

# KL15

## Differential Pressure Transmitter for Incorporation into Machines and Equipments

For gas measurement  
(Featuring silicone diaphragm)

For Lot Production

### Overview

Highly sensitive pressure transmitter detecting small "Pa" pressure featuring small SC [Silicon Capacitive] sensor can be installed into a variety of machines and equipments. The manufacturing is done by lot production.

### Features

- Newly developed small sensor chip is built in. Cost reduction is achieved for the incorporation into machines
- Achieved high proof pressure up to 1000 times Allowable maximum pressure 50kPa ( $\pm 50\text{kPa}$  against single port, double ports)
- Highly sensitive pressure sensor is built in



### Specifications

#### Media:

Gas (Dry air and nitrogen gas)  
No water or dusts should be contained.

#### Installation Environment\*1:

Install in location where no gases or liquids may exist that have the potential to become flammable or ignitable under normal operating condition

#### Pressure connection:

Outer dia  $\phi 3$  straight port (H, L)

#### Wetted parts:

Silicon, Glass, Au, Ti, Ceramic, Silicone rubber, PBT

#### Differential pressure range:

0 to 50, 100, 200, 300Pa

#### Allowable maximum pressure:

Proof pressure for single port  $\pm 50\text{kPa}$   
Proof pressure for double ports  $\pm 50\text{kPa}$   
\*Proof pressure against surge negative pressure caused by open/close solenoid valve is not specified.

#### Operating temperature:

-10 to 60°C (Non-freezing or condensing)

#### Operating humidity range:

95%RH and below (Non-condensing, at -10 to 60°C)

#### Storage temperature and humidity ranges:

-20 to 70°C, 85%RH and under (Non-freezing or condensing)

#### Power source (Vcc):

5V DC  $\pm 0.25\text{V DC}$

#### Output:

Ratio metric 1/10 Vcc to 9/10 Vcc  
(0.5 to 4.5V DC when Vcc=5V DC)

#### Current consumption:

2mA and under

#### Load resistance:

10 k $\Omega$  and over

#### Accuracy:

$\pm 2\%$ F.S. ( $23 \pm 2^\circ\text{C}$ )

#### Position effects:

1Pa/45° and below

#### Temperature coefficient:

$\pm 0.1\%$ F.S./°C (Zero)  
 $\pm 0.3\%$ F.S./°C (Span)

#### Construction:

Indoor use (IP20)

#### Weight:

Approx. 10 g (Not including cable)

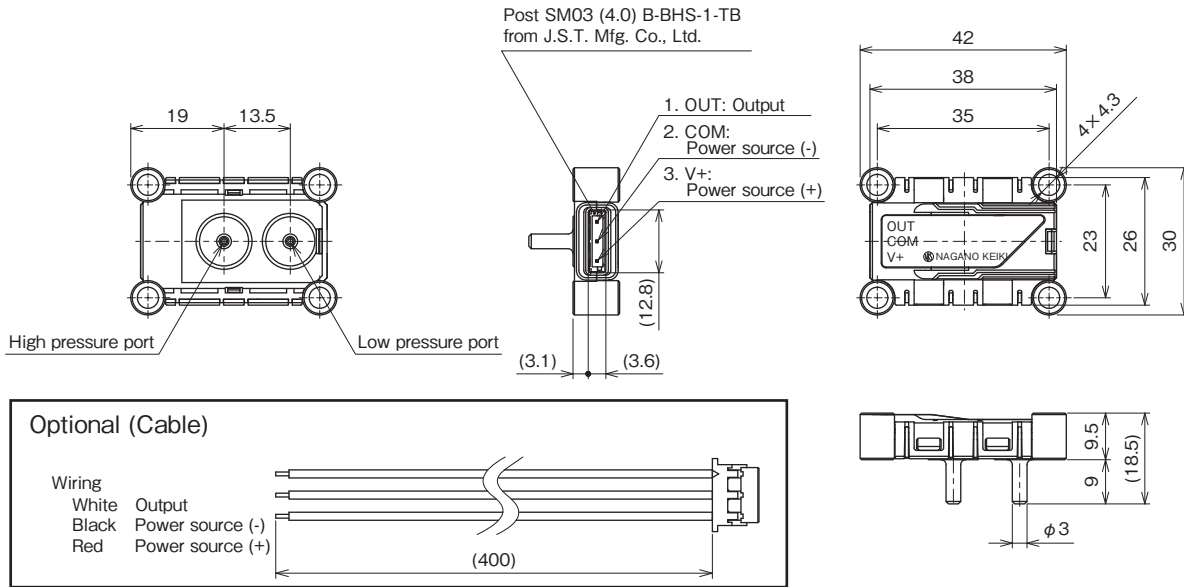
\*1 Noise prevention against circuit should be prepared where noise is present at installed area.

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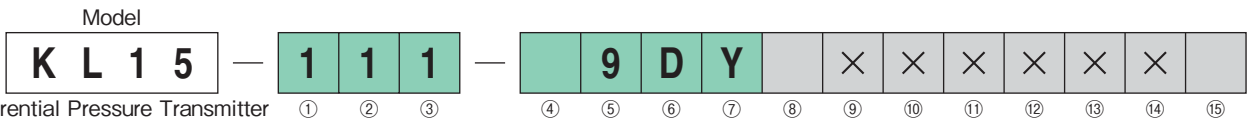
## Dimensions

Unit: mm



## Model number configuration

Please specify the model, each requiring specification and differential pressure range to order.



Model number		Product specifications	Additional specifications (Optional)
① Type	1	Connector type	
② Pressure connection	1	Outer dia $\phi 3$ straight (H, L)	
③ Wetted parts	1	Silicon, Glass, Au, Ti, Ceramic, Silicone rubber, PBT	
④ Differential pressure range	M	0 to 50Pa	
	N	0 to 100Pa	
	P	0 to 200Pa	
	W	0 to 300Pa	
⑤ Accuracy	9	$\pm 2.0\%$ F.S.	
⑥ Power source	D	5V DC $\pm 0.25$ V DC	
⑦ Output	Y	0.5 to 4.5V DC	
⑧ Cable	0	Not required	
	1	Required (Mating connector: BHR-03VS-1 from J.S.T. Mfg. Co., Ltd.) 400mm	
⑮ Documents	0	Not required	
	1	Required (Documents available upon request) Datasheet (Drawing / Specifications) Instruction manual Inspection procedure Calibration test report (One-part one sheet) Inspection / Traceability certificate Attending inspection	

Please specify differential pressure range and unit of measure along with corresponding ordering code.

\* Specify code "X" to refer N/A

### Warning

The product can't be used for corrosive, flammable gas and fluids measurements.