

WATER MONITORING SOLUTIONS

DRINKING WATER



HydrINS 2 Mini®

Electromagnetic
Insertion Flowmeter



Sensor diameter: 15 mm (0.6")
Pipe diameter range: 3" to 12"

Ease of installation with no
interruption to supply

Accurate measurement on low
velocities: +/- 2 mm/s at 2 cm/s
(0.006 ft/sec at 0.066 ft/sec)

"Hot tap" installation
(3/4" BSP or NPT)

Self checking of operation in
accordance with OIML
R49 Type P (Permanent)
requirements

IP68



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Applications

The HydrINS 2 Mini® flowmeter, developed by Hydreka, is an easily deployed and cost effective flowmeter providing highly accurate bi-directional flow measurement for water distribution and raw water pipelines.

- Metering at reservoirs, treatment works
- Pumping stations, water pipes
- Zoning and DMA
- Night flow monitoring and meter testing.



Key Benefits







Operational

- Technical specifications identical to the HydrINS 2® (software, reliability, accuracy)
- Sensor diameter has been reduced to 15mm / 0.6" to minimise flow restriction in small pipes
- Can be deployed over a large range of pipe diameters starting at 3"
- Small overall dimensions (less than 2 kg/ 4,41 lb and 61 cm/2,00 ft height), quick and easy installation and removal
- 3/4 inch hot tap (BSP or NPT) for an installation under pressure
- High sensitivity giving accurate measurement even at low velocities : +/- 2 mm/s at 2 cm/s (0.006 ft/sec at 0.066 ft/sec)
- Robust and watertight (IP68)
- Self checking of operation in accordance with OIML R49 Type P (Permanent) requirements

Economic Benefits

- Cost effective and versatile flow meter
- Ease of installation compared to traditional electromagnetic magmeter or mechanical flow meter
- Dedicated survey tool for monitoring Non Revenue Water (NRW)
- Ideal for checking bulk meter and zone meter accuracy
- Easily removed for calibration and maintenance

Technical Specifications

Measurement range	Bi-directional from 0.02 m/s to 5 m/s (0.06 ft/sec to 16.40 ft/sec), limited only by the stability of the probe in the flow. Fluid conductivity needs to be minimum of 20 µS/cm.
Accuracy	± 2% if V ≥ 10 cm/s and ±2 mm/s (0.33 ft/sec and ± 0.006 ft/sec) of reading value for V < 10 cm/s (0.33 ft/sec).
Units	Selectable : mm, meters, feet, liters, Megaliters, m3, ft3, ImpGal, USGal, MegalimpGal, MegaUSGal, seconds, minutes, hours, days, KiloUSGal, KiloUKGal, KiloFt³, Kilom³, MegaUSGal
Power	<p>Mode 1 (Sensor and logger): 2 internal lithium batteries, 3.6 VDC, 5 year battery life (at 1 minute logging interval).</p> <p>Mode 2 (Sensor and display A,C or Display-Logger): 1 internal lithium battery back-up, 3.6 VDC, probe powered by display.</p> <div>  Octopus LX  Lolog  Vista + </div> <div>  Display A  Display C  Display G -Logger </div>
Sensor Information	Calibration, serial no, date of calibration.
Self checking	Internal checking in accordance with OIML R49 Type P (Permanent) requirements.
Internal logging	Negative Totalizer / Positive Totalizer / Net Totalizer.
Outputs	<p><i>RS 232</i> Programmable point velocity, average velocity, instantaneous flow, totalised volume, signal quality, presence of water 2 pulse outputs, isolated open collector.</p> <p><i>Pulse</i> Can be 1 channel positive flow and 1 channel negative flow or 1 channel flow and 1 direction. Maximum frequency 50 Hz.</p>
Connector	IP68 Watertight 10 way mil spec connector.
Software	Winfluid
Temperature Range	Electronics -20° to +60°C (-4°F to 140° F). Insertion element: non frozen water up to +60 °C (140°F).
Max Pressure	20 bar (290 PSI). Integral to BSP quick fit pressure connector.
Ingress Rating	IP 68/ NEMA6 (immersed in 10 meters of water for upto 72h) with connectors secured.
Installation	Connection on a 3/4 inch hot tap BSP or NPT. Safety chain.
Insertion length	200 mm (7.87") for pipe diameter from 70 to 350 mm (2.76" to 13.78") maximum.
Dimensions	Sensor diameter 15 mm (0.59"), stem diameter 12.3 mm (4.84"), head diameter 106 x 80 mm (4.17" x 3.15").
Weight	< 2 kg (<4.4 lb).
Construction	<p>Insertion components: Stainless Steel 316 - PVDF, WRAS approved N° 1206569 / ACS approved N° 14ACCLY334 / approbation NSF/ANSI 61 N° C028658. Nitrile joints WRAS approved N° 1410504 / 1301500.</p> <p>External components: Stainless Steel 316. Bronze C2121- Probe head: Strengthened ABS.</p>
Warranty	36 months.
Certification	Calibrated to reference meters to COFRAC procedures and traceability.

Products available for sales and rental.
Please contact us for more information.

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