

PRODUCT OVERVIEW

PRESSURE MEASUREMENT

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P20E Series Diffused Silicon Pressure Sensor

PROFILE

The P20E series pressure transmitter is built with a diffused silicon sensor core and integrated digital electronics that transform millivolt signals into standardized current outputs. It connects seamlessly with PLCs, computer interface cards, controllers, and smart instruments. For reliable long-distance data transmission, the current output option ensures stable performance.

Designed with a compact, lightweight, and hermetically sealed stainless-steel housing, the transmitter is well-suited for operation in corrosive or harsh conditions. Simple to install and engineered for high resistance to vibration and impact, it finds extensive application in process automation, aerospace, aviation, automotive systems, medical devices, and HVAC industries.



CHARACTERISTICS

- ☆ 316L stainless steel isolation diaphragm for durability and corrosion resistance
- ☆ High accuracy up to $\pm 0.5\%$ F.S
- ☆ Small, lightweight design for flexible applications
- ☆ Outstanding anti-interference capability and long-term signal stability
- ☆ Multiple connections optional
- ☆ Excellent resistance to mechanical shock & vibration
- ☆ Wide pressure range available, up to 60 MPa
- ☆ Supports absolute, gauge & sealed pressure measurement

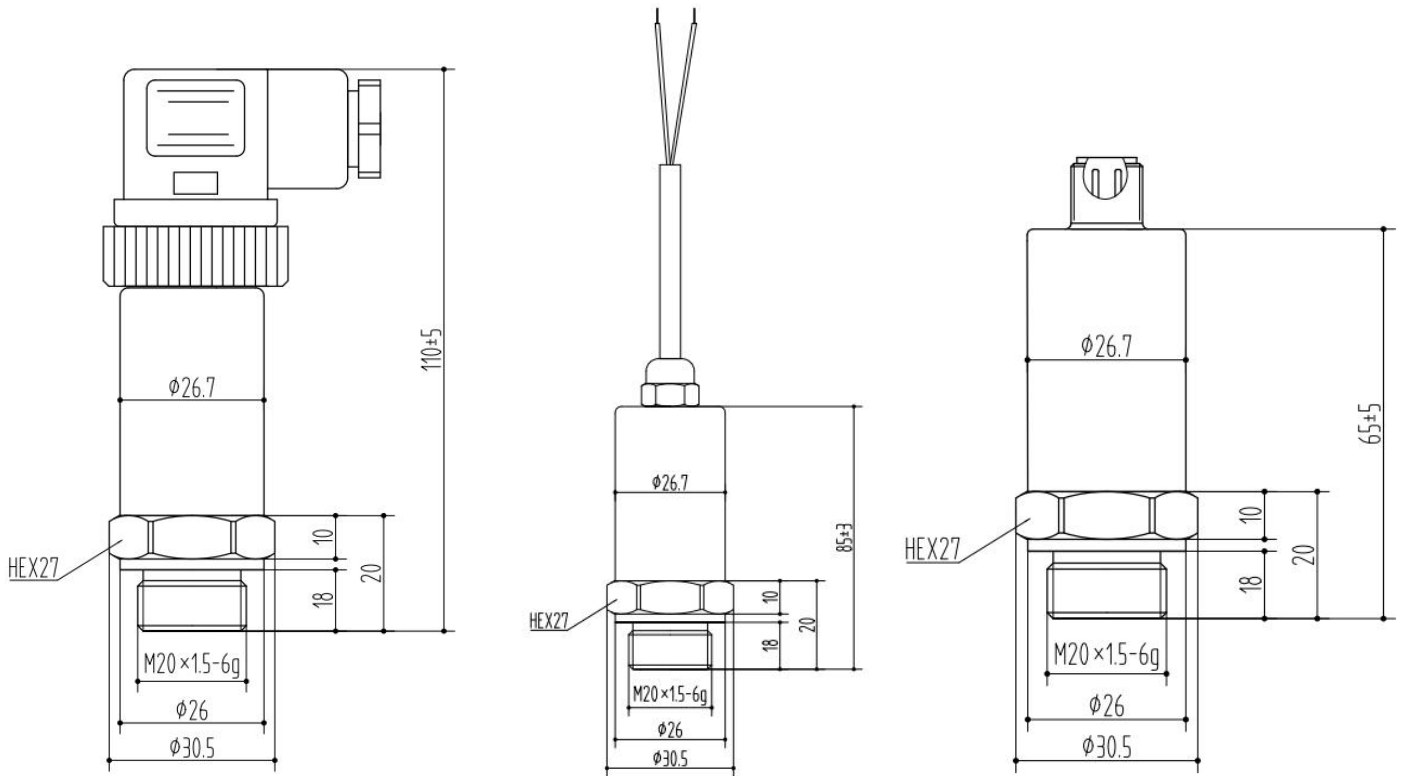
APPLICATIONS

- ☆ Hydraulic pressure controller
- ☆ Industrial automation control
- ☆ Pipeline systems
- ☆ Petrochemical industry
- ☆ Water conservancy
- ☆ Laboratory equipment
- ☆ HVAC systems
- ☆ Automatic detection system
- ☆ Gas pressure measurement
- ☆ Automotive industry
- ☆ Medical equipment

SPECIFICATIONS

Model	P20E Series				
Parameter					
Pressure Range	0~35kPa...60MPa				
Pressure Type	Gauge pressure; Absolute pressure; Sealed gauge pressure optional				
Electronic Wire	2 Wires		3 Wires		
Output	4-20mA	0-5V	0-10V	0.5-4.5V ratiometric	0.5-4.5V Non-ratiometric
Power Supply	12-30 V DC	12-30 V DC	12-30 V DC	5 V DC	5 V DC
Accuracy	±0.5%F.S				
Safe overload	150% F.S				
Burst pressure	300%F.S/ 400%F.S/ 500% F.S / 600% F.S				
Hysteresis	0.1%F.S				
Repeatability	0.1%F.S				
Working temp.	-30°C~80°C				
Medium temp.	-20°C~80°C				
Storage temp.	-40°C~125°C				
Compatible medium	Compatible with 304 Stainless Steel				
Insulate resistance	≥250M Ω / 500Vdc (100M Ω / 250Vdc)				
Electrical connection	DIN43650 Hirschmann connector; Cable-out; M12 4-pin connector				
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, M16×1.5, M20×1.5, G1/2, 1/2" NPT, M18×1.5 etc.				
Response time	≤100ms				
Endurance	≥1×10 ⁶ pressure cycles				
EMC	Immunity: IEC 61000-6-2, Emission: IEC 61000-6-3				
Withstand voltage	Current output: 500V AC for 1 minute				
Electrostatic discharge	IEC 61000-4-2 Level 3				
Hexagon	HEX27				
Long-term stability	0.2%F.S/year				
Certificate	CE				
Insulate resistance	≥250M Ω / 500Vdc (100M Ω / 250Vdc)				
Electrical connection	DIN43650 Hirschmann connector; Cable-out; M12 4-pin connector				
IP rating	IP65				

DIMENSION AND DRAWING



ELECTRICAL CONNECTIONS

Electrical Connections		
Hirschmann DIN43650 / Cable-out / M12×1 connector		
	Wire color/Pin No.	Definition
2-wire current	Red / Pin 1	V+
	Green / Pin 2	Iout
3-wire voltage	Red / Pin 1	V+
	Green / Pin 2	V-
	Yellow / Pin 3	Vout

PART NUMBER CODE TABLE FOR PRESSURE RANGE

000	0~10kPa(G)	007	0~1.6MPa(G,A,S)	014	0~40MPa(S)
001	0~35kPa(G,A)	008	0~2.5MPa(S)	015	0~60MPa(S)
002	0~70kPa(G)	009	0~4MPa(S)		
003	0~100kPa(G,A)	010	0~6MPa(S)		
004	0~250kPa(G,A)	011	0~10MPa(S)		
005	0~600kPa(G,A)	012	0~16MPa(S)		
006	0~1MPa(G,A)	013	0~25MPa(S)	X	Customized

ORDER INFORMATION

P20E	H	003	G	E5	S10	1	2	8
Selection								
Electronic Connection	H= Hirschmann DIN43650 S= Cable-out M= M12 (4-pin)							
Pressure Measurement	Refer to <i>PART NUMBER CODE TABLE FOR PRESSURE RANGE</i> on previous page and select your requested range code here							
Pressure Type	G=Gauge	A=Absolute	S=Sealed					
Output	E5=4-20mA(2 wire)		E6=0-5V(3 wire)					
	E8=0.5-4.5V(ratiometric, 3 wire)							
	E21=0.5-4.5V(non-ratiometric, 3 wire)							
	E7=0-10V(3 wire)		X= By Customized					
Power Supply	S10=12-30 V DC	S6=5 V DC	X= By Customized					
Accuracy	1=0.5%F.S	X=By customized						
Cable length	0=Non-Cable	1=Cable 1M	2=Cable 1M	...	X=By Customized			
Pressure connection	8=M20×1.5 male	9=G1/2 male	6=G1/4" male	20=M14×1.5 male				
	3=1/4" NPT male	10=1/2" NPT male	47 =M16×1.55	21=M18×1.5 male				
	X=By Customized							