



**USE AND MAINTENANCE MANUAL** 

MEMBRANE LEVEL SWITCH "SM85"

Membrane level control SM85

#### **Manual Purpose**

This manual has been designed by the manufacturer to provide the necessary information regarding the instrument to those who are authorized to carry out safely its installation, maintenance, dismantling and disposal. All necessary information for buyers and planners can be found in the sales documentation.

In addition to adopting good technical construction methods, this information should be read carefully and strictly applied. Inobservance of this information could cause risks for the health and safety of people and damage to equipment.

This information provided by the manufacturer in the original language (Italian) is also available in other languages to satisfy legislative and/or commercial needs.

This manual must be kept in a good condition by a responsible person in a safe place so that it is always available for consultation. In case this manual is lost or damaged, a replacement should be requested directly from the manufacturer quoting the manual code.

This manual reflects the state of the instrument at the time of input on the market: however the manufacturer reserves the right to make changes, add or improve the manual without giving any reason to hold the present manual inadequate.

### Identification of the equipment

The identification plate represented is applied on the instrument.

To find out the identification code of the instrument, consult the sales catalogue.

#### **Environmental conditions**

Temperature setting: min. -10°C, max. + 80°C.

It is forbidden to use the instrument other than its specific use and in potentially explosive conditions or where anti- explosive elements are used.

#### Storage

Here below are some references to be followed for the storage of the instrument.

Avoid environments with excessive humidity and those exposed to bad weather (avoid open areas). Avoid putting the instrument directly on the ground. Store the instrument in its original packing.

# Conformity declaration and EC marking

The instrument answers to the following Communitarian Directives:

2014/30/EU Electromagnetic compatibility, 2014/35/EU Low voltage, 2011/65/EU RoHS.

#### Inspections

The instrument does not require regular calibration, but requires verification of correct operation at least annually. Check the integrity of the structure, the mobility of the membrane, the switching of the microswitch and the good overall operation.

#### Maintenance technical assistance

The instrument does not needs a particular maintenance except cleaning to do only with a soft cloth dampen with ethylic alcohol or water. Do not use hydrocarbon solvents (petrol, diluents, etc.): the using of these products could affect the proper functioning of the instrument.

Reparations should be done only and exclusively at the FIAMA technical assistance centre.

#### Manufacturer's responsibility

The manufacturer declines any responsibility in case of :

- Using the instrument contrary to the national safety and accident-prevention laws.
- Wrong installation, inobservance or wrong procedures of the instructions provided in the present manual.
- Defective electrical power supply.
- · Modifications or tampering.
- Operations carried out by untrained or unqualified staff.

The safety of the instrument also depends on the strict observance of the procedures indicated in the manual: always operate the instrument in its functioning capacity and carry out a careful routine maintenance.

- All phases of inspection and maintenance should be done by qualified staff.
- The configurations provided in the manual are the only ones permitted.
- Do not try to use it anyway contrary to the indications provided.
- The instructions in this manual do not substitute but accomplish the obligations of the current legislation regarding the safety laws.

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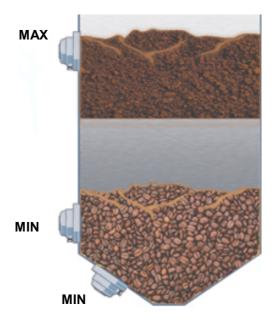
Membrane level control SM85

## Description

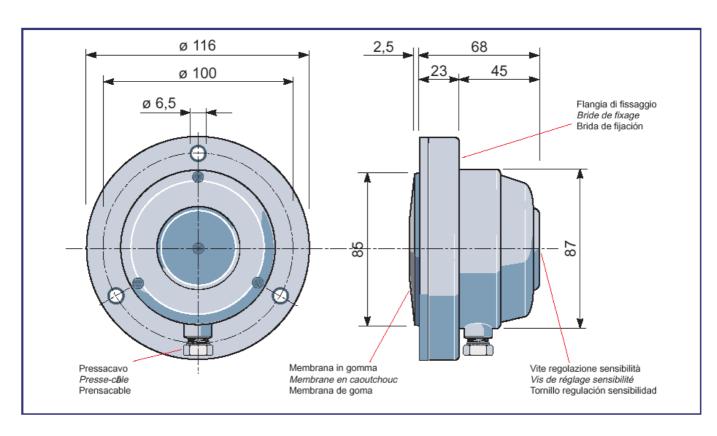
The SM85 is a simple and economical instrument suitable for the minimum and maximum level control inside silos or hoppers that contain no sticky materials, powders or granulars like rice, corns, plastics, coffee, sand, lime, etc.

Working is very simple: the pressure practiced by material on membrane activates a trigger.

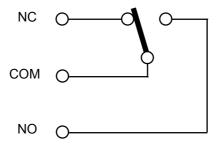
Trigger sensibility is adjustable by a screw placed on the instrument tap. Humidity and temperature variations do not affect working, the membrane is collision and vibration proof. The mounting is external on the silo's wall by the means of 3 holes placed on the fixing flange.



#### **Dimensions**



### **Electrical schematic**



# **Technical characteristics**

| Case                | Flange: aluminum alloy                    |  |
|---------------------|---|--|
|                     | Body: ABS                                 |  |
|                     | Membrane: rubber                          |  |
| Protection rating   | IP65                                      |  |
| Electrical contacts | 6A – 250Vac resistive loas                |  |
| Temperature range   | -10° + 80°C                               |  |
| Cable entrance      | PG7 cable gland                           |  |
| Relative humidity   | 10-90%                                    |  |
| Working pressure    | Atmospheric pressure                      |  |
| Directive           | 2014/30/EU Electromagnetic compatibility, |  |
|                     | 2014/35/EU Low voltage,                   |  |
|                     | 2011/65/EU RoHS                           |  |

## Manufacturer

All communications to the manufacturer should be addressed to: FIAMA s.r.l., Via G. Di Vittorio, 5/A - 43016 San Pancrazio (Parma) - Italy Tel. (+39) 0521.672.341 - Fax. (+39) 0521.672.537 - e-mail: info@fiama.it - www.fiama.it

FIAMA srl is not responsible for any damage to persons or things caused by tampering and wrong use and in any case that are not consistent with the features of the instrument.