



PRODUCT OVERVIEW

PRESSURE MEASUREMENT

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P20 Series Universal Industry Pressure Transducer & Transmitter



P20H



P20M



P20S



P20G

Characters:

- ☆ Accuracy: $\leq \pm 0.5\%F.S.$
- ☆ High stability and reliability
- ☆ Using industrial silicon sensor
- ☆ Digital calibration system
- ☆ Multifarious electronic connector
- ☆ Multifarious pressure port
- ☆ Temperature compensate
- ☆ Zero point drift small ling
- ☆ CE Certificate approved
- ☆ Accord with ROHS standard
- ☆ Zero point and span adjustable via internal potentiometer

Applications:

- ☆ Hydraulic pressure controller
- ☆ Industrial automation control
- ☆ Oxygen Services
- ☆ Petrochemical industry
- ☆ Water conservancy
- ☆ Pressure meter
- ☆ Laboratory equipment
- ☆ Real-time management well
- ☆ Automatic detection system
- ☆ Gas pressure measurement
- ☆ And so on

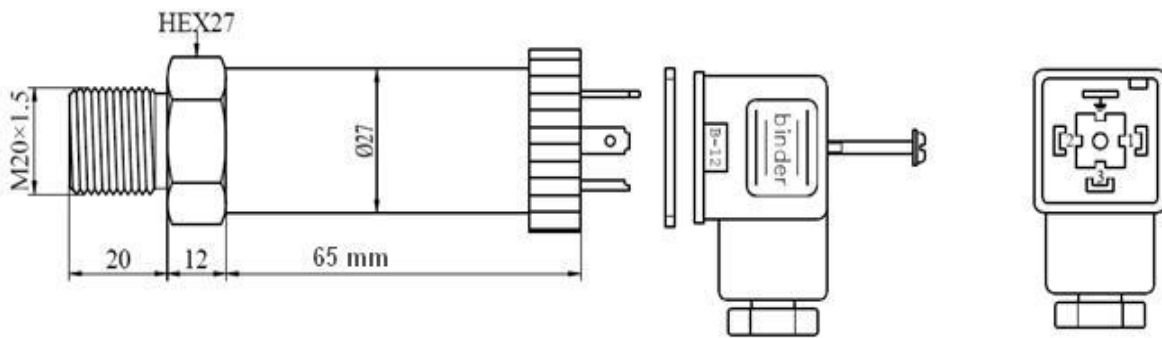
I . Profiles:

Pressure transmitter P20 is designed for use in almost all industrial applications, and offers a reliable pressure measurement, even under harsh environmental conditions. The flexible pressure transmitter programme covers current , voltage, digital and double output signal, absolute and gauge (relative) versions, measuring ranges from -1~0 to 0-1000 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. The used high quality imported piezoresistive pressure sensor 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.

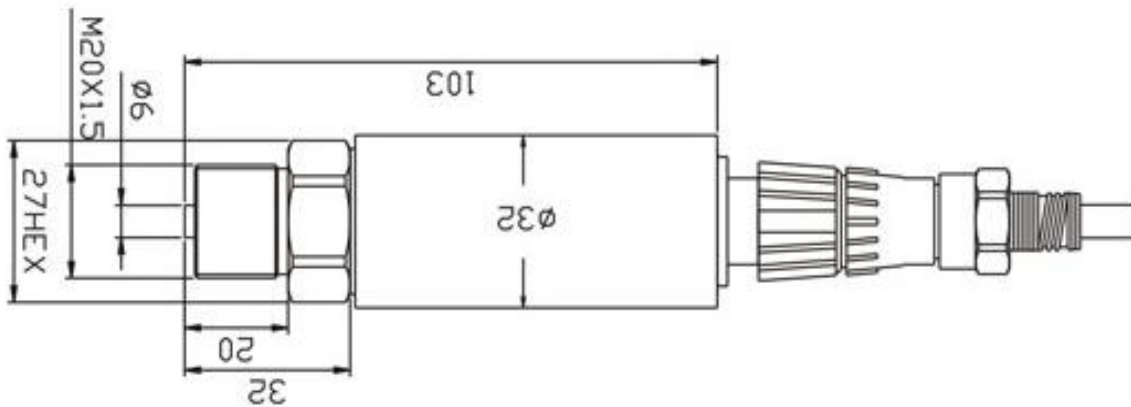
II . Specifications:

Model: Parameter:	P20H/G/S/M				
Pressure Range:	-1 Bar-1 Bar; 0-0.1Bar.....1000 Bar / 0-2 Psi...15000 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 Stability:	Standard: $0.1\%F.S \pm 0.05\%$				
Working/Storage Temp:	-30°C~85°C				
Tempe Compensation:	-10°C~60°C (standard); -20°C~60°C; -20°C~80°C (customized)				
Medium compatible:	Compatible with 316 Stainless Steel or 1Cr18Ni9Ti stainless steel				
Electronic Wire:	2 Wires	3 or 4 Wires	3 Wires	4 Wires	4 Wires
Output:	4~20mA Or 4~20mA+HART	4-20 mA or Double 4-20mA	0~5V ,1~5V, 0-10V	RS485	4~20mA +Temp (Ω)
Power Supply:	12~36 Vdc	12~36 Vdc	8~36Vdc/15-36Vdc	10~30 Vdc	12~36 Vdc
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:	$0.03\%FS/^{\circ}C$ ($\leq 100kPa$) , $0.02\%FS/^{\circ}C$ ($>100kPa$)				
Body materials:	316 stainless steel (standard); 1Cr18Ni9Ti stainless steel optional				
Material of diaphragm:	316L Stainless steel				
Filling oil:	Silicon oil (standard); Fluorocarbon oil (Oxygen Services)				
Electronic connection:	-DIN43650 Hirschman Connector, 4-poles and IP65. -Plug: M12 (4-poles) 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)				
Dimension:	Length: 120 mm (standard); Body diameter: 27 mm (standard). *special size by requested*				
Water Proof:	IP65(P20H,P20G,P20M); IP67(P20S)				
Response time:	$\leq 1ms$				
Endurance:	> 100 million cycles, 0...100 %FS at 25 °C				
Options:	Temperature Range by customized, Maximal range: -40...+120 °C Oil Filling Fluorocarbon oil (O2-compatible), olive-oil, lowest temperature oil (-55 °C) Pressure Connection, Electrical Connection Others on request. withstand Xylene medium pressure and level application (customized)				

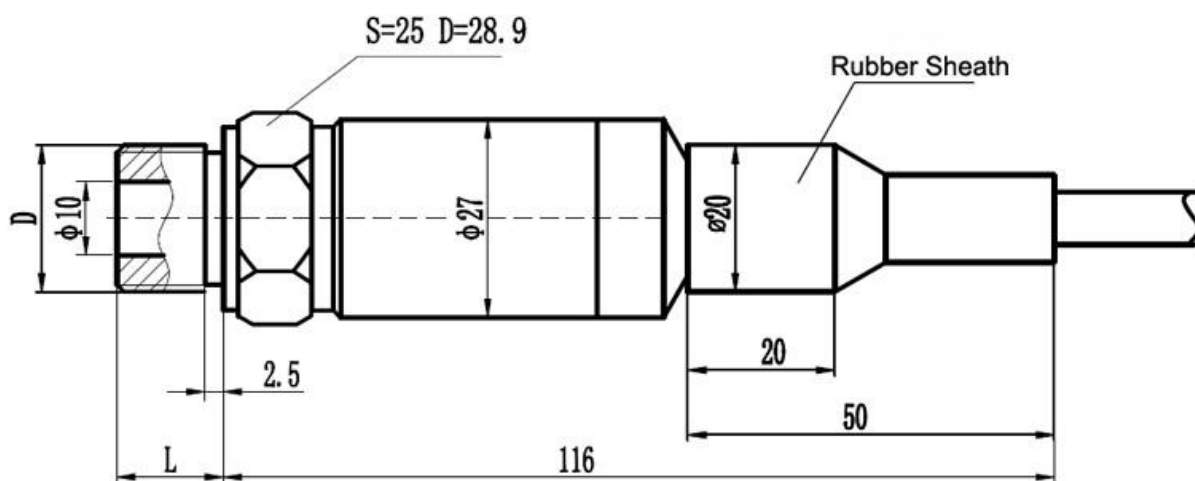
III. Dimension and Drawing:



P20H (body length can short down to total 90 mm)



P20M



P20S

IV. Electronic Connections:

Electronic Wire Connections					
	Power Supply +	Power Supply -	Signal Output +	Signal Output -	Ground & Shield Wire
2 wires, 4-20 mA 4-20mA +HART	Red wire	NA	Green wire	NA	Black wire
3 wires, Double 4-20 mA	Red wire	NA	Green wire (for pressure) Yellow wire (for temp)	NA	Black wire
4 wires, 4-20mA + Temp	Red wire	NA	Green wire (for pressure) Yellow wire (for PT100A) Blue wire (for PT100B)	NA	Black wire
3 Wires,0-5V; 0-10V; 0.5-4.5V	Red wire	Green wire	Yellow wire	Green wire	Black wire

V. Part Number Code Table For Pressure Range:

000	-1-0	016	0-1.5	031	0-10	047	0-125
001	-1-1	017	0-1.6	032	0-12	048	0-150
002	-1-9	018	0-1.7	033	0-15	049	0-200
003	-1-10	019	0-1.8	034	0-16	050	0-250
004	-1-16	020	0-1.9	035	0-20	051	0-300
005	-1-20	021	0-2.0	036	0-25	052	0-350
006	-1-25	016	0-2.1	037	0-30	053	0-400
007	-1-30	022	0-2.2	038	0-35	054	0-450
008	-1-35	023	0-2.3	039	0-40	055	0-500
009	-1-40	024	0-2.5	040	0-50	056	0-600
010	-1-65	025	0-3	041	0-60	057	0-700
011	0-0.5	026	0-4	042	0-65	058	0-800
012	0-1.0	027	0-5	043	0-70	059	0-1000
013	0-1.1	028	0-6	044	0-80	060	0-10000
014	0-1.2	029	0-7	045	0-90	061	0-15000
015	0-1.3	030	0-8	046	0-100	X	Customized

VI.Order Information:

P/N Selection	P20 (Model)	H	3	D	00500	P	1	0	N	G
Electronic Connection	H= Hirschman DIN43650 EX= 1/2"NPT S= Directly Outlet Cable M= M12 (4-pole) Type G= LCD digital display P= Packard									
Output	3= 4-20mA 4= 0.5-4.5V 5= 0-5V 6= 1-5V 7= 0-10V 8= 0.5-4.5V 9= RS485(MODBUS) 10= RS232 11= Double 4-20mA for P+T 12= 4-20mA for P and Ω for T 13= Double RS485 for P+T 14= 4-20mA Hart protocol X= By Customized									
Pressure connection	A= G1/4" B= G1/4" Female D= G1/2" E= G1/2" Female G= 1/4" NPT H= 1/4" NPT Female 5= M20*1.5 6= M10*1.0 7= 1/8"NPT X= By Customized									
Pressure Measurment	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. 3=0.2%F.S. 4=0.1%F.S.									
Cable length	0=Non-Cable 1= Cable 1M 2= Cable 2M x= By Customized									
Other Spec	F= Flush diaphragm N= None (Standard) A= Anti-Corrosion Type O= Oxygen Services X= Withstand Xylene									
Pressure type	G=Gage S=Sealed A=Absolute									

Stock Parts

P20H3D-0010P10NG