

HPT613

LEVEL

• DATASHEET •

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

HPT 613

Ceramic Capacitor Pressure Level Transmitters

Applications

- Dams, weirs
- Seawater Compatible Version
- Irrigation systems
- Waterways that are occasionally iced over
- Brackish water, saltwater
- Coastal & Estuary
- Telecomm Base Station
- Power & Energy Fields

Characters

- Corrosion-resistant, PTFE housing.
- Surge protection from lightning strikes and voltage spikes
- Ceramic pressure cell resistant to 10x burst pressure
- Rugged design: Ingress protection up to IP 68
- Lightning (Surge) Protection
- Excellent Long Term Stability
- EMI/RFI Protection
- CE/ATEX Certificate approved

Profiles

HPT613 series is a high reliability, high stability, high precision of the liquid level transmitter. It widely used in small range of liquid level measurement, such as water, oil, natural gas, liquefied gas and other corrosive liquids and gases. The semi-flush ceramic sensing face resists clogging and is easily cleaned.

HPT613 with 316L stainless steel/PTFE Teflon casing adopt Germany E + H ceramic capacitance pressure sensor core , special amplifier and V/I conversion circuit in the transmitter, It can convenient to zero and full range of calibration, and can undertake external program-controlled adjustment of zero and range . This product has got intrinsic safety certification, explosion proof certification and CE certification

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



Measuring range

Measuring range	
bar	-1 to 0....0 to 0.025...0 to 20
inWC	-100 to 0....0 to 2.5...0 to 2000
psi	-15 to 0....0 to 0.5...0 to 300
mH2O	-1 to 0....0 to 0.25...0 to 200

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

Materials

Wetted Parts	Standard	Option
Case and	Stainless steel 316	316L SST/SUS321
Sensor	Stainless steel 316	
Cable	PE	PTFE/PUR

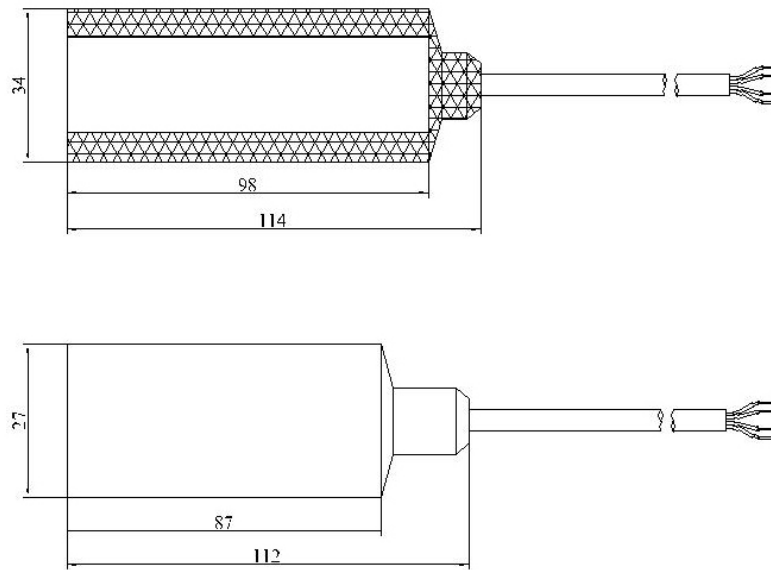


■ Specifications

Ambient Temperature: 25°C (unless specified)

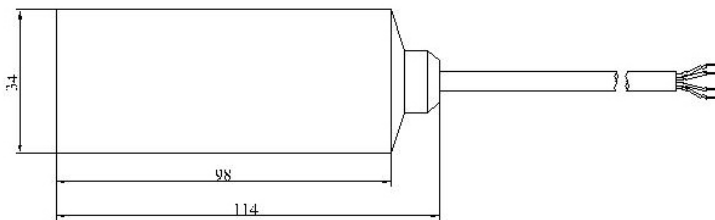
Parameter	HPT613-S/613-C		
Overload	300% F.S.		
Burst Pressure	600% F.S.		
Accuracy: (Linearity Hysteresis Repeatability)	≤ ±0.25%F.S (standard) ≤ ±0.1%F.S (cost is high!) Including non-lin., rep. and hys. Optional		
Long Stability	Standard: 0.1%F.S±0.05%		
Working Temp	-20°C~80°C		
Storage Temp	-30°C~90°C		
Temperature Compensation	0°C~50°C		
Medium compatible	Compatible with 316L Stainless Steel or Titanium Alloy or PTFE materiel.		
Electronic Wire	2 Wires	3 Wires	
Output	4~20mA	0.5~4.5V	0-5V, 1~5 V
Power Supply	12~30 V DC	5V DC	12~30 V DC
Temperature output	4~20mA or resistance signal; Range: -10... 100 degree C		
Load Resistance	(U-12)/0.02 Ω		
Insulate resistance	> 100M Ω@50V		
Zero Temp. Drift	0.3%FS/°C (≤100kPa) ; 0.2%FS/°C (>100kPa)		
FS Temp. Drift	0.03%FS/°C (≤100kPa) ,0.02%FS/°C (>100kPa)		
Electronic connection	Fixed cable and water proof IP68		
Response time	≤10 ms		
Resolution	Infinite small (theories), 1/100000 (usually)		
Pressure Type	Gage pressure; absolute pressure optional.		
Certificate approving	CE Certificate.		
EMC Standard	EN 61326-1:2013; EN 61326-2-3:2013 EN 61000-6-2:2005; EN61000-6-4:2007+A1		
Lighting Proof	By Customized		
Water Proof	IP68		
Weight	Net weight is about 0.25KG, Full Packing weight is about 1.5KG (Include 5M Cable)		

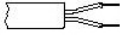
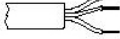
■ Dimensions and Drawing



Unit: mm

■ Electronic Connections



	Directly sealed cable		
	Current	Red	Vcc+
		Green	S+(0Vcc)
	RS485 MODBUS RTU	Red	Vcc+
		Green	S-&0Vcc
		Green/blue	Signal+

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

Electronic Wires Connection:

	Supply +	Supply -(0Vcc)	Signal+(RS485A)	Signal -(RS485B)
2wires 4-20 mA	Red	NA	Green	NA
3wires 0-5V、0-10V、1-5V	Red	Green	Yellow	Green

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 17 = 3 .
Unit of measure select on the Part Number Selection Table . Example: Code H=mH₂O, that's 3mH₂O

2. Part Number Selection Table:

HPT613	S	17	H	G	E5	S3	W	2	002
Selection Type									
Material	S=316L Stainless Steel C=PTFE Corrosion Resistant								
Range	Range reference to range selction table code								
Pressure Unit	B=Bar P=PSI K=kPa H=mH ₂ O F=mFuel								
Pressure type	G=Gage A=Absolute								
Signal Output	E5= 4-20mA(2 wires) E6= 0-5V (3 wires) E0= 1~5 V (3 wires) X= By Customized								
Power Supply	S3=24 Vdc (Standard) S5=12Vdc S15=12~30Vdc (for E6)								
Measuring Medium	W=Water D1=Diesel & ≈0.84g/cm ³ D2=Diesel & ≈0.83g/cm ³ D3=Diesel & ≈0.85g/cm ³ D4=Diesel & ≈0.86g/cm ³ X=By Customized								
Accuracy	2=0.25%F.S 3=0.1%F.S X=By Customized								
Cable length	000=Non-Cable 001= Cable 1M 002= Cable 2M X= By Customized								

Accessories

	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
	NPT adapter The 316 SS G1/2 adapter replaces the removable protective cap and converts the threads to 1/2"NPT male external, 1/4" female internal threads.	0001
	Surge Protector (Lightning Arrestor)14052336 This DIN rail mounted surge protector is designed to protect PMC transmitters to a maximum discharge current of 20 kA.	0007
	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 weight14052336 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. 500 g, length (L) 130 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
	Desiccant drying cartridge Desiccant Pack installed on Vented Transducer cable. The cartridge will have to be field replaced as site environment requires.	0010

Ordering information

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