PHB-A

High/Low-temperature Pressure Transducer

CE



Suitable for pressure measurement of LPG/LNG tanks and gas or steam turbines

- **Rated capacity: 1 to 50 MPa**
- **High/low temp (compensated: −196 to 200°C)**
- **Corrosion resistant**

Transducers with a hermetically-sealed structure filled with inert gas, featuring a stainless steel diaphragm on the pressure sensing surface.

To Ensure Proper Usage

- PHB-A-20 to 50MP cannot be used for endurance/fatigue tests.
- Suitable for measuring oil pressure. Please contact us if using for gas pressure measurement.

Specifications

Performance	
Rated Capacity	See table below.
Nonlinearity	Within ±0.4% RO
Hysteresis	Within ±0.4% RO
Repeatability	0.2 %RO or less
Rated Output	2.2 mV/V ±15 %
Environmental Characteristics	
Safe Temperature	−196 to 210°C (However, the limit temperature of the cable tip connector is −25 to 85°C)
Compensated Temperature	−196 to 200°C (However, the limit temperature of the cable tip connector is −25 to 85°C)
Temperature Effect on Zero	Within ±0.03% RO/°C
Temperature Effect on Output	Within ±0.03%/°C (1MP: Within ±0.035%/°C)
Electrical Characteristics	
Safe Excitation	15 V AC or DC
Recommended Excitation	1 to 10 V AC or DC
Input Resistance	350 Ω ±2%
Output Resistance	350 Ω ±2%
Cable	4-conductor (0.3 mm²) fluoroplastic shielded cable, 5 mm diameter by 3 m long, terminated with a connector plug PRC03-12A10-7M (Shield wire is connected to the case.)
Mechanical Properties	
Safe Overloads	120%
Natural Frequencies	See table below.
Material	Case: Stainless steel Liquid-contacting part: SUS630
Weight	See table below.
Degree of Protection	IP51 (JIS C 0920/IEC 60529)
Mounting Screw	G3/8 male
Compliance	Directive 2011/65/EU,(EU)2015/863(10 restricted substances) (RoHS)
Notes	
The air vent of this product is designed on the assumption that the pressure medium is a liquid. Therefore, if used to measure gas pressure, leakage may occur. We recommend using a pressure transducer that does not have an air vent for gas pressure measurement.	

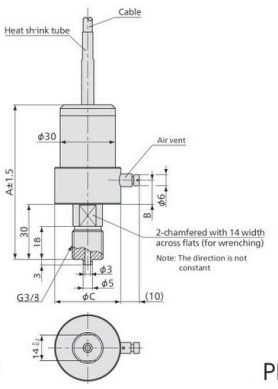
■**Standard Accessories** Gasket (Mild copper)

■**Models**

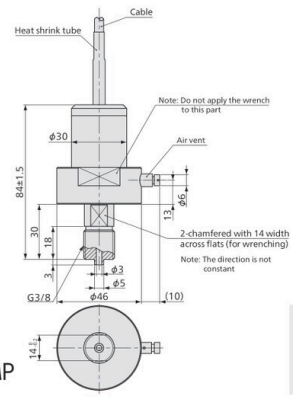
Model	Rated Capacity	(A)	B	φC	Natural Frequencies (Approx.)	Weight (Approx.)*1
PHB-A-1MP	1 MPa	80	10	36	8 kHz	230 g
PHB-A-2MP	2 MPa				13 kHz	
PHB-A-5MP	5 MPa	84	13		21 kHz	270 g
PHB-A-10MP	10 MPa				29 kHz	
PHB-A-20MP	20 MPa				40 kHz	
PHB-A-30MP	30 MPa	–	–	–	45 kHz	360 g
PHB-A-50MP	50 MPa				50 kHz	

*1 Excluding cable
*TEDS-installed models are available. Please contact us.
*Models with no air vent are available. Please contact us.

■**Dimensions**



PHB-A-1 to 20MP



PHB-A-30, 50MP

Connector plug (standard)
PRC03-12A10-7M

