



List-Magnetik

Manual

MP-1

OPERATION MANUAL

RESIDUAL MAGNETIC FIELD METER MP-1

2020-05



List-Magnetik

Dipl.-Ing. Heinrich List GmbH
D-70771 Leinfelden-Echterdingen
Max-Lang-Str. 56/2
Fon: + 49 (711) 903631-0
Fax: + 49 (711) 903631-10
Internet: <https://www.list-magnetik.com>
E-mail: info@list-magnetik.de



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INTRODUCTION

With the handy, battery-powered **Residual Magnetic Field Meter List-Magnetik MP-1**, you can quickly and reliably determine residual magnetism on ferromagnetic iron and steel parts. The measuring device can also be used for checking demagnetized parts.

The two measuring ranges of the analog display of 0-5 A/cm and 0-20 A/cm correspond to the industry standard of the ball bearing industry. The Hall sensor in the axial field probe is located at a defined measuring distance of 2.0 mm from the measuring surface.



WARNINGS AND HAZARD INFORMATION

List-Magnetik expressly draws your attention to the fact that the Residual magnetic field meter MP-1 may only be used for its intended purpose, the measurement of magnetic fields. Any improper use is prohibited and involves conscious handling of incalculable risks for the device and the operator.



The device operating company must ensure that it is only used by personnel who have access to these operating instructions and who have read and understood them.



The device and the sensor must not be brought into contact with electrical power sources that are not adequately insulated, under any circumstances. Disregard of this warning can result in a fatal hazard for the operator.



Although the device is splash-proof, it is not waterproof. The device must not be submerged in water or other liquids or cleaned with water. If the device comes into contact with a liquid medium, it must be switched off immediately.



Do not use the device in a potentially explosive environment (smoke, gases). The use of any electrical device, even this battery-operated measurement device, can result in an explosion.



The device must only be opened to replace the battery. Do not carry out any repairs to the electronics yourself. Instead, send the device to us for diagnostics in the event of a fault

TECHNICAL DATA MP-1

Measuring unit:	A/cm
Measuring probe:	Axial field probe \varnothing 8mm with defined measuring distance of 2.0 mm
Measuring range DC:	0-5 A/cm and 0-20 A/cm
Accuracy:	in the homogeneous field \pm 5% of maximum scale value
Display:	Analog scale with 2 ranges, colored tolerance ranges
Power Supply:	1x 1,5 V battery (baby) with battery indication
Operating time:	approx. 100 h
Dimensions:	83 x 122 x 40 mm
Weight:	approx. 300 g (with probe and battery)
Warranty:	12 months on device, 3 months on probe

OPERATION

After switching on to area I (more sensitive area 5 A/cm) please hold the probe vertically downwards, if possible, at a great distance from iron parts or magnets. Then set the zero point with the blue knob on the left.

Please note that the sensitivity in the display of the device is so high that external fields, especially the approx. 0.2 A/cm strong earth's magnetic field, can be included in the measurement. The probe must therefore always keep the same direction in the room.

Always carefully place the probe directly on the object you want to measure. When the needle hits the end of the scale, change the measuring range to 20 A/cm (range II).



As soon as the red LED (right side down of the scale) lights up, the battery must be replaced

OPTIONAL AND SPARE PARTS

Part# 2101: Calibration Standard 5 A/cm

A calibration standard for checking the device calibration with 5 A / cm is **optionally** available so that the device can be checked with a measuring probe.



It makes sense, to send in the measuring device to List-Magnetik when you subsequently order a calibration standard. Only then can the optimal adjustment to an exact 5 A/cm be done.

Part# 2835: Axial Field Probe F35 for MP-1

The probe can be replaced separately.



CHECKING WITH CALIBRATION STANDARD

It is not necessary to calibrate the device. The measuring probe is pre-calibrated.

To check the device with the calibration standard, please first set the measuring range to I (5 A/cm), then place the probe vertically on the red circle of the calibration standard.

Now, turn the probe in a circle until the maximum value is displayed. Then you can compare the displayed value with the printed value of the calibration standard.



We supply:

- Coating Thickness Meters
- Magnetic Field Meters
- Magnetizing and Demagnetizing Equipment
- Ultrasonic Thickness Gauges

We advise and provide tailor-made solutions for your specialized requirements in magnetizing, demagnetizing and measuring

Fast calibration and repair service