



BANNING
PRESSURE TRANSMITTERS
PTM90



BANNING

DESCRIPTION

PTM90 monocrystalline silicon pressure sensor adopts MEMS monocrystalline silicon pressure chip imported from Germany to achieve international leading overpressure performance and ensure excellent signal stability. It is assembled using a fully welded sealed structure and filled with silicone oil under high vacuum. The material of the measuring diaphragm can isolate the measured medium from the pressure chip, and at the same time enable the sensor to perform long-term and reliable measurement of the differential pressure signals of various strongly corrosive media.

CHARACTERISTICS

- Adopt German imported MEMS monocrystalline silicon pressure chip
- With overload protection
- 316L stainless steel all-welded integrated structure
- Gauge type can be used for negative pressure measurement
- Suitable for various threaded shells

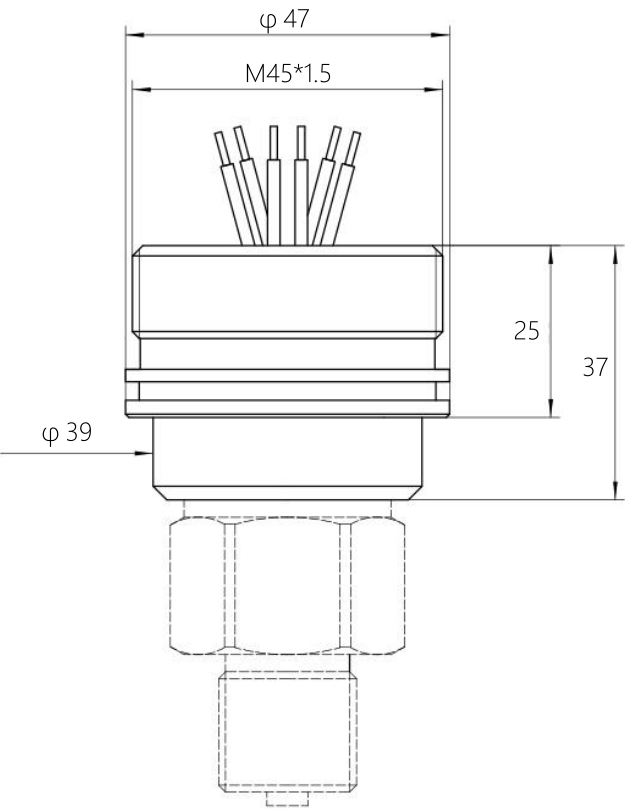
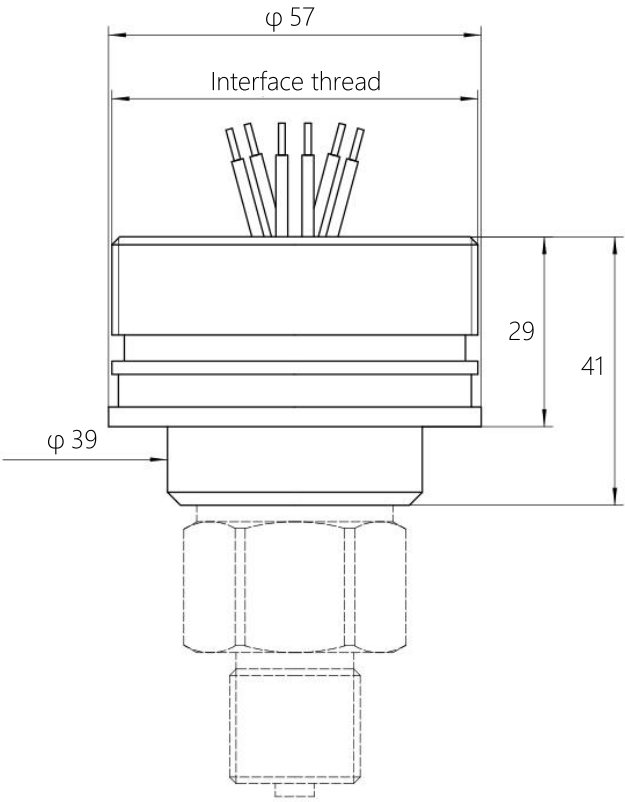
PREFORMANCE

Parameter	PTM90
Powered by	Constant pressure
Operating temperature	-40 ~ 85°C
Storage temperature	-50 ~ 125°C
Output voltage	60 ~ 140mV
Zero temperature drift	± 0.05%FS/°C
Temperature hysteresis	± 0.1%FS (sensor range ≥ 10kPa) ± 0.5%FS (sensor range <10kPa)
Pressure lag	± 0.05%FS
Long-term drift	± 0.05%FS/year
Non-linear	± 0.5%FS (sensor range ≥ 10kPa) ± 1.5%FS (sensor range <10kPa)
Maximum overpressure	See range selection
Diaphragm material	316L, Hastelloy C

USE AND INDUSTRY

- It is easy to install and simple, with high vibration and shock resistance. It is widely used in process control, aviation, aerospace, automotive, medical equipment, HVAC and other fields.
- It is especially suitable for occasions that require high pressure measurement accuracy.

DIMENSIONS

Back thread code	Dimensions	Unit: mm
<p>H9: M45× 1.5</p>		
<p>H10: M56× 1.5 H11: 55-16 inch</p>		

Thread code	C1: M20× 1.5-6g	C2: G1/2
Dimensions Unit: mm		
Recommended torque	15 ~ 25Nm	15 ~ 25Nm
Thread code	C7: NPT1/2	C7F: NPT1/2 (female thread)
Recommended torque	15 ~ 25Nm	15 ~ 25Nm

ELECTRICAL CONNECTIONS

Electrical schematic diagram 1	Electrical schematic 2	Electrical schematic 3
Wiring color	Wiring definition	
Red	Power+ (IN+)	
Blue	Power- (IN-)	
Yellow	Output positive (OUT+)	
White	Output negative (OUT-)	
Green	Temperature (T) or positive temperature (Diode+)	
Black	Negative temperature (Diode-)	

RANGE SELECTION TABLE

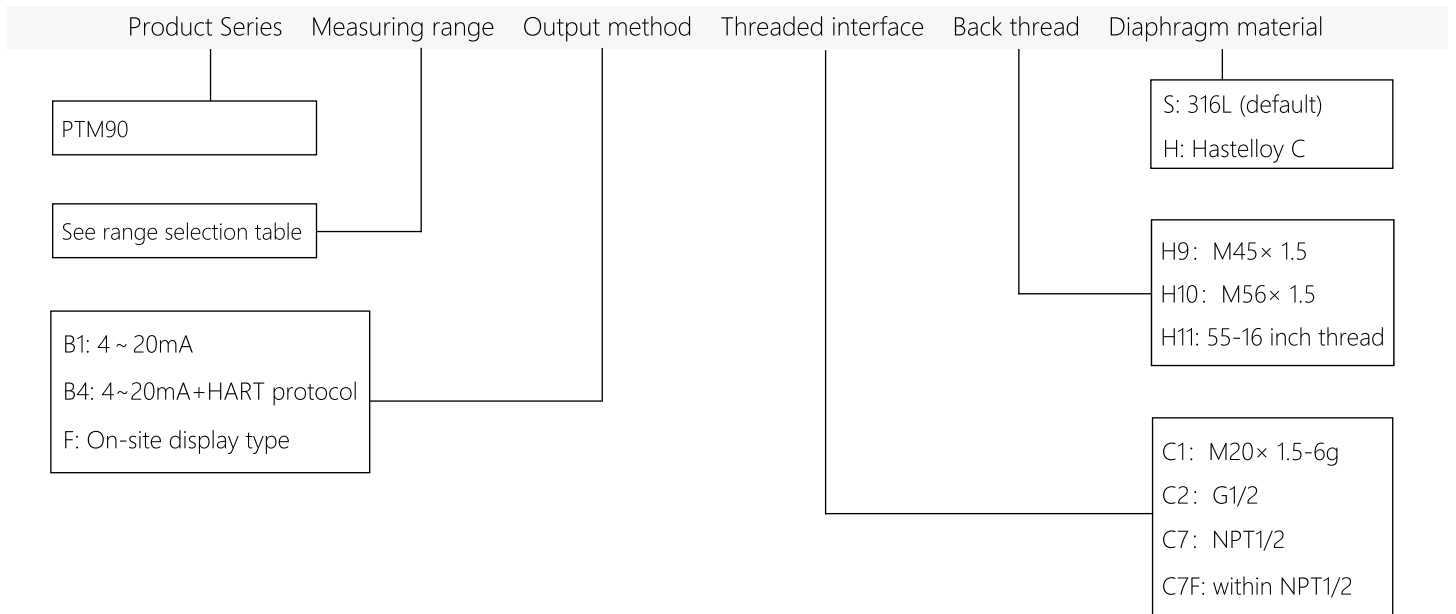
Range code	Pressure method	Measuring range	Overload pressure
6KG	G	0 ~ 6kPa	300kPa
35KG	G	0 ~ 35kPa	1MPa
100KG	G	0 ~ 100kPa	2MPa
250KG	G	0 ~ 250kPa	4MPa
1MG	G	0 ~ 1MPa	6MPa
3MG	G	0 ~ 3MPa	12MPa
10MS	S	0 ~ 10MPa	20MPa
20MS	S	0 ~ 20MPa	40MPa
40MS	S	0 ~ 40MPa	60MPa

Note: G gauge pressure, S seal pressure

ACCESSORIES

Model	Shape	Description	Item number
H3051T (silicon)		<ul style="list-style-type: none"> • LCD (liquid crystal) display • LCD meter head can be rotated • Green backlight • 4 ~ 20mA+HART • LCD removable 	100040100002
JT3051TH (silicon)		<ul style="list-style-type: none"> • LCD (liquid crystal) display • The LCD head cannot be rotated • Gray backlight • 4 ~ 20mA+HART • LCD removable 	100040100027
JT3051TS(silicon)		<ul style="list-style-type: none"> • LCD (liquid crystal) display • The LCD head cannot be rotated • Gray backlight • 4 ~ 20mA • LCD removable 	100040100028

NOMENCLATURE



Examples: PTM90-250KGB1C7FH11S

The product series is PTM90, range is 0~250kPa, pressure mode is gauge pressure, output mode is 4~20mA, threaded interface is NPT1/2 female thread, the rear thread is 55-16 inch thread, and the diaphragm material is 316L stainless steel.

Note

- Do not touch the diaphragm with hard objects, it will damage the isolation diaphragm.
- Please read the product manual carefully before installation, and check the relevant information of the product.
- Wire in strict accordance with the wiring method, otherwise it will cause product damage and other potential failures.
- Incorrect use can cause danger and personal injury.

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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