

principle and characteristics
 PN52C series pressure (level) transmitters use capacitive pressure core working, high and low pressure side of the isolation diaphragm and filling fluid to transfer the process pressure to the filling fluid, and then the filling fluid to transfer the pressure to the sensor center of the sensing diaphragm. The sensing diaphragm is a tensified elastic element whose displacement varies with the pressure applied (for a gauge transducer, atmospheric pressure is applied as on the low pressure side of the sensing diaphragm). The adiabatic pressure transmitter maintains a reference pressure at all times on the low pressure side. The maximum displacement of the sensing diaphragm is 0.1 mm, and the displacement is proportional to the pressure. The capacitive plates on both sides detect the position of the sensing diaphragm. The capacitance difference between the sensing diaphragm and the capacitor plate is converted to the corresponding current or digital HART output signal.

technical specification

- ◆ Measuring range: 0... 5000 kpa can be customized
- ◆ Display unit: LCD LCD screen
- ◆ Power supply voltage: 12... 36VDC
- ◆ Output signal: 4... 20mA,HART
- ◆ Measuring accuracy: 0.5,0.2% F.S.
- ◆ Repeatability: ≤0.1% full scale
- ◆ Measuring hysteresis: ≤ ± 0.01% full scale
- ◆ Stability: < 0.01%/ year
- ◆ Medium temperature: -30... 300 °C
- ◆ Ambient temperature: -30... 85 °C
- ◆ Electrical connection: Fastener, M20*1.5, NPT1/2
- ◆ Protection grade: IP65
- ◆ Explosion-proof mark: flameproof type EXDIICT6,
- ◆ intrinsically safe EXIA IICT6

Main features

- ◆ Stainless steel and Hastelloy Cr process isolation diaphragm
- ◆ Single isolation diaphragm design
- ◆ stable performance, high precision, high temperature resistance
- ◆ A variety of optional filling liquid, can meet the requirements of different occasions
- ◆ Range, zero external continuous adjustable
- ◆ Adjustable damping and high pressure resistance application

Mainly used for liquid and gas measurement such as: food, chemical, paper, medicine and other hygienic cleaning requirements of high temperature requirements, high viscosity medium and corrosion resistance needs occasions

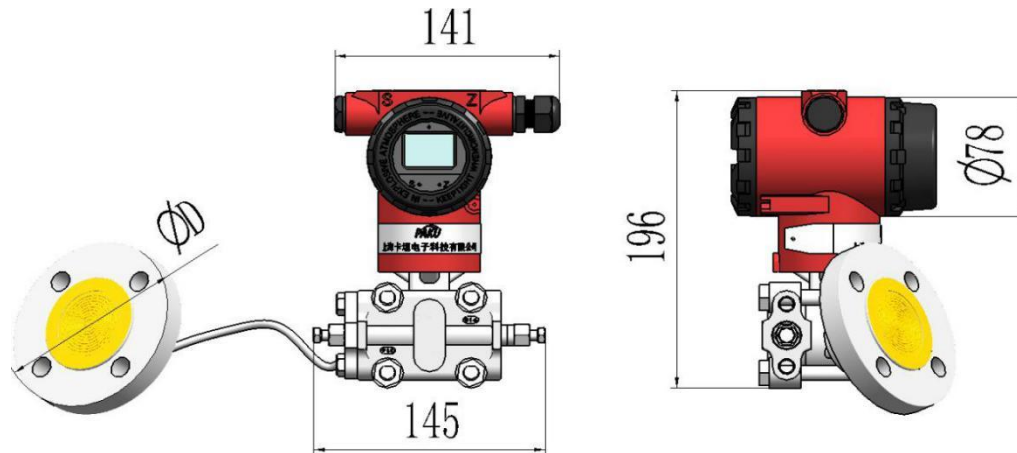
Range of code

code	range	code	range	code	rang
GP1	-100...0kPa	GP7	0...500kPa	GL5	0...5m
GP2	-100...100kPa	GP8	0...2500kPa	GL6	0...6m
GP3	-100...500kPa	GP9	0...5000kPa	GL10	0...10m
GP4	0...35kPa	GL1	0...1m	GL15	0...15m
GP5	0...100kPa	GL2	0...2m	GL20	0...20m
GP6	0...250kPa	GL3	0...3m	GL25	0...25m

note

: 1bar=0.1MPa=100KPa=1.0197kg/cm2

dimension figure



Selection table

PN52C-	GP1	4	D2	M2	L3	A	A	specification
PN52C								PN52C series pressure (liquid level)
	GP							Optional range (see range table)
	GM0							Range: 0–1.0 MPa
	GM1							Range: 0–1.6 MPa
	GM2							Range: 0–2.5 MPa
	GM4							Range: 0–4.0 MPa
	GM1							Range: 0 to 10 mpa
	GL							Liquid level range (see range table)
		4						Output 4... 20mA
		H						Output 4... 20mA+HART
			D2					DN25 flange installation
			D5					DN50 flange installation
			D8					DN80 flange installation
			K5					Clamp type (50.5mm outside diameter)
				G				Self-Clinching Fasteners
				M2				Electrical interface M20*1.5 inner teeth
				N2				Electrical interface NPT1/2 inner teeth
					L3			Capillary Length L (m) --- Standard 3 m
					LA50			Inserting barrel length 50 (mm) – optional
						A		Liquid stainless steel diaphragm 316L
						B		Liquid polytetrafluoroethylene PTFE coating
						C		Hastelloy alloy C coating
						D		Monel metal
							A	standard form
							B	flame-proof type
							C	intrinsic safety type
							A1	A1: LCD display header A2: No display
							B1	B1 tube mounting bending support: B2 plate
							B3	B3: Flat support for pipe mounting
							C1	1/4NPT
							C2	T-thread joint M20x1.5
							C3	Weld 14 pressure tubes at the back of 1/2NPT pressure transition joint
								Optional accessories

* The type selection table is only for technical selection, and the corresponding type of the factory model is reflected by the code.