

ASTF Series

LIQUID TURBINE FLOW METER

WORKING PRINCIPLE

Fluid entering the meter first passes through an inlet flow straightener that reduces its turbulent flow pattern. Fluid then passes through the turbine, causing the turbine to rotate at a speed proportional to fluid velocity. As each turbine blade passes through the magnetic field generated by the meter's magnetic pickup, an AC voltage pulse is generated. These pulses provide an output frequency that is proportional to volumetric flow.

APPLICATIONS

- Petrochemical/energy industry
- Oil / gas industry
- Clean water
- Hydraulic/lubrication system
- Test systems
- Food and beverage industry
- Distilled water

FEATURES

- Light oil & purity liquid measurement
- Backlight option
- Unit of GPM, KG/H, Ft3/h, LPM, BPD, m3/h, Ton/h
- Modbus RS485 communication
- Working Max Temp. +150°C
- Totalizer rest
- High/low alarm



**Explosion
Proof**



**Max temperature
up to +150°C**



**Easy to
installation**

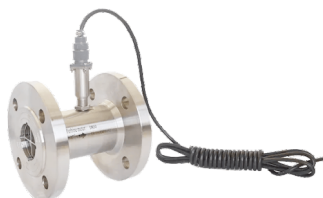


**High/
low alarm**

OTHER VARIANTS



A-Current Output Type



N1-Pulse Type



E-Digital Type



Thread Type

TECHNICAL DATA

Output	Pulse; 4-20mA	
Accuracy	±1.0 of Rate: ±0.5% of Rate	
Ambient Temp.	-20...+60 °C	
Fluid Temp.	-20...+150 °C	
Body Material	SS304, SS316	
Rotor Material	2Cr13; CD4MCu	
Bearing Material	Tungsten Carbide	
Connection	Flange of DIN, JIS, ANSI	DN15-DN 200
	Thread of G, BSP, NPT	DN4-DN 50
	Sanitary Tri- Clamp	DN10-DN100
	Wafer	DN50-DN200
Communication	RS485	
Power Supply	24V DC; Battery; 220V AC	
Protection	IP65	
Explosion Proof	Exd IICT6 Gb	

FLOW RANGE

Diameter (mm)	Standard Range (m³/h)	Extended Range (m³/h)	Max. pressure loss (kPa)
4	0.04-0.25	0.04-0.4	120
6	0.1-0.6	0.06-0.6	80
10	0.2-1.2	0.15-1.5	50
15	0.6-3.6	0.5-5	35
20	0.8-8	0.45-9	35
25	1-10	0.5-10	35
32	1.5-15	0.8-15	35
40	2-20	1-20	35
50	4-40	2-40	35
65	7-70	5-70	25
80	10-100	7-100	25
100	20-200	10-200	25
125	25-250	13-250	25
150	30-300	15-300	25
200	80-800	40-800	25

MODEL SELECTION

Model	Suffix Code										Description
ASTF	1	2	3	4	4	5	6	7	8	9	
Diameter											Stand for diameter 004: DN4; 006: DN6 100: DN100; 200: DN200
Converter Type	N1										24V DC; Pulse output; No display
	N2										24V DC; Pulse output; No display: Ex
	A										24V DC: 4-20mA output; No display: Ex
	E1										Battery power supply, No output: Ex: Digital display
	E2										24V DC: 2/3 wires 4-20mA/ Pulse output; Ex: Digital display
	E4										24V DC: 0-20mA output: Ex; Digital display
	G										220V AC; 4-20mA output; Ex; Digital display
	FE										FE: Fluidwell E series converter
	FF										FF: Fluidwell F series converter
	Notice										1) Modbus RS485 is optional for E2,E4 and G type 2) Dual Power(24VDC+Battery) is optional for E2, E4, G type
Accuracy		10									±1.0% of Rate
		05									±0.5% of Rate
		02									±0.2% of rate (consult with factory)
Flow Range			S								Standard Range
			E								Extended Range
Body Material						S4					SS304
						S6					SS316
Rotor Material							Cr				2Cr13
							CD				CD4MCu
Explosion Proof								CT			Exd II C T6 Gb
								NA			No explosion proof
Connection									THM		Male thread; Available from DN4 ... DN50
									THF		Female thread; Available from DN4 ... DN50
									WAF		Wafer connection
									TRC		D10: DIN 100 (Sanitary type)
									DXX		D16: 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...
Temperature										T1	-20...+80 °C
										T2	-20...+120 °C
										T3	-20...+150 °C

Due to continuous development of our products technical information's are subject to change. Please ensure the compatibility between the measured medium and the contacting part of the product when placing an order. ACT Sensors reserves the right to make any change in this datasheet without notice. The information provided is believed to be accurate and reliable as of this product sheet. Contact factory for customization