



TY-300™ Features

- Hand held ATEX & IECEx hazardous area lighting solution, approved for Gas Zone 1 and 2 and Dust Zone 21 and 22.
- Compact and lightweight product ideal for inspection in restricted spaces.
- Uniform light distribution due to Wolf's patented DLO (Directional Linear Optic) technology providing low glare lighting ideally suited for detailed inspection work.
- Luminaire can be suspended vertically or horizontally via integrated swivel hanging hooks.
- The luminaire can be laid on surfaces and orientated via hexagonal endcaps to illuminate the workspace.
- Replaceable protective films can be fitted to protect against dirt & paint damaging the luminaire, extending the life of the product.

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



0598

TY-300™ Portable ATEX LED Inspection Light



OPERATION & MAINTENANCE INSTRUCTIONS





Wolf TY-300

Operation and Maintenance Instructions
Please Retain - Read Before Use

EU/UK Declaration of Conformity

The TY-300 meets all relevant provisions of the 2014/34/EU Explosive Atmospheres (ATEX Equipment) Directive by virtue of the issued EU type examination certificate, and subsequent review confirming compliance with all relevant harmonised standards and essential health and safety requirements.

The TY-300 is a portable/hand-held LED inspection light. It is constructed from a polycarbonate tube with a permanent anti-static coating applied as a matrix and anodised aluminium end caps. The TY-300 is available in two sizes, each with a 110V or 230V mains driver. The TY-300 range is approved as Group II, Category 2 equipment for use in zone 1 & 2 potentially explosive atmospheres containing gases, vapours, mists and Zone 21 & 22 dusts where the T4 temperature class/80°C maximum surface temperature permits.

Approval Codes / Certification:

II 2GD Ex eb mb IIC T4 Gb
Ex tb IIIC T80°C Db
-20°C ≤ Ta ≤ +40°C

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

EU Type examination certificate:

ExVeritas24ATEX1826X

Harmonised standards applied:

EN IEC 60079-0:2018, EN60079-18:2015+A1:2017, EN IEC 60079-7:2015+A1:2018, EN60079-31:2024

The Wolf TY-300 range is certified compliant with the 2014/30/EU EMC Directive to the following harmonised/ designated EMC standards BS EN 61000-6-3:2007+A1:2011 and BS EN 61000-6-2:2005. EU RoHS Directive 2011/65/ to the harmonised standard EN IEC 63000:2018.

Ingress protection: IP66, 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, S8 0YA, UK.
Dated 21 June 2024.

IECEX Scheme Certification

Certificate number: **IECEX EXV 24.0024X**

Certification/Approval Code:

II 2GD Ex eb mb IIC T4 Gb
Ex tb IIIC T80°C Db
-20°C ≤ Ta ≤ +40°C

Standards applied: IEC 60079-0:2017, IEC 60079-7: 2017, IEC 60079-18: 2017, IEC 60079-31:2022
Ingress protection: IP66, IP67 to EN 60529:1992

TECHNICAL & ELECTRICAL DATA

TECHNICAL DATA	TY-300/18/110	TY-300/26/110	TY-300/18/230	TY-300/26/300
Input Voltage Range	88-140 V AC		180-277 V AC	
Input Power	18W	26W	18W	26W
Max. Input Current	0.2A	0.35A	0.1A	0.15A
Frequency	50 - 60 Hz			
PowerFactor	>0.85	>0.90	>0.85	>0.90
Lumen Output (light emitted).	1006	1391	1006	1391
Colour Temperature	5000K			
Ingress Protection	IP66			
Beam Angle	90°			
Gas Temp Class	T4			
Dust Surface Temp	T80°C			
Ambient Temperature	-20°C to +40°C			
Size	Ø 56mm x 640mm		Ø 56mm x 910mm	
Total weight (approx)	3.0kg	3.3kg	3.0kg	3.3kg

FAULT FINDING :

Risk of Shock



To be carried out by suitably qualified and experienced electricians only.

1. If a TY-300 luminaire fails to function, remove the product from service into a non hazardous area.
2. Remove the cover and apply power to the luminaire. Check for an output voltage at the terminals on the driver (this should be around 48V DC +/-1V).
3. If there is no output voltage, check the input voltage(s) to the driver are correct (this should be either 110V or 230V depending on the product variant). If there is an input voltage on the driver but still no output voltage then the driver is faulty. If there is an output voltage from the driver, the LED and rod assembly is faulty.

Contact - Wolf for further fault finding support.

SPARE PARTS

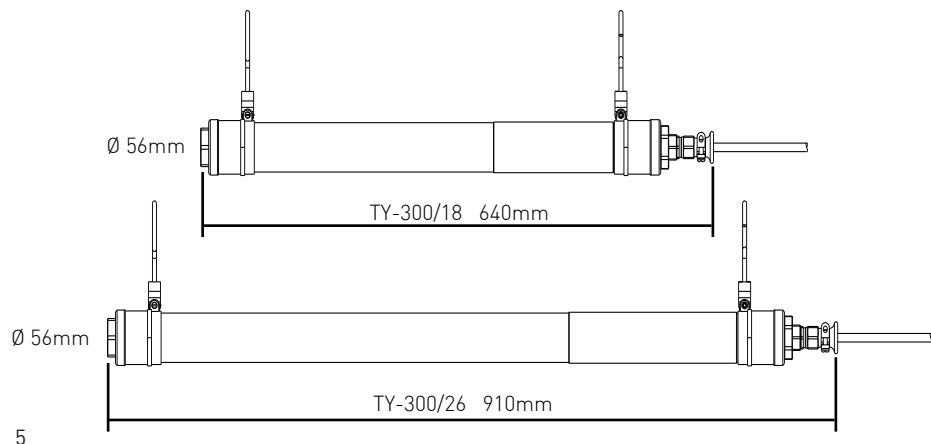
Item No.	Part No.	Spare Part Description
1	LL-311	Cable Gland.
2	TY-3009	TY-300 "O" ring kit (pack of 3).
3	TY-3001	Spare TY-300/18 tube with handle, shroud & hook.
4	TY-3003	Spare TY-300/26 tube with handle, shroud & hook.
5	TY-3005	TY-300/18W driver (LDX1L-HT).
6	TY-3007	TY-300/26W driver (LDX1H-HT).
7	TY-3011	TY-300/18 DLO / gear tray.
8	TY-3013	TY-300/26 DLO / gear tray.
9	TY-3015	TY-300 shroud and hook.
10	TY-3029	TY-300 Tube locknut.
11	TY-3021	TY-300 cable - 3x core 10m Ho7RN-F, 1.5mm CSA.
12	TY-3023	TY-300 gear tray endcap - cable end.
13	TY-3025	TY-300 gear tray endcap - non cable end.
14	TY-3027	TY-300 tube endcap.
15	TY-3017	TY-300/18 Protective film kit (pack of 5).
16	TY-3019	TY-300/26 Protective film kit (pack of 5).

DISPOSAL OF WASTE MATERIAL:

Disposal of packaging, parts and end of life products 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.

TECHNICAL INFORMATION



IMPORTANT: SPECIAL CONDITIONS FOR SAFE USE (X)

1. The equipment shall only be used with a power source having a prospective short circuit current which does not exceed 1500A.

SAFETY INSTRUCTIONS.



1. Please read these safety, operation and maintenance instructions carefully before commencing use or maintenance and retain for future use.

2. **IMPORTANT.** Move to a safe area. Luminaires should be disconnected from the power supply and allowed to cool before commencing maintenance work. Any maintenance work should be carried out by suitably qualified and experienced electricians only.

3. **IMPORTANT.** No modifications are permitted to the TY-300 luminaire, unauthorised spare parts or modifications will invalidate certification and warranty.

4. The TY-300 luminaire and cable should be inspected periodically and prior to each use for visible signs of damage. Particular attention should be paid to gland entries. Damaged luminaires should be removed from the hazardous area and repaired before being put back in service.

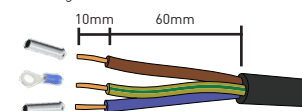
5. The rating label on the TY-300 must be checked to ensure the unit is being used within the correct ambient temperature and environmental conditions, and that the power supply is suitable.

6. The luminaire can be supplied with a number of different supply plug options. The Ex plug supplied is rated IP66 only when correctly connected to a compatible Ex socket or coupler. Ensure the Ex plug is protected from water ingress and dirt/dust when not in use.

7. This luminaire is supplied with 3 core earthed supply cable. It is Class 1 equipment and the product must be earthed (earth wire connected to the metal geartray).

CABLE TERMINATIONS

Cable strip length (luminaire end)
10mm uninsulated ferrules can be fitted to live & neutral
M5 Ring Terminal fitted to the earth wire.



EQUIPMENT USE.

1. The TY-300 luminaire incorporates silicone seals, the user must ensure suitability of the atmosphere the product will be used in. Unplug and clean only with a damp cloth and a small amount of mild detergent.

2. The luminaire is supplied with a ATEX/IECEX approved cable gland.

3. Replaceable protective films can be fitted to the TY-300 to prevent **contamination** and or damage to the luminaire. These can be removed and replaced when the light output of the luminaire is adversely effected.

4. The TY-300 luminaires are compliant with photobiological safety risk group 0 to EN 62471:2008 - No photobiological hazard risk.

5. The product is portable so can be moved while illuminated, it can be temporarily mounted horizontally using two swivel hooks located at either end of the fitting. Alternatively, it can be hung vertically from one hook.

MAINTENANCE.

1. Only use Wolf original spare parts and accessories, part numbers are listed within the spares section of this manual.

2. Do not disassemble or attempt to repair the DLO/geartray assembly. These modules must be assembled at Wolf and are only supplied as a complete geartray assembly (refer to spares list for specific part numbers).

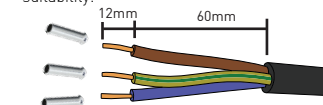
3. Portable Appliance testing must be carried out to IEC, EN standards to the correct rating i.e. 500V DC.
Live and neutral cables must be shorted together and the voltage applied between earth and this connection.

4. Do not change or alter any wiring. Cables have been assessed and chosen for compliance to the specific ambient temperature range.

5. The TY-300 range external wiring uses 1.5mm² cross section area H07RN-F cable. Unless otherwise specified by the customer.

Cable strip length (plug end)

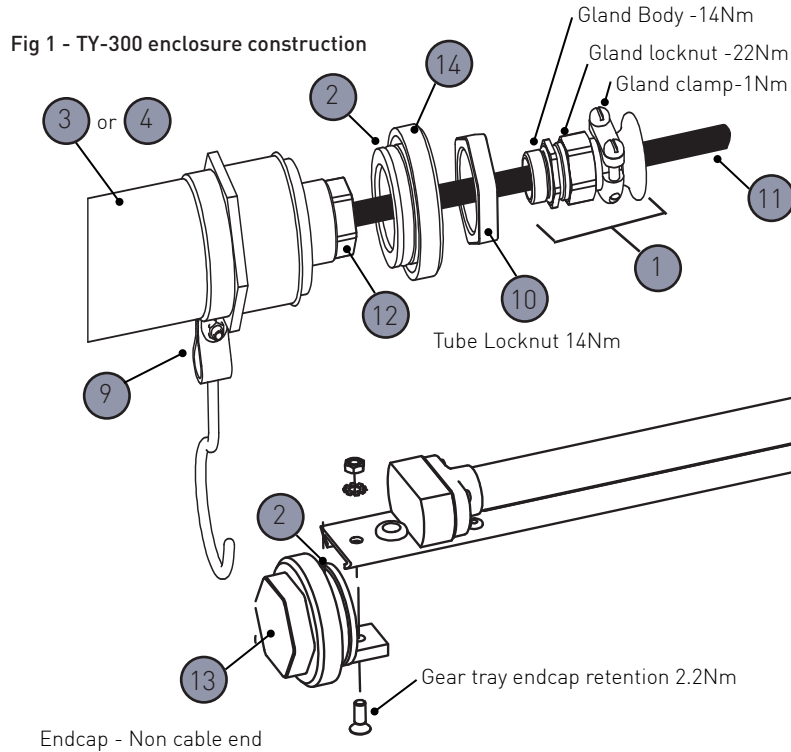
Refer to plug manufacturers instructions to confirm suitability:



MAINTENANCE & REPAIR

DIS-ASSEMBLING THE TY-300 ENCLOSURE

Loosen both the cable clamp and lock nut on the gland (1). Undo the tube locknut (10) whilst holding the geartray end cap (12). Slide the gland and the locknut down the cable. Remove the tube endcap (14) and slide down the cable. Hold the tube (3 or 4) with the handle and push on the gear tray end cap (12) to free the tube from the non-cable end cap (13) and expose the gear tray (7 or 8). Either disconnect the cable conductors from the driver and earth stud or remove the plug from the cable to be able to remove the tube assembly and gland from the gear tray.

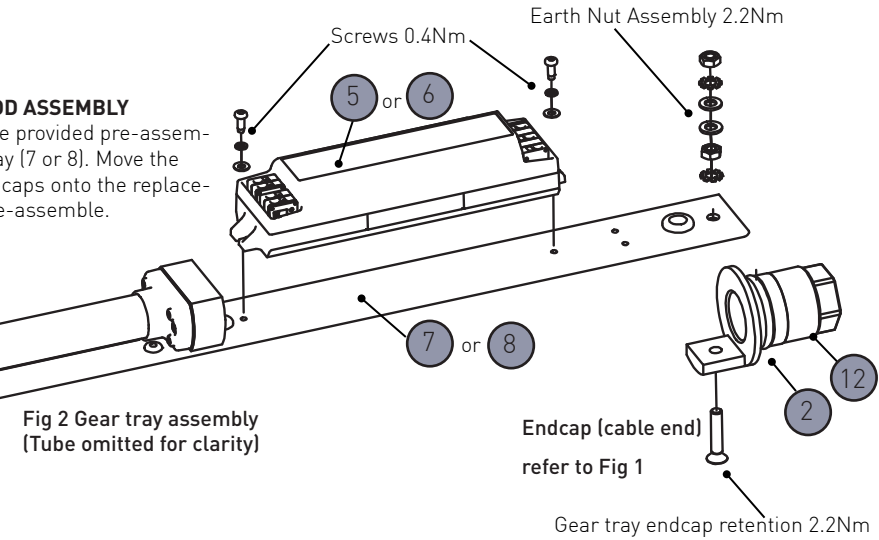


CHANGING LED DRIVERS

Dis-assemble the TY-300 enclosure then undo the screws retaining the driver (5 or 6) and remove. Replace the driver and retighten the retaining screws ensuring the washers are fitted. Replace the conductors to the driver as per the wiring diagram.

CHANGING LED / ROD ASSEMBLY

The DLO modules are provided pre-assembled onto the geartray (7 or 8). Move the existing driver / end-caps onto the replacement geartray and re-assemble.

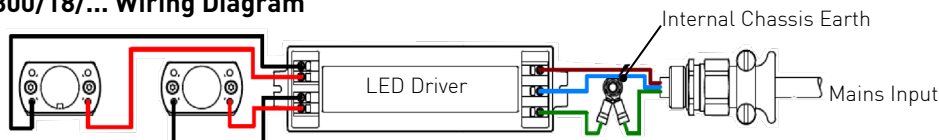


REASSEMBLE THE PRODUCT

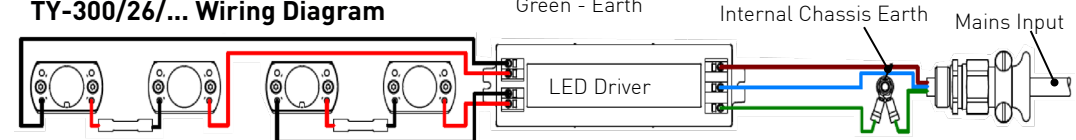
To re-assemble the TY-300, perform the steps in reverse noting the torques required.

The "O" rings in each endcap require lubricating with silicone spray prior to fitting the tube over them. When refitting the gland if contact between the two clamping faces is not made then low strength threadlock should be applied to prevent the clamp retaining screws from coming loose. The TY-300 enclosure tube must be fitted so the black rubber handle covers the driver on each geartray. The clear window sections in the tube must be orientated to align with the DLO rod(s).

TY-300/18/... Wiring Diagram



TY-300/26/... Wiring Diagram



The Driver terminal blocks are colour coded:
 Brown - Live
 Blue - Neutral
 Green - Earth