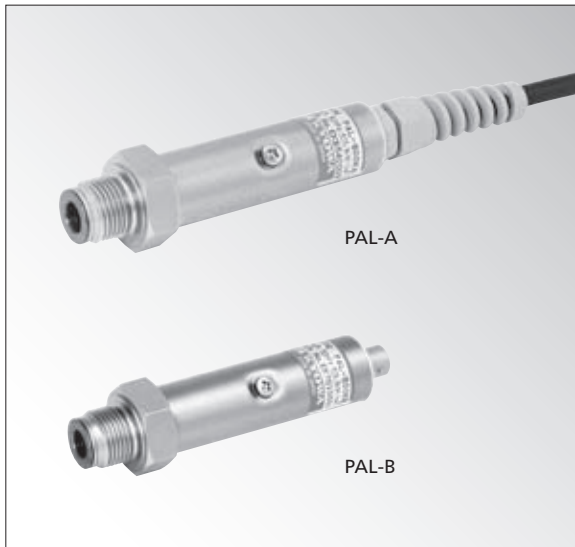


Current-output Pressure Transducer



Excellent Noise Resistance Type with a Built-in Amplifier

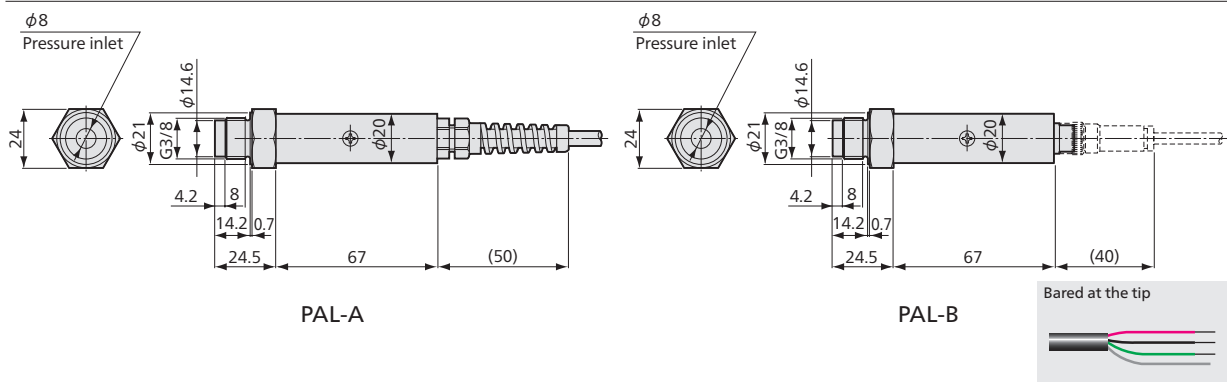
- Current output in a range from 4 to 20 mA
- High frequency response
- Small-sized and lightweight
- Applicable to highly viscous pressure medium
- Various capacity ranges

PAL series pressure transducers amplify detected slight signals by a built-in amplifier and then transmit amplified signals in current. The pressure sensor part is simply integrated structure and has high reliability. Also, the amplifier is fully tuned. Therefore, PAL series not only provide high vibration resistance, environmental resistance and stability but also measure without adjustment.

To Ensure Safe Usage

When measuring using voltage mode such as UCAM-60B, use a 250Ω resistor to convert to voltage.

Dimensions



Specifications

Performance

Rated Capacity	See table below.
Nonlinearity	Within $\pm 0.5\%$ RO (PVL-5 to 20 K) Within $\pm 0.3\%$ RO (PVL-30 to 500 K)
Hysteresis	Within $\pm 0.5\%$ RO (PVL-5 to 20 K) Within $\pm 0.3\%$ RO (PVL-30 to 500 K)
Rated Output	4 to 20 mA

Environmental Characteristics

Safe Temperature Range	-20 to 70°C
Compensated Temperature Range	-10 to 60°C
Temperature Effect on Zero Balance	Within $\pm 0.05\%$ RO/°C (PVL-5 to 20 KA) Within $\pm 0.03\%$ RO/°C (PVL-30 to 500 KA)
Temperature Effect on Output	Within $\pm 0.05\%$ /°C (PVL-5 to 20 KA) Within $\pm 0.03\%$ /°C (PVL-30 to 500 KA)

Electrical Characteristics

SN Ratio	50 dB or more
Load Resistance	0 to 500 Ω
Frequency Response (Built-in Amplifier)	DC to 1 kHz
Power Supply	24 VDC (21 to 30 V), 30 mA or less
Cable	PAL-A: 4-conductor (0.14 mm ²) chloroprene shielded cable, 6 mm diameter by 30 cm long, bared at the tip PAL-B: 4-conductor (0.18 mm ²) vinyl shielded cable, 4.6 mm diameter by 3 m long, bared at the tip (Shield wire is not connected to mainframe)

Mechanical Properties

Safe Overload Rating	150%
Material	Case: SUS (Metallic finish) Liquid-contacting part: SUS 630
Weight	Approx. 85 g (excluding cable)
Degree of Protection	IP52 (IEC 60529)
Mounting Screw	G3/8, male

Standard Accessories Gasket (Mild copper)

For every rated capacity, mechanical natural frequency is the same as PGM-H(2-88).

Models		Rated Capacity
Cable-integrated	Connector-equipped	
PAL-5KA	PAL-5KB	500 kPa
PAL-10KA	PAL-10KB	1 MPa
PAL-20KA	PAL-20KB	2 MPa
PAL-50KA	PAL-50KB	5 MPa
PAL-100KA	PAL-100KB	10 MPa
PAL-200KA	PAL-200KB	20 MPa
PAL-300KA	PAL-300KB	30 MPa
PAL-500KA	PAL-500KB	50 MPa



● Dynamic measurement

PAL Recommended products for combination

- Universal Recorder EDX-200A → 3-55
- Universal Recorder EDX-100A → 3-63
- Memory Recorder/Analyzer EDX-3000B → 3-69