Sensor Co.,LTD

PRODUCT OVERVIEW

PRESSURE MEASUREMENT

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P20T Series High Temperature Pressure Transducer & Transmitter

P20T

Characters:

☆ Accuracy: ≤±1%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

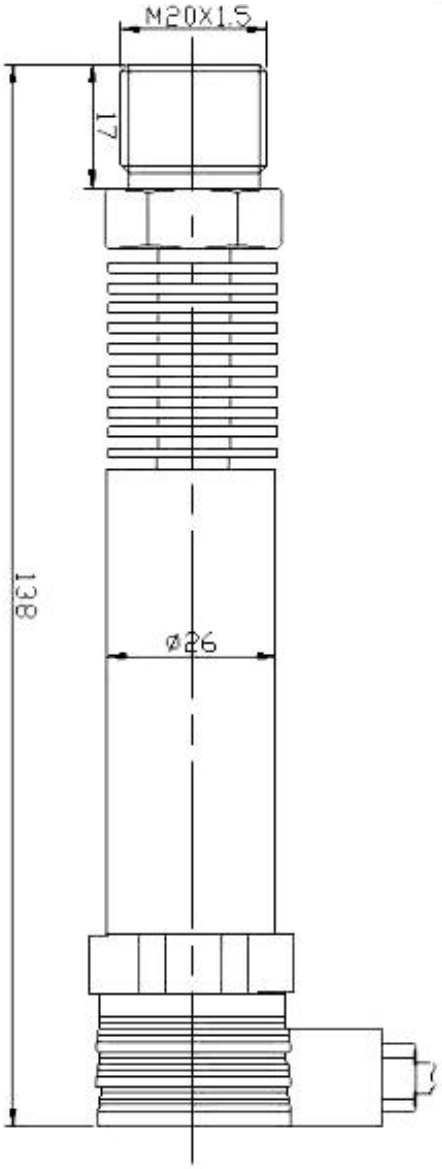
Ⅰ. Profiles:

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 airs 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.

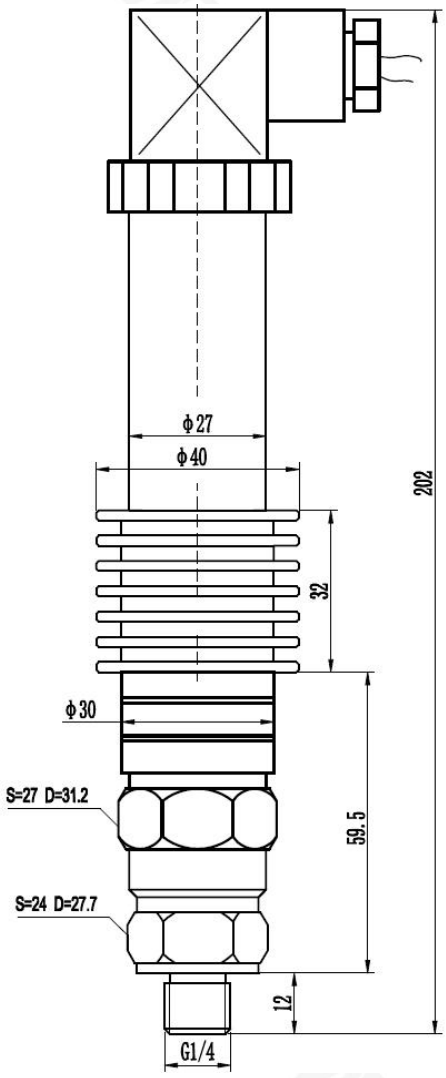
Ⅱ. Specifications:

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)	≤ ±1%F.S ≤ ±0.5%F.S Including non-lin., rep. and hys. Optional				
Long Stability:	Standard: 0.3%F.S±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/℃（≤100kPa）, 0.03%FS/℃（>100kPa）				
FS Temp. Drift:	0.05%FS/℃（≤100kPa）, 0.03%FS/℃（>100kPa）				
Process materials:	316L stainless steel				
Body materials:	316 stainless steel				
Electronic connection:	DIN Hirschman Terminal Box4 Pins and IP65. Directly 2 meters cable IP67 optional.				
Cable length:	2 meters or By customized.				
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				
Explore proof:	ExiaIICT6 Intrinsically Safe				
Response time:	≤1ms				
Certificate:	CE Certificated				

Ⅲ. Dimension and Drawing:



P20T (Max 125 degree C A Type Size)



P20T (Max 200 degree C B Type Size)

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	P20T (Model)	H	3	D	00500	B	1	0	A	G
Electronic Connection	H= Hirchman DIN43650 EX= 1/2"NPT S= Directly Outlet Cable M= M12 (4-pole) Type G= LCD digital display									
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									
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									
Working temperature	A= Max 125 degree C B= Max 200 degree C									
Pressure type	G=Gage S=Sealed gauge pressure type (for big presure) A=Absolute									

Stock Parts

P20T3D-0010P10