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COSTRUZIONI MECCANICHE ELETTRICHE

# Operating and maintenance instructions for rotary level indicator for plaster PFG57I

## PRODUCT IDENTIFICATION

The **PFG57I** is a rotary level indicator designed for plastering machines, used to detect a level threshold inside silos or hoppers. The device is identified by the label on the side of the case, the characteristics of which are given below:



- 1. Manufacturer information
- 2. Product model and reference code for the specific configuration
- 3. Serial number and year of production
- 4. Ambient and process temperature range
- 5. QR code leading to the specific configuration and IP rating
- 6. Usage warnings
- 7. Conformities and certification symbols

Tampering with the label voids certifications and warranty.

#### PRODUCT CHARACTERISTICS

Materials: casing and cover in die-cast aluminium, shaft in AISI 303 / EN 1.4305 stainless-steel

Connection to process: G 1" 1/2 (BSPP), counter nut and O-ring included

Connection plug: standard 3-poles male plug, 5-poles male plug on request

Power supply voltages: 42 VAC 50/60 Hz or 24 VAC 50/60 Hz

Power consumption: 4W

Contacts capacity: 8A at 250 VAC

Signal output: SPDT

Process temperature:  $-20 \div +70^{\circ}\text{C} (-4 \div 158^{\circ}\text{F})$ Ambient temperature:  $-20 \div +70^{\circ}\text{C} (-4 \div 158^{\circ}\text{F})$ 

Max process pressure: 3 bar (43,5 psi)

Protection rating: IP 54 (dust protected, protection against water splashes)

Rotation speed: 1 turn/minute

#### INSTALLATION

The device can be installed in any position, on the wall of the silo or hopper.

The instrument is connected to the container wall via the 1" 1/2 Gas (BSPP) thread on the casing. The level indicator is supplied with a counter nut and an O-ring to ensure the connection is sealed.

Always refer to the technical drawings supplied by the Manufacturer together with this manual.

## WIRING

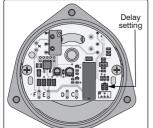
The entire connection of the device must take place while the device is de-energized. The level indicator is connected using industrial plugs which comply with IEC/EN 60309 standards. In the standard version, the instrument uses a 3-pole plug, but it can also be supplied with a 5-pole plug (of which only 3 are used) on request.

The image on the right shows the diagram for both versions: 42V (standard) and 24V alternating current. The remaining poles of the 5-poles plug are unused.

The PFG57l level indicators are also available in a timed version, which allows you to set a delay in the signal release. On the circuit inside the lower part of the instrument casing (shown in the image below), there is a trimmer that allows you to adjust the

delay from ~3 to ~10 seconds. The factory setting is a 5-second delay.

When the indicator encounters the material and



the propeller stops, the LED on the side of the plug lights up. When the material flows out and the propeller starts turning again, the LED turns off. If a delay is s

the propeller starts turning again, the LED turns off. If a delay is set, the LED will stay on for the designated amount of time.

3-poles plug

3

POWER.

SIGNAL

#### SAFETY WARNINGS

All the operations described in the documentation must be carried out only by qualified personnel authorized by the plant manager, adopting all the appropriate safety precautions to reduce the risk of fire, electric shock and personal injury.

Before installation, perform a visual inspection of the device to make sure that it did not suffer any damage during transport or storage. If anomalies are found, the product must



5-poles plug

42 VAC 24 VAC

NEUTRAL

SIGNAL

24V

42V

3

be sent to the Manufacturer for restoration of efficiency. The operational safety of the device is guaranteed only by use in accordance with the regulations, the instructions for use and any additional instructions.

Arbitrary transformations or modifications are categorically prohibited. In the event of improper or non-intended use, the device can be a source of dangers related to the specific application, or damage to the plant due to incorrect assembly or configuration.

Verify that the power supply system complies with the standards, with an automatic protection switch incorporated.

Any control, cleaning, maintenance, change or replacement of parts must be carried out with the indicator disconnected and the plug disconnected from the power supply.

#### WARRANTY

CAMLogic, in addition to the terms of the supply contract, guarantees its products for a period of twenty-four (24) months from the date of shipment. This warranty is expressed exclusively in the repair or replacement, free of charge, of those parts which, after careful examination by the manufacturer, are found to be defective.

The warranty, excluding any liability for direct or indirect damages, is limited to material defects only and has no effect if the returned parts are found to have been in any way disassembled, tampered with or repaired by anyone other than the manufacturer. Also excluded from the warranty is damage resulting from negligence, carelessness, incorrect or improper use of the level indicator, operator mishandling or improper installation. The warranty is also void if non-original spare parts have been used. A returned level indicator, even if under warranty, must be shipped freight prepaid.

#### **MAINTENANCE**

CAMLogic level indicators need no routine maintenance, however it is advisable to carry out the following checks: at each opening of the cover or removal of the instrument, visually check the sealing gaskets present. Always turn off the power

LED Switch G 1" 1/2 (BSPP) SW 55 G 1" 1/2 (BSPP) 23 33 140

REFERENCE FIGURES

before opening the instrument cover. In case there is evidence of damage or excessive tearing of the gaskets on the cover or other parts of the device, contact the manufacturer CAMLogic for the replacement with suitable materials.

## **REPAIRS**

The PFG57I can only be repaired by the CAMLogic manufacturer or by following the manufacturer's instructions. If in doubt about malfunctions or repairs, contact the manufacturer:

CAMLogic S.r.l. - Via dell'Industria 12-12/A - 42025 Cavriago (RE) - Italy (camlogic@camlogic.it - www.camlogic.it).

Learn more about the product and find drawings of each model on our website.



| Symbol      | Reference                | Description  |
|-------------|--------------------------|--|
| $\triangle$ | IEC 60417-6042 (2010-11) | Caution: risk of electric shock  |
| $\triangle$ | ISO 7000-0434B (2004-01) | Caution: if the instrument is used in a manner not specified by the manufacturer, the protection offered by the equipment may be impaired. |

Please note: the printed version of this manual may not reflect the most recent changes.

Please always refer to the updated digital version available on the official CAMLogic website; www.camlogic.it