

1 – REFERENCES :

European directive 2014/34/UE
NF EN ISO 80079-36:2016, NF EN ISO 80079-37:2016

2 – MARKING :

LEF Industries
Tél : (+33) 02.98.11.04.40 - www.lef-industries.com
29100 DOUARNENEZ - FRANCE

LEF 60- / LEF 66-
Serial No - Year

II 2 GD Ex h IIC T6 Gb
Ex h IIC T85°C Db
-°C ≤ Tamb ≤ +40 °C (Tfluid<40°C)
N° de dossier : -----

3 – INSTRUCTIONS FOR USE :

Our equipment is designed to be operated in explosive atmospheres in the presence of gas and/or dust particles. group II, category 2, G (zone 1) or GD (zones 1 and 21), in the range of the following ambient temperatures :

Type	T° amb.
LEF 601	-20°C, +40°C
LEF 602	-15°C, +40°C
LEF 603	-15°C or -05°C, +40°C
LEF 661	-20°C, +40°C

Check to ensure the compatibility between the indications specified on the identification plate, the explosive atmosphere present, the area of use and the ambient and surface temperatures.

3.1 - Commissioning and Installation :

Equipment should be installed by qualified and experienced personnel.
- Check the condition of the equipment (after storage)
- It is strictly prohibited to make any additional drill-holes or alterations.
- The equipment must not be subject to excessive vibration.

Installation, maintenance and use must be adapted to the equipment, and must comply with the regulations and standards of installation in force (EN 60079-14), as well as with the instructions defined in the present manual and in the rules of the art.

3.2 - Use :

The LEF 6-- equipment is designed for the position control and the remote control of a manual or motor-operated valve.

3.3 – Mounting and dismounting :

✓ **Assembly with the actuator :**

- Place the box to the actuator
- Fit the box pin into the actuator pin
- Attach the box support onto the actuator using the 4 CHC M5x10 screws (Accessories Kit)

✓ **Connection :**

- Pneumatic/Hydraulic coupling according to the cable drawings provided
- Grounding (if option)

✓ **Opening / Closing the box :**

- Loosen / Tighten the 4 screws holding the cover.
- Check the cleanliness and the condition of the sealing surface before closing the box (no chips, filings, dents, etc)

- All joins and/or cable entry slots must be connected or blocked up before bet under pressure.

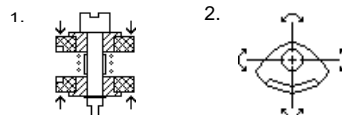
LEF 661 :

- Open the box (screws CHC M8x25)
- Check the presence of the O-ring (réf. BS0321-16 / 32.1x1.6mm) on the BIFOLD hydraulic switch.
- Attach the interface onto the switch (4 screws CHC M6x25 – Accessories Kit)
- Attach switch+interface onto the box, after having put the o-ring between interface and box (4 screws CHC M6x16 – Accessories Kit)
- Adjust the cam position : loosen the CHC M4x35 screw which go through the cam / adjust / tighten again
- Close the box

3.4 – Adjustment :

The detection cams must be adjusted as follows:

- 1- Disengage the detection cam by pressing the points as shown in figure 1
- 2- Adjust the detection parameters by rotating the cam (figure 2).
- 3- Engage the cam on the cam-holder.



3.5 – Maintenance :

This check must be performed at least once a trimester :
- The outer components and the seals must not be damaged.
- The attachment screws must be tightened to the appropriate torque.
- The lubrication of the mobile components must be checked and, if necessary, some grease must be applied to it.
- A regular cleaning must be performed to prevent any training of dust.

3.6 – Repairs :

Repairs must only be carried out by the manufacturer.

4 – CHARACTERISTICS :

Non-electrical type of protection constructional safety « c » :
The necessary protective means have been implemented during design in order to minimize the likelihood of ignition sources occurring. Especially : limitation of the operating temperature prevents the creation of hot surfaces ; use of antistatic material for non-conductive surfaces prevents the production of electrostatic discharge.

Pressure : 6 Bars Maxi.

Protection factor : depends of type : IP 65, IP66, IP66/67

Maximum surface temperature : T6 → 85°C

Maximum temperature of pneumatic and hydraulic feeding : 40°C
The compressed air of pneumatic network must be dry and without presence of dust.

5 – SPECIAL CONDITIONS AND RESTRICTIONS OF USE :

The range of ambient temperatures must be checked on the identification plate and enforced.

The equipment connected to the base plates of connections must be certified, according to the requirements of directive 2014/34/UE (ATEX). The lowest level of protection of the various equipments will define the level of protection of the unit and will have to be respected.

The instructions manuals for the components used are available on request.