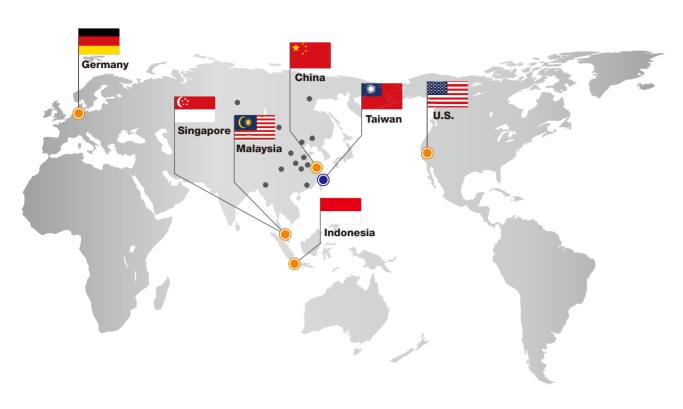
# Global Network



### Head Quarte

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

### Asia

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

37 Kaki Bukit Place, Level 4 Singapore 416215 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 Bandaraya, Seksyen 14, 40000 Shah Alam, Selangor, Malaysia 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

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





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# **About FineTek**

Established in 1978 by Mr Wu Ting Kuo, FineTek business model is based on providing complete customized solutions for a wide range of industrial automation process applications – in liquid level, flow, pressure and temperature. The company is constantly developing and innovating, and at the same time enforcing its core vision – "to provide solutions that exceed customers' expectations." In 1999, the company successfully expanded its operations both locally and internationally, achieving global success and recognition for quality products and services.

From 1999 to 2013, the company successfully grew and transformed with its operations expanding not just from within Taiwan, but globally with the setup of factories and branches in China and regional offices in the United States and Singapore. This development laid down the foundation for international business of FineTek Group. With emphasis placed on customer satisfaction, innovation, product development and overall business transformation, the company continued to innovate and expand with each passing year. In 2013, the factory in Yilan was upgraded and enhanced not only with increased capacity for manufacturing flow meters, but also with the additional of smart automation in the production process. Thus, FineTek successfully achieved global recognition, obtaining the leading position as Asia's top process automation sensor manufacturer.

From 2014 to 2018, Finetek achieved stable growth, continuously reviewing its five-year strategic plan to attain its goals. In 2014, the company successfully became publicly listed with its first IPO, then went on to merge with Mutec Germany in 2015. In 2016, subsidiary offices were established in Indonesia and Malaysia. In 2017, plans were put in place to build a production plant in Indonesia. In 2018, a group of FineTek R&D experts from various global offices were put together to not only develop high-end technological processes, but also incorporate Industrial 4.0, WIFI, 4G, NBIOT and other wireless transmission connection functions to our products to meet customers' need for the latest technology applications. These were implemented successfully, and FineTek products can be used in many different industries such as food & beverage, water, energy, pharmaceutical etc. In the past 5 years, the company has undergone tremendous growth and development – flourishing internationally and providing customers worldwide with the best customized solutions for process automation.

The company's management recognizes that it is important to not just be satisfied with its current level of success, but to continuously seek improvement. Change, customer satisfaction and profit-sharing are the main principles driving our employees in developing technology that result in new, improved and ecological products to sustain our environment for all people. FineTek will continue to strive to be the leading brand in the Process Automation market. Our goal - "To ignite the sensor industry, revolutionizing the world."



# **Philosophy**

### Innovation

- 1. Innovation is our mission. In today's business world where new technology is infiltrating every field and industry, only by insisting on the pursuance of change and excellence can we ensure that our company maintains its position of sustainable growth.
- 2. Our goal is the entire global market, establishing process automation sensor integration systems which are able to cross over industry boundaries. Although our strongest competitors are firms from foreign countries, we nonetheless continue to operate as a world-class business by focusing on international operations.
- 3. We continue to undertake long-term strategic planning, providing clarity, direction and focus to our organization. This is crucial in achieving stability and sustainable profit & success. Every year, a review of the company's next 5 years plan is done to ensure that the business' operations aligns with the organization's goals and mission.

### **Customer Satisfaction (Quality)**

- 1. We treat our customers as long-term partners, never as a competitor. With our dedicated support and cooperation, customers, too, grow together with us. This is the key to our success and the key to the company's continued growth in the future.
- 2. We regard our customers problems as our own, their needs as our opportunity. Our staff are taught to anticipate the clients' wants, and are trained to come up with solutions to problems that have not even been voiced yet. When serving our clients, we adopt a deliberate, customized and perceptive customer strategy that focuses on providing value, quality and satisfaction.
- 3. Customer satisfaction is the difference between surviving and thriving. It is the key in creating long-term relationships with our customers. Hence, we have made it the responsibility of every employee to pursue and maintain the goal of "Customer Total Satisfaction".

### **Profit Sharing**

- 1. Employees, shareholders and interns are all important assets of the company. They are the key to success in every organization, and a contented and motivated employee/shareholder has a higher probability of making significant contributions to the company. Profits are shared among all, as we believe in the mantra "Take care of your employees, who will in turn take care of your business".
- 2. The company's growth is also due to the contributions from both social and industrial environments. We are grateful to be able to give back to society through various channels and programs, and shall continue to expand our corporate philanthropy. Our business also adopts ecologically green practices, reducing harm against the environment We strive to be a socially responsible corporation.
- 3. The company adheres to its commitment to customers, suppliers, employees, shareholders and the general public. All of these stakeholders are important to the success of the company, and we will continue to look after their welfare in the company.
- 4. As long as everyone in the company keep in mind the company's business philosophy and work towards its mission & goals, the company will continue to grow and thrive, becoming a world-class corporation that all can be proud of.

# Vision

Through constant change, a humble, enterprising attitude and a crisis-oriented reform attitude, we can stimulate the company and all employees to grow together and achieve staff confidence, customer satisfaction, and fulfill shareholders' business goals.

FineTek is a global technology leader in process automation and control, providing world-class products & services to industrial, transportation, infrastructure and utility sectors. With over 40 years of experience in research and innovation, the company continues to plan for the next decade – with heavy emphasis on industrial digitization, and in advancing control system technologies for food, water and energy.

As the leading company in Asia, we will continue to invest in the development of industrial digital technology for the future. In the spirit of improvement and excellence, the company, since 2003, had begun promoting the "Changda Corporate Culture". It is expected that the Group's employees will follow the following four criteria that serve as the core values of the company:

### FineTek Corporate Culture

Technology: Pursuing excellence, leader in technology, customer satisfaction,

creating the future.

Humanities: ethical, upright, integrity, giving back to the community.

Environmental: energy saving, green energy products, reducing pollution.

environmental protection.

Action: commitment, accommodating, continuous learning, proactive.

With consideration and respect to the past, we shall focus on the future and strive to establish a deep relationship of trust and respect with our customers. We hope to become a permanent and important partner for customers to trust and work with, achieving together in becoming a global market leader. "Trusted Process Automation Sensor & Solutions Provider" - FineTek's creed.

# **Company History**

# 2014~2018 Stable growth stage

2018		Build up Indonesia Manufacturing Factory
2017		Pass OIML International Flow Meter Certificate, only one in Asia Win - Asia Quality Innovation Award
2016		M&A Germany Mütec GmbH to expand products line Set up a service center in Indonesia and Malaysia to expand sales and technical service of customers in Southeast Asia
2015		Pass approval of ASME Manufacturing Process Certificate  Pass TAF Laboratory Certificate for Flow Meter Calibration system  Establish Flow Meter Calibration System
2014	•	IPO (Stock number: 4549) in December Win of Taiwan Mittelstand award

# 1999~2013 Transformation and growth stage

2013		Yilan new plant start mass production. won the nineteenth Taiwan Excellence Award
2011	•	Established U.S. subsidiary Aplus Finetek Sensor, Inc.  Aplus Finetek Sensor, Inc.
2010		Won the twentieth Executive Yuan National Quality Award for SMEs 🛂
		Honored Bronze Medal Award for Human Resource Training Quality System by Council Of Labor Affairs Executive Yuan Taiwan
2008	•	Awarded the 17th session of the Ministry of Economic Affairs National Award for SMEs 🕎
2007		Set up German subsidiary FineTek GmbH to service EU customers
2005	•	Move to Tu-Cheng Industrial Park new factory and office, to expand the scale of operation.
2003		Founded own brand FineTek.
		Set up subsidiary in Singapore to service South Asia customers.
2001	•	Ministry of Economic Affairs awarded Eighth Small and Medium Enterprise Innovation Research Award

# 1979~1999 Entrepreneurial development stage

1979

1998 Shanghai Office established to service customers in Greater China.

• Early beginnings of manufacturing industrial control systems.



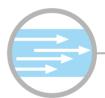




**Level Transmitter** 



**Point Switch** 



Flow Masurement



**Grain Monitoring System** 



**Pneumatic Products** 



Safety Products

# **Sensing Physical Principles**



### **FMCW Radar Level Transmitter**

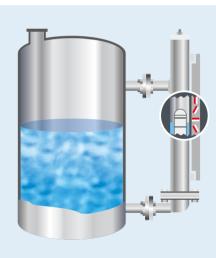
FMCW radar adopts a high frequency signal, which is emitted via an antenna and swipe frequency. During the measurement, the level is calculated from the transmitting frequency and the received frequency difference, which is directly proportional to the measured distance (or material surface).

### FEATURES

Non-contact measuring. No maintenance needed. Not affected by specific gravity, temperature, conductivity, humidity. High accuracy and wide measurement range.

• Operating temperature : -40~200°C

Operating pressure : 40bar



### By-Pass Level Transmitter

The By-Pass Level Indicator is installed outside of a vessel or tank. The liquid level in the tank can easily be observed from the change of the flag color.

### **FEATURES**

Applicable in environment with high temp., high pressure, strong acid, strong alkaline and hazardous locations; no power supply is needed.

The structure is simple but durable and reliable. It is also available with various options for upgrade, such as switch, transmitter, 4~20mA, RS485 output.

■ Operating temperature: -20~200°C

• Operating pressure: 100bar max.



### **Pressure Level Transmitter**

The sensor detects the liquid level through the diaphragm, and at the end of the sensor, the atmosphere is needed as a

Per 1m water hight produce 0.1kgf/cm pressure, and with this principle, actual liquid level can be calculated. •

### FEATURES

Various liquid level measurement. Pipe pressure detection. Various applications, simple operation. Analog output, fast responding

 ${\color{red}\bullet}$  Operating temperature : Max.150°C

Operating pressure : 4~20mA



### **RF Admittance Level Transmitter**

RF Admittance Level Transmitter utilizes the capacitance formed between the sensing probe and the reference probe or the metal vessel wall to calculate the level of the medium inside the vessel according to the capacitance theory that the capacitance and vessel are proportional increased.

### **FEATURES**

Low consumption of power, easy wiring. High accuracy of linearity. Temperature compensation. Easy calibration (Any 2 points for calibration), on-sight display

Operating temperature : -40~200°COperating pressure : 40bar max.



### Contactless level monitoring

The sensor sends out a microwave field, and it received by opposite receiver to detect and analyze. If solids move through this field, the microwaves are reflected and received by the sensor again, and it converts into a switching process.

### **FEATURES**

Contactless microwave measurement for all bulk materials. Adjustable sensitivity, damping, hysteresis and filter time. Easy installation by compact form

Operating temperature : -20~85°COperating pressure : 25bar max.



# Electromechanical-Tuning Fork/ Rotary Paddle Level Switch

When the sensor is stopped by the measuring liquid or solid, it alarms the measuring level.

### **FEATURES**

Suitable for all kinds of solid (powder) control. Easy installation by compact form.

Simple wiring, no complex setting is needed.

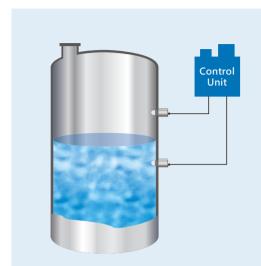
• Operating temperature : -20~200°C

Measuring Density: 0.5g/cm (Rotary Level Switch)

0.01g/cm (Tuning Fork Level Switch)

Sensing Physical Principles Sensing Physical Principles 2

# **Sensing Physical Principles**



### **Optical Level Switch**

SDX series is an optical level switch line that emit a beam of infrared light into the tip (prism) of the sensor.

### **FEATURES**

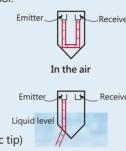
Simple, compact, and robust No moving parts

Built-in, solid-state electronics

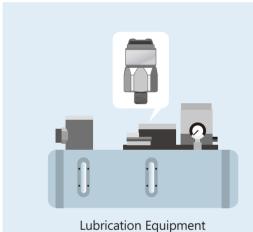
Easily removed, cleaned, and reinstalled LED switch indication

• Operating temperature : -10~80°C (Plastic tip) -20~120°C (Glass tip)

• Operating pressure : 60bar max.



n the liquid



### Pressure Switch

Using an internal diaphragm that is exposed to process pressure via the pressure switch threaded process connection. When the process pressure is greater than the force of the compression spring the switch contact will open or close depending on the choice of the contact form.

### **FEATURES**

Robust pressure switch even in severe duty applications Adjustable or fixed pressure High quality and cost effective Suitable for various industrial equipment

Operating temperature : -30~100°COperating pressure : 300bar max.



### Magnetic Float Level Transmitter

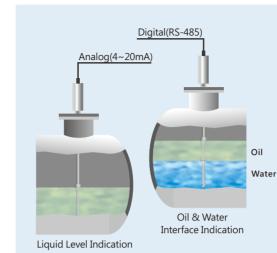
When float is raised or lowered by the liquid level, the magnet inside the float and the sensing rod will induce a resistance output, which is directly proportional to the liquid level.

### FEATURE

Sensing elements are protected with a plastic package for safety in use and transport.

High performance and reliable electric circuit modular design Operation is not affected by temperature and pressure changes. ATEX Explosion Certification/ DNV-GL/ ABS/ BV/ LR Marine Certification

Operating temperature : -20~120°COperating pressure : 30bar max.



### Magnetostrictive Level Transmitter

Using buoyancy, magnetostriction and state-of-the-art electronic technologies to accurately measure the level. When the float site changes along with the liquid level, it continuously output and converted into current or digital RS485, comparing to the level, the signal is the absolute site, even when the power is off, no adjustment is needed.

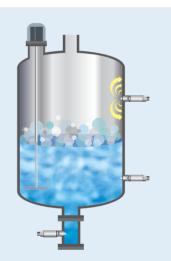
### **FEATURES**

High accuracy. Repeatability of 0.004% F.S.. Fast response time

Water Durable structure, dust-proof, withstands high pressure. Oil/water
dual level indication. Support HART / RS485 and 4~20mA /

■ Operating temperature : -40~200°C

• Operating pressure : 30bar max.



### Sanitary Intelligent Level Switch

The sensor tip will send out electric field signal, and different resonance frequency is created according to different medium. Thus a switching signal will be triggered if the sensor is covered with material.

### **FEATURES**

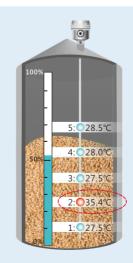
Easy installation by standard connection with IP67/IP68/IP695 as protection grade.

Unaffected by foam and viscous medium.

Applicable to measure the single-point level of liquid, viscous medium and powder medium in the container and pipe; also providing pump dry run protection.

• Operating temperature :  $-40\sim100^{\circ}$ C (Continuously)  $-40\sim150^{\circ}$ C (Less than 1HR)

Operating pressure : 30bar max.



### Temperature & Level Monitoring Transmitter

The tank uses One wire multi-point temperature module and placed inside the armored steel cable, to sense the temperature signal at each position of the material. At the same time, cover the material by a steel cable for the sensor to detect the change of capacitance and convert it into the material height measurement, through RS485 interface to transfer the data to the central control room or human-machine interface, the double data of temperature and level of the materials in the storage tank can be easily monitored, for the most convenient and efficient grain storage management.

■ Measuring Range : -10~85°C ■ Measuring Length: Maximum 30m

Sensing Physical Principles

Sensing Physical Principles

# **Quick Product Selection**

		Transmitter Monitoring						
		Liquid Transmitter						
Туре	Option	EAX	EGX	ECX	FGX	EFX	JFR	
Installation	Vertical Mounting	$\sqrt{}$	V	V	V	V	V	
Ilistaliation	Horizontal Mounting			$\sqrt{}$		$\checkmark$		
	ATEX		$\sqrt{}$		$\sqrt{}$	$\sqrt{}$		
	IECE x				$\sqrt{}$			
Explosion Certification	NEPSI		$\sqrt{}$		$\sqrt{}$			
	TS				$\sqrt{}$	$\sqrt{}$		
	CSA							
	Marine Approval				V	$\sqrt{}$		
Other Certification	CE		$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	
	UL		$\sqrt{}$		$\sqrt{}$			
Process	Max. Temp. ℃	70	200	150	120	400	200	
Temp.	Min. Temp. ℃	-40	-40	-10	-40	-20	-40	
Process Pressure	Max. Pressure(Bar)	3	30	10	30	100	40	
	Acid and Alkaline	$\sqrt{}$	$\sqrt{}$		$\sqrt{}$	$\sqrt{}$	V	
	Foam		$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$		
Application Scope (Recommending)	Pressure in Tank		$\sqrt{}$		$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	
(Recommending)	CIP/SIP Temp. Cycle		$\sqrt{}$	$\sqrt{}$	$\sqrt{}$		$\checkmark$	
	Viscous Medium	$\sqrt{}$					V	
Analog Outp	ut 4~20mA	V	V	V	V	V	V	
Digital Outpo	ut RS485		V		$\sqrt{}$		V	
Digital Outpo	ut HART	V	$\sqrt{}$		$\sqrt{}$		V	
Comply to Fi	neLink AI	V	V	V	V	V	V	
Comply to Fi	neLink RS485		V		V		V	

**X Wireless system can comply to LORA, NB-IOT, 4G** 

		Tra	ansmitter	Monitori	ng
		Dust	Monitori	ng Transn	nitter
Туре	Option	JTR	EBX	EEX	EST
Installation	Vertical Mounting	V	V	V	V
Installation	Horizontal Mounting				
	ATEX	V	V		V
	IECE x	$\sqrt{}$			$\checkmark$
Explosion Certification	NEPSI	$\sqrt{}$	$\sqrt{}$		
	TS		$\sqrt{}$		
	CSA	$\sqrt{}$			
	Marine Approval	V			
Other Certification	CE	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	
	UL				
Process	Max. Temp. ℃	1000 (Cooler)	200	80	85
Temp.	Min. Temp. ℃	-40	-40	-40	-10
Process Pressure	Max. Pressure(Bar)	60	40	ATM	ATM
	Acid and Alkaline	V	V		
	Foam	V	$\sqrt{}$		
Application Scope (Recommending)	Pressure in Tank	V	$\sqrt{}$		
(Neconiniending)	CIP/SIP Temp. Cycle	$\checkmark$	$\checkmark$		
	Viscous Medium			$\checkmark$	
Analog Output 4~20mA		V	V	$\sqrt{}$	
Digital Output RS485		V		$\sqrt{}$	$\sqrt{}$
Digital Outp	ut HART	V	V		
Comply to Fi	neLink AI	V	V	$\sqrt{}$	
Comply to Fi	neLink RS485	V		$\sqrt{}$	V

Quick Product Selection Quick Product Selection

# **Quick Product Selection**

		High/ Low Level Switch						
		Liquid Level Switch			Liquid/Solid Level Switch			
Туре	Option	FDX	FAB	FFX	SAX	SBX	SCX24/28	SIS
Installation	Vertical Mounting	V	$\sqrt{}$	V	V	V	√	V
installation	Horizontal Mounting			$\checkmark$	$\checkmark$	$\sqrt{}$	$\checkmark$	$\sqrt{}$
	ATEX	V		$\checkmark$		V		
	IECE x	$\checkmark$		$\checkmark$				
Explosion Certification	NEPSI	$\checkmark$		$\checkmark$	$\checkmark$			
	TS	$\sqrt{}$		$\checkmark$		$\sqrt{}$		
	Marine Approval	$\sqrt{}$		$\checkmark$				
	CE	$\checkmark$	$\sqrt{}$	$\checkmark$	$\checkmark$	$\sqrt{}$	$\checkmark$	$\sqrt{}$
Other Certification	FDA							$\sqrt{}$
	SIL2							
	UL	$\checkmark$		$\checkmark$				
Process	Max. Temp. ℃	200	60/80/170	100/200	800	550	150	150
Гетр.	Min. Temp. ℃	-20	-10	-40	-20	-40	-40	-40
Process Pressure	Max. Pressure(Bar)	30	2	30	20	20	40	40
	Acid and Alkaline	V	$\sqrt{}$	V	V			$\sqrt{}$
۰ - نام مان موردا	Foam	$\sqrt{}$	$\sqrt{}$	$\checkmark$	$\sqrt{}$	$\sqrt{}$	$\checkmark$	$\sqrt{}$
Application Scope (Recommending)	Pressure inTank	$\sqrt{}$	$\checkmark$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\checkmark$	$\sqrt{}$
(commenting)	CIP/SIP Temp. Cycle	$\sqrt{}$		$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\checkmark$	$\sqrt{}$
	Viscous Medium		$\checkmark$			$\sqrt{}$		$\sqrt{}$
Comply to Fi	neLink IO	$\sqrt{}$	$\sqrt{}$	<b>√</b>	$\sqrt{}$	<b>√</b>	V	

Wireless system can compl	ply to LORA, NB-IOI, 4G
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		High/	Low Level	Switch
		Solic	l Level Swi	tch
Туре	Option	SCX	SCX35	SEX
Installation	Vertical Mounting	$\checkmark$	V	$\sqrt{}$
Ilistaliation	Horizontal Mounting	$\checkmark$	$\checkmark$	$\sqrt{}$
	ATEX	$\checkmark$		$\sqrt{}$
	IECE x	$\checkmark$	$\checkmark$	
Explosion Certification	NEPSI	$\checkmark$	$\checkmark$	$\sqrt{}$
	TS	$\checkmark$	$\checkmark$	$\sqrt{}$
	Marine Approval			
	CE	$\checkmark$	$\checkmark$	$\sqrt{}$
Other Certification	FDA			
	SIL2		$\checkmark$	
	UL			
Process	Max. Temp. ℃	150	280	200
Temp.	Min. Temp. ℃	-40	-40	-20
Process Pressure	Max. Pressure(Bar)	40 (Probe) 10 (Fork)	25	2
	Acid and Alkaline	$\checkmark$	$\checkmark$	
A	Foam			
Application Scope (Recommending)	Pressure inTank	$\checkmark$	$\sqrt{}$	
(commending)	CIP/SIP Temp. Cycle			
	Viscous Medium			
Comply to Fi	neLink IO	V	V	

Quick Product Selection 8

# **Quick Product Selection**

		Flow Transmitter/ Switch							
		Flow Transmitter			Flow Switch		Optical/ Pressure Switch		
Туре	Option	EPD30	EPD34	EPD36	EPR	SFX	SPX	SDX	SQX
Installation	Vertical Mounting	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	V	$\sqrt{}$	V	V	$\sqrt{}$
Ilistaliation	Horizontal Mounting	$\sqrt{}$	$\checkmark$	$\checkmark$	$\sqrt{}$		$\checkmark$	$\sqrt{}$	$\checkmark$
Explosion	ATEX					$\sqrt{}$			
Certification	NEPSI					$\sqrt{}$	$\sqrt{}$		
	Marine Approval						V		
Other Certification	CE	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$		$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$
	OIML		$\sqrt{}$						
	UL							$\sqrt{}$	$\sqrt{}$
Process	Max. Temp. ℃	120	120	150	60/100	150	120	125	100
temp.	Min. Temp. ℃	20	-20	-20	-15	-30	-20	-40	-30
Process Pressure	Max. Pressure(Bar)	10	10	10	10	25	100	65	300
	Acid and Alkaline	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$			$\checkmark$	
	Foam	$\sqrt{}$	$\checkmark$	$\sqrt{}$		$\sqrt{}$			
Application	Pressure in tank	$\sqrt{}$	$\checkmark$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\checkmark$	$\sqrt{}$	$\checkmark$
Scope (Recommending)	Suspended Particles	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$			$\checkmark$	$\sqrt{}$	
	Viscous Medium								
	IP67 Protection	$\sqrt{}$	$\sqrt{}$	$\checkmark$			$\sqrt{}$	V	$\sqrt{}$
Comply to Fi	neLink AI	V	V	V	V				
Comply to Fi	neLink RS485	V	V	V	V				
Comply to Fi	neLink IO					V	V	V	V

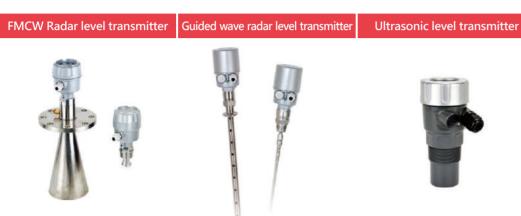
			Others							
		Bridge-	break an	d Dust Co	ollecting		Conveyor Protection		Signal Transmitting And Controlling	
Туре	Option	BVK/R/T	BAH/BVP	BRD/BHV	AEX	SRS/SRT	EDX	TRX	TXX	PB/PM
Installation	Vertical Mounting	V	V	$\sqrt{}$	$\sqrt{}$			$\sqrt{}$	$\sqrt{}$	V
Installation	Horizontal Mounting	V	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	V	$\sqrt{}$	$\checkmark$	$\sqrt{}$	$\sqrt{}$
	ATEX								$\sqrt{}$	
Explosion Certification	IECE x					$\sqrt{}$			$\checkmark$	
	NEPSI					$\sqrt{}$	$\sqrt{}$		$\sqrt{}$	
	Marine Approval									V
Other Certification	CE	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$		$\sqrt{}$
	UL							$\sqrt{}$		
Process	Max. Temp. ℃	100	100	85	70/75	60	80	85	60	50
Temp.	Min. Temp. ℃	-20	-20	-20	-25/0	-20	-40	-40	-20	0
Process Pressure	Max. Pressure(Bar)	10	10	10						
Working	Electricity				$\sqrt{}$		$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$
Principle	Air	V	$\sqrt{}$	$\sqrt{}$						
Analog Output 4~20mA							V	$\sqrt{}$	V	V
Contact Out	put				<b>√</b>	V	V		V	V
Digital Outp	ut HART								V	V

Quick Product Selection Quick Product Selection 10

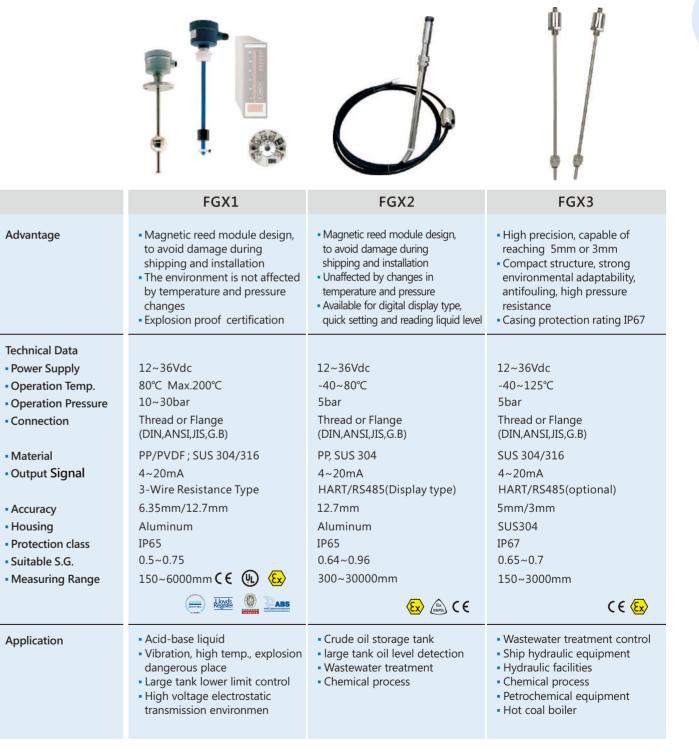


Magnetic float level transmitter

# **Level Transmitter**



	JFR	JTR	EAX
Advantage	<ul> <li>Non-contact Measurement</li> <li>Echo wave graphics display function, easy adjustment calibration</li> </ul>	<ul> <li>Contact measuring, capable of overcoming the steam, foam and stirring effects low dielectric constant material measurement</li> <li>Display distance, level, percentage, current 4~20mA</li> </ul>	<ul> <li>Non-contact measurement, easy operation</li> <li>Liquid receiving materials is PVDF can be used in all types of corrosive environment</li> <li>Fast response speed, suitable for all types of environment</li> </ul>
Technical Data			
<ul><li>Power Supply</li></ul>	9.5~30Vdc(4-wire) 24Vdc±10%(2-wire)	13~36Vdc 16~36Vdc(4-wire)	7~30Vdc 16~36Vdc(4-wire)
<ul><li>Operation Temp.</li></ul>	200℃	150℃ Max.1000℃	70℃
<ul> <li>Operation Pressure</li> </ul>	40bar	60bar	3bar (25°C)
<ul><li>Connection</li></ul>	Thread or Flange (DIN,ANSI,JIS,G.B)	Thread or Flange (DIN,ANSI,JIS,G.B)	2"Thread or Flange (DIN,ANSI,JIS,G.B)
<ul><li>Material</li></ul>	SUS 316	SUS 304/316	PVDF(Probe)
<ul> <li>Output Signal</li> </ul>	4~20mA	4~20mA	4~20mA
	RS485	HART(2-wire), RS485(4-wire)	HART(2-wire)
• Accuracy	±3mm/±5mm	±5mm	±0.25%
<ul><li>Housing</li><li>Protection class</li></ul>	Aluminum IP67	Aluminum	Aluminum IP67
Measuring Range	30m, Max.70m	IP67 (Housing) Max.30m	12m
- Wedsuring Range			
	(€	ECET EX BESS (F) ( E	C€
Application	<ul> <li>Hydrological monitoring level height</li> <li>Large oil tank monitoring</li> <li>Bulk granary materials level detection</li> <li>Water treatment sludge/ mud measurement</li> </ul>	<ul> <li>Oil refinery plant/power plant waste oil tank oil level detection</li> <li>Chemical solvent measurement</li> <li>Water treatment sewage measurement and control</li> <li>Cooking oil, industrial oil</li> <li>Water channel, ditches</li> </ul>	<ul> <li>Water or wastewater treatment equipment</li> <li>Chemical solvent measurement</li> <li>Water treatment sewage measurement and control</li> <li>Cooking oil, industrial oil</li> <li>Water channel, ditches</li> </ul>



Flexible Magnetic float level transmitte

Wafer Magnetic float level transmitte

Level Transmitter 12



# **Level Transmitter**



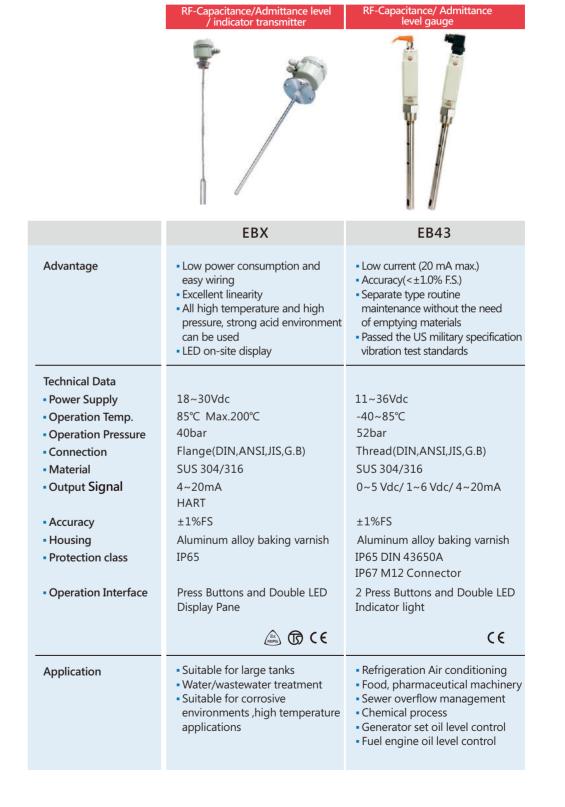
	• •	T T	9
	EGX	EG50	EG60
Advantage	<ul> <li>Absolute position output</li> <li>High Resolution, High Precision</li> <li>Dual liquid level Interface Measurement</li> <li>Multiple output methods for selection</li> </ul>	<ul> <li>Absolute position output, Returning to zero adjustment is not required after power restoration</li> <li>High resolution, high precision</li> <li>Dual liquid level interface measurement</li> </ul>	<ul> <li>Absolute position output, returning to zero adjustment is not required after power restoration</li> <li>High resolution, high precision</li> <li>Dual liquid level interface measurement</li> </ul>
Technical Data			
<ul> <li>Power Supply</li> </ul>	18~30Vdc	24Vdc (+20% / -15%)	18~30Vdc(2/4-wire)
<ul> <li>Operation Temp.</li> </ul>	125°C Max.200°C	-40~125°C	-40~195℃
<ul> <li>Operation Pressure</li> </ul>	30bar	10bar	30bar
<ul><li>Connection</li></ul>	Thread or Flange (DIN,ANSI,JIS,G.B)	Thread M18×1.5 ; 3/4"-UNF	Thread M18×1.5 ; 3/4"-UNF
<ul> <li>Material</li> </ul>	SUS 304/316	SUS 304/316/316L	SUS 304/316
<ul> <li>Output Signal</li> </ul>	4~20mA RS485	4~20mA / 20~4mA	4~20mA /(0~5V/0~10V-4-wire) HART/RS485
<ul> <li>Accuracy</li> </ul>	1.0mm	≦ 45um	0.1mm( Max. 1mm)
<ul><li>Housing</li></ul>	Stainless Steel	SUS 304	SUS 304
<ul> <li>Protection class</li> </ul>	IP67 (Housing) / IP69K	IP67	IP67
<ul><li>Suitable S.G.</li></ul>	0.5~0.9	0.7~0.9	0.65~0.9
<ul> <li>Measuring Range</li> </ul>	50~3500mm	50~1000mm	50~2500mm(4-wire)
	EX (RE) ( E	Ex CE	50~5500mm(2-wire) <b>€ € €</b>
Application	Liquefied natural gas liquid level measurement     Pharmaceutical or food liquid level control     Sluice gate position monitoring	Pharmaceutical or food liquid level control Drinking water, sewage treatment Oil tank oil level control indication Machine tool or processing	Liquefied natural gas liquid level measurement     Pharmaceutical or food liquid     Drinking water, sewage treatment     Chemical process

equipment positioning control

Valve control

Oil tank oil level control indication

Liquid level control



3 Level Transmitter 14

Oil tank oil level control indication

Liquid level control



# **Level Transmitter**

# Electromechanical level gauge





Pressure level transmitter

	EFX	EEX	ECX
Advantage	<ul> <li>High temperature, high pressure, strong acid, strong alkali and explosion-proof requirements</li> <li>Adding transmitter or switch, does not need to shutdown machine</li> </ul>	<ul> <li>Measurement results are not affected by the environmental interference</li> <li>Four detection modes, which can be set according to the requirements</li> <li>Multiple weight specifications</li> </ul>	<ul> <li>Viscous fluid liquid of weak acid-base containing scale and impurity</li> <li>Internal circuit has temperature compensation, long time operation stability is high</li> </ul>
Technical Data			
<ul><li>Power Supply</li></ul>	-	88~264Vac 50/60Hz	13~36Vdc
<ul> <li>Operation Temp.</li> </ul>	-40~85°C Max.400°C	80℃	80°C Max.150°C
<ul> <li>Operation Pressure</li> </ul>	Max.100bar	2bar	10bar
<ul> <li>Connection</li> </ul>	Flange (DIN,ANSI,JIS,G.B)	Flange (DIN,ANSI,JIS,G.B)	Thread or Flange (DIN,ANSI,JIS,G.B)
<ul> <li>Material</li> </ul>	Plastic PP/PVDF; SUS 304/316	SUS 304/316	SUS 304/316
<ul> <li>Output Signal</li> </ul>	4~20mA	4~20mA RS485	4~20mA
<ul> <li>Accuracy</li> </ul>	6.35mm	100mm/pulse	0.3%FS
<ul> <li>Housing</li> </ul>	Aluminum alloy baking varnish	Aluminum alloy baking varnish	Aluminum alloy baking varnish
<ul> <li>Protection class</li> </ul>	IP65	IP66	Ip67 (Housing)
Suitable S.G.	0.6~0.87	0.5~0.75	- (€
	CX (NESSI) AT CE	CE	
Application	<ul> <li>Apparel fabric dyeing and finishing equipment</li> <li>Corrosive environment, high temperature applications</li> <li>Wastewater treatment, power plant industry</li> <li>Chemical equipment, boiler</li> </ul>	<ul> <li>Various types of powder, granules, blocks places</li> <li>Sealed pressure less large tank level measurement</li> <li>Work with the production process control system, for the management of tank level</li> </ul>	<ul> <li>Mixed or fluid liquid measurement</li> <li>Reservoirs and other deeper water levels measurement</li> <li>Pressure measurement and control of various types of machinery equipment</li> </ul>

15 Level Transmitter Level Transmitter 16



# **Signal Transmitter**

# Explosion-proof Isolated Safety barrier

# Explosion-proof Isolated Safety barrier





	TXX1	TXX2
Advantage	<ul> <li>Used in dangerous areas, connect to the continuous current output or switch output of 1 set sensors.</li> <li>3 sets of output are Relay output, current output and RS485 respectively</li> <li>Switch between multiple different functions with the DIP switch</li> </ul>	<ul> <li>Integrated power insolated safety barrier and digital communication insolated gate</li> <li>Dangerous side and safety side insulation voltage resistance 2500V</li> <li>Communication HART repeater mode</li> <li>Power and digital communication indicator light</li> <li>Intrinsic safety explosion-proof IEC Ex / ATEX</li> </ul>
Technical Data Power Supply Ambient Temp. Power protection Current consumption	20~35 Vdc / 20~250 Vdc/Vac, 50/60 Hz 20~60°C Twith reverse protection / No directional < 100 or 200 mA @24V, Load 20mA	20~35Vdc 20~60°C Power consumption:4W
<ul><li>Dangerous zone</li><li>Input</li><li>Open circuit voltage</li><li>Distribution voltage</li></ul>	0~20mA / 4~20mA < 28 Vdc > 15 Vdc (Load 20 mA)	4~20mA, 20~4mA, HART, RS485 < 35 Vdc > 14Vdc (Load 20 mA)
Safe zone  Output  Transmission accuracy Application environment	0~20 / 4~20 mA or 0~5 / 0~10 V 0.1 % F.S.,0.5%@<0.3V (20°C) Zone 0 \ Zone 1 \ Zone 2 IIA \ IIB \ IIC T4~T6	4~20mA, 20~4mA, HART, RS485 0.1 % F.S. (20°C) Zone 0 \ Zone 1 \ Zone 2 IIA \ IIB \ IIC T4~T6
	Ex REPS	IEC PÉC
Application	Work with the connection configuration of intrinsic safety type sensor	Work with the connection configuration of intrinsic safety type sensor

# Temperature transmitter





	TRX	
Advantage	Capable of receiving multiple signals:     RTD, thermocouple, Rohm	
Technical Data		
• Power Supply	12~36Vdc	
• Ambient Temp.	-40~85°C	
<ul><li>Input signal</li></ul>	1 or 2	
<ul><li>Cold contact</li></ul>	≦ ± 1°C	
compensation		
<ul> <li>Current Output</li> </ul>	4~20mA	
<ul> <li>Accuracy</li> </ul>	RTD:±0.5℃; TC:±1.5℃	
■ PT100 Range /	-200~850 / 10℃	
Min. measuring span		
Rohm Range /	0~400 / 5℃	
Min. measuring span		
	(4) (€	
Application	Work with the connection configuration of temperature sensor     Heater equipment temperature transfer	

17 Signal Transmitter 18



# **Point Switch**





Capacitance level switch

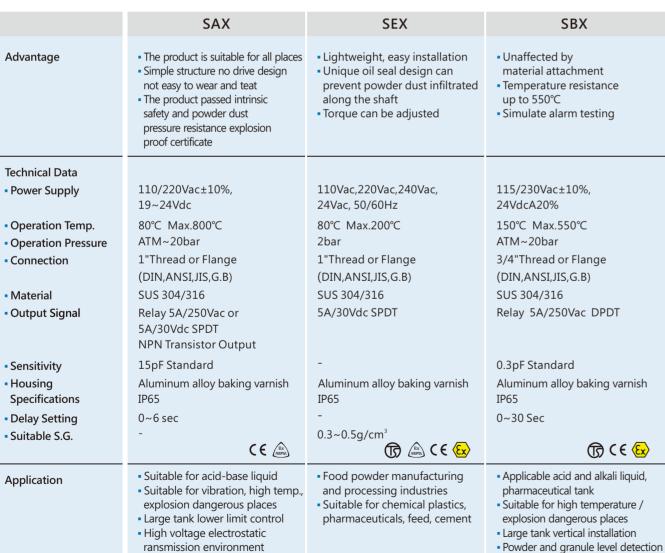


Rotary paddle level switch



Rf-capacitance/ Admittance level switch





Tuning fork level switch



raw materials/production process/

finished product tank



Pressure switch

	11
	SCX
Advantage	<ul> <li>Universal power supply input</li> <li>Adjust with materials of different densities, can also be used with fine material</li> <li>Capable of detecting wear and tear of the tuning fork or the material is sticky</li> </ul>
Technical Data	
<ul> <li>Power Supply</li> </ul>	20~250 Vac/Vdc,50/60Hz NPN / PNP(10~55Vdc)
<ul> <li>Operation Temp.</li> </ul>	130°C Max.280°C
<ul> <li>Operation Pressure</li> </ul>	40bar
<ul><li>Connection</li></ul>	1"Thread or Flange (DIN,ANSI,JIS,G.B)
<ul> <li>Material</li> </ul>	SUS 304/316
Output Signal	3A / 250Vac / 28Vdc SPDT SSR 400mA / 60 Vac / Vdc
<ul> <li>Sensitivity</li> </ul>	HI/LO Toggle switch
<ul><li>Housing</li><li>Specifications</li></ul>	Aluminum alloy baking varnish IP65
<ul><li>Delay Setting</li></ul>	0.6 sec. action; 1~3 sec return
<ul> <li>Suitable S.G.</li> </ul>	Powder: <u>≥</u> 0.07g/cm³ Liquid: <u>≥</u> 0.7g/cm³
	Elquid. ≥0.7g/cm
Application	All types of materials /liquid detection in the can or pipe     Solid and liquid control of industrial

SQX Capable of maintaining good Advantage mechanical operations in a harsh environment Low cost and high pressure switch Pressure adjustment is easy and fast Casing materials can be customized (Iron, Stainless Steel, Copper) **Technical Data** 4A/50Vdc, 4A/250Vac Working Current / Voltage -30 ~ 100°C Operation Temp. 300bar Max. Operation Pressure Thread (ISO, ANSI, JIS) Connection Material Iron, Stainless Steel, Copper Contact NO , NC, SPDT(1AB) Output Signal High voltage 1.5KV (IEC60947-2) resistance Insulation resistance Above  $100M\Omega$  Mechanical service life 1.5X106 cycles (in 50 bar) 10G/5-200Hz sine-ware Vibration frequency (IEC17025) Lubricant pressure reduction Application detection • Fire water detection for fire pumps Automatic start and stop of air compressor • Hydraulic machine, high pressure washing machine

Air limit switch

Point Switch Point Switch 20



# **Point Switch**

Advantage

**Technical Data** 

Power Supply

Connection

Material Output Signal

Sensitivity Housing

Specifications

Suitable S.G.

Application

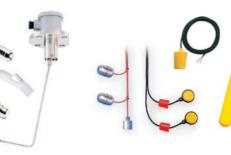
Operation Temp.

Operation Pressure





Cable float level switch





FDX

• Plastic / Metal materials are

Dry contact, Power supply not

Plastic PP/PVDF; SUS 304/316

suitable for all types of



suitable for different specific Multiple materials suitable for

FFX

- all types of liquid Can be used in explosive
- dangerous places
- Suitable for long distance, for multi-point control
- AR Type inlet port sealant, good weather resistant

FAX/FBX

 Product adjustment action point is easy

Dry contact, Power supply not

60/80°C Max.170°C

(DIN, ANSI, JIS, GB)

Plastic PP\PVC; SUS 304

10A/ 250Vac;3A/ 125/250Vac

1A/ 230Vac;AC70 VA / DC50W

Polypropylene PP/ Aluminum alloy baking varnish / IP65

required

4"Flange

SPST/SPDT

0.5~0.8

2bar



80°C Max.350°C 10~30bar 1-1/2" Thread or Flange

(DIN, ANSI, JIS, GB) SUS 304/316/316L 5A / 250Vac 1A 30W 220Vac/200Vdc

SPST/SPDT SPDT Aluminum alloy baking varnish Aluminum alloy baking varnish IP65 IP65

0.45~0.82

times

required

5~50bar

environment

80°C Max.200°C

Thread or Flange

(DIN, ANSI, JIS, GB)

20~50W 0.5A





Applicable acid and alkali liquid,

pharmaceutical tank, high temp.

Diesel generator oil level detection

/ explosion dangerous places

Hydraulic equipment level

detection environment









the tank



• Oil liquid level detection of

boiler equipment







- All types of liquid detection in low-specific gravity sewage control
  - Suitable for the places of clear water with smaller installation holes
  - Control applications in PLC or DCS, recommend to use magnetic reed switch type

 $\epsilon$ 

Sanitary intelligent level switch



<ul> <li>Stainless steel case sturdy and durable</li> <li>Can be used in CIP and SIP clean environment applications</li> <li>Not affected by the foam and viscous medium</li> <li>Protection rating IP69K</li> </ul>
18 ~ 30Vdc
(-40~ 85°C) Max.120°C
-1~40bar
1/2"Thread (ISO,ANSI,JIS)
316/316L
(DC)PNP/NPN(Optional)
50mA
SUS304/ 316/ 316L
IP67/IP68/IP69K
Startup state LED Yellow,
return state LED Green
Transistor<100mA
( FD/A
<ul> <li>Food manufacturing industry</li> <li>Beverage manufacturing industry</li> <li>Pharmaceutical industry</li> </ul>

Point Switch Point Switch



# **Flow Transmitter**

Electromagnetic flowmeter

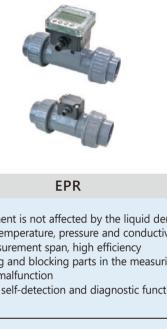
Separate electromagnetic flowmeter





	EPD30	EPD34
Advantage	<ul> <li>Measurement is not affected by the liquid density, viscosity, temperature, pressure and conductivity</li> <li>High measurement span, high efficiency</li> <li>No moving and blocking parts in the measuring pipe, low malfunction</li> <li>Intelligent self-detection and diagnostic functions</li> </ul>	<ul> <li>Measurement is not affected by the liquid density, viscosity, temperature, pressure and conductivity</li> <li>High measurement span, high efficiency</li> <li>No moving and blocking parts in the measuring pipe, low malfunction</li> <li>Intelligent self-detection and diagnostic functions</li> </ul>
Technical Data		
<ul><li>Power Supply</li></ul>	AC 100~240V	AC 100~240V
	24Vdc	24Vdc
<ul> <li>Operation Temp.</li> </ul>	120°C	120℃
<ul> <li>Operation Pressure</li> </ul>	10bar	10bar
<ul><li>Connection</li></ul>	Flange (DIN,ANSI,JIS,G.B)	Flange (DIN,ANSI,JIS,G.B)
Material	Carbon steel / SUS 316	Carbon steel / SUS 316
Output Signal	4~20mA,RS-485	4~20mA,RS-485
- Output Signal	NPN Transistor output 32vdc/200mA	NPN Transistor output 32vdc/200mA
<ul><li>Sensitivity</li></ul>	±0.5% of reading	±0.5% of reading
• Housing	Aluminum alloy baking varnish	Aluminum alloy baking varnish
<ul> <li>Protection Rating</li> </ul>	IP67	IP67
<ul><li>Maximum</li></ul>	0.1m/s ~ 10ms	0.1m/s ~ 10ms
measuring span	CE CE	E OM CE
Application	<ul> <li>Tap water purification treatment</li> <li>Sewage wastewater treatment discharge pipeline flow rate</li> <li>Sewer engineering</li> <li>Dyeing and finishing machinery</li> <li>Factory water cycle energy saving pipeline</li> </ul>	<ul> <li>Tap water purification treatment</li> <li>Sewage wastewater treatment discharge pipeline flow rate</li> <li>Sewer engineering</li> <li>Dyeing and finishing machinery</li> <li>Factory water cycle energy saving pipeline</li> </ul>

Sanitary electromagnetic flowmeter	Webbed wheel flowmeter



	EPD36	EPR
Advantage	<ul> <li>Measurement is not affected by the liquid density, viscosity, temperature, pressure and conductivity</li> <li>High measurement span, high efficiency</li> <li>No moving and blocking parts in the measuring pipe, low malfunction</li> <li>Intelligent self-detection and diagnostic functions</li> </ul>	<ul> <li>Measurement is not affected by the liquid density, viscosity, temperature, pressure and conductivity</li> <li>High measurement span, high efficiency</li> <li>No moving and blocking parts in the measuring pipe, low malfunction</li> <li>Intelligent self-detection and diagnostic functions</li> </ul>
Technical Data		
<ul><li>Power Supply</li></ul>	24Vdc	12~36Vdc,±10%
<ul> <li>Operation Temp.</li> </ul>	150°C	Material: PP=60°C , PVDF=100°C
<ul> <li>Operation Pressure</li> </ul>	10bar	10bar
<ul> <li>Connection</li> </ul>	Tri-clamp	T-pipe(DIN/ISO,ASTM,JIS)/ SUS Threads,(PF,PT,NPT)
<ul> <li>Material</li> </ul>	SUS 316	PVC
<ul> <li>Output Signal</li> </ul>	4~20mA,RS-485 NPN Transistor output 32vdc/200mA	4~20mA , RS485, Modbus NPN, PNP overcurrent protection 200mA
<ul><li>Sensitivity</li></ul>	±0.5% of reading/0.2% (Optional)	Under Standard K Value ±3%
<ul><li>Housing</li></ul>	Aluminum alloy baking varnish	PC Engineering Plastic
<ul> <li>Protection Rating</li> </ul>	IP67	IP66
<ul> <li>Maximum</li> </ul>	0.1m/s ~ 10ms	0.3m/s ~ 10ms
measuring span	CE CE	TAF OIML
Application	<ul> <li>Suitable for clear water or food manufacturing pipelines</li> <li>Suitable for pharmaceutical machinery</li> <li>Seawater desalination unit</li> </ul>	<ul> <li>Suitable for water or wastewater treatment equipment</li> <li>Semiconductor industry chemical pipeline flow</li> <li>PCB Wet production process control</li> </ul>

23 Flow Transmitter 24



# Flow Switch

# Thermal dispersion flow switch

# Paddle type flow switch





	SPX	SFX
Advantage	<ul> <li>Unrestricted mounting position, no moving mechanical structure wear</li> <li>The length of the sensing rod can be designed to match the size of the pipe diameter in the field</li> <li>Wide suitability capable of measuring liquids containing impurities</li> </ul>	<ul> <li>Mechanism drive design, clear action</li> <li>Blade size scale capable of adapting different flow and pipe diameter requirements</li> <li>Capable of positive and negative two-way water flow detection</li> </ul>
Technical Data		
Power Supply	19 ~ 30Vdc	Dry contact, Power supply not required
<ul> <li>Operation Temp.</li> </ul>	(-20 ~ 80°C) Max.120°C	Max.150°C
<ul> <li>Operation Pressure</li> </ul>	100bar	25bar
<ul><li>Connection</li></ul>	1/2"Thread(ISO,ANSI,JIS)	1"PT Screw Thread
<ul> <li>Material</li> </ul>	SUS 304/316/316L	SUS304
Output Signal	Open Collector: NPN / PNP Relay: (NO or NC)	SPDT Contact
<ul> <li>Current consumption</li> </ul>	50mA	
<ul><li>Housing</li></ul>	SUS304/316/316L	Aluminum alloy baking varnish
<ul> <li>Protection Rating</li> </ul>	IP67	IP65
<ul> <li>Indicator Light</li> </ul>	Red (Alarm) / Yellow (Warning) / Green (Normal Flow Rate)	
<ul> <li>Contact capacity</li> </ul>	Relay 1A/30Vdc, 0.3A / 125Vac;	1A,60W 220Vac /
	Transistor<400mA	200Vdc SPDT
Application	<ul> <li>Suitable for steel, chemical, shipbuilding, food, pharmaceutical, optical, hydropower, machine tool, refrigeration and air conditioning, electronics, semiconductor and other industries. Flow detection control for all types of transfer pipelines or cooling pipelines.</li> </ul>	<ul> <li>Factory building fire protection pipelines</li> <li>Electronic/ Semiconductor factory cooling pipelines</li> <li>Refrigeration and air conditioning pipeline flow detection</li> </ul>

# Optical level switch



	SDX	
Advantage	<ul> <li>Simple, small size and durable</li> <li>Optical detection, non-mechanical action</li> <li>Built-in solid state switching circuit</li> <li>LED Status indication</li> </ul>	
Technical Data		
<ul><li>Power Supply</li></ul>	10~28 Vdc, 115/230 Vac	
<ul> <li>Operation Temp.</li> </ul>	100℃ or 125℃	
<ul> <li>Operation Pressure</li> </ul>	40bar Max.65kg/cm²	
<ul><li>Connection</li></ul>	Thread (ISO,ANSI,JIS)	
<ul> <li>Material</li> </ul>	PC / PES/ SUS304/316	
<ul> <li>Output Signal</li> </ul>	NPN / PNP	
	Relay PDT	
<ul> <li>Current consumption</li> </ul>	25mA	
<ul><li>Housing</li></ul>	-	
<ul><li>Protection Rating</li></ul>	IP67	
<ul><li>Indicator Light</li></ul>	Red LED Action Light	
Countrat course its		
<ul> <li>Contact capacity</li> </ul>		
	€ (	
Application	<ul> <li>Refrigeration and air conditioning industries</li> <li>Industrial compressor</li> <li>Machine tool equipment oil storage tank</li> <li>Pharmaceutical industry</li> <li>Liquid thermal insulation water tank</li> <li>Food and Beverage system</li> </ul>	

25 Flow Switch 26



# **Grain Monitoring System**

### Multi-point temperature sensor

# Temperature and level monitoring transmitter





	EST110	EST120
Advantage	<ul> <li>Simple, small, durable and multi-point temperature measurement, allowing the administrator to respond more quickly to the food conditions</li> <li>Instant monitoring of storage temperatures for long-term grain preservation</li> <li>Prevent materials in the warehouse from changing quality or smoldering causes fire</li> </ul>	<ul> <li>Temperature measurement location can be customized according to customer requirements</li> <li>Prevent materials in the warehouse from changing quality or smoldering causes fire</li> <li>Open mainstream communication interface RS485, the system vendor can install this device on any system with this communication interface</li> </ul>
Technical Data		
<ul><li>Power Supply</li></ul>		9 ~ 30 Vdc
<ul> <li>Temperature</li> </ul>	-10~85℃	-10~85℃
Measurement Range		
<ul><li>Resolution</li></ul>	0.1℃	0.1℃
<ul><li>Accuracy</li></ul>	±0.5℃	±0.5℃
<ul><li>Length</li></ul>	Max. 30 m	Max. 30 m
<ul><li>Number of Sensors</li></ul>	Max. 30 PCS	Max. 30 PCS
<ul> <li>Positions of Temp.</li> <li>Measurement Point</li> </ul>	A built-in sensor at the intervals of one meter	A built-in sensor at the intervals of one meter
<ul> <li>Cable Material</li> </ul>	XLPE covered, the inner circle is steel wire	XLPE covered, the inner circle is steel wire
<ul> <li>Tensile Load</li> </ul>	2500 Kgf	2500 Kgf
<ul><li>Protection Rating</li></ul>	IP67	IP67
<ul> <li>Enclosure material</li> </ul>	SS41 Low-carbon steel	Aluminum alloy (ADC-12)
<ul> <li>Output interface</li> </ul>	Working with FineLink 1-wire for use	RS485
Outlet Cable Diameter	Φ4~7mm <b>&amp; ! ! ! ! ! ! ! ! ! !</b>	Φ4~7mm <b>(ξχ)</b>
Application	<ul> <li>Used in rice milling, flour, feed, food, low-temperature rice grain storage warehouse, food crops and other industries and the material level environment that</li> </ul>	Used in rice milling, flour, feed, food, low-temperature rice grain storage warehouse, food crops and other industries and the material level environment that

requires to measure multi-point temperature requires to measure multi-point temperature

### FineLink system Hub (1 to 8)



	Complete of compating 0 and 1 Mine communication	
Advantage	<ul> <li>Capable of connecting 8 sets 1-Wire communication of grain temperature sensors simultaneously</li> <li>Each sensor has an independent connection port, for data interpretation and transmission to PC or human interface through RS485, for instant temperature monitoring</li> </ul>	
Technical Data		
<ul> <li>Power Supply</li> </ul>	12~28Vdc	
• Ambient temp.	-40~80℃	
<ul><li>Number of</li></ul>	Max.8	
Connection Ports		
<ul> <li>Mechanism</li> </ul>	Aluminum alloy baking varnish	
Casing Material		
<ul> <li>Communication</li> </ul>	RS-485	
Interface		
RS485Baud Rate	1200~57600	
Protection Rating	IP67	
Current Input	-	
• Power Output	-	
Current Output	-	
Electrostatic protection	- IEC EC	
Application	Work with temperature sensor (EST110) connection configuration	

27 Grain Monitoring System 28



# **Grain Monitoring System**





	JMW10100-A4AI / JMW10200-A457	JMW10100-A1AI / JMW10200-A157
Advantage	<ul> <li>Capable of connecting the signal of 4 sets 1-Wire communication mode of grain temperature sensors simultaneously</li> <li>Each sensor has a independent connection port to prevent the entire system from crashing due to a certain equipment malfunction, allowing the users easier to maintain and capable of expanding to multiple equipment.</li> </ul>	<ul> <li>Capable of connecting the signal of 4 sets RS485 communication mode</li> <li>Each sensor has a independent connection port to prevent the entire system from crashing due to a certain equipment malfunction, allowing the users easier to maintain and capable of expanding to multiple equipment.</li> </ul>
Technical Data		
<ul><li>Power Supply</li></ul>	10~30Vdc	10~30Vdc
Ambient temp.	-40~80℃	-40~80°C
<ul><li>Number of</li></ul>	Max.4	Max.4
Connection Ports		
<ul><li>Mechanism</li></ul>	Aluminum alloy baking varnish	Aluminum alloy baking varnish
Casing Material		
<ul> <li>Communication</li> <li>Interface</li> </ul>	RS-485	-
RS485Baud Rate	9600~115200	1200~57600
Protection Rating	9600~113200 IP67	IP67
Current Input	-	2A
• Power Output	-	10~30Vdc
<ul> <li>Current Output</li> </ul>	-	400 mA/ CH
·		(Under the power input current 2A state )
<ul> <li>Electrostatic protection</li> </ul>	-	IEC61000-4-2 ESD 8kV Air, 4kV contact
Application	Work with temperature sensor (EST110) connection configuration	<ul> <li>Work with temperature level transmitter connection to read data</li> <li>Any one of the output RS485 signal device can be connected</li> </ul>





	JMW10100-A2AI / JMW10200-A257	JMW10100-A3AI / JMW10200-A357
Advantage	<ul> <li>Capable of expanding to multiple equipment, adding multiple Analog Input devices</li> <li>Single independence, each device has an independent connection port</li> <li>Combined with MWD wireless equipment, there is no need to consider the wire service life and maintenance</li> </ul>	<ul> <li>Capable of expanding to multiple equipment, adding multiple DI/IO devices</li> <li>Single independence, each device has an independent connection port</li> <li>Combined with MWD wireless equipment, there is no need to consider the wire service life and maintenance</li> </ul>
Technical Data		
<ul><li>Power Supply</li></ul>	10~30Vdc	10~30Vdc
<ul> <li>Ambient temp.</li> </ul>	-40~80℃	-40~80℃
<ul><li>Number of</li></ul>	Max.4	Max.4
Connection Ports		
<ul> <li>Mechanism</li> </ul>	Aluminum alloy baking varnish	Aluminum alloy baking varnish
Casing Material		
<ul> <li>Communication</li> </ul>	RS-485/MWD	RS-485/MWD
Interface		
RS485Baud Rate	9600~115200	9600~115200
Protection Rating	IP67	IP67
Current Input	±0.01mA F.S	-
Power Output	10~30Vdc	10~30Vdc
<ul> <li>Current Output</li> </ul>	-	Open Collector to 30 Vdc 30mA max. load
- Flactractatic protection	IFCC1000 4 2 FCD 0l3/ Air 4l3/	IFCC1000 4 2 FCD 013/ Air 413/
<ul> <li>Electrostatic protection</li> </ul>	IEC61000-4-2 ESD 8kV Air,4kV contact Under wireless state ESD 4kV Air,2kV contact	IEC61000-4-2 ESD 8kV Air,4kV contact Under wireless state ESD 4kV Air,2kV contact
	Officer wheless state ESD 4KV All, ZKV CONTact	Unider wheless state ESD 4KV All, ZKV CONTact
Application	<ul> <li>Use with continuous analog output type sensor</li> </ul>	Use with any switch contact output sensor

29 Grain Monitoring System 30



# **Pneumatic Products**

Pneumatic vibrator	Reciprocating vibrator	Air hammer	

	BVK/BVR/BVT	BVP	ВАН
Advantage	<ul> <li>Vibration frequency and amplitude can be adjusted according to usage requirements</li> <li>Capable of start, stop instantly</li> <li>Good airtightness, used in explosion-proof, powder dust and wet places</li> </ul>	<ul> <li>Low frequency vibration, the best effect in material flow</li> <li>Amplitude and frequency can be adjusted according to requirements during vibration</li> <li>Capable of start and stop work instantly</li> </ul>	<ul> <li>Single impact, one impact wave is generated for every action</li> <li>Impact force and impact interval can be adjusted according to requirements to improve the impact force of air hammer</li> </ul>
Technical Data  Body materials  Air inlet size  Use air pressure  Air consumption  Trequency (V.P.M)  Vibration force  Impact force	Aluminum alloy 1/8", 1/4", 3/8" 2~6kg/cm² Min.46~Max.745 l/min 7800~37500 250~8900 (N)	Aluminum alloy 1/8", 1/4" 2~6kg/cm² Min.230~Max.300 l/min 1000~3500 195~13850 (N)	Aluminum alloy 1/8", 1/4" 3~7kg/cm² 0.028 l/e.t.~0.455 l/e.t 1.0kg.m/s~12.5kg.m/s
	C€	C€	CE
Application	<ul> <li>Applicable acid and alkali liquid, pharmaceutical tank, high temp.         <ul> <li>/ explosion dangerous places</li> </ul> </li> <li>Diesel generator oil level detection</li> <li>Hydraulic equipment level detection environment</li> </ul>	<ul> <li>All types of liquid detection in the can</li> <li>Oil liquid level detection of boiler equipment</li> </ul>	<ul> <li>low-specific gravity sewage control</li> <li>Suitable for the places of clear water with smaller installation holes</li> <li>Control applications in PLC or DCS, recommend to use magnetic reed switch type</li> </ul>



Diaphragm valve

	BRD&BHV	
Advantage	<ul> <li>Fast response, high flow rate and good cleaning effect</li> <li>Low gas consumption</li> <li>Capable of working with sequence control circuit board to control the spray time and interval for easy adjustment</li> </ul>	
Technical Data		
General characteristics		
<ul> <li>Working fluid</li> </ul>	Compressed air	
Diaphragm materia	NBR	
<ul> <li>Operating tempe</li> </ul>	-20~ 85℃	
Electrical characteristics		
<ul> <li>Temp. resistance rating</li> </ul>	Class F (155°C)	
<ul> <li>Connection method</li> </ul>	Flying leads / DIN 43650A	
<ul> <li>Protection rating</li> </ul>	IP65	
<ul> <li>Standard voltage</li> </ul>	24Vdc±10%, 110Vac±10%,	
	220Vac±10%, 50/60Hz	
<ul> <li>Operating temp.</li> </ul>	-20~ 50°C	CE
Application	<ul> <li>Dust collector pulse cleaning filter system</li> <li>All types of filter bags, filter tanks, flat bags, ceramic pipes and metal fiber filter bags</li> </ul>	
	ceramic pipes and metal fiber filter bags	

Pneumatic Products 32



# **Pneumatic Products**

# Sequence Controller Sequence Controller

	AE7X	AE1X		
Advantage	<ul> <li>Instinct adjustment mode, fast and convenient</li> <li>Remote control contact to facilitate remote control</li> <li>Capable of working with sequence control circuit board to control the spray time and interval for easy adjustment</li> </ul>	<ul> <li>Digital display, easy operation</li> <li>Microcomputer control, more precise action</li> <li>Remote control contact to facilitate remote control</li> <li>Capable of working with sequence control circuit board to control the spray time and interval for easy adjustment</li> </ul>		
Technical Data				
<ul> <li>Working power</li> </ul>	100~ 240 Vac, 50/ 60Hz; 24 Vac, ±10%	110/220V, ±20% 50Hz/60Hz		
Spray interval	2~60 Sec	1~999 Sec		
<ul><li>Spray time</li></ul>	20~200 million seconds	10 million second~9.99 seconds		
<ul><li>Sequential stepping number</li></ul>	1~10 points	1~10/1~20 points		
<ul> <li>Ambient temp.</li> </ul>	-25~75℃	0~70°C		
<ul><li>Panel Display</li></ul>	-	Two sets digital display		
<ul><li>Machine stopping cycles</li></ul>	-	0~99 times		
<ul> <li>Contact output</li> </ul>	Thyristor	Thyristor		
	C€	€		
Application	Used with the dust collector pulse valve	Used with the dust collector pulse valve		

Pneumatic Products 34



**Speed monitor** 

1/1

# **Safety Products**

Advantage

**Technical Data** 

Contact capacity

 Action pull force Reset Mode

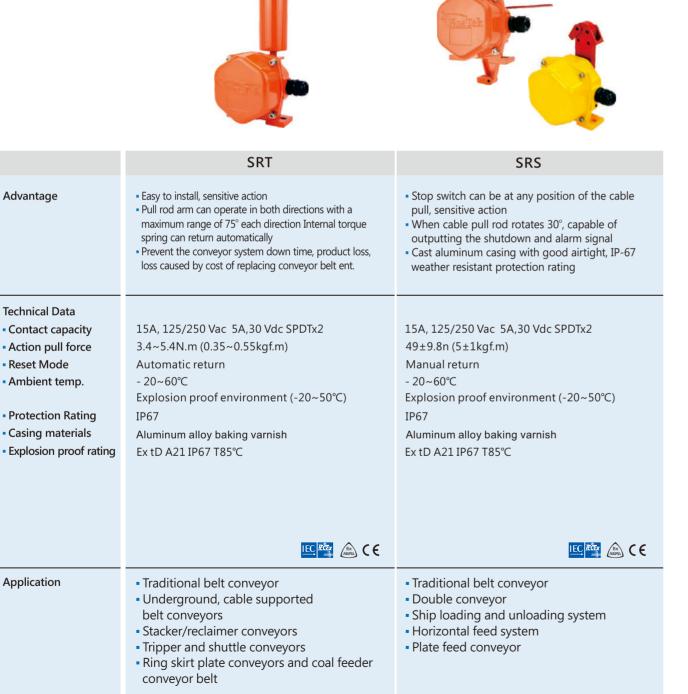
Ambient temp.

Protection Rating

Casing materials

Application

Misalignment switch

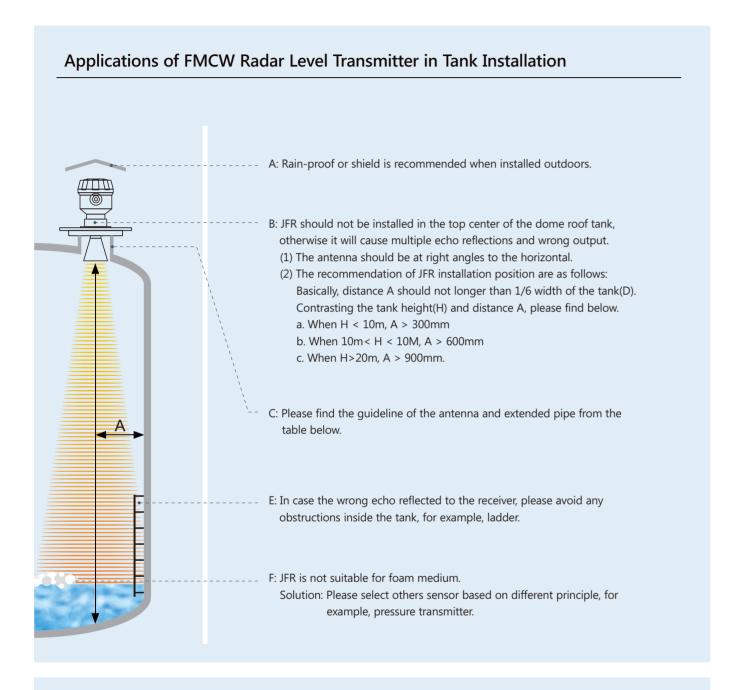


Cable pull switch

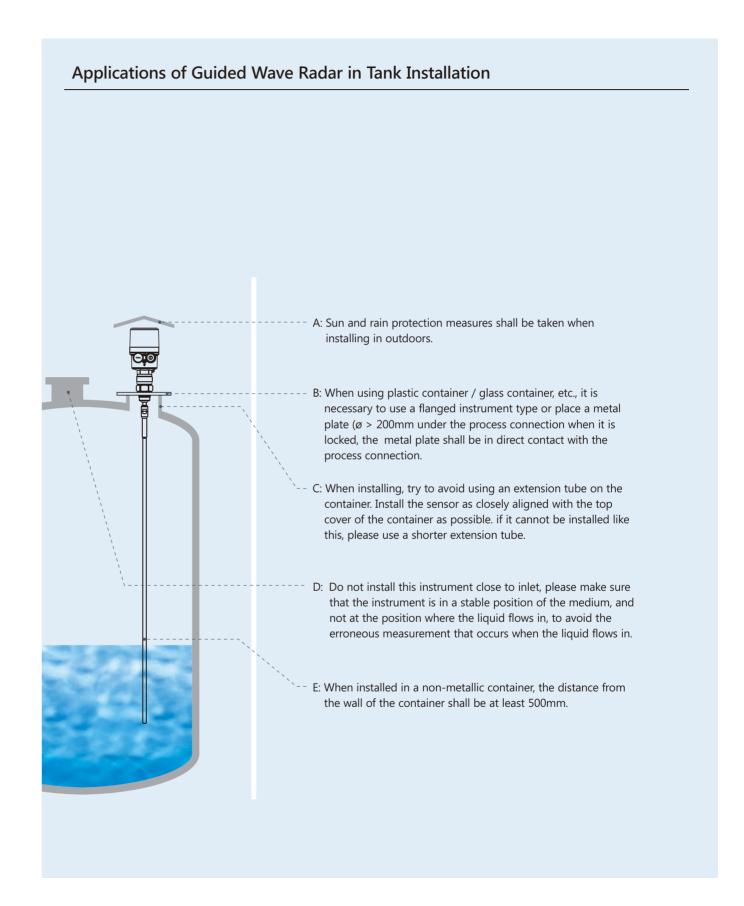
	EDX1	EDX4
Advantage	<ul> <li>Alarm point setting adopts knob operation, super fast speed</li> <li>Status indicator light, clearly and correctly determine whether or not the current speed is abnormal</li> <li>Universal relay output type eliminates complex wiring processes</li> <li>Equipped with contact and non-contact structural design</li> </ul>	<ul> <li>Seven segment LED display 0~999rpm</li> <li>Machine starting delay monitoring function</li> <li>Photoelectric switch for speed monitoring, not affected by the field environment</li> <li>Alarm monitoring function: low speed, stop, power failure, overload</li> </ul>
Technical Data		
<ul> <li>Working power</li> </ul>	110Vac or 220Vac±10% 50/60Hz 24Vdc±10%	85~265Vac (Explosion proof type: 100~240Vac)
<ul> <li>Rotation speed range</li> </ul>	0~150 rpm	0~999 rpm
<ul> <li>Contact capacity</li> </ul>	5A / 250Vac \ 5A / 30Vdc	5A / 250Vac \ 5A / 30Vdc
Output type	Relay output 1SPDT	Relay output 1SPDT / 4~20mA
Protection Rating	IP65	IP65
<ul><li>Casing material</li><li>Ambient temp.</li></ul>	Aluminum alloy baking varnish -40~ 80°C	Aluminum alloy baking varnish -20~ 70°C
Explosion proof rating	-40~ 60 C Ex tD A21 IP65 T85°C	Ex tD A21 IP65 T85°C
Induction method	Contact type/Non-contact type	Contact type
	© C€	© C €
Application	<ul> <li>Traditional belt conveyor</li> <li>Double conveyor</li> <li>Ship loading and unloading system</li> <li>Horizontal feed system</li> <li>Plate feed conveyor</li> </ul>	<ul> <li>Traditional belt conveyor</li> <li>Double conveyor</li> <li>Ship loading and unloading system</li> <li>Horizontal feed system</li> <li>Plate feed conveyor</li> </ul>

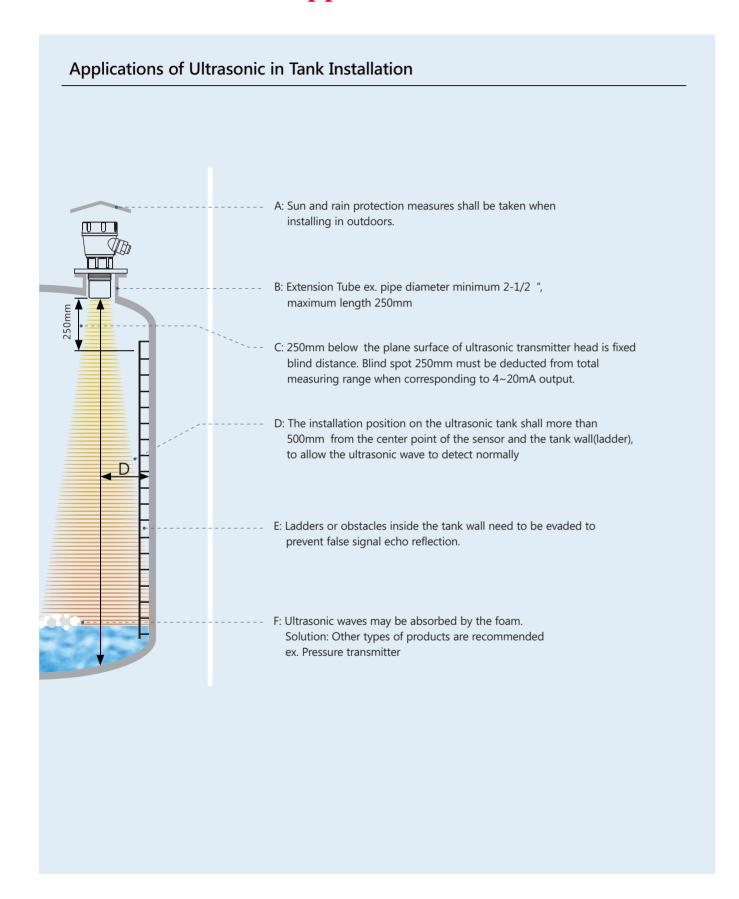
Microcomputer speed monitor

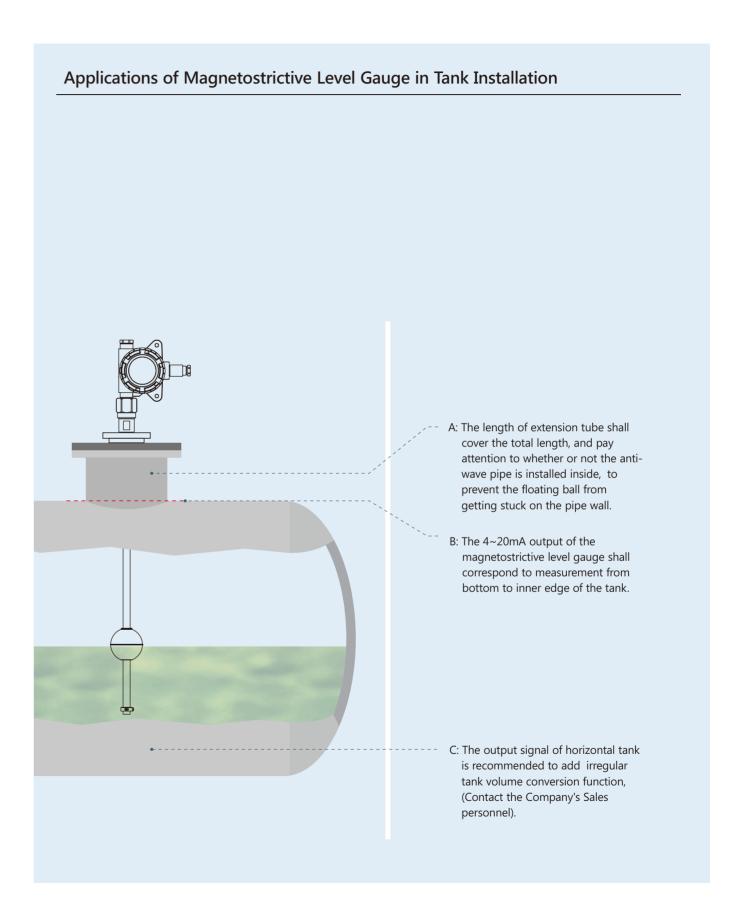
Safety Products Safety Products

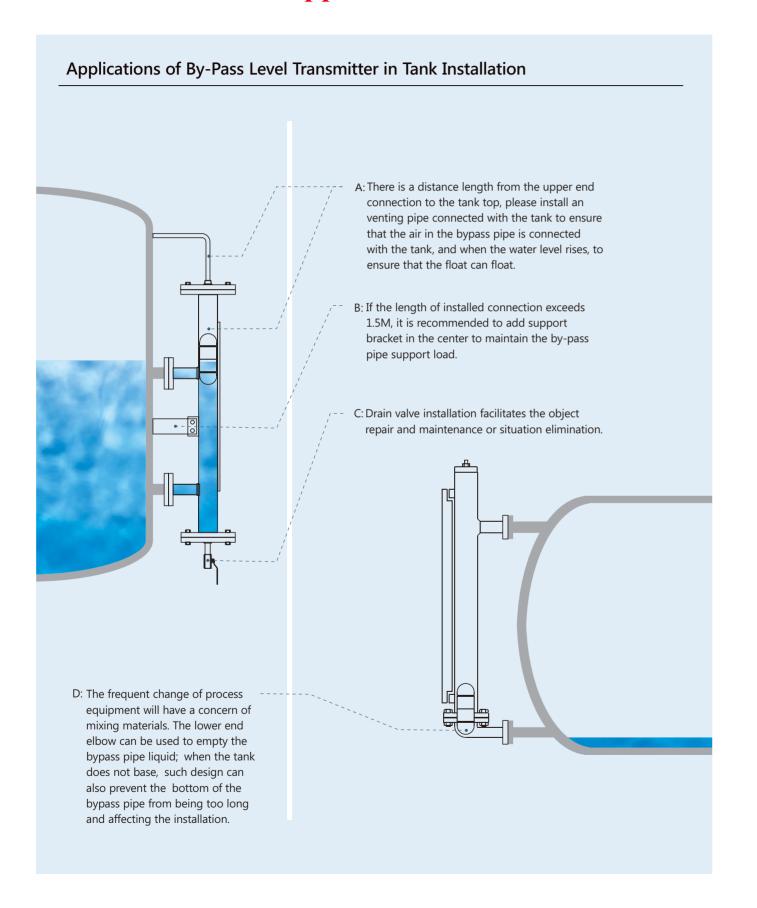


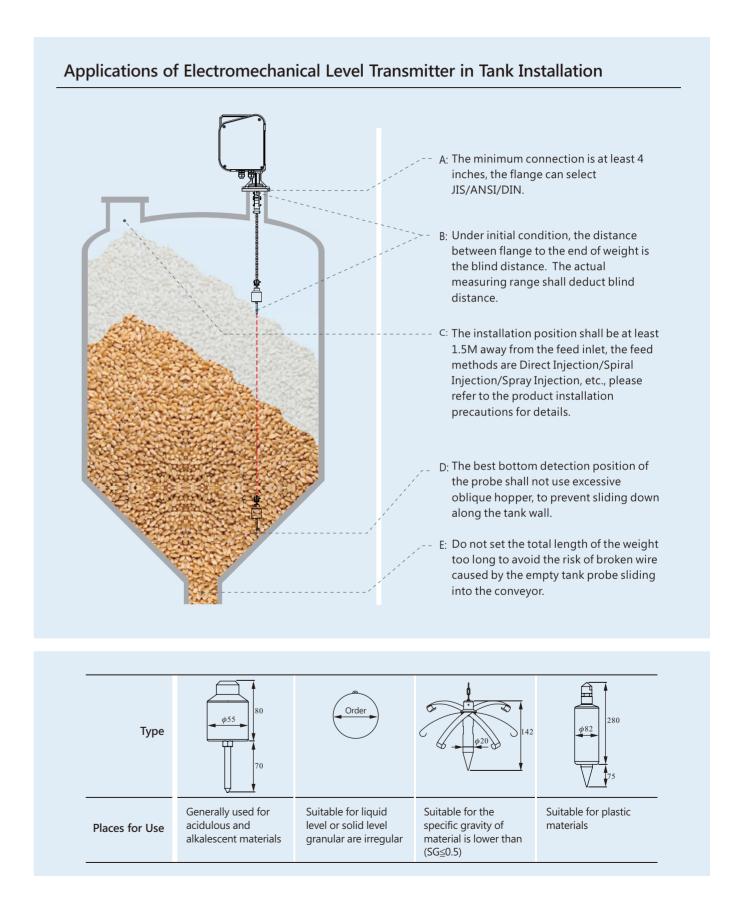
Madal	JFR-202	JFR-212	JFR-222	JFR-232	JFR-242
Model	JFR-204	JFR-214	JFR-224	JFR-234	JFR-244
Beam Angle	±9°	±9°	±5°	±3°	±10°
Extension pipe min. length	160mm	200mm	150mm	270mm	100mm

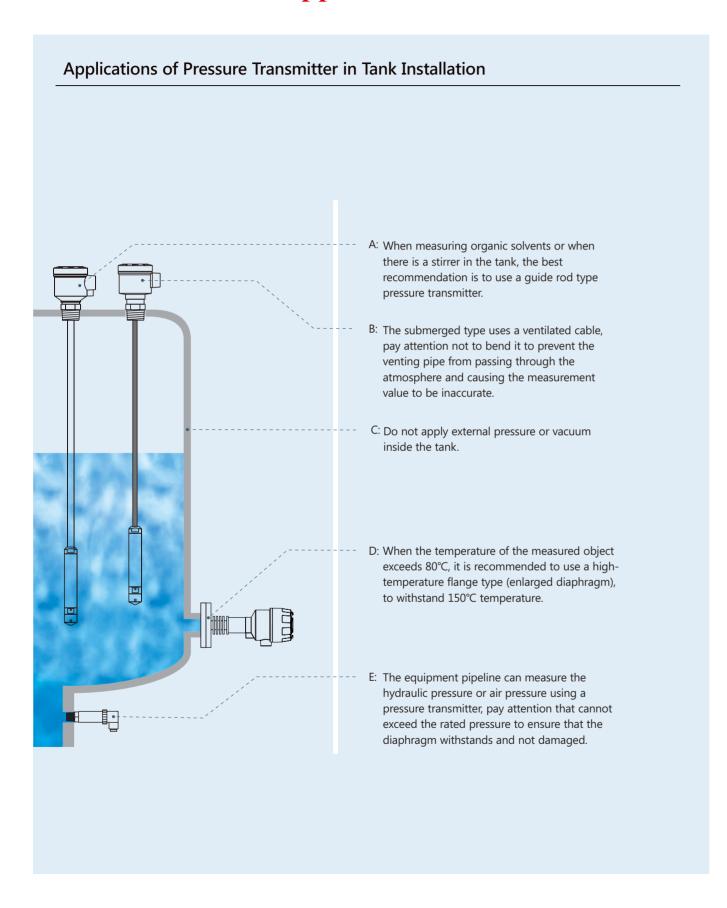










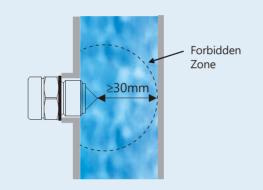


# Applications of Flowmeter in Tank Installation B: The grounding of Electromagnetic Flowmeter shall have a good single grounding wire, connect the C: When the flowmeter is installed on pipelines with insulating coatings, paints, linings, etc. grounding rings at both ends and on the plastic or inner wall, grounding rings controller with the each, poor shall be installed on both ends of the grounding will not operate normally. (Copper core crosssectional area 1.6mm<sup>2</sup>, grounding D: Behind 2D of flowmeter rear pipeline, resistance $< 10\Omega$ ). design a climbing pipeline can ensure the pipeline in saturated state. It can also be installed on the pipeline of water flow from bottom to top. 5D E: There must be at least 5D (D is the inner diameter of the flowmeter) length of straight pipe section in front of the flowmeter, and at least 2D length of straight pipe section at the rear end. A: The measurement pipeline must be completely filled with liquid. \*\*\*To detect the flow of the catch basin pipeline, select FineTek separate type flowmeter, with sensor protection rating of IP68 (underwater 6M/48 hours).

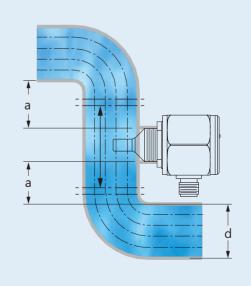
# **Applications of Webbed Wheel Flowmeter Installation** Installed in the case of a control valve Installed in the case of Double bend pipe Installed in the case of pipe with two 90° Installed in the case of one 90° joints joints and less than three times the distance of the T-pipe Installed in the case of enlarged pipe diameter Installed in the case of reduced pipe diameter

# **Applications of Optical Level Switch Installation**

The front end of Optical Switch cone sensor shall be at least a distance of 30mm from the tank wall.

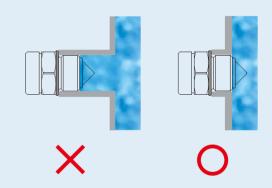


Applications of Thermal Dispersion Flow Switch

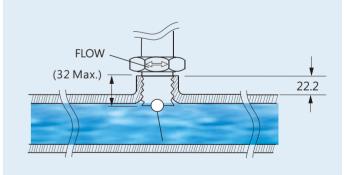


When the liquid pipe line is not full, SP must be installed below the pipeline, and the liquid level must be higher than the flow sensing rod.

When mounting Optical Switch on the threaded casing pipe, the sensor head must be exposed outside the casing pipe.



Applications of Paddle Type Level Switch



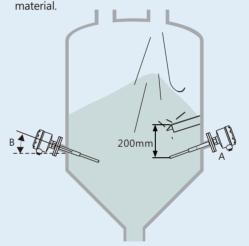
Must make sure the flow arrow "FLOW" mark on the product is parallel to the conduit when the assembly is complete.

During installing, it is necessary to pay attention to the center of the pivot of the mechanism drive ring cannot be extended in the threaded tube, to avoid insufficient paddle deflection angle, and causes erroneous action.

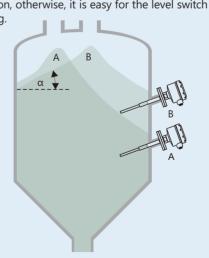
# Application of Liquid Level Switch Installation Application A: Please keep the Magnetic Float B: Cable float ball complete set Switch away from the water inlet enclosure outlet, install the or use anti-wave pipe, to avoid connection at least 4 inches specifications; heavy hammer and wave motion from causing the switch to start and stop float need to have a 100mm repeatedly, increase the service spacing in order to have flexible life, and pay attention to the length floating, the installation venting hole is required on the position and the tank wall shall be maintained with a distance of upper end of the anti-wave pipe. more than 250mm. C: Please install the connection pipe length and pipe diameter of Side Mounting Float Switch according to the size of following table Pipe inner diameter 45~50mm 50~55mm 55~60mm 60~65mm 65~70mm (a) (Max.) Length(b) (Max.) 130mm 140mm 150mm 160mm 170mm

## **Solid Level Switch Installation Application**

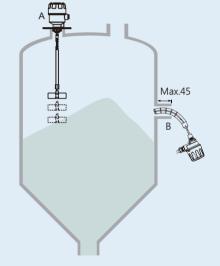
- A: Avoid installing near the feed inlet, to reduce damage to the sensing rod during impact from the feed material. If the switch must be installed near to the feed inlet, please add a protection baffle 200mm above the switch.
- B: The sensor rod shall be tilted downward and maintained an angle of 20° to the horizontal line as optimum, which reduces sensitivity, and reduce damage to the switch caused by the impact of feed material



Pay attention to the installation position during side mounting, if the feed inlet is not fed from the center, the angle of repose  $\alpha$  and the feed inlet corresponding point must be considered for installation, otherwise, it is easy for the level switch not operating.



- A: When install the Rotary Paddle Switch with adjustable shaft length, use the shaft length to adjust appropriate length, to avoid the material angle of repose from causing the switch malfunction
- B: The Rotary Paddle Switch utilizes the sickle paddle, the connection does not need to be opened too wide, and install the product on the side of the tank directly.



When the tank or the conveying pipeline is equipped with vibrator equipment, it is necessary to consider whether it will damage the internal parts of the switch.

 $\times$  Recommend to use the Company's SA140 Separate Type.

