Model KH14 Pressure Transmitter

OUTLINE

The built-in electronic circuit, using semiconductor strain gauge, of this pressure transmitter converts pressures into DC signals with a voltage of 0.5 V to 4.5 V and 1 V to 5 V or 4 mA to 20 mA. The simple and flat construction of this pressure transmitter for refrigerator and pneumatic devices demonstrates small and light features and increased reliability.

FEATURE

- A diaphragm using a vacuum-evaporation-type semiconductor strain gauge is applied to the pressure sensing portion of diaphragm and this pressure transmitter demonstrates excellent durability and stability.
- This pressure transmitter demonstrates excellent vibration resistance and impact resistance because no moving portion exists.
- In the pressure sensing portion, a metallic diaphragm is welded to the case. This pressure transmitter is appropriated for measuring medium pressure 1 MPa to 3 MPa (10 kgf/cm^2 to 35 kgf/cm^2) of gases or liquids.
- This pressure transmitter is of small and light type.

SPECIFICATION

Fluid:
Gas or Liquid
Operating condition:
Under the normal condition,where there is no inflammable gas or liquid which cause the ignition or explosion.
Type:
Wall mounting type
Connection:
R1 /8 (PT), 7/16-20 UNF flare (90˚)
2.5 DIA. copper pipe
Wetted parts material:

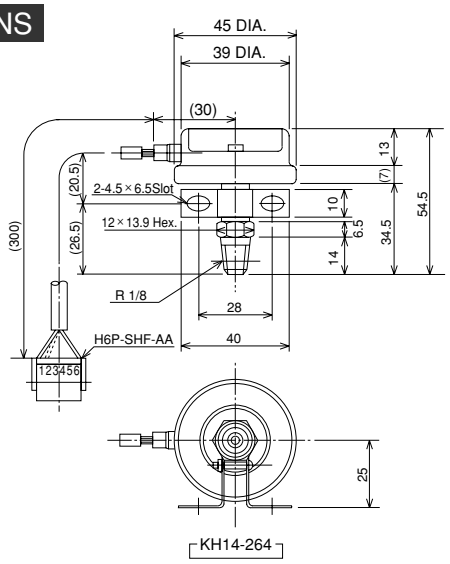
Diaphragm	630st.st. (17-4PH st.st.)
Socket or nipple	316st.st.
Pipe	Copper alloy seamless tube (C1220TS)

Pressure range:
0 ~ 1→0 ~ 3.5MPa (0 ~ 10→0 ~ 35kgf/cm^2)
* Compound range is available.
Max.allowable pressure:
150% of rated pressure
Operating temperature:
-20 ~ 60℃
Storage temperature:
-30 ~ 80℃

Power source:
24V DC ±10 % or 12V DC ±10 % (3 wire system)
Output:
4 ~ 20mA DC (2 wire system)
1 ~ 5V DC (3 wire system)
0.5 ~ 4.5V DC (3 wire system)

Load resistance:
500Ω max. (Current output)
10kΩ min. (Voltage output)
Transmission system:
2 or 3 wire system
Lead wire:
With 0.3 mm^2×300 mm
Accuracy:
±1.0%F.S.
(Include linearity, hysteresis, repeatability)
Temperature coefficient:
Zero, Span: ±0.08%F.S./℃ or ±0.1%F.S./℃
Weight:
Approx. 80 g

DIMENSIONS



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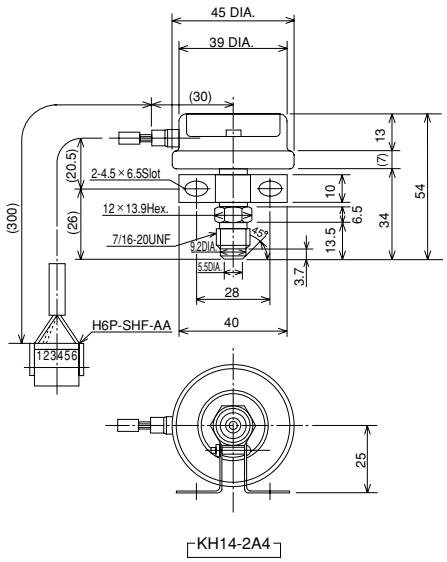

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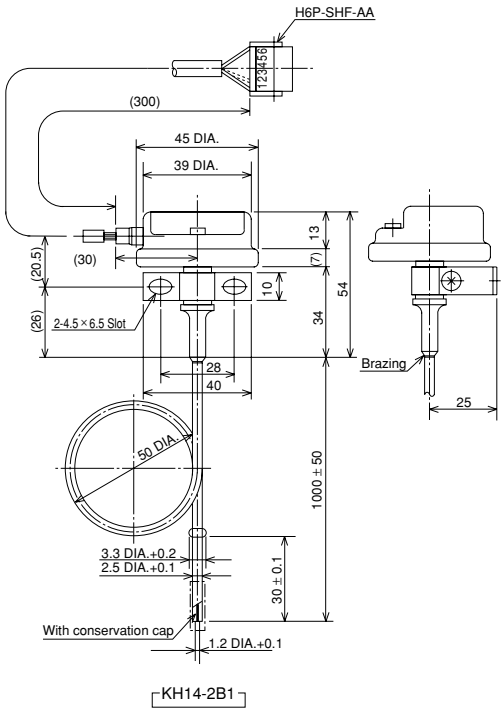

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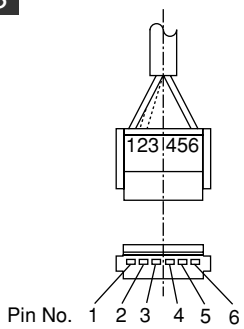
TERMINALS



Connector connection

2 wire system (Current output)

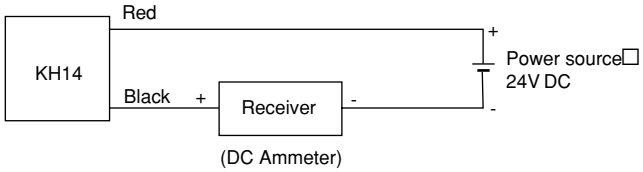
PinNo.	Electric wire color
1	Black: -
6	Red: +

2 wire system (Voltage output)

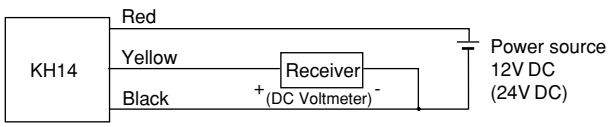
PinNo.	Electric wire color
1	Black: Common
2	Yellow: Output (+)
6	Red: Power source (+)

WIRING

2 wire system



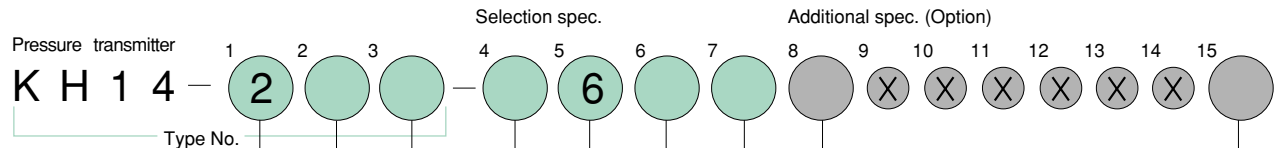
3 wire system



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.



1 Type

2	Wall mounting type

2 Connection

6	R1/8
A	7/16 - 20UNF Flare (90°)
B	With 2.5 DIA. copper pipe 1 m

3 Wetted parts material

1	Socket: 316st.st. Pipe: C1220TS 2.5 DIA. copper pipe only
4	316st.st. (Welding) 2.5 DIA. copper pipe is not manufaturing

4 Pressure range (MPa)

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

1	0 ~ 1
2	0 ~ 2
3	0 ~ 2.5
4	0 ~ 3.5
5	Compound pressure gauge

5 Accuracy

6	±1.0%F.S.

6 Power source

1	24V DC ±10%
6	12V DC ±10% 3 wire system only

7 Output

1	4 ~ 20mA DC (3 wire system)
8	1 ~ 5V DC (3 wire system)
Y	0.5 ~ 4.5V DC (3 wire system)

8 Treatment

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

15 Document

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