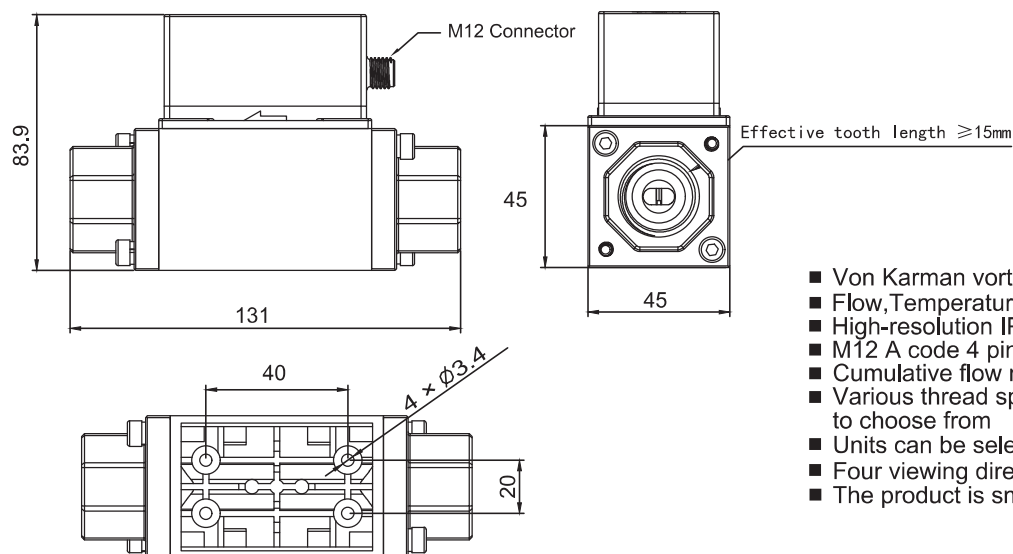


Vortex Flow Sensor

FMV-100-2AO-XXX Dual 4-20mA output (Flow,temperature) XXX:Select by interface

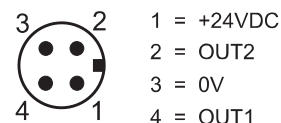
SENTINEL
INDUSTRIAL AUTOMATION



- Von Karman vortex principle vortex flow sensor
- Flow, Temperature dual output, Dual Display
- High-resolution IPS display
- M12 A code 4 pin interface
- Cumulative flow recording function
- Various thread specifications and models to choose from
- Units can be selected, simple button menu operation
- Four viewing directions can be switched
- The product is small in size and occupies little space

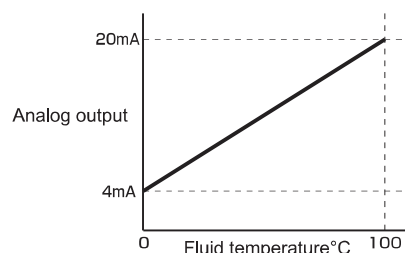
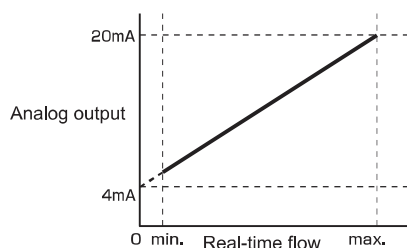
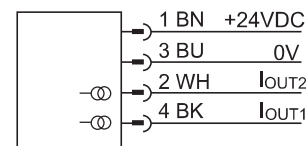
Model	FMV-100-2AO-G1 FMV-100-2AO-RC1 FMV-100-2AO-NPT1	FMV-100-2AO-G34 FMV-100-2AO-RC34 FMV-100-2AO-NPT34
Operating / load voltage	24VDC ± 10%	
Operating current	<100mA	
Flow parameters		
Measuring medium	water	
Measuring range	10 - 100L/min (0.6 - 6m³/h)	
Flow accuracy	< 3.0%F.S	
Cumulative flow range	99999L or 99999m³ Note:Power off reset,For reference only	
Contact liquid material	PPS/SUS304(Stainless steel)	
Process connection	Thread G or RC or NPT Model selection	
Pressure Level	10bar,greatest pressure16bar	
Real-time flow unit	L/min m³/h button optional	
Temperature parameters		
Measuring range	0-100°C	
Temperature accuracy	1°C	
Display units	°C or °F Button optional	
Analogue output		
Output channels	2	
Interface Type	M12 4-pin	
Output method	4-20mA output	
Output data correspondence	Button optional (OUT1:Flow OUT2: Temperature) (OUT1:Temperature OUT2: Flow)	
Ambient temperature	-10...+65°C	
Protection level	IP65	

M12 connection



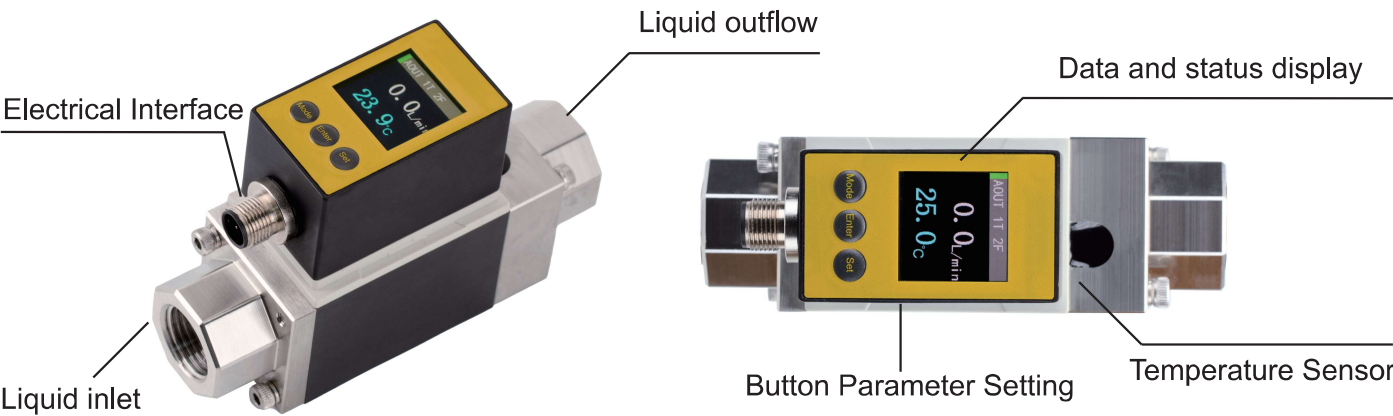
Note:The data relationship button corresponding to the pin is optional
OUT1: Flow data OUT2: Temperature data
or
OUT1: Temperature data OUT2: Flow data

Wiring Diagram



User Manual

Product structure



Product model naming rules

Product Series Name **FMV-040-2AO-G38**

Flowmeter Vortex

Range

016 : 2 - 16L/min
040 : 5 - 40L/min
100 : 10 - 100L/min

output signal

2AO : Two 4-20mA outputs
2VO : Two 0-10V outputs
IOL : Two-way switching IO-Link

Interface thread specifications

Model code	Corresponding specifications	Adaptable range
G38	G3/8	016
RC38	RC3/8	016
NPT38	NPT3/8	016
G12	G1/2	016 040
RC12	RC1/2	016 040
NPT12	NPT1/2	016 040
G34	G3/4	100 040
RC34	RC3/4	100 040
NPT34	NPT3/4	100 040
G1	G1	100
RC1	RC1	100
NPT1	NPT1	100

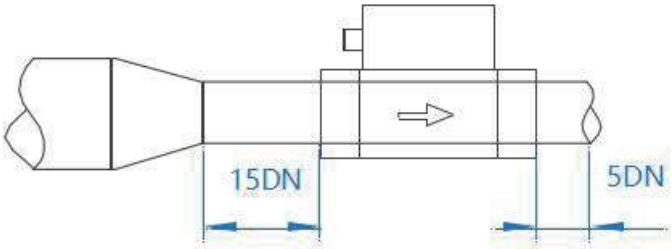
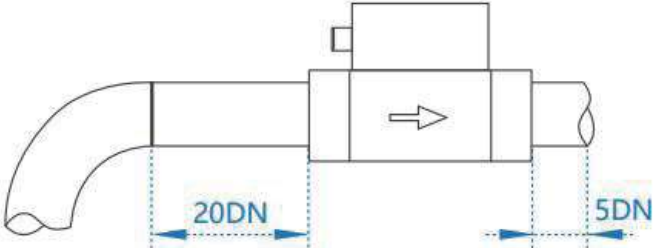
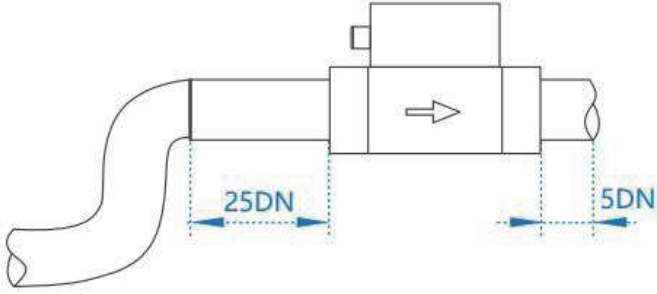
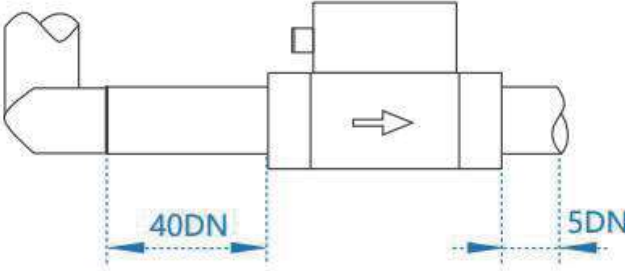
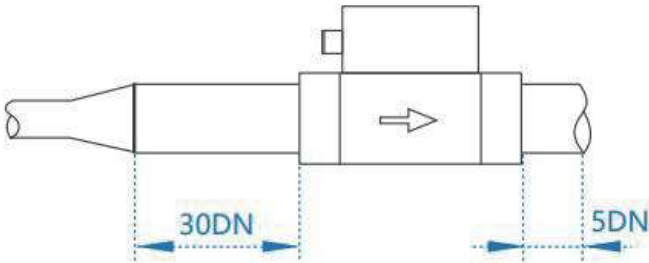
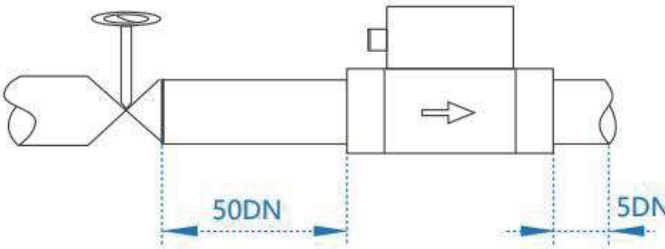
Pipeline installation precautions

Sensor upstream pipeline type and straight pipe length before and after

For the sensor to work properly, the following instructions must be followed:

1. Avoid multiple bends that are not on the same level before approaching the inlet.
2. The inner diameter of the pipe cannot be smaller than the inner diameter of the measuring pipe.

The table on the right shows the pipe installation requirements for different situations.

Pipe type upstream of sensor	Length of front and rear straight pipe sections
Concentric contraction fully open valve	
One 90 degree elbow	
Two 90 degree elbows on the same plane	
Two 90 degree elbows in different planes	
Concentric expansion	
Regulating valve half open valve (not recommended)	

Note: DN represents the nominal diameter or diameter of the pipe.