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**Low Pressure Transmitter with Stainless Steel Diaphragm**  
**Model : P225 (Circular Connector)**  
**P226 (DIN Connector)**

**WISE**®

**Advantages**

- High precision and qualified low pressure transmitter
- All stainless steel(316SS) Construction
- Measuring ranges from 0~250mmH<sub>2</sub>O to 10000mmH<sub>2</sub>O relative or compound pressure.
- Advanced piezoresistive silicon measuring cell
- Excellent accuracy and long term stability

**Applications**

The transmitters can be used for a wide range of applications in process control, automatic machinery and hydraulic or pneumatic system design.

- Standard hydraulic and pneumatic equipments
- Process control
- Machine tools and automatic machinery
- Monitoring systems
- Servo valves and drives
- Chemical and petrochemical industry
- Level measurements



P225

P226

**Descriptions**

P200 series pressure transmitter has been designed as an advanced device for measuring low pressure of gases and liquids in industrial applications. It is extremely versatile and suitable for measuring static pressure. The built-in piezoresistive silicon measuring cell is highly corrosion resistant, stable and has an excellent price / performance ratio. It is available in pressure ranges of 250mmH<sub>2</sub>O to 10000mmH<sub>2</sub>O relative or compound pressure and allows direct contact of the liquid with the measuring cell, therefore almost any liquids can be measured. Thanks to their high natural frequency and the rugged construction, the P200 transmitter withstands high shock and vibration. The transmitters are available as absolute and relative pressure types with either 2-wire current or 3-wire voltage output. The pressure to be measured acts without transmitting liquid on a stable, corrosion resistant ceramic measuring cell. Piezoresistive resistors are attached to the cell and connected into a Wheatstone bridge configuration. The output signal of this bridge is converted into a standardized current or voltage output signal.

# Specification

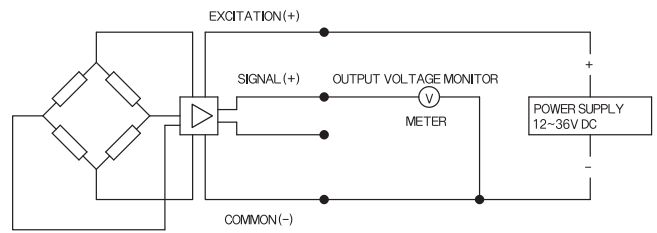
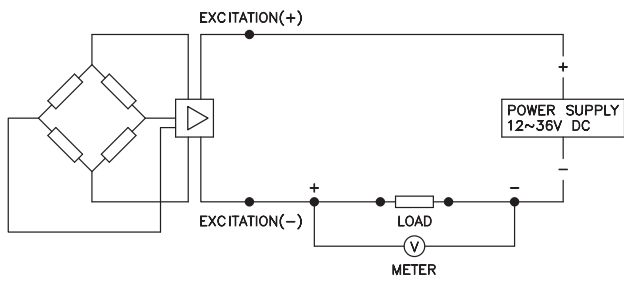
Input				
Technology	Piezoresistive pressure sensor			
Pressure ranges	0~250 to 1000mmH <sub>2</sub> O relative pressure			
	-250~0 to -2000~2000mmH <sub>2</sub> O compound pressure			
Pressure reference	Gauge, vacuum and compound			
Overload	3x full scale without damage			
Output				
	Current output		Voltage output	
Electrical connection type	2-wire technique		3 or 4-wire technique	
Full scale output signal	20mA	±0.05%	5V	±0.05%
Zero measured output	4mA	±0.03%	1V	±0.03%
	Other signals available on request			
Electrical Specification				
Excitation voltage	12~36V DC			
Load resistance max@24V	500 $\Omega$ at 24V			
Influence of excitation	0.01% FSO/V			
Power ripple	≤500mV P-P			
Reverse polarity	Protected			
Shock resistance	No change in performance after 10Gs for 11ms			
Vibration	0.1G (1m/s/s) maximum			
Response time(10~90%)	≤2 milliseconds			
Adjustment	±10% FSO/zero and span			
Performance Specification				
Accuracy	≤ ±0.25% FSO			
Non-linearity	±0.100% FSO typical			
Repeatability	±0.015% FSO typical			
Pressure hysteresis	±0.010% FSO typical			
Long term stability	±0.3% FSO over 6 month			
Cutoff frequency(-3 d B)	≤2KHz			
Reference temperature	25°C			
Operating temperature range	-20~80°C			
Compensated temperature range	0~50°C			
Thermal sensitivity shift	≤ ±0.2% FSO in reference to 35°C typical			
Thermal zero shift	≤ ±0.2% FSO in reference to 35°C typical			
Thermal hysteresis	≤ ±0.1% FSO in reference to 35°C typical			
Physical Specification				
Process connection	PT1/4", PT3/8", PT1/2" male thread			
	PF1/4", PF3/8", PF1/2" male thread			
	Female thread & other connections available on request			
Process media	Gases and liquids compatible with ceramic Al <sub>2</sub> O <sub>3</sub> , 96%			
Materials wetted by process	Diaphragm : Stainless steel 316L			
	Housing : Stainless steel 316			
	Gasket O-ring : Viton (HNBR, CSM, etc.)			
Enclosure rating	IP65			
Influence of mounting position	Not critical but should be mounted vertically			
Weight	Approx.(270g)			
Options	Cooling Fin			
	Siphon tube			

Note : ① Cable version : 1.5m standard length, 4-wire, shielded with integral vent tube

② Vented gauge units must breathe dry, non - corrosive gases.

③ Connector version is vented through the removed pin, cable versions are vented through a vent tube inside the cable sleeve

# System connection for 2-wire transmitter    System connection for 3-wire transmitter



## Dimension(mm)

## Electrical connection

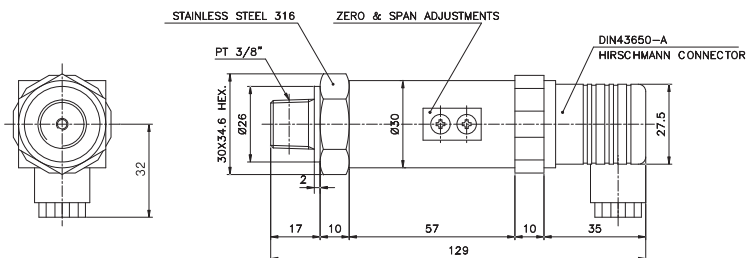
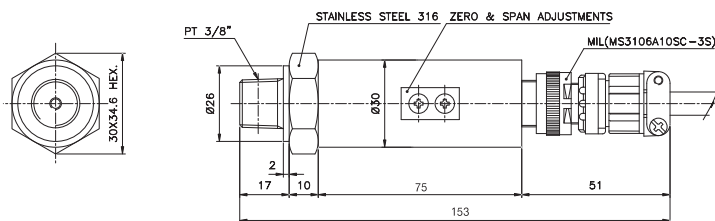
E : Excitation  
S : Signal  
C : Common

### Circular connector

System Color	2-Wire	3-Wire	4-Wire
Red	E +	E +	E +
Black	E -	C -	E -
Green		S +	S +
White			S -
⎓	Shielded	Shielded	Shielded

### DIN connector

System Color	2-Wire	3-Wire	4-Wire
1	E +	E +	E +
2	E -	C -	E -
3		S +	S +
⎓	Shielded	Shielded	S -



## Ordering Information

### Low Pressure Transmitter

P225										Circular Connector
P226										DIN Connector
	R									Relative pressure
	C									Compound pressure
	V									Vacuum
		M								Male thread
		F								Female thread
			T							PT thread as standard
			N							NPT
			F							PF thread
			X							Other process connections available on request
				1						1/4"
				2						3/8"
				3						1/2"
				X						Other units available on request
					H					Accuracy $\pm 0.25\%$ FSO
						01				Measuring range 250mmH <sub>2</sub> O
						02				500
						03				1000
						04				1500
						05				2000
						06				2500
						07				3000
						08				4000
						09				6000
						10				10000
						xx				Other calibration ranges available on request
							M			Calibration in mmH <sub>2</sub> O
							K			Calibration in KPa
							X			Other units available on request
								A1		4~20mA, DC, 2-wire output
								A2		4~20mA, DC, 4-wire output
								B1		1~5V, DC, 3-wire output
								B2		0~5V, DC, 3-wire output
								B3		0~10V, DC, 3-wire output
								N		None options
								C		Cooling Fin
								S		Siphon tube
								X		Other accessories available on request

P226	R	M	T	2	H	01	M	A1	N	Sample ordering code
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Specifications subject to change without notice