



principle and characteristics

When PN52D series pressure (level) transmitter works with capacitive pressure core, the isolation diaphragm and filling fluid at the high and low pressure sides will transfer the process pressure to the filling fluid, and then the filling fluid will transfer the pressure to the sensing diaphragm at the center of the sensor. 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.

main feature

- ◆ 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

technical specification

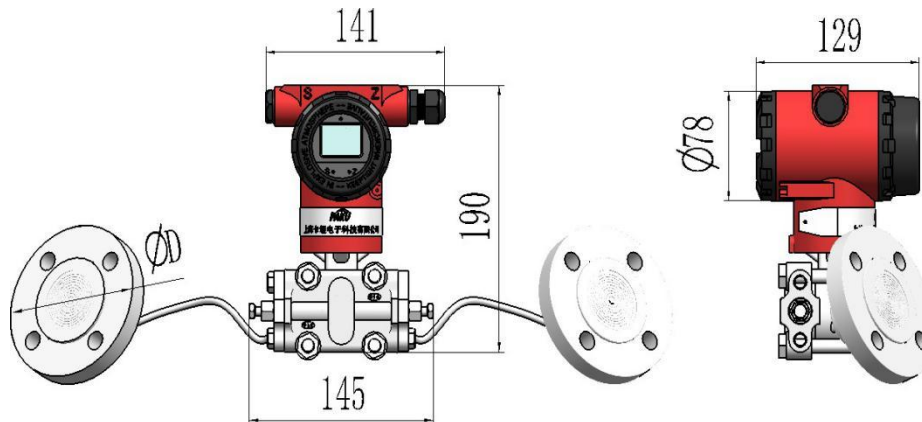
- ◆ Measuring range: 0... 5000 kpa can be customized
- ◆ Display unit: LCD LCD screen
- ◆ Power supply voltage: 12... 36VDC
- ◆ Output signal: 4... 20mA,HART
- ◆ Measuring accuracy: 0.5,0.2% F.S.
- ◆ Repeatability: ≤0.1% full scale
- ◆ Measuring hysteresis: ≤ ± 0.01% full scale
- ◆ Stability: < 0.01%/ 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

Range of code

code	range	code	range	code	range
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

PN52D	GP1	4	D	M	L3	H3	A	A	specification
PN52D-									PN52D series pressure (liquid level) transmitter
	GP								Optional range (see range table)
	GM01								Range: 0–1.0 MPa
	GM1.6								Range: 0–1.6 MPa
	GM2.5								Range: 0–2.5 MPa
	GM4.0								Range: 0–4.0 MPa
	GM10								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) Low Voltage End -- Standard 3 m
					LA5				Inserting barrel length 50 (mm) – optional
						H3			Capillary Length H (m) High Pressure End -- Standard 3 m
						HA5			Inserting barrel length 50 (mm) – optional
						HA...			Inserting barrel length (mm) – optional
							A		Liquid stainless steel diaphragm 316L
							B		Liquid polytetrafluoroethylene PTFE coating
							C		Hastelloy alloy C coating
								A	standard form
								B	flame-proof type
								C	intrinsic safety type
								A	A1: LCD display header A1: No display header
								B	B1 tube mounting bending support: B2 plate
								B	B3: Flat support for pipe mounting
								C	1/4NPT
								C	T-thread joint M20x1.5
								C	Weld 14 pressure tubes at the back of 1/2NPT
									Optional accessories

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