


1 – REFERENCES:

European Directive 2014/34/UE
EN 60079-0, EN60079-1, EN61241-0, EN61241-1

2 – MARKING:

LEF Industries
Tel: (+33) 02.98.11.04.40 - www.lef-industries.com
29100 DOUARNENEZ - FRANCE
LEF 550 - * - * - *
Serial number - Year of manufacture
INERIS 07ATEX0048X
II 2 G D
Ex d IIC T* Ex tD A21 IP66 T**°C
** °C ≤ amb T ≤ ** °C
Tapping type Pmax = 10W
WARNING ; DO NOT OPEN WHEN ENERGIZED



CE0080

* Marking is performed according to the equipment and component including in the LEF 560

3 – USER INSTRUCTIONS:

Our equipment is designed to be used in explosive atmospheres, in the presence of gases and/or dust:

group II, category 2, G (zone 1) or GD (zone 21),

** In the range of ambient temperatures included
between - 20°C ≤ amb T ≤ +40°C, +60°C or +85°C
or - 40°C ≤ amb T ≤ +40°C, +60°C or +85°C

Ensure compatibility between the indications given on the nameplate, the explosive atmosphere to be confronted, the area of use and the ambient and surface temperatures.

3.1 - Commissioning and Installation:

Installation must be carried out by qualified, competent and skilled personnel.

- Check the condition of the equipment (after storage)
- Any additional drilling or modifications are prohibited.

3.2 - Use:

The LEF 550 type equipment is designed for position testing and control of manual or motor-driven valves. It can be used as a junction box or for assembling various components such as fuses, connections, controls, test and/or signalling devices.

3.3 – Assembly and disassembly:

✓ Assembly on actuator:

- Place the box on the actuator
- Align the centre line of the box on the centre line of the actuator and position it.
- Attach the box to the actuator (4 CHC M5x10 screws – Accessory Kit)

✓ Connection:

- Connect the terminals according to the wiring plan indicated in the box.
- Grounding:
 - external ground: M6 tapping between cable inputs
 - internal ground: M3 tapping on an unused contact

✓ Opening / Closing the box:

DO NOT OPEN WHEN ENERGIZED

- Before opening make sure that the box is de-energized
- Opening/closing takes place using 4 CHC M8x25 screws (conforming to ISO262, ISO965-1, ISO965-3 and ISO4762) (traction strength ≥ 450 MPa or in class A4-70)
- Before each closing:
 - clean and check the condition of the sealing planes
 - protect the sealing planes with grease
 - check for the necessary seals
- Closing:
 - Place the cover on the socket (do not force to assemble them: there is a risk of damaging the explosion-proof seal)
 - Turn the position index so that the 2 shafts nest into one another
 - Tighten the 4 screws with a suitable tool

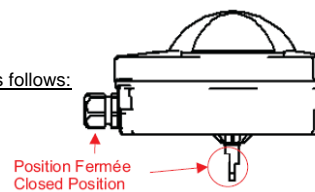
✓ Cable input:

- The type of hole tapped into the box is indicated on the nameplate. Installed cable inputs must correspond to the type of hole in the box
- Installed cable inputs must offer the explosion proof safety for group IIC and be certified in the ambient operating temperature range indicated on the nameplate of the box.
- Cable inputs and plugs must be screwed into the box with a suitable tool (wrench, screwdriver)
- If one of the tapped holes for installing a cable input is not used, it must be sealed off with an explosion-proof plug, certified for the IIC group.
- The protection index of the cable inputs must be at least equal to the protection index of the box.

3.4 – Adjustment:

- On leaving the workshop, adjustment is as follows:

Cable input on left + large flat on left = Closed position

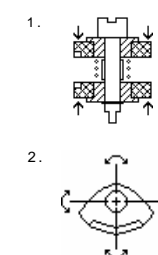


• Cam adjustment:

Pay attention to the micro-switch levers during adjustment of the cams!

Detection cam adjustment is carried out as follows:

- 1- Disengage the cam by pushing it as shown in diagram 1
- 2- Adjust the detection by turning the cam (diagram 2)
- 3- Engage the cam on the cam-holder.



• Detector adjustment:

The positions of some detectors can be adjusted. These detectors are positioned on a mobile plate.

Adjustment is carried out as follows:

- Loosen slightly the 2 CHC M3 screws holding the plate so that it becomes mobile
- Screw in/screw out the stop to obtain the desired position (adjust the cam operating the detector. It must not be exposed to excessive stress. The lever must preserve slight play after adjustment)
- Tighten the 2 CHC M3 screws retaining the plate

3.5 – Maintenance:

This check must be performed at least once each year:

- External components (cable inputs, etc) and seals must not be damaged
- Attaching screws must be tightened properly

3.6 – Repair:

Repairs or modifications can only be made by the manufacturer.

4 – CHARACTERISTICS:

- P max = 10 W, U max = 250 V
- Explosion-proof casing "d"
- Materials: Steel (C35) or stainless steel (316L)

- Protection index:
IP 66

- Maximum surface temperature:

- Amb T ≤ +40°C:** T6 → 85°C or
- Amb T ≤ +60°C:** T5 → 100°C or
- Amb T ≤ +85°C:** T4 → 135°C

5 – SPECIAL CONDITIONS AND OPERATING LIMITS:

The traction strength of the hardware used for assembling the cover shall be equal to or greater than 450 MPa or in class A4-70.

The chink (diametrical clearance) between the control shafts and the cover and the base of the explosion-proof casing shall be no greater than 0.07 mm.

For amb T ≤ 60°C, the stuffing box cable and packing must tolerate at least 74°C.

For amb T ≤ 85°C, the stuffing box cable and packing must tolerate at least 99°C.

The ambient operating temperature range is must be checked on the nameplate and complied with.

Information on the nameplate must be checked and complied with.

Instruction manuals for the components used are available on request.