

ASIT ITALIA

FLANGED and THREAD TURBINE FLOWMETER

MODEL AI.TF7.2

FLANGED VERSION

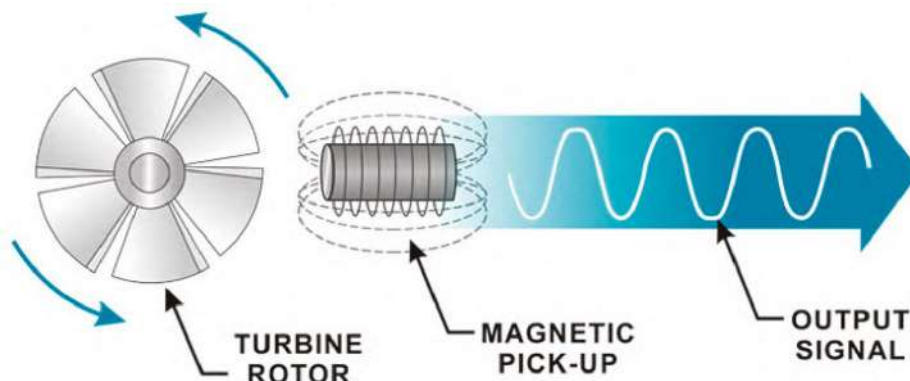


APPLICATION

- Flow measurement of tap water, demineralised water and chemicals.
- Fuels, marine engine fuel monitoring, vegetable oil, thermal oil and solvents.
- Special models for refrigerants, pharmaceutical fluids, cryogenic fluids, liquefied gases and high-pressure applications.

WORKING PRINCIPLE

A turbine flow meter is used for volumetric total flow and/or flow rate measurement and has a relatively simple working principle. As fluid flows through the turbine meter, it impinges upon turbine blades that are free to rotate about an axis along the center line of the turbine housing. The angular (rotational) velocity of the turbine rotor is directly proportional to the fluid velocity flowing through the turbine. The resulting output is taken by an electrical pickoff(s) mounted on the flow meter body.

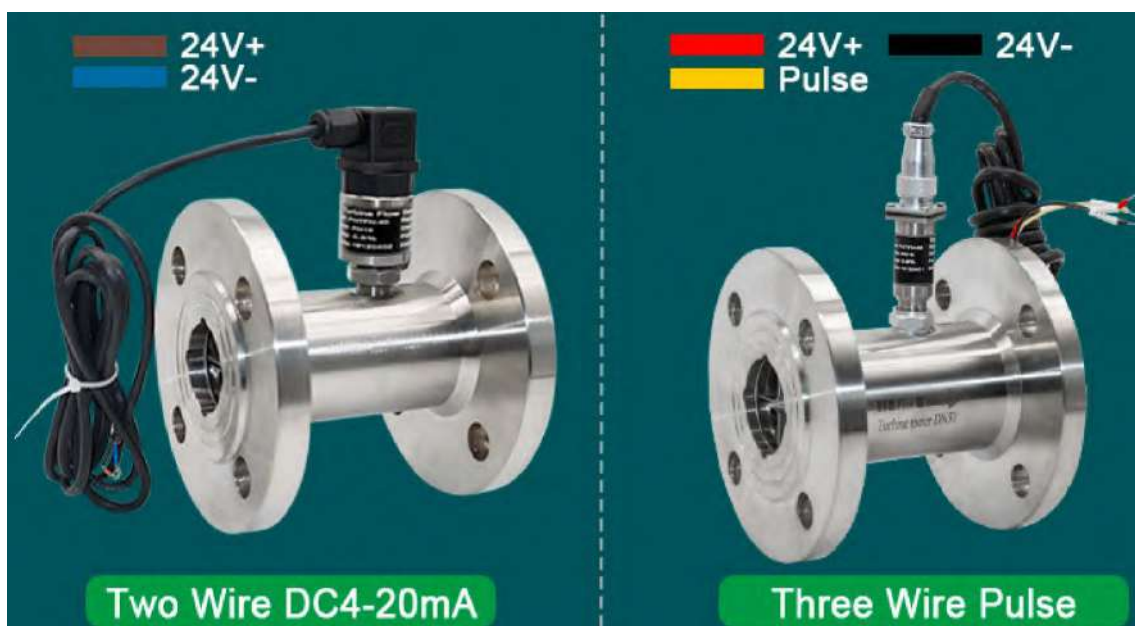


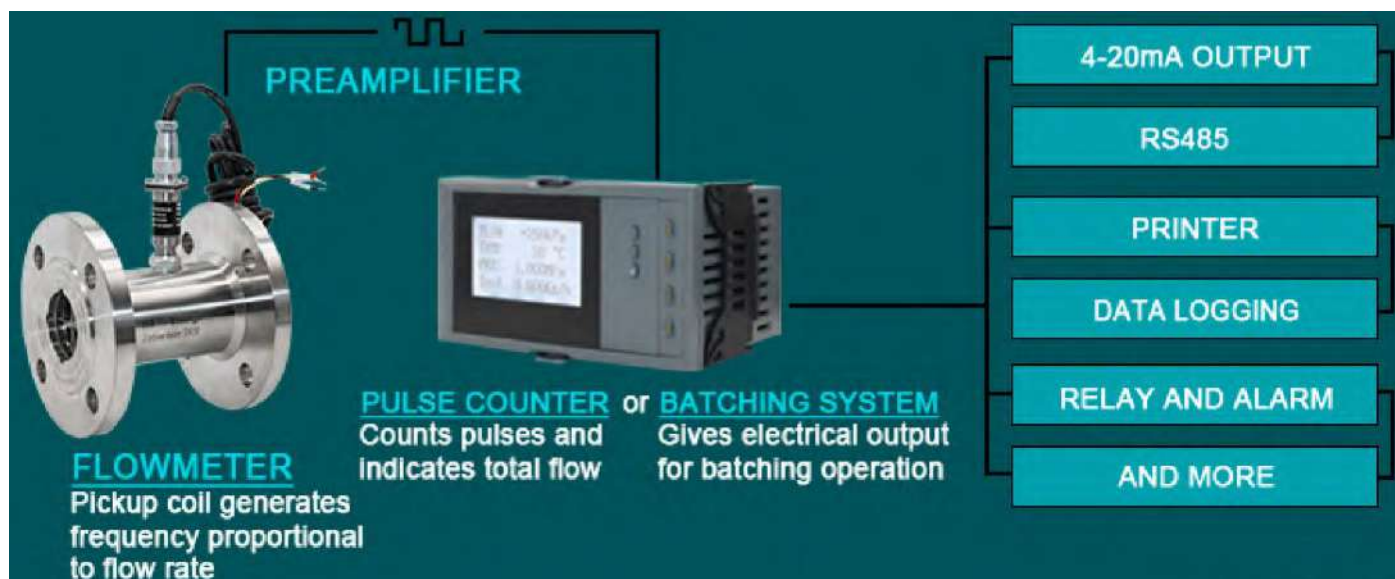
ACCURATE MEASUREMENT AND MINIMAL MAINTENANCE REQUIRED

0.5% Accuracy (0.2% optional)

Excellent repeatability 0.05%-0.2%; The repeatability of the meters ensure quality measurement over a wide range of flow rates, temperatures and compositions.

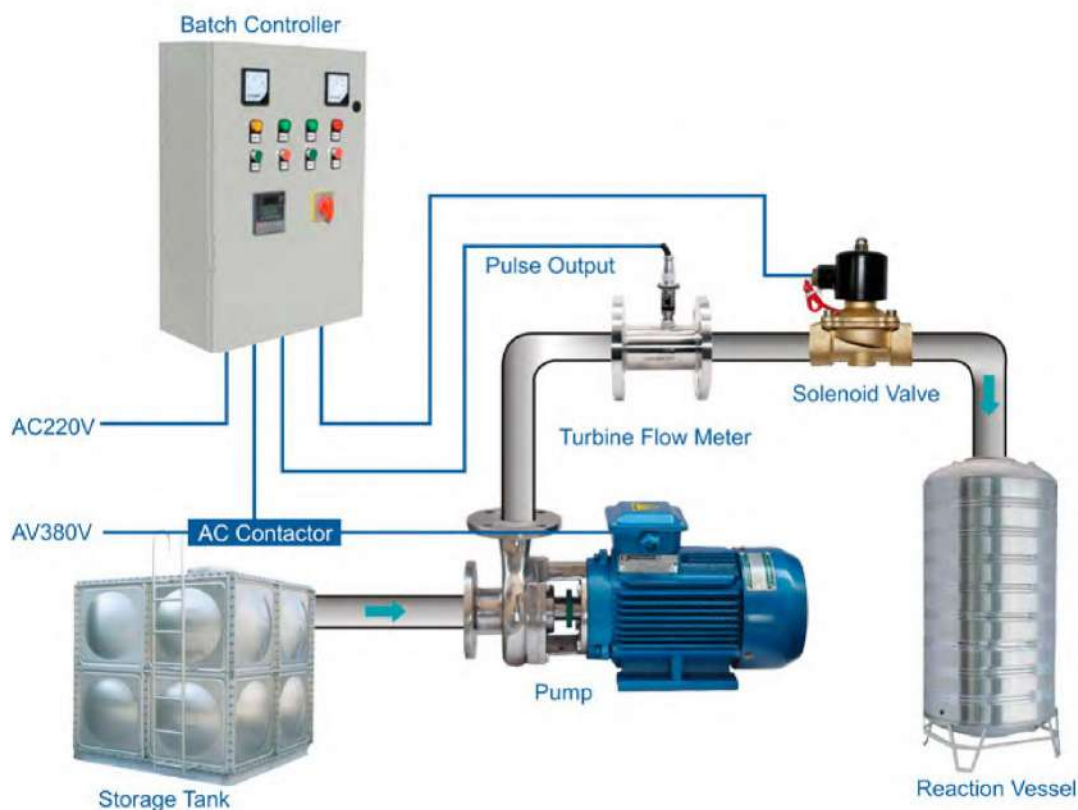
PICK-UP SENSOR & PRE-AMPLIFIER





IDEAL FOR BATCHING APPLICATIONS

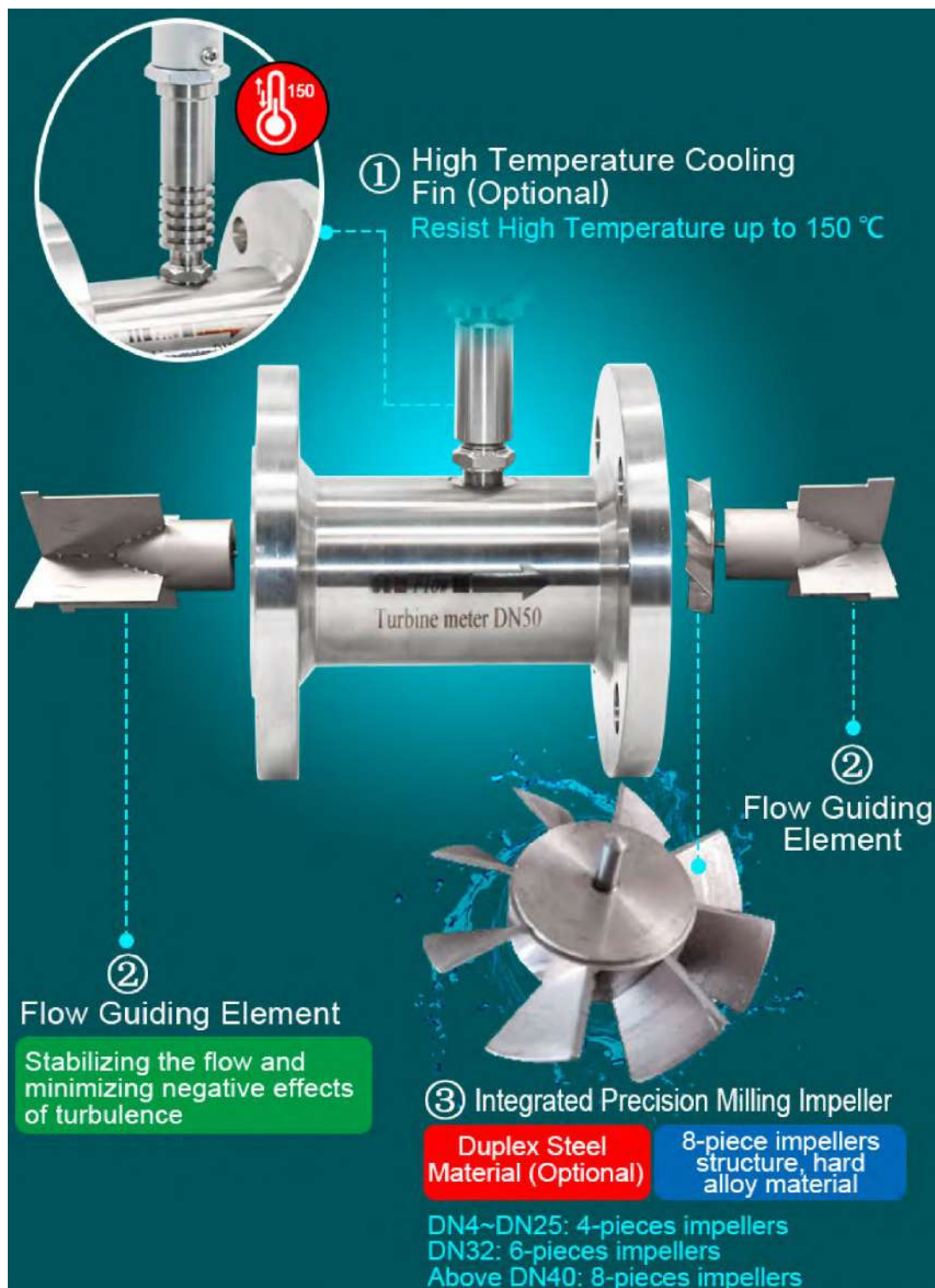
Good to use for applications of blending/batching as well as storage and off-loading etc.



Because of its structure, rotor will immediately rotate as soon as the media induces a forward force. As the rotor cannot through the media on its own, it will stop as soon as the media stops. This ensures an extremely fast response time, making the turbine flow meter ideal for batching applications.

FLOW SENSOR

Excellent forging process; Wear resistance; Durable AISI304 body (optional AISI 316)

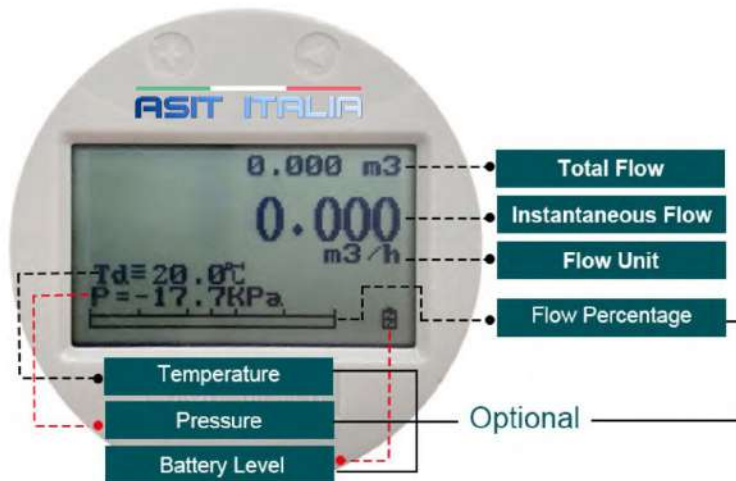


PERFORM OUTSTANDINGLY IN HIGH PRESSURE APPLICATIONS

- Resist high pressure up to 42MPa
- No need hole tapping on the body, so it's easy to make high pressure type

THREE LINE HD LCD DISPLAY

Temperature and pressure display also available



- 1.Low-power Design LCD
- 2.Multi-unit free switching, on-site display and analysis
FLOW UNIT: L, Gallon, m³, kg, pound, ton, etc
TIME UNIT: Hour and minute

DUAL POWER SUPPLY (OPTIONAL)

Embedded 3.6V lithium battery, sustain more than 2 years



INTELLIGENT TRANSMITTER



COMPACT OR REMOT TYPE



TECHNICAL PARAMETERS

Size & Process Connection	Thread connection:DN4,6,10,15,20,32,40,50,65,80,100 Flange connection:DN15,20,32,40,50,65,80,100,125,200 Clamp connection:DN4,6,10,15,20,32,40,50,65,80,100
Accuracy	±0.5%, ±0.2% Optional
Sensor Material	SS304, SS316L Optional
Ambient Conditions	Medium temperature:-20°C~+150°C Atmospheric pressure:86Kpa~106Kpa Ambient temperature:-20°C~+60°C Relative humidity:5%~90%
Signal Output	Pulse, 4-20mA, Alarm(optional)
Digital Communication	RS485, MODBUS; HART
Power Supply	24V DC/3.6V Lithium Battery
Cable Entry	M20*1.5; 1/2"NPT
Explosion-proof class	Ex d IIC T6 Gb
Protection class	IP65; IP67 Optional

FLOW RANGE

Diameter (mm)	Standard Range (m3/h)	Extended Range (m3/h)	Connection Standard (Optional)	Standard Pressure (Mpa)	Customized Pressure Rating (Mpa)
DN4	0.04~0.25	0.04~0.4	Thread	6.3	12,16,25...42
DN6	0.1~0.6	0.06~0.6	Thread	6.3	12,16,25...42
DN10	0.2~1.2	0.15~1.5	Thread	6.3	12,16,25...42
DN15	0.6~6	0.4~8	Thread(Flange)	6.3,2.5 (Flange)	4.0,6.3,12,16,25...42
DN20	0.8~8	0.45~9	Thread(Flange)	6.3,2.5 (Flange)	4.0,6.3,12,16,25...42
DN25	1~10	0.5~10	Thread(Flange)	6.3,2.5 (Flange)	4.0,6.3,12,16,25...42
DN32	1.5~15	0.8~15	Thread(Flange)	6.3,2.5 (Flange)	4.0,6.3,12,16,25...42
DN40	2~20	1~20	Thread(Flange)	6.3,2.5 (Flange)	4.0,6.3,12,16,25...42
DN50	4~40	2~40	Thread(Flange)	2.5	4.0,6.3,12,16,25...42
DN65	7~70	4~70	Flange	2.5	4.0,6.3,12,16,25...42
DN80	10~100	5~100	Flange	2.5	4.0,6.3,12,16,25...42
DN100	20~200	10~200	Flange	1.6	4.0,6.3,12,16,25...42
DN125	25~2500	13~250	Flange	1.6	2.5,4.0,6.3,12,16...42
DN150	30~300	15~300	Flange	1.6	2.5,4.0,6.3,12,16...42
DN200	80~800	40~800	Flange	1.6	2.5,4.0,6.3,12,16...42

THREAD VERSION





FLOW SENSOR

Version for high temperature

-  SS304 Material
Optional SS316
Excellent Forging Process
-  Resist High Temperature
up to 150 °C
-  Resist High Pressure up
to 42MPa
-  Wear Resistance,
Durable Life, Anti-rust



DN10 DN100 (MALE THREAD)



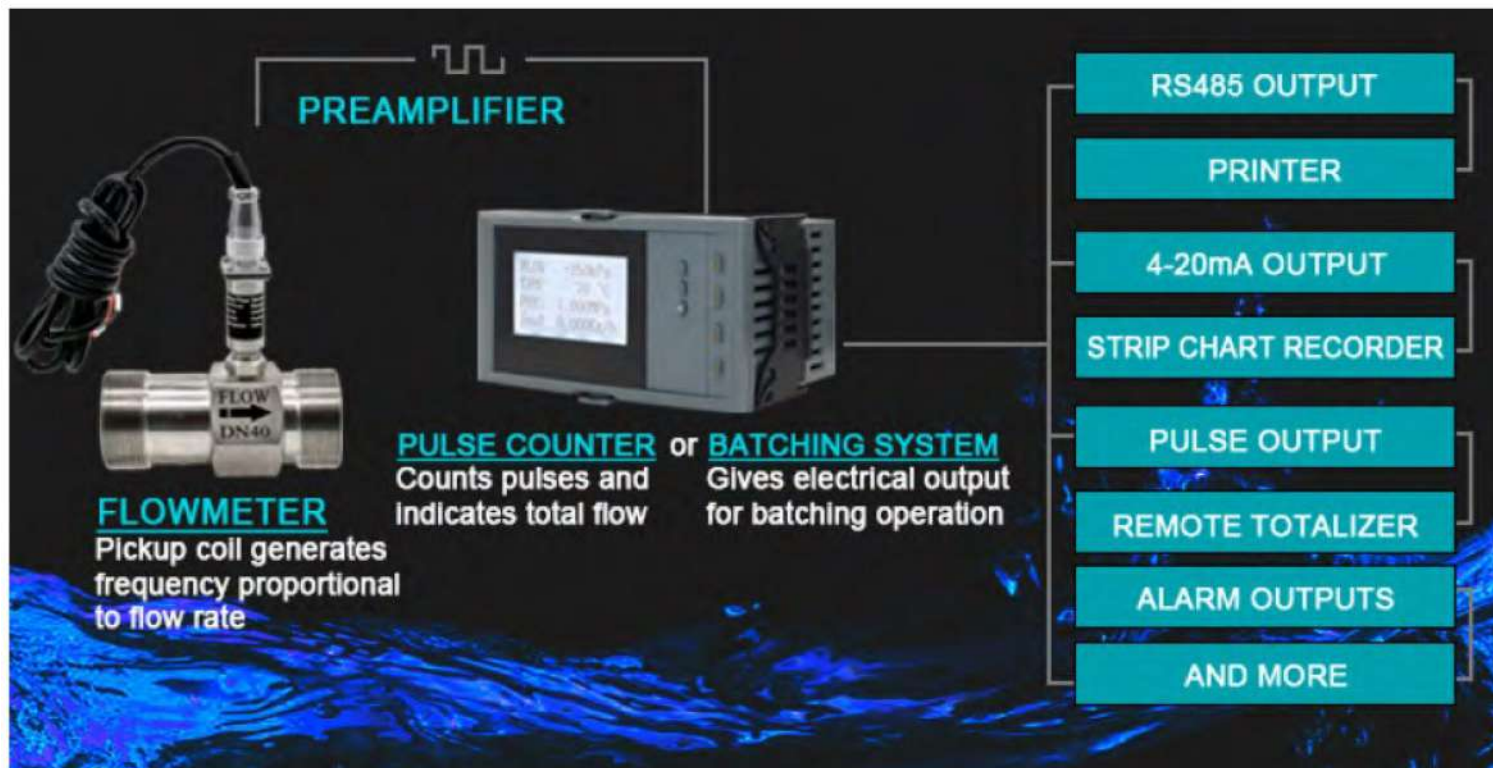
DN15 DN50 (FEMALE THREAD)



DN4 DN10 (EXTENDED STRAIGHT PIPELINE)



PICK-UP SENSOR



TECHNICAL PARAMETERS

Size & Process Connection	Thread connection:DN4,6,10,15,20,32,40,50,65,80,100 Flange connection:DN15,20,32,40,50,65,80,100,125,200 Clamp connection:DN4,6,10,15,20,32,40,50,65,80,100
Accuracy	±0.5%, ±0.2% Optional
Sensor Material	SS304, SS316L Optional
Ambient Conditions	Medium temperature:-20°C~+150°C Atmospheric pressure:86Kpa~106Kpa Ambient temperature:-20°C~+60°C Relative humidity:5%~90%
Signal Output	Pulse, 4-20mA, Alarm(optional)
Digital Communication	RS485, MODBUS, HART
Power Supply	24V DC/3.6V Lithium Battery
Cable Entry	M20*1.5; 1/2"NPT
Explosion-proof class	Ex d IIC T6 Gb
Protection class	IP65; IP67 Optional

FLOW RANGE

Diameter (mm)	Standard Range (m3/h)	Extended Range (m3/h)	Connection Standard (Optional)	Standard Pressure (Mpa)	Customized Pressure Rating (Mpa)
DN4	0.04~0.25	0.04~0.4	Thread	6.3	12,16,25...42
DN6	0.1~0.6	0.06~0.6	Thread	6.3	12,16,25...42
DN10	0.2~1.2	0.15~1.5	Thread	6.3	12,16,25...42
DN15	0.6~6	0.4~8	Thread(Flange)	6.3,2.5 (Flange)	4.0,6.3,12,16,25...42
DN20	0.8~8	0.45~9	Thread(Flange)	6.3,2.5 (Flange)	4.0,6.3,12,16,25...42
DN25	1~10	0.5~10	Thread(Flange)	6.3,2.5 (Flange)	4.0,6.3,12,16,25...42
DN32	1.5~15	0.8~15	Thread(Flange)	6.3,2.5 (Flange)	4.0,6.3,12,16,25...42
DN40	2~20	1~20	Thread(Flange)	6.3,2.5 (Flange)	4.0,6.3,12,16,25...42
DN50	4~40	2~40	Thread(Flange)	2.5	4.0,6.3,12,16,25...42
DN65	7~70	4~70	Flange	2.5	4.0,6.3,12,16,25...42
DN80	10~100	5~100	Flange	2.5	4.0,6.3,12,16,25...42
DN100	20~200	10~200	Flange	1.6	4.0,6.3,12,16,25...42
DN125	25~2500	13~250	Flange	1.6	2.5,4.0,6.3,12,16...42
DN150	30~300	15~300	Flange	1.6	2.5,4.0,6.3,12,16...42
DN200	80~800	40~800	Flange	1.6	2.5,4.0,6.3,12,16...42

ORDER CODE

Model	Product types	Caliber range	Nominal pressure range
Series AI.TF7.2.7102	Flange type turbine	DN15-DN200	1.6Mpa-16Mpa
Series AI.TF7.2.7202	Thread type turbine	DN4-DN80	1.6Mpa
Series AI.TF7.2.7302	Tri-clamp type turbine	DN25-DN50	1.6Mpa

Converter

A: No Display, 24V DC, Pulse Output

B: No Display, 24V DC, 4-20mA Output

C: Local Display, Lithium battery power, No output **CR:** Remote type

D: Local Display, 24V DC, 4-20mA Output **DR:** Remote type

E: Local Display, 24V DC, 4-20mA Output, Modbus RS485 Communication **ER:** Remote type

F: Local Display, 24V DC, 4-20mA Output, HART Communication **FR:** Remote type

Accuracy

05: 0.5% of rate

02: 0.2% of rate

Flow Range

SR: Standard Range: refer to flow range table

WR: Wide range: refer to flow range table

Body Material

3: AISI304

4: AISI316

Explosion Rating

S: Safety field without Explosion

AV: ATEX Version

Pressure Rating

D06: DIN PN6; **D10:** DIN PN10; **D16:** DIN PN16; **D25:** DIN PN25

D40: DIN PN40

A1: ANSI 150; **A3:** ANSI 300; **A6:** ANSI 600

Connection Thread

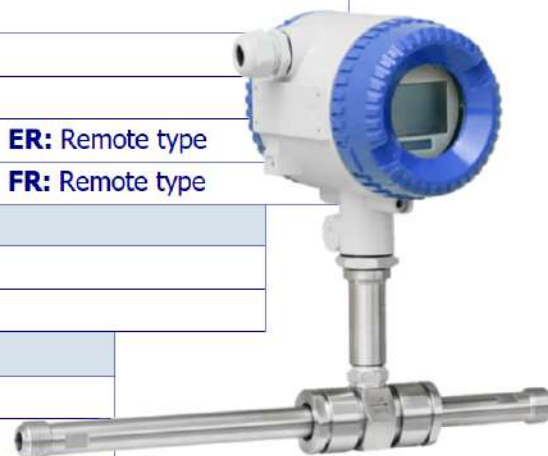
GM: GAS-M **GF:** GAS-F **NM:** NPT-M **NF:** NPT-F

Fluid Temperature

FT1: -20...+80°C

FT2: -20...+120°C

FT3: -20...+150°C



Order code example:

AI.TF7.2.7102	DN25	F	05	SR
	4	S	D16	FT1



ASIT ITALIA S.R.L.

Sede operativa e Uffici
Via Quintino Sella, 6
10020 Riva presso Chieri (TO)
T (+39) 011 198 218 39 - F (+39) 011 198 371 06

INFO@ASIT-GE.COM

WWW.ASIT-GE.COM



Company with
Certificate of Quality
System ISO 9001:2015
Cert n°38785/19/S