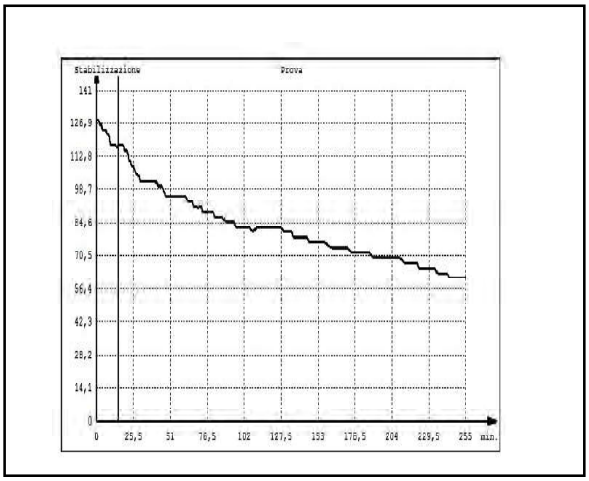
Associated Company

MD40REM-H2CH

Digital pressure gauge – Pressure from 0 to 40 bar



Firmware Version 8.1	According to the Regulations
	UNI 7129 Below 35 kW **UNI 11137** Automatic litre dispersion calculation **UNI 11137** Leak check for systems with a max of 18 dm^3 **UNI 11137** Valve leak check **D.M.12/04/96** Above 35kW 6° Type **D.M.12/04/96** Above 35kW 7° Type

The **BEINAT S.r.l.**-branded products comply with the European directives ROHS 2002/95/EC, REACH 1907/2006, STORAGE BATTERIES 2006/66/EC and WEEE 2003/96/EC

Main features

Instant measurement of pressures on the scales: **bar, mbar**, **mmH_2O, Pa, hPa, PSI**
Measures and performs all the **UNI 11137-UNI 7129-UNI 11147-UNI 10845-D.M.12/04/96** tests
Measures a pressure up to 10 bar with external sensor
Measures a pressure up to 25 bar with external sensor
Measures a pressure up to 40 bar with external sensor
Measures a pressure up to -1 to 45 bar with external sensor for FREON
Measures constant automatic barometric pressure
Records the pressure in the network
Measures the volume of a gas system
Measures the volume of a tank or container
Measures the ambient temperature from -10°C to 50°C
Measures the temperature from - 50°C to 500°C
Easy to use
Navigation buttons
Facilitated data entry program
Easy user data entry
Facilitated entry of the date of the system being tested
Menu Program
Language selection: Italian, English, German.
It stores the read data and then transmits it to a PC
Data transmission program **"MD40REM-H2CH provider"**to be installed on PC
Prints all the events
Prints the GRAPH of the measured Pressure and Temperature
1 USB port used for: battery charging and data transmission
1 USB port used for: External pressure switch and/or 500°C thermometer and maintenance port
IR transmission for portable printer
4 row by 20 column backlit alpha numeric display
Rechargeable NIMH batteries
Long autonomy
Microprocessor-controlled battery charger
Possibility of working with mains voltage
Equipped with a stand for use

Summary of Topics

3. content control, warnings, information notes, program descriptions
4. for your safety, precautions
5. prior to start-up, components and controls
6. pneumatic connections, connection of accessories, battery chargers, alternative sources
7. power on and off, navigating the MENU
8. user data entry
9. date and time insertion
10. how to measure pressures
11. how to record a pressure
12. tests and measurements according to the UNI 7129 regulations
13. tests and measurements according to the UNI 11147 regulations
14. automatic volume tests according to the UNI 11137 regulations
16. manual volume tests according to the UNI 11137 regulations
18. max 25 dm3 verification according to the UNI 11137 regulations
20. valve leak check according to the UNI 11137 regulations
22. mechanical seal according to the UNI 11137 regulations
24. flue pressure tightness test according to the UNI 10845 regulations
26. flue depression leak test according to the UNI 10845 regulations
28. connection and transfer to the computer, insurance and guarantees
30. conversion tables and pipe diameters
31. accessories

Check the contents of the package

Check that the package contains all of the items listed below.

Battery charging and data transmission cable for USB port
Silicone tube
Chromed brass pipe for flue connection
Spiral tube complete with fittings used for pneumatic connection
UBS KEY with PC configuration software and pressure gauge instructions **MD40REM-H2CH.**
Warranty certificate
Calibration certificate
Quick guide

Important Warning

The digital pressure gauge **MD40REM-H2CH** leaves the factory accompanied by a test and calibration certificate. This corresponds to the calibration declared by the sample instrument, **based on international standard norms.**
The evaluation of the measurement uncertainty is **"B category"**,

The ordinary and extraordinary maintenance of the digital pressure gauge and the **CALIBRATION,** whose natural expiry is **ONE YEAR,** must be performed by authorised personnel, using compliant equipment.

Information note between Pressure and Temperature: For each degree C. of temperature the pressure varies by approximately 1 mbar

To define a steady state of air, three macroscopic variables are required, each capable of direct measurement.
These variables are pressure, temperature and volume; the state of an air gas of volume **V**, at pressure **P**, and at temperature **T** is then defined by Boyle's law:
P*V =n*R*T. Where ***n*** is the number of gram molecules constituting the gas and **R** is a universal constant.
The possible states of a gas at constant pressure and volume are expressed by the Gay-Lussac laws:
at constant pressure the volume of a gas increases as the temperature increases, or vice-versa.

Therefore connecting the instrument with variable temperatures, the instrument will undoubtedly record a final pressure that is different from the initial one.
This is normal and is not the result of an instrument malfunction.

IMPORTANT NOTE:
With the pressure gauge turned on without pressure it is evident that the numbers after the point do not remain still. This is not a calibration defect or uncertainty, but rather the advantage of the high precision of this instrument. It should be remembered that reading occurs at 18 bits.
When the instrument is placed under pressure calibration takes place automatically.

Description of the TEST programs

TEST measurements

UNI 7129	Below 35 Kw	Leak Test
D.M. 12/04/96	Above 35 Kw 6° Type	Leak Test
D.M. 12/04/96	Above 35 Kw 7° Type	Leak Test
UNI 11147	Pressing system	Leak Test
UNI 11137	Automatic litre dispersion calculation	
UNI 11137	Manual litre dispersion calculation	
UNI 11137	Leak check for systems with a max of 25 dm^3	
UNI 11137	Valve leak check	
UNI 11137	Mechanical seal	
UNI 10845	Flue seal test	
UNI 10845	Flue draft test	

MULTI GENERIC TESTS

For your safety

To prevent risks of damage to the product or injury to you and to third parties, before using the pressure gauge, carefully read the following safety warnings in their entirety.
Keep them so that anyone who uses the appliance can consult them beforehand.

In the event of a malfunction, turn off the appliance immediately.
If you detect smoke or an acrid or unusual smell coming from the appliance or from the mains adapter (accessory supplied): Immediately turn off the pressure gauge, disconnect the power supply from the mains, and send the equipment to the nearest assistance centre.
Use the instrument with caution in the presence of flammable gases.
To avoid the risk of explosions or fires, always use the appliance under close supervision, without leaving it unattended.
Do not keep the bag strap wrapped around your neck.
Be extremely careful, especially when equipping the instrument with a shoulder strap, and especially in the presence of young children.
Do not try to disassemble the appliance.
Contact with internal components of the pressure gauge can cause injury. In case of faults, the product must be repaired exclusively by qualified personnel. If the appliance breaks following a fall or crushing, contact the Assistance Centre for the necessary repairs.
Observe the due precautions when handling the batteries.
The batteries should never be exposed to high temperatures, i.e. above 60°C.
To ensure optimal shelf life, use the batteries at room temperature.
If used at low temperatures, the durability may decrease.
Do not disassemble the batteries and do not throw them into fire as they could explode.
Never dispose of batteries in normal waste. Follow the local regulations for disposal.
Use the appropriate cables supplied.
In order to preserve the conformity of the product with the regulations, to connect to the input and/ or output terminals of the pressure gauge, use only the cables supplied for this purpose or marketed separately by the manufacturer **BEINAT S.r.l.**
USB KEY.
To avoid damage and to prevent possible risks, the USB stick containing the software programs and manuals relating to this product must not be reproduced and must be carefully stored.
Avoid contact with liquid crystals.
If the monitor breaks, be careful not to injure yourself from glass fragments and avoid liquid crystals coming into contact with your skin, eyes or mouth.

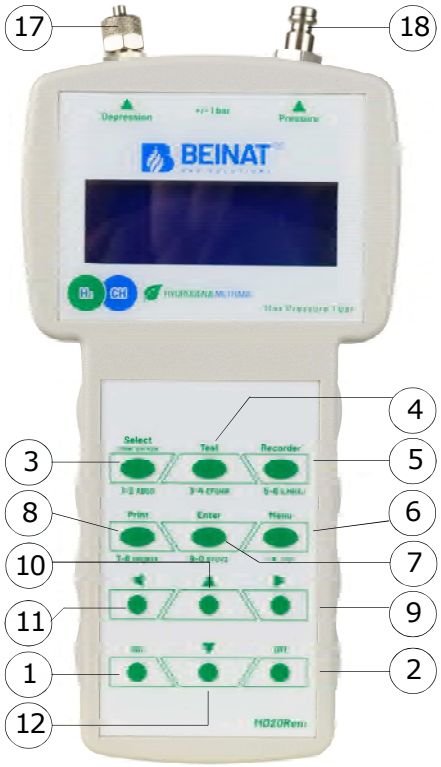
Precautions

To enjoy your **MD40REM-H2CH,** digital pressure gauge for a long time and with satisfaction, use and store it bearing in mind the following precautions.
Do not allow it to become wet.
The pressure gauge is not waterproof. If immersed in water or exposed to high humidity levels, it could cause serious damage.
Avoid dropping it.
Heavy impacts against hard surfaces and significant vibrations can damage the appliance.
Avoid high magnetic fields.
This pressure gauge should not be used or stored in the presence of radiations or high magnetic fields. Static electricity or magnetic fields produced by equipment such as radio transmitters can interfere while data is being collected, can damage the data stored in memory or the internal circuits of the pressure gauge.
Avoid sudden changes in temperature.
Sudden changes in temperature can cause condensation to form and the batteries may deliver less voltage. Above a certain temperature (approximately 45°C) the monitor turns black. To make it visible again, cool it by placing it in the refrigerator for a few minutes.
Cleaning
Never clean the appliance with chemical products. If necessary wash with a damp cloth.

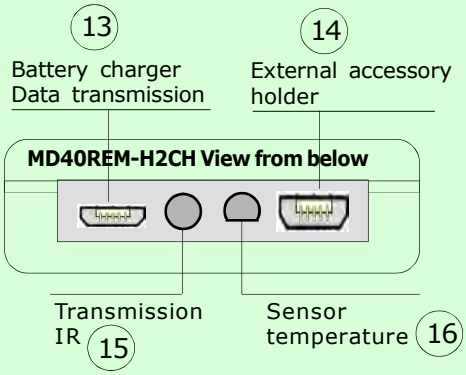
Before start-up

Thank you for choosing a **BEINAT S.r.l.** digital pressure gauge **MD40REM-H2CH.**
This manual has been designed to help you obtain maximum functionality and automatic efficiency of the product.
Read these instructions carefully before starting use and always keep it nearby when using the instrument.
The illustrations and text on the screens in this manual may differ from what is actually displayed.

Components and controls



1) ON **button**. Holding it down for 3 seconds turns on the **MD40REM-H2CH** .
2) OFF **button**. Holding it down for 3 seconds turns off the **MD40REM-H2CH**.
3) SELECT **button**. Press it to select the scales relevant to the desired pressure measurement.
mbar, **mmH$_2$O, Pa, hPa, PSI.**
4) Test **button**. It is used to enter the system verification menu according to the **UNI** regulations.
5) Recorder **button**.
Pressing this button activates a process of recording of the pressure present in the pipe.
6) Menu selection **button.**
Press this button to access the instrument settings.
7) Enter**button**. It is used to confirm the data entered.
8) Print **button**. Used to print the Ticket of the measurements taken.
9) Right navigation button. Pressing this button moves the cursor to the RIGHT of the screen.
10) UP navigation button. Pressing this button moves the cursor UP on the screen.
11) Left navigation button. Pressing this button moves the cursor to the LEFT of the screen.
12) Dwnnavigation button. Pressing this button moves the cursor DOWN on the screen.
13) Battery charging and data transmission connection.
This USB connector is used to connect the instrument to the battery charger which can be performed via PC or 230V mains (see paragraph on page 6).
Furthermore, from this USB port it is possible to transmit and receive data from the PC.
14) "External accessory USB port
This connector is used to connect external accessories, including: pressure sensor and temperature sensor.
15) IR infra-red port.
It is used to transmit data to a printer.
16) Ambient temperature probe.
This probe detects the ambient temperature with a temperature from -10°C to 50°C.
17) Pneumatic connection for measuring mbar depression.
18) Pneumatic connection for measuring mbar pressure.



Display on first screen

MD40REM-H2CH
BEINAT S.r.l.

A high-efficiency backlit display has been adapted to the instrument, to facilitate the reading of all events.
Below you will see all the events with the display turned on

Battery Notions and Recharging

Charging via PC

Charging via 230V mains

Technical data of the LITHIUM POLYMER battery
Nominal voltage of the **7.4V battery pack** , current **1050 mA.**
Operating time 8 hours approximately with batteries charged
Battery charging time approximately 6 hours.
N.B. Do not recharge the battery in an ATEX area

Before turning on the pressure gauge
At the time of purchase, the battery is not fully charged.
Please charge for at least 6 hours.
Loading with PC
Connect the battery charger connector to the micro USB socket located on the bottom of the instrument and then to the USB socket of any PC.
During charging, the battery level indicator (a graduated bar on the screen) will indicate the battery charge status.
230V mains voltage charging
Connect the battery charger connector to the micro USB socket located on the bottom of the instrument and then connect the battery charger to a power socket.
During charging, the battery level indicator (a graduated bar on the screen) will indicate the battery charge status.
Use
The battery must never be exposed to temperatures above 40°C.
To ensure optimal shelf life, use the batteries at room temperature.
If used at both low and high temperatures the durability may decrease.
Protection
For greater protection of the batteries and of the instrument, an additional control has been integrated.
When the batteries fall below a pre-set minimum limit, the following message lights up:
"LOW VOLTAGE DETECT " . The instrument remains blocked; **To reset, proceed as follows:**
Connect **the MD40REM-H2CH** to the mains voltage via the supplied power supply, or to the PC. Then the following text appears **" WAIT RESET SW... "**
Leave the **MD40REM-H2CH** to recharge for **at least 6 hours.**

Note
When the pressure gauge must be used for a long time, the instrument can be powered with 230V mains voltage via external power supply.

Pneumatic Connection

The ***MD40REM -H2CH pressure gauge*** has an input to measure a maximum pressure from **±1 bar.**
The pressure connections are located on the head of the instrument, (see page 5). There are two inputs available, one with positive pressure and one with negative pressure.
The latter is used to measure a pressure difference between two measurements or to check the draft efficiency in flues.
To measure pressure
Apply the supplied pipe to the dedicated inlet, being sure to leave the depression inlet open.
To measure depression
Apply the supplied pipe to the dedicated inlet, being sure to leave the pressure inlet open.
To measure the difference between two pressures.
Apply the higher pressure to the positive inlet and the other to the negative inlet.
The pressure difference that the instrument will measure between one inlet and another will appear on the display.
N.B. The higher pressure must always be connected to the positive input.

Connection of optional accessories

l'***External probes can be connected to the MD40REM*-H2CH** via the port : **"External accessory USB port "**

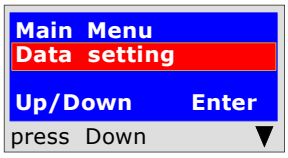
4 types of pressure switches with scale at: **10 bar -25bar - 40bar - from -1 to 45 bar**
1 PT100 Temperature Probe from **-50°C to 500°**
To activate the function of these probes it is necessary to select the ports from the main menu

Switching on and off

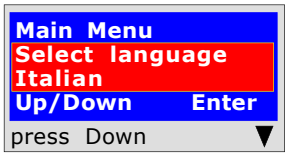
POWER ON. Turn on the pressure gauge by pressing the power button **"ON "**being sure to hold it down for 3 seconds: The window containing the instrument model, firmware version and serial number will be displayed.
After 5 seconds, the words "STABILISATION IN PROGRESS" will appear. Wait a few seconds, and the main window will open.
SHUTDOWN. To turn off the pressure gauge, press the **"OFF "** button, being sure to hold it down for 3 seconds

Navigate through the Menus

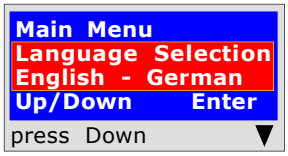
Pressing this button activates the **"Menu"** program. From here it is possible to set the device for and to select the work mode of the pressure gauge.
To scroll the menu use the Up and Down buttons, to confirm press Enter



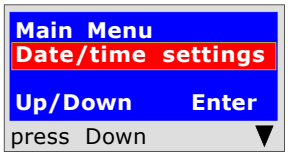
This program is used to enter the data of the operating company. Pressing the **"Enter"** button the tool will prompt to "Enter Password".
You will find the password on the warranty card. Follow the instructions that are requested.



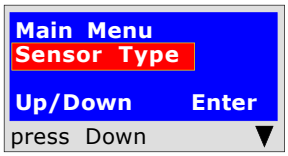
This function is used to configure the language to be used.
press the "Down" or "UP" buttons to select the desired language; press "Enter" to confirm.



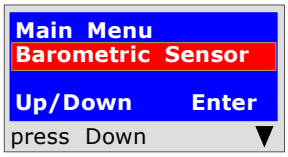
This function is used to configure the language to be used.
Use the "Down" or "UP" buttons to select the desired language:
English, German. Press "Enter" to confirm the selected language.



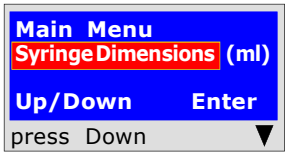
This program is used to insert the current date and time. Pressing the **"Enter"** button the tool will prompt to enter the date and time. Follow the instructions that are requested.



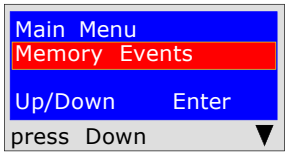
This program is used to select the type of pneumatic sensor to be used. Internal or External.
Pressing the "Enter" button the instrument will ask for the"Sensor type". Press the **"Down"** button and/or the **"UP"** button. Select and press **"Enter"** to confirm the required sensor.



This program is used to activate the barometric sensor. Pressing the **"Enter"** button, the instrument will ask whether or not want to activate the barometric pressure control. Use the **"Down"** or **"UP"** buttons to activate or deactivate it. Press **"Enter"** to confirm. When activated, the text appears on the main screen.



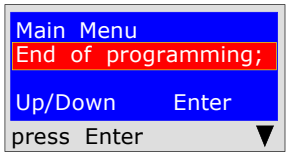
This program is used to select the type of syringe available to perform the dispersion tests.
Press the **"Enter"** button and the instrument will ask the following: the size of the syringe in millilitres (the equivalent in cc). To enter the numbers, press the appropriate keys (similar to when sending an SMS).
To move forward/back, use the navigation keys; for white spaces use the key with the number 1.



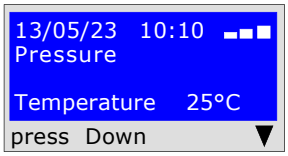
This program is used to read stored events. Pressing the **"Enter"** button the instrument will enable reading of all the tests performed up to a **maximum of 6 events.**

Deletion from memories

1) Select the test to be deleted with the **Up/Down** button.
2) Confirm it with the **Right** button.
3) Press the **Menu** button;
4) With the **Up/Down** buttons select **yes/no** and press **Enter** to confirm.

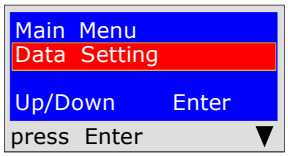


Pressing the **"Enter"** button the instrument will finish the Menu routine and will return to the main screen

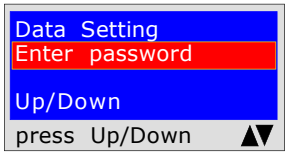


Entering user data

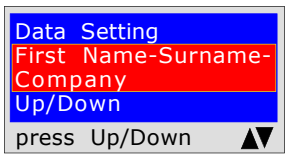
In order for the instrument to respect the **Regulations** it is necessary to enter your personal data. Start the guided configuration which accompanies the user in entering personal data, such as:
First name, surname or company data
Street, post code, city, telephone, VAT number, etc.
To do this, follow the instructions on the screen.
Attention! this operation can only be performed via PC.



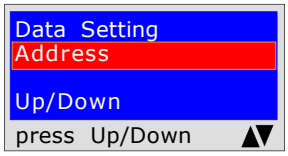
Starting from the **" Menu "** button you will find the **"Data Setting"** program. Press **"Enter"** to enter the **"Data Setting" program**



To protect your personal data before accessing programming it is necessary to **enter the Password (***)** Once inserted, press **Up/Down**. If you make a mistake, the tool exits the configuration.
To enter characters, press the appropriate buttons (similar to when sending an SMS).
To go forward/back use the navigation keys. For white spaces use the number key 1.

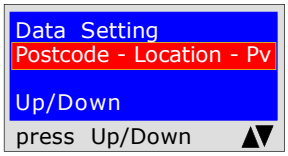


The program prompts to enter your **business name**. Remember that you have a total of 20 characters available.
Once inserted, press **Up/Down**.
To enter characters or numbering, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.

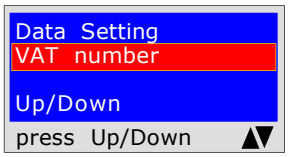


The program prompts to enter **the address** of the company name. Remember that you have a total of 20 characters available. Once entered, press **Up/Down**.
To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.

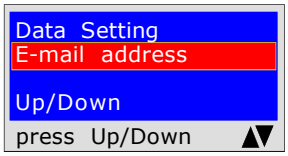
Next Data entry



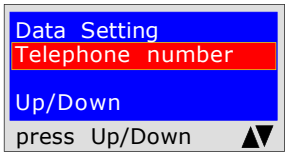
The program prompts to enter the **Postcode the City and the Province** where your company name is located, remembering that you have a total of 20 characters available. Once inserted, press **Up/Down**.
To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.



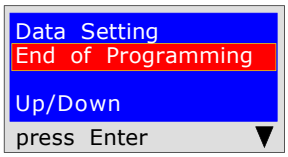
The program prompts to enter **the VAT number**of the company name. Remember that you have a total of 11 characters available. Once entered, press **Up/Down**.
To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.



The program prompts to enter the **E-mail address** of the company name, remembering that you have a total of 20 characters available. Once entered, press **Up/Down**.
To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.



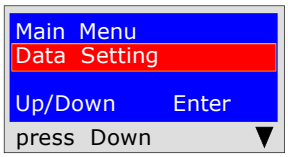
The program prompts to enter the telephone number of the company name, remembering that you have a total of 20 characters available. Once entered, press **Up/Down**.
To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.



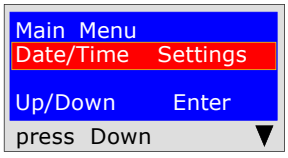
You have now finished entering your personal data. To exit press **Enter**

Date and time insertion

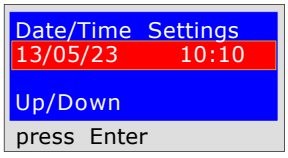
Attention! This operation can be performed via PC.



Starting from the **" Menu "** button
Pressing the **"Down"** button you will find the program:
"Date/Time Settings"



Pressing the **"Enter"** button you will find the insertion program



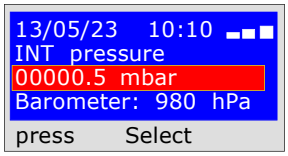
The program prompts to enter the "day, month, year" date and then the current time "Hour and Minutes". To move from one group of digits to another use the **"Up or Down"** navigation buttons.
If during insertion the digits are the same, simply move with the **"Right or Left"** navigation button
To enter, press the appropriate numbers (as when sending an SMS).
Once inserted, press **Down** to exit

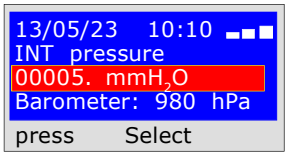
How to measure pressures and Direct reading of an eventless pressure

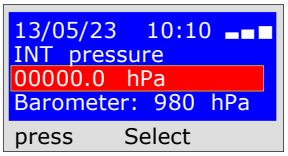
The instrument was designed to measure pressures of: air, water and gas.
Depending on requirements and on the regulations, pressures can be measured with these types of scales:
mbar - mmH_2O - Pa - hPa - PSI.
To select the scales press the **"Select "** button

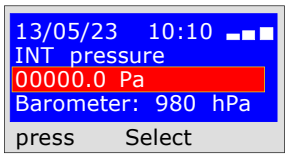
READING
1) Select the desired scale: **mbar - mmH_2O - Pa - hPa - PSI.**
2) Connect the pipe to the desired inlet, positive or negative.
3) Connect the pipe to the source of pressure or depression to be measured.
4) Read the value directly.

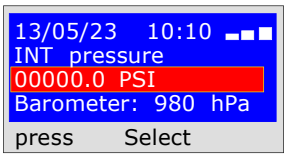
N.B. These readings are not stored. To print the event press **Print**











BEINAT S.R.I.
PRESSURE GAUGE MOD.**MD40REM-H2CH**
Firmware Version
Serial number: **0102**
Calib. Date: 10/01/23

COMPANY
BIANCHI GIOVANNI
VIA ROMA 155
10000 MILAN
VAT no. 02434381200
info@lapolipo.it
Tel. 023111457562

Instant Measurement
(date) 15.01.23(time) 09:54
(scale) **mbar** 00010.6

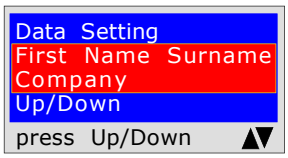
(time) **09:54**

Operator:

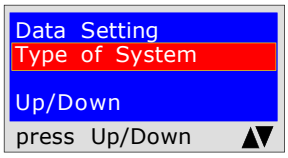
Signature:

Recording of a gas pressure in the network.

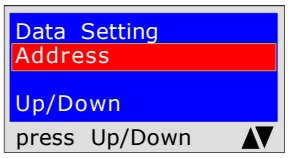
The instrument has been designed to record gas pressures in the network.
Select the scale in **mbar**. It is advisable to perform this test with this scale, as the network pressure is measured in **mbar. Recording procedure.**
1) Connect the pneumatic tube to the positive inlet of the **MD40REM-H2CH** and to the pressure source to be measured.
2) Turn on the printer and place it next to the **MD40REM-H2CH**.
3) Press the "Recorder" button . This begins the recording of the pressure present in the network. The instrument records every variation both up and down, within 10% and **prints the ticket**, stating the pressure recorded with the time of the event.



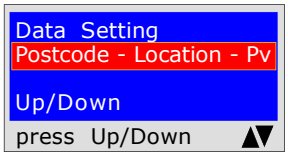
The program prompts to enter the **details of the user** in relation to which the test is performed. Remember that you have a total of 20 characters available.
To enter characters or numbering, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.



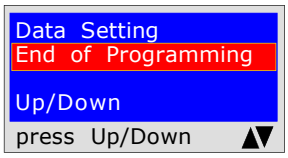
The program prompts to enter **the type of system,** if for civil use, heating, or industrial use; remember that you have a total of 20 characters available.
To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.



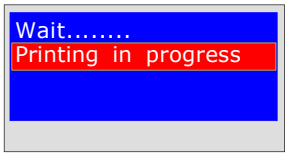
The program prompts to enter **the address of the building** in which the test is being performed, remembering that you have a total of 20 characters available.
To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.



The program prompts to enter **the post code, the city and the province** of the **building** in which the test is being performed, remembering that you have a total of 20 characters available.
To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.



The program prompts whether to finish entering the data. Press **ENTER** to finish and exit the program.
Press **Up/Down** to re-read the data entered.
To modify any data use the navigation keys, and correct.
Press Enter to start the recording phase.
Before pressing Enter remember to place the printer online and to turn it on.



The **MD40REM-H2CH** gives the order to print the TICKET; the first printout includes the entire initial phase, and consequently: will print each variation, indicating the measurement and time.
See the Ticket to the side.
The recording process lasts for the desired time, however no longer than 24 hours
To end recording, press **"Enter "**

BEINAT S.R.I.
PRESSURE GAUGE MOD.**MD40REM-N2CH**
Firmware version V 8.1
Serial number: **0102**
Calib. Date: 10/01/13

COMPANY
BIANCHI GIOVANNI
VIA ROMA 155
10000 MILAN
VAT no. 02434381200
info@lapolipo.it
Tel. 023111457562

Network Recording
(date)15.01.13 (time) 09:54

mbar 00000.0 11.22
mbar 00000.0 11.32
mbar 00000.0 11.44

Franco Riva
Independent Business
Via I Maggio 54
Verona

Operator:

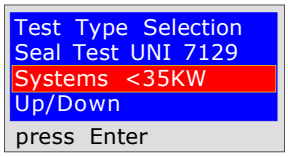
Signature:

Tests and Measurements according to the Regulations

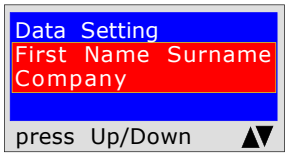
UNI 7129 **below 35kW**

The UNI7129/01 Below 35kW standard requires that the installer must verify the tightness of the gas system at a pressure of **at least 100 mbar**, (1000mmH_2O) for a **Stabilisation and Testing time of 15 minutes each.**
The **Stabilisation** test is performed. **15 minutes** of stabilization have elapsed, the reading is performed **Actual TEST**, for another 15 minutes.
No pressure loss must be detected between the initial pressure and the final pressure of the actual test. The test is positive if there is no pressure drop.
N.B. The two measurements, stabilisation and test, are performed automatically.

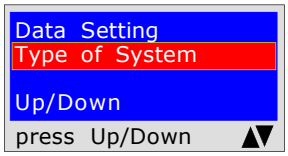
ATTENTION !!
Before starting the leak test it is advisable to **connect the temperature probe**.
The probe must be kept away from heat and/or cooling sources.
Warning. The temperature does not affect the leak test but is for information purposes and for comparison with the pressure.
For each degree Celsius of temperature the pressure varies by approximately 1 mbar.
Actions: Turn on the instrument, select the pressure in **mbar** with the SELECT button, press the TEST button and follow the operations reported below.



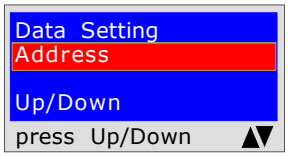
The instrument prompts whether to perform this test, press **ENTER**



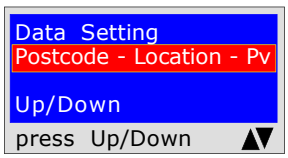
The program prompts to enter **the location of the system** where the test is being performed. Remember that you have a total of 20 characters available. To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.



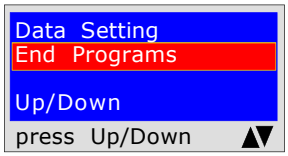
The program prompts to enter **the type of system,** whether for civil use, heating, industrial use, or anything else, remembering that you have a total of 20 characters available.
To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.



The program prompts to enter **the address of the building** in which the test is being performed, remembering that you have a total of 20 characters available. To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.

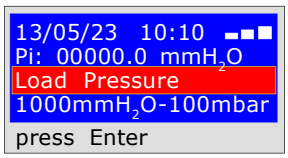


The program prompts to enter **the post code, the city and the province** of the **building** in which the test is being performed, remembering that you have a total of 20 characters available.
To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.

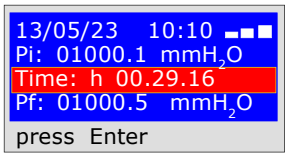


The program prompts whether to finish entering the data.
Press **Up/Down** to re-read the data entered.
To modify any data use the navigation keys, and correct.

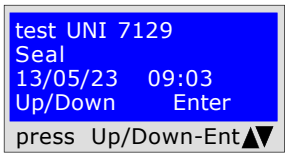
Press **ENTER** to finish and exit the program.



The program prompts to enter **the pressure.** To achieve this, proceed as follows:
1) Connect the extended pipe connected to the positive inlet, which is located at the top of the instrument.
2) The scale is automatically set to mmH_2O.
3) Connect the other end of the pipe to the pressure source to be measured.
4) Pressurised the pipe with a **minimum of 1000 mmH_2O (100mbar)** .
Press **ENTER.**

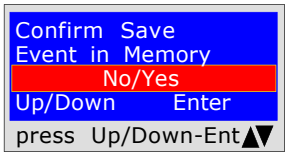


Now the instrument automatically starts the leak check. On the display you will notice that the **Time** starts the countdown; the test lasts 30 minutes.

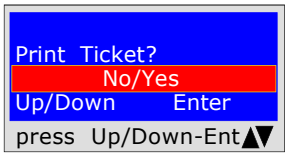


After 30 minutes it is possible to read on the**MD40REM-H2CH**all the data detected by the test

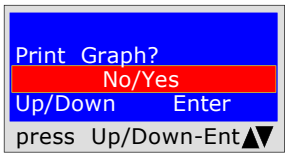
To navigate, press the **Up/Down** buttons, to exit press **ENTER**



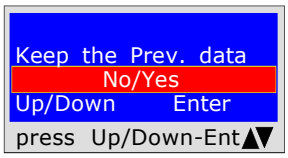
The instrument prompts whether to store the detected data.
To do this, select **Yes/No** by pressing **Up/Down.** Press **ENTER** to confirm. If saving is not confirmed within 30 seconds, the **MD40REM-H2CH** stores the event regardless



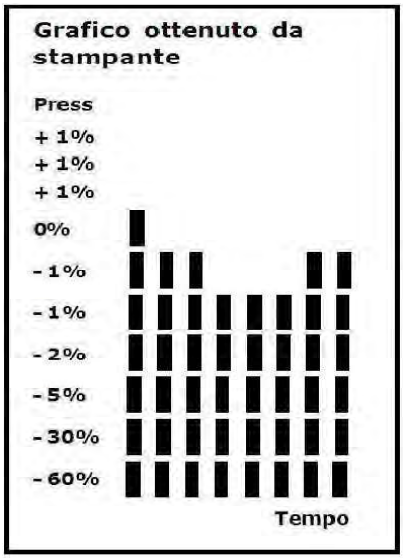
The instrument prompts whether to print the ticket proving the test.
Select **Yes/No** pressing the **Up/Down** buttons.
Select **"Yes** ", turn on the printer and place it in line with the pressure gauge transmitter; Press **ENTER**.



The instrument prompts whether to print the test graph.
To select **Yes / No** press the **Up/Down buttons.** Press **ENTER**.
Warning!
If the test is stored, the graph can be printed at high resolution from the PC



When performing several tests **" TEST "** or to repeat a test.
The instrument keeps in memory the data of the building where the test is being performed. The latter are only lost if the instrument is turned off.
To reinsert them, select **Yes/No,** with the **Up/Down** buttons and press **ENTER.**



BEINAT S.R.L.
PRESSURE GAUGE MOD.**MD40REM-H2CH**
Firmware version V 7.0
Serial number: **0102**
Calib. Date: 10/01/23

COMPANY
BIANCHI GIOVANNI
VIA ROMA 155
10000 MILAN
VAT no. 02434381200
info@lapolipo.it
Tel. 023111457562

Seal Test UNI 7129
< at 35kW
(date)15.01.23(time)09:54

Unit of measurement: mmH2O
STABILISATION

Pi:	1000.1
Sta. Time:	h 00.15
Pf:	0980.0
Difference:	0020.1
Temperature	25°C

TEST

Pi:	1000.1
Test Time:	h 00.15
Pf:	0990.0
Difference:	0010.1
Temperature	25°C

[]Test Passed
[]Test NOT Passed

Franco Riva
Independent Business
Via I Maggio 54
Verona

Operator:

Signature:

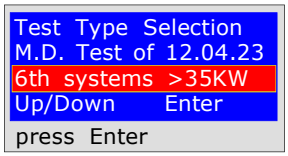
Tests and Measurements according to the Regulations

Ministerial Decree of 12/04/1996 6ª type > 35kW for external pipes

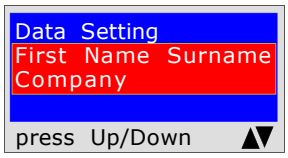
6ª type: pipelines for maximum operating pressures above 0.04 up to 0.5 bar;

Measurement of the **tightness** of gas systems as required by D.M. 12/04/96**, above 35kW of 6ª Type for external pipes.**
Italian Ministerial Decree 12/04/96 requires that the installer must check the seal of the gas system at a pressure of at least **1 bar**. The test is positive if there is no pressure drop.
The leak test for a gas system **6th Type** must be performed with a pressure of **at least 1 bar**, with a **pressure stabilisation time of 15 minutes, and the actual test of 4 hours.**
N.B. The two measurements, stabilisation and test, are performed automatically.
ATTENTION !!
Before starting the leak test it is advisable to **connect the temperature probe**.
The probe must be kept away from heat and/or cooling sources.
Warning. The temperature does not affect the leak test but is for information purposes and for comparison with the pressure.
For each degree Celsius of temperature the pressure varies by approximately 1 mbar.

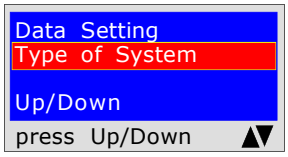
Actions: Turn on the instrument, select the pressure in **mbar** with the SELECT button, press the TEST button and follow the operations reported below.



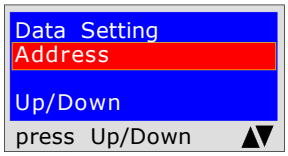
The instrument prompts whether to perform this test, press **ENTER**



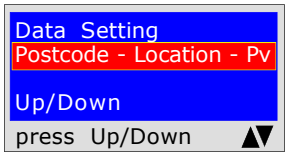
The program prompts to enter **the location of the system** where the test is being performed. Remember that you have a total of 20 characters available. To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.



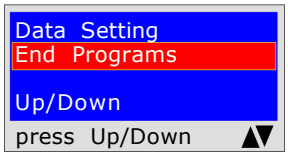
The program prompts to enter **the type of system,** whether for civil use, heating, industrial use, or anything else, remembering that you have a total of 20 characters available.
To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.



The program prompts to enter **the address of the building** in which the test is being performed, remembering that you have a total of 20 characters available. To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.

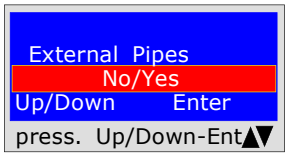


The program prompts to enter **the post code, the city and the province** of the **building** in which the test is being performed, remembering that you have a total of 20 characters available.
To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.



The program prompts whether to finish entering the data.
Press **Up/Down** to re-read the data entered.
To modify any data use the navigation keys, and correct.

Press **ENTER** to finish and exit the program.



The program asks if the gas pipe is underground or external To respond:
Press **Up/Down** to select "YES" or "NO"
Once the desired data has been selected, Press **ENTER**

13/05/23 10:10
Pi: 000000.1 mbar
Load Pressure
1000 mbar - 1 bar
press Enter

The program prompts to enter **the pressure.** To achieve this, proceed as follows:
1) Connect the extended pipe connected to the positive inlet, which is located at the top of the instrument.
2) The scale is automatically selected at mbar.
3) Connect the other end of the pipe to the pressure source to be measured.
4) Pressurise the pipe with a **minimum of 1000 mbar, (1 bar)**
Press **ENTER.**

13/05/23 10:10
Pi: 000000.1 mbar
Time: h 00.14.46
Pf. 00000.1 mbar
press Enter

STABILISATION TEST
Now the instrument automatically starts the stabilisation control on the display. You will notice that the **Time** starts the countdown. The test lasts 15 minutes.

13/05/23 10:10
Pi: 000000.1 mbar
Time: h 03.59.59
Pf. 00000.1 mbar
press Enter

LEAK TEST; pressure 1000mbar
Now the instrument automatically starts checking the actual tightness on the display. You will notice that the **Time** starts the countdown. **The test lasts 4 hours**

MD test 12/04/1996
Seal
13/05/23 09:03
Up/Down Enter
press Up/Down-Ent▲▼

At this point the **MD40REM-H2CH** enables reading of all the data detected by the test
To navigate, press the **Up/Down** buttons, to exit press **ENTER**

Confirm Save
Event in Memory
No/Yes
Up/Down Enter
press Up/Down-Ent▲▼

The tool prompts whether to store the detected data.
To do this, select **Yes/No** by pressing **Up/Down.**
Press **ENTER** to confirm.
If saving is not confirmed within 30 seconds, the MD40REM-H2CH stores the event regardless.

Print Ticket?
No/Yes
Up/Down Enter
press Up/Down-Ent▲▼

The instrument prompts whether to print the ticket proving the test.
Select **Yes/No** pressing the **Up/Down** buttons.
Select **"Yes** ", turn on the printer and place it in line with the pressure gauge transmitter; Press **ENTER**.

Print Graph?
No/Yes
Up/Down Enter
press Up/Down-Ent▲▼

To print the test graph.
To select **Yes No** press the **Up/Down buttons.** Press **ENTER**.
Warning!
If the test is stored, the graph can also be printed from a PC at high resolution

Keep the Prev. data
No/Yes
Up/Down Enter
press Up/Down-Ent▲▼

When performing several tests **" TEST "** or to repeat a test. The instrument keeps in memory the data of the building where the test is being performed. The latter are only lost if the instrument is turned off.

BEINAT S.R.I.
PRESSURE GAUGE MOD.**MD40REM-H2CH**
Firmware version V 8.1
Serial number: **0102**
Calib. Date: 10/01/23

COMPANY
BIANCHI GIOVANNI
VIA ROMA 155
10000 MILAN
VAT no. 02434381200
info@lapolipo.it
Tel. 023111457562

Test pursuant to M.D. 12/04/1996
6° type > at 35kW
(date)15.01.23(time)09:54

Unit of measurement: mmH2O
STABILISATION

Pi:	1000.1
Sta. Time:	h 00.15
Pf:	0980.0
Difference:	0020.1
Temperature	25°C

TEST

Pi:	1000.1
Test Time:	h 00.15
Pf:	0990.0
Difference:	0010.1
Temperature	25°C

[]Test Passed
[]Test NOT Passed

Franco Riva
Independent Business
Via I Maggio 54
Verona

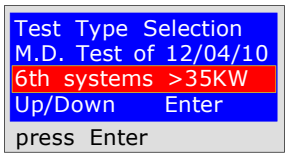
Operator:

Signature:

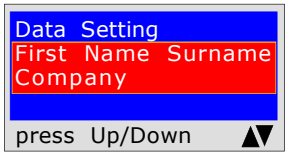
Tests and Measurements according to the Regulations	**6ª type:** pipelines for maximum operating pressures above 0.04 up to 0.5 bar;
Ministerial Decree of 12/04/1996 6ª type > 35kW for underground pipes	

Measurement of the **tightness** of gas systems as required by D.M. 12/04/96**, above 35kW of 6ª Type for underground pipes.**
Italian Ministerial Decree 12/04/96 requires that the installer must check the seal of the gas system at a pressure of at least **1 bar**. The test is positive if there is no pressure drop.
The leak test for a gas system **6th Type** must be performed with a pressure of **at least 1 bar**, with a **pressure stabilisation time of 15 minutes, and the actual test of 24 hours.**
If some sections of pipe are not visible, the test must be performed before covering.
N.B. The two measurements, stabilisation and test, are performed automatically.
ATTENTION !!
Before starting the leak test it is advisable to **connect the temperature probe**.
The probe must be kept away from heat and/or cooling sources.
Warning. The temperature does not affect the leak test but is for information purposes and for comparison with the pressure.
For each degree Celsius of temperature the pressure varies by approximately 1 mbar.

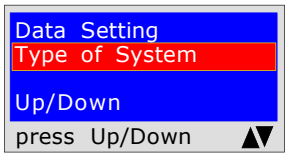
Actions: Turn on the instrument, select the pressure in **mbar** with the SELECT button, press the TEST button and follow the operations reported below.



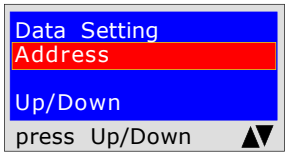
The instrument prompts whether to perform this test, press **ENTER**



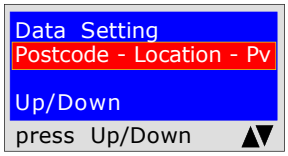
The program prompts to enter **the location of the system** where the test is being performed. Remember that you have a total of 20 characters available. To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.



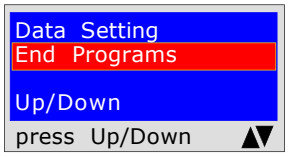
The program prompts to enter **the type of system,** whether for civil use, heating, industrial use, or anything else, remembering that you have a total of 20 characters available.
To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.



The program prompts to enter **the address of the building** in which the test is being performed, remembering that you have a total of 20 characters available. To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.

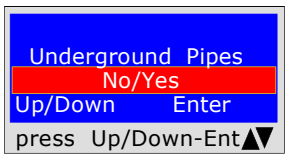


The program prompts to enter **the post code, the city and the province** of the **building** in which the test is being performed, remembering that you have a total of 20 characters available.
To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.



The program prompts whether to finish entering the data.
Press **Up/Down** to re-read the data entered.
To modify any data use the navigation keys, and correct.

Press **ENTER** to finish and exit the program.



The program asks if the gas pipe is underground or external To respond:
Press **Up/Down** to select "YES" or "NO"
Once the desired data has been selected, Press **ENTER**

Next **Tests and Measurements according to the Regulations**

Ministerial Decree of 12/04/1996 6ª type > 35kW
for underground pipes

13/05/23 10:10
Pi: 000000.1 mbar
Load Pressure
1000 mbar - 1 bar
press Enter

The program prompts to enter **the pressure.** To achieve this, proceed as follows:
1) Connect the extended pipe connected to the positive inlet, which is located at the top of the instrument.
2) The scale is automatically selected at mbar.
3) Connect the other end of the pipe to the pressure source to be measured.
4) Pressurise the pipe with a **minimum of 1000 mbar, (1 bar)**
Press **ENTER.**

13/05/23 10:10
Pi: 000000.1 mbar
Time: h 00.14.46
Pf. 00000.1 mbar
press Enter

STABILISATION TEST
Now the instrument automatically starts the stabilisation control. On the display you will notice that the **Time** starts the countdown;
The test lasts 15 minutes.

13/05/23 10:10
Pi: 000000.1 mbar
Time: h 03.59.59
Pf. 00000.1 mbar
press Enter

LEAK TEST; pressure 1000mbar
Now the instrument automatically starts checking the actual tightness on the display. You will notice that the **Time** starts the countdown. **The test lasts 24 hours**
When performing this test, remember to connect the instruments to the electrical mains

MD test 12/04/1996
Seal
13/05/23 09:03
Up/Down Enter
press. Up/Down-Ent▲▼

At this point the **MD40REM-H2CH** enables reading of all the data detected by the test
To navigate, press the **Up/Down** buttons, to exit press **ENTER**

Confirm Save
Event in Memory
No/Yes
Up/Down Enter
press. Up/Down-Ent▲▼

The tool prompts whether to store the detected data.
To do this, select **Yes/No** by pressing **Up/Down.**
Press **ENTER** to confirm.
If saving is not confirmed within 30 seconds, the MD40REM-H2CH stores the event regardless.

Print Ticket?
No/Yes
Up/Down Enter
press. Up/Down-Ent▲▼

The instrument prompts whether to print the ticket proving the test.
Select **Yes/No** pressing the **Up/Down** buttons.
Select **"Yes** ", turn on the printer and place it in line with the pressure gauge transmitter;
Press **ENTER**.

Print Graph?
No/Yes
Up/Down Enter
press Up/Down-Ent▲▼

To print the test graph.
To select **Yes No** press the **Up/Down buttons.** Press **ENTER**.
Warning!
If the test is stored, the graph can also be printed from a PC at high resolution

Keep the Prev. data
No/Yes
Up/Down Enter
press Up/Down-Ent▲▼

When performing several tests **" TEST "** or to repeat a test. The instrument keeps in memory the data of the building where the test is being performed. The latter are only lost if the instrument is turned off.

BEINAT S.R.I.
PRESSURE GAUGE MOD. **MD40REM-H2CH**
Firmware version V 8.1
Serial number: **0102**
Calib. Date: 13/05/23

COMPANY
BIANCHI GIOVANNI
VIA ROMA 155
10000 MILAN
VAT no. 02434381200
info@lapolipo.it
Tel. 023111457562

Test pursuant to M.D. 12/04/1996
6° type > at 35kW
(date)10.10.23 (time) 09:54

Unit of measurement: mmH2O
STABILISATION

Pi:	1000.1
Sta. Time:	h 00.15
Pf:	0980.0
Difference:	0020.1
Temperature	25°C

TEST

Pi:	1000.1
Test Time:	h 00.15
Pf:	0990.0
Difference:	0010.1
Temperature	25°C

[]Test Passed
[]Test NOT Passed

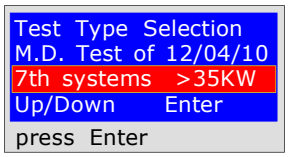
Franco Riva
Independent Business
Via I Maggio 54
Verona

Operator:

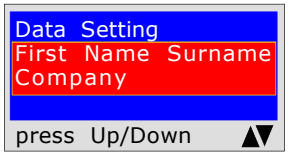
Signature:

Tests and Measurements according to the Regulations	**7ª type;** pipelines for maximum operating pressures up to 0.04 bar;
Ministerial Decree of 12/04/1996 7ª type > 35kW for external pipes	

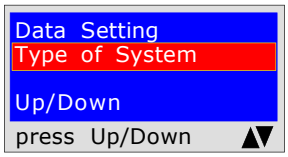
Measurement of the **tightness** of gas systems as required by D.M. 12/04/96**, above 35kW of 7ª Type for external piping.**
Italian Ministerial Decree 12/04/96 requires that the installer must check the seal of the gas system at a pressure of at least **0.1 bar**. The test is positive if there is no pressure drop.
The leak test for a **7ª Type** gas system must be performed with a pressure of **at least 0.1 bar**, with a pressure stabilization time **of 15 minutes, and the actual test of 30 minutes.**
N.B. The two measurements, stabilisation and test, are performed automatically.
ATTENTION !!
Before starting the leak test it is advisable to **connect the temperature probe**.
The probe must be kept away from heat and/or cooling sources.
Warning. The temperature does not affect the leak test but is for information purposes and for comparison with the pressure.
For each degree Celsius of temperature the pressure varies by approximately 1 mbar.
Actions: Turn on the instrument, select the pressure in **mbar** with the SELECT button, press the TEST button and follow the operations reported below.



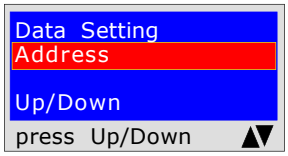
The instrument prompts whether to perform this test, press **ENTER**



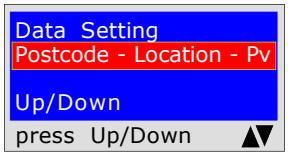
The program prompts to enter **the location of the system** where the test is being performed. Remember that you have a total of 20 characters available. To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.



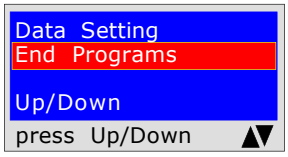
The program prompts to enter **the type of system,** whether for civil use, heating, industrial use, or anything else, remembering that you have a total of 20 characters available.
To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.



The program prompts to enter **the address of the building** in which the test is being performed, remembering that you have a total of 20 characters available. To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.

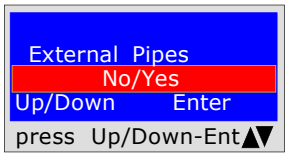


The program prompts to enter **the post code, the city and the province** of the **building** in which the test is being performed, remembering that you have a total of 20 characters available.
To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.



The program prompts whether to finish entering the data.
Press **Up/Down** to re-read the data entered.
To modify any data use the navigation keys, and correct.

Press **ENTER** to finish and exit the program.



The program asks if the gas pipe is underground or external To respond:
Press **Up/Down** to select "YES" or "NO"
Once the desired data has been selected, Press **ENTER**

13/05/23 10:10
Pi: 00000.1 mbar
Load Pressure
1000 mbar - 1 bar
press Enter

The program prompts to enter **the pressure.** To achieve this, proceed as follows:
1) Connect the extended pipe connected to the positive inlet, which is located at the top of the instrument.
2) The scale is automatically selected at mbar.
3) Connect the other end of the pipe to the pressure source to be measured.
4) Pressurise the pipe with a **minimum of 1000 mbar, (1 bar)**
Press **ENTER.**

13/05/23 10:10
Pi: 00000.1 mbar
Time: h 00.14.46
Pf. 00000.1 mbar
press Enter

STABILISATION TEST
Now the instrument automatically starts the stabilisation control. On the display you will notice that the **Time** starts the countdown;
The test lasts 15 minutes.

13/05/23 10:10
Pi: 00000.1 mbar
Time: h 00.29.59
Pf. 00000.1 mbar
press Enter

LEAK TEST; pressure 100mbar
Now the instrument automatically starts checking the actual tightness on the display. You will notice that the **Time** starts the countdown. **The test lasts 30 minutes.**
When performing this test, remember to connect the instruments to the electrical mains

MD test 12/04/1996
Seal
13/05/23 09:03
Up/Down Enter
press. Up/Down-Ent▲▼

At this point the**MD40REM-H2CH** enables reading of all the data detected by the test
To navigate, press the **Up/Down** buttons, to exit press **ENTER**

Confirm Save
Event in Memory
No/Yes
Up/Down Enter
press Up/Down-Ent▲▼

The tool prompts whether to store the detected data.
To do this, select **Yes/No** by pressing **Up/Down.**
Press **ENTER** to confirm.
If saving is not confirmed within 30 seconds, the **MD40REM-H2CH** stores the event regardless.

Print Ticket?
No/Yes
Up/Down Enter
press Up/Down-Ent▲▼

The instrument prompts whether to print the ticket proving the test.
Select **Yes/No** pressing the **Up/Down** buttons.
Select **"Yes** ", turn on the printer and place it in line with the pressure gauge transmitter;
Press **ENTER**.

Print Graph?
No/Yes
Up/Down Enter
press Up/Down-Ent▲▼

To print the test graph.
To select **Yes No** press the **Up/Down buttons.** Press **ENTER**.
Warning!
If the test is stored, the graph can also be printed from a PC at high resolution

Keep the Prev. data
No/Yes
Up/Down Enter
press Up/Down-Ent▲▼

When performing several tests **" TEST "** or to repeat a test. The instrument keeps in memory the data of the building where the test is being performed. The latter are only lost if the instrument is turned off.

BEINAT S.R.L.
PRESSURE GAUGE MOD.**MD40REM-H2CH**
Firmware version V 7.0
Serial number: **0102**
Calib. Date: 10/01/23

COMPANY
BIANCHI GIOVANNI
VIA ROMA 155
10000 MILAN
VAT no. 02434381200
info@lapolipo.it
Tel. 023111457562

Test pursuant to M.D. 15.01.13
7° type > at 35kW
(date)10.10.23 (time) 09:54
External Pipes
Unit of measurement: mbar
STABILISATION

Pi:	1000.1
Sta. Time:	h 00.15
Pf:	0980.0
Difference:	0020.1
Temperature	25°C

TEST

Pi:	1000.1
Test Time:	h 00.15
Pf:	0990.0
Difference:	0010.1
Temperature	25°C

[]Test Passed
[]Test NOT Passed

Franco Riva
Independent Business
Via I Maggio 54
Verona

Operator:

Signature:

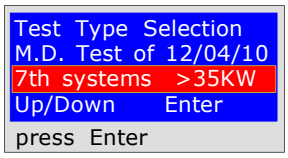
Tests and Measurements according to the Regulations

Ministerial Decree of 12/04/1996 7ª type > 35kW for underground pipes

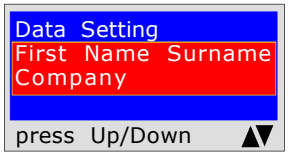
7ª type; pipelines for maximum operating pressures up to 0.04 bar;

Measurement of the **tightness** of gas systems as required by UNI7129/01**, above 35kW of 7ª Type for underground pipes.**
Italian Ministerial Decree 12/04/96 requires that the installer must check the seal of the gas system at a pressure of at least **1 bar**. The test is positive if there is no pressure drop.
The leak test for a **7ª Type** gas system must be performed with a pressure of **at least 1 bar**, with a pressure stabilization time **of 15 minutes, and the actual test of 30 minutes.** If some sections of pipe are not visible, the test must be performed before covering.
N.B. The two measurements, stabilisation and test, are performed automatically.
ATTENTION !!
Before starting the leak test it is advisable to **connect the temperature probe**.
The probe must be kept away from heat and/or cooling sources.
Warning. The temperature does not affect the leak test but is for information purposes and for comparison with the pressure.
For each degree Celsius of temperature the pressure varies by approximately 1 mbar.

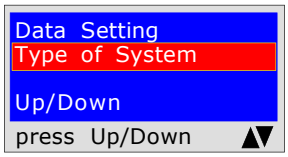
Actions: Turn on the instrument, select the pressure in **mbar** with the SELECT button, press the TEST button and follow the operations reported below.



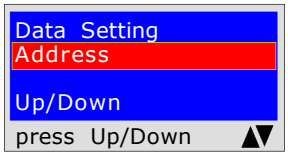
The instrument prompts whether to perform this test, press **ENTER**



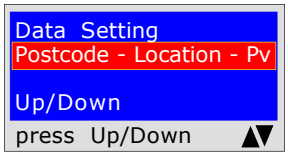
The program prompts to enter **the location of the system** where the test is being performed. Remember that you have a total of 20 characters available. To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.



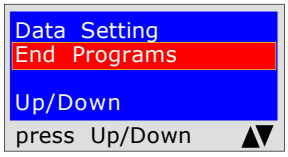
The program prompts to enter **the type of system,** whether for civil use, heating, industrial use, or anything else, remembering that you have a total of 20 characters available.
To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.



The program prompts to enter **the address of the building** in which the test is being performed, remembering that you have a total of 20 characters available. To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.

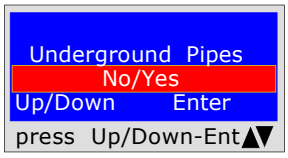


The program prompts to enter **the post code, the city and the province** of the **building** in which the test is being performed, remembering that you have a total of 20 characters available.
To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.



The program prompts whether to finish entering the data.
Press **Up/Down** to re-read the data entered.
To modify any data use the navigation keys, and correct.

Press **ENTER** to finish and exit the program.



The program asks if the gas pipe is underground or external To respond:
Press **Up/Down** to select "YES" or "NO"
Once the desired data has been selected, Press **ENTER**

Next **Tests and Measurements according to the Regulations**

Ministerial Decree of 12/04/1996 7ª type > 35kW
for underground pipes

```
13/05/23   10:10
Pi: 00000.1 mbar
Load Pressure
1000 mbar - 1 bar
press Enter
```

The program prompts to enter **the pressure.** To achieve this, proceed as follows:
1) Connect the extended pipe connected to the positive inlet, which is located at the top of the instrument.
2) The scale is automatically selected at mbar.
3) Connect the other end of the pipe to the pressure source to be measured.
4) Pressurise the pipe with a **minimum of 1000 mbar, (1 bar)**
Press **ENTER.**

```
13/05/23   10:10
Pi: 00000.1 mbar
Time: h 00.14.46
Pf. 00000.1 mbar
press Enter
```

STABILISATION TEST
Now the instrument automatically starts the stabilisation control. On the display you will notice that the **Time** starts the countdown;
The test lasts 15 minutes.

```
13/05/23   10:10
Pi: 00000.1 mbar
Time: h 00.29.59
Pf. 00000.1 mbar
press Enter
```

LEAK TEST; pressure 1000mbar
Now the instrument automatically starts checking the actual tightness on the display. You will notice that the **Time** starts the countdown. **The test lasts 30 minutes.**
When performing this test, remember to connect the instruments to the electrical mains

```
MD test 12/04/1996
Seal
13/05/23   09:03
Up/Down      Enter
press Up/Down-Ent▲▼
```

At this point the**MD40REM-H2CH** enables reading of all the data detected by the test
To navigate, press the **Up/Down** buttons, to exit press **ENTER**

```
Confirm Save
Event in Memory
      No/Yes
Up/Down      Enter
press Up/Down-Ent▲▼
```

The tool prompts whether to store the detected data.
To do this, select **Yes/No** by pressing **Up/Down.**
Press **ENTER** to confirm.
If saving is not confirmed within 30 seconds, the **MD40REM-H2CH** stores the event regardless.

```
Print Ticket?
      No/Yes
Up/Down      Enter
press Up/Down-Ent▲▼
```

The instrument prompts whether to print the ticket proving the test.
Select **Yes/No** pressing the **Up/Down** buttons.
Select **"Yes** ", turn on the printer and place it in line with the pressure gauge transmitter;
Press **ENTER**.

```
Print Graph?
      No/Yes
Up/Down      Enter
press Up/Down-Ent▲▼
```

To print the test graph.
To select **Yes No** press the **Up/Down buttons.** Press **ENTER**.
Warning!
If the test is stored, the graph can also be printed from a PC at high resolution

```
Keep the Prev. data
      No/Yes
Up/Down      Enter
press Up/Down-Ent▲▼
```

When performing several tests **" TEST "** or to repeat a test. The instrument keeps in memory the data of the building where the test is being performed. The latter are only lost if the instrument is turned off.

BEINAT S.R.L.
PRESSURE GAUGE MOD.**MD40REM-H2CH**
Firmware version V 8.1
Serial number: **0102**
Calib. Date: 10/01/23

COMPANY
BIANCHI GIOVANNI
VIA ROMA 155
10000 MILAN
VAT no. 02434381200
info@lapolipo.it
Tel. 023111457562

Test pursuant to M.D. 15.01.13
7° type > at 35kW
(date)10.10.23 (time) 09:54
Underground Pipes
Unit of measurement: mbar
STABILISATION

Pi:	1000.1
Sta. Time:	h 00.15
Pf:	0980.0
Difference:	0020.1
Temperature	25°C

TEST

Pi:	1000.1
Test Time:	h 00.15
Pf:	0990.0
Difference:	0010.1
Temperature	25°C

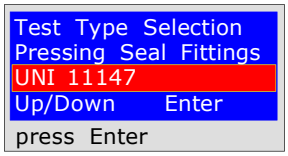
[]Test Passed
[]Test NOT Passed

Franco Riva
Independent Business
Via I Maggio 54
Verona

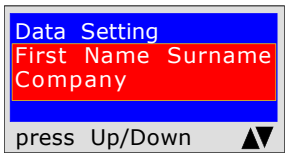
Operator:

Signature:

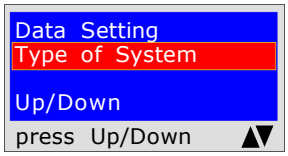
The UNI 11147 **Pressing systems** standard requires that the installer must check the tightness of the gas system at a pressure of **at least 5000 mbar,r**, **(5 bar)** for a **Stabilization and Testing time of 15 minutes** each.
The **Stabilisation** test is performed. **15 minutes** of stabilization have elapsed, the reading is performed **Actual TEST**, for another 15 minutes.
No pressure loss must be detected between the initial pressure and the final pressure of the actual test. The test is positive if there is no pressure drop.
N.B. The two measurements, stabilisation and test, are performed automatically.
ATTENTION !!
Before starting the leak test it is advisable to **connect the temperature probe**.
The probe must be kept away from heat and/or cooling sources.
Warning. The temperature does not affect the leak test but is for information purposes and for comparison with the pressure.
For each degree Celsius of temperature the pressure varies by approximately 1 mbar.
Actions: Turn on the instrument, select the pressure in **mbar** with the SELECT button, press the TEST button and follow the operations reported below.



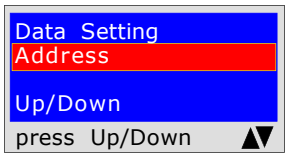
The instrument prompts whether to perform this test, press **ENTER**



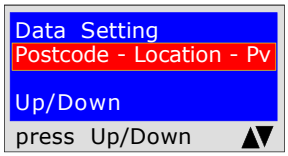
The program prompts to enter **the location of the system** where the test is being performed. Remember that you have a total of 20 characters available. To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.



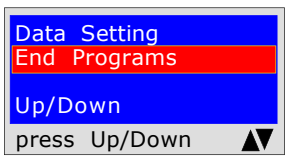
The program prompts to enter **the type of system,** whether for civil use, heating, industrial use, or anything else, remembering that you have a total of 20 characters available.
To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.



The program prompts to enter **the address of the building** in which the test is being performed, remembering that you have a total of 20 characters available. To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.

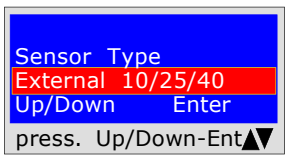


The program prompts to enter **the post code, the city and the province** of the **building** in which the test is being performed, remembering that you have a total of 20 characters available.
To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.

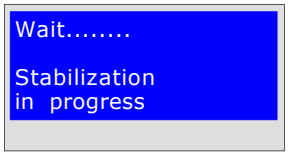


The program prompts whether to finish entering the data.
Press **Up/Down** to re-read the data entered.
To modify any data use the navigation keys, and correct.

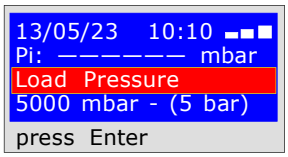
Press **ENTER** to finish and exit the program.



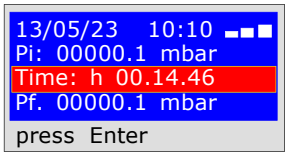
The program asks which type of sensor should be used: 10/25/40 bar
Choose by pressing-/Down and Press **ENTER** to confirm
Attention! this test cannot be performed with an internal sensor.



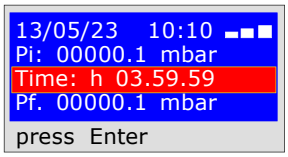
Performs external sensor stabilization



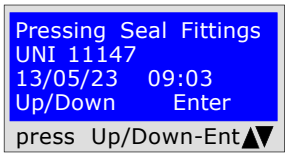
The program prompts to enter **the pressure.** To achieve this, proceed as follows:
1) Connect the extended pipe connected to the positive inlet, which is located at the top of the instrument.
2) The scale is automatically selected at mbar.
3) Connect the other end of the pipe to the pressure source to be measured.
4) Pressurise the pipe with a **minimum of 5000 mbar, (5 bar)**
Press **ENTER.**



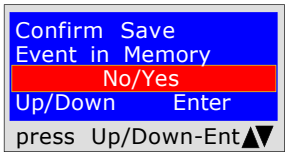
STABILISATION TEST
Now the instrument automatically starts the stabilisation control. On the display you will notice that the **Time** starts the countdown;
The test lasts 15 minutes.



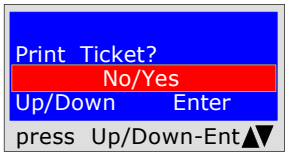
LEAK TEST; pressure 5000mbar
Now the instrument automatically starts checking the actual tightness on the display. You will notice that the **Time** starts the countdown;
The test lasts 15 minutes
When performing this test, remember to connect the instruments to the electrical mains



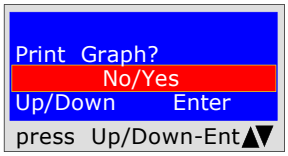
At this point the **MD40REM-H2CH** enables reading of all the data detected by the test
To navigate, press the **Up/Down** buttons, to exit press **ENTER**



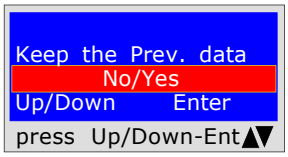
The tool prompts whether to store the detected data.
To do this, select **Yes/No** by pressing **Up/Down.**
Press **ENTER** to confirm.
If saving is not confirmed within 30 seconds, the**MD40REM-H2CH** stores the event regardless.



The instrument prompts whether to print the ticket proving the test.
Select **Yes/No** pressing the **Up/Down** buttons.
Select **"Yes** ", turn on the printer and place it in line with the pressure gauge transmitter;
Press **ENTER**.



To print the test graph.
To select **Yes No** press the **Up/Down buttons.** Press **ENTER**.
Warning!
If the test is stored, the graph can also be printed from a PC at high resolution



When performing several tests **" TEST "** or to repeat a test.
The instrument keeps in memory the data of the building where the test is being performed. The latter are only lost if the instrument is turned off.

BEINAT S.R.l.
PRESSURE GAUGE MOD.**MD40REM-H2CH**
Firmware version V 8.1
Serial number: **0102**
Calib. Date: 10/01/23

COMPANY
BIANCHI GIOVANNI
VIA ROMA 155
10000 MILAN
VAT no. 02434381200
info@lapolipo.it
Tel. 023111457562

Seal Test UNI 11147
Pressing Pipes
(date)15.01.23(time)09:54
Underground Pipes
Unit of measurement: mbar
STABILISATION

Pi:	1000.1
Sta. Time:	h 00.15
Pf:	0980.0
Difference:	0020.1
Temperature	25°C

TEST

Pi:	1000.1
Test Time:	h 00.15
Pf:	0990.0
Difference:	0010.1
Temperature	25°C

[]Test Passed
[]Test NOT Passed

Franco Riva
Independent Business
Via I Maggio 54
Verona

Operator:

Signature:

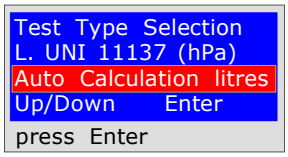
Tests and Measurements according to the Regulations

UNI 11137 Automatic volume test

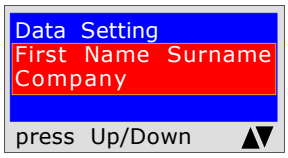
Verification of the sealing requirements, with an indirect method, as required by the standard **UNI 11137**
The test of **dispersions** in gas conduction systems consists of searching for any leaks by detecting the pressure drop over time.
Any pressure drop measured is related to the volume of the internal system and translated into the flow rate of dispersed gas.
Before performing the test with gas, open doors and/or windows to ensure air exchange and close all valves, making sure there are no leaks unrelated to the test.

Before performing this test, remember to have selected the size of the syringe based on the size of the system, moving from the main menu. **Otherwise measurement will be incorrect**
see table on p. 44

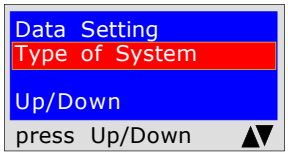
Actions: Turn on the instrument, select the pressure in **hPa** with the **SELECT** button, press the **TEST** and **Down** buttons and follow the operations reported below



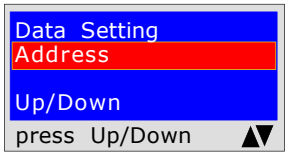
The instrument prompts whether to perform this test, press **ENTER**



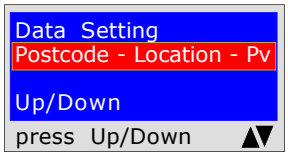
The program prompts to enter **the location of the system** where the test is being performed. Remember that you have a total of 20 characters available.
To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.



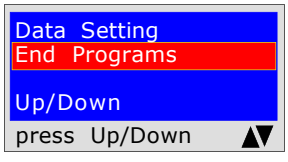
The program prompts to enter **the type of system,** whether for civil use, heating, industrial use, or anything else, remembering that you have a total of 20 characters available.
To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.



The program prompts to enter **the address of the building** in which the test is being performed, remembering that you have a total of 20 characters available.
To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.

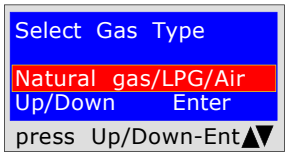


The program prompts to enter **the post code, the city and the province** of the **building** in which the test is being performed, remembering that you have a total of 20 characters available.
To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.



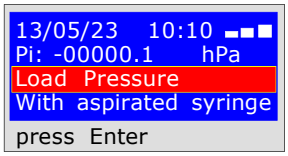
The program prompts whether to finish entering the data.
Press **Up/Down** to re-read the data entered.
To modify any data use the navigation keys, and correct.

Press **ENTER** to finish and exit the program.

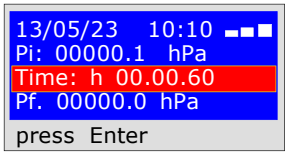


The program asks what type of gas the test should be used with: Natural Gas and/or LPG Gas, or Air.
To select the type of gas press the **Up/Down** keys and once the gas has been selected press **ENTER**.

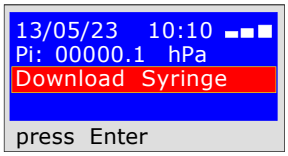
UNI 11137 Automatic volume test



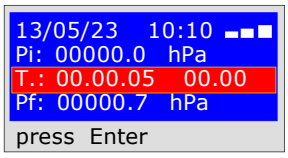
The program prompts to enter **the pressure**, . To do this, proceed as follows:
1) Connect the extendible pipe, connected to the appropriate inlet, located in the upper part of the instrument.
2) Connect the syringe and be sure to: **select the correct size** (see page 44) from the **Menu** program and to position it **with the plunger open**.
3) Connect the other end of the pipe to the pressure source to be measured.
4) Pressurise the pipe with mains gas **which must not be higher** than:
approximately 22 hPa for natural gas (methane),
approximately 30 hPa for LPG gas,
approximately 50 hPa for air
Press **ENTER.**



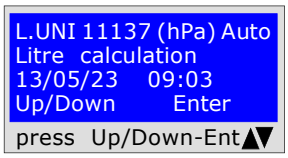
Now the instrument automatically starts the stabilization check which lasts 1 min.
It is possible to read the time running directly on the display.



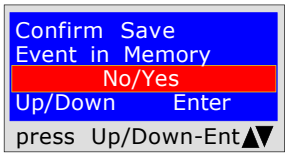
Now the instrument prompts to discharge the gas contained in the syringe.
Press **ENTER.**
N.B. It is advisable to drain the syringe slowly to prevent air from escaping between the plunger and cylinder.



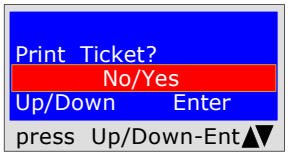
Now the instrument automatically calculates the quantity of litres that the system disperses. The tests last:
1 minute for Natural Gas
2.5 minutes for LPG Gas
3 minutes for Air



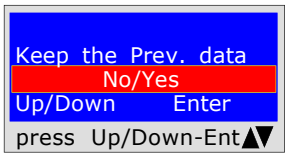
At this point **MD40REM-H2CH** enables reading of all the data detected by the test
To navigate, press the **Up/Down** buttons, to exit press **ENTER.**



The tool prompts whether to store the detected data.
To do this, select **Yes/No** by pressing **Up/Down.**
Press **ENTER** to confirm.
If saving is not confirmed
within 30 seconds, the**MD40REM-H2CH** saves the event regardless.



The instrument prompts whether to print the ticket proving the test.
Select **Yes/No** pressing the **Up/Down** buttons.
Select **"Yes** ", turn on the printer and place it in line with the pressure gauge transmitter;
Press **ENTER**.



When performing several tests **" TEST "** or to repeat a test.
The instrument keeps in memory the data of the building where the test is being performed. The latter are only lost if the instrument is turned off.

BEINAT S.R.I.
PRESSURE GAUGE MOD.**MD40REM-H2CH**
Firmware version V 7.0
Serial number: **0102**
Calib. Date: 10/01/23

COMPANY
BIANCHI GIOVANNI
VIA ROMA 155
10000 MILAN
VAT no. 02434381200
info@lapolipo.it
Tel. 023111457562

L.UNI 11147 (hPa) Auto Litre calculation
(date)15.01.23(time)09:54
Natural Gas.
Unit of measurement: hPa

Pi:	0200.1
Pf:	0200.0
Difference:	0000.1
Initial (L)	000.00
Final (L)	000.00
Litres Lost:	000.01
Pf:	0990.0
Litres Hour	000.01

[]Test Passed
[]Test NOT Passed

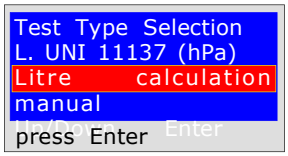
Franco Riva
Independent Business
Via I Maggio 54
Verona

Operator:

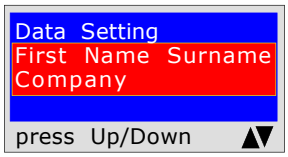
Tests and Measurements according to the Regulations

UNI 11137 Volume manual test

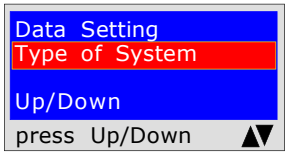
Measurement of dispersions in domestic gas systems suitable for all systems with the indirect method, as required by the Standard UNI 11137 of art. 6.4
The test procedure must be performed with the natural pressure of the gas in the network which must not be higher than **approximately 22 hPa** for natural gas, **approximately 30 hPa** for LPG gas, or as required by UNI 11137 by pumping air into the pipes at a maximum pressure of 50 **hPa.**
Before performing the test with gas, open doors and/or windows to ensure air exchange and close all valves, making sure there are no leaks unrelated to the test.
Actions: Turn on the instrument, select with the **SELECT** button the pressure in **hPa,** press the **TEST** button once and **2** times **Down** and follow the operations below



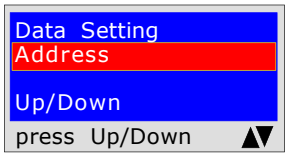
The instrument prompts whether to perform this test, press **ENTER**



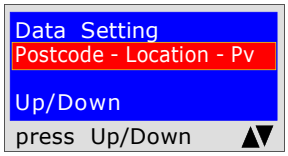
The program prompts to enter **the location of the system** where the test is being performed. Remember that you have a total of 20 characters available. To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.



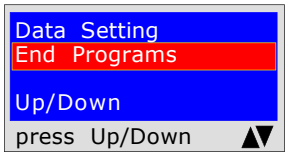
The program prompts to enter **the type of system,** whether for civil use, heating, industrial use, or anything else, remembering that you have a total of 20 characters available.
To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.



The program prompts to enter **the address of the building** in which the test is being performed, remembering that you have a total of 20 characters available. To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.

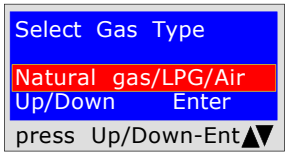


The program prompts to enter **the post code, the city and the province** of the **building** in which the test is being performed, remembering that you have a total of 20 characters available.
To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.

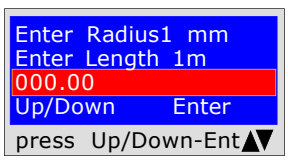


The program prompts whether to finish entering the data.
Press **Up/Down** to re-read the data entered.
To modify any data use the navigation keys, and correct.

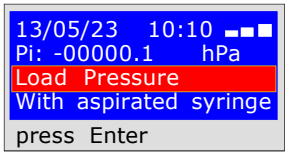
Press **ENTER** to finish and exit the program.



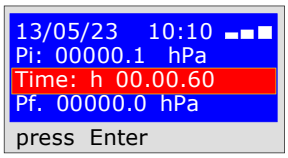
The program asks what type of gas the test should be used with:
Natural Gas and/or LPG Gas, or Air.
To select the type of gas press the **Up/Down** keys and once the gas has been selected press **ENTER**.



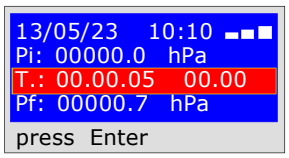
You are asked to enter the diameter and length measurements to calculate the volume.
Enter the **radius** (see table on page 44), press **Up/Down**, enter the **length** expressed in metres, press **Up/Down**
The MD40REM-H2CH asks for this operation **three times**. This is because different systems are made with different sizes. If the pipe is built with a single diameter, enter the dimension only once or twice. Press **ENTER.**



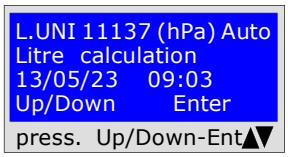
The program prompts to enter **the pressure**, . To do this, proceed as follows:
1) Connect the extendible pipe, connected to the appropriate inlet, located in the upper part of the instrument.
2) Connect the syringe and be sure to: **select the correct size** from the **Menu** program and to position it **with the plunger open** .
3) Connect the other end of the pipe to the pressure source to be measured.
4) Pressurise the pipe with mains gas **which must not be higher** than:
approximately 22 hPa for natural gas (methane),
approximately 30 hPa for LPG gas,
approximately 50 hPa for air
Press **ENTER.**



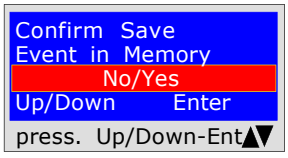
Now the instrument automatically starts the stabilization check which lasts 1 min.
It is possible to read the time running directly on the display.



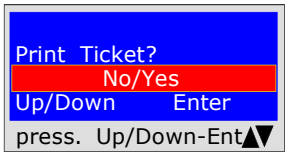
Now the instrument automatically calculates the quantity of litres that the system disperses. The test lasts 1 min.



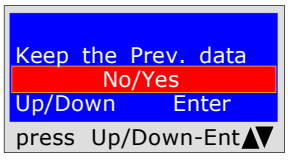
At this point the**MD40REM-H2CH** enables reading of all the data detected by the test
To navigate, press the **Up/Down** buttons, to exit press **ENTER.**



The tool prompts whether to store the detected data.
To do this, select **Yes/No** by pressing **Up/Down.**
Press **ENTER** to confirm.
If saving is not confirmed within 30 seconds, the **MD40REM-H2CH** stores the event regardless.



The instrument prompts whether to print the ticket proving the test.
Select **Yes/No** pressing the **Up/Down** buttons.
Select **"Yes "**, turn on the printer and place it in line with the pressure gauge transmitter;
Press **ENTER**.



When performing several tests **" TEST "** or to repeat a test.
The instrument keeps in memory the data of the building where the test is being performed. The latter are only lost if the instrument is turned off.

BEINAT S.R.l.
PRESSURE GAUGE MOD.**MD40REM-H2CH**
Firmware version V 8.1
Serial number: **0102**
Calib. Date: 10/01/23

COMPANY
BIANCHI GIOVANNI
VIA ROMA 155
10000 MILAN
VAT no. 02434381200
info@lapolipo.it
Tel. 023111457562

L.UNI 11147 (hPa) Manual Litre calculation
(date)15.01.23(time)09:54
Natural Gas.
R1 mm:030.00
L1 m: 10.00
R2 mm:000.00
L2 m: 00.00
R3 mm:000.00
L3 m: 00.00
Unit of measurement: hPa
Pi: 0200.1
Pf: 0200.0
Difference: 0000.1

Initial (L): 000.00
Final (L): 000.01
Litres Lost: 000.01
Litres/hour 000.01
[]Test Passed
[]Test NOT Passed

Franco Riva
Independent Business
Via I Maggio 54
Verona

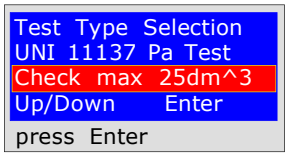
Operator:

Signature:

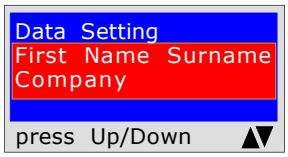
Tests and Measurements according to the Regulations

UNI 11137 **Check max 18 dm³**

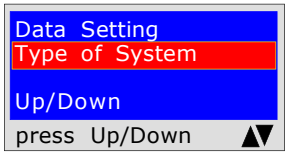
Measurement of dispersions in domestic gas systems suitable for all systems with the indirect method, as required by the Standard UNI 11137 of art. 6.2.2
The test procedure must be performed with the natural pressure of the gas in the network at a maximum pressure of: **approximately 22 hPa** for natural gas (methane), **approximately 30 hPa** for LPG gas.
Before performing the test with gas, open doors and/or windows to ensure air exchange and close all valves, making sure there are no leaks unrelated to the test.
Actions: Turn on the instrument, select with the **SELECT** button the pressure in **Pa,** press the **TEST** button once and **2** times **Down** and follow the operations below



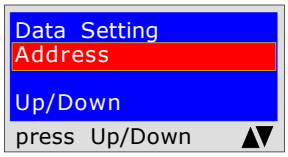
The instrument prompts whether to perform this test, press **ENTER**



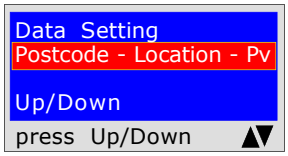
The program prompts to enter **the location of the system** where the test is being performed. Remember that you have a total of 20 characters available. To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.



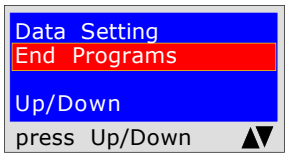
The program prompts to enter **the type of system,** whether for civil use, heating, industrial use, or anything else, remembering that you have a total of 20 characters available.
To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.



The program prompts to enter **the address of the building** in which the test is being performed, remembering that you have a total of 20 characters available. To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.

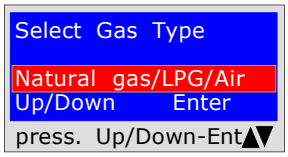


The program prompts to enter **the post code, the city and the province** of the **building** in which the test is being performed, remembering that you have a total of 20 characters available.
To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.

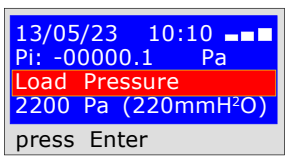


The program prompts whether to finish entering the data.
Press **Up/Down** to re-read the data entered.
To modify any data use the navigation keys, and correct.

Press **ENTER** to finish and exit the program.



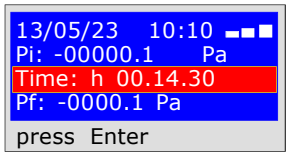
The program asks what type of gas the test should be used with: Natural Gas (methane) and/or Town Gas (LPG).
To select the type of gas press the **Up/Down** keys and once the gas has been selected press **ENTER**.



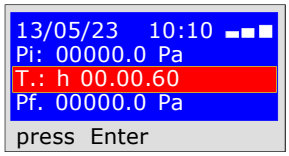
The program prompts to enter **the pressure**,. To do this, proceed as follows:
1) Connect the extendible pipe, connected to the appropriate inlet, located in the upper part of the instrument.
2) Connect the other end of the pipe to the pressure source to be measured.
3) WITH NATURAL GAS Pressurise the pipe with mains gas **2200 Pa approx.** Press **ENTER.**
4) WITH LPG, Pressurise the pipe with mains gas at **3000 Pa approx.** Press **ENTER.**

Next **Tests and Measurements according to the Regulations**

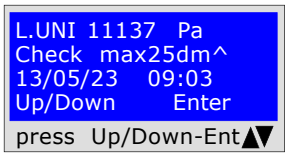
UNI 11137 **Check max 18 dm³**



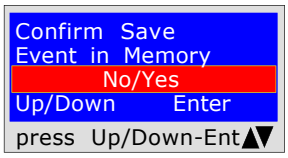
Now the instrument automatically starts the stabilization check which lasts 10 seconds.
The time elapsing can be read directly on the display.



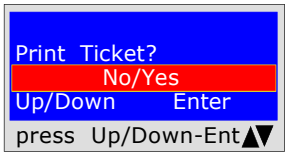
The tool now automatically starts the verification check. On the display you will notice that the **Time** will start the countdown;
The test lasts exactly:
1 minute for Natural Gas
2 minutes for LPG gas.
N.B. the leak must not exceed 100 Pa (1 millibar)



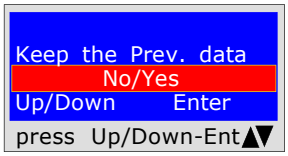
At this point the**MD40REM-H2CH** enables reading of all the data detected by the test
To navigate, press the **Up/Down** buttons, to exit press **ENTER.**



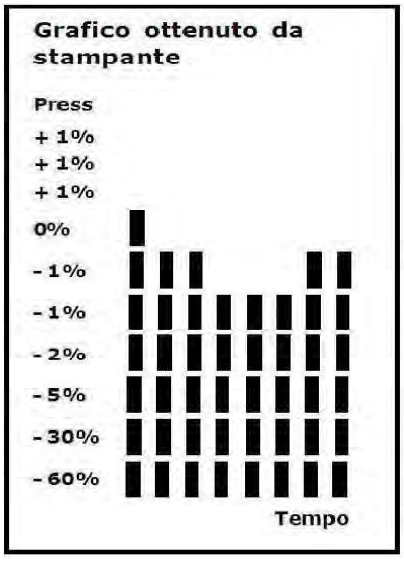
The tool prompts whether to store the detected data.
To do this, select **Yes/No** by pressing **Up/Down.** Press **ENTER** to confirm.
If saving is not confirmed within 30 seconds, the **MD40REM-H2CH** stores the event regardless.



The instrument prompts whether to print the ticket proving the test.
Select **Yes/No** pressing the **Up/Down** buttons.
Select **"Yes "**, turn on the printer and place it in line with the pressure gauge transmitter; press **ENTER**.



When performing several tests **" TEST "** or to repeat a test.
The instrument keeps in memory the data of the building where the test is being performed. The latter are only lost if the instrument is turned off.



BEINAT S.R.I.
PRESSURE GAUGE MOD. **MD40REM-H2CH**
Firmware version V 8.1
Serial number: **0102**
Calib. Date: 10/01/23

COMPANY
BIANCHI GIOVANNI
VIA ROMA 155
10000 MILAN
VAT no. 02434381200
info@lapolipo.it
Tel. 023111457562

UNI 11137 Test (Pa)
Check max 25 dm^3
(date)15.01.23(time)09:54

Natural Gas	
Pi: (Pa)	02200
Pf: (Pa)	02198
Diff:(Pa)	00002
dPmax(Pa:	00002

Test OK

Franco Riva
Independent Business
Via I Maggio 54
Verona

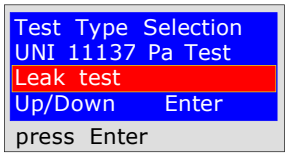
Operator:

Signature:

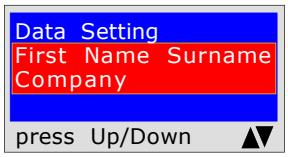
Tests and Measurements according to the Regulations

UNI 11137 **Seal Test**

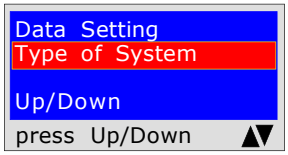
Leak check of the meter valve, as required by the Standard UNI 11137 art. 6.2.3
The test procedure is performed directly in the gas mains pipe to check the tightness of the meter valve.
Before performing the gas test, open doors and/or windows to ensure air exchange.
Actions: Turn on the instrument, select with the **SELECT** button the pressure in **mmh2O,** press the **TEST** button once and **4** times **Down** and follow the operations below



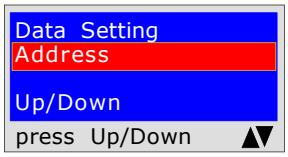
The instrument prompts whether to perform this test, press **ENTER**



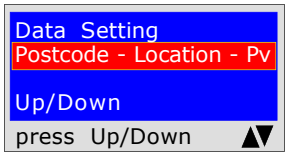
The program prompts to enter **the location of the system** where the test is being performed. Remember that you have a total of 20 characters available. To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.



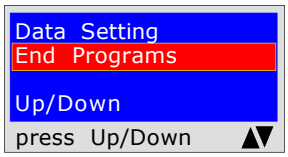
The program prompts to enter **the type of system,** whether for civil use, heating, industrial use, or anything else, remembering that you have a total of 20 characters available.
To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.



The program prompts to enter **the address of the building** in which the test is being performed, remembering that you have a total of 20 characters available. To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.

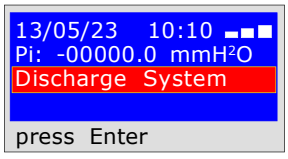


The program prompts to enter **the post code, the city and the province** of the **building** in which the test is being performed, remembering that you have a total of 20 characters available.
To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.

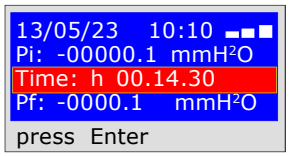


The program prompts whether to finish entering the data.
Press **Up/Down** to re-read the data entered.
To modify any data use the navigation keys, and correct.

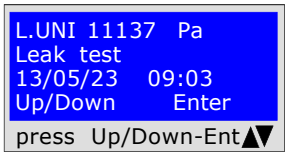
Press **ENTER** to finish and exit the program.



The program prompts to discharge **the pressure**. To do this, proceed as follows:
1) lose the gas meter valve.
2) Discharge the gas pressure to the outside.
3) Connect the extendible pipe connected to the appropriate inlet, which is located in the upper part of the instrument.
4) Connect the other end of the pipe to the pressure source to be measured.
Press **ENTER.**

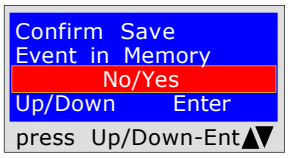


Now the instrument automatically starts the leak check. On the display you will notice that the **Time** starts the countdown;
The test lasts exactly **15 minutes.**

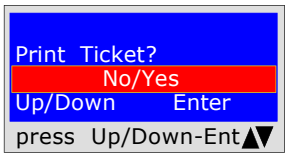


At this point it enables reading of all the data detected during the test

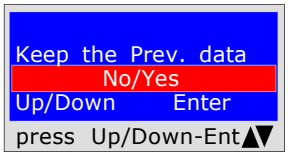
To navigate, press the **Up/Down** buttons. To exit press **ENTER**



The tool prompts whether to store the detected data.
To do this, select **Yes/No** by pressing **Up/Down.** Press **ENTER** to confirm.
If saving is not confirmed within 30 seconds, the **MD40REM-H2CH** stores the event regardless.



The instrument prompts whether to print the ticket proving the test.
Select **Yes/No** pressing the **Up/Down** buttons.
Select **"Yes** ", turn on the printer and place it in line with the pressure gauge transmitter; press **ENTER**.



When performing several tests **" TEST "** or to repeat a test.
The instrument keeps in memory the data of the building where the test is being performed. The latter are only lost if the instrument is turned off.

BEINAT S.R.l.
PRESSURE GAUGE MOD.**MD40REM-H2CH**
Firmware version V 8.1
Serial number: **0102**
Calib. Date: 10/01/23

COMPANY
BIANCHI GIOVANNI
VIA ROMA 155
10000 MILAN
VAT no. 02434381200
info@lapolipo.it
Tel. 023111457562

Ver. UNI 11137
Leak test
(date)15.01.23 09:54

Unit of measurement: mmH2O

Pi: 00000.1
Pf: 00000.0
Difference: 00000.1
[]Test Passed
[]Test NOT Passed

Franco Riva
Independent Business
Via I Maggio 54
Verona

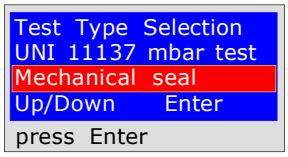
Operator:

Signature:

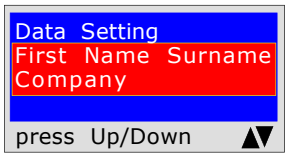
Tests and Measurements according to the Regulations

UNI 11137 — **Mechanical seal**

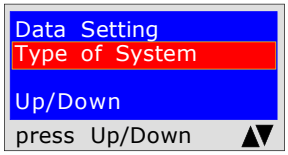
System leak check, as required by the Standard UNI 11137
The test procedure is performed by pumping air to check the tightness of the system
Actions: Turn on the instrument, select with the **SELECT** button the pressure in **mbar 3 approx.,** press the **TEST** button once and **4** times **down** and follow the operations below



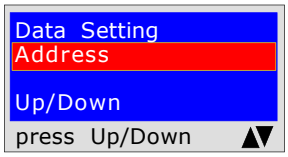
The instrument prompts whether to perform this test, press **ENTER**



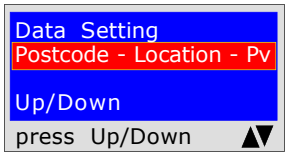
The program prompts to enter **the location of the system** where the test is being performed. Remember that you have a total of 20 characters available. To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.



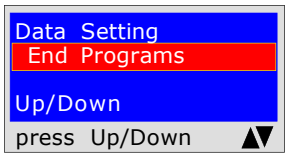
The program prompts to enter **the type of system,** whether for civil use, heating, industrial use, or anything else, remembering that you have a total of 20 characters available.
To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.



The program prompts to enter **the address of the building** in which the test is being performed, remembering that you have a total of 20 characters available. To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.

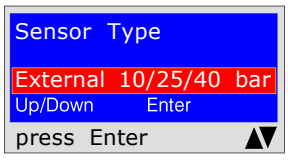


The program prompts to enter **the post code, the city and the province** of the **building** in which the test is being performed, remembering that you have a total of 20 characters available.
To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.

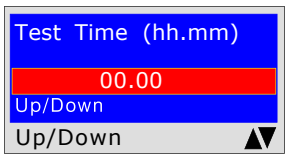


The program prompts whether to finish entering the data.
Press **Up/Down** to re-read the data entered.
To modify any data use the navigation keys, and correct.

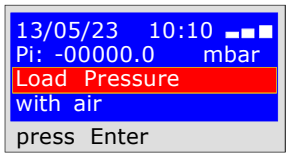
Press **ENTER** to finish and exit the program.



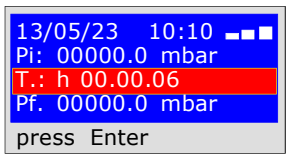
The program asks which type of sensor should be used: 10/25/40 bar
Choose by pressing-/Down and Press **ENTER** to confirm
Attention! this test cannot be performed with an internal sensor.



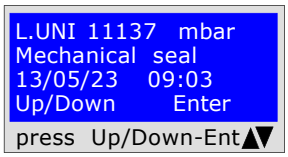
The program prompts to enter **the time** (expressed in hours and minutes) **of the duration of the test** . To do this, proceed as follows:
1) Type in the hours remembering that the maximum time that can be entered is **11 hours and 59 minutes.**
2) To move from one digit to another use the **Right** and **Left** buttons
3) After setting the Hours and Minutes, press the buttons to continue with the **Up/Down** program
4) At this point the instrument stabilises the pressure switch.



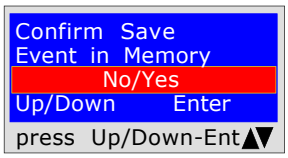
The program asks to load **the pressure**. To do this, proceed as follows:
1) Connect the pressure switch to the pipe of the pressure source to be measured.
2) Connect the external pressure switch into the appropriate input, located at the bottom of the instrument.
3) Select the mbar scale, or the desired scale.
4) Pressurise the pipe. Press **ENTER.**



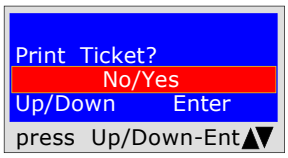
Now the instrument automatically starts the leak check. On the display you will notice that the **Time** starts the countdown.
The test lasts as long as the previously set time



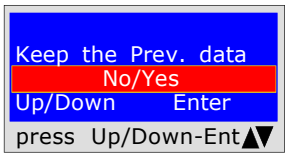
At this point it enables reading of all the data detected by the test
To navigate, press the **Up/Down** buttons, to exit press **ENTER.**



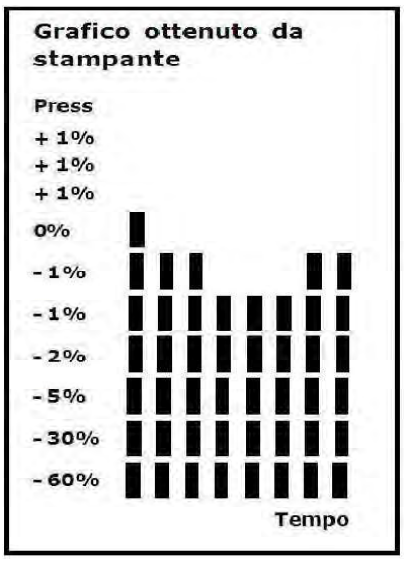
The tool prompts whether to store the detected data.
To do this, select **Yes/No** by pressing **Up/Down.** Press **ENTER** to confirm.
If saving is not confirmed within 30 seconds, the **MD40REM-H2CH** stores the event regardless.



The instrument prompts whether to print the ticket proving the test.
Select **Yes/No** pressing the **Up/Down** buttons.
Select **"Yes** ", turn on the printer and place it in line with the pressure gauge transmitter; Press **ENTER**.



When performing several tests **" TEST "** or to repeat a test.
The instrument keeps in memory the data of the building where the test is being performed. The latter are only lost if the instrument is turned off.



BEINAT S.R.L.
PRESSURE GAUGE MOD. **MD40REM-H2CH**
Firmware version V 8.1
Serial number: **0102**
Calib. Date: 10/01/23

COMPANY
BIANCHI GIOVANNI
VIA ROMA 155
10000 MILAN
VAT no. 02434381200
info@lapolipo.it
Tel. 023111457562

Ver. UNI 11137 mbar Mechanical seal
(date)15.01.23(time)09:54

Unit of measurement: mbar

Pi:	00000.1
Pf:	00000.0
Difference:	00000.1

Test OK

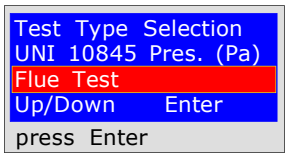
Franco Riva
Independent Business
Via I Maggio 54
Verona

Operator:

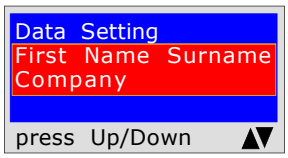
Signature:

Flue pressure tightness control, as required by the Standard UNI 10845
The test procedure is performed directly in the flue of the building, to check its tightness.

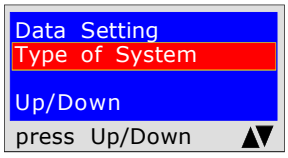
Actions: Turn on the instrument, select with the **SELECT** button the pressure in **Pa,** press the **TEST** button once and **6** times **Down** and follow the operations below



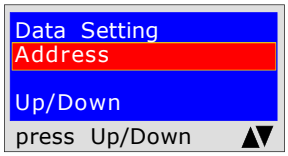
The instrument prompts whether to perform this test, press ENTER



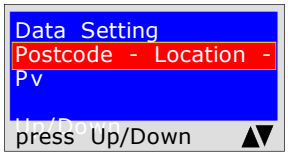
The program prompts to enter **the location of the system** where the test is being performed. Remember that you have a total of 20 characters available. To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.



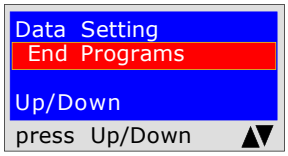
The program prompts to enter **the type of system,** whether for civil use, heating, industrial use, or anything else, remembering that you have a total of 20 characters available.
To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.



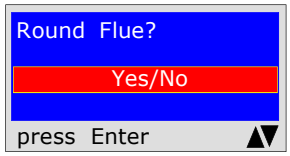
The program prompts to enter **the address of the building** in which the test is being performed, remembering that you have a total of 20 characters available. To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.



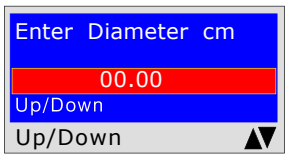
The program prompts to enter **the post code, the city and the province** of the **building** in which the test is being performed, remembering that you have a total of 20 characters available.
To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.



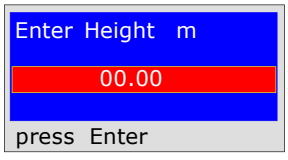
The program prompts whether to finish entering the data.
Press **Up/Down** to re-read the data entered.
To modify any data use the navigation keys, and correct.
Press **ENTER** to finish and exit the program.



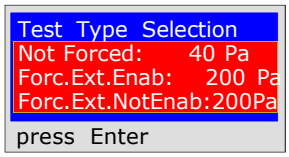
The program asks for the size of the flue, whether round and/or quadrilateral in which the test is to be performed, select the type with the buttons **Up/ Down** .
Press **ENTER.**



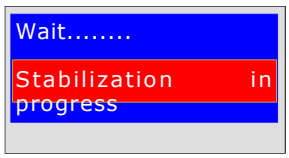
The program asks for the diameter of the round flue, or the length of the side, if the flue is square.
This last measurement is requested twice. The flue might also be rectangular. Press **Up/Down**



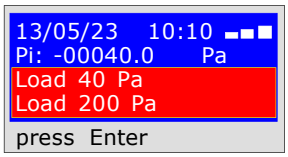
The program asks for the height of the flue in meters. Enter data and press **ENTER**



The program asks which type of flue should be examined. Press **Up/Down** to select:
Not Forced
Forced External close to homes
Forced External not close to homes
Select and press **Enter**



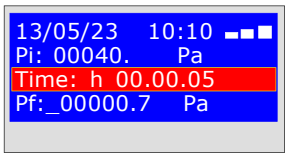
Now the instrument asks for a moment's pause in order to stabilize the internal pressure switch, therefore giving the best test result.



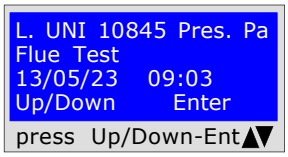
1) Load **40 Pa** if the flue is not forced.

2) Load **200 Pa** if the flue is Forced.

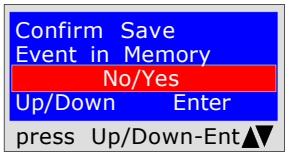
The necessary pressure is specifically requested.
Press **Enter**



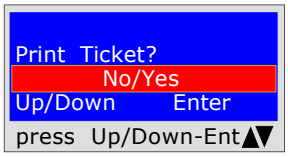
The instrument automatically calculates the quantity of litres that the system disperses.
The test lasts 5 min.



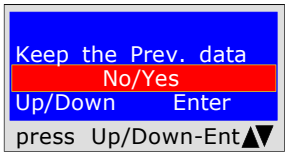
At this point the**MD40REM-H2CH** enables reading of all the data detected by the test
To navigate, press the **Up/Down** buttons, to exit press **ENTER.**



The tool prompts whether to store the detected data.
To do this, select **Yes/No** by pressing **Up/Down.** Press **ENTER** to confirm.
If saving is not confirmed within 30 seconds, the **MD40REM-H2CH** stores the event regardless.



The instrument prompts whether to print the ticket proving the test.
Select **Yes/No** pressing the **Up/Down** buttons.
Select **"Yes "**, turn on the printer and place it in line with the pressure gauge transmitter;
Press **ENTER**.



When performing several tests **" TEST "** or to repeat a test.
The instrument keeps in memory the data of the building where the test is being performed. The latter are only lost if the instrument is turned off.

BEINAT S.R.l.
PRESSURE GAUGE MOD.**MD40REM-H2CH**
Firmware version V 8.1
Serial number: **0102**
Calib. Date: 10/01/23

COMPANY
BIANCHI GIOVANNI
VIA ROMA 155
10000 MILAN
VAT no. 02434381200
info@lapolipo.it
Tel. 023111457562

UNI 10845 Pres.(Pa)
Flue Test
(date)15.01.23(time)09:54
Forz.Ext. NAbit 200 Pa
Diameter (cm): 30.00
Height(m): 10.00
Unit of measurement: Pa
Pi: 00200.1
Pf: 00200.0
Difference: 00000.1
Reference: 00004.1

Test OK

Franco Riva
Independent Business
Via I Maggio 54
Verona

Operator:

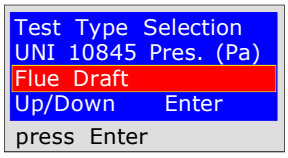
Signature:

Tests and Measurements according to the Regulations UNI 7129 - UNI 11137 - UNI 10845

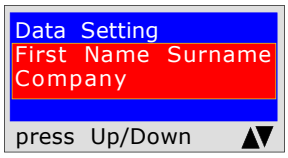
UNI 10845 **Depression Flues Test**

Check the flue depression for leaks, as required by the Standard **UNI 10845**
The test procedure is performed directly in the flue of the building to check the draft

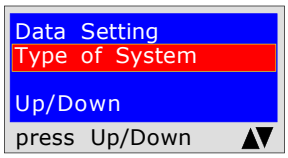
Actions: Turn on the instrument, select with the **SELECT** button the pressure in **Pa,** press the **TEST** button once and **7** times **Down** and follow the operations below



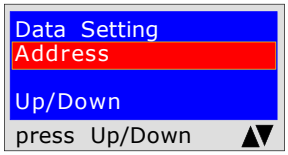
The instrument prompts whether to perform this test, press **ENTER**
To continue, insert the sampling probe supplied into the flue



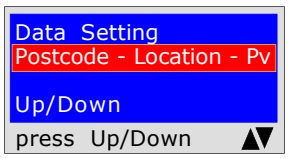
The program prompts to enter **the location of the system** where the test is being performed. Remember that you have a total of 20 characters available. To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.



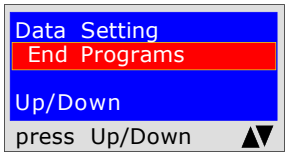
The program prompts to enter **the type of system,** whether for civil use, heating, industrial use, or anything else, remembering that you have a total of 20 characters available.
To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.



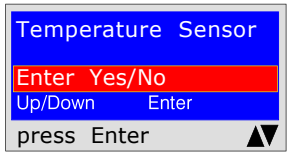
The program prompts to enter **the address of the building** in which the test is being performed, remembering that you have a total of 20 characters available. To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.



The program prompts to enter **the post code, the city and the province** of the **building** in which the test is being performed, remembering that you have a total of 20 characters available.
To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.

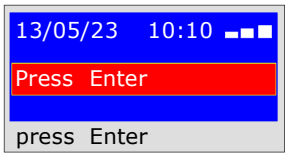


The program prompts whether to finish entering the data.
Press **Up/Down** to re-read the data entered.
To modify any data use the navigation keys, and correct.
Press **ENTER** to finish and exit the program.

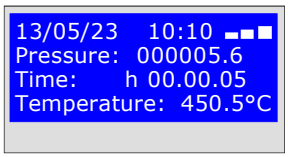


The program asks if you also want to measure the flue temperature; remember that the thermometer reaches up to 450°C. Press **ENTER**

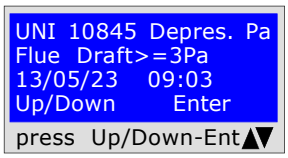
Now the instrument asks for a moment's pause in order to stabilize the internal pressure switch, therefore giving the best test result.



The tool now waits for Enter to be pressed.
Before proceeding to measure the flue draft:
Connect the pipe to the specific negative pressure fitting of the MD40REM-H2CH and to the flue to be checked.
Remember to also insert the temperature probe into the flue, if this has been selected.

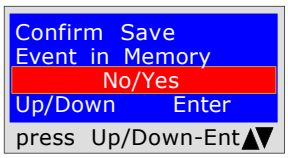


The instrument begins measuring depression. The test lasts 45 seconds

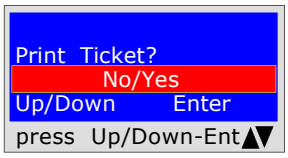


Now it enables reading of all the data detected by the test

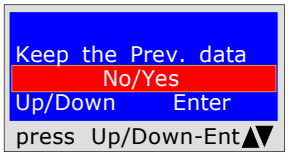
To navigate, press the **Up/Down** buttons. To exit press **ENTER**



The tool prompts whether to store the detected data.
To do this, select **Yes/No** by pressing **Up/Down.** Press **ENTER** to confirm.
If saving is not confirmed within 30 seconds, the **MD40REM-H2CH** stores the event regardless.

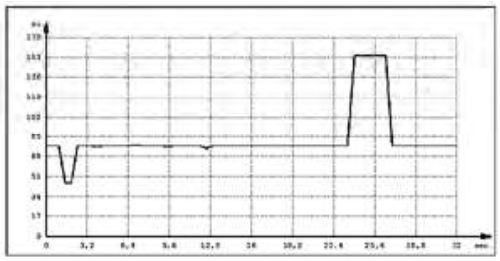


The instrument prompts whether to print the ticket proving the test.
Select **Yes/No** pressing the **Up/Down** buttons.
Select **"Yes "**, turn on the printer and place it in line with the pressure gauge transmitter;Press **ENTER**.



When performing several tests **" TEST "** or to repeat a test.
The instrument keeps in memory the data of the building where the test is being performed. The latter are only lost if the instrument is turned off.

Depression graph,
This operation is only performed via PC



BEINAT S.R.l.
PRESSURE GAUGE MOD.**MD40REM-H2CH**
Firmware version V 8.1
Serial number: **0102**
Calib. Date: 10/01/23

COMPANY
BIANCHI GIOVANNI
VIA ROMA 155
10000 MILAN
VAT no. 02434381200
info@lapolipo.it
Tel. 023111457562

UNI 10845 Depre.(Pa)
Flue Draft >=3Pa
(date)15.01.23(time)09:54

Unit of measurement: Pa
Pi: 0005.1
Pf: 0005.5
Difference: 0000.4

>3Pa = suitable system
Temperature: 280.5° C

Franco Riva
Independent Business
Via I Maggio 54
Verona

Operator:

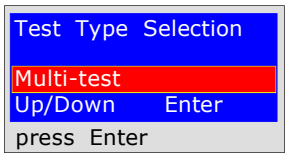
Signature:

Multi-test

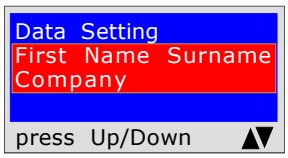
This program requires the expert installer, under their complete responsibility, to check the tightness of the system with a variable pressure, at their discretion, from **10 millibars** to **45 bar**, for the **Stabilization and Testing test decided by the same.**
Leak Test: **Set the** Stabilization Time; once the set stabilization time has elapsed, the **MD40REM-H2CH** performs the reading of the **Actual TEST**, for the time set.
No pressure loss must be detected between the initial pressure and the final pressure of the actual test. The test is positive if there is no pressure drop.
N.B. The two stabilization and test measurements are performed automatically.

Warning: The temperature does not affect the leak test but is for information purposes and for comparison with the pressure.

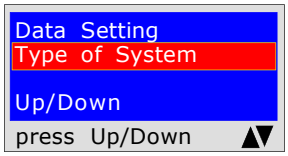
Actions: Turn on the instrument, select the pressure with the SELECT button in **mbar.** Press the TEST button and follow the operations below



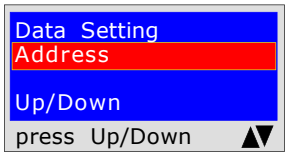
The instrument prompts whether to perform this test, press ENTER



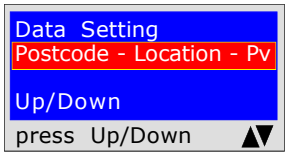
The program prompts to enter **the location of the system** where the test is being performed. Remember that you have a total of 20 characters available. To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.



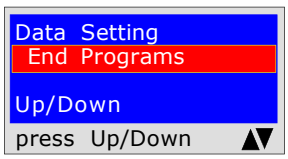
The program prompts to enter **the type of system,** whether for civil use, heating, industrial use, or anything else, remembering that you have a total of 20 characters available.
To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.



The program prompts to enter **the address of the building** in which the test is being performed, remembering that you have a total of 20 characters available. To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.

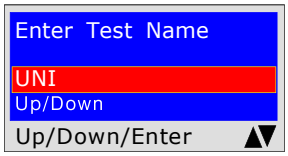


The program prompts to enter **the post code, the city and the province** of the **building** in which the test is being performed, remembering that you have a total of 20 characters available.
To enter characters, press the appropriate buttons (similar to when sending an SMS).
To move forward/back use the navigation keys. For white spaces use the key with the number 1.

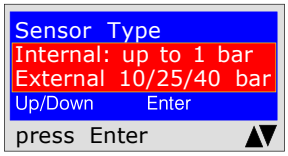


The program prompts whether to finish entering the data.
Press **Up/Down** to re-read the data entered.
To modify any data use the navigation keys, and correct.

Press **ENTER** to finish and exit the program.



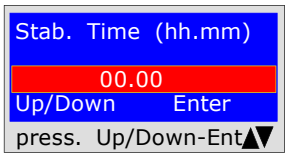
The program prompts to enter the name of the Standard to be executed.
The text "UNI" appears (this word can be overwritten) and, subsequently, it is possible to enter the number of the standard.
Press **Up/Down**, to exit. The text typed in remains in memory.



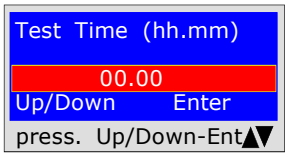
The program prompts to select the type of sensor. The sensor must be selected depending on the type of pressure to be measured.
Press **Up/Down** to view the sensor type

Press **ENTER** to confirm and finish the selection.

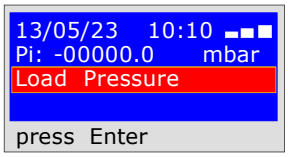
Next Multi-test



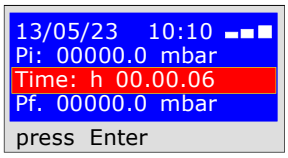
The program prompts to enter **the stabilization duration**
1) Type in the hours remembering that the maximum time that can be entered is **99 hours and 59 minutes.**
2) To move from one digit to another use the **Right** and **Left** buttons
3) After setting the Hours and Minutes, press the buttons to continue with the **Up/Down program**



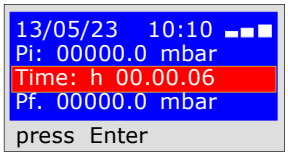
The program prompts to enter **the duration of the Test**
1) Type in the hours remembering that the maximum time that can be entered is **99 hours and 59 minutes.**
2) To move from one digit to another use the **Right** and **Left** buttons
3) After setting the Hours and Minutes, press the buttons to continue with the **Up/Down program**



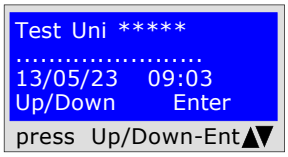
The program asks to load **the pressure**. To do this, proceed as follows:
1) Connect the pressure switch to the pipe of the pressure source to be measured.
2) Connect the external pressure switch into the appropriate input.
3) Select the mbar scale, or the desired scale.
4) Pressurise the pipe. Press **ENTER.**



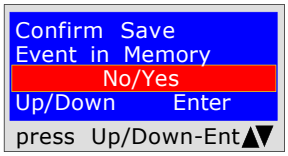
STABILISATION TEST
Now the instrument automatically starts the stabilization control on the display. You will notice that the **Time** starts the countdown.



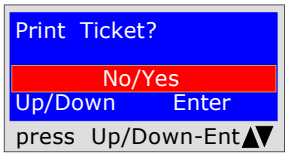
SEAL TEST
Now the instrument automatically starts checking the actual tightness on the display. You will notice that the **Time** starts the countdown;
The test lasts the set time



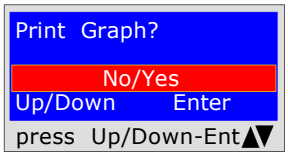
At this point it enables reading of all the data detected by the test
To navigate, press the **Up/Down** buttons, to exit press **ENTER.**



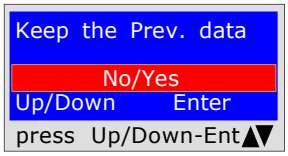
Store the collected data?
To do this, select **Yes/No** by pressing **Up/Down.**
Press **ENTER** to confirm.
If saving is not confirmed within 30 seconds, the **MD40REM-H2CH** stores the event regardless.



The instrument prompts whether to print the ticket proving the test.
Select **Yes/No** pressing the **Up/Down** buttons.
Select **"Yes** ", turn on the printer and place it in line with the pressure gauge transmitter; press **ENTER**.



Print the test graph?
To select **Yes / No** press the **Up/Down buttons.** Press **ENTER**.
Warning!
If the test is stored, the graph can also be printed from a PC at high resolution



When performing several tests **" TEST "** or to repeat a test.
The instrument keeps in memory the data of the building where the test is being performed. The latter are only lost if the instrument is turned off.

BEINAT S.R.L.
PRESSURE GAUGE MOD.**MD40REM-H2CH**
Firmware version V 8.1
Serial number: **0102**
Calib. Date: 10/01/23

COMPANY
BIANCHI GIOVANNI
VIA ROMA 155
10000 MILAN
VAT no. 02434381200
info@lapolipo.it
Tel. 023111457562

UNI ****
(date)15.01.23(time)09:54

Unit of measurement: mmH2O
STABILISATION

Pi:	1000.1
Sta. Time:	h 00.15
Pf:	0980.0
Difference:	0020.1
Temperature	25°C

TEST

Pi:	1000.1
Test Time:	h 00.15
Pf:	0990.0
Difference:	0010.1
Temperature	25°C

[]Test Passed
[]Test NOT Passed

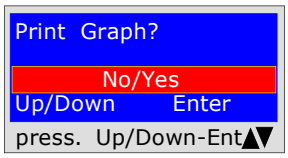
Franco Riva
Independent Business
Via I Maggio 54
Verona

Operator:

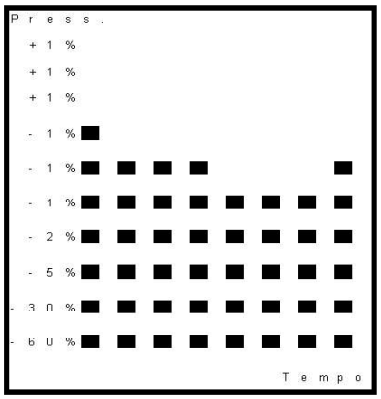
Signature:

Example of graph

Graph detected and printed directly



The Graph is only printed if requested; to do this follow the instructions described.
To select **Yes No** press the **Up/Down** buttons.
Selecting **Yes**, turn on the printer and place it online. Press **ENTER**.



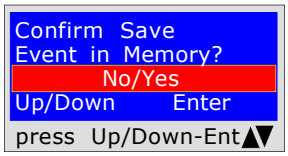
This graph, at low resolution, is obtained directly from the portable printer at the end of the tests

Examples of Graphs

Graphs detected and printed from PC

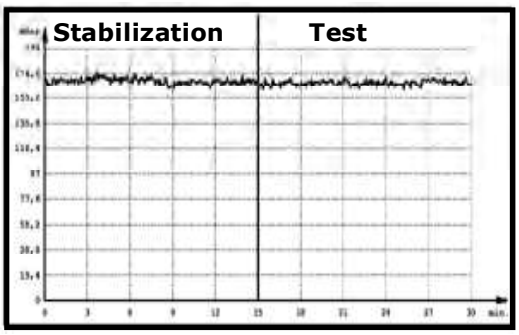
These Graphs can only be obtained via the PC, in **PDF formatf**.
To do this it is necessary to save in the memory (6 TESTS can be saved) of the **MD40REM-H2CH** the test performed.

N.B. The graph is high resolution and exportable in the same format.

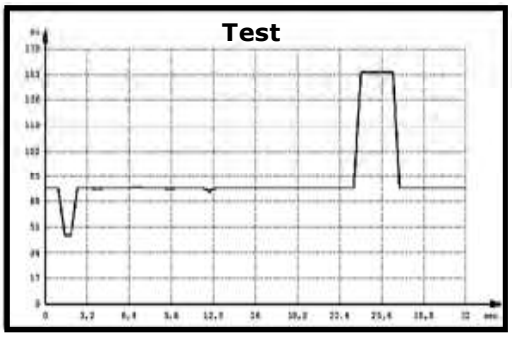


Confirmation of storage of the detected tests.
To select **Yes No** press the **Up/Down** buttons.
Press **ENTER** to confirm.

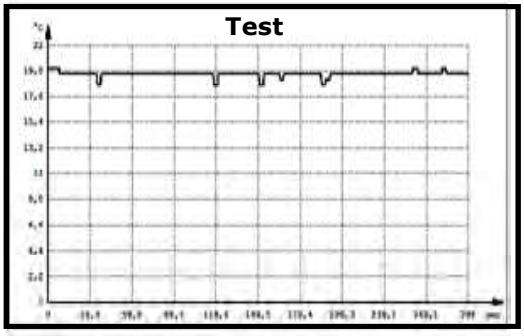
UNI 7129 test < at 35kW



UNI Test 10845 Flue draft



Temperature Test



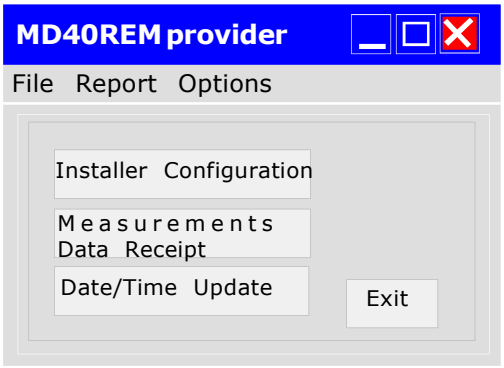
Connection to Personal Computer

The digital pressure gauge **MD40REM-H2CH** can be connected to a Personal Computer via the appropriate USB port.

Why connect it to a Personal Computer? For various and useful reasons including:
1. To configure or modify the data of the company that must perform the tests.
2. To configure or change the date and time,
3. To configure the temperature probe
4. To configure the pressure sensors, whether internal or external
5. To receive the data collected from the various systems examined and to create an imaginative and useful database of all customers, thus maintaining useful and easy-to-consult records for several years.

Configuration
A USB stick containing the program to be installed on your Personal Computer is delivered together with the pressure gauge. The program **"MD40REM provider"**

To use the ***MD40REM-H2CH Provider*** your computer must be compatible with one of the following Windows operating systems:
* Windows 98
* Windows 2000 professional
* windows XP Professional and/or Home Edition



Minimum requirements
PC with CPU Intel Pentium or Centrino or ADM Athlon
Memory : min. 64 MB RAM or greater
SVGA Monitor with 640X480 resolution

Installing the program
Insert the USB stick into the PC, press **"SETUP.EXE"**
The program begins installing, follow the installation according to the prompts that appear.
At the end you will also find the program link in the Start start-up programs.

Insurance

INSURANCE. The equipment is protected by SOCIETA' REALE MUTUA for liability insurance PRODUCTS for a maximum value of 1,500.000 Euro against the damage that this equipment could cause in the event of non-functioning.

Warranty

WARRANTY. The equipment is guaranteed for a period of 3 years from the date of manufacture, subject to the conditions described below. Components recognised as defective will be replaced free of charge, **excluding** plastic or aluminium cases, bags, packaging, any batteries, and technical data sheets.
The equipment must arrive carriage paid at the company **BEINAT S.r.l.**
The warranty excludes faults due to tampering by unauthorised personnel, as well as incorrect installations or negligence resulting from phenomena unrelated to the normal functioning of the appliance.
The company **BEINAT S.R.l.** is not liable for any damage, direct or indirect, caused to persons, animals or property by product failures or by the forced suspension of its use.

Technical features

1st power supply ..... 8.4 V.dc via built-in batteries
2nd power supply ..... 230 V.ac with appropriate power supply
Type of batteries ..... NIMH
Consumption 40mA
Battery autonomy ..... approximately 10 hours
Battery charger ..... via the USB port of a PC, or with an appropriate power supply
Charging control ..... controlled by microprocessor
Charging time with depleted batteries ..... Approximately 8 hours
Battery charging/discharging control ..... shown on the display
Alpha numeric display ..... 4 lines for 20 characters
Event Storage ..... Ten
PC connection ..... USB port
Non-condensate work humidity ..... from 0 to 90%
Printing ..... Via IR port
Electromagnetic compatibility ..... EC
Dimensions and weight ..... 105*210*40mm - approximately 0.4kg.

Pressures: from 100 Pa to 1 bar
Pressure detection probe ..... Incorporated
Measuring range ..... /- 1bar (~10.000 mmH_2O)
Pressure overload 0.4bar
Maximum seal pressure ..... /- 1.4bar (~14,000 mmH_2O)
Resolution ..... 0.1 mbar
Precision ..... +/- 10mbar
Pressures: from 50 Pa to 100 Pa
Pressure detection probe ..... Incorporated
Measuring range ..... /- 100 Pa
Resolution ..... 0.1 Pa
Precision ..... /- 3 Pa
Pressures: from 0 Pa to 50 Pa
Pressure detection probe ..... Incorporated
Measuring range ..... /- 50 Pa
Resolution ..... 0.1 Pa
Precision ..... /- 0.5 Pa
Pressures: greater than 1 bar
Adaptable outdoor sensors ..... from 10/25/40/45 bar
Precision ..... /- 1% FS

Temperature:
Temperature detection probe ..... Built-in -10°C to 50°C
External temperature probe ..... from - 50°C to 500°C
Operating temperature ..... 0°C÷ 50°C
Readings and Measurements
These operations must be performed respecting the method and manner illustrated in this booklet.
ATTENTION!
All measurements performed with **depleted batteries,** 1/2 notches, **distort the measurement.**

MD40REM Calibration Instruments and Precision

Measurement Type	Instrument Used	Serial Number	Measurement Range	Uncertainty	Resolution
Pressure 4 bar	DRUCK DPI5030	0745/99-09	0 ÷ 4 bar (0÷ 400000 Pa)	± 0.1% F.S	1 mbar 100Pa
Pressure 100 mbar	DRUCK DPI5030	53001103	0 ÷ 100 mbar (0÷ 10000 Pa)	± 0.1% F.S	0.01 mbar 1 Pa
Pressure DH002	Dwyer DIGIHELIC	4735	0 ÷ 0.623 mbar (0÷ 62.3 Pa)	± 0.5%	0.0001 mbar 0.01 Pa
Pressure DH002	Dwyer DIGIHELIC	4636	0 ÷ 0.249 mbar (0÷ 249 Pa)	± 0.5%	0.0001 mbar 0.01 Pa
Temperature	VEMER VE305K	100764	-30°C ÷ 1,300°C	± 0.3% Reading +1°C	0.1°C

Some Conversion Tables

Unit of Type	Symbol	Pa	hPa	bar	mbar	at	mmH_2O
Pascal	Pa	1	0,01	0,00001	0,01	0,00001	0,1
Hecto Pascal	hPA	100	1	0,001	1	0,0001	10
bar	bar	100000	1000	1	1000	0,0001	10000
millibar	mbar	0,01	1	0,001	1	0,001	10
Technical Technique	at	100000	1000	1	1000	1	10000
millimetres H^2O	mmH^2O	10	0,01	0,0001	0,1	0,0001	1
PSI	PSI	0.000145038	0,0145038	1.45038	0,0145038	1.45038	0,00145038

Unit of Type	Symbol	KW	W	Kcal/h	BTU
Kilowatt	KW	1	1.000	859	3.412
Wat	W	0,001	1	0.859	3.412
Calorie kilo Hour	Kcal/h	0,001163	1,163	1	3968
Brithis termal Unit hour	BTU/h	0,000295	0,293	0,252	1

Unit of Type	Symbol	m3	dm3	l/h
Metre Cube	m3	1	1.000	1.000
Decimetre Cube	d3	0,001	1	1
Litre Hour	l/h	0,001	1	1

Conversion and diameter tables

Diameter of some weld-free steel pipes

DN	inches	mm.external	mm. internal	mm radius
15	1/2	21,3	16,7	8,35
20	3/4	26,9	21,7	10,85
25	1”	33,7	28,5	14,25
32	1”1/4	42,4	36,6	18,3
40	1”1/2	48,3	42,5	21,25
50	2”	60,3	53,9	26,95
65	2”1/2	76,1	69,7	34,85
80	3”	88,9	81,7	40,85
100	4”	114,3	106,3	53.15
125	5”	139,7	130,7	65,35
150	6”	168,3	159,3	79,65
200	8”	219,1	207,9	103,95
250	10”	273,0	260,4	130,2

Diameter of some copper pipes

mm.external	mm. internal	mm radius
6X1	5	2,5
8X1	7	3,5
10X1	9	4,5
12X1	11	5,5
14X1	13	6,5
15X1	14	7
16X1	15	7,5
18X1	17	8,5
22X1	21	10,5
28X1	27	13,5
35X1,5	33,5	16,75
42X1,5	40,5	20,25
54X1,5	52,5	26,25

Examples of pipe volumes

Diameter (inches)	Diameter (mm)	Litres contained in each meter of pipe
3/4"	21,7	0,37
1"	28,5	0,64
1" e 1/4	36,6	1,05
1" e 1/2	43,5	1,49
2	53,9	2,28
2 e 1/2	69,7	3,82

Syringe selection (ml)	Volume to be measured (l)
50 ml	up to 10 litres
100 ml	from 10 to 50 litres
200 ml	from 50 to 100 litres

Approximately 2ml per litre over 100 litres

Remote pressure switch

PHU10 pressure switch range 0-10 bar
PHU25 pressure switch range 0-25 bar
PHU40 pressure switch range 0-40 bar
PHU45 pressure switch range -2-45 bar dedicated for the "Freon" refrigerant gas

Temperature Probe in PT100

ST100 temperature probe with extendible cable Range - 50 400°C

Portable thermal printer

To complete this instrument for instrumental testing, and for the issuing of the declaration of conformity, **BEINAT S.r.l.** has adopted this type of thermal printer, as its innovative solution compared to systems that use an impact method.
The elegance, size and weight, combined with the flexibility of use, make this printer a useful work tool.

Description of the printer

The printer consists of an ABS body equipped with a cover through which it is possible to access the paper roll and the printing mechanism.
The multifunction button, the red LED and the IR transmission are housed on the front

Paper replacement

To change the paper roll proceed as follows:

Open the printer cover and position the roll of paper, respecting the direction of rotation of the paper as indicated in the figure below

INSURANCE. The equipment is protected by SOCIETA' REALE MUTUA for liability insurance PRODUCTS for a maximum value of 1,500.000 Euro against the damage that this equipment could cause in the event of non-functioning.

WARRANTY. The equipment is guaranteed for a period of 3 years from the date of manufacture, subject to the conditions described below.
Components recognised as defective will be replaced free of charge, **excluding**plastic or aluminium cases, bags, packaging, any batteries, and technical data sheets.
The equipment must arrive carriage paid at the company **BEINAT S.r.l.**
The warranty excludes faults due to tampering by unauthorised personnel, as well as incorrect installations or negligence resulting from phenomena unrelated to the normal functioning of the appliance.
The company **BEINAT S.r.l.** is not liable for any damage, direct or indirect, caused to persons, animals or property by product failures or by the forced suspension of its use.

"END OF LIFE" DISPOSAL OF ELECTRICAL AND ELECTRONIC APPLIANCES
The dustbin symbol on the product or on its packaging indicates that this product cannot be treated as household waste. Instead, it must be taken to a specific collection point for the recycling of electrical and electronic equipment, such as:
- points of sale, when purchasing a new product similar to the one to be disposed of;
- local collection points (waste collection centres, local recycling centres, etc.).

By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and for human health, which could be caused by inappropriate waste disposal of this product.
Recycling materials will help conserve natural resources. For more detailed information regarding the recycling of this product, please contact your local office, your household waste disposal service or the store where you purchased this product.
Attention: in some countries of the European Union the product does not fall within the scope of application of the national law transposing the European Directive 2002/96/EC, and therefore there is no obligation for separate collection at the "end of life" in force in them.

RoHS Compliant

Made in Italy

Pressure gauge MD40REM-H2CH

The styling is by b & b design

Dealer's stamp and signature

Purchase date: . . . . . .

Serial Number: . . . . . .

Beinat S.r.l. following the aim of improving its products, reserves the right to modify the technical, aesthetic and functional characteristics at any time and without giving any notice.

BEINAT S.r.l.
Via Fatebenefratelli 122/C 10077, S. Maurizio C/se (TO) - ITALY
Tel. 011.921.04.84 - Fax 011.921.14.77
http:// www.beinat.com

Sales - info@beinat.com
Technical assistance - produzione@beinat.com