HTW-CQ04531 Differential Pressure Transmitter

Description

CQ04531 serie differential pressure transmitters adopt HT serie piezoresistive isolated membrane silicon oil-filled sensing element as the signal measuring element, the measured pressure on both ends of the transmitter, utilizes the semiconductor silicon piezoresistive effect to fulfill the differential pressure transformed into electrical signal. After strict testing and aging screening on components, semi-manufactured products and end products, the performance is ensured to be stable and reliable.

Features


(II1)


(I1)

- ✧ Measurement range: 0~2MPa
- ✧ Whole aluminum shell, plastic shell
- ✧ Stainless steel sealed structure design
- ✧ Protection level: IP65
- ✧ Multiple output signals
- ✧ Pass aging test, the performance is reliable and stable
- ✧ CE certificated
- ✧ Intrinsic safety explosion-proof type
- ✧ Conform to the state explosion protection standards
- ✧ Explosion-proof certificated, explosion-proof sign: ExiaIICT6

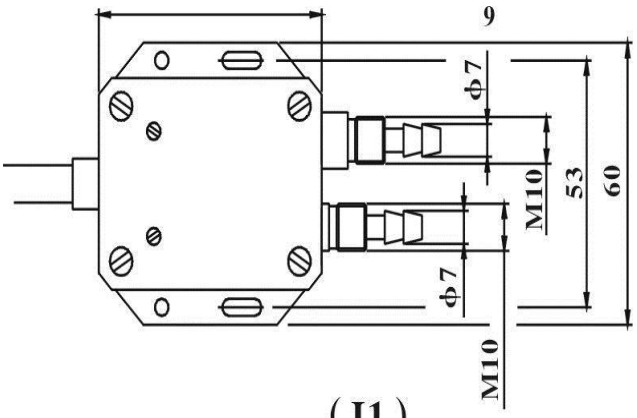
Applications

- ✧ Liquid, gas is non-corrosive and compatible with 316L stainless steel
- ✧ Wind pressure, flow velocity measurement and dry gas in industrial process system
- ✧ Piping and furnace pressure measurement
- ✧ Petroleum industry, chemical industry
- ✧ Meteorological monitoring

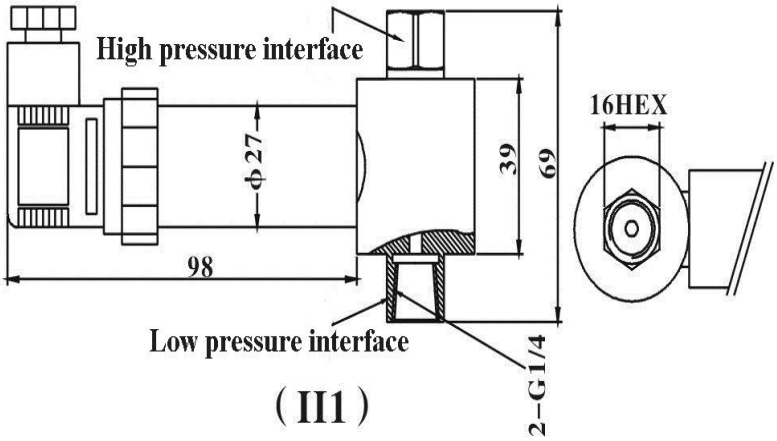
Performance Specification

Measurement Range	I1: 0~1Kpa…200Kpa…1000Kpa II2: 0~20Kpa…35Kpa…2Mpa
Medium	I1: Dry gases compatible with aluminium casting or plastic II2: Liquids or gases compatible with 316LSS
Proof pressure	1.5X rated range or 7MPa, which is less
Accuracy	±0.25%(typical) ±0.5%(max)
Long-term Stability	±0.5%F.S/year(≤200KPa) ±0.2%F.S/year(≤2000KPa)
Zero Temperature Error	±0.03%F.S/℃(≤100KPa) ±0.02%F.S/℃(＞100KPa)
Span Temperature Error	±0.03%F.S/℃(≤100KPa) ±0.02%F.S/℃(＞100KPa)
Operating Temperature Range	-20℃~80℃
Storage Temperature Range	-40℃~120℃
Power Supply	15~30VDC(intrinsic safety type, safety barrier power supply)
Output Signal	4~20mA 0~10/20mA 0/1~5VDC
Pressure Connection	G1/4 female thread ∮7 air cock (customized)
Housing Material	Stainless steel 1Cr18Ni9Ti Aluminium casting Plastic
Diaphragm Material	316L
O-ring Seal Ring	Fluororubber
Cable	Polyethylene
Insulation Resistance	100MΩ 100VDC
Housing Protection Level	IP65

Dimension (unit: mm)



(I1)



(II1)

Selecting Example

HTW-CQ04531D1I1 0~35KPa D1 S1 J1

- J1 — Thread connector
- S1 — Output signal
- D1 — Power supply
- 0~35KPa — Measuring range
- HTW-CQ04531D1I1 — Configuration

Selection Instructions

1. Please notice the compatibility between the product part of contacting medium and the measured medium.
2. In order to ensure the safe and reliable operation of the product, it is suggested to install the three valves manifold between the measured point and the transmitter. Ensure the measured medium putting onto the positive and negative pressure cavity of differential pressure transmitter evenly and slowly.
3. When installing, it is suggested to make pressure on both ends of the interface is in horizontal in order to minimize the influence of installation location to the products.
4. Please notice the measured static pressure point, the overpressure on positive and negative pressure cavity should not exceed the specified value of the product.
5. Please inform us if have special requirements like strong vibration, Instantaneous impact force, strong electromagnetic radio frequency interference.

Selection Guide

HTW-CQ04531	Differential pressure transmitter						
	Code	Configuration					
	I1	Micro differential pressure aluminium casting sealed shell 1.5M direct outgoing line. (Only to measure dry gases)					
	I2	Micro differential pressure plastic sealed shell 1.5m outgoing line. (Only to measure dry gases)					
	II1	Full stainless steel, Hirschmann connector					
	II2	Full stainless steel, 1.5M direct outgoing line					
		Range	0~10KPa…35KPa…2MPa				
		(0-X) KPa or MPa	X: Stand for actual measurement range				
			Code	Power supply			
			D1	24VDC			
			D2	Other power supply way			
				Code	Output signal		
				S1	4~20mADC		
				S2	1~5VDC		
				S3	0~5VDC		
				S4	0~10mAC		
				S5	0~20mAC		
				S6	0~10VDC		
					Code	Thread connector	
					J1	∮ 7 air cock	
					J2	G1/4 female thread	
					J3	M20×1.5 male thread	
					J4	Other special thread	