



# BANING PRESSURE SENSOR BNPSM110



**BANING**

## DESCRIPTION

BNPSM110 The pressure sensor for type flowmeter is assembled with high performance and high reliability silicon piezoresistive pressure core. The pressure connection and housing are made of stainless steel and have good corrosion resistance.

## CHARACTERISTICS

- High-strength stainless steel structure
- Anti-EMC
- Small size and easy installation
- Wide operating temperature range
- High precision, strong anti-interference, long-term stability
- Vibration and shock resistance

## PREFORMANCE

Parameter	BNPSM110
Measuring range	-100kPa... 0 ~ 20kPa... 100MPa
Pressure type	Gauge, Absolute, Sealed
Power supply	Constant current : 1.5mA, minimum 0.4mA; Constant voltage : 10V, 5V, minimum 2.5V
Zero output	± 2mV
Full output	60 ~ 120mV (typical 100mV)
input resistance	2.5kΩ ~ 6kΩ (Constant current) ; 4kΩ ~ 15kΩ (Constant voltage)
Compensation temperature	-10°C ~ 70°C (≥ 100kPa) ; 0°C ~ 60°C (< 100kPa)
Operating temperature	-20°C ~ 85°C
Storage temperature	-40°C ~ 125°C
Zero temperature drift	± 1.5%FS (@-10°C ~ 70°C) ; ± 1%FS (@0°C ~ 60°C)
Sensitivity temperature drift	± 1.5%FS (@-10°C ~ 70°C) ; ± 1%FS (@0°C ~ 60°C)
Overload pressure	200%FS(10MPa below) ; 150%FS (25MPa above)
Mechanical vibration	20g (20 ~ 5000Hz)
Shock	100g (11ms)
Filling fluid	Silicone oil
Insulation	200MΩ/250VDC
Response time	≤ 1ms (Rise to 90%FS)
Long-term stability	± 0.2%FS/year
Material	Housing stainless steel; isolation diaphragm 316L
Media compatible	Liquid and gas compatible with isolation diaphragms

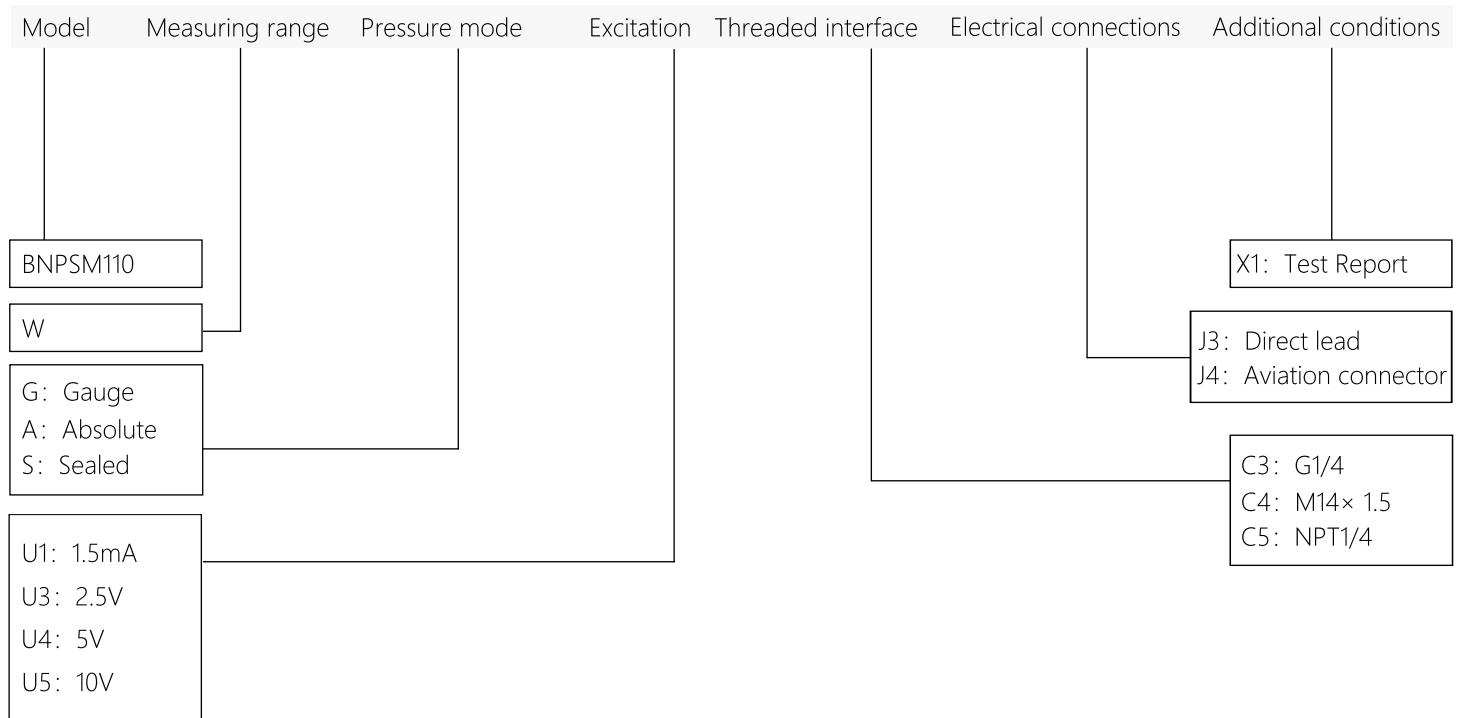
## APPLICATION

- For pressure measurement in flow meters.

## PRESSURE RANGE

Code	Measuring range	Code	Measuring range	Code	Measuring range	Code	Measuring range
W1	0 ~ 10kPa/0.01MPa	W6	0 ~ 160kPa/0.16MPa	W11	0 ~ 1.6MPa	W16	0 ~ 25MPa
W2	0 ~ 20kPa/0.02MPa	W7	0 ~ 250kPa/0.25MPa	W12	0 ~ 2.5MPa	W17	0 ~ 40MPa
W3	0 ~ 35kPa/0.035MPa	W8	0 ~ 400kPa/0.4MPa	W13	0 ~ 6MPa	W18	0 ~ 60MPa
W4	0 ~ 70kPa/0.07MPa	W9	0 ~ 600kPa/0.6MPa	W14	0 ~ 10MPa	W19	0 ~ 100MPa
W5	0 ~ 100kPa/0.1MPa	W10	0 ~ 1.0MPa	W15	0 ~ 16MPa	Please select according to product range	

## NOMENCLATURE



**FOR EXAMPLE:** BNPSM110 (W10) -G-U4-C3-J4

The model is BNPSM110, the range is 0 ~ 1.0MPa, the pressure method is gauge pressure, the excitation is 5V, the thread interface is G1 / 4, and the electrical connection is aviation plug.

# DISCLAIMER

## ⚠ Warning

### LIFE OR PROPERTY RISK

- Please ensure that this product has been designed as part of whole system and already considered related risks, make sure the product has the correct ratings and is designed based on the entire system. It must not be used when applications related to serious life or property damage risks.

**Failure to follow this instruction can result in death or serious injury.**

## ⚠ Warning

### PERSONAL INJURY

- DO NOT USE these products as safety or emergency stop devices or in any other application where failure of the product could result in personal injury.

**Failure to follow this instruction can result in death or serious injury.**

## ⚠ Warning

### MISUSE OF DOCUMENTATION

- The information presented in this product sheet is for reference only. Do not use this document as a product installation guide.
- Complete installation, operation, and maintenance information is provided in the instructions supplied with each product.

**Failure to follow this instruction can result in death or serious injury.**

## Warranty/Remedy

Banning warrants goods of its manufacture as being free of defective materials and faulty workmanship during the applicable warranty period. Banning's standard product warranty applies unless agreed to otherwise by Banning in writing; please refer to your order acknowledgment or consult your local sales office for specific warranty details. If warranted goods are returned to Banning during the period of coverage, Banning will repair or replace, at its option, without charge those items that Banning, in its sole discretion, finds defective. **The foregoing is buyer's sole remedy and is in lieu of all other warranties, expressed or implied, including those of merchantability and fitness for a particular purpose. In no event shall Banning be liable for consequential special, or indirect damages.**

While Banning may provide application assistance personally, through our literature and the Banning web site, it is buyer's sole responsibility to determine the suitability of the product in the application.

Specifications may change without notice. The information we supply is believed to be accurate and reliable as of this writing. However, Banning assumes no responsibility for its use.

## SALES & SERVICE

Banning serves its clients through a worldwide network of sales offices, agents and distributors. For application assistance specifications, prices or names with the nearest authorized dealer, please contact your sales specialist or contact us directly:

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