

FMTG SERIES GAS TURBINE FLOW METER

FEATURES

- ◎ High accuracy, with options of $\pm 1.5\%R$ or $\pm 1.0\%R$.
- ◎ Sensitive response and excellent repeatability, with short-term repeatability as low as 0.05% to 0.2%. Ideal for trade settlement applications.
- ◎ Capable of measuring temperature, pressure, and flow of the gas. A highly reliable, precision gas flow meter with automatic flow tracking and compensation.
- ◎ Optional oil injection pump to protect the impeller and extend the flow meter's service life.



INTRODUCTION

The FMTG series gas turbine flow meters are velocity-type flow meters designed for precise measurement of gas flow. They offer high measurement accuracy, excellent repeatability, wide measurement range, compact structure, easy installation, low maintenance requirements, minimal pressure loss, long service life, and user-friendly operation. The instrument also accounts for the compressibility of gases, converting the volume flow, affected by changes in medium temperature and pressure, directly into standard flow conditions to ensure measurement accuracy.

This meter is suitable for gas flow measurement in various fields such as petroleum, chemicals, aerospace, research institutions, and the chemical industry. It can be used for measuring and metering gases like natural gas, coal gas, propane, air, and hydrogen, playing a key role in process control in industrial production.

SPECIFICATIONS

Measuring medium	Gas
Nominal Diameter(mm)	DN25-DN300
Accuracy	$\pm 1.0\%R$, $\pm 1.5\%R$
Measurement Range Rate	1:10, 1:15, 1:20
Connection method	Flange, Thread(Only for DN25 and DN40)
Instrument material	304 stainless steel, 316L stainless steel, Aluminum Alloy
Impeller Material	Corrosion-resistant ABS or Aluminum Alloy

Medium Temperature(°C)	-20 ~ +120 °C
Ambient Conditions	Temperature: — 10~+55°C , Relative Humidity:5%~90% Atmosphere Pressure:86~106Kpa
Output Signal	Pulse, 4~20mA
Communication	RS485
Power Supply	Sensor: +12V DC, +24V DC (option) Transducer: +24V DC Scene display type meter: 3.2V Lithium
Signal Transmission Line	STVPV 3×0.3 (three wires), 2×0.3(two wires)
Transmission Distance	≤ 1000m
Electric Interface	Internal thread M20×1.5
Explode-proof Class	ExdIIBT6
Protection Class	IP65

MEASUREMENT RANGE AND WORKING PRESSURE TABLE

Model	Diameter (mm)	Flow Rate (m ³ /h)	Initial Flow Rate (m ³ /h)	Tolerance pressure (Mpa) Connection
FMTG-25A	25 (1")	0.7—7	0.6	4.0 Flange or Thread
FMTG-25B		1.5—15	1.0	4.0 Flange or Thread
FMTG-25C		3—30	2.0	4.0 Flange or Thread
FMTG-40A	40 (1.5")	4—40	2.5	4.0 Flange or Thread
FMTG-40B		8—80	3	4.0 Flange or Thread
FMTG-50A	50 (2")	10—100	3.5	4.0 Flange
FMTG-50B		15—150	4	4.0 Flange
FMTG-80	80 (3")	15—300	4	1.6 Flange
FMTG-100	100 (4")	20—400	5	1.6 Flange
FMTG-150	150 (6")	50—1000	8	1.6 Flange
FMTG-200	200 (8")	100—2000	20	1.6 Flange
FMTG-250	250 (10")	150—3000	30	1.6 Flange
FMTG-300	300 (12")	200—4000	40	1.6 Flange

ORDER FORMAT

FMTG - 25A - FP16ENALASCDEX

Nominal diameter	Model
Refer to range table	

Connection	Code
Flange	F
Thread	T

Nominal pressure	Code
4.0MPa	P40
2.5MPa	P25
1.6MPa	P16

Accuracy	Code
1.0%FS	E
1.5%FS	L

Turbine type	Code
Extended flow range	E
Normal flow range	N

Code	Special requirement
Null	Non Explosion-proof
EX	Explosion-proof

Code	Power supply
D	24VDC
B	3.6V Lithium battery

Code	Output signal
C	4~20mA
P	Pulse
H	HART
R	RS485

Code	Impeller Material
AS	ABS
AL	Aluminum Alloy

Code	Housing Material
AL	Aluminum alloy
S4	SS304
3L	SS306L

Example:

FMTG-25A-FP16ENALASCDEX, FMTG series gas turbine flow meter, DN25mm flange installation, pressure 1.6MPa, accuracy 1.0%FS,normal flow range, aluminum housing material,ABS impeller material, 4~20mA output, power supply 24VDC, explosion proof type.