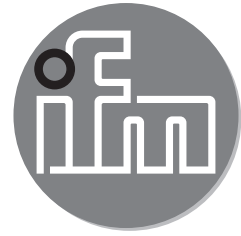


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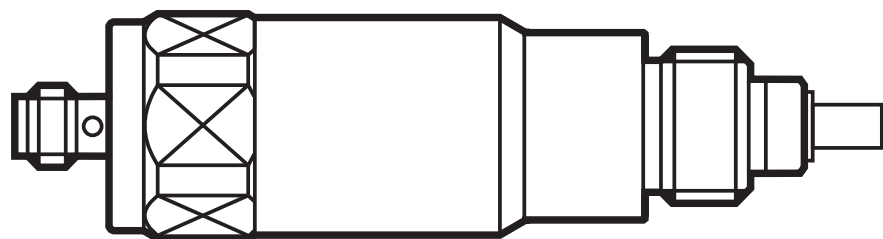
Operating instructions
2-point switch for brake diagnosis

efector120[®]

M95

UK

706113 / 00 10 / 2015



Content

1 Functions and features	3
1.1 Symbols used	3
2 Installation.....	3
2.1 Installation of the unit in the application.....	3
3 Electrical connection.....	4
4 Set-up	4
4.1 Switch point programming for output 1	5
4.2 Switch point programming for output 2	5
4.3 Switch point reprogramming	6
4.4 Switching characteristics (example)	6

1 Functions and features

The unit operates on the magnetic principle. The unit detects the position of the plunger and indicates it by two switching signals.

1.1 Symbols used

► Instructions

> Reaction, result

→ Cross-reference



Important note

Non-compliance can result in malfunction or interference.



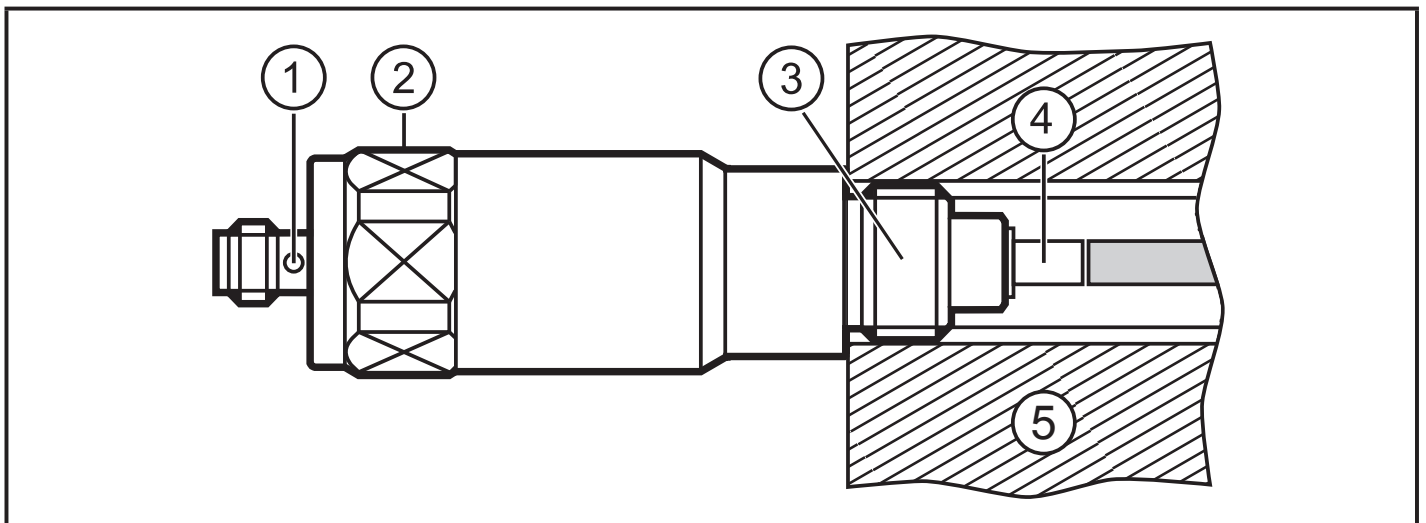
Information

Supplementary note.

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2 Installation

2.1 Installation of the unit in the application



1: output 1 (LED red), output 2 (LED yellow)

2: wrench flat

3: G1/2" mounting thread

4: plunger

5: installation environment or application

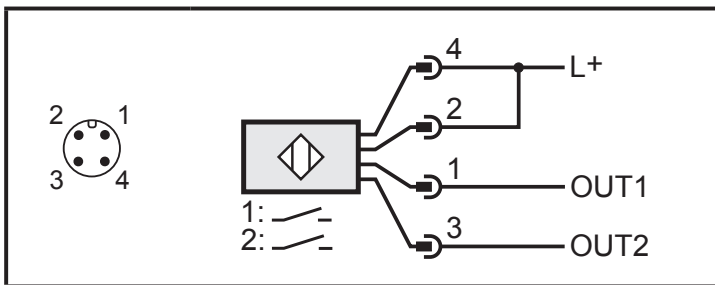
3 Electrical connection



The unit must be connected by a qualified electrician.

- ▶ The national and international regulations for the installation of electrical equipment must be adhered to.
- ▶ Ensure voltage supply to EN 50178.

- ▶ Disconnect power.
- ▶ Connect the unit as follows.



If only one output is required:

- ▶ Connect output 1.

If only output 2 is connected, the unit does not function.

4 Set-up

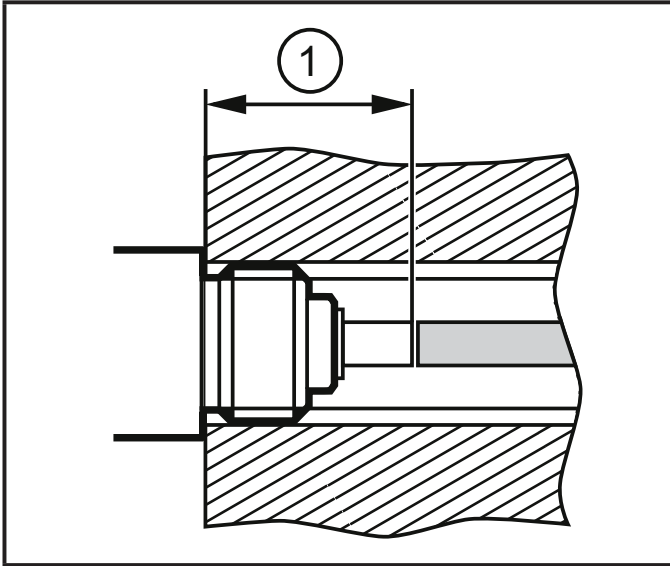
- ▶ Install the unit in the application.



Programming the switch points outside the application and subsequent installation in the application can lead to switch point shifting.

- ▶ Connect the unit.
- ▶ Switch on the operating voltage.
- > Both outputs continuously switch on and off alternately. Both LEDs flash (factory setting).

4.1 Switch point programming for output 1

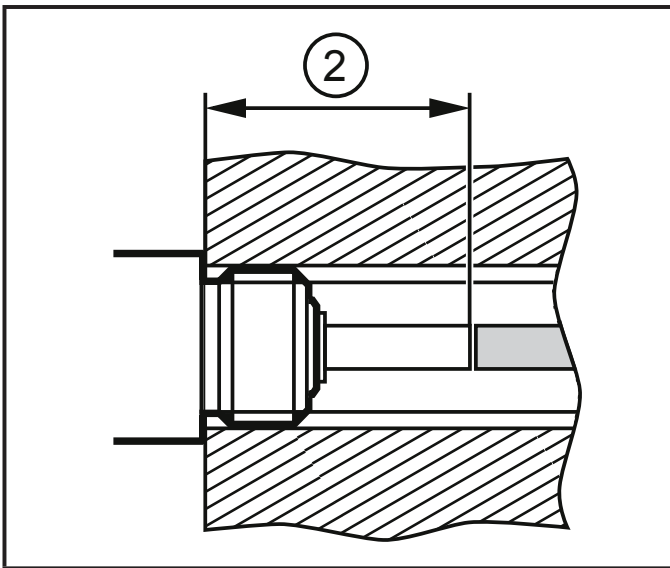


1: teach position 1

- ▶ Bring plunger to teach position 1.
- ▶ Short output 1 to GND (≥ 1 s).
- ▶ Remove short circuit.
- > Switch-off point:
switch point 1 + 0.1 mm.

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4.2 Switch point programming for output 2



2: teach position 2

- ▶ Bring plunger to teach position 2.
- ▶ Short output 2 to GND (≥ 1 s).
- ▶ Remove short circuit.
- > Switch-off point:
switch point 2 + 0.1 mm.



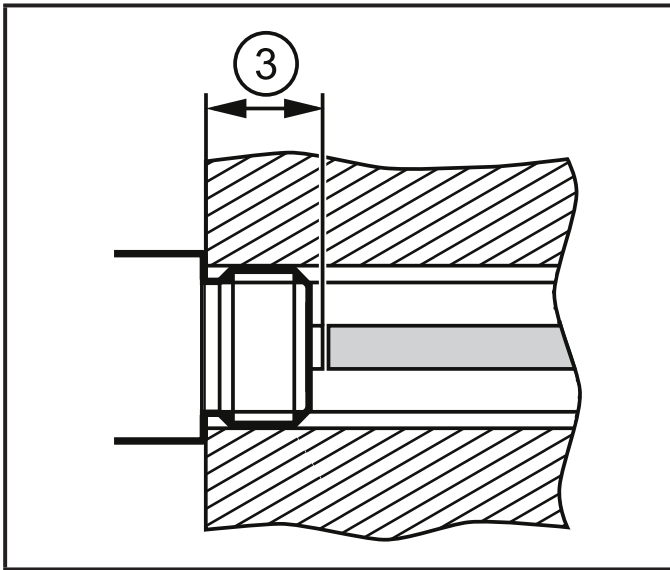
For a reliable function of the sensor, both switch points need to be programmed.

If only one switch point is programmed, the sensor is reset to the factory setting after a voltage drop.

4.3 Switch point reprogramming



Both switch points can only be reprogrammed together because this requires the original factory setting.



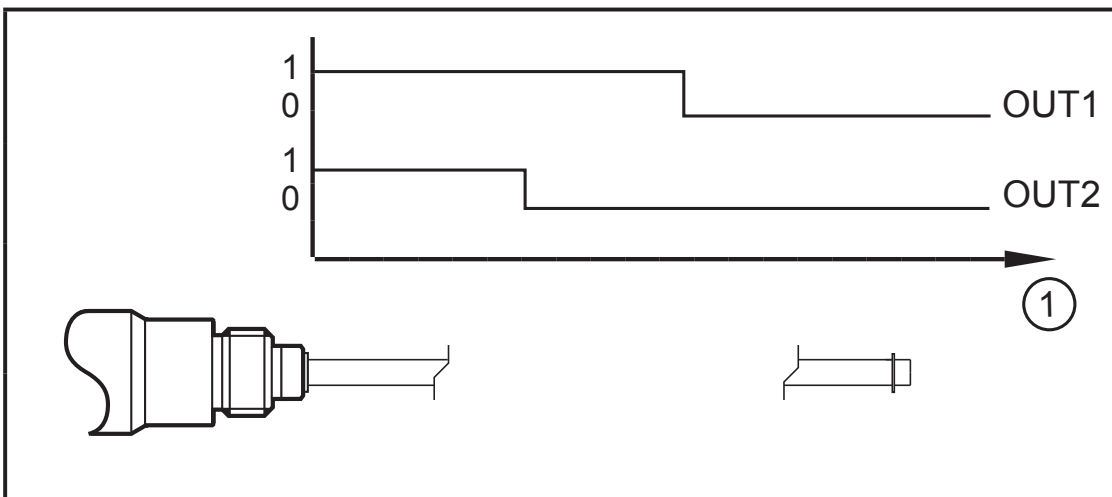
3: reset position

- ▶ Switch off the operating voltage.
- ▶ Bring plunger to the reset position:
The plunger is retracted into the unit at maximum position.
- ▶ Short both outputs (OUT1 and OUT2) to GND.
- ▶ Switch on the operating voltage.
- ▶ Maintain the short circuit (≥ 1 s) and then remove it.
- > Factory setting restored.
- ▶ Reprogram switch points → 4.1 and → 4.2.

4.4 Switching characteristics (example)



The switch points can be set anywhere within the whole operating range.



> LED red

> LED yellow

1: operating range

Technical data and further information at www.ifm.com