

Model NDG16 · 17

Differential Pressure Gauges



OUTLINE

This differential pressure gauge is compactly de-signed to measure differential pressure of 2 places. This can be used for not only measurement of differential pressure, but also measurement of tank level, loss of head of strainer or flow measurement of pipe-line by combination with orifice.

Micro switch is used for the diff. pressure gauge with electric contact and suitable for ON-OFF control.

FEATURES

- ◆ It can bear high pressure by liquid filled in the element interior, and isn't damaged even if extreme extravagance pressure, reverse pressure acts by valve operation.
- ◆ Process pipe lavina connection gets vent plug whether it is an account, and can select it in top and bottom freedom.

* Case of demand asks for a unit of a street (kgf/cm² single dial) up to now as ordered.

SPECIFICATION 1

Model :

NDG16 Differential pressure gauge
NDG17 Differential pressure gauge with electric contacts

Fluid :

Gas or liquid

Operating condition :

In case of NDG17 under the normal condition, where there is no inflammable gas and liquid which case the ignition or explosion.

Mounting type :

2B Pipe mounting, Panel mounting (NDG16 only), Surface mounting

Filled liquid :

Silicone oil (General use), Daifloil (Oxygen use)

Size :

150 DIA.

Connection

Rc1/4(PT female), 1/4NPT female

Wetted parts material :

Body SCS14A
Bellows 316L st.st.
Gasket NBR

Differential pressure range :

0 ~ 10kPa → 0 ~ 0.3MPa

Base pressure :

0 ~ 10MPa, 0 ~ 20MPa (Option)

One side pressure tight : 10MPa (100kgf/cm²)

Operating temperature :

-20 ~ 60 °C (But fluid should not be frozen)

Indication accuracy :

±0.5%F.S.(NDG16 Only), ±1.0%F.S., ±1.5%F.S.
(Only Capillary Type & Low Diff. Range 20kPa Less ±1.0%F.S.)

Blowout disk :

When an emergency, Bourdon tube exploded, it open up internal pressure from blowout disk, and blowout disk prevents puncture of Window.

Note To keep normal function, please take a space behind of gauge at least 10mm when installing.
Don't process or stop up the blowout disk.

Case material · finishing :

Aluminium alloy casting (AC7A) · Black

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 pressrue.

Type No. : FV43-991, FV43-993

Dial scale specified : (Option)

Printed words, colored circle, customer's logo

Construction :

IP66 (NEMA 4)

Weight : NDG16 Approx. 5.2kg ~ approx. 5.9kg
NDG17 Approx. 6.4kg ~ approx. 6.6kg

NDG17 DIFFERENTIAL PRESSURE GAUGE WITH ELECTRIC CONTACT

Setting accuracy :

Within 1%F.S

Dead band :

Fixed, within 8%F.S.

Temperature coefficient :

± 0.05%F.S./°C

Switch :

Micro switch

Number of contact ;

One contact or two contact

Setting system :

Internal adjustment type (0~100% scale)
with setting lock

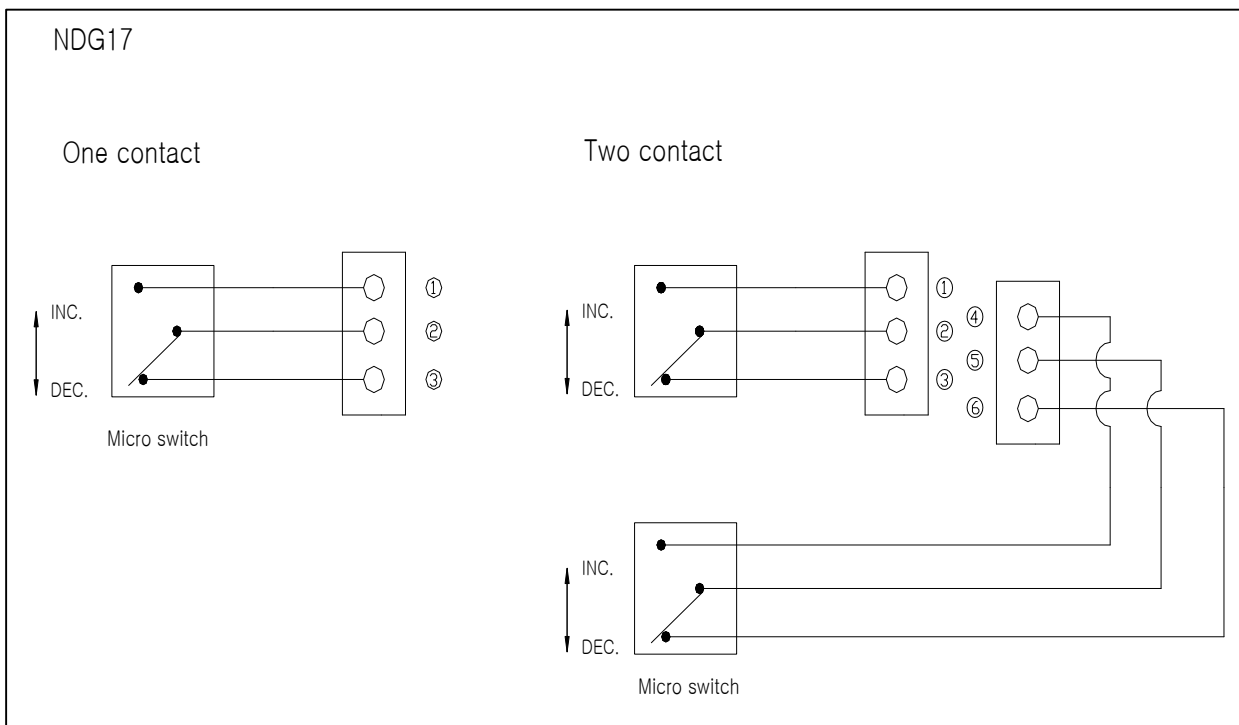
Outlet for electric wire :

Conduit type PF 3/4", PT 3/4",
NPT 3/4"

Electric characteristics :

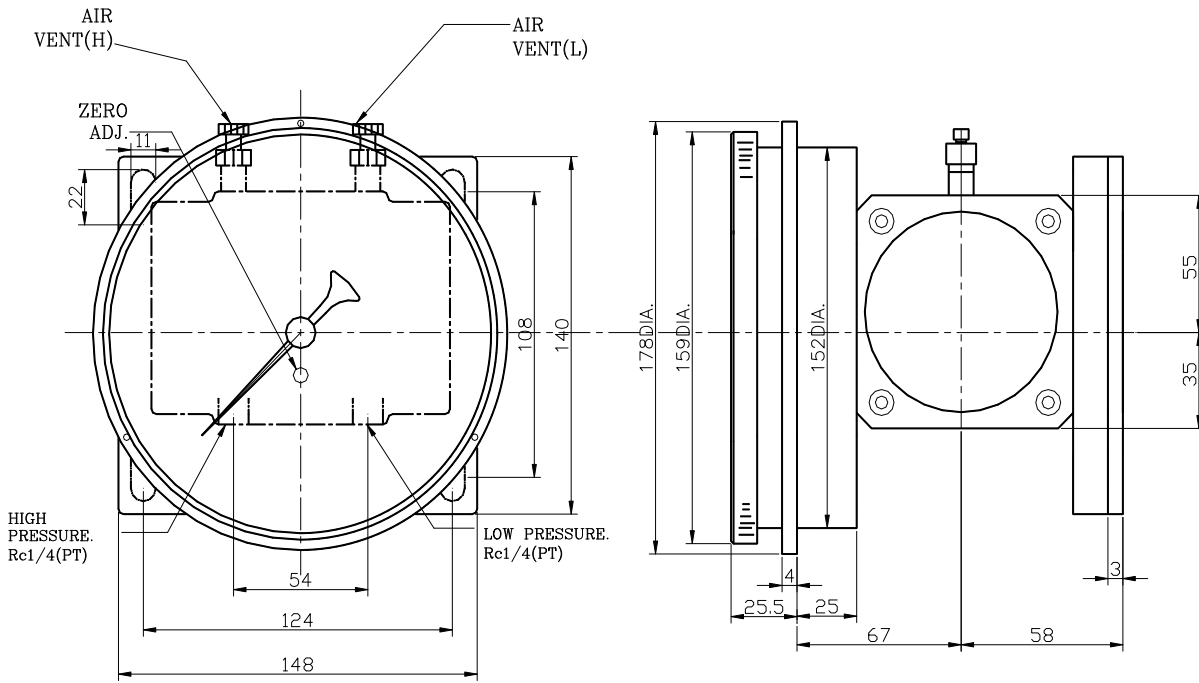
	Rating		Withstand voltage	Insulation resistance	Load inductive
	Load resistance	Inductive load			
125V AC	5A	3A	1500V AC Between terminal and case 1 minute	500V AC 100MΩ over Between terminal and case	Power factor 0.4 over (AC) Time-constant 0.7 or less (DC)
250V AC	5A	3A			
30V DC	5A	3A			
125V DC	1A	0.4A			

WIRING

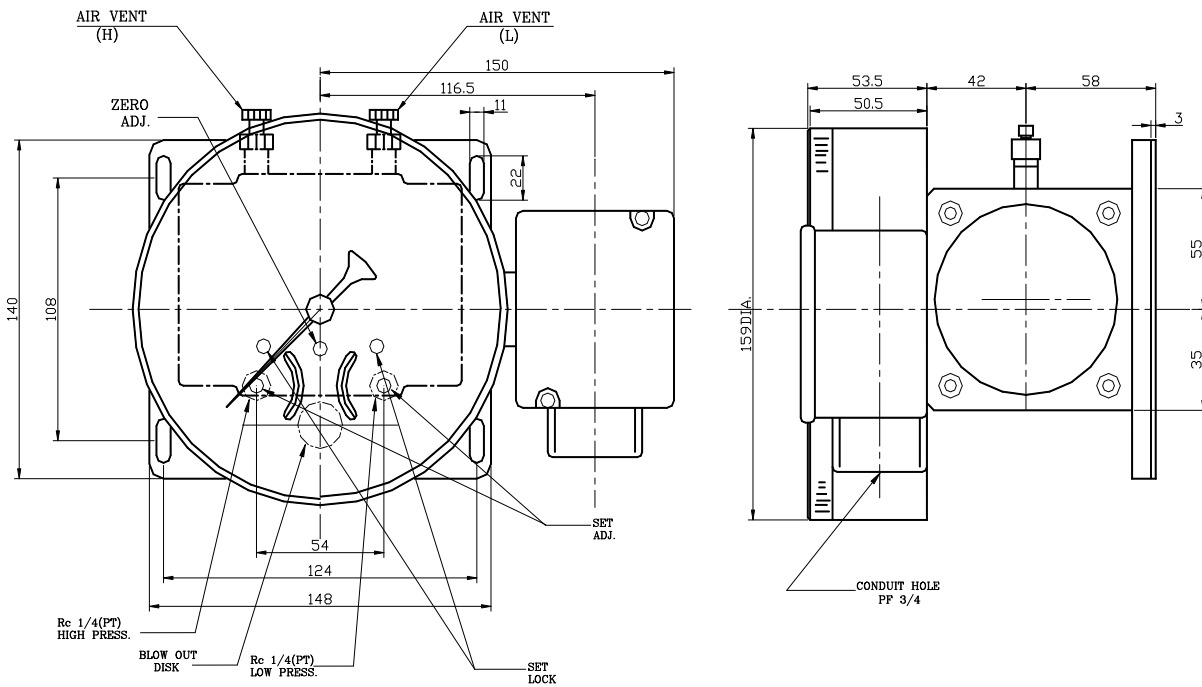


DIMENSIONS

NDG16



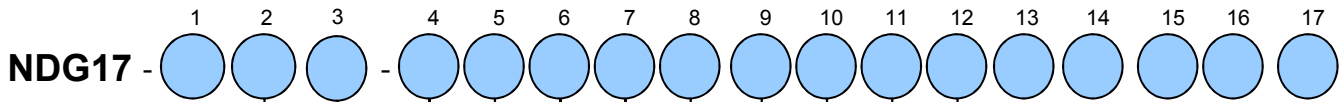
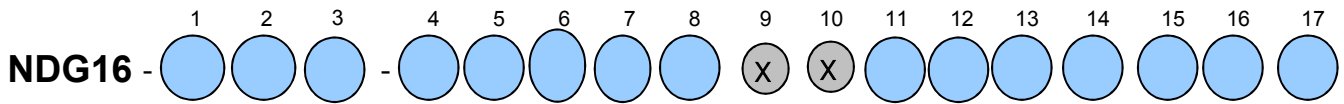
NDG17



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



1. Mounting type

1	2B pipe mounting
2	Panel mounting NDG16 only
3	Surface mouting

2. Connection

7	Rc 1/4 female
X	1/4NPT female

3. Wetted part material (Filled liquid)

3	General use (Silicone oil)
7	Oxygen use (Daifloil)

4. Base pressure

1	10MPa(100kgf/cm ²)
2	20MPa(200kgf/cm ²)

5. Type

1	Diff. Pressure Type
2	Flow Type
3	Level Type

6. Accuracy

1	±0.5% F.S.(NDG16 Only)
2	±1.0% F.S
3	±1.5% F.S

7. Differential pressrue range

A	0 ~ 10 kPa	G	0 ~ 0.15 MPa
B	0 ~ 20 kPa	H	0 ~ 0.2 MPa
C	0 ~ 25 kPa	I	0 ~ 0.25 MPa
D	0 ~ 0.05 MPa	J	0 ~ 0.3 MPa
E	0 ~ 0.07 MPa	K	0 ~ 0.35 MPa
F	0 ~ 0.1MPa	L	Other

8. Construction

1	Not Remote Seal
2	Remote Seal

14. Selection code

Diaphragm seal CC

13. Remote Seal Length

0	Nil	G	7m
B	1m	H	9m
C	2m	I	10m
D	3m	J	12m
E	4m	K	15m
F	5m	L	Other

12. Treatment

0	Nil and wetted parts material is a case for oxygen
1	Use no oil
2	Use no water
3	Use no oil & water

11. Other additional spec.(Option)

0	Nil
1	3-Way Manifold Valve
2	5-Way Manifold Valve

10. Outlet for electric wire (Conduit type)

0	Nil
2	PF1/2"(F)
3	PF3/4" (Standard)
A	PT3/4"(F)
B	NPT3/4"(F)

9. Type of contact

0	Nil
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 thpe with two contact
B	HLR : Upper limit type,reverse lower limit type

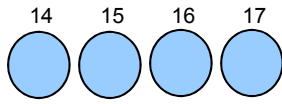
NKS KOREA NAGANO CO., LTD.

HEAD OFFICE & : #296-2, Osan-ri, Dongtan-myun, Hwaseong City, Gyeonggi Province, 445-813,
SALES DEPT KOREA

TEL. : 82- 31- 379- 3934

FAX. : 82- 31- 379- 3936

Selection Code for Diaphragm Seal



17. Diaphragm material

0	Nil	
A	SUS 316L	304SS (Upper flange)
B	MONEL	
C	Hastelloy-C	
D	Tantalum	
E	316L SS + Teflon	
F	SUS 316L	316SS (Upper flange)
G	MONEL	
H	Hastelloy-C	
I	Tantalum	
J	316L SS + Teflon	

16. Under flange

0	Nil
A	304SS
B	316SS
C	316L SS
D	Monel
E	Hastelloy-C
F	316SS + Teflon

15. Process con'n 2

0	Nil
A	PF
B	PT
C	NPT
D	ANSI 150# RF
E	ANSI 150# FF
F	ANSI 300# RF
G	ANSI 300# FF
H	ANSI 600# RF
I	ANSI 600# FF
J	ANSI 1500# RF
K	ANSI 1500# FF

14. Process con'n 1

0	Nil
1	3/8"
2	1/2"
3	3/4"
4	1"
5	1-1/2"
6	2"
7	2-1/2"

 **KOREA NAGANO CO., LTD.**

HEAD OFFICE : #296-2, Osan-ri, Dongtan-myun, Hwaseong City, Gyeonggi Province, 445-813,

SALES DEPT KOREA

: 82- 31- 379- 3934

: 82- 31- 379- 3936