

Magnet system tester

MT 01

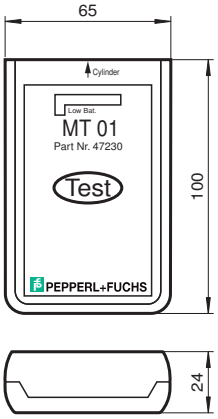
- Battery operated
- Display of the magnetic flux density

Magnet system tester for magnet systems in hydraulic cylinders

Function

The magnetic system tester MT 01 serves for checking the magnetic system in hydraulic cylinders.
The magnetic field sensor MB-F32 -...enables the detection of the piston position through the wall of a steel cylinder possible.
Additionally a magnetic system must be built in the piston. With the magnetic system tester MT 01 it can be checked that a sufficient magnetic field for the function of the MB-F32 -... is produced.
The piston with the magnetic system must pass through at least once the stroke of the cylinder.
For examination the magnetic system tester is held toward the longitudinal axis directly on the surface of the cylinder. The device is activated by pressing the "test" button.
10 LEDs indicate the magnetic flux density on the surface of the cylinder.

Dimensions



Technical Data

Electrical specifications		
Operating voltage	U_B	9 V monobloc battery, accessible via cover at the rear wall of housing
Ambient conditions		
Operating temperature		0 ... 70 °C (32 ... 158 °F)
Mechanical specifications		
Degree of protection		IP40
Material		
Housing		black ABS

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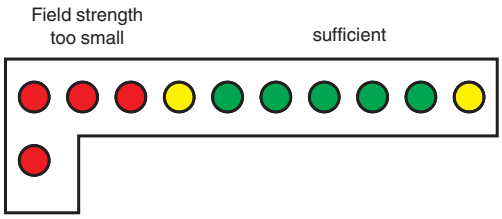
Operation

10 LEDs indicate the magnetic flux density on the surface of the cylinder:

- 1 red: battery voltage to low
- 1-3 red: field strength too small
- 4 yellow: transient area
- 5-9 green: field strength sufficient
- 10 yellow: field strength max.



The field strength is sufficient, if LEDs light up within the green area. The field strength should be checked over the entire length of the cylinder. In the area of the piston the field strength should be the highest.

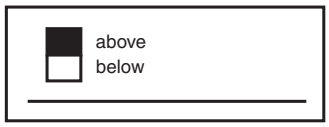
When entering or leaving the switching zone, i. e. where the piston is detected, there is a zero crossover of the field strength, so that none or only red LEDs light up within these small areas.

Others:

Switching of the display:

By means of a switch, which is accessible by opening the battery box and removal of the battery, the LED display can be switched.

The display is switched off during too low battery voltage.



Switch above: bar graph (standard adjustment)
switch below: LEDs are headed individually.

Note

With this test normally there will be only a static test with resting piston possible. By higher piston speed and temperatures the field strength can decrease.

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