

## EP201 PRESSURE •DATASHEET•

Pressure Measurement 2. Level Measurement 3. Temperature Measurement
4. Flow Measurement 5. Display & Control Instruments
6.Wireless Monitoring System 7.Velocity Measurement



# **EP201**Diffused Silicon Pressure Sensor

## Applications

- Process control
- Aerospace and aviation
- Automotive industry
- Medical equipment
- HVAC systems
- · Pipeline systems



#### Features

- 316L stainless steel isolation diaphragm structure
- · High accuracy with all stainless steel construction
- · Compact size and lightweight design
- · Strong anti-interference and long-term stability
- Various structural forms for easy installation
- Excellent resistance to vibration and shock
- Wide measuring range up to 60MPa
- · Absolute/gauge/ sealed pressure measurement

### Profiles

EP201 pressure transmitter uses a diffused silicon sensing core and built-in digital circuitry to convert millivolt signals into standard current outputs. It can be easily connected directly to computer interface cards, control instruments, intelligent instruments, or PLCs. For long-distance transmission, a current output can be used.

With a compact, lightweight, fully stainless-steel sealed structure, it is suitable for use in corrosive environments. The product is easy to install and offers excellent resistance to vibration and shock, making it widely used in process control, aerospace, aviation, automotive, medical equipment, and HVAC applications.

Holykell can provide a cost effective solution for pressure monitoring for a variety of applications. Welcome your inquiry.

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PRESSURE MEASUREMENT

## Specifications

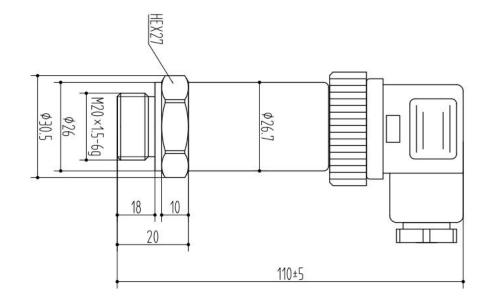
Ambient Temperature: 25°C (unless specified)

Parameter	EP201						
Measuring range	0~35kPa60MPa						
Measuring pressure	Gauge, absolute and seal pressure optional						
Safe overload	150% F.S./ 200% F.S/ 300% F.S						
Burst pressure	300%F.S/ 400%F.S/ 500% F.S / 600% F.S						
Accuracy	±0.5%F.S						
Hysteresis	0.1%F.S						
Repeatability	0.1%F.S						
Medium temp.	-30°℃~105°℃						
Storage temp.	-40°℃~125°C						
Compatible medium	Compatible with 304 Stainless Steel						
Temp. Drift	35kPa: ±3%F.S(0℃~60℃); Other ranges: ±1.5%FS(-10℃~70℃)						
Electrical wire	2 Wires 3 Wires						
Output signal	4~20mA	0~5V	0-10V	0.5-4.5V Ratiometric	0.5-4.5V Non-ratiometric		
Power supply	12~30Vdc	12~30Vdc	12~30Vdc	5Vdc	5Vdc		
Insulate resistance	≥250M Ω / 500Vdc (100M Ω / 250Vdc)						
Electrical connection	DIN43650 Hirs	chmann connec	tor				
IP rating	IP65						
Mechanical vibration	Sine wave: 20g, 25Hz to 2kHz; IEC 60068-2-6 Random: 7.5grms, 5Hz to 1kHz; IEC 60068-2-64						
Shock-resistance	Shock: 20g/1ms; IEC 60068-2-27 Free fall: 1 meter; IEC 60068-2-32						
Pressure connection	G1/4, M14×1.5, NPT1/4, R1/4, PT1/4, M12×1.5, R1/2, PT1/2, 7/16-20UNF, NPT1/8						
Response time	≤90ms						
Endurance	≥1×10 <sup>6</sup> pressure cycles						
EMC	Immunity: IEC 61000-6-2, Emission: IEC 61000-6-3						
Surge	IEC 61000-4-5 Level 3, 2kV						
Withstand voltage	Current output: 500V AC for 1 minute						
Electrostatic discharge	IEC 61000-4-2 Level 4						
Hexagon	HEX27						



Dimensions and Drawing

Unit: mm



## Electrical Connection

Hirschmann DIN43650						
	Wire color/Pin No.	Definition				
2-wire current	Pin 1	V+				
2-wire current	Pin 2	lout				
	Pin 1	V+				
3-wire voltage	Pin 2	V-				
	Pin 3	Vout				

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PRESSURE MEASUREMENT

## How to Order

1. Range Selection Table:

01	0~10kPa(G)	07	0~1MPa(G,A)	13	0~16MPa(S)			
02	0~35kPa(G,A)	08	0~1.6MPa(G,A,S)	14	0~25MPa(S)			
03	0~70kPa(G)	09	0~2.5MPa(S)	15	0~40MPa(S)			
04	0~100kPa(G,A)	10	0~4MPa(S)	16	0~60MPa(S)			
05	0~250kPa(G,A)	11	0~6MPa(S)					
06	0~600kPa(G,A)	12	0~10MPa(S)			Х	By Customized	

Kindly according to your application select suitable range code , Example: Code  $11 = 0 \sim 6$ MPa.

2. Part Number Selection Table:

<b>201</b> Selection Type	н	15	S	E5	S10	3	1	000
Electrical Connection	H=Hirschmann DIN 43650							
Pressure Range	Range reference to pressure range table code	selection						
Pressure type	G=Gauge A=Absolute S	=Sealed						
Signal Output	E8=0.5-4.5V(ratiometric, 3wire) E21=0.5-4.5V(non-ratiometric, 3 wir	E6=0-5V(3 wire) e) (= By Customize	d					
Power Supply	S10=12~30Vdc X= By Custo	omized						
Pressure connection		male NPT male 8×1.5 male	1	6=G1/4'' n 0=1/2'' NF K=By Cus	PT male			
Accuracy	1=0.5%F.S (Typical) X=By custor	mized						
Cable length	000=Non-Cable 001= Cable 1	IM 002= Cab	ole 2M	X= By (	Customize	ed		

#### **Ordering Notes**

1. Please ensure compatibility between the measured medium and the product's wetted materials during model selection.

2. Measuring range can be customized between 1–35 kPa. (For ranges ≤6 kPa, a non-oil-filled pressure sensor is used, and the measured medium must be clean, dry gas.)

3. For ranges between 25–100 MPa, customization is available for applications involving extreme pressure spikes.

PRESSURE MEASUREMENT

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## Accessories

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(Notes: Please purchase separately. For the price of accessories, please contact our sales.)

	Description	Order number
	<b>Liquid level display control device</b> With all kinds of liquid level sensor, measurement according to liquid level, and according to the setting of the container structure and size and the density of liquid, calculation, display liquid volume or quality.	0008
C. C.	<b>Damper</b> Screw/damper against pressure peak	0038
	Hirschmann connector	0039
T	<b>Terminal box</b> The terminal box, with IP67 and watertight ventilation element, provides a moisture-free electrical termination for the submersible pressure transmitter. It should be mounted in dry environment or directly in the switch cabinet.	0003
	M12 connector	0040

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