

TECHNOLOGY

HOLYKELL®

HPT611
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 611

Anti Clog Attachment for Submersible Liquid Level Pressure Transmitter

Applications

- Sewage
- Lift stations
- Storm canals
- Reservoirs / dams
- Weirs, wells, pond, reservoir, and dam
- Sludge, slurry
- For sewage water tank level

Features

- All 316L stainless steel construction for durability
- Open double flange design
- Diaphragm is protected from physical damage and turbulence
- Added weight prevents movement of the transmitter
- Cable withstand over 200 pounds of strain
- Ingress protection up to IP68

Profiles

HPT611 a fully submersible level transducer is the cost effective solution for sewage or waste water with viscous medium level measurement. It consists of the U.S.A imported GE piezoresistive sensing element encased in a 316L SS housing. Its all stainless steel, hermetically sealed housing make it suitable for immersion for a long time in most industrial sewage and waste water .

Each submersible sewage level transducer has "Steel cage" design offers the highest reliability in level measurement for severe high solids environments .The steel cage front end design allows for proper flow of liquids while keeping the sensor at the bottom of the tank or well. The "Steel cage" design gives full protection and allows sensing to sewage levels no matter how much debris/mud /sand or rags build up.

Ventilation tube in the cable automatically compensates for changes in atmospheric pressure . The vent is protected with a filter eliminating moisture in the transducer. The circuit design can the under the input and output short-circuit conditions to prevent reverse connection .

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



Measuring range

bar	0... 10
inWC	0... 1000
psi	0... 150
mH2O	0... 100

When choosing the PTFE cable, only measuring ranges up to 0 ...10 bar, 0 ... 150 psi and 0 ... 100 mH2O are available. The given measuring ranges are also available in mbar, kPA and MPa

Materials

Wetted Parts	Standard	Optional
Case	Stainless steel 316L	316L SST/SUS321
Sensor	Stainless steel 316	
Cable	PE	FEP/PUR

Mounting position

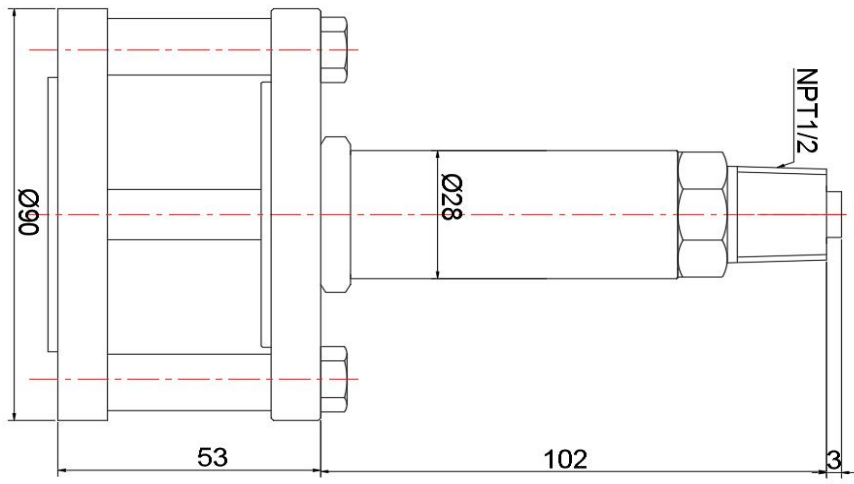
Calibrated in vertical mounting position with pressure connection facing downwards.

Specifications

Ambient Temperature: 25°C (unless specified)

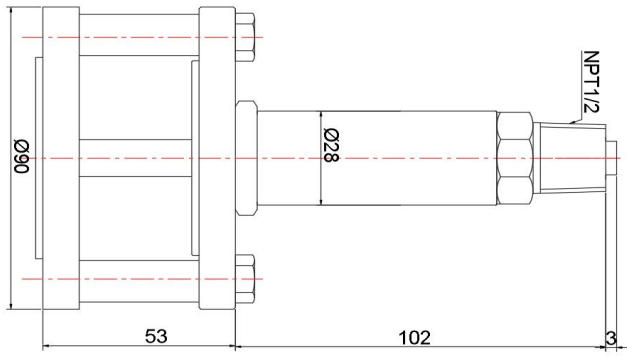
Parameter	HPT611			
Overload	200% F.S.			
Burst Pressure	300% F.S.			
Accuracy	≤ ±0.5%F.S (typical); ≤ ±0.25%F.S (optional) @25 degree C			
(Linearity Hysteresis Repeatability)	Including non-lin., rep. and hys. Optional			
Long-term Stability	0.1%F.S±0.05%/year			
Working Temp.	-40-80°C(non-corrosive medium)			
Storage Temp.	-40°C~80°C(Nitrile rubber sealing ring); -20°C~80°C(fluororubber rubber sealing ring)			
Temperature Compensation	0°C~50°C			
Medium compatible	Compatible with 316L Stainless Steel			
Electrical Wire	2 Wires	3 Wires	4 wires	
Output	4-20mA	0-5V	0-10V	0.5-4.5V RS485 Modbus RTU
Power Supply	7-30Vdc	8-30Vdc	13-30Vdc	5Vdc±5% 3.5-36Vdc
Insulate resistance	> 100M Ω@50V			
Zero Temp. Drift	0.5%FS/°C (≤100kPa) ; 0.25%FS/°C (>100kPa)			
FS Temp. Drift	0.02%FS/°C (≤100kPa) ,0.01%FS/°C (>100kPa)			
Electronic connection	Over molded and Fixed cable with vented tube, IP68			
Process Connect	90mm (3.5") flange			
Body Diameter	28 mm			
Material of housing	Stainless Steel			
Response time	≤10ms			
Pressure Type	Gage pressure and absolute pressure optional			
Certificate	Exia IICT6 ,RoHS, CE Certificate			
EMC Standard	EN 61326-1:2013; EN 61326-2-3:2013 EN 61000-6-2:2005; EN61000-6-4:2007+A1			
IP Rating	IP68			

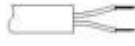
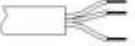

Dimensions and Drawing



Unit: mm

Electrical Connections



Direct cable outlet												
	Current	<table border="1"> <tr> <td>Red</td> <td>U+</td> </tr> <tr> <td>Green</td> <td>Iout(U-)</td> </tr> <tr> <td>Yellow</td> <td>⊥ Connect to earth ground</td> </tr> </table>	Red	U+	Green	Iout(U-)	Yellow	⊥ Connect to earth ground				
	Red	U+										
	Green	Iout(U-)										
Yellow	⊥ Connect to earth ground											
	Voltage	<table border="1"> <tr> <td>Red</td> <td>U+</td> </tr> <tr> <td>Green</td> <td>Vout</td> </tr> <tr> <td>Yellow</td> <td>⊥ Connect to earth ground</td> </tr> <tr> <td>Black</td> <td>U-</td> </tr> </table>	Red	U+	Green	Vout	Yellow	⊥ Connect to earth ground	Black	U-		
	Red	U+										
	Green	Vout										
	Yellow	⊥ Connect to earth ground										
Black	U-											
	RS485 RTU Modbus	<table border="1"> <tr> <td>Red</td> <td>U+</td> </tr> <tr> <td>Black</td> <td>U-</td> </tr> <tr> <td>Green</td> <td>RS485A</td> </tr> <tr> <td>Blue</td> <td>RS485B</td> </tr> <tr> <td>Yellow</td> <td>⊥ Connect to earth ground</td> </tr> </table>	Red	U+	Black	U-	Green	RS485A	Blue	RS485B	Yellow	⊥ Connect to earth ground
	Red	U+										
	Black	U-										
	Green	RS485A										
Blue	RS485B											
Yellow	⊥ Connect to earth ground											

How to Order

1. Range Selection Table:

		01	0~1.0	02	0~1.1	03	0~1.2	04	0~1.3	05	0~1.4	06	0~1.5	07	0~1.6	08	0~1.7
09	0~1.8	10	0~1.9	11	0~2	12	0~2.1	13	0~2.2	14	0~2.3	15	0~2.4	16	0~2.5	17	0~3
18	0~4	19	0~5	20	0~6	21	0~7	22	0~8	23	0~10	24	0~12	25	0~15	26	0~16
27	0~20	28	0~25	29	0~30	30	0~35	31	0~40	32	0~50	33	0~60	34	0~80	35	0~100
										X	By Customized						

Kindly according to your application select suitable range code , Example: code 19 =5 .









Unit of measure select on the Part Number Selection Table . Example: Code H=mH₂O, that's 5mH₂O

2. Part Number Selection Table:

611		19		H	G	E5	S11	1	1	002
Selection Type										
Range	Range reference to range selection table code									
Pressure Unit	B=bar K=KPa H=mH ₂ O		P=Psi M=MPa							
Pressure type	G=Gage/Relative		A=Absolute							
Signal Output	E5=4-20mA(2 wires) E8=0.5-4.5V(3 wires) X= By Customized		E6=0-5V(3 wires)		E7=0-10V(3 wires) E11=RS485(MODBUS)					
Power Supply	S6=5Vdc S12=8-30Vdc S43=13-30Vdc		S11=7-30Vdc S42=3.5-36Vdc X= By Customized							
Pressure connection	1=Double 90mm(3.5") diameter flange									
Accuracy	1=0.5%F.S (Typical)		2=0.25%F.S optional							
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
	<p>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.</p>	0008
	<p>Flange 4 holes 316 SS flange, size can be customized</p>	0001
	<p>Locking flange For locking cables, made of aluminum alloy</p>	0029
	<p>Conduit adapter 316 SS 1/2" NPT male cable conduit adapter. Must be factory installed.</p>	0011
	<p>Terminal box 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>Additional weight The additional weight increases the dead weight of the submersible pressure transmitter. It simplifies the lowering into monitoring wells, narrow shafts and deep wells. It effectively reduces negative environmental influences on the measuring result from the measured medium (e.g. turbulent flow). Stainless steel 316L, approx. 1.46kg, height (H) 70 mm</p>	0009
	<p>Adapter Converter 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 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