



WPCH01

General Type Ceramic Pressure Transmitter

Manual Version4.0

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Zhengzhou Winsen Electronics Technology CO., LTD.

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WPCH01 General Type Ceramic Pressure Transmitter

1.Profile

WPCH01 general type ceramic pressure transmitter has small size and light weight, it is convenient and easy to install. It adopts pressure sensor made by Winsen and it convert pressure into standard voltage signal output through a high reliable amplifying circuit and accurate temperature compensation circuit. The whole stainless delicate structure and plastic elements with high-strength enhance its anti-corrosion character, which make the product meet demands in different application occasions.

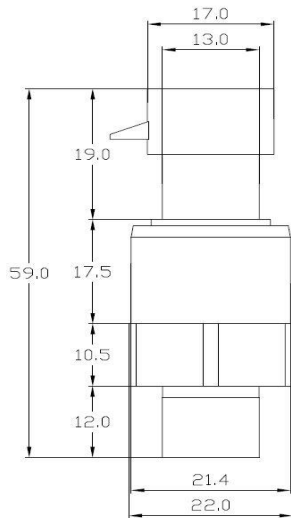
It has various output way and connector, and it also could be customized. It is widely used in water pump, smart water supplying, air compressor, cars, air conditioners, water dealing device, controlling gas and liquid pressure.



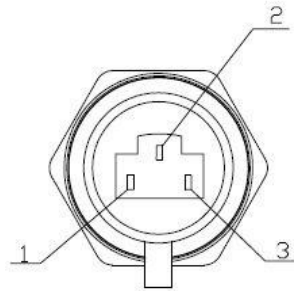
2.Parameters

| | | |
|------------------------|---------------------------------------------------------------------|--------------|
| Detection range | 0.2 MPa 、 0.5MPa、 1 MPa、 2 MPa 、 5MPa | selectable |
| Comprehensive accuracy | 0.1%FS、 0.2%FS、 0.5%FS、 1.0%FS、 2.0%FS（默认）、 5.0%FS | |
| Output signal | 4-20mA、 0/1-5/10V、 0.5-4.5V | customizable |
| Power supplying | +5VDC、 +12VDC、 +24VDC | customizable |
| Structural connection | G1/4、 G1/2、 G1/8、 1/4NPT、 1/2NPT、 M20*1.5、 M14*1.5 | customizable |
| Electrical connection | Three-pin plug, direct leading wire, Hersman's joint, aviation plug | customizable |
| Compensation | 0-45°C 、 0-65°C（default）、 -10-85°C、 -20-85°C | customizable |
| Working temperature | -20-125°C | |
| Safe overload | 150% | |
| Ultimate overload | 200% | |
| Long-term stability | 0.2%FS/year | |
| Response time | Less than 1ms | |
| Shell material | 304 stainless steel | customizable |
| Protection grade | IP65 | |

3. Structure sizes



4. Electric connection and definition of wires



| Pin | Cable | Definition (three-wire) | Definition (two-wire) |
|-----|-------|-------------------------|-----------------------|
| 1 | Brown | Power: V+ | Power: V+ |
| 2 | Gray | Output: OUT+ | |
| 3 | Black | Common port: GND | Output: OUT |

5. Guide to select model

Example: W—P—C—H—M1—V1—S2—L1—D1—P3

| | | | | | | |
|-----------|---------------------|-----------------------------------------------------------------------------------------------------------------------------------|---------------------------------|--------------------|--------------------|-------------------|
| W | | Winsen company | | | | |
| P | | Pressure sensors products | | | | |
| C | | Pressure transmitter products | | | | |
| H | Sensor type | H: ceramic type | K: diffused-silicon type | Q: others | | |
| M1 | Detection range | M1 stands for 1MPa; M0.2 stands for 0.2MPa; ... M60 stands for 60MPa | | | | |
| V1 | Supply voltage | V1: 5VDC | V2: 12VDC | V3: 24VDC | V4: others | |
| S2 | Output signal | S1: 4-20 | S2: 0.5-4.5V | S3: 0-5V | S4: 1-5V | S5: others |
| L1 | Screw Connection | L1: G1/2 | L2: G1/4 | L3: M20*1.5 | L4: M14*1.5 | L5: others |
| D1 | Electric connection | D1: Three-pin plug, D2: Hersman’s joint, D3: direct leading wire, D4: aviation plug D5: others | | | | |
| P3 | Overall accuracy | P1: 0.2% | P2: 0.5% | P3: 1% | P4: 2.0% | P5: 5.0% |

6. Cautions

- 1, Before selecting suitable model, please note the compatibility between the medium and the contacting part.
- 2, If selecting others, please indicate the specific requirements.
- 3, if have special requirements on parameters or functions, welcome to communicate with us further.
- 4, Please be sure to pay attention to the definition of cable wiring, the production will fail with wrong connection ways, this should be assumed by users.