# **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
- Compact & 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 resistant, environmental resistance and stability but also measure data without adjustment.

#### To Ensure Safe Usage

When using the UCAM-60C M14 in voltage mode, use a 250  $\Omega$  resistor to convert data 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°C			
Compensated Temperature	-10 to 60°C			
Temperature Effect on Zero	Within ±0.03% RO/°C			
	(5 to 20K: Within ±0.05% RO/°C)			
Temperature Effect on Output	Within ±0.03%/°C			
	(5 to 20K: Within ±0.05%/°C)			

#### **Electrical Characteristics**

SN Rat	io	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		24 VDC (21 to 30 V), 30 mA or less			
Cable	PAL-A: 4-cc	onductor (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	3 conductors only)			
(Shield wire is not connected to the case.)					

#### **Mechanical Properties**

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Safe Overloads	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 (page 2-88).

Mod	Pated Canadity		
Cable Integrated Type	Connector Type	Rated Capacity	
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	

Outline

General

High temp. Low temp

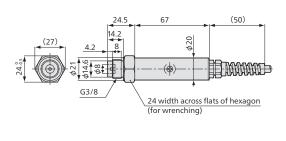
Absolute pressure High pressure

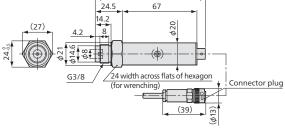
> Pressure transmitter

Differential pressure

Distributed

### Dimensions





PAL-B

(99)

PAL-A