



## MAGNETIC FIELD INDICATOR *MFf-3*<sup>®</sup> product information

### Intended Use

The magnetic field indicator is designed for the permanent registration of a magnetic field presence. Inter alia, it can be used for the identification of attempts to affect measuring devices with a neodymium magnet (e.g. watt-hour meters and time switches for them, water meters, gas meters) whose operation correctness, and thus the measuring accuracy of the medium used, is disrupted by an external magnetic field.



### Principle of Operation

When a magnetic field, of the appropriate strength (e.g. coming from a neodymium magnet), has acted on the indicator, the arrangement structure of the indicator's magnetic domains, initially visible in the form of magnetic geometric figures, is disturbed, leads to irreversible blurring of the contours of these figures or to their complete disappearance.

### Types

The magnetic field indicator MFI-3 is manufactured in two versions:

- to install on internal surface of transparent casing of measuring device (MFI-3i)
- to install on external casing surface of measuring device (MFI-3o)

In both indicator versions, the installation consists in applying the indicator on a flat surface with the help of the transparent, self-adhesive tape being an integral part of the indicator.

### Protection

A magnetic field indicator MFI-3o, installed on the external surface of a measuring device casing, requires additional mechanical protection in the form of holograms or film protection labels applied on one or both the indicator side wings. The holograms and labels are characterized by so-called self-destruction (each attempt of removal from the surface they are applied to causes their destruction). For each magnetic field indicator, the holograms and/or labels with a printed inscription (logo, name, serial number, code, etc.) are delivered. In the case of the hologram, its mark is registered in the Polish Central Holographic Register.



### Technical Data

- number of magnetic geometric figures: 3,
- width: 11 mm,
- length: 29 mm,
- thickness: 1.5 mm,
- operating temperature: - 40 ÷ + 70 °C,
- passive indicator – does not require any electric, mechanical, chemical or luminous energy supply and does not have any movable elements.

*The magnetic field indicators *MFf-3*<sup>®</sup> and their geometric figures are subject to patent applications: P-374397, Z-299748, Z-299749, Z-299750, Z-299751, and a Community design present in all European Community countries: 000485487-0001/0002*

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