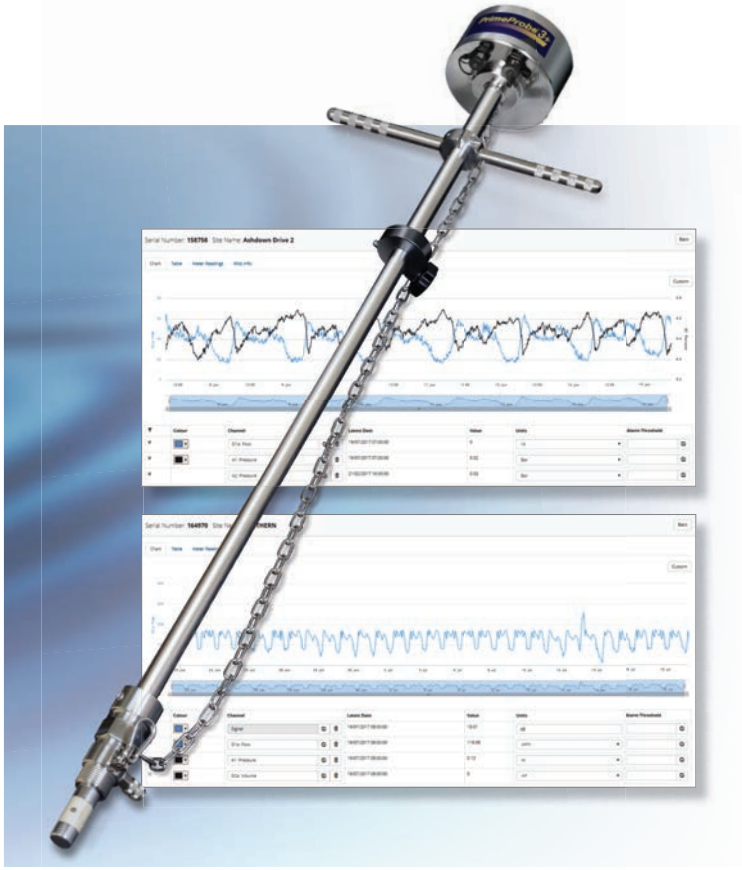
Electromagnetic insertion flowmeter for water networks

PrimeProbe3+ is a bi-directional insertion flowmeter for permanent or portable use in managing water distribution systems. It is a cost effective alternative to full-bore flow meters and is ideal for use over a wide range of flows and pipe diameters.



Features

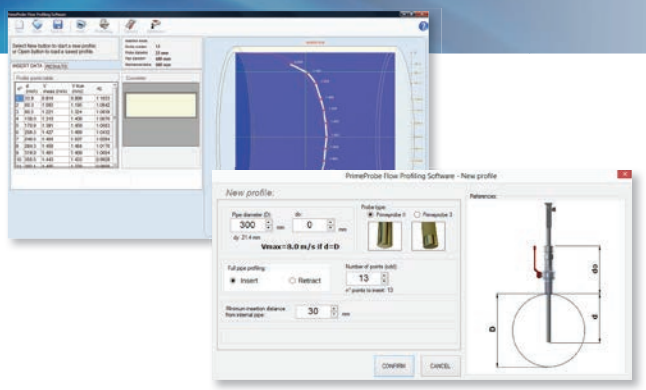
- **Insertion lengths available for use in pipe diameters 80mm to > 2000mm**
- **Velocity measurement 20mm/sec to 5m/sec**
- **No interruption to water supply at installation**
- **Long battery life up to 10 years (dependent upon response time)**
- **Operation in low conductivity water**
- **Very rugged, for use up to 25 Bar operating pressure**

Applications

The *PrimeProbe3+* applications can be in water distribution systems where permanent flowmeters do not exist or where a full bore flow meter would be uneconomic. It may be installed in pipelines without the need for excavation work associated with the installation of full bore meters. Typical applications include;

- DMA and zonal metering
- Night flow measurement for leakage control
- Metering at pumps and reservoirs
- Permanent meter testing and calibration
- Network analysis surveys

Rugged electromagnetic insertion flowmeter for water networks



SMART mode optimum performance

PrimeProbe3+ SMART mode offers optimum accuracy whilst preserving battery life. This mode automatically adjusts the measurement response time when variation of the flow velocity occurs. This gives more accurate results when the flowrate is changing rapidly and also preserves battery life when the flow-rate is stable. Other modes include rapid sampling for very best accuracy and maximum life mode to preserve battery life.

Operation

Installation in pipelines is typically via a small valve tapping. It may be installed with the sensor on the pipe centreline or at the position of mean velocity (1/8 pipe diameter). *PrimeProbe3+* is a very rugged device with a strong stem and sensor plus a safety chain. It is available with a choice of six insertion lengths and is waterproof to IP68. *PrimeProbe3+* is able to operate in pure water areas with conductivity down to 20µS/cm.

Flexible data collection

Programming is carried out via USB connection. *PrimeProbe3+* provides a pulsed output which may be connected to a PrimeLog+ data logger (for local data collection) or to *XiLog+* (for remote data collection). *XiLog+* data can be transferred to any FTP server to be viewed online using PrimeWeb or connection to SCADA systems. Logged flow and pressure data can also be transferred to PrimeWorks or XAP Desktop, providing graphing, reporting, export and database facilities.

Flow Profiling

PrimeProbe3+ provides an accurate measurement of water velocity and if the flow velocity profile is fully developed then also a measurement of flow volume. A software package is available to determine the velocity profile by measuring the velocity at multiple positions across the pipe. This profile then allows more accurate conversion of point velocity measurement to flowrate and flow volume.

Products

Primeprobe3: length 150mm	RXG 731
PrimeProbe3: length 300mm	RXG 732
PrimeProbe3: length 500mm	RXG 733
PrimeProbe3: length 700mm	RXG 734
PrimeProbe3: length 1000mm	RXG 735
PrimeProbe3: length 2000mm	RXG 736
PrimeProbe3: USB communications cable	PP 550 039
PrimeProbe3: output cable to data logger	RXG 921
Gauging Rod - 25mm BSP connection: length 500mm	TXG 101/500
Gauging Rod - 25mm BSP connection: length 1000mm	TXG 101/1000
Flow Profiling software	RXS 880
System: 150mm probe + gauging rod + PrimeLog+ + cables + hose + case	RXG 741
System: 300mm probe + gauging rod + PrimeLog+ + cables + hose + case	RXG 742
System: 500mm probe + gauging rod + PrimeLog+ + cables + hose + case	RXG 743
System: 700mm probe + gauging rod + PrimeLog+ + cables + hose + case	RXG 744

Primayer

Primayer Limited
Primayer House, Parklands Business Park
Denmead, Hampshire PO7 6XP, United Kingdom
T +44 (0)2392 252228 **F** +44 (0)2392 252235
E sales@primayer.com
www.primayer.com

LIT-PP3-044-3.0