

## Main Specifications

## ▼Size

3" , 4" , 6"

## ▼Installation type

Bottom mount (A) /

Bottom mount with flange (B)/

Back mount with flange

(Eccentric thread) (BDE)

## ▼Window

Acrylic

With external screw adjustment

## ▼Pressure connection

Material: SS316 (standard)

Thread size: 1/4" , 3/8" , 1/2"

Thread type: BSPT, NPT, PF

## ▼Pressure range

Gauge pressure ▼

0...0.6 to 1600 bar

Negative pressure ▼

-1...0bar / -76...0cmHg

Compound pressure ▼

-1...0 to 20bar

## ▼Applicable fluid

Liquid and gas that compatible with connection's material

## ▼Ambient temperature

-40°C to +60°C

## ▼Fluid temperature

+100°C

## ▼Liquid-filling

Glycerin

(For concealed magnet base with junction box type only)

## ▼Temperature drift

20°C as standard, every  $\pm 8^{\circ}\text{C}$   
max. error:  $\pm 0.5\%$  F.S.

## ▼Protection level

IP54 (standard) / IP65 (option)

## Other Specifications

## ▼Ring material

Stainless steel

## ▼Ring mount

Visual type:

Outside bayonet

Concealed type:

Inside bayonet

Adjustable set point

## ▼Case material

SS 304

## ▼Wiring type

Visual wiring (FL) /

Visual magnet base with

junction box (JB) /

Concealed magnet base with

junction box (H)

(Only available for 4&amp;6" )

## ▼Switch contact type

Sliding Switch SPST (NC / NO)

## ▼Contact function

Single contact N.O. (1a)/

Single contact N.C. (1b)/

Double contacts N.O.+N.C. (1a1b) /

Double contacts N.C.+N.O. (1b1a) /

Double contacts N.O.x2 (2a) /

Double contacts N.C.x2 (2b)

For more information please refer to single / double contacts wiring

## ▼Contact material

80% silver, 20% nickel, 10 $\mu\text{m}$ gold-plated ( $>110\text{V}$ )Gold ( $\leq 36\text{V}$ )

## ▼Number of contact

SPSTx1 / SPSTx2 / SPSTx4

## ▼Pointer

Aluminum with black enamel

## ▼Dial face

Red and black scale

Pressure unit, scale, and color can be customized upon request

## ▼Measuring elements

Bourdon tube

Material: SS316

## ▼Protection design (option)

Install a blow out back

(Only available for 4" )

## ▼Movement

Stainless steel

## ▼Gauge accuracy

 $\pm 2.5\%$  (option:  $\pm 1.6\%$ ,  $1\%$ )

## ▼Set point accuracy

 $\pm 3\sim 6\%$ 

## ▼Operating pressure

Stabilization: 3/4\* F.S.

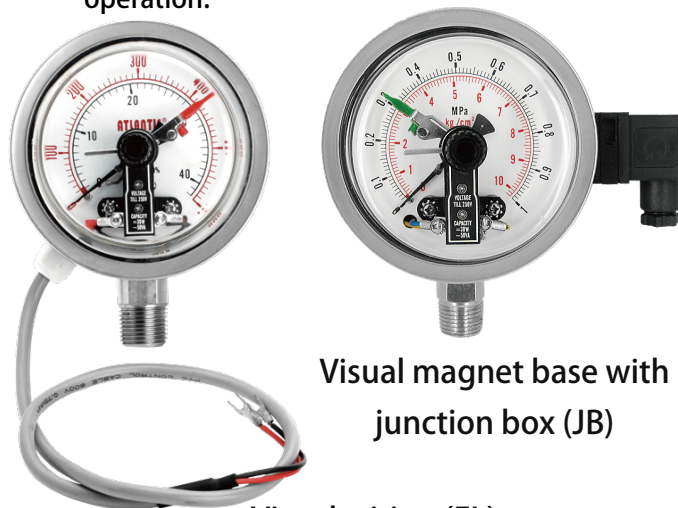
Fluctuation: 3/4\* F.S.

# Pressure Gauge with Electrical Contact (Sliding Switch Type)

## Model: ECS

### Introduction

ECS pressure gauge with contact has buzzer alarm function, the indicator light flashing and relay can be added to control and ensure the safety of pressure operation.



Visual wiring (FL)



Due to the variety of customization, the picture is only for reference, please confirm the actual item with our sales.

(If there is any change on specification, please take the latest version as standard.)

### Features

- OEM service (No oil-filling).
- The SPST sliding switch can be installed on 3" / 4" / 6" pressure gauge, suitable for various pressure control application.
- Visual / Concealed wiring types for selection (No control elements and additional power supply required.).
- Compared with magnetic reed switch, the gauge pressure of ECS sliding switch is  $\pm 1.0$ , contacts max. limit are 3.

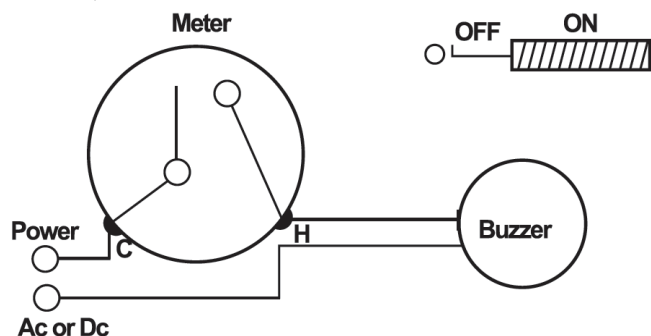
### Power parameter

Voltage	DC	AC	Inductive load
230V	100mA	120mA	65mA
110V	200mA	240mA	130mA
50V	300mA	450mA	200mA
24V	400mA	600mA	250mA
Switch capacitor 18W / $\sim 30\text{VA}$			

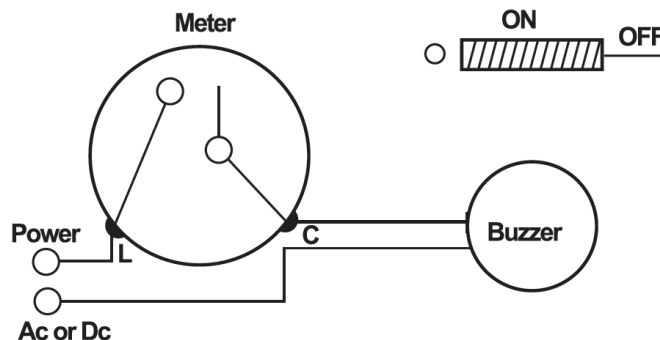


Concealed magnet base with junction box (H)

## The type of contact wire



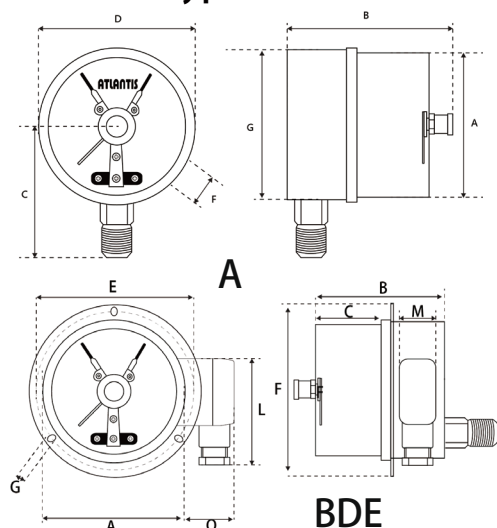
Single contact N.O. (1a)



Single contact N.C. (1b)

Double contacts		
	<p>When the pressure indicator reaches left set point (green pointer), "1" contact breaks (circuit open);</p> <p>When the pressure indicator reaches right set point (red pointer), "2" contact makes (circuit close) (NC+NO)</p> <p>&lt;Positive pressure: left→right&gt;</p> <p>Switch mode: SPST X 2</p>	1a1b
	<p>When the pressure indicator reaches left set point (red pointer), "1" contact makes (circuit close)</p> <p>When the pressure indicator reaches right set point (green pointer), "2" contact breaks (circuit open) (NO+NC)</p> <p>&lt;Positive pressure: left→right&gt;</p> <p>Switch mode: SPST X 2</p>	1b1a
	<p>When the pressure indicator reaches left set point (yellow pointer), "1" contact makes (circuit close)</p> <p>When the pressure indicator reaches right set point (red pointer), "2" contact makes (circuit close) (NO x 2)</p> <p>&lt;Positive pressure: left→right&gt;</p> <p>Switch mode: SPST X 2</p>	2a
	<p>When the pressure indicator reaches left set point (green pointer), "1" contact breaks (circuit open)</p> <p>When the pressure indicator reaches right set point (yellow pointer), "2" contact breaks (circuit open) (NC x 2)</p> <p>&lt;Positive pressure: left→right&gt;</p> <p>Switch mode: SPST X 2</p>	2b

## Installation types



### Installation type-size table

Installation type	3"	4"	6"
A	●	●	●
B		●	
BDE	●	●	●

## How to order

### ECS Pressure Gauge with Electrical Contact (Sliding Switch Type)

Std.	Spec.	Code	Item	Code	Item	Code	Item	Code	Item
04	Size	03	3"	04	4"	06	6"	—	—
FL	Wiring type	FL	Visual wiring	JB	Visual magnet base with junction box	H	Concealed magnet base with junction box (Only for 4&6" )	—	—
A	Installation type	A	Bottom mount	B	Bottom mount with flange	BDE	Back mount with flange (Eccentric thread)	—	—
1a1b	Contact function	1a	N.O.	1b	N.C.	1a1b	N.O.+N.C.	1b1a	N.C.+N.O.
		2a	N.O.x2	2b	N.C.x2	—	—	—	—
2	Number of contacts	1	SPSTx1	2	SPSTx2	4	SPSTx4	—	—
316	Connection material	316	SS316	O	Others	—	—	—	—
316	Bourdon tube material	316	SS316	O	Others	—	—	—	—
2	Thread size	2	1/4"	3	3/8"	4	1/2"	O	Others
N	Thread type	P	BSPT	N	NPT	F	PF	O	Others
Custom	Pressure range	Gauge pressure— (0…0.6 to 1600bar) Negative pressure— (-1…0bar) Compound pressure— (-1…0…0.6 to 20bar) Customized pressure unit (psi, bar, kPa, kg/cm2, MPa, inHg, mmHg, cmHg, etc…), single / dual scale							
C	Accuracy	A	±1%	B	±1.6%	C	±2.5%	—	—
N	Liquid-filling (Only for concealed wiring type)	N	Dry	G	Glycerin	O	Other liquids	—	—
/D	Other requests	/A	Third party notarized documents			/B	Inspection report		
		/C	Tag			/D	Customized dial face (scale, color, unit, etc.)		
		/E	Install a diaphragm seal			/F	Internal stop pin for overpressure protection		
		/G	Dampened movement			/H	Epoxy coating		
		/I	Peak hold pointer			/J	Case material SS316		
		/K	Max. voltage AC 380 V			/L	High pressure Bourdon tube: max. pressure 1600bar		
		/M	Install a blow out back			/N	Switch type SPDT		
		/O	Contact material: platinum-iridium alloy			/P	Contact material: pure silver 999		

Order example: ECS - 04 - FL - A - 1a1b - 2 - 316 - 316 - 2 - N - (0…10bar) - C - N + /D