

TECHNOLOGY

HOLYKELL®

HPT601/602
LEVEL
• DATASHEET •

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

HPT 601 & HPT602 Series

Flush Pressure Transmitter / Sanitary Tri-Clamp Pressure Transmitter

Applications

- Irrigation Equipment
- General industrial applications
- Food and beverage industry
- Filling and packing machinery
- Dairy and beverage processing
- Pharmaceutical
- Dosing technology

Features

- For Sanitary or CIP (Clean-in-Place) applications
- 316L stainless steel diaphragm welded 316SS body construction shock and erosion
- Custom pressure ranges from 0-1m thru 0-500m
- Flush process connection eliminates plugging
- Advanced digital temperature compensation
- Available with an integral cooling extension for high temperature applications

Profile

HPT601 and HPT602 are a pressure and level transmitter with sanitary flush diaphragm. They adopt U.S.A imported GE pressure sensor. All process connections of the flush pressure transmitter are made of stainless steel, fully welded and isolate the process medium from the pressure measuring instrument via a positive seal. A reliable, dead-space free sealing between the process connection and the measuring medium is thus assured.

Through its optimized design, the flush process connection enables cleanability with the wetted diaphragm integrated into the process. Low-maintenance and trouble-free pressure measurement is thus guaranteed in critical applications with frequently changing media.

It has been specifically designed for the measurement of viscous, paste-like, adhesive, crystallizing, particulates containing and contaminated media, which would clog the pressure channel of conventional process connections. This model application in the field of water tank, fuel tank, building & office water level measurement, city water supply, irrigation, food and sanitation, water factory, refinery, metallurgy, glass factory, sewage disposal center, water supply, reservoir.....

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



Measuring range

bar	0 to 0.1 ... 0 to 600
inWC	0 to 40 ... 0 to 24000
psi	0 to 1.5 ... 0 to 9000
mH2O	0 to 1 ... 0 to 6000

The given measuring ranges are also available in mbar, kPa and MPa.

Materials

Wetted Parts	Standard	Optional
Case & sensor	Stainless steel 304(HPT601) Stainless steel 316L(HPT602)	Ceramic Capacitor
Cable	PVC	PUR/PE /PTFE

Mounting position

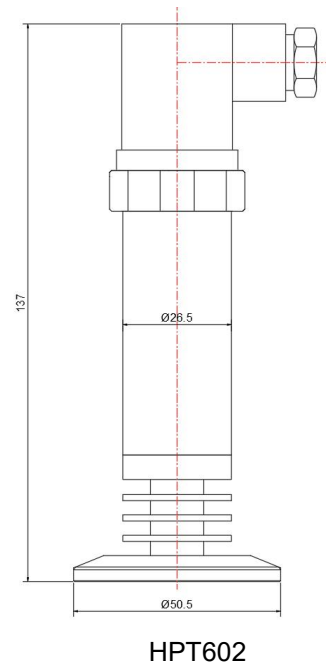
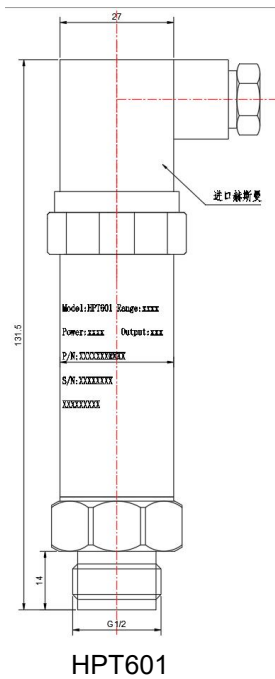
Calibrated in vertical mounting position with pressure connection facing downwards.

Specifications

Ambient Temperature: 25°C (unless specified)

Parameter	HPT601/HPT602				
Pressure Range	Clamp flush type -1 bar-0-0.1 bar...100 Bar optional Thread flush type 0-20 bar...600bar optional				
Overload	150% F.S				
Burst Pressure	300% F.S				
Accuracy (Linearity, Hysteresis, Repeatability)	±0.5%F.S@25°C (±0.25%F.S@25°C by customized) including non-lin., rep. and hys optional				
Long-term Stability	Standard: 0.1%F.S±0.05%				
Working Temp.	-40°C to +80°C(non-corrosive medium)				
Storage Temp.	-40°C to +125°C(Nitrile rubber sealing ring); -30°C to +150°C(fluororubber rubber sealing ring)				
Temperature Compensation	0°C to +80°C				
Medium compatible	Compatible with 304/316L Stainless Steel				
Electrical Wire	2 Wires	3 Wires			4 wires
Output	4-20 mA	1-5 V;0-5 V	0-10 V	0.5-4.5 V	RS485 Modbus RTU
Power Supply	7-30 V DC	8-30 V DC	13-30 V DC	5 V DC±5%	3.5-36 V DC
Polarity Protection	The power lines feature reverse polarity protection; however, the signal lines do not have reverse polarity protection against the positive power supply and must not be cross-connected.				
Insulation Resistance	>100M Ω@100V				
Zero-point Temp. Drift	0.01%FS/°C				
Full scale Temp. Drift	0.005%FS/°C				
Electrical connection	DIN43650 Hirschmann Terminal Box; Fixed cable and water proof IP67 optional				
Response Time	≤20 ms(Current and voltage signals); ≤100 ms (digital signals)				
Pressure Type	Gauge pressure; Sealed gauge and absolute optional				
Certificate	CE				
EMC Standard	EN 61326-1:2013; EN 61326-2-3:2013 EN 61000-6-2:2005; EN61000-6-4:2007+A1				
Process Connection	G1/2", M20*1.5; G1", Φ50 clamp or by customized				

Dimensions and Drawing



Unit: mm

Electrical Connections







	DIN 43650 Connector					
	Current	1	U+	RS485 RTU Modbus	1	U+
		2	Iout(U-)		2	U-
		3	NC		3	485A
		4	⊥ Connect to earth ground		4	485B
	Voltage	1	U+			
		2	U-			
		3	Vout			
4		⊥ Connect to earth ground				

Pressure Connections

M20x1.5 male	G1/2" male	G1 male	Clamp Φ50 mm
<p>M20x1.5 male</p>	<p>G1/2"</p>	<p>G1"</p>	<p>Φ50 flange</p>

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>Site LED display unit</p> <p>Attached LED indicator for transmitters standard version</p>	0006
	<p>Site LCD display unit</p> <p>Attached LCD indicator for transmitters standard version</p>	0007
	<p>Terminal box</p> <p>The terminal box, with IP67 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.</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

Ordering information

Model / Measuring range / Output signal / Temperature measurement / Cable material / Cable length / Case / Lightning protection / Accessories