



# CQ30 Pressure Switch

## ONLINE

This is a pressure switch with outstanding safety characteristics using a microswitch for contact mechanism.

This switch can be manufactured over a wide pressure range from low pressure to high pressure and is therefore suitable for liquid level control, flow control and also for pneumatic, hydraulic pressure and other fluid pressure controls.

## FEATURES

- Bourdon tube which was developed for durable pressure switch is used and is suitable for vibration.
- The one contact type or two contact type can be selected. With the two contact type, the setting of upper limit and lower limit can be possible.
- Acid-proof coating prevents rusting from salt damage.

## 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), G1/2B(PF)

### Wetted parts material:

Bourdon tube 316st.st.

Socket SCS14

### Pressure range:

0 ~ 0.2 → 0 ~ 70MPa

(0 ~ 2 → 0 ~ 700kgf/cm<sup>2</sup>)

### Proof-pressure:

0.3 ~ 105MPa (3 ~ 1050kgf/cm<sup>2</sup>)

(Depending on range)

### Operating temperature:

-20 ~ 60°C

### Accuracy:

1%max.P.

### Dead band:

0.014 ~ 5.6MPa or less (0.14 ~ 56kgf/cm<sup>2</sup> or less)

(Depending on pressure range and number of contact)

### Switch:

Micro switch

### Number of contact:

One contact (S.P.D.T.) or two contact (S.P.D.T. × 2)

### Setting system:

Internal adjustment type (With setting lock)

### Outlet for electric wire:

Conduit type PF3/4 female

Gland JIS 20a, JIS 20b, JIS 20c

### Construction:

IP43 (Water-proof) or IP65 (Drip-proof)

### Case material-finishing:

Aluminium alloy die casting (ADC12)

Blue & Gray Epoxy painted

### Terminal box: (Option)

Although the wire used to have to be removed from the terminal plate and the tester terminal pressed against it when measuring contact resistance, with the provision of a check terminal, simply remove the screws on the terminal plate and insert the terminals of the tester. This ensures stability when measuring and eliminates the trouble of removing the wire from the terminal plate.

### Operation lamp: (Option)

The on/off state of the pressure switch and the operating state of the microswitch can also be confirmed at a glance.

### Weight:

Approx. 1.3kgs

## SPECIFICATION 2

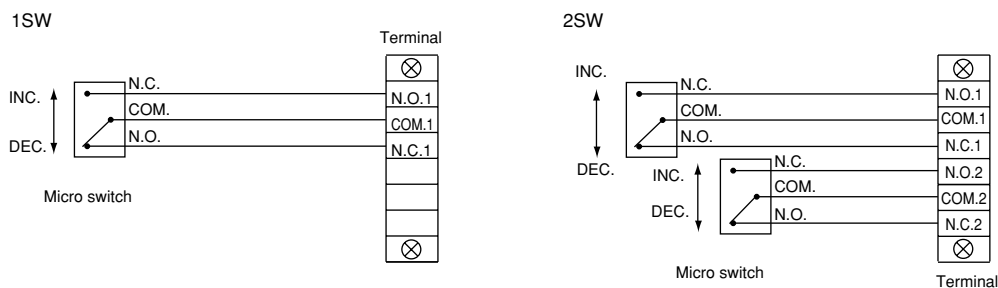
Electric characteristics:

	Rating		Withstand voltage	Insulation resistance
	Load resistance	Inductive load		
125V AC	15A	15A	1500V AC  Between terminal and case 1 minute	500V DC 100MΩ over  Between terminal and case
250V AC	15A	15A		
125V DC	0.5A	0.05A		
30V DC	2A	1A		
· Inductive load: Power factor 0.4 over (AC) Time-constant 7ms or less (DC)				

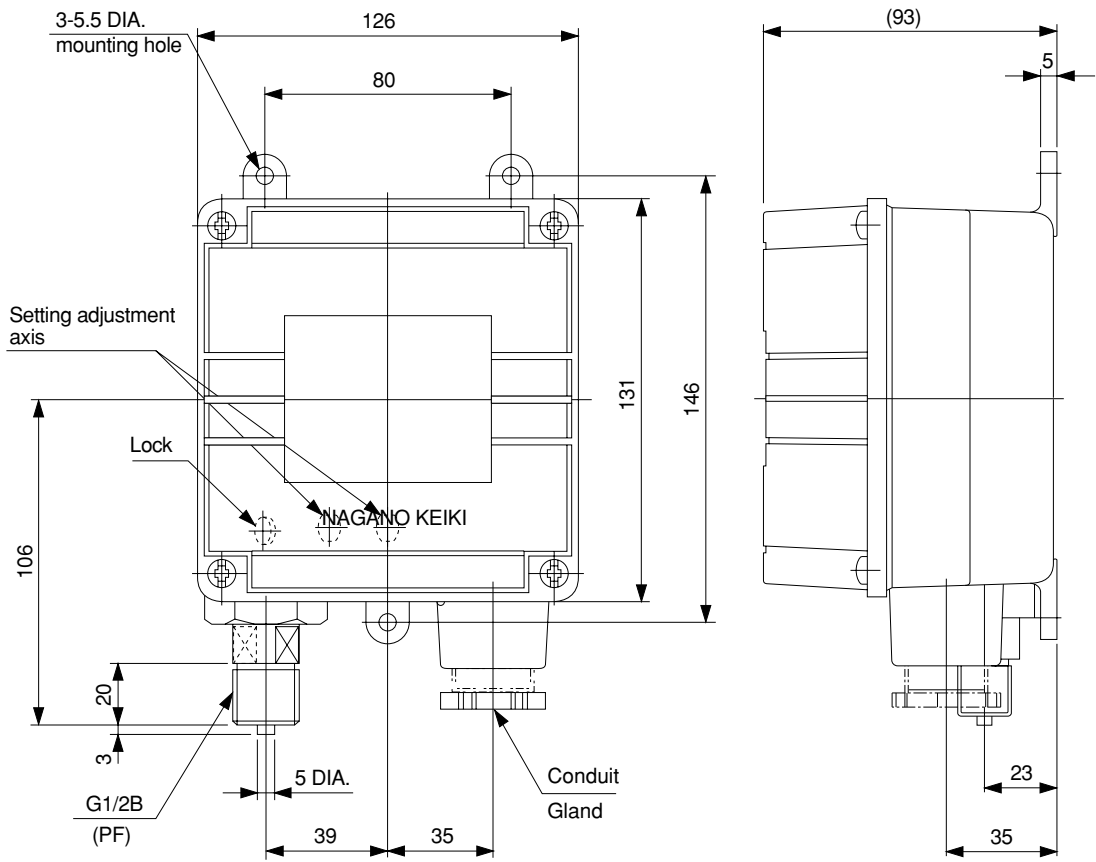
Pressure range and dead band·Proof-pressure

Pressure range MPa(kgf/cm <sup>2</sup> )	Dead band MPa(kgf/cm <sup>2</sup> )		Proof-pressure MPa(kgf/cm <sup>2</sup> )
	One contact	Two contact	
0~0.2 (0~2)	0.014 or less (0.14 or less)	0.02 or less (0.2 or less)	0.3 (3.0)
0~0.4 (0~4)	0.028 or less (0.28 or less)	0.04 or less (0.4 or less)	0.6 (6.0)
0~0.6 (0~6)	0.042 or less (0.42 or less)	0.06 or less (0.6 or less)	0.9 (9.0)
0~1 (0~10)	0.07 or less (0.7 or less)	0.1 or less (1.0 or less)	1.5 (15.0)
0~1.5 (0~15)	0.08 or less (0.8 or less)	0.12 or less (1.2 or less)	2.25 (22.5)
0~2 (0~20)	0.08 or less (0.8 or less)	0.14 or less (1.4 or less)	3 (30.0)
0~2.5 (0~25)	0.1 or less (1.0 or less)	0.18 or less (1.8 or less)	3.75 (37.5)
0~3.5 (0~35)	0.14 or less (1.4 or less)	0.25 or less (2.5 or less)	5.25 (52.5)
0~5 (0~50)	0.2 or less (2.0 or less)	0.35 or less (3.5 or less)	7.5 (75)
0~7 (0~70)	0.25 or less (2.5 or less)	0.4 or less (4.0 or less)	10.5 (105)
0~10 (0~100)	0.3 or less (3.0 or less)	0.5 or less (5.0 or less)	15 (150)
0~15 (0~150)	0.45 or less (4.5 or less)	0.75 or less (7.5 or less)	22.5 (225)
0~25 (0~250)	0.75 or less (7.5 or less)	1.25 or less (12.5 or less)	37.5 (375)
0~35 (0~350)	1.25 or less (12.5 or less)	1.75 or less (17.5 or less)	52.5 (525)
0~50 (0~500)	2.5 or less (25.0 or less)	4 or less (40.0 or less)	75 (750)
0~70 (0~700)	3.5 or less (35.0 or less)	5.6 or less (56.0 or less)	105 (1050)

## WIRING

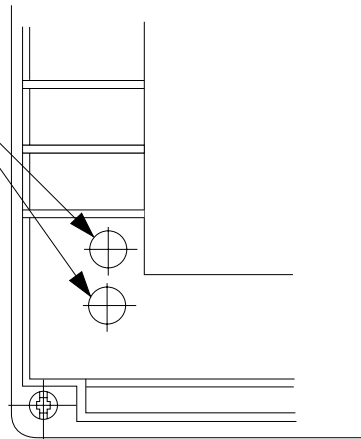


# DIMENSIONS



## Option

Neon lamp  
or LED



	JIS20a
Gland	20b
	20c
Conduit	PF3/4

# 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.

Pressure switch  
**C Q 3 0** — 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Type No.

Selection spec.

Additional spec. (Option)

1 Construction

1	Water proof one contact
2	Water proof two contact
3	Drip-proof one contact
4	Drip-proof two contact

2 Connection

3	G3/8B
4	G1/2B

3 Wetted parts material

3	Socket:SCS14,Bourdon tube:316st.st.
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4 Pressure range (MPa)  
 (When ordering, please specify pressure range & unit.)

1	0 ~ 0.2, 0.4
2	0 ~ 0.6, 1, 1.5, 2, 2.5, 3.5, 5, 7
3	0 ~ 10, 15, 25, 35
4	0 ~ 50, 70

5 Type of contact

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	Standard type
1	Ultra high sensitivity switch
3	Standard + gold plated
4	Ultra high sensitivity switch + gold plated

7 Outlet for electric wire (Conduit type)

3	PF3/4 female (Standard)
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7 Outlet for electric wire (Gland type)

6	JIS 20a
7	JIS 20b (Standard)
8	JIS 20c

8 Treatment

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

9 Terminal box

0	Nil
1	W/Check terminal

10 Operation lamp

0	Nil
1	With LED (24V DC), one contact
2	With LED (24V DC), two contact
3	With neon lamp (110V AC), one contact
4	With neon lamp (110V AC), two contact
5	With neon lamp (220V AC), one contact
6	With neon lamp (220V AC), two contact

11 Other additional spec.

0	Nil
1	Please specify your requirement Case finishing

12 X

13 X

14 X

15 Document

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

\* Appoint old model model in case of hope extra.

The contents in the catalogue are subject to change without notice.

 **NAGANO KEIKI CO., LTD.**

