

TECHNOLOGY

**HOLYKELL®**

**HPT300-C3**  
**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-C3

## Compact HVAC/HVACR Pressure Transducer & Transmitter

### Applications

- Multi-line pipeline pressure
- Pipeline pressure of air-conditioning refrigeration units
- Air source heat pump
- Internal pressure of compressor inlet/outlet piping
- Building control

### Features

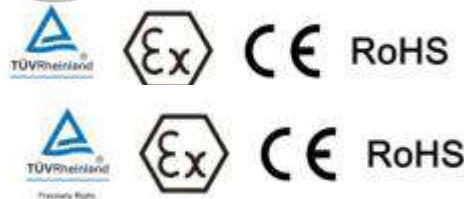
- Absolute/sealed gauge pressure optional
- Breaking pressure up to 300%
- High accuracy at working temperature
- Anti-condensation
- Fully sealed, IP66 protection
- Built-in Schrader Deflator for easy installation and disassembly
- -35°C~105 °C wide working temperature scope
- Long time working at low temperate
- Superior long term stability
- Excellent repeatability/hysteresis
- EMI/RFI rejection
- Over voltage,reverse polarity and short circuit protection

### Profiles

HPT300-C3 pressure transducer adopts the high quality ceramic capacitor pressure sensors and the special integrated circuit of the refrigeration industry. It features high measurement accuracy and digital temperature compensation function, which can operate stably in high and low temperature environment, and can avoid impact caused by the temperature, humidity, mechanical fatigue on the product, thus to improve its long term stability in the environment.

The product is equipped with a NOK imported O-ring, which is leak-free, safe and reliable. And with its strong corrosion resistance and vibration resistance, it can provide accurate data for monitoring gases and liquids.

HPT300-C3 is specially designed with highest quality standard and has successfully passed TUV CE certification. With its excellent resistance to the main refrigerants filed, it is an ideal and economic choice for refrigeration, air-conditioning and HVAC/HVACR systems.



### Measuring range

bar	-1-0-10...65
Kpa	-100-0-1000..6500
psi	-15-0-145..943
mbar	-10-0-100..650

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

### Materials

Wetted Parts	Standard	Optional
Case	Brass	304 Stainless steel
Sensor	ceramic capacitor	NA
O-ring	CR	NA

### Specifications

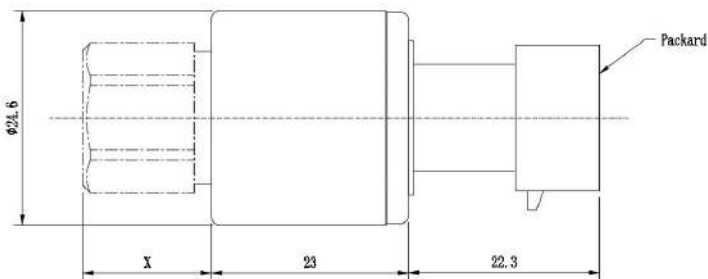
Ambient Temperature: 25°C (unless specified)

Parameter	HPT300-C3
Pressure Type	Absolute(A)/sealed gauge(S) pressure optional
Pressure Range	-1-0-10 bar...65barS; 0-10...50barA optional
Overload	200% F.S.
Burst Pressure	300% F.S.
Accuracy (At 25°C)	≤ ±1.0%F.S (Typical)
Total Error Band	-20...50 °C max. ≤±1.0%FS; -40...80 °C max. ≤±2.0 %FS
Stability	0.2%F.S±0.05%/Year
Working Temp.	-35°C~105°C
Storage Temp.	-40°C~105°C
Temp. Compensation	-20°C~80°C
Medium Compatible	SS304/brass and ceramic compatible
Electronic Wire	3 Wires
Output	0.5~4.5V ratiometric
Power Supply	5Vdc±5%
Output loading	≥10KΩ
Over-voltage protection	20Vdc
Reverse voltage	-14Vdc
Response time	≤10ms (10% ~ 90%)
Insulate resistance	>100M Ω @100V
Thermal effect on span	±0.03%/°C
Thermal effect on zero	± 0.03%/°C
Electronic connection	Packard Metri-Pack 3 Pin connector
Pressure connect port	7/16-20 UNF-2B
EMC Standard	EN 61326-1:2013; EN 61326-2-3:2013 EN 61000-6-2:2005; EN61000-6-4:2007+A1
IP rating	≥IP66
Vibration	10g, 5~2000Hz
Impact	20g, 11mshalf sine
Compatible medium	R12,R22,R134a,R404a,R407c,R410a,R502,R507
O-ring materials	CR
Certificate	CE Certificate

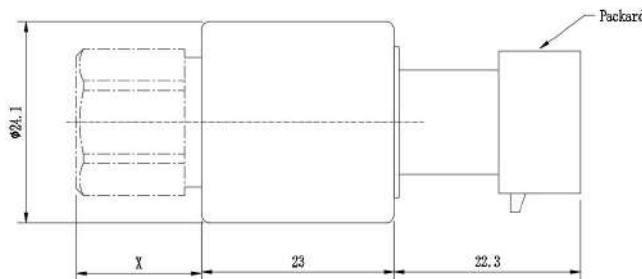
### Dimensions and Drawing

Unit, mm

Brass Housing



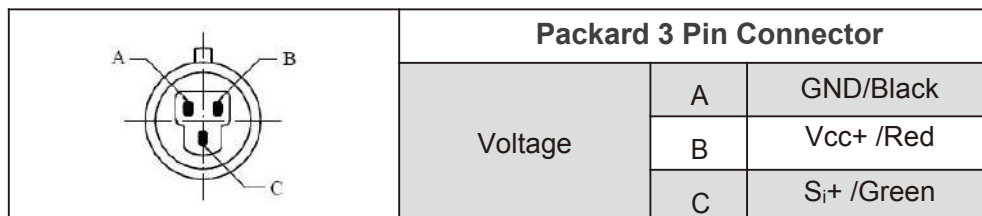
SS304 housing



Thread spec	X (mm)	Material
7/16-20UNF-2B (Female)	15	Brass
NPT1/4 (Male)	14	Brass

Thread spec	X (mm)	Material
7/16-20UNF-2B (Female)	15	304
NPT1/4 (Male)	14	304

### Electronic Connection



### Notes

1. The transmitter must be used in a medium that is not corrosive to the sealing material and the shell material.
2. When the pressure hole of the transmitter is blocked, it is forbidden to dredge the pressure hole with a sharp device. The transmitter should be unloaded and the pressure hole should be partially immersed in energy Dissolving the blockage in the liquid, to be dissolving the blockage after it is thrown out.
3. Do not open the transmitter for calibration or maintenance.
4. If you are not sure whether the transmitter is suitable for the measuring medium, please contact the manufacturer.
5. The installation position of the transmitter should be selected in the place where it is not easy to be collided and trampled.
6. Use beyond the transmitter overload pressure may cause permanent damage.
7. When lightning may occur, customers should consider lightning protection measures.
8. Special advice: this product can only measure refrigerant, can not be used to measure water or wet media.

### How to Order

#### 1. Range Selection Table:

01	0-10	02	-1~10	03	0~20	04	-1~20	05	-1~30	06	-1~35	07	-1~65	X	By customized
08	0-145	09	-14.5~145	10	0~290	11	-14.5~290	12	-14.5~435	13	-14.5~500	14	-14.5~950	X	By customized


Kindly according to your application select suitable range code , Example: code 02 =-1~10 bar .  
Unit of measure select on the Part Number Selection Table . Example: Code B=Bar , that's 10 bar

#### 2. Part Number Selection Table:

<b>300C3</b> Selection Type	<b>12</b>	<b>M0</b>	<b>B</b>	<b>G</b>	<b>E5</b>	<b>S3</b>	<b>3</b>	<b>A1</b>	<b>002</b>
Pressure Range	Range reference to pressure range selection table code								
Housing Material	M3=Brass (typical) M0=SUS304 (optional)								
Pressure Unit	B=bar P=Psi K=KPa M=MPa								
Pressure type	A=Absolute pressure S=Sealed gauge pressure								
Signal Output	E8=0.5-4.5V Ratio metric (3 wires) X=By customized								
Power Supply	S6=DC 5V±0.25V								
Pressure connection	2=7/16-20UNF-2B X=By customized								
Accuracy (At 25°C)	A0=1.0%F.S    A1=0.5%F.S(By customized)								
Cable length	000=Non-Cable    001=Cable 1m    X=By customized								

### Accessories

(Notes: Purchased separately. For the price of accessories, please contact our sales.)

	Description	Order number
	<p><b>Liquid level display control device</b>                      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

### Statement

Holykell reserves the right to modify the specifications and contents of this manual. Subject to change without prior notice. Due to the product update, the individual details of this document may be inconsistent with the product, please refer to the actual object. The right to interpret this document belongs to Holykell.