



GC61 Digital Pressure Gauge

OUTLINE

This is a digital pressure gauge with built-in highly reliable vapor-deposited semiconductor pressure sensor. It can be used to monitor and control the oil pressure, water pressure, and other pressure lines in various industrial machines and facilities. A digital display and transmitter + switch are compactly integrated, and loop check, scaling check, and other intelligent functions are provided.

FEATURES

- Vapor-deposited semiconductor pressure sensor makes it extremely durable and stable. Reliability is also superb because the sensor body and socket are welded.
- A bright, easy-to-read 4-digit LED display is used. The case construction has cleared IP65 (dust-proof, jet-proof).
- The GC61 can be used as a display, transmitter, and switch. Loop check, scaling, and other intelligent functions are also provided.

SPECIFICATION 1

Fluid:

Air, water, oil (gases and liquid do not corrode the connection)

Operating environment:

Places where there are no inflammable liquids or gases which may cause ignition or explosion under normal conditions.

Mounting:

Vertical mounting or horizontal mounting

Connection:

R1/4

Wetted parts materials:

Sensor SUS630 (17-4PH) +SUS316

Pressure range:

0~0.5MPa→0~50MPa
-0.1~0.5MPa→-0.1~2MPa

Max. allowable pressure:

Twice the pressure range (For 35MPa or higher pressure, 1.5 times the pressure range.)

Accuracy:

Display accuracy $\pm(1\% \text{ F.S.} + 1 \text{ digit})$
Temperature coefficient $\pm 0.1\% \text{ F.S./}^\circ\text{C}$ (Zero point and span)

Display:

Display type 4-digit LED display (character height 8mm)
Display period 0.2s

Display units:

MPa

Power source:

12~24V DC $\pm 10\%$ (15~24V DC $\pm 10\%$ 4~20mA output)

Current consumption:

30mA or less (50mA or less 4~20mA output)

Comparator output:

NPN open collector (30V DC 80mA max.)
Response: 5ms or less
Dead band: Hysteresis mode: Variable
Window comparator mode: 1%F.S. fixed
Delay: 0~2.00s (Both ON and OFF)

Operation lamp:

Red LED (OUT1, 2) Lit when ON

Analog output: (Option)

4~20mA DC (Load resistance 400 Ω or less)
Or 1~5V DC (Load resistance 10k Ω or over)
* When 4~20mA DC was selected; a 15V DC or greater power source must be used.
Output accuracy: $\pm 1\% \text{ F.S.}$
Response time: 50ms or less

Scaling function:

Indicated value, analog output

Loop check function:

Comparator output, analog output

Filter function:

25ms, 250ms, 2.5s, 5s, 10s

Self check functions:

Over pressure, Over current, Except zero adjustment error display

Hold function:

Peak value, Bottom value indication

Other functions:

One touch zero adjustment, Key lock function

Operating temperature range:

-10~50 $^\circ\text{C}$ (There shall be no condensation and freezing.)

Operating humidity range:

35~85%RH (There shall be no condensation.)

GC61 Digital Pressure Gauge

SPECIFICATION 2

Storage temperature range:

-20~60°C (There shall be no freezing.)

Case material:

Front case PC/ABS (UL-94, V-0)

Rear case ADC12

Case construction:

IP65 (with atmosphere opening hole)

Weight:

Vertical mounting 175g (including 2m cable)

Horizontal mounting 155g (including 2m cable)

Pressure range and maximum display value for each unit:

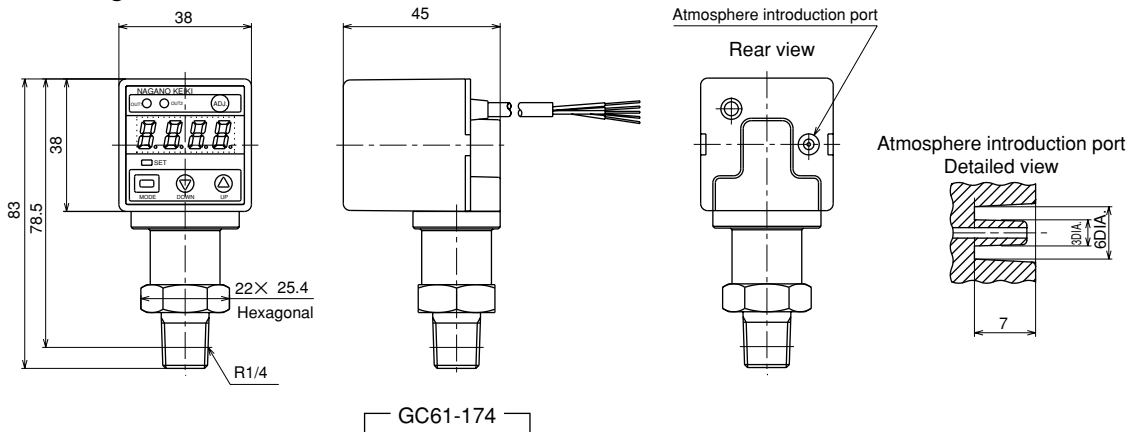
Pressure range (MPa)	Max. display value
	MPa
0~ 0.5, -0.1~0.5	0.500
0~ 1.0, -0.1~1.0	1.000
0~ 2.0, -0.1~2.0	2.000
0~ 3.5	3.50
0~ 5.0	5.00
0~10	10.00
0~20	20.00
0~35	35.0
0~50	50.0

* Minus symbol is displayed for compound.

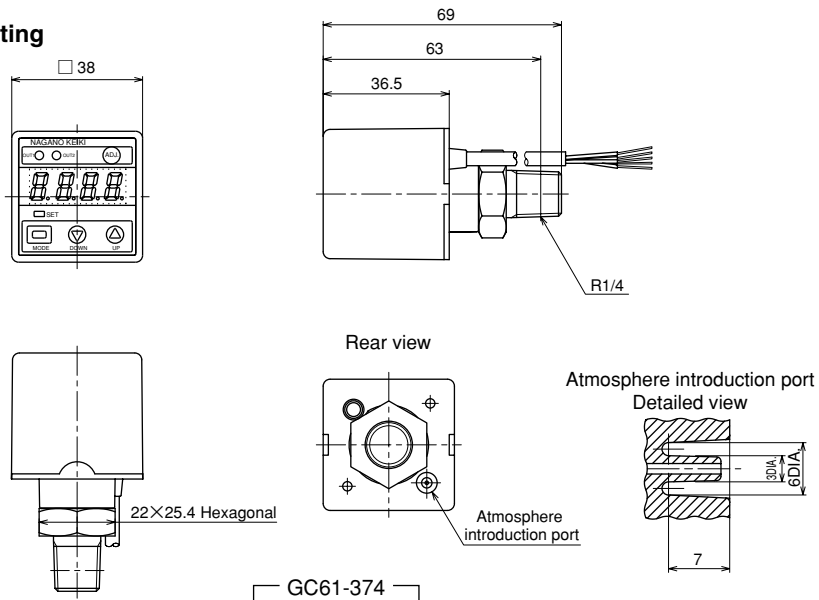
DIMENSIONS

(Unit: mm)

Vertical mounting

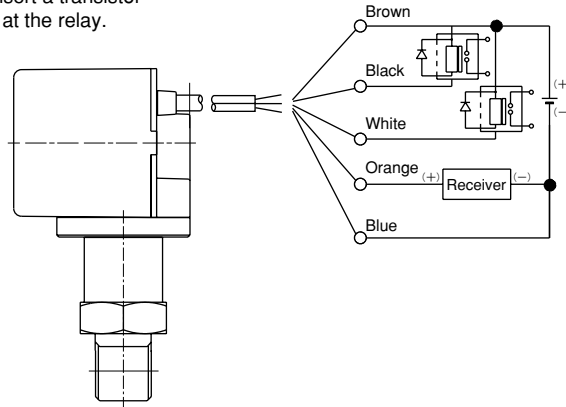


Horizontal mounting



WIRING

For relay load, insert a transistor protection diode at the relay.



Load resistance
 For 4~20mA DC 400Ω or less
 For 1~5V DC 10kΩ or over

Cable wiring color

- Brown . . . Power source (+) 12~24V DC
- Black . . . Open collector (OUT1)
- White . . . Open collector (OUT2)
- Orange . . . Analog output (+)
(4~20mA DC or 1~5V DC)
- Blue . . . Power source (-)

Model number configuration

For ordering, please specify the model number, each specs and range.

Digital pressure gauge		①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩	⑪	⑫	⑬	⑭	⑮	
Model		Selective spec.							Additional spec. (Option)								
GC61		7	4		7			3			X	X	X	X	X		
①	Mounting	1	Vertical mounting														
		3	Horizontal mounting														
②	Connection	7	R 1/4														
③	Wetted parts materials	4	Sensor SUS630 (17-4PH) +SUS316														
(When ordering, please specify the range and units separately.)	④ Pressure range (MPa)	1	-0.1~0.5, 1, 2														
		2	0~0.5, 1, 2, 3.5														
		3	0~5, 10														
		4	0~20, 35														
		5	0~50														
⑤	Accuracy	7	±(1%F.S. + 1 digit)														
⑥	Power source	N	12~24V DC±10%														
		P	15~24V DC±10% * 4~20mA DC output														
⑦	Signal output	3	NPN open collector output × 2 (30V DC, 80mA max.)														
⑧	Analog output	0	Nil														
		1	4~20mA DC														
		8	1~5V DC														
⑨	Treatment	0	Nil														
		1	Use no oil														
		2	Use no water														
		3	Use no oil & water														
⑮	Documents	0	Nil														
		1	Required (Please specify the desired documents separately.) Submission drawings, instruction manual, inspection procedure, test report (1 pc 1 copy), traceability certificate, inspection certificate, standard inspection report, strength calculation sheet, attended inspection														

Specify "X" if there is no specification item.



NAGANO KEIKI CO., LTD.

OVERSEAS SALES DEPT

: 1-30-4, HIGASHIMAGOME OHTA-KU, TOKYO, JAPAN

Phone : +81-3-3776-5328

F a x : +81-3-3776-5447

E-mail : overseas_sales_dept@naganokeiki.co.jp

URL : <http://www.naganokeiki.co.jp/>

GERMANY

- ADZ NAGANO GmbH
Bergener Ring 43
01458 Ottendorf-Okrilla
Phone : +49-35205-596930
F a x : +49-35205-596959
- Nagano Keiki Solutions Support Center
Bergener Ring 43
01458 Ottendorf-Okrilla
Phone : +49-35205-75701
F a x : +49-35205-75702

CHINA

- NAGANO FUKUDA (Tianjin)
Instruments CO., LTD.
10 Muning 1st Avenue TEDA Tianjin China
Phone : +86-22-5981-0966
+86-22-6620-4348
F a x : +86-22-5981-0967
+86-22-6620-4349

KOREA

- KOREA NAGANO CO., LTD.
#296-2 Osan-ri,
Dongtan-myun, Hwaseong-shi,
Kyonggi-do, Korea
Phone : +82-31-379-3934
F a x : +82-31-379-3936

JAPAN

- OVERSEAS
SALES DEPT.

U.S.A.

- DRESSER-NAGANO, INC.



- OVERSEAS PLANT
- OVERSEAS SALES NETWORK

Gets ISO 9001, ISO 14001, ISO/TS 16949 Certification

The contents in the catalogue are subject to change without notice.