

A low-angle, blue-tinted photograph of an industrial facility, likely a refinery or chemical plant. The image shows a complex network of pipes, walkways, and structural steel against a cloudy sky. The perspective is looking up and down a long, straight pipe that runs diagonally across the frame.

TFM Turbine 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 TFM turbine flowmeters

Turbine flowmeters measure flows of low viscosity liquids from 3 to 4000 m³/hr in a range of sizes from 1/2" to 16" (10-400mm). TFM series flowmeters have an axial rotor and flow guides & must be installed in straight sections of pipe either horizontal or vertical so the flow is conditioned. TFM series flowmeters can be purchased with Exd & Intrinsically Safe (I.S) approvals for use in hazardous areas. Applications include the distribution of fuels, alcohols, solvents, metering of chemicals, insecticides, water & light hydraulic oils.

Features / Benefits

- High accuracy & repeatability, direct reading flowmeter
- Low cost of ownership, wide flow range
- Rugged & compact design
- Certified Exd & I.S hazardous area versions
- Integral 4-20mA output option
- ± 0.15% linearity, 0.02% repeatability option available (sizes TFM100 and above)

Integral instruments

BanksiaControls TFM series 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
- E112/E018 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)



FLOW RANGES - TFM Turbopulse

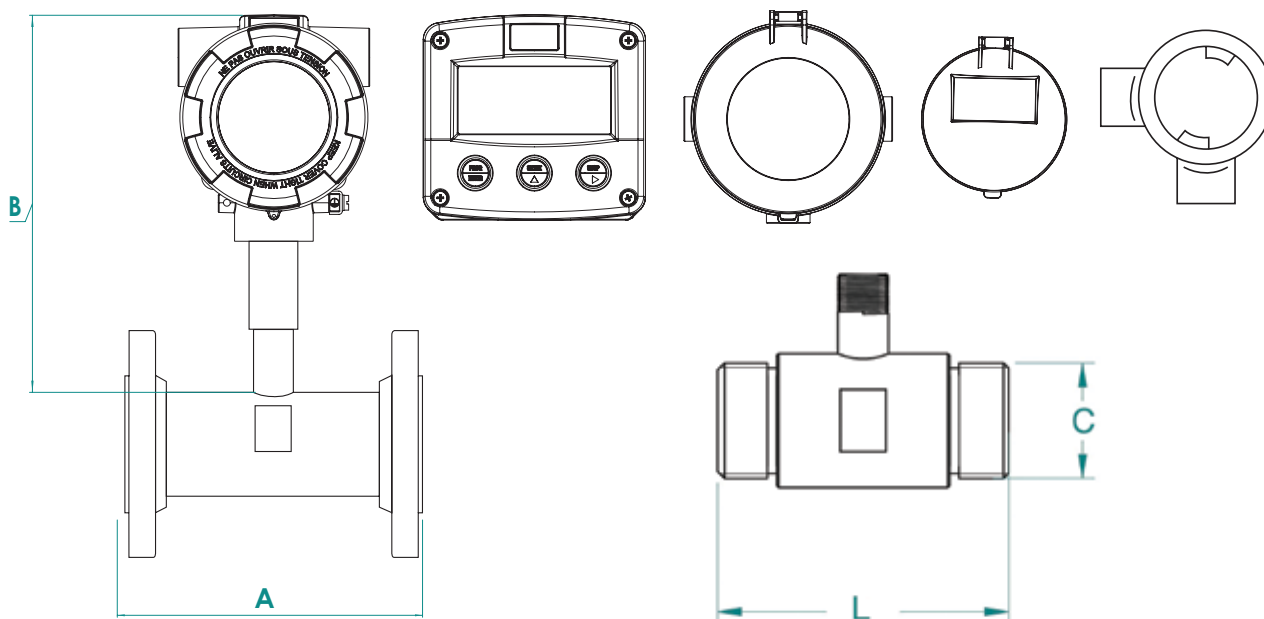
Size	Model	litres/hr (GPH)
1/2"	TFM0010	100~1100 (0.44~4.4)
3/4"	TFM0012	220~2200 (0.97~9.7)
3/4"	TFM0015	400~4000 (1.77~17.7)
3/4"	TFM0020	800~8000 (3.5~35.2)
M3/hr (GPM)		
1"	TFM0025	1.6~16 (7~70)
1 1/2"	TFM0040	3.4~34 (15~150)
2"	TFM0050	6.8~68 (30~300)
3"	TFM0080	13~135 (60~600)
4"	TFM0100	27~270 (120~1200)
6"	TFM0150	55~550 (240~2400)
8"	TFM0200	110~1100 (480~4800)
10"	TFM0250	190~1900 (840~8400)
12"	TFM0300	270~2700 (1200~12000)
16"	TFM0400	400~4000 (1800~18000)

Refer to factory for larger meter sizes.

Specifications

Model prefix:	TFM-Turbopulse
Nominal size (inches)	10~400mm (1/2" ~ 16")
**Accuracy @ 3cp	± 0.5% of reading (accuracy is ± 0.2% of reading with optional RT/F/E series with non-linearity correction)
Temperature range	For custody transfer option: +/-0.15% linearity, 0.02% repeatability -40°C ~ +200°C (-40°F ~ +400°F), refer factory for lower temperature
Maximum Viscosity	10Cst
Maximum pressure	(Threaded meters)bar (PSI) 250 (3625)
316 Stainless Steel	
Electrical	
Standard output	Pick-off coil
Optional outputs	4~20mA, scaled pulse, quadrature pulse, flow alarms or two stage batch control
Physical	
Protection class	IP66/67 (NEMA4X), optional Exd IIBT4/T6, integral ancillaries can be supplied I.S. (intrinsically safe), Exd
Overall dimensions	Refer over page

Overall Dimensions:



All dimensions in mm (± 2 mm)

THREADED METERS		
Model No.	L (mm)	C
TFM-010	64	1/2" BSP or NPT
TFM-012	64	3/4" BSP or NPT
TFM-015	64	3/4" BSP or NPT
TFM-020	83	3/4" BSP or NPT
TFM-025	89	1" BSP or NPT
TFM-040	115	1 1/2" BSP or NPT

OPTIONS	DIM B	Model No.	DIM A
Turbine		TFM010	127
E-Series	227	TFM012	127
F-Series	224	TFM015	127
RT-Series	210	TFM020	140
BT11	190	TFM025	152
Junction Box	150	TFM040	178
		TFM050	197
		TFM080	254
		TFM0100	356
		TFM0150	368
		TFM0200	457
		TFM0250	457
		TFM0300	457
		TFM0400	610

Refer to factory for larger meter sizes.

Model Coding - BanksiaControls TFM series Meters

TFM	Banksia Controls Turbine Flowmeter, TFM Series					
	Model	Std Flow Range (M ³ /hr)	End Connection Threaded	End Connection Flanged	Dimensions "A" Threaded (mm)	Dimensions "A" Flanged (mm)
	0010	0.11-1.1	1/2"	1/2"/DN15	64	150
	015S	0.22-2.2	3/4"	3/4"/DN20	64	150
	0015	0.4-4.0	3/4"	3/4"/DN20	64	150
	0020	0.8-8.0	3/4"	3/4"/DN20	83	150
	0025	1.6-16.0	1"	1"/DN25	88	200
	0040	3.4-34.0	1.5"	1.5"/DN40	114	200
	0050	6.8-68.0	2"	2"/DN50	132	200
	0080	13.5-135.0	N/A	3"/DN80	N/A	200
	0100	27.0-270.0	N/A	4"/DN100	N/A	300
	0150	55.0-550.0	N/A	6"/DN150	N/A	300
	0200	110.0-1100.0	N/A	8"/DN200	N/A	350
	0250	190.0-1900.0	N/A	10"/DN250	N/A	350
	0300	270.0-2700.0	N/A	12"/DN300	N/A	400
	0400	400.0-4000.0	N/A	16"/DN400	N/A	610
End Connections Threaded						
	EB100	Threaded BSP/G Male				
	EB200	Threaded NPT Male				
	EB300	Threaded, Special				
End Connections Flanged						
	EFA1X	Flanges, ANSI 150#		EFD1X	Flanges, DIN PN 10	
	EFA2X	Flanges, ANSI 300#		EFD2X	Flanges, DIN PN 16	
	EFA3X	Flanges, ANSI 600#		EFD3X	Flanges, DIN PN 25	
	EFA4X	Flanges, ANSI 900#		EFD4X	Flanges, DIN PN 40	
	EFA5X	Flanges, ANSI 1500#		EFD5X	Flanges, DIN PN 63	
	EFA6X	Flanges, ANSI 2500#		EFD6X	Flanges, DIN PN 100	
End Connections Face Finish						
	EFXXF	FF	EFXXR	RF	EFXXJ	RTJ
End Connections Specials						
	EFSSS	Special Flanges				
Material of Construction						
	M1X	SS 304 Body				
	M2X	SS 316 Body				
	M0X	Special Body Material				
	MX1	SS 304 Flanges				
	MX2	SS 316 Flanges				
	MX3	CS Flanges				
	MX9	Special Flange Material				
Pick-off Sensor						
	P1X	Standard pick-off (Max. Temp. + 120C)				
	P2X	Hi Temp Pick-off (+240C)				
	P3X	ATEX approved I.S Pick-off				
	P4X	Pick-off with integral Amp (PA1001A)				
	PX1	Military Style Connector				
	PX2	Flying Leads				
Integral Options						
	LJB00	IP65 Junction Box				
	LJB02	ATEX Approved Junction Box				
	B2	Totaliser				
	B3	IS Totaliser				
	R5	RT14 Flow Rate Totaliser with all outputs (GRN Housing)				
	R3	Intrinsically safe RT12 (I.s) (GRN Housing)				
	F1	Rate Totaliser, GRP, IP67				
	F2	IS Rate Totaliser, GRP, IP67				
	F10	Rate Totaliser, Aluminium, IP67				
	F11	IS Rate Totaliser, Aluminium, IP67				
	F12	Rate Totaliser, SS, IP67				
	F13	IS Rate Totaliser, SS, IP67				
	F18	IS Rate Totaliser, Aluminium, IP67, HART				
	F19	IS Rate Totaliser, SS, IP67, HART				
	E10	Exd Rate Totaliser, Aluminium				
	E11	Exd Rate Totaliser, Stainless Steel				
	E18	Exd Rate Totaliser, Aluminium, HART				
	E19	Exd Rate Totaliser, Stainless Steel, HART				
	E0	Batch Controller				
	SB	Special				



Standard Conditions	
Bearings:	Tungsten Carbide
Internals:	Stainless Steel
Rotor:	Stainless Steel
Linearity:	+/-0.05% over flow range
Service:	Liquid
Mounting Position:	Horizontal
Example	
TFM0025-EFA2R-M22-P32-F2	
Banksia Controls Turbine Flowmeter, TFM Series, 1"	
Size, Flow Range 1.6 to 16 m ³ /hr, 1" ANSI300# RF end connections, 316SS body and Flanges, ATEX approved IS pickoff with flying leads, with IS approved Rate totaliser in GRP IP67 enclosure, integrally mounted.	

Note: For custody transfer option, please add a C to the prefix when defining the model code. Eg: TFM-CXXX.

Part No. BCFTFX0919