

TECHNOLOGY

HOLYKELL®

HPT200-EX
PRESSURE
• DATASHEET •

1. Pressure Measurement 2. Level Measurement 3. Temperature Measurement
4. Flow Measurement 5. Display & Control Instruments

HPT200-EX

Industry 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, hazardous application

Features

- U.K. GE chips, 0.25% F.S.,
- 316L stainless steel diaphragm, Welded 316SS Body Construction Shock and erosion
- High degree of EMC/EMI protection
- IP68 Ingress waterproof protection
- Exia IIC T6, and ATEX approval
- Custom absolute and gauge (relative) versions

Profiles

The HPT200-EX 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 approved explosion proof Exia IIC T6, and ATEX approval.

They feature all stainless steel wetted parts, an exceptionally high resistance to vibration, pressure spikes and moisture ingress. Furthermore, these pressure transmitters fulfil IP68. The compact yet rugged construction of these units makes them ideal for installation where space in a hazardous environment is at a premium.

Pressure transmitters can be delivered with analog signals 4... 20 mA or RS485 RTU output signal, absolute and gauge (relative) versions, measuring ranges from 0-1 to 0-600 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 8705
mbar	-100 to 0..0 to 100...0 to 60000

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

Materials

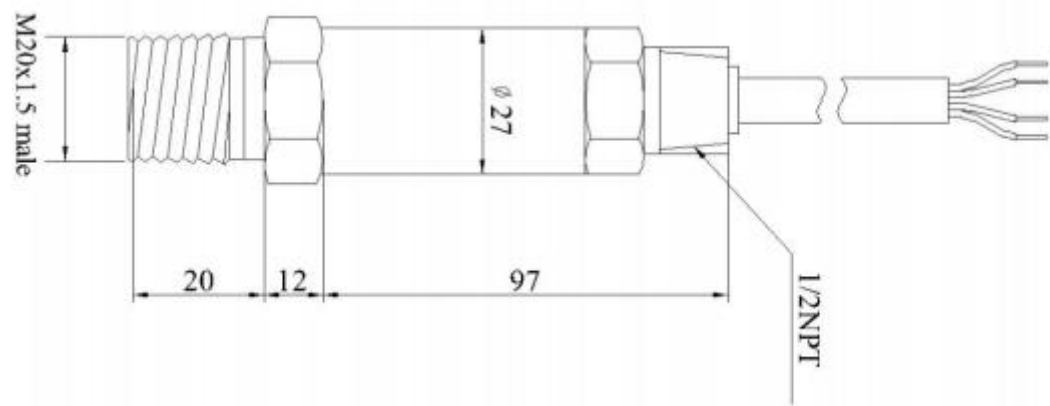
Wetted Parts	Standard	Option
Case and sensor	Stainless steel 316	316 SST/SUS321
Filled Oil	Silicone oil	Fluorocarbon oil
Cable	PVC	PTFE/PUR/PE

Specifications

Ambient Temperature: 25°C (unless specified)

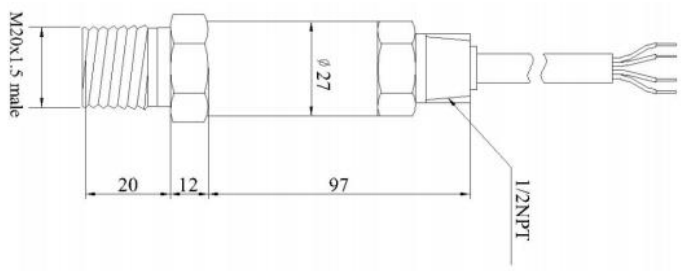
Parameter	HPT200-EX	
Pressure Range	Gauge /Absolute / Negative pressure optional.	
Overload	200% F.S.	
Burst Pressure	500% F.S.	
Accuracy	0.5%F.S.(Typical) 0.25%F.S. 0.1%F.S. (by customized)	
(Linearity Hysteresis Repeatability)	Including non-lin., rep. and hys. Optional	
Long Stability	≤ ±0.1%F.S. of span/year	
Working Temp	-40°C~105°C	
Compensation Temp	0°C~50°C	
Storage Temp	-40°C~125°C	
Medium Compatible	Compatible with 316L Stainless Steel	
Electronic Wire	2 Wires	4 Wires
Output	4~20mA	RS485 MODBUS RTU
Power Supply	7~30 V DC	
Load Resistance	(U-10)/0.02 (Ω)	
Insulate resistance	>100M Ω @100V	
Zero Temp. Drift	0.03%FS/°C(≤100kPa). 0.02%FS/°C(>100kPa)	
Pressure connection port	G1/4"male, G1/2"male, 1/4"NPT male, 1/2"NPT male and female optional.	
Electronic connection	1/2"NPT male thread with outlet cable IP68.	
Endurance	> 100 million cycles, 0...100 %FS at 25°C	
Explosion-proof rating	Ex(ia) IIC6 (standard type)	
Mechanical vibration	±20g	
Certificate	CE RoHS ATEX	
IP rating	IP68	
Response time	≤10ms	
Options	Customize 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



Unit: mm

Electronic Connection



		Directly sealed cable	
	Current	Red	Vcc+
		Green	S+(Signal)
		Black	GND&Shield
	Digital	Red	Vcc+
		Green	Vcc-&0Vcc
		Yellow	RS485A
		Blue	RS485B

S=Signal, Vcc=Power Supply, GND=Vcc-&S-

Pressure Connections

M20x1.5 male	1/2" NPT male	1/4" NPT male	G1/2" male	G1/4" male
<p>M20x1,5 male</p>	<p>1/2" NPT</p>	<p>1/4" NPT</p>	<p>G1/2"</p>	<p>G1/4"</p>

How to Order

1. Range Selection Table:

01	0~0.05	07	0~0.35	13	0~0.9	19	0~5	25	0~30	31	0~200	37	0~600	43	-1~1.5	47	-1~10
02	0~0.1	08	0~0.4	14	0~1	20	0~6	26	0~35	32	0~250	38	0.8~1.2	44	-1~3	48	-1~15
03	0~0.15	09	0~0.5	15	0~2	21	0~10	27	0~40	33	0~300	39	-0.6~0	45	-1~5	49	-1~20
04	0~0.2	10	0~0.6	16	0~2.5	22	0~16	28	0~50	34	0~350	40	-1~0	46	-1~9		
05	0~0.25	11	0~0.7	17	0~3	23	0~20	29	0~100	35	0~400	41	-1~0.6	X	By Customized		
06	0~0.3	12	0~0.8	18	0~4	24	0~25	30	0~160	36	0~500	42	-1~1				








Kindly according to your application select suitable range code , Example: code 21 = 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	S3	3	N	1	002
Selection Type										
Electronic Connection	EX= 1/2"NPT or by customized									
Pressure Range	Range reference to pressure range selection table code									
Pressure Units	B=bar P=Psi K=KPa M=MPa H=mH2O									
Pressure type	G=Gauge/Relative A=Absolute									
Signal Output	E5=4-20mA E11=RS485 (MODBUS rtu)									
Power Supply	S3=24 V DC (Typical) S15=12~30 Vdc									
Pressure connection	1=7/16-20UNF male 2=7/16-20UNF Female 3= 1/4" NPT male 6=G1/4" male 8= M20x1.5 male 9=G1/2" male 10 =1/2" NPT male 20= By Customized									
Other option	C=Anti-Corrosion Type O=Oxygen Services X=Withstand Xylene 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 1M 002= Cable 2M X= By Customized									

Accessories

(Notes: Purchased 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
	Attached LED indicator for transmitters standard version	0006
	<p>Damper</p> <p>Use for protection pulse pressure to destroy sensor.</p>	0025
	Attached LCD indicator for transmitters standard version	0007
	<p>Cooling device</p> <p>For thread attachment</p>	0004
	<p>Terminal box</p> <p>The terminal box, with IP 67 ingress protection 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 RS-232 signal to RS-485 balanced differential signal and extend the communication distance to 1.2km.It uses a particular pump to gain power from RS-232 signal (RTS, DTR, TXD) without initializing the RS-232 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