

GC62 Differential Pressure Gauge

OUTLINE

This is a digital differential pressure gauge using a compact, high-pressure-resistant silicon capacitance sensor in its pressure sensing section. The display and output functions are housed in a compact body to save space, and its many functions enable a variety of uses.

FEATURES

- Despite its compact size, it can measure extremely small differential pressures of 50 Pa. It has a high precision, pressure resistant design.
- Has a large, bright, easy-to-read 4-digit LED display in addition to 2 relay contacts as a comparator output.
- Can be mounted, and position of the pressure port can be selected to facilitate pipe connections.

SPECIFICATION 1

Fluid:

Dry air, non corrosion gas

Operating condition:

Under the normal condition, where there is no inflammable gas or liquid which cause the ignition or explosion.

Mounting:

Panel mounting • Surface mounting (DIN rail)

Process connection:

G1/8 (Back • side)

Differential pressure range:

0 ~ 50Pa → 0 ~ 20kPa

±50Pa → ±10kPa

Wetted parts material:

Silicon ABS

Max. allowable pressure:

50kPa (100kPa for the range 10kPa or over)

Accuracy

Differential pressure display accuracy

±1.0% F.S.±1digit (±1.5% F.S. ±1digit for the range 200Pa or less) Indication accuracy by root scale

±0.5%F.S.*

* Within 5 ~ 100% F.S. of differential pressure range

Display:

Display type 4 digit LED display (Height of letter: 10mm)

Display period 0.2s

Display unit:

Pa, kPa, mmH₂O

Power source:

12 ~ 24V DC ±10%

Consumption electric current:

100mA or less

Comparator output:

Relay contact (110V AC, 0.2A Load resistance)

Response: 5ms or less (GC62-□□2 10ms or less)

Cead band: Hysteresis mode: Changeable

Window comparator mode: 1%F.S. fixed

Delay: 0 ~ 2.00s (Both ON & OFF)

Operation lamp:

Red LED (OUT1, 2) Light at ON

Analog output: (Option)

 $4 \sim 20$ mA DC (Load resistance 400Ω or less)

or 1 ~ 5V DC (Load resistance $10k\Omega$ over)

* When 4 ~ 20mA DC is selected, power source should be 15V DC or over.

Output accuracy: ±1% F.S. (±1.5%F.S. for the range 200Pa or less)

Response time: 50ms or less (GC62-□□2 100ms or less)

Scaling function:

Indicated value, Analog output

Loop check function:

Comparator output, analog output

Filter function:

0ms, 25ms, 250ms, 2.5s

Self check function:

Over pressure • Error message for adjustment

Hold function:

Peak value • bottom value indication

Other function:

With one touch of zero adjustment, key lock

SPECIFICATION 2

Operating temperature:

-10 ~ 50℃

Operating humidity range:

35 ~ 85%RH (But should not be frozen)

Storage temperature:

-20 ~ 60℃

Construction:

IP40 (Indoor specification)

Weight:

Approx. 95g (Panel mounting) Approx. 140g (Surface mounting)

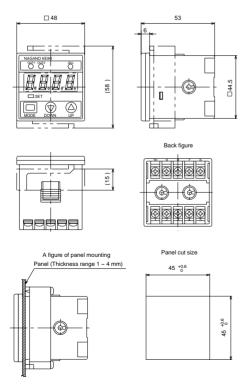
Differential pressure range and max. value for each unit:

Differential pressure range		Max. display value				Differential pressure display (GC62-□□1)	Indication accuracy by root scale (GC62-□□2)
		Pa	kPa	mmHg	mmH2O	etc.	root
0 ~ 50Pa	±50Pa	50.0		0.375	5.10	Scaling indication at any optional valve is available within	Setting at any optional valve is available within 0 ~ 2999
0 ~ 100Pa	±100Pa	100.0		0.750	10.20		
0 ~ 200Pa	±200Pa	200.0		1.500	20.39		
0 ~ 0.5kPa	±0.5kPa	500.0	0.500	3.75	51.0	-1999 to +2999	
0 ~ 1kPa	±1kPa	1000.0	1.000	7.50	102.0		
0 ~ 2kPa	±2kPa		2.000 (2.00)	15.00	203.9 (204)		
0 ~ 5kPa	±5kPa		5.00	37.5	510		
0 ~ 10kPa	±10kPa		10.00	75.0	1020		
0 ~ 20kPa			20.00 (20.0)	150.0	2039		

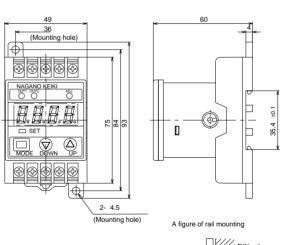
- * Minus mark (-) is displayed for compound.
- * Value in parenthesis is the max. display value at compound range.
- * GC62- a is available within 0 ~ 1kPa, Pa mmH2 only.

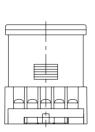
DIMENSIONS

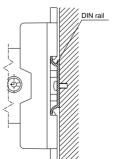




Surface mounting







WIRING · Panel mounting Surface mounting Analog output Analog output Θ **① (**+) Θ Empty Empty **500000** Empty Empty Low side High side (10) (9) High side Low side (9) -(10)-OUT2 OUT1 Back Front 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. Selection spec. Additional spec. (Option) Digital pressure gauge 10 12 13 G C 6 2 Type No 1 Mounting -Surface mounting 8 Analog output

0 Nil

4 ~ 20mA DC 1 ~ 5V DC

Relay output \times 2 points

(110V AC 0.2A)

12 ~ 24V DC ±10% 15 ~ 24V DC ±10%

* 4 ~ 20mA DC only

7 Comparator output

6 Power source

(1.5% F.S. ±1digit for the range

15 Document

Please specify your requirement

Mill sheet, Test report

Drawing one sheet, Instruction

manual, Inspection procedure,

0

5 Accuracy

Display accuracy:

±1%F.S. ±1digit

200 Pa or less)

Panel mounting

2 Process connection

1 G1/8

3

4

5

3 Display

5 DIA. barb (Straight)

7 DIA. barb (Straight)

7 DIA. barb (Rotary)

Rc 1/8 Conversion joint

* 2m vinyl tube is attached for above 2 to 4.

Differential pressure display

0 ~ 50Pa

0 ~ 100Pa

0 ~ 200Pa

0 ~ 0.5kPa

0 ~ 1kPa

0 ~ 2kPa

0 ~ 5kPa

0 ~ 10kPa 0 ~ 20kPa

■ Caution of operation

Indication accuracy by root scale

4 Differential pressure range

±50Pa

±100Pa

±200Pa

±0.5kPa

±1kPa

±2kPa

±5kPa ±10kPa

GC62-□□2 is available within 0 ~ 50Pa → 0 ~ 1kPa
 Available to display negative pressure only.

Please do not use corrossive gas or liquid.

• Pressure port can be selected from back or side but the one which is not used (H or L)must be closed.

* Minus mark (-) is displayed for compound or negative pressure

* Value in parenthesis is the max. display value at compound range.

. Sensing part is applicable to dry air, water mist air or nitrogen gas.

Tightaning forgue for G1/8 should not exceed 1N/m (10.2kgf • cm).

Joint for 6 mm Dia. metal pipe