

TECHNOLOGY

HOLYKELL®

HPT300-C
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

HPT300-C Series

Commercial Refrigeration Pressure Transducers & Transmitters

Applications

- Refrigeration equipment
- Centrifugal compressor
- Screw-type, reciprocating and turbo compressors
- Air-conditioner production line testing
- HVAC Systems
- Energy and Water Treatment

Features

- Built-in Schrader Deflator
- -35°C~125°C wide working temp scope
- Long time working at low temperature
- Superior long-term stability
- Excellent repeat ability/hysteresis
- EMI/RFI rejection
- Over voltage,reverse polarity and short circuit protection

Profiles

HPT300-C pressure transducer is with integrated Germany Ceramic sensors for manufacturing, and the advanced circuit design to avoid influences on the product caused by the temperature, humidity, mechanical fatigue and medium, thus to improve its permanent stability in the industrial environment. Its measuring range -1 to 200Bar, long lifetime 100 million pressure cycles, stainless steel body material, thread and output signal can be customized.

The HPT300-C series is specially designed with highest quality standards and has successfully passed TUV CE certification,its excellent resistance to the main refrigerants filed, with economic price make it ideal pressure monitoring device for low temp performance for use in refrigeration, air-conditioning and HVAC systems.

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



HPT300-C1

HPT300-C2



RoHS CE

Measuring range

| | |
|------|--------------------------|
| bar | -1 to 0 ...0 to 200 |
| Kpa | -100 to 0 ...0 to 20000 |
| psi | -15 to 0...0 to 3000 |
| mbar | -1000 to 0...0 to 200000 |

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

Materials

| Wetted Parts | Standard | Optional |
|--------------|---------------------|----------------------|
| Case | 304 Stainless steel | 316 SST/SUS321 |
| Sensor | Ceramic | Sputtering thin film |
| O-ring | CR/HNBR | FKM |

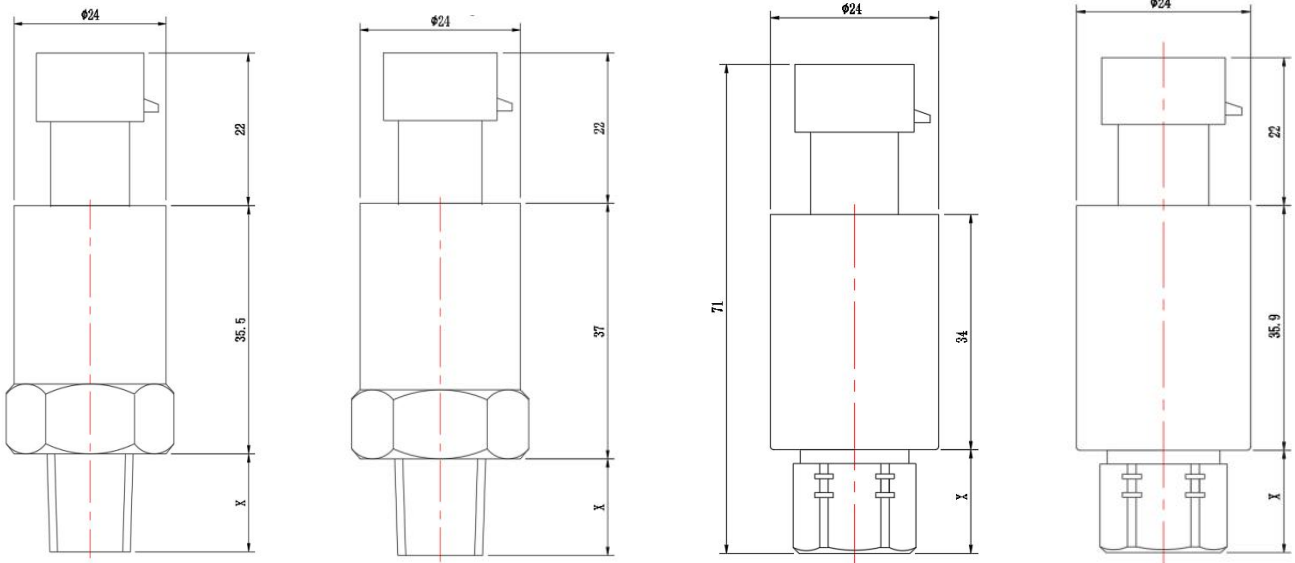
Specifications

Ambient Temperature: 25°C (unless specified)

| Parameter | HPT300-C | | | |
|--------------------------|--|------------------------------|------------------------------------|----------------------|
| Pressure Range | Gauge /Negative/Absolute pressure optional | | | |
| Overload | 150% F.S. | | | |
| Burst Pressure | 200% F.S. | | | |
| Accuracy | Min.: $\leq \pm 1.5\%F.S$ | Typical: $\leq \pm 1.0\%F.S$ | Max: $\leq \pm 0.5\%F.S$ (at 25°C) | |
| Total Error Band | 0...50 °C max. $\leq \pm 1.5\%FS$; -20...80 °C max. $\leq \pm 2.0 \%FS$ | | | |
| Stability | 0.2%F.S \pm 0.05%/Year | | | |
| Working Temp. | -40°C~105°C(with CR O-ring); -40°C~135°C(with HNBR O-ring); -20°C~135°C(with FKM O-ring) | | | |
| Storage Temp. | -40°C~105°C | | | |
| Temperature Compensation | 0°C~50°C | | | |
| Medium Compatible | Compatible with SUS304 Stainless Steel and ceramic | | | |
| Electrical Wire | 2 Wires | | 3 Wires | |
| Output | 4-20mA | 0-5V | 0-10V | 0.5-4.5V ratiometric |
| Power Supply | 8-30Vdc | 8-30Vdc | 13-30Vdc | 5Vdc \pm 5% |
| Insulate resistance | >100M Ω @100V | | | |
| Thermal effect on span | +/- 0.02%/°C | | | |
| Thermal effect on zero | +/- 0.2%/°C | | | |
| Electrical connection | Packard 3 Pin Connector; Packard 3 Pin Connector with cable length by customized. | | | |
| Pressure connect port | 1/4"NPT male, 7/16"-20 UNF male/Female (by customized) | | | |
| EMC Standard | EN 61326-1:2013; EN 61326-2-3:2013 EN 61000-6-2:2005; EN61000-6-4:2007+A1 | | | |
| IP rating | IP67 | | | |
| Response time | \leq 20ms | | | |
| Certificate | CE Certificate | | | |

Dimensions and Drawing

Unit, mm



HPT300-C1(Pressure < 65Bar) HPT300-C1D(Pressure ≥ 65Bar) HPT300-C2(Pressure < 65Bar) HPT300-C2D(Pressure ≥ 65Bar)

Electrical Connection

| | Packard 3 Pin Connector | | |
|---|-------------------------|--------------|-----------------------------------|
| | Current | A | ⏚ Connect to earth ground / Black |
| | | B | U+ / Red |
| | | C | Iout(U-) / Green |
| | Voltage | A | U- / Black |
| | | B | U+ / Red |
| C | | Vout / Green | |

| Pressure Connections | | | | |
|----------------------|-----------------|--------------|--------------|----------------------------|
| 1/2" NPT male | 1/4" NPT male | G1/2" male | G1/4" male | 7/16"-20 UNF Female |
| <p>1/2" NPT</p> | <p>1/4" NPT</p> | <p>G1/2"</p> | <p>G1/4"</p> | <p>7/16"-20 UNF Female</p> |

How to Order

1. Range Selection Table:

| | | | | | | | | | | | | | |
|----|--------|----|------|----|-------|----|---------------|--|--|--|--|--|--|
| 01 | -1~65 | 07 | 0~6 | 13 | 0~35 | 19 | 0~160 | | | | | | |
| 02 | -1~125 | 08 | 0~10 | 14 | 0~40 | 20 | 0~200 | | | | | | |
| 03 | 0~1 | 09 | 0~16 | 15 | 0~50 | | | | | | | | |
| 04 | 0~2 | 10 | 0~20 | 16 | 0~60 | | | | | | | | |
| 05 | 0~3 | 11 | 0~25 | 17 | 0~70 | | | | | | | | |
| 06 | 0~5 | 12 | 0~30 | 18 | 0~100 | X | By Customized | | | | | | |


Kindly according to your application select suitable range code , Example: code 17 = 70 .
Unit of measure select on the Part Number Selection Table . Example: Code B=Bar , that's 70 bar

2. Part Number Selection Table:

| | | | | | | | | |
|----------------------------------|---|----------|----------|-----------|------------|----------|----------|------------|
| 300C1/2 Selection Type | 12 | B | G | E5 | S11 | 3 | 1 | 002 |
| Pressure Range | Range reference to pressure range selection table code | | | | | | | |
| Pressure Unit | B=bar P=Psi K=KPa M=MPa | | | | | | | |
| Pressure type | G=Gauge/Relative A=Absolute | | | | | | | |
| Signal Output | E5=4-20mA(2 wire) E6=0-5V(3 wire) E7=0-10V(3 wire) E8=0.5-4.5V(3 wire) X= By Customized | | | | | | | |
| Power Supply | S6=5Vdc S12=8-30Vdc S43=13-30Vdc X= By customized | | | | | | | |
| Pressure connection | 1=7/16-20UNF male 2=7/16-20UNF Female 3= 1/4" NPT male 4=1/4" NPT Female 5=1/8"NPT male 6=G1/4"male 7=G1/4"Female X= By customized | | | | | | | |
| Accuracy | 0=better than1.5%F.S (Default) 0=1.0%F.S(Typical) 1=0.5%F.S(On request) | | | | | | | |
| 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 |
|---|---|--------------|
|  | <p>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.</p> | <p>0008</p> |

Order information

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