

VPx4 Series

■ Overview

The VPx4 series General pressure transducer/transmitter, which connector and housings are made of aluminum or stainless steel, has strong corrosion resistance and long-term stability. Sensors in a wide temperature range has temperature compensation, which ensure the technical parameters in well. Variety of connector types and wiring modes, can be the maximum to meet the customer requirement. Widely used in the field of hydraulic pneumatic control testing system, industrial equipment, medical equipment, refrigeration equipment, constant pressure water supply and process control etc. VPx4 series includes four series of VP4, VPA4, VPC4, VPP4.

LED,LCD indicator module and HART protocol and RS485 Serial Communication board are optional. And Option to match the measurement & control instruments or circuit module made by our company.

■ Applications

- Light industry, machinery, metallurgy industry
- Hydraulic pneumatic control testing system
- Industrial automation and process control
- Constant pressure water supply
- Food and pharmaceutical industry
- Petrochemical, environmental protection



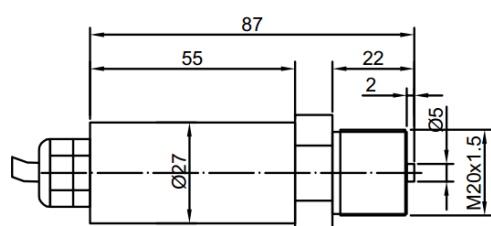
VPx4 Series

■ Specifications

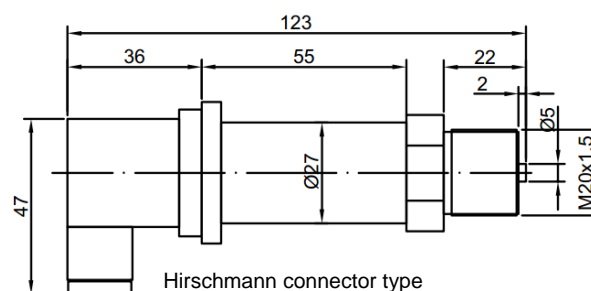
| | |
|-------------------------------|---|
| Pressure range | -0.1 to 200MPa |
| Accuracy | ±0.1%FS, ±0.25%FS, ±0.5%FS, ±1.0%FS optional |
| Power supply | Transducer: +5~12Vdc; Transmitter: +24Vdc, +12Vdc, +5Vdc |
| Output | Transducer: 1mV/V; Transmitter: 0/0.5/1.0-4.0/4.5/5.0V(3 wires), 4-20mA(2 or 3 wires) |
| loading Capacity(Transmitter) | Current output model ≤500 Ω; Voltage output model ≥100k Ω |
| zero temp. coefficient | ±0.5%FS |
| FS temp. coefficient | ±1.0%FS |
| Compensation temperature | -10℃~70℃ |
| Medium temperature | -30℃~125℃~150℃ |
| Operation temperature | -20℃~75℃, ≤ 85%RH |
| Storage temperature | -40℃~85℃, ≤ 95%RH |
| Safe overpressure | 150% |
| limit overpressure | 250% |
| Temperature drift | 0.02%FS/℃ |
| Long-term stability | ±0.2%FS/year |
| Housing | 316L Stainless steel |

Note: Specification based on 25℃

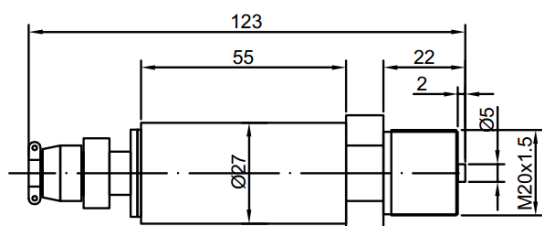
■ Mechanical Specifications(For reference)



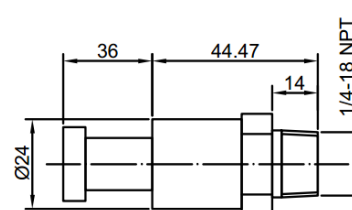
Cable waterproof connector type



Hirschmann connector type



Aviation connector type



Quick connector type

VPx4 Series

■ Connection

- Pressure transducer

Red/2#: Excitation(Power) positive E+; **Black/4#:** Excitation(Power) negative E-; **Green/1#:** Signal output positive S+;

White/3#: Signal output negative S-; **Gray/5#:**Cable shield

- Pressure transmitter

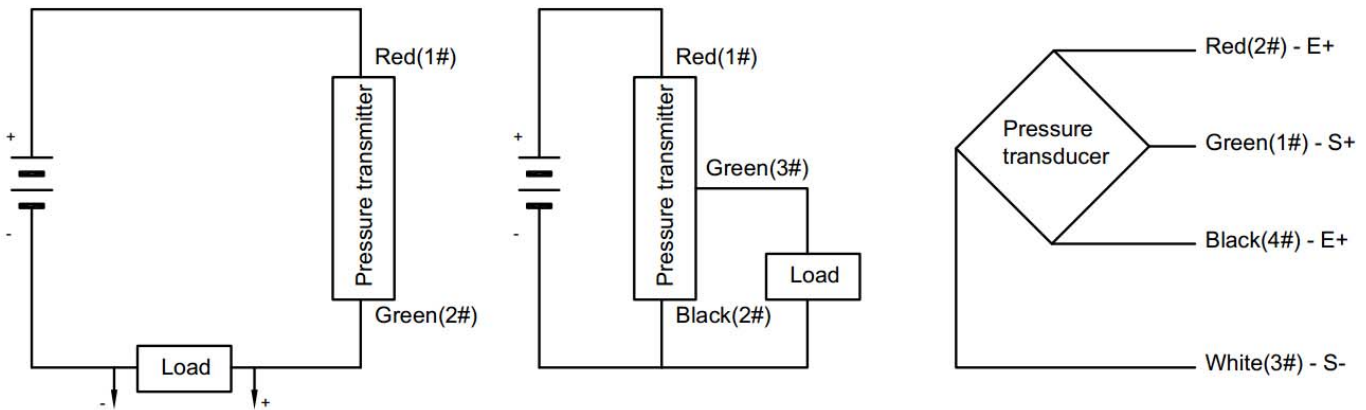
For two wires:

Red/1#: Power positive E+; **Green/2#:** Output current I_{out}

For three wires:

Red/1#: Power positive E+; **Black/2#:** GND; **Green/3#:** Output current I_{out} or Voltage V_{out}

- The wiring diagrams are as follows:



2 wires pressure transmitter

3 wires pressure transmitter

Pressure transducer

■ Order

| VPx4 | □ | □ | - □ | - □ | - □ | □ |
|--|--|---|----------------------------------|---|--|--|
| General series | Housing dimension | Output | Pressure range | Mounting | Wiring | Additional function |
| S: Stainless steel A: Aluminum C: Copper P: POM plastic | S:Stainless steel 0:Ø20x30 1:Ø22x15 2:Ø22x27 3:Ø25x45 4:Ø27x45 5:Ø27x55 6:Ø29x55 7:Ø31x60 9.others A:Aluminum 1:Ø30x28 2:Ø30x32 3:Ø30x45 C:Cooper 1:Ø22x15 P:POM 1:Ø30x32 | 0: mV(4 wires for Transducer) 1: 4-20mA(2 wires) 2: 4-20mA(3 wires) 3: 0-5V(3 wires) 4: 1-5V(3 wires) 5: 0.5-4.5V(3 wires) 6: 0-10V(3 wires) 9: custom | (Mpa, Kpa, Pa, Bar, PSI, Kg/cm2) | Standard screw thread Ex.:M20x1.5, G1/2 or Cutting sleeve dim. Ex.:CD50 or flange dim. Ex.:DN25 or air tube dim. Ex.: Ø6 | P1: Cable waterproof seal P2: Hirschmann connector P3: Aviation connector(Steel) P4: Mini Hirschmann connector P5:Aviation connector(Aluminium) P6: quick connector | A1: 1.0%FS A2: 0.5%FS A3: 0.25%FS A4: 0.1%FS V1: 24Vdc V2:12Vdc V3: 5Vdc V4: ± 12Vdc D1: LED indicator D2: LCD indicator D3: dial indicator D4: 0-100% indicator(bar code) SI: Intrinsically explosion-proof (ia II CT4) SS: Isolation explosion-proof(d II BT4) HT: Hart protocol R4: RS485 Y: Custom requirement |

Example:

VP456-60Mpa-M201.5-P3A2V1 – VP4 series: Pressure rage 0-60Mpa, stainless steel housing, Ø27x55, output 0-10V(3 wires), M20x1.5 installation, aviation connector, accuracy 0.5%FS, Power 24Vdc.

Note: If the user has special requirement, please feel free to contact our company