

Medium capacity  
chemical flowmeters

**BanksiaControls** 

## BanksiaControls medium capacity chemical flowmeters

### Medium capacity chemical flowmeters

provide precise volumetric flow measurement of a broad range of clean water based products and aggressive chemicals and is also suitable for most fuels, fuel oils and lubricating liquids. Applications include batching, dosing or packaging of various corrosive chemicals or as a more economical alternative to a complete 316 stainless steel meter for liquids such as Diesel Exhaust Fluid (AdBlue).

### Features / Benefits

- High accuracy & repeatability, direct reading flowmeter
- No requirement for flow conditioning (straight pipe runs)
- Measures high & low viscosity liquids
- Quadrature pulse output option & bi-directional flow
- Optional IS approved Instruments (ATEX, IECEx)

### Meter selection

- PPS meters are used for non-aromatic/non-halogenated chemicals, water based liquids, Diesel Exhaust Fluid and petroleum products including oils and grease, fuels and fuel oils.
- PPS meters with standard ceramic rotor pins are suitable for applications where stainless steel is not suited or permitted.
- Blind pulse meters are available with Reed Switch & Hall Effect outputs. Quadrature pulse & Integral 4-20mA outputs are optional.

### Integral instruments

BanksiaControls chemical meter options include integral LCD totalisers, flow rate totalisers & batch controllers. These instruments provide monitoring & control outputs including 4~20mA, scaled pulse, alarms & batch control:

- BT LCD 5 digit reset, 8 digit cumulative totaliser.
- F112/F018 LCD 6 digit reset, cumulative totaliser & flow rate, analogue and pulse outputs
- HART option, IS available, GRP, aluminium or SS enclosures.
- LCD 6 digit reset, cumulative totaliser & flow rate.
- Backlit display.
- EB LCD 6 digit 2 stage batcher & cumulative totaliser.

(Instruments also available for remote mounting and with I.S. approvals)

### General specification

**Flow Range:** 10 ~ 150 litres / min. (2.6~ 40 USgal/min)

**Size:** 25mm (1"NB)

**Materials:** Meter Body:- Glass Reinforced PPS (Ryton®)

Meter Cap:- Glass Reinforced PPS (Ryton®)

Rotors:- Glass Reinforced/Teflon Filled PPS (Ryton®)

Rotor Pins:- Ceramic (High Purity Alumina, AL<sub>2</sub>O<sub>3</sub>)

Blind Pulse  
Meter



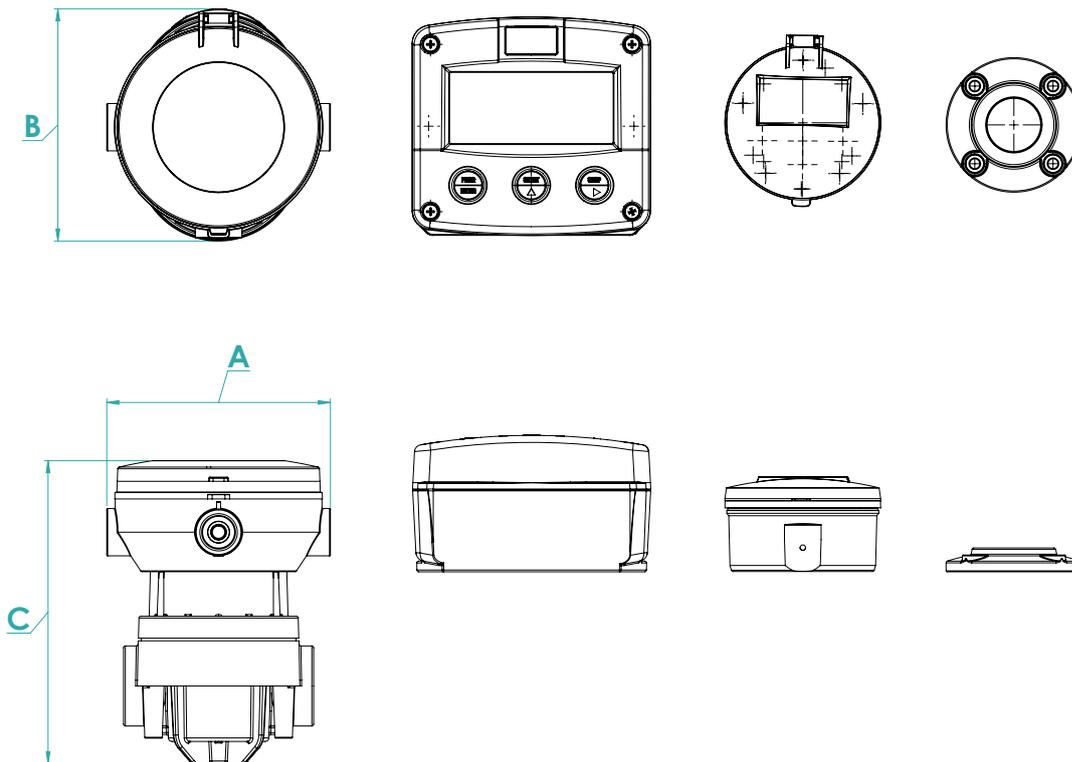
With LCD  
Register



## Specifications

Model prefix:	OM025 (1")
Nominal size ( inches )	25mm (1")
*Flow range - ( litres/min )	10 ~ 150
( US gal/min )	2.6 ~ 40
**Accuracy @ 3cp	± 0.5% of reading ( accuracy is ± 0.2% of reading with optional RT12 with non-linearity correction )
Repeatability	typically ± 0.03% of reading
Temperature range	-20°C ~ +80°C ( -4°F ~ +180°F ), refer factory for lower temperature
Maximum pressure	(Threaded meters)bar (PSI)
PPS meters	5 (70)
<b>Electrical - for pulse meters ( see below for optional outputs )</b>	
Output pulse resolution	pulses / litre ( pulses / US gallon ) - nominal
Reed switch	27 (102)
Hall effect	107 (405)
Quadrature Hall option	54 (204)
Reed switch output	30Vdc x 200mA max. ( maximum thermal shock 10°C (18°F) / minute )
Hall effect output (NPN)	3 wire open collector, 5~24Vdc max., 20mA max.
Optional outputs	4~20mA, scaled pulse, quadrature pulse, flow alarms or two stage batch control
<b>Physical</b>	
Protection class	IP66/67 (NEMA4X), integral ancillaries can be supplied I.S. ( intrinsically safe )
Overall dimensions	Refer Below
Recommended filtration	150 microns (100 mesh)
* Maximum flow is to be reduced as viscosity increases, see flow de-rating guide. Max. Recommended pressure drop is 100Kpa. (15 psi).	

## Overall Dimensions:



### All dimensions in mm (±2mm)

025 Threaded Meter	DIM A	DIM B	DIM C
F-Series	130	120	181
RT-Series	122	127	166
BT11	103	94	158
Cap	103	74	119

## Model Coding - BanksiaControls PPS Pulse Meter

	<b>Meter Size</b>	
	OMO25	25mm (1") 10-150 L/min 2.6-40 GPM
	<b>Body Material</b>	
	P	Glass Reinforced PPS
	<b>Rotor Material</b>	
	0	PPS - Teflon Filled (Polyphenylene Sulfide)
	1	Keishi cutting of PPS rotors
	<b>Bearing type</b>	
	0	No bearing-PPS rotors only
	<b>O-ring material</b>	
	1	Viton (standard); -15°C (+5°F) minimum
	2	Ethylene Propylene Rubber (EPR)
	3	Teflon encapsulated viton - application specific; -15°C (+5°F) minimum
	4	Buna-N (Nitrile)
	<b>Temperature Limits</b>	
	8	80°C (180°F)
	<b>Process connections</b>	
	1	BSP Female threaded
	2	NPT Female threaded
	<b>Cable entries</b>	
Exclusive to B2 & B3 options	0	3~6mm cable gland or no cable entry
	1	M20 x 1.5mm
	2	1/2" NPT
	<b>Integral Options</b>	
	00	Nil
	RS	Reed switch only - to suit intrinsically safe installations (I.S)
	QP	Quadrature pulse (2 NPN phased outputs)
	PF	Pulsating flow option (hall effect output only)
with scaleable pulse output	B2	BT11 dual totaliser with pulse output
IECEX & ATEX approved	B3	Intrinsically safe BT11 (I.S)
Scaled pulse, alarm, 4 ~ 20mA	R2	RT12 Flow Rate Totaliser with all outputs (GRN Housing)
IECEX & ATEX approved	R3	Intrinsically safe RT12 (I.S) (GRN Housing)
2 stage DC batcher and totaliser	E0	EB10 batch controller
	F1	F112 in GRP Encl, Non IS, Battery, DC and LP 4to20mA, Linearisation, OC Pulse
	F2	F112 in GRP, IS, Battery, DC and LP 4to20mA, Linearisation, OC Pulse
	F10	F112 in Alu, Non IS, Battery, DC and LP 4to20mA, Linearisation, OC Pulse
	F11	F112 in Alu, IS, Battery, DC and LP 4to20mA, Linearisation, OC Pulse
Faeries indicators are integrally mounted to flowmeter via screw and gasket	F12	F112 in SS, Non IS, Battery, DC and LP 4to20mA, Linearisation, OC Pulse
	F13	F112 in SS, IS Appr, Battery, DC and LP 4to20mA, Linearisation, OC Pulse
	F18	F018 in Alu, IS, Battery, DC and LP 4to20mA, Linearisation, OC Pulse, HART
	F19	F018 in SS, IS, Battery, DC and LP 4to20mA, Linearisation, OC Pulse, HART
	SB	Specific build requirement

Model Code Example

OMO25 P 0 0 1 - 8 1 0 B2