

Gauge Pressure Field-Mounted Transmitter PEK401HA With HART Protocol



Application Area

Field mounted Gauge pressure transmitter PEK401HA with HART- protocol for converting pressure into a scalable 4 to 20 mA analogue output signal.

Input Types

This Transmitter uses gauge 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 475 Rosemount
- Self-diagnostics function ensures long-term performance and lower cost of ownership
- High Resolution LCD display
- 2-wire technology, Loop-powered 4-20mA temperature Transmitter analogue output with HART protocol
- Wide voltage supply ranges from 9V DC without load up to 15V DC with 250 Ω load
- Extremely high overload limit and High temperature and long-term stability
- No hysteresis and Corrosion-resistant

Technical Data

Power Supply			
Supply Voltage	12 ~ 36V DC		
Communication resistance for HART Protocol	Typ. 250 Ω		
Output			
Output Signal	4 to 20 mA with HART Protocol		
Signal on Alarm	Under Range 3.8 mA Over Range 22.8 mA		
Load	Max. 23mA		
Transmission Behavior	Loop Current Linear in Input Range		
Pressure Ranges			
Nominal	$\pm 250\text{mbar}$, $\pm 400\text{mbar}$, $\pm 2\text{Bar}$, $\pm 30\text{Bar}$		
Over pressure	Minimum 1.3 Nominal Range		
Performance Characteristic			
Accuracy	0.1 % Full Scale		
Noise suppression for noise frequency	50/60 Hz		
Update time	< 0.5 sec		
Response Time	≤ 700 ms		
Switch on Delay	< 5 sec		
Influence of Ambient	Negligible		
Load Influence	Negligible		
Power Supply Influence	Negligible		
Resolution	1 μA		
Insulation resistance	>250M Ω		
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	Compliance with IEC 61000-4-3		
Explosion Proof	EXia/Eexd IIC T6		
Vibration Effect	10 to 60 Hz : 0.21 mm 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)	IP65		
Others			
Display Type	5 digits		
Weight	Approx. 3,720 gr (AL) / 4,900 gr (SS316)		
Display Range	-19999 ~ 19999		
Enclosure	Enclosure Materials	PEK002	Aluminum die cast or SS316

Electrical Connection of Sensors

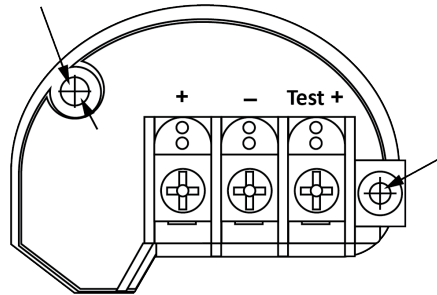
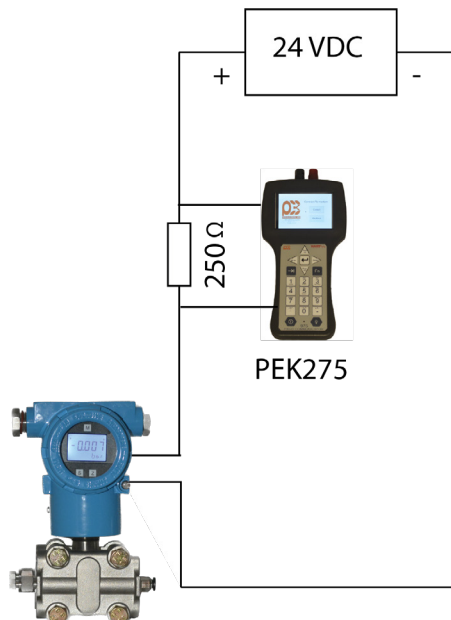


Diagram of connectors

Connection	Description
+	HART Network Connector (without polarization)
-	HART Network Connector (without polarization)
	Communicator
Test+	Communicator

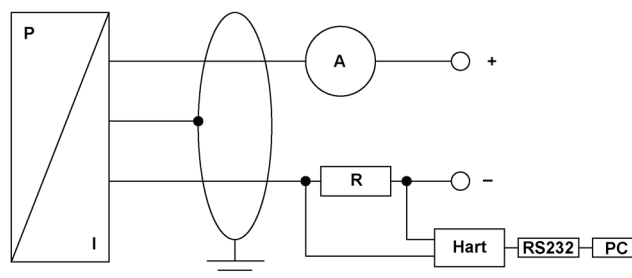
Electrical Field Connection Diagram



Electrical Field Connection Diagram

Wiring Diagram

Wiring Diagram



Wiring Diagram