

MVPT Smart Pressure Transmitter

Features

- Advanced MEMS monocrystalline silicon pressure sensor chip adopted
- Wide pressure range covering
- Double-wire mode, 4~20mA HART® protocol digital communication option
- Intelligent LCD gauge outfit with backlight
- With local zero and pressure range adjustment
- Complete varieties, high accuracy, good stability,
- Isolation ex-proof housing structure, strong resistance to the frequency conversion interference
- No mechanical transmission parts, strong anti-vibration

Applications and industries

- Process control fields for the industries such as petroleum, chemical industry, metallurgy, electricity, food, papermaking, medicine, machine manufacturing, scientific experiment and military aviation etc.

Notes:

- 1 Do not touch the diaphragm with hard objects, which may cause damage to the diaphragm.
- 2 Please read the Instruction Manual of the product carefully before installation and check the relevant information of the product.
- 3 Strictly follow the wiring method for wiring, Otherwise it may cause product damage or other potential faults.



Product overview

MVPT chip adopts advanced MEMS monocrystalline silicon pressure sensor chip. The sensor signal is converted into a standard signal output by a dedicated signal processing module. After long-term aging and stability screening, the product performance is stable and reliable. It is applied to the outdoor scene where the environment is harsh. At the same time, it can display on-site pressure, zero point and full range migration. The installation port form of MVPT monocrystalline silicon pressure transmitter can be processed according to the requirements of users, and can also be compatible with other brands of transmitters. This series of products are widely used in industrial process control, petroleum, chemical, metallurgical and other industries.

Notes:

- 1 Do not misuse documentation.
- 2 The information presented in this product sheet is for reference only. Do not use this document as a product installation guide.
- 3 Complete installation, operation, and maintenance information is provided in the instructions of the product.

Performance parameters

Pressure range	-1...400 bar
Pressure reference	Gauge pressure Absolute pressure
Supply	12V~32V, recommended 24V
Output	4~20mA (optional HART protocol)
Accuracy	±60 mbar ±0.1%FS; Other pressure ranges: ±0.075%FS(Standard pressure range, 25±5°C)
Temperature drift	±60mbar: ±0.3%FS; Other pressure ranges: ±0.25%FS(Standard pressure range, -20~70°C)
Ambient temperature	-30 °C~ 80 °C ; with LCD gauge outfit: -30°C~70°C
Medium temperature	-40 °C~ 120 °C
Vibration resistance	20g (20~5000Hz)
Shock resistance	10 0g (11m s)
Overpressure	Please see pressure range selection
Long-term stability	±0.1%FS/year
Protection grade	IP67
Ex-proof grade	None
Material	Housing cast aluminum alloy; isolation diaphragm 316L
Medium compatibility	All kinds of media compatible with SS316L
Response time	HART collects data from sensor: 0.1s; HART outputs data: 0.5s

How to order

MODEL	PROCESS CONNECTION	MEASURING RANGE	SIGNAL OUTPUT
MVPT	10 G ½" female thread	-1...400 bar	AA 4...20 mA AH 4...20 mA HART
	20 G ½" male thread	Write the range as below, Put P for pressure and V for vacuum	
	30 ½" NPT female thread	Example 1 : P0/0010 = 0-10 bar Example 2 : V-1/0 = -1...0 bar	
	YY special		

Example model code : MVPT-30-P0/0100-AH
 1/2" NPT female thread, 0-100 bar, 4...20 mA HART