

KL17

Differential Pressure Transmitter for Incorporation into Machines and Equipments

For gas measurement
(Featuring silicone diaphragm)

Overview

Highly sensitive pressure transmitter with analog outputs can detect very small pressure in conjunction with dedicated ASIC.

Features

- Highly sensitive pressure detection from 50Pa to 20kPa.
- High proof pressure withstanding more than 1000(50kPa) times higher pressure when rated pressure is 50Pa.
- Small and lightweight (Approx. 20g) pressure transmitter can be installed into equipments and on-board installation is easily done by connector.



RoHS

Specifications

Media:

Gas (Dry air and nitrogen gas)
No water or dusts should be contained.

Installation Environment*1:

Install in location where no gases or liquids may exist that have the potential to become flammable or ignitable under normal operating condition

Pressure connection*2:

Outer dia ϕ 3 straight port (H, L)

Wetted parts:

Glass, Aluminum, Silicon, PBT

Differential pressure range:

0 to 50Pa \rightarrow 20kPa
 \pm 50Pa \rightarrow \pm 10kPa

Allowable maximum pressure:

Proof pressure for single port \pm 50kPa
Proof pressure for double ports \pm 50kPa
*Proof pressure against surge negative pressure caused by open/close solenoid valve is not specified.

Operating temperature:

0 to 60°C (Non-condensing)

Operating humidity limits:

30 to 90%RH (Non-condensing)

Storage temperature:

-30 to 85°C (Non-freezing or condensing)

Response time:

20 ms and under

Power source (Vcc):

5 \pm 0.5V DC

Output:

Ratio metric 1/10 Vcc to 9/10 Vcc
(0.5 to 4.5 V DC when Vcc=5 V DC)

Consumption electric current:

10mA maximum

Load resistance:

10k Ω minimum

Accuracy:

\pm 2%F.S. (23 \pm 2°C)

Position effects:

1Pa/45° and under

Temperature coefficient:

\pm 0.1% F.S./°C (Zero), 0 to 0.3% F.S./°C (Span)

Construction:

Indoor use (IP20)

Weight:

Approx. 20g (Not including cable)

*1 Noise prevention against circuit should be prepared where noise is present at installed area.

*2 At the time of shipment, both H and L pressure ports are covered by silicone tubes to protect incorporated sensor.

