

PCM2051-F Intelligent Flush Diaphragm Pressure Transmitter with Flange

Features

- Using monocrystalline silicon pressure chips
- Wide pressure range
- 2-wire, 4~20mA HART® protocol digital communication
- Intelligent LCD gauge with backlight
- With both local zero and pressure range adjustment
- Complete varieties, high accuracy, good stability
- Explosion-proof housing structure, strong resistance to frequency conversion interference
- Without mechanical drive components, solid and vibration-resistant
- Lightning protection circuit design

Applications

- Process control fields for 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

PCM2051-F intelligent flush pressure transmitter with flange uses a monocrystalline pressure chip inside. The sensor signal is converted to a standard signal through dedicated signal processing. This product, with stable and reliable performance, has passed long-term aging and stability screening and can be used in harsh outdoor environments. It also ensures the on-site pressure display, with zero and span transferable. The products of this series are widely apply to the industrial process control, petroleum, chemical, metallurgy, 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	0~6kPa, 0~40kPa, 0~100kPa, 0~250kPa, 0~1MPa, 0~3MPa
Pressure reference	Gauge pressure
Supply	12~32V, recommend 24V
Output signal	4~20mA+HART® protocol
Accuracy	±0.1%FS (25±5℃, Standard ranges)
Temp. drift	0.25%FS (-20℃~70℃, Standard ranges)
Ambient temperature	-30℃~80℃; with LCD gauge -30℃~70℃
Medium temp.	-40℃~125℃
Storage temp.	-20℃~70℃
Insulation resistance	≥200MΩ/250VDC
Protection grade	IP65
Ex-proof grade	Ex db IIC T6 Gb
Long-term stability	±0.2%FS/2years

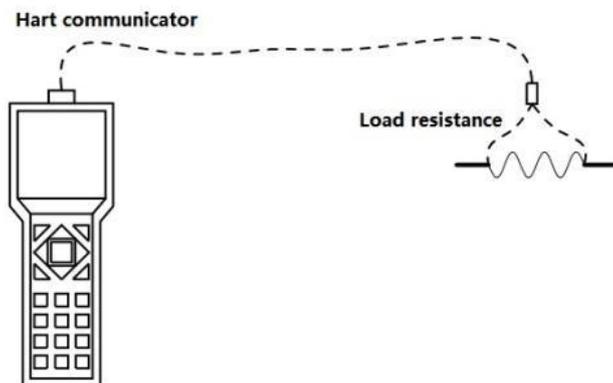
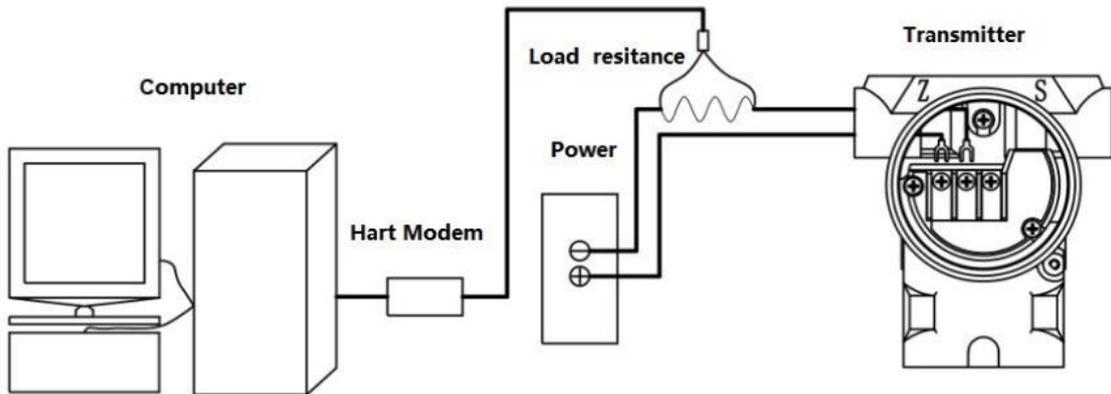
Structural performance

Diaphragm material	316L, Hastelloy C, Tantalum, Other materials to be customized
Exhaust/Drain valve	Stainless Steel
O-ring	Fluoroelastomer
Filling liquid	Silicon oil
Flange	304 (316 is optional)
Housing material	Die-cast aluminium alloy, painted epoxy coating
Electrical connection	M20×1.5, NPT1/2 Female
Process connection	DN25 PN16, DN40 PN16, DN50 PN16, DN80 PN16 options Implementation standard GB/T 9119-2010; other standards can be customized

Dimension unit: mm

Product Model	Dimension
PCM2051-F	<p>According to the flange specifications</p>

HART communication connection diagram



PCM2051-F	-	40k	F3	M4	J8X										
								Housing							
						J8X	2051 Housing with display (M20×1.5)								
						J12X	2051 Ex-proof housing with display (M20×1.5)								
						J22X	2051 Ex-proof housing with display (NPT1/2)								
								Diaphragm			Diaphragm				
						M1	Hastelloy C		M2	Tantalum		M4	316L		
								Flange				Flange			
						F1	304 DN25 PN16 RF			F2	304 DN40 PN16 RF				
						F3	304 DN50 PN16 RF			F4	304 DN80 PN16 RF				
								Pressure range			Pressure range			Pressure range	
						6k	0~6kPa		40k	0~40kPa		100k	0~100kPa		
						250k	0~250kPa		1M	0~1MPa		3M	0~3MPa		
								Product model							
PCM2051-F								Intelligent flush diaphragm pressure transmitter with flange (Capillary available)							

Example: PCM2051-F-40kF3M4J8X

Product model PCM2051-F, pressure range 0~40kPa, output signal: 4~20mA@HART® protocol, electrical connection: 2051 housing with display (M20×1.5 female), flange specification: 304 DN50 PN16 RF, diaphragm material: 316L.

Wotian reserves the right to make any change in this publication without notice. The information provided is believed to be accurate and reliable as of this product sheet.

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