



Recorder



Flow



Pressure



Temp



Analyzer



Level

Datasheet

Flat membrane pressure transmitter

SIN-P450

Sinomeasure

Committed to process automation solutions

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Datasheet**Flat membrane pressure transmitter
SIN-P450**

The flat membrane pressure transmitter uses a corrugated membrane to directly sense the pressure. The sensor's flat diaphragm prevents fouling, unsanitary and clogging of viscous liquids. It has the characteristics of small size, light weight and good long-term stability, and is widely used in food, medicine, health and brewing industries.

Applications

- Food
- Medicine
- Oil industry
- Paper industry
- Chemical industry

Features

- Compact structure and easy installation.
- Advanced diaphragm/oil-filled isolation technology.
- High stability and high reliability.
- Anti-vibration, anti-radio frequency interference.
- 316L stainless steel isolation diaphragm structure.
- Micro amplifier, voltage, current, RS485 signal output.
- Strong anti-interference, good long-term stability.
- Wide range and multiple mode pressure

**Flat membrane pressure transmitter**

Parameters

Details	
Power supply	4-20mA output (10-32V); 0-10V output (12-32V); RS485 output (5-28V)
Output	4~20mA; 1~5V; 0~10V; 0~5V; RS485
Accuracy	0.5%FS
Threaded connection flat film range	-0.1...0...10MPa (the measuring range cannot be lower than 10KPa)
Clamp connection flat film range:	-100kPa...0~10kPa...7MPa
Pressure type	Gauge pressure, Sealing pressure
Compensation temperature	-10℃~70℃
Working temperature:	-20℃~85℃
Medium temperature	-20℃~85℃
Zero temperature drift	±0.3%FS/10℃
Full-scale output temperature drift:	±0.3%FS/10℃
Long-term stability	±0.2%FS/year
Response time	Current and voltage output pressure≤10ms (up to 90%FS); RS485 output pressure≤100ms (up to 90%FS)
Insulation resistance	20MΩ, 250VDC
Dielectric strength	50Hz, 500VAC
Protection class	IP65
Load resistance	(U-9V)/0.02A, U: supply voltage

Dimensions

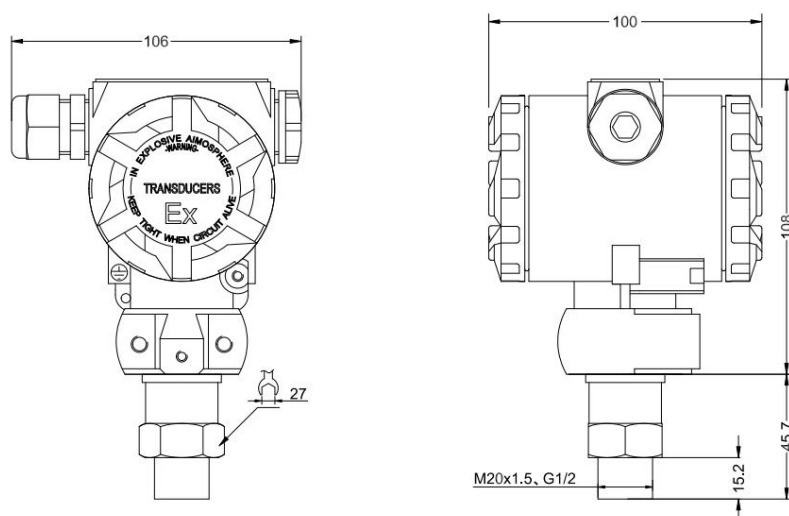


Figure 1 2088 Housing with Threaded Flat Diaphragm

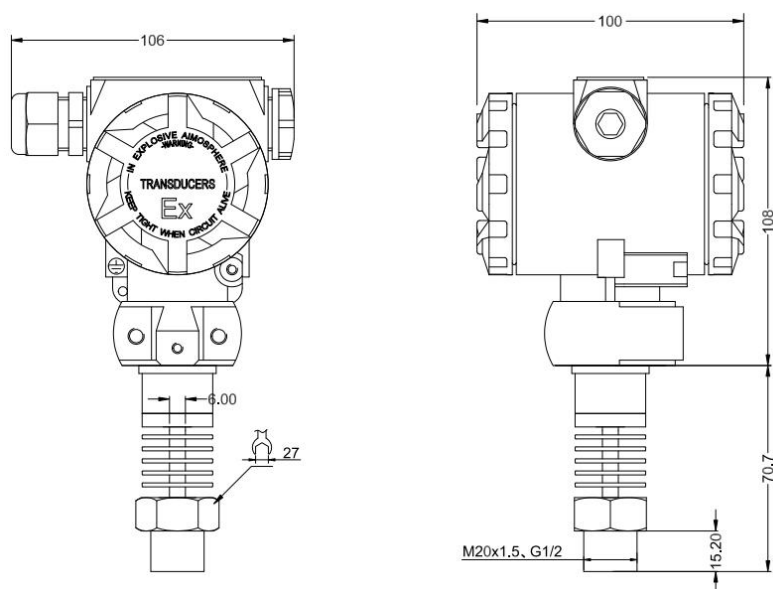


Figure 2 2088 Housing with Threaded Flat Diaphragm and 5 Cooling Fins

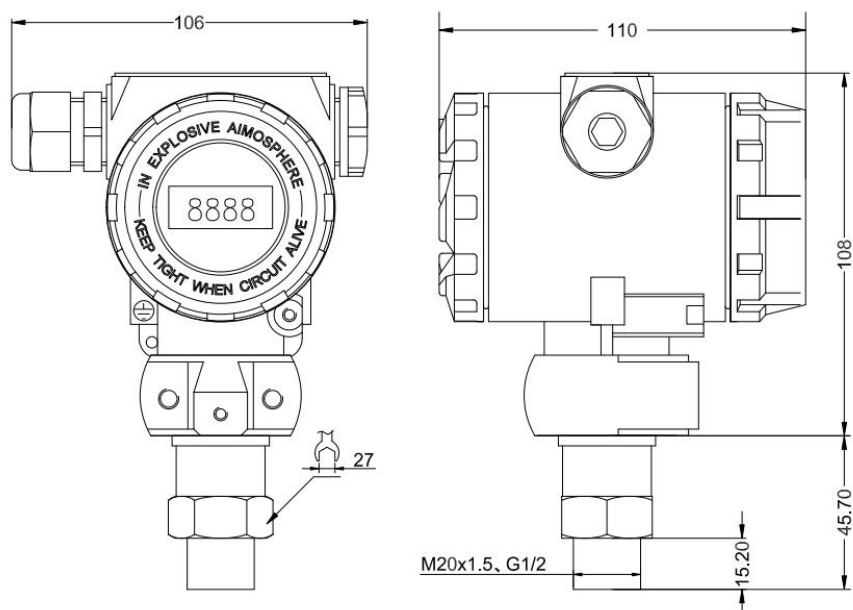


Figure 3 2088 Housing with LCD Display, Threaded Flat Diaphragm

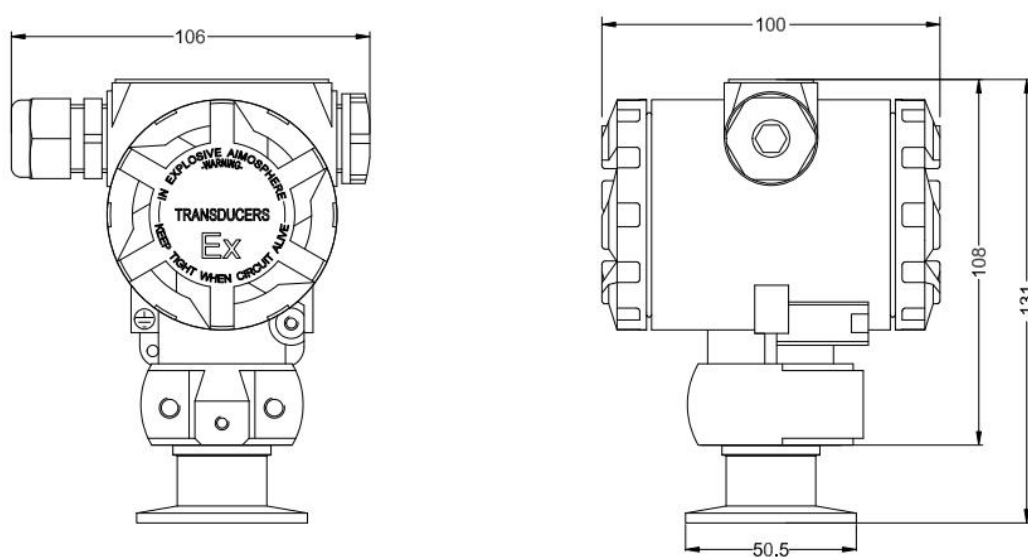


Figure 4 2088 Housing with Clamp-Type Flat Diaphragm

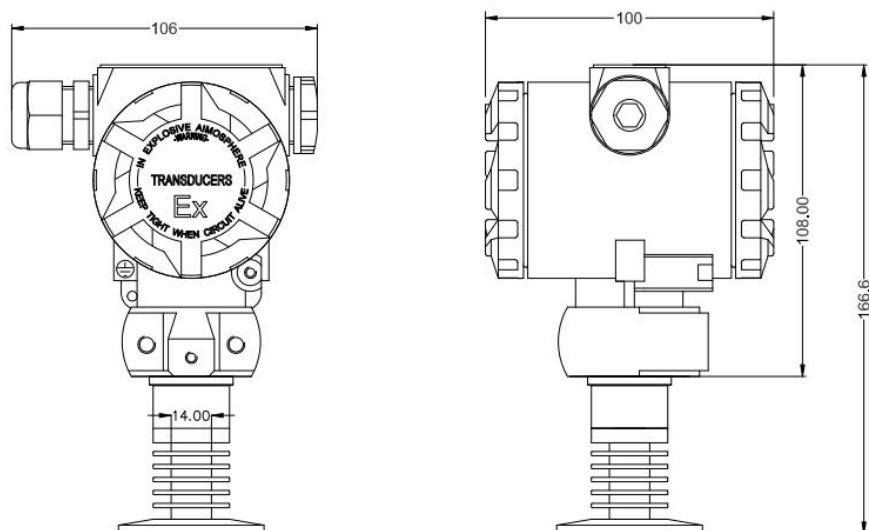


Figure 5 2088 Housing with Clamp-Type Flat Diaphragm and 5 Cooling Fins

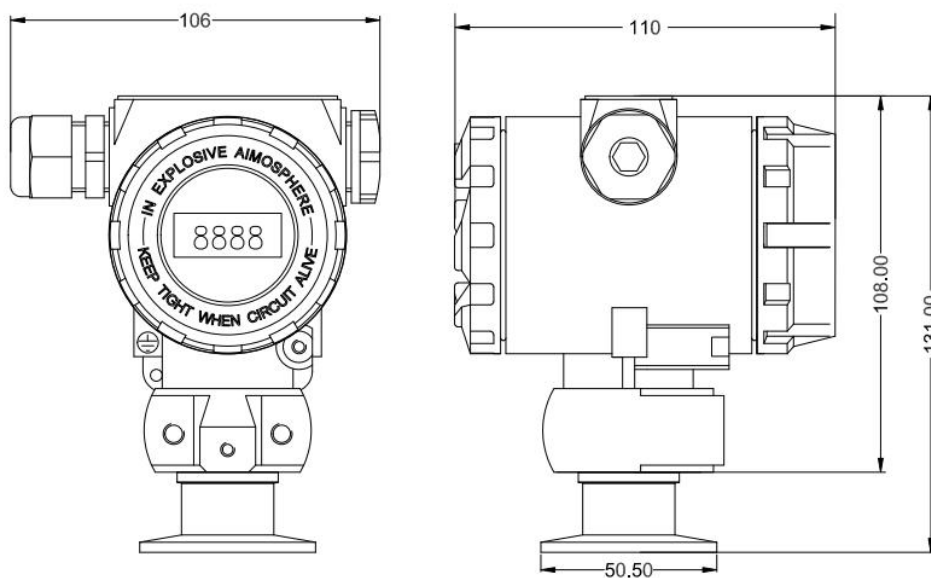
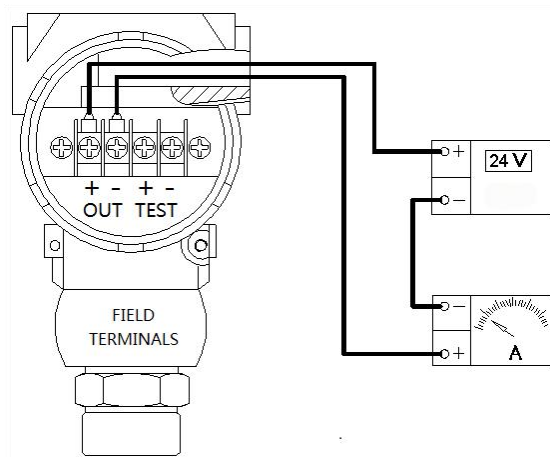


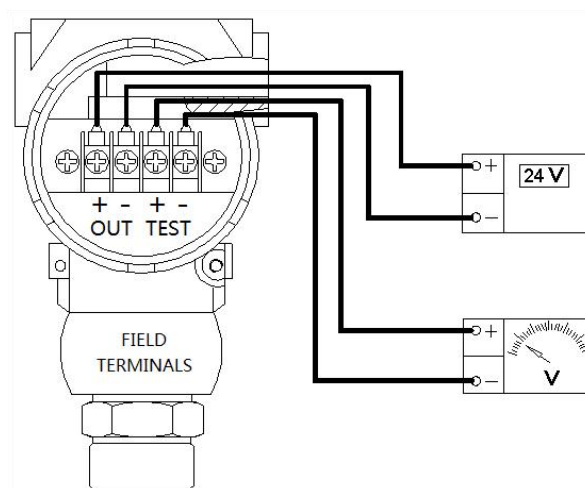
Figure 6 2088 Housing with LCD Display, Clamp-Type Flat Diaphragm

Wirings

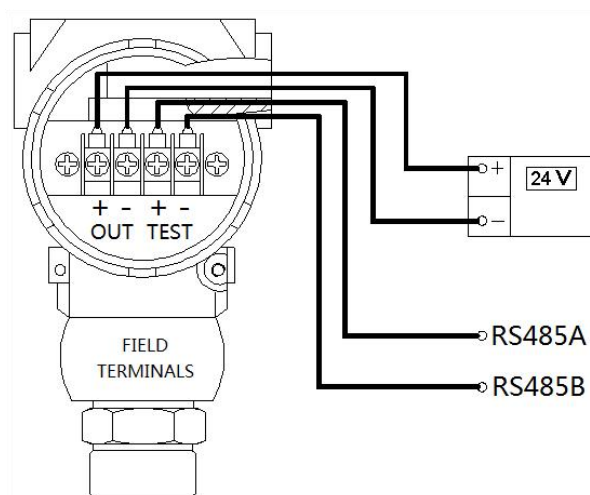
Current output



Voltage output



RS485 output



Ordering code

SIN-P450-G-1A-K-0-A1-L2-B-W1									Description
SIN-P450	-	-	-	-	-	-	-	-	
Sensor Type	G								Gauge Pressure
	A								Absolute Pressure
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
	2G								0-7MPa
	XX								Other
Accuracy		K							0.5 Class
		G							0.25 Class
		F							0.2 Class
Display Type			0						None
			1						Present
Output and Power Supply				A1					2-Wire 4-20 mA
				A2					1-5V, 24VDC
				A3					0-10V, 24VDC
				A4					0-5V, 24VDC
				A5					RS485, 24VDC
				A9					4-20mA+RS485, 24VDC
				X					Other
Process Connection					L2				M20×1.5 External Thread
					G2				G1/2 External Thread
					AK				2"Clamp Connection
					XX				Other
Diaphragm and Process Connection Material						B			316LSS, 316LSS
						X			Other
Electrical Interface, Housing Material, and Protection Rating									W1 M20×1.5Cable Gland, Aluminum Alloy, IP65