

Long-term Stability at 200°C200 kPa_{abs}. to 20 MPa_{abs}.

Highly Reliable Pressure Transducer (Sputter-gage type)



Both High and Low Temperatures Possible to Measure Absolute Pressure Excellent High-temperature

PHS-B series pressure transducers have the thin-film strain gage and temperature-compensating resistive membrane formed directly on the diaphragm by sputtering and photo-lithography, thereby enabling accurate temperature compensation even at high temperatures.

Recommended

Instrumentation Amplifier

Specifications

Performance

Rated Capacity	See table below.
Nonlinearity	Within ±0.2% RO
Hysteresis	Within ±0.2% RO
Rated Output	1.5 mV/V or more

Environmental Characteristics

Safe Temperature	-196 to 230°C	
Compensated Temperature	-30 to 200°C	
Temperature Effect on Zero	Within ±0.02% RO/°C	
Temperature Effect on Output	Within ±0.015%/°C	

Electrical Characteristics

Safe Excitation	15 V AC or DC		
Recommended Excitation	1 to 10 V AC or DC		
Input Resistance	900 Ω ₋₁₅₀ Ω		
Output Resistance	900 Ω ₋₁₅₀ Ω		
Cable 4-conductor (0.09 mm²) fluoroplastic shielded cable, 5 m long,			
3.1 mm diameter, bared at the tip			
(Shield wire is not connected to the case.)			

Mechanical Properties

Safe Overloads	150%	
Natural Frequencies	See table below.	
Materials	Case: SUS (Metallic finish)	
	Liquid-contacting part: SUS 630	
Weight	Approx. 130 g (Excluding cable)	
Mounting Screw	G3/8, male	

Standard Accessories Gasket (Mild copper)

Models	Rated Capacity	Natural Frequencies
PHS-B-200KP	200 kPa _{abs}	≈ 5 kHz
PHS-B-500KP	500 kPa _{abs} .	≈ 7 kHz
PHS-B-1MP	1 MPa _{abs} .	≈ 20 kHz
PHS-B-2MP	2 MPa _{abs} .	≈ 30 kHz
PHS-B-5MP	5 MPa _{abs} .	≈ 50 kHz
PHS-B-10MP	10 MPa _{abs} .	≈ 70 kHz
PHSB20MP	20 MPa _{abs} .	≈ 100 kHz

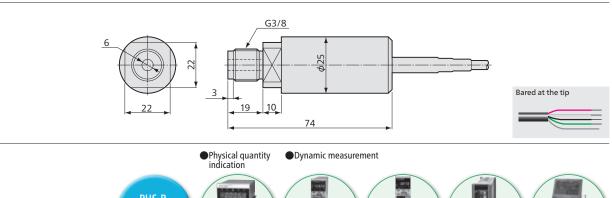
To Ensure Safe Usage

Signal Conditioner

Universal Recorde

High-carrier-based dynamic strain amplifier DPM-912, 913 or 952 may not satisfy the specified rated output in some rare case. Request us to calibrate the transducer in combination with the strain amplifier. Or, if possible, use dynamic strain amplifier DPM-911 or 951 or signal conditioner CDV-900A.

Dimensions



Strain Amplifier