

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



Installation, Operation and Maintenance Manual

IOM : 6.25 Issue A 13/06/2023 © 2023 Rapidrop Rapidrop Global Ltd T: +44 (0) 1733 847 510 F: +44 (0) 1733 553 958 e: rapidrop@rapidrop.com w: www.rapidrop.com



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) - Remote (Via mobile app - Download readings)	Pg 5-7 Pg 8-12
5.	Test Report Document Example	Pg 13
6.	Maintenance/Service	Pg 14
7.	Additional Information	Pg 14

Rapidrop Global Ltd T: +44 (0) 1733 847 510 F: +44 (0) 1733 553 958 e: rapidrop@rapidrop.com w: www.rapidrop.com



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

Installation - Application dependant

Wet Riser Systems

Verify the flow and pressure requirements of wet riser pressure regulating valves. According to BS 9990: 2015. 8 ± 0.5 bar 750LPM \pm 75LPM

Contents

The Mag-Flux HTL consist of:

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



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

IOM : 6.25 Issue A 13/06/2023 © 2023 Rapidrop

Rapidrop Global Ltd T: +44 (0) 1733 847 510 F: +44 (0) 1733 553 958 e: rapidrop@rapidrop.com w: www.rapidrop.com



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 13/06/2023 © 2023 Rapidrop Rapidrop Global Ltd T: +44 (0) 1733 847 510 F: +44 (0) 1733 553 958 e: rapidrop@rapidrop.com w: www.rapidrop.com



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.

23.03.2023

ON

Start Measuring

Settings Bluetooth Mode

Fxit

mag-flux HTL

Serial number: Flow Direction

Operation - Standalone

1. Press and hold

2. Press the ON button

to turn the flow meter on.

The below screen will appear.

15:30

The screen below will appear

ON

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

\rightarrow	Record the measurement Without saving measure Exit

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

Use the arrow

to navigate down.

5. Name the test (Up to 16 characters)

Description	
-	

Use the arrows

to change the character.



to move to the next character. Once named press

enter until the readings are displayed (step 6)



© 2023 Rapidrop

to start measuring

Rapidrop Global Ltd T: +44 (0) 1733 847 510 F: +44 (0) 1733 553 958 e: rapidrop@rapidrop.com w: www.rapidrop.com

IOM 6.25	
Issue A	
Portable Wet Riser, Dry Rise & Hydrant Tester Mag-Flux HTL	er System
6. The flowmeter is now ready to use.	
To change the flow rate units select	Wireless displays & docks
23.03.2023 15:30	Other devices
0.00 (/min 0.00 bar	HTL-142808 Paired
Total 0.00m3	Kemove de
7. After testing press OFF (The below will appear)	4. Once paired open the PC software. Select mag-flux HTL (COM) suchen
	💽 mag-flux HTL Datenexport - V0.2.4
The measurement should be terminated?	mag-flux HTL (COM) suchen
No	COM5 ~ Verbinden m
Use the arrow to select Yes and press enter.	From the drop down select the appropriate COM port that the HTL bluetooth is connected to.
To turn the power off press and hold	Then select Verbinden.
Download and convert the test (CSV) using the HTL PC software.	5. Select mag-flux HTL auslesen
1. Turn on the flow meter and ensure "BT" (bluetooth) is turned on	HTL-142808 (3.2.2)
2. Open the bluetooth setting on the Windows based PC (device with bluetooth connection)	erbinden mag-flux HTL auslesen
3, Select Add a bluetooth device and connect to the \ensuremath{HTL}^{****} (Flow meter serial number)	6. Select the appropriate test you require to export
	COM5 Verbinden m
	✓ 0 TEST 26/03/2023 13:56:51 □ 1 6 26/03/2023 14:06:27
IOM : 6.25 Rapidrop (l Global Ltd
Issue A T: +44 (0) 1733 847 510 13/06/2023 e: rapidrop@r	F: +44 (0) 1733 553 958

w: www.rapidrop.com



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

12. Select finish.

create customised graphs/ charts.

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.

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

ginal data type

oose 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 <u>r</u>ow: 1

File origin: 65001 : Unicode (UTF-8)

<u>/</u>y data has headers.

В C D Ε Druck[bar] Durchfluss[m³/h] Trübung[L 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 F14:06:31+01:00 0 0 Г14:06:32+01:00 0 0 0 0 F14:06:33+01:00 0 Г14:06:34+01:00 0.01 F14:06:35+01:00 0.01 0

13. The data will be exported into columns allowing the user to

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

Nummer 0;2023 1;2023 2;2023 3;2023 4;2023 5;2023	r; Zeitst 3-03-26T1 3-03-26T1 3-03-26T1 3-03-26T1 3-03-26T1 3-03-26T1	tempel; 14:06:27 14:06:28 14:06:30 14:06:31 14:06:31	Druck[bar 7+01:00;0; 3+01:00;0; 9+01:00;0. 0+01:00;0; L+01:00;0; 2+01:00;0;	01; 01; 01; 01; 01; 0;;	Durchfluss 0;;; ; 0;;; 0;;; ; ;	;[mº/h];	Trübung [FNU];	Leitfähi
					Cancel	< B:	ack	<u>N</u> ex	t >

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			
<u>T</u> ab			
Se <u>m</u> icolon	Treat conse	cutive delimiters as on	e
<u>C</u> omma	Tout qualifier		
Space	Text <u>q</u> uaimer:		
Other:			

IOM : 6.25 Issue A 13/06/2023 © 2023 Rapidrop

Rapidrop Global Ltd T: +44 (0) 1733 847 510 F: +44 (0) 1733 553 958 e: rapidrop@rapidrop.com w: www.rapidrop.com



BT 23.03.2023 15:30 mag-flux HTL Serial number: Flow Direction

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



App Store 📶 🗢	10:21	• 1 🔳
K New object	pt	
o ⁺	C: C	apture image hoose image
		Assign QR
Project:		
ID:	0	
Name:	This field is red	quired.
Туре:	Absperrklappe	
Address:		
Driveway:		
Notes:		
Last		

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

IOM : 6.25 Issue A 13/06/2023 © 2023 Rapidrop Rapidrop Global Ltd T: +44 (0) 1733 847 510 F: +44 (0) 1733 553 958 e: rapidrop@rapidrop.com w: www.rapidrop.com



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

Latitude:	52.58479259342751
Longitude::	-0.2069209643505114
D	etermine location
+ H.	Empson Road
Cancel	Save

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

∎ sky 🗢 🕻 Chooce device	10:39		• 7 •
Quick selectio	n		
HTL-142808 (368E00	C27-0E59-9	97F-8458	
Sea	rch devices		
If you could not find a de switched on and Bluetoe	evice, check oth is activat	if device is ed.	
To use this function, ei portable hydrant tester HTL from MECON Gmb hydrant tester HyDatLo data logger PreDatLog	her the MAG-FLUX H or the g or the from M + R	MEC SAFETY C m+r re	

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

Realtime measurement < Store on Yes No device?: Name Interval [s] 1 Measurement inputs Pressure: Yes No Flowrate: Yes No Cancel

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

© 2023 Rapidrop

▲ Ap	p Store 📶 奈	10:20	
۲.	Liste		Q
	Create new v	water source	
	Measureme	nts	





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

8. Once connected the flow meter will automatically display:

23.03.2023 15:30
0.00 (/min 0.00 bar
Total 0.00m3

Change the units by selecting



The app will display:

Pressu	re Flowrate 0.01 bar 1.00 m³/h 0.01 bar 0.90 m³/h 0.01 bar 0.90 m³/h 0.01 bar 0.90 m³/h 0.01 bar 0.70 m³/h 0.00 bar 0.70 m³/h 0.00 bar 0.50 m³/h 0.00 bar 0.30 m³/h
Stop	measurement
Name:	IOM
Name: Start:	IOM 24.03.2023 10:40:06
Name: Start: Pressure min/max:	IOM 24.03.2023 10:40:06 0.00 / 0.01 bar v
Name: Start: Pressure min/max: Flowrate min/max:	IOM 24.03.2023 10:40:06 0.00 / 0.01 bar ▼ 0.00 / 0.00 m³/h ▼
Name: Start: Pressure min/max: Flowrate min/max: Total flow [m³]:	IOM 24.03.2023 10:40:06 0.00 / 0.01 bar 0.00 / 0.00 m ³ /h 0

Change the flowrate units by selecting the drop down.

Once testing has finished click 'stop measurement'

Save the measurement.

9. Select $\ensuremath{\textbf{Assign}}$ and attach the relevant 'water source' that was created earlier.



IOM : 6.25 Issue A 13/06/2023 © 2023 Rapidrop Rapidrop Global Ltd T: +44 (0) 1733 847 510 F: +44 (0) 1733 553 958 e: rapidrop@rapidrop.com w: www.rapidrop.com



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

Click the red box

. One change	e not synchronized!	
List	Map	
Live	Scan QR	

Click the blue sync button to synchronisate 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 13/06/2023 © 2023 Rapidrop Rapidrop Global Ltd T: +44 (0) 1733 847 510 F: +44 (0) 1733 553 958 e: rapidrop@rapidrop.com w: www.rapidrop.com



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

Download Test Results

1. Select measurements

W sser karte.in

Create new

Water sourcefittings

C building

Showmap

🕀 Create nei

show list
 Showma
 features

maintenance
C Object maintenance
Maintenance schedule
C Measurements

operational planning

Indicative preparation
Assembly areas
Notification contacts

water pipelines

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

			karte
User lo	gin		
Account n	nenu	🔿 Log in	+New account
User name*	4		
Password*	a,		
Remembe	er me		Recover lost passv
		Login	
		oder	
	Cre	ate new ac	count

Hello michal.multaniak!

Q,

Wasserkarte.info-PLUS is activated. Many thanks for the support

0

my account

license status

👁 🗭 🄁 🙆 🛣 A reate new 🔊 🚯 🚯 🖹 ЮМ how list 🐼 🤊 🚯 🕼 🖹 bra ۲ how map 👁 🗭 🦻 🚯 🕼 🖹 Level 6 Stage 2 Wet Riser Valve ures perational planning New ntenance naintenance naintenance schedules neasurements neasurement reports

2. All recordings will be shown below:

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 13/06/2023 © 2023 Rapidr<u>op</u>

Rapidrop Global Ltd T: +44 (0) 1733 847 510 F: +44 (0) 1733 553 958 e: rapidrop@rapidrop.com w: www.rapidrop.com



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

Steigleitung (#1) W SSer Karte... Flow [l/min] 1000 1200 800 600 400 200 9 Pressure [bar] 10 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 Op. 25:27 56:25:27 06:25:27 5.25 S 02:25:27 57:25:72 Firmware version: undefined.undefined.undefined MOI Flow -07:25:27 50:25:25 MOI Me asure ment inte rval: 1s Measure count: 90 Total flow: 0.2 m³ Device type: HT L-142808 00:25:25 Pressure 5:25:22 05:75:20 75:57 Sp. 75:27 OB:TS:ZT SE:75:32 0E:75:27 Start time: Oct 12, 2022, 12:51 PM Stop time: Oct 12, 2022, 12:52 PM **IOM Water Source** 52:75:57 Maintenance worker: Creation: Oct 12, 2022 Last update: Mar 29, 2023 Latitude: **51.5166647** Longitude: -**0.1750731** Drive way: 02:75:27 Name: IOM Version: 5 Address: 57:75:27

IOM Water S

© 2023 Rapidrop

Rapidrop Global Ltd T: +44 (0) 1733 847 510 F: +44 (0) 1733 553 958 e: rapidrop@rapidrop.com w: www.rapidrop.com 

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 bluetoot mode should display BLE.

To change the bluetooth mode;



Change the bluetooth Mode by selecting BLE or BT.

Note first connection the bluetooth password is 1234

IOM : 6.25 Issue A 13/06/2023 © 2023 Rapidrop Rapidrop Global Ltd T: +44 (0) 1733 847 510 F: +44 (0) 1733 553 958 e: rapidrop@rapidrop.com w: www.rapidrop.com



Power Supply/ Charging

carrying out any flow tests.

and prevent damage to the flow meter

Carry Case

Features include:



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

The bespoke carrycase can be ordered separately to safely store