

# SMP050 – Battery Powered Electromagnetic Flowmeter

## FEATURES

- **Unobstructed flow.**
- **No moving parts.**
- **Internal Battery or external powered options.**
- **Built-in flowrate and total indicator.**
- **Minimal straight pipe required.**
- **Corrosion resistant plastic construction.**
- **Optional Pulse Output (externally powered model).**



The SMP050 is a full-bore, plastic-bodied lightweight compact electromagnetic flowmeter designed for flow and usage monitoring applications in 50mm pipe. The polypropylene flow tube offers corrosion resistance to a wide range of chemicals and water qualities.

Because there are no mechanical parts in the flow stream and being an obstruction less bore, the meter tolerates high flowrates with no headlosses, providing virtually maintenance free operation.

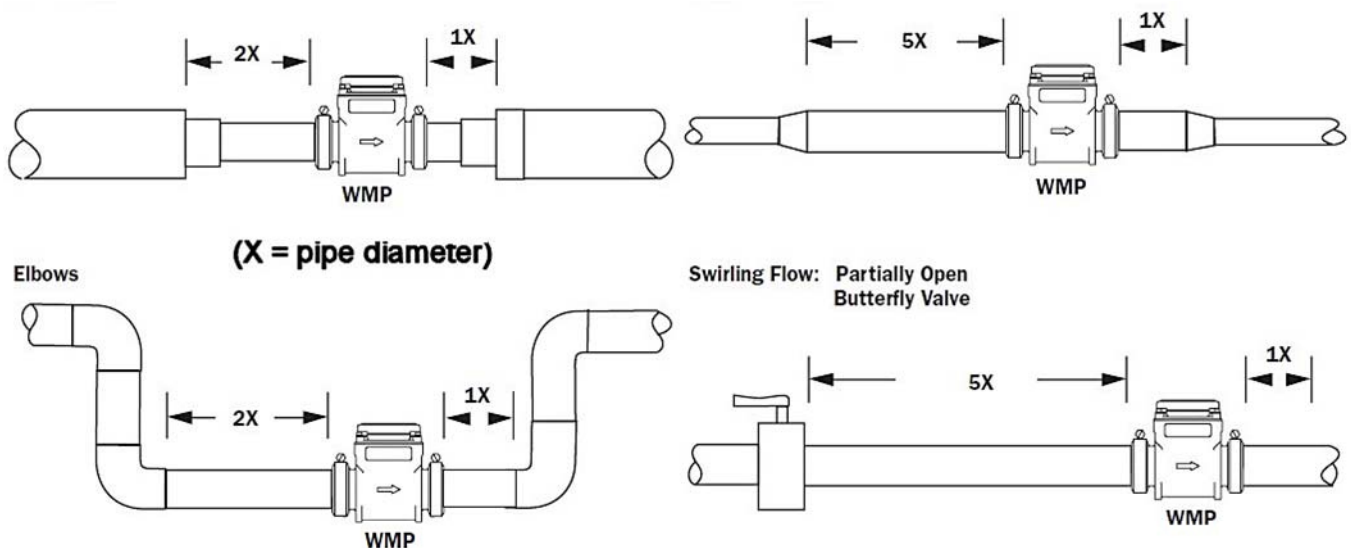
The hinged, opaque polyethylene cover protects the LCD flow rate and total display from dust and UV rays. The electronics housing is made of rugged powder-coated die-cast aluminum.

The LCD display shows flowrate and total.

The SMP050 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 SMP050 is available as either battery-operated unit or a external DC powered option with pulse output facility for batching and logging applications. The batteries are user replaceable with an approximate 1-year life under continuous use, or more 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 SMP050 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 and makes installation very easy.



## MINIMUM STRAIGHT PIPE REQUIREMENTS

**SPECIFICATIONS**

<b>Size</b>	50mm full port	
<b>Fittings</b>	Flange clamps. 2" BSP female threaded ends.	
<b>Pressure</b>	10.3 bar (1030 kPa0 working pressure @ 21 °C	
<b>Operating temperature range</b>	-12 °C to 54 °C	
<b>Flowrange</b>	22 to 1170 Litres/min	
<b>Security</b>	Cross-drilled screws and tamper-evident seal	
<b>Weight</b>	1.7 kg	
<b>Empty Pipe detection</b>	Hardware/software, conductivity-based	
<b>Conductivity of measured liquid</b>	>20 microSiemens	
<b>Environmental</b>	NEMA 4X standard; -40° to 80° C storage	
<b>Accuracy</b>	±1% of reading from 100% to 10% of full scale ±3% of reading from 10% of full scale to cut off	
<b>Power</b>	6 AA alkaline cells. Replaceable life: 1 year with meter in use; 3 years dry. <u>Optional:</u> 10-25 VDC external regulated voltage supply model with pulse output (via 5-pin plug set).	
<b>Pulse Output (external powered only)</b>	1 pulse/Litre, sinking opto isolated 24VDC @10mA max.	
<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/min; Total: 8 digits, m <sup>3</sup> (1 decimal place)

**DIMENSIONS**

**FITTING**

**Step 1.** Position gasket at either end

**Step 2.** Place adapter against gasket, open screw clamps to clear flanges

**Step 3.** Place screw-clamps over both adapter and meter flanges and tighten screws

Gray: Pin 5 = Ground  
White: Pin 4 = (-) Pulse  
Blue: Pin 3 = (+) Pulse  
Black: Pin 2 = (-) Power  
Brown: Pin 1 = (+) Power  
Shield Drain Wire

optional pulse output

<b>ORDER</b>	<b>SMP050</b>	Battery powered. No pulse output.
<b>CODES:</b>	<b>SMP050-P</b>	10-25 VDC powered. 1 pulse/Litre pulse output.

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