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CATÁLOGO DE INGLÉS

PTH 401 H

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PRESSURE TRANSMITTER HART

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Absolute Pressure Field-Mounted Transmitter

PTH401H

Application Area

Field mounted Absolute pressure transmitter PTH401H 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, absolute pressure for deriving flow rated (volumetric or mass flow), level, mass or volume

Input Types

This Transmitter uses absolute 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.

TECHNICAL DATA

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	
Pressure Ranges		
Nominal	Max. Permissible Overload	
0.....5Kpa	400Kpa	
0.....10Kpa	400Kpa	
0.....20Kpa	600Kpa	
0.....40Kpa	600Kpa	
0.....100Kpa	1Mpa	
0.....200Kpa	1.8Mpa	
-100.....400Kpa	2.5Mpa	
-0.1.....1Mpa	4Mpa	
-0.1.....2Mpa	4Mpa	
-0.1.....4Mpa	6Mpa	
-0.1.....7Mpa	10.5Mpa	

Performance Characteristic		
Accuracy	± 0.25 % F.S	
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. 3,100 g
Display Range	pressure :-9999.9 Current : 99.999
Materials	Aluminum die cast

Electrical Connection of Sensors

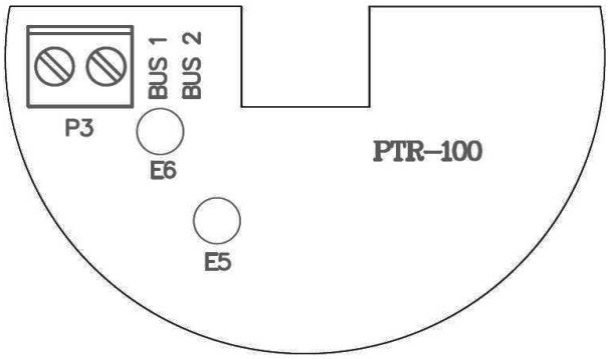

Figure 1: Diagram of connectors on the PTH401H

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

Figure 2 : Wiring Diagram for the PTH401H Working as a Transmitter.

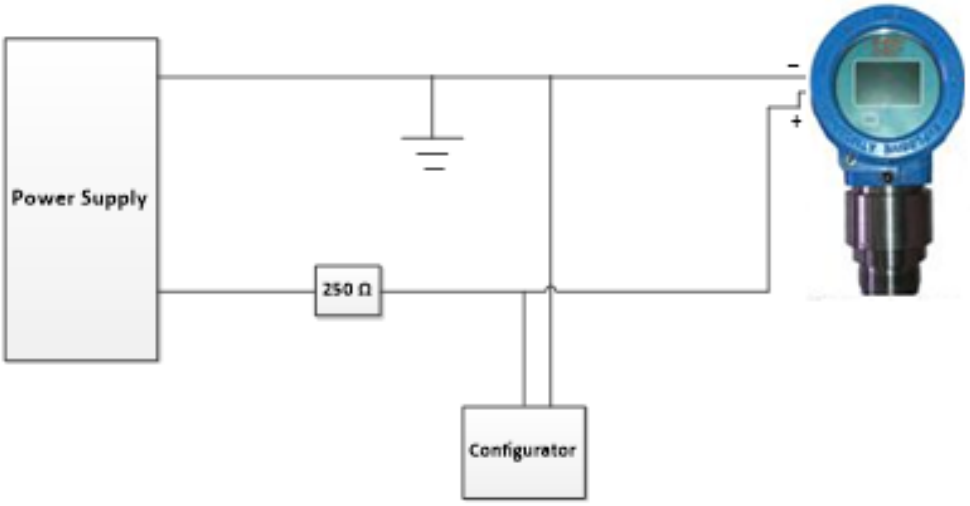

Figure 3: Electrical Field Connection Diagram