



Digital Backflow Test Kit

USER GUIDE & SPECIFICATIONS

HYDROFLOW



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1. Specifications

IMPORTANT

Ensure your test kit is drained before storing it.

Open all valves and drain hoses prior to storage.

Storing in a damp environment will void the warranty of this product.

Model: HFD-DTK

Static Max Pressure Range: 0-2000kPa

Pressure Differential Measuring Range: 0-350kPa

Over Pressure: 700kPa

Accuracy: 0.5% FS Includes Long term stability

Power: 3V (2 x Alkaline AAA batteries.)

Battery Life: Est 8-12 months

Sampling rate: 3 times / Sec

Damping Selectable from: 0.1 - 10

Display: 4-digit LCD

Back light Resolution: 0.1 kPa.

Temperature Compensated pressure range: 0 - 40°C

Operating temperature range: -20 to 85°C





IP Rating: IP55, with rubber protective boot fitted.

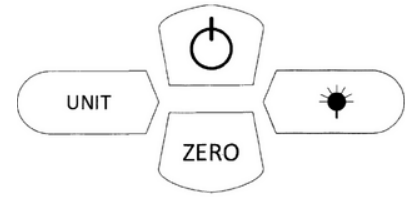
This unit meets the requirements of AS/NZS 2845.3:2020 Water Supply- Backflow prevention devices.



2. Keypad layout


2.1 Functions

-  **Power**
-  **Pressure units; Selectable**
- kPa, PSI, kgf/cm², MPa, mmH₂O, mmHg, inH₂O inHg, & Torr
-  **Zero set**
-  **Back light**

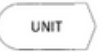


3. Operation Instructions


3.1. On/Off

- A short press of the "POWER"  button turns the unit **ON**. (Hold the "POWER" button to turn **OFF**).
- Allow the unit to stabilize with all valves open and no pressure connected ensure the meter reads 0.00 kPa. If Digital Gauge does not settle at 0.00 - Perform a **Set Zero** by pressing and holding the "ZERO" button approximately 3-4 seconds.





3.2. Selecting Pressure Unit of Measure

- A short press of the "UNIT"  button will scroll through units of measure: - kPa, PSI, kgf/cm², MPa, mmH₂O, mmHg, inH₂O inHg, & Torr

3.3. Back Light

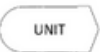
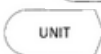

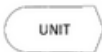
- A short press of the "LIGHT"  button turns the backlight on for 20 seconds. (Hold for 3 seconds for backlight to stay on).

3.4. Adjust Damping

- A short press of the "LIGHT"  and "ZERO"  buttons + brings up code: r-03.
- Change the value by pressing "ZERO"  button between 0.1 to 10.
- Use the "LIGHT"  button to save setting and exit menu.

Note: The lower the value the Faster the display will change, the bigger the value the slower the display will change. (0.1 faster response, 10 slow response).

3.5. Peak Values

- Press and hold "UNIT"  button for approx. 4 seconds. Display will show Max Value.
- Short Press "UNIT"  button again will display Min Value.
- Short Press "ZERO"  button to clear recorded reading while in this menu.
- Press "UNIT"  button again to quit menu.

4. Error Code Description

No.	Code	Description
1	E-E	Sensor damaged.
2	E-H	Applied pressure over range or sensor damage.
3	E-P	Enter pressure calibration procedure, please power off and exit
4	P-C	Enter Temperature Compensation Procedure, please turn off and exit.
5	r-03	Damping Filter Setting 1-10.
6	Max	Maximum reading.
7	Min	Minimum reading.

5. Problem & Troubleshooting

No.	Problem	Reason	Solution
1	Backlight dark	Low battery	Replace batteries
2	Battery image blinking		
3	Pressure reading not changing	1. Pressure line blocked 2. "ZERO" pressed (SetZero) while under pressure 3. Sensor Damaged	1. Check Pressure lines. 2. Disconnect and re-SetZero with no pressure applied. 3. Contact Hydroflow Distributors Ltd.
4	E-H	1. Pressure overload back off pressure. 2. Sensor Damaged.	1. Should start reading below 350kPa (max differential reading; 0- 350kPa). 2. If Code remains contact Hydroflow Distributors Ltd.
5	Readings change slowly	Damping set to Low	See: 3.4. of instructions: Adjust Damping.
6	Readings change rapidly		

6. Calibration Requirements

Equipment used for testing backflow prevention devices shall be calibrated annually or as required by a suitably accredited laboratory, using the intent of MSA Test Method 2 or Test Method 1, with the minimum test points being 100, 70, 50, 35, 20, 14, 10 and 7 kPa.



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