

Liquid Turbine Flow Meter

Application:

- Agricultural
- Water
- Diesel
- Gasoline
- Low Viscosity Petroleum



Specification:

Measuring system

- Application range : Liquid: water; diesel; gasoline
(1) Without Impurity
(2) Low viscosity

Measured Value

- Primary measured value : Flow Rate
- Secondary measured value : Volume flow

Design

Features

- Modular construction : The measurement system consists of a flow sensor and a signal converter. It is available as compact and as separate version.
 - Compact version converter :
 - N Type: Pulse output without local display
 - A Type: 4-20mA Output without local display
 - B Type: Local Display; Lithium Battery Power; No Output
 - C Type: Local Display; 24V DC Power; 4-20mA Output;
- Optional Function:
- (1) Backup Power Supply: Lithium Battery
 - (2) Modbus RS485
 - (3) Pulse Output
- Connection : Thread: DN4-DN50a
Flange: DN15-DN200 (DIN, ANSI, JIS)
Wafer: DN15-DN100
 - Measurement Ratio : Standard —10:1; Optional: 20:1

Liquid Turbine Flow Meter

Measuring accuracy

- Reference conditions : Flow conditions similar to EN 29104
Medium: Water
Electrical conductivity: 300 µS/cm
Temperature: +10...+30°C / +50...+86°F
Inlet section: 10 ON
Operating pressure: 1 bar / 143 psig
- Flow Meter Accuracy : Standard: 1.0% of rate
: Optional: 0.5% of rate

Operating conditions

- Temperature
- Process temperature : T1 Level: -20...+80°C
T2 Level: -20...+120°C
T3 Level: -20...+150°C
- Ambient temperature (all versions) : Standard (with aluminum converter housing):
-10...+55°C
-20...+70"

Installation Conditions

- Installation : Take care that flow sensor is always fully filled
For detailed information see chapter "Cautions for Installation"
- Flow Direction : Forward
Arrow on flow sensor indicates flow direction.
- Inlet run : ≥ 10 DN
- Outlet run : ≥ 5 DN

Materials

- Sensor housing : SS304
Other materials on request
- Flanges : SS304

Rotor

- Standard: 12Cr13 : EN 10088-3 1.4021 X20Cr13
NISI 420
BS 420S37
JIS SUS410J1
- Optional: CD4MCu : DN15...DN80
- Bearings. and Shaft : Tungsten Carbide
- Converter Housing : Standard: polyurethane coated die-cast aluminum

Process Connection

Flange

- EN 1092-1 : DN15...200 in PN 6 ..40
- ASME : 1/2"...8" in 150 lb RF
- JIS : 1/2"...8" in 10...20K
- Design of gasket surface : RF
Other sizes or pressure ratings on request
- Thread : DN4...DN50 in PN63



Liquid Turbine Flow Meter

Measurable Flow Rate Range:

Note: The flow range as blow is for reference only_ Consort the factory if you have special requirement
Refer to the nameplate or certificate for actual flow range

Nominal Diameter		Standard Flow Range	Extended Flow Range
(mm)	(in.)	(m3/h)	(m3/h)
4	0.15	0.04 to 0.25	0.04 to 0.4
6	0.25	0.1 to 0.6	0.06 to 0.6
10	0.4	0.2 to 1.2	0.15 to 1.5
15	0.5	0.6 to 6	0.4 to 8
20	0.75	0.8 to 8	0.45 to 9
25	1	1 to 10	0.5 to 10
32	1.25	1.5 to 15	0.8 to 15
40	1.5	2 to 20	1 to 30
50	2	4 to 40	2 to 40
65	2.5	7 to 70	4 to 70
80	3	10 to 100	5 to 100
100	4	20 to 200	10 to 200
125	5	25 to 250	13 to 250
150	6	30 to 300	15 to 300
200	8	80 to 800	40 to 800

