



Liquid Turbine Flow meter

Overview

The HLWGY series Turbine Flow meters have a simple structure, high accuracy, good repetitiveness, fast response time and easy maintenance. It is widely used for liquids which are not corrosive to stainless steel, and do not have fibre or particles. The liquid must also have a kinematic viscosity less than $50 \times 10^{-6} \text{m}^2/\text{s}$.

Features

- ★ High accuracy: $\pm 1\%$, $\pm 0.5\%$, $\pm 0.2\%$
- ★ Good repetitiveness: 0.05% ~ 0.2%
- ★ Output of pulse frequency signal, suitable for totalizer and connection with PC; no zero shift and interference resistant
- ★ High frequency signal (3~4 kHz), strong signal resolution
- ★ Turndown: 1:20, 1:10
- ★ Compact structure & easy maintenance

Basic Parameters

Instrument Diameter (mm) & Connection	4, 6, 10, 15, 20, 25, 32, 40 thread connection (15, 20, 25, 32, 40) 50, 65, 80, 100, 125, 150, 200 flange connection
Accuracy	$\pm 1\%$, $\pm 0.5\%$, $\pm 0.2\%$ (special order)
Turndown	:10, 1:15; 1:20
1Instrument	Material SS304, SS316 (L)
Medium Temperature	-20 to +120 Degree C
Ambient Conditions	-10 to 55 C, Temperature relative humidity 5% to 90%, atmospheric pressure 86 to 106 KPa
Output Signal Sensor:	pulse frequency signal, low level $\leq 0.8\text{V}$, high level $\geq 8\text{V}$ Transmitter: two wire, 4-20 mA DC current signal
Power Supply	Sensor: +12V DC, +24V DC (optional) Transmitter: +24V DC Local indication type: built-in 3V lithium cell or +24VDC external
Signal Transmission	Wire STVPV3x0.3 (3 wire), 2x0.3 (2 wire) Transmission Distance No more than 1000 m
Signal Line Interface	Basic type: Hausman connector or 3-core wire; Explosion-proof type: M20 x 1.5 (F)
Explosion Proof	Basic type: non-explosion proof; explosion proof type: ExdIIBT6
Enclosure Protection	IP65

Measuring Range & Pressure

Instrument Diameter (mm)	Normal Flow Range (m ³ /h)	Extended Flow Range (m ³ /h)	Normal Connection & Pressure Rating	Special Pressure Rating Available (MPa) (Flange Connection)
DN 4	0.04 ~ 0.25	0.04 ~ 0.4	Thread connection/6.3MPa	10, 16, 25
DN 6	0.1 ~ 0.6	0.06 ~ 0.6	Thread	10, 16, 25



			connection/6.3MPa	
DN10	0.2 ~ 1.2	0.15 ~ 1.5	Thread connection/6.3MPa	10, 16, 25
DN15	0.6 ~ 6	0.4 ~ 8	Thread connection/6.3MPa Flange connection/2.5MPa	4.0, 6.3, 10, 16, 25
DN20	0.8 ~ 8	0.45 ~ 9	Thread connection/6.3MPa Flange connection/2.5MPa	4.0, 6.3, 10, 16, 25
DN25	1 ~ 10	0.5 ~ 10	Thread connection/6.3MPa Flange connection/2.5MPa	4.0, 6.3, 10, 16, 25
DN32	1.5 ~ 15	0.8 ~ 15	Thread connection/6.3MPa Flange connection/2.5MPa	4.0, 6.3, 10, 16, 25
DN40	2 ~ 20	1 ~ 20	Thread connection/6.3MPa Flange connection/2.5MPa	4.0, 6.3, 10, 16, 25
DN50	4 ~ 40	2 ~ 40	Flange connection/2.5MPa	4.0, 6.3, 10, 16, 25
DN65	7 ~ 70	4 ~ 70	Flange connection/2.5MPa	4.0, 6.3, 10, 16, 25
DN80	10 ~ 100	5 ~ 100	Flange connection/2.5MPa	4.0, 6.3, 10, 16, 25
DN100	20 ~ 200	10 ~ 200	Flange connection/2.5MPa	4.0, 6.3, 10, 16, 25
DN125	25 ~ 250	13 ~ 250	Flange connection/1.6MPa	2.5, 4.0, 6.3, 10, 16
DN150	30 ~ 300	15 ~ 300	Flange connection/1.6MPa	2.5, 4.0, 6.3, 10, 16
DN200	80 ~ 800	40 ~ 800	Flange connection/1.6MPa	2.5, 4.0, 6.3, 10, 16

Types of Instrument

HLW Turbine Flow meters can be classified to two types:

■ Turbine flow sensor/transmitter

No local indication, Flow signal can be pulse signal or current signal (4-20mA);
 HLWGY-N 12~24V DC power supply, 3 wire pulse output, high level more than 8V, low level less than 0.8V; signal transmission distance less than 1000.
 HLWGY-A 24V DC power, 2 wire 4-20 mA output, signal transmission distance less than 1000m.

■ Smart integral turbine flow meter

Smart Integral Turbine Flowmeter

※Two-line LCD indicator

※Compact structure

※Indication of flow rate (4 digits) & total flow (8 digits with zero clear function).

All effective data kept for 10 years after power off

HLWGY-B: power supply 3.2V 10AH Lithium cell (4 years service life); no signal output

HLWGY-C: external 24V DC supply, output 4-20 mA standard two wire current signal; RS485 or HART communication optional





AGE Technologies



