

# HPT606 LEVEL • DATASHEET•

# **HPT 606**

# Submersible Flood & River Level Transducer& Transmitter

# **Applications**

- · Flood level monitor and alarm
- Wastewater treatment and biogas production
- · Retention Ponds Monitoring
- Canals and Dams Monitor Systems
- · Level Measurement in Lakes, Pond and Rivers
- · Level Measurement in waste water channels
- · Agricultural applications hydro-static level control

### Features

- · Imported GE pressure cell, 0.25% F.S
- · 316L stainless steel diaphragm welded 316SS body construction shock and erosion
- Custom level ranges from 1m to 200m
- · Special sediment filter to prevent to the tiny impurities clogging problem
- · IP68 full sealed plastic waterproof design
- · Optional Lifetime Lightning Protection
- · Custom PU, PE or FEP cable lengths



HPT606 a fully submersible level transducer suitable for flood and river level measurement. It consists of the U.S.A imported GE piezoresistive sensing element encased in a 316 SS housing. It's all stainless steel, hermetically sealed housing make it suitable for immersion for a long time in most river and flood

Each submersible sewage level transducer features a removable 30 um ceramic filter nose which can effective against the inside of the rivers and lakes sediment, stones and grasses into the liquid level sensor, and easy to clean. Ventilation tube in the cable automatically compensates for changes in atmospheric pressure. The vent is protected with a filter eliminating moisture in the transducer. It incorporates lightning and surge protection utilizing dual arrestor technology, to assure under the input and output short-circuit conditions and prevent reverse connection.

It can be used for rivers, flood, sewage, water, liquid measure and control of sewage pump station, water well, liquid tank, medicine, metallurgy, electricity, mine, city water supply and drainage and hydrology, especially used in the field of sewage level and pressure measurement.

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 20								
inWC	0 to 200 to 8000								
psi	0 to 1.00 to 300								
mH2O	0 to 1.00 to 200								

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

#### **Materials**

Wetted Parts	Standard	Optional
Housing	Stainless steel 316L	Titanium alloy
Cable	PUR/PE	FEP

#### Mounting position

Calibrated in vertical mounting position with pressure connection facing downwards.



# Specifications

Ambient Temperature: 25°C (unless specified)

Parameter	HPT606					
Pressure Range	0-0.1 Bar20 Bar / (* 80m max for SDI-12 si		₂O Optional (	See P1 page d	lescription)	
Overload	200% F.S.					
Burst Pressure	500% F.S.					
Accuracy	≤ ±0.5%F.S (Typical);	≤ ±0.25%F.S;	≤ ±0.1%F.S op	otional @25 de	gree C	
(Linearity Hysteresis	Including non-lin., rep.	and hys.				
Repeatability)	Optional					
Long-term Stability	≤ ±0.1 % of span/year					
Working Temp.	-40-80℃ (non-corrosive	medium)				
Storage Temp.	-40°C~80°C (Nitrile rubb	er sealing ring);	-20℃~80℃(fl	uororubber rub	ber sealing ring)	
Temperature Compensation	0~50℃					
Medium compatible	Compatible with 316L S	Stainless Steel				
Electrical Wire	2 Wires	3 Wires				4 wires
Output	4-20mA	1-5V;0-5V	0-10V	0.5-4.5V	SDI-12	RS485 Modbus RTU
Power Supply	7-30Vdc	8-30Vdc	13-30Vdc	5Vdc±5%	12Vdc	3.5-36Vdc
Polarity protection	yes	Pov	ver wires-Yes;	Signal Wires-Y	es, Power&Signal \	Vires-Without!
Insulate resistance	> 100M Ω@100V					
Zero Temp. Drift	0.2%FS/°C (≤100kPa)	; 0.1%FS/℃ (	>100kPa)			
FS Temp. Drift	0.02%FS/℃ (≤100kPa	); 0.01%FS/°C	(>100kPa)			
Process Connection	Submersible Type					
Electrical connection	Fixed cable with vented	I tube and wate	r proof IP68			
Response time	≤10 ms					
Pressure Type	Gage pressure and abs	solute optional.				
Certificate	TUV RoHS and CE Ce	rtificate				
EMC Standard	EN 61326-1:2013; EN EN 61000-6-2:2005; EI					
Lightning Protection (optional functions)	Air conduction more that	an 8000V; exter	nal sensor mo	re than 4000 V	oltage protection.	
Cable optional	Cable materials are opposed PE Cable (Water proof					

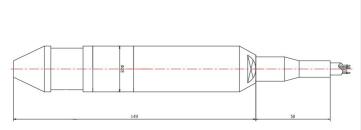


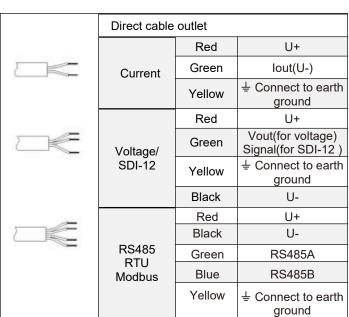
# Dimensions and Drawing



Unit: mm

#### Electrical Connections







# 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	80	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	2	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	3	34	0~80	35	0~100
36	0~150	37	0~200							Х	By Custo	om	ize						

Kindly according to your application select suitable range code, Example: code 30 = 35.

Unit of measure select on the Part Number Selection Table . Example: Code H=m  $H_2O$ , that's 35m  $H_2O$  .

#### 2. Part Number Selection Table:

<b>606</b> Selection Type	30		Н	G	<b>E</b> 5	S11	CW	N	1	00
Range	Range reference to rang table code	e selection								
Pressure & Level Units	H=mH2O(Min:1 mH2 B=bar(Min: 0.1bar Ma P=Psi(Min:1.5Psi; Ma	ax: 20bar)	0)							
Pressure type	G=Gage/Relative pre A=Absolute pressure		rsal)							
Signal Output	E5=4-20mA(2 wires)   E21=0.5-4.5V non-ration   E8=0.5-4.5V ratiometric   E11=RS485(MODBUS)   E16=SDI-12   E0=1   X= By customized	netric (default, 3 wir	res)	s wires	)					
Power Supply	S6=5Vdc S11=7-30Vdc S43=13-30Vdc	S5=12Vdc S12=8-30Vdc X= By Customize	S42=3.5 ed	5-36Vd	lc					
Measuring Medium	CW=Normal Water	SW=Sewage	X=by cus	tomiz	ed					
Others Function (Optional)	N=Standard Type ELP=External Lightning	protection box								
Accuracy	1=0.5%F.S (Typical)	2=0.25%F.S (b)	y customize	ed)						
Cable length	001= Cable 1m	002= Cable 2m	003=	Cable	3m	X= By o	customize	ed		



# Accessories

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

	Description	Order number
TOTAL STREET,	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 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.	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
THE ROB	Adapter Converter It is able to convert RS-232 signal to RS-485 balanced differential signal and extend the communication distance to 1.2km.lt 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

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