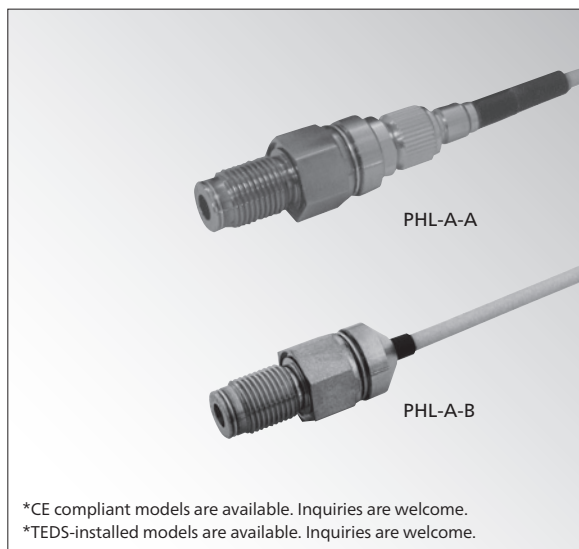


## Small-sized High/Low-temperature Pressure Transducer



\*CE compliant models are available. Inquiries are welcome.  
\*TEDS-installed models are available. Inquiries are welcome.

### Compact & lightweight For high & low temperatures High frequency response

PHL-A series pressure transducers are suitable for pressure measurement in not only limited space under both high and low temperature environments but also highly viscous heated fluids like melt resin, high-temperature gases and LPG/LNG tanks. A semi-flush diaphragm at the top not only ensures excellent response and dynamic characteristics.

### Specifications

#### Performance

<b>Rated Capacity</b>	See table below.
<b>Nonlinearity</b>	Within $\pm 0.3\%$ RO (2 MPa or less: Within $\pm 0.5\%$ RO)
<b>Hysteresis</b>	Within $\pm 0.2\%$ RO (2 MPa or less: Within $\pm 0.5\%$ RO)
<b>Repeatability</b>	0.2% RO or less
<b>Rated Output</b>	2 mV/V $\pm 20\%$ (2 MPa or less: 2 mV/V $\pm 30\%$ )

#### Environmental Characteristics

<b>Safe Temperature</b>	PHL-A-A: -40 to 150°C PHL-A-B: -196 to 210°C (Connector plug: -25 to 85°C)
<b>Compensated Temperature</b>	PHL-A-A: -20 to 150°C PHL-A-B: -196 to 200°C (Connector plug: -25 to 85°C)
<b>Temperature Effect on Zero</b>	Within $\pm 0.03\%$ RO/°C (3 MPa or less: Within $\pm 0.05\%$ RO/°C)
<b>Temperature Effect on Output</b>	Within $\pm 0.03\%$ /°C

#### Electrical Characteristics

<b>Safe Excitation</b>	6 V AC or DC
<b>Recommended Excitation</b>	1 to 3 V AC or DC
<b>Input Resistance</b>	350 $\Omega$ $\pm 2\%$
<b>Output Resistance</b>	350 $\Omega$ $\pm 2\%$
<b>Cable</b>	PHL-A-A: 4-conductor (0.08 mm <sup>2</sup> ) fluoroplastic shielded cable, 3.1 mm diameter by 4 m long Sensor side: Terminated with a connector plug MR01-9008P4F Measuring instrument side: Terminated with a connector plug PRC03-12A10-7M PHL-A-B: 4-conductor (0.08 mm <sup>2</sup> ) fluoroplastic shielded cable, 3.1 mm diameter by 30 cm long, terminated with a connector plug PRC03-12A10-7M (Shield wire is not connected to the case.)

#### Mechanical Properties

<b>Safe Overloads</b>	150%
<b>Natural Frequencies</b>	See table below.
<b>Material</b>	Liquid-contacting part: SUS 630 Screw part: Nickel plating
<b>Weight</b>	Approx. 20 g (Excluding cable)
<b>Degree of Protection</b>	PHL-A-A: IP67 (IEC 60529) PHL-A-B: IP64 (IEC 60529)
<b>Mounting Screw</b>	G1/8, male

**Standard Accessories** Gasket (Mild copper) (SS-105 O-ring is also usable. However, use the pressure and temperature range within the O-ring specification range.)

Models		Rated Capacity	Natural Frequencies (Approx.)
Connector Type	Cable Integrated Type		
PHL-A-1MP-A	PHL-A-1MP-B	1 MPa	48 kHz
PHL-A-2MP-A	PHL-A-2MP-B	2 MPa	74 kHz
PHL-A-3MP-A	PHL-A-3MP-B	3 MPa	94 kHz
PHL-A-5MP-A	PHL-A-5MP-B	5 MPa	122 kHz
PHL-A-10MP-A	PHL-A-10MP-B	10 MPa	149 kHz
PHL-A-20MP-A	PHL-A-20MP-B	20 MPa	210 kHz
PHL-A-30MP-A	PHL-A-30MP-B	30 MPa	250 kHz
PHL-A-50MP-A	PHL-A-50MP-B	50 MPa	294 kHz

### Dimensions

