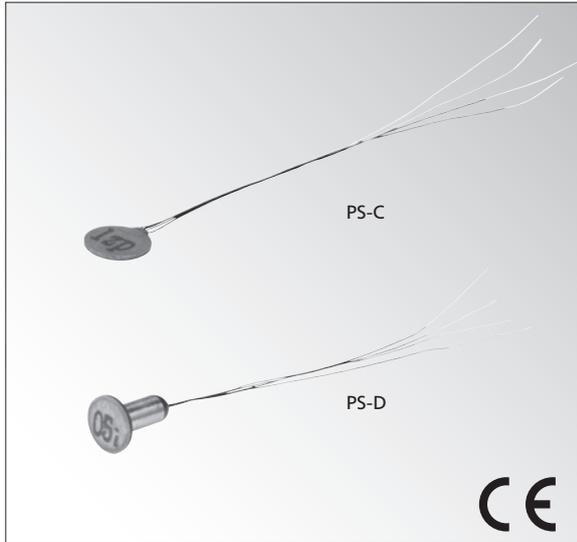


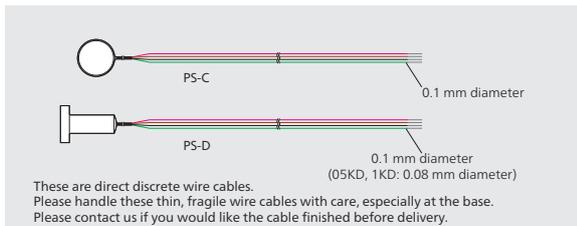
Miniature Pressure Sensor



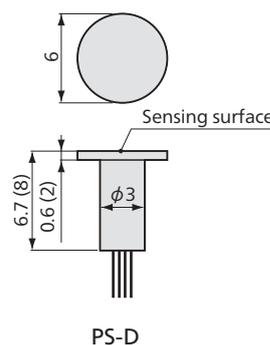
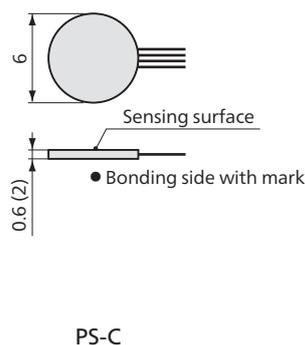
Ultra-thin & compact design Wide range of rated capacity

PS series pressure transducers have a bridge of strain gages inside, achieving ultra-thin compact structure. They are installed by adhesives. They are suitable for distributed pressure measurement by using multiple units.

- (Note 1) Copper alloy is used for liquid-contacting part.
Avoid measuring corrosive liquid or gas.
- (Note 2) Epoxy adhesive has been used to assemble the liquid-contacting part.
Avoid measuring organic solvent (toluene, ketone, etc.).
- (Note 3) Measuring liquids of 20 to 70K are limited to oil.



Dimensions



Figures in parentheses are for 2 to 7 MPa.

Specifications

Performance

Rated Capacity	See table below.
Nonlinearity	Within $\pm 1\%$ RO
Hysteresis	Within $\pm 1\%$ RO
Rated Output	1 mV/V $\pm 20\%$
	05KC, D: 0.25 mV/V or more
	1KC, D: 0.5 mV/V or more
	2KC, D: 0.85 mV/V $\pm 30\%$

Note: Rated output is sorted to one of the classes divided by every 2% difference in output value. Since the rated output stated in the Test Data Sheet is the center value of the class, it may include a maximum error of $\pm 1\%$.

Environmental Characteristics

Safe Temperature	-20 to 70°C
Compensated Temperature	0 to 50°C
Temperature Effect on Zero	Within $\pm 0.2\%$ RO/°C
	(05K: Within $\pm 0.8\%$ RO/°C)
	(1K: Within $\pm 0.4\%$ RO/°C)
	(2K: Within $\pm 0.3\%$ RO/°C)
Temperature Effect on Output	Within $\pm 0.2\%$ /°C
	(05K to 2K: Within $\pm 0.3\%$ /°C)

Electrical Characteristics

Safe Excitation	3 V AC or DC
Recommended Excitation	1 to 2 V AC or DC
Input Resistance	350 Ω $\pm 10\%$
Output Resistance	350 Ω $\pm 10\%$
Cable	Polyurethane coated copper wires, 0.1 mm diameter by 5 cm long (red, brown, black, green each), pre-soldering at the tip
	05KD, 1KD: Polyurethane coated copper wires, 0.08 mm diameter by 5 cm long (red, brown, black, green each), pre-soldering at the tip

Mechanical Properties

Safe Overloads	150% (100% with 70K M2)
Natural Frequencies	See table below.
Weight	Approx. 0.5 g (Excluding cable)
Material	Metallic finish
Dedicated Adhesive	RC-19 (Request the RC-19 when ordering the transducer.)
Compliance	Directive 2011/65/EU, (EU)/2015/863 (10 restricted substances) (RoHS)

Models		Rated Capacity	Natural Frequencies (Approx.)
Cable Direction to Sensing Surface			
Horizontal	Vertical		
PS-05KC	PS-05KD	50 kPa	10 kHz
PS-1KC	PS-1KD	100 kPa	
PS-2KC	PS-2KD	200 kPa	14 kHz
PS-5KC	PS-5KD	500 kPa	20 kHz
PS-10KC	PS-10KD	1 MPa	37 kHz
PS-20KC M2	PS-20KD M2	2 MPa	46 kHz
PS-30KC M2	PS-30KD M2	3 MPa	58 kHz
PS-50KC M2	PS-50KD M2	5 MPa	71 kHz
PS-70KC M2	PS-70KD M2	7 MPa	86 kHz



Outline

General

High temp.
Low temp.

Absolute pressure
High pressure

Pressure transmitter

Differential pressure

Distributed pressure