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CATÁLOGO DE INGLÉS

PTH 501 H

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DIFFERENTIAL PRESSURE TRANSMITTER HART

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Differential Pressure Field-Mounted Transmitter

PTH501H with HART Protocol

Application Area

Field mounted differential pressure transmitter PTH501H with HART- protocol for converting pressure into a scalable 4 to 20 mA analogue output signal. Typical area use of this transmitter is Process Control, differential pressure for deriving flow rated (volumetric or mass flow), level, mass or volume

Input Types

This Transmitter uses differential pressure sensor as input analogue signal.

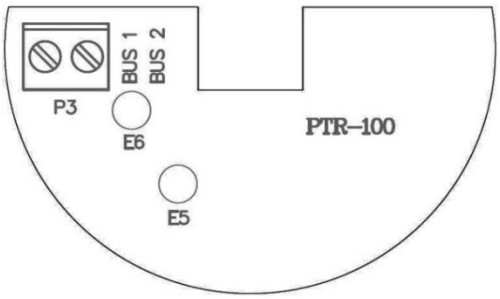
- High Performance and Accuracy in total ambient pressure and Temperature range
- Digital Communication and Universal configuration with HART protocol communicator or PC-based configuration
- Self-diagnostics function ensures long-term performance and lower cost of ownership
- High Resolution LCD display and a bar-graph with an indicator for alarms
- 2-wire technology, Loop-powered 4-20mA temperature Transmitter analogue output with HART protocol
- Wide voltage supply range from 9V DC without load up to 15V DC with 250 Ω load
- Extremely high overload limit and High temperature and long term stability
- Minimum temperature and static pressure influence

Power Supply			
Supply Voltage	Minimum	9V DC without load 15V DC with 250Ω load	
	Maximum	36V DC	
Output			
Output Signal		4 to 20 mA	
Signal on Alarm		Under Range 3.9 mA Over Range 21 mA	
Load		Max. 23mA	
Transmission Behavior		Loop Current Linear in Input Range	
Input Types and Ranges			
Input Sensor	Sensor Type	Nominal Pressure	Max. Permissible Overload
	4S	±40KPa	13MPa
	5S	±200KPa	13MPa
	7S	±2100KPa	13MPa
Performance Characteristic			
Accuracy		± 0.25% FS	
Stability		±0.3% of output reading or ±0.5°C (whichever is greater)	
5 Years Stability		±0.7% of output reading or ±1°C (whichever is greater)	
Noise suppression for noise frequency		50/60 Hz	
Update time		< 0.5 sec	
Response Time		2 sec	
Switch on Delay		3 sec	
Influence of Ambient		Negligible	
Load Influence		Negligible	
Power Supply Influence		Negligible	
Resolution		1µA	

Electromagnetic Compatibility (EMC) standards		
Electromagnetic Compatibility (EMC) standards		IEC/EN 61326-1: 2006 IEC/EN 61326-2-3: 2006
EMC	ESD	4KV Contact 8KV Air
	Radiated	80-1000MHz @ 10V/m AM
	Burst	1KV
	Surge	0.5KV Line-Line 1KV Line-Earth
	Conducted	150KHz to 80MHz @ 10V
	Magnetic	50Hz @ 30A/m
	Emission	30-230MHz, 30dB (uV/m) @ 10m 230-1000MHz, 37dB (uV/m) @ 10m
Vibration Effect		10 to 60 Hz : 0.21mm peak Displacement 60 to 500 Hz : 3g
Operating Temperature		Without LCD: -40˚C to +85˚C With LCD: -20˚C to 60˚C
Relative humidity		0% to 95%
Protection rating (Enclosure)		IP66
Others		
Display Type		Graphical Display, 8×17 Characters, 102x64 Pixels, FSTN Pos. Transflective
Weight		Approx. 3,150 g
Display Range		pressure :-9999.9 Current : 99.999
Materials		Aluminum die cast

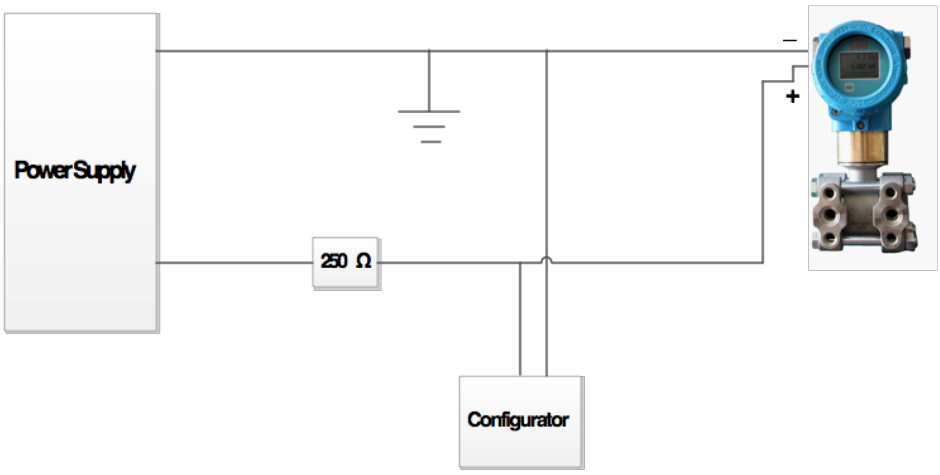
Electrical Connection of Sensors

Figure 1: Diagram of Connectors on the PTH501H



Connection	Description
BUS 1	HART Network connector (without polarization)
BUS 2	HART Network connector (without polarization)

Figure 2 : Wiring Diagram for the PTH501H Working as a Transmitter.



Electrical Field Connection Diagram