MEDIUM CAPACITY CHEMICAL METER

FLOMEC® Medium Capacity Chemical Flowmeter 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 NMI Pattern Approval (Australia Only)

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 output is optional.

Integral Instruments

FLOMEC® Chemical Meter options include integral LCD totalisers, flow rate totalisers and batch controllers. These instruments provide monitoring & control outputs including 4~20mA, scaled pulse, alarms & batch control:

- BT11 LCD 5 digit reset, 8 digit accumulative totaliser.
- RT12 LCD 6 digit reset, accumulative totaliser & flow rate. Analogue and pulse outputs
- RT40 LCD 6 digit reset, accumulative totaliser & flow rate. Backlit Display.
- EB10 LCD 6 digit 2 stage batcher & accumulative totaliser. (Instruments also available for remote mounting)

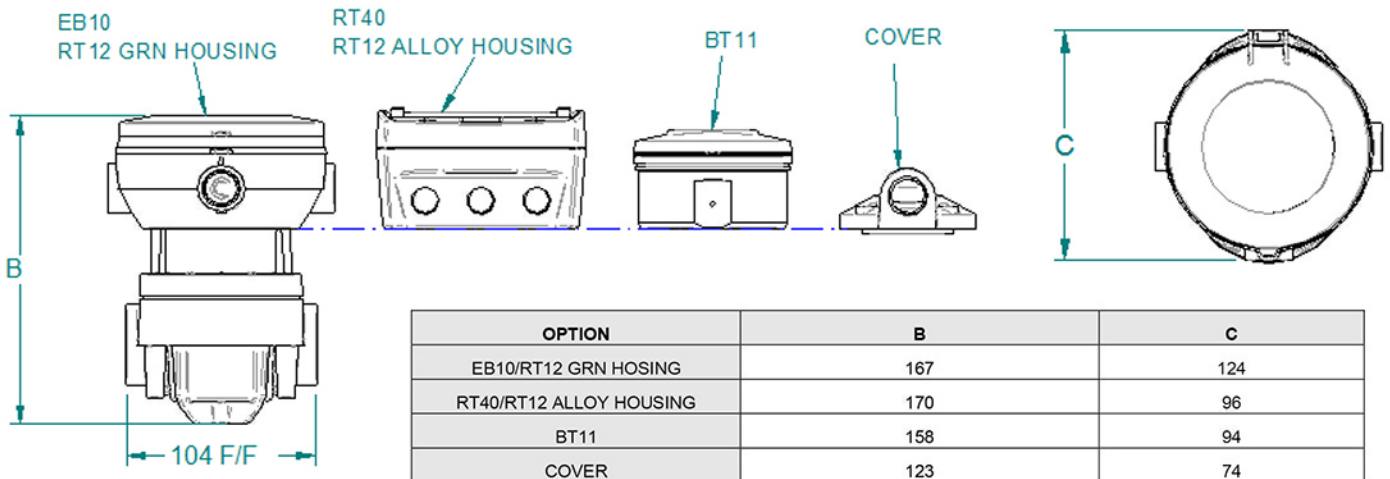*Illustration of RT12, RT40, EB10 and BT11 integral instrument options*

Specifications

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, AL203)

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	-20ºC ~ +80ºC (-4ºF ~ +180ºF), refer factory for lower temperature
Maximum pressure	(Threaded meters)bar (PSI)
PPS meters	5 (70)
Electrical - for pulse meters (see below for optional outputs)	
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 10ºC (18ºF) / 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
Physical	
Protection class	IP66/67 (NEMA4X)
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. Reccomanded pressure drop is 100Kpa. (15 psi).

Overall Dimensions

OPTION	B	C
EB10/RT12 GRN HOSING	167	124
RT40/RT12 ALLOY HOUSING	170	96
BT11	158	94
COVER	123	74

Model Coding

Model	Size			
OM025	1"	(25mm)	10~150 L/min	2.6~40 GPM

	Body material
P	PPS (suitable for PPS rotors only)

	Rotor material
0	PPS - Teflon filled (Polyphenylene Sulfide)
1	Keishi cut PPS rotors (for high viscosity liquids)

	Bearing type
0	No Bearing (PPS rotors only)

	O-ring material
1	Viton (standard) -15°C minimum (-5°F)
3	Teflon encapsulated viton
4	Buna-N (Nitrile), -40°C minimum (-40°F)

		Temperature limits
-	**8**	80°C (176°F) max.

	Process connections
1	BSPP (G) female threaded
2	NPT female threaded

		Cable entries
Exclusive to B2,B3, G5, G6, G7 options	**0**	3~6mm cable gland or no cable entry
	1	M20 x 1.5mm (M16 x 1.5mm for R0 and R4 options)
	2	1/2" NPT

		Integral options
		Nil
not available with high press models	**QP**	Quadrature pulse (2 NPN phased outputs)
for injected combustion engines	**PF**	Pulsating flow option (Hall effect output only)
with scaleable pulse output	**B2**	BT11 totaliser with pulse output
scaled pulse, alarms, 4~20mA	**R0**	RT12 rate totaliser with all outputs (Alloy housing)
scaled pulse, alarms, 4~20mA	**R2**	RT12 rate totaliser with all outputs (GRN housing)
scaleable pulse output, backlight	**R4**	RT40 rate totaliser with backlit large digit LCD (Alloy housing)
2 stage DC batcher & totaliser	**E0**	EB10 batch controller

Model No. Example									
OM025	P	0	0	1	-	8	1	0	B2

Data sheet No. DSOMP-0213