FULLKON

Measuring principle

The pressure transmitter operates based on the piezoresistive effect.
The measured medium pressure acts directly on the sensor diaphragm, producing a micro-displacement proportional to the pressure. This changes the sensor resistance, which is detected and converted by the electronic circuit into a standard output signal.

Recorder | Flow | Temp | Analyzer | Level | Pressure

Special characteristics

- High-performance diffused silicon piezoresistive sensor
- Wide pressure measurement range
- Optional digital display
- Multiple output signal options

Features

- High Precision Options: Available in accuracy grades of 0.2, 0.25, and 0.5.
- Reliable Stability: Long-term stability maintained at ±0.2%FS/year.
- Fast Response Speed: T90 ⩽10ms for analog outputs (Current/Voltage) and ⩽100ms for RS485.
- Temperature Performance: Compensated temperature ranges from -10 ° C to 70 ° C.

This transmitter features an imported high-precision diffused silicon core and a built-in amplifier to output standard signals (Current, Voltage, RS485). It allows direct connection to PLCs, PC interface cards, and control instruments, making it widely suitable for industrial control, petroleum, chemical, and metallurgy sectors.

Preferred areas of use are

Widely used for accurate pressure measurement in industrial process control, petroleum, chemical, metallurgy, and other industries.

Material and test

CE PA ISO

Tel: +8613362159512
E-mail:info@fullkon.com
www.fullkonsensor.com

Parameters

Measuring Range	-100kPa ~ 0...10kPa ~ 60MPa
Output	4–20 mA (with/without display), 0–5V, 1–5V, 0–10V, RS485 (Modbus)
Power Supply	9–32 VDC (4–20 mA without display) 12–32 VDC (with display or voltage output) 10–32 VDC (4–20 mA + RS485)
Accuracy	0.2 / 0.25 / 0.5 class
Long-term Stability	±0.2% FS/year (range below 35kPa scaled accordingly)
Response Time	Current/voltage: T90 ≤ 10 ms RS485: T90 ≤ 100 ms
Overload Pressure	150% FS (0.035~10 MPa) 125% FS (10~60 MPa)
Medium Temperature	-20 ~ 85 °C
Ambient Temperature	-20 ~ 85 °C
Storage Temperature	-40 ~ 85 °C
Ingress Protection	IP65
Electrical Connection	M20 × 1.5 internal thread or 1/2" NPT
Materials	Housing: Aluminum alloy Diaphragm: 316L stainless steel Process connection: 304SS or 316LSS

Technical Data

Dimension

1 Standard Type

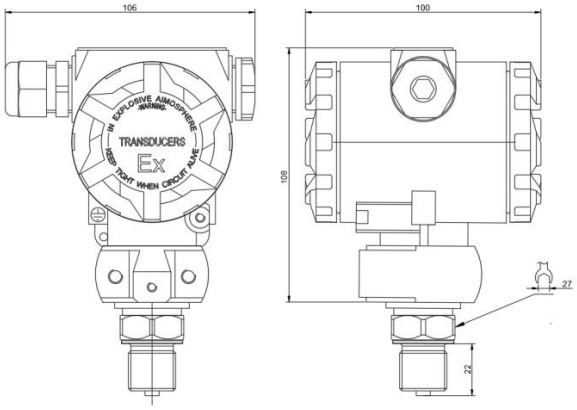

Figure 1: Dimensions of the conventional pressure transmitter (unit: mm)

2 With Display Type

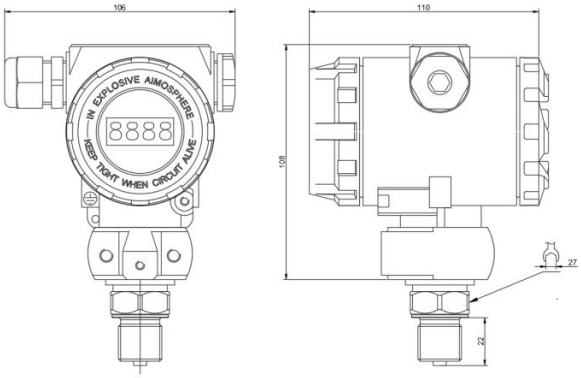

Figure 2: Dimensions of the display-equipped pressure transmitter (unit: mm)

3 High Temperature Type (with five heat sinks)

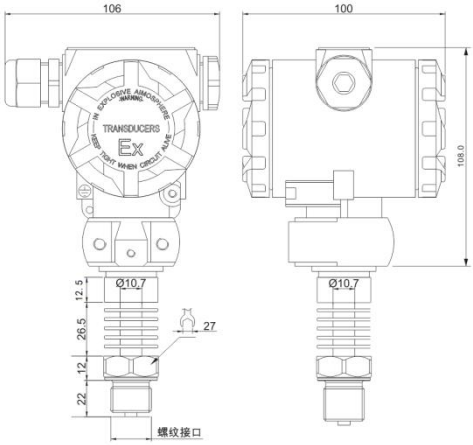

Figure 2: Dimensions of the display-equipped pressure transmitter (unit: mm)

Ordering Code

FK-P400G-A-E-G-1A-K-A1-9-L2-A-W7-00-PA															Description
P400G	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Pressure transmitter
Sensor type	G														Gauge pressure
	A														Absolute pressure
	X														others
Measuring range		1A													-100-0kPa
		1B													-100-100kPa
		1C													-100-1000kPa
		1L													0-10kPa
		1M													0-20kPa
		1N													0-30kPa
		1Q													0-50kPa
		1S													0-100kPa
		2A													0-0.6MPa
		2B													0-1MPa
		2C													0-1.6MPa
		2D													0-2.5MPa
		2E													0-4MPa
		2H													0-10MPa
		2K													0-20MPa
		2L													0-25MPa
		2M													0-30MPa
		2N													0-40MPa
		2P													0-60MPa
Accuracy			K												Level 0.5
Output and Power Supply				A1											Two-wire 4-20mA
				A2											1-5V, 24VDC
				A3											0-10V, 24VDC
				A4											0-5V, 24VDC
				A5											RS485, 24VDC
				A6											0.5-4.5V, 5VDC
				X											others
Heat sink					9										9 pieces
Process connection						L2									M20×1.5 external thread
						G2									G1/2 External Thread
						G1									G1/4 External Thread

	NA								NPT1/4 External Thread
	NC								NPT1/2 External Thread
	ND								NPT1/2 Internal Thread
	L1								M14×1.5 external thread
	X								others
Diaphragm and process connection materials		A							316LSS, 304SS
		B							316LSS, 316LSS
		X							others
Electrical interfaces, housing material and protection level			W7						M20×1.5 external thread, cast aluminum, IP65
			XX						others
Cable length / capillary length				00					0m
				XX					others
Additional features (optional)									
Accessories					PA				Threaded base carbon steel CS
					PB				Threaded base 304SS
					PD				304SS condenser bend
Example						Model			P300-E-G1AKAL2AWA02
						Specification			Pressure transmitter, gauge pressure, -100-0 kPa, 0.5 class, two-wire 4-20 mA, M20×1.5 thread, 316LSS diaphragm, process connection material 304SS, Hirschmann connector, 304SS housing, IP65, 2m cable.