Fluxera

TURBINE FLOW METER



PRODUCT LITERATURE

EMCT Global Trading LLC
Office# 44, 6th Floor, Mai Tower, Al Nahda-1,
Dubai, UAE.
Tel: +971 4 3332544
Mob: +971 50 8191982
Email: contact@emcglobaltrade.com

GENERAL INTRODUCTIONS


Smart Integrated Display


Low Power


Remote Display


Remote Display

Fluxera turbine flow meter is the use of advanced low-power single-chip microprocessor technology developed turbine flow sensor and display totalizer integration of new smart meter, with a compact structure, intuitive readings clear, high reliability, without outside power interference, anti-lightning, obvious low cost advantage, it is widely used to measure the closed pipe and stainless steel 1Cr18Ni9Ti, 2Cr13 and corundum Al2O3, carbide not corrode, and no fibers, particles and other impurities, kinematic viscosity at operating temperature is less than 5 × 10-6m² / s of liquid, for kinematic viscosity more than 5 × 10-6m² / s of liquid, can be quantitative control, excessive alarm, etc., is an ideal flow metering and energy meter.

Measurement objects: oil, organic liquids, inorganic liquid, liquefied petroleum gas, natural gas, coal gas and cryogenic fluids.

FEATURES:

- High accuracy, generally up to ±1%R, ±0.5%R, high accuracy up to 0.2%R
- Good repeatability, short-term repeatability up to 0.05%~0.2%, in the trade settlement is the preferred choice of flow meter.
- Output pulse frequency signal, no zero drift and strong anti-interference ability.
- High frequency signal(3~4KHz) can be obtained, the signal resolution is strong.
- Wide range, medium and large diameter up to 1:20, small caliber 1:10.
- Can be customized, for example Low temperature type, Bi-Directional type, Mixed sand type and Underground type etc.
- Can be made into an insert type, suitable for large diameter measurement, the pressure loss is small, the price is low, take it out with not cut off the liquid.

APPLICATION

- Liquefied petroleum gas, refined oil and light crude oil transport and gathering stations, and terminal station of large crude oil pipeline for trade settlement
- Widely used in petroleum, chemical, metallurgy, paper and other industries to measure the volume of liquid flow and total volume

TECHNICAL PARAMETERS

MECHANICAL DATA:

Materials	Body & Flange	304, 316L (stainless steel),
	Rotor	2Cr13, CD4MCu
Connection of Flange	JIS/ANSI Flange, Male/Female Thread.	
Ambient Environment	Temperature:	-20 to 60°C
	Humidity:	5% to 90%(RH)
Measurable Fluid	Liquefied petroleum gas, refined oil and light crude oil	
Fluid Temperature	-20°C~80°C, -20°C ~120°C, -20°C ~150°C	
Max. Pressure	16 Bar standard, 25 Bar	
Accuracy	±1%, ±0.5%, ±0.2%	
Protection Ratings	Integral type: IP65. Higher (customize)	
Ex-proof Protection	ExiaIICT4 or ExdIIBT6	

ELECTRICAL DATA:

Power Supply	+24VDC +15% Applying to 4~20mA, Pulse, RS485, or 3.0V, 10AH lithium battery
Power Consumption	≤ 0.5 W External, 3.0V lithium battery 12 Months (Internal)
Output Signals	4~20mA DC, Pulse,
Communication Interface	RS485, HART
Display Unit	Flow rate, Totalizer

APPROVAL:

Compliance	ISO9001-2008, CE
	EMC Directive 2014/30/EU

FLOW RANGE

Diameter (mm)	Standard Range (m3/h)	Extended Range (m3/h
4	0.04~0.25	0.04~0.4
6	0.1~0.6	0.06~0.6
10	0.2~1.2	0.15~1.5
15	0.6~6	0.4~8
20	0.8~8	0.45~9
25	1~10	0.5~10
32	1.5~15	0.8~15
40	2~20	1~20
50	4~40	2~40
65	7~70	4~70
80	10~100	5~100
100	20~200	10~200
125	25~250	13~250
150	30~300	15~300
200	80~800	40~800

FTF-S SMART INTEGRAL DISPLAY

FTF-S smart integrated display type The site itself with field display function, the flow signal can be remote output, two display units available, multiple electrical signal output mode optional.

Parameter		Value
Power supply External		24VDC±15% (Ripply≤5%), <0.5W
Power supply Internal		3VDC lithium battery (12 months)
Input signal frequency range		0~3000Hz
Communication interface		RS485, Modbus
Current output	Load capacity	≤900Ω
	Two-wire	4-20mA
	Three-wire	0-20mA
Pulse output	Load capacity	>1100Ω
	High/Low level amplitude	>22V / <0.8V
	Pulse width	1/2fin×1000(ms)



Smart Integrated Display

FTF-R REMOTE DISPLAY

The site itself does not have a display function, only the flow of remote signal output, signal flow can be divided into pulse signal and current signal, especially suitable for the secondary display instruments, PLC, DDC and other control systems with the computer.

Parameter		Value
Power supply		24VDC±15% (Ripply≤5%)
Power Consumption		<0.5W
Input signal		frequency range 0~3000Hz
4-20mA output	Load capacity	≤600Ω
Pulse output	Load capacity	>1100Ω
	High/Low level amplitude	>22V / <0.8V
	Pulse width	1/2fin×1000(ms)



Low Power

FTF-L LOW POWER TYPE

Backlit dot matrix LCD display, low power consumption, multiple display units are available and multiple electrical signal output mode optional.

Parameter		Value
Power supply External		24VDC±15% (Ripply≤5%), <0.5W
Power supply Internal		3VDC lithium battery (12 months)
Input signal frequency range		0~3000Hz
Communication interface		RS485, Modbus
Current output	Load capacity	≤880Ω
	Two-wire	4-20mA
	Three-wire	4-20mA
Pulse output	Load capacity	>1100Ω
	High/Low level amplitude	>22V / <0.8V
	Pulse width	1/2fin×1000(ms)



Remote Display

FTF-M MINI TYPE

Repeatability ±0.25% has strong corrosion resistance, suitable for high temperature, high pressure and harsh environments.

Parameter	Value		
Flow Range	Diameter(mm)	Measuring range(L/min)	Meter factor (cm3/imp)
	1.15	0.035~1.60	0,50
	1.30	0.010~1.86	0.60
	1.50	0.045~2.08	0.67
	2.00	0.085~2.32	1.02
	2.50	0.120~2.40	1.44
	3.70	0.150~3.00	2.28
Max pressure	20.0 bar		
Pressure Loss	2.0 bar		
Temp. range	-10°C/+100°C		
Accuracy level	±1%		
Pipe connection	G1/4 Internal thread (Customizable)		
Installation mode	Horizontal installation		
Dimension(L×B×H)	55×40×47mm		
Weight	About 300g		
Certification	NSF, CE		



Remote Display

SELECTION CODE

Model	Suffix Code									Description
FTF	1	2	3	4	5	6	7	8	9	Liquid Turbine Flow meter
Diameter	xxx									Stand for diameter 004: DN4; 006: DN6 100: DN100; 200: DN200
Converter Type		N1								24VDC; Pulse; No display
		N2								24VDC; Pulse; No display, EX
		A								24VDC; 4-20mA; No display; EX
		E1								Battery power supply; No output; EX; Digital display
		E2								24VDC; 2-wire 4-20mA; EX; Digital display
		E3								24VDC; Pulse; EX; Digital display
		E4								24VDC; 0-20mA; EX; Digital display
		E5								24VDC; 3-wire 4-20mA / Pulse output; EX; Digital display
		M								220VAC; 4-20mA; EX; Digital display
		FE								FE: Fluid well E series converter
		FF								FF: Fluid well F series converter
		Note								1) Modbus RS485 is optional for E2, E3, E4, E5 and M 2) Dual Power(24VDC+Battery) is optional for E2, E3, E4, E5, M
Accuracy			10							±1.0% of rate
			05							±0.5% of rate
			02							±0.2% of rate
Flow Range				S						Standard range
				E						Extended range
Body Material					S4					SS304
					S6					SS316
					PL					Plastic (DN15-DN50)
Rotor Material						Cr				2Cr13
						CD				CD4MCu
Explosion Proof							BT			ExdII BT6
							N A			No Explosion Proof
Connection								THM		Male thread; Available from DN4...DN50
								THF		Female thread; Available from DN4...DN50
								WAF		Wafer connection
								DXX		D16: DIN PN 16 Flange; DN25: DIN PN25 Flange...
								AXX		A15: ANSI 150#Flange; A30: ANSI 300# Flange...
								JXX		J10: JIS 10K Flange; J20: JIS 20K Flange...
Liquid Temperature									T1	-20...+80℃
									T2	-20...+120℃
									T3	-20...+150℃

FTF-S-080-E4-10-S-S4-CR-NA-A15-T1

Example: Turbine Flow Meter w/ Integral display, size DN80, 24VDC; 0-20mA; EX; Digital display, Accuracy1%, SS304 body, 2Cr13 rotor, ANSI 150 LB Flange, 80□, IP65

