

KH52

Differential Pressure Transmitter

Overview

This is a transmitter that can detect differential pressure, liquid level, liquid flow etc., converting them into an electric signal and transmits it. Bellows is used for the pressure sensing element, and its displacement is detected as an inductance variation converting into an electric signal in proportion with measuring quantity.

Features

- By removing the front screw type lid, zero and span adjustment can be easily performed.
- The test terminal is mounted, allowing to test without opening the output circuit.
- Output signal is an international standard 4 to 20mA DC signal, easily combined with related equipment.
- Available in selection of upper or lower pressure port process connection for suitable installation depending on installing environment.



Specifications 1

Media:

Gas and fluid

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

Type:

Surface mounting



2B pipe mounting



* Diaphragm seal type are also available.
Please contact us.

Connection:

Rc1/4, 1/4NPT

* For other connections, please contact us.

Wetted parts:

Bellows SUS316L

Body SCS14

O-ring NBR

Differential pressure range:

0 to 5→0 to 400kPa

Operating pressure range:

0 to 5MPa

Proof pressure against single port:

0.2 to 1.2MPa

(Varies depending on differential pressure range)

Operating temperature range:

0 to 60°C

Power source:

24V DC±10%

Output:

4 to 20mA DC

Load resistance:

400Ω max.

Transmission system:

2 wire system

Accuracy:

±1.5%F.S.

Temperature coefficient:

±0.05%F.S./°C TYP. (Zero)

±0.05%F.S./°C TYP. (Span)

Outlet for electric wire:

Conduit type G1/2, G3/4

Gland JIS 15a, JIS 15b, JIS 15c

JIS 20b, JIS 20c

Case material, finish:

ADC12 · Gray crystal paint

Enclosure:

Splash-proof (IP54)

Valve manifold: (Option)

Three-way valve manifold incorporating high pressure and low pressure stop valves and an equal pressure valve. It can be used to check the zero point during operation and to prevent excessive differential pressure and reverse differential pressure during zero adjustment at the beginning (Stop) of operation.

Weight:

Approx. 6kg

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Differential Pressure Transmitter

Specifications2

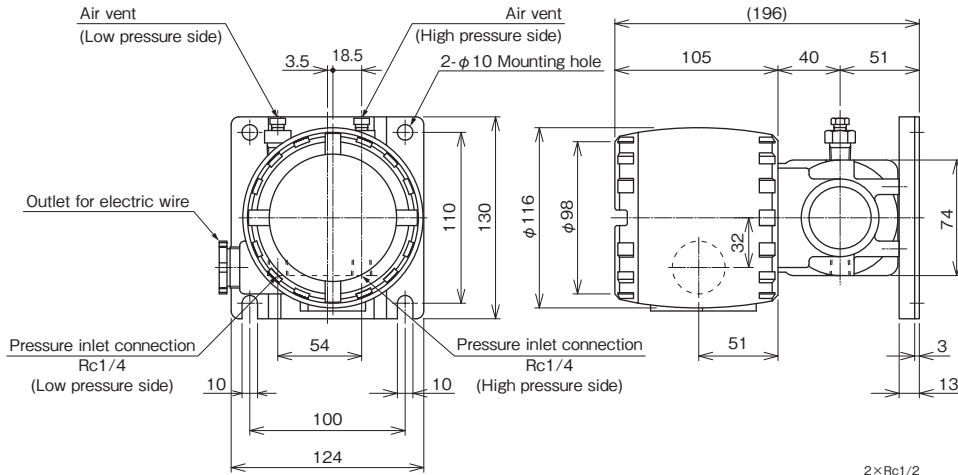
Differential pressure range and proof pressure against single port:

Differential pressure range	Proof pressure against single port
0 to 5kPa 0 to 7kPa 0 to 10kPa 0 to 20kPa	0.2MPa
0 to 30kPa 0 to 50kPa	0.4MPa

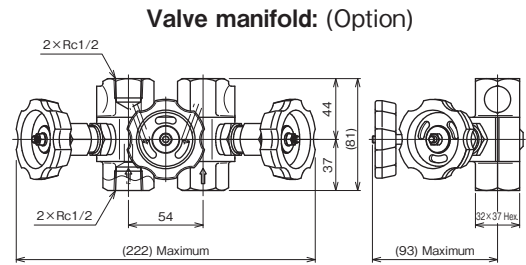
Differential pressure range	Proof pressure against single port
0 to 70kPa 0 to 100kPa	0.4MPa
0 to 200kPa 0 to 300kPa 0 to 400kPa	1.2MPa

Dimensions

Unit: mm

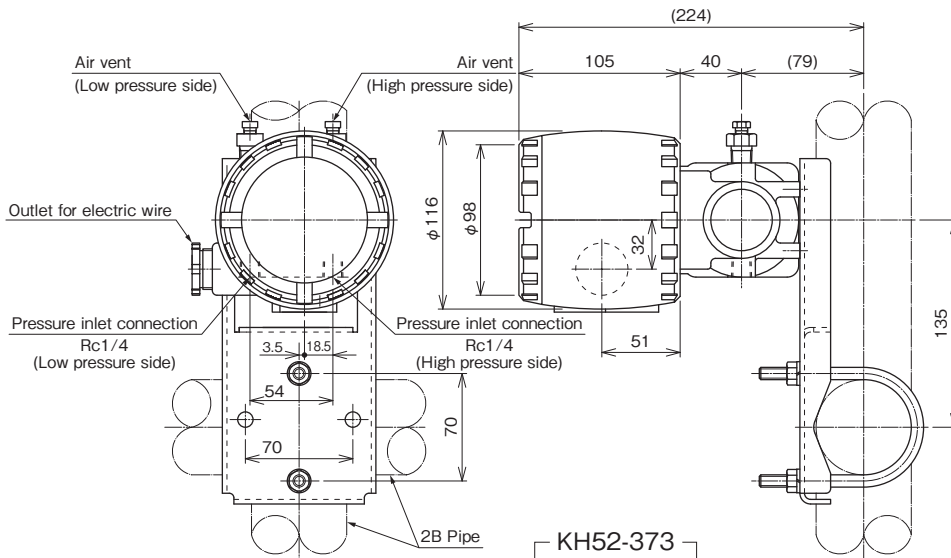


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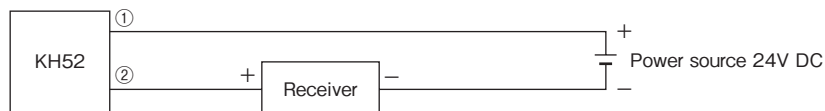
FV42-993

*As for connection of differential pressure gauge, valve-manifold: FJ92-001 (2 pieces) is necessary.



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Wiring



Model number configuration

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

Model		K H 5 2	—	①	②	③	—	④	⑤	⑥	⑦	⑧	⑨	⑩	⑪	⑫	⑬	⑭	⑮
Differential Pressure Transmitter		3	—	4	1	1	—	X	X	X	X	—	—	—	—	—	—	—	—
Model number		Product specifications										Additional specifications (Optional)							
①	Type	2	Surface mounting																
		3	2B pipe mounting																
②	Connection	7	Rc1/4																
		X	1/4NPT																
③	Wetted parts	3	Bellows: SUS316L Body: SCS14 O-ring: NBR																
Please specify differential pressure range and unit of measure along with corresponding ordering code.	④	Differential pressure range	1	0 to 5, 7, 10, 15, 20kPa															
			2	0 to 30, 40, 50, 70, 100kPa															
			3	0 to 200, 300, 400kPa															
⑤	Accuracy	4	±1.5%F.S. (Standard)																
⑥	Power source	1	24V DC±10%																
⑦	Output	1	4 to 20mA DC 2 wire system																
⑧	Outlet for electric wire			Conduit															
		B	G1/2																
		C	G3/4																
				Gland															
		3	JIS 15a																
		4	JIS 15b																
		5	JIS 15c																
		6	JIS 20a																
		7	JIS 20b																
		8	JIS 20c																
				Others															
⑨	Treatment	0	Not required																
		1	Use no oil																
		2	Use no water																
		3	Use no oil & water																
⑩	Other additional spec.	0	Not required																
		1	Required (Documents available upon request) Wetted parts O-ring: Fluorine rubber Case finish <Option> Valve manifold FV42-993 Rc1/2 FV42-995 High Pressure Gas Ministry Approval FV42-DD3 1/2NPT FV42 Connector FJ92 (Need 2 pcs.) FV42 Use no oil and water (No label)																
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 Strength calculation sheet Attending inspection																

[Manufacturing range]

- As for connection of differential pressure gauge, valve-manifold: FJ92-001 (2 pieces) is necessary.

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