TECHNOLOGY

HOLYKELL®

HPT611

LEVEL

• DATASHEET •

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

HPT 611

Anti Clog Attachment for Submersible Liquid Level Pressure Transmitters

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 a imported MEAS TE 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 's "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 protect prevent reverse connection .

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

Measuring range	
bar	1 to 0 0 to 1…0 to 20
inWC	-100 to 0...0 to 100…0 to 2000
psi	-15 to 0...0 to 15…0 to 300
mH2O	-1000 to 0..0 to 1000…0 to 20000

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	Option
Case	Stainless steel 316L	316L SST/SUS321
Sensor	Stainless steel 316	
Cable	PE	FEP/PUR

Mounting position

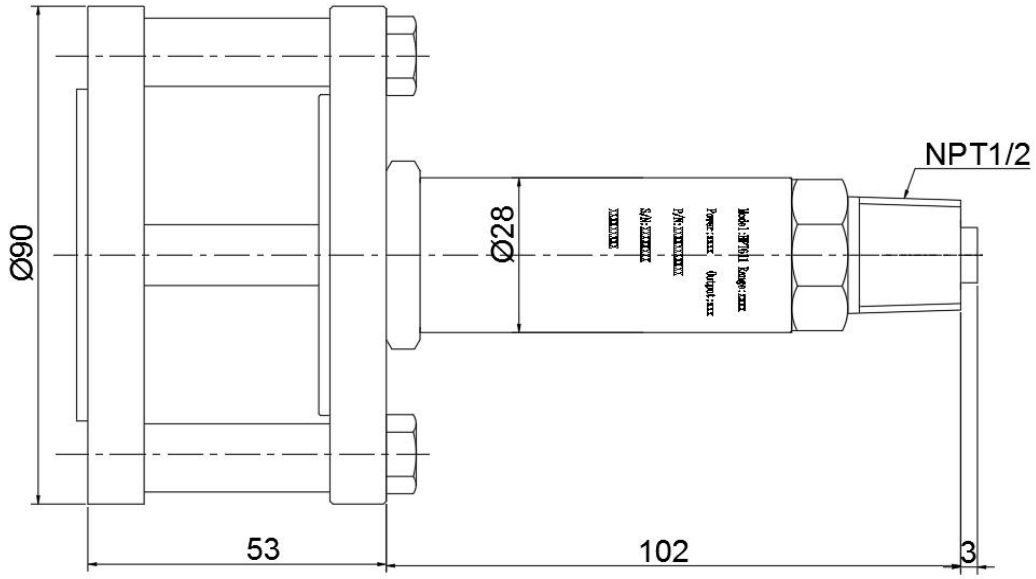
Calibrated in vertical mounting position with pressure connection facing downwards.

Specifications

Ambient Temperature: 25°C (unless specified)

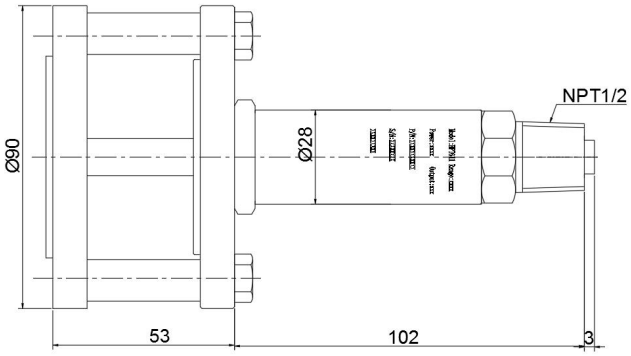
Parameter	HPT611				
Overload	200% F.S.				
Burst Pressure	300% F.S.				
Accuracy: (Linearity Hysteresis Repeatability)	≤ ±0.5%F.S (standard) ≤ ±0.25%F.S (regular) Including non-lin., rep. and hys. Optional				
Long Stability	Standard: 0.1%F.S±0.05%				
Working Temp	-20℃~85℃				
Storage Temp	-40℃~125℃				
Temperature Compensation	0℃~70℃				
Medium compatible	Compatible with 316L Stainless Steel				
Electronic Wire Output	2 Wires 4~20mA	0~5V	3 Wires 0~10 V	0.5~4.5 V	4 wires Rs485
Power Supply	7~30Vdc	9~30Vdc	15~30Vdc	5Vdc	10~30Vdc
Insulate resistance	> 100M Ω@50V				
Zero Temp. Drift	0.05%FS/℃（≤100kPa）；0.03%FS/℃（>100kPa）				
FS Temp. Drift	0.02%FS/℃（≤100kPa）,0.01%FS/℃（>100kPa）				
Electronic connection	Over molded and Fixed cable and water proof IP68				
Process Connect	88 mm (3.5'') Flange, nylon nose cap, DN50 Flange, DN80 , DN100 Flange optional				
Body Diameter	28 mm				
Material of housing	Stainless Steel				
Response time	≤10ms				
Pressure Type	Gage pressure and absolute pressure optional.				
Certificate approving	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				
Water Proof	IP68				
Weight	Net weight is about 1.8KG, Full Packing weight is about 3.0KG (Not Including Cable)				

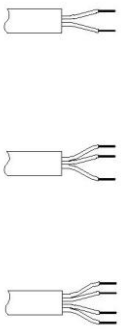
Dimensions and Drawing



Unit: mm

Electronic Connections





Directly	sealed cable
Red	S+
Black:	S-(0Vcc)
Green/blue	Signal+
Red	S+
Black:	S-(0Vcc)
Green/blue	Signal+
Red	S+
Black:	S-(0Vcc)
Green/blue	Signal+

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

Electronic Wires Connection:					
	Supply +	Supply –(0Vcc)	Signal+(RS485A)	Signal -(RS485B)	Ground Wire
2wires 4-20 mA	Red	NA	Blue/Green	NA	Yellow
3wires 0-5V,0-10V,0.5-4.5V,	Red	Black	Blue/Green	NA	Yellow
4wires Rs485	Red	Black	Green	Blue	NA

How to Order

1. Range Selection Table:

00	0~0.5	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
36	0~150	37	0~200	38	0~250	39	0~300	40	0~500	X	By Customized						

Kindly according to your application select suitable range code , Example: code 19 =35 .

Unit of measure select on the Part Number Selection Table . Example: Code H=mH_2 O, that's 5mH_2 O

2. Part Number Selection Table:

HPT611 Selection Type	**19**	**H**	**G**	**E5**	**S3**	**1**	**1**	**002**
Range	Range reference to range selection table code							
Pressure Unit	B=Bar P=PSI K=kPa M=MPA H=mH_2O							
Pressure type	G=Gage A=Absolute							
Signal Output	E5=4-20mA(2 wires) E6=0-5V (3 wires) E7=0-10V (3 wires) E8=0.5-4.5V(3 wires) E11=RS485 MODBUS RTU (4 wires) X=By Customized							
Power Supply	S3=24Vdc(Standard) S6=5Vdc (for E8) S9=15~36Vdc (for E7) S10=12~30Vdc S11=9~30Vdc S17=10~30Vdc (for E11)							
Pressure connection	1=Double 88 mm(3.5'') Diameter Flange (Typical) X= By Customized							
Accuracy	1=0.5%F.S (Typical) 2=0.25%F.S							
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
	**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
	**Flange** 4 holes 316 SS flange, size can be customized	0001
	**Locking flange** For locking cables, made of aluminum alloy	0029
	**Conduit adapter** 316 SS 1/2” NPT male cable conduit adapter.Must be factory installed.	0011
	**Terminal box** 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.	0003
	**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	0009
	**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.	0005
	**Surge electrostatic protector** Anti-surge ±2000V/±4000V, anti-static 18KV, suitable for protecting 4-20ma and RS485 circuits.	0014

Ordering information

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