



Recorder



Flow



Pressure



Temp



Analyzer



Level

## Datasheet

## Flat membrane pressure transmitter

## SIN-P350

# **Sinomeasure**

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

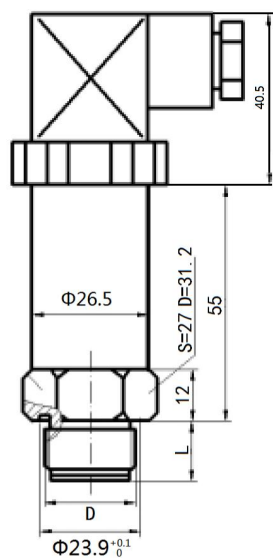
- Compact structure and easy installation.
- Advanced diaphragm/oil-filled isolation technology.
- High stability and high reliability.
- Anti-vibration, anti-radio frequency interference.
- 316L stainless steel isolation diaphragm structure.
- Micro amplifier, voltage, current, RS485 signal output.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

**Flat membrane pressure transmitter**

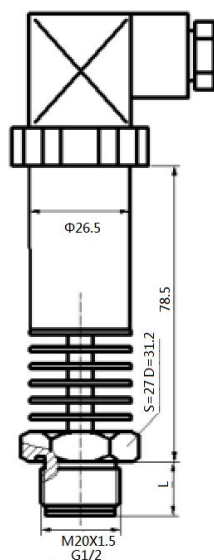
**Parameters**

| 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                                                                   |

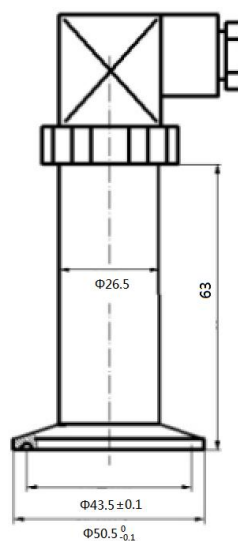
## Dimensions



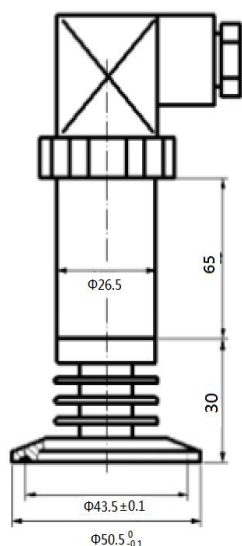
Hessman Threaded Flat Membrane film



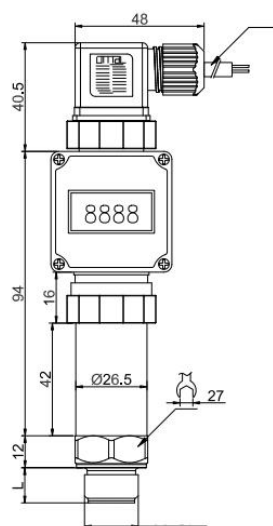
High temperature type Hessman thread



Hessman clamp flat



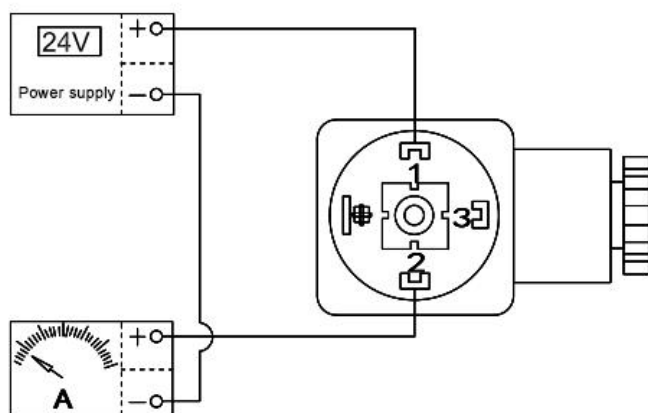
High temperature type Hessman clamp flat film



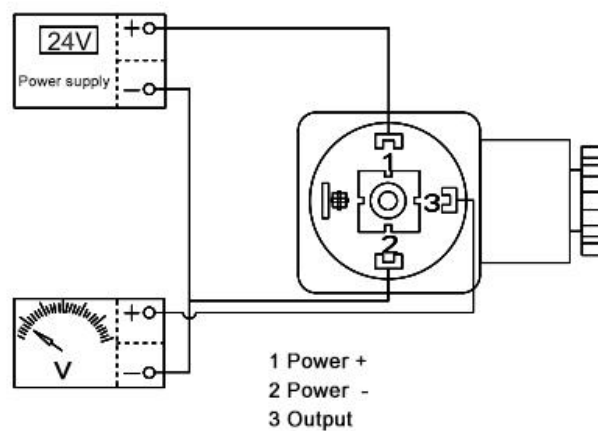
Herssman flat film belt display

## Wirings

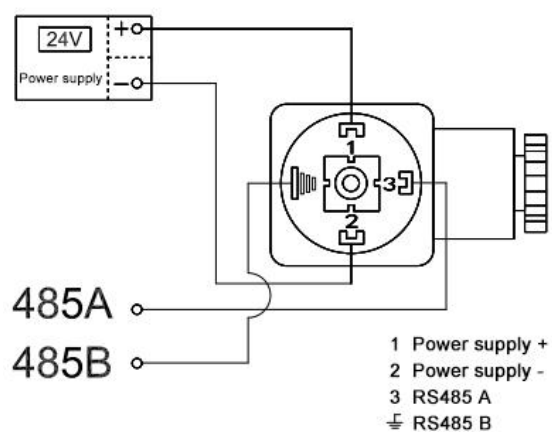
2-wire current



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

| SIN-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          |
| 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 $\pm 50$ 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<br>only for<br>measurement<br>ranges<br>greater than<br>or equal to<br>100kPa |
|              |                                |  |                          |                             |                                                                                          |
|              | WU                             |  |                          |                             |                                                                                          |
|              | XX                             |  |                          | Other                       |                                                                                          |
| 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