



Model KL76 Ceramic Capacitance Sensor

OUTLINE

This is a ceramic capacitance sensor in the field of micropressure and low pressure, equipped with a ceramic sensor for the pressure-sensing portion.

FEATURE

- By equipping a ceramic diaphragm, this ceramic capacitance sensor demonstrates high pressure resistance, high corrosion resistance and high reliability.
- ASICs are installed in the circuit, resulting in high performance.
- When compared with the conventional type, this ceramic capacitance sensor is smaller, lighter and low priced.
- This ceramic capacitance sensor can be applied to refrigerating and air conditioning devices, burning devices, medical equipment, liquid level devices and other various fields.

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.

Type:

Electric wire type (With electric wire 200mm)

Connection:

R1/4(PT)

Wetted parts material:

Element Alumina

Case 316st.st., Acetal copolymer(25%glass fiber)
(GC-25)

Packing NBR

Pressure range:

0 ~ 20kPa → 0 ~ 0.5MPa (0 ~ 2000mmH₂O → 0 ~ 5kgf/cm²)

-10 ~ +10 → -50 ~ +50kPa

(-1000 ~ +1000mmH₂O → -5000 ~ +5000mmH₂O)

-0.1 ~ 0 → -0.1 ~ 0.3MPa (-1 ~ 0 → -1 ~ 3kgf/cm²)

Max. allowable pressure:

500% of rated pressure (Permission pressure range is depend on range to maximum 1MPa)

Operating temperature:

-30 ~ 80°C

Storage temperature:

-40 ~ 100°C

Power source:

24V DC±10% (2 wire system)

12 ~ 30V DC (3 wire system)

Output:

4 ~ 20mA DC(2 wire system)

1 ~ 5V DC (3 wire system)

Load resistance:

500Ω max.(Current output)

10kΩ min. (Voltage output)

Consumption current:

Less than 15mA(3 wire system)

Transmission system:

2 or 3 wire system

Accuracy:

±0.5%F.S.

Temperature coefficient:

±0.05%F.S./°C (Zero)

±0.05%F.S./°C (Span)

Construction:

Indoor use

Weight:

Approx. 70 g

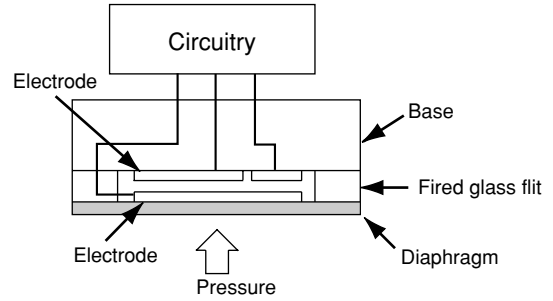
SPECIFICATION 2

Allowable pressure range:

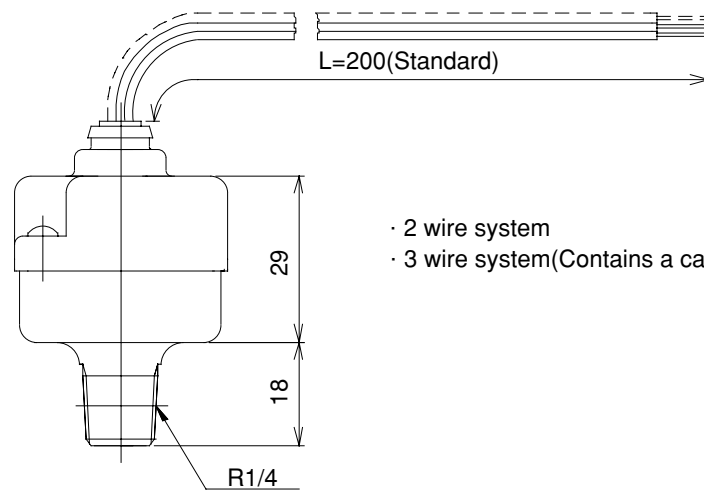
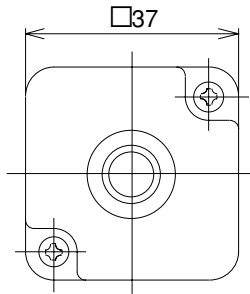
Pressure range	Allowable pressure range
-10 ~ +10kPa	-10 ~ 50kPa
0 ~ 20kPa -20 ~ +20kPa -20 ~ 0kPa	-20kPa ~ 0.1MPa
0 ~ 50kPa -50 ~ +50kPa -50 ~ 0kPa	-50kPa ~ 0.25MPa
0 ~ 0.1MPa -0.1 ~ 0.1MPa -0.1 ~ 0MPa	-0.1 ~ 0.5MPa
0 ~ 0.2MPa -0.1 ~ 0.2MPa 0 ~ 0.3MPa -0.1 ~ 0.3MPa 0 ~ 0.5MPa	-0.1 ~ 1MPa

STRUCTURAL DRAWING

Pressure detecting unit is ceramic diaphragm, and it detects pressure change as capacity change, and there is a little hysteresis, and, in particular, reproducibility is good or temperature characteristic is superior in accuracy mark and becomes high search construction of reliability with high withstand pressure.



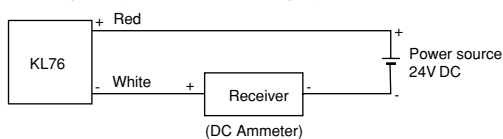
DIMENSIONS



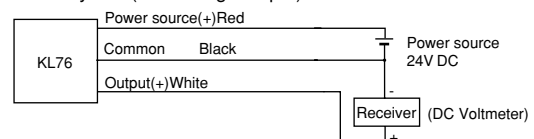
- 2 wire system
- 3 wire system(Contains a cable of a dotted line)

WIRING

2 wire system(Electric current output)



3 wire system(The voltage output)



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.

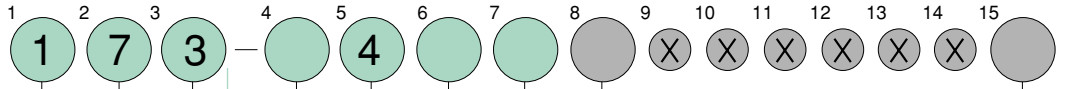
Ceramic
Capacitance sensor

K L 7 6

Type No.

Selection spec.

Additional spec.(Option)



1 Type

1 Electric wire type
(With electric wire 200mm)

2 Connection

7 R1/4

3 Wetted parts material

3 Element: Alumina
Case: 316st.st., Acetal copolymer (25% glass fiber)
(GC-25)
Packing: NBR

4 Pressure range

(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

8 Treatment

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

7 Output

1	4 ~ 20mA DC [2 wire system]
8	1 ~ 5V DC [3 wire system]

6 Power source

1	24V DC±10% [2 wire system]
9	Other(12 ~ 30V DC) [3 wire system]

5 Accuracy

4 ±0.5%F.S.

15 Document

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