TECHNOLOGY

HOLYKELL®

HPT601/602

LEVEL

•DATASHEET•

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

HPT 601 & HPT602 series

Flush Pressure Transmitter / Sanitary Tri-Clamp Pressure Transmitter

Applications

- Irrigation Equipment
- General industrial applications
- Food and beverage industry
- Filling and packing machinery
- Dairy and beverage processing
- Pharmaceutical
- Dosing technology

Characters

- For Sanitary or CIP (Clean-in-Place) Applications
- 316L stainless steel diaphragm, welded 316SS body construction shock and erosion
- Custom pressure ranges from 0-1m thru 0-500m
- Flush process connection eliminates plugging
- Advanced digital temperature compensation
- Available with an integral cooling extension for hightemperature applications

HPT601

HPT602

Profiles

HPT601and HPT602 is pressure and level transmitter with sanitary flush diaphragm. All process connections of the flush pressure transmitter are made of stainless steel, fully welded and isolate the process medium from the pressure measuring instrument via a positive seal. A reliable, dead-space free sealing between the process connection and the measuring medium is thus assured.

Through its optimized design, the flush process connection enables cleanability with the wetted diaphragm integrated into the process. Low-maintenance and trouble-free pressure measurement is thus also guaranteed in critical applications with frequently changing media

It has been specifically designed for the measurement of viscous, paste-like, adhesive, crystallizing, particulates containing and contaminated media, which would clog the pressure channel of conventional process connections. This model application in the field of water tank, Fuel tank, building& office water level measurement, city water supply, irrigation, food and sanitation, water factory, refinery, metallurgy, glass factory, swage dispose center, water supply, reservoir….

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

Measuring range

Measuring range	
bar	0 to 0.1 ... 0 to 600
inWC	0 to 40 ... 0 to 24000
psi	0 to 1.5... 0 to 9000
mH2O	0 to 1 ... 0 to 6000

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

Materials

Wetted Parts	Standard	Option
Case and sensor	Stainless steel 316L	Ceramic Capacitor
Protection cap	Stainless steel 316	316/PTFE/PVC
Cable	PVC	PUR/PE/PTFE

Mounting position

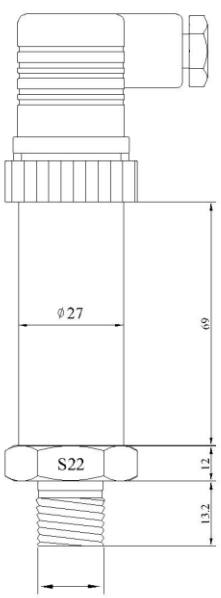
Calibrated in vertical mounting position with pressure connection facing downwards.

Specifications

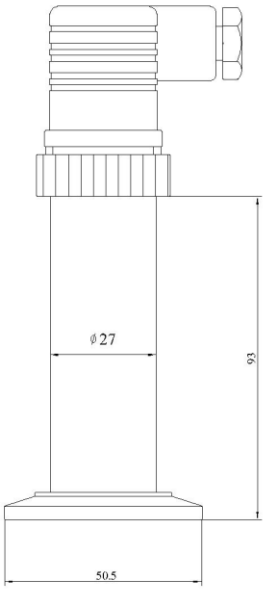
Ambient Temperature: 25°C (unless specified)

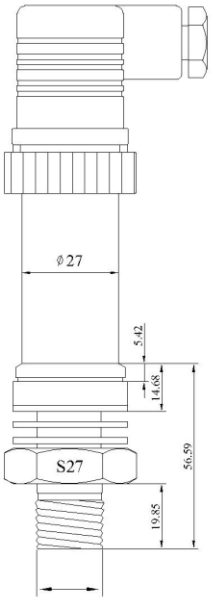
Parameter	HPT601/602					
Pressure Range	-1 Bar-0-1 Bar.....600 Bar Optional (See the P1 page description)					
Overload	200% F.S.					
Burst Pressure	300% F.S.					
Accuracy: (Linearity Hysteresis Repeatability)	≤ ±0.1%F.S ≤ ±0.15%F.S ≤ ±0.25%F.S ≤ ±0.5%F.S Including non-lin., rep. and hys. Optional					
Long Stability	Standard: 0.1%F.S±0.05%					
Working Temp	-30℃~85℃ (Non-Cooling Device); -30℃~150℃ (With Cooling Device)					
Storage Temp	-40℃~125℃					
Temperature Compensation	Standard:-10℃~80℃ or by Customized					
Medium compatible	Compatible with 316L Stainless Steel					
Electronic Wire	2 Wires		3 Wires		4 wires	
Output	4~20mA	1~5V 0~5V	0~10 V	0.5~4.5 V Radiometric	0-100 mV/V	Rs485 Modbus RTU
Power Supply	12~30 V DC (7-30Vdc optional)	8~30 Vdc	15~30 Vdc	5Vdc±5%	10 Vdc	10~30 Vdc (2.7-5.5Vdc optional)
Polarity protection	yes	yes	yes	yes	yes	yes
Insulate resistance	> 100M Ω@50V					
Zero Temp. Drift	0.03%FS/℃ (≤100kPa) ; 0.02%FS/℃ (>100kPa)					
FS Temp. Drift	0.003%FS/℃ (≤100kPa) ; 0.002%FS/℃ (>100kPa)					
Electronic connection	DIN 43650 Hirschman Terminal Box; Fixed cable and water proof IP68 optional.					
Response time	≤4 to 10 ms (standard); ≤1 ms (Customized)					
Pressure Type	Gage pressure; Sealed gage and absolute optional.					
Certificate approving	ATEX intrinsic safety or ExdIICT6, TUV RoHS and CE Certificate approving					
EMC Standard	EN 61326-1:2013; EN 61326-2-3:2013 EN 61000-6-2:2005; EN61000-6-4:2007+A1					
Process Connect	G1/2'', G1'', M20*1.5; Φ50 flange or by customized					
Weight	Net weight is about 0.35KG, Full Packing weight is about 1.0 KG (Not Include Cable)					

Dimensions and Drawing



M20x1.5 male

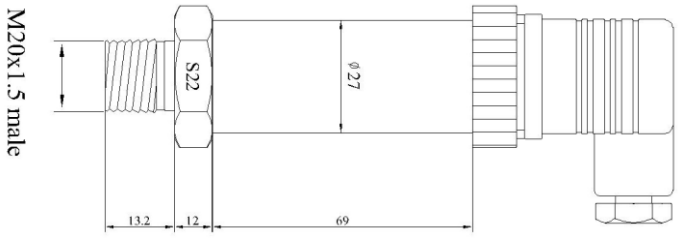


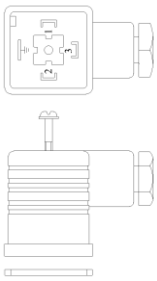


M20x1.5 male

Unit: mm

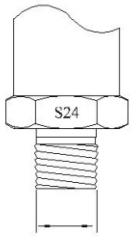
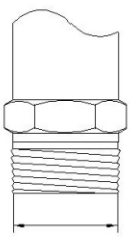
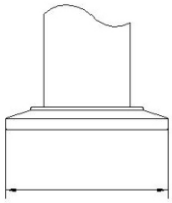
Electronic Connections





DIN 43650 Connector			
Current	1	Vcc+	Red
	2	S+	Green
	3	NC	NA
	4	Shield	Big Black
Voltage	1	Vcc+	Red
	2	S+	Yellow
	3	Vcc-&S-	Green
	4	Shield	Big Black

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

Pressure Connections			
M20x1.5 male	G1/2" male	G1 male	Clamp Φ50 mm
			
M20x1.5 male	G1/2"	G1"	Φ50 flange

How to Order

1.Range Selection Table:

01	0~0.1	02	0~0.15	03	0~0.2	04	0~0.25	05	0~0.3	06	0~0.4	07	0~0.5	08	0~1				
09	0~2	10	0~2.5	11	0~3	12	0~5	13	0~10	14	0~16	15	0~25	16	0~40				
17	0~60	18	0~100	19	0~160	20	0~250	21	0~300	22	0~400	23	0~500	24	0~600				
X	By Customized																		

Kindly according to your application select suitable range code , Example: code 13 = 10 .
Unit of measure select on the Part Number Selection Table . Example: Code B=Bar , that's 10 bar .

2.Part Number Selection Table:

HPT601/602 Selection Type	13	B	G	E5	S3	N	8	2	001
Range	Range reference to range selction table code								
Pressure & Level Units	H=m H2O (Min: 0.5 mH2O; Max:500 mH2O) B=Bar (Min: 0.05Bar Max: 50Bar) P=Psi (Min:1Psi; Max:725Psi) K= kPa (Min:5 kPa; Max:5000 kPa) I= inWC (Min: 20 inWC; Max: 20000 inWC) MB= mbar (Min: 50 mbar Max: 50000 mbar)								
Pressure type	G=Gauge/Relative pressure type (universal) A=Absolute pressure (customized)								
Signal Output	E5= 4-20mA E0=1-5 V (3 wires) E6=0-5 V (3 wires) E7=0-10 V (3 wires) E11= RS485(MODBUS) E8= 0.5-4.5 V (3 wires) X= By Customized								
Power Supply	S3=24 V DC (standard) S5=12 V DC (for code E0, E6) S6=5 V DC (for code E8) S9=15 ~ 30 V DC (for code E7) S10=12 ~ 30 V DC (for code E5) S17=10 ~ 30 V DC (for code E11) S11=7-30 V DC (for code E5) S12=8-30 V DC (for code E0, E6) S16=2.7-5.5 V DC (for code E11)								
Measuring Medium	N= Standard Type 2= Max 150℃ (With Cooling Device)								
Others Function (Optional)	8= M20*1.5 male 9= G1/2'' male 29= G1 male 18= Clamp Φ50 mm X= By Customized								
Accuracy	1=0.5%F.S (Typical) 2=0.25%F.S (Customized) 4=0.15%F.S(For RS485)								
Cable length	001= Cable 1M 002= Cable 2M 003= Cable 3M 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
	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
	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
	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

Ordering information

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

HOLYKELL TECHNOLOGY COMPANY LIMITED
•www.holykell.com•
•E-mail：admin@holykell.com
•Tel ： +86 731 89873265
•Fax ： +86 731 89873265