

KH22

Differential Pressure Transmitter

Overview

This has a built-in electronic circuit and sensor that a semiconductor strain gauge is utilized. Differential pressure is measured for converting to 4 to 20mA DC standardized signal for transmission.

Features

- Because an evaporation type semiconductor strain gauge is used for the sensor, durability and stability is assured.
- Because stainless steel-based material is used for the wetted parts with all-welded structure, corrosion resistance is assured.
- Two sensors are attached to the pressure receiving part and humidity resistance is taken into consideration by charging inert gas to the back pressure side.
- With electric dumping function and built-in linearization compensation circuit, the performance of transmitter is improved. Electric wave hindrance countermeasure is provided, expelling the effect of transceivers, etc.



Specifications 1

Media:

Gas, fluid, steam

Installation environment:

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

Mounting:

Panel mounting

Connection:

Rc 1/4

Wetted parts:

Diaphragm SUS630 (17-4PH)
Fitting SUS316
Sensing part SUS316

Differential pressure range:

0 to 0.3→0 to 1MPa

Maximum operating pressure:

0.3 to 1MPa
(Depends on differential pressure range)

Proof pressure:

0.6 to 2MPa
(Depends on differential pressure range)

Operating temperature range:

-10 to 60°C (Non-freezing or condensing)

Power source:

24V DC ±10%

Output:

4 to 20mA DC

Load resistance:

500Ω max.

Transmission system:

2 wire system

Damping adjustment:

0.1 to 5 seconds (Time-constant)

Accuracy:

±1.0%F.S.

Temperature coefficient:

±0.075%F.S./°C (Zero)
±0.075%F.S./°C (Span)

Type of electrical wire outlet:

Metal cable gland
Cable outer Dia. to conform φ4 to φ8

Case material:

ADC12, AC7A

Enclosure:

Rain-proof type (Equivalent to IP43)

Weight:

Approx. 2.2kg

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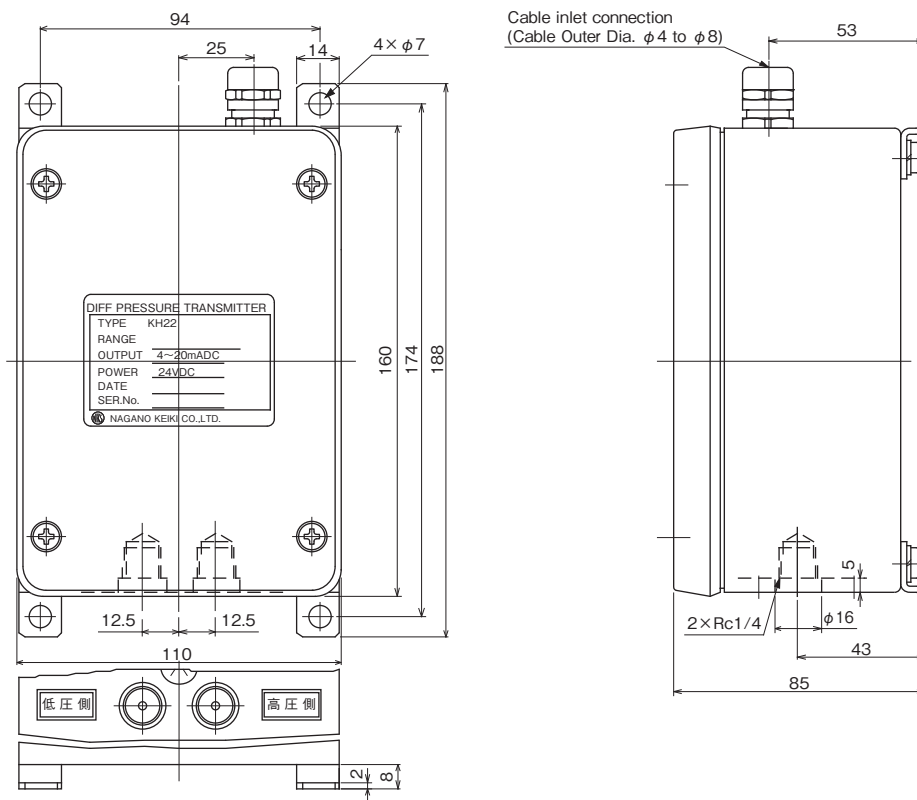
Specifications2

Maximum operating pressure, proof pressure:

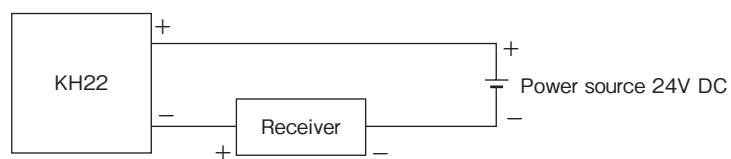
Differential pressure range MPa	Maximum operating pressure MPa	Proof pressure MPa
0 to 0.3	0.3	0.6
0 to 0.5	0.5	1
0 to 0.7	0.7	1.4
0 to 1	1	2

Dimensions

Unit: mm



Wiring



Model number configuration

Please specify the model, each requiring specification and differential pressure range to order.

Model																			
K	H	2	2	—	2	7	3	—	7	1	1	×	×	×	×	×	×	×	
Differential Pressure Transmitter				①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩	⑪	⑫	⑬	⑭	⑮	
Model number										Product specifications			Additional specifications (Optional)						
① Type		2		Panel mounting															
② Connection		7		Rc 1/4															
③ Wetted parts		3		Diaphragm: SUS630 (17-4PH) Fitting: SUS316 Sensing part: SUS316															
Please specify differential pressure range and unit of measure along with corresponding ordering code.		④ Differential pressure range (MPa)		1	0 to 0.3														
				2	0 to 0.5														
				3	0 to 0.7														
				4	0 to 1														
⑤ Accuracy		7		±1.0%F.S.															
⑥ Power source		1		24V DC±10%															
⑦ Output		1		4 to 20mA DC 2 wire system															
⑧ Treatment		0		Not required															
		1		Use no oil															
		2		Use no water															
		3		Use no oil & water															
⑮ Documents		0		Not required															
		1		Required (Documents available upon request) Datasheet (Drawing / Specifications) Instruction manual Inspection procedure Mill test report Calibration test report (One-part one sheet) Inspection / Traceability certificate Calibration certificate for pressure standard Strength calculation sheet Attending inspection															

• Type of electrical wire outlet: Metal cable gland
Cable outer Dia. to conform $\phi 4$ to $\phi 8$

Treatment of wetted parts

- **Use no oil**
Manufacture/process wetted parts not to retain oils.
- **Use no water**
Manufacture/process wetted parts not to retain water.
- **Use no oil & water**
Manufacture/process wetted parts not to retain oils and water.

* Specify code "X" to refer N/A