



**FLAMEPROOF®**

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## RJB01WL

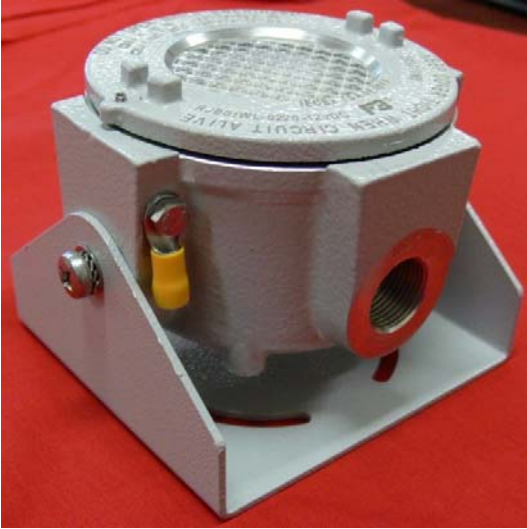
Flameproof Ex dt IP66/IP67 LED lighting equipment

- Explosion-proof low voltage solid state high intensity light fitting
- High power, high efficiency, cool LED technology
- 1650 lumen luminous flux
- Supply voltage options: Vin= 12Vdc, 24Vdc, 36Vdc, 48Vdc or 60Vdc
- Constant light output through a wide input voltage range -20% to +30% Vin
- Very long operating life, no lamp replacements
- Impact and vibration resistant
- Suitable for installation in areas with possible presence of any type of explosive gas and combustible dust: IECEx certification for zone 1 and zone 21
- Withstands weather conditions, water jets and temporary submersion

The RJB01WL Power LED lights offer superior quality, durability and reliability in all conditions.

- Ex d IIC: suitable for all gas types including Hydrogen and Acetylene
- Ex t IIIC: suitable for all dust types including conductive dusts
- Extended operating ambient temperature range
- Protected against water jets and temporary submersion
- Rugged construction
- Metric entry has accurate flat spot-face for perfect gland sealing
- One or two M20 threaded entries
- Delivered with lug for external earth connection
- Stable and robust mounting base with 4 external fixing points
- Adjustable swivel bracket available for wall or ceiling mounting.

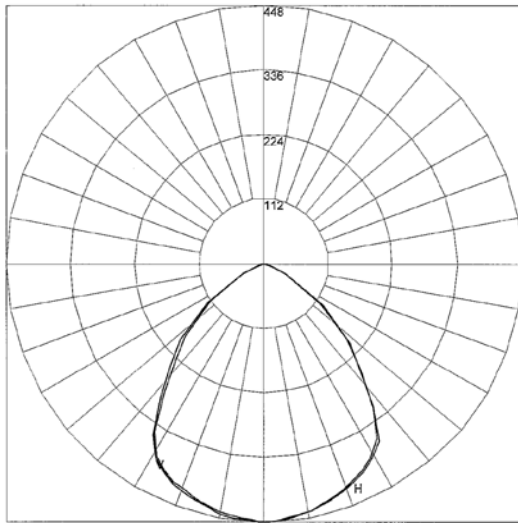
## RJB01WL LED light 1Q10



RJB01WL complete with external diffuser and adjustable mounting bracket. The light source is solid-state and is designed to last for life. The reflector is internal, therefore is protected from dust and weather.

The RJB01WL delivers constant light output in a wide range of input DC voltage supply. It can be supplied from an external DC source with battery backup and in this way delivers constant light during the emergency period.

IES FLOOD REPORT  
PHOTOMETRIC FILENAME : PH979.IES  
AXIAL CANDELA DISPLAY



Maximum Candela = 448 Located At Horizontal Angle = 0, Vertical Angle = 0  
H - Horizontal Axial Candela  
V - Vertical Axial Candela

Typical polar radiation pattern at the minimum supply voltage (worst case). The output luminous flux is constant and 50% higher than shown in typical operating conditions (input voltage higher than 11 V).

Dimensions: mm 107x102x90 complete with mounting bracket.  
Weight kg 1.

Other models available with different operating voltages and power ratings.

FJB210WL2 STOP-GO red/green light.

Power supply units, emergency units.

Explosion-proof switches, control stations, distribution panels.

## INSTALLATION

The RJB01WL is available in different versions, to suit different AC or DC voltages. Please make sure that the unit in your hands suits your system voltage, as wrong voltage can cause damage to the internal circuit.

The product code includes the nominal voltage and entry configuration:

RJB01WL-0120-12VDC (1x M20 entry, 12 VDC nominal supply, 2A max; input voltage range 9.6 Vdc to 28 Vdc)

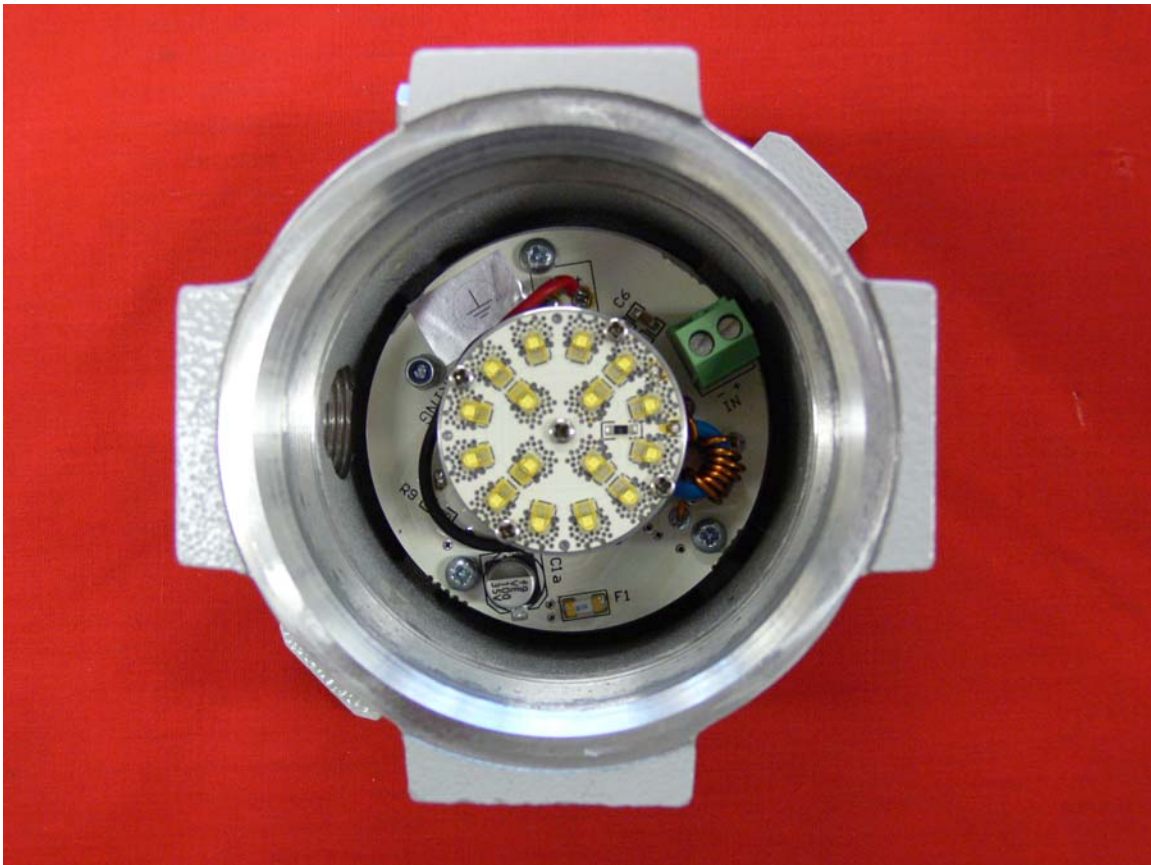
RJB01WL-0220-12VDC (2x M20 entries, 12 VDC, 2A max; input voltage range 9.6 Vdc to 28 Vdc)

RJB01WL-0220-24VAC (2x M20 entries, 24 Vac, 1A max; input voltage range 10 Vac to 24 Vac)

RJB01WL-0220-36VDC (2x M20 entries, 36 Vdc, 0.6 A max; input voltage range 18 Vdc to 48 Vdc)

RJB01WL-0220-48VDC (2x M20 entries, 48 Vdc, 0.4 A max; input voltage range 24 Vdc to 60 Vdc)

RJB01WL-0220-60VDC (2x M20 entries, 60 Vdc, 0.3 A max; input voltage range 30 Vdc to 78 Vdc)



Note the polarity required for the incoming wiring: 12 and 24 Vdc models have the POSITIVE connection at the outer terminal; 36, 48 and 60 Vdc models have the POSITIVE connection at the inner terminal. DO NOT REVERSE THE POLARITY or circuit damage will occur!

## RJB01WL LED light 1Q10

DC models shall not be supplied with AC voltage.

The internal Earth connection can be made using the screw on the circuit board near the red and black wires. Use a ring lug (eyelet) with 3 mm hole.

Up to 5 units at 12V, 10 units at 24V or 20 units at 48V may be connected in cascade using double ferrules with 0.75 mm<sup>2</sup> 2C+E SWA. Note that the PCB terminals suit conductors up to 1.5 mm<sup>2</sup> in total.

Ask for 2 entry versions if the units are to be linked. Entries can be straight or at 90 degree as required.

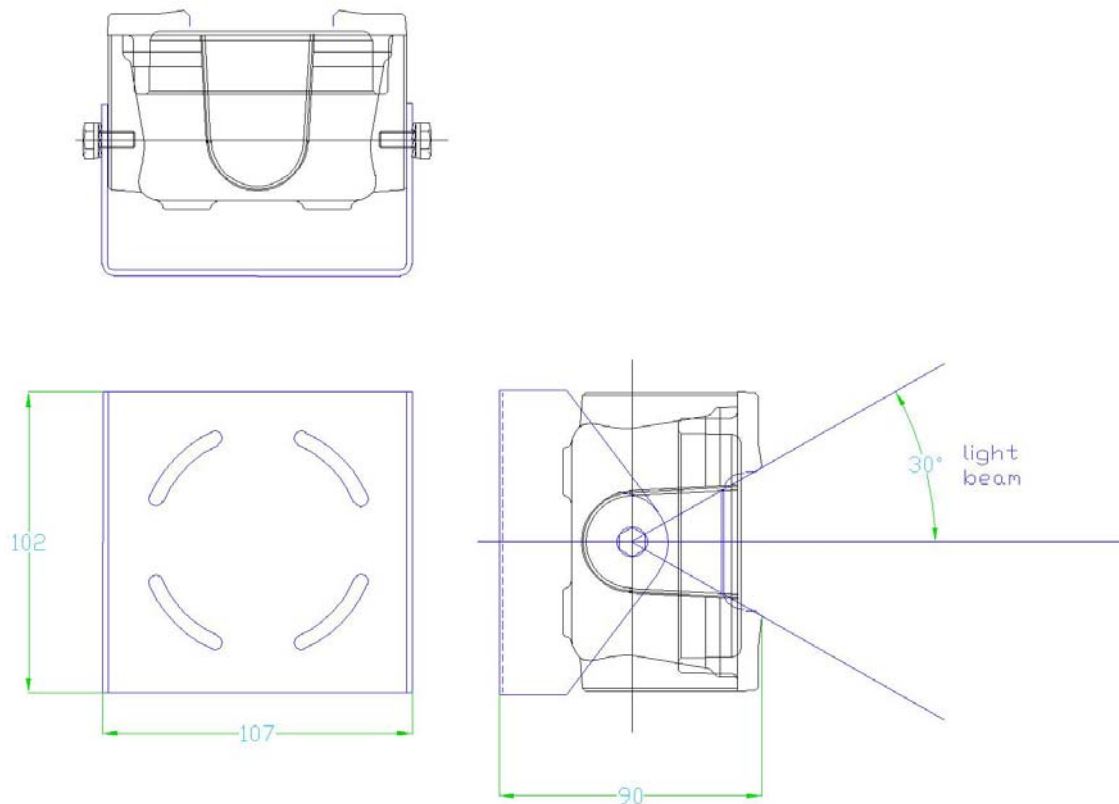
**DO NOT TOUCH THE LED EMITTERS!** Dirt on the LED surface affects the life of the device. The LED chips are very delicate and shall not be touched with fingers or tools.

The external earth connection shall be made with a 4 mm<sup>2</sup> conductor using the lug provided with the unit.

Use SWA cable (2C+E, max 1.5 mm<sup>2</sup>) in Zone 1 installations. Heavy duty circular cable may be used in Zone 2 installations. Use Ex dt certified cable glands.

### ADJUSTING THE LIGHT DIRECTION:

The adjustable bracket allows mounting the RJB01WL to the ceiling and adjusting the angle of the light beam  $\pm 45^\circ$  from the vertical axis in all directions. Fix the bracket to the ceiling (or wall) using 4x 5mm diameter screws and then fix the RJB01WL to the bracket using the two M6 screws provided. Tighten all screws after having decided the most appropriate orientation of the RJB01WL.



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**EXTERNAL DIFFUSER:** the external prismatic diffuser disk is press-fitted on the outside of the window in the lid. The purpose of the diffuser is solely to diffuse the light from the individual LED emitters. The diffuser disk can be replaced and is not part of the explosion protection features.



RJB01WL with the external prismatic diffuser fitted.

Tighten down the lid and the set screw to lock the lid down (use 1.5 mm Allen key tool).



If in doubt, or for any service requirement, please contact FLAMEPROOF ENGINEERING at: [engineering@fe-ex.com.au](mailto:engineering@fe-ex.com.au) .

**APPLICATIONS:**

- Flameproof Fork Lift Trucks, Flameproof vehicles, Ships, motor boats
- Tank inspection light
- Work light for tank cleaning
- Hazardous Area Emergency Lights
- Hazardous Area spotlight
- Hazardous Area lighting
- Marine lighting

A separate low voltage DC power supply unit may be required in some application. We can offer AC/DC power supply units with distribution switches and backup if required.