Please refer to page 5 for detailed selection

FV50
Vortex Type Flow Temperature Sensor

Product Description

The vortex flow temperature sensor is an industrial intelligent sensing device that integrates flow and temperature dual parameter monitoring. It works based on the mature Karman vortex measurement principle and has no mechanical rotating parts inside the device, reducing problems such as wear, stuttering, and faults from the root. It has a long service life and extremely low maintenance costs. This sensor has strong adaptability and can accurately measure various industrial media such as gases, liquids, saturated steam, superheated steam, etc. It has high measurement accuracy, fast response speed, and stable and reliable data acquisition.

The product is made of wear-resistant and vibration resistant industrial grade materials, which are resistant to high temperature and high pressure. It can effectively resist on-site vibration, medium corrosion, and environmental interference, and is suitable for various complex and harsh industrial working conditions. The whole machine has a compact structure, flexible installation method, simple debugging operation, supports standardized signal output, and can seamlessly integrate with various industrial control systems and data acquisition equipment. Integrated design eliminates the tedious steps of installing split type equipment and is widely used in industries such as thermal heating, chemical production, sewage treatment, power energy, and light manufacturing. It can monitor medium flow and temperature in real-time, providing accurate data support for industrial condition regulation, energy consumption statistics, and safe production.

Scope of application

The vortex flow temperature sensor is widely applicable in various industries, capable of synchronously monitoring flow and temperature parameters, and suitable for various media conditions such as gas, liquid, steam, etc. Mainly used in industrial scenarios such as thermal heating, power plant energy, chemical production, sewage treatment, and light manufacturing, it is suitable for pipeline process monitoring, equipment energy consumption measurement, and production condition regulation. The equipment is anti-interference, temperature and pressure resistant, and can adapt to complex industrial environments, providing stable and reliable data support for factory automation control, energy consumption statistics, and safety production monitoring.

Features

Industrial instrument intelligent temperature control switch, with high-precision industrial grade temperature control capability, equipped with professional temperature sensors and intelligent computing chips, accurate temperature measurement, rapid response, customizable temperature upper and lower limits and hysteresis parameters, achieving closed-loop control of automatic shutdown for over temperature and automatic start for low temperature. Equipped with an industrial grade high-definition digital display interface, data is clear and visible in strong and dim environments. The buttons are easy to debug and support parameter locking to prevent workshop misoperation. The whole machine adopts a flame-retardant and explosion-proof shell, which is dustproof, moisture-proof, anti-interference, and suitable for complex industrial working conditions. It is equipped with multiple safety protections such as overcurrent, overload, and overheating, and is suitable for industrial voltage. It can be installed on rails or wall mounted, with intelligent start stop temperature control as needed, energy-saving, and can extend the service life of equipment, meeting the precise temperature control needs of industrial continuous operation.

✆ 400-860-9760

For more product information, please visit www.ludwig-schneider.com.cn

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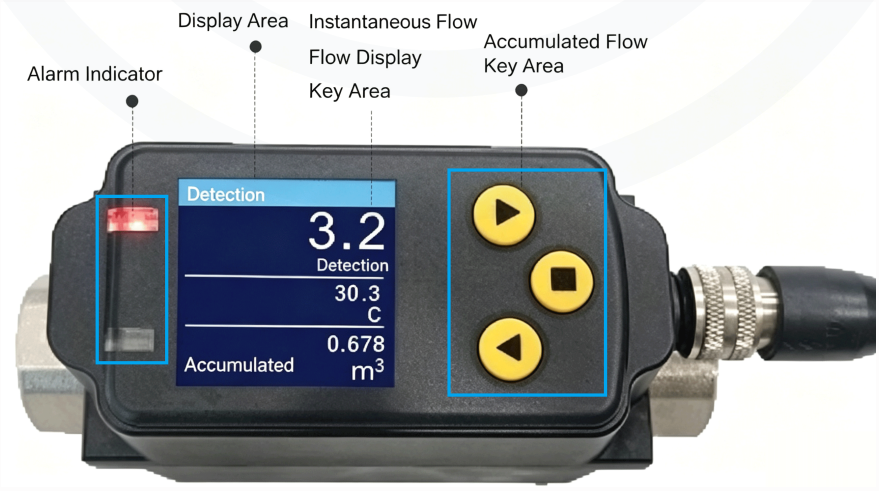
Technical Parameters

Measurement range	Temperature 0~100 ° C; flow rate (see attachment below)
accuracy	Traffic level 3; Temperature 1 ° C
signal output	IO-Link/4-20mA/PNP/NPN
Working Voltage	24VDC
insulation resistance	50MQ at 100VDC
power consumption	3W
environmental conditions	-20~60°C,≤85RH
Protection rating	IP65
Voltage endurance range	1.2MPa
threaded interface	G1/2, G3/4, G1 internal thread

Flow Range Comparison Table

Pipe diameter	Flow range	Pipe diameter	Flow range
DN8	1-15L/min	DN20	8-80 L/min
DN10	3-30L/min	DN25	12-120 L/min
DN15	5-50L/min		

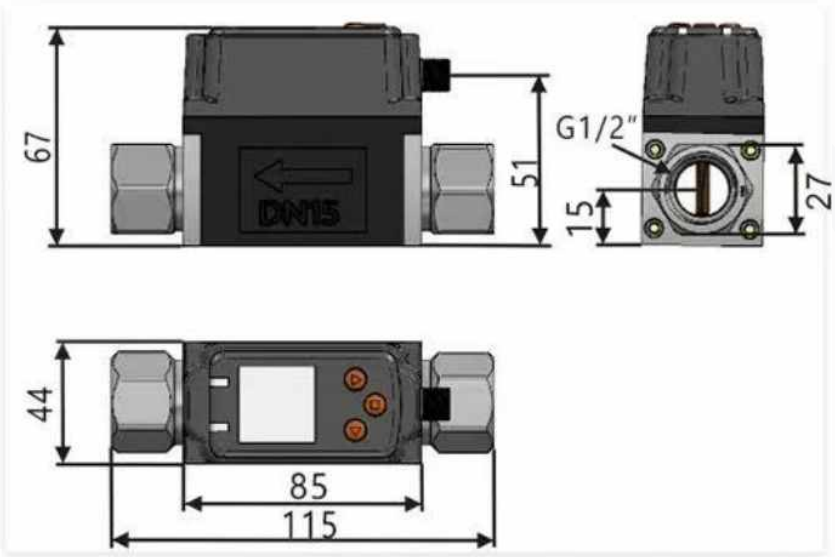
Clear color TFT display



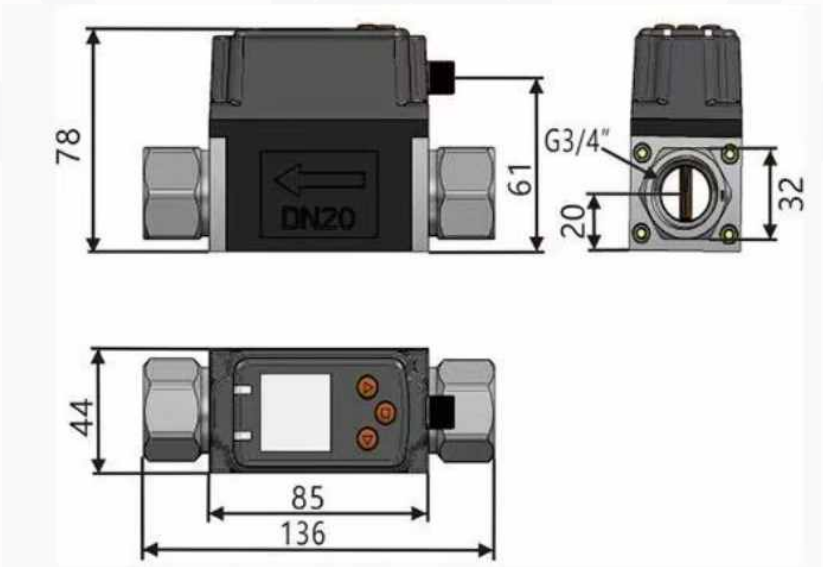
Four types of traffic can be switched

Cubic meters per hour | Liters per hour | Liters per minute | Meters per second

Product dimensions



DN8, DN10, DN15 external dimensions



DN20 external dimensions

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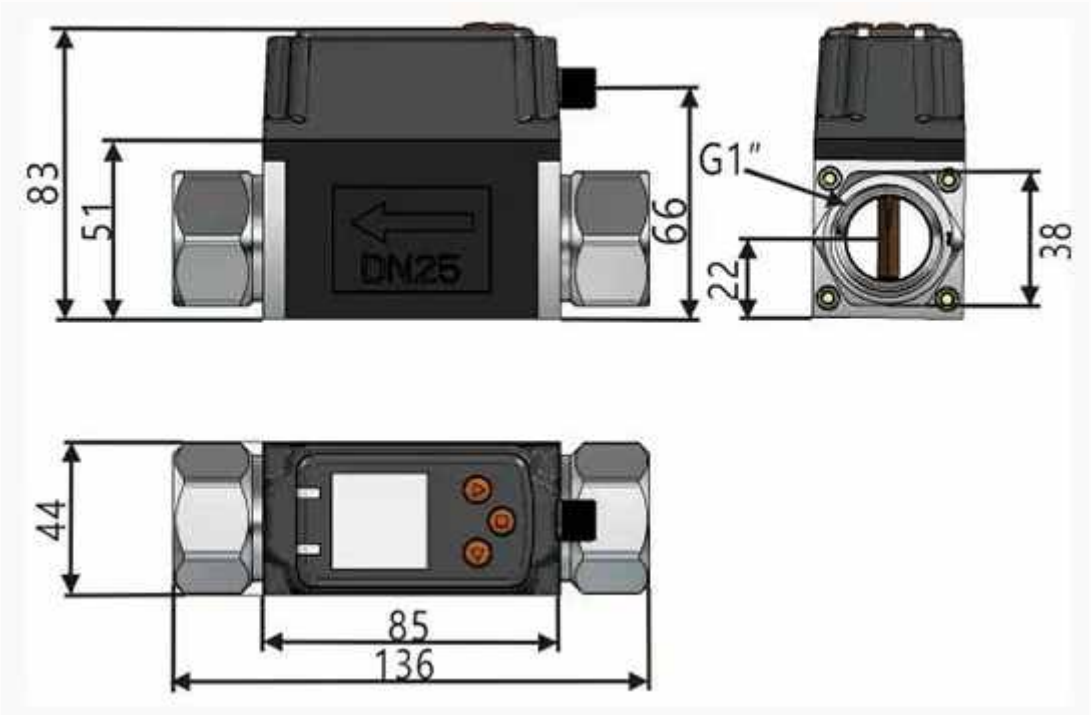

DN25 external dimensions

Product Real Shot

FV50- Selection Composition

Example of Selection **FV50**

B	G	1-10	O	Y	W	B	S	V	X	A	C
1	2	3	4	5	6	7	8	9	10	11	12

1. Process installation method	A	Flange clamping type
	B	Flanged pipe section type
	C	plug-in
	D	split-type
2. Signal output type	G	4~20mA
	H	4-20mA, HART protocol signal
	I	4-20mA、Discrete output
	J	4~20mA+RS485
	K	4~20mA+FF bus
	L	4~20mA+PF bus
	M	4~20mA+MODBUS bus
	T( )	Other output signals
3. Flow range	R( )	Range (note range)
4. Shell material	O	Stainless steel
	P	aluminium
5. Liquid receiving material	X	Anti corrosion ABS
	Y	three hundred and four
	Z	316L
	T( )	Other materials
6. Accuracy level	V	Level 1.0
	W	Level 1.5
7. Voltage resistance level	A	PN10
	B	PN16
	C	PN25
	D	PN40
	E	PN63
	F	PN100
	G	Class150
	H	Class300
	I	Class400
	J	Class600
	T( )	Other pressure levels
8. Flange connection specifications(Insert type does not select this option)	N	DN15
	O	DN20
	P	DN25
	Q	DN32
	R	DN40
	S	DN50
	Z	DN65
	U	DN80
	V	DN100
	W	DN125
	X	DN150

FV50- Selection Composition

Example of Selection **FV50**

B	G	1-10	O	Y	W	B	S	V	X	A	C
1	2	3	4	5	6	7	8	9	10	11	12

8. Flange connection specifications(Insert type does not select this option)	A	DN200
	B	DN250
	C	DN300
	D	3/8"
	E	1/2"
	F	3/4"
	G	1"
	H	1¼"
	I	1½"
	J	2"
	K	2½"
	L	3"
	Z	3½"
	M	4"
	T( )	Other specifications

8.1. Plug in flange connection(This option is not selected for flange connection)	W1	DN200
	X1	DN250
	Y1	DN300
	Z1	DN350
	A1	DN400
	B1	DN450
	C1	DN500
	D1	DN600
	E1	DN700
	F1	DN800
	G1	DN900
	H1	DN1000
	I1	DN1400
	J1	DN1600
	K1	DN1800
	L1	DN2000
	M1	DN3000
	N1	8"
	O1	10"
	P1	12"
	Q1	14"
	R1	16"
	S1	18"
	T( )	其它规格

FV50- Selection Composition

Example of Selection **FV50**

B	G	1-10	O	Y	W	B	S	V	X	A	C
1	2	3	4	5	6	7	8	9	10	11	12

8.2. Threaded connection	Y	G1"	
	Z	2"	
	T()	Other thread specifications	
9. Power supply	V	24VDC	
	U	220VAC	
10. Wire system	X	2-wire system	
	Y	3-wire system	
	Z	4-wire system	
11. Explosion proof type	A	Intrinsic safety explosion-proof	
	B	flameproof	
	N	No explosion-proof	
12. Temperature range	C	0-100℃	
	T( )	Other	

Instructions:

The FV50 vortex flow temperature sensor is installed in a pipe section, with a signal output of 4-20mA and a range of 1-10t/h. The body material is stainless steel, the liquid material is 304 stainless steel, the accuracy level is 1.5, the pressure resistance level is PN16, the flange specification is DN50, and one of the three options is (8, 8.1, 8.2). The power supply is 24V DC, 2-wire system, intrinsic safety explosion-proof, and the temperature measurement range is 0-100 ℃.

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;