



Recorder



Flow



Pressure



Temp



Analyzer



Level

Datasheet

Flat Membrane High

Temperature Pressure

Transmitter

SUP-P350G

Supmea[®]

Committed to process automation solutions

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www.supmea.com

Datasheet**Flat membrane high temperature pressure transmitter
SUP-P350G**

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

SUP-P350G

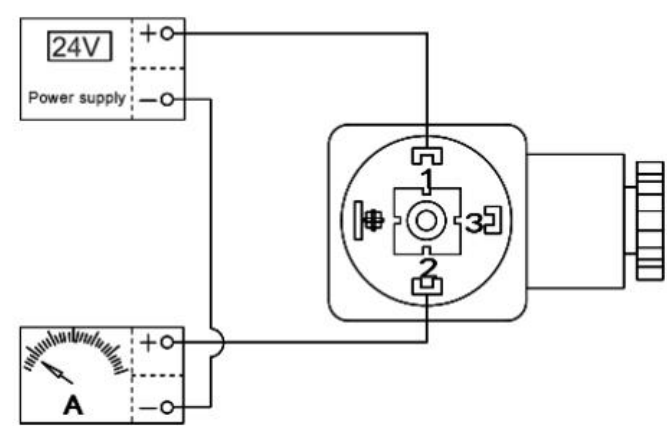
Principle

Pressure Transmitter are devices that convert the mechanical force of applied pressure into electrical energy. This electrical energy becomes a signal output that is linear and proportional to the applied pressure. And a transmitter sends signals in milliamps (mA). At present, various types of pressure sensors, such as diffused silicon, capacitive, silicon sapphire, ceramic thick film, metal strain electric type are widely used in various industries. SUP-P300 is diffused silicon type pressure transmitter.

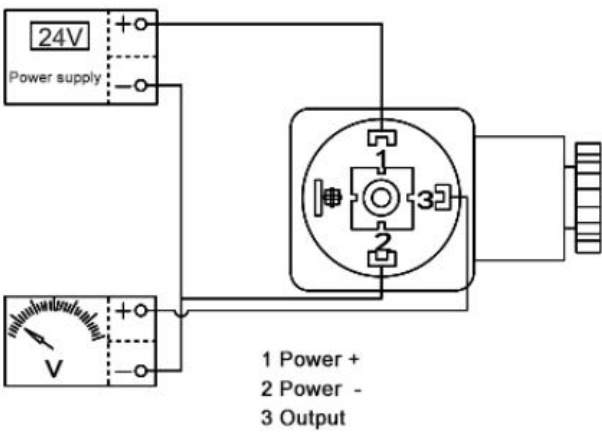
Parameters	
Power supply	4-20mA output (10-32V); 0-10V output (12-32V); RS485 output (8-32V)
Output	4~20mA; 1~5V; 0~10V; 0~5V; RS485
Accuracy	0.5%FS
Threaded connection flat film range	-0.1~0~10MPa (the measuring range cannot be lower than 10KPa)
Clamp connection flat film range:	-0.1~0~3.5MPa (the range cannot be lower than 10KPa)
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

Wiring

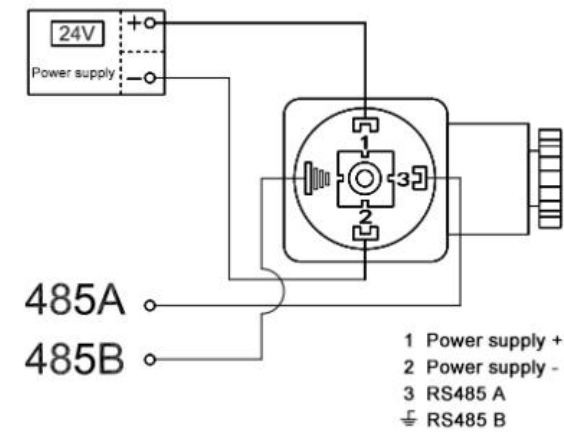
2-wire current



Voltage output



RS485 output

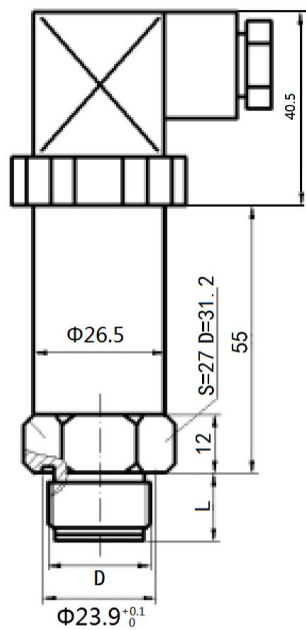


Current output:
Red: Power +
Green: Current output +

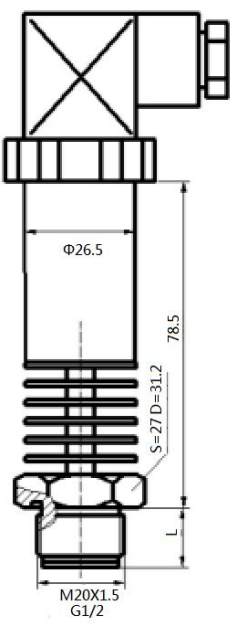
Voltage output:
Red: Power +
Green: Power -
Yellow: Voltage +

RS485 output:
Red: Power +
White: Power -
Green: RS485 +
Yellow: RS485 -

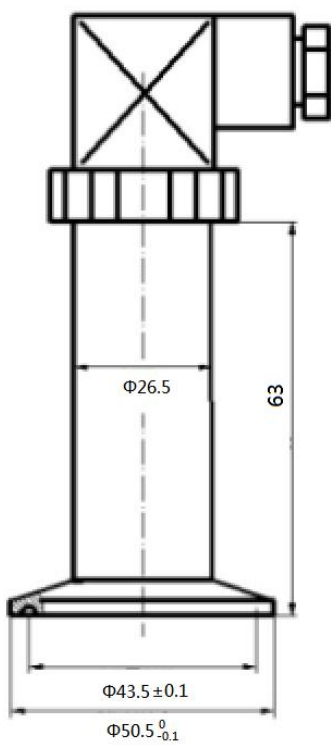
Dimension



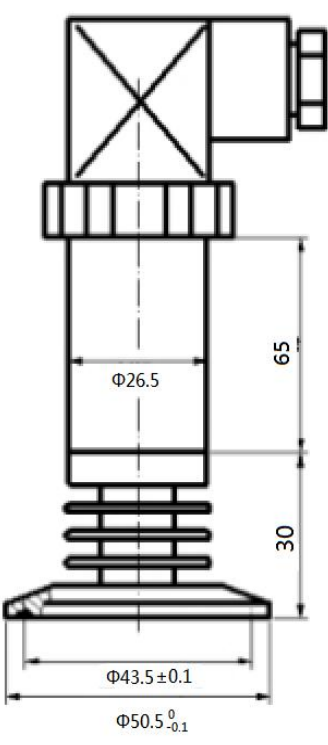
Hessman Threaded Flat Membrane



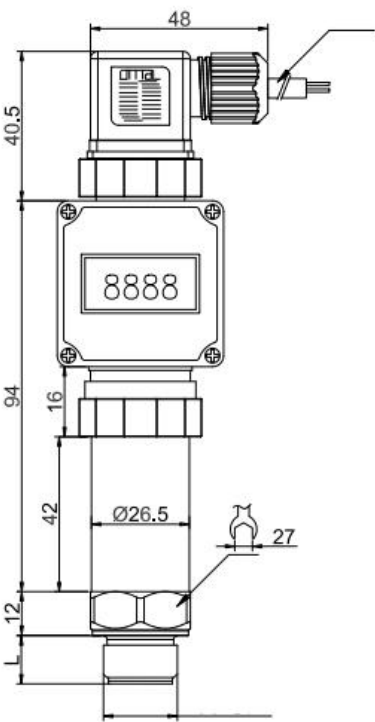
High temperature type Hessman thread



Hessman clamp flat film



High temperature type Hessman clamp flat film



Herssman flat film belt display

Installation

■ Installation

- (1) The pressure transmitter is installed as far as possible where the temperature fluctuation is small to avoid vibration and shock.
- (2) The pressure transmitter is installed directly on the measuring point, and the threads are connected at the same time: M20mm 1.5, G1amp 2. Special threads or clamps need to contact the salesman.
- (3) The signal should not pass through the wire tube or open wire slot together with other power lines, and should not pass through the high-power equipment at the same time.
- (4) If the transmitter needs to use the pressure tube, it is necessary to pay attention to the strong corrosive or superheated medium does not touch the transmitter, so as to prevent the slag from precipitating in the pressure tube, and it is necessary to ensure that the pressure tube is as short as possible. At the same time, when measuring steam or other high temperature media, do not let the working temperature of the transmitter exceed the limit. When used for steam measurement, the suction tube should be filled with water to prevent the transmitter from coming into direct contact with the steam

Ordering code

SUP-P350G -G-1A-K-A1-3-L2-B-WA-02-PA										Description
SUP-P350G	-	-	-	-	-	-	-	-	-	
Pressure Type	G									Gauge Pressure
	A									Absolute Pressure
Measurement Range	1A									-100 - 0 kPa
	1B									-100 - 100 kPa
	1C									-100 - 1,000 kPa
	1L									0 - 10 kPa
	1M									0 - 20 kPa
	1N									0 - 30 kPa
	1Q									0 - 50 kPa
	1S									0 - 100 kPa
	2A									0 - 0.6 MPa
	2B									0 - 1 MPa
	2C									0 - 1.6 MPa
	2D									0 - 2.5 MPa
	2E									0 - 4 MPa
	2H									0 - 10 MPa
	2K									0 - 20 MPa
	2L									0 - 25 MPa
	2M									0 - 30 MPa
	2N									0 - 40 MPa
	2P									0 - 60 MPa
	XX									Other
Accuracy		K								0.5 Class
		G								0.25 Class
		F								0.2 Class
Output and Power Supply			A1							Two-wire 4-20 mA
			A2							1-5 V, 24 VDC
			A3							0-10 V, 24 VDC
			A4							0-5 V, 24 VDC
			A5							RS485, 24 VDC
Heat sink				3						3
				5						5
				7						7
				9						Other
Thread Type					L2					M20×1.5 thread
					G2					G1/2
					AK					NPT1/4
					XX					Other
Electrical interface, housing material and ingress protection						B				316L SS, 316L SS
						X				Other
							WA			Hirschmann connector, 304 SS, IP65

	WB		Hirschmann connector, 316L SS, IP65
	WG		Aviation plug, 304 SS, IP65
	WH		Aviation plug, 316L SS, IP65
	XX		Other
	02		2 m
Cable length	05		5 m
	10		10 m
	00		0 m
	XX		Other
Accessories		PA	Carbon Steel Thread Base
		PB	304SS Thread Base