

LinkEx™ WF-250XL LED Floodlite Features

- Ideal for task lighting and work activities in a hazardous area
- ATEX, UKEX and IECEx approved for Zone 1 and 21 explosive gas and dust atmospheres
- Compact and lightweight design for ease of portability
- High power 'fitted for life' LED light source
- High quality, even, ultra-wide angle LED light, reduces shadows and enhances visibility
- Medium angle flood beam
- Safe/Optimal Voltage Indication "SOVI" to ensure safe certified operation
- ATEX/UKEX/IECEx approved floodlite protection accessories available
- Will fit through Ø410mm access hole when used in stand or Ø240mm when removed from stand



LinkEx™ LED FLOODLITE

WF-250®XL



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 LinkEx™ WF-250XL LED Floodlite

Operation and Maintenance Instructions
Please Retain - Read Before Use

EU Declaration of Conformity

The Wolf WF-250XL LED Floodlite 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 WF-250XL LED Floodlite is a high performance lightweight portable floodlite, constructed from marine grade aluminium with a powder coated finish and toughened glass lens. The floodlite is Group II, Category 2 equipment for use in zone 1, 2, 21 and 22 potentially explosive gases, vapours, mists and dusts where the T4 temperature class/118°C maximum surface temperature permits.

Certification/Approval Code:

 II 2GD Ex eb mb IIC T4 Gb
Ex tb IIIC T118°C Db

Ta = -40°C to +55°C or Ta = -40°C to +40°C when the WF-462 optional Protection Cover is fitted.

EU Type examination certificate: **CML 18ATEX3372X**

Notified Body: SGS FIMKO OY, PO Box 30 (Särkiniementie 3),
00211, Helsinki, Finland.

Notified Body Number: **0598**

Harmonised standards applied:-

EN IEC 60079-0:2018, EN IEC 60079-7:2015 +A1:2018,
EN IEC 60079-18:2015 +A1:2017, IEC 60079-31:2022.
Ingress protection level IP66 & IP67 to EN60529:1992.

Wolf WF-250XL LED Floodlites are manufactured in accordance with the 2014/30/EU EMC Directive to the following standards:- EN 55015: 2019, EN 61000-3-2:2014, EN 61000-3-3:2013, EN 61547:2009.

The WF-250XL is compliant with the 2011/65/EU RoHS Directive to the harmonised standard EN IEC 63000:2018.

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

Alex Jackson – Managing Director,
Wolf Safety Lamp Company Ltd.
Sheffield, S8 0YA.
Dated: 01 January 2024

UK Declaration of Conformity

The Wolf WF-250XL LED Floodlite 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.

Certification/Approval Code:

 II 2GD Ex eb mb IIC T4 Gb
Ex tb IIIC T118°C Db

Ta = -40°C to +55°C or Ta = -40°C to +40°C when the WF-462 optional Protection Cover is fitted

UK Type examination certificate: **CML 21UKEX3645X**

Approved Body: SGS Baseefa Ltd, Rockhead Business Park,
Staden Lane, Buxton, SK17 9RZ, UK.

Approval body number: **1180**

Designated Standards Applied:

EN IEC 60079-0:2018, EN IEC 60079-7:2015+A1:2018,
EN IEC 60079-18:2015+A1:2017, IEC 60079-31:2022

Wolf WF-250XL LED Floodlites also meet all the statutory requirements of the UK EMC Regulations 2016, UKSI 2016/109 and The Electrical Equipment (Safety) Regulations 2016, UKSI 2016/1101, both as amended by UKSI 2019/696 to the following relevant designated standards:-
EN 55015: 2019, EN 61547: 2009, EN 61000-3-2:2014,
EN 61000-3-3:2013.

The WF-250XL is compliant with the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012, UKSI 2012/3032 to the designated standard EN IEC 63000:2018.

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

Alex Jackson – Managing Director,
Wolf Safety Lamp Company Ltd.
Sheffield, S8 0YA.
Dated: 01 January 2024

IECEx Scheme Certification

Certificate number: **IECEx CML 18.0198X**

Certification/Approval Code:
Ex eb mb IIC T4 Gb
Ex tb IIC T118°C Db
Ta = -40°C to +55°C or Ta = -40°C to +40°C when the WF-462 optional Protection Cover is fitted.

Standards applied:
IEC 60079-0:2017, IEC 60079-7:2015,
IEC 60079-18:2014 & IEC 60079-31:2022.

IMPORTANT: SPECIAL CONDITIONS FOR SAFE USE (X)

1. The enclosure's coated surfaces are non-conducting and may generate an ignition-capable level of electrostatic charge under certain extreme conditions. The user shall ensure that the equipment shall not be installed in a location where the external conditions are conducive to the build-up of electrostatic charge on non-conductive surfaces. Additionally, the equipment shall only be cleaned with a damp cloth.
2. The Floodlite can be fitted with a protective cover (WF-462), when fitted the maximum ambient temperature lowers from +55°C to +40°C. Use only Wolf supplied accessories.

PHOTOBIOLOGICAL SAFETY

Photobiological safety to EN 62471:2008.

Wolf WF-250XL LED Floodlite: Risk Group 2

CAUTION: Possibly hazardous optical radiation emitted from this product. Do not stare at operating lamp. May be harmful to the eye.

EQUIPMENT USE

1. Check the rating label to ensure the Floodlite is suitable for the supply provided, ambient temperature present and the environmental conditions.
2. Ensure the cable type is suitable for your application as certain cables and their operational use / installation may alter the temperature range of the product:
- SY cable has a lower operational temperature range of -5°C for flexed applications. Note this cable's insulation is made from PVC.
 - SB cable has a lower operational temperature range of -20°C for flexed applications.
 - H07RN-F cable has a lower operational temperature range of -25°C for flexed applications.
 - Helkama cable H-FLEX PWR C-PUR has a lower operational temperature range of -35°C for flexed applications.

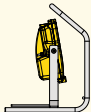
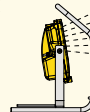
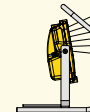
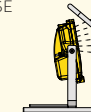
3. It is the user's responsibility to ensure there is no potential difference between the earth supply to a Floodlite unit and the local earth in the work area. Where this is not possible the equipment should be securely earth bonded to metalwork in the immediate vicinity of where the Floodlite is being used. A flexible cable is recommended (6mm² 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.
4. This product is Class 1 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.
5. The Floodlite is approved with a range of protective consumable accessories that are designed to protect and extend its maintained lifecycle. These accessories should be replaced when damaged or the light output is obscured.
6. When the polycarbonate Floodlite Lens Guard (WF-321) is fitted to the Floodlite, the end user must ensure that this is suitable for the atmosphere the Floodlite will be used in.
7. WF-250XL incorporates silicone seals, the user must ensure suitability of the atmosphere the product will be used in.
8. All Floodlites have terminal blocks suitable for incoming cables for up to 4mm² conductor capacity.
9. Ex "e" certified Increased Safety terminal blocks must have all terminals fully tightened down even if a conductor is not fitted. On all terminal blocks, tighten screws to 0.5-0.7Nm.
10. ATEX/IECEx 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.
11. Floodlites, cable and accessories should be inspected prior to each use for visible signs of damage. Particular attention should be paid to gland and socket entries. Damaged lamps should be removed from the work area and repaired before being put back in service.
12. Safe/Optimal Voltage Indicator (SOVI). The Wolf WF-250XL LED Floodlite incorporates SOVI technology to highlight to the user if the product is operating outside of the certified maximum and recommended minimum voltage range.

Wolf LinkEx™ WF-250XL LED Floodlite

13. When using the product, the plugs must be connected and fully engaged in their corresponding socket to maintain the IP rating of the plug & socket. Check the seals are present and in good condition in the socket lid on any fitted sockets. The covers on the sockets must be fully closed and latched to seal surfaces and maintain the stated IP rating of the product.

Note - plugs do not have latching covers or other devices to prevent ingress of Liquids/ Dusts. They are only IP rated when engaged in their corresponding sockets. Plugs must be kept clean and dry when not engaged with a socket.

14. The diagram below represents the SOVI function, it demonstrates that when the voltage is not within the "Safe/Optimal Voltage" the light output will change from a constant uninterrupted beam to a pulse. If connecting a large number of floodlites check for SOVI indication on all the lamps in the string. Guidance on lamp connection and extensions can be found on the Wolf website: www.wolfsafety.com. If a lamp is pulsing, it is recommended that the lamp be switched off until it is operating at a correct voltage.

SOVI	LAMP OFF	SAFE OPTIMAL VOLTAGE		UNSAFE VOLTAGE
WF-250XLH WF-250XLL	< 90V < 18V	90-100V 18-19V	100-264V 19-50V	264V > 50V >
LIGHT OUTPUT	OFF 	PULSE 	ON 	PULSE 

MAINTENANCE



EN IEC 60079-17

- IMPORTANT.** Any maintenance work should be carried out in the safe area by suitably qualified and experienced technicians only.
- Isolate the Floodlite from the mains supply and allow to cool before carrying out any maintenance work.
- 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.
- Portable Appliance testing must be carried out to IEC, EN standards to the correct rating i.e. 250V DC for 18-50V versions and 500V DC for 90-264VAC versions. Live and neutral cables must be shorted together and the voltage applied between earth and this connection.

FAULT FINDING



Risk of Shock

If a WF-250XL Floodlite fails to function, remove the product from service into a non hazardous area. Remove the cover and apply power to the Floodlite. Check the input voltage at the terminals is present and is the correct rating for the Floodlite. If the voltage is correct check the output voltage to the LED panels, this should be 19V DC+/-1V. If this voltage is not present then the driver is faulty, if it is then the LED panel is faulty. Replace as necessary.

FRONT COVER

Remove the front cover by unscrewing the four socket head retaining bolts. Release the Earth connecting wire by releasing the locking spade connection in the floodlite by depressing the tab on the connector and pulling away. See fig. 8.

Perform repairs/maintenance as necessary. To reassemble follow the above points in reverse order. Take care not to trap/crush wires and ensure the seal is in good condition. Ensure correct torque settings are followed, as specified in Fig. 7.

*The Certificate label and serial number are fitted to the front cover, therefore do not interchange the front covers with other WF-250XL Floodlites. See internal body label for serial number reference.

CHANGING CABLE OR SOCKET

Disconnect the input cable, release cable from input gland. Check the gland seal is in good condition, fit the new part(s) and re-assemble the product by following the stated procedure in reverse order. For wiring and termination details, see Fig. 1-6. Specified torque settings must be followed.

If any change is made to cable, glands, plugs or sockets the manufacturers instructions should be adhered to, ensuring the seal between the item and the cable is reliable.

Please note sockets and plugs have no IP rating unless connected or sockets have covers closed.

Spare Parts

Item No.	Part No.	Spare Part Description	Quantity
1	WF-551	Painted rear casting, enclosure seal, washers and retaining bolts	1
2	WF-571	Painted front cover assembly, complete with glass, retaining brackets, seal and wiring labels	1
3	WF-553	Glass lens, seal and bracket pads	1
4	WF-586	18-50V LED driver	1
5	WF-592	90-264V LED driver	1
6	WF-558	LED panel, thermal pad and fixing screws	1
7	WF-561	6 Way - 4mm ² terminal block, 2 QB links and fixing screws	1
8	WF-565	2 Way - 4mm ² terminal block and fixing screw	1
9	WF-225	LED driver retention bracket	1
10	WF-559	Complete driver assembly including bracket and terminals (18-50V)	1
11	WF-569	Complete driver assembly including bracket and terminals (90-264V)	1
12	WF-284	Floodlite enclosure seal	1
13	WF-285	Floodlite lens seal	1
14	WF-276L	Internal screw and label set (18-50V)	1
15	WF-276H	Internal screw and label set (90-264V)	1
16	WF-566	Internal earth/grounding wire set	1
17	WF-568	External earth stud	1
18	WF-490	Bridle fixing kit	1
19	WF-445	Frame and bridle (No fixings included)	1
20	LL-311	Trumpet gland M20 x 1.5mm	1 (+1 LinkEx Versions)
21	WF-495	M20 stopping plug	1
22	WF-549	Certification label and bracket are specific to the individual product, contact your authorised Wolf supplier for replacement	
23	A-103	External Eyebolt M6 x 15mm	

Contact your authorised Wolf supplier for replacement cables, plugs or link socket components.

DISPOSAL OF WASTE MATERIAL

Disposal of packaging, LinkEx LED products and parts should be carried out in accordance with applicable regulations.

The Wolf Safety Lamp Co. Ltd has a policy of continuous product improvement. Changes in design details may be made without prior notice. Prices and design are subject to alteration without notice. All products sold are subject to our conditions of sale. A copy of these instructions with any relevant revisions can be found at www.wolfsafety.com.

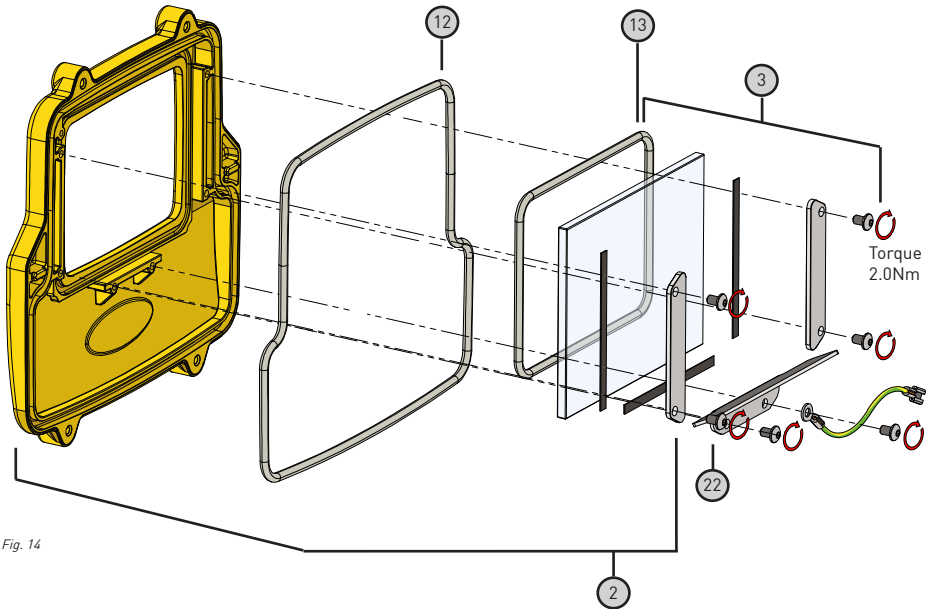


Fig. 14

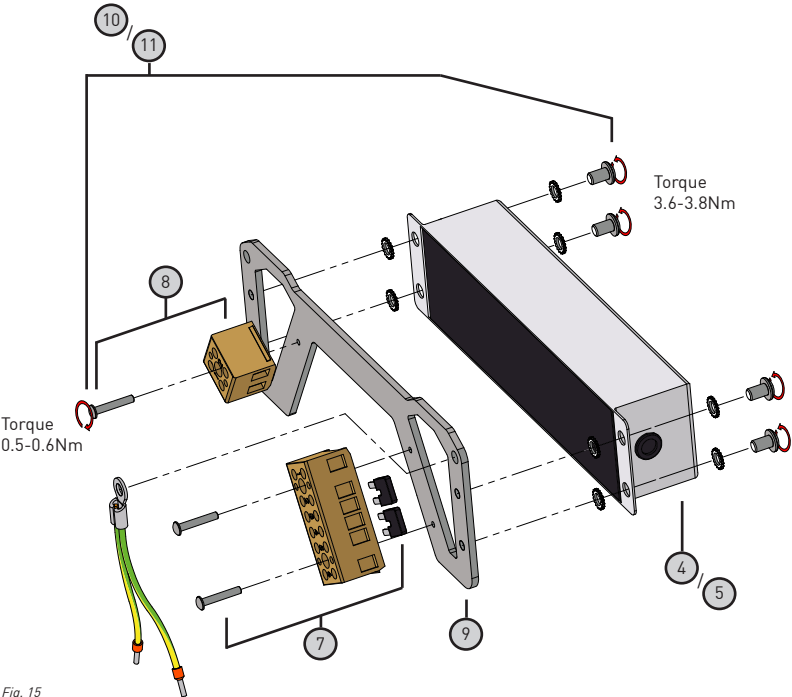


Fig. 15

CHANGING LED PANELS

The LED panel can be removed by unscrewing four socket head screws and the wiring terminations. Discard the old panel and replace with a new one by following the removal procedure in reverse. A new thermal pad must be fitted on replacement under the LED panel as shown in Fig. 7. For wiring and termination details, see Fig. 1-6. Specified torque settings must be followed.

CHANGING LED DRIVERS

Unscrew the internal & external wiring terminations from the six & two way terminal blocks and remove the driver retention bracket by unscrewing the two bolts. To reassemble follow the above points in reverse order. For wiring and termination details, see Fig. 1-6. Specified torque settings must be followed.

CHANGING GLASS LENS

Replace the glass by unscrewing the six socket head screws securing the three retaining plates. Fit the new glass making sure strip gasket material is fitted between the glass and each retention plate. See Fig. 14. Specified torque settings must be followed.

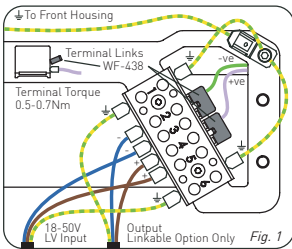
TECHNICAL DATA

Enclosure	Marine grade aluminium alloy with a powder coated finish.	
Lens	6mm Toughened Glass	
Light Source	Type	18 x White High Power LEDs
	Life	100,000+ hrs
Weight	5.4kg (excluding cable)	

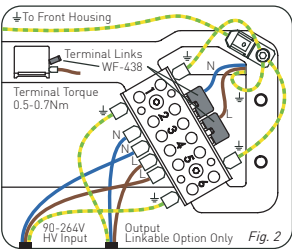
ELECTRICAL DATA

Model	WF-250XLL	WF-250XLH
Voltage	18-50V AC/DC	90-264V AC/DC
Freq Hz	50/60	50/60
Total Circuit Power	≤ 28 Watts	≤ 31 Watts
VA (AC)	40VA at 24V AC	31VA at 110V AC
	48VA at 42V AC	33VA at 240V AC
	52VA at 48V AC	

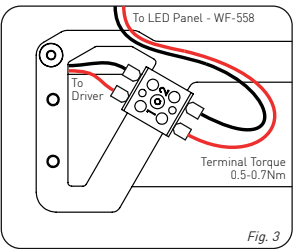
Wiring Schematic



Driver Input Terminal Block (90-264V Variant)

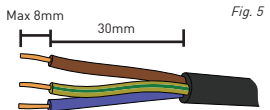
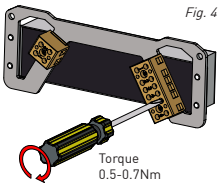


Driver Input Terminal Block (18-50V Variant)

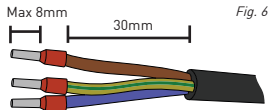


Driver Output Terminal Block

Terminal Connecting



Ensure less than 1mm conductor exposed from the metal of the terminal throat



Wolf LinkEx™ WF-250XL LED Floodlight

Product Breakdown

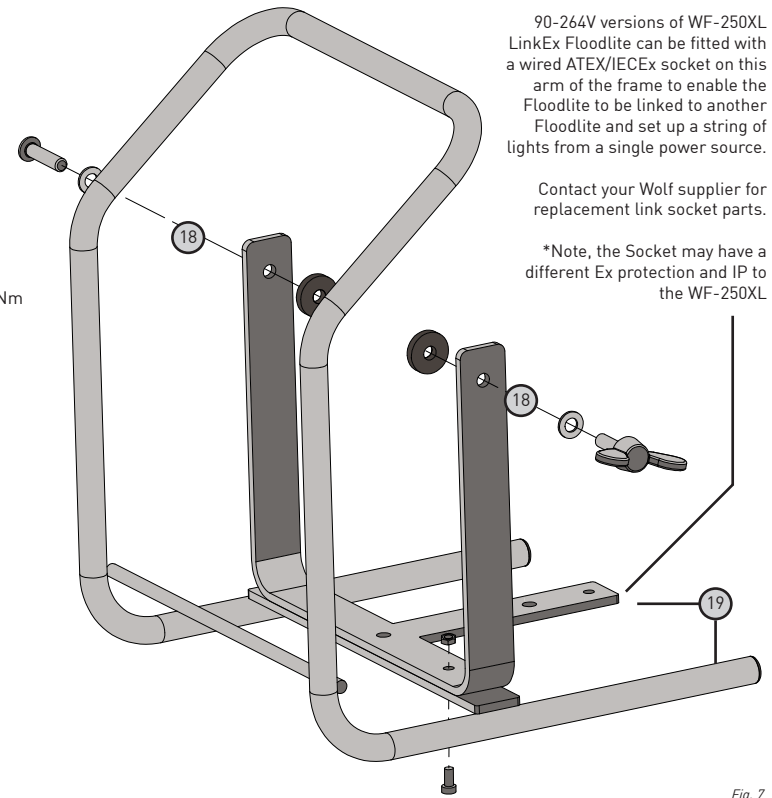
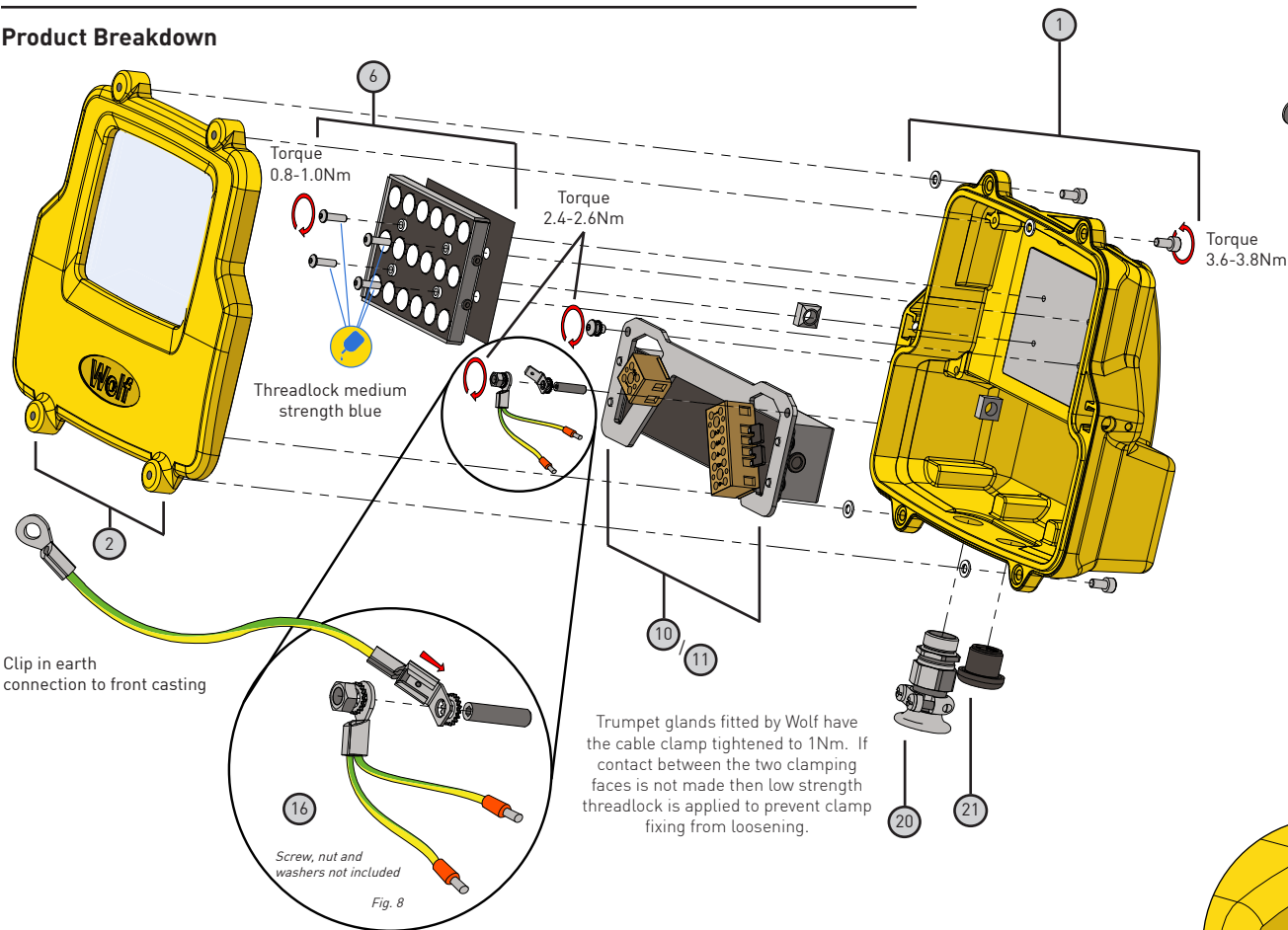


Fig. 7

Accessories

WF-478
Mesh Cover

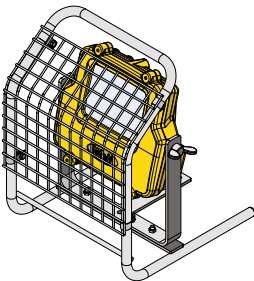


Fig. 10

WF-321
Anti-Static Lens Guard Kit

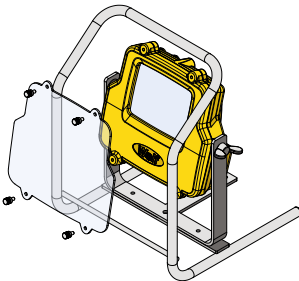


Fig. 11

WF-545
Magnet Kit

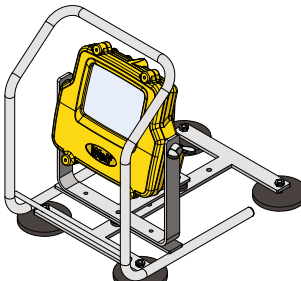


Fig. 12

WF-462
Anti-Static Protection Cover Kit

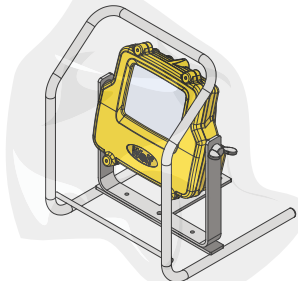


Fig. 13

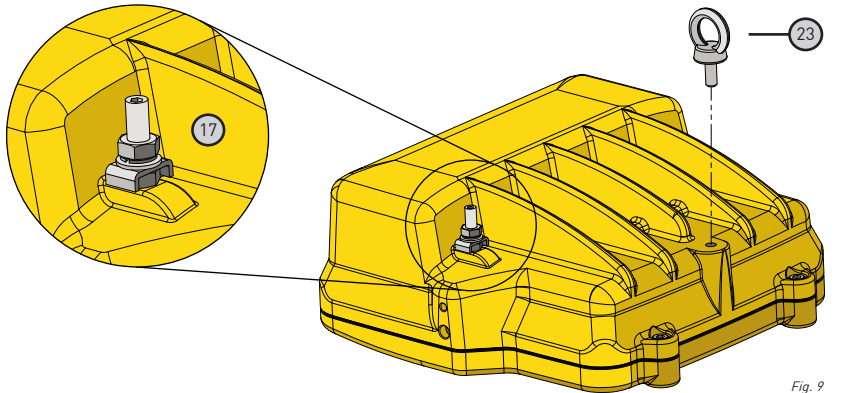


Fig. 9