

TECHNOLOGY

HOLYKELL®

HPT200

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

HPT200 series

Universal Industry Pressure(Level) Transducer & Transmitter

Applications

- Critical industrial applications
- Petroleum
- Chemi-industry
- Metallurgy
- Power station
- Hydrology, Agriculture
- Harsh environments in the process industry
- Fuel storage and transport

Features

- Non-linearity up to 0.1% of span
- High Shock and Vibration
- Customized outputs, electrical connections and pressure ports
- CE ATEX RoHS certificate approved
- Overcurrent/overvoltage protection
- Polarity Protection
- Full sealed high stability impact design

Profiles

HPT200 pressure transducers/transmitters use high quality imported piezoresistive pressure sensor. It has a fully welded 316L stainless steel housing, with high shock and vibration resistance and EMI/RFI protection.

HPT200 series offers continuous measuring ranges up to 1000 bar and it can be combined with all the standard industrial output signals, the most common process connections and a wide number of electrical connections.

Furthermore, it offers numerous options, such as different accuracy classes, extended temperature ranges and custom specific pin assignments, meaning it can suit the widest range of applications.

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



Measuring range

bar	-1 to 1...0 to 0.1...0 to 1000
Kpa	-100 to 100...0 to 10...0 to 100000
psi	-15 to 15...0 to 1.5...0 to 15000
mbar	-1000 to 1000...0 to 100...0 to 1000000
m	0 to 1...50m Level (by customized)

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

Materials

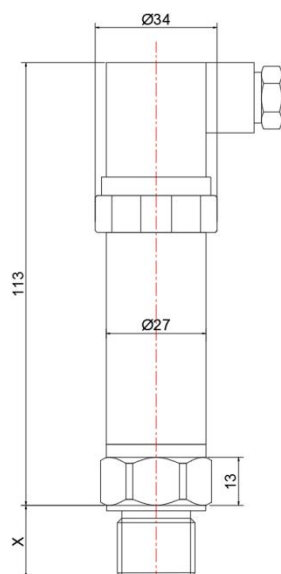
Wetted Parts	Standard	Option
Case and sensor	Stainless steel 316L	316 SST/SUS321
Filled Oil	Silicone oil	Fluorocarbon oil
Cable	PVC	PTFE/PUR/PE

Specifications

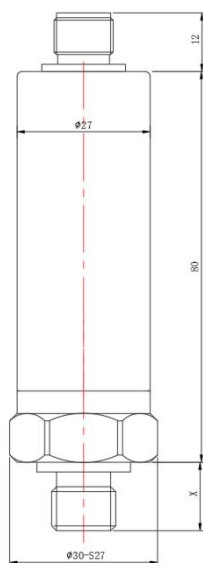
Ambient Temperature: 25°C (unless specified)

Parameter	HPT200-H/C8/C5
Pressure Type	Gauge /Absolute / Sealed gauge / Negative pressure optional.
Safe Overload	200% F.S.
Burst Pressure	500% F.S.
Accuracy at 25°C (Linearity Hysteresis Repeatability)	$\leq \pm 0.25\% \text{F.S}$ typical $\leq \pm 0.1\% \text{F.S}$ (by customized) at 25°C Including non-lin., rep. and hys.
Total Error Band	0...50 °C max. $\leq \pm 0.75\% \text{FS}$; -10...60 °C max. $\leq \pm 1.0\% \text{FS}$
Long-term Stability	0.1%F.S/Year
Working Temp.	-20°C~80°C (corrosive medium); -40°C~80°C (non-corrosive medium)
Storage Temp.	-40°C~125°C (Nitrile rubber sealing ring); -30°C~150°C (fluororubber rubber sealing ring)
Medium Compatible	Compatible with SUS316L
Electrical Wire	2 Wires 3 Wires 4 wires
Output	4-20mA 4-20mA+ 0-5V;0.5- 0-10V 0.5-4.5V 4-20mA Double 4-20mA RS485 Hart 5V non-ratiometric +Temp(Ω) (P+Temp) Modbus RTU
Power Supply	7-30Vdc 12-30Vdc 8-30Vdc 13-30Vdc 5Vdc $\pm 5\%$ 12-30Vdc 12~30Vdc 7-30Vdc
Load Resistance	Current type: (U-10)/0.02 (Ω); Voltage type: >100K Ω
Insulate resistance	>100M Ω @100V dc
Zero Temp. Drift	0.2%FS/°C ($\leq 100 \text{kPa}$), 0.1%FS/°C ($> 100 \text{kPa}$)
Body material	316L stainless steel
Material of diaphragm	316L Stainless steel
Endurance	>100 million cycles, 10...90 %FS at 25°C
Electrical connection	DIN43650 Hirschmann Connector 4 Pin Type Direct cable outlet type
Limiting Frequency	1 kHz
Mechanical vibration	$\pm 20 \text{g}$
Pressure connect port	G1/4"male, G1/2"male, 1/8"NPT male, 1/4"NPT male, 1/2"NPT male and female optional. (by customized)
Water Proof	IP65 to IP67
Response time	$\leq 10 \text{ms}$
Options	Temperature Range by customized, Maximal range: -40...+100 °C Oil Filling Fluorocarbon oil (O2-compatible), olive-oil, lowest temperature oil (-55 °C) Pressure Connection, Electrical Connection Others on request. withstand Xylene medium pressure and level application (customized)

Dimensions and Drawing



HPT200-H



HPT200-C5



HPT200-C8

Unit,mm

Electrical Connection

Direct cable outlet			
	Current	Red	U+
		Green	Iout(U-)
		Black	⏏ Connect to earth ground
	Voltage	Red	U+
		Green	Vout
		Black	U-

Direct cable outlet			
	4-20mA +Temp	Red	U+
		Green	Signal+(Pressure)
		Yellow	Signal+(PT100A)
		Blue	Signal+(PT100B)
		Black	U- & ⏏ Connect to earth ground
	RS485 RTU Modbus	Red	U+
		Black	U-
		Green	RS485A
		Blue	RS485B
		Yellow	⏏ Connect to earth ground

DIN 43650 Connector			
	Current	1	U+ / Red
		2	Iout(U-) / Green
		3	NC
		4	⏏ Connect to earth ground / Black
	Voltage	1	U+ / Red
		2	U- / Black
		3	Vout / Green
		4	⏏ Connect to earth ground

Plug:4-pin Type			
	Current	1	U+ / Brown
		2	Iout(U-) / White
		3	NC
		4	⏏ Connect to earth ground / Black
	Voltage	1	U+ / Brown
		2	Vout / White
		3	U- / Blue
		4	⏏ Connect to earth ground /Black

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	27	0~1000		
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 11 = 25 .






Unit of measure select on the Part Number Selection Table . Example: Code B=Bar , that's 25 bar .

2. Part Number Selection Table:

200 Selection Type	H	15	B	G	E7	S43	3	N	1	002
Electrical Connection	H= Hirschmann DIN43650 EX=1/2"NPT C8=Directly cable outlet C5= M12 (4-pin) Type GE=LED digital display GC=LCD digital display									
Pressure Range	Range reference to pressure range selection table code									
Pressure Units	B=bar P=Psi K=KPa M=MPa H=mH2O F=m Fuel									
Pressure type	G=Gauge/Relative A=Absolute									
Signal Output	E0=1-5V (3 wire) E5=4-20mA(2 wire) E6=0-5V(3 wire) E7=0-10V (3 wire) E8=0.5-4.5V(3 wire) E11=RS485 Modbus RTU (4wire) E22=Double 4-20mA for P+T E55=4-20mA+Temp. X= By customized									
Power Supply	S6=5Vdc S10=12-30Vdc S11=7-30Vdc S12=8-30Vdc S43=13-30Vdc X= By customized									
Pressure connection	3= 1/4" NPT male 6=G1/4" male 7=G1/4"Female 8= M20x1.5 male 9=G1/2" male 10 =1/2" NPT male 26=1/4"-18 NPT Female X= By customized									
Other option	C=Anti-corrosive Type F=Flush diaphragm O=Oxygen services X=Withstand Xylene N=Standard Type FF=Fuel Filter									
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 1M 002= Cable 2M X= By customized									

Accessories

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

	Description	Order number
	Liquid level display control device 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.	0008
	Attached LED indicator for transmitters standard version	0006
	Attached LCD indicator for transmitters standard version	0007
	Terminal box 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.	0003
	Damper Screw/damper against pressure peak	0025

Order information

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