

Industrial Pressure Transmitter PEK401HI With HART Protocol



Application Area

- Compressed air
- Non-aggressive gases
- Vacuum technology
- Pneumatics
- Fixed measuring ranges up to 600 bar
- Compact construction
- Simple mounting
- Excellent long term stability
- Long operational life
- Low price
- HART-Communication
- LED display (Option)

Input Types

This Transmitter uses Gauge pressure sensor as input analogue signal.

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		
Input Types and Ranges			
Absolute Sensor	Minimum Pressure	Maximum Pressure	Max. Permissible Overload
	1 Bar	60 Bar	1.5 ~ 2 Times of full Range
Performance Characteristic			
Accuracy	0.2 % Full Scale		
Long Term Stability	Typically 0.15% per year		
Communication Resistance	250 Ω		
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		
Insulation resistance	>250MΩ		
Intrinsic safety	Eex ia IIC T4		
Short-Circuit protection	Permanent		

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 LED: -40°C to +85°C With LED: -20°C to 60°C	
Relative humidity	0% to 95%	
Protection rating (Enclosure)	IP65	
Others		
Display Type	4 Digit, red LED Display, digit high 7 mm, digit width 4.85 mm	
Weight	Approx. 140 g	
Display Range	Current: -1.9.9.9 ~ 9.9.9.9	
Materials	SS304	
Process connections	NPT ½"	

Electrical Connection

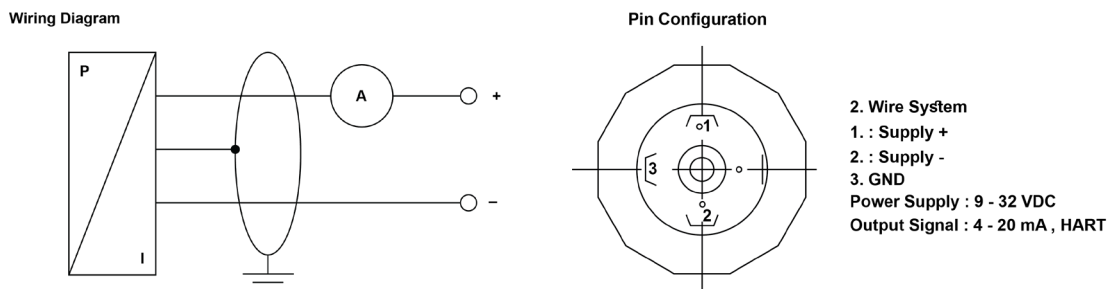
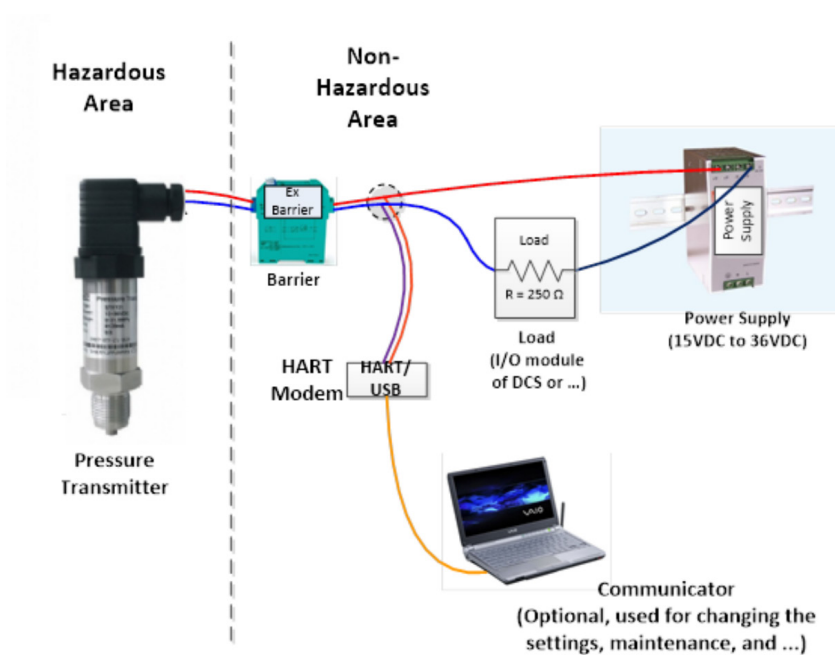


Diagram of connectors PEK401HI

Connection	Description
BUS 1	HART Network connector
BUS 2	HART Network connector

Electrical Field Connection Diagram



Electrical Field Connection Diagram PEK401HI