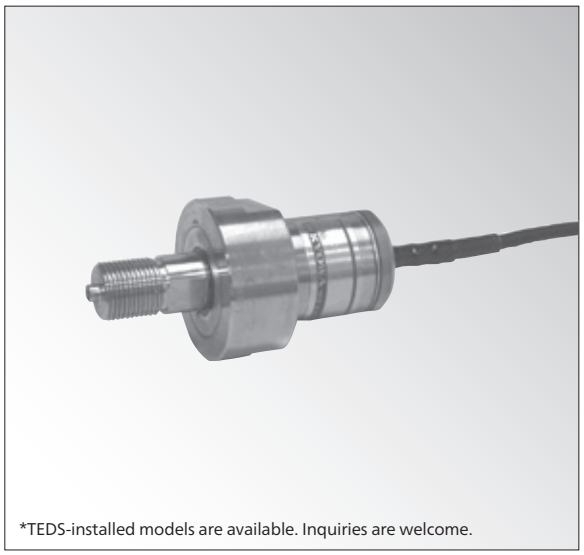
PHB-A

●-196 to 200°C ●1 to 50 MPa

High/Low-temperature Pressure Transducer



*TEDS-installed models are available. Inquiries are welcome.

Suitable for Pressure Measurement of LPG/LNG Tanks and Gas or Steam Turbines

●Usable at both high and low temperatures
●Corrosion resistant
●Hermetically-sealed structure with inert gas filled in
●Highly reliable

PHB-A series is designed for pressure measurement from low to high temperatures. The sensor surface is made by stainless steel diaphragm and inert gas is filled in to increase reliability.

Specifications

Performance

Rated Capacity	See table below.
Nonlinearity	Within ±0.4% RO
Hysteresis	Within ±0.4% RO
Rated Output	2.2 mV/V ±15%

Environmental Characteristics

Safe Temperature	-196 to 210°C
	(Connector plug: -25 to 80°C)
Compensated Temperature	-196 to 200°C
	(Connector plug: -25 to 80°C)
Temperature Effect on Zero	Within ±0.03% RO/°C
Temperature Effect on Output	Within ±0.035%/°C (1 MPa)
	Within ±0.03%/°C (2 to 50 MPa)

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 connector plug
	PRC03-12A10-7M (Shield wire is connected to the case.)

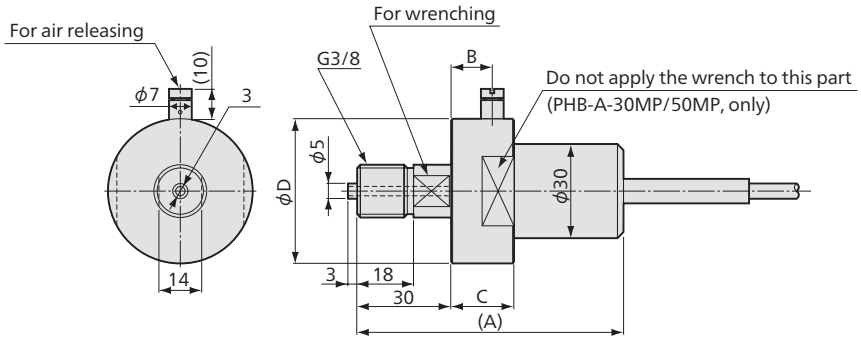
Mechanical Properties

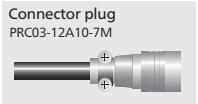
Safe Overloads	120%
Natural Frequencies	See table below.
Material	Case: SUS metallic finish
	Liquid-contacting part: SUS 630
Weight	See table below.
Degree of Protection	IP51 (IEC 60529)
Mounting Screw	G3/8, male

Standard Accessories Gasket (Mild copper)

*Do not use PHB-A-20MP to PHB-A-50MP for endurace/fatigue tests.
*Avoid using for a long-term measurement of gas pressure if much importance is attached to the stability of output in a minute range. For such application, models with no air vent are available.

■Dimensions





Models	Rated Capacity	A	B	C	ϕD	Natural Frequencies	Weight*
PHB-A-1MP	1 MPa	80	10	16	36	≈ 8 kHz	≈ 230 g
PHB-A-2MP	2 MPa					≈ 13 kHz	
PHB-A-5MP	5 MPa	84	13	20	36	≈ 21 kHz	≈ 270 g
PHB-A-10MP	10 MPa					≈ 29 kHz	
PHB-A-20MP	20 MPa					≈ 40 kHz	
PHB-A-30MP	30 MPa	84	13	20	46	≈ 45 kHz	≈ 360 g
PHB-A-50MP	50 MPa					≈ 50 kHz	

*Excluding cable

●Physical quantity indication ●Static measurement ●Dynamic measurement

PHB-A Recommended products for combination