

The Series KF510-VA Threaded Type Paddlewheel Flowmeter

From DN10 to DN50, easy to install and maintain



The Serie KF510-VA Threaded Type Paddlewheel Flowmeter is commonly used for liquid flow measurement in industries such as water supply and drainage systems, petroleum, chemicals, and hydraulic systems. Featuring a simple structure and easy installation, it is widely applied in both industrial settings and laboratories. Its measurement principle involves fluid flowing through the flowmeter, driving the paddlewheel to rotate at a speed proportional to the fluid velocity. The paddlewheel drives an electromagnetic device, converting mechanical rotation into electrical pulse signals; calculating the pulse frequency yields the instantaneous or cumulative flow rate of the fluid.

FEATURES

- Threaded connection for convenient installation
- Intuitive measurement with linear correlation between rotational speed and flow rate
- High measurement accuracy
- Simple structure, easy maintenance, low maintenance cost
- Suitable for clean liquids like water and oil, featuring a wide turndown ratio and broad application range
- Highly sensitive to flow changes, rapid response, capable of reflecting flow velocity fluctuations in real time

APPLICATIONS

- Petrochemical Industry
- Metallurgical Industry
- Textile Industry
- Pharmaceutical Industry
- Semiconductor Industry
- Food and Beverage Industry
- Paper and Pulp
- Power Plants
- Urban Water Supply and Drainage
- Environmental Protection
- New Energy Industry
- Shipbuilding Industry

SPECIFICATIONS

Wetted Materials	Paddlewheel: PVDF, PTFE; Shaft: Ceramic; Seal Ring: FKM
Pipe Size	DN10 - DN50
Flow Velocity Range	0.3m/s ~ 6m/s
Accuracy	±1.5%FS
Repeatability	±0.5%
Ambient Temperature	-20°C to 65°C
Temperature Rating	PVDF: -20°C to 80°C
Pressure Rating	0.8MPa or 1.0MPa
Dimensions	100mm × 100mm
Installation Type	Panel-mounted type (cutout size 95*95), integrated pipe type
Power Supply	24V DC, optional battery power supply
Output	4-20mA + Pulse + RS485
Power Consumption	2W
Enclosure Rating	IP65

MODEL CHART

Example	KF510-VA	-A	-10	-1	-AT	-1	-1	-1	
Series	KF510-VA								Threaded Type Paddlewheel Flowmeter
Converter Type		A							Integrated Type
		B							Remote Type
Pipe Size			10						DN10. Range: 0.1m³/h - 1.8 m³/h, Male Thread BSP 3/8", Working Pressure:1.0MPa, A=152mm, B=121mm
			15						DN15. Range: 0.2m³/h - 4 m³/h, Male Thread BSP 1/2", Working Pressure:1.0MPa, A=152mm, B=130mm
			20						DN20. Range: 0.3m³/h - 6 m³/h, Male Thread BSP 3/4", Working Pressure:1.0MPa, A=158mm, B=134mm
			25						DN25. Range: 0.5m³/h - 12 m³/h, Male Thread BSP 1", Working Pressure:0.8MPa, A=158mm, B=141mm
			40						DN40. Range: 2m³/h - 24 m³/h, Male Thread BSP 1-1/2", Working Pressure:0.8MPa, A=168mm, B=175mm
			50						DN50. Range: 4m³/h - 40 m³/h, Male Thread BSP 2", Working Pressure:0.8MPa, A=184mm, B=175mm
Process Connection				1					BSP Thread
				2					NPT Thread
Flow Transmitter Function					AT				Instantaneous flow rate, cumulative flow rate
					AF				Instantaneous flow rate, cumulative flow rate, current output
					AC				Instantaneous flow rate, cumulative flow rate, pulse output
					AD				Instantaneous flow rate, cumulative flow rate, RS485
Power Supply							1		Battery-powered (no signal output)
							2		24V DC
Interlock Alarm								1	High limit alarm
								2	Low limit alarm
								3	Batch control
								4	No alarm
Flow Unit								1	L/S
								2	L/min
								3	L/h
								4	m³/S
								5	m³/min
								6	m³/h
								7	G/S
								8	G/min
								9	G/h