°/100°/ 200°/60°x80°/ 90°x110°	66	0.98	100,000hrs	295x330x350

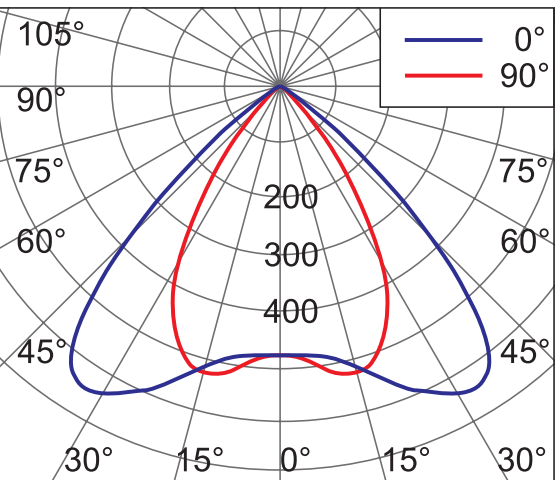


Item No.	Power (W)	Luminous Flux	CCT	CRI	Voltage	Line Frequency (Hz)	Beam Angle	IP	PF	Lifetime	Dimensions (mm)
29421	200W	24000lm	5000K	70	AC100-277V	50/60Hz	40°/60°/80°/100°/ 200°/60°x80°/ 90°x110°	66	0.98	100,000hrs	295x330x350
29422	240W	29500lm	5000K	70	AC100-277V	50/60Hz	40°/60°/80°/100°/ 200°/60°x80°/ 90°x110°	66	0.98	100,000hrs	295x330x350

For 60°x80°:

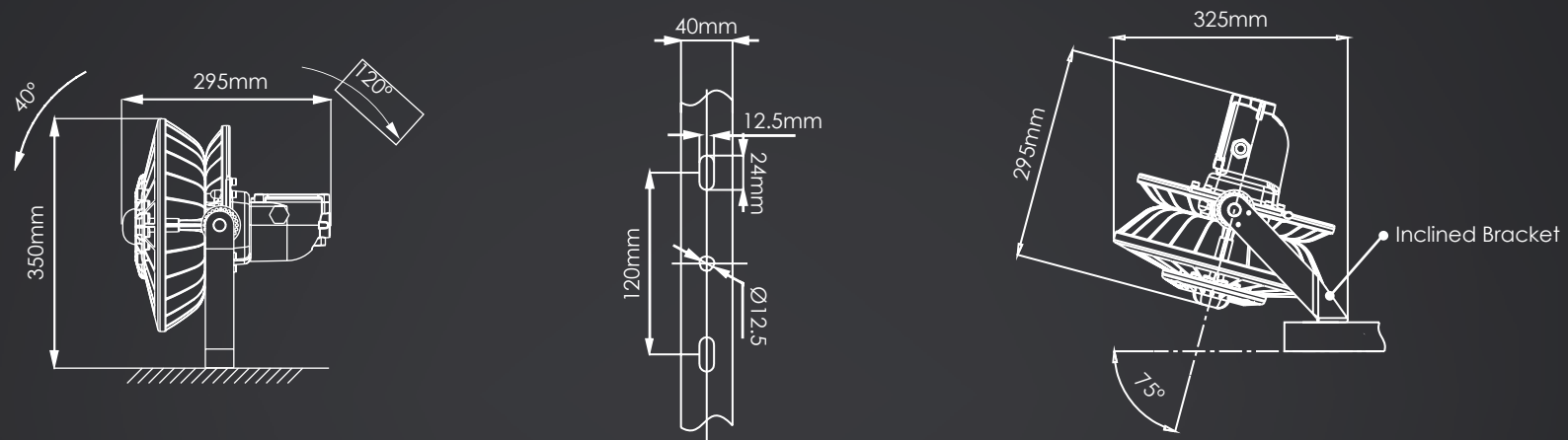


For 90°x110°:

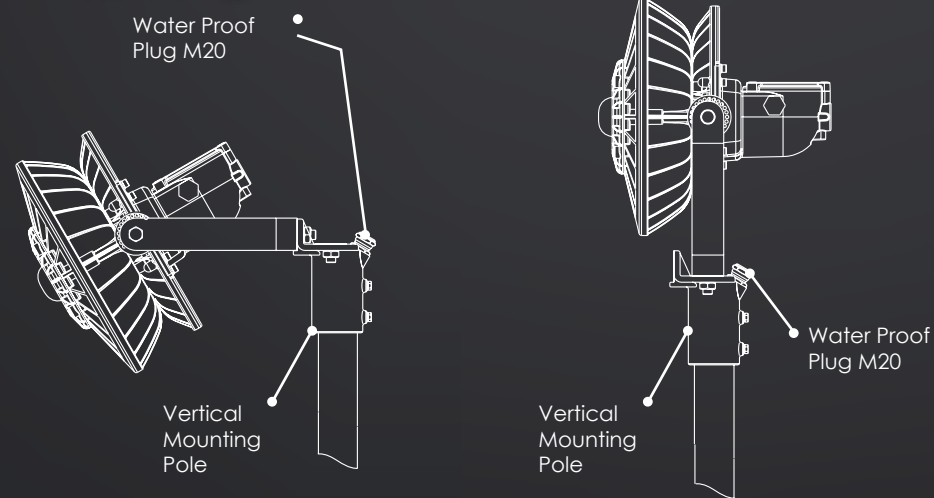


Fixed Explosion Proof Light / Light Distribution Curve

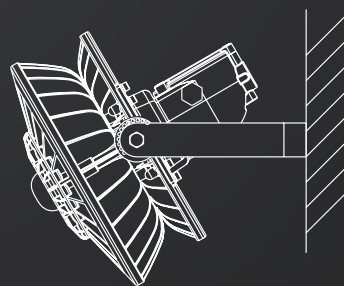
→ Seat Mounting



→ Pole Mounting



→ Side Wall Mounting



Labelling of explosion proof equipment according to ATEX (2014/34/EU)

Classification and labelling of hazardous locations					
Flammable medium	Hazardous locations Probability of a potentially explosive atmosphere occuring	Classification of hazardous locations	Product classification		Equipment protection level (EPL)
			Product group	Product category	
Gases, mists, vapours	Continuously, for long periods or frequently	Zone 0	II		
	Likely to occur	Zone 1	II	1G	Ga
	Infrequently and for short periods only	Zone 2	II	2G	Gb
Dusts	Continuously, for long periods or frequently	Zone 20	II		
	Likely to occur	Zone 21	II	1D	Da
	Infrequently and for short periods only	Zone 22	II	2D	Db
Official Institutes					
code number	Institute Notified Body				
0477	Eurofins Product Testing Italy				

0477

Ex

II

2G

Ex db e

IIC

T6..T3

Gb

II

2D

Ex tb

IIIC

T80°C...T195°C

Db

Tamb = -25°C to +55°C

Prevents transmission of the explosion outside	flameproof enclosure	Ex d		1,2	EN 60079-1
Prevents high temperatures and sparks	increased safety	Ex e		1,2	EN 60079-7
Low current / voltage supply	intrinsic safety	Ex I (1) Ex iD (2)		0,1,2, 20,21,22	EN 60079-11
Positive pressure device	pressurized apparatus	Ex p Ex pD		1,2, 21,22	EN 60079-2
Encapsulated	moulding	Ex m (3) Ex mD (4)		0,1,2, 20,21,22	EN 60079-18
Parts immersed in oil to isolate from explosive atmosphere	oil immersion	Ex o		1,2	EN 60079-6
Prevents transmission of explosion outside	powder filling	Ex q		1,2	EN 60079-5
As above, but for use in zone 2	protection "n"	Ex n		2	EN 60079-15
Dust explosion proof	protection "ID"	Ex t (5)		20,21,22	EN 60079-31
Protection principle	Type of protection	Code	Symbol	Zones to use in (6)	CENELEC
Protection principle - Type of protection - EN 60079-0 General Requirements					
(1) ia (zone 0,1,2) ib (zone 1,2) ic (zone 2)		(3) ma (zone 0,1,2) mb (zone 1,2) mc (zone 2)		(5) ta (zone 20,21,22) tb (zone 21,22) tc (zone 2)	
(2) iuD (zone 20,21,22) iuD (zone 21,22) iCD (zone 2)		(4) maD (zone 20,21,22) mBD (zone 21,22) mCD (zone 2)		(6) Highest possible application areas	

Classification Explosion groups & Temperature classes						
Explosion group	Examples depending on explosion group temperature class					
	IIA	IIB	Ammonia Methane Ethane Propane	Ethanol Cyclohe-xene n-Butane	Petrol Diesel fuel Fuel oil Hexane	Acetal - dehyde
	IIC		City gas Acrylic nitrile	Ethylene Ethylene-oxide	Ethyl-glycol Carbon hydrogen	Ethyl-ether
		Hydrogen	Acetylene			Carbon disulphide
		T1< 450°C				
		T2< 300°C				
		T3< 200°C				
		T4< 135°C				
		T5< 100°C				
		T6< 85°C				
Product use depending on temperature class (T1 -T6). The temperature class indicates the max. temperature of the exposed surface of the product. For dust explosion proof, the max. surface temperature is directly shown (e.g. T80°C)						
Temperature class						

III A	IIB	IIIC	flammable fibres
			non conductive dust
			conductive dust
Code			Dust classification
8	-	long periods of immersion	
7	-	the effects of temporary immersion	
6	totally protected against dust	strong jets of water	
5	dust-limited ingress	low pressure jets from all directions	
4	solids objects >1mm	sprays from all directions	
3	solids objects >2.5mm	direct sprays up to'60 from vertical	
2	solids objects >12.5mm	direct sprays up to'15 from vertical	
1	solids objects >50mm	vertical falling drops of water	
0	no protection	no protection	
IP	Protection against solids/dust	Protection against water	
Ingress Protection EN 60529			
Application		Code	
For common use		-	
For use under special conditions		X	
This product is an Ex-certified component for use in a complete system		U	
Further information			





Applications

Ideal for harsh and humid environments with flammable gases.

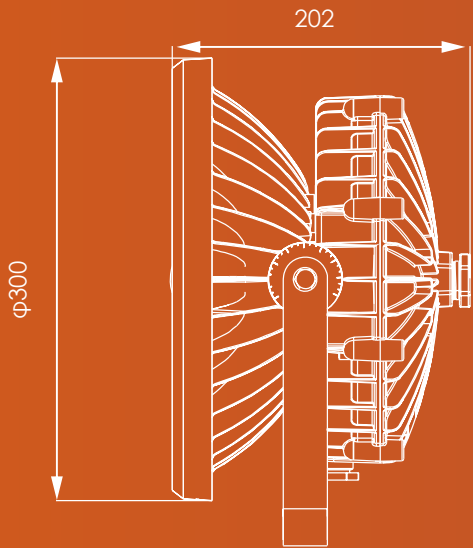
- Petrochemical Plant
- Chemical plant
- Coal washery
- Pharmaceutical factory

**Gas & Dust explosive zone environments:
Zone1, Zone2, Zone21, Zone22**

Characteristics

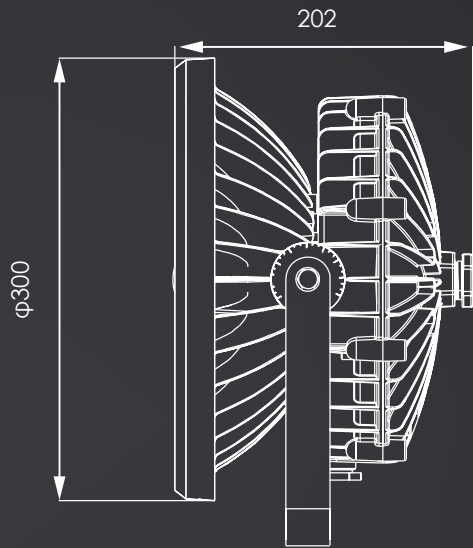
- A range of highly conductive materials accelerate the heat convection in the cooling structure, which guarantees good performance after long-term use in high temperature environments.
- The various light distribution and installation types, aim towards offering attractive and effective lighting solutions to workshops and platforms.
- The light source provided by CREE LEDs emits no dark spots and can offer energy savings over 60%, in comparison with a Metal Halide lamp.
- AC-DC wide voltage driver with a power factor over 0.98, render the luminaire highly reliable.
- Power supply can be easily replaced without the need of any welding tools
- The adjustable locking device on the bracket can tightly fix the lamp to any desired angle, making the lamp resistant to harsh vibrations.
- The aluminum housing and type 304 stainless steel fasteners and brackets are treated with a high-tech anti-corrosion technology, thus making the fixture suitable for use in hazardous locations.
- Windward area is only 30% of the size of a traditional lamp, making it extremely suitable for high altitude installation even in windy areas.
- Intelligent control functions are available.

Fixed Explosion Proof Light



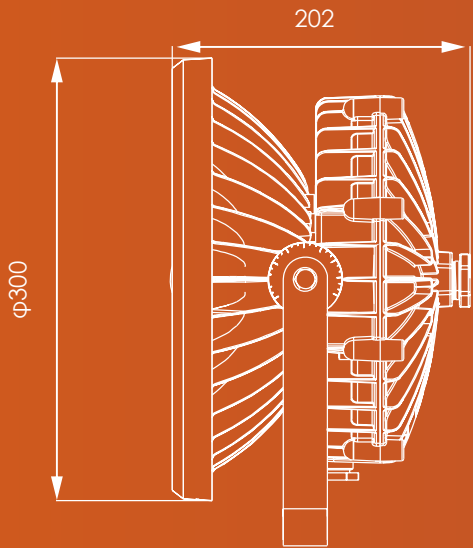
Item No.	Power (W)	Luminous Flux	CCT	CRI	Voltage	Line Frequency (Hz)	Beam Angle	IP	PF	Lifetime	Dimensions (mm)
88167	60W	7000lm	4000K	70	AC90-305V	50/60Hz	40°/60°/80°/100°/ 60°x80°/ 90°x110°	66	0.98	100,000hrs	D300x202x332
25727	80W	8600lm	4000K	70	AC90-305V	50/60Hz	40°/60°/80°/100°/ 60°x80°/ 90°x110°	66	0.98	100,000hrs	D300x202x332

Fixed Explosion Proof Light



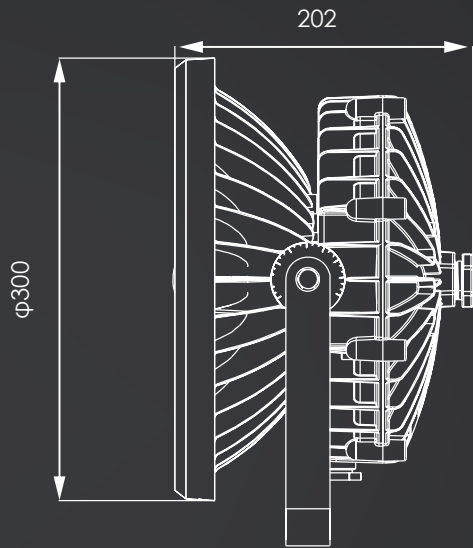
Item No.	Power (W)	Luminous Flux	CCT	CRI	Voltage	Line Frequency (Hz)	Beam Angle	IP	PF	Lifetime	Dimensions (mm)
25728	100W	11300lm	4000K	70	AC90-305V	50/60Hz	40°/60°/80°/100°/ 60°x80°/ 90°x110°	66	0.98	100,000hrs	D300x202x332
25729	120W	13000lm	4000K	70	AC90-305V	50/60Hz	40°/60°/80°/100°/ 60°x80°/ 90°x110°	66	0.98	100,000hrs	D300x202x332

Fixed Explosion Proof Light



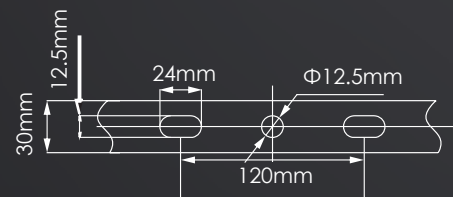
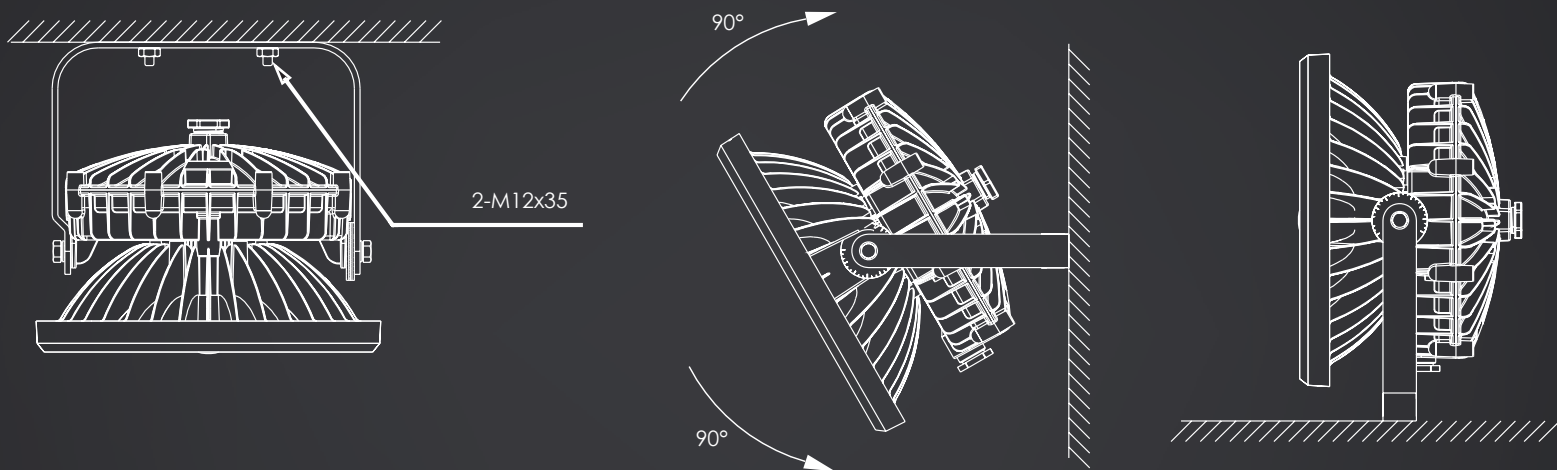
Item No.	Power (W)	Luminous Flux	CCT	CRI	Voltage	Line Frequency (Hz)	Beam Angle	IP	PF	Lifetime	Dimensions (mm)
25730	150W	16500lm	4000K	70	AC90-305V	50/60Hz	40°/60°/80°/100°/ 60°x80°/ 90°x110°	66	0.98	100,000hrs	D300x202x332
25731	180W	18900lm	4000K	70	AC90-305V	50/60Hz	40°/60°/80°/100°/ 60°x80°/ 90°x110°	66	0.98	100,000hrs	D300x202x332

Fixed Explosion Proof Light

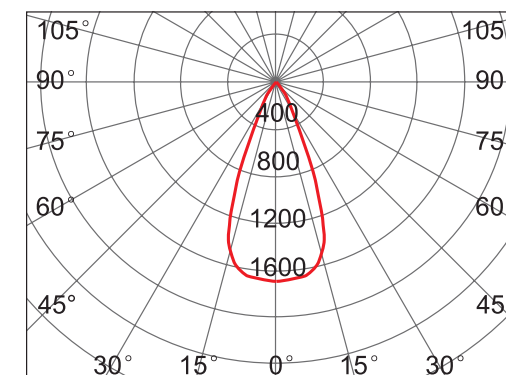


Item No.	Power (W)	Luminous Flux	CCT	CRI	Voltage	Line Frequency (Hz)	Beam Angle	IP	PF	Lifetime	Dimensions (mm)
25732	200W	23000lm	4000K	70	AC90-305V	50/60Hz	40°/60°/80°/100°/ 60°x80°/ 90°x110°	66	0.98	100,000hrs	D300x202x332

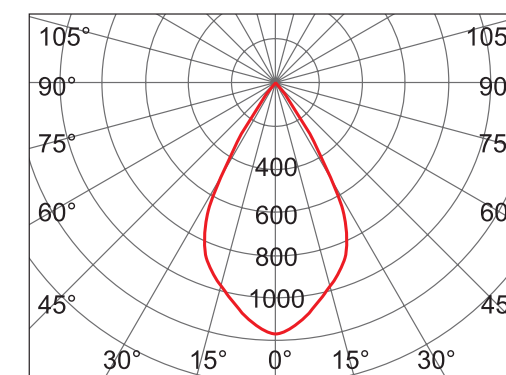
→ Seat Mounting



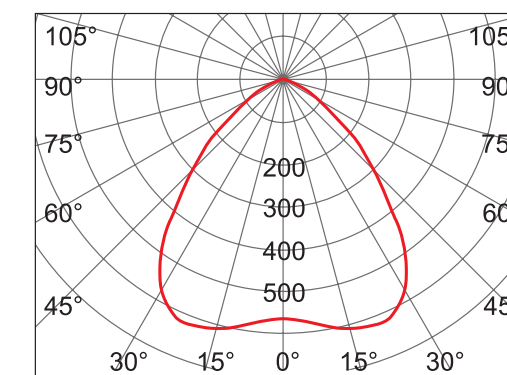
For 40°:



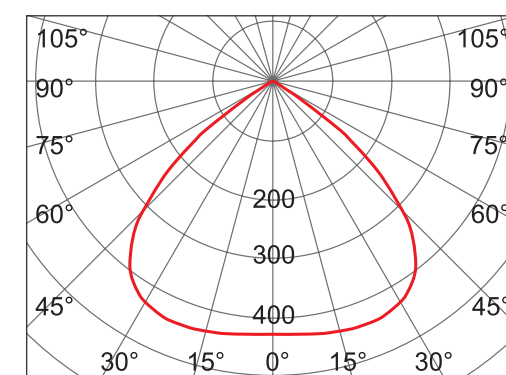
For 60°:



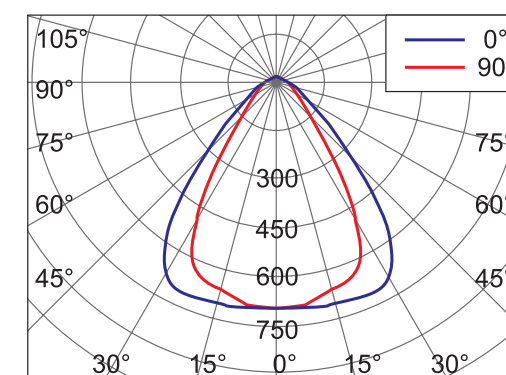
For 80°:



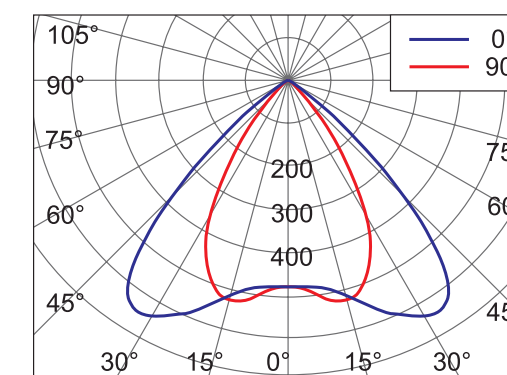
For 100°:



For 60°x80°:



For 90°x110°:



Labelling of explosion proof equipment according to ATEX (2014/34/EU)

Classification and labelling of hazardous locations						
Flammable medium	Hazardous locations Probability of a potentially explosive atmosphere occurring	Classification of hazardous locations	Product classification		Equipment protection level (EPL)	
			Product group	Product category		
Gases, mists, vapours	Continuously, for long periods or frequently	Zone 0	II			
	Likely to occur	Zone 1	II	1G	Ga	Gb
	Infrequently and for short periods only	Zone 2	II		3G	Gc
Dusts	Continuously, for long periods or frequently	Zone 20	II			
	Likely to occur	Zone 21	II	1D	Da	Db
	Infrequently and for short periods only	Zone 22	II		3D	Dc

Official Institutes

code number	Institute Notified Body
0477	Eurofins Product Testing Italy

CE 0477

Ex

II 2G Ex db IIC T5..T3 Gb

II 2D Ex tb IIIC T95°C...T195°C Db

Tamb = -40°C to +40°C/55°C

Prevents transmission of the explosion outside	flameproof enclosure	Ex d		1,2	EN 60079-1
Prevents high temperatures and sparks	increased safety	Ex e		1,2	EN 60079-7
Low current / voltage supply	intrinsic safety	Ex i (1) Ex iD (2)		0,1,2, 20,21,22	EN 60079-11
Positive pressure device	pressurized apparatus	Ex p Ex pD		1,2, 21,22	EN 60079-2
Encapsulated	moulding	Ex m (3) Ex mD (4)		0,1,2, 20,21,22	EN 60079-18
Parts immersed in oil to isolate from explosive atmosphere	oil immersion	Ex o		1,2	EN 60079-6
Prevents transmission of explosion outside	powder filling	Ex q		1,2	EN 60079-5
As above, but for use in zone 2	protection "n"	Ex n		2	EN 60079-15
Dust explosion proof	protection "D"	Ex t (5)		20,21,22	EN 60079-31
Protection principle	Type of protection	Code	Symbol	Zones to use in (6)	CENELEC

Protection principle - Type of protection - EN 60079-0 General Requirements

(1) ia (zone 0,1,2) ib (zone 1,2) ic (zone 2)	(3) ma (zone 0,1,2) mb (zone 1,2) mc (zone 2)	(5) ta (zone 20,21,22) tb (zone 21,22) tc (zone 2)
(2) iaD (zone 20,21,22) ibD (zone 21,22) icD (zone 2)	(4) maD (zone 20,21,22) mbD (zone 21,22) mcD (zone 2)	(6) Highest possible application areas

Classification Explosion groups & Temperature classes								
Explosion group	Examples depending on explosion group temperature class							
IIA	IIB	IIC	Ammonia Methane Ethane Propane	Ethanol Cyclohe-xene n-Butane	Petrol Diesel fuel Fuel oil Hexane	Acetal - dehyde		
			City gas Acrylic nitrile	Ethylene Ethylene-oxide	Ethyl-glycol Carbon hydrogen	Ethyl-ether		
			Hydrogen	Acetylene				Carbon disulphide

T1 < 450°C

T2 < 300°C

T3 < 200°C

T4 < 135°C

T5 < 100°C

T6 < 85°C

Product use depending on temperature class (T1 -T6). The temperature class indicates the max. temperature of the exposed surface of the product. For dust explosion proof, the max. surface temperature is directly shown (e.g. 180°C)

Temperature class

IIIA	IIIB	IIIC	flammable fibres	For common use	-
			non conductive dust		
	conductive dust				
Code		Dust classification		For use under special conditions	X
8	-	long periods of immersion			
7	-	the effects of temporary immersion			
6	totally protected against dust	strong jets of water			
5	dust-limited ingress	low pressure jets from all directions			
4	solids objects >1mm	sprays from all directions			
3	solids objects >2.5mm	direct sprays up to°60 from vertical			
2	solids objects >12.5mm	direct sprays up to°15 from vertical			
1	solids objects >50mm	vertical falling drops of water			
0	no protection	no protection			
IP	Protection against solids/dust	Protection against water			

Ingress Protection EN 60529

This product is an Ex-certified component for use in a complete system

Application
 Code

Further information



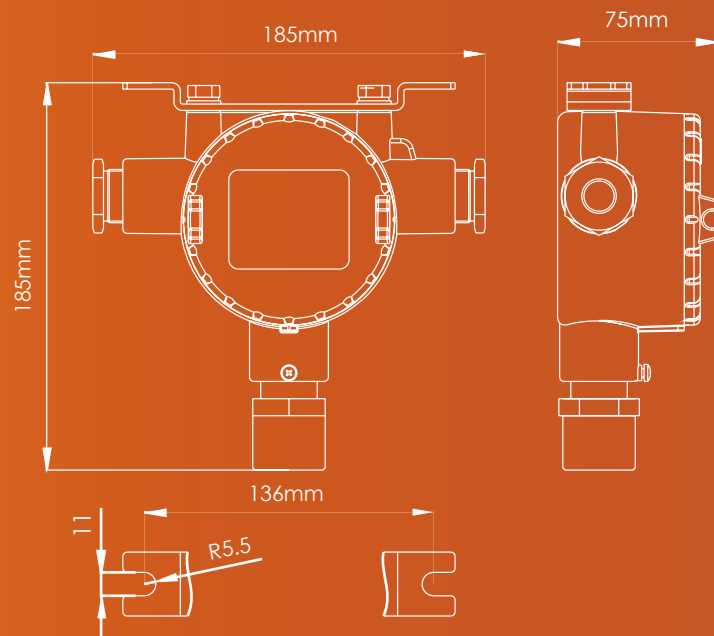


Applications

Used as a junction box and mounting element for lighting equipment installed in hazardous explosive areas like petrochemical plants, chemical plants, pharmaceutical factory, polishing plant, etc.

Characteristics

- Small and light weight junction box for convenient installation.
- The junction box shell is treated with a high-tech anti-corrosion technology, which makes it suitable for use in hazardous locations.



Item No.	Voltage	mA	IP	Dimensions (mm)
25760	AC<500V	20000	66	185x166x75

Labelling of explosion proof equipment according to ATEX (2014/34/EU)

Classification and labelling of hazardous locations					
Flammable medium	Hazardous locations Probability of a potentially explosive atmosphere occurring	Classification of hazardous locations	Product classification		Equipment protection level (EPL)
			Product group	Product category	
Gases, mists, vapours	Continuously, for long periods or frequently	Zone 0	II		
	Likely to occur	Zone 1	II	IG	Ga
	Infrequently and for short periods only	Zone 2	II		Gc
Dusts	Continuously, for long periods or frequently	Zone 20	II		
	Likely to occur	Zone 21	II	ID	Da
	Infrequently and for short periods only	Zone 22	II		Dc
Official Institutes					
code number	Institute Notified Body				
0080	INERIS				

0080

II

2G

Ex db

IIC

T6

Gb

II

2D

Ex tb

IIIC

T80°C

Db

Tamb = -50°C to +60°C

Prevents transmission of the explosion outside	flameproof enclosure	Ex d		1,2	EN 60079-1
Prevents high temperatures and sparks	increased safety	Ex e		1,2	EN 60079-7
Low current / voltage supply	intrinsic safety	Ex I (1) Ex iD (2)		0,1,2, 20,21,22	EN 60079-11
Positive pressure device	pressurized apparatus	Ex p Ex pD		1,2, 21,22	EN 60079-2
Encapsulated	moulding	Ex m (3) Ex mD (4)		0,1,2, 20,21,22	EN 60079-18
Parts immersed in oil to isolate from explosive atmosphere	oil immersion	Ex o		1,2	EN 60079-6
Prevents transmission of explosion outside	powder filling	Ex q		1,2	EN 60079-5
As above, but for use in zone 2	protection "n"	Ex n		2	EN 60079-15
Dust explosion proof	protection "tD"	Ex t (5)		20,21,22	EN 60079-31
Protection principle	Type of protection	Code	Symbol	Zones to use in (6)	CENELEC

Protection principle - Type of protection - EN 60079-0 General Requirements

(1) ia (zone 0,1,2) ib (zone 1,2) ic (zone 2)

(2) iaD (zone 20,21,22) ibD (zone 21,22) icD (zone 2)

(3) ma (zone 0,1,2) mb (zone 1,2) mc (zone 2)

(4) maD (zone 20,21,22) mbD (zone 21,22) mcD (zone 2)

(5) ta (zone 20,21,22) tb (zone 21,22) tc (zone 2)

(6) Highest possible application areas

Classification Explosion groups & Temperature classes							
Explosion group	Examples depending on explosion group temperature class						-
							-
IIA	IIB	IIC	Ammonia	Ethanol	Petrol		
			Methane	Cyclohexene	Diesel fuel		
			Ethane	n-Butane	Fuel oil	Acetaldehyde	
			Propane	Hexane			
			City gas	Ethylene	Ethyl-glycol		
			Acrylic nitride	oxide	Carbon hydrogen	Ethyl-ether	
			Hydrogen	Acetylene			Carbon disulphide
T1< 450°C							
T2< 300°C							
T3< 200°C							
T4< 135°C							
T5< 100°C							
T6< 85°C							
Product use depending on temperature class (T1 -T6). The temperature class indicates the max. temperature of the exposed surface of the product. For dust explosion proof, the max. surface temperature is directly shown (e.g. T80°C)							
Temperature class							

III A	IIB	IIIC	flammable fibres		For common use	-
			non conductive dust			
			conductive dust			
Code		Dust classification		For use under special conditions	X	
8	-	long periods of immersion				
7	-	the effects of temporary immersion				
6	totally protected against dust	strong jets of water		This product is an Ex-certified component for use in a complete system	U	
5	dust-limited ingress	low pressure jets from all directions				
4	solids objects >1mm	sprays from all directions				
3	solids objects >2.5mm	direct sprays up to'60° from vertical				
2	solids objects >12.5mm	direct sprays up to'15° from vertical				
1	solids objects >50mm	vertical falling drops of water				
0	no protection	no protection				
IP	Protection against solids/dust	Protection against water		Application	Code	
Ingress Protection EN 60529				Further information		

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