



IOM 6.25
Issue A

Portable Wet Riser, Dry Riser System & Hydrant Tester Mag-Flux HTL



Installation, Operation and Maintenance Manual



IOM 6.25 Issue A

Portable Wet Riser, Dry Riser System & Hydrant Tester Mag-Flux HTL

Page Index

1.	General Information	Pg 3
2.	Contents	Pg 3
3.	Installation	Pg 3-4
4.	Operation	
	- Standalone (Manual readings/ Software)	Pg 5-7
	- Remote (Via mobile app - Download readings)	Pg 8-12
5.	Test Report Document Example	Pg 13
6.	Maintenance/ Service	Pg 14
7.	Additional Information	Pg 14



IOM 6.25 Issue A

Portable Wet Riser, Dry Riser System & Hydrant Tester Mag-Flux HTL

General Description

The Mag-Flux HTL portable flow meter is used to measure flow and pressure in varying applications. These include:

- Wet Riser Systems - Pressure regulating valve Outlets
- Hydrant Mains
- Dry Riser Systems

The device can operate in 2 different modes

- Standalone Operation ① using the digital display to manually verify the flow and pressure readings of the test ② record the test to download and convert the data within microsoft excel (CSV)
- Remote Operation - Record the test via a bluetooth device (app). Download and view data via website with automatic pressure and flow graphs of test results

Contents

The Mag-Flux HTL consist of:

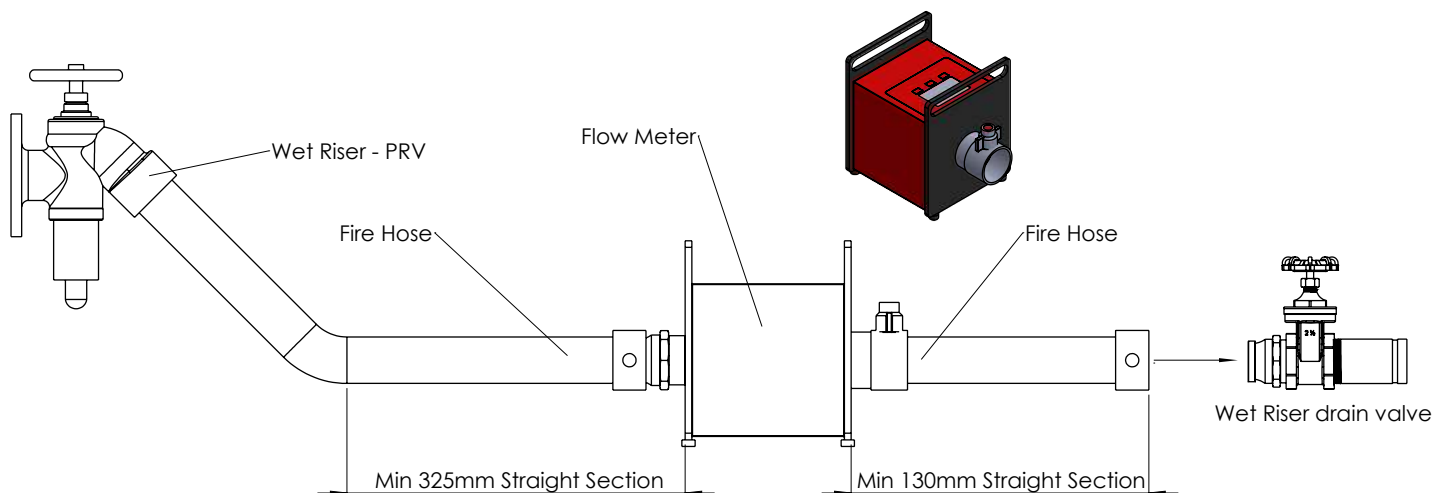
- Flow Meter
- Power charger
- Operating Instructions
- Calibration certificate

Installation - Application dependant

Wet Riser Systems

Verify the flow and pressure requirements of wet riser pressure regulating valves.

According to BS 9990: 2015, $8 \pm 0.5\text{bar}$ $750\text{LPM} \pm 75\text{LPM}$



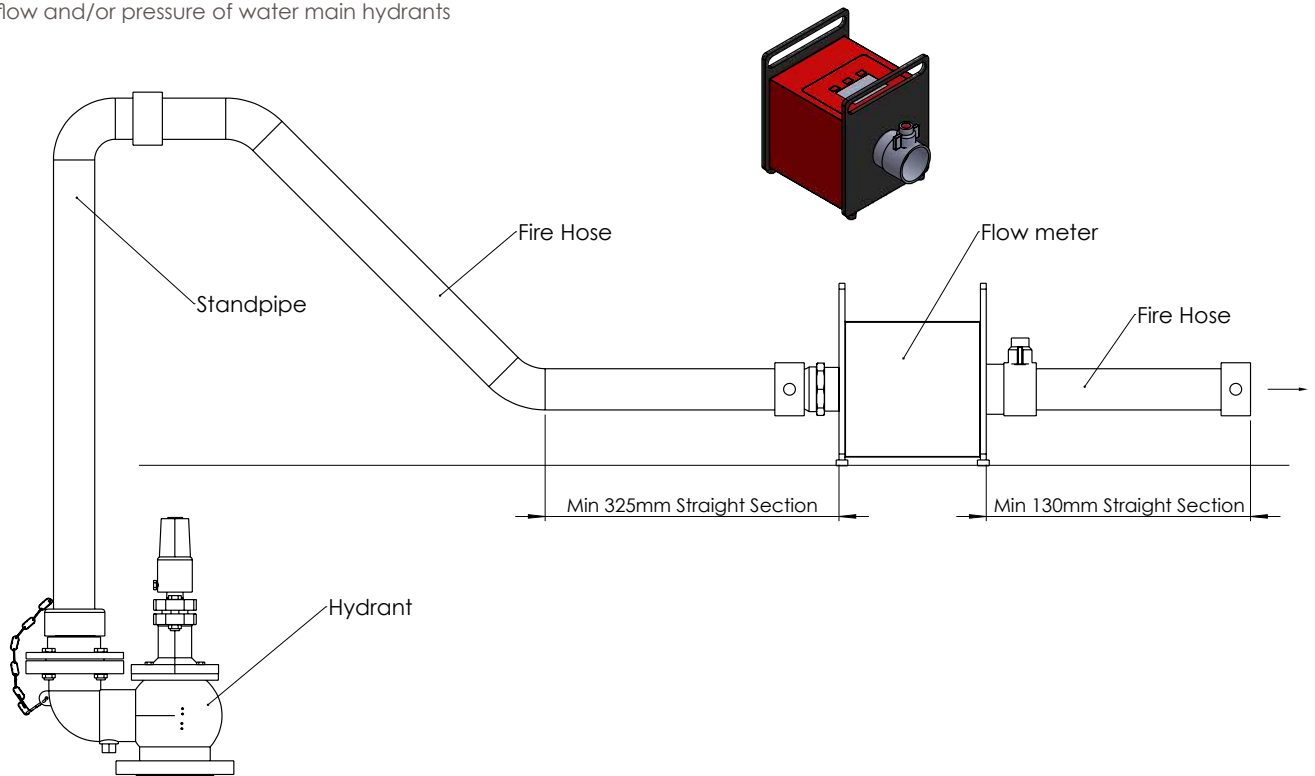
Note: Wet riser drain valve should be a BS336 male connector
The BS336 instantaneous washer design is intended for flow in one direction.



Portable Wet Riser, Dry Riser System & Hydrant Tester Mag-Flux HTL

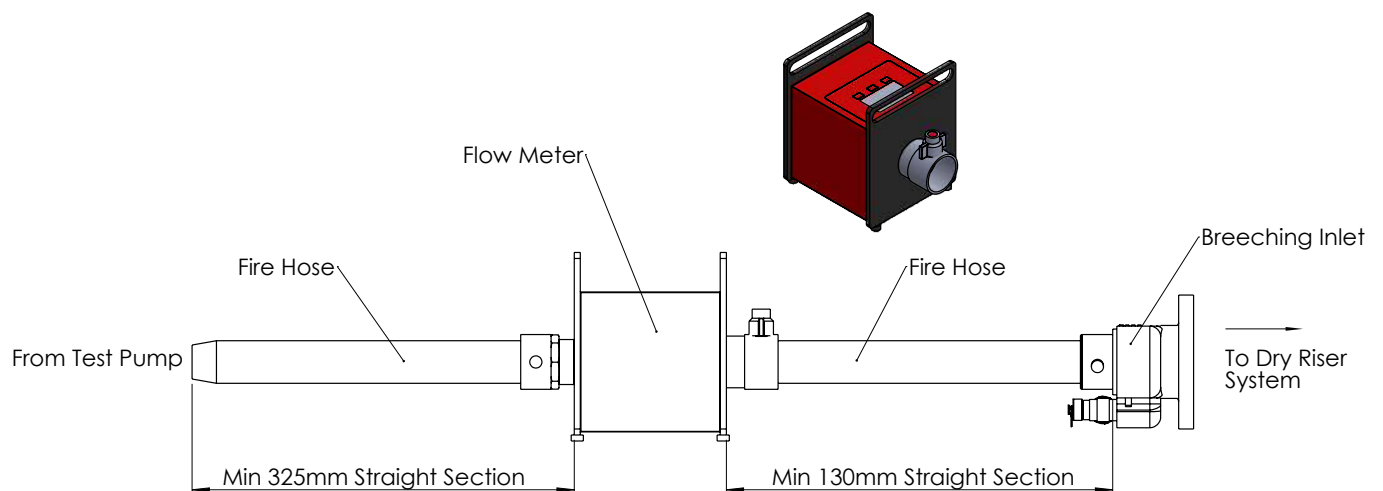
Hydrant Testing

Verify the flow and/or pressure of water main hydrants



Dry Riser System Pressure Test

Verify the design operating pressure of the system as per BS 9990: 2015





IOM 6.25 Issue A

Portable Wet Riser, Dry Riser System & Hydrant Tester Mag-Flux HTL

Operation

The device can operate in 2 different modes:

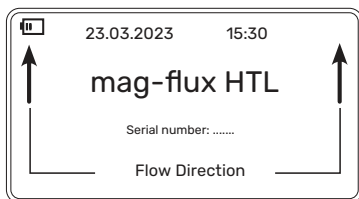
- Standalone Operation ① using the digital display to manually verify the flow and pressure readings of the test ② record the test to download and convert the data within microsoft excel (CSV)
- Remote operation - Record the test via a bluetooth device (app) Download and view data via website with pressure and flow graphs.

Note: Remote operation requires a subscription charge.

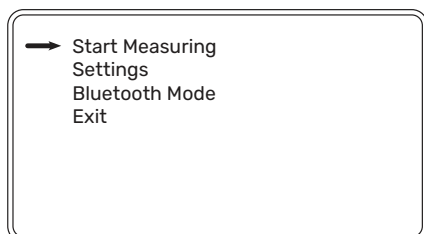
Operation - Standalone

1. Press and hold  to turn the flow meter on.

The screen below will appear

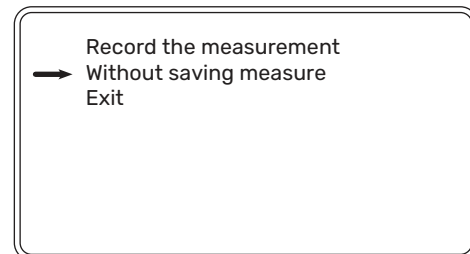


2. Press the ON button  The below screen will appear.



3. Select  to start measuring

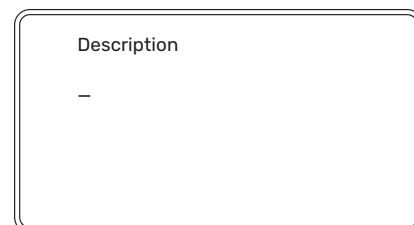
4. ② If recording the test to download a CSV select 'Record the measurement' by pressing enter and follow step 5.




① To display the flow and pressure **only** select 'Without saving measure' by pressing  (Step 6 will appear)

Use the arrow  to navigate down.

5. Name the test (Up to 16 characters)



Use the arrows   to change the character.

Use  to move to the next character. Once named press enter until the readings are displayed (step 6)

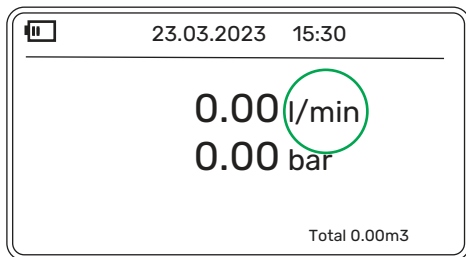


IOM 6.25 Issue A

Portable Wet Riser, Dry Riser System & Hydrant Tester Mag-Flux HTL

6. The flowmeter is now ready to use.

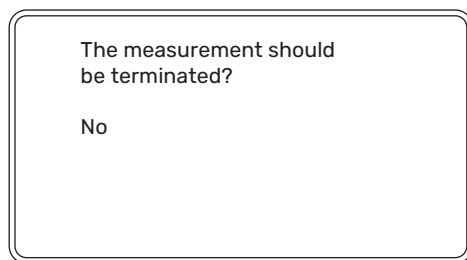
To change the flow rate units select



7. After testing press



(The below will appear)



Use the arrow to select Yes and press enter.

To turn the power off press and hold



Download and convert the test (CSV) using the HTL PC software.

1. Turn on the flow meter and ensure "BT" (bluetooth) is turned on
2. Open the bluetooth setting on the Windows based PC (device with bluetooth connection)
3. Select Add a bluetooth device and connect to the HTL**** (Flow meter serial number)

Wireless displays & docks

[TV] Samsung 7 Series (75)
Not connected

Other devices

HTL-142808
Paired

Remove device

4. Once paired open the PC software.

Select mag-flux HTL (COM) suchen

mag-flux HTL Datenexport - V0.2.4

mag-flux HTL (COM) suchen

HTL- ...

COM5

Verbinden

m

From the drop down select the appropriate COM port that the HTL bluetooth is connected to.

Then select Verbinden.

5. Select mag-flux HTL auslesen

HTL-142808 (3.2.2)

Verbinden

mag-flux HTL auslesen

ME
SAFETY

6. Select the appropriate test you require to export

COM5

Verbinden

m

<input checked="" type="checkbox"/>	0	TEST	26/03/2023 13:56:51
<input type="checkbox"/>	1	6	26/03/2023 14:06:27



IOM 6.25 Issue A

Portable Wet Riser, Dry Riser System & Hydrant Tester Mag-Flux HTL

7. Export the file as a CSV or JSON and save in relevant location.

To import the file in excel.

8. Change the file extension from .CSV to a .txt file

9. Open excel and open the .txt file

10. Select Delimited and click Next.

is correct, choose Next, or choose the data type that best describes your data.

Original data type

Choose the file type that best describes your data:

☒ Delimited - Characters such as commas or tabs separate each field.

☐ Fixed width - Fields are aligned in columns with spaces between each field.

Import at row: 1 File origin: 65001 : Unicode (UTF-8)

My data has headers.

Preview of file C:\Users\bobby.harrison\Desktop\1_6.txt.

```
Nummer; Zeitstempel; Druck[bar]; Durchfluss[m³/h]; Trübung[FNU]; Leitfah  
0;2023-03-26T14:06:27+01:00;0.01;0;;;  
1;2023-03-26T14:06:28+01:00;0;0;;;  
2;2023-03-26T14:06:29+01:00;0.01;0;;;  
3;2023-03-26T14:06:30+01:00;0.01;0;;;  
4;2023-03-26T14:06:31+01:00;0;0;;;  
5;2023-03-26T14:06:32+01:00;0;0;;;
```

Cancel < Back Next >

11. Select Semicolon and click Next

Text Import Wizard - Step 2 of 3

This screen lets you set the delimiters your data contains. You can see how yo

Delimiters

☐ Tab

☒ Semicolon

☐ Comma

☐ Space

☐ Other:

☐ Treat consecutive delimiters as one

Text qualifier: " " >

12. Select finish.

13. The data will be exported into columns allowing the user to create customised graphs/ charts.

B	C	D	E
I	Druck[bar]	Durchfluss[m³/h]	Trübung[I
T14:06:27+01:00	0.01	0	
T14:06:28+01:00	0	0	
T14:06:29+01:00	0.01	0	
T14:06:30+01:00	0.01	0	
T14:06:31+01:00	0	0	
T14:06:32+01:00	0	0	
T14:06:33+01:00	0	0	
T14:06:34+01:00	0.01	0	
T14:06:35+01:00	0.01	0	



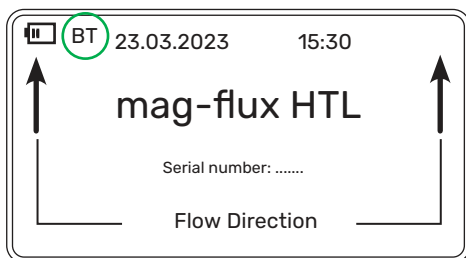
IOM 6.25 Issue A

Portable Wet Riser, Dry Riser System & Hydrant Tester Mag-Flux HTL

Operation - Record the test via a bluetooth device

1. Press and hold  to turn the flow meter on.

2. Ensure the flow meter bluetooth is on by pressing 



BT or BLE will indicate bluetooth is turned on the flow meter. For 1st time connection the bluetooth code is 1234. See additional section for more information with regards to BT or BLE

3. Download the wasserkarte.info app (android or apple device) onto your mobile device.

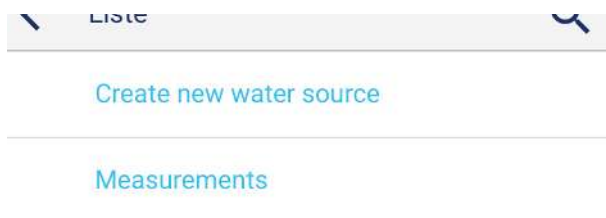
Login to your account (Username and password)

Testing operation:

3. Open the wasserkarte app Select **+ New object**



4. Create a new water source



5. Fill in the relevant details as per above and image on the next page.

Note:

Capture/choose image - will allow you to add a physical image to the PDF test document


Type - 'Abspercklappe' is a 'Valve' (this function is not yet translated)

Portable Wet Riser, Dry Riser System & Hydrant Tester Mag-Flux HTL

Latitude: 52.58479259342751

Longitude: -0.2069209643505114

Determine location



Cancel Save

6. Search and pair to the 'HTL' flow meter (The relevant serial number will be displayed at the end of the digits)

Choose device



Quick selection

HTL-142808 (368E0C27-0E59-997F-8458...

Search devices

If you could not find a device, check if device is switched on and Bluetooth is activated.

To use this function, either the portable hydrant tester MAG-FLUX HTL from MECON GmbH or the hydrant tester HyDatLog or the data logger PreDatLog from M + R

7. Once paired Select and fill the relevant details below (Name - used to identify the measurement) Click Start measurement

Determine Location will allow for the GPS of where the test has been conducted (Refer to Page 11 for test document example)

Click **save** once all relevant details have been filled in.

5. Select **Measurements**

App Store 10:20

Liste

Create new water source

Measurements

Realtime measurement

Store on device?: Yes No

Name

Interval [s] 1

Measurement inputs

Pressure: Yes No

Flowrate: Yes No

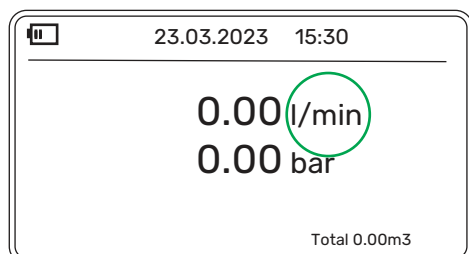
Cancel Start measurement



IOM 6.25 Issue A

Portable Wet Riser, Dry Riser System & Hydrant Tester Mag-Flux HTL

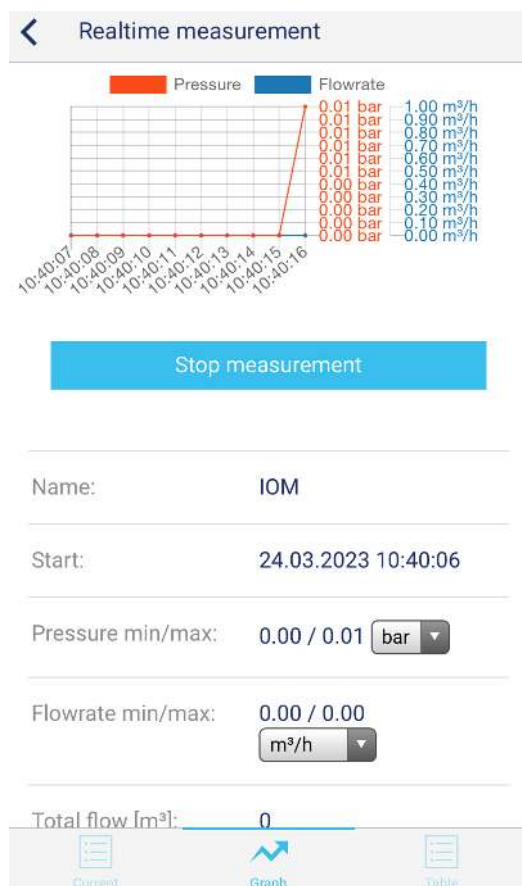
8. Once connected the flow meter will automatically display:



Change the units by selecting



The app will display:



Change the flowrate units by selecting the drop down.

Once testing has finished click 'stop measurement'

Save the measurement.

9. Select **Assign** and attach the relevant 'water source' that was created earlier.



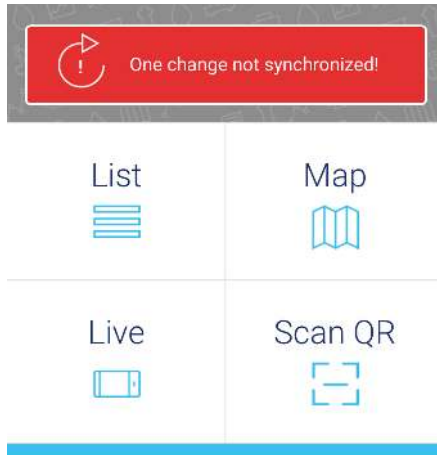


IOM 6.25 Issue A

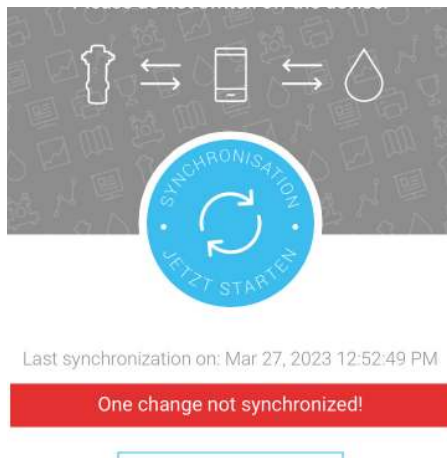
Portable Wet Riser, Dry Riser System & Hydrant Tester Mag-Flux HTL

9. Press the back button twice (to the main page) The note below will appear.

Click the red box



Click the blue sync button to synchronise the latest test.



Once synchronised you can exit the app and turn the power off to the flow meter (Press and hold the 'Off button')

All test data will be saved to the account.



IOM 6.25 Issue A

Portable Wet Riser, Dry Riser System & Hydrant Tester Mag-Flux HTL

Download Test Results

To download the test results. Login your account via webbrowser
(<https://portal.wasserkarte.com/>)

The login form is titled 'User login' and is set against a blue background with a pattern of water-related icons. It includes a header with the 'wasserkarte.info' logo and navigation links: 'Account menu', 'Log in', and 'New account'. The main section contains fields for 'User name*' and 'Password*', each with a corresponding icon (person and key). Below the password field is a link for 'Recover lost password'. There is a 'Remember me' checkbox. At the bottom, there are two buttons: a blue 'Login' button and a red 'Create new account' button.

1. Select measurements

The screenshot shows the 'wasserkarte.info' portal interface. On the left is a sidebar menu with categories: 'Water sources', 'water pipelines', 'features', 'maintenance', 'Indicative preparation', and 'Notification contacts'. The 'Measurements' item under the 'features' category is highlighted with a green box. The main content area shows a greeting 'Hello michal.multaniak!', a 'my account' section with icons for 'logout', 'Change password', 'Change email address', and 'Settings', and a 'license status' section stating 'Wasserkarte.info-PLUS is activated. Many thanks for the support!'.

2. All recordings will be shown below:

create new							A
show list							IOM
show map							bra
ures							Level 6 Stage 2 Wet Riser Valve
operational planning	New						
aintenance							
maintenance							
maintenance schedules							
measurements							
measurement reports							

Select to edit test title,
crop measurements shown
on the test document.



Select to download test
document (PDF)



Example of exported test document can be found on the next
page.



IOM 6.25
Issue A

Portable Wet Riser, Dry Riser System & Hydrant Tester Mag-Flux HTL

Steigleitung (# 1)



wasser
karte.info



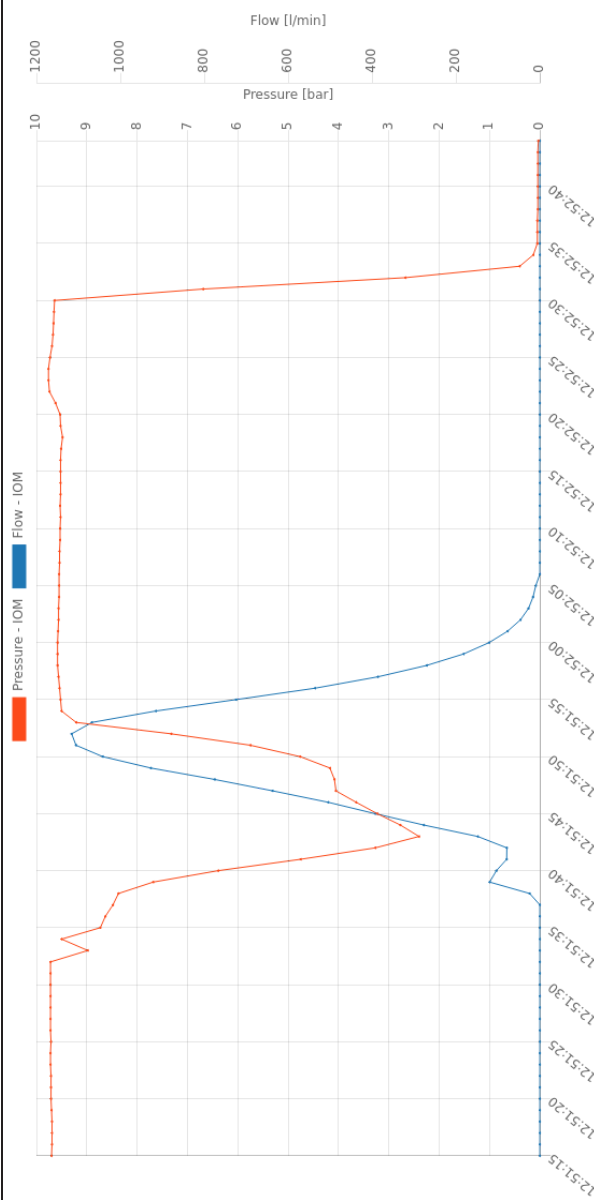
IOM Water Source

Address:
Latitude: 51.5166647
Longitude: -0.1750731
Drive way:

Name: IOM
Start time: Oct 12, 2022, 12:51 PM
Stop time: Oct 12, 2022, 12:52 PM
Maintenance worker:
Creation: Oct 12, 2022
Last update: Mar 29, 2023
Version: 5

Measurement interval: 1s
Measure count: 90
Total flow: 0.2 m³
Device type: HTL-142808
Firmware version: undefined. undefined. undefined

Pressure (min/max): 0.03/9.76 bar
Flow (min/max): 0/1.116 l/min
Flow at 1.5 bar: 148 l/min - 2.4 bar





IOM 6.25 Issue A

Portable Wet Riser, Dry Riser System & Hydrant Tester Mag-Flux HTL

Maintenance & Service

The Mag-Flux HTL is maintenance-free device. It is recommended that the device is returned to the manufacturer for recalibration every 2 years.

Additional Information

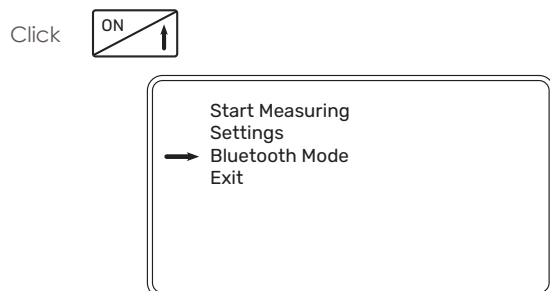
Safety considerations

Suitably restrain the flow meter when running high flow and pressure tests through the flow meter. Consider manual handling techniques when handling the flow meter and carry case.

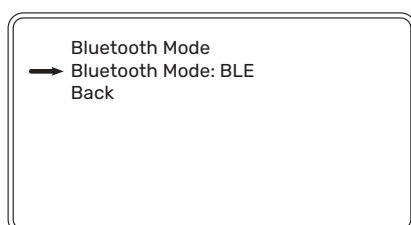
Bluetooth Mode

For Android device the bluetooth mode should display BT
For IOS device the bluetooth mode should display BLE.

To change the bluetooth mode;



Press  to 'Bluetooth Mode' (as per above) and press 



Change the bluetooth Mode by selecting BLE or BT.

Note first connection the bluetooth password is 1234

Power Supply/ Charging

The Mag-Flux HTL is powered by 2 internal integrated rechargeable battery packs (7.2V each). A fully charged flow meter will provide approximately 24 hours use. Charge the battery periodically to prevent detriment to the internal batteries. Allow approximately 4 hours to fully charge the unit. Always ensure the protective cap for the charging connector is applied after charging and before carrying out any flow tests.

Carry Case

The bespoke carrycase can be ordered separately to safely store and prevent damage to the flow meter

Features include:

- High strength
- Safe storage
- Foam inlay
- Dust and water proof
- Wheels and travel handle

