

# WHEN FLOW CONTROL IS CRITICAL

MAKE SURE IT IS SONTAY

POWER MONITORING



WATER LEAK DETECTION



TEMPERATURE & HUMIDITY



SMART SENSORS



## AIR & WATER FLOW

### BENEFITS

**SAFETY**

Prevent dry-run, blockage, and overflow · Enable safe interlocking of equipment ·



**RELIABILITY**

· Proven technologies for HVAC environments · Long-term stability and accuracy

**EFFICIENCY**

Ensure correct flow for optimal performance · Reduce energy waste and system imbalance ·



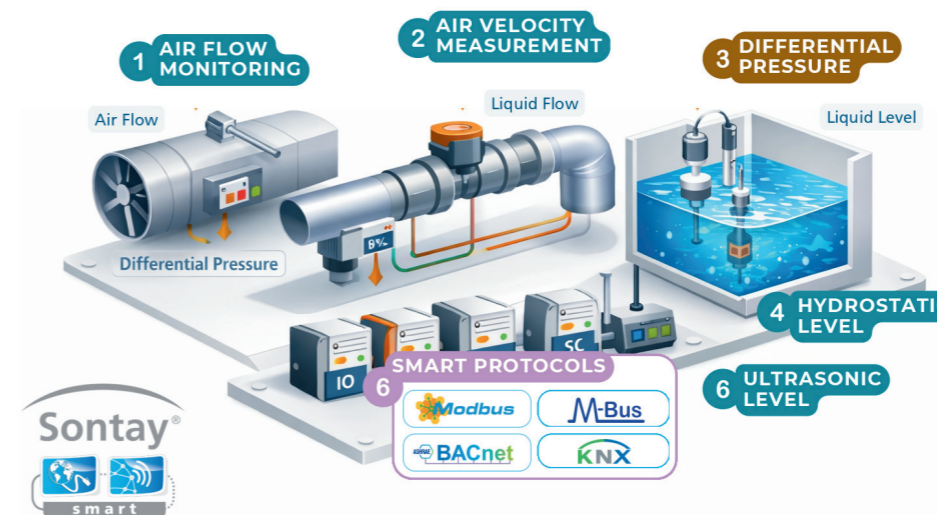
**INTEGRATION**

· Easy integration with BMS architectures · Compatible: Sontay pressure & control sensors

## Sontay Sensors for Air & Water Flow

Reliable monitoring for ventilation control, safety, and compliance.

SCAN HERE



**Sensing for safe, efficient flow control.** Accurate air and water flow measurement is essential for the safe and efficient operation of HVAC and building services systems. From air distribution in ductwork to liquid circulation in heating and cooling systems, reliable flow monitoring protects equipment, supports system efficiency, and reduces energy waste.

Sontay's Air & Water Flow sensing range delivers dependable monitoring across airflow, liquid flow, and level detection, supporting engineers and integrators with proven solutions for real-world HVAC applications.

Air velocity probes and flow switches are commonly used within AHUs and heating circuits to verify airflow and liquid circulation before enabling heating or cooling equipment, improving safety, reliability, and energy efficiency.

	Product Code	Applications	
1	FS-W / FS-X	Air Flow Monitoring	
2	AV-EP / AV-MPS	Air Velocity Measurement	
3	PA / PS	Differential Pressure	
4	LS-SLP	Hydrostatic Level	
5	LS-RD	Radar Level	
6	SC	Smart Communication Protocols	



**AIR VELOCITY & FLOW**

- Measure airflow in ducts and controlled spaces
- Support balancing, ventilation, and pressurisation



**AIR & LIQUID FLOW SWITCHES**

- Prove airflow or liquid circulation
- Enable safe fan, pump, and heater interlocking



**LIQUID LEVEL MONITORING**

- Detect low and high levels early
- Protect equipment and prevent overflow

**AV-D Single-Point Multi-Range Air Velocity Transmitter**



**SPECIFICATION**

Accuracy	±3% of ranges
Environmental Housing	-30 to 60°C 0 to 95% non-condensing
Environmental Media	-10 to +50°C
Housing Dimensions	125 x 105 x 85mm
Housing Material	PC (Halogen free, flame retardant & UV stabilized)
Max.Current	50mA
Output	4-20mA into 100Ω min, 0-10Vdc into 4.7kΩ min
Probe Dimensions	215mm x 20mm dia
Probe Material	Delrin
Protection	IP65
Selectable ranges	0 to 4m/s, 0 to 8m/s, 0 to 16 m/s, 0 to 32 m/s
Supply (Current Output)	20Vdc to 35Vdc for 500Ω loop resistance, 12Vdc to 30Vdc for 100Ω loop resistance
Supply (Voltage output)	17Vdc to 34Vdc, 14Vac to 26Vac supply into 4.7kΩ min.
Weight	220g

Part code	Description
AV-D	Single Point Air Velocity Sensor
<b>Accessory</b>	
DPA	Duct probe adjustment flange

The AV-D is a single point, multi-range air velocity transmitter with user selectable 0-10Vdc or 4-20mA outputs and 4 user selectable measurement ranges. The unit has a built-in self-test feature and the user can manually override the output to 0%, 50% or 100% of output range to aid commissioning.

**FEATURES**

- User selectable 0-10Vdc or 4-20mA outputs
- User selectable measurement ranges
- Durable and resistant to chemical reagents
- Adjustable probe depth using the optional DPA
- Built-in self-test feature



**AV-W Wind Speed and Direction Sensors**



**SPECIFICATION**

Accuracy	±2%
Ambient Range	-20 to +70°C
Contact rating Current	1A max.
Contact rating Power	50W max. (dc resistive)
Contact Rating Voltage	100Vdc max
Electrical connections	Flying lead (3m long)
Electrical Travel	357° (±2°)
Mechanical travel	360° endless travel
Min. start speed	0.5m/s typically
Output	1 contact closure per 1.493 metre (zero bounce)
Protection	IP65
Weight	1.45kg

Part code	Description
AV-W-AD	Wind Speed and Direction Transmitter
AV-W-S	Wind Speed Transmitter

The AV-W series measures the wind speed and direction, providing output signals compatible with most BEMS controllers. Intended for applications where external weather conditions influence the building control strategy, such as for the automatic closing of windows in high wind conditions. Mounting kit is included.



**AV-X Multi-point Air Velocity Probes**



**SPECIFICATION INCOME STEAMI**

Connectors	Nickel Plated brass to suit 6mm ID PVC tubing
Probe Material	ABS Flame retardant (V0)

Part code	Description
AV-EP-100	100mm Multi-point probe (ABS)
AV-EP-200	200mm Multi-point probe (ABS)
AV-EP-300	300mm Multi-point probe (ABS)
AV-EP-400	400mm Multi-point probe (ABS)
AV-EP-500	500mm Multi-point probe (ABS)
AV-EP-600	600mm Multi-point probe (ABS)
AV-MPS-700	To suit duct size 600-700mm
AV-MPS-800	To suit duct size 700-800mm
AV-MPS-1000	To suit duct size 750-1000mm
AV-MPS-1250	To suit duct size 1000-1250mm
AV-MPS-1500	To suit duct size 1250-1500mm
AV-MPS-1750	To suit duct size 1500-1750mm
AV-MPS-2000	To suit duct size 1750-2000mm

The AV-EP and the EV -MPS velocity probes are used to ensure that recommended flow rates for public buildings and industrial plants are achieved. They are used with either the PA-DPT, PA-699 or PA-267 Air Differential Pressure Sensor of an appropriate range (please refer to data sheet on Sontay's website for the further information), the output of the sensor represents the velocity pressure and is defined by the following equation:

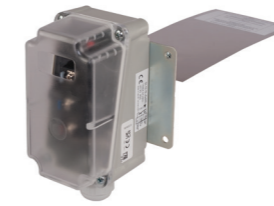
$$\text{Velocity} = \sqrt{(2 \times \text{Velocity Pressure}) / 1.2}$$

**FEATURES**

- Push-on connectors to suit PA-TUBE range of PVC tubing
- Neoprene rubber gaskets duct seals included
- Averages across the duct
- Fully compatible with Sontay's range of DP pressure transmitters
- Mounting plates included
- Double gasket seals the probe to the duct



**FS-A Air Flow Paddle Switch**



**SPECIFICATION**

Operating ambient temp	-20 to +70°C
Operating media temp	-20 to +120°C
Paddle Material	Stainless Steel
Rod Material	Brass
Enclosure Material	ABS flame retardant (type VO)
Switch rating	15(8)A SPDT @ 230Vac
Paddle dimensions	80 x 175mm
Housing Dimensions	113.5 x 65 x 62mm
Protection	IP65
Weight	580g

The FS-A paddle switch is intended to monitor air flow within a duct and provides a switched output on detection of either a specific air velocity or flow failure. Switching sensitivity can be adjusted by means of a calibration screw within the unit.

**FEATURES**

- Adjustable switching point
- High capacity, fully encapsulated N/C, N/O micro-switch
- Lid-mounted screws provide tamper proofing
- Cost-effective flow switch for many HVAC applications

Part code	Description
FS-A	80 x 175mm Paddle Switch



**FS-W Liquid Flow Switch**



**SPECIFICATION**

Operating Temperature	-40 to +120°C
Paddle Material	Stainless Steel
Rod Material	Brass
Enclosure Material	ABS flame retardant (type VO)
Switch rating	15(8)A @ 24 to 250Vac
Pipe suitability	1" to 8"
Housing Dimensions	113.5 x 65 x 62mm
Paddle dimensions	28.5, 54.5, 83.5 and 161.5mm
Protection	IP65
Weight	700g

The FS-W paddle switch is intended to monitor liquid flow within pipes and provide a VFC output on detection of either a specific flow rate or flow failure. Switching sensitivity can be adjusted by means of a calibration screw within the unit. The paddle can be trimmed to increase sensitivity if necessary.

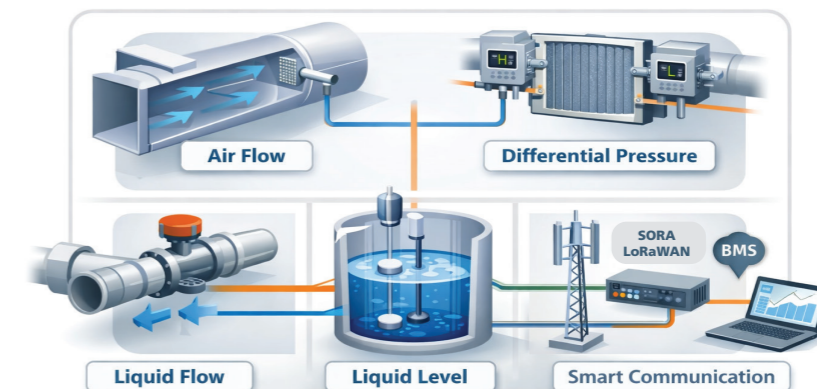
**FEATURES**

- Adjustable switching point
- Suitable for applications up to 11bar
- Lid-mounted screws provide tamper proofing
- Well suited for many general industrial plant applications
- Screws directly into a 1" BSPT boss

Part code	Description
FS-W	1" BSPT Flow Switch



**Integrated Air & Water Flow Monitoring**



**LS-RD Radar level sensor**



Radar sensor for non-contact level measurement in all standard applications where a high degree of protection is required. It is particularly suitable for level measurement in pumping stations, water treatment, flow measurement in open channels, and level monitoring and for many other industrial applications. The sensor is suitable both for measuring liquids and for maintenance free use on small bulk silos or bulk solids containers.

**FEATURES**

- Maintenance-free operation due to non-contact 80 GHz radar technology
- Exact measuring results independent of product, process and ambient conditions
- Low-cost sensor for simple measuring tasks

**SPECIFICATION**

Operating Voltage	12-35VDC
Output	4-20mA
Control	Bluetooth 5.0 app 25m range
Measurement range	10m
Beam Angle	8 °C
Accuracy	≤5mm
Radar frequency	W-band 80 GHz
Operating Temperature	-40 - +60°C
Housing colour	White
Housing Dimensions	108mm x 76mm Dia.
IP Rating	IP66/68
Country of origin	Germany

Part code	Description
LS-RD	Radar level sensor



**LS-SLP Submersible level probe**



This level probe measures the level of liquids continuously and hydrostatically. It can be used in ventilated tanks at filling heights from 2.50 to 10 mH<sub>2</sub>O. The level probe can also be used in other places such as rainwater cisterns or in greywater recycling.

**FEATURES**

- Measuring ranges: 0.25 to 1 bar, Medium temperature 0 to 50 °C
- Piezoresistive silicon sensor
- Accuracy: 0.3% MSP2 (linearity)
- Sensor technology proven thousands of times over Reverse-polarity protection mechanism

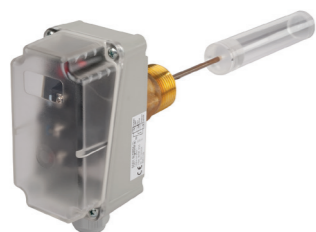
**SPECIFICATION**

Operating pressure	0-0.25 Bar
Operating Temperature	0-50°C Sensor must not freeze in the medium
Output	4-20mA
Supply Voltage	10-30V Nominal 24VDC
Weight	90g

Part code	Description
LS-SLP-0.25	Submers Level probe 0.25 Bar 4-20ma 5m cable
LS-SLP-0.25-V	Submers Level probe 0.25 Bar 0-10Vdc 5m cable
LS-SLP-0.4	Submers Level probe 0.4 Bar 4-20ma 10m cable
LS-SLP-0.4-V	Submers Level probe 0.4 Bar 0-10Vdc 10m cable
LS-SLP-1	Submers Level probe 1 Bar 4-20ma 25m cable
LS-SLP-1-V	Submers Level probe 1 Bar 0-10Vdc 25m cable



**LS-541 Float Switch**



The LS-541 is liquid level float switch which is intended to monitor liquid level in a tank or vessel, to provide a switched output to provide local alarm, pump or valve control. The differential between switching is equivalent to approximately 15mm. The unit mounts into 1" BSPT female boss. Access is not required from the inside of the tank.

**SPECIFICATION**

Enclosure Material	ABS Base, PC Cover
Float & Rod Dimensions	200 x 25mm dia max.
Float Material	Acrylic
Housing Dimensions	140 x 65 x 62mm
Media	Non-aggressive fluids
Mounting	1" BSPT boss
Operating pressure	11 bar max
Operating Temperature	-40 to +85°C, media 85°C max.
Protection	IP65
Rod/boss material	Brass
Switch rating	15(8)A SPDT @ 24...250Vac, VFC
Weight	960g

Part code	Description
LS-541	1"BSPT Float Switch (horizontal mount)



**LS-FL Liquid Level Float Switches**



The LS-FL series is a range of level switches suitable for single or multi-level applications where access is only available from the top surface or where multiple level sensing is desired from a single penetration. Units consist of a float, which is suspended from a weighted cable. As the liquid level changes, the float follows the surface level, at the same time tilting due to its weighted restraint. Inside the float are a number of micro switches which trigger as the float tips.

**SPECIFICATION**

Ambient Temperature Range	0 to +55°C
Material	Polypropylene & PVC
Max. ext. pressure	200Kpa
Min. fluid S.G	0.7
Protection	IP68
Std. cable length	5m
Switch rating	6A @ 240Vac
Weight	1.62kg max.

Part code	Description
LS-FL-1H	High Level, Alarm Switch
LS-FL-1L	Low Level, Alarm Switch
LS-FL-2H	Emptying Pump, Control Switch
LS-FL-2L	Filling Pump, Control Switch
LS-FL-2LH	High & Low Level AlarmSwitch



**LS-S Liquid Level Float Switches**

**LS-S TYPES**



The LS-S range of side mounting level switches designed for high or low liquid level detection in tanks and vessels. Units consist of a lever arm reed switch assembly and a tank fixing boss. The LS-S types are for side mounting, type 1 switches fit from the inside of the tank and tighten on to a back nut whilst the type 2 switches mount from the outside into a tapered boss. Units project into the tank by a maximum of 100mm.

**SPECIFICATION LS-SN (POLYPROPYLENE)**

Operating range	-20 to +80°C
Switch Rating	230Vac/200Vdc@0.5A max.
Weight	120g max.

**SPECIFICATION LS-SS (STAINLESS STEEL 316)**

Operating range	-20 to +120°C
Switch Rating	300Vac/350Vdc@1A max.
Weight	120g max.

Part code	Description
LS-SN-1	Level Switch Side (Int) Polypropylene M16 back nut
LS-SN-2	Level Switch Side Mtg Ext Polypropylene ½" NPT
LS-SS-1	Stainless Level Switch Side Mount Int M8 back nut
LS-SS-2	Stainless Steel Level Switch Side Mounting Ext ½" BSPT

**LS-TM**



The LS-TM is an easy to install Top Mounting Level Switch, and has a reversible float so that it can be used for either high or low level alarms. The float is suspended from a 5 metre PVC weighted cable.

**SPECIFICATION**

Switch rating	240Vac/200Vdc @ 0.5A max.
Contact	N/O, reversible to N/C
Material	Cable: PVC (5 metres)
	Float: Nylon
	Weight: Stainless Steel
Operating range	-20 to +80°C
Dimensions	115 x 65mm
Weight	320g

Part code	Description
LS-TM	Top Mounting Level Switch



Data sheets online: [www.sontay.com](http://www.sontay.com)

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