

PCM3051-LT Intelligent Flange-Mounted Pressure Transmitter

Features

- Advanced monocrystalline silicon differential pressure sensor adopted
- 2-wire, 4~20mA analog output, HART® protocol digital communication
- Intelligent LCD with backlight
- With local zero and pressure range adjustment function
- Complete varieties, high accuracy, good stability
- Ex-proof housing structure, strong resistance to frequency conversion interference
- High static pressure, high overload protection
- Patented dual overload protection diaphragm design
- Lightning protection circuit design

Applications and industries

- Process control fields for the industries such as petroleum, chemical, metallurgy, power generation, food & beverage, pulp & paper, pharmaceuticals, machinery manufacturing, scientific research, and aerospace & defense.

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

The PCM3051-LT intelligent flange-mounted pressure transmitter is an internationally leading high-performance pressure transmitter carefully developed using the world's advanced monocrystalline silicon pressure sensor technology and patented packaging process. This product adopts a patented dual overload protection diaphragm and an internal circuit with surge protection, which can accurately measure the level, density, pressure, and flow rate of the liquid, gas, or steam, and then convert the result into a 4~20mA +HART current signal.

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	0~6kPa, 0~40kPa, 0~100kPa, 0~250kPa, 0~1MPa, 0~3MPa
Pressure reference	Pressure
Supply	12~32V, 24V recommended
Output signal	4~20mA+HART protocol
Accuracy	±0.1%FS (25±5°C, standard ranges)
Temperature drift	0.25%FS (-20°C~70°C, standard ranges)
Ambient temp.	-30°C~80°C; with LCD -30°C~70°C
Medium temp.	-40°C~125°C
Storage temp.	-20°C~70°C
Insulation resistance	≥200MΩ/250VDC
Protection	IP67
Ex-proof	Ex db IIC T6 Gb
Static pressure impact	Zero 0.15%FS/4MPa Span 0.25%FS/4MPa
Long-term stability	±0.2%FS/2 years

Structural performance	
Diaphragm material	316L, Hastelloy C, tantalum, other materials to be customized
Exhaust/Drain valve	Stainless steel
O-ring	FKM
Filling liquid	Silicon oil
Clamp block	SS304
Flange	304 (316 is optional)
Housing material	The shell is die-cast aluminum alloy, painted with epoxy resin coating
Electrical connection	M20×1.5, NPT1/2 female
Pressure connection	DN25 PN40, DN40 PN40, DN50 PN40, DN80 PN16 options Flange comply with the GB/T 9119-2010 standard; other standards can be customized

Dimension unit: mm

Product model	Dimension drawing
PCM3051-LT	

HART communication diagram



