



Model KL55·KH55 Pressure Transmitters

OUTLINE

This is a stable and reliable pressure transmitter for ships. The built-in electronic circuit of this pressure transmitter converts checked pressures into uniform DC currents between 2 mA to 20 mA and transmit them.

FEATURE

- The construction of the case is of drip resistant type according to the IP54. So, it is appropriate for ships. (Model KH55 has obtained the approval from the NK Standard, Lloyd Standard and NV Standard. Model KL55 has obtained the NK Standard and is now applying to the Lloyd Standard for approval).
- This pressure transmitter is of small and light type, easy to handle. So, this pressure transmitter can be applied to the wider industrial field in addition to ships.
- This pressure transmitter is equipped with a ceramic diaphragm (low pressure and medium low pressure) or a metallic diaphragm (medium pressure and high pressure). So, it demonstrates excellent corrosion resistance and reliability.
- No moving portion exists in this pressure transmitter. No leakage of measuring media, which is worried in the case of the piston type, exists.

SPECIFICATION 1

Model:

- KL55 Low pressure·Medium low pressure
(Ceramic capacitance sensor type)
- KH55 Medium pressure·High pressure
(Semiconductor strain gauge sensor type)

Fluid:

Gas, Liquid or Steam
(Non-corrosion fluid only)

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:

G3/8B(PF), G1/2B(PF)

Wetted parts material:

Element

- KL55 Alumina
- KH55 630st.st. (17-4 PH st.st.) or Co-Ni alloy (high corrosion-proof use)

Socket 316 st.st.

Packing(KL55) NBR

Pressure range:

KL55

- 0 ~ 20kPa → 0 ~ 0.5MPa (0 ~ 2000mmH₂O → 0 ~ 5kgf/cm²)
- 10 ~ +10 → -50 ~ +50kPa
(-1000 ~ +1000 → -5000 ~ +5000mmH₂O)
- 0.1 ~ 0 → -0.1 ~ 0.3MPa (-1 ~ 0 → -1 ~ 3kgf/cm²)

KH55

- 0 ~ 0.3 → 0 ~ 35MPa (0 ~ 3 → 0 ~ 350kgf/cm²)
- 0.1 ~ 0.2 → -0.1 ~ 2MPa (-1 ~ 2 → -1 ~ 20kgf/cm²)

Max. allowable pressure:

KH55 150% of rated pressure

Permission pressure range of KL55 is depend on range

Operating temperature:

-20 ~ 70°C (But fluid should not be frozen)

Temperature compensation:

0 ~ 60°C

Power source:

24V DC±10%

Output:

4 ~ 20mA DC

Load resistance:

500Ω max.

Insulation resistance:

100MΩ or over (500V DC)

Transmission system:

2 wire system

Influence of line voltage variation:

KH55 0.05%F.S./V

KL55 0.01%F.S./V

Withstand voltage (KL55):

500V AC (1 minute)

Accuracy:

±0.5%F.S. (In 24V DC ±10 %, 23 °C±2 °C)

SPECIFICATION 2

Temperature coefficient:

±0.05%F.S./°C (Zero)

±0.05%F.S./°C (Span)

Outlet for electric wire:

Gland JIS 15b (standard) or JIS 15c

Case material-finishing:

Aluminium alloy die casting(ADC12)·M5B4/9

Construction:

Splash-proof(IP54)

Weight:

KH55 Approx. 0.6 kg

KL55 Approx. 0.8 kg

Allowable pressure range (KL55):

Pressure range	Allowable pressure range
-10 ~ +10kPa	-10 ~ 50kPa
0 ~ 20kPa -20 ~ +20kPa -20 ~ 0kPa	-20kPa ~ 0.1MPa
0 ~ 50kPa -50 ~ +50kPa -50 ~ 0kPa	-50kPa ~ 0.25MPa
0 ~ 0.1MPa -0.1 ~ 0.1MPa -0.1 ~ 0MPa	-0.1 ~ 0.5MPa
0 ~ 0.2MPa -0.1 ~ 0.2MPa 0 ~ 0.3MPa -0.1 ~ 0.3MPa 0 ~ 0.5MPa	-0.1 ~ 1MPa

DIMENSIONS

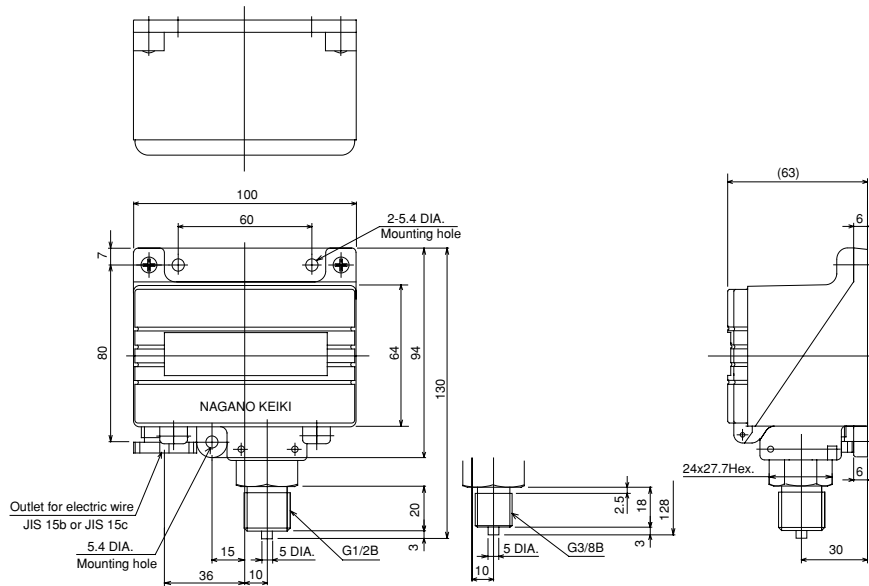
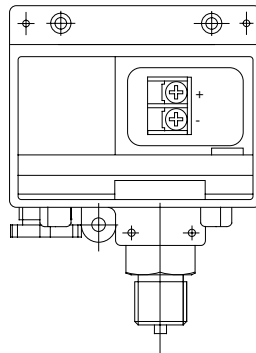
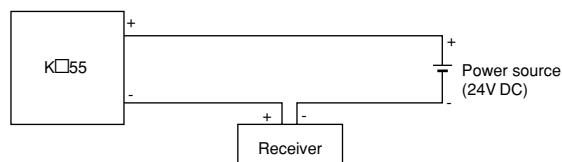


FIGURE OF TERMINAL



WIRING

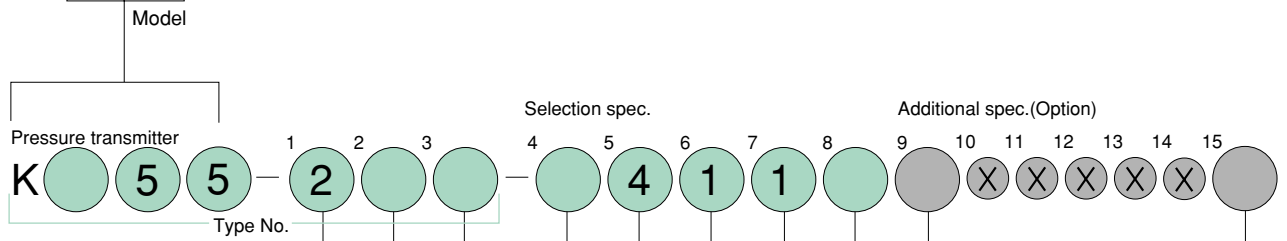


Type No. constitution

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.

K	L	5	5	Low pressure-Medium low pressure
K	H	5	5	Medium pressure-High pressure



1 Type

2	Wall mounting type
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2 Connection

3	G3/8B
4	G1/2B

3 Wetted parts material In case of KL55

3	Element:Alumina Socket:316 st.st. Packing:NBR
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3 Wetted parts material In case of KH55

4	Diaphragm: 630st.st.(17-4PH st.st.) Socket: 316st.st.
6	High corrosion-proof use Diaphragm: Co-Ni alloy

4 Pressure range In case of KL55
(When ordering, please specify pressure range & unit.)

1	0 ~ 20, 50kPa
2	0 ~ 0.1, 0.2, 0.3, 0.5MPa
3	-20 ~ 0, -50 ~ 0kPa -0.1 ~ 0MPa
4	-10 ~ +10, -20 ~ +20, -50 ~ +50kPa
5	-0.1 ~ 0.1, 0.2, 0.3MPa

4 Pressure range In case of KH55
(When ordering, please specify pressure range & unit.)

1	-0.1 ~ 0.2, 0.3, 0.4, 0.5, 0.6MPa -0.1 ~ 1, 1.6, 2MPa
2	0 ~ 0.3, 0.4, 0.5, 0.6, 1, 1.6, 2MPa 0 ~ 2.5, 3, 3.5, 4MPa
3	0 ~ 5, 6, 10, 16, 20, 25, 30, 35MPa

Selection spec.

4 Accuracy

4	±0.5%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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8 Outlet for electric wire

4	Gland JIS 15b
5	Gland JIS 15c

Additional spec.(Option)

9 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