

# SENSORS, INTERNET OF THINGS AND INDUSTRIAL AUTOMATION SYSTEMS

Sensors, Internet of things and industrial automation systems



Industrial pressure sensor



## Company profile >>

Shanghai Ziasiot Technology Co., Ltd. is an experienced manufacture of pressure transmitter、liquid level sensor、flow sensor、melt pressure transmitter(transducer)、melt pressure gauge、burst plug、laboratory instruments etc, which are used in different industrial fields and process control.

We strive for innovation. advocate environmenta conservation, adhere to the concept of high quality and integrity and are committed to developing into a technology manufacturing group enterprise of sensor Internet of things and automated controsystems. Shanghai Ziasiot Technology Co., Ltd is a high-tech enterprise headquartered in Shanghai, members of whom have many years of experience in automation and extrusion industry. With years of professional knowledge, we established an organizational structure oriented by customer demand, and continuously innovated technology and obtained a number of nationa patents, which makes Ziasiot as an innovator in the fields of sensors. Internet of things ang automation control. In order to emnhasize our commitmentto auality ang reputation. the R & D and production process of all Ziasiot brands ensure to meet and possess RoHS, ISO, CE, CMC, CPA, ex and other certifications.



# Redefine Pressure and Temperature Measurement and Control



## • SERVICE AREA

Sensoriot committed to the continuous improvement and development of productivity and manufacturing. In the field of industrial manufacturing, the ability to control pressure and temperature is an important key to improving productivity and manufacturing high-quality quality. Our design concept must keep its foresee ability, continuity and repeatability. In the rapidly changing industrial field, through continuous improvement of the production and research and development of process control equipment, and then contribute to the development of industrial automation and production

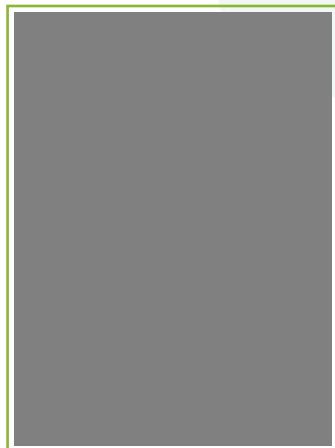
## • CUSTOMER RESOURCES

Our clients including companies from Fortune 500, distributors, government agencies and its comprehensive departments, etc, involving various market demands from manufacturing and industry. Products are mainly used in: plastic machinery, chemical fiber machinery, petrochemicals, water treatment engineering, power plants, aerospace, air compressors, robots, air conditioners, automobiles, plastics, packaging, medical, electronics, chemicals, rubber, textiles, food, Smart agriculture and smart cities and other fields; Products are exported to the United States, Canada, Germany, Italy, Britain, Austria, Malaysia, India, Pakistan, Australia and other countries

# Enterprise certificate >>

《Pressure Transmitter》, 《Pressure Transducer》 etc  
 Drafting company of National Metrology Verification Regulations and  
 National Metrology Technical Specifications Type Evaluation Outline

Not only the role of an innovator, we are more concerned about every production process.....



ISO14001

ISO9001

沪制01120089号

# Production Line >>



## » Diffused Silicon Pressure transmitter

Standard Series PT216

Flush Diaphragm Series PT216AS/PT216AH/PT216AM

Medium & High Temperature Series PT216HT/PT216HH

Explosion Proof Series PT216FS/PT216FH/PT216FM/PT216FJ

## » Strain Gauge Pressure transmitter

Standard Series PT210

Flush Diaphragm Series PT210AS/PT210AH

High Temperature Series PT210HT/PT210HH

High Pressure Series PT210CS/PT210CH

Explosion-Proof Series PT210FS/PT210FH/PT210FC

Ceramic Piezoresistive Pressure Transmitter PT218/PT218E/PT218LR

Throw-in Level Transmitter PT220/PT220E/PT220FE



## » Differential Pressure Transmitter

Compact Differential Pressure Transmitter PT230/PT230FH/PT230FN

Wind Differential Pressure transmitter PT230BN

High Pressure Explosion-proof Differential Pressure Transmitter PT3051

Diffused Silicon Pressure Core ZDX

Ceramic Pressure Core ZCX



## » Pressure Gauge

Analogue Diaphragm Pressure Gauge PG110S

Digital Diaphragm Pressure Gauge PG110X

Load Cell HL301 series /HL601 Series

Linear Position Transducer ZSP /ZSF/ ZSM/ ZSL

Temperature Sensor WSP

Intelligent Temperature Switch TP202

Intelligent Pressure Switch PT202



## PT216 Standard Series

>> Diffused Silicon Pressure Transmitter



### Description

PT216 standard series is designed and manufactured with high precision diffused silicon pressure core and precision compensation technology, It has the characteristics of wide measuring range, high precision and compact design

### Product Feature

- Accuracy can be 0.25% F.S
- Protection level IP65
- Compact stainless steel housing package
- Multiple E-connection optional

### Application

Hydraulic and pneumatic control; Construction machinery; Light industry, machinery and metallurgy; Industrial process and control

### Technical Data

Technical Parameter				
Pressure range	-1 ~ 0bar; 0~400 bar(-100 ~ 0kPa; 0~40MPa)			
Pressure type	Gauge pressure, absolute pressure			
Accuracy	0.5% F.S; 0.25% F.S			
Electrical Performance	2-wire	3-wire 0-10V	3-wire	3-wire
Output signal	4 ~ 20 mA	0~10V	0~5V	0.5~4.5V
Power supply	6.5 ~ 32Vdc	12~32Vdc	10 ~ 32Vdc	5Vdc
Overload resistance	< (U-6.5)/0.02	> 20k	> 20k	> 20k
E-connection	M12x 1(4-pin), Hirschmann, PACK connector, water-proof connector			
Process connection	G1/4, G1/2, 1/4NPT, 1/2NPT, M20x1.5, R1/4, R1/2, G1/4 etc			
Overload pressure	1.5 times rated pressure			
Diaphragm Temp	-20 ~ 80°C			
Protection degree	IP65			
Response time	≤10msec			
Long term stability	0.2%FS/year			

## PT216AS/AH/AM

>> Flush Diaphragm Pressure Transmitter



### Description

This series is a sanitary special pressure transmitter with diffused silicon pressure core as sensitive element and 316L stainless steel diaphragm isolation. And with characteristics of stainless steel welded structure, high precision, non-cavity corrugated flat film, wide measuring range and on-site display

### Product Feature

- Non-cavity corrugated flat film
- Protection degree IP67
- Multiple E-connection optional
- Hygienic surface roughness Ra <0.38μm optional

### Application

Food and beverage industry; Medical pharmaceutical industry; Biotechnology; Pigment, spraying; Chemical industry and paper industry

### Technical Data

Technical Parameter		
Product structure	Core Front diaphragm	Flush Diaphragm / Hygienic Type
Pressure range	-1~0bar; 0~400bar	-1~0bar; 0~40bar
Pressure type	Gauge pressure, absolute pressure	
Accuracy	0.5% F.S; 0.25% F.S; 0.1% F.S	
Electrical Performance	2-wire	
Output signal	4 ~ 20 mA	
Power supply	12 ~ 30Vdc	
Overload resistance	<(U-12) /0.02	
E-connection	M12x 1(4-pin), Hirschmann, water-proof connector	
Diaphragm temperature	-20~125°C (direct connection typ); -20~160°C (heat sink type)	
Ambient temperature	-40 ~ 80°C	
Protection degree	IP67	
Process connection	G1/2, G3/4, G1, M20X1.5 etc	

## PT216HT/PT216HH

>> High Temperature Pressure transmitter



### Description

This series is of all stainless steel structure, adopt imported high temperature resistant pressure sensor as signal measurement sensitive element, the pressure of the measured medium is transmitted to the sensor through the heat dissipation structure on the transmitter. The sensor probe can work stably for a long time at a high temperature 200°C.

### Product Feature

- Accuracy can be 0.25% F.S
- Multiple E-connection optional
- withstand medium and high temperature
- Compact stainless steel housing package
- Heat dissipation structure design, can

### Application

High temperature fluids such as steam and hot oil; Boiler industry; Medical high temperature and high pressure disinfection

### Technical Data

Technical Parameter				
Pressure range	-1 ~ 0bar; 0~400 bar(-100 ~ 0kPa; 0~40MPa)			
Pressure type	Gauge pressure, absolute pressure			
Accuracy	0.5% F.S; 0.25% F.S			
Electrical Performance	2-wire	3-wire 0-10V	3-wire	3-wire
Output signal	4 ~ 20 mA	0~10V	0~5V	0.5~4.5V
Power supply	6.5 ~ 32Vdc	12~32Vdc	10 ~ 32Vdc	5Vdc
Overload resistance	< (U-6.5)/0.02	> 20k	> 20k	> 20k
E-connection	M12x 1(4-pin), Hirschmann, PACK connector, water-proof connector			
Process connection	G1/4, G1/2, 1/4NPT, 1/2NPT, M20x1.5, R1/4, R1/2, G1/4 etc			
Overload pressure	1.5 times rated pressure			
Diaphragm Temp	-20 ~ 200°C			
Electrical Temp	-20 ~ 80°C			
Protection degree	IP65			
Response time	≤ 10msec			
Long term stability	0.2%FS/year			



## PT216FS/PT216FH/ PT216FM/PT216FJ

>> Explosion-proof Pressure Transmitter



### Description

This series are intrinsically safe pressure transmitters, which adopt imported diffused silicon core as components, and have strong earthquake resistance, long-term stability.

### Product Feature

- Accuracy can be 0.25% F.S
- Protection degree IP65
- 4 ~ 20mA output

### Application

Drilling platform; Petrochemical and natural gas control system; Explosion-proof industrial process measurement and control

### Technical Data

Technical Parameter	
Pressure range	0 ~ 100 bar, 0 ~ 2000 bar(0~1MPa.0~200MPa)
Pressure type	Gauge pressure,absolute pressure
Accuracy	0.5% F.S; 0.25% F.S
Output signal	4 ~ 20 mA
Power supply	12 ~ 30Vdc
E-connection	Leading wire
Overload pressure	1.5 times rated pressure
Working temperature	-20 ~ 80°C
Protection degree	IP65
Explosion-proof grade	Exia II CT4
Long term stability	0.2%FS/year
Process connection	G1/4,G1/4C,G1/2,1/2NPT,1/4NPT,M20X1.5,R1/2,R1/4

## PT210 Standard Series

>> Strain Gauge Pressure Transmitter



### Description

This series use 17-4PH materials as elastic elements and imported strain gauges. Through a high-reliability amplifier circuit and temperature compensation, the gauge pressure of the measured medium is converted into a standard voltage or current output mode. Strong interference ability, wide operating temperature range, good long-term stability etc.

### Product Feature

- Accuracy can be 0.5% F.S, 0.25% F.S
- Imported strain gauge
- 0 ~ 10bar; 0 ~ 1600bar

### Application

Industrial process detection and control; Hydraulic system; Industrial machinery manufacturing; General industrial application

### Technical Data

Technical Parameter			
Pressure range	0 ~ 10 bar, 0~1600bar (0~1MPa, 0-160MPa)		
Pressure type	Gauge pressure		
Accuracy	0.5% F.S		
Temperature drift	≤ 0.04% / °C		
Compatible medium	all corrosive medium compatible with material 1Cr18Ni9Ti and 17-4PH		
Electrical Performance	2-wire	3-wire	3-wire
Output signal	4 ~ 20 mA	0~10V	0~5V
Response time	≤ 3msec	≤ 10msec	≤ 10msec
Power supply	12~30Vdc	12~30Vdc	10 ~ 30Vdc
Overload resistance	(U-10)/0.02Ω	25kΩ	25kΩ
E-connection	M12x 1(4-pin), Hirschmann, Leading wire		
Process connection	G1/4, G1/2, 1/4NPT, M20x1.5		
Overload pressure	1.5 times rated pressure		
Broken pressure	3 times rated pressure		
Diaphragm Temp	-20 ~ 85°C		
Mechanical shock	100 g/1 msec		
Mechanical Vibration	≤ 20 g (15—2000 Hz)		
Protection degree	IP65		

## PT210AS/PT210AH

Pro Series

>> Flush Diaphragm Strain Gauge Pressure Transmitter



### Description

This series is sanitary special pressure transmitters designed and produced by using strain sensor core, Reasonable structural design and strict quality standards ensure the high reliability and stability of the products. with stainless steel welded structure, cavity-free full flush film, wide measuring range and field display

### Product Feature

- Accuracy can be 0.25% F.S
  - High reliability
- Full hard flat diaphragm

### Application

Environmental protection and dust engineering, Chemical industry and paper industry, Sewagetreatment industry, Industrial process and control

### Technical Data

Technical Parameter				
Pressure range	0 ~ 100 bar, 0~2000bar (0~10MPa, 0~200MPa)			
Pressure type	Gauge pressure			
Accuracy	0.5% F.S; 0.25% F.S			
Electrical Performance	2-wire	3-wire 0-10V	3-wire	3-wire
Output signal	4 ~ 20 mA	0~10V	0~5V	0.5~4.5V
Power supply	6.5 ~ 32Vdc	12~32Vdc	10 ~ 32Vdc	5Vdc
Overload resistance	< (U-6.5)/0.02	> 20k	> 20k	> 20k
E-connection	M12x 1(4-pin), Hirschmann, PACK connector, water-proof connector			
Process connection	G1/2, 1/2NPT, M20x1.5, R1/2 etc			
Overload pressure	1.5 times rated pressure			
Diaphragm Temp	-20 ~ 85°C			
Electrical Temp	-20 ~ 80°C			
Protection degree	IP65			
Response time	≤10msec			
Long term stability	0.2%FS/year			

## PT210HT/PT210HH

>> High Temperature Strain Gauge Pressure Transmitter



### Description

This series is all stainless steel structure, and imported high temperature resistant pressure sensor is selected as the signal measurement sensitive element, the measured medium pressure is transmitted to the sensor through the heat dissipation structure and the sensor probe can work stably at 200°C for a long time

### Product Feature

- Compact stainless steel package
- resistant to medium and high temperature
- Heat dissipation structure design,

### Application

Measurement of high temperature fluids such as steam and hot oil; Measurement and control of boiler industry; Medical autoclave

### Technical Data

Technical Parameter				
Pressure range	0 ~ 700 bar (0~70MPa)			
Pressure type	Gauge pressure			
Accuracy	0.5% F.S; 0.25% F.S			
Electrical Performance	2-wire	3-wire 0-10V	3-wire	3-wire
Output signal	4 ~ 20 mA	0~10V	0~5V	0.5~4.5V
Power supply	6.5 ~ 32Vdc	12~32Vdc	10 ~ 32Vdc	5Vdc
Overload resistance	< (U-6.5)/0.02	> 20k	> 20k	> 20k
E-connection	M12x 1(4-pin),Hirschmann,PACK connector,water-proof connector			
Process connection	G1/4,G1/2,1/4NPT,1/2NPT,M20x1.5,R1/4,R1/2,G1/4 etc			
Overload pressure	1.5 times rated pressure			
Diaphragm Temp	-20 ~ 200°C			
Electrical Temp	-20 ~ 80°C			
Protection degree	IP65			
Response time	≤10msec			
Long term stability	0.2%FS/year			

## PT210CS/PT210CH

>> High Pressure Strain Gauge Pressure Transmitter



### Description

This series is for high-pressure pressure measurement (as high as 8000bar) and applied to various media compatible with stainless steel 17-4PH. This sensor core base is made of integral stainless steel, without any welding or sealing ring structure, no leakage risk, which can ensure to meet the requirements for production safety and reliability.

### Product Feature

- One-piece structure
- reduce the cost of repeated calibration
- High load cycle, long service life,

### Application

Structure of test platform; Autoclave and cleaning; Water jet cutting; Oil drilling

### Technical Data

Technical Parameter			
Pressure range	0 ~ 1600 bar, 0~8000bar (0~160MPa, 0~800MPa)		
Pressure type	Gauge pressure		
Accuracy	0.5% F.S; 0.25% F.S		
Electrical Performance	2-wire	3-wire 0-10V	3-wire
Output signal	4 ~ 20 mA	0~10V	0~5V
Power supply	12~30Vdc	12~30Vdc	10 ~ 30Vdc
Overload resistance	< (U-6.5)/0.02	> 20k	> 20k
E-connection	M12x 1(4-pin), Hirschmann, water-proof connector		
Process connection	G1/2 male/, M20x1.5 male or female, M16x1.5 female etc		
Overload pressure	1.5 times rated pressure		
Diaphragm Temp	-20 ~ 85°C		
Electrical Temp	-20 ~ 80°C		
Protection degree	IP65		
Response time	≤ 10msec		
Long term stability	0.2%FS/year		

## PT210FS/PT210FH/PT210FC

ero Series

>> Explosion-Proof Strain Gauge Pressure Transmitter



### Description

Intrinsically safe series adopt imported 17-4PH and excellent strain gauges as elastic components. It is with a special explosion-proof shell, has a wide range of temperature compensation and good measurement accuracy, has reverse polarity protection, instantaneous over-current, voltage and anti-interference protection measures.

### Product Feature

- Accuracy can be 0.25% F.S
- Protection degree IP65
- 4~ 20mA output

### Application

Drilling platform; Petrochemical and natural gas control system; Explosion-proof industrial process measurement and control

### Technical Data

Technical Parameter	
Pressure range	0 ~ 100 bar, 0 ~ 2000 bar(0~1MPa.0~200MPa)
Pressure type	Gauge
Accuracy	0.5% F.S; 0.25% F.S
Output signal	4 ~ 20 mA
Power supply	12 ~ 30Vdc
E-connection	Leading wire
Overload pressure	1.5 times rated pressure
Working temperature	-20 ~ 80°C
Protection degree	IP65
Explosion-proof grade	Exia II CT4
Long term stability	0.2%FS/year

## PT218/PT218E/PT218LR

>> Ceramic Piezoresistive Pressure Transmitter



### Description

This series is a high reliability and durability product with large quantities and low cost OEM. It adopts the international advanced piezoresistive sensor core, and it has the characteristics of all stainless steel structure, ultra-wide working temperature range and compact design

### Product Feature

- Compact stainless steel housing package
- Imported high performance thick film ceramic core
- Protection degree IP65

### Application

Constant pressure water supply; Pneumatic system; Compressor ; Automobile electron

### Technical Data

Technical Parameter			
Pressure range	0~100bar (0~10MPa)		
Pressure type	Gauge pressure		
Accuracy	0.5% F.S		
Temperature drift	≤ 0.04% / °C		
Compatible medium	all corrosive medium compatible with material 1Cr18Ni9Ti		
Electrical Performance	2-wire	3-wire	3-wire
Output signal	4 ~ 20 mA	0~10V	0.5~4.5V
Response time	≤ 3msec	≤ 10msec	≤ 10msec
Power supply	10~30Vdc	12~30Vdc	5Vdc
Overload resistance	(U-10)/0.02Ω	100kΩ	100kΩ
E-connection	Hirschmann, PACK connector		
Process connection	G1/4,G1/2,1/4NPT,G1/2,M20x1.5		
Overload pressure	1.5 times rated pressure		
Diaphragm Temp	-25 ~ 85°C		
Mechanical shock	100 g/1 msec		
Mechanical Vabration	≤ 20 g (15—2000 Hz)		
Protection degree	IP65		

## PT220/PT220E/PT220FE

>> Throw-in Level Transmitter



### Description

This series is specially designed for diving liquid level measurement. The sensitive components adopt diffused silicon core, built-in digital circuit board with strong anti-radio frequency and electromagnetic interference. 304 stainless steel material, adopts a perfect assembly process, and the protection level is IP68 to ensure that it is sturdy and durable in high-demand industrial occasions and has a long service life.

### Product Feature

- Anti-clogging structure design
- Protection degree IP68

### Application

Urban water supply, groundwater level monitoring; Water conservancy and hydro-power monitoring and control; Petrochemical industry; Strongly corrosive liquid level monitoring

### Technical Data

Technical Parameter			
Pressure range	0~1mH <sub>2</sub> O; 0~200mH <sub>2</sub> O		
Pressure type	Gauge pressure		
Accuracy	0.5% F.S; 0.25%F.S; 0.1%F.S		
Electrical Performance	2-wire	3-wire 0~10V	3-wire
Output signal	4 ~ 20 mA	0~10V	0~5V
Power supply	12~30Vdc	15~30Vdc	12~30Vdc
Overload resistance	50MΩ 100Vdc		
Process connection	Throw-in type, "X" thread or flange connection		
Overload pressure	3 times rated pressure		
Broken pressure	5 times rated pressure		
Diaphragm Temp	-25 ~ 85°C		
Long term stability	0.2% FS/year		
Protection degree	IP68		



## PT230/PT230FH/PT230FN

>> Differential Pressure Transmitter



### Description

This series is assembled with diffused silicon differential pressure core. The two pressure interfaces are directly installed on the measuring pipeline or connected through the pressure pipe. Compact design makes it suitable for equipment matching, machinery manufacturing and other applications with narrow space, complete equipment design, etc.

### Application

Flow measurement; Filter monitoring; Hydraulic and pneumatic system; Machine manufacture

### Technical Data

Technical Parameter			
Pressure range	0~1bar,0~100bar (0~100kPa,0~10MPa)		
Pressure type	Gauge pressure		
Accuracy	0.5% F.S; 0.25% F.S		
Electrical Performance	2-wire	3-wire 0-10V	3-wire
Output signal	4 ~ 20 mA	0~10V	0~5V
Power supply	9~36Vdc	15~36Vdc	12 ~ 36Vdc
Insulation resistance	500MΩ 100Vdc		
Overload pressure	2 times rated pressure		
Bilateral static pressure	5 times rated pressure		
Diaphragm Temp	-20 ~ 85°C		
Protection degree	IP65		
Long term stability	0.2% FS / year		

## PT230BN Series

>> Wind Differential Pressure transmitter



### Description

PT230BN is assembled by silicon piezoresistive differential pressure core, the whole product is of aluminum alloy structure, the two pressure interfaces are 6 air pipe joints, it can be directly installed on the measuring pipeline or connected through the pressure pipe, Simple installation, small and light structure

### Product Feature

- Air pipe joint, easy to install
- Measure tiny other differential pressure values
- Wide measuring range

### Application

HVAC and clean room technology; Filter technology, flow detection; Boiler air supply and underground ventilation; Pilot tube, flow orifice plate

### Technical Data

Technical Parameter			
Pressure range	0~0.01bar,0~2bar (0~1kPa,0~200kPa)		
Pressure type	Gauge pressure		
Accuracy	0.5% F.S; 0.25% F.S		
Electrical Performance	2-wire	3-wire 0-10V	3-wire
Output signal	4 ~ 20 mA	0~10V	0~5V
Power supply	9~36Vdc	15~36Vdc	12 ~ 36Vdc
Insulation resistance	500MΩ 100Vdc		
Overload pressure	1.5 times rated pressure		
Bilateral static pressure	3 times rated pressure		
Diaphragm Temp	-20 ~ 85°C		
Electrical Temp	-20 ~ 80°C		
Protection degree	IP65		
Product material	Aluminium alloy		



## ZDX Series

>> Diffused Silicon Pressure Core



### Description

ZDX silicon piezoresistive pressure core is the core component for manufacturing pressure sensors. It can be easily amplified and assembled into a standard signal output transmitter. ZDX core encapsulates the diffused silicon pressure sensitive chip into a 316L stainless steel shell. The pressure is passed to the sensitive chip by the stainless steel diaphragm and the internally sealed silicone oil is transferred. The sensitive chip does not directly contact the measured medium, forming an all-solid structure for pressure measurement.

### Product Feature

- Constant current, constant voltage excitation optional
- Highly reliable imported pressure chip
- Wide temperature compensation
- Can do normalized output

### Technical Data

Technical Parameter			
Pressure range	100kPa~100MPa	Storage Temp	-40°C~+125°C
Pressure type	Gauge pressure, Absolute pressure, Sealing pressure	Insulation Resistance	≥200MΩ /250DVC
Excitation	Constant current:1.5mA; Constant Voltage:10V	Response time	≤1ms(Rise to 90%F.S)
Output impedance	Constant current:2KΩ~5KΩ; Constant Voltage:3KΩ~18KΩ	Measuring medium	Liquid compatible with SUS316 stainless steel
E-connection	Gold-plated Kovar pin or silicone flexible wire	Mechanical vibration	20g(20~5000HZ)
Compensation temp	Constant current:0°C~60°C (≤35KPa), -10°C~70°C (other range); Constant Voltage: -10°C~70°C	Shock	100g(10ms)
Working Temp	-40°C~+125°C	Service life	10*10(cycles)
Diaphragm material	SUS316L	Filling medium	Silicone oil
Housing material	SUS316L	Sealing ring	Butadiene cyanide or fluorine rubber

## ZCX Series

ero Series

>> Ceramic Pressure Core



### Description

It is a ceramic piezoresistive pressure sensor refined by a thick film process with an imported refined ceramic base. Ceramic is a recognized material with high thermal stability characteristics of ceramics and the high temperature sintering process of thick film make the working temperature range of ceramic pressure sensors as high as  $-40 \sim 125^{\circ}\text{C}$ . The high elasticity and creep resistance of ceramics make ceramic pressure sensors have good long-term stability. In addition, the corrosion resistance of ceramics gives it unique advantages in the fields of refrigeration, chemical industry and environmental protection.

### Product Feature

- Zero point and full scale laser calibration
- Excellent anti-corrosion and anti-wear performance
- Anti-shock and anti-vibration
- Wide operating temperature range

### Technical Data

Technical Parameter	
Pressure range	2bar/5bar/10bar/50bar/100bar
Power supply	2-20V
Sensitivity	15-4mV/V, Typical value: $2.5 \pm 10\text{mV/V}$
Input/Output impedance	$10\text{K}\Omega$ +/-30%F.S
Working Temp	$-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$
Zero Output	$0 \pm 0.1\text{mV/V}, 0 \pm 0.2\text{mV/V}$
Temperature drift	$\pm 0.05\% \text{FS}/^{\circ}\text{C}$
Linearity/Hysteresis/Repeatability	$\pm 0.3\% \text{F.S}$
Safety Overload	2 times the rated range (sensitivity is a typical value)
Stability	Better than $0.3\% \text{FS} / \text{year}$

## PG110S Series

Pro Series

>> Digital Diaphragm Pressure Gauge



### Description

The design of this series meets the special requirements of food and process connection. Its design adopts isolation diaphragm to measure pressure, so that there is no residue in the measuring medium, easy to clean, and no dead corners in the connection process.

### Application

Food industry; Biotechnology & pharmaceutical industry; Homogenizer

### Technical Data

Technical Parameter	
Pressure range	0~3.5MPa~160MPa(0~35bar~1600bar)
Accuracy	1.6% F.S
Diaphragm Temp	-20~+150°C
	Static load is used up to 3/4 of the upper limit of measurement Alternating load is used up to 2/3 of the upper limit
Diaphragm Material	Short-time pressure is used up to the upper limit ambient temp -20~+60°C

## PG110X Series

>> Mechanical Diaphragm Pressure Gauge



### Description

This series adopts German imported movement, it can realize the setting of zero point, full scale, decimal point, damping time, switch alarm and alarm direction by single-key programming, without adjustment by potentiometer; high accuracy and good stability, Perfect performance, high reliability, long-term stability, combined with the world's leading micro-processing technology and advanced analog-to-digital conversion algorithm, to meet the requirements of high precision and low power consumption.

### Product Feature

- Large-screen LCD display, easy to read
- Corrosion-resistant, anti-vibration, can be used in a variety of complex environments

### Application

Food industry; Biotechnology&pharmaceutical industry; Homogenizer

### Technical Data

Technical Parameter	
Pressure range	0~100MPa;0-150MPa;0-200MPa (0~1000bar;0~1500bar;0-2000bar)
Accuracy	1.0% F.S
Power supply	9VDC
Process connection	M20*1.5
Display	Max display:1999bar;Min display: 10bar
Working Temp	-15~+70°C
Overload pressure	150% FSO
Measuring medium	Liquid compatible with SUS316 stainless steel

## ZS301 Series /ZS601 Series

>> Load Cell



### Description

The elastic body of the sensor is made of alloy steel; rubber sealing or welding sealing treatment, the surface is nickel-plated, waterproof, anti-corrosion, and the protection level reaches IP66. It is widely used in various weighing and force measuring equipment such as industrial process force control, batching control system and testing equipment.

### Technical Data

Technical Parameter	
Range	0~0.1kg~2000kg~100T
Accuracy	±0.02% F.S
Sensitivity	2.0± 0.004mV/V
Creep	±0.03% F.S /30min
Zero Output	±1.0%F.S
Input resistance	350±5Ω
Output resistance	350±3Ω
Insulation resistance	≥5000 (100VDC)
Sensitivity temp influence	'±0.017% F.S /10°C
Zero temp influence	±0.023% F.S /10°C
Temp compensation	-10°C ~+40°C
Working temp	-35°C ~+65°C
Excitation voltage	9~12 DC V
Safety overload	150%F.S
Limit overload	200%F.S
Protection degree	IP66



## ZSP/ZSF/ZSM/ZSR Series

>> Linear Position Transducer



### Description

This series is an absolute position measurement type. It is used in adjustment systems and measurement systems to directly measure displacement and length, output current and voltage signals, and can also transfer signals to standard 0-5V, 0-10V or 4-20mA DC signal through built-in or external conversion modules, which can meet the requirements of longdistance transmission control.

### Technical Data

Technical Parameter	
Standard Series	Universal Pull Rod Series      ZSP
	Slider Series                      ZSF
	Miniature Rod Series              ZSM
	Micro Self-recovery Series      ZSR
Electrical stroke (C.E.)	0025=25mm                      0275=275mm
	0050=50mm                      0300=300mm
	0075=75mm                      0325=325mm
	0100=100mm                      0350=350mm
	0125=125mm                      0375=375mm
	0150=150mm                      0400=400mm
	0175=175mm                      0425=425mm
	0200=200mm                      0450=450mm
	0225=225mm                      0475=475mm
	0250=250mm                      0500=500mm

## WSP Series

>> Temperature Sensor



### Description

This WSP series with thermocouple or thermal resistance is a field-installed temperature transmitter unit. It is composed of thermocouple, thermal resistance and temperature transmitter modules. It adopts a 2-wire system and has a nonlinear correction circuit. It can directly measure liquid, gaseous media and various kinds of media in the range of  $-200^{\circ}\text{C} \sim +1600^{\circ}\text{C}$  in the industrial process.

### Application

It is widely used in petroleum, chemical, metallurgy, electric power, light industry, textile, food and other industries. It can be used with moving coil instruments, digital display instruments, recording instruments, regulators, computers, etc., to form various temperature measurement control systems .

### Technical Data

Technical Parameter	
Accuracy	$\pm 0.2\% \text{F.S.}; \pm 0.5\% \text{F.S.}; \pm 1\% \text{F.S}$
Output	4~20mA 2-wiring
Power supply	12~34VDC Rated supply:24VDC
Working Temp	$-25 \sim +85^{\circ}\text{C}$
Relative humidity	5~95%; no condensation
Storage Temp	$-25 \sim +125^{\circ}\text{C}$
load capacity	0-500 $\Omega$
Temp influence	Class0.2;0.02%F.S/ $^{\circ}\text{C}$ Class0.5; 0.05%F.S / $^{\circ}\text{C}$ Class1.0;0.05% F.S/ $^{\circ}\text{C}$
Head accuracy	Analogue: $\pm 2.5\% \text{F.S}$ Digital: $\pm 1.0\% \text{F.S}$
Power consumption	< 0.5W

## TP202 Series

>> Intelligent Temperature Switch



### Description

This series is an intelligent digital temperature measurement and control product integrating temperature measurement, display and output control. It is a fully electronic structure, which measures and controls the temperature of the control system. It is flexible to use, simple to operate, easy to debug, safe and reliable.

### Application

Widely used in dry hydro-power, tap water, petroleum, chemical, machinery, hydraulic and other industries to measure, display and control the temperature of fluid media.

### Technical Data

		Technical Parameter	
Temp range	-200~350°C	Accuracy	≤ +/-0.25%,0.5%FS
Stability	≤0.2%/year	Display way	4-digit digital tube + unit display
Sensor	PT100	Display range	-1999-9999
Power supply	15~36VDC	Protection Degree	IP65
Switching load	≤1.2A(24VDC)	Output	2 switch (PNP or NPN)+4-20mA
Load resistance	≤(U-12)/0.02Ω	Response time	≤5ms
Service life	> 10year	Ambient Temp	-40°C~70°C
Medium temp	-200~350°C	Storage Temp	-20°C~60°C

## PT202 Series

>> Intelligent Temperature Switch



### Description

This series is an intelligent digital display pressure measurement and control product that integrates pressure measurement, display, and output control. The product is a fully electronic structure, which measures and controls the pressure of the control system. It is flexible to use, simple to operate, easy to debug, safe and reliable.

### Application

Widely used in hydropower, tap water, petroleum, chemical, machinery, hydraulic and other industries to measure, display and control the pressure of fluid media

### Technical Data

Technical Parameter	
Pressure range	-0.1~0;0.02~100MPa
Stability	≤0.2%/year
Pressure type	Gauge pressure,Absolute pressure,Sealing pressure
Load ability	1.5times full range
Switching load	≤1.2A(24VDC)
Load resistance	≤(U-12)/0.02Ω
Service life	> 10year
Medium temp	-40°C ~85°C
Power supply	15~36Vdc
Temp effect	within the specified working temperature, the output change is ≤every 10°C,output change≤ +/-0.05% of range
Accuracy	≤ +/-0.25%,0.5%FS
Display way	4-digit digital tube + unit display
Display range	-1999-9999
Protection Degree	IP65
Output	2 switch (PNP or NPN)+4-20mA
Response time	≤5ms
Ambient Temp	-40°C ~70°C
Storage Temp	-20°C ~60°C
Relative humidity	0~95%



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