

Micro Pressure Transmitter

MPM430



Applications

- Petrochemical industry
- Power plant
- Mine
- Urban water supply
- Hydro exploration

Features

- Pressure port has general, non-cavity two structures available, the contact surface between the pressure-sensing diaphragm and the medium is large
- The pressure-sensitive diaphragm material is ceramic with good corrosion resistance
- Overpressure can reach dozens of times, which can resist strong pressure shocks
- Intrinsic safety type, Ex ia IIC T6 Ga

Introduction

The MPM430 micro pressure transmitter is a pressure measurement product specially developed for applications in the field of micro pressure measurement. Ceramic sensor and integrated stainless steel fully sealed structure, small size, strong overload resistance, high stability, good corrosion resistance and reliable performance.

Specification

Range	
Overpressure	see Accuracy on Page 2
Accuracy	
Pressure Type	gauge (with negative pressure measurement) absolute
Long-term Stability	±0.5%FS/year
Thermal Drift	≤±0.15%FS/10°C (-20°C ~ 80°C)
	≤±0.2%FS/10°C (-30°C ~ -20°C)
Application Temperature	-30°C ~ 80°C (plug connector type)
	-20°C ~ 70°C (cable type, cable material: PE, PVC)
	-20°C ~ 80°C (cable type, cable material: PUR)
	-20°C ~ 60°C (intrinsic safety type)
Storage Temperature	-40°C ~ 120°C
	-20°C ~ 85°C (cable type)
Housing Protection	IP65
Weight	≤150g

Accuracy

Range Code	Measurement Range	Overpressure	Accuracy
OD	-25mbar...-5mbar ~ 5mbar...50mbar	1.8bar	±1%FS
OC	-100mbar...-10mbar ~ 10mbar...100mbar	2bar	±1%FS
OB	0mbar ~ 20mbar...200mbar	6bar	±1%FS
			±0.5%FS

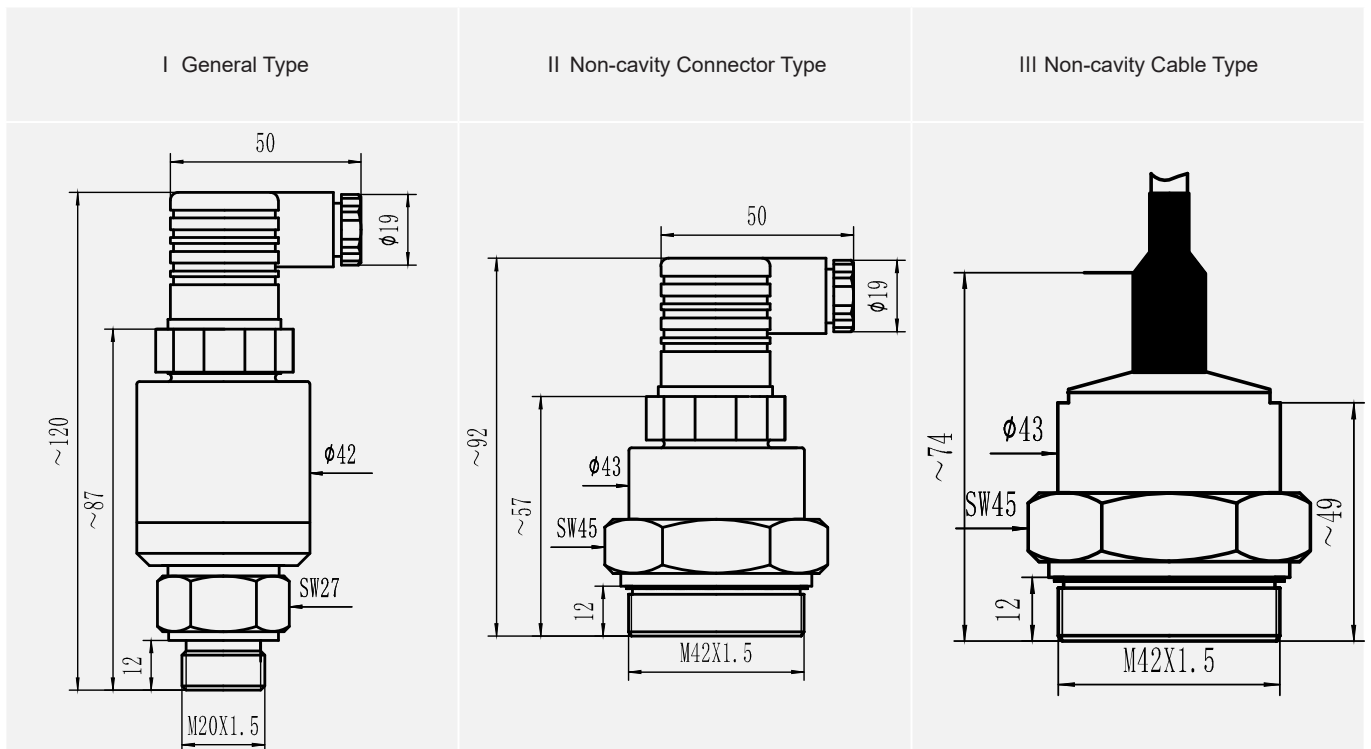
Test Standard: GB/T 17614.1-2015/IEC60770-1:2010

Output Signals

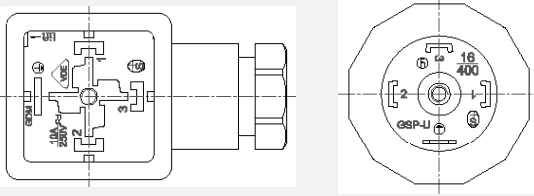

Output Signal	Power Supply	Output Format	Load Resistance
4mA~20mA DC(E)	12V~28V DC (The intrinsic safety product is powered by a safety barrier)	2-wire	≤(U-12)/0.02(Ω)

Outline Dimensions

unit: mm



Electrical Connection

	Hirschmann 4-pin Plug Connector	Cable
Definition		
	current 2-wire	current 2-wire
+V	1	red
+OUT	2	black

Materials

Wetted Parts

Isolated Diaphragm: 96% alumina ceramics

Pressure Port: SS 304

Non-wetted Parts

Housing: SS 304/SS 316L

Cable: PE/PUR/PVC

Ordering Guide

MPM430	Micro Pressure Transmitter	
Range	Code	Measurement Range
	0D	-25mbar...-5mbar ~ 5mbar...50mbar
	0C	-100mbar...-10mbar ~ 10mbar...100mbar
	0B	0mbar ~ 20mbar...200mbar
[0 ~ X]mbarL or barL		X: actual measured range, L means cable length when choosing III type
E	Code	Output Signal
	E	4mA~20mA DC
I	Code	Function Selection ^②
	I	general type(pressure port M20×1.5 male)
	II	non-cavity connector type(pressure port M42×1.5 male)
	III	non-cavity cable type(pressure port M42×1.5 male)
i	Code	Certification Requirement
	null	no certification requirement
	i	intrinsic safety Ex ia IIC T6 Ga
GN	Code	Pressure Type
	G	gauge
	A	absolute
	N	with negative pressure measurement
MPM430	[-2~10]mbar	E I i GN Complete Type Specification

Ordering Notes

- "①" in ordering guide means accuracy, see "Accuracy" on page 2 for details.
- "②" in ordering guide means electrical connection requirement:
when choosing type I or II, please specify us if cable is needed.
- The cable length is 1.5m by default, cable material is available for 3 types: PE cable is provided as default; if other material is needed, please specify in the order.
- When ordering the transmitter with M6 or M7 indicator, power supply should $\geq 17V$ DC.
- Environmental temperature should be $-20^{\circ}C \sim 70^{\circ}C$ when ordering the transmitter with M6 indicator, environmental temperature should be $-10^{\circ}C \sim 60^{\circ}C$ when ordering the transmitter with M7 indicator, indicator setting can refer to our indicator lectotype, which can be found on our company's website.
- If metrology verification certificate is needed or there are other requirements, please contact us and specify it in the order.