



Model GC10 • 11 Precision Digital Pressure Gauges

OUTLINE

This is a high-performance digital pressure gauge equipped with a thin film strain gauge for the pressure-electric conversion portion, and can be used in manufacturing process, research and gauge calibration.

The maximum indication of model GC10 is 1999, and that of model GC11 is 19999 increasing the reading precision.

FEATURES

- For the conversion portion, a thin film gauge directly constituted the strain sensing portion is used, resulting in excellent stability and durability.
- This pressure gauge is of high-precision type.
- This pressure gauge is small in size and easy to bring. A battery (Ni-Cd battery) can be built in. (Option)
- By combining it with a pressure controller, this pressure gauge can be used as an air pressure tester. (Option)

SPECIFICATION 1

Fluid:

Gas or liquid

Operating condition:

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

Max. display:

GC10 1999

GC11 19999

Connection:

Rc1/4 (PT female)

Wetted parts material :

Socket 316st.st.

Sensing parts 316st.st.

Pressure range:

0 ~ 2kPa → 0 ~ 20MPa (0 ~ 200mmH₂O → 0 ~ 200kgf/cm²)

-100 ~ 0kPa (76cmHg ~ 0kgf/cm²)

0 ~ 100kPa abs. (76cmHg abs.),

0 ~ 200kPa abs. (150cmHg abs.)

* Compound range is also available.

Max. allowable pressure:

120% of rated pressure

Operating temperature:

0 ~ 40°C

Power source:

100V AC ±10% 50/60Hz

* Built-in battery (Ni-Cd Dry cell) Option

Output:

Analog output

(Output resistance 100Ω Maximum allowable current Less than 2mA)

* Digital output (B.C.D.) is available by GC10 only as option.

Effect of line voltage fluctuation:

Less than ± 0.03 % at ± 10 %

Accuracy:

± (0.2 % F.S.+1digit) or ± (0.1%F.S.+1digit) at 23 ± 3°C
(Include linearity, hysteresis, repeatability)

(Depending on range)

Temperature coefficient:

Less than ± 0.01 % F.S. / °C

Accuracy of ± (0.1 % F.S. + 1 digit)

Less than ± 0.02 % F.S. / °C

Accuracy of ± (0.2 % F.S. + 1 digit)

Display:

GC10 3 1/2 figure LED (Character height 14.2mm)

GC11 4 1/2 figure LED (Character height 14.2mm)

Unit:

kPa, MPa, kgf/cm², mmHg

* %, (Pressure from 20 ~ 100kPa is indicated in 0 ~ 100 %

But only 100kPa, 200kPa range) Option

* Unit change-over switch (Max. 4 channel) Option

Case material, finishing :

Aluminum, Gray

Construction :

Indoor type

Weight:

Approx. 3.5 kg (With battery)

SPECIFICATION 2

Max. display • accuracy:

Pressure range	Max. display		Accuracy
	GC10	GC11	
0 ~ 2kPa (0 ~ 200mmH ₂ O)	1.999	—	(0.2%F.S.+1digit)
0 ~ 3kPa (0 ~ 300mmH ₂ O)	—	3.000	
0 ~ 4kPa (0 ~ 400mmH ₂ O)	—	4.000	
0 ~ 6kPa (0 ~ 600mmH ₂ O)	—	6.000	
0 ~ 10kPa (0 ~ 1000mmH ₂ O)	10.00	10.000	(0.1%F.S.+1digit)
0 ~ 20kPa (0 ~ 2000mmH ₂ O)	19.99	19.999	
0 ~ 30kPa (0 ~ 3000mmH ₂ O)	—	30.00	
0 ~ 40kPa (0 ~ 4000mmH ₂ O)	—	40.00	
0 ~ 60kPa (0 ~ 6000mmH ₂ O)	—	60.00	
0 ~ 100kPa (0 ~ 1kgf/cm ²)	100.0	100.00	
0 ~ 200kPa (0 ~ 2kgf/cm ²)	199.9	199.99	
0 ~ 300kPa (0 ~ 3kgf/cm ²)	—	300.0	

Pressure range	Max. display		Accuracy
	GC10	GC11	
0 ~ 400kPa (0 ~ 4kgf/cm ²)	—	400.0	(0.1%F.S.+1digit)
0 ~ 600kPa (0 ~ 6kgf/cm ²)	—	600.0	
0 ~ 1MPa (0 ~ 10kgf/cm ²)	1.000	1.0000	
0 ~ 2MPa (0 ~ 20kgf/cm ²)	1.999	1.9999	
0 ~ 3MPa (0 ~ 30kgf/cm ²)	—	3.000	(0.2%F.S.+1digit)
0 ~ 4MPa (0 ~ 40kgf/cm ²)	—	4.000	
0 ~ 6MPa (0 ~ 60kgf/cm ²)	—	6.000	
0 ~ 10MPa (0 ~ 100kgf/cm ²)	10.00	10.000	
0 ~ 20MPa (0 ~ 200kgf/cm ²)	19.99	19.999	
-100kPa (76cmHg) ~ 0	-100.0	-100.00	
0 ~ 100kPa abs. (76cmHg abs.)	100.0	100.00	
0 ~ 200kPa abs. (150cmHg abs.)	199.9	199.99	

Pressure controller (Option)

As a combination with GC10 • GC11 (in pressure range 0 ~ 100 kPa → 0 ~ 600 kPa), it can be used as pneumatic pressure tester.

Pressure range: (Secondary pressure)

200kPa (2kgf/cm²), 600kPa (6kgf/cm²)

Max. supply pressure: (Primary pressure)

700kPa (7kgf/cm²)

Connection:

Rc 1/4 (PT female)

Case material • finishing:

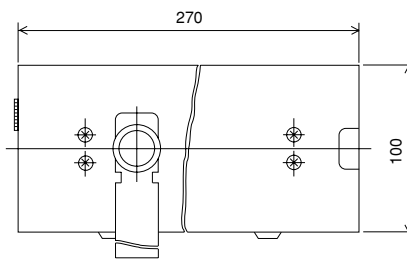
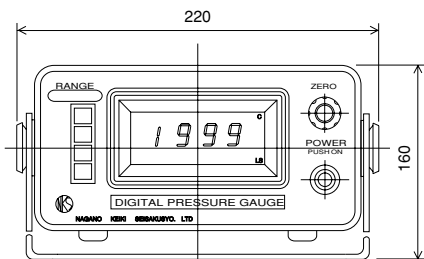
Aluminum alloy • Gray

Weight:

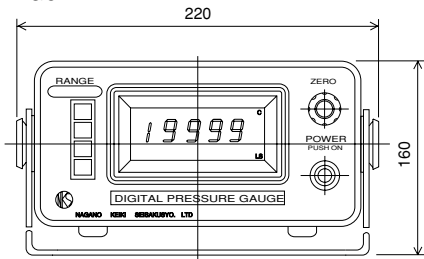
Approx. 3 kg

DIMENSIONS

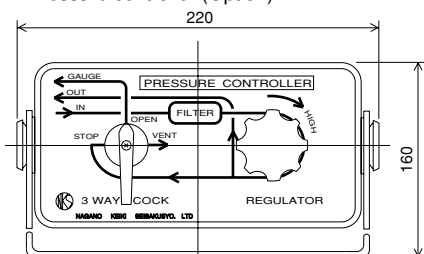
GC10



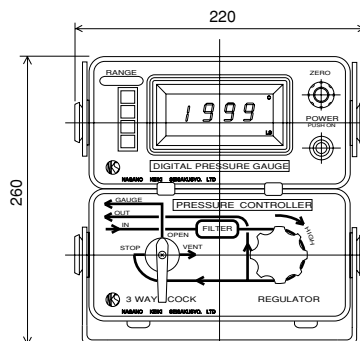
GC11



Pressure controller (Option)



Pressure gauge, controller combination example

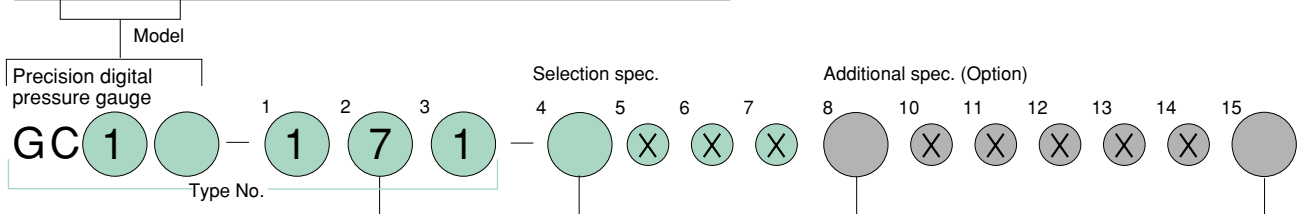


Type No. constitution

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.

G	C	1	0	Precision digital pressure gauge	Max. display 1999
G	C	1	1	Precision digital pressure gauge	Max. display 19999



2 Connection

7	Rc1/4
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4 Pressure range In case of GC10
(When ordering,please specify pressure range & unit.)

1	0 ~ 2kPa
2	0 ~ 10, 20kPa
3	0 ~ 100, 200kPa 0 ~ 1MPa
4	0 ~ 2, 10, 20MPa
5	-100 ~ 0kPa
6	0 ~ 100, 200kPa abs.

4 Pressure range In case of GC11
(When ordering,please specify pressure range & unit.)

1	0 ~ 3, 4, 6kPa
2	0 ~ 10, 20, 30, 40kPa
3	0 ~ 60, 100, 200, 300kPa 0 ~ 400, 600kPa 0 ~ 1MPa
4	0 ~ 2, 3, 4, 6, 10, 20MPa
5	-100 ~ 0kPa
6	0 ~ 100, 200kPa abs.

8 Other additional spec.

0	Nil
1	Please specify your requirement Pressure controller builin battery charge type compound pressure gauge % indication digital output (B.C.D.) option, 200% indication unit change-over switch option

15 Document

0	Nil
1	Please specify your requirement Drawing one sheet, Instruction manual, Inspection procedure, Mill sheet, Test report