



principle and characteristics

PN30C series monocrystalline silicon pressure transmitter adopts full isolation circuit technology design, to isolate the power supply and sensor signals, improve the stability and anti-interference ability of the whole machine. Especially for the work site of the frequency converter and motor and other equipment generated by a variety of strong interference signals with strong anti-interference ability, in the anti-high frequency interference signal aspect is better than similar products at home and abroad.

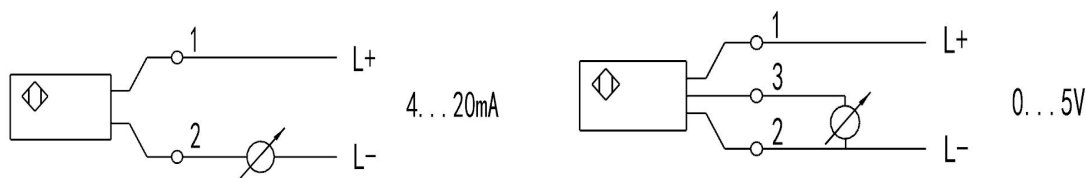
PN30C series mono-crystalline silicon pressure transmitter also has the function of parameter data backup and recovery. When the data is wrongly modified or damaged, three keys can be used to restore the modified or damaged data online.

PN30C series single crystal silicon pressure transmitter is added with a coded potentiometer, without opening the transmitter table cover, in the instrument shell outside the rotation of the coded potentiometer, you can adjust the zero pressure. The site use is convenient and flexible, the use efficiency is greatly improved. The key function of the intelligent transmitter can be realized by the communication software or the hand operation device produced by our company.

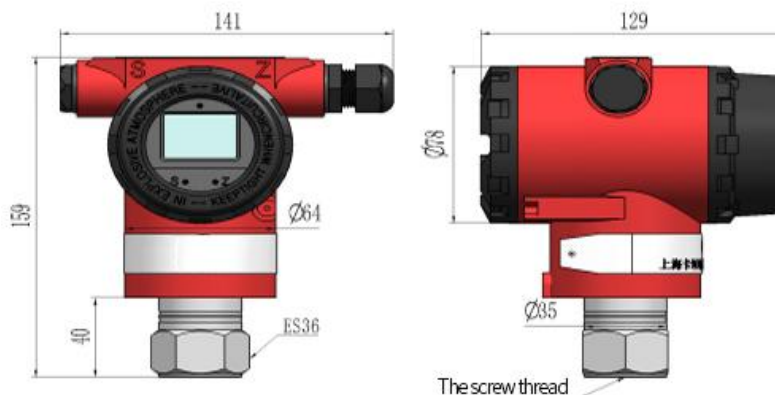
Technique Data

- ◆ Scope of use: liquid, gas and steam.
- ◆ Basic error: $\pm 0.075\%$, 0.1% , 0.2% .
- ◆ Quantity range: See range table
- ◆ End-base consistency error: $\pm 0.1\%$, 0.2% , 0.3% . Repeatability error: 0.1% , 0.2% , 0.3% .
- ◆ return difference: 0.1% , 0.2% , 0.3% .
- ◆ Stability: within the range of measurement, within one year, the basic error is not exceeded.
- ◆ Anti-interference characteristics: $1 \sim 100\text{KHz}$ frequency conversion interference signal with peak value of $1 \sim 380\text{VAC}$ is added to the power supply and shell, and the output variation of $4 \sim 20\text{mA}$ is less than $\pm 0.2\%$.
- ◆ Temperature influence: for DP and GP class, range code $4 \sim 8$, error $< \pm 0.15/10^\circ\text{C}$, maximum range limit; For other types and other ranges, the error is doubled.
- ◆ Constant current performance: variation $< 0.075\%$.
- ◆ Insulation performance: Power resistance to the ground $>400\text{M}$.
- ◆ Response time: When powered up, the response time is less than 2 seconds. Mental acuity: lower limit and range change $< 0.01\%$.
- ◆ Power supply voltage change: lower limit and range change $< 0.02\%$.
- ◆ Steady-state variation: the power supply is interrupted for a short time, and the variation is $< 0.02\%$. Over-standard range: lower limit and range change $< 0.05\%$.
- ◆ Static pressure error: DP class, for 14MPa , the change of lower limit is $< \pm 0.3\%$; For HP class, for 32MPa , the change of lower limit value was $< \pm 0.5\%$.
- ◆ Influence of external magnetic field: in a magnetic field of 400A/m (root mean square), the variation is less than 0.05% .
- ◆ Mechanical vibration: vibration frequency: 50Hz , full amplitude: 0.2mm , lasting 2 hours of vibration, residual lower limit and range change $< 0.075\%$.
- ◆ Installation position effect: when the sensor center measuring diaphragm is not vertical, there may be a zero position system error of not more than 0.24kPa , but this error can be eliminated by adjusting the zero pressure fine tuning, and it has no effect on the range.
- ◆ Guide connection: the connecting hole on the pressure chamber is $1/4-18\text{NPT}$, and the connecting hole on the pressure lead joint is $1/2-14\text{NPT}$. The center distance can be changed by adjusting the connecting head.
- ◆ Electrical connection: The transmitter housing has two $\text{M}20 \times 1.5$ screw holes for connecting the cable conduit. The housing is provided with a terminal and a test gasket, which can be fixed on the test gasket if it is connected with the communicator.
- ◆ Volume absorption: $< 0.16\text{C m}^3$

wiring diagram



dimension figure



Selection table

PN30C-	A	1	B	2	4	G2	H	specification
PN30C-								PN30C series high precision
	A							absolute pressure
	B							gage pressure
		1						Range: 100... 0KPa
		2						Range: 100... 100KPa
		3						Range: 100... 500KPa
		4						Range: 0... 6KPa
		5						Range: 0... 35KPa
		6						Range: 0... 70KPa
		7						Range: 0... 100KPa
		8						Range: 0... 200KPa
		9						Range: 0... 500KPa
		10						Range: 0... 1000KPa
		11						Range: 0... 2.5 MPa
		12						Range: 0... 7MPa
		13						Range: 0... 10MPa
		14						Range: 0... 25MPa
		15						Range: 0... 40MPa
		16						Range: 0... 60MPa
		17						Range: 0... 100MPa
								Customized range: user-defined
			A					no display
			B					With LCD display head
				1				Accuracy grade: 0.1%
				2				Accuracy grade: 0.2%
					4			4-20mA analog output
					5			0-5V voltage output
					0			0-10V voltage output
					H			HART
					4H			4-20mA analog output +HART
					R			RS485 communication
						G2		Connection mode: G1/2 thread
						M2		Connection mode: M20*1.5 thread
						G4		Connection mode: G1/4 thread
						M7		Connection mode: Flush film M27*2
						K		Connection mode: sanitary chuck type
						D...		Connection mode: flange, type D...
								Custom thread
							H	internal thread
							K	external thread

* The selection table is only available for parameter selection, and the corresponding code is delivered.