

### FEATURES

- Unobstructed flow. No moving parts.
- Ideal for bore water, irrigation, recycled water.
- Internal Battery powered.
- Built-in flowrate and total indicator.
- Minimal straight pipe required.
- Corrosion resistant plastic construction.



unobstructed flow

The SMP series full-bore, plastic-bodied lightweight compact electromagnetic flowmeters are designed for flow and usage monitoring applications, for 25, 50 and 80mm pipes. The polypropylene flow tube offers corrosion resistance to a wide range of chemicals and water qualities.

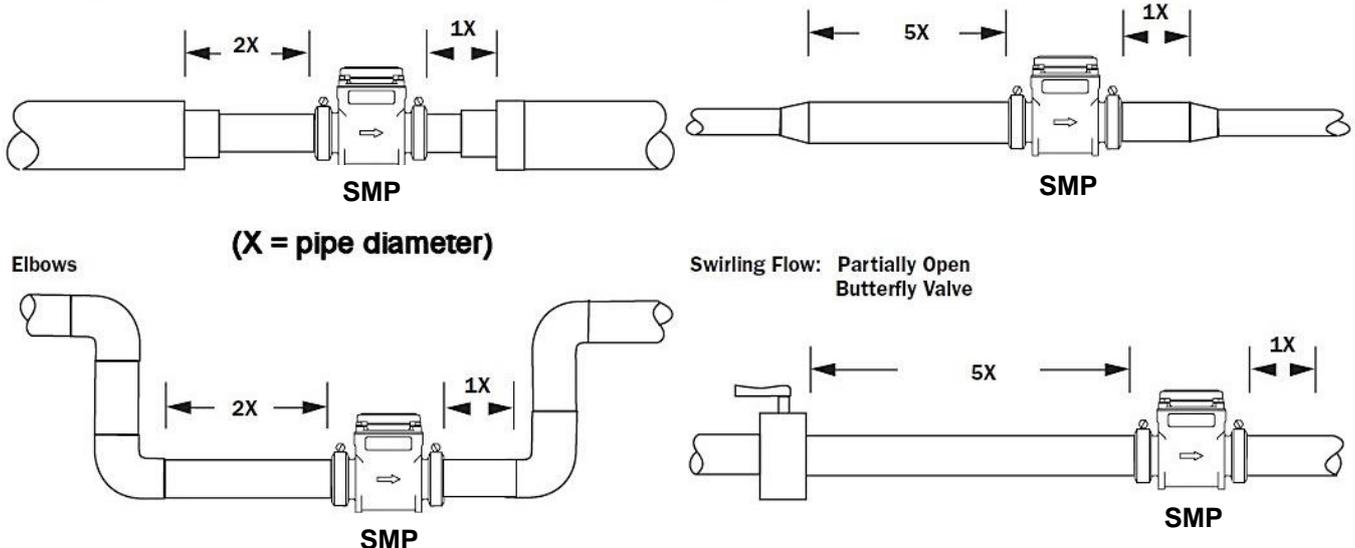
Because there are no mechanical or moving parts in the flow stream and being an obstruction less bore, the meter tolerates high flowrates with no headlosses, providing virtually maintenance free operation, measuring all types of water qualities.

The hinged, opaque polyethylene cover protects the LCD flow rate and total display from dust and UV rays. The LCD display shows flowrate (in Litres/second to 2 decimal places) and total (in m<sup>3</sup> to 1 decimal place).

The SMP range is ideal for tracking flowrate and total flow in usage monitoring applications, and is ideal for irrigation applications, heap leach mining discharge, cooling tower deduct metering, and other water reclamation operations.

The SMP is a battery-operated unit. The batteries are user replaceable with an approximate 2-4 year life under continuous use, or longer depending on the frequency of use. A anti-tamper lead seal is provided and in the event of power failure or replacement of batteries the settings and totals are retained in memory.

With no moving parts, the flowmeter permits unobstructed flow, minimizing flow disturbances and hence straight pipe requirements. The SMP can be used in piping configurations where there is little space between the meter and an elbow or valve. A clamp flange pipe connection kit is included for 50 and 80mm sizes that makes installation very easy. The 25mm size has NPT (female) threaded connection ends.



### MINIMUM STRAIGHT PIPE REQUIREMENTS

## SPECIFICATIONS

<b>Size</b>	25, 50 and 80 mm full port	
<b>Fittings</b>	25 mm: straight NPT (female) threaded ends. 50 & 80mm: Flange clamps with BSP (female) threaded ends.	
<b>Pressure</b>	1030 kPa (10.3 bar, 150psi) working pressure @ 21 °C	
<b>Liquid operating temperature range</b>	-12 °C to 54 °C	
<b>Security</b>	Cross-drilled screws and tamper-evident seal	
<b>Empty Pipe detection (E.P.)</b>	Hardware/software, conductivity-based	
<b>Conductivity of measured liquid</b>	>20 microSiemens	
<b>Environmental</b>	NEMA 4X (IP66) standard; -40° to 80° C storage	
<b>Power</b>	2x C-size Lithium cells (typical replaceable life: 2-4 years).	
<b>Materials</b>	<b>Body</b>	Glass-filled polypropylene
	<b>Electrodes</b>	316 Stainless Steel
	<b>Electronics Housing</b>	Diecast aluminum, powder-coated
	<b>Display Cover</b>	Polyethylene
<b>Display</b>	<b>LCD</b>	Flowrate: 6 digits, Litres/second (2 decimal places); Total: 8 digits, m <sup>3</sup> (1 decimal place).

Size (mm)	weight (kg)	FLOWRANGE					
		min				max	
		@ ±5% accuracy		@ ±3% accuracy		@ ±1% accuracy	
		Litres/sec	Litres/min	Litres/sec	Litres/min	Litres/sec	Litres/min
25	1.5	0.025	1.6	0.145	8.7	6.94	410
50	2.5	0.08	5.0	0.38	22.6	18.9	1130
80	4.5	0.2	12.0	0.88	52.8	42.3	2530



## FLANGE CLAMP FITTING (50 & 80 mm)

### FEATURES

- Polyethylene protective cover
- LCD rate and total indicator
- Powder-coated die cast-aluminum electronics housing
- Cross-drilled screws (2) for tamper-evidence
- Clamping flanges for ease of installation
- 316SS electrodes
- Corrosion-resistant glass-filled polypropylene body
- Lightweight for easy handling



Fitting Kit



To changing the battery of SMP Flowmeters:-



- 1) First remove the 4 hex bolts that hold top section of meter to main body to access the battery compartment. Carefully pry apart the top compartment from the main body.
- 2) Release the elastic strap that holds the battery in place
- 3) Unclip the plastic terminal plug from the board at J1 & J2
- 4) Carefully remove the batteries from their slots on the main board.

Replace batteries in reverse order to above instruction.

# PIPE INSTALLATION

**Recommended:**  
Keep pipe full at meter for accuracy

**Not Ideal:**  
Allows air pockets to form at meter

**Recommended:**  
Keeps pipe full at meter for accuracy

**Not Ideal:**  
Post-valve cavitation can create air pocket

**Recommended:**  
Allows air to bleed off

**Not Ideal:**  
Air can be trapped

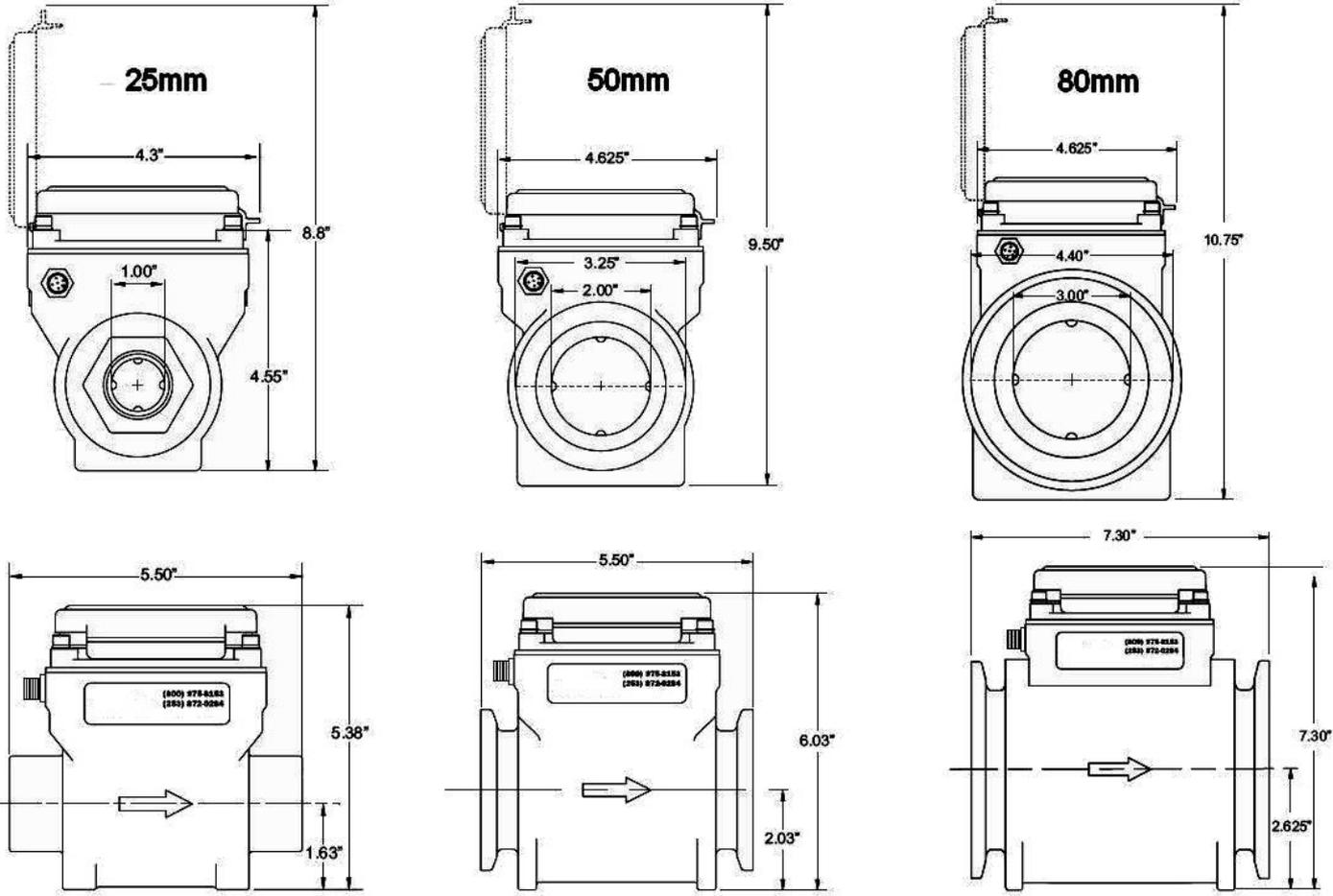
**Recommended:**  
May prevent sediment or bubble problems

- Electrode moved from top by rotating meter
- Intermittent air bubbles miss electrode
- Electrodes free from sediment build-up

**Less Ideal:**  
Air bubbles and sediment on the electrodes can affect accuracy

- Intermittent air bubbles pass over electrode
- Possible sediment build-up

**DIMENSIONS**



**ORDER CODES**

Order Code	Description
SMP025	25mm flowmeter.
SMP050	50mm flowmeter.
SMP080	80mm flowmeter.
<b>Optional</b>	
-LITH	replacement pair of C-size Lithium batteries

Due to continuous product improvement, specifications are subject to change without notice.