# HPM718-H High Temperature Flush Membrane

# Ceramic Capacitor Pressure Transmitter

## Nanjing Hangjia Electronic Technology Co.,Ltd.

## Overview

HPM718-H high temperature flush membrane pressure transmitter adopts advanced ceramic capacitive pressure sensor as the sensitive element, threaded installation and flush membrane structure design. Ceramics have the characteristics of high elasticity, wear resistance, corrosion resistance, and fast heat dissipation, which make the transmitter a very good thermal stability, so that it can be used normally in the range of degrees Celsius, and the temperature drift is extremely low. At the same time, the minimum measuring range of this product can reach 2.5kPa, and the anti-overload capacity in the small range can reach dozens of times of the full scale, which completely solves the problem of poor overload capacity in the small range, and it is very suitable for micro-pressure measurement.

Application:Measurement of gauge or absolute pressure of gases, vapors or liquids in the field of industrial process control/ Printing and dyeing industry/Food industry/Pharmaceutical industry/ Environmental protection industry.

## Features

- Full stainless steel shell
- Ceramic capacitor core, corrosion-resistant and wear-resistant
- Micro-pressure measurement, high overload pressure
- Flush membrane structure, easy to clean, anti-clogging and scaling
- Applicable medium temperature up to 140ºC
- Suitable for CIP and SIP in health industry
- Support a variety of output signals and a variety of electrical interfaces

## Technical Parameters

Measuring Medium: various liquid, gas or steam compatible with ceramic

Pressure Range: -100kPa…0~2.5kPa…100bar(Gauge pressure);-100kPa…0~2.5kPa…100bar

(Absolute pressure)

Pressure Type: Gauge pressure, absolute pressure

Accuracy: ±0.25%FS (Representative); ±0.1%FS (High accurate type)

Long-term Stability: ±0.15%FS/year

Temperature Coefficient of Zero: ±1.0%FS/℃（Reference 25℃）

Temperature Coefficient of Full Scale: ±1.0%FS/℃（Reference 25℃）

Operation Temperature: -40~85℃

Medium Temperature: -40~140℃, at 140℃, max 120mins

Storage Temperature: -40~85℃

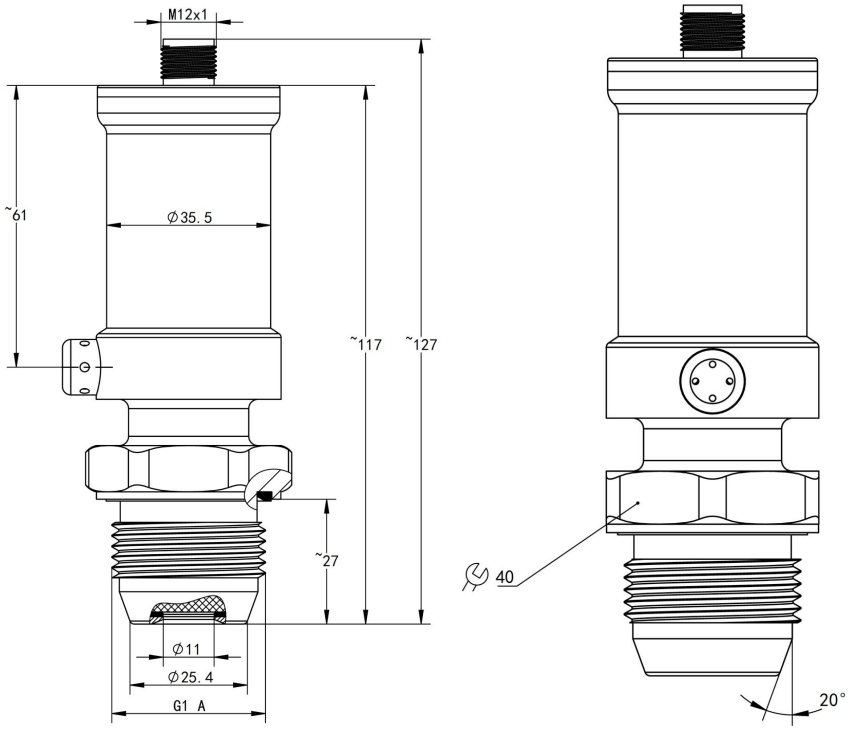
Supply Voltage: 24VDC

Output Signal: 4～20mADC,0.5～4.5VDC,etc.

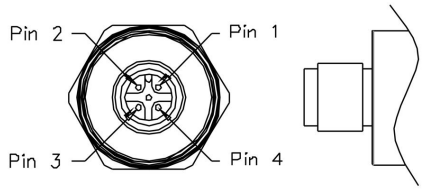
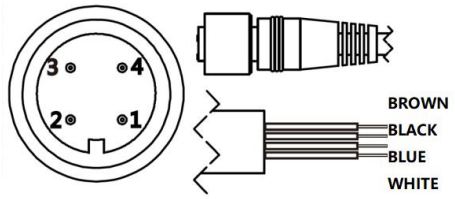
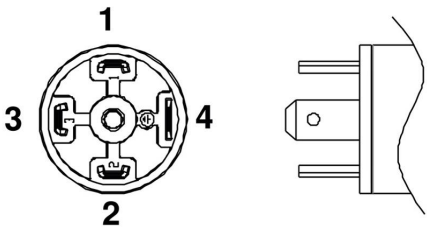
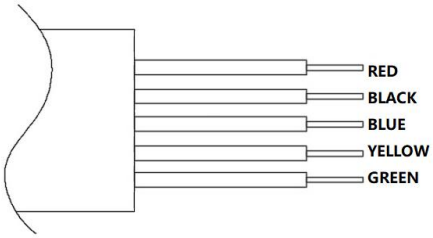
Ingress Protection of Shell: IP65(can do IP69K)

Electrical Connection: Aviation Connector, Cable Output,Hirschmann, etc

## Structure Drawings



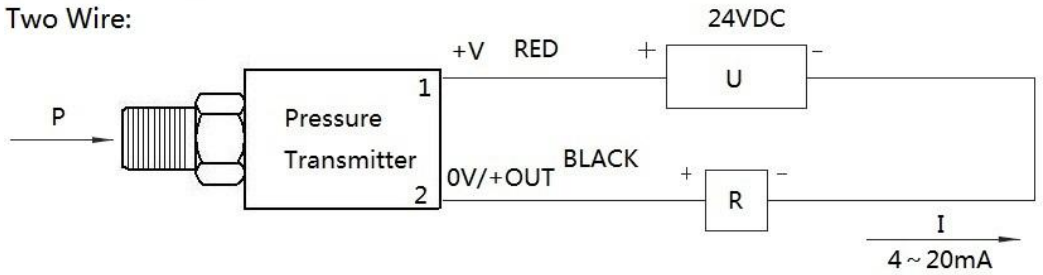
## Electrical Connection

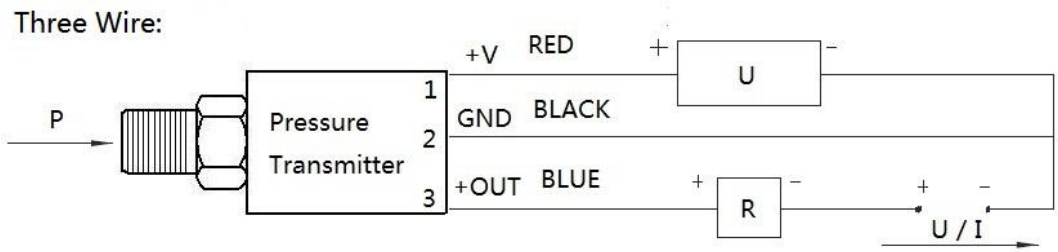
| M12×1（Ordering code C5） | M12×1，with cable（ordering code C5X） |
|---|---|
|  |  |
| **DIN43650（Ordering code C1）** | **Cable outlet（ordering code C2）** |
|  |  |

| Two wires 4 ~ 20mA Output | | |
|---|---|---|
| Signal definition | Power +（+V） | Power -（0V/+OUT） |
| M12×1 | 1 | 2 |
| M12×1，with cable | Brown | Black |
| DIN43650 | 1 | 2 |
| Cable outlet | Red | Black |

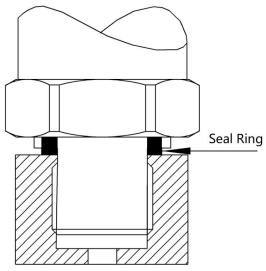
| Three wires 0~5V/10V Output | | | |
|---|---|---|---|
| Signal definition | Power +（+V） | Power -（GND） | Signal+（+OUT） |
| M12×1 | 1 | 2 | 3 |
| M12×1，with cable | Brown | Black | Blue |
| DIN43650 | 1 | 2 | 3 |
| Cable outlet | Red | Black | Blue |

| Four wires Modbus-RTU/RS485 | | | | |
|---|---|---|---|---|
| Signal definition | Power +(+V) | Power -(-V) | RS485A | RS485B |
| M12×1 | 1 | 2 | 3 | 4 |
| M12×1，with cable | Brown | Black | Blue | White |
| DIN43650 | 1 | 2 | 3 | 4 |
| Cable outlet | Red | Black | Yellow | Green |




## Process Connection




Tips:

1.The thread length of the pressure transmitter must be less than the depth of the base thread to ensure the effective seal of the root gasket

2.Flush film pressure transmitter front diaphragm can not touch the bottom of the base

# Ordering Guide

| Item NO. | Type | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| HPM718-H | Flat Film Hygienic Pressure Transmitter | | | | | | | |
| | Pressure Range | Measuring Range | | | | | | |
| | (0～X)kPa | Fill out X directly | | | | | | |
| | | Code | Output Signal | | | | | |
| | | B1 | (4～20)mA | | | | | |
| | | B3 | (0～10)V | | | | | |
| | | B4 | (0～5)V | | | | | |
| | | B5 | (1～5)V | | | | | |
| | | B7 | RS485 | | | | | |
| | | | Code | Thread Spec | | | | |
| | | | KG1 | G1" male flush film | | | | |
| | | | KG112 | G1-1/2" male flush film | | | | |
| | | | | Code | Electrical Connection | | | |
| | | | | C1 | DIN output | | | |
| | | | | C2 | Cable Output | | | |
| | | | | C5 | M12×1 4pin | | | |
| | | | | C5X | M12*1 with cable | | | |
| | | | | | Code | Housing Material | | |
| | | | | | S4 | SS304(Default) | | |
| | | | | | S6 | SS316L | | |
| | | | | | | Code | Wet Material | |
| | | | | | | S6 | 316L(default ) | |
| | | | | | | DF | PVDF | |
| | | | | | | HC | Hastelloy | |
| | | | | | | | Code | Additional Functions |
| | | | | | | | G | Gauge Pressure（Default） |
| | | | | | | | A | Absolute Pressure |
| | | | | | | | QF | Provide test report |
| | | | | | | | F1 | FKM o-ring |
| | | | | | | | F2 | FFKM o-ring |
| | | | | | | | SI | VMQ o-ring |
| | | | | | | | | Other requirement |
| HPM718-H | (0~20)kPa | B1 | P19 | C5 | S4 | GF1 | | |