TECHNOLOGY

HOLYKELL®

HPT708

PRESSURE

•DATASHEET•

1. Pressure Measurement   2. Level Measurement   3. Temperature Measurement
4. Flow Measurement   5. Display & Control Instruments
6.Wireless Monitoring System   7.Velocity Measurement

HPT 708 Series

Oxygen Services Industry
Differential Pressure Transducer

Applications

- Liquid oxygen/ nitrogen/CO_2 level application
- Automatic testing system
- Storage and fuel, Oil, Water Tank applications
- Gas DP pressure measurement
- Chemistry Industry level application
- Petrochemical industry

Features

- Filling fluid Fluorocarbon oil/100% O2 compatible
- Highest overload resistance
- All media wetted parts are clean oil grease free
- Improved EMC resistance and reduced installation sensitivity
- Linearized and temperature -compensated output signal
- System without any sealings
- Calibration of zero /Span and Turn -down

Ex TÜVRheinland RoHS C€

Profiles

HPT708 DP transmitter is a highly reliable, stable, and accurate DP transmitters. Oxygen clean sensors & instruments which have sensor cells that are dry or filled with Fluorocarbon oil filled, which will not burn when exposed to an ignition source in an Oxygen environment, It can be used in areas where there is a risk that the device will be exposed to high levels of pure Oxygen.

The HPT708 with 316L stainless steel construction is designed to meet intrinsically safe standards, ATEX approved. All media welded parts are clean oil grease free for oxygen applications. Pressure transmitters can be delivered with analog signals including 4-20mA ,voltage output or digital 4-20mA +Hart , RS485 RTU output signal,min measuring ranges up to 100mbar.

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

Measuring Range/Span

bar	Min: 0-0.1 to Max: 0-35
Kpa	Min: 0-10 to Max: 0-3500
psi	Min: 0-1.5 to Max: 500
mbar	Min: 0-100 to Max: 35000

They give measuring range also available in MPa , mH2O , in Hg, mm Hg...

Materials

Wetted Parts	Standard	Optional
Case	316L Stainless steel	NA
Diaphragm	316L Stainless steel	NA
Filled Oil	Fluorocarbon oil	NA

Specifications

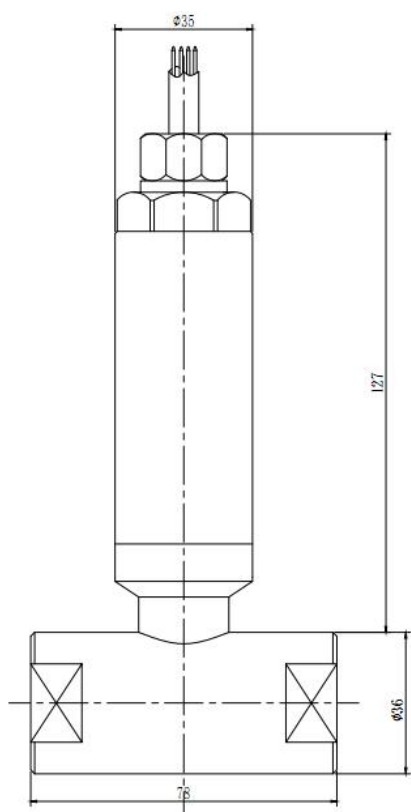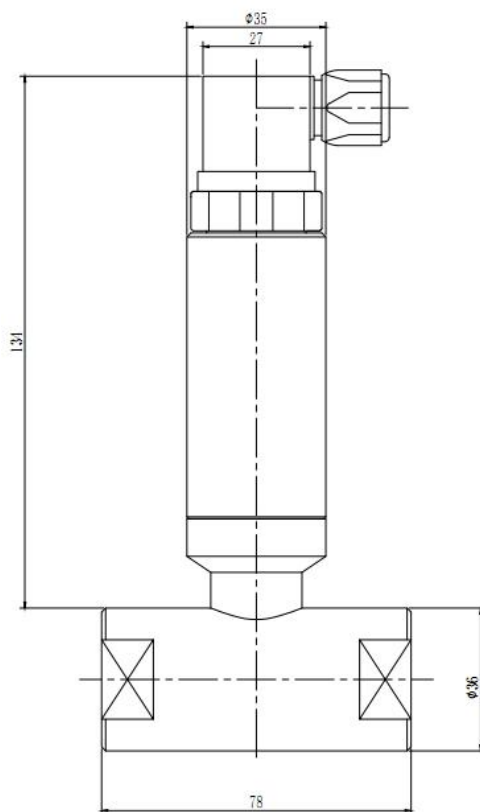Ambient Temperature: 25°C (unless specified)

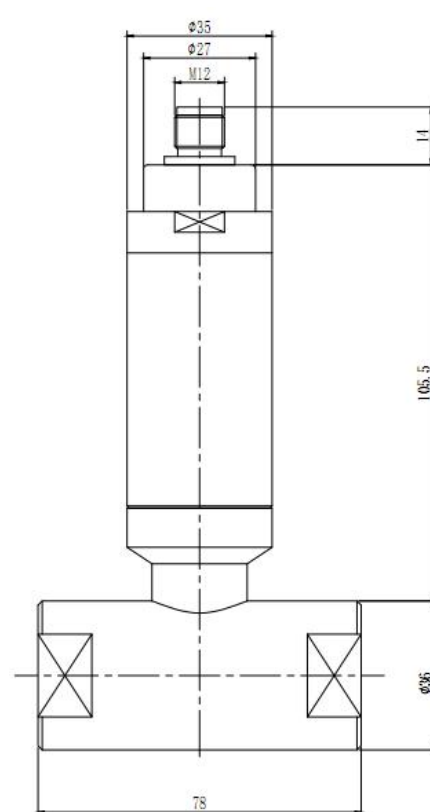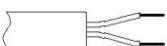| Parameter	HPT708			
Pressure Range	10~35 KPa	35~200 KPa	200~1000 KPa	1000~3500 KPa
High port overload	30...100 KPa	100...500 KPa	500...3000 KPa	3000...10000 KPa
Low port overload	20...70 KPa	70...400 KPa	400...2000 KPa	2000...7000 KPa
Max Static Pressure	20bar	100bar	200bar	200bar
Pressure Type	Differential pressure			
Accuracy	≤ ±0.5%F.S at 25℃ (Typical); ≤±0.25%F.S at 25℃ (by customized)			
Stability	0.1%F.S.±0.05%/Year Max:0.2%F.S/Year			
Working Temp.	-40℃~85℃ or -40℃~125℃ with cooling device			
Storage Temp.	-40℃~125℃			
Temperature compensation	0~50℃			
Medium compatible	Compatible with 316L Stainless Steel			
Electrical Wire	2 Wires		3 Wires	4 Wires
Output	4~20mA 4~20mA + HART		0-5V 0~10 V	RS485 MODBUS RTU
Power Supply	12 ~ 30VDC 12 ~ 30VDC		12 ~ 30VDC 15~30Vdc	10~30VDC
Load resistance	(U-10)/0.02(Ω)		>100kΩ	Max 255
Insulate resistance	>100M Ω @100V			
Filled oil	Fluorocarbon oil (suitable for oxygen/nitrogen/CO2 medium)			
Zero Temp. Drift	0.02%F.S/℃			
Sensitivity Temp Drift	0.02%F.S/℃			
Electrical connection	Fixed cable and water proof IP67; DIN43650 Hirschmann Terminal Box IP65 optional			
Mounting connect	NA			
Pressure connection port	1/4''-18NPT Female hose connection, Others by customize			
Certificate	ATEX ExiaIICT6 Explosion Proof, TUV CE and RoHS Certificates			
IP Rating	IP65 and IP68 according electronic connector type			
EMC Standard	EN 61326-1:2013; EN 61326-2-3:2013 EN 61000-6-2:2005; EN61000-6-4:2007+A1			
Response time	≤10ms			

Dimensions and Drawing

Unit: mm

HPT708-C8

HTP708-H5

HTP708-M7

Electrical Connections

	Direct cable outlet		
	Current	Red	U+
		Green	Iout(U-)
		Black	⏚ Connect to earth ground
	Voltage	Red	U+
		Green	Vout
		Black	U-
	RS485 RTU MODBUS	Red	U+
		Black	U-
		Green	RS485A
		Blue	RS485B
		Yellow	⏚ Connect to earth ground

3

How to Order

1. Pressure Range Selection Table:

01	0~0.1	02	0~0.2	03	0~0.35	04	0~0.7	05	0~1	06	0~1.5	07	0~2	08	0~2.5
09	0~3	10	0~3.5	11	0~5	12	0~10	13	0~15	14	0~20	15	0~25	16	0~30
17	0~35	18	0~38	19	0~40	20	0~50	21	0~100	22	0~150	23	0~200	24	0~250
25	0~300	26	0~500	27	0~1000	X	By Customized								

Kindly according to your application select suitable range code , Example: Code 09 =3 .
Unit of measure select on the Part Number Selection Table . Example: Code B=Bar , that's 3 bar .

2. Part Number Selection Table:

708 Selection Type		23	K	E5	S10	26	N	1	1	002

Pressure Range	Range refer to *pressure range selection table* code
Pressure Unit	B=bar P=Psi K=KPa M=MPa H=mH2O
Signal Output	E5=4-20mA(2 wires) E6=0-5V (3 wires) E7=0-10V (3 wires) E11=RS485 MODBUS RTU (4 wires) E14=4-20mA +Hart (2 wires)
Power Supply	S13=12~24Vdc S10=12~30Vdc S17=10~30Vdc S9=15~30Vdc
Pressure Connection	26= 1/4''-18NPT Female (Typical) 9=G=1/2" male 6=G1/4" male 7=G1/4" Female 8= M20x1.5 male 10=1/2"NPT male X= By Customized
Installation Mounting	N=Top Clamp (Typical) X=By customized
Electrical Connection	1=Direct outlet cable 2=Hirschmann terminal box 3=M12*1.0 4 Pins 4=M12*1.0 5 Pins (Modbus type application)
Accuracy	1=0.5%F.S (Typical) 2=0.25%F.S (by customized)
Cable length	000=Non-Cable 001= Cable 1M 002= Cable 2M X= By customized

Accessories

(Notes: Please purchase 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
	Locking flange For locking cables	0029
	IP68 rated deep water level cable extender Mainly used to extend the cable of deep water level transmitter. Users can rewire it locally. It can work continuously for more than 10 years 500 meters underwater, and the safe tensile strength of the cables at both ends can reach 200N	0028
	Terminal box The terminal box, with IP67 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
	Desiccant drying cartridge Desiccant Pack installed on Vented Transducer cable.The cartridge will have to be field replaced as site environment requires.	0010

Order information

Model /Measuring range /Output Signal/Medium/Cable length/Case/Accessories