

# Testboy<sup>®</sup> 15 Testboy<sup>®</sup> 120

contact-less magnet field tester

The Testboy 15 and Testboy 120 are particularly suitable for rapid and precise testing of electro-magnetic switches and valves. The method used for the measurement process has significantly simplified test procedures in all pneumatic and hydraulic systems.

A functional test can be performed without the need for any setting-up time or machine downtime.

Your advantages: - 3 year manufacturer's guarantee  
- TÜV / GS tested and approved  
IEC/EN 61010-1, DIN VDE 0411

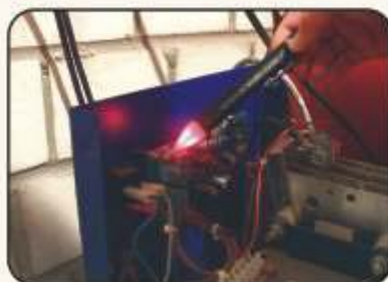


When power is applied, a magnetic field is created in an electro-magnetic switch that the Testboy 15 and the Testboy 120 are able to detect. All permanent and synthetic magnetic fields are indicated by the tip lighting up. The sensitivity of the device is such that often the lid or covering need not be removed or dismantled.



Relays and magnetic coils, contactors, valves and pumps can be reliably tested. These instruments are suitable for testing in motor cars and utility vehicles, heating and sanitation as well as in numerous industrial applications. Both devices are equipped with a permanent magnet for the purposes of self-testing.

The light given off from the energy saving, powerful LED torch on the Testboy 120 is white and extremely bright. Using the batteries supplied with the Testboy 120, the torch light will burn for approx. 80 hours.



Their handy size means that the instruments can be carried around in a shirt pocket.

Technical Details	Testboy 15	Testboy 120
Display	optical, LED	optical, LED
Measurement Range	all magnetic fields	all magnetic fields
Power Supply	2 x 1,5V	2 x 1,5V
Dimensions	142 x 26 mm	160 x 25 mm
Protection	IP 44	IP 44
Weight	22g	45g
TÜV / GS	IEC/EN 61010-1	IEC/EN 61010-1
Integrated LED-torch Lamp	no	yes
Colour	black, other colours on request	black, other colours on request
Scope of Delivery	1x operating instructions 2x battery type AAA LR03	1x operating instructions 2x battery type AAA LR03

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#### 4. Multimeter

The digital multimeter from Testboy exhibit a variety of functions, those not only ease the work in daily use.

##### Digital or Analog

In order to get an exact display with high resolution, the multimeter are equipped with LC-Displays.

An analogue indication is inaccurate, because indicated values between the scale gradations must be estimate. However the digital indication always indicates the full measured value. The advantage of the analogue indication essentially consists of that a changing signal can be better represented. The high-quality multimeter offer here remedy. The bar graph indication indicates changes of a signal as an analogue multimeter.

##### Voltage

The main power supply of electronic devices is 230V alternating voltage, which will be transformed to a lower operating voltage for the electronic circuits (in example computer power packs, wall power supply, etc.).

To measure these voltage directly, a multimeter is needed.

The work is again facilitated, if the multimeter exhibits an automatic range.

##### Current

Each electronic equipment consumes current. To indicate this all multimeter possess a current measuring range up to 10A or up to 2000A with an optional current clamp.

##### Continuity Test

All multimeter possess a continuity test with acoustic signal, to be able to recognize a good, low impedance connection.

The testing voltage during the continuity test is so low thereby, that guaranteed, that only low impedance connections will be recognized, not transistors or diodes.

##### Accuracy

The maximum reading error is indicated by the accuracy of the multimeter. This value becomes indicated in per cent regarding the current measured value.

##### Auto-Power-Off

The mutlimeter Testboy 310, 311 and 312 switches off after a certain time automatically, in order to avoid an unnecessary consumption of the batteries. This function can be also switched off for long-term measurements with the Testboy 311 and 312.

##### Relative Measurment

After indicating the reference value the relative value measuring can be activated.

The reading is set to zero and only the deviation to the reference value is indicated.

##### Data-Hold

Durch Betätigung der Taste "HOLD" oder "DATA H" wird der momentan angezeigte Messwert in der Anzeige festgehalten. Dies ist sehr nützlich, wenn der Wert für eine Dokumentation noch erfasst werden muss oder das Display bei der Messung nicht lesbar ist.



**MIN-MAX Logging**

In order to store different or varying values, the multimeter Testboy 311 and 312 possess MIN/MAX value logging. The stored values can be recalled after a measurement.

The Testboy 310 possesses a Max Hold function, whereby the maximum value of the current measurement will be stored and shown in the display.

**TRUE-RMS**

The multimeter Testboy 311 and 312 are equipped with TRUE-RMS. Multimeter, those measure RMS, are calibrated on sinusoidal voltage. With TRUE-RMS the crest factor by non-sinusoidal tensions will be corrected in the multimeter using special electronic circuits, so that the indicated value corresponds to the real measured size.

**Windows-Software**

The multimeter Testboy 311 and 312 possess an optical RS-232 interface. With the attached software all measuring procedures can be indicated on a PC, so they can be stored, too.

Long-term measurements with courses of the curve are possible.

The sampling rate is adjustable.

Overview	 Testboy 310	 Testboy 311	 Testboy 312	 Testboy 2000
AC Voltage	✓	✓	✓	✓
DC Voltage	✓	✓	✓	✓
AC Current	✓	✓	✓	✓
DC Current	✓	✓	✓	✓
Resistance	✓	✓	✓	✓
Continuity Test	✓	✓	✓	✓
Diode Test	✓	✓	✓	✓
Battery Test	✓	✓	✓	✓
Data-Hold	✓	✓	✓	✓
Min-Max-Logging	✓	✓	✓	✓
Relative Value Measurement			✓	
TRUE-RMS		✓	✓	
Auto Power-Off	✓	✓	✓	
Auto Range	✓	✓	✓	
Back Light		✓	✓	✓
Torch Lamp				✓
hFE Transistor test	✓			✓
Temperature	✓	✓		
Frequency Measurement		✓	✓	
Capacity Measurement		✓	✓	
Optional Current Clamp	✓			
Bargraph			✓	
RS-232 Interface		✓	✓	
TÜV/GS IEC/EN 61010-1	✓	✓	✓	✓
Protection	IP 30	IP 30	IP 30	IP 30
Overvoltage Category	CAT III 600V	CAT III 1000V	CAT III 1000V	CAT II 600V