

## Current-output Pressure Transducer



### Excellent Noise Resistance Type with a Built-in Amplifier

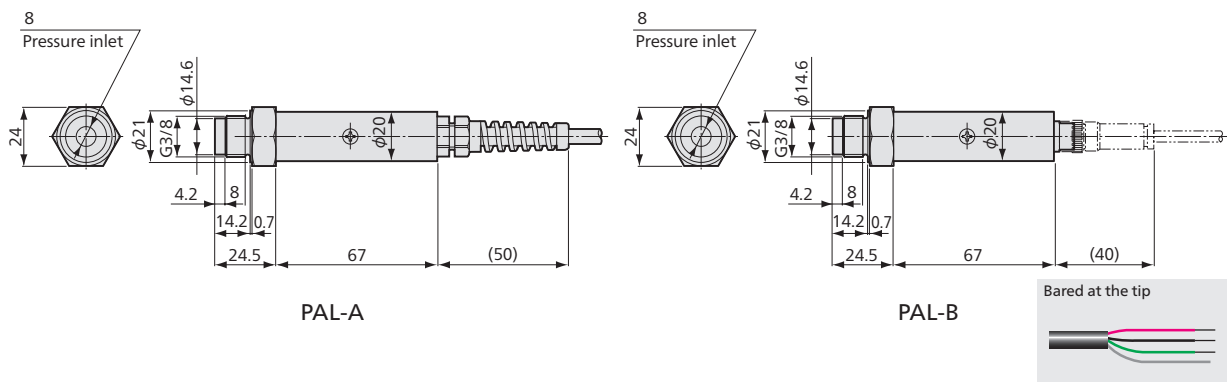
- Current output in a range from 4 to 20 mA
- High frequency response
- Small-sized and lightweight
- Applicable to highly viscous pressure medium
- Various capacity range

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 250 Ω resistor to convert to voltage.

#### Dimensions



#### Specifications

##### Performance

<b>Rated Capacity</b>	See table below.
<b>Nonlinearity</b>	Within $\pm 0.5\%$ RO for 0.5 to 2 MPa Within $\pm 0.3\%$ RO for 5 to 50 MPa
<b>Hysteresis</b>	Within $\pm 0.5\%$ RO for 0.5 to 2 MPa Within $\pm 0.3\%$ RO for 5 to 50 MPa
<b>Rated Output</b>	4 to 20 mA

##### Environmental Characteristics

<b>Safe Temperature</b>	-20 to 70°C
<b>Compensated Temperature</b>	-10 to 60°C
<b>Temperature Effect on Zero</b>	Within $\pm 0.05\%$ RO/°C for 0.5 to 2 MPa Within $\pm 0.03\%$ RO/°C for 5 to 50 MPa
<b>Temperature Effect on Output</b>	Within $\pm 0.05\%$ /°C for 0.5 to 2 MPa Within $\pm 0.03\%$ /°C for 5 to 50 MPa

##### Electrical Characteristics

<b>SN Ratio</b>	50 dB or more
<b>Load Resistance</b>	0 to 500 Ω
<b>Frequency Response (Built-in Amplifier)</b>	DC to 1 kHz, sensitivity Deviation $\pm 10\%$
<b>Power Supply</b>	24 VDC (21 to 30 V), 30 mA or less
<b>Cable</b>	PAL-A: 4-conductor (0.14 mm <sup>2</sup> ) chloroprene shielded cable, 6 mm diameter by 30 cm long, bared at the tip PAL-B: 4-conductor (0.18 mm <sup>2</sup> ) vinyl shielded cable, 4.6 mm diameter by 3 m long, bared at the tip (Shield wire is not connected to the case.)

##### Mechanical Properties

<b>Safe Overloads</b>	150%
<b>Material</b>	Case: SUS (Metallic finish) Liquid-contacting part: SUS 630
<b>Weight</b>	Approx. 85 g (Excluding cable)
<b>Degree of Protection</b>	IP52 (IEC 60529)
<b>Mounting Screw</b>	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-5000A → 3-68