



Model CE11 Electronic Pressure Switch

OUTLINE

This is a small and high-performance electronic pressure switch in which an evaporation type semiconductor strain gauge and a hybrid electronic circuit are combined. This can be applied to the pressure control of vehicles, construction machines, hydraulic in oil and water machinery

FEATURES

- A stainless steel diaphragm is equipped to the pressure sensing portion and welded to the body, making it an over all construction. So, no oil leakage is worried.
- As no moving part exists in this pressure gauge, excellent anti-impact and durable performance are demonstrated.
- The output is of open collector type and is easily inputted into a computer and a sequencer.
- This pressure switch is small in size and light in weight.

SPECIFICATION

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:

R1/4 (PT), R3/8 (PT), G3/8 (PF)

* For other connections, please contact us.

Wetted parts material:

Diaphragm 630st.st. (17-4 PH st.st.)

Socket 304st.st.

Throttle S35C (Option)

* When surge pressure to exceed the rated pressure is expected. Please use throttle.

Pressure range:

0 ~ 1 → 0 ~ 50MPa (0 ~ 10 → 0 ~ 500kgf/cm²)

Max. allowable pressure:

200% of rated pressure
(150% for range 35, 50MPa)

Operating temperature:

-20 ~ 90°C

Storage temperature:

-30 ~ 100°C

Power source:

10 ~ 30V DC (Standard 20V DC)

Output signal:

Open collector output
30V, 150mA DC max.

Operating point error:

Within ±3 % F.S. (At -10 ~ 70°C)

Dead band:

3% F.S. within fixation

Setting:

1 setting

Vibration resistance:

6.8G According to JIS D1601 (33.3 Hz or 66.6 Hz)

Shock resistance:

20G According to JIS C0912

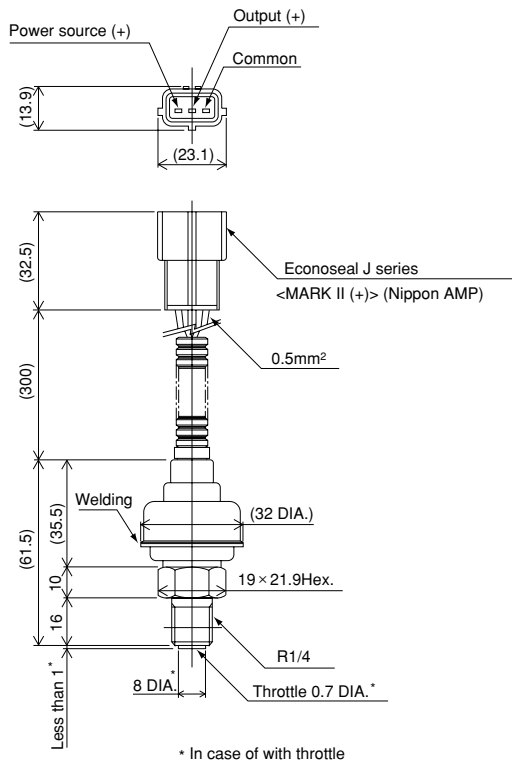
Construction:

Equivalent to IP54

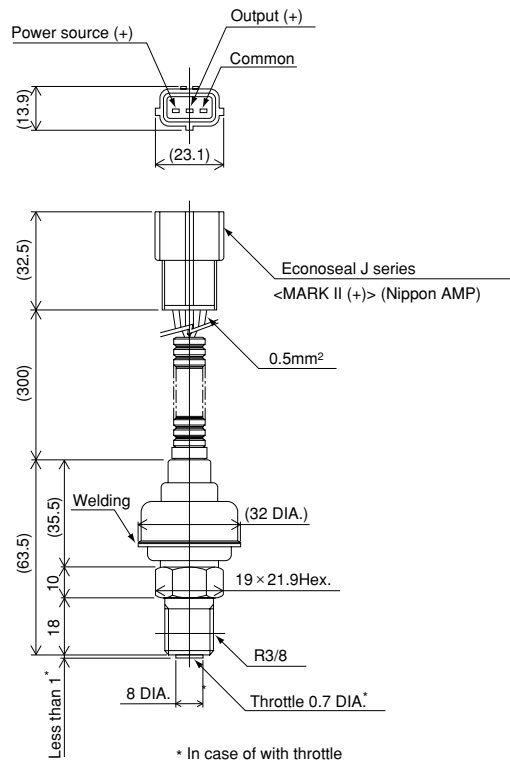
Weight:

Approx. 100 g

DIMENSIONS



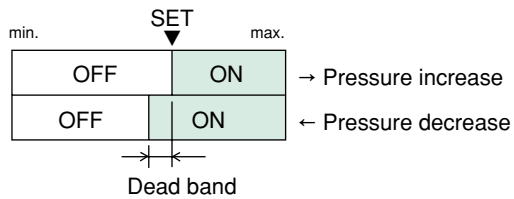
CE11-174



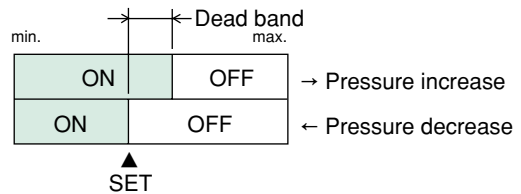
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OPERATION SYSTEM

Upper limit ... Transistor will be ON at setting point when pressure increase

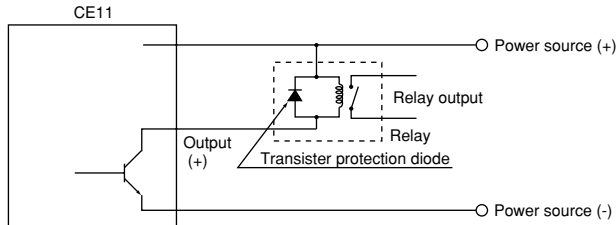


Lower limit ... Transistor will be ON at setting point when pressure decrease



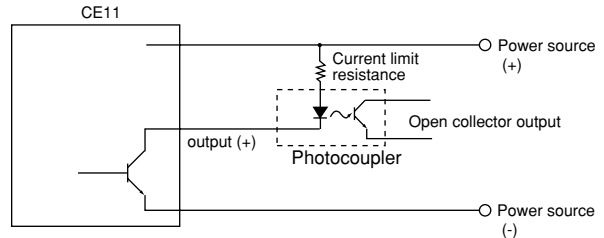
OPEN COLLECTOR OUTPUT EXAMPLE

① Relay connection

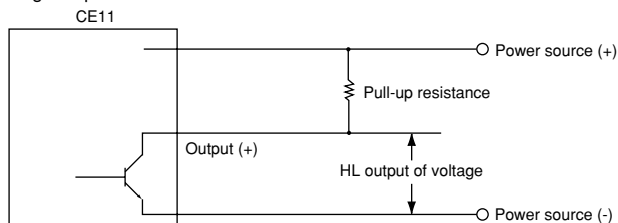


Note
Rated current and voltage of operation coil of relay should be in transistor's rating.

② Photocoupler connection



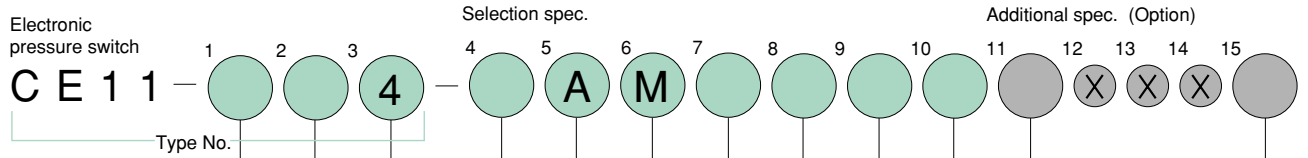
③ Voltage output



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 Type

1	Cable + EJII (IP54 specification limitation)
X	Cable + other indication connector*

* If only cable wire is required, please select above X and designate 7 or 8 in 10 cable terminal.

2 Connection

7	R1/4
8	R3/8
C	G3/8 O-ring

3 Wetted parts material

4	Diaphragm: 630st.st. (17-4PHst.st.) Coupling: 304st.st.
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4 Pressure range (MPa)

(When ordering, please specify pressure range & unit.)

1	0 ~ 1, 2, 3.5
2	0 ~ 5, 10
3	0 ~ 20, 35
4	0 ~ 50

5 Operating point error

A	±3%F.S. Synthetic accuracy in temperature compensation limit
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6 Power source

M	10 ~ 30V DC (Standard 24V DC)
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7 Setting

1	H: Upper limit 1 setting
2	L: Lower limit 1 setting

Additional spec. (Option)

11 Treatment

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

10 Cable terminal

Terminal treatment	Correspondence	Manufacturer name	Class
0	Standard	(Selected No.1 of 1. Type)	
1	Connector	Cable type AMP (Standard)	Econoseal J series MARK II +174359.2 3pin
2	Connector	Cable type AMP	172205-01
3	Connector	Cable type AMP	174259-2
4	Connector	Cable type Yazaki	7118-3230
5	Connector	Cable type Yazaki	7222-7434-40 (Drip-proof character nil)
6	Connector	Cable type Molex	1625-04 (Drip-proof character nil)
7	Bare	With call gate tube	
8	Bare	Without call gate tube	

In connector selection, consult you.

9 Cable

1	Cable (With 0.3m as standard) Latex wire EF0.5mm ² 2.2DIA. Standard color: Red / green / white
2	Cable (With 0.3m as standard) AEX0.5mm ² 2.0 DIA. ~ 2.2 DIA. Standard color: Red / white / black

Available 0.2m to 0.5m with 0.1m step.

8 Throttle

0	Nil
F	S35C
G	SUSXM7*

* St.st. forged part, water hammer countermeasures use

15 Document

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