USER MANUAL

ONE-STOP SOLUTION

ONE-STOP SERVICE

HUNAN MACSENSOR COMPANY LIMITED

Liquid Turbine Flow Meter
Model: TF

SPECIFICATIONS

Performance

Repeatability:	±0.2%
Accuracy:	Standard: ±1% of reading; Optional: ±0.5% of reading
Wetted Components	Standard - 304 Stainless Steel
Housing:	Optional - 316 Stainless Steel
Bearings and Shaft:	Tungsten Carbide
Rotor:	Standard - 2Crl3 Stainless Steel (Optional Alloy CD4Mcu)
Retaining Rings:	316 Stainless Steel

Output Signal: (Where applicable)

Sensor:	Pulse signal (Low Level: <0.8V; High Level: >8V)
Transmitter:	4 to 20mA DC current signal

Signal Transmission Distance: <1,000 m

Electrical Connections：

Basic Type:	Hirschmann Connector or three-core cable

Explosion Proof Level:

Standard:	None
Protection Level:	IP65

OPERATION CONDITIONS

Ambient:

Temperature:	-10°C to +55°C
Pressure:	86 to 106 KPa
Relative Humidity:	5% to 90%

Power Supply:

Sensor:	+12V DC (Optional: +24V DC)
Transmitter:	+24V DC
Field Display Type B:	Integral 3.2V Lithium Battery (Others available on request)
Field Display Type C:	+24V DC

Fluid Temperature and Pres：

Temperature: Pres: -20°C to+110°C Fluid pres should be limited according to rating.

Measurable Flow Rate Range and Pres Level： (See table 1)

Table 1 . Measurable Flow Rage Range and Pres Rating

Nominal Diameter		Standard Flow Range (SFR)	Extended Flow Range (EFR)	Standard Pres Rating	Customized Pres Rating
(mm)	(in.)	(m^3/h)	(m^3/h)	(MPa)	(MPa) - Flange Fitting
4	0.15	0.04 to 0.25	0.04 to 0.4	Thread: 6.3	12, 16,25
6	0.25	0.1 to 0.6	0.06 to 0.6	Thread: 6.3	12, 16, 25
10	0.4	0.2 to 1.2	0.15 to 1.5	Thread: 6.3	12, 16,25
15	0.5	0.6 to 6	0.4 to 8	Thread: 6.3; Flange: 2.5	4.0, 6.3, 12, 16, 25
20	0.75	0.8 to 8	0.45 to 9	Thread: 6.3; Flange: 2.5	4.0, 6.3, 12, 16, 25
25	1	1 to 10	0.5 to 10	Thread: 6.3; Flange: 2.5	4.0, 6.3, 12, 16,25
32	1.25	1.5 to 15	0.8 to 15	Thread: 6.3; Flange: 2.5	4.0, 6.3, 12, 16,25
40	1.5	2 to 20	1 to 30	Thread: 6.3; Flange: 2.5	4.0, 6.3, 12, 16, 25
50	2	4 to 40	2 to 40	Flange: 2.5	4.0, 6.3, 12, 16, 25
65	2.5	7 to 70	4 to 70	Flange: 2.5	4.0, 6.3, 12, 16,25
80	3	10 to 100	5 to 100	Flange: 2.5	4.0, 6.3, 12, 16, 25
100	4	20 to 200	10 to 200	Flange: 1.6	4.0, 6.3, 12, 16,25
125	5	25 to 250	13 to 250	Flange: 1.6	2.5, 4.0, 6.3, 12, 16
150	6	30 to 300	15 to 300	Flange: 1.6	2.5, 4.0, 6.3, 12, 16
200	8	80 to 800	40 to 800	Flange: 1.6	2.5, 4.0, 6.3, 12, 16

Order Selection(Non explosion-proof version)

Model Number									Description
TF	□	□	□	□	□	□	□	□	Description
DN Size	4								DN4
	6								DN6
	10								DN10
	15								DN15
	20								DN20
	25								DN25
	32								DN32
	40								DN40
	50								DN50
	65								DN65
	80								DN80
	100								DN100
	125								DN125
	150								DN150
	200								DN200
Connection Type		FL							Flange Connection
		LW							Threaded Connection
		JZ							Clamp Connection
Type			N						24V Power, No Local Display, Pulse Output
			A						24V Power, Local Display, 4-20mA Output
			G1						Battery Power, Local Display, No Output
			GX						External Power, Local Display, RS485/Current/Pulse Output
			E1						Battery Power, Local Display, No Output
			EX						External Power, Local Display, RS485/Current/Pulse Output
Accuracy				05					Standard Range
				10					Extended Range
				02					Special Range
Flow Range					S				0.5
					W				1.0
					Z				0.2 (by custom, longer lead time)

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Body Material	S			304 Stainless Steel	
	L			316(L) Stainless Steel	
Impeller Material		S		2Cr13 Impeller	
		L		Duplex Steel Impeller	
Temperature / Pressure Rating				N	Standard
				H(x)	High Pressure

Note: * DN20, DN32, DN65, DN125 are non-standard products and require custom orders.
X represents a number indicating different functions; please consult sales personnel.

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