

DATASHEET

HPT613 Series Ceramic Capacitor Pressure Level Transmitters



HPT613-S



HPT613-C

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Characters:

Corrosion-resistant, 316L, PTFE housing optional
 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

Applications:

- ★ Industrial course testing and control
- ★ Automatic testing system
- ★ well level measurement and control
- ★ Sea water level measurement and control
- ★ Industrial course testing and control
- ★ Laboratory equipment
- ★ Brackish water, saltwater
- ★ Other corrosive chemicals liquid

I . 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, 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, it serves for users that have high requirement for level sensors.

II . Specifications:

Model:	HPT613-S HPT613-C
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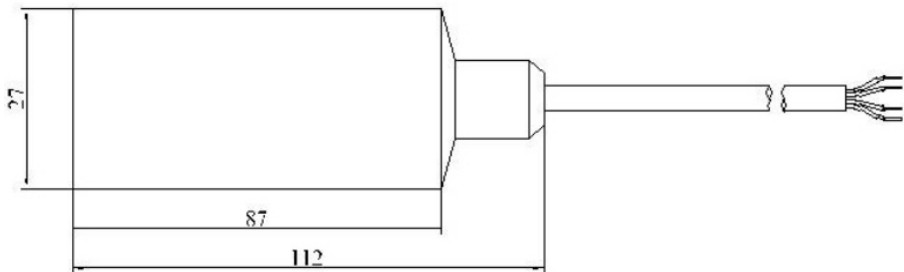
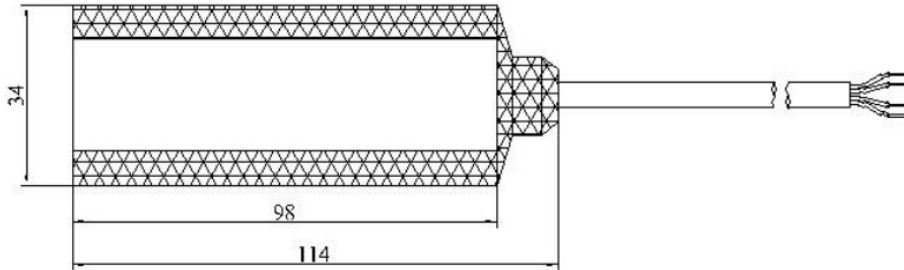
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Parameter:			
Pressure Range:	-1 Bar-0-0.025 Bar...20 Bar / 0-0.25M...200M Optional		
Overload:	200% F.S.		
Burst Pressure	400% F.S.		
Accuracy: (Linearity Hysteresis Repeatability)	$\leq \pm 0.25\% \text{F.S}$ (standard) Including non-lin., rep. and hys. Optional		
Long Stability:	Standard: $0.1\% \text{F.S} \pm 0.05\%$		
Working Temp:	-20°C~70°C		
Storage Temp:	-30°C~90°C		
Temperature Compensation:	-10°C~60°C		
Medium compatible:	Compatible with 316L Stainless Steel or PTFE materials.		
Electronic Wire:	2 Wire	3 Wire	
Output:	4~20mA	0.5~4.5V	0-5V
Power Supply:	12~30 V DC	5V DC	12~30 V DC
Temperature output:	4~20mA or resistance signal; Range: -10...80 degree C		
Loading Resistance:	$(U-12)/0.02 \ \Omega$		
Insulate resistance:	>100M Ω @500V dc		
Zero Temp. Drift:	0.03%FS/°C ($\leq 100\text{kPa}$) , 0.02%FS/°C ($> 100\text{kPa}$)		
FS Temp. Drift:	0.003%FS/°C ($\leq 100\text{kPa}$) , 0.002%FS/°C ($> 100\text{kPa}$)		
Electronic connection:	Fixed cable and water proof IP68		
Response time:	≤ 10 ms		
Resolution:	Infinite small (theories), 1/100000 (usually)		

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Pressure Type:	Gauge pressure Absolute pressure optional.
Certificate approving:	Exia IICT6 and CE Certificate.
EMC Standard:	electromagnetic radiation:EN50081-1/-2 electromagnetic susceptibility:EN50082-2
Lighting Proof:	Air conducts withstand voltage 8000V Shell and Cable conduct withstand voltage 4000V.
Water Proof:	IP68

III. Dimension and Drawing:



Unit: mm

IV. Electronic Connections:

Electronic Wire Connections

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		Power Supply +	Power Supply -	Signal Output +	Signal Output -
2 wire 4-20 mA	Red wire	NA	Green wire	NA	
3 Wire 0-5V; 0.5-4.5V;	Red wire	Green wire	Yellow wire	Green wire	

V . Part Number Selection Table:

613S/613C	Ceramic Capacitor Pressure Level Transmitters					
	Range code	Pressure range	Ref.	Range code	Pressure range	Ref.
	01	0-0.025 Bar/0-0.25M H2O	G	21	0-1 Bar/0-10 M H2O	G/A
	02	0-0.05 Bar/0-0.5M H2O	G	22	0-1.2 Bar/0-12 M H2O	G/A
	03	0-0.1 Bar/0-1M H2O	G	23	0-1.5 Bar/0-15 M H2O	G/A
	04	0-0.15 Bar/0-1.5M H2O	G	24	0-1.6 Bar/0-16 M H2O	G/A
	05	0-0.2 Bar/0-2M H2O	G	25	0-2 Bar/0-20 M H2O	G/A
	06	0-0.25Bar/0-2.5M H2O	G	26	0-2.5 Bar/0-25 M H2O	G/A
	07	0-0.3 Bar/0-3M H2O	G	27	0-3 Bar/0-30 M H2O	G/A
	08	0-0.35 Bar/0-3.5M H2O	G	28	0-3.5 Bar/0-35 M H2O	G/A
	09	0-0.4 Bar/0-4M H2O	G	29	0-4 Bar/0-40 M H2O	G/A
	10	0-0.45 Bar/0-4.5M H2O	G	30	0-5 Bar/0-50 M H2O	G/A
	11	0-0.5 Bar/0-5M H2O	G	31	0-6 Bar/0-60 M H2O	G/A
	12	0-0.55 Bar/0-5.5M H2O	G	32	0-7 Bar/0-70 M H2O	G/A
	13	0-0.6 Bar/0-6M H2O	G	33	0-8 Bar/0-80 M H2O	G/A

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	14	0-0.65 Bar/0-6.5M H2O	G	34	0-9 Bar/0-90 M H2O	G/A		
	15	0-0.7 Bar/0-7M H2O	G	35	0-10 Bar/0-100 M H2O	G/A		
	16	0-0.75 Bar/0-7.5M H2O	G	36	0-12 Bar/0-120 M H2O	G/A		
	17	0-0.8 Bar/0-8M H2O	G	37	0-15 Bar/0-150 M H2O	G/A		
	18	0-0.85Bar/0-8.5M H2O	G	38	0-16 Bar/0-160 M H2O	G/A		
	19	0-0.9 Bar/0-9M H2O	G	39	0-20 Bar/0-200 M H2O	G/A		
	20	0-0.95 Bar/0-9.5M H2O	G	X	By Customized	G/A		
		Code	Pressure type					
		G	Gauge/Relative pressure type					
		A	Absolute pressure type					
		Code	Power Supply					
		S3	24 V DC (Standard)					
		S10	12 ~ 30 V DC					
		S6	5 V DC (for code E8)					
		Code	Signal Output					
		E5	4~20 mA (2 wires) standard					
		E6	0~5 V (3 wires) customized					
		E8	0.5-4.5 V (3 wires)					
		Code	Electronic connection					
		C	Directly Cable IP68					
		Code	Accuracy Grade					
		2	±0.25%F.S (Std.)					
		Code	Cable Length					
		003	3 Meters					
		XXX	By Customized					
613S	07	G	S3	E5	C	2	003	Remarks

Example P/N: 613S07GS3E5C2003

Innovative Environmental Scientific Pty Ltd

Telephone: – 0421 474 658

132 Cremorne Street, Cremorne Vic 3121

Email Us: info@ieands.com.au