Global Network





PRODUCTS GUIDE

Flow instrument

Asia

Taiwan FineTek Co., Ltd. - Taipei Head Quarter No.16, Tzuchiang St., Tucheng Industrial Park New Taipei City 236, Taiwan TEL: 886-2-2269-6789 FAX: 886-2-2268-6682 EMAIL: info@fine-tek.com

China

Fine automation Co., Ltd. - Shanghai Factory No.451 DuHui Rd, MinHang District, Shanghai, China 201109 TEL: 86-21-6490-7260 EMAIL: info.sh@fine-tek.com

Singapore

FineTek Pte Ltd. - Singapore Office No. 60 Kaki Bukit Place, #07-06 Eunos Techpark 2 Lobby B, Singapore 415979 TEL: 65-6452-6340 EMAIL: info.sg@fine-tek.com

Indonesia

FineTek Co., Ltd. - Indonesia Office Ruko Golden 8 Blok H No.38 Gading Serpong, Tangerang, Indonesia TEL: 62 (021)-2923-1688 EMAIL: info.id@fine-tek.com

Malaysia

FineTek Co., Ltd. - Malaysia Office

8-05, Plaza Azalea, Persiaran Bandarava, Seksyen 14, 40000 Shah Alam, Selangor, Malaysiac TEL: 603-5524-7168 EMAIL: info.my@fine-tek.com

North America

• California, U.S. Aplus Finetek Sensor Inc. - US Office 355 S. Lemon Ave, Suite D, Walnut, CA 91789 TEL: 1 909 598 2488 FAX: 1 909 598 3188 EMAIL: info@aplusfine.com

Europe

Germany FineTek GmbH - Germany Office Bei den Kämpen 26 21220 Seevetal-Ramelsloh, Germany TEL: +49-(0)4185-8083-12 FAX: +49-(0)4185-8083-80 EMAIL: info@fine-tek.de

> Mütec Instruments GmbH - Germany Office Bei den Kämpen 26 21220 Seevetal-Ramelsloh, Germany TEL: +49-(0)4185-8083-0 FAX: +49-(0)4185-8083-80 EMAIL: muetec@muetec.de





08-AII06-B0-EP, 03/29/2013



(€ @





MC









Solid / Liquid Level Measurement for Field Application **Temperature Controller/ Counter /Digital Panel Meter**



Your BEST Partner







FineTek has accumulated 30 years of technology and has always focused on the field of industrial sensing measurement and research and development.Specialized R & D capabilities and stringent process management have resulted in us not only obtainingISO9001 certification but also meeting a variety of the industry certification.

FineTek is committed to the development of the flow meter, and research. Approved by the National Industrial Technology Research Institute (ITRI) who provides annual checks.The products are widely applied to all kinds of fluids and liquid applications.

Your Made-To-Order Solutions

APPLICATION INDUSTRY

- Water treatment
- Beverage
- Processing and manufacturing
- Power plant
- Mining refining
- Steel making
- Feed processing
- Pharmaceutical and process equipment
- Semiconductor process equipment
- Cooling water circulation system.



Level monitoring is very important in the water treatment industry. Water purification / sewage, sinksor dosing tanks need immediate level control and monitoring and measurement before and after the process so you can get the best control of the system. From urban waste water, drinking water to industrial water needs the water treatment to get better. Quality.

FineTek provides various types of liquid level detection sensors, diversewetted material, from a single chemical substance to a large number. The appropriate analysis for all liquids is required.







Piston Flow switch

Commonly used in process equipment and especially suitable for low-velocity. The piping flow control, flow range is from 2.1 to 51 L / min. With high-precision Measurement and a variety of wetted materials. Applicable to a variety of corrosive liquids, Diameter 1/4 "to 2".



EPD Electromagnetic flowmeter

Common to all applications. Liquid, can also be measured if containing particles. A liquid mixture of granules for most temperatures, pressure, density and viscosity does not affect operation. Product accuracy of up to 0.3%, with optional lining material, optional diameter range from DN15~3000.





SF Paddle flow switch

Commonly used in liquids and clean fluids mass flow detection, using simple operating principles.

Easy to install with low price. Appropriate and applicable diameter DN 25~80.



EPV Vortex flowmeter

Usually applied to the liquid applications. Measurement of gas, steam, external vibrations, temperature, pressure with longterm stability and does not need calibration. Accuracy of up to 1%, the Diameter ranges from DN 25~300.



EPM Mass flowmeter

Commonly used in liquid natural gas flow measurement, can be directly measured. The mass flow rate of the flow, density, viscosity, temperature, etc., is precise up to 0.2%, range DN 8~250.



SP Thermal flow switch

Commonly used in liquid and oils.Simple to use, with more higher sensitivity.Easy to install with no moving parts and thus no wear of the mechanical structure. Applicable to acid-base solutions.



SF Piston flow switches

OPERATING PRINCIPLE

A piston, encapsulating a permanent magnet is positioned in the flow path within the unit's housing. When displaced by the pressure differential from fluid flow, this piston magnetically actuates a hermetically sealed reed switch (SPST or SPDT, depending on the series) within the unit. The piston metering land diameter precisely sets the actuation point by regulating bypass clearance. A stainless steel spring provides positive piston return as flow decreases.

FEATURES

- Simple structure, easy installation and adjustment.
- Suitable for use in low flow rates Long life, cheap.
- Flow rate can be adjusted.
- Maximum pressure-30kg/cm².
- Kinds of materials can be used for all kinds of corrosive liquids.

Reed Switch



SPECIFICATIONS

Connectionr	R1 / 2 ", R3 / 4", R1 "
Operating temperature	0°C~85°C
Contact form	SPST-NO (Option NC)
Contact capacity	10W
Wetted material	PP, Brass, SUS304 SUS316
Outlet specifications	# 24 AWG / 2-Wire
Mechanical life	1,000,000 cycle



SP Thermal flow switches

OPERATING PRINCIPLE

Thermal dispersion flow switches measure the velocity of a liquid inside a pipe or channel. The switch's probe contains two key components a heating sensor and temperature sensor. The heating sensor is positioned closest to the flowing liquid and provides a consistent heat. The temperature sensor measures the temperature emitted from the heating sensor.

When liquid is flowing, there is a temperature difference between the two sensors. The temperature difference has an inverse relationship with the flow velocity.

SPECIFICATIONS

Flow rate range	Water: 1 to 150 cm / s oil: 3 to 300 cm / s
Warm-up time	15 seconds
Operating temperature	-25°C ~ 80°C (fluid temperature)
Pressure	100 bar max
Degree of protection	IP67
Operating power	19 ~ 30Vdc
Contact	NPN / PNP 400mA max) Output signal Relay: 1A/30Vdc, 0.3A/125Vac(NO or NC) 5A/250Vac (SPDT).



FEATURES

- Measurement with high sensitivity, good stability.
- Small size and mounting position is unrestricted.
- No moving mechanical structure is easy to wear.
- Can be measured to a liquid containing impurities.
- Measured for different pH's for liquid environments.



SF Paddle flow switch

OPERATING PRINCIPLE

Paddle-type flow switch works when the flow of water forces the blade to close the switch. When the liquid in the pipe flows, the paddle and spring push the blade up actuating the switch. When the flow stops and the paddle hangs perpendicularly, the switch is opened.

eed switch avis addle

Switch on in case of liquid flowing in pipes

SPECIFICATIONS

Repetitive error	5%
Operating temperature	-30°C~150°C
Protection class	IP65
Contact capacity	60W/220Vac,200Vdc
Contact form	SPDT

FLOW CONTROL RANGE TABLE

Pipe spec.	1	"	1-1	/2"		2"	2-	1/2"		3"
Flow Volume Gallon Paddle Length Min.	Act.	De-Act.								
1"	4.7	3.9	10.9	8.3	19.9	16.1				
1-1/4"			7.7	6.1	16.5	12.3	31.3	22.8		
1-1/2"			5.7	4.5	13.4	9.5	25.2	18.5		
2"					8.4	6.3	15.1	12.8	29.7	21.9
2-1/2"							13.9	10	20.4	15.4
3"									17.1	12.8

%1 Gallon=3.7854 Litter

FEATURES

- Simple structure, easy to install, without adjustment.
- Long life, cheap.
- Maximum pressure up to 25kg/cm².

EPD Electromagnetic flowmeter

OPERATING PRINCIPLE

Electromagnetic flowmeter measurement principle based on Faraday's law of electromagnetic induction, The conductive liquid stream in a magnetic field lies perpendicularly to the direction of the magnetic lines of force When liquid is flowing and crossing the magnetic lines, voltage is generated through this induction.



SPECIFICATIONS

Accuracy	±1.0%, ±0.5%, ±0.3%
The fluid	80°C (NBR)
temperature	120°C (PTFE)
Ambient temperature	-10°C~50°C
Protection class	Integrated IP65 Submersion IP68
Electrode material	Hastelloy, titanium tantalum
Lining material	PTFE,NBR
Measuring tube	stainless steel
Output	4-20mA,1-5000Hz
Communication interface	RS-485
Power	24Vdc 110/220Vac @50/60Hz



FEATURES

- Used for measurement of liquid density, viscosity, pressure, conductivity and the effect of other changes.
- Can measure the liquid with particles and suspended matter.
- Protection class up to IP68.
- Lining materials have a variety of options.
- Functions in a extreme pH environments.





EPM Mass flowmeter

OPERATING PRINCIPLE

The sensor is a measuring chamber with inlet and outlet flanges for mounting on a pipeline. Inside the measuring chamber there are two parallel U-shaped flow tubes, which vibrate by means of an electromagnetic coil and a magnet.

Liquid flowing into the tube creates resistance to its upward movement and downward pressure on the tube. Absorbing vertical momentum by driving around the tube's bend, the liquid, flowing out of the pipe, pushes the tube up. This makes the tube twist. When the tube is moving down in the second half of the oscillation cycle, it twists in the opposite direction.

This twisting is called Coriolis effect and allows the mass flow values to be calculated.



SPECIFICATIONS

Accuracy	±0.2%, ±0.5%
Ambient temperature	-25°C~55°C
Density measuring	0.2~2.0 g/cm ³
Temperature measuring	-50°C~125°C
Protection class	IP65
Flange material	carbon steel stainless steel
Output	4-20mA/0-10mA 1-10KHz
Communication interface	RS-485
Power	24Vdc 110/220Vac@50/60Hz

FEATURES

- Direct mass measuring
- High accuracy
- Digital signal processing
- Straight upsteam / downstream piping not required
- High viscosity liquids measuring





EPV Vortex flowmeter

OPERATING PRINCIPLE

This measuring principle is based on the fact that vortices are formed downstream of an obstacle in a fluid flow, e.g. behind a bridge pillar. This phenomenon is commonly known as the Karman vortex street.

When the fluid flows past a bluff body in the measuring tube, vortices are alternately formed on each side of this body. The frequency of vortex shedding down each side of the bluff body is directly proportional to mean flow velocity and therefore to volume flow. As they shed in the downstream flow, each of the alternating vortices creates a local low pressure area in the measuring tube. This is detected by a capacitive sensor and fed to the electronic processor as a primary, digitized, linear signal. The measuring signal is not subject to drift. Consequently, vortex meters can operate an entire life long without recalibration.



SPECIFICATIONS

Accuracy	±1.0%, ±1.5%
Fluid temperature	-40°C ~ 150°C
Ambient temperature	-25°C ~ 60°C
Protection class	Integrated IP65 Submersion IP68
Electrode material	Stainless steel Hastelloy, titanium tantalum Platinum- iridium alloy, tungsten carbide
Flange material	carbon steel stainless steel
Measuring tube	stainless steel

FEATURES

- Simple structure, no moving parts, stable performance And long service life.
- Same flowmeter can measure liquids, gases and vapors. The instrument is not subject to changes in temperature of the fluid, pressure, viscosity, and composition changes.
- The spectrum analysis processing signals, anti-interference ability.



Output

Communication interface

Power

4-20mA/0-10mA 1-5KHz

RS-485

24Vdc 110/220Vac@50/60Hz