



Model KL11 Ultra-Low Differential Pressure Transmitter

OUTLINE

This is a high-performance ultra-low pressure differential transmitter with a built-in, small silicon diaphragm precisely machined based on fine-pitch manufacturing technology. An ultra-low pressure is sensed, converted into electric signals and then transmitted.

FEATURES

- The sensor is of capacitance type, sensing ultra-low pressure in high sensitivity and in high precision.
- The sensor is hermetically sealed in a capsule, demonstrating excellent vibration-resistant and durable properties.
- An error due to installing posture is small, 1 Pa/45°.

SPECIFICATION

Fluid:

Air or inert gas

Operating condition:

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

Mounting:

Surface mounting

Connection:

3.2 DIA., 5.1 DIA., 2 steps barb connection

Gas contact parts:

Diaphragm Silicon, A ℓ

Differential pressure range:

0 ~ 0.05 → 0 ~ 2kPa (0 ~ 5 → 0 ~ 200mmH₂O)

-0.05 ~ +0.05 → -1 ~ +1kPa

(-5 ~ +5 → -100 ~ +100mmH₂O)

Operating pressure range:

-50 ~ +50kPa (-0.5 ~ +0.5kgf/cm²)

Permission max. differential pressure:

50kPa (0.5kgf/cm²)

Operating temperature:

0 ~ 60°C

Operating humidity limits:

30 ~ 90%RH (But should not be frozen)

Power source:

24V DC ±10% 15mA max. (Voltage output),

14 ~ 27V DC 20mA max. (Current output)

Output :

4 ~ 20mA DC (2 wire system)

0 ~ 5V DC (3 wire system)

1 ~ 5V DC (3 wire system)

Load resistance:

500Ω max. (With current output at the time of power source 24V DC)

10kΩ min. (Voltage output)

Transmission system:

2 or 3 wire system

Accuracy:

±1.0%F.S.

Temperature coefficient:

±0.1%F.S./°C (Zero)

±0.1%F.S./°C (Span)

Influence of mounting style:

1Pa /45° less

Case material • finishing:

PBT

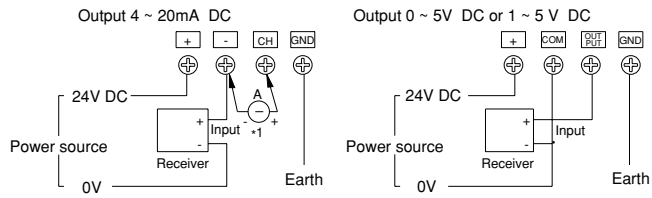
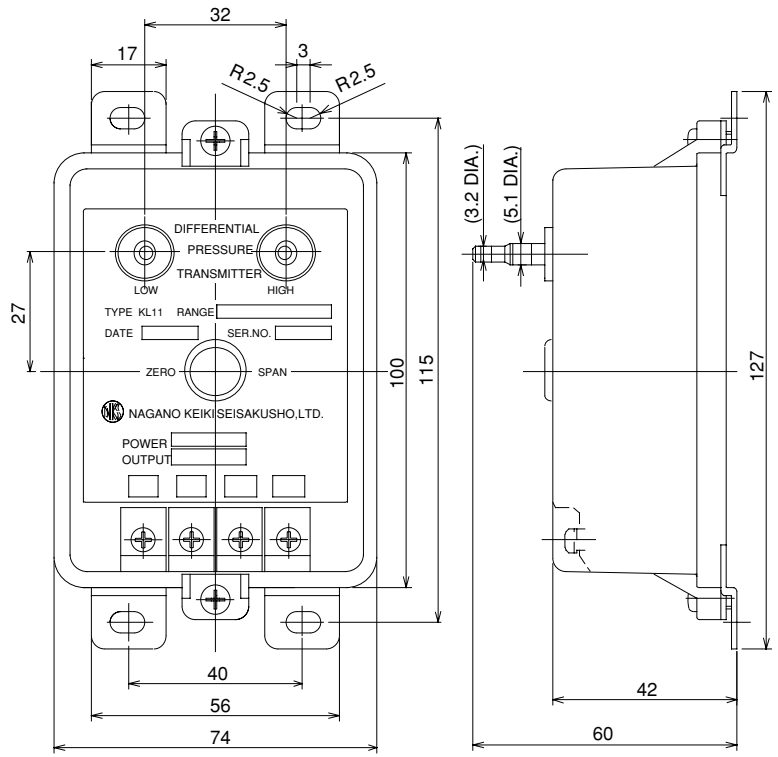
Construction:

Indoor use

Weight:

Approx. 250 g

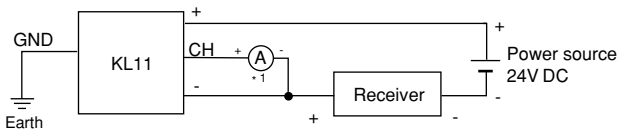
DIMENSIONS



* 1: Available output check without opening circuit.
Less than 10Ω resistance load.

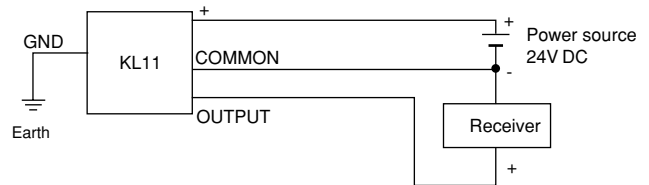
WIRING

2 wire system (4 ~ 20mA DC)



* 1: Available output check without opening circuit.
Less than 10Ω resistance load.

3 wire system (0 ~ 5V DC
1 ~ 5V DC)

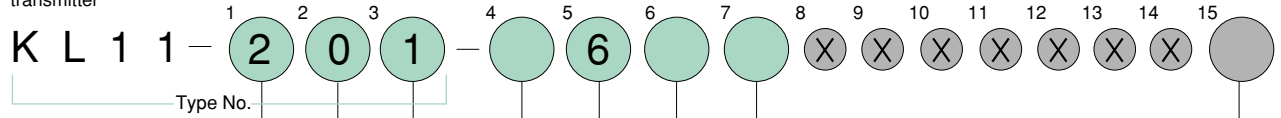


Type No. constitution

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



1 Mounting

2	Surface mounting
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2 Connection

0	3.2 DIA., 5.1 DIA. 2 steps barb connection
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3 Gas contact parts

1	Diaphragm: Silicon
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4 Differential pressure range (kPa)

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

1	-0.05 ~ +0.05, -0.1 ~ +0.1
2	-0.25 ~ +0.25
3	-0.5 ~ +0.5, -1 ~ +1
4	0 ~ 0.05, 0.1, 0.25, 0.5
5	0 ~ 1, 2

Selection spec.

Additional spec. (Option)

7 Output

1	4 ~ 20mA DC (2 wire system)
6	0 ~ 5V DC (3 wire system)
8	1 ~ 5V DC (3 wire system)

6 Power source

1	24V DC $\pm 10\%$ (Voltage output)
9	Other (14 ~ 27V DC) (Current output)

5 Accuracy

6	$\pm 1.0\%$ F.S.
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15 Document

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