Mechanical adjustable pressure switch P20 series



principle and characteristics

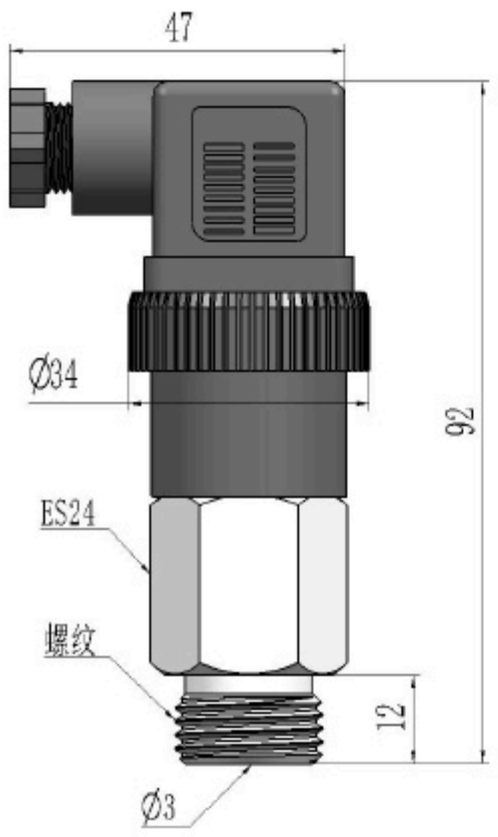
The built–in piston is connected to the precision spring, and when the pressure changes, the spring expansion will change accordingly. When the pressure reaches the set value, the preset mechanical structure will be triggered and the switch signal will be sent.

Compact structure, solenoid valve standard plug, wiring is extremely convenient, wide measurement range (0–400bar). High overload capacity (up to 1230bar), high repeatability, normally open or normally closed contact, gold–plated contact, large contact capacity. Can be used for water, oil, gas pressure measurement.

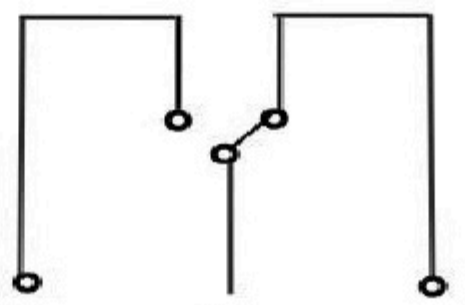
technical specification

- Measurement range: See the table below
- Hysteresis: 10... 20% set value (25%–35%, 1%–5% optional)
- Error: 3% set value
- Output: Normally open + normally closed contacts gold plated
  - ≤DC 42V,1A
  - ≤DC 115V,0.15V
  - ≤DC 42V,3A
  - ≤DC 125V,3A
  - ≤DC 250V,0.5A
- medium temperature: –20... 85 ℃ (– 40... 160 ℃ optional)
- Protection Protection: IP65
- Wiring mode: terminal wiring
- Material: Diaphragm: NBR
- Piston: Steel piston with NBR seal
- Process connection: galvanized steel/stainless steel
- Shell: steel + engineering plastic

dimension figure



wiring diagram

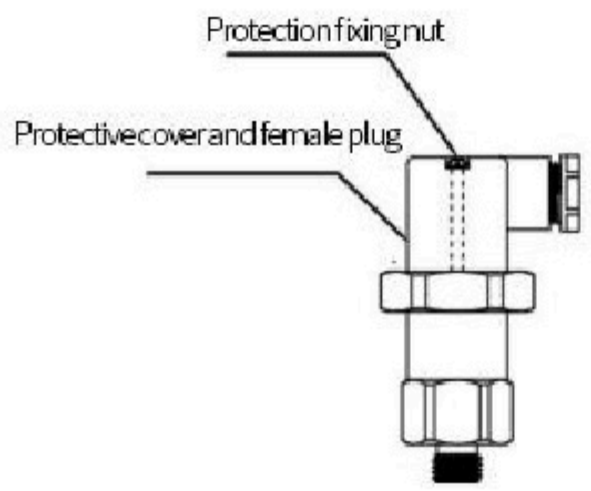


parameter list

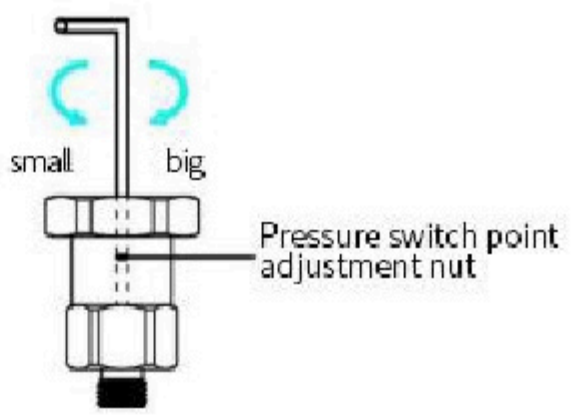
Interface material	model	MPa (bar)	setting range (bar)	error	Fixed hysteresis	weight (kg)
diaphragm type servomotor	P20–02.5	300	0.2––2.5	3% of the set value	10% – 20% value 25–35% value (optional) 1% – 5% value (optional)	0.1
	P20–005	300	0.8––5.0			
	P20–012	300	1––12			
	P20–050	300	5––50			
	P20–100	600	10––100			
piston	P20–200	600	20––200			
	P20–400	600	50––400			

* 1bar=0.1MPa

accommodation mode



Step 1: Loosen the protective cover fixing nut with a screwdriver and remove the protective cover and female plug (do not rotate the Hersman joint around to avoid breaking the internal line



Step 2: Adjust the pressure switch point with a screwdriver as shown in the figure above, increasing it clockwise and decreasing it counterclockwise

Selection table

P20-	C	N	A	G1	H	R	specification
P20–							P20 series mechanical adjustable
	A						Measuring range: 0.2––2.5bar
	B						Measuring range: 0.8––5bar
	C						Measuring range: 1––12bar
	D						Measuring range: 5––50bar
	E						Measuring range: 10––100bar
	F						Measuring range: 20––200bar
	G						Measuring range: 50- - 400bar
		N					Alarm point setting, such as 7bar
			A				Material: galvanized steel
			B				Material: 304 stainless steel
			C				Material: stainless steel 316L
				G1			Interface thread: G1/2
				G2			Interface thread: G1/4
				G3			Interface thread: G1/8
				N1			Interface thread: NPT1/4
				N2			Interface thread: NPT1/8
				M1			Interface thread: M12*.1.5
				M2			Interface thread: M14*.1.5
				M3			Interface thread: M20*.1.5
							Custom thread
					H		external thread
					K		internal thread
						R	Normally open + normally closed

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