

Cat No
KN-4-14

Model NDG97 · 98 Differential Pressure Gauges With Switch



OUTLINE

This is a compact differential pressure gauge, to check the pressure difference (differential pressure) between two points. This pressure gauge can also be used for measuring liquid level and flow rate. Reed switches are installed the differential pressure gauge used for measuring equipped with contactors, allowing use for warning and controlling.

FEATURES

- ◆ Pressure piping can be connected to either upper side or lower side of this pressure gauge, making the piping work easier.
 - ◆ Certified pressure gauges complying with the High Pressure gas control Law are also available. (option) (however, they cannot be applied to poisonous gas)
- * The base pressure refers to the pressure to be used as the basis out of pressure at two points, or a pressure with smaller fluctuation.
One-sided pressure tight means the maximum differential pressure.

SPECIFICATION 1

<p>Model : NDG97· 98 Differential pressure gauge With Contact Switch</p> <p>Fluid : Gas or Liquid</p> <p>Operating condition : In case of NDG97· 98 Under the normal condition, where there is no inflammable gas and liquid which case the ignition or explosion.</p> <p>Installation system : 2B Pipe installation, Surface mounting type</p> <p>Size : NDG97 100DIA. NDG98 150 DIA.</p> <p>Connection : Rc1/4(PT female), 1/4 NPT female</p> <p>Wetted parts material : Body CF8M Bellows 316L st.st. Gasket NBR</p> <p>Differential pressure range : 0 ~ 5kPa → 0 ~ 1MPa</p> <p>Base pressure : 5MPa</p>	<p>Operating temperature Ambient : -20 ~ 60 °C</p> <p>One side pressure tight ; 0.2~1.2MPa (Depend on differential pressure range)</p> <p>Indication accuracy : ±1.5%F.S (NDG97,98 Below 10kPa is ±2.0%F.S.)</p> <p>Case material · finishing : NDG97, 98 AC7A Black</p> <p>Dial scale specified : (Option) Printed words, colored circle, customer's logo</p> <p>Case of Protection : IP65</p> <p>Weight : Approx. 2.9 kg ~ Approx. 4.3 kg</p> <p>Valve-manifold : (Option) Three-way valve manifold which combined the stop valve for high and low pressure and stop valve. This valve manifold is suitable for checking zero point or zero adjustment during operation and also available to prevent excess differential pressure or reversal differential pressure. Type No. : FV43-991, FV43-993</p>
---	---

NDG97 - 98 DIFFERENTIAL PRESSURE GAUGE WITH ELECTRIC CONTACT

Setting accuracy :

±2.0% F.S

Repeatability

1% F.S.

Dead bane :

Fixed. within 5% F.S.

Temperature coefficient :

± 0.05%F.S./°C

Switch :

Reed switch

Number of contact ;

One contact or two contact

Setting system :

External adjustment type
with setting lock

Outlet for electric wire :

Conduit type PF3/4", PF1/2",
1/2"PT, 1/2"NPT


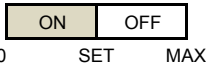
Electrical characteristic :

Switch	Rating	Withstand voltage	Insulation resistance
Reed switch	125V AC 0.2A	Non-continuation Terminal interval	500V DC
	200V DC 0.25A	400V AC 1minute	Over 100MΩ
	50V DC 1A	Between terminal and case	Between terminal and case
	(Resistance load)	600V AC 1minute	

* The contact protective circuit is required especially when the inductive load or the other load with a flow of surge current is used as the load of the Reed switch.

* 200V AC should not be used.

TYPE OF CONTACT POINT AND WIRING SYSTEM

Model	Type of contact point	Mark	A figer of operation system and operation	Connection terminal number	Setting pointer
NDG97 NDG98	Upper limit with one contact (Reverse lower limit type with one contact)	H (LR)	When the differential pressure rises (decreases) to a set value, contact point work to turn a circuit ON(OFF). Pressure up → 	① - ②	Red pointer
	Lower limit with one contact (Reverse lower limit type with one contact)	L (HR)	When the differential pressure rises (decreases) to a set value, contact point work to turn a circuit OFF(ON). ← Pressure doen 	③ - ④	Yellow pointer
	Upper and lower limit type with tow contact (Reverse lower and upper limit type with two contact)	HL (HRLR)	This is the combination of the upper limit type(rever lower limit type)and the lower limit type(rever upper limit typ)and each works independently	① - ② ③ - ④	Red pointer Yellow pointer
	Upper limit with two contact (Reverse lower limit type with two contact)	2H (2LR)	This is the combination of two upper limit type(rever lower limit type)and each works independently	① - ② ③ - ④	Red pointer Yellow pointer
	Lower limit with two contact (Reverse lower limit type with two contact)	2L (2HR)	This is the combination of two lower limit type(rever upper limit type)and each works independently	① - ② ③ - ④	Red pointer Yellow pointer

SPECIFICATION 2

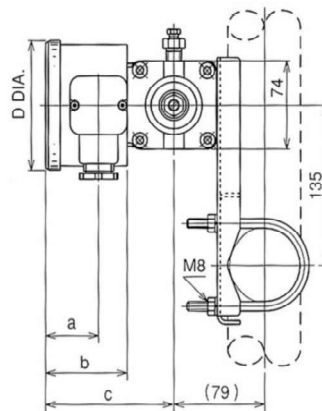
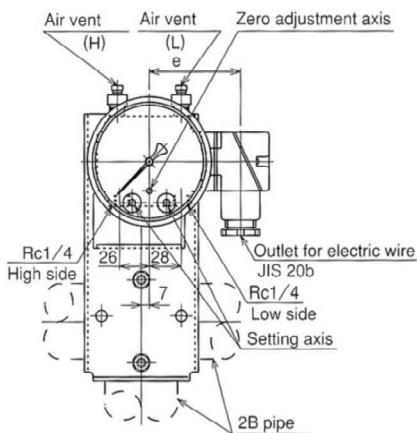
Minimum graduation :

Differential pressure range	One side pressure tight	Minimum graduation
0 ~ 5 kPa	0.2MPa	0.1 kPa
0 ~ 7		0.2
0 ~ 10		0.2
0 ~ 15		0.5
0 ~ 20		0.5
0 ~ 30	0.4MPa	1
0 ~ 40		1
0 ~ 50		1
0 ~ 70		2
0 ~ 100		2
0 ~ 200	1.2MPa	5
0 ~ 300		10
0 ~ 400		10
0 ~ 600		20
0 ~ 1MPa		0.02MPa

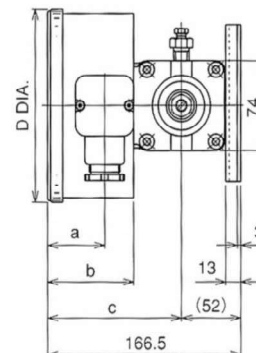
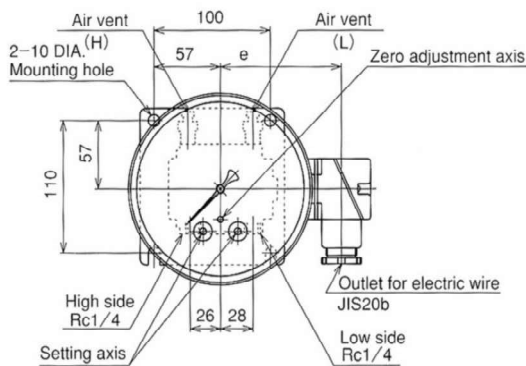
DIMENSION 1

(Unit : mm)

2B Pipe installation



Wall mounting type

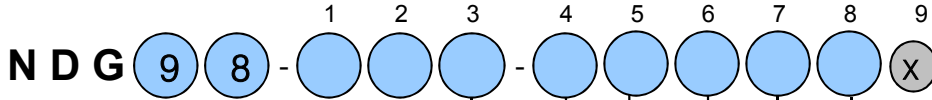


Model	D	e	a	b	c
NDG97	109	80	46.5	71.5	112.5
NDG98	159	104	49	74	115

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



Model

NDG97	100DIA
NDG98	150DIA

1. Installation system

1	2B Pipe installation
2	Surface mounting

2. Connection

7	1/4"PT(F)
X	1/4" NPT(F)

3. Wetted parts material

3	Case : AC7A Body : SCS14(CF8M)/Belolws : 316L st.st.
---	---

4. Accuracy

1	±1.5% F.S
---	-----------

5. Differential Pressure Scale

A	0 ~ 5kPa	K	0 ~ 0.2MPa
B	0 ~ 7kPa	L	0 ~ 0.3MPa
C	0 ~ 10kPa	M	0 ~ 0.4MPa
D	0 ~ 15kPa	N	0 ~ 0.5MPa
E	0 ~ 20kPa	O	0 ~ 0.6MPa
F	0 ~ 30kPa	P	0 ~ 0.7MPa
G	0 ~ 40kPa	Q	0 ~ 0.8MPa
H	0 ~ 0.05MPa	R	0 ~ 0.9MPa
I	0 ~ 0.07MPa	S	0 ~ 1MPa
J	0 ~ 0.1MPa	Z	Other Scale

8. Outlet for electric wire

A	PF1/2(F)
B	PF3/4 (Standard)
C	1/2PT(F)
D	1/2NPT(F)

7. Type of contact point

1	H : Upper limit type with one contact
2	L : Lower limit type with one contact
3	HL : Upper and lower limit type with two contact
4	2H : Upper limit type with two contact
5	2L : Lower limit type with two contact

6. Switch

0	Reed switch
---	-------------

NKS KOREA NAGANO CO., LTD.

HEAD OFFICE & : 120-1, Dongbu-daero 970beon-gil, Hwaseong-si, Gyeonggi-do Korea, 18481,
SALES DEPT

TEL. : 82- 31- 379- 3934

FAX. : 82- 31- 379- 3936