

Mouldtester MOULD EXPERT



- Compact mould testing device for electrical hotrunner elements
- Battery driven, can be used far from electrical power supply
- Checks all elements wired to the connector
- 16- or 24-pole connector can be selected
- Grafical or table view, can be exported as EXCEL-file via USB

Application

NOLDEN MouldExpert checks the pin assignment of any arbitrary 24- or 16-pole mould connector, identifies the different elements (heater or thermocouple) and shows their operational state and characteristics. Shortage to ground on one of the pins is identified and indicated as well. The testing result is displayed on a large, bright colour touchscreen and may be downloaded as an EXCEL file via USB-plug.

Design

Measurement electronics and high contrast 7" touchdisplay are mounted in a rugged, portable plastic casing. The device is driven by a set of rechargeable batteries, which allows to be carried to any location. Charging takes place with a standard USB-C charger on any household wall plug.

Function

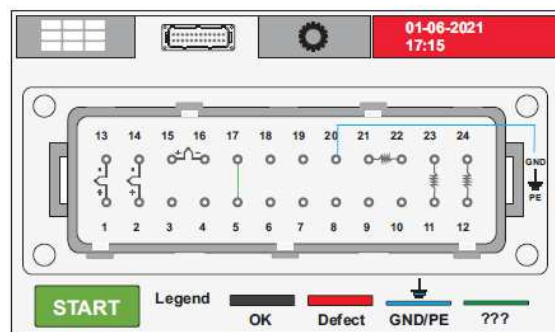
MouldExpert is a fully automated multimeter, which measures every connector pin against every other pin as well as against earth. If a thermocouple or a heater is identified, the correspondant electrical symbol is drawn graphically between the associated connector pins on a picture of the chosen connector.

In case of an earth shortage, a line from this pin to ground is drawn.

All results can also be displayed as a table, in this case, beside the electrical symbol, resistance (Ohm) as well as power (W, A, rated to 230V) is depicted in case of a heater.

This table can be exported with one push of a button as an EXCEL-file (csv) via the build-in USB-socket.

One 24-pole and one 16-pole connector cable comes standard with the device, others are available on demand. Nevertheless, the number of measurement channels is limited to 24 + Ground.



Example graphical view with 24-pole connector

Mouldtester MOULD EXPERT

The screenshot shows the Mouldtester MOULD EXPERT interface. At the top right, the date and time are 01-06-2021 17:15. Below this is a table with 7 columns: Pin, Pin, Ohm, Type, Amp., Watt, and Status. The table contains 11 rows of data. To the left of the table is a legend with symbols for Heater, Sensor, OK, Defect, ???, and GND/PE. There are also 'START' and 'Export' buttons.

Pin	Pin	Ohm	Type	Amp.	Watt	Status
1	13	100	—	2,3	530	OK
2	14	255	—	0,9	207	OK
3	15	255	—	0,9	207	OK
4		∞	???	-	-	Open
	16	∞	???	-	-	Open
5	17	255	—	0,9	207	OK
6		1,5	GND	-	-	Short to GND
	18	∞	???	-	-	Open
7	19	7	⊕	-	-	OK
8	20	6,5	⊕	-	-	OK
9	21	7	⊕	-	-	OK
10	22	5	⊕	-	-	OK
11	23	4,6	⊕	-	-	OK

Example table view with 24-pole connector

Characteristics:

Mains voltage (charger)

230V ±10%, 48...63Hz

Battery

Type 2x Samsung 18650
 Capacity 2x 3000mAh
 Charger USB-C wall plug charger
 Battery life appr. 6h

Measurement connector

SUB-D 25-pol.

Mould connector adaptor

SUB-D to 24-pole heavy duty connector (female) as well as SUB-D to 16-pole heavy duty (female) come standard, each 1,5m long. Others as e.g. 16-pole narrow series (male/female) available on demand.

Display

Projected capacitive 7" TFT colour-touchdisplay

Temperature sensor

Thermocouple Fe-CuNi (J) or Ni-CrNi (K)

Measurement voltage

5V

Precision

Ca. 2,5% f.s.

Power cable

2m, black, with EU standard plug

Casing

ABS anthracite

Dimensions

223 x 205 x 80mm (W x H x D)

Weight

0,5kg