



## Wolf Safety Lamp Company

### Wolf WF-300 LED Floodlite


#### Operation and Maintenance Instructions Please Retain – Read Before Use

#### EU Declaration of Conformity

The Wolf WF-300 LED Floodlite meets all relevant provisions of the 2014/34/EU Explosive Atmospheres (ATEX Equipment) Directive by virtue of the issued EC Type Examination Certificate, demonstrating compliance with all relevant Harmonised Standards and Essential Health and Safety Requirements.


The Wolf WF-300 LED Floodlite is a high performance lightweight portable floodlight. Constructed in marine grade aluminium, with a polycarbonate lens, the end user must check that these materials are suitable for the atmosphere the Floodlite will be used in. The Floodlite is group II, Category 2 equipment for use in Zone 1 & 2 potentially explosive gases, vapours & mists, where temperature class, T4 is permitted, and Group II, Category 2 equipment for use in zone 21 & 22 potentially explosive dusts\*.

#### WF-300 Supply Voltage 100-254V AC

 II 2GD Ex mb IIC T4 Gb (-20°C < Ta < +50°C)  
 Ex t IIIC T103°C Db IP66 / IP67\*\*

The incoming mains cable should not exceed a temperature rise of 61°C above the ambient conditions; select suitable cable and cable gland.

#### WF-300 Supply Voltage 18-54V AC/DC

 II 2GD Ex mb IIC T4 Gb (-20°C < Ta < +55°C)  
 Ex t IIIC T87°C Db IP66 / IP67\*\*

The incoming mains cable should not exceed a temperature rise of 34°C above the ambient conditions; select suitable cable and cable gland.

\*Linkable Wolf WF-300 LED Floodlites fitted with Stahl 8575/14 couplers are Group II, Category 3 equipment for use in zone 22 potentially explosive non-conductive dusts only.

\*\*Linkable Wolf WF-300 LED Floodlites fitted with Stahl 8575/14 couplers are IP54.

#### EC Type Examination Certificate: **SIRA10ATEX5117X**

Notified	Baseefa Ltd.
Body:	Rockhead Business Park, Staden Lane, Buxton, SK17 9RZ, UK
	Notified body number: <b>1180</b>

Harmonised standards applied:- EN60079-0:2012, EN60079-7:2007, IEC60079-18:2009, EN60079-31:2009.

Wolf LED Floodlites are manufactured in accordance with the 2014/30/EU EMC Directive to the following standards:- 18-54V versions- EN 55015:2013, EN 61547:2009. 100-254V versions:- EN 55022:2010, EN 61000-3-2:2006, EN 61000-3-3:2008, EN 61000-6-2:2005.

Alex Jackson – Managing Director, Wolf Safety Lamp Company Ltd



#### IMPORTANT

Read these instructions carefully before commencing to use the Floodlite and retain for future use.

- Check the rating label to ensure the Floodlite is suitable for the supply provided, ambient temperature present and IP rating.
- Floodlites should be used at their rated voltage during normal operation. The ATEX standards the equipment is certified to, permits a  $\pm 10\%$  variance in the supply voltage for abnormal conditions, but it does not allow for the luminaire to be routinely used across this range. Running lamps outside of this voltage range will invalidate the ATEX approval and the product warranty, may result in a dangerous condition, and could cause the product to fail prematurely.
- It is the user's responsibility to ensure there is no potential difference between the earth supply to a Floodlite unit and the local earth in the work area. Where this is not possible the equipment should be securely earth bonded to metalwork in the immediate vicinity of where the Floodlite is being used. A flexible cable is recommended (6mm<sup>2</sup> minimum, no more than two metres long), connected to the earth grounding point on the Floodlite enclosure. Floodlites must be de-energised during connection or disconnection of the local earth bond.
- This product is Class1 equipment and must be earthed. Floodlites are supplied as standard with 3 core earthed supply cables. Where the user specifically requires a 24 volt SELV Floodlite with 2 core cable (+ve and -ve) / a 2 pole plug, the Floodlite must be used with a separate connection to earth via the external earth grounding point.
- If the Floodlite is to be used in areas of high vibration, please consult with Wolf Safety.
- **ELECTROSTATIC CHARGING HAZARD** Clean lens with damp cloth.
- The Floodlite consists of an Ex mb LED chamber and an Ex mb terminal chamber.
- All Floodlites have terminal blocks suitable for up to 4mm<sup>2</sup> live, neutral and earth.
- The internal fuse should be replaced using a Wolf supplied encapsulated fuse of the correct rating (see spare parts list).
- ATEX approved cable glands must be used and be suitable for the type of cable used. Any unused cable entries should be blanked off with a suitable ATEX/IECEx approved stopper plug to maintain a minimum IP66/67 rating as marked on the label.
- Lamps should be inspected prior to each use for visible signs of damage. Damaged lamps should be removed from the work area and repaired before being put back in service.
- The Floodlite lens is moulded in Polycarbonate, the end user must ensure that this is suitable for the atmosphere the Floodlite will be used in.
- 18-54V Floodlites with long cable lengths (>20m) must be checked to ensure the calculated voltage drop will not prevent the apparatus from operating within the specified voltage tolerance.
- Low voltage floodlites marked 18-54V can be connected to a CTE transformer.

#### PHOTOBIOLOGICAL SAFETY.

Floodlites are risk group 1 - No photobiological hazard under normal behavioural limitations

## SPECIAL CONDITIONS FOR SAFE USE (DENOTED BY X AFTER THE CERTIFICATE NUMBER)

- The supply circuit to the 18-54V floodlights must be protected by a fuse capable of withstanding a prospective short circuit current of 1500 A (Wolf Safety transformers are fitted with 80kA breaking capacity fuses, compliant with this requirement).
- Except for internal wiring, not more than one single or multiple strand lead shall be connected into either side of any terminal, unless multiple conductors have been joined in a suitable manner, e.g. two conductors into a single insulated crimped boot lace ferrule.
- Leads connected to the terminals shall be insulated for the appropriate voltage and this insulation shall extend to within 1 mm of the metal of the terminal throat.
- When terminals (WF-653) in accordance with certificate IECEx SIR 05.0035U are used, all terminal screws, used and unused, shall be tightened down to between 0.5 Nm and 0.7 Nm.
- When terminals (WF-653) in accordance with certificates IECEx SIR 05.0035U are used, they shall only be installed and wired with cable within a temperature range of -10°C to 80°C.
- When cross-connecting combs (QB type) are used on terminals (WF-653) to certificates IECEx SIR 05.0035U, the relevant conditions of certification associated with the certificate shall be applied.
- Cable entry holes shall be fitted with either an appropriately certified cable gland or appropriately certified blanking element. These shall provide and maintain a minimum enclosure ingress protection of IP66 or IP67 as appropriate.
- The LED assembly must be replaced following the failure of a maximum of 8 individual LED's.
- User must ensure that when used, the protective film must remain fixed in place at all times when the equipment is being moved.
- Always use the lamp in the bridle provided and if the Floodlite head is not situated within the protective frame/stand ensure the unit is de-energised before moving.

## MAINTENANCE



- Isolate the Floodlite from the mains supply and allow to cool before carrying out any maintenance work.
- It is essential that all Floodlites are maintained in accordance with the requirements of EN60079-17.
- The cable should be inspected before each use. Regular close inspections must be carried out to ensure the cable is not damaged in any way. Particular attention should be paid to gland and socket entries.
- IMPORTANT.** No modifications are permitted to the Floodlites, all spare parts must be purchased from the manufacturer, unauthorized modifications or spare parts will invalidate certification.

## TECHNICAL DATA

Enclosure	Marine grade aluminium alloy, epoxy powder coated	
Lens	Polycarbonate	
Beam Type	Medium Flood(Wide Flood Available)	
Light Source:	Type	48 x White High Power LEDs
	Life	100,000+ hrs
	Output	5200lm
Weight	9.0kg (excluding cable)	
Accessories	Supplied with bridle and lamp stand	

## ELECTRICAL DATA

Model	WF-300/*L*	WF-300/*H*
Voltage	18-54V AC/DC	100-254V AC only
Total Circuit Power	≤ 59Watt	≤ 51 Watt
VA (AC)	93.6 at 24VAC 105.6 at 48VAC	53.46 at 230VAC

**PAT testing**, maximum insulation testing must be carried out at voltages less than 500V DC, live and neutral cables must be shorted together and the voltage applied between earth and this connection.

## CHANGING LED ASSEMBLIES

Isolate the Floodlite, remove the lid assembly by releasing the 4 socket head bolts that are retained in the polycarbonate cover, the inner LED assembly can now be removed by releasing the 4 socket head bolts, the casting with the encapsulated LED's can now be discarded and the whole assembly replaced. Fitting a new LED assembly is a reversal of the above procedure.

## DISPOSAL OF WASTE MATERIAL

Disposal of packaging, Floodlite and old LED assemblies should be carried out in accordance with national regulations.

**IECEx Scheme Certificate Number: IECEx SIR 10.0016X**

### Supply Voltage 100-254V AC

Ex emb IIC T4 Gb (Ta= -20°C to +50°C)

Ex t IIIC T103°C Db IP66 & IP67

### Supply Voltage 18-54V AC/DC

Ex emb IIC T4 Gb (Ta= -20°C to +55°C)

Ex t IIIC T87°C Db IP66 & IP67

IEC Standards applied: IEC60079-0:2011, IEC60079-18:2009, IEC60079-31:2008, IEC60079-7:2006/07.

## SPARE PARTS

### WARNING: USE ONLY GENUINE WOLF REPLACEMENT PARTS.

Floodlite ancillary spares (all versions)	
Part Description	Wolf Part Number
Protective Lens Film 3 pack	WF-650/3
Stand and Bridle	WF-698K
Stainless Bolt Pivot Kit	WF-641
4 off Stainless Bolt and 'O' Ring kit	WF-645
Polycarbonate Lens Cover with Seal	WF-647
Trumpet Gland	LL-311
EX Terminal block	WF-653
Model WF-300/*H*/*** (100-254V)	
Part Description	Wolf Part Number
Internal Fuse - 2.5A	WF-264
Mains supply 5200lm LED driver -Supply voltage (100-254V) lamp housings including potted circuit for products with serial No from 8745. (Except serial numbers 10302 to 10401)	WF-655
5200lm LED Panel – Supply voltage (100-254V) lamps with product serial No from 8745 (Except serial numbers 10302 to 10401)	WF-652
Model WF-300/*L*/*** (18-54V)	
Part Description	Wolf Part Number
Internal Fuse – 5A	WF-262
18-54V 5200lm LED driver - 18-54V lamp housings including potted circuit for products with serial No from 22717. (Also serial numbers 22591 to 22690)	WF-658
5200lm LED Panel - 18-54V lamps with serial Nos from 22717. (Also serial numbers 22591 to 22690)	WF-652

**Please contact Wolf Safety for information regarding drivers and LED panels for the lamps listed below:**

Supply voltage (100-254V) lamps with serial Nos up to 8744 (also 10302 to 10401).

24V lamps with serial Nos up to 22716 (Except Serial numbers 22591 to 22690)

The Wolf Safety Lamp Co. Ltd has a policy of continuous product improvement. Changes in design details may be made without prior notice.



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