



PRODUCT OVERVIEW

PRESSURE MEASUREMENT

P20 Series Industry Pressure Transducer & Transmitter



P20H



P20M



P20S

Characteristics

- ☆ Accuracy: $\pm 0.5\%F.S$
- ☆ High stability and reliability
- ☆ Using industrial silicon sensor
- ☆ Digital calibration system
- ☆ Multifarious electronic connector
- ☆ Temperature compensate
- ☆ Zero point drift small ling
- ☆ CE /RoHs compliant
- ☆ Zero point and span adjustable via internal potentiometer

Applications

- ☆ Hydraulic pressure controller
- ☆ Industrial automation control
- ☆ Water conservancy
- ☆ Pressure meter
- ☆ Laboratory equipment
- ☆ Real-time management well
- ☆ Automatic detection system
- ☆ Process control
- ☆ And so on

Profiles

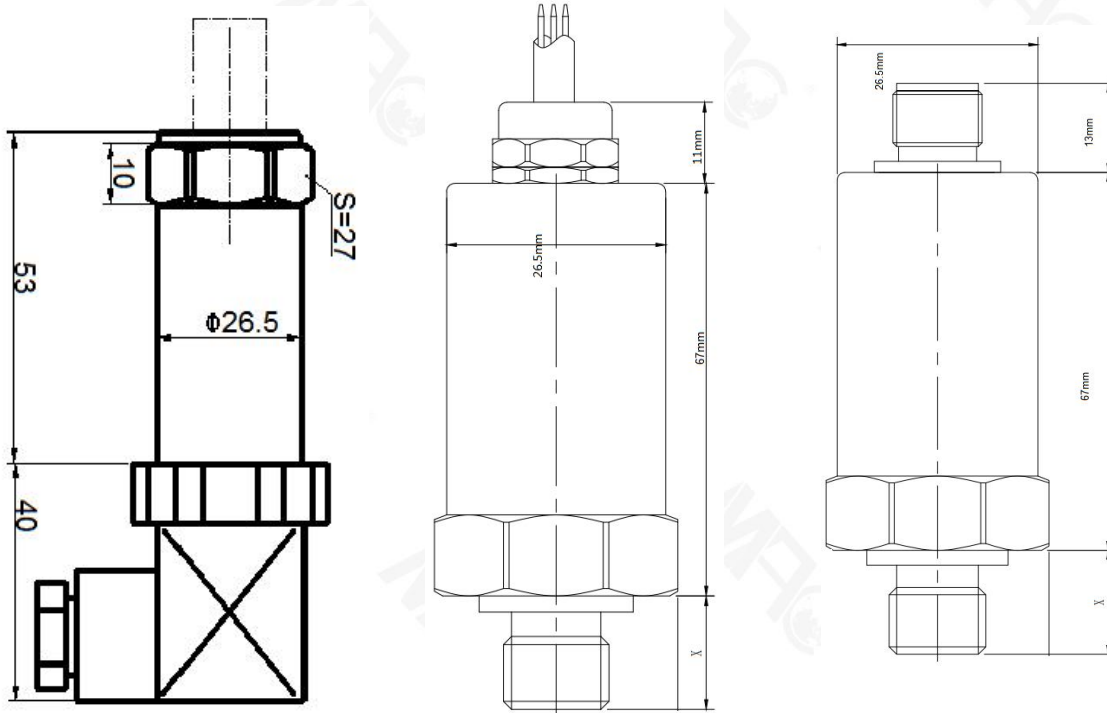
Pressure transmitter P20 is designed for use in almost all industrial applications, and offers a reliable pressure measurement. The flexible pressure transmitter programme covers current , voltage, digital and double output signal, absolute and gauge (relative) versions, measuring ranges from -1-0 to 0-600 bar and a wide range of pressure and electrical connections. The fully welded measuring system (without seals) made of high-grade stainless steel allows this device to be used in almost all media, even in harsh conditions. The structure ensures optimum protection against process medium leakage. It uses high quality imported piezoresistive pressure sensor that is resistant to extreme overloading and is capable of handling millions of pressure cycles. Through strict component making, semi-finished product and all-finished product testing and aging, the transmitter is stable and reliable, having excellent flexibility, sensitivity and diversity. Excellent vibration stability, robust construction, and a high degree of EMC/EMI protection equip the pressure transmitter to meet the most stringent industrial requirements.

Specifications

Parameter	P20				
Pressure Range	-1 Bar-1 Bar; 0-0.1Bar....600 Bar / 0-2 Psi...9000 Psi Optional				
Pressure Type:	Gauge pressure; Absolute pressure; Sealed gauge pressure; Negative pressure optional				
Safe Overload	200% F.S.(standard)				
Burst Pressure	300% F.S. (standard)				
Accuracy (Linearity, Hysteresis Repeatability)	$\leq \pm 0.5\%F.S.$; $\leq \pm 0.25\%F.S.$; $\leq \pm 0.1\%F.S.$ (Customized) Including non-lin., rep. and hys. Optional				
Total Error Band	0...50 °C max. $\pm 0.5\%FS$; -10...70 °C max. $\pm 1.0\%FS$				
Long-term Stability	Standard: $0.1\%F.S \pm 0.05\%$				
Working/Storage Temp.	-30°C to 85°C				
Tempe Compensation	-10°C to 60°C(standard); -20°C to 60°C; -20°C to 80°C(customized)				
Medium compatible	Compatible with 316 Stainless Steel or 1Cr18Ni9Ti stainless steel				
Electrical Wire	2 Wires	3 or 4 Wires	3 Wires	4 Wires	4 Wires
Output	4-20mA	Double 4-20mA	0-5V ,1-5V, 0-10V	RS485	4-20mA +Temp (Ω)
Power Supply	12-36 V DC	12-36 V DC	8-36 V DC/ 15-36 V DC	10-30 V DC	12-36 V DC
Load Resistance	(U-10)/0.02 (Ω)	Current type: (U-10)/0.02 (Ω); Voltage type: $>100K \Omega$			
Insulate resistance	$>100M \Omega @100V DC$				
Zero Temp. Drift	0.03%FS/°C($\leq 100kPa$), 0.02%FS/°C($>100kPa$)				
Body material	316 stainless steel (standard); 1Cr18Ni9Ti stainless steel optional				
Material of diaphragm	316L Stainless steel				
Filling oil	Silicon oil (standard); Fluorocarbon oil (Oxygen Services)				
Electrical connection	-Hirschmann Connector, 4-pin and IP65; -Plug: M12 (4-pin) Type IP67; -Directly Outlet Cable Type IP68 optional.				
Limiting Frequency	1 kHz				
Mechanical vibration	$\pm 20g$				
Pressure connect port	G1/4" male, G1/2" male, 1/8" NPT male, 1/4" NPT male, 1/2" NPT male and female optional. (by customized)				
Water Proof	IP65				
Response time	$\leq 1ms$				
Endurance	>100 million cycles, 0...100 %FS at 25°C				
Options	Pressure Connection, Electrical Connection Others on request				

Dimension and Drawing

UNIT:mm



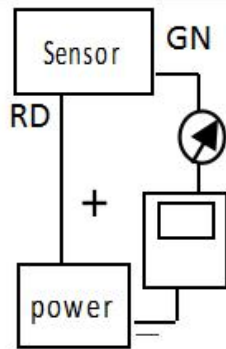
P20H

P20S

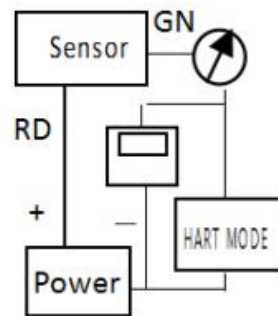
P20M

The dimensions above are just for reference purposes only. The actual dimension of the sensors may differ in different orders.

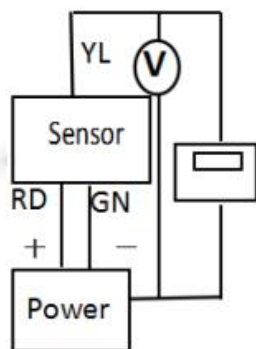
Electrical Connections



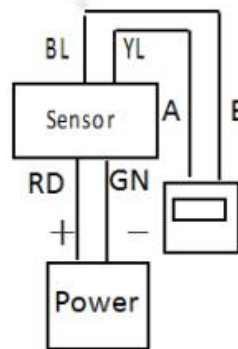
Current output



Hart



Voltage output



RS485

Part Number Code Table For Pressure Range

000	-1-0	016	0-1.5	032	0-10	048	0-125
001	-1-1	017	0-1.6	033	0-12	049	0-150
002	-1-9	018	0-1.7	034	0-15	050	0-200
003	-1-10	019	0-1.8	035	0-16	051	0-250
004	-1-16	020	0-1.9	036	0-20	052	0-300
005	-1-20	021	0-2.0	037	0-25	053	0-350
006	-1-25	022	0-2.1	038	0-30	054	0-400
007	-1-30	023	0-2.2	039	0-35	055	0-450
008	-1-35	024	0-2.3	040	0-40	056	0-500
009	-1-40	025	0-2.5	041	0-50	057	0-600
010	-1-65	026	0-3	042	0-60	058	0-700
011	0-0.5	027	0-4	043	0-65	059	0-800
012	0-1.0	028	0-5	044	0-70	060	0-1000
013	0-1.1	029	0-6	045	0-80	061	0-5000
014	0-1.2	030	0-7	046	0-90	062	0-9000
015	0-1.3	031	0-8	047	0-100	X	Customized

Order Information

P/N	P20	H	E5	S37	3	010	B	1	1	N	G
Selection	(Model)										
Electrical Connection	H= Hirschmann S= Cable-out M= M12 (4-pin) Type										
Output	E0=1-5V E6=0-5V E11=RS485	E5= 4-20mA E7=0-10V X=By Customized									
Power Supply	S37=12-36 V DC S52=8-36 V DC X= By Customized	S44=15-36 V DC S17=10-30 V DC									
Pressure connection	3=1/4" NPT male 7=G1/4" Female 9=G1/2" male 26=1/4"-18 NPT female X=By Customized	6=G1/4" male 8=M20x1.5 male 10=1/2" NPT male 5=1/8" NPT male									
Pressure Measurement	See last pages pressure range code table and select your requested range code adhere here										
Pressure Unit	B=Bar	P=Psi	K=KPa	M=MPa	H=mH2O						
Accuracy	1=0.5%F.S		2=0.25%F.S								
Cable length	0=Non-Cable		1=Cable 1m		X=By Customized						
Other Spec	N=None(Standard)										
Pressure type	G=Gage	S=Sealed	A=Absolute								