

Please refer to page 5 for detailed selection

FV70-L

Vortex Flow Meter



Product Description

This series is a vortex flow meter based on the Von Karman vortices principle. Under certain conditions, when a fluid with a constant volume flow rate bypasses a turbulence column, double row vortices with opposite rotation directions and regular arrangement will periodically form on both sides of the turbulence column, forming a Karman vortex street. The sensor uses an internal chip to sense the frequency of vortex flow and calculate the liquid flow rate through the pipeline. Sensors have the characteristics of long service life, pollution resistance, high precision, fast response, and no drift, making them an ideal choice for demanding and cost sensitive OEM applications.

Scope of application

This series of vortex flow meters is a commonly used measuring instrument with a sturdy casing and compact structure. It can provide multifunctional sensing solutions for various indoor application scenarios such as harsh industrial production environments, energy metering, environmental protection, laboratory environments, and transportation.

Features

- Excellent repeatability and high precision
- Low voltage loss, pollution resistance
- Vortex measurement principle, without moving parts



Physical diagram

Physical image with temperature display but no display



Physical picture of needle valve without temperature band display



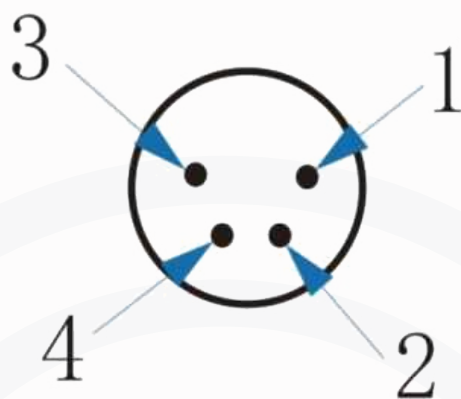
Performance parameters

Parameter	Numerical value	
Flow range	2~16L/min, 5~40 L/min, 10~100 L/min	
Fluid temperature range	0~90 ° C (no freezing or condensation)	
Flow accuracy	<±3.0% F.S. (traffic)	
temperature accuracy	±5%F.S.max.(@25°C)	
repetitiveness	<2.0%	
Contact with liquid materials	Base: PPS/End cap: SUS304 (stainless steel)	
pressure rating	10bar (maximum pressure 16bar)	
Ambient temperature	-10~65°C	
pipeline	Thread type: G or RC or NPT	
power supply	18~28VDC	
Certification, specifications, etc	CE certification RoHS	
medium	Non corrosive liquid	
signal output	Three wire system 4-20mA	Three wire system 1-5V or RS485 or NPN or PNP
power consumption	Below 1100mW	Below 600MW

Note: (1) NPN and PNP are only for flow alarm output.



Pin assignment



Pin number diagram (RS485, 4-20mA, NPN, 1-5V output, PNP output)



FV70-L Vortex Flow Meter Wiring Diagram

FV70-L Vortex Flow Meter - Selection Composition

Example of Selection **FV70-L** C E Q A A

1 2 3 4(4.1/4.2/4.3) 5

1. Range	A	2~16L/min	
	B	5~40L/min	
	C	10~100L/min	
2. Output signal	E	RS485	
	F	4~20mA	
	G	NPN	
	H	1~5V	
	J	PNP	
	K	NPN, 4~20mA	
	L	PNP, 1~5V	
3. Temperature +Display Screen	N	No temperature, no display	
	O	No temperature band display	
	P	Temperature with no display	
	Q	Equipped with temperature display	
4.1 Thread specifications (A series)	A	G3/8	
	B	RC3/8	
	C	NPT3/8	
	D	G1/2	
	E	RC1/2	
	F	NPT1/2	
4.2 Thread specifications (B series)	G	G1/2	
	H	RC1/2	
	J	NPT1/2	
	K	G3/4	
	L	RC3/4	
	M	NPT3/4	
4.3 Thread specifications (C series): Needle valves are temporarily not available for the entire series	P	G3/4	
	Q	RC3/4	
	R	NPT3/4	
	S	G1	
	T	RC1	
	U	NPT1	
5 Accessories		A	M8 connector, without needle valve
		B	M8 connector with needle valve
		C	M12 connector, without needle valve
		D	M12 connector with needle valve

Instructions:

The FV70-L vortex flowmeter has a range of 10~100L/min, an output signal of RS485, a temperature band display, thread specifications of A series G3/8, accessories of M8 connector, and no needle valve.

Product Certification

Compliance and approval; Rod Weige flowmeter meets key standards and certifications for process measurement technology; Thus ensuring the highest reliability in such settings;