

# HuaTian

HPT-12

## Instruction:

HPT-12 series pressure sensor/transmitter applied in the refrigeration & compressor industry adopts the ceramic piezoresistive technology 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.

This product adopts high quality stainless steel structure, pressure core body and sensor chips are imported from Germany.

## Features:

- The original German imports of core body
- Compact design ,easy installation
- Design for air compressor applications
- Strong applicability

## Applications:

- Air compressor
- Hydraulic and Pneumatic system
- Oil pressure
- Industrial process control



## Specifications( Refer to 25℃ )

Sensor Type	Ceramic sensor	Operable Temp. (℃)	-20~125℃
Wetted parts	Ceramic	Compensation Temp (℃)	-20~85℃
Housing	304 Stainless steel	Storage Temp (℃)	-40℃...125℃
Sealing method	O-ring	Long term stability	±0.10%FS(annual)
Power supply	12-36V DC(24V standard)	Zero error (%FS)	±0.5%
Compensated temp.	-20-85℃	Full range error (%FS)	±0.5%
Load impedance	500Ω	Thermal Zero drift (%FS) *	±2.0%
Pressure port	See below code description	Thermal Span drift (%FS) *	±2.0%
		Input Voltage / Output	See below code description
Accuracy (Combined Non-linearity, Hysteresis and Non-repeatability) %FS	0.5%(Typical)	Response time	< 1mS
		Insulation	Min1MΩ @250VDC&25℃
Pressure Range(psi)	0-5, ..., 750	Shock	100g, 11msec
Over pressure	3X Full Range	Noise	< 2m VRMS
Burst pressure	4X Full Range or 20kpsi which is less	Pressure reference	Absolute Gauge
Life	>10 <sup>7</sup> Full Range Pressure	Weight	90g Max.

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HPT-12 pressure transducer model code

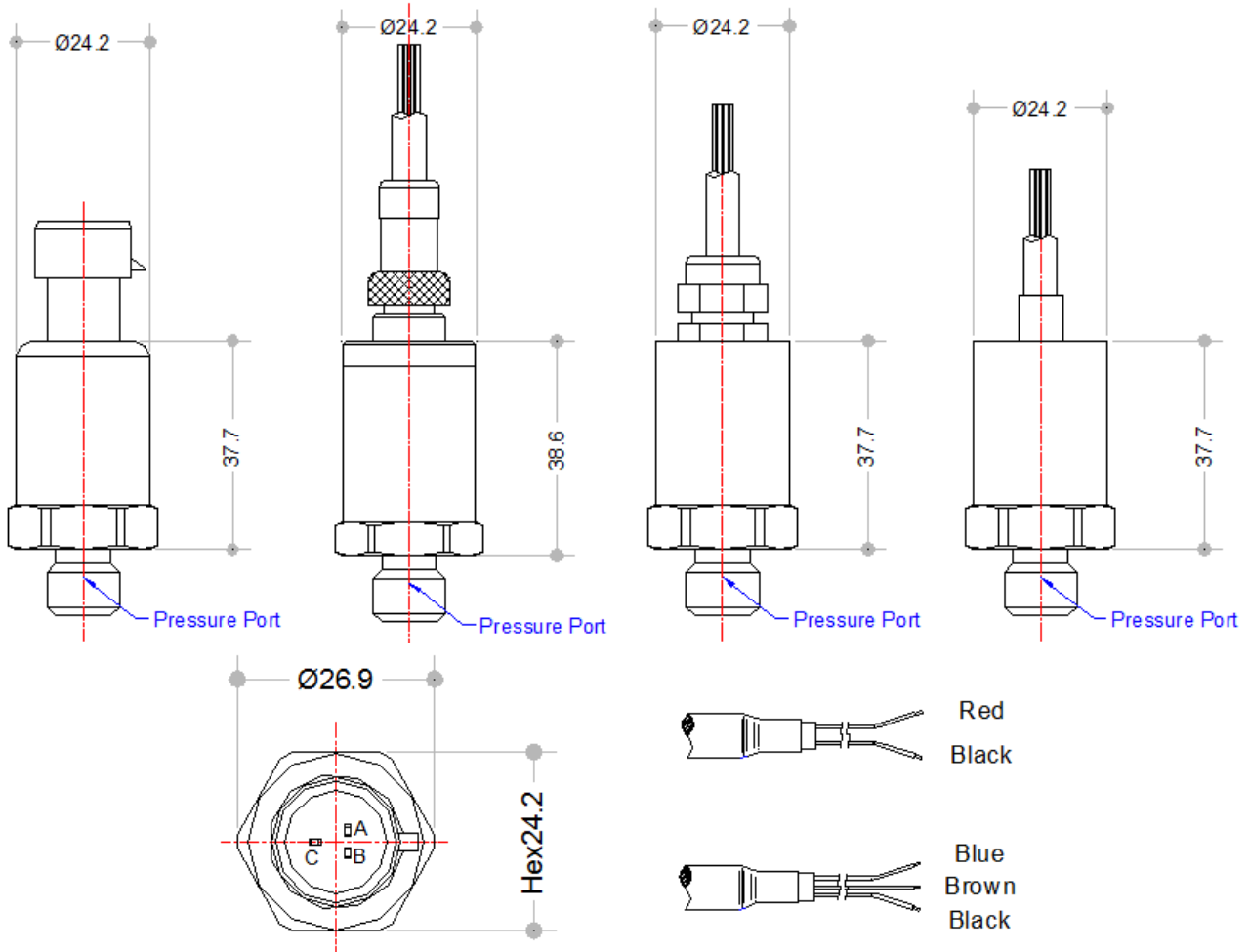
Model	Description						
HPT-12	Air compressor transmitter						
	Range/Code	Pressure unit					
	0-X B	Bar					
	0-X M	Mpa					
	0-X S	PSI					
		Code	Output Signal				
		E	4-20mA two wire				
		W	0.5V-4.5V DC				
		Z	others				
			Code	Accuracy (%FS)			
			J2	0.25			
			J3	0.5			
				Code	Pressure port		
				C3	G1/2		
				C5	G1/4		
				C7	1/4NPT		
				C8	ZG1/4		
				X	Customized		
					Code	I/O Outlet	
					B4	Metri-park(2 meters)	
					B3	Direct cable	
					X	Customized	
						Code	Pressure reference
						A	Absolute
						G	Vent Gauge

Example:

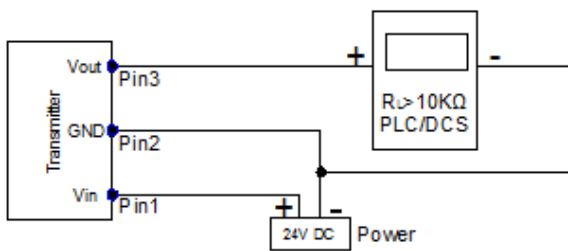
HPT-12	10B	E	J2	C3	X	A	
HPT-12	10Bar	4-20mA	0.25%	G1/2	Customized	Absolute	

Model Choose:HPT-12-10B-EJ2C3XG

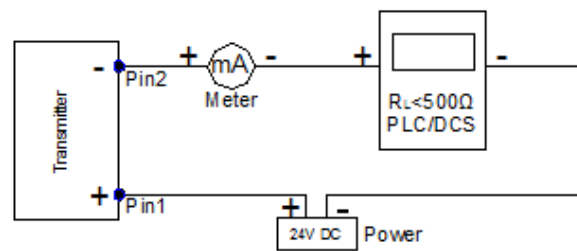
**Outline Drawing:**



**Electric Circuit:**



Output: 1-5V



Output: 4-20mA

Pin	2-Wire (Current)
A(Red)	Vsupply+ (Vs+)
B(Black)	Vsupply- (Vs-)

Pin	3-Wire (Voltage)
A(Blue)	Vsupply+ (Vs+)
C(Black)	GND
B(Brown)	Voutput+(Vo+)

### Pressure Port Dimension:

Code	Pressure port	"L" (mm)
C1	M20*1.5	16
C2	M14*1.5	14
C3	G1/2	16
C4	G3/8	
C5	G1/4	12
C6	1/2NPT	
C7	1/4NPT	13.8
C8	ZG1/4	13.8