



CL21 Differential Pressure Switch

OUTLINE

This is a differential pressure switch which sends an on and off electric signal in accordance with differential pressure mainly for the application of liquid level warning in a closed tank and the clogging check in a pipe line strainer.

A microswitch with extensive application and high reliability is applied to the contact.

FEATURES

- This differential pressure switch is extensively applied to general industrial machinery including the differential pressure control in a power station, etc.
- The exterior appearance is compact.
- The construction is simple.
- In case of selecting pressure gauge, choose the pressure range which can be used in between 30 ~ 65% of full scale, so that the gauge can give its full capacity.
- Useing This Diiferential Pressure Switch
It the pressure larger than differential pressure is applied to the one pressure switch will be damaged. So, careful attention is required. Especially at the time of starting and finishing, this type of phenomena can occur. Therefore, a bypass cock or a bypass valve is recommended.

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.

Connection:

G3/8B(PF)

Wetted parts material:

General use

Body Copper alloy (C2801P)

Bellows Phosphor bronze (C5212R)

Corrosion-proof use

Body 316st.st.

Bellows 316Lst.st.

Differential pressure range:

0.02 ~ 0.1 → 0.3 ~ 1.5MPa (0.2 ~ 1 → 3 ~ 15kgf/cm²)

Base pressure:

0 ~ 1MPa (0 ~ 10kgf/cm²)

* It may become use inability when accompanied by negative pressure.

Operating temperature:

-5 ~ 40°C (But fluid should not be frozen)

Setting accuracy:

Within ±3%max. P.

Repeatability:

Within 1.5%max. P.

Temperature coefficient:

0.05%max.P./

Dead band:

Fixed 0.02 ~ 0.15MPa or less (0.2 ~ 1.5kgf/cm²)
(Depending on differential pressure range)

Switch:

JIS C4505 Industrial micro switch

Number of contact:

One contact

Setting system:

External adjustment type

Outlet for electric wire:

Gland JIS 20b

Case material-finishing:

Aluminium alloy casting (AC7A)-Black

Construction:

Drip-proof (IP32)Weight:

Approx. 1.0kg

SPECIFICATION 2

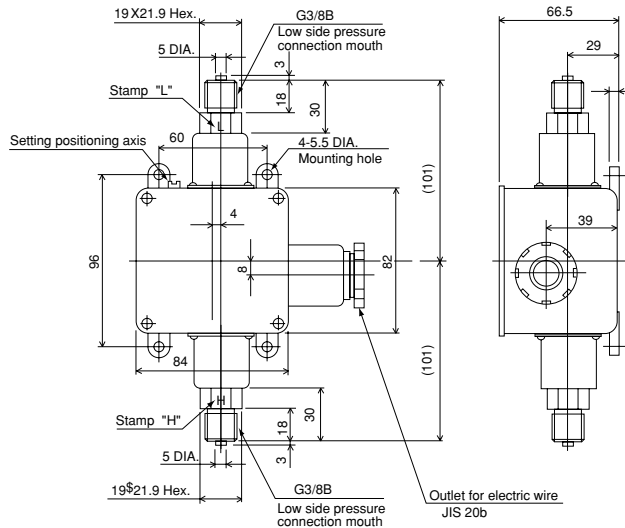
Differential pressure switch & dead band-one side proof-pressure:

Differential pressure switch MPa(kgf/cm ²)	Dead band MPa(kgf/cm ²)	One side proof-pressure MPa(kgf/cm ²)
0.02~0.1 (0.2~1)	0.02 (0.2) or less	0.12 (1.2) or less
0.05~0.25 (0.5~2.5)	0.05 (0.5) or less	0.3 (3) or less
0.1 ~0.4 (1~4)	0.04 (0.4) or less	0.48 (4.8) or less
0.2 ~1 (2~10)	0.1 (1) or less	1.2 (12) or less
0.3 ~1.5 (3~15)	0.15 (1.5) or less	1.8 (18) or less

Electric characteristics:

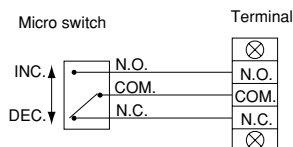
	Rating		Withstand voltage	Insulation resistance
	Load resistance	Inductive load		
125V AC	10 A	6 A	1500V AC Between terminal and case 1 minute	500V DC 100MΩ over Between terminal and case
250V AC	10 A	6 A		
125V DC	0.5 A	0.1 A		
30V DC	5 A	3 A		

DIMENSIONS



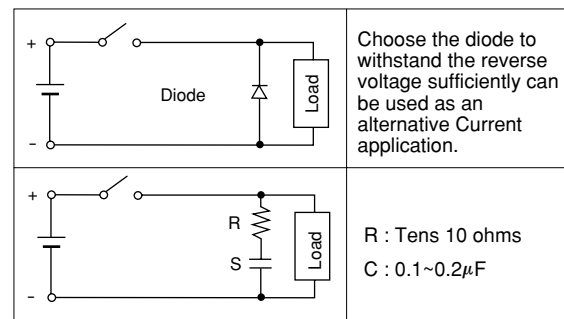
TYPE OF CONTACT AND WIRING SYSTEM

Type of contact	Mark	A figure of operation system and operation
Upper limit type with one contact	H	When differential pressure rises to a set value, switch work to turn a circuit ON.
Lower limit type with one contact	L	When differential pressure decreases to a set value, contact points work to turn a circuit ON.



Installation of protection circuit for contact:

In the inductive load open and close circuit, install the protection circuit to protect the contact.
When you use the relay, choose the built-in protection circuit for the contact.



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.

Differential Pressure Switch

C L 2 1 — 1 3 — 4 5 6 7 8 9 10 11 12 13 14 15

Type No.

1 Mounting

1	Surface mounting
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2 Connection

3	G3/8B
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3 Wetted parts material

1	Bellows : C5212R Body : C2801P
3	Bellows : 316Lst.st. Body : 316st.st.

4 Differential pressure range (MPa)
(When ordering, Please specify pressure range & unit.)

1	0.02 ~ 0.1
2	0.05 ~ 0.25
3	0.1 ~ 0.4
4	0.2 ~ 1
5	0.3 ~ 1.5

5 Type of contact

1	H : Upper limit type with one contact
2	L : Lower limit type with one contact

6 Switch

0	Standard
3	Standard + gold plated

7 Outlet for electric wire

7	Gland JIS 20b
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8 Treatment

0	Nil
1	Use no oil
2	Use no water
3	Use no oil & water

9 Other additional spec.

0	Nil
1	Prease specify your requirement Case finishing

10 X

11 X

12 X

13 X

14 X

15 Document

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