

HC-25 Micro Pore Water Pressure Sensor

Product Introduction

Due to the requirements for measuring the flow field and placement, it is necessary to measure pressure in situ and reproduce the variation pattern of the pulsating flow field without interfering with the flow field state. There are usually strict requirements for the miniaturization of the external dimensions of sensors. The HC-25 microporous water pressure sensor and transmitter are designed for the above working conditions. This series of products consists of ceramic filters and stainless steel structures, with micro processed silicon film as the core component. It adopts international advanced miniaturization production and packaging technology to achieve high-precision integration and exquisite packaging. This product has a small size, compact structure, light weight, durability, and excellent dynamic and static characteristics. This series of products is particularly suitable for geotechnical simulation, centrifuge simulation, and other applications, and is widely used in many fields such as civil engineering, geotechnical mechanics, and earthquake monitoring.



Features of Product

- ☆ High precision, up to 0.1% FS
- ☆ Dynamic pressure sensor , High frequency dynamic response: 20KHz~2MHz
- ☆ Small size, small diameter to ϕ 2.54mm and a length of 3.77mm.
- ☆ Good long-term stability, resistant to all kinds of worse condition
- ☆ Wide range of temperature, from -40°C to+120°C (up to+175°C specially)
- ☆ Good medium compatibility, may be used for all kinds of corrosive medium.
- ☆ Wide scale of measurement, any scale from -100KPa to 100MPa(The range can be freely selected between -100Kpa and 100Mpa)
- ☆ May specially be customized according to the customer's requirements: Range size, external dimensions, performance parameters, accuracy level, output type, cable length and other parameters can all be customized.

Product Parameters

Measuring range	-100KPa~100MPa(Choose between -100Kpa~100Mpa)
Overloading capacity	1.2~5 times FS (Overload is determined by the range)
Pressure type	Gauge pressure or absolute pressure
Medium to be measured	The gas or liquid compatible with 316 stainless steel
Accuracy	0.1% FS,0.2% FS,0.3% FS
Long-term stability	Typical: $\pm 0.1\%$ FS /year,Maximum: $\pm 2\%$ FS/year
Operating temperature	-40°C~85°C (generally),-40°C~125°C(Specially)

Zero point temperature drifting	Typical:±0.02% FS/°C,Maximum:±0.05% FS/°C
Sensitivity temperature drifting	Typical:±0.02% FS/°C,Maximum:±0.05% FS/°C
Range of power supplying	5VDC, ±15VDC ,9~32VDC(24VDC generally)
Signal output	mV output /4~20mA/0~5VDC/RS485 //Customized
Intrinsic frequency	20KHz~2MHz
Enclosure protective degree	IP68
Resolution	Infinite small(theoretical) 1/100000 (general)
Port and enclosure	Stainless steel(1Cr18Ni9Ti)

Guideline of Selection

HC-25		Micro Pressure Sensor and Transducer	
Code	Type of pressure		
g	Gauge pressure (may not be indicated)		
a	Absolute pressure		
	Range	Choose any measurement range between -100KPa and 100MPa	
	Code	Code cable length	
	L1	standard configuration 3m	
	L2	custom length	
	Code	Overall accuracy (linear + repeatability + lagging)	
	1	±0.3% FS	
	2	±0.2% FS	
	3	±0.1% FS	
	Code	Signal Output	
	A1	4~20mA	
	V1	mV output	
	V2	0~5V	
	RS	RS485	
	V0	Customized output signal	
	Code	Additional functions	
	F1	M8*1 external thread	
	F2	M5*1 external thread	
	F3	Φ5 Input type	
	F4	Φ8 Input type	
	F0	Special customized sensor	
HC-25 - g- 0~50Kpa - L1 - 2 - V2 2 F1			

**Beijing Ruiheng Changtai Technology Co., Ltd. / Address: Room 1413, Building 2, No. 106 Kexing West Road, Changping District, Beijing, China / Postal Code : 102208
Tel: +86 10 60728968 / Fax : +86 10 50976396 / Mobile(WeChat) :+86 15311807298/
Email(Skype) : bjrhct@163.com**