

TECHNOLOGY

HOLYKELL®

HPT200EX
PRESSURE
• DATASHEET •

1. Pressure Measurement 2. Level Measurement 3. Temperature Measurement
4. Flow Measurement 5. Display & Control Instruments
6. Wireless Monitoring System 7. Velocity Measurement

HPT200EX

Industrial Explosion-proof Type Pressure Transmitter



Applications

- Oil, gas applications
- Drilling platforms and pipeline
- Refineries and petrochemical industry
- Natural gas compressors
- Marine and vessel approved
- Diesel tank level monitoring
- Hydraulic and pneumatic system
- Harsh and hazardous application

Features

- Imported chip, 0.25% F.S
- 316L stainless steel diaphragm
Welded SUS316L Body construction
- High degree of EMC/EMI protection
- Strong shock and erosion resistance
- IP68 waterproof protection
- ATEX/ IECEx approved
- Custom absolute and gauge (relative) versions

Profiles

The HPT200EX intrinsically safe pressure transmitter is designed for use in hazardous environments, and offers a reliable pressure measurement, specifically for the high demands of industrial oil and gas applications. It has the explosion proof ATEX/ IECEx approval.

It features all stainless steel wetted parts, an exceptionally high resistance to vibration, pressure spikes and moisture ingress. Furthermore, this pressure transmitter is IP68 rated. The fully sealed structure makes it ideal for installation where space in a hazardous environment is at a premium.

HPT200EX pressure transmitter can be delivered with analog signals 4...20mA or RS485 RTU output signal, absolute and gauge (relative) pressure can be measured with measuring ranges from up to 600 bar.

Holykell can provide a cost effective solution for pressure monitoring for a variety of applications. Welcome your inquiry.

Measuring range

bar	-1 to 0..0 to 0.1...0 to 600
Kpa	-100 to 0..0 to 10...0 to 60000
psi	-15 to 0..0 to 1.5...0 to 9000
mbar	-1000 to 0..0 to 100...0 to 600000

They give measuring range are also available in Mpa , Pa,in Hg,mm Hg

Materials

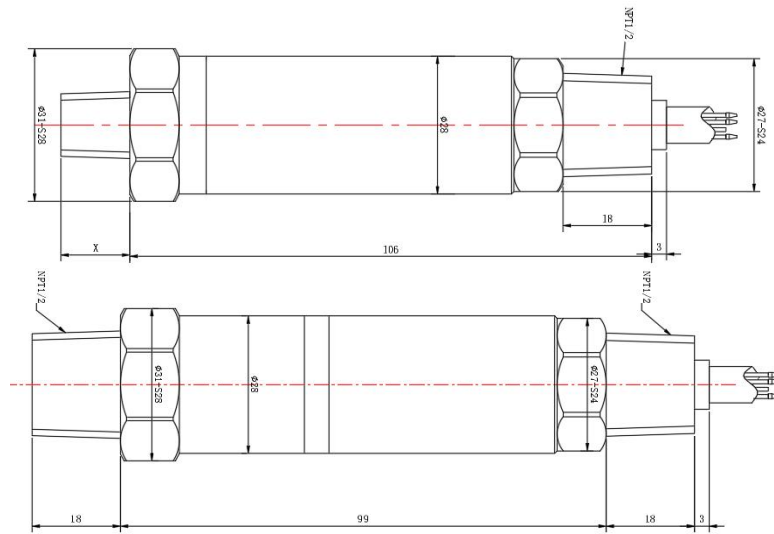
Wetted Parts	Standard	Optional
Case and sensor	Stainless steel 316L	316 SST/SUS321
Filled Oil	Silicone oil	Fluorocarbon oil
Cable	PVC	PTFE/PUR/PE

Specifications

Ambient Temperature: 25°C (unless specified)

Parameter	HPT200EX					
Pressure Range	Gauge /Absolute / Negative pressure optional					
Overload	150% F.S					
Burst Pressure	500% F.S					
Accuracy (Linearity, Hysteresis & Repeatability)	0.5%F.S(Typical); 0.25%F.S; 0.1%F.S(by customized) at 25°C including non-lin., rep. and hys.					
Long-term Stability	≤ ±0.1%F.S/year					
Working Temp.	-20°C to +80°C(corrosive medium),-40°C to +80°C (non-corrosive medium); -40~250°C by customized					
Compensation Temp.	0°C to +50°C					
Storage Temp.	-40°C to +85°C					
Medium Compatible	Compatible with 316L Stainless Steel					
Electrical Wire	2 Wires		3 Wires			4 wires
Output	4-20 mA	4-20 mA+ Hart	0-5 V;0.5-5 V	0-10 V	0.5-4.5 V non-ratiometric	RS485 Modbus RTU
Power Supply	8-30 V DC	12-30 V DC	8-30 V DC	13-30 V DC	5 V DC±5%	8-30 V DC
Load Resistance	≤(U-8)/0.02 Ω		≥ 100 KΩ			-
Insulate Resistance	>100M Ω @100V					
Zero Temp. Drift	0.01%FS/°C					
Pressure Connection	G1/4"male, G1/2"male, 1/4"NPT male, 1/2"NPT male optional					
Electrical Connection	1/2"NPT male thread with cable outlet IP68					
Endurance	>100 million cycles, 0...100 %FS at 25°C					
Mechanical Vibration	±20g					
Certificate	ATEX (Ex ia IIC), IECEx, CE, ROHS					
IP Rating	IP68					
Response Time	≤20 ms(Current and voltage signals)					
Options	Custom oil filling fluorocarbon oil (O2-compatible), olive-oil, lowest temperature oil (-55°C) Other pressure connections and electrical connections by customized Withstand Xylene medium pressure and level application (customized)					

Dimensions and Drawing



Range: 0~1000Bar

Range 0-60bar

Unit: mm

Electrical Connection

		Cable-out	
	Current	Red	U+
		Green	Iout(U-)
		Yellow	⊥ Connect to earth ground
	Voltage	Red	U+
		Green	Vout
		Black	U-
	RS485 RTU Modbus	Yellow	⊥ Connect to earth ground
		Red	U+
		Black	U-
		Green	RS485A
		Blue	RS485B
		Yellow	⊥ Connect to earth ground/Black

		Hirschmann connector	
	Current	Pin 1	U+/Red
		Pin 2	Iout(U-)/Green
		Pin 3	/
		Pin 4	⊥ Connect to earth ground /Black
	Voltage	Pin 1	U+/Red
		Pin 2	U-/Black
		Pin 3	Vout/Green
		Pin 4	/
	RS485 RTU Modbus	Pin 1	U+/Red
		Pin 2	U-/Black
		Pin 3	RS485A/Green
		Pin 4	RS485B/Yellow

Pressure Connections				
M20x1.5 male	1/2" NPT male	1/4" NPT male	G1/2" male	G1/4" male
M20x1,5 male	1/2" NPT	1/4" NPT	G1/2"	G1/4"

How to Order

1. Range Selection Table:

01	-1~65	07	0~6	13	0~35	19	0~160	25	0~500		
02	-1~125	08	0~10	14	0~40	20	0~200	26	0~600		
03	0~1	09	0~16	15	0~50	21	0~250				
04	0~2	10	0~20	16	0~60	22	0~300				
05	0~3	11	0~25	17	0~70	23	0~350				
06	0~5	12	0~30	18	0~100	24	0~400	X	By Customized		





Kindly according to your application select suitable range code , Example: code 08 =10 .
Unit of measure select on the Part Number Selection Table . Example: Code B=Bar , that's 10 bar .

2. Part Number Selection Table:

200	EX	04	B	G	E5	S12	3	N	1	002
Selection Type										
Electrical Connection	EX= 1/2"NPT X=By customized									
Pressure Range	Range reference to pressure range selection table code									
Pressure Units	B=bar M=MPa	P=Psi H=mH2O	K=KPa							
Pressure type	G=Gauge/Relative		A=Absolute							
Signal Output	E5=4-20 mA(2 wire) E8=0.5-4.5 V(3 wire) E14=4-20 mA+Hart (2 wire) X= By Customized		E6=0-5 V(3 wire)		E7=0-10 V(3 wire) E11=RS485(MODBUS) E18=0.5-5 V (3 wire)					
Power Supply	S6=5 V DC S12=8-30 V DC		S10=12-30 V DC S43=13-30 V DC			X=By customized				
Pressure connection	1=7/16-20 UNF male 3= 1/4" NPT male 8= M20x1.5 male 10 =1/2" NPT male		2=7/16-20 UNF Female 6=G1/4" male 9=G1/2" male X=By Customized							
Other option	C=Anti-corrosive Type X=Withstand Xylene		O=Oxygen Services N=Standard Type							
Accuracy	1=0.5%F.S 2=0.25%F.S 3=0.1%F.S (by customized)									
Cable length	000=Non-cable		001= Cable 1 m		002= Cable 2 m		X= By Customized			

Accessories

(Notes: Please purchase separately. For the price of accessories, please contact our sales.)

	Description	Order number
	<p>Liquid level display control device</p> <p>With all kinds of liquid level sensor, measurement according to liquid level, and according to the setting of the container structure and size and the density of liquid, calculation, display liquid volume or quality.</p>	0008
	<p>Terminal box</p> <p>The terminal box, with IP67 and watertight ventilation element, provides a moisture-free electrical termination for the submersible pressure transmitter. It should be mounted in dry environment or directly in the switch cabinet. It's use for extend ground cable to control room.</p>	0003
	<p>Adapter Converter</p> <p>It is able to convert RS232 signal to RS485 balanced differential signal and extend the communication distance to 1.2km. It uses a particular pump to gain power from RS232 signal (RTS, DTR, TXD) without initializing the RS232 series interface. This interface converter does this without requiring any AC or DC power.</p>	0005
	<p>Surge electrostatic protector</p> <p>Anti-surge $\pm 2000V/\pm 4000V$, anti-static 18KV, suitable for protecting 4-20ma and RS485 circuits.</p>	0014

Order information

Model / Measuring range / Output Signal / Medium / Cable length / Case / Accessories