

KH62

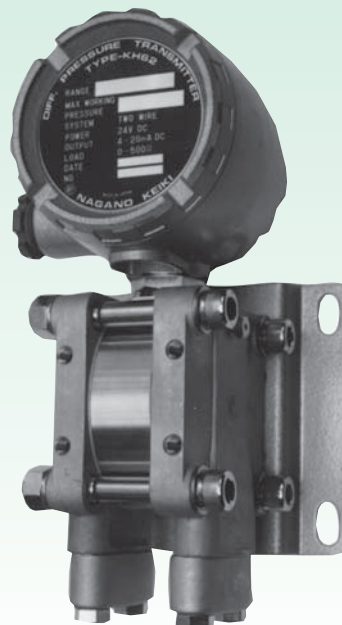
Differential Pressure Transmitter

Overview

This is a transducer that is installed on-site to measure differential pressure, level and flow to transmit in the measurement site, which detects the differential pressure, liquid level, and flow rate, etc., converts it into a DC signal, and then transmits it. Since this transmitter employs a detection method converting the force corresponding to the input differential pressure into an electric signal, it is highly reliable products.

Features

- The liquid is sealed in the pressure receiving part, allowing to withstand the high pressure. (Maximum 10MPa depending on the pressure range)
- The lid on the front is a screw-type, therefore the lid can be easily removed. Also, it can easily be adjusted by an electric zero and span electrically.
- The test terminal is mounted on the built-in terminal section, allowing to test without opening the output circuit. In addition, the reverse polarity protection circuit is built in the power supply.



Specifications 1

Media:

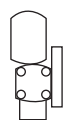
Gas, liquid, steam

Installation environment:

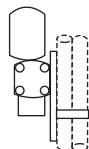
Install in location where no gases or liquids may exist that have the potential to become flammable or ignitable under normal operating condition

Type:

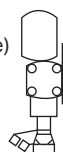
Wall mounting



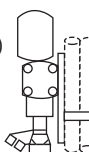
2B pipe mounting



Wall mounting
(Three-way valve)



2B pipe mounting
(Three-way valve)



※Intrinsically Safe Type (3aG4) is also available (Model: KJ62)

※With indicator type or diaphragm seal type are also available. Please contact us.

Connection:

Rc1/4, Rc1/2

Wetted parts:

Flange	SCS14, SS400 or SUS316 (Depends on differential pressure range)
Diaphragm, Body	SUS316
Gasket	Teflon
O-ring	NBR

Differential pressure range:

0 to 0.3kPa→0 to 2MPa

Operating pressure range:

0 to 0.1MPa, 0 to 1MPa, 0 to 2.5MPa,
0 to 5MPa, 0 to 10MPa
(Depends on differential pressure range)

Power source:

24V DC±10%

Output:

4 to 20mA DC

Load resistance:

500Ω max.

Transmission system:

2 wire system

Operating temperature range:

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

Storage temperature range:

-20 to 70°C (Non freezing or condensing)

Accuracy:

±0.5%F.S., ±1.0%F.S.

(Depends on differential pressure range)

Temperature coefficient:

±0.05%F.S./°C (Zero point, however, in case of maximum span)

±0.05%F.S./°C (Span)

Influence of static pressure:

Zero point output change caused by simultaneously applying the static pressure within the operating pressure range to the high pressure side and low pressure side. Within ±0.5%

(In case of maximum span in each differential pressure range)

Specifications2

Influence of one-side pressure:

Zero point output change caused by alternately applying the static pressure within the operating pressure range to the high pressure side and low pressure side.

Within $\pm 1.5\%$

(In case of maximum span in each differential pressure range)

Influence of position effect:

No effect on the changes in the diaphragm and the parallel direction.

Within 0.2kPa/22.5°

Filled liquid:

Silicone oil

Outlet for electric wire:

Gland JIS 20b

Case material, finishing:

ADC12 · Gray crystal paint

Protection:

Splash-proof (IP54)

Elevation and suppression:

Both elevation and suppression of zero point can be adjusted within 10%F.S. of pressure range.

Standard accessory:

Flange adaptor Vent/Drain valve

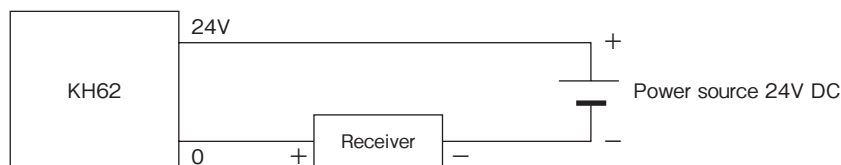
Weight:

Approx. 8kg (1.2kPa or lower is Approx. 10kg)

Accuracy, Operating pressure range, Single withstand pressure, Flange material:

Differential pressure range	Accuracy	Operating pressure range	Proof pressure against single port	Flange material
0—0.3 to 0—1.2kPa	$\pm 1.0\%$ F.S.	0 to 0.1MPa (Standard), 0 to 1MPa	Operating pressure range	SCS14
0—1.21 to 0—4.5kPa 0—4.51 to 0—9.0kPa 0—9.01 to 0—19.0kPa 0—19.01 to 0—40.0kPa	$\pm 0.5\%$ F.S.	0 to 2.5MPa (Standard), 0 to 5MPa, 0 to 10MPa	Operating pressure range	Operating pressure range is 5MP or lower SCS14 Operating pressure range is 10MP or lower SS400 or SUS316
0—40.01 to 0—80.0kPa 0—0.1 to 0—0.4MPa 0—0.5 to 0—2.0MPa	$\pm 1.0\%$ F.S.	0 to 2.5MPa (Standard), 0 to 5MPa, 0 to 10MPa	300% of differential pressure range	

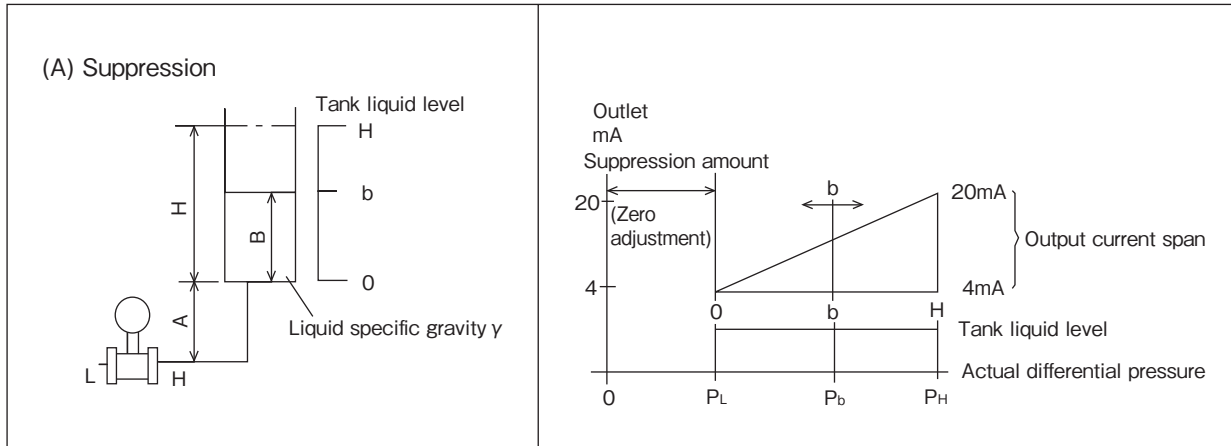
Wiring



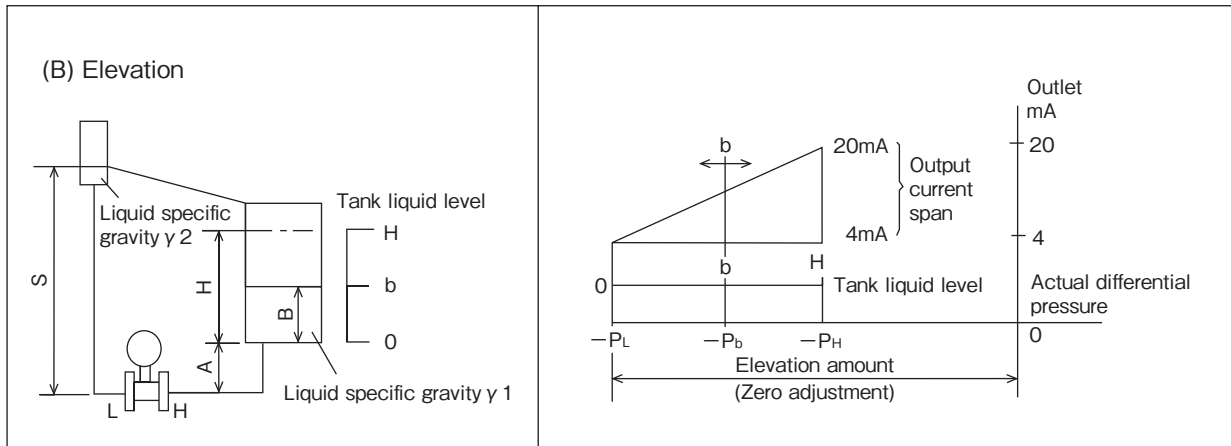
Specifications3

Elevation, suppression:

(A) In the case of liquid level measurement of an open tank shown in the following figure, even when the tank liquid level is "O" position, if the positive load is applied on the H side of the differential pressure transmitters, zero point (4mA point) is moved to the positive side of the actual differential pressure.



(B) In the case of liquid level measurement of a sealed tank shown in the following figure, even when the tank liquid level is "H" position, if the negative load is applied on the H side of the differential pressure transmitters, zero point (4mA point) is moved to the negative side of the actual differential pressure.



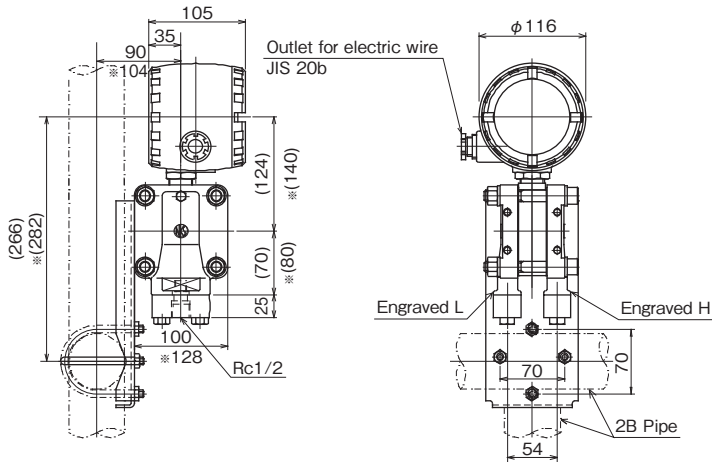
Dimensions

Unit: mm

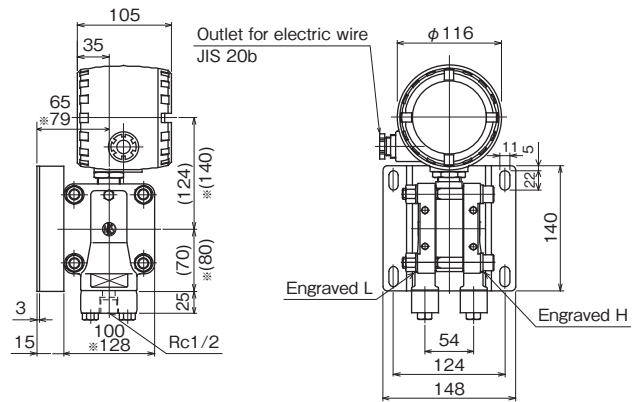
Dimension for flange material SCS14 (When flange material is SS400 or SUS316, Please contact us.)

※For differential pressure range 0—0.3 to 0—1.2kPa

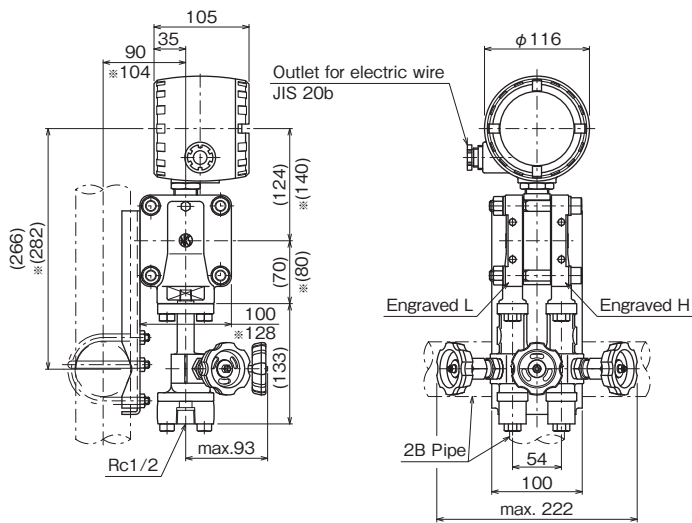
2B pipe mounting



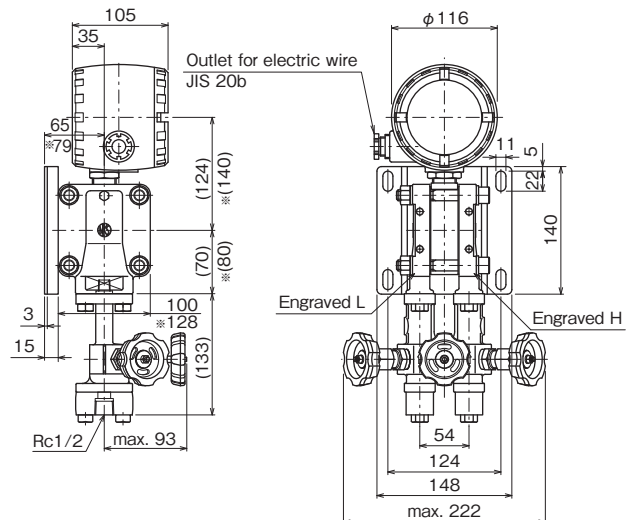
Surface mounting



2B pipe mounting with three-way valve



Surface mounting with three-way valve



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Differential Pressure Transmitter

Model number configuration

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

Model

K H 6 2 — **0 1 1 7** × × × ×

Differential Pressure Transmitter

Model number		Product specifications		Additional specifications (Optional)	
① Type	2 Wall mounting 3 2B pipe mounting	Outlet for electric wire: JIS 20b Gland (Standard)			
② Connection	7 Rc1/4 9 Rc1/2				
③ Flange material	1 SCS14 2 SS400 3 SUS316				
④ Differential pressure range	1	0-0.3 to 0-1.2kPa	±1.0%F.S.	Flange: SCS14 Only	
	2	0-1.21 to 0-4.5kPa	±0.5%F.S.		
	3	0-4.51 to 0-9.0kPa	±0.5%F.S.		
	4	0-9.01 to 0-19.0kPa	±0.5%F.S.		
	5	0-19.01 to 0-40.0kPa	±0.5%F.S.		
	6	0-40.01 to 0-80.0kPa	±1.0%F.S.		
	7	0-0.1 to 0-0.4MPa	±1.0%F.S.		
	8	0-0.5 to 0-2.0MPa	±1.0%F.S.		
⑤ Accuracy	0	±0.5%F.S. ±1.0%F.S. (Depends on differential pressure range)			
⑥ Power source	1	24V DC±10%			
⑦ Output	1	4 to 20mA DC 2 wire system			
⑧ Outlet for electric wire	7	Gland JIS 20b			
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) (Separate order) Valve manifold FV42-XX3: Flange type, SUS FV42-XX5: Flange type, SUS, Certified by the Minister for Trade and Industry for high pressure			
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 test report for pressure standard Strength calculation sheet Attending inspection			

Please specify differential pressure range and unit of measure along with corresponding ordering code.

[Manufacturing range]
• With indicator type or diaphragm seal type are also available.
Please contact us.

* FV42 is Use no oil and water (No label is affixed)

Treatment against wetted parts

- **Use no oil**
Oil used in manufacturing the gauges had been flushed out & no oil residue remained inside its wetted parts.
- **Use no water**
Water used in manufacturing the gauges had been flushed out & no water residue remained inside its wetted parts.
- **Use no oil & water**
Oil/Water used in manufacturing the gauges had been flushed out & no oil/water residue remained inside its wetted parts.

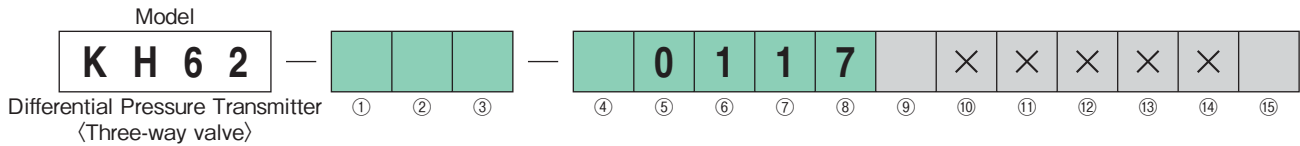
* Specify code "X" to refer N/A

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Differential Pressure Transmitter

Model number configuration

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



Model number	Product specifications	Additional specifications (Optional)		
①②③ Type	Type Flange material			
	T02	Surface mounting with three-way valve (SUSF316)	SCS14	
	T03	Surface mounting with three-way valve (SUSF316 Certified by the Minister for Trade and Industry for high pressure)	SCS14	
	T05	Surface reverse mounting with three-way valve (SUSF316)	SCS14	
	T12	Surface mounting with three-way valve (SUSF316)	SS400	
	T13	Surface mounting with three-way valve (SUSF316 Certified by the Minister for Trade and Industry for high pressure)	SS400	
	T22	Surface mounting with three-way valve (SUSF316)	SUS316	
	T23	Surface mounting with three-way valve (SUSF316 Certified by the Minister for Trade and Industry for high pressure)	SUS316	
	T32	2B pipe mounting with three-way valve (SUSF316)	SCS14	
	T33	2B pipe mounting with three-way valve (SUSF316 Certified by the Minister for Trade and Industry for high pressure)	SCS14	
	T35	2B pipe reverse mounting with three-way valve (SUSF316)	SCS14	
	T42	2B pipe mounting with three-way valve (SUSF316)	SS400	
	T43	2B pipe mounting with three-way valve (SUSF316 Certified by the Minister for Trade and Industry for high pressure)	SS400	
	T52	2B pipe mounting with three-way valve (SUSF316)	SUS316	
	T53	2B pipe mounting with three-way valve (SUSF316 Certified by the Minister for Trade and Industry for high pressure)	SUS316	
④ Differential pressure range	1	0-0.3 to 0-1.2kPa	±1.0%F.S.	Flange: SCS14 Only
	2	0-1.21 to 0-4.5kPa	±0.5%F.S.	
	3	0-4.51 to 0-9.0kPa	±0.5%F.S.	
	4	0-9.01 to 0-19.0kPa	±0.5%F.S.	
	5	0-19.01 to 0-40.0kPa	±0.5%F.S.	
	6	0-40.01 to 0-80.0kPa	±1.0%F.S.	
	7	0-0.1 to 0-0.4MPa	±1.0%F.S.	
	8	0-0.5 to 0-2.0MPa	±1.0%F.S.	
⑤ Accuracy	0	±0.5%F.S. ±1.0%F.S. (Depends on differential pressure range)		
	1	24V DC±10%		
⑥ Power source	1	24V DC±10%		
	1	4 to 20mA DC 2 wire system		
⑦ Output	1	4 to 20mA DC 2 wire system		
	7	Gland JIS 20b		
⑧ Outlet for electric wire	0	Not required		
	1	Use no oil		
	2	Use no water		
	3	Use no oil & water		
⑨ Treatment	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 test report for pressure standard Strength calculation sheet Attending inspection		
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 test report for pressure standard Strength calculation sheet Attending inspection		

Please specify differential pressure range and unit of measure along with corresponding ordering code.

KH62 has basically same design with KJ62 Intrinsicly safe pressure transmitter. Zener barrier is included.

[Manufacturing range]
 • With indicator type or diaphragm seal type are also available. Please contact us.

* Three-way valve is Use no oil and water (No label is affixed)

Treatment against wetted parts

- **Use no oil**
Oil used in manufacturing the gauges had been flushed out & no oil residue remained inside its wetted parts.
- **Use no water**
Water used in manufacturing the gauges had been flushed out & no water residue remained inside its wetted parts.
- **Use no oil & water**
Oil/Water used in manufacturing the gauges had been flushed out & no oil/water residue remained inside its wetted parts.

* Specify code "X" to refer N/A