

LBX Bulkhead Features

- ATEX, UKEX and IECEx approved for Zone 1 and 21 explosive gas and dust atmospheres
- Quick and easy to install, with fast fit cable terminations
- Two lumen outputs, 1,086 & 1,629lm
- Wide ambient temperature range of -50°C to +65°C
- Optimised thermal management for extending service life in extreme conditions.
- Fully optimised LED driver system for enhanced lifetime, performance, durability and efficiency
- CE and UKCA marked.
- Powder coated marine grade aluminium construction.

ATEX INSTALLED LED LIGHTING

LBX BULKHEAD



WOLF SAFETY LAMP COMPANY

Saxon Road Works, Sheffield, S8 0YA, England

Tel: +44 114 255 1051 E-mail: info@wolfsafety.com Website: www.wolfsafety.com

















Wolf Installed LBX Bulkhead

Installation, Operation and Maintenance Instructions Please Retain - Read Before Use

EU Declaration of Conformity

This Wolf Installed LBX Bulkhead range meets all relevant provisions of the 2014/34/EU Explosive Atmospheres (ATEX Equipment) Directive by virtue of the issued EU type examination certificate, demonstrating compliance with all relevant harmonised standards and essential health and safety requirements.

The Wolf Installed LBX Bulkhead range is an efficient, robust and durable luminaire constructed of a cast aluminium enclosure protected by a powder coated finish. Models are available in a variety of input voltages. Approval is as Group II, Category 2 equipment for use in zone 1 & 2 potentially explosive gases, vapours, mists and dusts where the T4 temperature class/T80°C maximum surface temperature permits.



Ex eb mb IIC T4 Gb Ex tb IIIC T80°C Db IP66 / IP67

 $-50^{\circ}\text{C} \leq \text{Ta} \leq +50 \text{ up to } +65^{\circ}\text{C} \text{ (dependent on model type)}$

Notified Body:

SGS FIMKO OY., P.O. Box 30 (Särkiniementie 3) 00211 HELSINKI, Finland. Notified body number: 0598

EU Type examination certificate:

ExVeritas19ATEX0439X

Harmonised standards applied: EN IEC 60079-0:2018, EN60079-18:2015+A1:2018, EN IEC 60079-7:2015+A1:2018 EN60079-31:2014

Wolf Installed LMX linear range also meet the requirements of the 2014/30/EU EMC Directive to the harmonised standards: EN 55015: 2013 +A1:2015, EN 61547: 2009. EN 61000-3-2:2019, EN 61000-3-3:2013 +A1:2019

Ingress protection: IP66 and IP67 to EN 60529:1992

This declaration is issued under the sole responsibility of Wolf Safety Lamp Company.



Alex Jackson - Managing Director. Wolf Safety Lamp Company Ltd., Sheffield, UK. Dated 01 November 2021.

UK Declaration of Conformity

The Wolf Installed LBX Bulkhead range meets all the statutory requirements of the Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 2016, UKSI 2016/1107 as amended by UKSI 2019/696 by virtue of the issued UKEX type examination certificate, demonstrating compliance with all relevant designated standards and essential health and safety requirements.

Approval code:

Ex eb mb IIC T4 Gb Ex tb IIIC T80°C Db IP66 / IP67 -50°C \leq Ta \leq +50 up to +65°C (dependent on model type)

Approved Body:

SGS Baseefa Ltd, Rockhead Business Park, Staden Lane, Buxton, SK17 9RZ, UK Approval body number: 1180

UK Type examination certificate:

ExVeritas21UKEX0945X

Designated standards applied: EN IEC 60079-0:2018. EN IEC 60079-7:2015+A1:2017. EN60079-18:2015+A1:2018, EN60079-31:2014

The Wolf Installed LBX Bulkhead Luminaire also meets all the statutory requirements of the UK EMC Regulations 2016, UKSI. 2016/1091 as amended by UKSI 2019/696 to the following relevant designated

EN 55015: 2013 +A1:2015. EN 61547: 2009. EN 61000-3-2:2019. EN 61000-3-3:2013 +A1:2019

Ingress protection: IP66 and IP67 to EN 60529:1992

This declaration is issued under the sole responsibility of Wolf Safety Lamp Company.

Alex Jackson - Managing Director, Wolf Safety Lamp Company Ltd., Sheffield, UK. Dated 01 November 2021

IECEx Scheme Certification

Certificate number: IECEx EXV 19.0002X

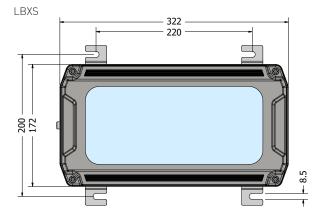
Certification/Approval Code: Ex eb mb IIC T4 Gb Ex tb IIIC T80°C Db

Ta -50°C to +50 up to +65°C (dependent on model type)

Standards applied: IEC 60079-0:2017, IEC 60079-7:2015+A1:2017, IEC 60079-18:2014+A1:2017, IEC 60079-31:2013

Ingress protection: IP66 and IP67 to EN 60529:1992

DIMENSIONS



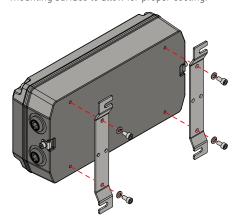


Dimensions are in mm.

MOUNTING

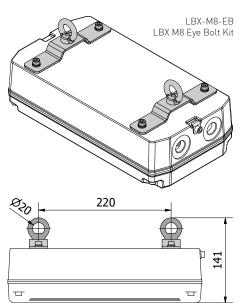
There are two mounting brackets supplied with the luminaire. These should be fixed to the back of the luminaire using the 4x M6 screws, washers and spring washers provided. The mounting brackets are designed to be secured using M8 fixings. A minimum of 2x fixings should be used to mount the luminaire.

If not using the mounting brackets provided, a distance of at least 8mm must be allowed between the back of the luminaire and any mounting surface to allow for proper cooling.



ACCESSORIES

The following mounting accessories are available to be purchased separately.



| TECHNICAL DATA Wolf Safety Lamp Co. reserves the right to change technical specifications without prior notice. | LBXS-L-50-230 | LBXS-L-55-230 | LBXS-L-65-230 | LBXS-L-50-110 | LBXS-L-55-110 | LBXS-L-65-110 |
|--|-------------------------|---------------|---------------|---------------|---------------|---------------|
| Input Voltage Range | 180-277 V AC | | | 88-140 V AC | | |
| Input Power | 24W | | 16W | 24W | | 16W |
| Max. Input Current | 0.15A | | 0.1A | 0.35A | | 0.2A |
| Frequency | 50 - 60 Hz | | | | | |
| Power Factor | >0.90 | | | | | |
| Lumen Output | 1,629 | | 1,086 | 1,629 | | 1,086 |
| Beam Angles | 90° (110° upon request) | | | | | |
| Ingress Protection | IP66 & IP67 | | | | | |
| Weight | 4kg | | | | | |
| Gas Temperature Class | T4 | | | | | |
| Dust Surface Temperature | T80°C | | | | | |
| Lower Temperature Limit | -50°C | | | | | |
| Upper Temperature Limit | 50°C | 55°C | 65°C | 50°C | 55°C | 65°C |
| No. of Cable Entries | 4 x M20x1.5 threaded | | | | | |
| Inrush Current (Peak) | 2.5A | | | | 2.0A | |
| Inrush Current Duration | 150µs | | | | | |
| Total Harmonic Distortion | <10% | | | | | |

PATENTS

The lighting apparatus within these luminaires is covered by UK patent 2531689B & EU patent 3214365B1.

DISPOSAL OF WASTE MATERIAL

Disposal of packaging, Wolf products and any component parts should be carried out in accordance with applicable regulations, (WEEE).

The Wolf Safety Lamp Co. Ltd has a policy of continuous product improvement. Changes may be made to the above specification without notification, details are available on request. E&OE. All information has been gathered under laboratory conditions, the user must regard the values given as approximate. A copy of these instructions with any relevant revisions can be found at www.wolfsafety.com.

IMPORTANT: SPECIAL CONDITIONS FOR SAFE USE (X)

- 1. Cable entries into the equipment shall utilise suitably certified cable glands and shall provide a minimum degree of protection of IP66 or IP67 (dependent on the installation environment).
- 2. Unused cable entry apertures shall be closed with suitably certified blanking plugs which provide a minimum degree of protection of IP66 or IP67 (dependent on the installation environment).
- 3. When used in hazardous dust atmospheres, the equipment shall be installed so as to minimize the risk from electrostatic discharge. In particular, the equipment shall not be installed where there is a likelihood of there being fast moving particles over the surface of the equipment.
- 4. The equipment shall only be used with a power source having a prospective short circuit current which does not exceed 1500A.

SAFETY, OPERATION, INSTALLATION & MAINTENANCE INSTRUCTIONS



EN IEC 60079-17

- 1. Please read these installation, operation and maintenance instructions carefully before commencing installation or maintenance and retain for future use
- 2. All Wolf LBX luminaires must be installed in accordance with EN IEC 60079-14 Electrical installations design, selection and erection standard, and maintained in accordance with EN IEC 60079-17 Electrical installations inspection and maintenance standard or the local hazardous area code of practice. If any parts are damaged or missing, the luminaire should be replaced in accordance with these instructions.
- 3. **IMPORTANT.** The installation area should be made safe and luminaires should be allowed to cool before commencing installation or maintenance work. Any installation or maintenance work should be carried out by suitably qualified and experienced electricians only.
- 4. Do not change or alter any internal wiring.
- 5. **IMPORTANT.** No modifications are permitted to the LBX Bulkhead luminaires, unauthorized modifications or spare parts will invalidate certification.
- 6. The rating label must be checked to ensure the unit is being used within the correct ambient temperature and environmental conditions, and that the power supply is suitable.

- 7. In the UK the requirements of the 'Health and Safety at Work Act' must be met. Handling and electrical work associated with this product to be in accordance with the 'Manual Handling Operations Regulations' and 'Electricity at Work Regulations'
- 8. Insulation resistance testing should be carried out in accordance with the latest applicable wiring regulations. Maximum insulation resistance test 500V DC. LEDs should be disconnected from the circuit before performing this test.
- 9. Incoming mains cable should be suitable for use at the peak ambient temperature expected to be found where the unit is sited, plus 6°C.
- 10. Suitably certified ATEX/UKEX/IECEx M20x1.5 cable glands and/or stopper plugs must be used when installing the LMX range of luminaires. Glands must be suitable for the ambient temperature, cable type, diameter and intended environment to ensure correct IP rating. Threads must be parallel with a minimum thread length of 7.5mm. If you are unsure, please contact Wolf Safety.
- 11. Type C MCBs are recommended when installing these products.
- 12. If the luminaire is to be installed in an area of high vibration or shock conditions, consult with Wolf Safety.
- 13. Intense light output. Do not look directly at operational light fitting.
- 14. The luminaire enclosure contains non-metallic materials in the form of high-performance silicones used for the seals. The performance of these materials must be taken into consideration with respect to the atmosphere present in the hazardous area, and if in doubt, contact Wolf Safety.
- 15. The external faces of the luminaire may be cleaned with water containing a small amount of detergent only. Chemicals and oils may cause premature failure of seals.

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OPENING

To allow access to the internals of the unit, the four bolts securing the front assembly must first be removed. An internal tether allows the lid to hang out of the way. The cover fixing bolts are retained in the cover.

When replacing the cover fixings, recommended torque for fixing screws is 4.5Nm.

WIRING

The unit will contain one or two terminal blocks designated for Mains field wiring connections. The terminal block poles are labelled # (Earth), N (Neutral), L1 (Switched Live) and L2 (Live).

For details of connections, see wiring diagrams.

MAINS TERMINALS

Terminal wiring must be carried out in accordance with these instructions:

- Insulation strip length of 10-11mm
- Only one wire should be connected to each clamping point

Mains cable cross-section:

- 0.5-2.5mm² when using solid or stranded cable
- 0.5-2.5mm² when using an un-insulated bootlace ferrule
- 0.5-1.5mm² when using an insulated bootlace ferrule

The luminaire should be connected to earth. An external earth connection point is available for up to 4mm² connection. An internal earth point is also provided.

LOOP-IN LOOP-OUT

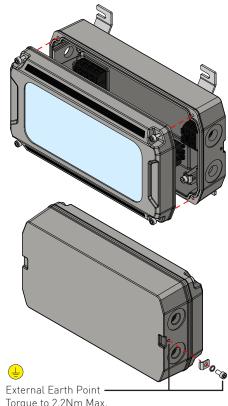
Two cable glands and one end may be used for a loop-in loop-out arrangement.

THROUGH WIRING

The through wiring in this product is 2.5mm² and the terminal blocks are rated for a current carrying capacity of 28A max.

LAMP MODULE REPLACEMENT

For lamp module replacement instructions, please refer to the instruction sheet supplied with the spare lamp module.



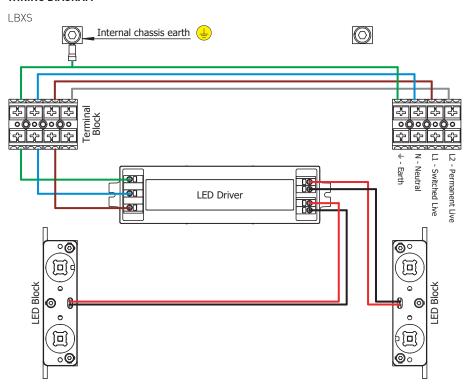
Torque to 2.2Nm Max.

CABLE ENTRIES

There are four M20x1.5 threaded cable entries on the unit. The product is supplied with three of these entries blanked by a suitably certified blanking plug. The fourth entry is blanked with a dust cap. When wiring the unit, this dust cap must be replaced with a suitably certified cable gland.



WIRING DIAGRAM



SERVICE LIFE & ROUTINE INSPECTION

Refer to the Safety, Operation, Installation & Maintenance section of this document before commencing any routine inspection work.

Frequency of maintenance will depend on the procedures in place on the site where the unit is installed, the installation location of the unit and the local operating conditions.

- 1. Check for mechanical damage and/or corrosion of enclosure, gaskets and fastenings. Damaged parts should be replaced.
- 2. Check for loose connections including internal and external earth connections. Tighten any loose
- 3. Check for accumulations of dust or dirt and clean if necessary.
- 4. Check tightness of fixing, glands, blanking plugs etc to ensure IP rating is maintained.
- 5. Check for unauthorised modifications.
- 6. Check for any accumulation of moisture.

If there is any doubt that the luminaire remains safe and suitable in the installation location, contact Wolf Safety for advice.

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