



# WPCR01

## General Type Ceramic Pressure Sensor

Manual Version1.2

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## WPCR01 Ceramic Capacitive Pressure Sensor

### 1. Profile

WPCR01 ceramic capacitive pressure sensor is a kind of ceramic capacitive pressure sensor refined by thick film process using refined ceramic components. Its overall dimension is  $\Phi 20 * 4.35\text{mm}$ .

Ceramic is a kind of material with high elasticity, corrosion resistance, wear resistance, impact resistance and vibration resistance. The good thermal stability of ceramic and high temperature sintering process of thick film make the working temperature range of ceramic pressure sensor as high as  $-40 \sim 125\text{ }^{\circ}\text{C}$ . The high elasticity and creep resistance of ceramics make ceramic pressure sensor have good long-term stability. In addition, due to its corrosion resistance, ceramics have unique advantages in the fields of refrigeration, chemical industry and environmental protection.



### 2. Features

Ceramic sensitive diaphragm with high overload capacity

Excellent corrosion and wear resistance

Anti shock and anti vibration

Wide working temperature range

Compact and easy to package

Environmental protection

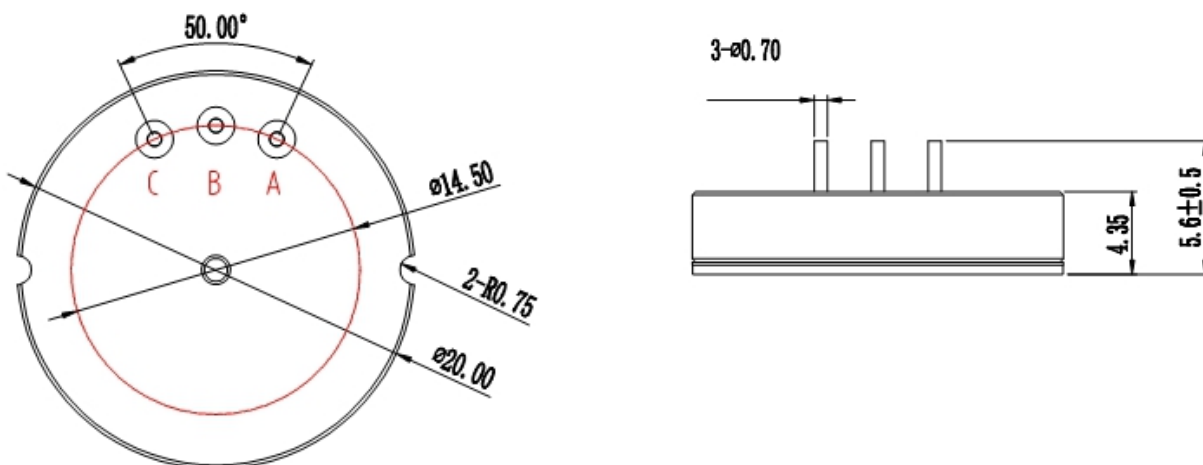
### 3. Applications

WPCR01 ceramic capacitive pressure sensor is mainly used in automobile, air conditioning, process control, environmental control, hydraulic and pneumatic equipment, chemical products, chemical industry and medical instruments.

#### 4. Technical parameters

Size	Φ20±0.1*4.35±0.05mm
Detection range	0~20bar
Safety overload pressure	2 Times
Limit overload pressure	3 Times
Initial capacitance value	8-30pF, Typically 18±5pF
Full scale signal	≥1.5pF
Stability	<±1%FS / Year
Response time	<10ms
Working temperature	-40℃-125℃

#### 5. Dimensions



#### 6. Electrical connection

<b>A</b>	<b>pin 1 (drive)</b>
<b>B</b>	<b>pin2 (common ground)</b>
<b>C</b>	<b>pin 3 (receive)</b>

## 7. Note

1. When installing the core, it is recommended to install nylon washer on the lead surface of the core to make the core bear uniform force and avoid zero point instability.
2. It is not recommended to use the sensor beyond the range, please select the appropriate range according to the specific application.
3. When using it, handle it with care and try not to bump it.