

DigiLEAK

DigiFLO Vacuum / Gas Leak Tester

Subsurface Water / Fuel Leak Finder



WARRANTY

PLEASE NOTE: THE WARRANTY BELOW WAS DRAFTED TO COMPLY WITH FEDERAL LAW APPLICABLE TO PRODUCTS MANUFACTURED DRAFTED AFTER JULY 4, 1975.

The warranty is extended only to original purchaser/user of our product.

This warranty gives you specific legal rights and you may also have other legal rights, which vary from state to state.

DigiFLO warrants its parts to be free of defects in material and workmanship for a period of One (1) year from date of purchase. If within such warranty period any such product shall be proven to be defective, such product shall be repaired or replaced at DigiFLO option. This warranty does not include any labor for shipping charges incurred in replacement part installation or repair of any such product. DigiFLO's sole obligation and your exclusive remedy under this warranty shall be limited to repair and / or replacement. For warranty service please contact your supplier or dealer.

DO NOT return products or parts directly to our factory without prior written consent. Any such shipments will be refused.

LIMITATIONS AND EXCLUSIONS: THE FORGOING WARRANTY SHALL NOT APPLY TO SERIAL NUMBERED PRODUCTS IF THE SERIAL NUMBER HAS BEEN REMOVED OR DEFACED, PRODUCTS SUBJECT TO NEGLIGENCE, ACCIDENT, IMPROPER OPERATION, MAINTENANCE OR STORAGE, COMMERCIAL OR INSTITUTIONAL USE, PRODUCTS MODIFIED WITHOUT DIGIFLO EXPRESS WRITTEN CONSENT (INCLUDING BUT NOT LIMITED TO MODIFICATIONS THROUGH THE USE OF UNAUTHORIZED PARTS OR ATTACHMENTS) OR TO PRODUCTS DAMAGED BY REASON OF REPAIRS MADE TO ANY COMPONENT WITHOUT DIGIFLO SPECIFIC WRITTEN CONSENT OR TO PRODUCTS DAMAGED BY CIRCUMSTANCES BEYOND DIGIFLO CONTROL. SUCH EVALUATION SHALL BE SOLELY DETERMINED BY DIGIFLO. WARRANTY SHALL NOT APPLY TO PROBLEMS ARISING FROM NORMAL WEAR OR FAILURE TO ADHERE TO THE FOLLOWING INSTRUCTIONS.

THE FOREGOING WARRANTY IS EXCLUSIVE AND IS IN LIEU OF ALL OTHER EXPRESS WARRANTIES. IMPLIED WARRANTIES, IF ANY, INCLUDING THE IMPLIED WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, SHALL NOT EXTEND BEYOND THE DURATION OF THE EXPRESSED WARRANTY PROVIDED HEREIN AND THE REMEDY FOR VIOLATIONS OF ANY IMPLIED WARRANTY SHALL BE LIMITED TO THE REPAIR OR REPLACEMENT OF THE DEFECTIVE PRODUCT PURSUANT TO THE TERMS CONTAINED HEREIN. DIGIFLO SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL DAMAGES WHATSOEVER.

THIS WARRANTY SHALL BE EXTENDED TO COMPLY WITH STATE/PROVINCIAL LAWS AND REQUIREMENTS.

Measure gas molecular weight

1. Acclimate DigiLEAK to surrounding temperature for one minute, away from measurement location.
2. Press for 1/2 second and then release the front button. Display will come on displaying 29.0 – molecular weight of clean air.
3. With inlet close to target gas, repeatedly press for 1/2 second and then release the front button. Internal pump will activate and surrounding gas will enter the sensor. Observe the displayed molecular weight.

Find Subsurface water / Fuel pipe leak

Caution: Thorough expertise in using pressurized gases is mandatory. Tightly adhere to gas manufacturer directions.

- Close the main / street valve & Empty the pipe.
- Apply Helium, Argon, or CO₂ gas, as close as possible to the leak.
- Increase gas pressure up to 15psi (105 KPa).
- Protruding the pavement, drill 6" deep, 1 foot apart holes in the ground.
- With gas pressure applied, wait for 10 to 30 minutes to allow sufficient amount of gas to leak through defective segment of the pipe.
- Acclimate DigiLEAK to surrounding temperature for one minute, away from the location of the leak.
- Press for 1/2 second and then release the front button. Internal pump will inject clean air into the sensor. Display will turn on displaying 29.0 – molecular weight of clean air.
- With inlet positioned, within drilled holes, repeatedly press for 1/2 second and then release the front red button. Internal pump will inject ground holes' air / gas into the sensor. Observe the displayed molecular weight. Molecular weight of Argon is 40; Molecular weight of CO₂ is 44; Molecular weight of Helium is 4, molecular weight of air is 29. Upon approaching the leak, displayed molecular weight of air will change as follows:

Increase, if Argon or CO₂ is used

Decrease, if Helium is used

- Front Leak detect / proximity LED will turn orange and then red.

gas leak detect

1. Determine if target gas molecular weight is lighter or heavier than 29.0 – molecular weight of air.
2. Acclimate DigiLEAK to surrounding temperature for one minute, away from the location of the leak.
3. Press for 1/2 second and then release the front button. Display will come on displaying 29.0 – molecular weight of clean air.
4. With inlet open repeatedly press for 1/2 second and then release the front button. Internal pump will activate and surrounding air will enter the sensor. Observe the molecular weight displayed. As you approach the desired target gas location, where target gas is mixing with air, 29.0 molecular weight of air, subject to target gas molecular weight, will change to a different value. Leak Detect LED will turn orange then Red indicating target gas close proximity.

Find Vacuum mold leaks:

I. Setup:

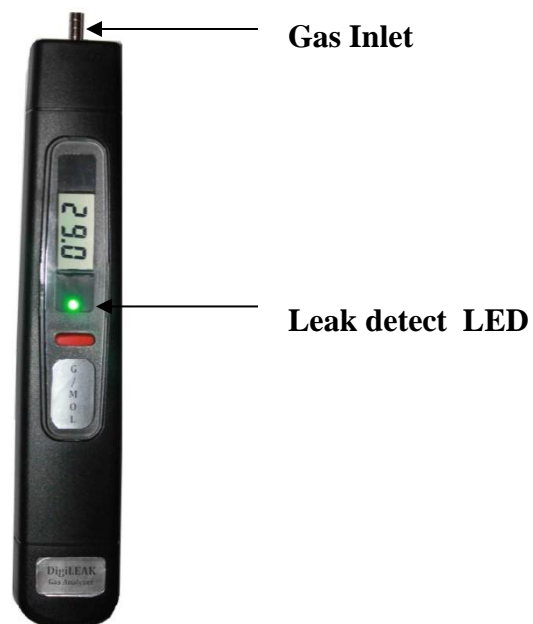
- Vacuum pump active.
- Next to suspected leaks and gaps apply Helium, Argon, or CO₂.

Find a leak: Using DigiLEAK probe vacuum pump exhaust. As gas leaks through the leak, molecular weight of air – 29.0, will change. Also, led color will change from green to orange and then to red.

II. Setup:

- Attach a valve gas outlet to the mold.
- With outlet valve open, replace all air by blowing Helium, Argon, or CO₂ into the vacuum inlet port of the mold. Slightly increase pressure by gradually closing the outlet valve.

Find a leak: Using DigiLEAK, probe for leaks around the mold. At the place of a leak, molecular weight of air – 29.0 will change. Also, led color will change from green to orange and then to red



Indication For Use:

This tool is to be used by certified technical personnel to detect gas leaks and to measure molecular weight of Air / other gas mixtures. DigiLEAK can only measure molecular weight of gas in the range of 10 to 120 g/mol

How to pinpoint a leak

Find & mark at least 3 locations where DigiLEAK shows a red light. Write the difference between 29.0 and DigiLEAK displayed molecular weight, at each mark. Draw a straight line between these marks, thus forming a triangle. Draw a circle through the edges of the triangle. The leak is within the area of the circle.

Specification:

Size	9" x 1.5" x 1" / 23 x 3.8 x 2.5cm
Weight with battery	164g
Response Time	20 mili-seconds
Gas Molecular weight range	10 to 120 g/mol
Molecular weight accuracy of resolution	±0.1 g/mol
Operating Temperature	-45 to 70°C
Survival Temperature	-85 to +85°C
Battery	Single Alkaline 9V battery
Battery Life	1000+ read cycles
Automatic shut down	2 minutes if not active

BATTERY

Reasons to replace the battery:

- **BA**t is seen blinking on the display.
- DigiLEAK does not respond to a Power On.

CHANGING THE BATTERY

1. Open the rear battery compartment.

Caution: Observe proper battery installation.

2. Carefully lift the battery from its location.
3. Remove the clips from the battery.
4. Apply the clips to a new battery.
5. Position the new battery within its groove, with the clips facing the Inlet.
6. Turn ON the unit. The display should turn ON. If it does, close the battery compartment. If it does not, replace the battery with another.



TROUBLESHOOTING

There are no user serviceable parts within the DigiLEAK.

If the unit fails to come ON, replace the battery with a known good battery.

If the unit fails to come on with known good battery, contact DigiFLO Technical Service for repair.

If the unit comes on and the reading are erratic or frozen, contact DigiFLO Technical Service for repair.

If the front button does not respond, contact DigiFLO Technical Service for repair.

If a segment within the display is missing or is displayed intermittently, contact DigiFLO Technical Service for repair.