

## FC0803G Diaphragm Pressure Transmitter

### Production application

The series of products were based on the prototype of FC0802 and FC0803 pressure transmitters, formed through adding the welded seal diaphragm structure. There are various processes connection structures of the welded seal diaphragm devices, especially fit the pressure measurement of the medium which has high temperature, high viscosity, easy to crystallize, and the occasion which is easy to block, it also fit the pressure measurement of health and medical occasions.

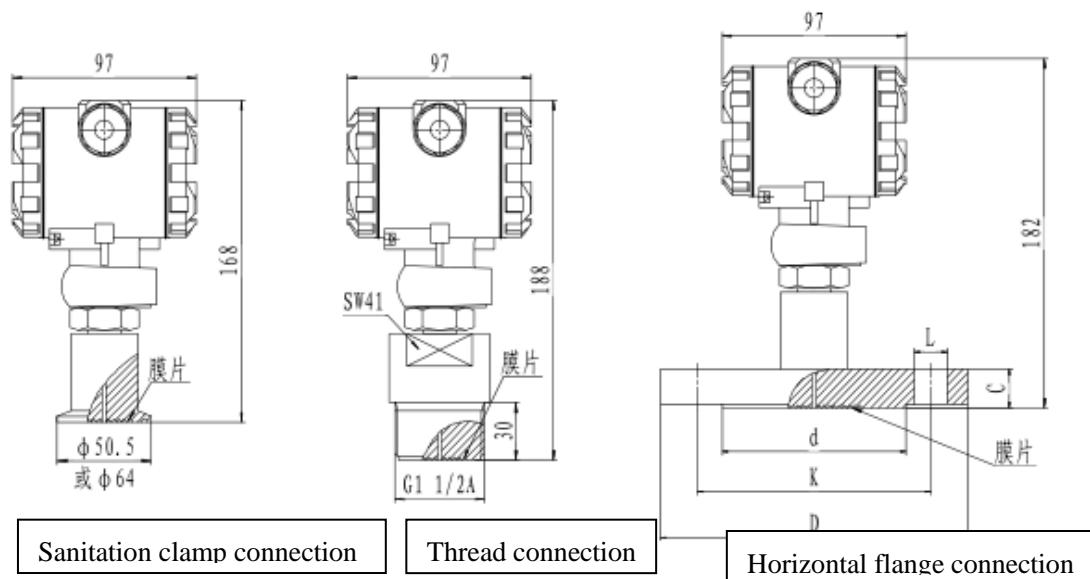


### Features

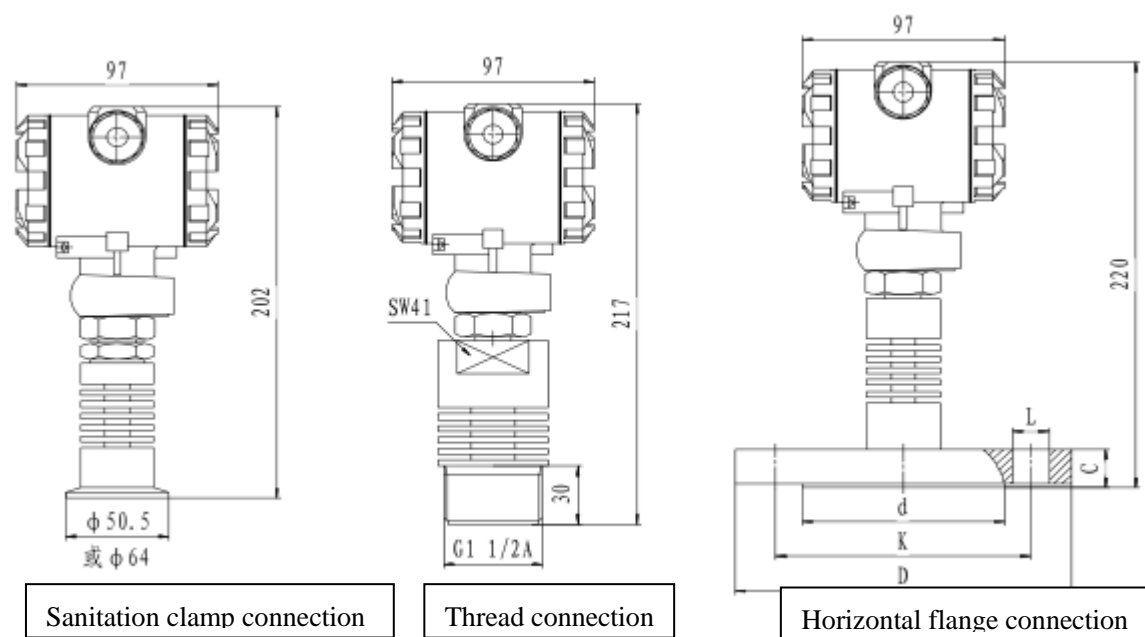
- Using ceramic capacitance pressure sensor or diffused silicon pressure sensor;
- Can measure the gauge pressure and absolute pressure of gases, vapors and liquids;
- Suitable for the pressure measurement of large, medium-sized equipment and production process control;
- The explosion-proof type has intrinsic safety Exia II CT6 and flame-proof Exd II CT6;
- Output: Intelligent type 4 ~ 20mA ADC two-wire system + Fieldbus HART protocol;
- Accuracy:  $\pm 0.25\%$  FS,  $\pm 0.5\%$  FS;
- Small temperature influence, high repeatability, good long-term stability;
- Overload pressure is from 10 times to 100 times of the full scale pressure;
- Diaphragm is made of stainless steel 316L;
- Process connection material is made of stainless steel 304, with a variety of process connection types and specifications;
- Polyurethane (PU) paint low copper die-cast aluminum alloy case, protection level is superior to IP65.

## Structure size

### Normal temperature



### High temperature type



DN Nominal diameter	D External diameter of flange	K Center diameter of bolt hole	L Bolt hole diameter	d Sealing Face Diameter	C Flange Thickness
50	165	125	4-Φ18	99	20
80	200	160	8-Φ18	132	24

## Mode selection diagram

Code				Illustration
FC0803G				Diaphragm type pressure transmitter
Range of Measurement	0~3.5			Directly write numerical value (MPa)
Signal output		S		Intelligent type 4~20mA DC, two-wire system + Fieldbus Hart protocol
Accuracy grade		J1		0.25
		J2		0.5
Process connection		L3		Thread connection, External thread G1 1/2" A
		L5		Sanitation clamp interface 1 1/2" (Interface diameter 50.5mm)
		L6		Sanitation clamp interface 2" (Interface diameter 64mm)
		L7		Horizontal flange connection DN50
		L8		Horizontal flange connection dn80
		O		Provide size processing according to users
Temperature of the measuring medium		TN		Normal temperature type ( $\leq 70^{\circ}\text{C}$ )
		TH		High temperature type ( $\leq 130^{\circ}\text{C}$ )
Option			d	Flame-proof type ExdIICT6
			i	Intrinsic safety type ExiaIICT6
			M3	Digital display meter 3 1/2 LCD
			G	Gauge pressure measurement
			F	Absolute pressure measurement (customized by user's appointment)

	A	Negative pressure measurement (customized by user's appointment)
	S	process adapting piece
	Y	User's appointment

Illustration: 1) If the measured pressure overloads, please give overload pressure value.  
2) Temperature of measured medium is as high as 130 °C or below 20 °C, suggesting using the temperature isolator or capillary structure, to ensure that the sensor from being damaged.