

Instructions

Compact Hydraulic Application Pressure Transmitter

PT210CC



Product Introduction

PT210CC Type pressure transmitter is a based on the principle of thick film strain measurement, compact all stainless steel welding structure, excellent stability of electronic components, so that it is very strong and reliable, suitable for all industrial applications, especially with high impact, vibration and other hydraulic systems.

Application

- 1. Hydraulic and pneumatic techniques
- 2. Pump and compressor
- 3. machine building

Functional Characteristics

- 1. 0~10MPa to 0~200MPa measuring range
- 2. Multiple output signal selection
- 3. Multiple electrical interface optionsMultiple international universal process connections

Technical Parameters

| Pressure range | 0~10MPa to 0~200MPa |
|-----------------------|---|
| Accuracy | ±0.5%FS、±0.25%FS |
| Output signal | See the output signal and performance parameter table for details |
| Power supply | See the output signal and performance parameter table for details |
| Process connection | See the output signal and performance parameter table for details |
| Electrical connection | See the electrical connection table for details |
| Overload pressure | 1.5 times the rated pressure |
| Rupture pressure | Six times the rated pressure |
| Ambient temperature | -20~85°C |
| | |

Storage temperature

20~85℃

Temperature of liquid medium

 $-20\sim$ 105 $^{\circ}$ C

Response time

<2ms

Protection degree

IP65, IP67

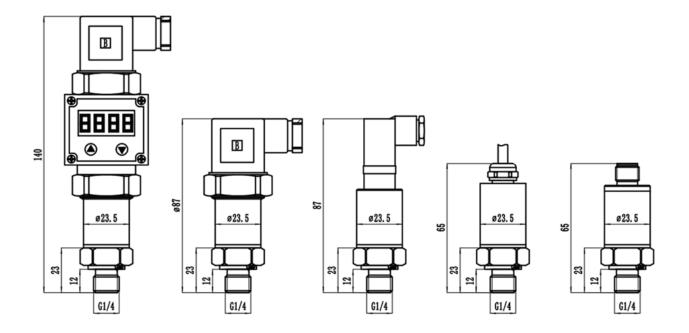
Fluid material

304 stainless steel and 17-4 PH stainless steel

Table of output signals and performance parameters

| Output signal | Signal features | Power supply | Load resistance (Ω) |
|--|-------------------|--------------|-----------------------------------|
| 4~20mA | two-wire system | 9~30Vdc | <(Power supply voltage-9) / 20 mA |
| 0~10Vdc | three-wire system | 12~30Vdc | >20k |
| 0.1~10.1Vdc | three-wire system | 12~30Vdc | >20k |
| 0.2~10.2Vdc | three-wire system | 12~30Vdc | >20k |
| 1~10Vdc | three-wire system | 12~30Vdc | >20k |
| 2~10Vdc | three-wire system | 12~30Vdc | >20k |
| 0~5Vdc | three-wire system | 8~30Vdc | >20k |
| 0.1~5.1Vdc | three-wire system | 8~30Vdc | >20k |
| 1~5Vdc | three-wire system | 8~30Vdc | >20k |
| 1~6Vdc | three-wire system | 8~30Vdc | >20k |
| 0.5~4.5Vdc proportional output | three-wire system | 3.3~5Vdc | >20k |
| 0.5~4.5Vdc Absolute output of 5VDC for power supply | three-wire system | 5Vdc | >20k |
| 0.5~4.5Vdc Absolute output of the high-voltage powersupply | three-wire system | 8~30Vdc | >20k |

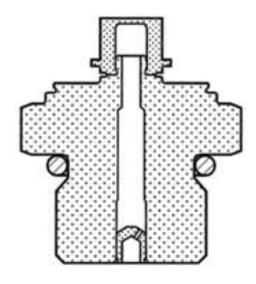
Appearance size



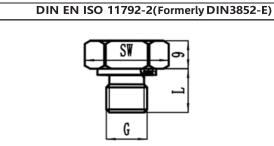
Pulse buffer selection

Gas itation, water hammer, and pressure peaks may occur in product applications, especially in hydraulic systems, e. g When quickly closing the valve or when the pump is up and down, these phenomena may be on the sensor evil. PT210CC Provide a pressure pulse buffer to eliminate these harmful peaks and protect the sensor. Please note for a pulse buffer.

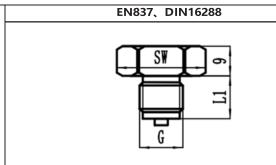
Process connection of ANSI / ASME B1.20.1/ISO/KS Internal Thread, EN837 Internal Thread, The SAE 04 SA4395-E is unable to select a pulse buffer



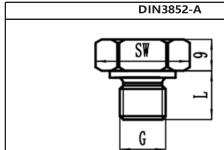
Process connection



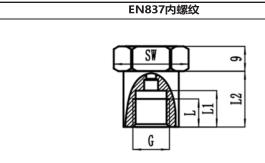
| G | L(mm) | SW(mm) | Selection code | | | | |
|---------|-------|--------|----------------|--|--|--|--|
| G1/4A | 14 | 24 | M-G1/4 | | | | |
| G1/2A | 17 | 27 | M-G1/2 | | | | |
| M14×1.5 | 14 | 24 | M-M14 | | | | |
| M20×1.5 | 17 | 27 | M-M20 | | | | |
| G1/8A | 12 | 24 | M-G1/8 | | | | |



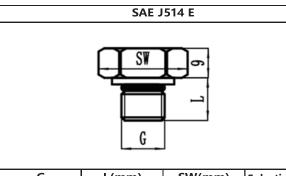
| G | L(mm) | SW(mm) | Selection code |
|---------|-------|--------|----------------|
| G1/4B | 13 | 24 | N-G1/4 |
| G3/8B | 16 | 24 | N-G3/8 |
| G1/2B | 20 | 24 | N-G1/2 |
| M20×1.5 | 20 | 24 | N-M20 |
| | | | |



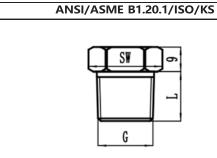
| G | L(mm) | SW(mm) | Selection code |
|-------|-------|--------|----------------|
| G1/4A | 14 | 24 | O-G1/4 |
| G3/8A | 14.5 | 24 | O-G3/8 |
| G1/2A | 17 | 27 | O-G1/2 |



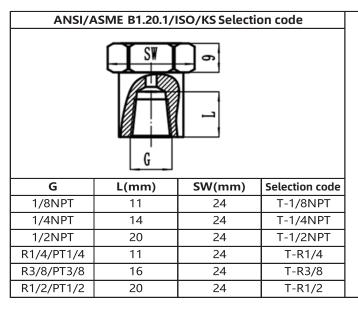
| G | L(mm) | L1(mm) | SW | Selection code |
|------|-------|--------|----|----------------|
| G1/8 | 7.5 | 10 | 24 | P-G1/8 |
| G1/4 | 10 | 13 | 24 | P-G1/4 |
| G3/8 | 12 | 16 | 24 | P-G3/8 |
| G1/2 | 15 | 19 | 27 | P-G1/2 |

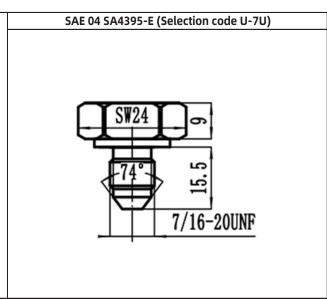


| G | L(mm) | SW(mm) | Selection code |
|------------|-------|--------|----------------|
| 7/16-20UNF | 12 | 24 | Q-7U |
| 9/16-20UNF | 13 | 24 | Q-9U |
| | | | |
| | | | |
| | | | |
| | | | |

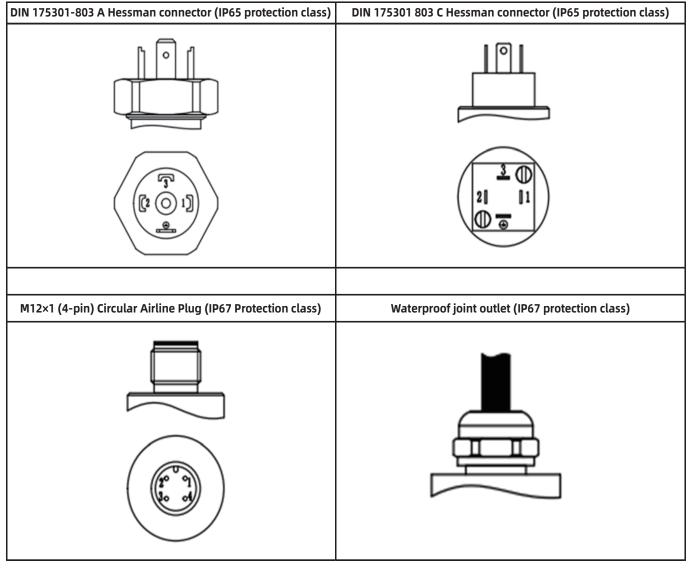


| G | L(mm) | SW(mm) | Selection code |
|------------|-------|--------|----------------|
| 1/8NPT | 10 | 24 | S-1/8NPT |
| 1/4NPT | 13 | 24 | S-1/4NPT |
| 1/2NPT | 19 | 24 | S-1/2NPT |
| R1/4/PT1/4 | 13 | 24 | S-R1/4 |
| R3/8/PT3/8 | 15 | 24 | S-R3/8 |
| R1/2/PT1/2 | 19 | 24 | S-R1/2 |





Electrical joint



Electrical connection

If the product provided has been equipped with cable, please directly according to the color of the cable, please do the correct wiring according to the pin definition

| DIN 175301 | I-803 A Hessman connector | | | | | |
|--------------------|-----------------------------|---|--|--|--|--|
| Wiring terminal | Electrical connection | Two-wire system of 4-20 mA / cable color | Three-wire system voltage output /cable color | | | |
| 1 | | Power supply positive / red | Power supply positive / red | | | |
| 2 | | Signal positive / black | Power negative/signal negative/ black | | | |
| 3 | | | Signal positive / green | | | |
| DIN 17530 | 1-803 C Hessman connector | | | | | |
| Wiring terminal | Electrical connection | Two-wire system of 4-20 mA / cable color | Three-wire system voltage output /cable color | | | |
| 1 | 3 (1) | Power supply positive / red | Power supply positive / red | | | |
| 2 | | Signal positive / black | Power negative/signal negative/ black | | | |
| 3 | | | Signal positive / green | | | |
| | | | | | | |
| M12×1(4- | pin) circular aviation plug | | | | | |
| Wiring terminal | Electrical connection | Two-wire system of 4-20 mA / cable color | Three-wire system voltage output /cable color | | | |
| 1 | B | Power positive / brown | Power positive / brown | | | |
| 2 | ((2° °1)) | | | | | |
| 3 | \\3o o4// | Signal positive / blue | Signal positive / blue | | | |
| 4 | | | Power negative/signal negative/ black | | | |
| | | | | | | |
| DIN 17530 | 1-803 C Hessman connector | | | | | |
| Wiring terminal | Electrical connection | Two-wire system of 4-20 mA / cable color | Three-wire system voltage output /cable color | | | |
| Red | Tran | Power supply positive | Power supply positive | | | |
| Black | | Signal positive | Power negative/signal negative | | | |
| Green/Blue | | | Signal positive | | | |

Ordering guide

| Series guide | PT210CC - X X - X | - | Х | - | Х | - | Х | - | Х | - | Χ |
|-----------------------|--|---------|-------------|---|-----|---|---|---|----|---|---|
| | bar B | 7 | | | | 1 | | | | | |
| Pressure Unit | MPa M | | | | | | | | | | |
| | psi P | | | | | | | | | | |
| Pressure range | Pressure Range Value x X | | | | | | | | | | |
| Product connection | See the process connection selection code for details X | | | | | | | | | | |
| | Two-wire system 4~20mA | | MA | | | | | | | | |
| | Three-wire system 0~10Vdc | | 10V | | | | | | | | |
| | Three-wire system 0.1~10.1Vdc | | 10V1 | | | | | | | | |
| | Three-wire system 0.2~10.2Vdc | | 10V6 | | | | | | | | |
| | Three-wire system 1~10Vdc | | 9V | | | | | | | | |
| | Three-wire system 2~10Vdc | | 8V | | | | | | | | |
| Output signal | Three-wire system 0~5Vdc | | 5V | | | | | | | | |
| | Three-wire system 0.1~5.1Vdc | | 5V3 | | | | | | | | |
| | Three-wire system 1~5Vdc | | 4V2 | | | | | | | | |
| | Three-wire system 1~6Vdc | | 5V4 | | | | | | | | |
| | Three-line system 0.5~4.5Vdc proportional output | | 4V3 | | | | | | | | |
| | Three-wire system 0.5~4.5Vdc absolute output 5VDC power supply | | 4V | | | | | | | | |
| | Three-wire system 0.5 ~ 4.5 Vdc absolute output high voltage power sup | oly | 4V1 | | | | | | | | |
| | DIN 175301-803 A Hessman connector 1D | | | | | | | | | | |
| | DIN 175301 803 C Hessman connector | | | | 2D | | | | | | |
| Electrical | DIN 175301-803 A Hessman connector with LED display(output signal | l is on | ıly 4-20mA) | | 3D | | | | | | |
| connection | M12×1(4-pin) circular aviation plug | | | | Т | | | | | | |
| | Nylon joint outlet line "X" meters | | | | MNx | | | | | | |
| | Metal waterproof joint outlet "X" meters | | | | MDx | | | | | | |
| Pulse buffer | No pulse buffer is required | | | | | | | | | | |
| ruise bullel | A pulse buffer is required | | | | | | N | | | | |
| Accuracy | 0.5%FS | | | | | | | | | | |
| Accuracy | 0.25%FS | | | | | | | | 2A | | |
| Specific requirements | Please consult for other special requirements | | | | | | | | | | |