

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
- Isolation ex-proof housing structure, strong resistance to frequency conversion interference
- High static pressure, high overload protection
- Patented double overload protection diaphragm design
- Lightning protection circuit design

Applications and industries

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

PCM3051-LT intelligent flange mount pressure transmitter adopts advanced monocrystalline silicon pressure sensor technology and patented encapsulation process. PCM3051-LT is a well developed high-performance pressure transmitter with international leading technology. With patented double overload protection diaphragm design and internal circuit anti-surge protection design, this product can be used to measure liquid, gas or steam level, density, pressure, and flow rate, and then convert it to 4-20mA + HART current signal output.

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 type	Gauge Pressure
Supply	12~32V, 24V recommended
Output	4~20mA+HART protocol
Accuracy	±0.1%FS (25±5℃, standard ranges)
Temperature drift	0.25%FS (-20℃~70℃, standard ranges)
Ambient temperature	-30℃~80℃; with LCD -30℃~70℃
Medium temp.	-40℃~125℃
Storage temp.	-20℃~70℃
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

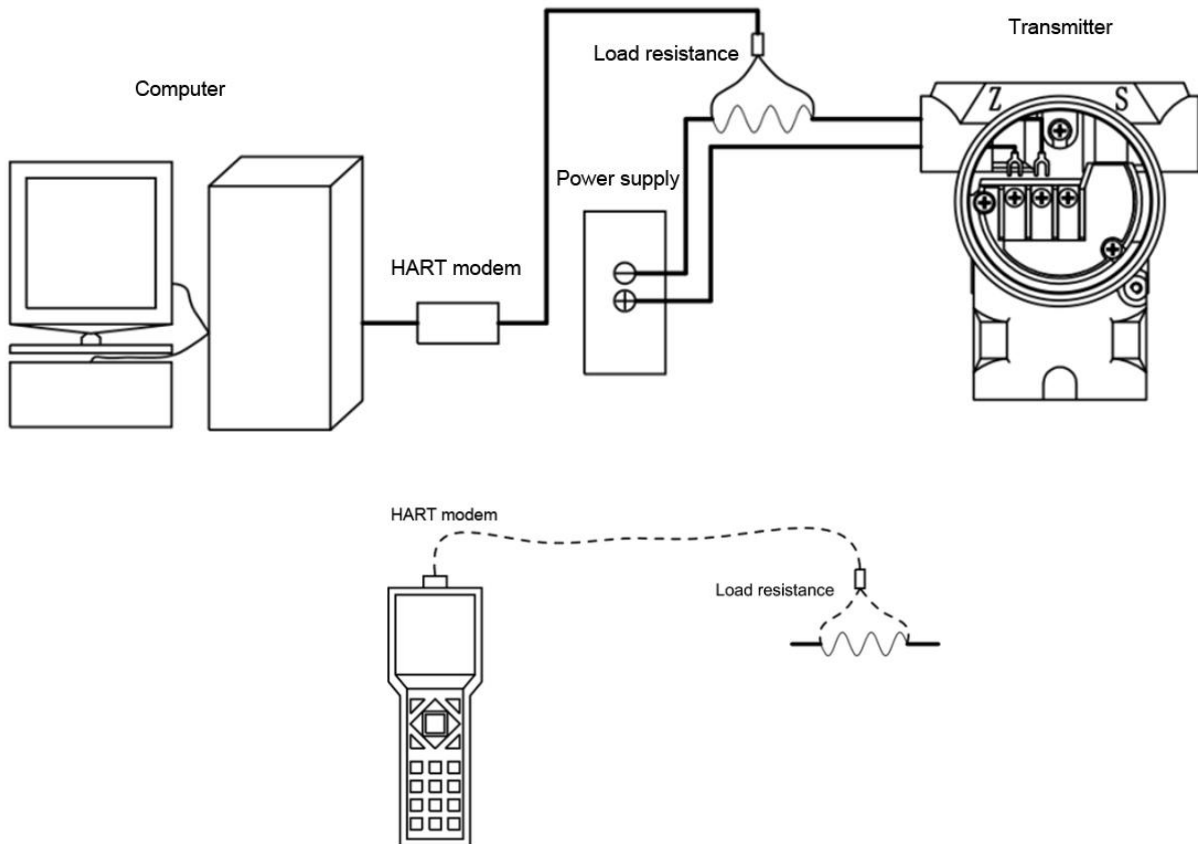
Structural performance

Diaphragm material	316L, Hastelloy C, tantalum, other materials to be customized
Exhaust/Drain valve	Stainless steel
O-ring	VITON
Filling liquid	Silicon oil
Clamp block	SS304
Flange	316
Housing material	Die-cast aluminum alloy shell, painted epoxy resin coating
Electrical connection	M20×1.5 ,NPT1/2 female
Pressure connection	DN25 PN40, DN40 PN40, DN50 PN40, DN80 PN16 options Flange execution standard GB/T 9119-2010, other standards can be customized

Dimension drawing

Product model	Dimension drawing	unit: mm
PCM3051-LT		

HART communication diagram



PCM3051- LT		– 40k		F1		M4		J8X															
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Example: PCM3051-LT-40k F3M4J8X

Product model: PCM3051-LT, pressure range 0 ~ 40kPa, Output: 4 to 20mA+HART protocol, Electrical connection: 3051 housing with display (M20 × 1.5), Flange size: DN50 PN40, wetted diaphragm material: 316L

Ordering tips:

Accessories should be ordered separately.