



# Model KH52 Differential Pressure Transmitter

## OUTLINE

This is a differential pressure transmitter which senses differential pressure, liquid level, flow, etc. on job site, converts them into an electric signal, and transmits them. A bellows is applied to the pressure sensing portion, its displacement is taken out as an inductance variation, and converts it into an electric signal in proportion with sensing quantity.

## FEATURES

- The adjustment of zero point and span can be simply implemented by removing the front screw cover.
- A test can be performed without opening the output circuit because of equipping test terminals.
- An output signal is 4 mA to 20 mA DC of the international standard signal, easily combining it with instruments and equipment concerned.
- Two-direction pressure piping connections in the upper and lower side are provided, making pressure piping work easier.

## SPECIFICATION 1

### Fluid:

Gas or liquid

### Operating condition:

Under the normal condition, where there is no inflammable gas or liquid which cause the ignition or explosion.

### Mounting:

Surface mounting



2B pipe mounting



\* Diaphragm seal type is also available.

### Connection:

Rc1/4 (PT), 1/4NPT

\* For other connections, please contact us.

### Wetted parts material:

Bellows 316Lst.st.  
Body SCS14  
O ring NBR

### Differential pressure range:

0 ~ 5 → 0 ~ 400kPa (0 ~ 0.05 → 0 ~ 4kgf/cm<sup>2</sup>)

### Operating pressure range:

0 ~ 5MPa (0 ~ 50kgf/cm<sup>2</sup>)

### One side proof pressure:

0.2 ~ 1.2MPa (2 ~ 12kgf/cm<sup>2</sup>)  
(Depending on differential pressure range)

### Operating temperature:

0 ~ 45°C

### Storage temperature:

0 ~ 60°C

### Power source:

24V DC±10%

### Output:

4 ~ 20mA DC

### Load resistance :

400Ω max.

### Transmission system:

2 wire system

### Accuracy:

±1.5%F.S.

### Temperature coefficient:

±0.05%F.S./°C TYP. (Zero)

±0.05%F.S./°C TYP. (Span)

### Outlet for electric wire:

Conduit type PF1 /2 female, PF3 /4 female

Gland JIS 15a, JIS 15b, JIS 15c

JIS 20b, JIS 20c

### Case material • finishing:

Aluminium alloy die casting (ADC10) • Gray

### Construction:

Splash-proof (IP54)

### Valve-manifold: (Option)

Three-way valve manifold which combined the stop valve for high and low pressure and stop valve. This valve manifold is suitable for checking zero point or zero adjustment during operation and also available to prevent excess differential pressure or reversal differential pressure.  
Type No.: FV43-993

### Weight:

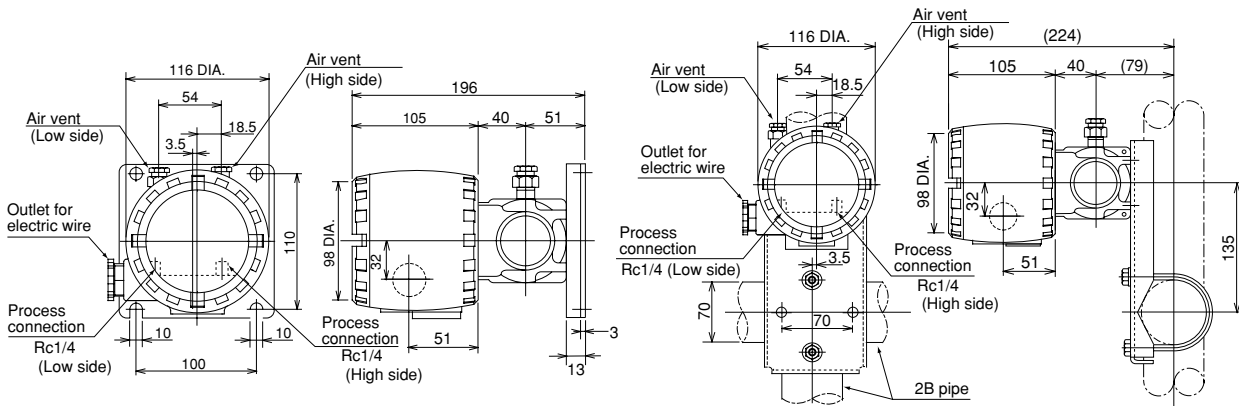
Approx. 6 kg

## SPECIFICATION 2

Differential pressure range and one side proof pressure:

Differential pressure range kPa (kgf/cm <sup>2</sup> )	One side proof pressure MPa (kgf/cm <sup>2</sup> )	Differential pressure range kPa (kgf/cm <sup>2</sup> )	One side proof pressure MPa (kgf/cm <sup>2</sup> )
0 ~ 5 (0 ~ 0.05) 0 ~ 7 (0 ~ 0.07) 0 ~ 10 (0 ~ 0.1) 0 ~ 20 (0 ~ 0.2)	0.2 (2)	0 ~ 70 (0 ~ 0.7) 0 ~ 100 (0 ~ 1)	0.4 (4)
0 ~ 30 (0 ~ 0.3) 0 ~ 50 (0 ~ 0.5)	0.4 (4)	0 ~ 200 (0 ~ 2) 0 ~ 300 (0 ~ 3) 0 ~ 400 (0 ~ 4)	1.2 (12)

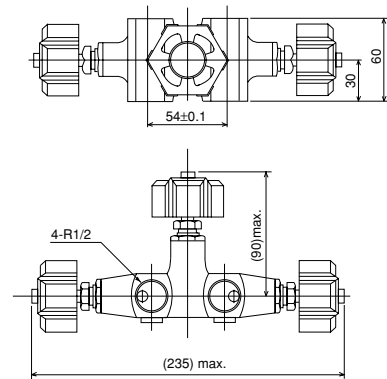
## DIMENSIONS



KH52-273

KH52-373

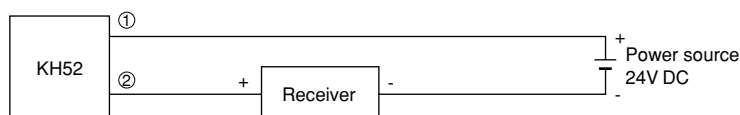
Valve - manifold: (Option)



Type No.: FV43-993

\* As for connection of differential pressure gauge and valve-manifold, FJ92-001 (2pieces) is necessary.

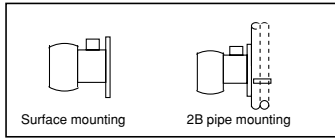
## WIRING



# Type No. constitution

Please specify Type No., each specification and range when ordering.

Note: For this Model, there is no applicable item for the figures X, but please specify X when ordering.



Differential pressure transmitter

**K H 5 2**

Type No.

1 Mounting

2	Surface mounting
3	2B pipe mounting

2 Connection

7	Rc1/4
X	1/4NPT

3 Wetted parts material

3	Bellows: 316Lst.st. Body: SCS14 O-ring: NBR
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4 Differential pressure range (kPa)

(When ordering, please specify pressure range & unit.)

1	0 ~ 5, 7, 10, 15, 20
2	0 ~ 30, 40 0 ~ 50, 70, 100
3	0 ~ 200, 300, 400

5 Accuracy

7	±1.5%F.S.
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6 Power source

1	24V DC ±10%
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7 Output

1	4 ~ 20mA DC (2 wire system)
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Selection spec.

Additional spec. (Option)

11 Other additional spec.

0	Nil
1	Please specify your requirement Wetted parts O ring: Fluorine rubber option Case finishing Valve manifold FV43-993 Valve manifold FV43-DD3 (1/2NPT) FV43 Connection use FJ92

10 Treatment

0	Nil
1	Use no oil
2	Use no water
3	Use no oil & water

9 Outlet for electric wire  
In case of conduit type

2	PF1 /2 female
3	PF3 /4 female

9 Outlet for electric wire  
In case of gland

3	JIS 15a
4	JIS 15b
5	JIS 15c
7	JIS 20b
8	JIS 20c

8 Type of outlet

1	Conduit type
2	Gland

15 Document

0	Nil
1	Please specify your requirement Drawing one sheet, Instruction manual, Inspection procedure, Mill sheet, Test report