

LORRIC

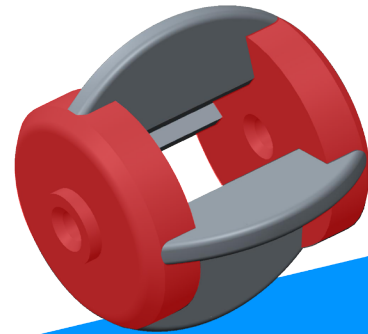
FP-AS510 Paddle Wheel Flowmeter

FP-AS510



Product Features

AxleSense



Double the measuring range of similar products on the market

Two-directional flow detection function

Immediate detection of paddle disappearance to mitigate zero-flow problems

● LORRIC exclusive patent - The AxleSense Technology

- A wider flowrate detection range (0.15 m/s~10m/s)-- LORRIC's patented AxleSense technology shifts the direction of flowrate detection, which means that even under low flow speeds, any paddle movement will be accurately sensed, as well as maintaining a low margin of error for flowrate monitoring.

- Actively detects any paddle abnormalities and offers clear information for the on-site manager to see, and will not simply display a passive "zero-flow" notice.

- Bidirectional flow detection - AxleSense uses the paddle's direction to detect the flow's fundamentals, while at the same time supplies direct information about the flow direction inside the pipelines. This in conjunction with integration with the factory's management system, makes on-site management more convenient.

**Exclusive LCD/
LED double screen
design, double
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● Exclusive LCD/LED double screen design, double screen monitoring which makes work equivalent to 1+1>2

- Double screen display: LED-5 digits LED/LCD 16x3 LCD backlight display

- Large bright LED digits display screen for flow observation: LED's brightness is best suited for long-distance monitoring.

- LCD screen best suited for the display of more complex text-based details



● Green, yellow and red indicator lights: Red – Major abnormality; Green – Normal operation; Yellow – Non-urgent data display.

● Daily Accumulation of positive/negative/net flow volume in the past 14 days.

● The screen can change direction according to the pipes' alignment.

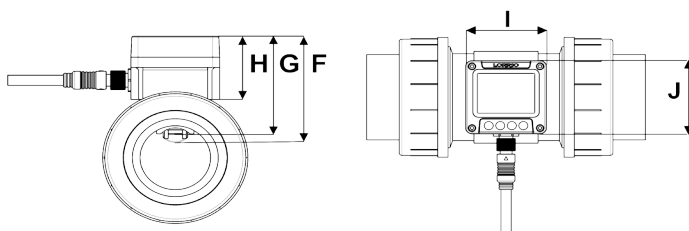
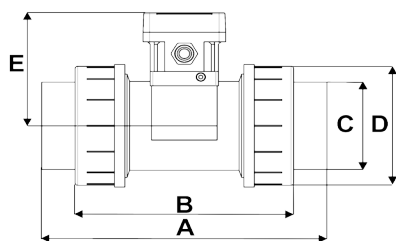
■ Comparison with flowmeters with other various principles

	Variable area flowmeter	Paddle wheel flowmeters	LORRIC's Paddle wheel flowmeter	Electromagnetic flowmeter	Ultrasonic flowmeters
Pipeline loss	Low	Low	Low	No	No
Non-invasive install	No	No	No	No	Yes
Precision	Middle	Middle	Middle	High	High
Bidirectional flow detectable	No	No	Yes	Yes	Yes
Blockages	Possible	Possible	Possible	Not possible	Not possible
Applicable fluid	Air / Liquid	Liquid	Liquid	Conductive liquid	Liquid
Cost	Lowest-costs in small diameter pipe, cost increases with pipe diameter	Low-costs, cost increases with pipe diameter	Low-costs, cost increases with pipe diameter	High-costs, cost increases with pipe diameter	Middle-costs Cost does not increase with pipe diameter

Specifications

Mechanism Specs		Measurement Specs	
Installation method	in-line (Pipe segment)	Applicable fluid maximum dynamic viscosity	300cSt
Fluid in pipes temperature	Under 50 °C (122°F)	Applicable fluid	Clear, oil or chemicals with less impurities (<1%)
Device working environment temperature	-25~70(-13~158°F)	Measurement accuracy	≤ 0.5 % FS + 2.5 % OR
Tee pipe connector	PVC gluing adaptors(ASTM, JIS, DIN),PVC internal and external thread Connector (BSPT and NPT)	Linearity	± 0.5 % FS (>0.3m/s)
		Reproducibility	± 0.4 %
Paddle material	PVDF with embedded magnet + ceramic bearing and shaft	Measuring principle	Paddle wheel
Tee pipe material	UPVC	Flow rate range	±0.3 ~10 m/s Can extend to ±0.15 ~10 m/s
Power supply	DC 12V to 36V 100mA	Tee pipe diameter (mm)	DN20-50 (¾" to 2")
Reaction time	< 0.5 second	Transient data	Instantaneous flow and flow rate
Waterproof level	IP65	Cumulative data	Positive and negative net flow accumulation, past 14 days and long time accumulative net flow
User Interface			
Language	English, Traditional Chinese, Simple Chinese (Others customizable)	Operation button	4 Key touch button
Unit	Metric : Litre, cubic meters, meters Time : seconds, minutes, hours, days Imperial : foot, cubic foot, Uk gallon, US gallon	Wired communication	Analog output 4-20mA (External Power Supply Required) Modbus RS485 Two-line OCT switch signal (ship with 2 meter cable)
Display	Double screen display :Large 5-Digit LED, 16x3 3-Color Backlit LCD display	Calendar function battery	CR2032
Display digits	LED 5 Digits, LCD 10 Digits		

Size



Pipe diameter = 2"

A	B	C	D	E
217.3	166.5	61	103	107
F	G	H	I	J
83	77	49.4	63	63

Unit : mm