



Datasheet

Flat membrane pressure transmitter

SUP-P350

Supmea[®]

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Flat membrane pressure transmitter SUP-P350

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

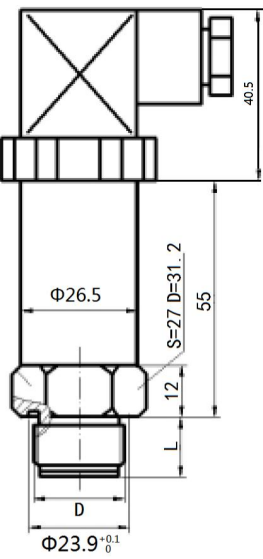


Flat membrane pressure transmitter

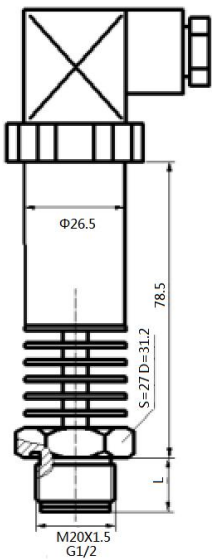
Parameters

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

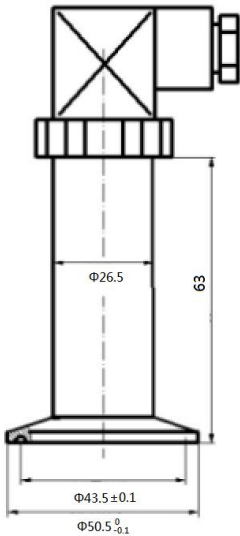
Dimensions



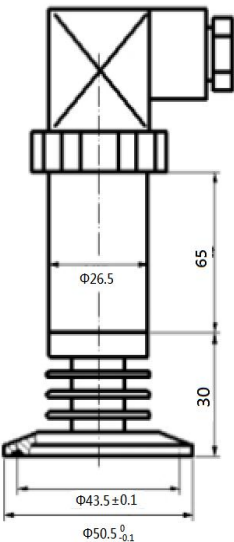
Hessman Threaded Flat Membrane



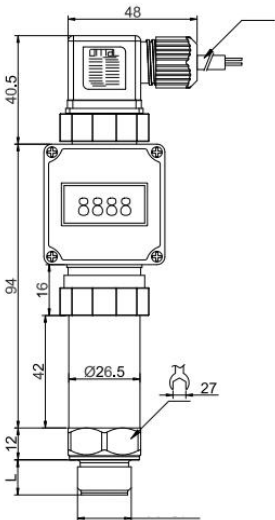
High temperature type Hessman thread



Hessman clamp flat film



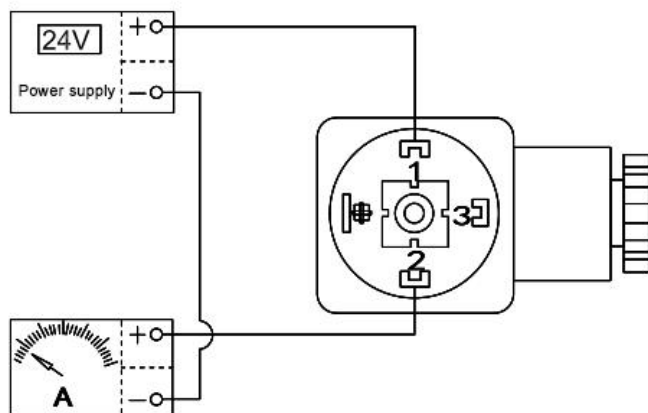
High temperature type Hessman clamp flat film



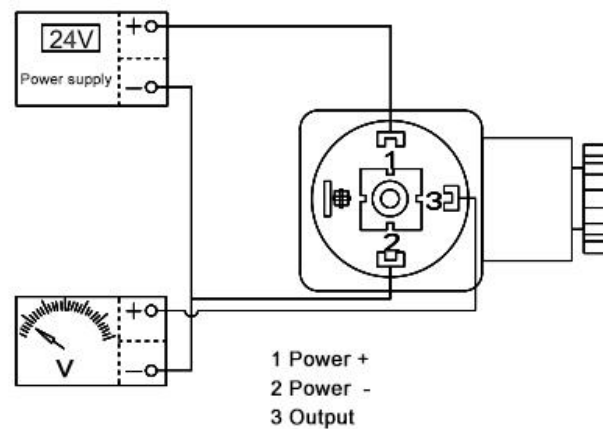
Herssman flat film belt display

Wirings

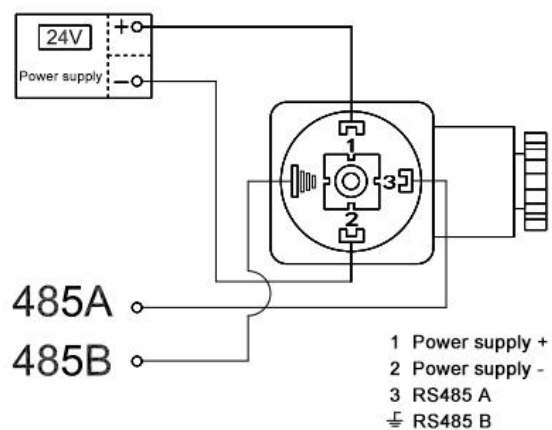
2-wire current



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 -

Ordering code

SUP-P350-G-1A-F-A1-L2-B-WA-02										Description	Remarks
P350	-	-	-	-	-	-	-	-	-	Gauge Pressure	
Pressure Type	G									Absolute Pressure	Optional only for the range of 0-30kPa to 1MPa
	A										
Measurement 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	
	XX									Other	
Accuracy		K								0.5 Class	
		G								0.25 Class	Measurement range within $\pm 50\text{kPa}$ is not selectable
		F								0.2 Class	
Output and Power Supply				A1						2-Wire 4-20mA	12-32VDC
				A2						1-5V,24VDC	
				A3						0-10V,24VDC	
				A4						0-5V,24VDC	
				A5						RS485.24VDC	
Thread Type				L2						M20×1.5	
				G2						G1/2	
				AK						2" Clamp	
				XX						Other	
										SS316L,SS316L	
Diaphragm and Thread Type Material					B					Other	
					X						
Electrical Interface, Housing Material, and Ingress Protection						WA				DIN Connector,304SS,IP65	
						WB				DIN Connector,SS316L,IP65	

	WG		M12 Connector,304SS,IP65	
	WH		M12 Connector,SS316L,IP65	
	WN		Cable Connector,304SS,IP65	
	WP		Cable Connector,SS316L,IP65	
	WT		Cable Connector,304SS,IP68	Selectable only for measurement ranges greater than or equal to 100kPa
			WU	
	XX			
	Cable Length		02	2m
05		5m		
10		10m		
XX		Other		
Additional Features (Optional)				
Accessories	PA	Carbon Steel Thread Base		
	PB	304SS Thread Base		

Note: Transmission output and communication output do not coexist