PAL

Current-output Pressure Transducer



Excellent noise resistance with built-in amplifier

- Rated capacity: 500 kPa to 50 MPa
- Current output (4 to 20 mA)
- Measures highly viscous pressure media

Pressure transducers use built-in amplifiers to amplify slight voltage detected by the pressure transducer (strain gage), and then transmit it as current. Their integrated design combines the pressure amplifier with a simple reliable structure and fully tuned. Excellent vibration resistance, environmental resistance, and stability.

To Ensure Proper Usage

If using a UCAM-80A static strain measuring instrument, etc. to measure in voltage mode, use a 250 Ω resistor to convert to voltage.

Specifications

Performance	
Rated Capacity	See table below.
Nonlinearity	Within ±0.3% RO (5 to 20K: Within ±0.5% RO)
Hysteresis	Within ±0.3% RO (5 to 20K: Within ±0.5% RO)
Current Output	4 to 20 mA
Environmental Characteristics	
Safe Temperature	−20 to 70℃
Compensated Temperature	−10 to 60℃
Temperature Effect on Zero	Within ±0.03% RO/℃ (5 to 20K: Within ±0.05% RO/℃)
Temperature Effect on Output	Within ±0.03%/℃ (5 to 20K: Within ±0.05%/℃)
Electrical Characteristics	
SN Ratio	50 dB or more
Load Resistance	0 to 500 Ω
Frequency Response (Built-in Amplifier)	
	DC to 1 kHz (Sensitivity deviation: ±10%)
Power Supply	24 VDC (21 to 30 V), 30 mA or less
Cable	PAL-A 4-conductor (0.14 mm²) chloroprene shielded cable, 6 mm diameter
	by 30 cm long, bared at the tip (use 3 conductors only)
	PAL-B 4-conductor (0.18 mm²) vinyl shielded cable, 4.6 mm diameter by 3 m long,
	Sensor side: Terminated with a connector plug R06-P5F
	Measuring instrument side: Bared at the tip (use 3 conductors only)
	(Shield wire is not connected to the case.)
Mechanical Properties	
Safe Overloads	150%
Material	Case: SUS (Metallic finish)
	Liquid-contacting part: SUS630
Weight	Approx. 85g (Excluding cable)
Degree of Protection	IP52 (JIS C 0920/IEC 60529)

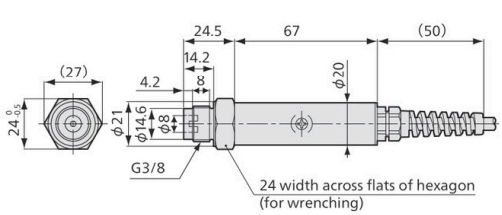
Standard Accessories Gasket (Mild copper)

*For every rated capacity, mechanical natural frequency is the same as PGM-H (page 1-131).

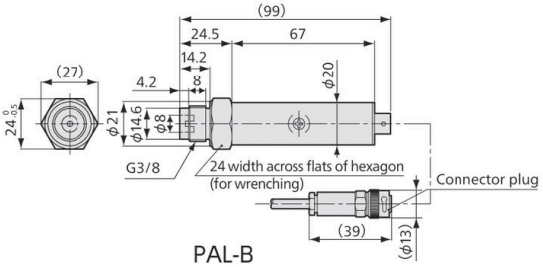
Models

Model		Rated Capacity
Cable Integrated Type	Connector Type	
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

Dimensions



PAL-A



PAL-B

