

PRODUCT OVERVIEW

PRESSURE MEASUREMENT

P20T Series High Temperature Pressure Transducer & Transmitter



Characteristics

- ☆ Accuracy: $\leq \pm 1\% \text{F.S.}$
- ☆ Wide working temperature scope
- ☆ Advanced digital temperature compensation.
- ☆ Excellent resistance against impact, overload, Shock and erosion.
- ☆ Highly-efficient lighting absorption and strong RFI & EMI resistance
- ☆ Impact resistance and disturbance
- ☆ 1.5 times range standard overload.
- ☆ 3 times range burst pressure

Applications

- ★ Industrial course testing and control
- ★ Automatic testing systems
- ★ Petrochemical industry
- ★ Hydraulic and pneumatic systems
- ★ Pump station and water treatment systems
- ★ Laboratory equipment
- ★ High temp gas pressure measurement
- ★ Automatic detection systems
- ★ Saving water to irrigate
- ★ And so on

Profiles

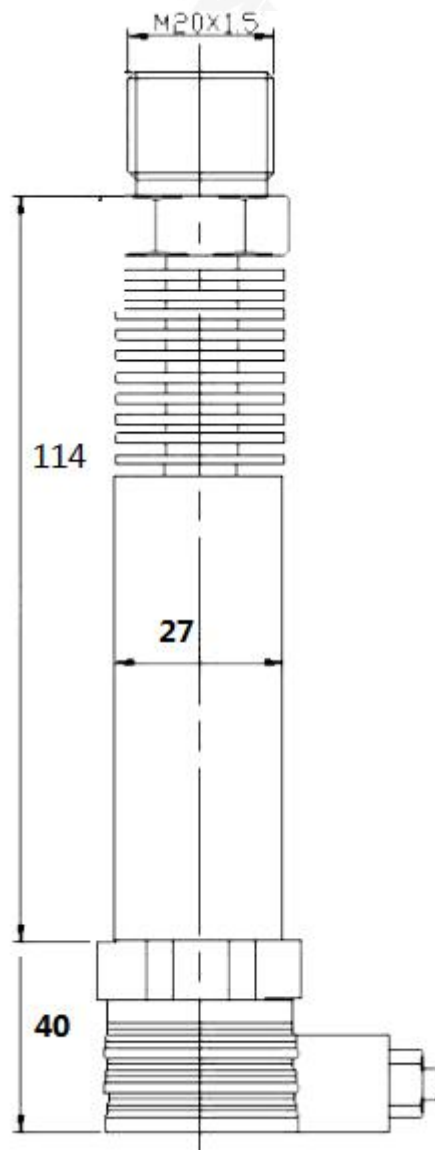
P20T piezo-resistive high temperature transmitter is suited for media temperatures up to 200°C. The pressure acted on diaphragm is transmitted onto imported silicon or sapphire sensing die through the radiating fin. The radiating fin could decrease high media temperature to close to environment temperature by the air heat dissipation function. This design not only do not need additional cooling devices (e.g. water cooling device), but also able to make full use of performance advantages of Piezo-resistive pressure sensor. The integrated high precise PCB amplifies sensor signal into voltage or current signal related to pressure proportionally. The whole transmitter is full welded construction, IP65 protection and good anti-corrosive capability. It can be widely used for pressure measurement of various high temperature media.

Specifications

Model Parameter	P20T				
Pressure Range	-1-0-1 Bar.....2000 Bar Optional				
Pressure Type	Gauge pressure; Absolute pressure; Sealed gauge pressure optional.				
Overload	200% F.S.				
Burst Pressure	400% F.S.				
Accuracy (Linearity Hysteresis Repeatability)	$\leq \pm 1\%F.S$ $\leq \pm 0.5\%F.S$ Including non-lin., rep. and hys. Optional				
Long-term Stability	Standard: $0.3\%F.S \pm 0.05\%$				
Medium Working Temperature Span	-10℃-125℃ (A type) OR -60℃~200℃ (B type)				
Ambient Temp.	0-85℃ (A type) Or -20℃~100℃ (B type)				
Cooling device	With cooling device for max 125℃; With cooling device for max 200℃ optional				
Storage Temp.	-20℃~125℃				
Temperature Compensation	0-85 degree C (A type) OR 0℃~100℃(B type)				
Medium compatible	Compatible with 316L Stainless Steel or 1Cr18Ni9Ti stainless steel				
Electronic Wire	2 Wires	3/4 Wires			
Output	4~20mA	0~10mA	0~5V	1~5V	0.5~4.5V Ratiometric
Power Supply	12~36 V DC	12~36V DC	12~36 V DC	12~36 V DC	5Vdc
Insulate resistance	>100M Ω @100V				
Electric strength	500V@60 second				
Loading resistance	(U-10)/0.02(Ω) for 4-20 mA				
Vibration/impact	10g/5~2000Hz, Axes X/Y/Z 20g sine 11ms				
Zero Temp. Drift	0.05%FS/℃ ($\leq 100kPa$), 0.03%FS/℃ ($>100kPa$)				
FS Temp. Drift	0.05%FS/℃ ($\leq 100kPa$), 0.03%FS/℃ ($>100kPa$)				
Process materials	316L stainless steel				
Body materials	316 stainless steel				
Electrical connection	DIN Hirschmann Terminal Box 4 Pins and IP65. Directly 2 meters cable IP67 optional.				
Pressure connect port	G1/4" male, 1/4" NPT male, 1/2" NPT Female G1/2"; G3/4" male optional. (by customized)				
Water Proof	IP65				
Explosion proof	ExiaIICT6 Intrinsically Safe				
Response time	$\leq 1ms$				
Certificate	CE Certificated				

Dimension and Drawing

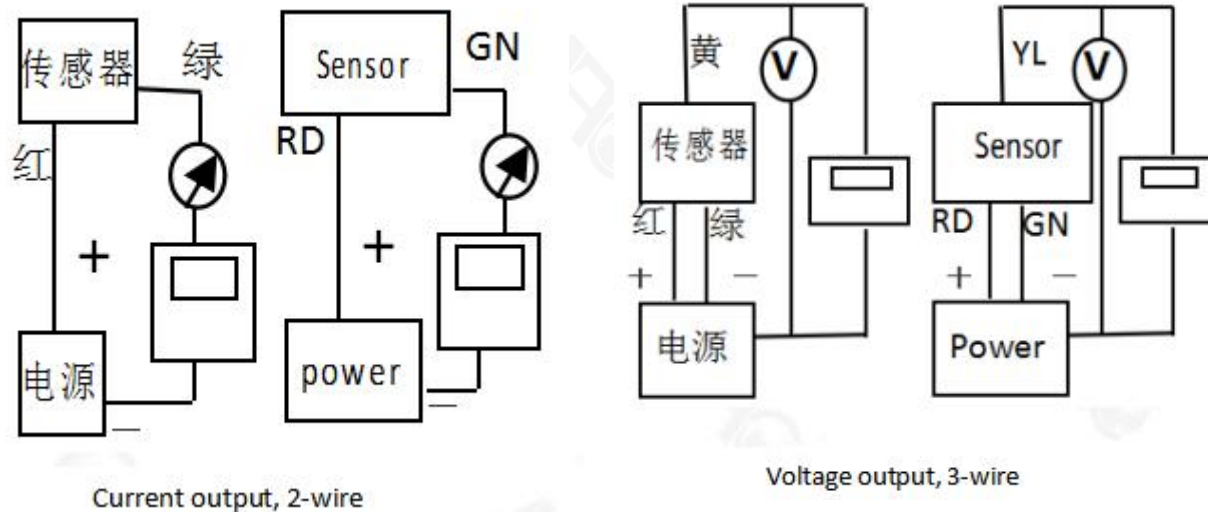
UNIT:mm



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

Electrical Connections

Electrical Wire Connections



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	0-10000
014	0-1.2	030	0-7	046	0-90	062	0-15000
015	0-1.3	031	0-8	047	0-100	X	Customized

Order Information

P/N Selection	P20T (Model)	H	E0	S37	3	010	B	1	1	A	G
Electrical Connection	H= Hirschmann DIN43650 EX=1/2" NPT S= Directly Outlet Cable M= M12 (4-pin) Type G=LCD digital display										
Output	E0=1-5V E5= 4-20mA E6=0-5V E7=0-10V E8=0.5-4.5V X=By Customized										
Power Supply	S37=12~36Vdc S6=5Vdc S17=10~30Vdc X= By Customized										
Pressure connection	3=1/4" NPT male 6=G1/4" male 9=G1/2" male 10=1/2" NPT male 36=G3/4" male X=By Customized										
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 0=1.0%F.S										
Cable length	0=Non-Cable 1=Cable 1M X=By Customized										
Working temp.	A= Max 125 degree C B= Max 200 degree C										
Pressure type	G=Gage	S=Sealed(for big pressure)	A=Absolute								