



Hazardous Area Lighting

Abtech Custom Solutions

Our Philosophy

Abtech recognises that not every customer can find a solution to meet their requirements out of a catalogue or off the shelf, and in keeping with the traditions of its parent company, Abtech, the staff and designers at Abtech will be pleased to assist where possible in finding innovative designs to meet our customers exacting specifications. Our philosophy of providing quality hazardous area solutions is evident in the number of customer specified products we have produced over the years with some of these unique designs eventually finding their way into our mainstream catalogue as with the APC photocell (right).



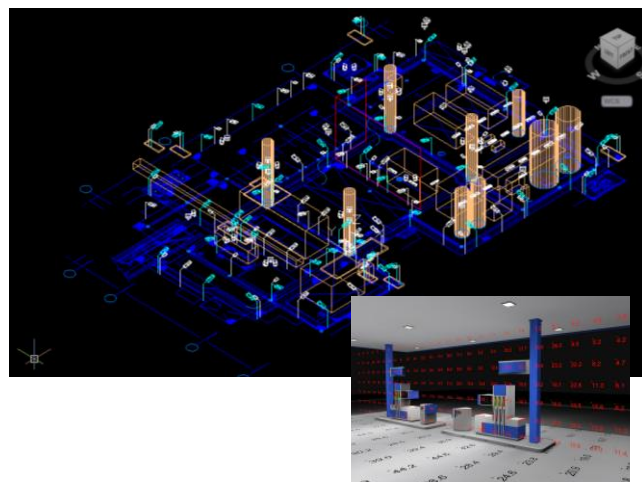
One solution recently provided to a customer was a low level emergency escape luminaire. The specification was for a luminaire which could be mounted at low level, small enough not to be intrusive, rugged and capable of temporary immersion. The solution was ExGuide (left), compact, rugged and with the necessary LED drivers integral to the enclosure. Apart from the obvious advantage of size, afforded by the use of LED's, we were able to offer a solution which will provide in excess of 50,000 hours use without the need for maintenance or replacement.



Lighting Design

No luminaire range would be complete without the photometric files and lighting design experience to support it. Our in house lighting design team are available to assist with your project design requirements and can provide advice on luminaire selection.

Photometric files are available for each product in standard IES and LDT format. These can be used with any mainstream lighting design package.



Abtech Lighting

About Us

Abtech has over 40 years experience in providing unique and innovative electrical solutions for use in hazardous areas. We have applied this knowledge, to produce a range of luminaires engineered to meet the varied demands the global Oil, Gas and Petrochemical market.

This catalogue contains the latest luminaires that make up our range of lighting products. We will continue to develop these products, adding to the range. Our aim is for our products to evolve and develop by listening to the needs of the people who install and use these products; you, our customers.

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ModuEx^{Fluorescent}

IP66/67

The ModuEx Ex e fluorescent is designed for use in Zone 1 and 21 hazardous areas.

Key Features:

- Lightweight design with unrivalled UV protection
- Small silicone gasket area for superior ingress protection
- Simple to install and maintain
- Cassette system allows quick and easy re-lamping
- Single lamp emergency operation



Luminaire Ratings

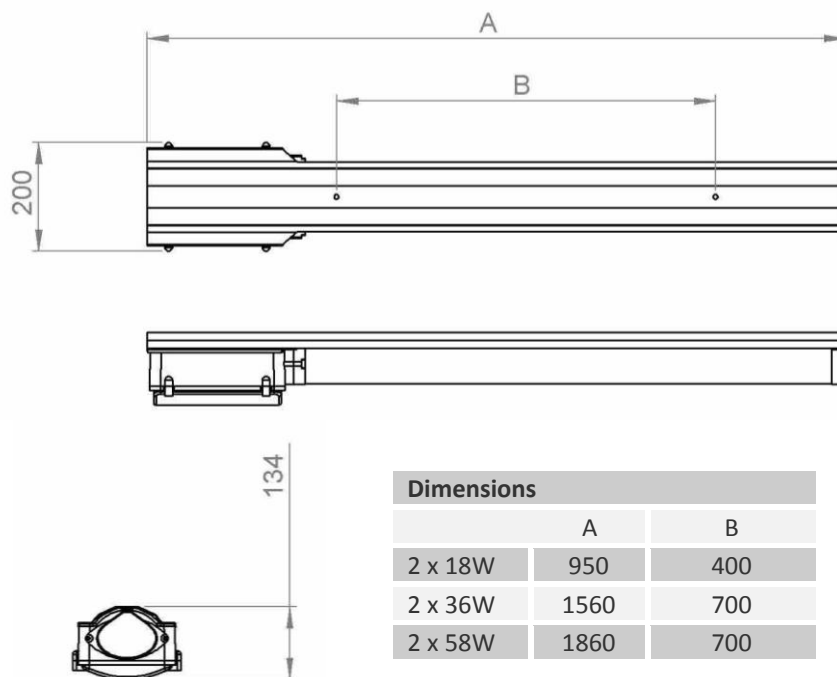
Product Reference	Lamp Type	Lamp Cap	Power (W)	Temperature Rating*	Ambient Temperature*	Weight (kg)
LX1MOD218	T8 bi-pin	G13	2 x 18W	T4	-30°C to 55°C	4.0
LX1MOD236	T8 bi-pin	G13	2 x 36W	T4	-30°C to 55°C	5.8
LX1MOD258	T8 bi-pin	G13	2 x 58W	T4	-30°C to 53°C	6.8
LX1MODE218	T8 bi-pin	G13	2 x 18W	T4	-15°C to 55°C	5.2
LXX1MODE236	T8 bi-pin	G13	2 x 36W	T4	-15°C to 55°C	7.0
LX1MODE258	T8 bi-pin	G13	2 x 58W	T4	-15°C to 53°C	8.0

E – Emergency battery backup version

Standard Specifications

Luminaire Type	Zone 1 Tubular Fluorescent Luminaire
Ingress Protection	IP66/67 to EN60529
Material	Polycarbonate enclosure & diffuser, painted stainless steel reflector (1.4003), epoxy powder painted & fasteners, silicone gasket.
Distribution/output	Via diffuser.
Lamp Types	Tubular fluorescent T8 bi-pin lamps.
Lamp Cap	G13
Lamp Change	Via 2 x cassette clamp screws (retained)
Cable Entry	2 x M20 clearance holes, Supplied with 1 x Ex plug and 1 x transit plug
Terminals	Looping terminal block for up to 4mm ² conductors
Control Gear	HF electronic ballast with EOL protection
Orientation	Universal
Mounting	8mm diameter holes on rear of external reflector
Supply	220 to 254V 50/60Hz ac dc
Emergency Duration	3 hours
Certification	
Area Classification	Zone 1 & 21, Gas & Dust
Type of Protection	Ex e mb (increased safety, encapsulation)
Apparatus Coding	II 2 GD Ex e mb II T4, Ex tD A21 T100°C
Certificate Number	Sira 13ATEX3145X / IECEx SIR 13.0056X

* For alternate T rating and ambient, refer to certificate



Options

M25	M25 cable entries (other thread types available on request)
110	110 to 130V 50/60Hz ac dc operation
P	Pole mount version to suit xx O/D spigot (1 x M20 cable entry)
RA4	316 Stainless steel reflector (1.4404)
REX	Marine grade Aluminium reflector with U-channel
EP	Threaded earth continuity plate - Brass
6T	6mm ² terminal block

Add the required suffix to the product reference,

Example: **LX1MODE236110P** = Zone 1, 2 x 36W with emergency battery backup, 110V ac/dc, pole mounted

Accessories

LX4MOD-PM1	Pole mounting bracket - 316 SS (to suit Ø35 to Ø45mm spigot)
LX4MOD-PM2	Pole mounting bracket - 316 SS (to suit Ø45 to Ø60mm)
LX4MOD-CB	Ceiling mount stand off bracket - 316 SS
LX4MOD-WBA	Angled (135°) wall mount bracket - 316 SS
LX4MOD-HE	M8 eyelet suspension bracket – 316 SS

ModuEx B Bulkhead

IP66/67

The ModuEx B Ex e bulkhead fluorescent is designed for use in Zone 1 and 21 hazardous areas.

Key Features:

- Excellent lumen output in compact enclosure
- Small silicone gasket area for superior ingress protection
- Simple to install and maintain
- Self contained battery backup for up to three hours emergency operation



Luminaire Ratings

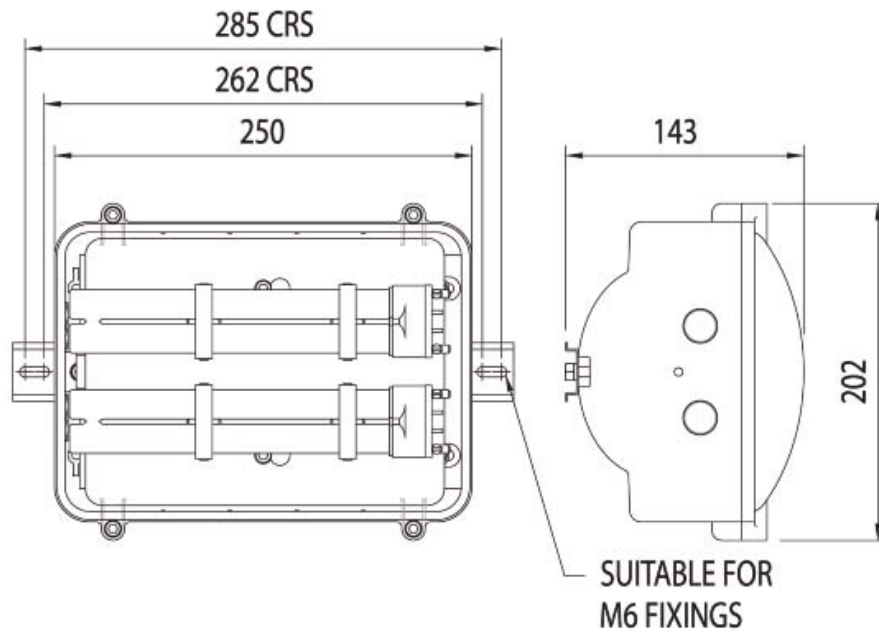
Product Reference	Lamp Type	Lamp Cap	Power (W)	Temperature Rating*	Ambient Temperature*	Weight (kg)
LX1MOB218	CFL	N/A	2 x 18W	T4	-20°C to 40°C	2.5
LX1MOBE218	CFL	N/A	2 x 18W	T4	-15°C to 40°C	3.1

E – Emergency battery backup version

Standard Specifications

Luminaire Type	Zone 1 Bulkhead Luminaire
Ingress Protection	IP66/67 to EN60529
Material	Polycarbonate enclosure & diffuser, silicone gasket and stainless steel fasteners
Distribution/output	Via diffuser
Lamp Types	4 pin compact fluorescent
Lamp Cap	N/A
Lamp Change	Via diffuser cover
Cable Entry	2 x M20 clearance holes. Supplied with 1 x Ex plug and 1 x transit plug
Terminals	Looping terminal block for up to 4mm ² conductors as standard
Control Gear	HF electronic ballast with EOL protection
Orientation	Universal
Mounting	Via external bracket
Supply	220 to 254V 50/60Hz ac dc
Emergency Duration	3 hours
Certification	
Area Classification	Zone 1 & 21, Gas & Dust
Type of Protection	Ex e mb (increased safety, encapsulation)
Apparatus Coding	II 2 GD Ex e mb II T4, Ex tD A21 T100°C
Certificate Number	Sira 13ATEX3145X / IECEx SIR 13.0056X

* For alternate T rating and ambient, refer to certificate



Options

M25	M25 cable entries (other thread types available on request)
110	110 to 130V 50/60Hz ac dc operation
EP	Threaded earth continuity plate - Brass

Add the required suffix to the product reference,
Example: **LX1MOB218110** = Zone 1, 2 x 18W bulkhead, 110V ac/dc

Accessories

LX4MOB-PM1	Pole mounting bracket - 316 SS (to suit Ø35 to Ø45mm spigot)
LX4MOB-PM2	Pole mounting bracket - 316 SS (to suit Ø45 to Ø60mm)
LX4MOB-CB	Ceiling mount stand off bracket - 316 SS
LX4MOB-WBA	Angled (135°) wall mount bracket - 316 SS
LX4MOB-RMx	Running man decal (x = direction to be stated on order – left (L) , right (R), up (U), down (D))
LX4MOD-HE	M8 eyelet suspension bracket – 316 SS

Xena Recessed Fluorescent

IP56

The Xena Ex e recessed fluorescent is designed for use in Zone 1 hazardous areas.

Key Features:

- Variety of mounting options to suit ceiling type
- Shallow body design reduces encroachment in to ceiling void, minimising space requirements
- Self contained battery backup for up to three hours emergency operation



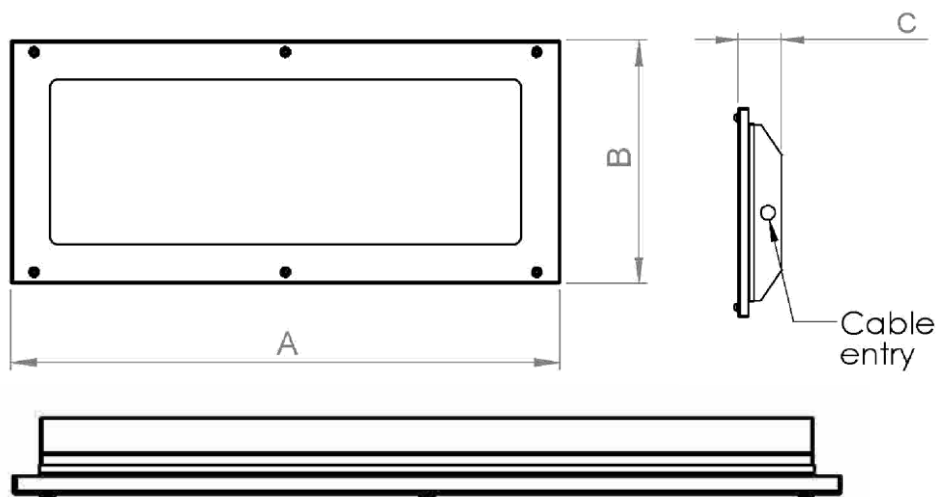
Luminaire Ratings

Product Reference	Lamp Type	Lamp Cap	Power (W)	Temperature Rating*	Ambient Temperature*	Weight (kg)
LX1XEN218	T8 bi-pin	G13	2 x 18W	T4	-20°C to 40°C	8.9
LX1XEN236	T8 bi-pin	G13	2 x 36W	T4	-20°C to 40°C	13.1
LX1XENE218	T8 bi-pin	G13	2 x 18W	T4	-20°C to 40°C	10.8
LX1XENE236	T8 bi-pin	G13	2 x 36W	T4	-20°C to 40°C	14.9

E – Emergency battery backup version

Standard Specifications

Luminaire Type	Zone 1 Recessed Fluorescent Luminaire
Ingress Protection	IP56 to EN60529
Material	Zintec epoxy painted enclosure, toughened glass diffuser and stainless steel fasteners.
Distribution/output	Various options available
Lamp Types	Tubular fluorescent T8 bi-pin lamps
Lamp Cap	G13
Lamp Change	Via front cover
Cable Entry	2 x M20 clearance holes, one at each end. Supplied with 1 x Ex plug and 1 x transit plug
Terminals	'Through wire' terminal block for up to 6mm ² conductors as standard
Control Gear	HF electronic parallel ballast with EOL protection
Orientation	Ceiling mounted
Mounting	Various attachment & mounting options available
Supply	220 to 254V 50/60Hz ac dc
Emergency Duration	3 hours
Certification	
Area Classification	Zone 1 Gas
Type of Protection	Ex e mb (increased safety, encapsulation)
Apparatus Coding	II 2 G Ex e mb II T4
Certificate Number	CML 14ATEX3105 / IECEx CML 14.0043



Dimensions			
Type	A	B	C
2 x 18W	700	200- 310	65-120
2 x 36W	1000	200-310	65-120

Emergency versions depth 120mm

Options

M25	M25 cable entries (other thread types available on request)
60	60Hz ac dc operation
110	110 - 130V operation
RALxxx	Specific paint colour (RAL number to be specified)

Add the required suffix to the product reference.

Example: **LX1XENE236110RAL7001** = Zone 1, 2 x 36W with emergency battery backup, 110V ac/dc, painted grey (RAL7001)

Accessories

LX4XEN-SK1	Mounting skirt
LX4XEN-DR	Drop rod attachment points
LX4XEN-SA	Side arm brackets
LX4XEN-PR	Prismatic diffuser
LX4XEN-AG	Anti-glare diffuser

Alpha Floodlight

IP66/67

The Alpha is a highly efficient Ex de asymmetric floodlight, designed for use in Zone 1 and 21 hazardous areas.

Key Features:

- Simple and quick lamp replacement. Single tool operation, no need to remove cover
- Internal flame path removes the need for routine physical inspection
- Dark Sky asymmetric design reduces light pollution and glare
- Ignitor located in lamp body allowing for optional remote gear box and reduced weight on pole



Luminaire Ratings

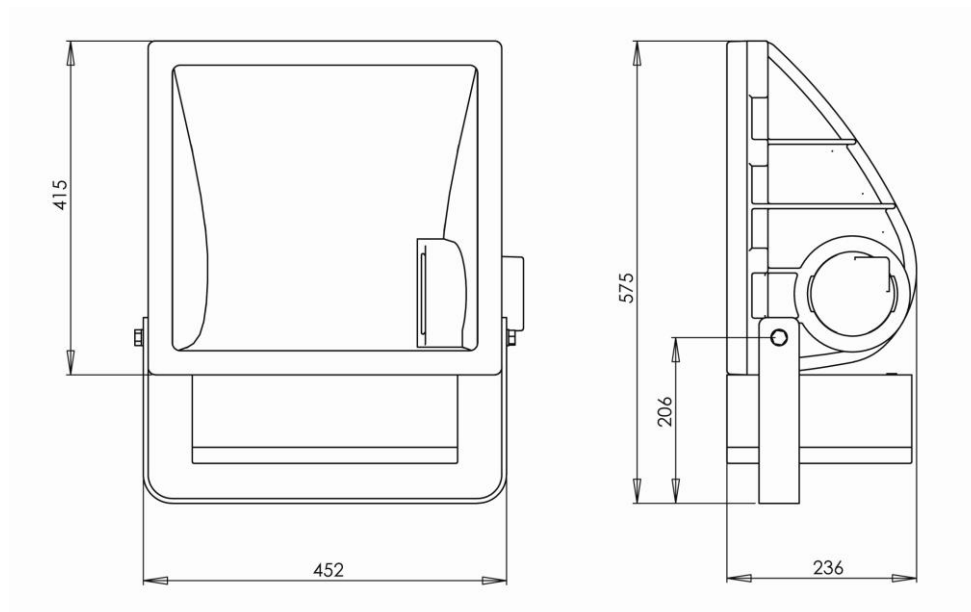
Product Reference	Lamp Type	Lamp Cap	Power (W)	Temperature Rating*	Ambient Temperature*	Weight (kg)
LX1ALP150SH	HPS/MBI	E40	150	T4	-20°C to 55°C	27.0
LX1ALP250SH	HPS/MBI	E40	250	T3	-20°C to 55°C	28.0
LX1ALP400SH	HPS/MBI	E40	400	T3	-20°C to 55°C	28.5
LX1ALP500T	TH	E40	500max*	T3	-20°C to 55°C	22.0

* 500W is the maximum lamp size permitted. Lower wattage lamps may be fitted.

Standard Specifications

Luminaire Type	Zone 1 asymmetric floodlight with optional remote control box
Ingress Protection	IP66/67 to EN60529
Material	Die-cast LM6 aluminium, toughened cover glass & stainless steel fasteners
Distribution/output	Area illumination via high efficiency asymmetric reflector
Lamp Types	High Pressure Sodium, Metal Halide, or Single Ended Tungsten Halogen
Lamp Cap	E40/GES
Lamp Change	Via quick access bayonet mount lamp holder
Cable Entry	2 x M20 tapped entries on AZG control gearbox. Supplied with 1 x Ex plug and 1 x transit plug
Terminals	Looping terminals for up to 6mm ² conductors as standard on AZG control gearbox
Control Gear	Copper and iron ballast, timed impulse ignitor, pfc capacitor
Orientation	Universal
Mounting	Via Saddle bracket (standard), pendant bracket & other options available
Supply	220 to 254V 50/60Hz
Certification	
Area Classification	Zone 1 & 21, Gas & Dust
Type of Protection	Ex de (flameproof & increased safety)
Apparatus Coding	II 2 GD Ex de IIB**
Certificate Number	ATEX CML 14ATEX1049X / IECEx CML 14.0019X

** see table for temperature rating & ambient temperature range



Options

M25	M25 cable entries (other thread types available on request)
110	110 - 130V 50Hz ac dc operation
60	60Hz ac dc operation
IO	Ignitor only (allows mounting remote mounting of control gear)
EC	Epoxy powder coated
PT	PTFE coated
NR	Narrow beam reflector

Add the required suffix to the product reference.

Example: **LX1ALP250HS/M25/60** = Zone 1, 400W HPS/MH floodlight with M25 cable entries and 60Hz operation.

Accessories

LX4ALP-PM1	Pole mounting bracket - 316 SS (to suit Ø50 to Ø75mm spigot) Other diameters available on request
LX4ALP-AGS	Anti glare shield – 316 SS
LX4ALP-WG	Wire guard – 316 SS
LX4ALP-WGS	Combined Anti glare shield/Wire guard

APC Photocell

IP66/67

The APC provides the ability to control the switching of lighting in hazardous areas, without the need for major rewiring of existing circuits. Based on Abtech's proven BPG enclosure range, the photocell combines tried and tested circuitry with superior ingress and UV protection.

- Reduce carbon emissions and running costs by switching off lighting automatically when a specific light level is reached
- Standard switching level is 70 lux
- Built in delay of 25 seconds to prevent nuisance switching



Luminaire Ratings

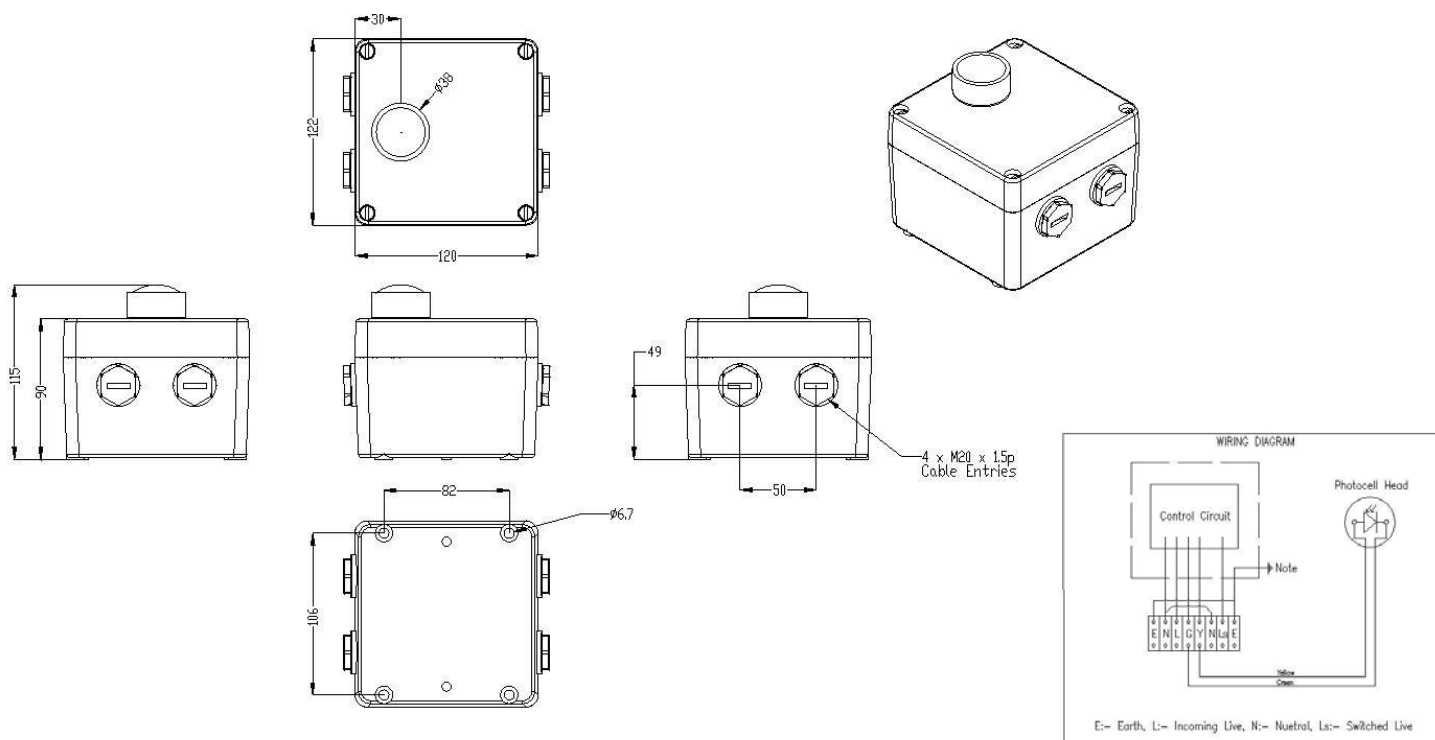
Product Reference	Load Types	Current Rating (A)	Light Level (lux)	Temperature Rating*	Ambient Temperature*	Weight (kg)
LX1APC104M20	Resistive & Inductive	10	70*	T6	-40°C to 55°C	2.0

*Alternative switching levels are available; refer to table on page 2

Standard Specifications

Luminaire Type	Zone 1 photocell
Ingress Protection	IP66/67 to EN60529
Material	Glass reinforced polyester housing, polycarbonate sensor window, stainless steel fixings
Lamp Types	Suitable for use with all lamp types, resistive and inductive loads
Cable Entry	4 x M20 tapped entries. Supplied with 4 x Ex plugs
Terminals	Terminals block for up to 4mm ² conductors
Control Gear	Electronic with on load switching up to 10A
Orientation	Universal
Mounting	Via rear mounting holes
Supply	110 to 254V 50/60Hz ac dc
Certification	
Area Classification	Zone 1 & 21, Gas and Dust
Type of Protection	Ex e mb (increased safety, encapsulation)
Apparatus Coding	II 3 GD Ex e mb IIC T6 Gc, Ex tb IIIC T80°C Dc
Certificate Number	ATEX 10ATEX5274X / IECEx SIR 10.0171X

Dimensions



Switching

ON	OFF				
Switching Ratio	1 : 1	1 : 0.5	1 : 1.5	1 : 2	1 : 3
70 lux	70 lux	35 lux	105 lux	140 lux	210 lux
18 lux	18 lux	9 lux	27 lux	36 lux	54 lux
55 lux	55 lux	27.5 lux	82.5 lux	110 lux	165 lux
100 lux	100 lux	50 lux	150 lux	200 lux	300 lux

Standard switching is 70 lux with a 1:1 on/off ratio

Options

2M16	4 x M16 cable entries
Lxx/Ratio	Non-standard lighting level (e.g. L18/115 = 18 lux, on/off ratio 1 : 1.5)

Add the required suffix to the product reference.

Example: **LX1APC104M16** = Zone 1, 10A photocell with 4 x M16 entries

Accessories

LX4APC-MF	External mounting feet
ABAD-M20M25	M20 to M25 adaptor

Nimbus Flat Panel Luminaire

 IP22

The Nimbus LED ceiling panel is designed for use in indoor industrial environments.

Key Features:

- Extremely thin profile >12mm
- Significant weight and energy saving over traditional recessed fluorescent
- Excellent uniformity and colour rendering
- Surface or drop rod mounted and suitable a variety of modular and suspended ceilings

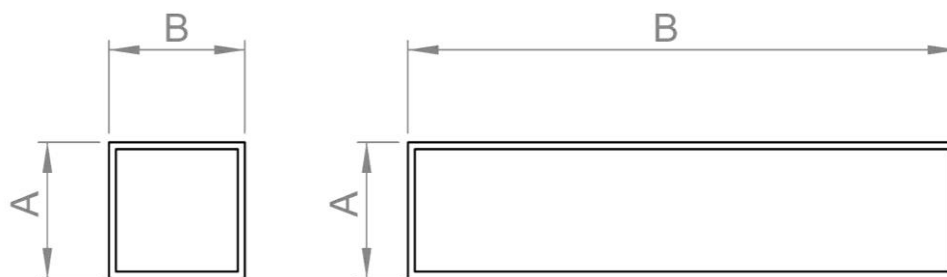


Luminaire Ratings

Product Reference	Lamp Type	Dimensions (mm)	Power (W)	Lumen Output	Ambient Temperature
LX3NIM05	LED	150 x 150	12W	730	-40°C to 40°C
LX3NIM11	LED	300 x 300	20W	1,460	-40°C to 40°C
LX3NIM125	LED	275 x 600	26W	2,100	-40°C to 40°C
LX3NIM12	LED	300 x 600	26W	2,100	-40°C to 40°C

Standard Specifications

Luminaire Type	LED panel luminaire
Ingress Protection	IP20 Panel, IP66 Driver to EN60529
Material	Panel: Aluminium frame, acrylic diffuser / Driver: Aluminium enclosure
Distribution/output	Internal diffusion reflector
Lamp Type	Light emitting diode, pure white (6000K)
LED Life	50,000 hours
Colour Rendering Index	>75
Cable Entry	Flying lead between driver and panel (specify length when ordering)
Terminals	Flying lead from driver to supply (specify length when ordering)
Control Gear	Remote HF electronic driver
Orientation	M5 studs on rear of frame
Mounting	Various
Supply	220 to 240V 50/60Hz ac dc
Area Classification	Zone 1 & 21, Gas & Dust
Type of Protection	Panel – Ex ic (intrinsically safe) Driver – Ex nA q (non-sparking, sand filled)
Apparatus Coding	Ex II 2 G D, Ex ic nA q T4
Certificate Number	Panel - CML 14ATEX2084X / IECEx CML 14.0036X Driver - CML 14ATEX4082X/ IECEx CML 14.0035X



	NIMBUS05	NIMBUS11	NIMBUS125	NIMBUS12
A	150	295	275	295
B	150	295	595	595

Options

24, 110	Non standard voltage driver
WW	Warm white (3000K)
ST	Rear mounting studs
RALxxxx	Specific paint colour (RAL number to be specified)

Add the required suffix to the product reference.

Example: **LX3NIM05RAL7001** = Industrial, 12W panel, painted white (RAL9001)

Accessories

LX4NIM-D02	Rotary dimmer switch 0-10V output (200W max)
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Delta Floodlight

IP66/67

The Delta Ex nR asymmetric floodlight is designed for use in Zone 2 & 22 hazardous areas.

Key Features:

- Quick access lamp chamber reduces maintenance time and removes the need to open the cover
- Dark Sky asymmetric design reduces light pollution and glare
- Marine grade stainless steel construction
- Optional remote control gear box giving a weight saving for pole of mast mounting



Luminaire Ratings

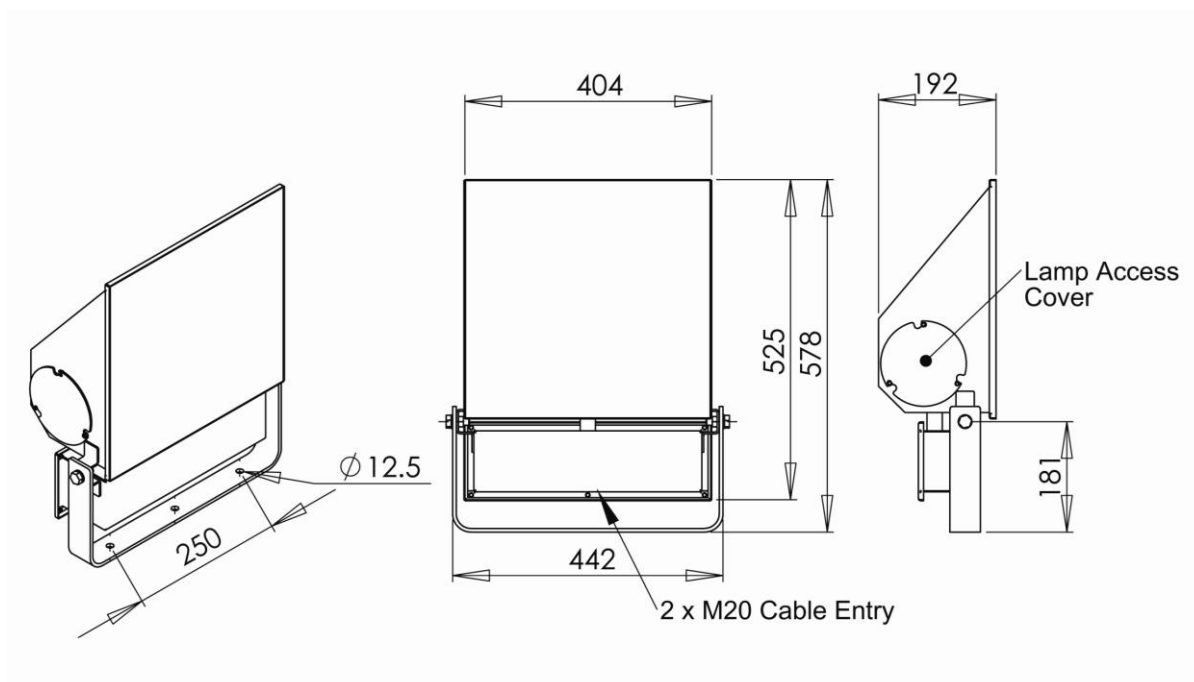
Product Reference	Lamp Type	Lamp Cap	Power (W)	Temperature Rating*	Ambient Temperature*	Weight (kg)
LX2DELT150SH*	HPS/MBI	E40	150	T4	-40°C to +55°C	17.0
LX2DELT250SH*	HPS/MBI	E40	250	T3	-40°C to +55°C	17.8
LX2DELT400SH*	HPS/MBI	E40	400	T3	-40°C to +55°C	19.0
LX2DELT500T**	TH	E40	500	T3	-40°C to +40°C	16.0

*Values relate to product mounted such that the lamp is positioned above the control gear. Universal mounting is allowable with different ambient rating.

**500W is the maximum lamp size permitted. Lower wattage lamps may be fitted. TH version has terminal box only.

Standard Specifications

Luminaire Type	Zone 2 Asymmetric Floodlight
Ingress Protection	IP66/67 to EN60529
Material	Stainless steel 316 grade housing, toughened glass window, silicone gaskets and stainless steel fixings
Distribution/output	Asymmetric wide beam
Lamp Types	High Pressure Sodium, Metal Halide or Single Ended Tungsten Halogen
Lamp Cap	E40/GES
Lamp Change	Via quick access lamp cover on side of enclosure
Cable Entry	2 x M20 clearance holes. Supplied with 1 x Ex plug and 1 x transit plug
Terminals	Looping terminal block for up to 6mm ² conductors
Control Gear	Copper and iron ballast, timed impulse ignitor, pfc capacitor
Orientation	Universal
Mounting	Via saddle bracket
Supply	220 to 254V 50/60Hz ac dc
Certification	
Area Classification	Zone 2 & 22, Gas and Dust
Type of Protection	Ex nR (restricted breathing)
Apparatus Coding	Ex nR IIC T# Gc, Ex tc IIIC T ⁰ C Dc (refer to table to T rating and ambient)
Certificate Number	ATEX 10ATEX4333X / IECEx SIR 12.0039X



Options

M25	M25 cable entries (other thread types available on request)
60	60Hz ac dc operation
110	110 - 130V operation
IO	Ignitor only (allows for remote mounting of control gear)
MR	Medium beam reflector

Add the required suffix to the product reference.

Example: **LX2DEL400SH60IO** = Zone 2, 400W HPS/MH floodlight with 60Hz operation and remote control gear box

Accessories

LX4DEL-PM1	Pole mounting bracket – 316 SS (to suit Ø35 to Ø50mm spigot)
X4DEL-AGS	Anti glare shield – 316 SS
LX4DEL-WG	Wire guard – 316 SS
LX4DEL-WGS	Combined anti glare shield/wire guard – 316 SS

Novus Floodlight

The Novus Ex nR symmetric floodlight is designed for use in Zone 2 & 22 hazardous areas.

Key Features:

- Quick access lamp cover reduces maintenance time, no need to remove cover
- Compact design with Internal control gear
- Timed Ignitor supplied as standard



IP66/67



Luminaire Ratings

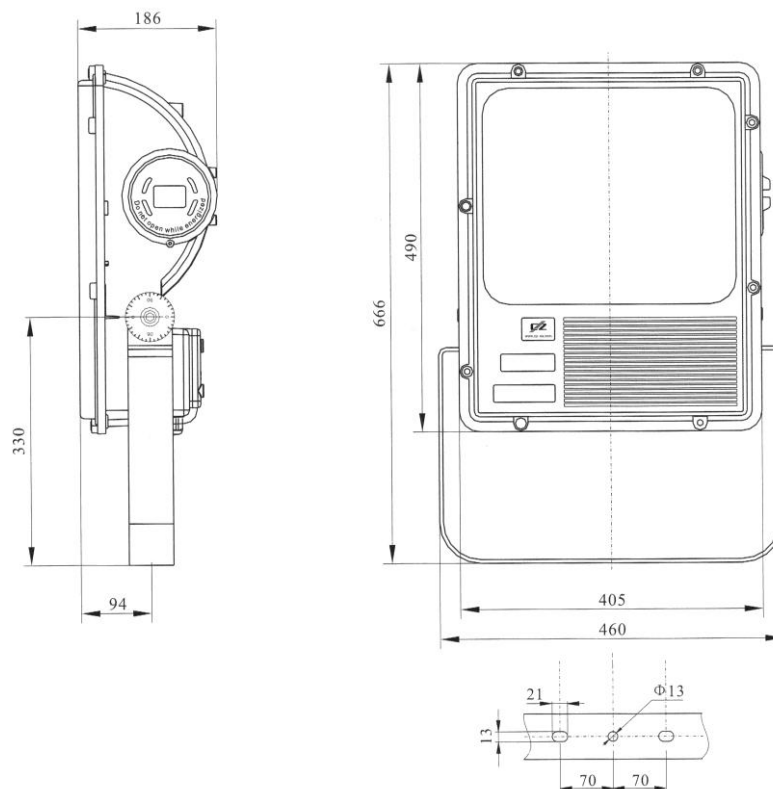
Product Reference	Lamp Type	Lamp Cap	Power (W)	Temperature Rating*	Ambient Temperature*	Weight (kg)
LX2NOV150SH*	HPS/MBI	E40	150	T4	-40°C to 55°C	15.0
LX2NOV250SH*	HPS/MBI	E40	250	T3	-40°C to 55°C	16.0
LX2NOV400SH*	HPS/MBI	E40	400	T3	-40°C to 45°C	17.5
LX2NOV500T**	TH	E40	500	T3	-40°C to 40°C	13.6

*Values relate to product mounted such that the lamp is positioned above the control gear. Universal mounting is allowable with different ambient rating.

**500W is the maximum lamp size permitted. Lower wattage lamps may be fitted. TH version has terminal box only.

Standard Specifications

Luminaire Type	Zone 2 Symmetric Floodlight
Ingress Protection	IP66/67 to EN60529
Material	Epoxy painted die cast marine grade Aluminium body, toughened glass window, silicone gaskets and stainless steel fixings
Distribution/output	Parabolic (symmetric) wide beam
Lamp Types	High Pressure Sodium, Metal Halide or Single Ended Tungsten Halogen
Lamp Cap	E40/GES
Lamp Change	Via quick access lamp cover on side of enclosure
Cable Entry	2 x M25 clearance holes
Terminals	Looping terminal block for up to 4mm ² conductors
Control Gear	Copper and iron ballast, timed impulse ignitor, pfc capacitor
Orientation	Universal
Mounting	Via saddle bracket
Supply	220 to 254V 50/60Hz ac dc
Certification	
Area Classification	Zone 2 & 22, Gas and Dust
Type of Protection	Ex nR (restricted breathing)
Apparatus Coding	Ex nR IIC T# Gc, Ex tc IIIC T ⁰ C Dc (refer to table to T rating and ambient)
Certificate Number	ATEX 12ATEX4348X / IECEx SIR 12.0145X



Options

M25	M25 cable entries (other thread types available on request)
60	60Hz ac dc operation
110	110 - 130V operation
IO	Ignitor only (allows for remote mounting of control gear)
MR	Medium beam reflector

Add the required suffix to the product reference.

Example: **LX2NOV400SH60IO** = Zone 2, 400W HPS/MH floodlight with 60Hz operation and remote control gear box

Accessories

LX4NOV-PM1	Pole mounting bracket – 316 SS (to suit $\varnothing 35$ to $\varnothing 50$ mm spigot)
LX4NOV-AGS	Anti glare shield – 316 SS
LX4NOV-WG	Wire guard – 316 SS
LX4NOV-WGS	Combined anti glare shield/wire guard – 316 SS

Optimus^{Wellglass}

IP66/67

The Optimus Ex nR wellglass range is designed for use in Zone 2 & 22 hazardous areas. The flexible body is capable of accepting a wide range of lamp types

Key Features:

- Lightweight Aluminium construction
- Hinged base/body combination for easy installation
- Versatile range of mounting options



Luminaire Ratings

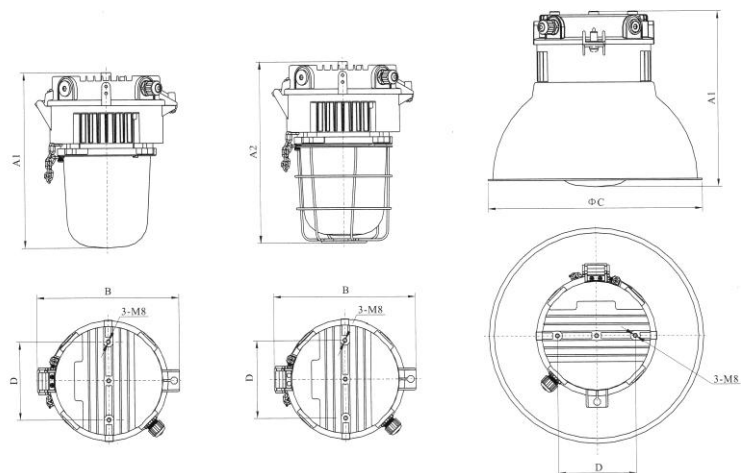
Product Reference	Lamp Type	Lamp Cap	Power (W)	Temperature Rating*	Ambient Temperature*	Weight (kg)
LX2OPT1070SH	HPS/MBI	E27	70	T4	-55°C to +45°C	9.0
LX2OPT1080M	MBFU	E27	80	T4	-55°C to +45°C	8.6
LX2OPT2125M	MBFU	E40	125	T3	-55°C to +45°C	8.8
LX2OPT2150HS	HPS/MBI	E40	150	T3	-55°C to +45°C	9.4
LX2OPT2300T	T/H	E40	300max*	T3	-55°C to +45°C	7.3
LX2OPT2250SH	HPS/MBI	E40	250	T3	-55°C to +45°C	15.8
LX2OPT2250M	MBFU	E40	250	T3	-55°C to +45°C	15.5
LX2OPT2500T	T/H	E40	500max*	T3	-55°C to +45°C	12.2

*Values relate to product mounted such that the lamp is positioned above the control gear. Universal mounting is allowable with different ambient rating.

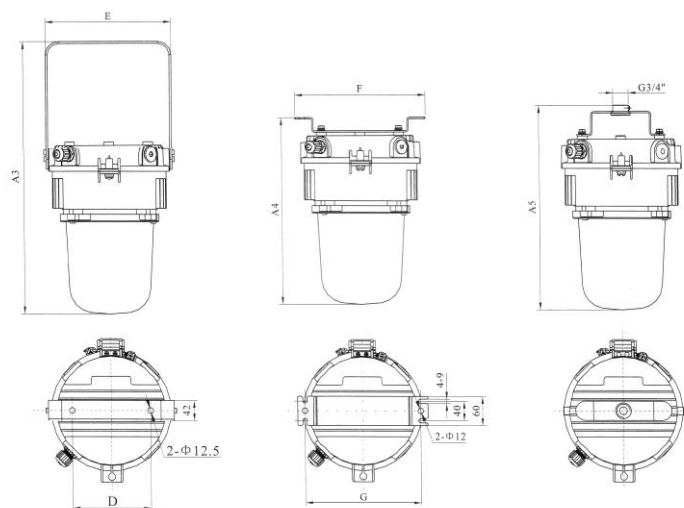
**500W is the maximum lamp size permitted. Lower wattage lamps may be fitted. TH version has terminal box only.

Standard Specifications

Luminaire Type	Zone 2 Wellglass Luminaire
Ingress Protection	IP66/67 to EN60529
Material	Epoxy painted die cast aluminium, toughened borosilicate globe & stainless steel fasteners
Distribution/output	General illumination
Lamp Types	High Pressure Sodium, Metal Halide, Mercury Vapour or Single Ended Tungsten Halogen
Lamp Cap	E27/ES & E40/GES
Lamp Change	Via globe (retained by suspension mechanism)
Cable Entry	2 x M25 clearance holes. Supplied with 1 x Ex plug and 1 x transit plug
Terminals	Looping terminals for up to 6mm ² conductors
Control Gear	Copper and iron ballast, timed impulse ignitor, pfc capacitor (where required)
Orientation	Universal
Mounting	Via two rear M6 tapped holes
Supply	220 to 254V 50/60Hz ac dc
Certification	
Area Classification	Zone 2 & 22, Gas and Dust
Type of Protection	Ex nR (restricted breathing)
Apparatus Coding	Ex nR IIC T# Gc, Ex tc IIIC T ⁰ C Dc (refer to table to T rating and ambient)
Certificate Number	ATEX 12ATEX4348X / IECEx CML 14.0021X



	A1	A2	B	ΦC	D	A3	A4	A5	E	F	G
ATW1	358	373	293	475	160	559	388	421	258	270	240
ATW2	438	453	293	685	160	639	468	501	258	270	240



Options

60	60Hz ac dc operation
110	110 - 130V operation
S	Stanchion mount version to suit 2" BSP thread

Add the required suffix to the product reference.

Example: **LX2OPT250SHS** = Zone 2, 250W HPS/MH wellglass, stanchion mounted

Accessories

LX4OPT-SB	Saddle bracket
LX4OPT-PB	Pendant bracket
LX4OPT-CB	Ceiling bracket
LX4OPT-DR	Dome reflector
LX4OPT-WG	Wire guard
ABREM25M20	M25 to M20 reducer

ATR1 Streetlight

IP66/67

The ATR1 Ex nR road lanterns is designed for use in Zone 2 & 22 hazardous areas.

Key Features:

- Suitable for post top or side arm mounting
- Ideal for walkways and perimeter lighting in addition to roadways
- Internal control gear suitable for both High Pressure Sodium and Metal Halide lamps
- Timed Ignitor as standard



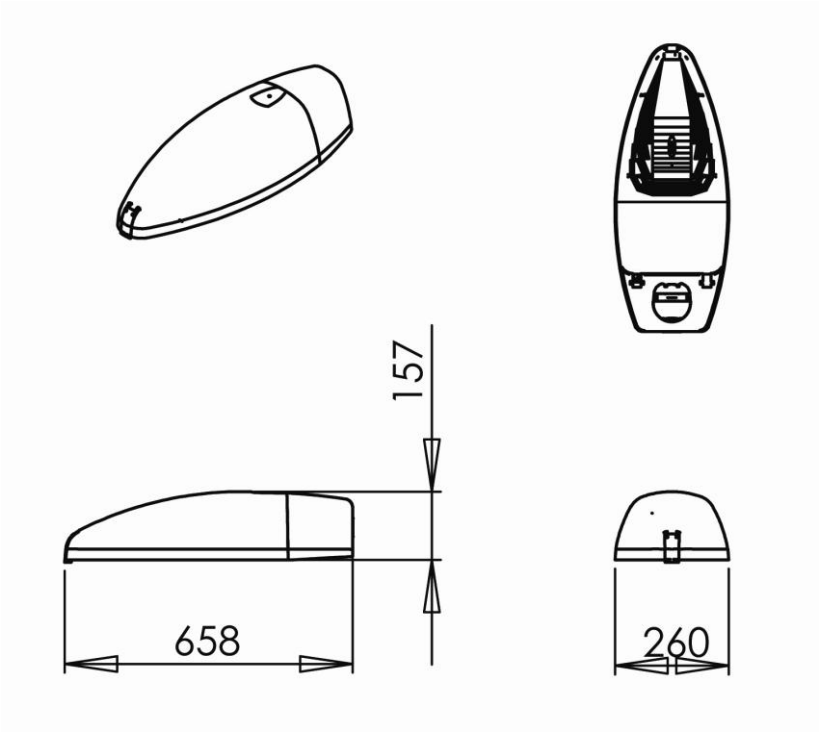
Luminaire Ratings

Product Reference	Lamp Type	Lamp Cap	Power (W)	Temperature Rating*	Ambient Temperature*	Weight (kg)
LX2ATR70SH	HPS/MBI	E27	70	T4	-40°C to 55°C	7.5

Standard Specifications

Luminaire Type	Zone 2 road lantern
Ingress Protection	IP65 to EN60529
Material	Epoxy painted die cast marine grade Aluminium body, toughened glass window, silicone gasket and stainless steel fixings
Distribution/output	Highly efficient pot optic reflector system
Lamp Types	High Pressure Sodium or Metal Halide
Lamp Cap	E27/ES
Lamp Change	Via front cover
Cable Entry	1 x M20 clearance hole
Terminals	Terminals block for up to 6mm ² conductors
Control Gear	Copper and iron ballast, timed impulse ignitor, pfc capacitor
Orientation	Horizontal, beam down
Mounting	Side arm mounting - Ø34 to Ø42mm Post top mounting - Ø60 to Ø76mm
Supply	220 to 254V 50/60Hz ac dc
Certification	
Area Classification	Zone 2 & 22, Gas and Dust
Type of Protection	Ex nR (restricted breathing)
Apparatus Coding	Ex nR IIC T4 Gc, Ex tc IIIC T135°C Dc*
Certificate Number	ATEX 12ATEX4231X / IECEx SIR12.0097X

* For alternate T rating and ambient, refer to certificate



Options

60	60Hz ac dc operation
110	110 - 130V operation
IO	Ignitor only (allows for remote mounting of control gear)

Add the required suffix to the product reference.
Example: **LX2ATR70SH60IO** = Zone 2, 70W HPS/MH streetlight with 60Hz operation and remote control gear box

Accessories

N/A	No accessories available for this product
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Avena Road Lantern

IP66/67

The Avena Ex nR road lantern is designed for use in Zone 2 & 22 hazardous areas. Dependant upon wattage the Avena comes in two sizes making it ideal for roads, walkways and perimeter lighting.

Key Features:

- Efficient optical design and five position lamp adjustment for optimum horizontal distribution
- Internal control gear suitable for both High Pressure Sodium and Metal Halide lamps
- Timed Ignitor as standard



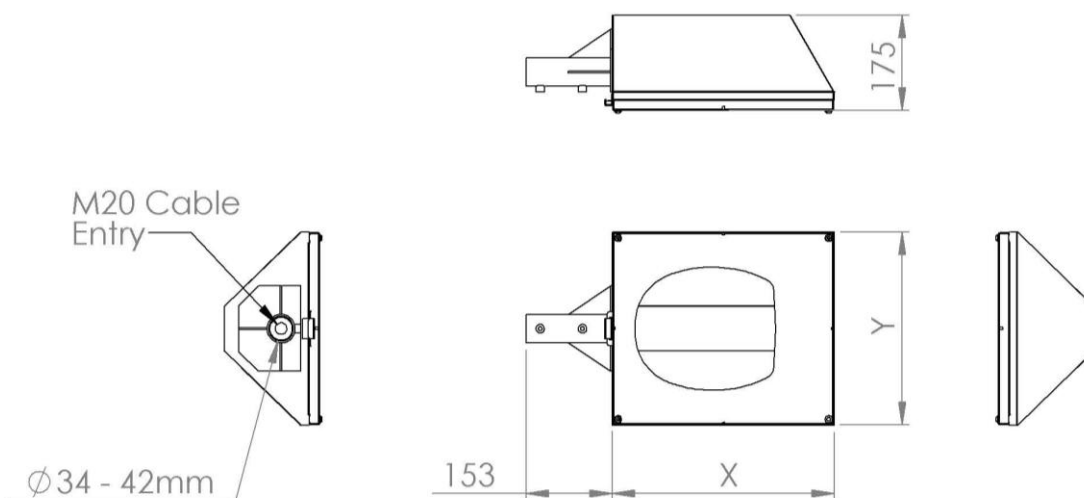
Luminaire Ratings

Product Reference	Lamp Type	Lamp Cap	Power (W)	Temperature Rating	Ambient Temperature	Weight (kg)
LX2AVE100SH	HPS or MH	E40	100W	T4	-50 to +55°C	8.5
LX2AVE150SH	HPS or MH	E40	150W	T4	-50 to +55°C	8.5
LX2AVE250SH	HPS or MH	E40	250W	T3	-50 to +55°C	9.8

Standard Specifications

Luminaire Type	Zone 2 road lantern
Ingress Protection	IP65 to EN60529
Material	316 stainless steel body, toughened glass optical chamber, silicone gasket and stainless steel fixings
Distribution/output	Highly efficient optical reflector system with adjustable lamp position
Lamp Types	High Pressure Sodium or Metal Halide
Lamp Cap	E40/ES
Lamp Change	Via front cover
Cable Entry	1 x M20 clearance hole
Terminals	Terminals block for up to 6mm ² conductors
Control Gear	Copper and iron ballast, timed impulse ignitor, pfc capacitor
Orientation	Horizontal, beam down
Mounting	Side arm mounting - Ø34 to Ø42mm pole, other diameters on request
Supply	220 to 254V 50/60Hz ac dc
Certification	
Area Classification	Zone 2 & 22, Gas and Dust
Type of Protection	Ex nR (restricted breathing)
Apparatus Coding	Ex nR IIC T* Gc, Ex tc IIIC T135°C Dc
Certificate Number	Pending

* For T rating and ambient, refer to luminaire table



Dimensions		
	X	Y
AVENA100/150	395	345
AVENA250	480	345

Options

60	60Hz ac dc operation
110	110 - 130V operation
IO	Ignitor only (allows for remote mounting of control gear)

Add the required suffix to the product reference.

Example: **LX2AVE150SH60IO** = Zone 2, 150W HPS/MH streetlight with 60Hz operation and remote control gear box

Accessories

N/A	No accessories available for this product
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Endurans Bulkhead

IP66/67

The Endurans Ex nR bulkhead is designed for use in Zone 2 & 22 hazardous areas.

Key Features:

- Compact design is ideal for building perimeter, walkway or stairwell lighting
- Highly resistant to corrosion
- Accepts both High Pressure Sodium and Metal Halide lamps without needing to change control gear

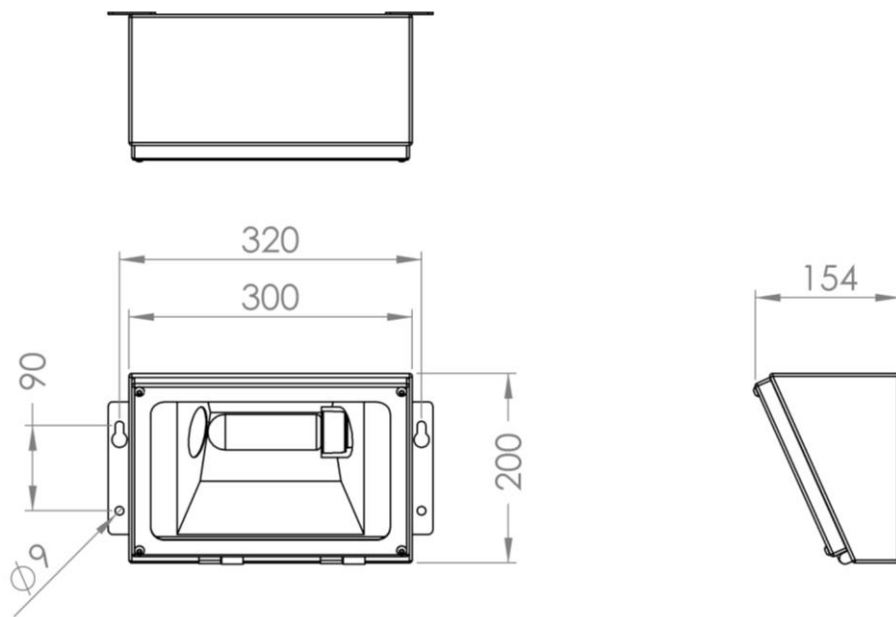


Luminaire Ratings

Product Reference	Lamp Type	Lamp Cap	Power (W)	Temperature Rating*	Ambient Temperature*	Weight (kg)
LX2END50SH	HPS/MBI	E27	50W	T3	-55°C to 50°C	8
				T4	-55°C to 35°C	8
LX2END70SH	HPS/MBI	E27	70W	T3	-55°C to 50°C	8
				T4	-55°C to 35°C	8

Standard Specifications

Luminaire Type	Zone 2 Bulkhead Luminaire
Ingress Protection	IP66/67 to EN60529
Material	Stainless steel 316 grade housing, toughened glass window, silicone gaskets and stainless steel fixings
Distribution/output	High efficiency reflector system
Lamp Types	High Pressure Sodium or Metal Halide
Lamp Cap	E27/GES
Lamp Change	Via hinged front cover
Cable Entry	2 x M20 clearance holes, one at each end. Supplied with 1 x Ex plug and 1 x transit plug
Terminals	Looping terminal block for up to 6mm ² conductors
Control Gear	Copper and iron ballast, timed impulse ignitor, pfc capacitor
Orientation	Universal
Mounting	Via saddle bracket
Supply	220 to 254V 50/60Hz ac dc
Certification	
Area Classification	Zone 2 & 22, Gas and Dust
Type of Protection	Ex nR (restricted breathing)
Apparatus Coding	Ex nR IIC T3 or T4 Gc, Ex tc IIIC T150°C or T135°C Dc
Certificate Number	ATEX CML 13ATEX4001X / IECEx CML 14.0023X



Options

M25	M25 cable entries (other thread types available on request)
60	60Hz ac dc operation
RALxxx	Specific paint colour (RAL number to be specified)

Add the required suffix to the product reference.

Example: **LX2ENDM2560**= Zone 2, 70W HPS/MH bulkhead with M25 entries and 60Hz operation

Accessories

LX4END-PM	Pole mounting bracket – 316 SS (to suit $\phi 35$ to $\phi 50$ mm spigot)
LX4END-AGS	Anti glare shield – 316 SS
LX4END-WG	Wire guard – 316 SS
LX4END-WGS	Combined anti glare shield/wire guard – 316 SS

APC Photocell

IP66/67

The APC provides the ability to control the switching of lighting in hazardous areas, without the need for major rewiring of existing circuits. Based on Abtech's proven BPG enclosure range, the photocell combines tried and tested circuitry with superior ingress and UV protection.

- Reduce carbon emissions and running costs by switching off lighting automatically when a specific light level is reached
- Standard switching level is 70 lux
- Built in delay of 25 seconds to prevent nuisance switching



Luminaire Ratings

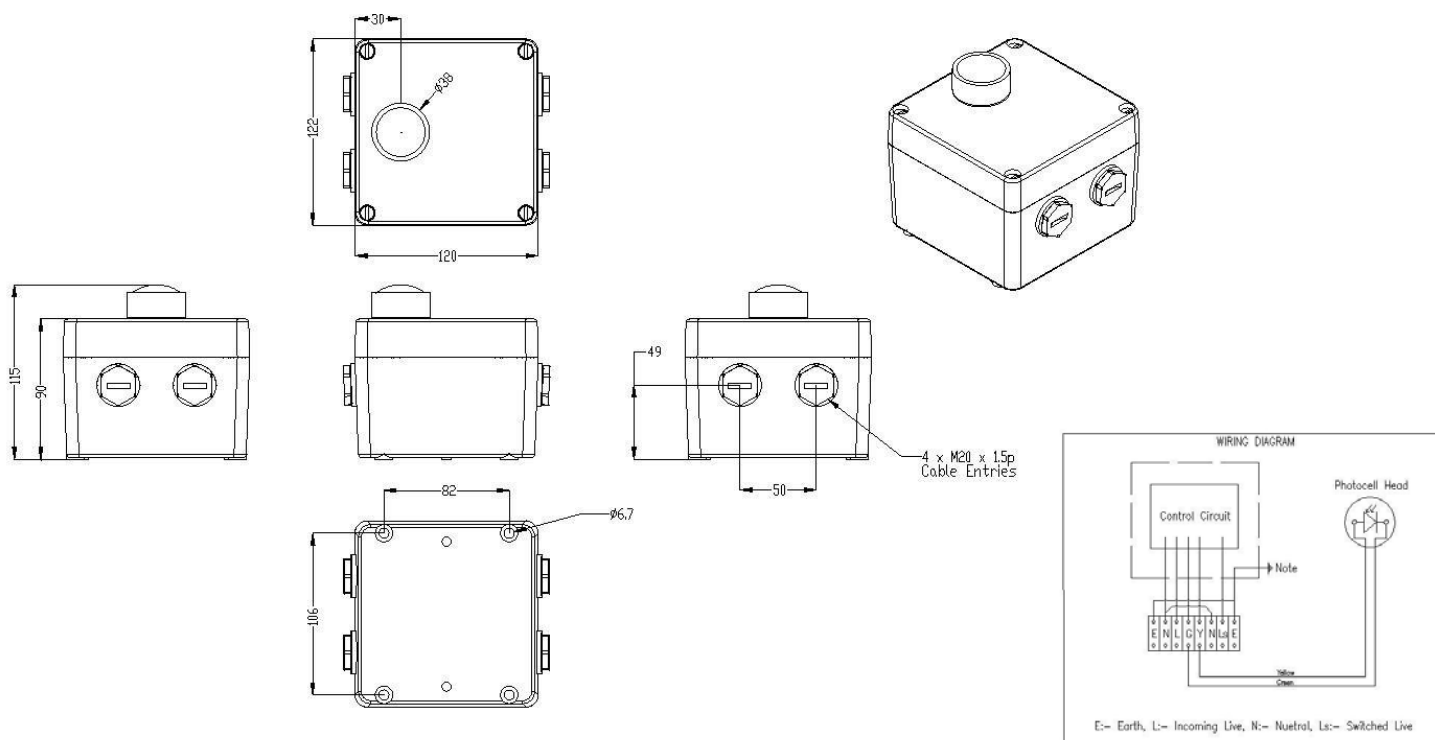
Product Reference	Load Types	Current Rating (A)	Light Level (lux)	Temperature Rating*	Ambient Temperature*	Weight (kg)
LX2APC104M20	Resistive & Inductive	10	70*	T6	-40°C to 55°C	2.0

*Alternative switching levels are available; refer to table on page 2

Standard Specifications

Luminaire Type	Zone 2 photocell
Ingress Protection	IP66/67 to EN60529
Material	Glass reinforced polyester housing, polycarbonate sensor window, stainless steel fixings
Lamp Types	Suitable for use with all lamp types, resistive and inductive loads
Cable Entry	4 x M20 tapped entries. Supplied with 4 x Ex plugs
Terminals	Terminals block for up to 4mm ² conductors
Control Gear	Electronic with on load switching up to 10A
Orientation	Universal
Mounting	Via rear mounting holes
Supply	110 to 254V 50/60Hz ac dc
Certification	
Area Classification	Zone 2 & 22, Gas and Dust
Type of Protection	Ex nA mC (non-sparking, encapsulation)
Apparatus Coding	II 3 GD Ex nA mc IIC T6 Gc, Ex tc IIIC T80°C Dc
Certificate Number	ATEX 10ATEX3543X / IECEx SIR 10.0171X

Dimensions



Switching

ON	OFF				
Switching Ratio	1 : 1	1 : 0.5	1 : 1.5	1 : 2	1 : 3
70 lux	70 lux	35 lux	105 lux	140 lux	210 lux
18 lux	18 lux	9 lux	27 lux	36 lux	54 lux
55 lux	55 lux	27.5 lux	82.5 lux	110 lux	165 lux
100 lux	100 lux	50 lux	150 lux	200 lux	300 lux

Standard switching is 70 lux with a 1:1 on/off ratio

Options

4M16	4 x M16 cable entries
Lxx/Ratio	Non-standard lighting level (e.g. L18/115 = 18 lux, on/off ratio 1 : 1.5)

Add the required suffix to the product reference.

Example: **LX2APC104M16** = Zone 2, 10A photocell with 4 x M16 entries

Accessories

LX4APC-MF	External mounting feet
ABAD-M20M25	M20 to M25 adaptor

Nimbus Flat Panel Luminaire

IP22



The Nimbus LED ceiling panel is designed for use in indoor industrial environments.

Key Features:

- Extremely thin profile >12mm
- Significant weight and energy saving over traditional recessed fluorescent
- Excellent uniformity and colour rendering
- Surface or drop rod mounted and suitable a variety of modular and suspended ceilings

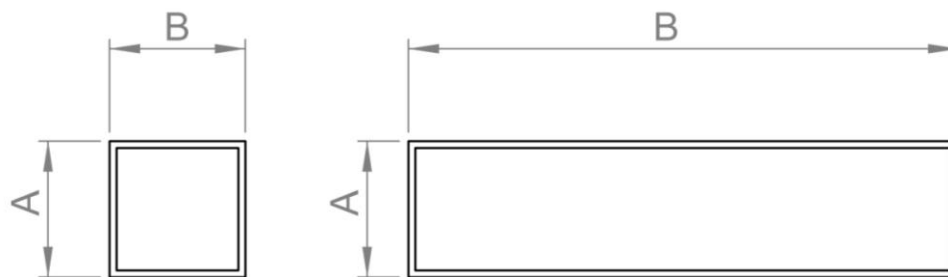


Luminaire Ratings

Product Reference	Lamp Type	Dimensions (mm)	Power (W)	Lumen Output	Ambient Temperature
LX3NIM05	LED	150 x 150	12W	730	-40°C to 40°C
LX3NIM11	LED	300 x 300	20W	1,460	-40°C to 40°C
LX3NIM125	LED	275 x 600	26W	2,100	-40°C to 40°C
LX3NIM12	LED	300 x 600	26W	2,100	-40°C to 40°C
LX3NIM14	LED	300 x 1200	45W	3,200	-40°C to 40°C
LX3NIM22	LED	600 x 600	50W	4,200	-40°C to 40°C
LX3NIM24	LED	600 x 1200	45W	4,950	-40°C to 40°C

Standard Specifications

Luminaire Type	LED panel luminaire
Ingress Protection	IP20 Panel, IP66 Driver to EN60529
Material	Panel: Aluminium frame, acrylic diffuser / Driver: Aluminium enclosure
Distribution/output	Internal diffusion reflector
Lamp Type	Light emitting diode, pure white (6000K)
LED Life	50,000 hours
Colour Rendering Index	>75
Cable Entry	Flying lead between driver and panel (specify length when ordering)
Terminals	Flying lead from driver to supply (specify length when ordering)
Control Gear	Remote HF electronic driver
Orientation	M5 studs on rear of frame
Mounting	Various
Supply	220 to 240V 50/60Hz ac dc



	NIMBUS05	NIMBUS11	NIMBUS125	NIMBUS12	NIMBUS14	IMBUS22	NIMBUS24
A	150	295	275	295	295	595	595
B	150	295	595	595	1195	595	1195

Options

24, 110	Non standard voltage driver
WW	Warm white (3000K)
ST	Suitable for use with drop rods
RALxxxx	Specific paint colour (RAL number to be specified)

Add the required suffix to the product reference.

Example: **LX3NIM05RAL7001** = Industrial, 12W panel, painted white (RAL9001)

Accessories

LX4NIM-DR	M5 drop rods (x 4)
LX4NIM-D02	Rotary dimmer switch 0-10V output (200W max)

Lumex Floodlight

IP66/67
LED

The Lumex and Lumex Twin stainless steel asymmetric floodlights are designed for use in heavy industrial and marine environments.

Key Features:

- Highly efficient photometric distribution combining maintenance free LED's with asymmetric distribution
- Compact design saves both space and weight
- Marine grade stainless steel construction
- Twin luminaire provides effective distribution for walkway illumination



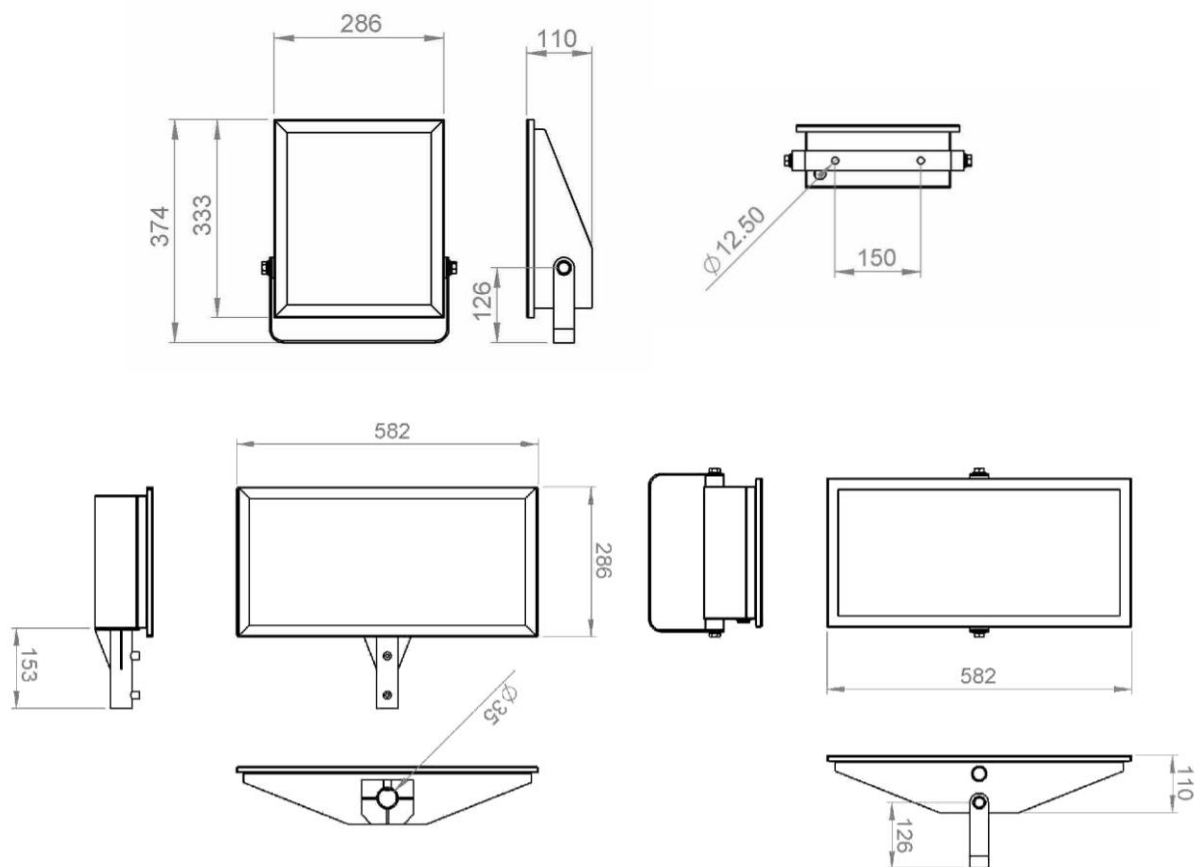
Luminaire Ratings

Product Reference	Lamp Type	Luminaire Type	Power (W)	Light Output (lm)	Ambient Temperature	Weight (kg)
LX3LUM30L	LED	Single	30	2,580	-40°C to +55°C	10.0
LX3LUM60L	LED	Twin	60	5,233	-40°C to +55°C	11.0

Lumex supplied with 3m of 3-core non armoured PVC/PVC cable as standard

Standard Specifications

Luminaire Type	Asymmetric LED Floodlight
Ingress Protection	IP66/67 to EN60529
Material	Stainless steel 316 grade housing, toughened glass window, silicone gaskets and stainless steel fixings
Distribution/output	Asymmetric wide beam
Lamp Types	LED (4000K)
LED Life	50,000 hours
Cable Entry	2 x M20 clearance holes. Supplied with 1 x IP rated blanking plug and 1 x transit plug
Terminals	Pre-wired with 3m, three core non-armoured PVC/PVC cable supplied
Control Gear	HF electronic driver
Orientation	Universal
Mounting	Via saddle bracket
Supply	220 to 254V 50/60Hz ac dc



Options

NSC	Non-standard cable (to be specified with enquiry/order)
D	Dimmable
48	48V dc operation
S	Spigot mount version (to suit $\varnothing 35$ to $\varnothing 45$ mm spigot)

Add the required suffix to the product reference.

Example: **LX3LUM30S** = Industrial, 30W LED floodlight with spigot mount

Accessories

LX4LUM-PMLR1	Pole mounting bracket for use with saddle bracket- 316 SS (to suit $\varnothing 35$ to $\varnothing 45$ mm spigot)
LX4LUM-AGS	Anti glare shield – 316 SS
LX4LUM-WG	Wire guard – 316 SS
LX4LUM-WGS	Combined anti glare shield/wire guard – 316 SS

Delta Floodlight

IP66/67

The Delta stainless steel asymmetric floodlight is designed for use in heavy industrial and marine environments.

Key Features:

- Quick access lamp chamber reduces maintenance time and removes the need to open the cover
- Dark Sky asymmetric design reduces light pollution and glare
- Marine grade stainless steel construction
- Optional remote control gear box giving a weight saving for pole of mast mounting

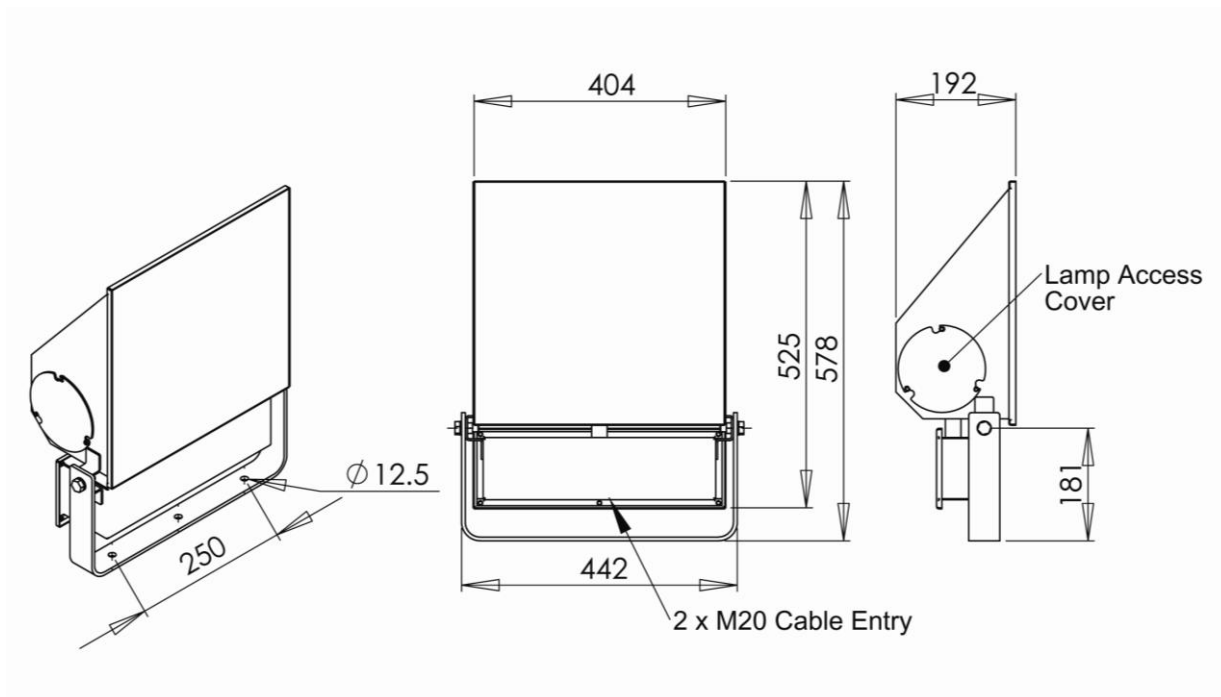


Luminaire Ratings

Product Reference	Lamp Type	Lamp Cap	Power (W)	Ambient Temperature	Weight (kg)
LX3DELT150SH	HPS/MBI	E40	150	-40°C to +55°C	17.0
LX3DELT250SH	HPS/MBI	E40	250	-40°C to +55°C	17.8
LX3DELT400SH	HPS/MBI	E40	400	-40°C to +55°C	19.0
LX3DELT500T	TH	E40	500	-40°C to +40°C	16.0

Standard Specifications

Luminaire Type	Asymmetric HID Floodlight
Ingress Protection	IP66/67 to EN60529
Material	Stainless steel 316 grade housing, toughened glass window, silicone gaskets and stainless steel fixings
Distribution/output	Asymmetric wide beam
Lamp Types	High Pressure Sodium, Metal Halide or Single Ended Tungsten Halogen
Lamp Cap	E40/GES
Lamp Change	Via quick access lamp cover on side of enclosure
Cable Entry	2 x M20 clearance holes. Supplied with 1 x IP rated blanking plug and 1 x transit plug
Terminals	Looping terminal block for up to 6mm ² conductors
Control Gear	Copper and iron ballast, timed impulse ignitor, pfc capacitor
Orientation	Universal
Mounting	Via saddle bracket
Supply	220 to 254V 50/60Hz ac dc



Options

M25	M25 cable entries (other thread types available on request)
60	60Hz ac dc operation
110	110 - 130V operation
IO	Ignitor only (allows for remote mounting of control gear)
M	Medium beam reflector

Add the required suffix to the product reference.

Example: **LX3DEL400SH60IO** = Industrial, 400W HPS/MH floodlight with 60Hz operation and remote control gear box

Accessories

LX4DEL-PM1	Pole mounting bracket – 316 SS (to suit Ø35 to Ø50mm spigot)
LX4DEL-AGS	Anti glare shield – 316 SS
LX4DEL-WG	Wire guard – 316 SS
LX4DEL-WGS	Combined anti glare shield/wire guard – 316 SS

APC

Photocell

IP66/67

The APC provides the ability to control the switching of lighting in heavy industrial, without the need for major rewiring of existing circuits. Based on Abtech’s proven BPG enclosure range, the photocell combines tried and tested circuitry with superior ingress and UV protection.

- Reduce carbon emissions and running costs by switching off lighting automatically when a specific light level is reached
- Standard switching level is 70 lux
- Built in delay of 25 seconds to prevent nuisance switching



Luminaire Ratings

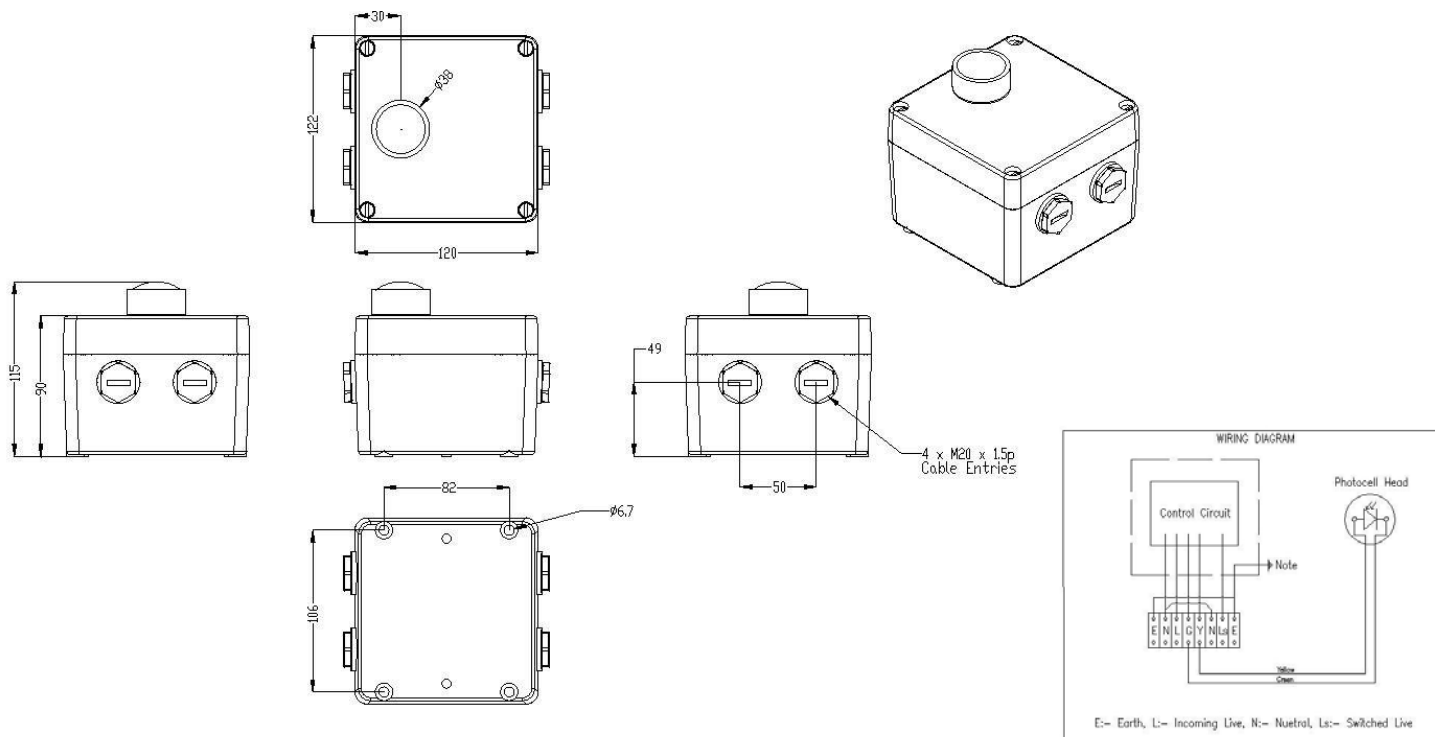
Product Reference	Load Types	Current Rating (A)	Light Level (lux)	Temperature Rating*	Ambient Temperature*	Weight (kg)
LX3APC104M20	Resistive & Inductive	10	70*	T6	-40°C to 55°C	2.0

*Alternative switching levels are available; refer to table on page 2

Standard Specifications

Product Type	Heavy industrial photocell
Ingress Protection	IP66/67 to EN60529
Material	Glass reinforced polyester housing, polycarbonate sensor window, stainless steel fixings
Lamp Types	Suitable for use with all lamp types, resistive and inductive loads
Cable Entry	4 x M20 tapped entries. Supplied with 4 x Ex plugs
Terminals	Terminals block for up to 4mm ² conductors
Control Gear	Electronic with on load switching up to 10A
Orientation	Universal
Mounting	Via rear mounting holes
Supply	110 to 254V 50/60Hz ac dc

Dimensions



Switching

ON	OFF				
Switching Ratio	1 : 1	1 : 0.5	1 : 1.5	1 : 2	1 : 3
70 lux	70 lux	35 lux	105 lux	140 lux	210 lux
18 lux	18 lux	9 lux	27 lux	36 lux	54 lux
55 lux	55 lux	27.5 lux	82.5 lux	110 lux	165 lux
100 lux	100 lux	50 lux	150 lux	200 lux	300 lux

Standard switching is 70 lux with a 1:1 on/off ratio

Options

4M16	4 x M16 cable entries
Lxx/Ratio	Non-standard lighting level (e.g. L18/115 = 18 lux, on/off ratio 1 : 1.5)

Add the required suffix to the product reference.

Example: **LX2APC104M16** = Zone 2, 10A photocell with 4 x M16 entries

Accessories

LX4APC-MF	External mounting feet
ABAD-M20M25	M20 to M25 adaptor

Notes



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