A low-angle, blue-tinted photograph of an industrial facility, likely a refinery or chemical plant. The image shows a complex network of large pipes, walkways, and structural steel against a cloudy sky. The perspective is looking up and slightly to the side, creating a sense of scale and depth.

Small Capacity Flowmeters

BanksiaControls 

The logo for BanksiaControls features the company name in a bold, white, sans-serif font. To the right of the name is a graphic consisting of several white, multi-pointed starburst or asterisk shapes of varying sizes, arranged in a loose, circular pattern.

BanksiaControls small capacity flowmeters

Small capacity flowmeters provide precise volumetric measurement of small quantities of liquids or low flows found in a broad range of industries including automotive, aviation, mining, power, chemical, pharmaceutical, food, paint, petroleum & environmental. Applications include the metering of additives for fuel, consumer products, water treatment & flotation cells, corrosion inhibitors, catalysts, emulsifiers, oils, grease, fragrances, adhesives, solvents, ink & insecticides.

Features / Benefits

- High accuracy & repeatability, direct reading flowmeter
- No requirement for flow conditioning (straight pipe runs)
- Stainless Steel rotors (Optional PPS Rotor for OM008 meter)
- Measures high & low viscosity liquids
- Quadrature pulse output option & bi-directional flow
- Optional Exd approval (ATEX,IECEX).
- PF option available for metering pulsating flows
- Optional IS/Exd approved Instruments (ATEX, IECEX)

Meter selection

- Aluminium meters are used for petroleum product including oils and grease, fuels and fuel oils.
- Stainless steel meters are for the chemical, cosmetic, food and pharmaceutical industries & water based liquids.
- Blind pulse meters are available with reed switch & Hall Effect outputs. Quadrature pulse is optional.

Integral instruments

BanksiaControls 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. Instruments include:

- BT LCD 5 digit reset, 8 digit cumulative totaliser.
- F112/F018 LCD 6 digit reset, cumulative totaliser & flow rate, analog and pulse outputs.
- HART options, IS available, GRP aluminium or SS enclosures.
- LCD 6 digit reset, cumulative totaliser & flow rate.
- E112/E018, Exd approved, aluminium or SS enclosure
- Backlit display.
- EB LCD 6 digit 2 stage batcher & cumulative totaliser.

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

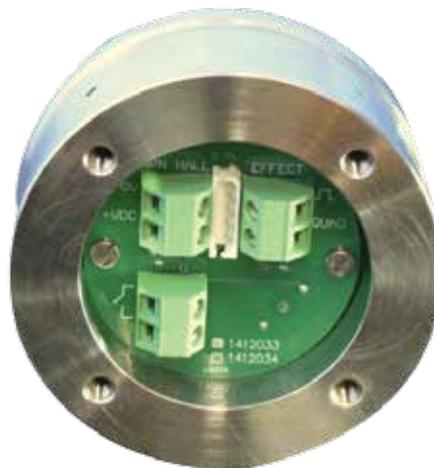
General specification

Flow rates : 0.5 ~ 550 litres / hr. (0.16~ 145 USgal/hr.)*

Sizes : 4~8mm (1/8"~3/8"NB)

Materials : Aluminium, 316 Stainless steel

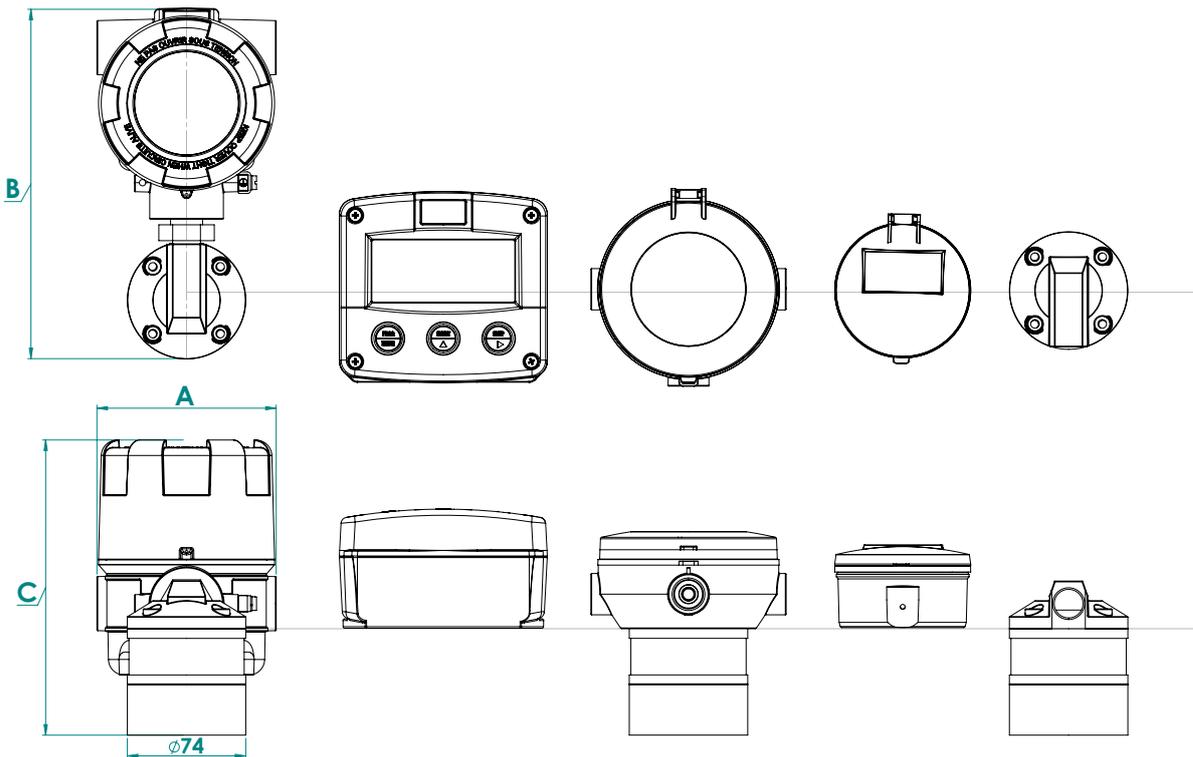
* See also medium and large capacity sheets for other size meters.



Specifications

Model prefix:	OM004 (1/8")	OM006 (1/4")	OM008 (3/8")
Nominal size (inches)	4mm (1/8")	6mm (1/4")	8mm (3/8")
*Flow range - (LPH) litres/hour	(0.5 ~ 36)	(2 ~ 100)	(15 ~ 550)
(GPH) US gallons/hour	(0.13 ~ 9.5)	(0.5 ~ 27)	(4 ~ 145)
**Accuracy @ 3cp	± 1% of reading (accuracy is ± 0.2% of reading with optional RT/F/E series with non-linearity correction)		
Repeatability	typically ± 0.03% of reading		
Temperature range	-40°C ~ +120°C (-40°F ~ +250°F) (Note: +150°C (302°F) max temp option available with Hall only output)		
Maximum pressure	(Threaded meters)bar (PSI)		
Aluminium meters	15 (220)		
316 Stainless Steel	34 (495)		
Intermediate press. SS meter	100 (1450)	100 (1450)	100 (1450)
High pressure models	400 (5800)	400 (5800)	400 (5800)
Electrical - for pulse meters (see below for optional outputs)			
Output pulse resolution	pulses / litre (pulses / US gallon) - nominal		
Reed switch	2800 (10600)	1050 (3975)	355 (1345)
Hall effect	2800 (10600)	1050 (3975)	710 (2690)
QP - Quadrature Hall option	2800 (10600)	1050 (3975)	710 (2690)
PF - Pulsating Flow (Hall effect)	2800 (10600)	1050 (3975)	178 (675)
HR - High resolution Hall effect	11200 (42400)	4200 (15900)	N/A
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		
Physical			
Protection class	IP66/67 (NEMA4X), optional Exd/Exia integral ancillaries can be supplied. Refer to separate approvals for details.		
Overall dimensions	Refer Below		
Recommended filtration	75 microns (200 mesh)		
* Maximum flow is to be reduced as viscosity increases, see flow de-rating guide. Max. Recommended pressure drop is 100Kpa. (14.5 psi).			
** QP & PF Options are not available with High Pressure meters.			

Overall Dimensions:



All dimensions in mm (±2mm)

OPTIONS	DIM C	DIM C	DIM C	DIM B	DIM A
	OM004	OM006	OM008	OPTION	OM004, 6, 8
E-Series	186	186	190	220	112
F-Series	142	142	148	120	130
RT-Series	122	122	129	124	122
BT11	113	113	120	94	85
Cap	94	94	99	72	74

Model Coding - BanksiaControls Pulse Meters

Meter Size	
OM004	4mm (1/8") 0.5-36 L/hr 0.13 - 9.5 GPH
OM006	6mm (1/4") 2-100 L/hr 0.5 - 27 GPH
OM008	8mm (3/8") 15-550 L/hr 4 - 145 GPH
Body Material	
A	Aluminium
S	316/L Stainless Steel
N	Intermediate press. 316/L SS meter (OM004N ~ OM008N = 100bar max.)
H	High pressure 316/L SS (OM004H ~ OM008H = 400bar [5800psi] max.)
Rotor Material	
0	PPS* - Teflon Filled (Polyphenylene Sulfide)* Only available with OM008 size
5	Stainless Steel (all standard OM004 ~ OM008 meters)
7	Keishi cutting of stainless steel rotors (for high viscosity liquids) (Only available with 008 size)
Bearing type	
0	No bearing-PPS rotors only
1	Carbon-Ceramic (Stainless steel rotors only)
O-ring material	
1	Viton (standard); -15°C (5°F) minimum
2	Ethylene Propylene Rubber (EPR); -40~+120°C (-40~+250°F)
3	Teflon encapsulated silicone - application specific; -40°C minimum
4	Buna-N (Nitrile) -40~+100°C (-4~+212°F)
Temperature Limits	
2	120°C (250°F) - see note 1
3	*150°C (300°F) max. - (Hall effect output only); O-Ring code 1 or 3
5	*120°C (250°F) max. (Includes integral cooling fin) see note 2
8	*80°C (180°F) max. (For OM008 with PPS rotors)
Process connections	
1	BSP Female threaded
2	NPT Female threaded
4	Flange Selection (direct on body of meter - meter body size only) (Ref. to flange/thread selection table)
7	Threaded manifold (Ref. to flange/thread selection table)
8	Wafer Manifold Selection (Ref. to flange/thread selection table)
9	Customer nominated
Cable entries	
0	3-6mm cable gland
1	M20 x 1.5mm
2	1/2" NPT
Integral Options	
	Nil
	SS Stainless Steel Terminal Cover
	RS Reed Switch only - to suit intrinsically safe installations
IECEX & ATEX approved	E1 Explosion proof Exd IIB T4/T6 (aluminium & stainless meters)
IECEX & ATEX mines approved	E2 Explosion proof Exd I/II B T4/T6 (stainless meters only)
not available with high press models	QP Quadrature pulse (2NPN phased outputs)
IECEX & ATEX approved	Q1 Explosion proof Exd (with quadrature pulse, na with HP meters)
OM004:11200ppl, OM006:4200ppl	HR High resolution Hall effect output (Hall Effect only)
IECEX & ATEX approved	H1 Explosion proof - Exd with HR Hi-res. Hall option
for injected combustion engines	PF Pulsating flow option (Hall effect output only)
IECEX & ATEX approved	P1 Explosion proof - Exd with PF pulsating flow option
	E0 EB10 Batch Controller
Scaled pulse, alarm, 4 ~ 20mA	R5 RT14 Flow Rate Totaliser with all outputs (GRN Housing)
IECEX & ATEX approved	R3 Intrinsically safe RT12 (I.S) (GRN Housing)
	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
Fseries indicators are integrally mounted to flowmeter via screw and gasket	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
	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
	E10 E112 in Alu, Exd, Battery, DC and LP 4to20mA, Linearisation, OC Pulse
Eseries indicators are integrally mounted to flowmeter via Exd approved line bushing	E11 E112 in SS, Exd, Battery, DC and LP 4to20mA, Linearisation, OC Pulse
	E18 E018 in Alu, Exd, Battery, DC and LP 4to20mA, Linearisation, OC Pulse, HART
	E19 E018 in SS, Exd, Battery, DC and LP 4to20mA, Linearisation, OC Pulse, HART
with scaleable pulse output	B2 BT11 dual totaliser (with scaleable pulse output)
IECEX & ATEX approved	B3 I.S. intrinsically safe BT 11 including output
	SB Specific build requirement



Recommended Strainers	
YS006S51	6mm (1/4") - 316SS, 200 mesh, BSP
YS008S51	8mm (3/8") - 316SS, 200 mesh, BSP



Flange/ Thread selection

T	Threaded manifold
A	ANSI
D	DIN
J	JIS
S	Special

T	Thread type
B	BSPP (G) female threaded manifold
N	NPT female threaded manifold
A	MP Autoclave threaded manifold - female thread*
S	Special consult factory

A	ANSI Flange Type
1	ANSI-150
2	ANSI-300
3	ANSI-600
4	ANSI-900
5	ANSI-1500
6	ANSI-2500
S	Special

D	DIN Flange Type
1	DIN, PN15
2	DIN, PN-40
S	Special

J	JIS Flange Type
1	JIS, 10K
2	JIS, 20K
S	Special

S	Special - Consult factory

Flange Face	
T	Thread only
1	RF
3	RTJ - only applicable to ANSI600, 900, 1500 and 2500 flanges
9	Other

Flange/Thread Size	
18	1/8"
14	1/4"
38	3/8"
12	1/2"
96*	9/16" MP Autoclave * thread only
34	3/4"
10	1"
15	1 1/2"
20	2"
25	2 1/2"
30	3"
40	4"
50	5"
60	6"
99	Special

Model Number Examples

OM006 S 5 1 1 - 2 8 A 1 1 1 2 2 F2 - OM006 SS meter with SS rotors, Ceramic bearings, Viton Oring, 120C, Flanged wafer manifold, 1/2" ANSI150 RF, 1/2" NPT cable entry, IS approved integral F112

OM006 S 5 1 1 - 5 1 1 R2 - OM006 SS meter with SS rotors, ceramic bearings, Viton Oring, 120C, with cooling fins 1/4" BSP Female threads, M20 cable entry, integral RT12

* (1) 120°C (250°F) rating for the pulse meter, 80°C (180°F) rating with BT, RT, EB & F Series options. See temperature code 5 for higher temperature with RT, BT & EB. * (2) Cooling fin is fitted with LCD instruments for operation between 80~120°C (180~250°F)