

# GAS TURBINE FLOW METER

SIL



## DESCRIPTION

The gas turbine flow meters are specially designed for use in natural gas, and other fluid measurement. And the volume and mass flow rate are available.

## APPLICATIONS

- Natural gas transmission and distribution network
- Petrochemical industry
- Urban gas industry
- Electric power industry
- Gas skids
- LNG gas station

## FEATURES

- Temperature & pressure compensation
- Digital absolute pressure transmitter
- Segment LCD, displays normally at -30°C
- Integrated movement
- Communication: Modbus RS485
- Simultaneous display flow rate, total flow volume, pressure and temperature

## TECHNICAL DATA

<b>Diameter</b>	DN25-DN400
<b>Ambient Temp.</b>	-20°C ~ +60°C
<b>Fluid Temp.</b>	-30°C ~ +80°C
<b>Accuracy</b>	±1.0% of Rate; ±1.5% of Rate
<b>Humidity</b>	5%~90%
<b>Pressure</b>	86~106Kpa
<b>Power Supply</b>	DC24V / DC3.6V Battery
<b>Power Consumption</b>	<2.4W / <2mW
<b>Protection Level</b>	IP65
<b>Explosion Proof</b>	ExialICT4 Ga
<b>Output</b>	Pulse; 4-20mA
<b>Rotor Material</b>	Aluminum Alloy; Plastic ABS
<b>Body Material</b>	SS304; SS316; Cast Steel (DN50-DN200) Cast Aluminum



D4-Compensation

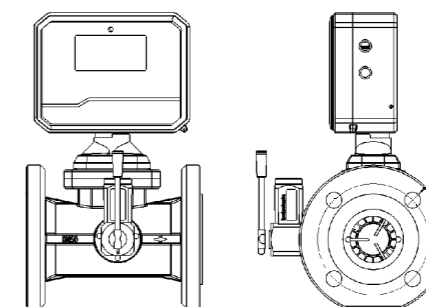


D2-Compensation



E-No-Compensation

## TECHNICAL DRAWINGS



## MODEL SELECTION

Model	Suffix Code								Description
LWQ-	1	2	3	4	5	6	7	8	Gas Turbine Flow Meter
Diameter	XXX								Stand for diameter 020: DN20; 050: DN50 100: DN100; 400: DN400
Converter Type	E1								Battery power supply; No output; Ex; Digital display
	E2								24V DC; 3- wire 4-20mA/ Pulse output; Ex; Digital display
	E4								24V DC; 0-20mA/ Pulse output; Local display; Ex; Digital display
	D2								24V DC; 2/ 3 wires 4-20mA/ Pulse output; Digital display; Temperature & Pressure Compensation; RS 485
	D4								24V DC; 4-20mA/ Pulse output; Modbus RS485; Digital display Temperature & Pressure Compensation
	Notice:								1) Modbus RS485 is optional for E2, E4, D4, D2 2) Battery Power(24V DC + Battery) is optional for E2, E4, D2, D4, T3 3) 24V DC; 4-20mA/ Pulse output; Modbus RS485; Digital display Temperature & Pressure Compensation
Accuracy		10							±1.0% of rate
		15							±1.5% of rate
Flow Range			S						Standard Range: S;S1; S2 optional
Body Material				S4					SS304
				SA					Cast aluminum alloy
				CA					Cast aluminum
Rotor Material							AB		ABS Plastic
							AA		Aluminum Alloy
Explosion Proof								BT	Exd II BT6 Gb
								NA	None
								CT	Exia IIC T4Ga
Connection								THM	Male Thread; Available from DN25...DN50
								THF	Female Thread; Available from DN25...DN50
								DXX	DN16: DIN PN16 Flange; D25: DIN PN25 Flange...
								AXX	A15: ANSI 150# Flange; A30: ANSI 300# Flange...
								JXX	J10: JIS 10K Flange; J20: JIS 20K Flange...

## FLOW RANGE

Diameter (mm/inch)	Code	Flow Range (m³/h)	Max Pressure loss (kPa)	Connection
25(1")	S	4-40	1.5	Flange/ Thread
40(1.5")	S	6-65	1.5	
50(2")	S	7-70	0.5	
	S1	10-100	1.0	
65(2.5")	S2	16-160	1.0	Flange
	S	15-200	1.0	
80(3")	S1	13-250	1.0	
	S	20-400	2.5	
100(4")	S1	20-400	1.0	
	S	32-650	1.5	
125(5")	S	40-800	1.3	
	S	50-1000	1.0	
150(6")	S1	80-1600	2.0	
	S	80-1600	0.5	
200(8")	S1	130-2500	1.0	
	S	130-2500	0.5	
250(10")	S1	200-4000	1.5	
	S	320-6500	1.0	
300(12")	S	400-8000	1.5	
350(14")	S	650-13000	2.0	
400(16")	S			

Note: 1. The maximum pressure loss is the pressure loss value when the flowmeter is working at the maximum flow point, the medium is air, and the normal temperature state.