



BANNING

PRESSURE TRANSMITTERS

PTM380



BANNING

DESCRIPTION

PTM380 intelligent pressure transmitter is high-precision, high-stability intelligent pressure measurement product. This product is developed with fully welded OEM oil-filled core and ADI special chip combined with microprocessor technology. It has on-site display, data processing, zero point, full-scale software adjustment, permanent setting parameters saving, 4-20mA output and communication, etc. function. Small size, high accuracy, light weight, wide range coverage, suitable for places where various industries need precise measurement of fluid pressure. This product works in a two-wire system and can directly replace the analog two-wire 4 ~ 20mADC output transmitter.

CHARACTERISTICS

- RS485 communication interface or HART communication protocol optional
- Support networking applications
- Using digital compensation and non-linear correction technology
- No moving parts, reliable performance
- Provides a wide range of pressure ranges for low, medium and high pressures
- Excellent field interchangeability, can be customized according to customer requirements

PERFORMANCE

Parameter	PTM380
Measuring range	-100kPa... 0 ~ 10kPa... 100MPa
Pressure type	Gauge, Absolute, Sealed
Power supply	24V、 12V
output signal	4 ~ 20mA + HART protocol, 4 ~ 20mA + RS485
Operating temperature	-20°C ~ 85°C
Medium temperature	-20°C ~ 85°C
Storage temperature	-40°C ~ 125°C
Zero temperature drift	± 0.5%FS (@-20°C ~ 85°C)
Sensitivity temperature drift	± 0.5%FS (@-20°C ~ 85°C)
Overload pressure	150%FS
Mechanical vibration	20g (20 ~ 5000Hz)
Shock	100g (11ms)
Comprehensive accuracy	0.5%, 0.3% (2.5MPa above)
Cut off	200MΩ/250VDC
Response time	≤ 1ms (Rise to 90% FS)
Long-term stability	± 0.2%FS/year
Texture	Housing stainless steel; isolation diaphragm 316L
Media compatible	Various media compatible with 316L stainless steel

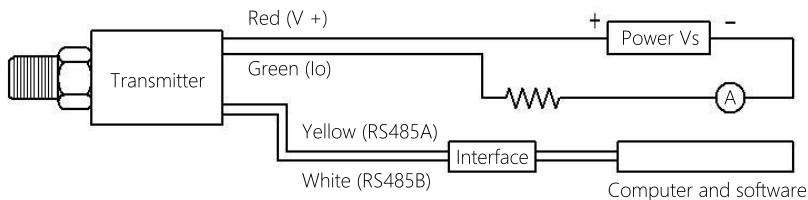
APPLICATION

- Project supporting; scientific experiments; leak monitoring, petrochemical process industry; precise measurement of fluid pressure ...

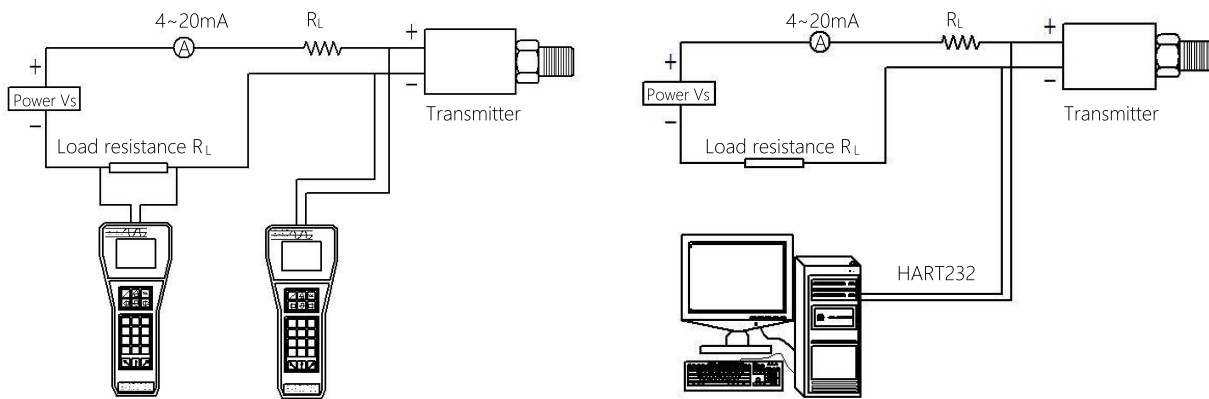
EXTERNAL STRUCTURE

Type	J4: Aviation connector	J5: Hirschmann	J15: Hirschmann direct lead
Dimensions unit: mm			
Wiring (HART protocol type)	Pin 1: Power + Pin 2: Current output (HART)	Pin 1: Power + Pin 2: Current output (HART)	Red Wiring: power supply + Green Wiring: current output (HART)
Wiring (RS485 interface type)	Pin 1: Power + Pin 2: Power- Pin 3: RS485A Pin 4: RS485B	Pin 1: Power + Pin 2: Power- Pin 3: RS485A Pin 4: RS485B	Red Wiring: power supply + Green Wiring: Power- Yellow Wiring: RS485A White Wiring: RS485B

NOTE: (1) RS485 interface type transmitter is used for electrical connection for RS485 communication:



(2) Connection method of HART protocol type transmitter, communicator and configuration system:

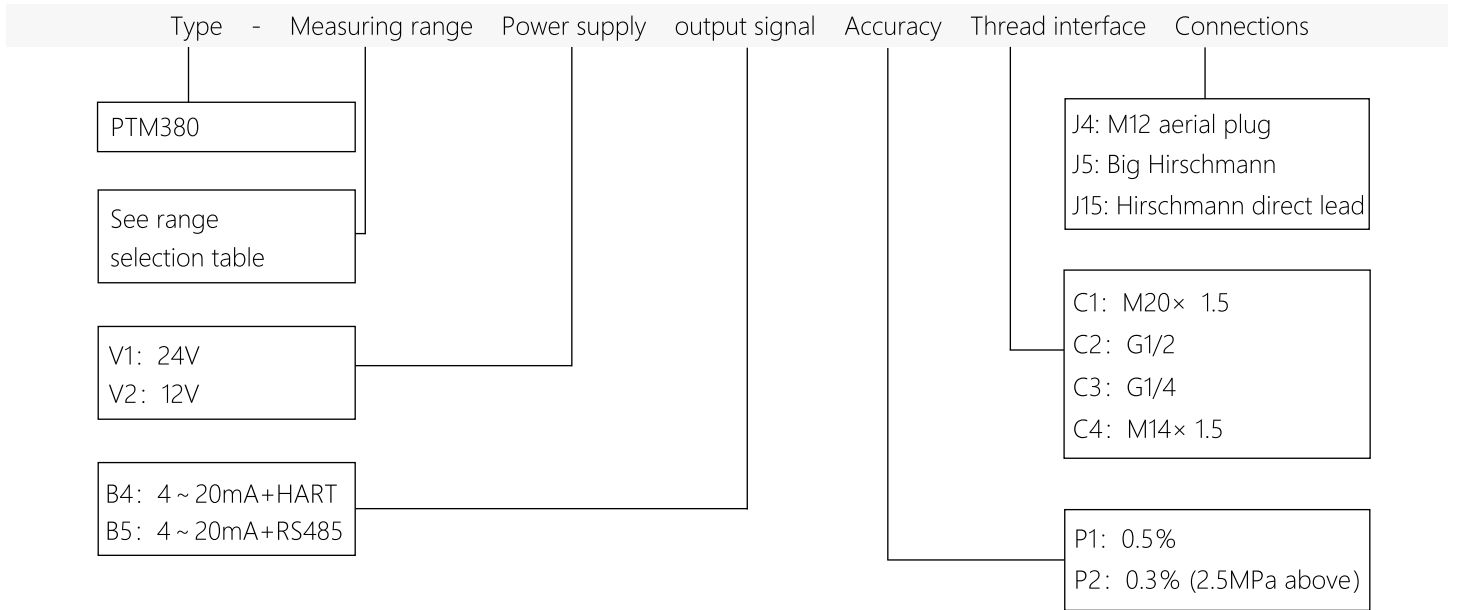


Thread Type	C1: M20× 1.5	C2: G1/2	C3: G1/4	C4: M14× 1.5
Dimensions unit: mm				

PRESSURE RANGE SELECTION TABLE

Code	Pressure type	Measuring range	Overload pressure	Burst pressure
1K	G	0 ~1kPa	200%FS	600%FS
2K	G	0 ~2kPa	200%FS	600%FS
5K	G	0 ~5kPa	200%FS	600%FS
7K	G	0 ~7kPa	200%FS	600%FS
10K	G	0 ~10kPa	200%FS	600%FS
20K	G	0 ~20kPa	200%FS	600%FS
35K	G	0 ~35kPa	200%FS	600%FS
70K	G	0 ~70kPa	200%FS	600%FS
100K	G	0 ~100kPa	150%FS	300%FS
160K	G	0 ~160kPa	150%FS	300%FS
250K	G	0 ~250kPa	150%FS	300%FS
400K	G	0 ~400kPa	150%FS	300%FS
600K	G	0 ~600kPa	150%FS	300%FS
1M	G	0 ~1MPa	150%FS	300%FS
1.6M	G	0 ~1.6MPa	150%FS	300%FS
2.5M	G	0 ~2.5MPa	150%FS	300%FS
35K	A	0 ~35kPa	150%FS	500%FS
100K	A	0 ~100kPa	150%FS	300%FS
160K	A	0 ~160kPa	150%FS	300%FS
250K	A	0 ~250kPa	150%FS	300%FS
400K	A	0 ~400kPa	150%FS	300%FS
600K	A	0 ~600kPa	150%FS	300%FS
1M	A	0 ~1MPa	150%FS	300%FS
1.6M	A	0 ~1.6MPa	150%FS	300%FS
2.5M	A	0 ~2.5MPa	150%FS	300%FS
4M	A	0 ~4MPa	150%FS	300%FS
1M	S	0 ~1MPa	150%FS	300%FS
1.6M	S	0 ~1.6MPa	150%FS	300%FS
2.5M	S	0 ~2.5MPa	150%FS	300%FS
4M	S	0 ~4MPa	150%FS	300%FS
6M	S	0 ~6MPa	150%FS	300%FS
10M	S	0 ~10MPa	150%FS	300%FS
16M	S	0 ~16MPa	150%FS	500%FS
25M	S	0 ~25MPa	150%FS	300%FS
40M	S	0 ~40MPa	150%FS	300%FS
60M	S	0 ~60MPa	150%FS	200%FS
100M	S	0 ~100MPa	120%FS	150%FS
N1K	/	-100~0kPa	150%FS	300%FS
N2K	/	0~-100kPa	150%FS	300%FS
N3K	/	-100~100kPa	150%FS	300%FS
N5M	/	-100~250kPa	150%FS	300%FS
N7M	/	-0.1~0.6MPa	150%FS	300%FS
N8M	/	-0.1~ 1MPa	150%FS	300%FS
N9M	/	-0.1~1.6MPa	150%FS	300%FS
N10M	/	-0.1~2.5MPa	150%FS	300%FS

NOMENCLATURE



FOR EXAMPLE: PTM380-60MSV1B4P1C2J5

The model is PTM380, the range is 0 ~ 60MPa, the power supply is 24V, the output signal is 4 ~ 20mA+HART protocol, the accuracy is 0.5%, the screw interface is G1/2, and the electrical connection is Big Hirschmann.

NOTE

- (1) Please pay attention to the compatibility between the medium and the product's contact part when selecting.
- (2) If there are special requirements for product appearance and performance parameters, our company can provide customization.

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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