



CB14 Pressure Switch

OUTLINE

This is a simple, small and lightweight pressure switch which has been specially developed for various applications of gases indispensable for semiconductor industry, and is capable of direct connection to an appliance when it is used. In manufacturing process of this pressure switches, enough attention has been paid to cleanliness and hermetic properties, and products are supplied through strict quality control and performance tests. So, this pressure switch is appropriate for the process of semiconductor industry and for gas of a high degree of purity.

FEATURE

- The application of this pressure switch to places with limited installing space is convenient because of its small and lightweight type.
- Pressure setting is easily performed.
- Stable control is assured because of a mechanism without applying excessive loads to a microswitch.
- Cleaning and assembling work are performed in a clean bench (class 100) and a clean room, to secure cleanliness. Complete degreasing is performed by a Freon ultrasonic cleaning method, anti-oil and anti-water treatment is also applied, and after completion, products are hermetically packaged in dust-free polyethylene packages.
- The gas contacting portion of diaphragm type is electrolytically polished.

* The set pressure range with which a pressure gauge functions precisely and for a long period of time is 30% to 60% of the pressure range.

SPECIFICATION 1

Fluid:

Various kinds of process gases

Operating condition:

Under the normal condition, where there is no inflammable gas or liquid which cause the ignition or explosion.

Pressure element:

Bellows or diaphragm (Electro polishing)

Gas contact parts:

316st.st., 316L st.st.

Connection:

1/8NPT, 1/4VCR (9/16-18UNF Male • Female)

Pressure range:

0.02 ~ 0.35 → 0.1 ~ 2.1MPa (0.2 ~ 3.5 → 1.0 ~ 21kgf/cm²)

Operating temperature:

-5 ~ 40°C

Storage temperature:

-5 ~ 40°C

Accuracy (Repeatability) :

Within 1% max. Press.

Electrical characteristics:

Rating 125, 250V AC 15A

Withstand voltage 1500V AC one minute (Between case and terminals)

Insulation resistance 500VDC at meggar 100MΩ over

Switch:

JIS C4505 Industrial micro switch

Number of contact:

One contact

Setting:

External adjustment

Cable connecting method:

Directly connect to micro switch terminal.
(M4 Terminal)

Leakage: (Helium leak test)

1.01×10^{-9} Pa • m³/s or less (1×10^{-9} atm cc/s or less)

Construction:

Indoor use type

Finish (Switch mounting clamp and a body) :

Ni-plating

Weight:

Approx.160g ~ approx.270g

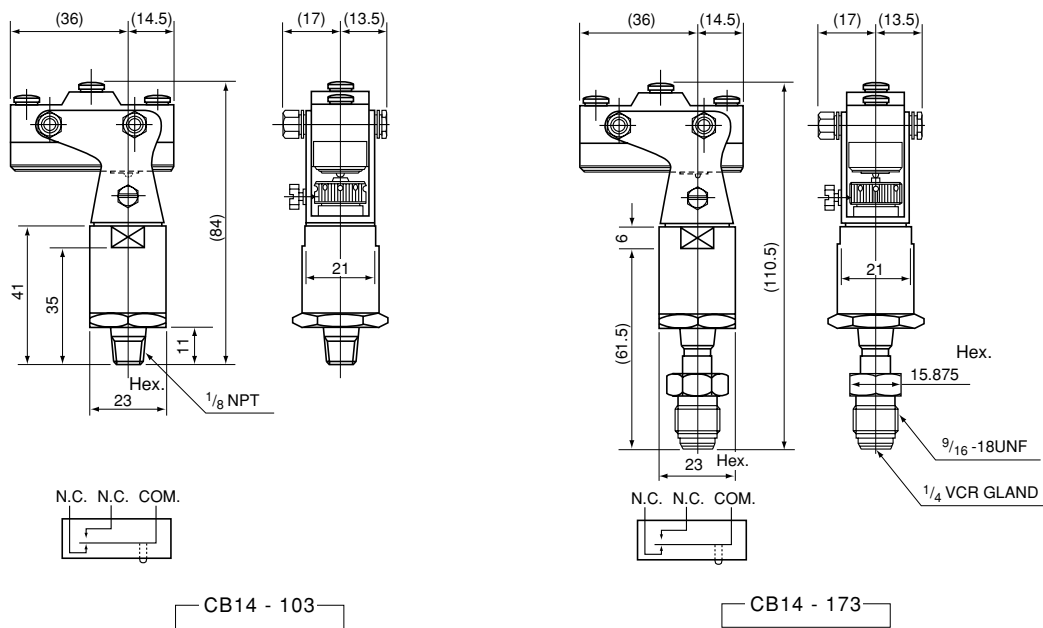
SPECIFICATION 2

Withstand pressure • Dead band

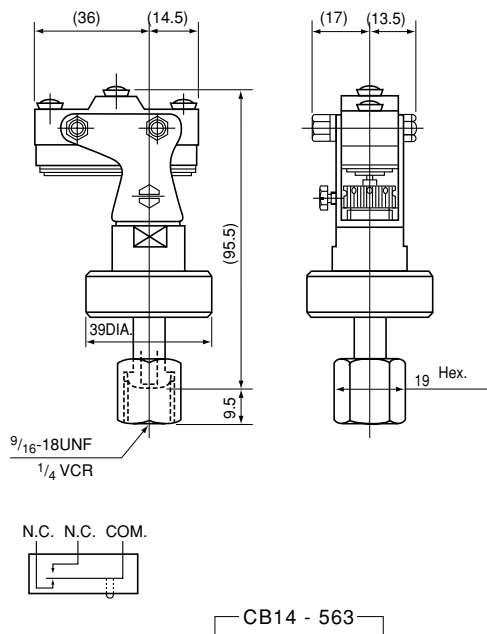
Pressure range MPa (kgf/cm ²)	Withstand pressure MPa (kgf/cm ²)	Dead band MPa (kgf/cm ²)
0.02 ~ 0.35 (0.2 ~ 3.5)	0.53 (5.3)	0.021 (0.21) or less
0.035 ~ 0.7 (0.35 ~ 7.0)	1 (10)	0.021 (0.21) or less
0.1 ~ 2.1 (1.0 ~ 21) * Bellows type only	2.5 (25)	0.042 (0.42) or less

DIMENSIONS

Bellows type



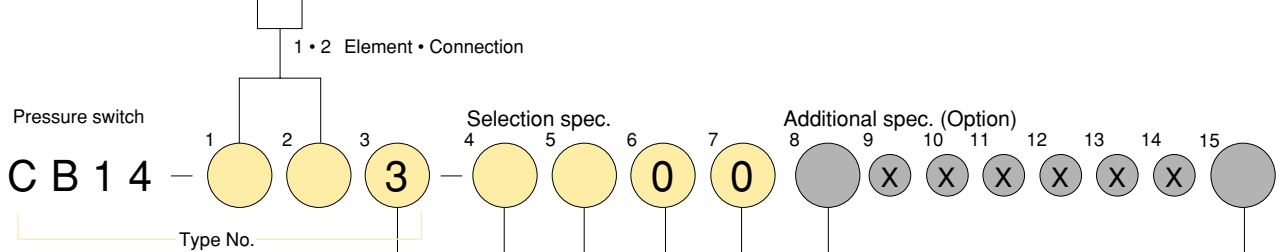
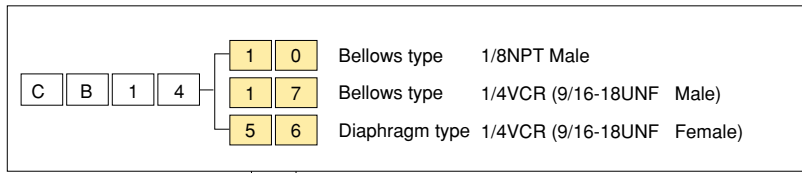
Diaphragm type



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.



3 Gas contact parts

3	316st.st. or 316Lst.st. (Bellows, diaphragm)
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4 Pressure range (MPa)

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

1	0.02 ~ 0.35
2	0.035 ~ 0.7
3	0.1 ~ 2.1 Bellows type only

5 Contact

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

6 Switch

0	JIS C4505 Industrial micro switch
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7 Cable connecting method

0	M4Terminal
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15 Document

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

8 Other additional spec.

0	Nil
1	Please specify your requirement Micro switch cover