



EU Declaration of Conformity

The Wolf LX-400 LinkEx™ LED Temporary Luminaire 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 LX-400 LinkEx™ LED Temporary Luminaire is a leadlamp with a durable enclosure construction of polycarbonate with polyurethane protective rings. 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/135°C maximum surface temperature permits.

Certification/Approval Code:



Ex eb mb op is IIC T4 Gb

Ex tb op is IIIC T135°C Db IP6X

Ta = -20°C to +55°C

or Ta = -20°C to +45°C when the LX-621 optional Protection Cover is fitted

EU Type examination certificate: **CML 18ATEX3371X**

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

EU Notified body number: **0598**

Harmonised standards applied:

EN60079-0:2018, EN60079-7:2015+A1:2018, EN60079-18:2015+A1:2017,

EN60079-28:2015, EN60079-31:2014

Ingress protection level IP67 to EN60529:1992

Some variants of plugs/sockets may reduce the Ingress Protection rating.

e.g. ATX, CEAG & STAHL IP66.

ATEX LinkEx LED Leadlamps are certified compliant with the 2014/30/EU EMC

Directive to the harmonised standards: - EN 55015: 2013,

EN 61547: 2009, EN 61000-3-2:2014, EN 61000-3-3:2013

Alex Jackson – Managing Director
Wolf Safety Lamp Company Ltd.

IECEx Scheme Certification

Certificate number: **IECEx CML 18.0197X**

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Standards applied: IEC60079-0:2017, IEC60079-7:2017, IEC60079-18:2017,

IEC60079-28:2015, IEC60079-31:2013

IMPORTANT: SPECIAL CONDITIONS OF USE (X)

1. The user/installer shall ensure that, when the Luminaire is fitted with a previously certified plug or socket that has associated special conditions for safe use, they shall take into account any restrictions or conditions for safe use that are applicable to these devices.

2. Linkable lamps fitted with Marechal sockets are certified for low impact risk use only, do not expose to shocks greater than 4 joules.

PHOTOBIOLOGICAL SAFETY

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

EQUIPMENT USE

1. Read this document carefully before first use of the Wolf LinkEx™ LED Temporary Luminaire and retain for future reference.

2. Check the rating label to ensure the LinkEx LED leadlamp is suitable for the supply provided, ambient temperature present and the environmental conditions.

3. In areas where processes that induce circulating currents in the earth system are being undertaken, such as welding, it is the user's responsibility to ensure there is no potential difference between the supply earth and the earth local to the luminaire. If a potential difference exists there is a risk of arcing should the lamp's end cap fixings or metal gland come into contact with local metal work. In these situations, the luminaire should also be locally earth bonded with a flexible cable, no longer than 2 metres, with a conductor area of 6mm² minimum. The luminaire must be de-energised from the mains supply during connection or disconnection of the local earth bond. An external Earth Bonding Stud is available in the spares list and can be retro fitted in place of one of the end cap retaining screws.

4. Safe Optimal Voltage Indicator (SOVI). The Wolf LX-400E LED Leadlamp incorporates SOVI technology to highlight to the user if the product is operating outside of the certified maximum and recommended minimum voltage range. 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.

SOVI	LAMP OFF	SAFE NON-OPTIMAL VOLTAGE	SAFE OPTIMAL VOLTAGE	UNSAFE VOLTAGE
LX-400SL LX-400SH	< 18V < 90V	18-19V 90-100V	19-50V 100-264V	50V > 264V >
LIGHT OUTPUT				

If connecting a large number of lamps 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 indicating an unsafe voltage, it is recommended that the lamp be switched off until it can be made to operate at a correct voltage.

5. The LinkEx LED leadlamp enclosure is constructed from polycarbonate, the end user must ensure suitability of the atmosphere the LinkEx LED leadlamp will be used in.

6. The LinkEx LED leadlamp is class 1 earthed electrical equipment, using 3 core cable. This product must be earthed.

7. Ex e terminal blocks must have all terminals fully tightened down even if a conductor is not fitted. On the six way terminal block, tighten screws to 0.7Nm, on the 4 way terminal block tighten to 1.8Nm.

8. ATEX/IECEx certified cable glands must be used and be suitable for the type of cable used.

9. Ensure cable is rated for the ambient temperature the LinkEx LED leadlamps will be used in, standard SY cable is not rated for use below 0°C.

10. Inspect cable at regular intervals.

11. Damaged equipment should be withdrawn and repaired as necessary before being put back in to service, in accordance with EN60079-17.

12. Lamps must not be opened in Hazardous Areas.

13. When the LinkEx LED leadlamp is used in temporary installations two mounting points must be used, see Wolf clamp rings and associated accessories.

14. LinkEx LED leadlamps can be carried whilst energised/illuminated.

15. Plugs must be connected and fully engaged in the correct socket to maintain the IP rating of the plug and socket. Wolf LinkEx™ LED Temporary Luminaire and any connected power distribution equipment, fitted with a socket, must have the socket covers closed when not in use to maintain IP rating of the socket housing.

MAINTENANCE

1. IMPORTANT. Any maintenance work should be carried out in the safe area only.

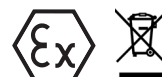
2. IMPORTANT. No modifications are permitted to the LinkEx LED leadlamps, use only genuine Wolf spare parts and accessories, unauthorised modifications, spare parts or accessories will invalidate certification.

3. Isolate the LinkEx LED leadlamps from the power supply before carrying out any maintenance work.

4. To replace LED strip, replace entire tray (see spares list).

5. External plastic components have an anti-static coating. Use only a dilute water/detergent mix to clean.

6. Insulation testing must be carried out to IEC, EN standards to the correct rating i.e. 250V DC for 18-55V and 500V DC for 90-264V versions. Live and neutral cables must be shorted together and the voltage applied between earth and this connection.



Wolf LinkEx™ LED Temporary Luminaire

ELECTRICAL DATA

Maximum current on a linked lamp configuration not to exceed 16A.

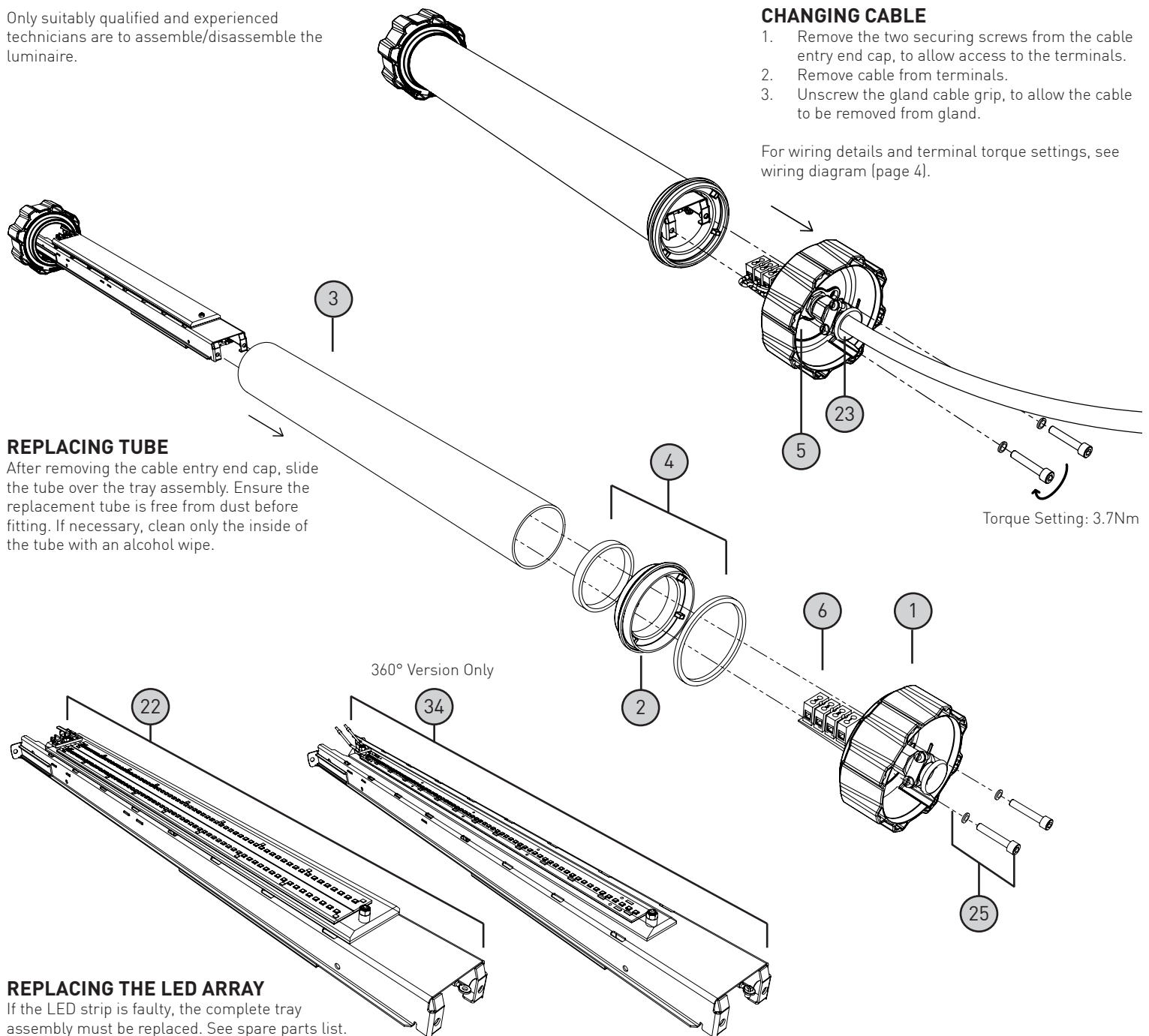
MODEL	Safe Optimal Voltage Range	Freq Hz	Power Watt	VA
LX-400SL../T4../24V	18-50VAC	50-60	27.1	41.2
	18-50VDC		27.1	
LX-400SL../T4../48VAC	18-50VAC	50-60	26.9	51.2
	18-50VDC		26.9	
LX-400SH../T4../110V	95-264VAC	50-60	30.5	31.2
LX-400SH../T4../230V	95-264VAC	50-60	27.6	28.5

DISPOSAL OF WASTE MATERIAL

Disposal of packaging, LinkEx LED products, old LED trays and drivers should be carried out in accordance with national regulations. (WEEE)

Product Breakdown

Only suitably qualified and experienced technicians are to assemble/disassemble the luminaire.



CHANGING CABLE

1. Remove the two securing screws from the cable entry end cap, to allow access to the terminals.
2. Remove cable from terminals.
3. Unscrew the gland cable grip, to allow the cable to be removed from gland.

For wiring details and terminal torque settings, see wiring diagram (page 4).

Torque Setting: 3.7Nm

REPLACING TUBE

After removing the cable entry end cap, slide the tube over the tray assembly. Ensure the replacement tube is free from dust before fitting. If necessary, clean only the inside of the tube with an alcohol wipe.

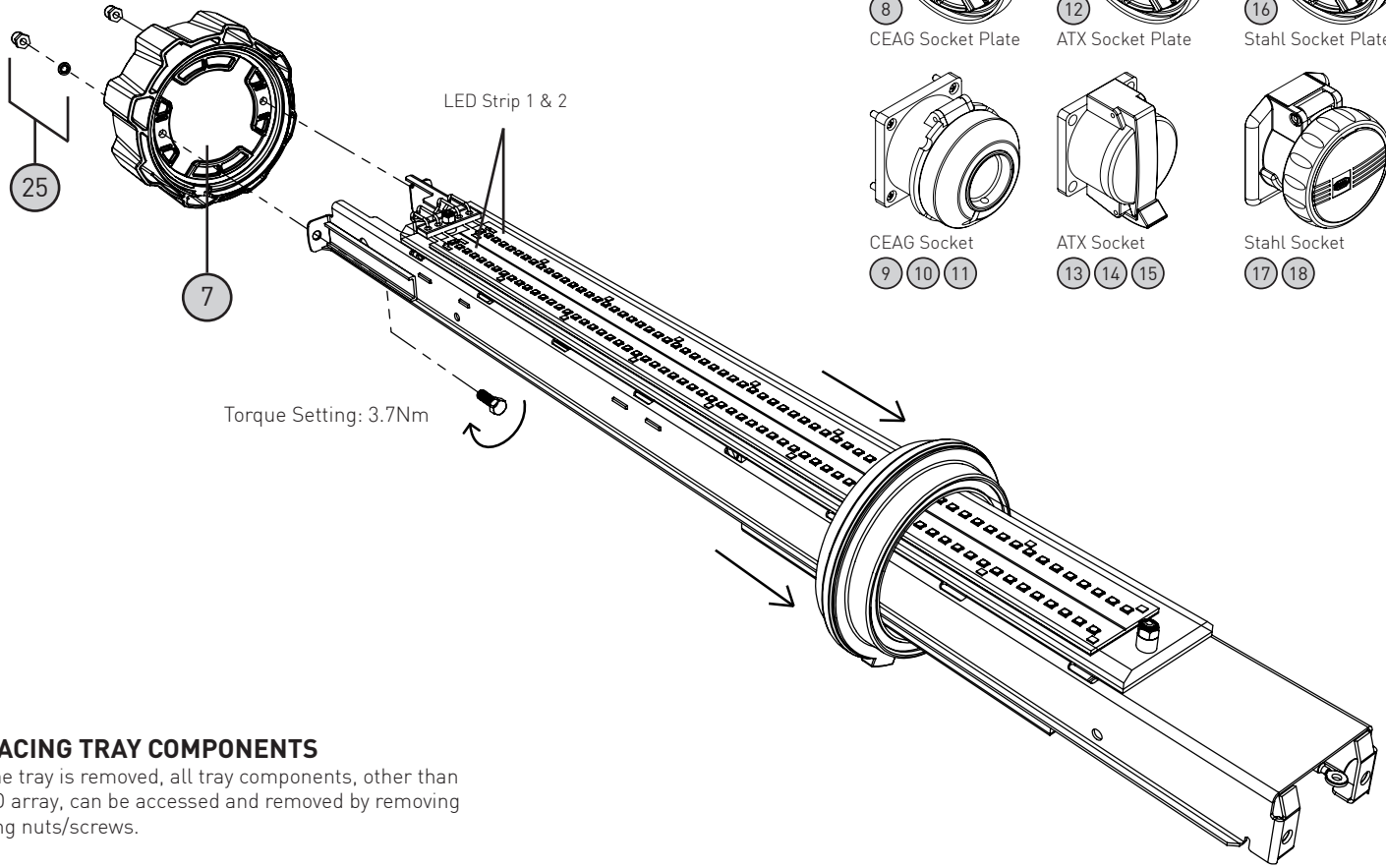
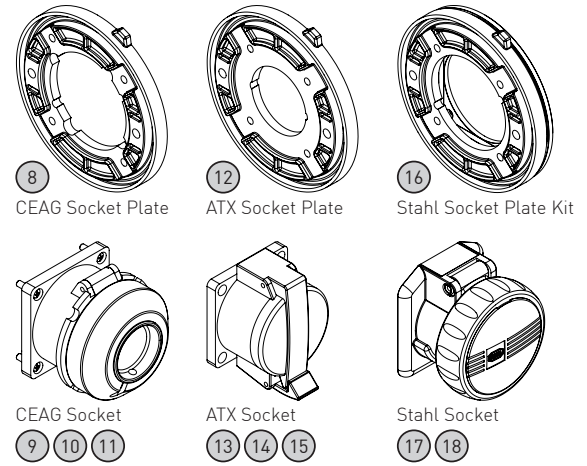
REPLACING THE LED ARRAY

If the LED strip is faulty, the complete tray assembly must be replaced. See spare parts list.

Wolf LinkEx™ LED Temporary Luminaire

REPLACING BLANK END CAP / SOCKET

After removing the cable entry end cap and tube, and seal, the blank end cap can be removed by removing the two internal securing screws. The same process is applicable to the socket end caps on linkable versions, however cables must be removed from socket terminals. Check all seals are present and in good condition prior to fitting replacement end cap.



REPLACING TRAY COMPONENTS

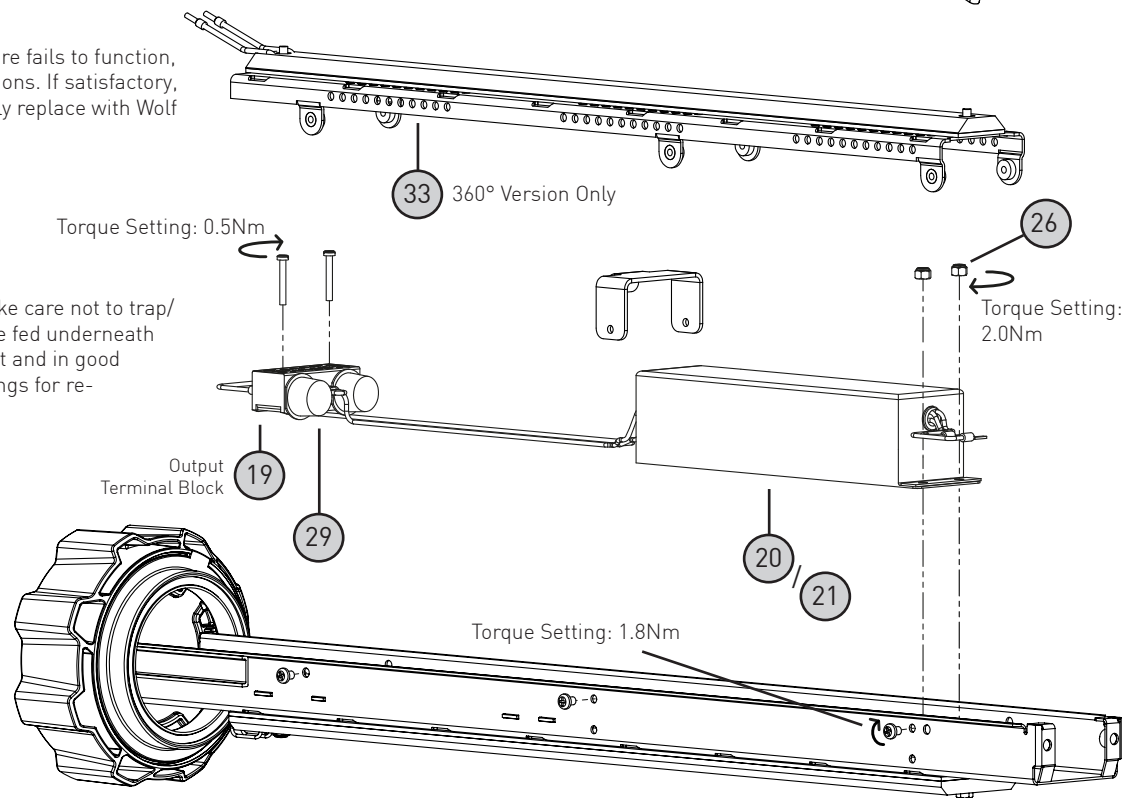
Once the tray is removed, all tray components, other than the LED array, can be accessed and removed by removing the fixing nuts/screws.

FAULT FINDING

If a Wolf LinkEx™ LED Temporary Luminaire fails to function, check input cable continuity and terminations. If satisfactory, test the output fuse to each LED strip. Only replace with Wolf encapsulated fuse of the correct rating.

RE-ASSEMBLY

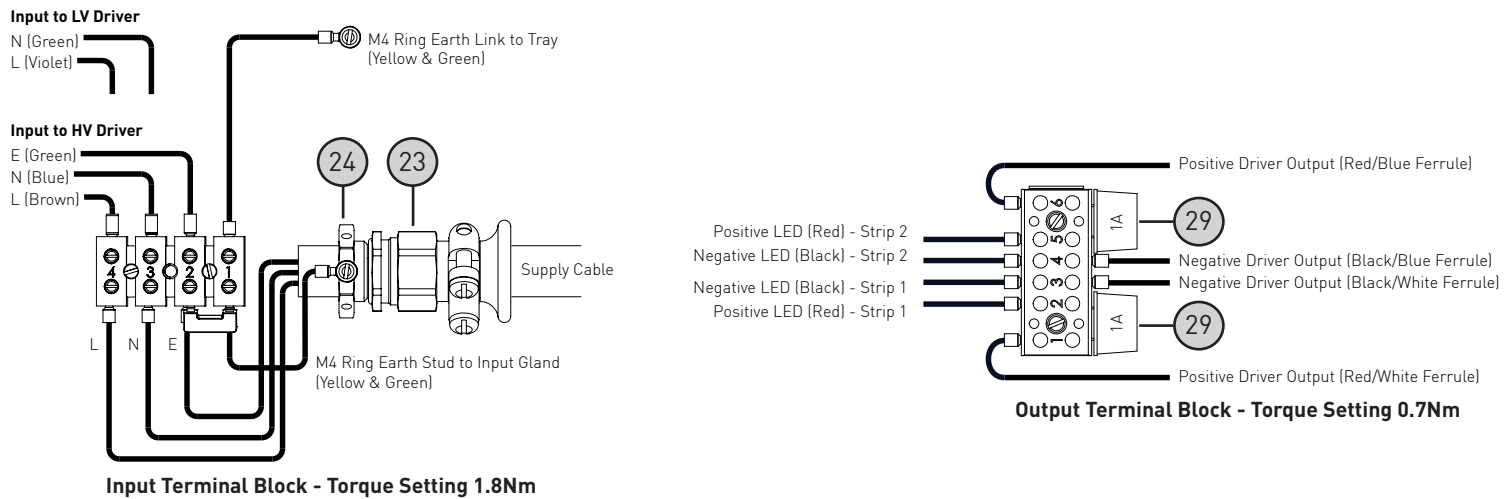
Re-assembly is the reverse procedure. Take care not to trap/crush wires. Driver output wires should be fed underneath tray brackets. Ensure all seals are present and in good condition. The recommended torque settings for re-assembly are shown on diagrams.



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

Wolf LinkEx™ LED Temporary Luminaire

Wiring Diagram



Spare Parts List

Item No.	Part No.	Spare Part Description	Quantity Required per Lamp
1	LX-602	Bump Ring - pack of 2	1
2	LX-304	Tube Seal Ring	1
3	LX-370	Spare Tube	1
4	LX-622	Plate Seal 5mm and Tube Seal 10mm - 1 of each, for one end of the lamp	1
5	LX-306	Cable Entry End Cap	1
6	LX-656	Input Terminal Block - Ex e Weidmuller MK6 4 Way Terminal Block and Screws M3x22	1
7	LX-316	Blank End Cap Non Link	1
8	LX-310	CEAG Socket Plate	1
9	LX-1043	CEAG Socket 24 Volt	1
10	LX-1044	CEAG Socket 110 Volt	1
11	LX-1045	CEAG Socket 230 Volt	1
12	LX-312	ATX Socket Plate	1
13	LX-1049	ATX Socket 24 Volt	1
14	LX-1050	ATX Socket 110 Volt	1
15	LX-1051	ATX Socket 230 Volt	1
16	LX-315	Stahl Socket Plate Kit	1
17	LX-1350	Stahl Socket 110 Volt	1
18	LX-1351	Stahl Socket 230 Volt	1
19	LX-684	LED Output Terminal Block - 6 Way Weidmuller Terminal Block and Screws M3x20	1
20	LX-640	High Voltage Driver and Fittings	1
21	LX-624	Low Voltage Driver and Fittings	1
22	LX-618	180° LED Strip Assembly and Tray	1
23	LL-311	Trumpet Gland	1
24	LX-608	Gland Nut	1
25	LX-658	M6 Bonded Washers, M6x30 Screws, M5 Domenuts, M5 Bonded Washers, M5x12 Cap Head Screws - 2 of each	1
26	LX-682	M4x5 Pan Head Screws, M4 Nyloc Nut - 4 of each	1
27	LX-680	Magnet Bracket Kit - pack of 2	1
28	LX-1258	M6 External Earth Bonding Stud - Accessory for Earth Bonding	1
29	LX-691	1A LED Fuse - pack of 2	1
30	LX-654	Shoulder Strap - pack of 2	1
31	LX-545/3	Protective Films - pack of 3	1
32	LX-621	Anti-Static Protection Cover Kit - pack of 5 [Note: When fitted the maximum ambient temperature lowers from +55°C to +45°C]	1
33	LX-636	360° LED Top Tray Assembly	1 [360° Models Only]
34	LX-637	360° LED Bottom Tray Assembly and Fittings	1 [360° Models Only]

WOLF SAFETY LAMP COMPANY

Saxon Road Works, Sheffield, S8 0YA, England

Tel: +44 114 255 1051
Fax: +44 114 255 7988

E-mail: info@wolfsafety.com
Website: www.wolfsafety.com

