



EU Type Examination Certificate CML 19ATEX3021X Issue 0

1 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

2 Equipment SP-600 Handheld inspection lamp

3 Manufacturer Wolf Safety Lamp Company Ltd.

4 Address Saxon Road Works,

Sheffield, S8 0YA,

UK

- 5 The equipment is specified in the description of this certificate and the documents to which it refers.
- 6 CML B.V., Chamber of Commerce No 6738671, Hoogoorddreef 15, Amsterdam, 1101 BA, The Netherlands, Notified Body Number 2776, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports listed in Section 12.

- If an 'X' suffix appears after the certificate number, it indicates that the equipment is subject to conditions of safe use (affecting correct installation or safe use). These are specified in Section 14.
- This EU Type Examination certificate relates only to the design and construction of the specified equipment or component. Further requirements of Directive 2014/34/EU Article 13 apply to the manufacture of the equipment or component and are separately certified.
- Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the confidential report, has been demonstrated through compliance with the following documents:

EN 60079-0:2018 EN 60079-18:2015 EN60079-28:2015

EN 60079-31:2014 EN60079-7:2015

10 The equipment shall be marked with the following:

 $\langle \Sigma \rangle_{\text{IM2}} \qquad \langle \Sigma x \rangle_{\text{II 2 G}} \qquad \langle \Sigma x \rangle_{\text{I}}$

Ex eb mb op is I Mb Ex eb mb op is IIC T4 Gb Ex mb op is tb IIIC T95°C Db

-30°C≤Ta≤+55°C -30°C≤Ta≤+55°C -30°C≤Ta≤+55°C

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11 Description

The SP-600 Handheld inspection lamp is a portable, handheld, LED lamp. The enclosure consists of an elliptical, aluminium enclosure with a clear, polycarbonate, domed lens at the front and an aluminium cover at the back. The lens and the back cover are sealed to the main body of the enclosure using a black or yellow gasket and four fasteners on each of the front and back faces. Underneath the clear lens, there is a yellow dome which contains LEDs and an encapsulating compound. The main body of the enclosure contains two compartments; a smaller, terminal chamber for connection of the power supply to the driver and a larger, encapsulated compartment housing the LED driver. The main enclosure, at the terminal chamber, has an M20 entry for connection of a suitably certified cable gland.

The aluminium enclosure is housed in a plastic handle which leaves only the clear polycarbonate domed lens exposed. The cable passes through the bottom of the handle to the cable gland. Although the handle provides mechanical protection, it does not form the explosion protection enclosure.

The equipment is certified for three rating options, as defined in the table below:

Model no.	Voltage rating (Vac or Vdc)	Current (mA)	
SP-600Hxxx	0 to 264	80	
SP-600Lxxx	0 to 54	600	
SP-600ELxxx	0 to 16	800	

The equipment may be marked with other voltage ratings within this range.

The handle has various fitting options, such as a clamp, hook, magnet, blanking plug and cage which may be used with the equipment. The equipment also has the option of being used with a plastic, static dissipative, protective bag in accordance with the manufacturer's certification specifications.

In addition to the IP requirements of the applied standards, the equipment has been additionally tested to IP67 in accordance with IEC/EN 60529.

12 Certificate history and evaluation reports

Issue	Date	Associated report	Notes	
0	14/02/2019	R12200A/00	Issue of prime certificate	

Note: Drawings that describe the equipment or component are listed in the Annex.

13 Conditions of manufacture

The following conditions are required of the manufacturing process for compliance with the certification.

Where the product incorporates certified parts or safety critical components the manufacturer shall ensure that any changes to those parts or components do not affect the compliance of the certified product that is the subject of this certificate.





- The encapsulated parts of the apparatus shall be subjected to a visual inspection. No visible damage of the compound shall be evident, such as cracks, exposure of the encapsulated parts, flaking, impermissible shrinkage, discoloration, swelling decomposition or softening, as required by EN 60079-18:2015 Clause 9.1.
- 13.3 For equipment which uses the High Voltage driver (model SP-600Hxxx), a dielectric strength test of 1528 V ac, shall be applied between circuit and casing for at least 1 minute, as required by EN 60079-7:2007, Clause 6.1. No breakdown shall occur. As an alternative to the ac test voltage, a test voltage of 2139 V dc may be applied.

For equipment which uses the Low Voltage driver (model SP-600Lxxx) or the Extra Low Voltage driver (model SP-600ELxxx), a dielectric strength test of 500 V r.m.s. shall be applied between the circuit and the casing for at least 1 minute, as required by EN 60079-7:2007, Clause 6.1. No breakdown shall occur. As an alternative to the ac test voltage, a test voltage of 700 V dc may be applied.

As an alternative to the specified test voltages, the test voltages may also be increased by a factor of 1.2 and applied for at least 100 ms.

14 Specific Conditions of Use (Special Conditions)

The following conditions relate to safe installation and/or use of the equipment.

14.1 This equipment shall not be used in mining locations where oils, greases or hydraulic liquids may be present.



Certificate Annex

Certificate Number CML 19ATEX3021X

Equipment SP-600 Handheld inspection lamp **Manufacturer** Wolf Safety Lamp Company Ltd.

The following documents describe the equipment or component defined in this certificate:

Issue 0

Drawing No	Sheets	Rev	Approved date	Title
SP-701	1 of 1	4	14/02/2019	General arrangement
SP-711	1 of 1	3	14/02/2019	Marking
SP-810	1 of 1	2	14/02/2019	LED assembly
SP-812	1 of 1	3	14/02/2019	Potted Assembly SP-600EL
SP-824	1 of 1	3	14/02/2019	Potted Assembly SP-600L
SP-840	1 of 1	3	14/02/2019	Potted Assembly SP-600H
SP-912	1 of 1	3	14/02/2019	Schematic SP-600EL
SP-924	1 of 1	3	14/02/2019	Schematic SP-600L
SP-940	1 of 1	3	14/02/2019	Schematic SP-600H