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Pressure Transmitter

Committed to process automation solutions

Datasheet

SUP-P300

Add: 5th floor, Building 4,
Singapore-Hangzhou Science & Technology Park,
Hangzhou,China

SUP-P300 Series pressure transmitter is kind of device based on pressure layer, which inside expert integrate circuit can transform sensor milli-volt signal to standard far distance transmission current signal, and it can be directly joined with computer joint clip, control instrument ,aptitude instrument or PLC etc. conveniently. The series' product is applied extensively in the professions, such as the industry process control, petroleum, chemical engineering and metallurgy etc. Carry the distance delivers and can adopt electric current exportation method.

Product advantage

- The physical volume small, the weight is small;
- Work in the causticity environment;
- That product installs the convenience simple and direct;
- The whole stainless steel seals completely the structure,have the very high anti- to flap to pound at the function with anti.

Principle

Pressure Transmitter are devices that convert the mechanical force of applied pressure into electrical energy. This electrical energy becomes a signal output that is linear and proportional to the applied pressure. And a transmitter sends signals in milliamps (mA). At present, various types of pressure sensors, such as diffused silicon, capacitive, silicon sapphire, ceramic thick film, metal strain electric type are widely used in various industries. SUP-P300 is diffused silicon type pressure transmitter.

Features

SUP-P300 pressure transmitter for general industrial applications is not only notable for its compact design, but it also offers excellent at an extremely competitive price.The modular design of the device allows combining a variety of process connections, pressure ranges and electrical connection variants, covering virtually all industrial application requirements.

Highlights

(1)DIN connector type
(2)M12 connector type
(3)Cable connector type

Fully welded pressure measuring cell with
AISI 316L stainless steel diaphragm
Accuracy, terminal based:0.5%
temperature at zero point:±0.03%FS/℃
Measuring range:-1...0-2...1000bar
Ingress protection up to IP65

Applications

Oil industry paper industry chemical industry and so on.

Options and variants

P300G：Pressure transmitter Fins with cooling

PX300：Pressure transmitter with digital display

P350：Hygienic Pressure transmitter with flat film

P400：Pressure transmitter with Shell protection

Technical Data

The following data is provided for general applications. If you require data that is more relevant to your specific application, please contact us.

MEASURE SYSTEM:	
Application Range	Measurement of gauge and absolute pressure in gases and liquids
Measuring Range	-1…0-2…1000bar

TECHNICAL PERFORMANCE	
Pressure Type	Gauge pressure absolute pressure sealing pressure
Power Supply	12VDC 24VDC 12-36VDC
Signal Output	4-20mA 0-20mA 0-5V 1-5V 0-10V RS485
Zero Drift	±0.03%FS℃
Accuracy	±0.5%FS℃,0.3%FS optional
Thermal Sensitivity Drift	±0.03%FS℃
Long Term Stability	≤0.2%FS℃ one year
Frequency Response(-3dB)	5kHz~650kH
Ingress Protection	IP65
Pressure Connection	G1/4, G1/2,1/2NPT,1/4NPT, M20*1.5etc.(optional)
Measure Medium	Gas, water, oil etc. (non-explosion-proof area)
Electrical Connections	DIN connector type, M12 connector, cable connector type
Time Response	＜10ms
Weight	Min，400g（depending on model）

MATERIALS:	
Housing	304/316L stainless steel
Fill Fluid	Silicon oil

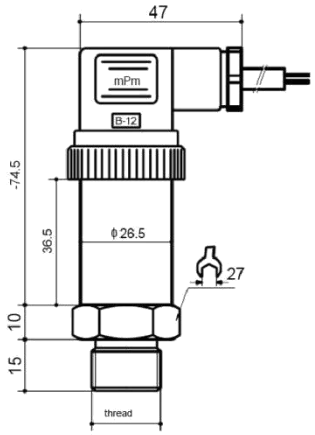
WETTED PARTS:	
Pressure Port	Stainless steel 304 / AISI 316L
Separating Diaphragm	Stainless steel 304/ AISI 316L
Sealing	FKM(medium temperature≤+200℃/392℃F);EPDM; NBR

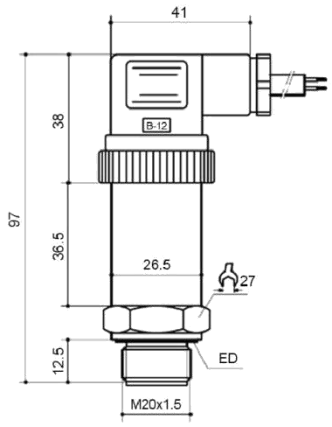
VOLTAGE SUPPLY:		
Output Signal	**Power Supply Standard**	**Option**
4-20 mA	**12VDC**	**12-36VDC**
0-20 mA	**24VDC**	**12-36VDC**
DC 0-5V	**24VDC**	**12-36VDC**
DC 1-5V	**24VDC**	**12-36VDC**
DC 0-10V	**24VDC**	**12-36VDC**

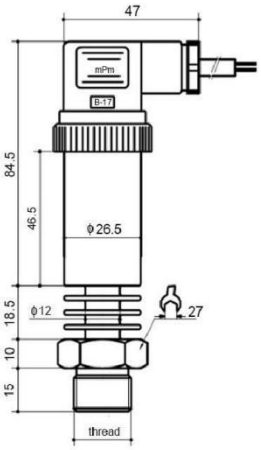
OUTPUT SIGNAL:	
Signal Type	Signal
Current(2-wire)	4-20mA
Voltage(3-wire)	0-5V 1-5V 0-10V

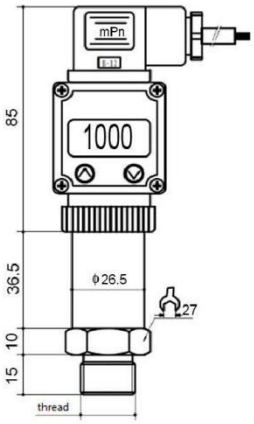
OPERATING CONDITIONS:	
Temperature	-20…+80℃/-4...+176°F
Nominal Temperature	-40…+85℃/-40...+185°F
Ambient Temperature	-40…+100℃/-40...+212°F
Storage Temperature	PN≤40 bar /580 psi：-40…+125℃/-40...+257°F
Medium Temperature	PN≥60 bar /870 psi：-25…+125℃/-13...+257°F
	With cooling fins（optional）： PN≤40 bar /580 psi：-40…+125℃/-40...+257°F PN≤40 bar /580 psi：-40…+125℃/-40...+257°F

SIZE CHART:

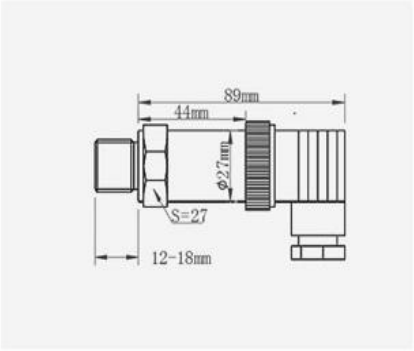




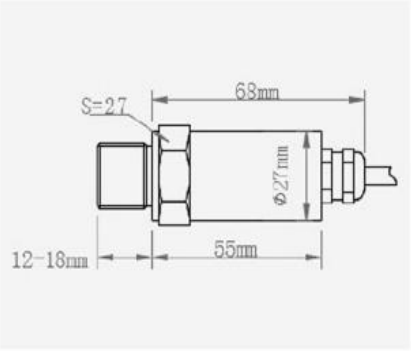




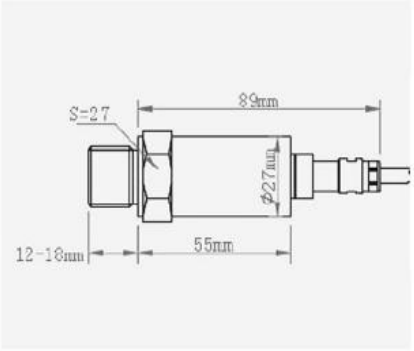
CONNECTOR TYPE:



DIN connector type

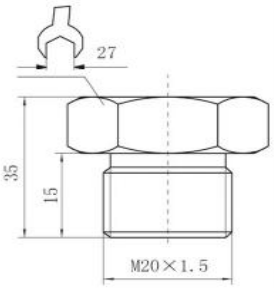
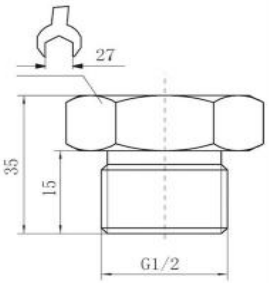
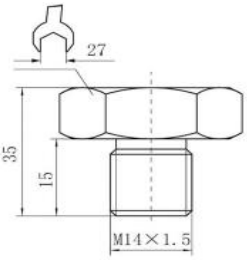
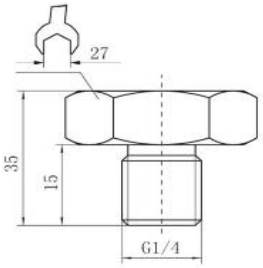


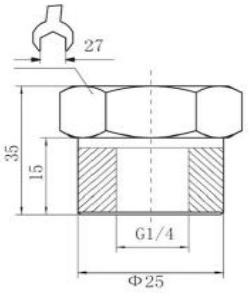
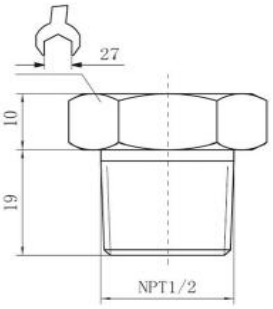
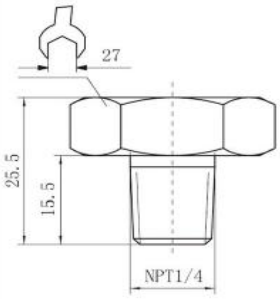
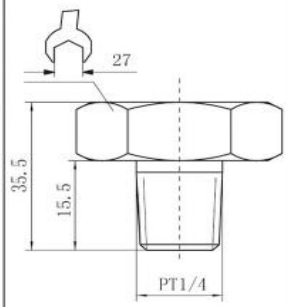
Cable connector type



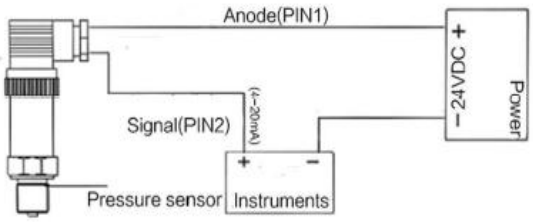
M12 connector type

PROCESS CONNECTION:

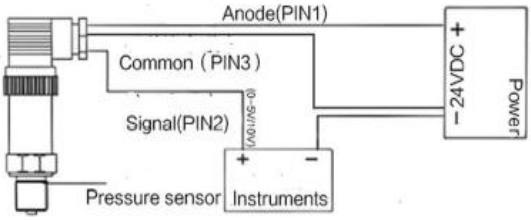
Thread	M20×1.5	G1/2	M14×1.5	G1/4
Size chart unit：mm				
No.	C1	C2	C3	C4

Thread	G1/4内	NPT1/2	NPT1/4	PT1/4
Size chart unit：mm				
No.	C5	C6	C7	C8

TERMINAL ASSIGNMENT:



Two-wire wiring diagram



Three-wire wiring diagram

Ordering Code

Model											Description
	-	-	-	-	-	-	-	-	-	-	
SUP-P300											-
Pressure type	PT1										Gauge pressure
	PT2										Absolute pressure
	PT3										Sealed gauge pressure
Measuring range		R(XX - XX)									-0.1MPa...0 - 10kPa...60MPa
Accuracy			J1								0.50%
			J2								0.30%
Analog output				O0							No analog output
				O1							4 - 20mA output
				O2							1 - 5V output
				O3							0 - 5V output
				OZ							Others
Communication output					D0						No communication output
					D1						RS485
Mounting thread						I1					M20*1.5
						I2					G1/4
						I3					G1/2
						I4					M14*1.5
						I5					NPT1/4
						I6					NPT1/2
						IZ					Others
Electrical Interface							EI1				DIN connector
							EI3				Cable connector
							EI4				M12 connector
							EIZ				Others
Power supply								V1			24VDC
								V2			12VDC
Ingress Protection									IP1		IP65
									IP2		IP68
Cable length										CS2	2m (Standard)
										CSXX	XX m (Custom length)