4ManPro

Elements For Manufacturing Processes

CATALOGO GENERAL

MEDIDORES DE PRESIÓN

Vol. 1

MEDIDORES DE PRESION

DIGITALES

Touchscreen Digital Pressure Gauge

Model: LTS

Product Description

- Touch screen buttons are more durable and easier to operate than traditional buttons
- Circular arc percentage chart can simulate pressure values, helping prevent overpressure

Product Specification

Connection location
Bottom mount

Nominal size
4"

Scale ranges
0 ... 5 kPa to 0 ... 100 MPa, or other equivalent units of pressure, vacuum or compound

Pressure units
MPa, kg/cm^2, bar, psi, mmH_2O, kPa, Pa, inWC, mbar, mH_2O, inHg, mmHg, Torr (Up to 8 units can be switched, if not specified, the engineer will select it according to the pressure range)

Accuracy
±0.4% F.S. (standard), ±0.2% F.S.

Process connection
304 SS
PT: 1/4", 1/2"
G: 1/8", 1/4", 3/8", 1/2", 7/8"
NPT: 1/4", 1/2"
M: 12*1.5, 10*1.0, 10*1.5, 14*1.5, 20*1.5

Case/Ring
304 SS

Sensor element
316 SS

Product Specification

Medium temperature
-35℃ ... 60℃

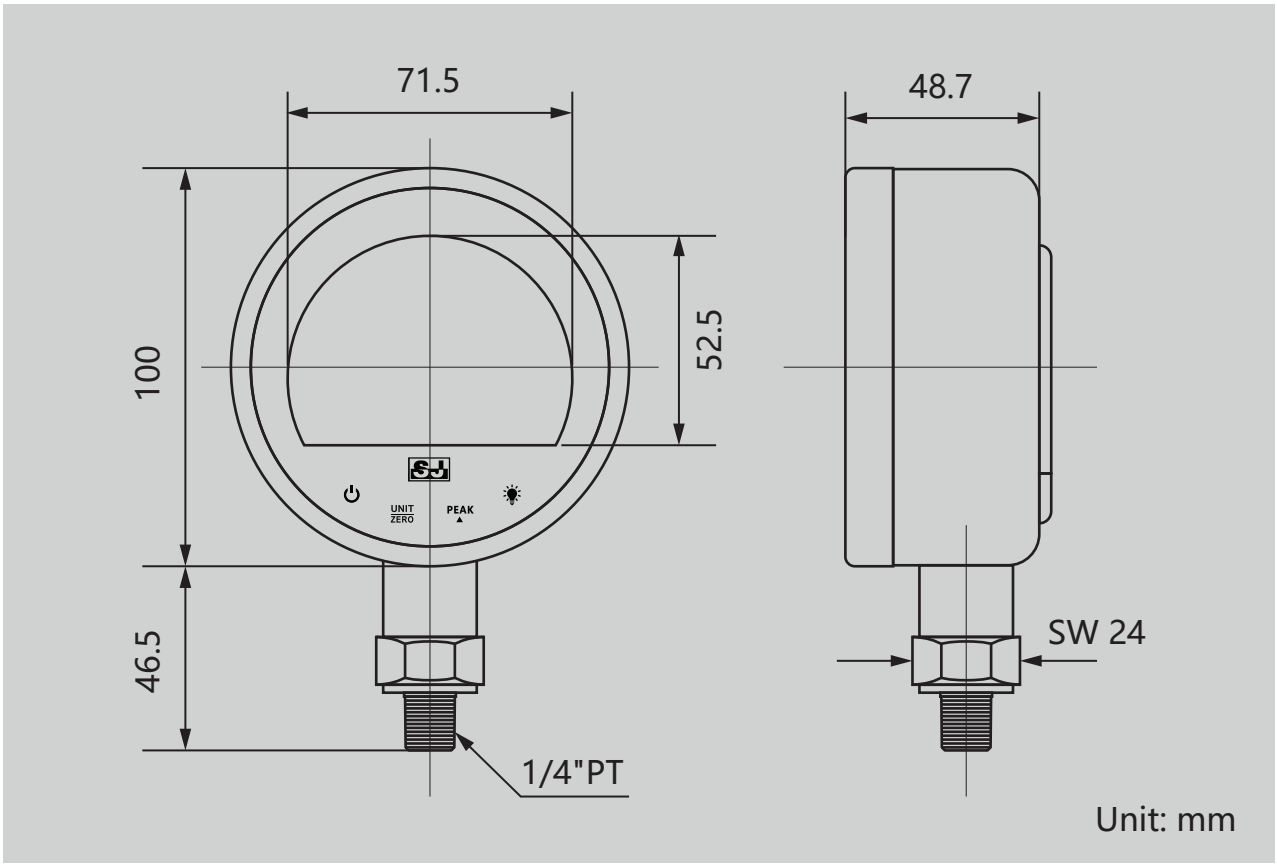
Display
5.5 digits
LCD, switchable backlight button

Response time
18 times/sec

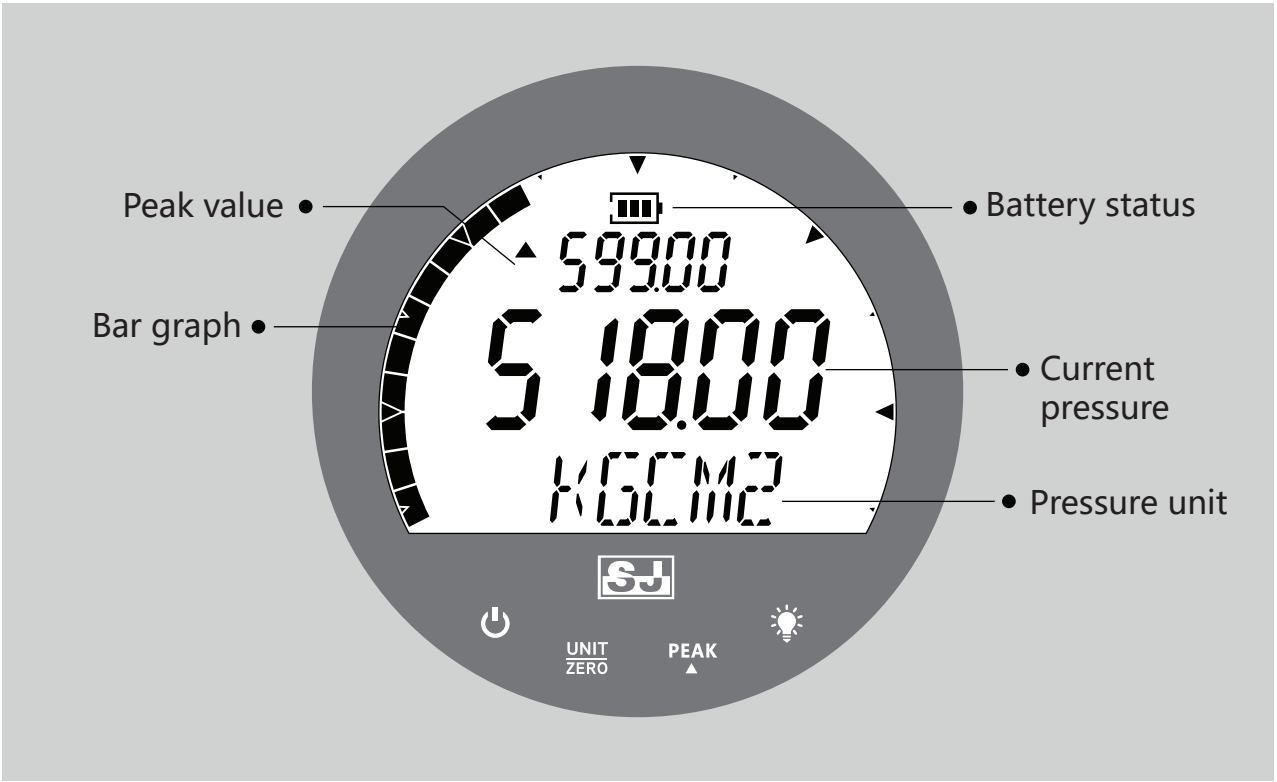
Voltage supply
AA battery*3
Optional external power supply: DC24V, DC5V, or with other transformers such as AC110V.

Protection level
IP 40

Dimensions



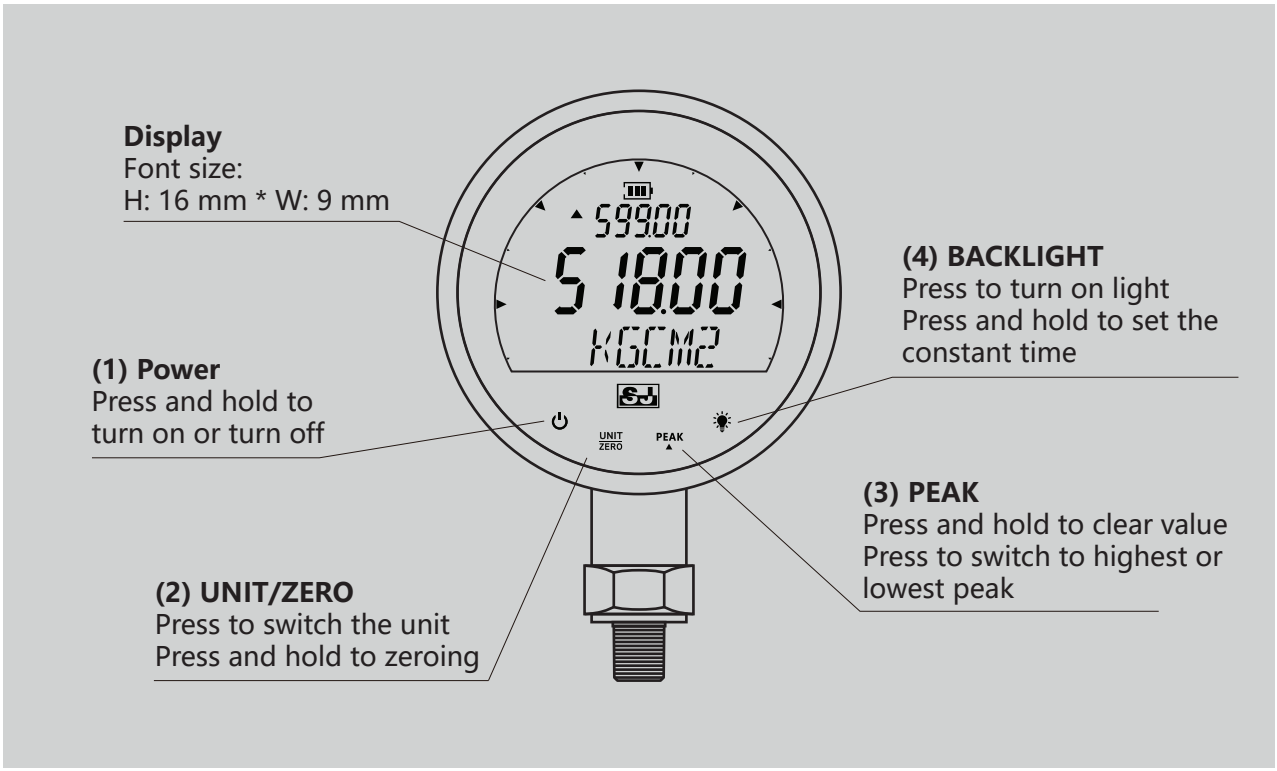
Interface Description



Touchscreen Type
Model: LTS

Operation Manual

Key functions



How to set constant backlight?

1. Turn on.
2. Press and hold (4) BACKLIGHT to enter the menu.
3. Press (4) BACKLIGHT to change the ones digit to 0.
4. Press (2) ZERO/UNIT to switch to the tens digit, and press (4) BACKLIGHT to set the value to 0.

※ Do not set numbers other than 00, otherwise it will affect the factory settings and cause program confusion。

5. And press (3) PEAK again to complete the constant backlight setting.

How to reset?

1. Turn on.
2. Press and hold (4) BACKLIGHT to enter the menu.
3. Press (4) BACKLIGHT to change the ones digit to 9.
4. Press (2) ZERO/UNIT to switch to the tens digit, and press (4) BACKLIGHT to set the value to 9.
5. And press (3) PEAK to complete resetting.

How to adjust the update frequency?

[Enter the menu]
1. Turn on.
2. Long press (4) BACKLIGHT to enter the first level menu.
3. Press (4) BACKLIGHT to toggle the ones digit to 6.
4. Press (2) ZERO/UNIT to switch to the tens digit, then press (4) BACKLIGHT to set the value to 9.
5. Press (3) PEAK to confirm to enter the second level menu.

[Setting]
6. Press (2) ZERO/UNIT or (4) BACKLIGHT to switch the screen to "SEF9", then press (3) PEAK to enter the frequency setting.
7. The default value is "01", press (4) BACKLIGHT to adjust the value. (The larger the number, the lower the update frequency and the more stable the display.)

[Exit the menu]
8. Press (3) PEAK to return to the second level menu.
9. Press (2) ZERO/UNIT or (4) BACKLIGHT to switch the screen to "SOUt", then press (3) PEAK to complete the frequency setting.

How to set automatic shutdown time?

[Enter the menu]
1. Turn on.
2. Long press (4) BACKLIGHT to enter the first level menu.
3. Press (4) BACKLIGHT to toggle the ones digit to 6.
4. Press (2) ZERO/UNIT to switch to the tens digit, then press (4) BACKLIGHT to set the value to 9.
5. Press (3) PEAK to confirm to enter the second level menu.

[Setting]
6. Press (2) ZERO/UNIT or (4) BACKLIGHT to switch the screen to "CLtt", then press (3) PEAK to enter the shut-down setting.
7. The default value is "00", press (4) BACKLIGHT to adjust the value. (Number 01 is 1 minute, number 02 is 2 minutes, etc.)

[Exit the menu]
8. Press (3) PEAK to return to the second level menu.
9. Press (2) ZERO/UNIT or (4) BACKLIGHT to switch the screen to "SOUt", then press (3) PEAK to complete the shutdown setting.

Digital Pressure Gauge: LCD Display

Model: MXB

Product Description

- Bar graph display can prevent over-pressure
- Helps record highest and lowest peak values effectively
- Same material as PCE Deutschland GmbH

Product Specification

Connection location
Bottom mount, back mount, with/without flange, bottom mount with cooling element

Nominal size
2.5", 3", 4"

Scale ranges
0 ... 5 kPa to 0 ... 100 MPa, or other equivalent units of pressure, vacuum or compound

Pressure units
MPa, kg/cm^2, bar, psi, mmH_2O, kPa, Pa, inWC, mbar, mH_2O, inHg, mmHg, Torr (Up to 8 units can be switched, if not specified, the engineer will select it according to the pressure range)

Accuracy
±0.4% F.S. (standard), ±0.2% F.S.

Process connection
304 SS
PT: 1/4", 1/2"
G: 1/8", 1/4", 3/8", 1/2", 7/8"
NPT: 1/4", 1/2"
M: 12*1.5, 10*1.0, 10*1.5, 14*1.5, 20*1.5

Product Specification

Case/Ring
304 SS

Panel
Acrylic

Diaphragm
316 SS

Medium temperature
-35°C ... 60°C

Display
5.5 digits
LCD, switchable backlight button

Response time
18 times/sec

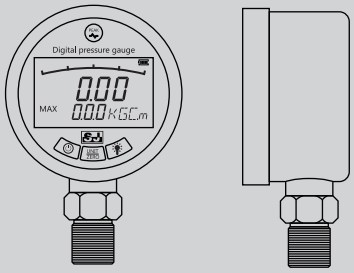
Power supply
2.5" bottom mount, 3": AAA battery*3
2.5" back mount, back mount with flange: AAA battery*4
4": AA battery*3
Optional external power supply: DC24V, DC5V, or with other transformers such as AC110V. You need to open the top cover to replace the battery of 2.5" back mount type.

Protection level
IP40

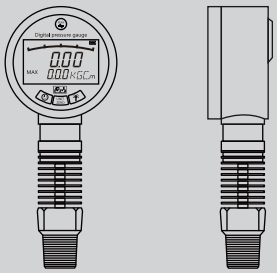
Battery life
3500 hours
Can be used for half a year to 1 year without the backlight, and can be used for about 8 months when it is turned on continuously.

Connection location

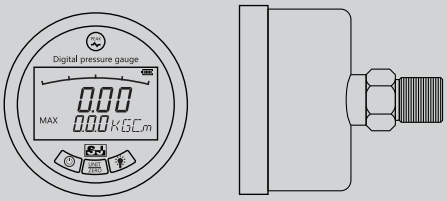
A-Bottom mount



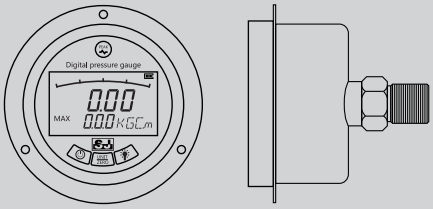
AC-Bottom mount with cooling element



AD-Center back mount

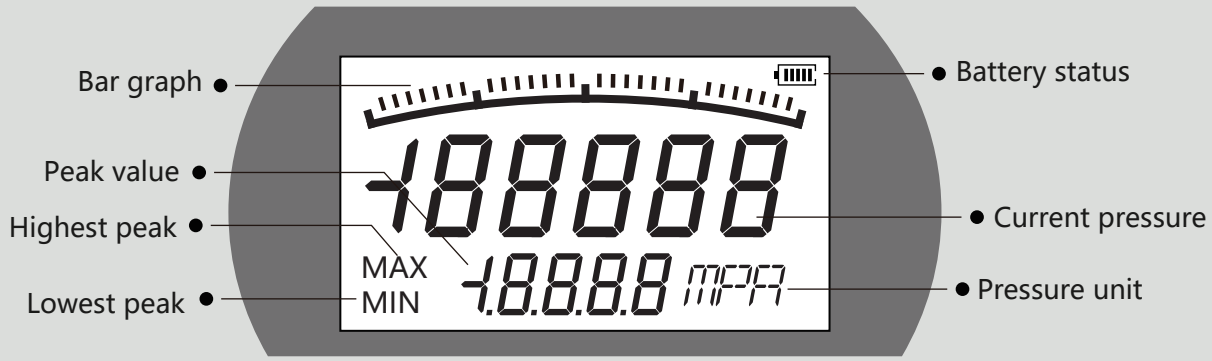


BD-Center back mount with flange



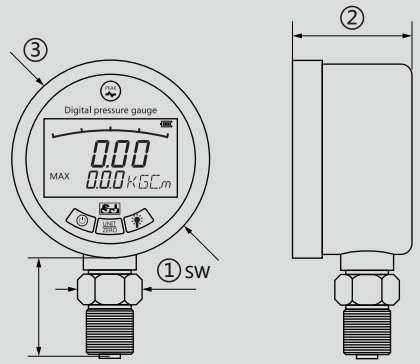
Connection location				
NS	A	AC	AD	BD
2.5"	V	-	V	V
3"	V	V	V	V
4"	V	-	V	V

Interface Description



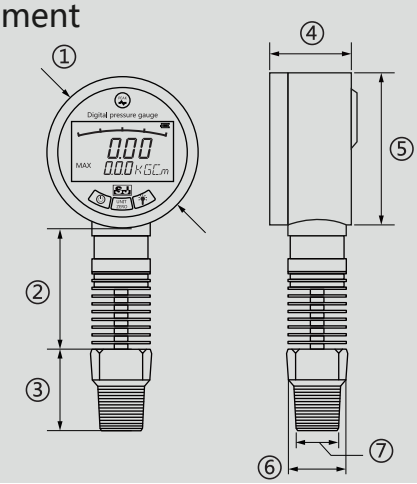
Dimensions

A-Bottom mount



Dimensions (mm)			
NS	①	②	③
2.5"	24	40	67
3"	24	51	81
4"	24	48	100

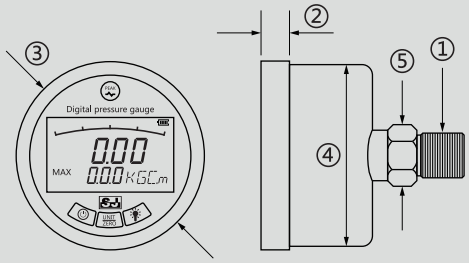
AC-Bottom mount with cooling element



Dimensions (mm)							
NS	①	②	③	④	⑤	⑥	⑦
3"	80.6	63.8	31	48.3	79.8	29	M20*1.5

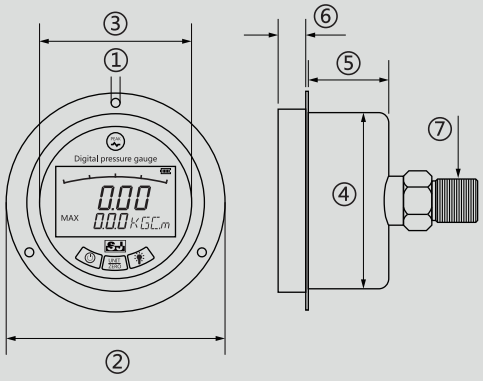
Dimensions

AD-Center back mount



Dimensions (mm)					
NS	①	②	③	④	⑤
2.5"	1/4"	10.5	69	62	27
3"	1/4"	12.5	71.5	76	27
4"	1/4"	16	97	103	27

BD-Center back mount with flange

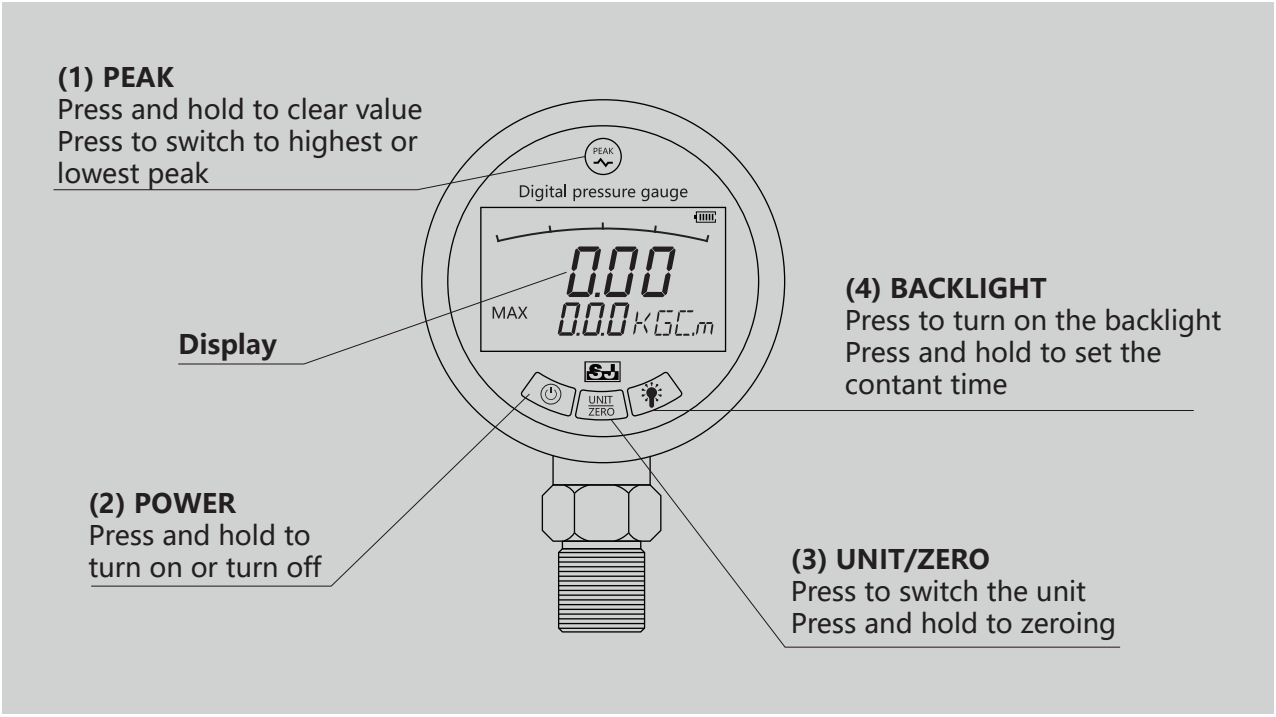


Dimensions (mm)							
NS	①	②	③	④	⑤	⑥	⑦
2.5"	6.5*5.5	89	69	62	29.5	10.5	1/4"
3"	4.5*3	107	71.5	76	38	12.5	1/4"
4"	5.5*3	135	97	103	33	16	1/4"

LCD Digital Display
Model：MXB

Operation Manual

Key functions



How to get back when accidently access the menu?

Press (1) PEAK to return to measurement mode.

How to set constant backlight?

1. Turn on.
2. Press and hold (4) BACKLIGHT to enter the menu.
3. Press (4) BACKLIGHT to change the ones digit to 0.
4. Press (3) ZERO/UNIT to switch to the tens digit, and press (4) BACKLIGHT to set the value to 0.

※ Do not set numbers other than 00, otherwise it will affect the factory settings and cause program confusion。

5. And press (1) PEAK again to complete the constant backlight setting.

How to reset?

1. Turn on.
2. Press and hold (4) BACKLIGHT to enter the menu.
3. Press (4) BACKLIGHT to change the ones digit to 9.
4. Press (3) ZERO/UNIT to switch to the tens digit, and press (4) BACKLIGHT to set the value to 9.
5. And press (1) PEAK to complete resetting.

How to adjust the update frequence?

[Enter the menu]
1. Turn on.
2. Long press (4) BACKLIGHT to enter the first level menu.
3. Press (4) BACKLIGHT to toggle the ones digit to 6.
4. Press (3) ZERO/UNIT to switch to the tens digit, then press (4) BACKLIGHT to set the value to 9.
5. Press (1) PEAK to confirm to enter the second level menu.

[Setting]
6. Press (3) ZERO/UNIT or (4) BACKLIGHT to switch the screen to "SEF9", then press (1) PEAK to enter the frequency setting.
7. The default value is "01", press (4) BACKLIGHT to adjust the value. (The larger the number, the lower the update frequency and the more stable the display.)

[Exit the menu]
8. Press (1) PEAK to return to the second level menu.
9. Press (3) ZERO/UNIT or (4) BACKLIGHT to switch the screen to "SOUt", then press (1) PEAK to complete the frequency setting.

How to set the automatic shutdown time?

[Enter the menu]
1. Turn on.
2. Long press (4) BACKLIGHT to enter the first level menu.
3. Press (4) BACKLIGHT to toggle the ones digit to 6.
4. Press (3) ZERO/UNIT to switch to the tens digit, then press (4) BACKLIGHT to set the value to 9.
5. Press (1) PEAK to confirm to enter the second level menu.

[Setting]
6. Press (3) ZERO/UNIT or (4) BACKLIGHT to switch the screen to "CLtt", then press (1) PEAK to enter the shutdown setting.
7. The default value is "00", press (4) BACKLIGHT to adjust the value. (Number 01 is 1 minute, number 02 is 2 minutes, etc.)

[Exit the menu]
8. Press (1) PEAK to return to the second level menu.
9. Press (3) ZERO/UNIT or (4) BACKLIGHT to switch the screen to "SOUt", then press (1) PEAK to complete the shutdown setting.

Digital Pressure Switch

Model: MXE4

Product Description

- Precisely set value to efficiently avoid incorrect signals from pointer vibration
- Easily set the pressure switch values on site
- Various operating voltage settings and switch contacts to support different applications

Product Specification

Nominal size
3", 4"

Scale ranges
0 ... 10 kPa to 0 ... 1000 MPa, or other equivalent units of pressure, vacuum or compound

Pressure units
3": MPa, kg/cm^2, kPa
4": MPa, kg/cm^2, kPa, psi

Accuracy
±1.0% F.S. (standard), ±0.5% F.S.

Process connection
304 SS
1/4" PT, G 1/4", G1/2", 1/4" NPT, 1/2"NPT, M14*1.5, M20*1.5

Case/Ring
304 SS

Ambient temperature
-10℃ ... 60℃

Medium temperature
-35℃ ... 60℃

Voltage supply
DC12V, DC24V, DC36V, AC110V, AC220V, AC380V

Production Specification

Rated point capacity
DC32V/5A, AC250V/10A

Relay
Omron

Starting current
0.5 A

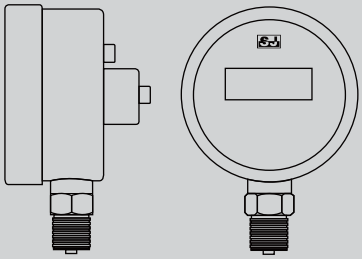
Protection level
IP 40

Fuse
F3AL250V, 5*20, 3A

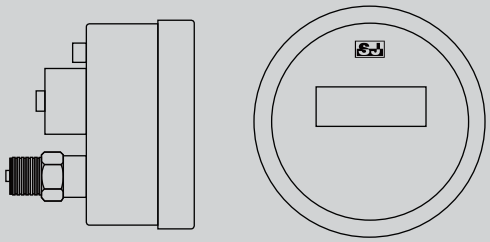
Relay \ Volt	DC24V	AC220V	AC380V
Single	35 mA	7.5 mA	5 mA
Double	50 mA	10 mA	7.5 mA

Connection Location

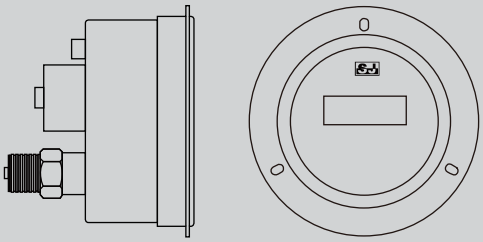
A-Bottom mount



AD-Back mount



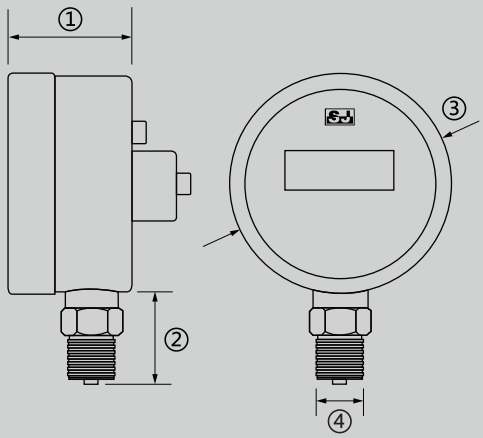
BD-Back mount with flange



Connection location			
NS	A	AD	BD
3"	V	V	V
4"	V	V	V

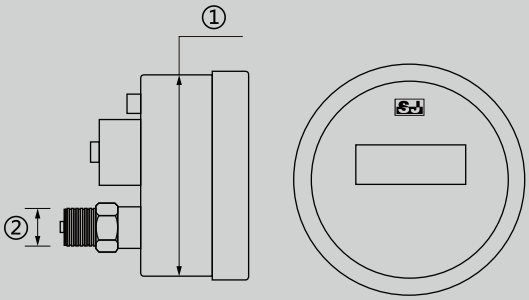
Dimensions

A-Bottom mount



Dimension (mm)				
NS	①	②	③	④
3"	48	36.8	80.8	M14*1.5
4"	58	41	100	M20*1.5

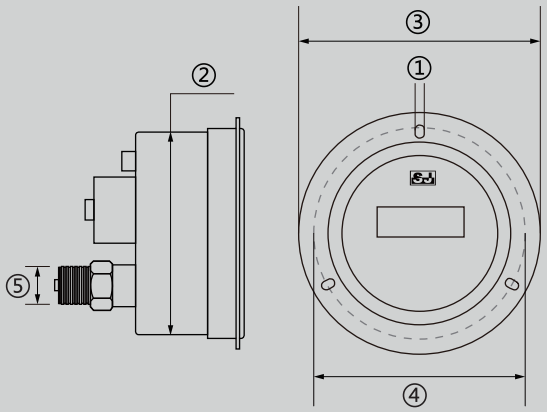
AD-Back mount



Dimension (mm)		
NS	①	②
3"	76	M14*1.5
4"	100	M20*1.5

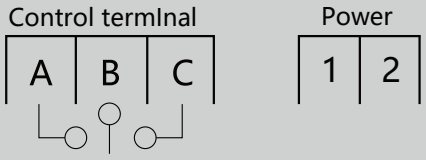
Dimensions

BD-Back mount with flange



Dimension (mm)					
NS	①	②	③	④	⑤
3"	4.5	79	107	96.5	M14*1.5
4"	5	100	132.5	117	M20*1.5

Wiring Diagram



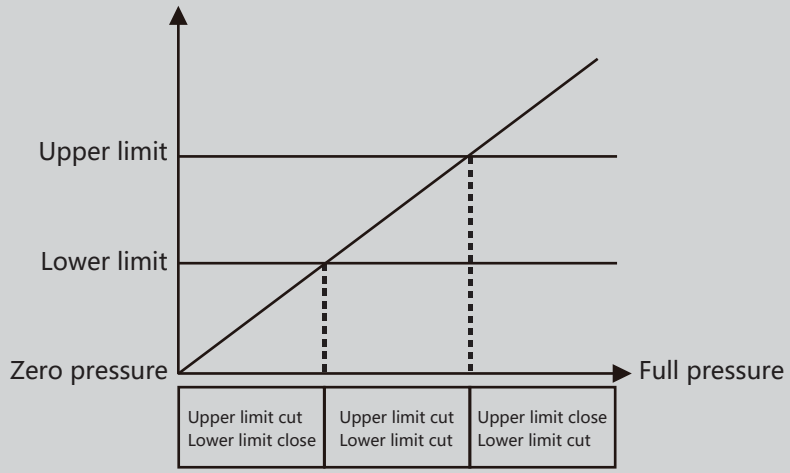
A. Upper limit contact
B. Common
C. Lower limit contact

Note: the input voltage

⚠
While control the output switch signal, it need to use with AC contactor

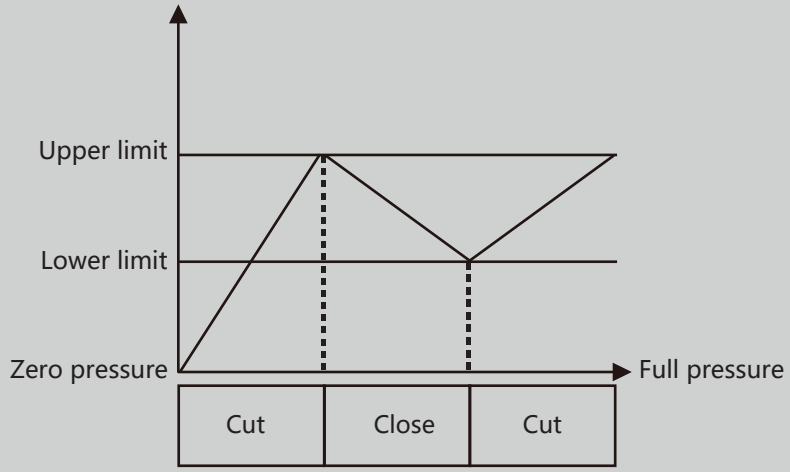
Control Function

05 Electric contact (standard)



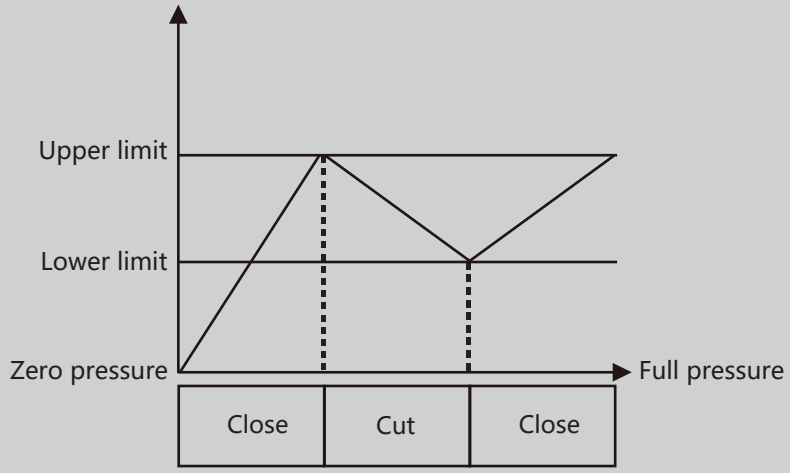
Over the upper limit point than output,
below the lower limit point than output

03 Anti-control



Over the upper limit point than cut,
below the lower limit point than close

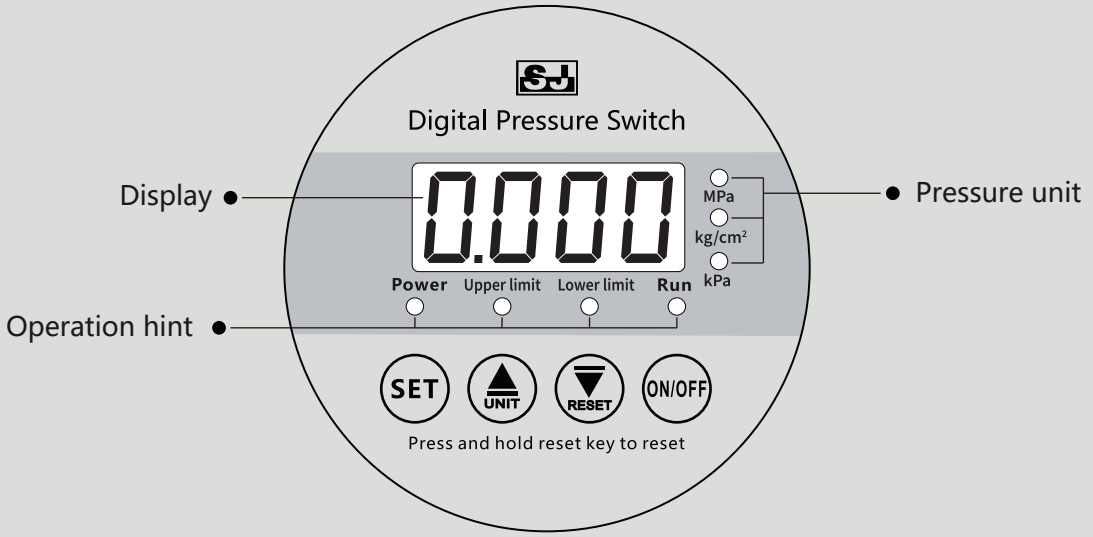
01 Positive control



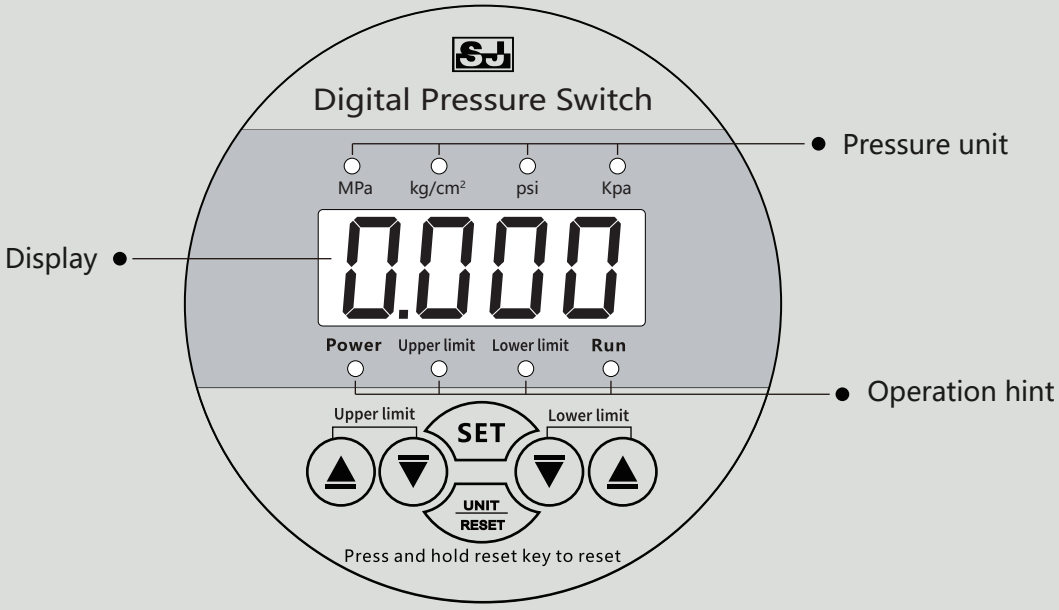
Over the upper limit point than cut,
below the lower limit point than close

Panel display

3" Digital pressure switch

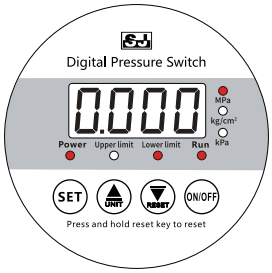
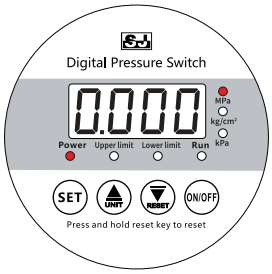


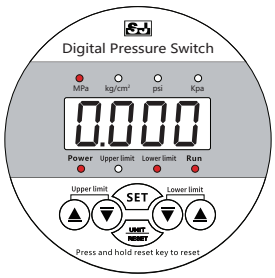
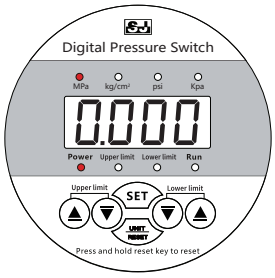
4" Digital pressure switch



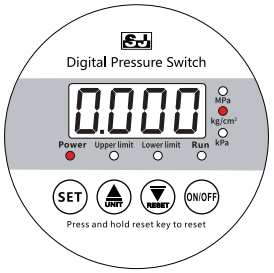
How to zeroing?

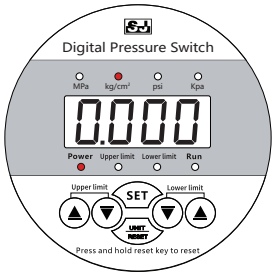
Due to the different atmospheric pressures in different places, the zero calibration should be performed first regardless of whether the screen has displayed values or not.

3" Digital pressure switch		
Operation	Operate	Indicator light
Step. 1 Power on	Please make sure that the pressure gauge is powered on at atmospheric pressure. At this time, the indicator light is on, and the "RUN" light is flashing.	
Step. 2 Zeroing	1. Press "ON/OFF" to enter the setting menu. 2. Press and hold "RESET" (down arrow) to zero.	

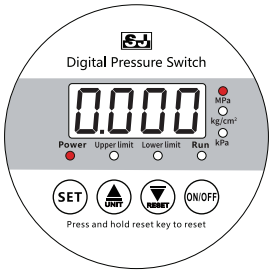
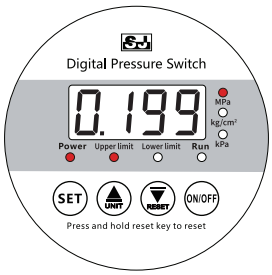
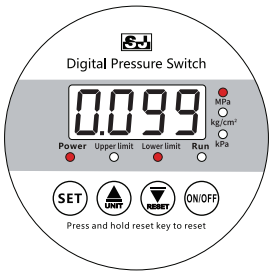
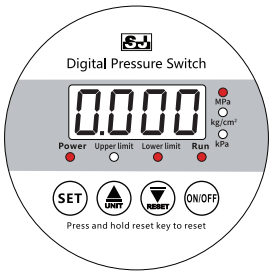
4" Digital pressure switch		
Operation	Operate	Indicator light
Step. 1 Power on	Please make sure that the pressure gauge is powered on at atmospheric pressure. At this time, the indicator light is on, and the "RUN" light is flashing.	
Step. 2 Zeroing	Press and hold "UNIT/RESET" to zero.	

How to switch the pressure unit?

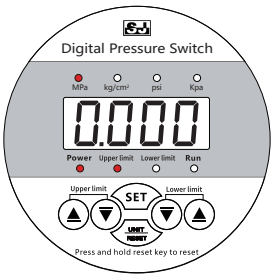
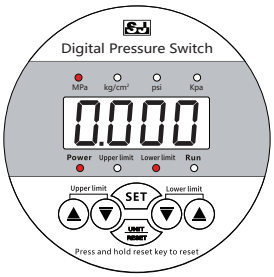
3" Digital pressure switch		
Operation	Operate	Indicator light
Switch the unit	1. Press "ON/OFF" to enter the setting menu. 2. Press and hold UNIT" (up arrow) to switch the unit.	

4" Digital pressure switch		
Operation	Operate	Indicator light
Switch the unit	Press "UNIT/RESET" to switch the unit.	

How to set the upper and lower limit?

3" Digital pressure switch		
Operation	Operate	Indicator light
Step. 1 Enter the menu	Press "ON/OFF" to enter the setting menu.	
Step. 2 Set the upper limit	1. Press "SET" key to enter the upper limit setting menu. 2. Press "UNIT" (up arrow) or "RESET" (down arrow) to increase or decrease values.	
Step. 3 Set the lower limit	1. Continue to the previous step, press "SET" to enter the lower limit setting menu. 2. Press "UNIT" (up arrow) or "RESET" (down arrow) to increase or decrease values.	
Step. 4 Complete the setting	1. Press "SET" to exit the limit setting. 2. Press "ON/OFF" to complete the upper and lower setting.	

How to set the upper and lower limit?

4" Digital pressure switch		
Operation	Operate	Indicator light
Set the upper limit	Short press the "up arrow" or "down arrow" under "Upper limit" to increase or decrease the value to complete the upper limit setting.	
Set the lower limit	Short press the "up arrow" or "down arrow" under "Lower limit" to increase or decrease the value to complete the lower limit setting.	

High Precision Digital Pressure Gauge

Model: MXP

Product Description

- Accuracy up to 0.025% F.S., ideal for instrument calibration
- Regulated by the equipment from international, industry-leading calibration companies: Mensor and GE
- Built-in lithium battery, which allows charging during use (micro-B)

Product Specifications

Nominal size
4"

Scale ranges
0 ... 40 kPa to 0 ... 100 MPa, or other equivalent units of pressure, vacuum or compound

Pressure units
kg/cm^2, mH_2O, kPa, mmHg, psi, bar, pa, MPa

Accuracy
±0.1% F.S., ±0.05% F.S., ±0.025% F.S.

Process connection
304 SS
1/2" NPT, G1/8", G1/4", G3/8", G1/2", M20*1.5 or with adapter

Case/Ring
Aluminum alloy nickel plating

Panel
PVC

Diaphragm
316L SS

Medium temperature
-35℃ ... 60℃

Product Specifications

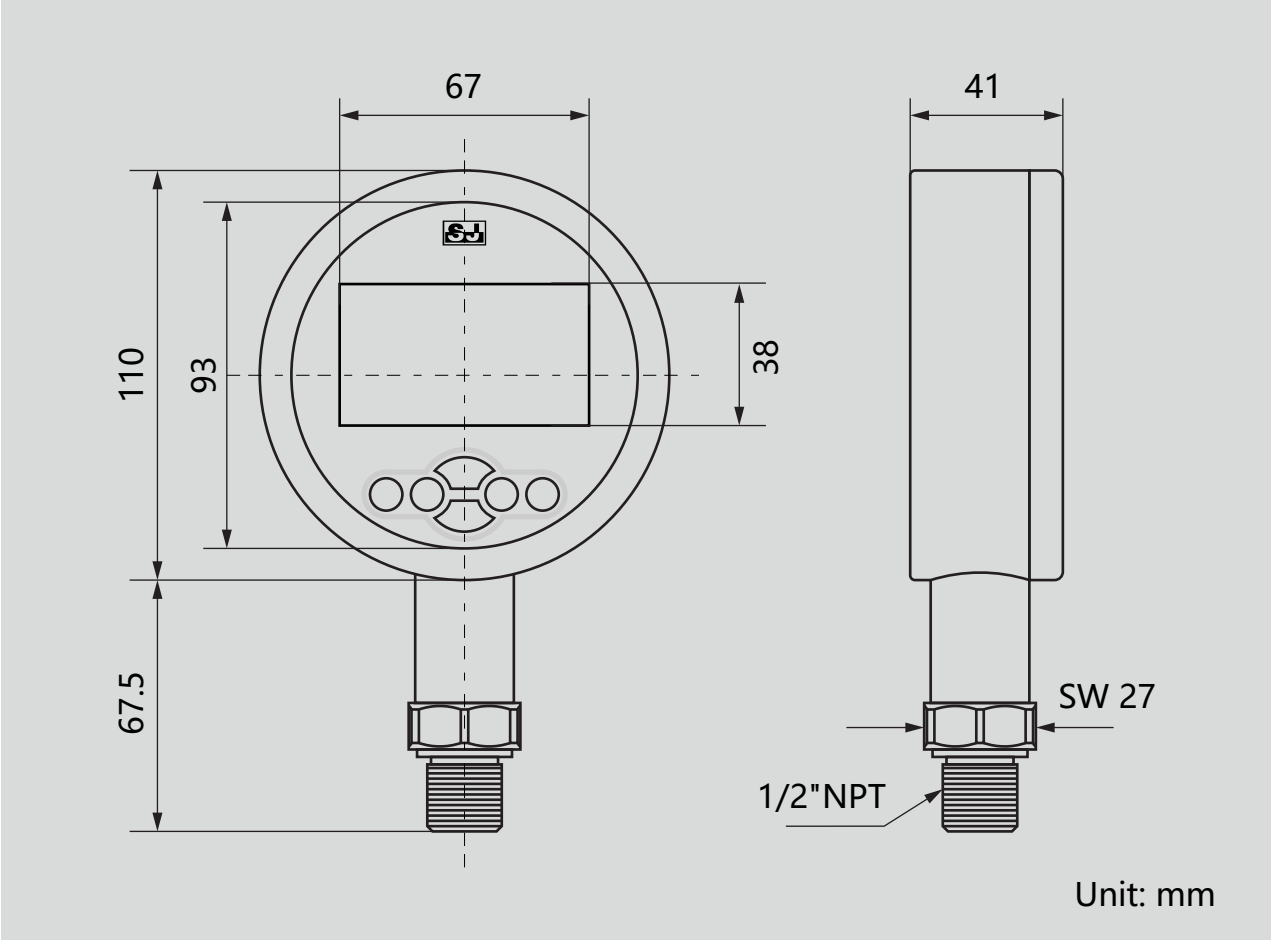
Display
5 digits
LCD, switchable backlight button

Response time
20 ... 25 times/sec

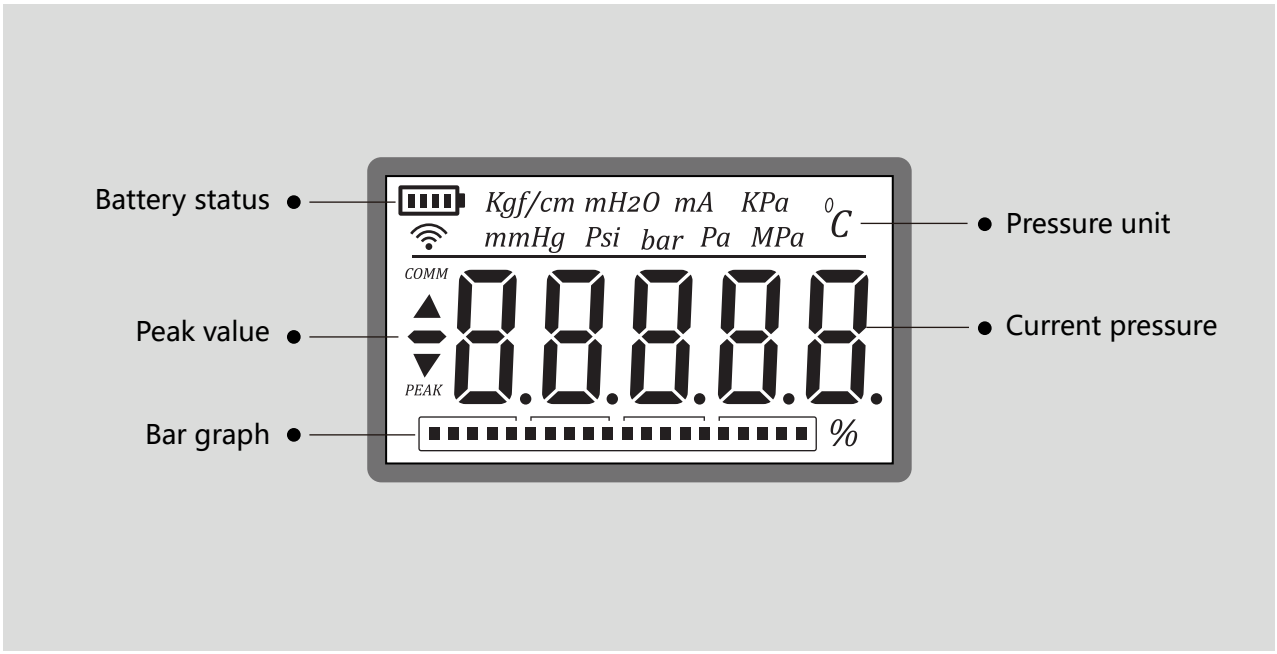
Power supply
14500 chargeable lithium battery

Weight
1.5 Kg
(including the box and accessories)

Dimensions



Interface Description



Accessories

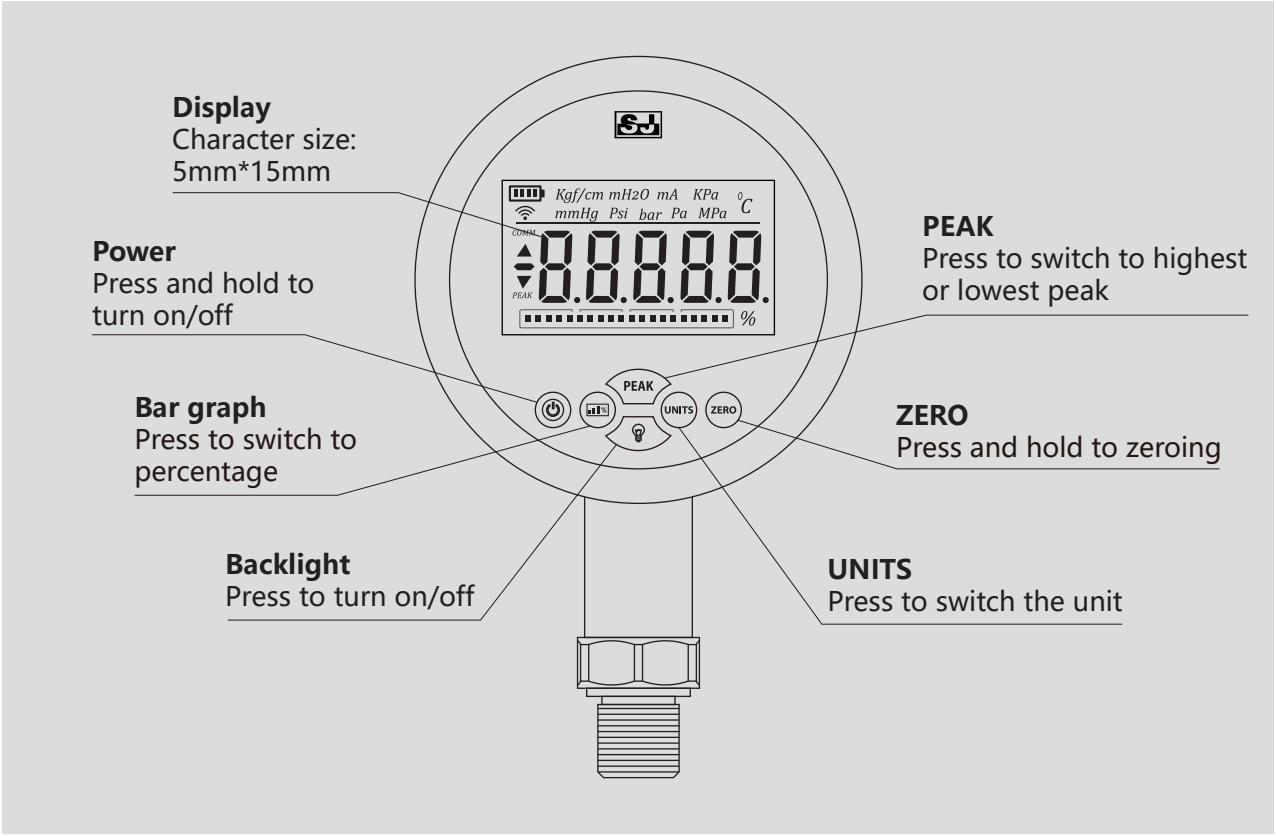
Standard

Shake-proof box
size: 200mm*140mm*100mm

Standard

Accessory kits: charger, charging cable

Key functions



Pressure Transmitter: Analog Signal Output

Model: MXT

Product Description

- 4-20mA signal output for remote monitoring
- Digital display which allows local observation at the same time
- LED digital panel with high brightness and a wide viewing angle

Product Specificaion

Connection location
Bottom mount

Electrical connection
2P aviation plug

Nominal size
2.5"

Scale ranges
0 ... 5 kPa to 0 ... 100 MPa, or other equivalent units of pressure, vacuum or compound

Pressure units
Any units are available

Accuracy
±1.0% F.S. (standard), ±0.5% F.S.

Process connection
304 SS (standard), 316 SS
1/4", 3/8", 1/2"; PT, G, NPT

Case/Ring
304 SS

Panel
PVC

Medium temperature
-35℃ ... 60℃

Display
4 digits

Product Specification

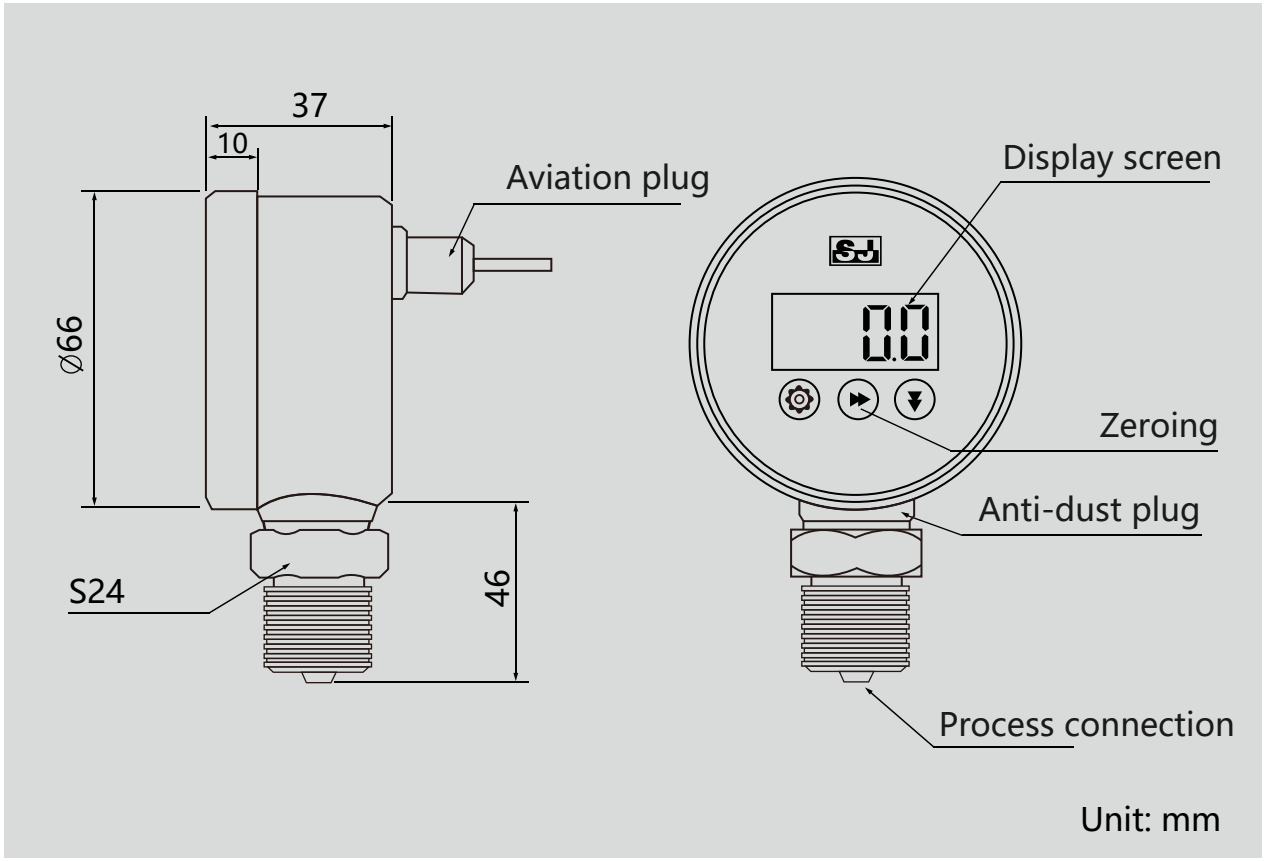
Response time
Above 5 Hz

Voltage supply
DC16-32V

Output signal
4-20mA

Protection level
IP 40

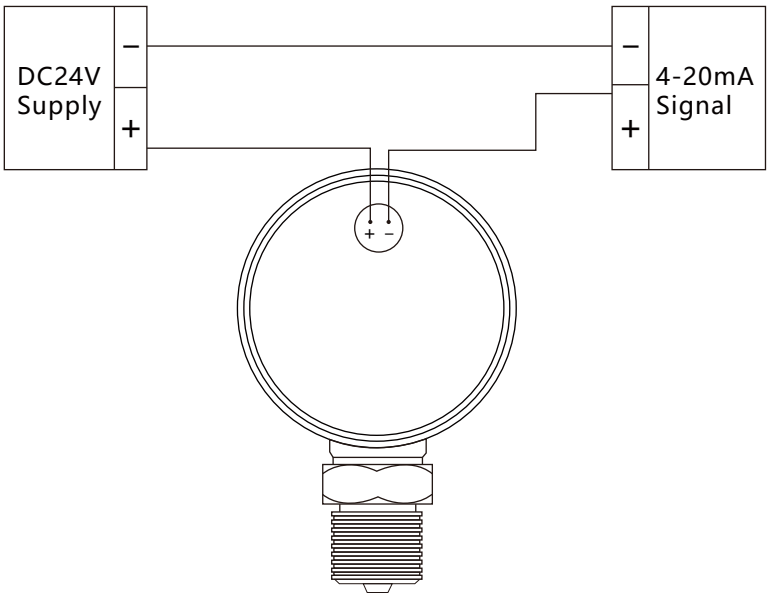
Dimensions & Key Functions



Analog signal output
Model: MXT

Operation Manual

Wiring Instruction



※ Please refer to the label on the rear of the instrument .
※ The 4-20mA signal terminal must be connected in series, otherwise the meter will not be powered on.

How to zero?

Press and hold ⏩ for 3 seconds.

FAQ

1. If the screen still display the pressure value under the zero pressure state. It is because of the slight error caused by the different atmospheric pressures in various places, which does not affect the normal use. (Please make sure that the instrument is not connected to the pressure pipeline, otherwise it will increase the equipment error.)
2. If the output mA number of the device is lower than the normal value. It may be because the power supply voltage has not reached 24V. Please check the power supply equipment.

Integrated Anti-corrosion Plastic Type

Model: PRD-APP

Product Description

- 4-20mA or RS485 signal output for remote observation
- Digital display which allows local observation at the same time
- Corrosion resistance on both case and wetted part, mainly used in the PCB industry

Product Specification

Nominal size
2.5"

Scale range
0 ... 10 kPa to 0 ... 5 MPa, or other equivalent units of pressure, vacuum or compound

Accuracy
±1.0% F.S.

Process connection
PP; G1/2" (F)

Case/Ring
Nylon

Sensor element
Zirconia

Accessories (options)
Transparent plastic cover

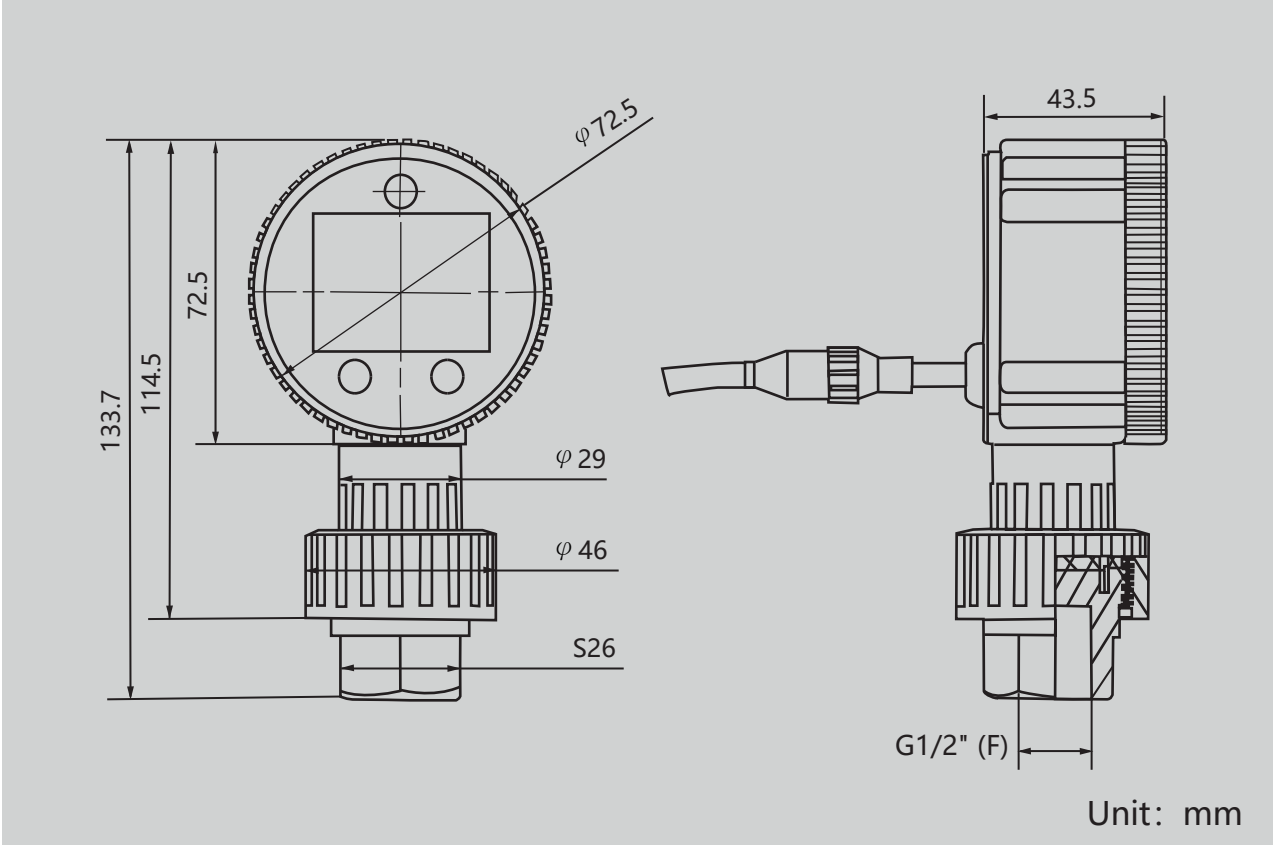
Medium temperature
-20℃ ... 70℃

Voltage supply
DC15-30V

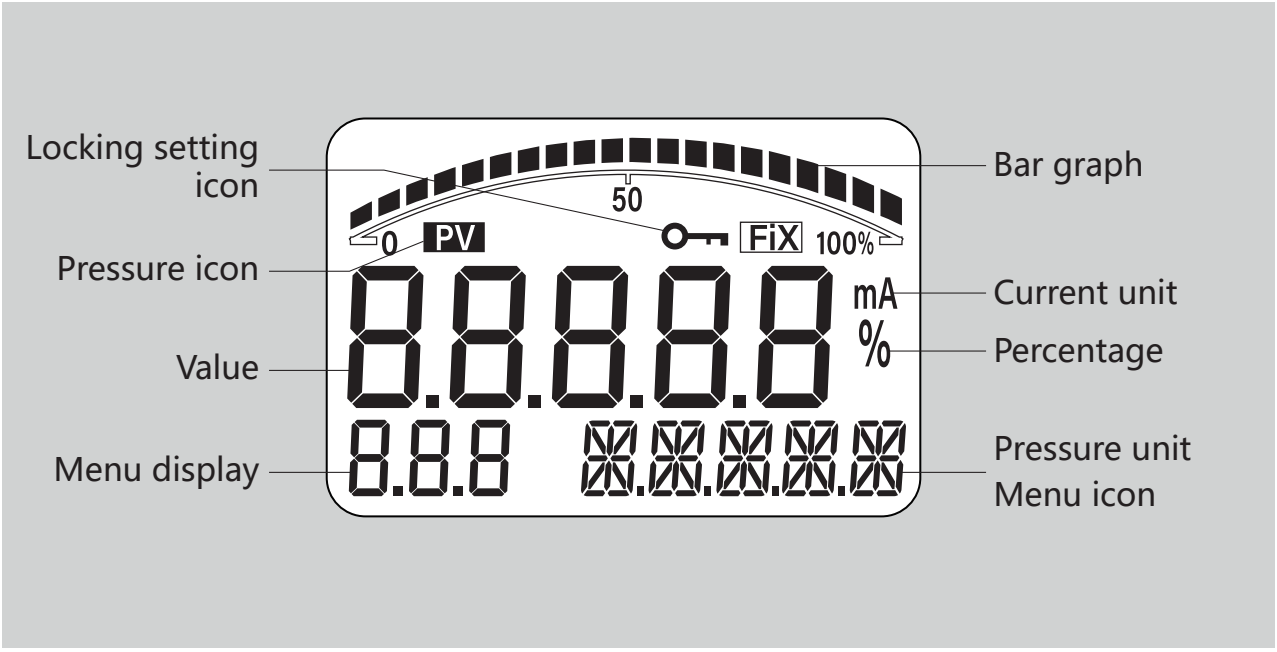
Output signal
4-20 mA, RS485

Power consumption
0.5 W

Dimensions



Interface Description



Accessories

Options

Transparent plastic cover

Double Sided PP Diaphragm Pressure Gauge

Model: PRD-DP

Product Description

- Double sided display facilitating observation and operation
- LCD monitor with backlight, beneficial to long-term monitoring
- Corrosion resistance on both case and wetted part, generally used in the PCB industry

Product Specification

Nominal size
3"

Scale ranges
0 ... 2 MPa or other equivalent units of pressure, vacuum or compound

Pressure units
MPa, kg/cm^2, bar, psi, mmH_2O, kPa, Pa, inWC, mbar, mH_2O, inHg, mmHg, Torr (Up to 8 units can be switched, if not specified, the engineer will select it according to the pressure range)

Accuracy
±1.0% F.S.

Process connection
Thread: nylon; core: zirconia
G1/2 (F)

Case/Ring
Nylon

Panel
Acrylic

Medium temperature
-35℃ ... 60℃

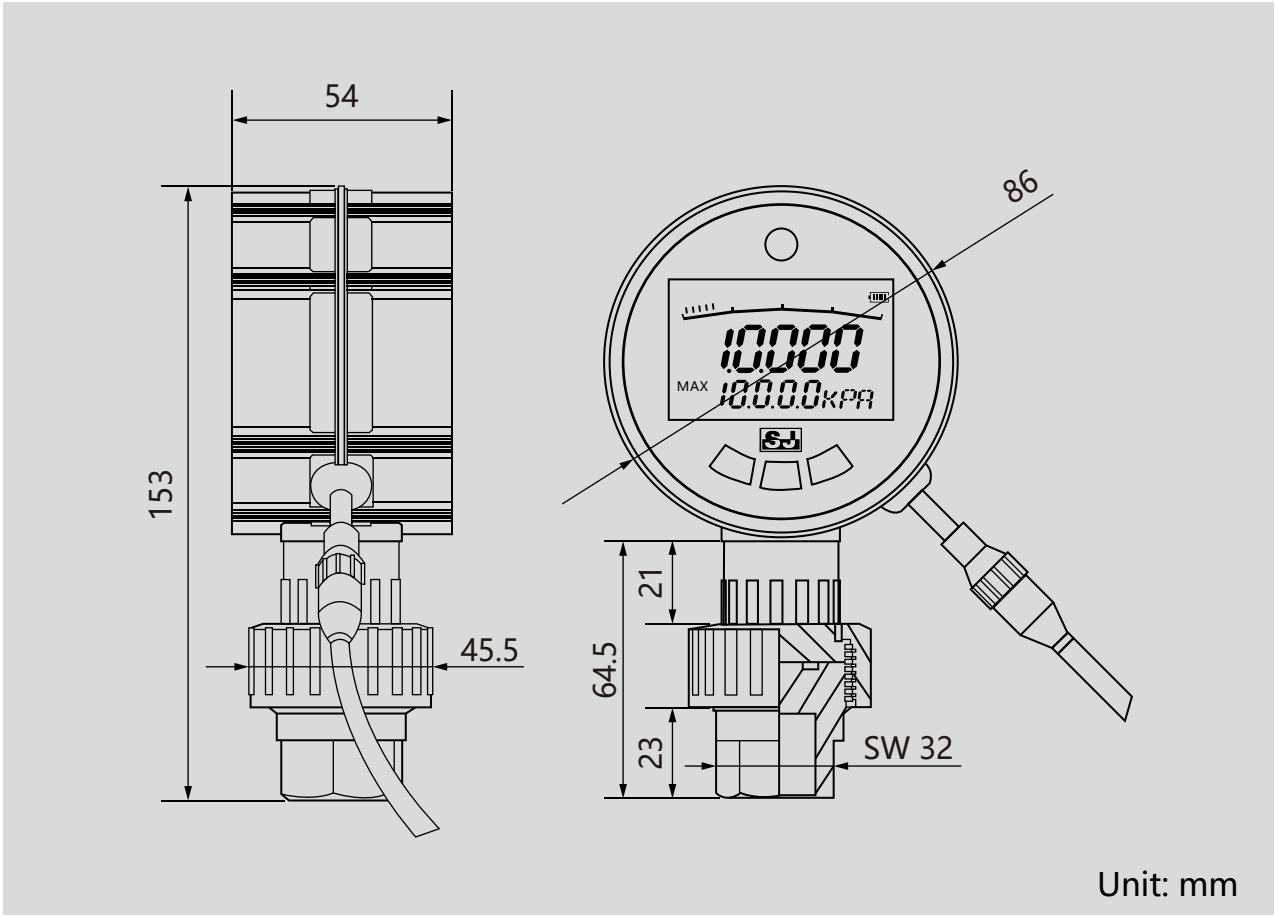
Display
5.5 digits
LCD switchable backlight button

Product Specification

Response time
18 times/sec

Voltage supply
External power supply DC5V

Dimensions



Simple Digital Pressure Gauge

Model: PRD-TG

Product Description

- Cost-effective digital pressure gauge with a short lead time
- Intuitive interface for easy operation
- For gaseous and liquid pressure media that are not highly viscous or crystal-lizing

Product Specification

Nominal size
2.5"

Pressure medium
Non-corrosive gases and liquid

Scale ranges
5 ... 175 psi,
The value starts to display after
0.21 kg/cm^2

Pressure units
psi, bar, kPa, kg/cm^2

Accuracy
±1.0% F.S.

Process connection
G1/4"

Resolution
0.2% F.S. ... 0.5% F.S.

Burst pressure
1.6 MPa

Medium temperature
-10℃ ... 50℃

Display
3.5 digits
LCD, switchable backlight button

Power supply
AAA battery*2 (not included)

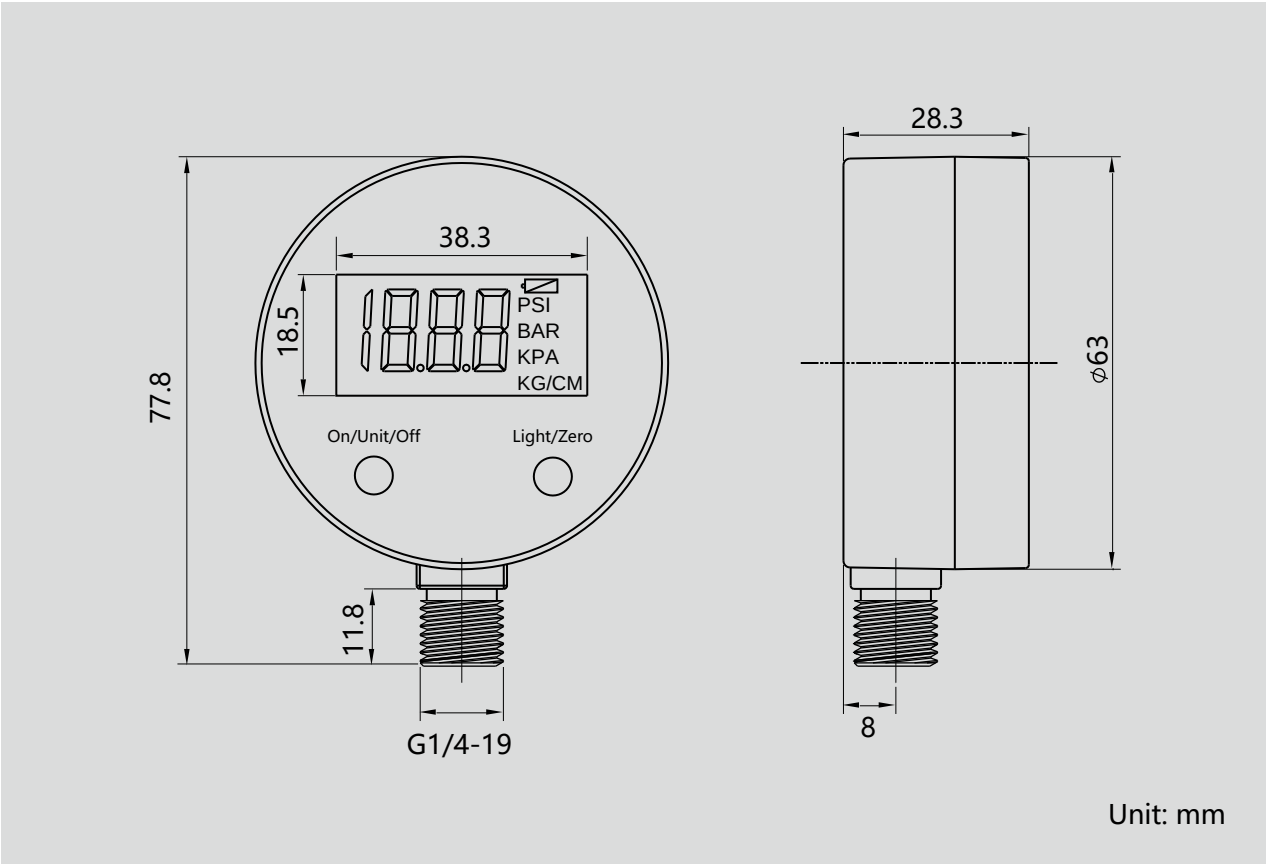
Product Specification

Working current
0.5 mA

Functions
Long press "On/Unit/Off" button to turn on.
If the client doesn't press any buttons, the gauge will automatically turn off after 30 seconds by default.

Weight
80 g

Dimensions



Pressure Transmitter for General Use

Model: QD

Product Description

- Selectable output signal based on your needs (4-20mA and RS485, etc.)
- Select from waterproof connector, angular connector and aviation connector.
- Can be used as a level gauge under certain conditions

From the left side to the right: Angular connector/Circular connector/Waterproof metal connector/Waterproof plastic connector

Product Specification

Electrical connections
Angular, aviation,
water-proof plastic (Cable outlet 1 M),
water-proof metal (Cable outlet 1 M)

Scale ranges
0 ... 10 kPa to 0 ... 1000 bar,
or other equivalent units of pressure,
vacuum or compound

Accuracy
±0.5% F.S. (standard)
±0.25% F.S.

Process connection
304 SS (standard) , 316 SS
PT: 1/4", 1/2"
G: 1/8", 1/4", 1/2"
NPT: 1/4", 1/2"
M20*1.5, M14*1.5

Case/Ring
304 SS

Diaphragm
316L SS

Accessories
Cooling element: -30℃ ... 200℃
(options)

Product Specification

Medium temperature
-35℃ ... 60℃

Response time
≦ 10ms

Voltage supply
DC 16 ... 32V

Output signal
4-20mA, 0-10V, 0-5V, RS485

Zero drift
≦ 0.1% F.S.

Stability
≦ ±0.15% F.S. / year

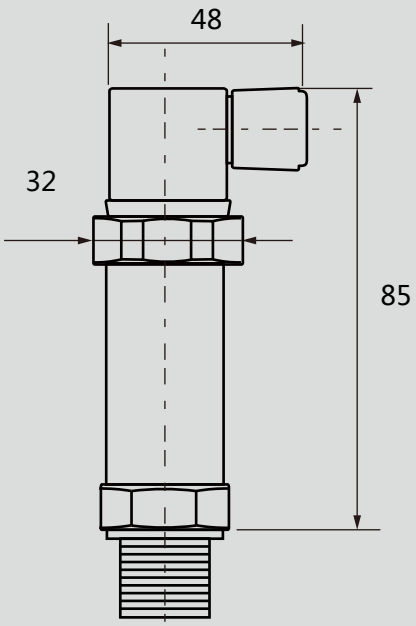
Transmission distance
±100M (without electromagnetic interference)

Vibration resistance
≦ 0.15% F.S. / year

Insulation resistance
≧ 1000MΩ / 100VDC

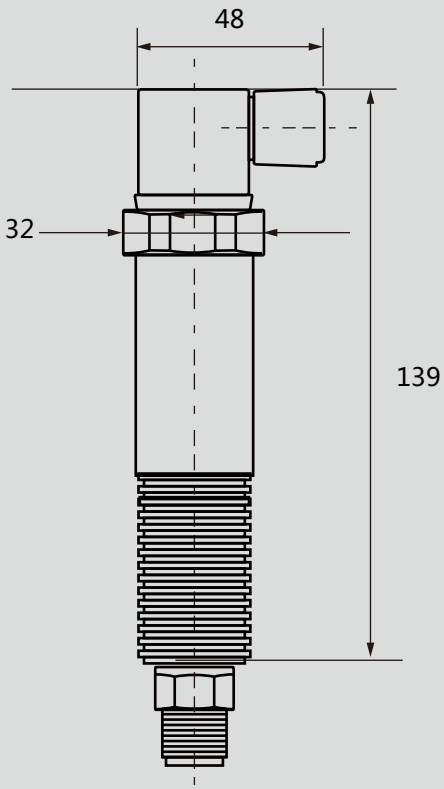
Dimensions

Angular connector



Unit: mm

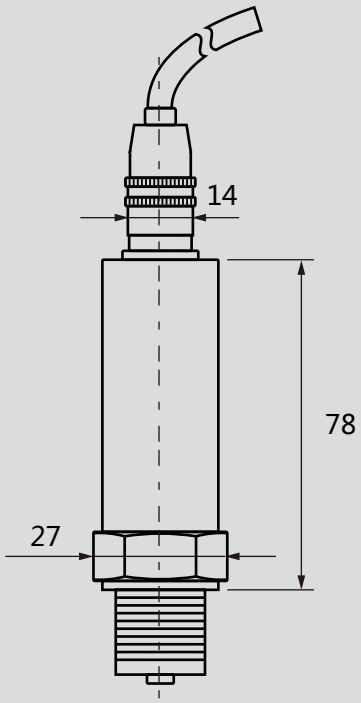
Angular connector with cooling element



Unit: mm

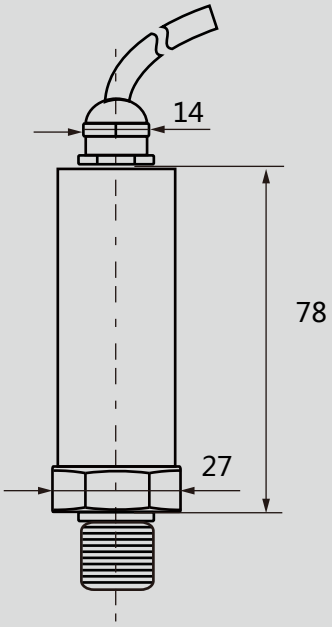
Dimensions

Aviation connector



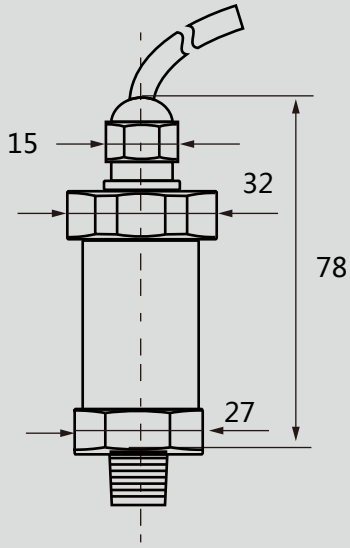
Unit: mm

Water-proof metal connector



Unit: mm

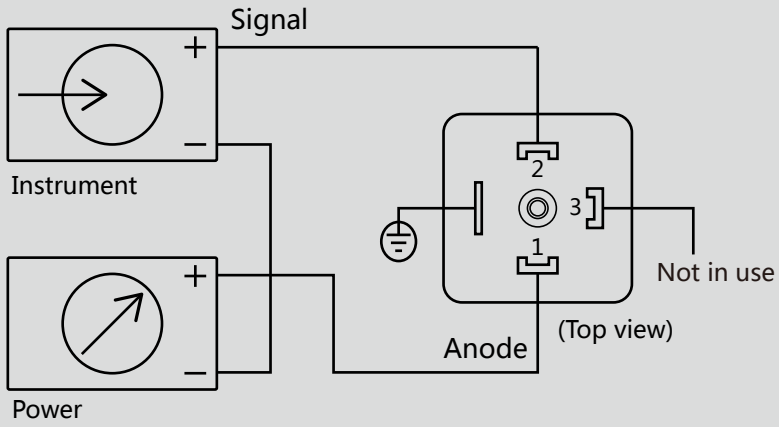
Water-proof plastic connector



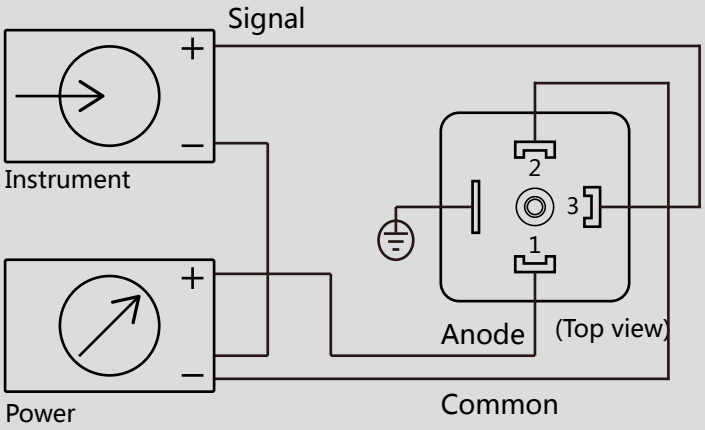
Unit: mm

Wiring Diagram

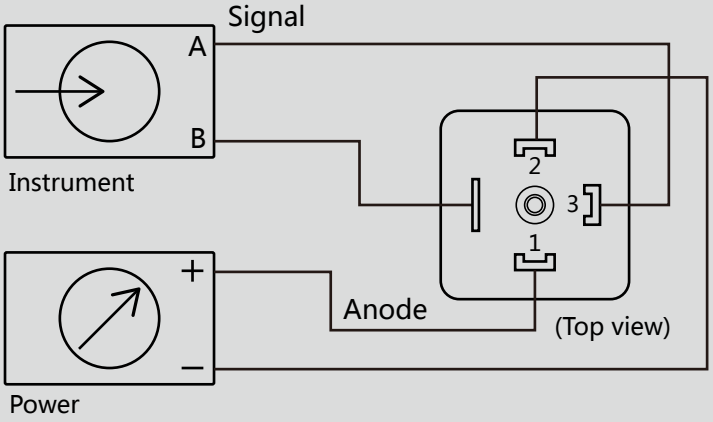
Angular connector-2 wire (4-20mA)



Angular connector-3 wire (0-5V, 0-10V)



Angular connector-4 wire (RS485)



Multi-function Dp Transmitter

Model: TWM11

Product Description

- On site customizable units and range for specific scales
- LCD backlight display, beneficial for long-term monitoring
- Limited to non-flammable and non-corrosive gases
- Usually used in filter, fan and duct pressure monitoring for building automation systems in the HVAC industry

Fig. left: With screen display
Fig. right: Without screen display

Product Specification

Version
With monitor, without monitor

Pressure medium
Gas

Scale ranges

Type	Scale range	Minimum scale range
0	-1000 ... 1000 Pa	0 ... 100 Pa
2	-10000 ... 10000 Pa	0 ... 1000 Pa
6	-100 ... 100 Pa	0 ... 10 Pa

Pressure units
Pa, mmH_2O, mbar, inWC, mmHg, daPa, kPa, hPa

Accuracy
±1.0% F.S.

Resolution
0, 2: 1 Pa, 0.1 mmH_2O, 0.01 mbar, 0.004 inWG, 0.007 mmHg, 0.1 daPa, 0.001 kPa, 0.001 hPa
6: 0.1 Pa, 0.01 mmH_2O, 0.01 mbar, 0.01 daPa, 0.001 hPa

Pressure limitation
0: 15 kPa
2: 150 kPa
6: 4.5 kPa

Medium temperature
-10℃ ... 60℃

Product Specification

Ambient temperature
-10℃ ... 70℃

Voltage supply
12-30VDC

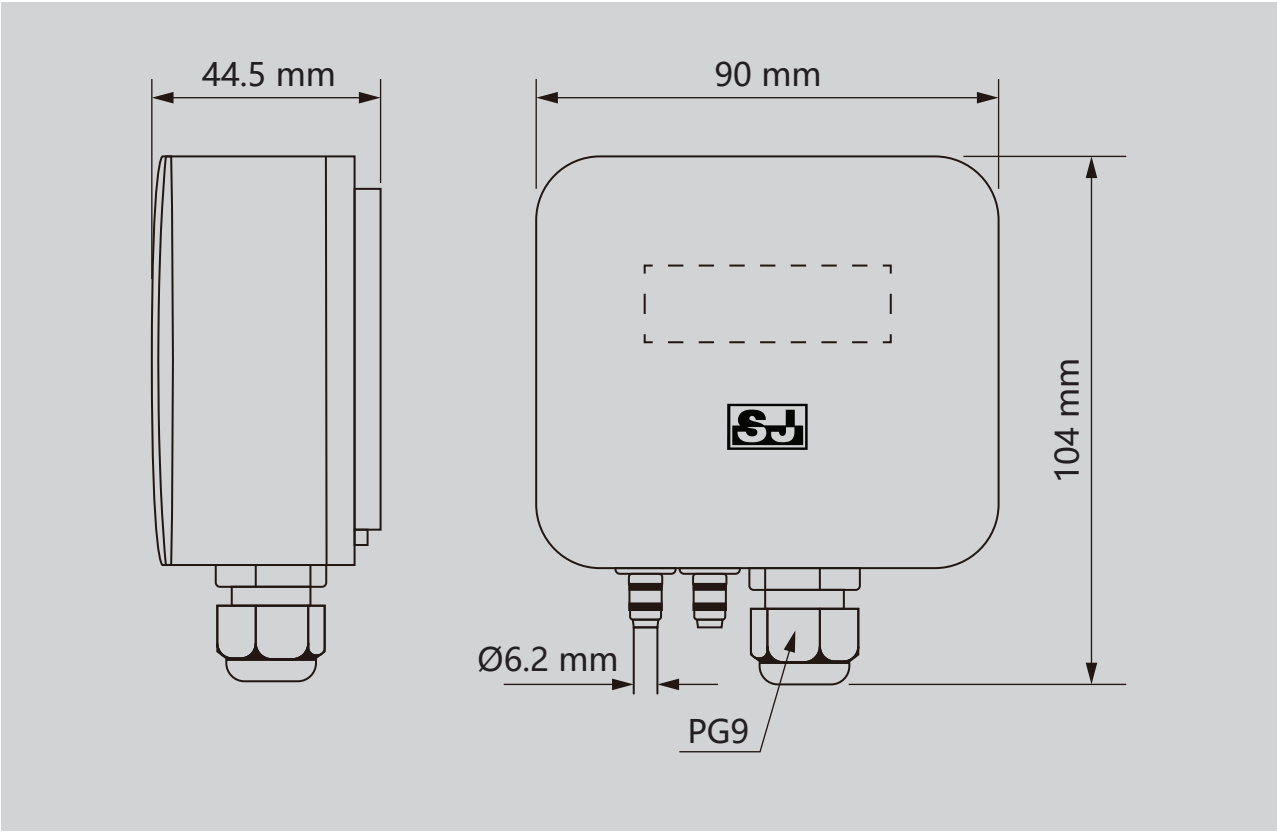
Output signal
2-wire: 4-20mA
3-wire: 0-5VDC, 0-10VDC
4-wire: RS485
6-wire: 4-20mA & 0-5VDC, 4-20mA & 0-10VDC

Response time
0.5 s, 1 s, 2 s, 4 s

Power consumption
≦ 1.5W

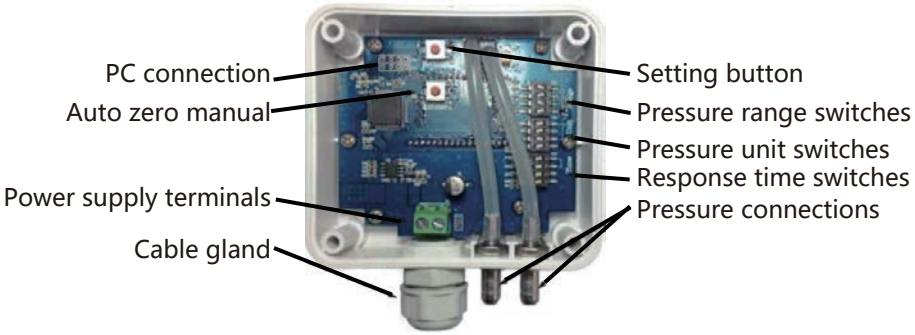
Zero adjustment
By manual or automatic operation

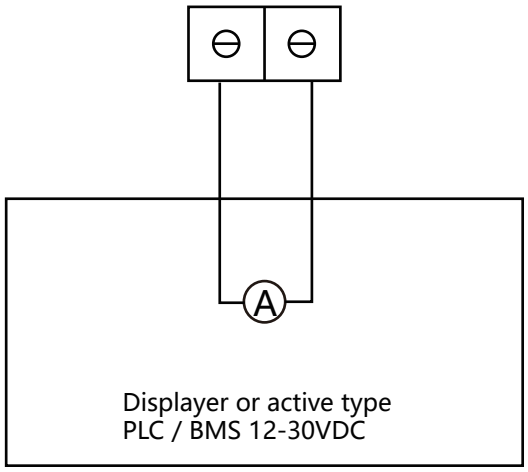
Dimensions



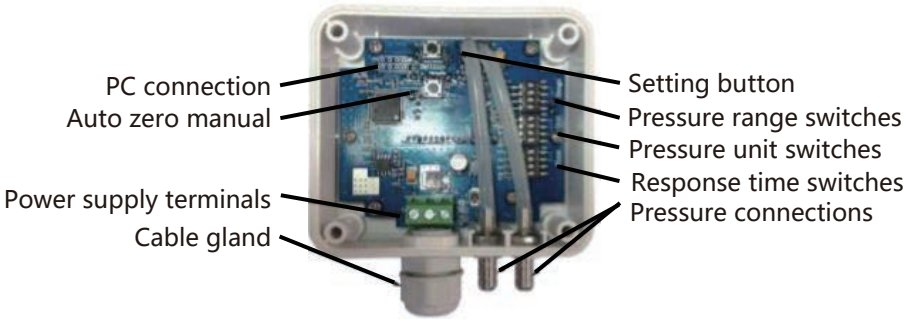
Wiring Diagram

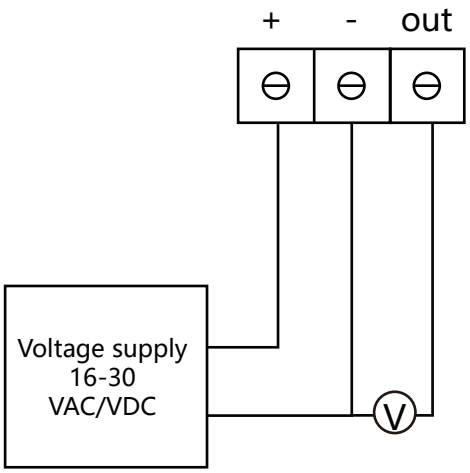
2-wire (4-20mA)





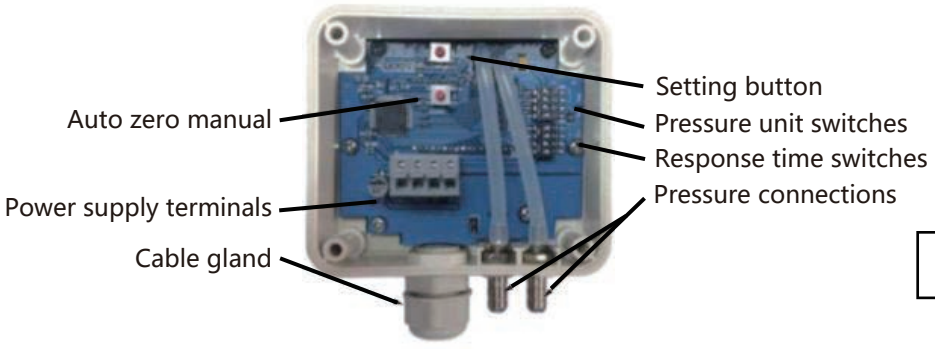
3-wire (0-5VDC, 0-10VDC)

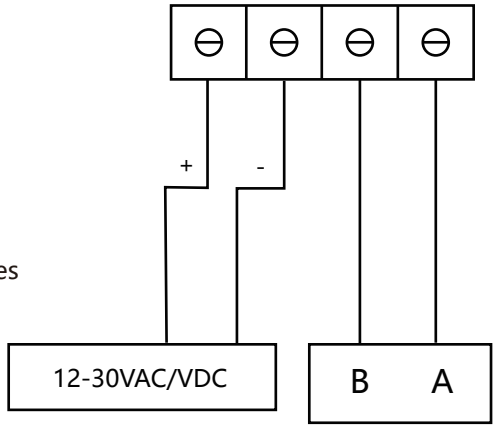




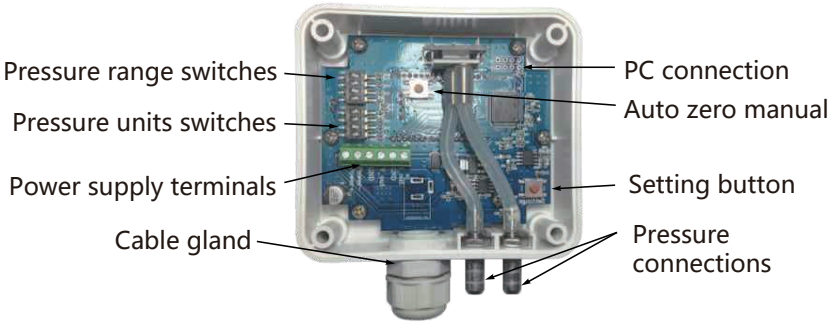
Wiring Diagram

4-wire (RS485)

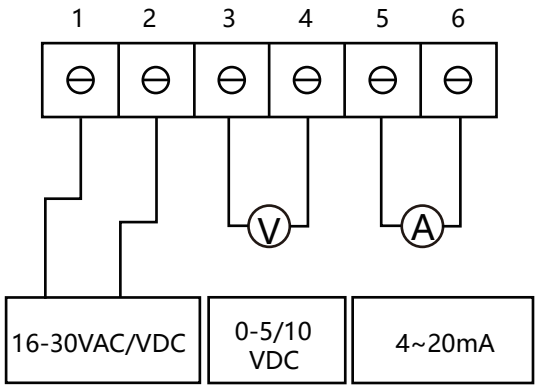




6-wire (4-20mA & 0-5VDC, 4-20mA & 0-10VDC)



※ Note: The standard will produce 4~20mA&0~10V, if you need to produce 4~20Ma&0~5V, please specify in the order.



1. Power+ VAC/VDC L 2. Power- VAC/VDC N
3. Output signal GND 4. Voltage output signal V_out
5. Output signal GND 6. Current output signal I_out

Multi-function Dp Transmitter
Model: TWM11

Operation Manual

Basic functions

1. Display function:

Display pressure and pressure unit, available as Pa, mmH_2O, inWC, mmHG, daPa, kPa, hPa, mbar。

2. FUnction settings:

Precision calibration is through the circuit board by pushing the button. Taking -1000pa to 1000pa as an example, when the button activated, the sensor will enter into the precision calibration status. Input the pressure supply to -1000 Pa and push the button to save the -1000Pa pressure value. Then validating the setting for each additional 500pa. If the next value smaller than the previous one, the validation is invalid and will display "Err" without saving the value. Usually, we set the pressure range with professional machines and workers before shipment, customers are not encouraged to set the pressure.

3, Manual zeroing:

Push the auto zero manual button for resetting. (If any deviation of pressure value or output, please reset the transmitter parallel with the installation)

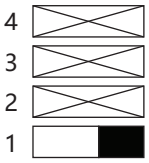
Dial-up switch swtting

1. Range setting:

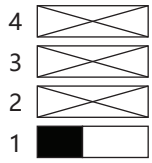
Set the pressure range by the pressure range switch. (The range is correlated to the output. For example, 0~100pa carries with the corresponding 4~20mA and 0~5VDC/0~10VDC.)

	Unit / Model	Pa	mmH_2O	mbar	inWG	mmHG	daPa	kPa	hPa
4 ■ 3 □ 2 ■ 1 ⊠	TWM116	10.0	1.00	0.100	/	/	1.00	/	0.100
	TWM110	100	10.0	1.00	0.40	0.75	10.0	0.100	1.00
	TWM112	1,000	100.0	10.00	4.00	7.50	100	1.000	10.00
4 □ 3 ■ 2 □ 1 ⊠	TWM116	25.0	2.50	0.250	/	/	2.50	/	0.250
	TWM110	250	25.0	2.50	1.00	1.87	25.0	0.250	2.50
	TWM112	2,500	250.0	25.00	10.00	18.75	250.0	2.500	25.00
4 ■ 3 ■ 2 □ 1 ⊠	TWM116	50.0	5.00	0.500	/	/	5.00	/	0.500
	TWM110	500	50.0	5.00	2.00	3.750	50.0	0.500	5.00
	TWM112	5,000	500.0	50.00	20.00	37.50	500.0	5.000	50.00
4 □ 3 □ 2 ■ 1 ⊠	TWM116	75.0	7.50	0.750	/	/	7.50	/	0.750
	TWM110	750	75.0	7.50	3.00	5.62	75.0	0.750	7.50
	TWM112	7,500	750.0	75.00	30.00	56.20	750.0	7.500	75.00
4 ■ 3 □ 2 ■ 1 ⊠	TWM116	100.0	10.00	1.000	/	/	10.00	/	1.000
	TWM110	1,000	100.0	10.0	4.00	7.50	100.0	1.000	10.00
	TWM112	10,000	1,000.0	100.00	40.00	75.00	1,000.0	10.000	100.00

■ Full range/Central zero (take 0~1,000 Pa as an example)
To set the type of measuring range by adjusting the pressure range switch as indicated.



Full range:
0 ... 1000 Pa

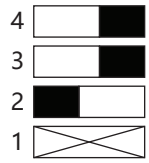
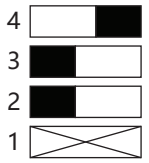
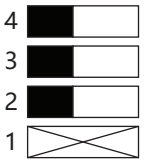
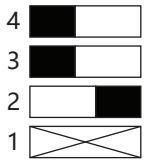
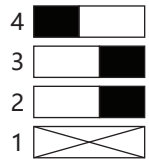
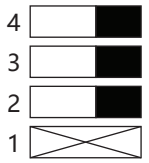
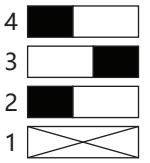
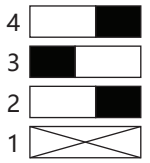


Central zero
(compound):
-500 Pa ... 500 Pa

※ Note:
Please follow carefully the combinations above the Dial-up switch. If the combination is wrongly done, the following message will appear on the display as "Err". In that case, you have to unplug the transmitter, place the Dial-up switches correctly and then power the transmitter up.

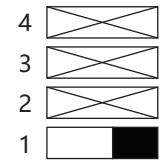
2. Unit setting

Set the pressure unit by adjusting the dial up switches referring to following combination

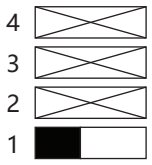
Pressure unit	Pa	mmH_2O	mbar	inWG
Combination				
Pressure unit	mmHG	daPa	kPa	hPa
Combination				

3. Auto zero function setting

Dial the switch 1 to activate or deactivate the auto zero function when powering up(the transmitter will be auto zeroed when activate this switch and vise versa)



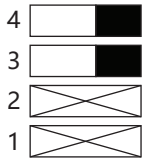
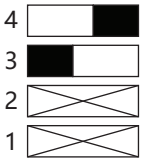
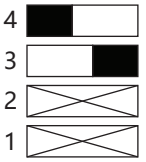
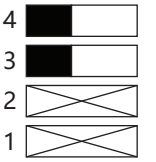
Deactivate auto
zero switch



Active auto
zero switch

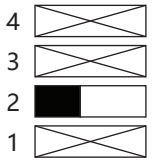
4. Response time

Set the response time by adjusting the time response dial up switches referring to following combination

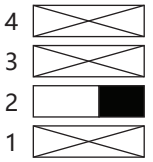
Response time	0.5 s	1 s	2 s	4 s
Combination				

5. RS485 model setting:

We included the RS-485 communication function in time response dial up switches. By dial up the switch 1 and 2 in following combination to change the baud rate either in 19200 or 9600(Only workable for RS485 differential transmitter)



Baud rate: 19200

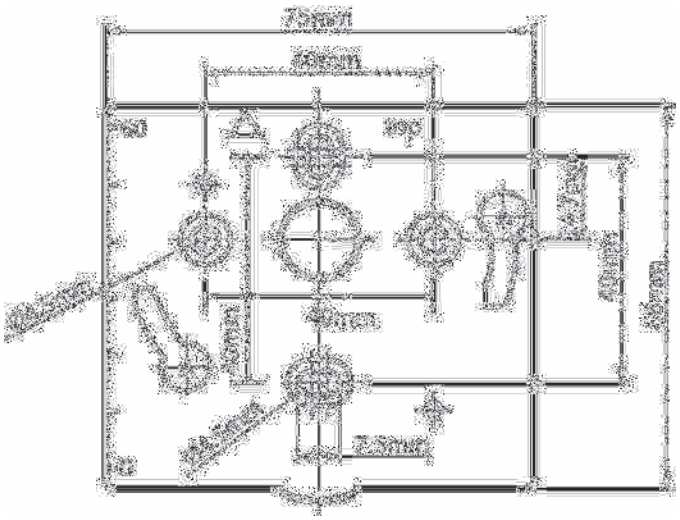


Baud rate: 9600

※ In the Figure 4 there are a set of resistor jump which could be connected for reducing signal interference when the communication distance above 300 meters.

Mounting

To mount the transmitter, mount the ABS plate on the wall (drilling: Ø 6mm, depth 30 mm, scr ews and pins a resupplied) Insert the transmitter on the fixing plate (see A on the drawing) Rotate the housing in clockwise direction until you hear a 'click' which confirms that the transmitter is correctly installed.



Maitenance

Please avoid any aggressive solvent and protect the transmitter and its probes from any cleaning product containing formalin, that may be used for cleaning rooms and ducts.

Accessories

PVC tube, 2 pressure connectors, ABS mounting plate

FAQs

- **The display range or units do not tally with the Settings.**
  ① dial the code switch is not in place, the electricity to restart the redial later.

- **Pressure pressure showed no change or the output value (display of 0 or FULL), or change is not allowed.**
  ① whether the load pressure over blasting pressure directly blunt bad core body;
  ② whether there is corrosive or use media. And the purchased product applicable medium exist discrepancy (existing micro differential pressure transmitter are for no corrosive gas);
  ③ check whether there is any foreign bodies blocked on inlet hose (particulate matter or water) or leakage;
  ④ using the environment temperature is beyond compensation temperature range (micro differential pressure transmitter temperature compensation range -10 ... 60℃);
  ⑤ with and without the pressure to zero wrong operation, such as there is no input in determining the state of stress under the reset again;
  ⑥ have corrosive Settings button of wrong operation (Settings button to prevent wrong operation mechanism, namely the set point pressure value must be increasing from small to big to finally set up successful, needs to be in high precision pressure source under the calibration set, don't recommend customer to calibration, such as the deviation caused by the calibration operation, must be returned to the factory heavy school).

- **Pressure normal value, no output analog or analog output is not allowed.**
  ① check the output line connection is normal;
  ② three wire system output is to detect transducer with control instrument is normal (i.e., ground wire must be connected to);
  ③ check the load resistance to choose proper.

- **The zero pressure value drift slightly.**
  ① clear operation after drift stability.

If the above method cannot eliminate the fault, contact the manufacturer!

Differential Pressure Controller

Model: TWM30

Product Description

- Support multiple working modes
- Buit-in buzzer with sound-light alarm, field programmable alarm pressure value
- Used to measure fan and blower pressure, filter resistance, medical equipment, etc

Product Specification

Electrical connections
Cable outlet (0.5 cm)

Nominal size
4.5"

Pressure medium
Gas

Scale ranges
0 type: -1000 ... 1000 Pa
2 type: -10000 ... 10000 Pa
6 type: -100 ... 100 Pa

Pressure units
Pa, kPa, mbar, mmHG, inWC, mmWC

Accuracy
±1.0% F.S.

Process connection
Quick coupler
Air inler way: front panel, back panel, side panel

Case/Ring
ABS

Pressure limitation
0 type: 10 kPa
2 type: 80 kPa
6 type: 5 kPa

Ambient temperature
-20℃ ... 70℃

Product Specification

Medium temperature
-10℃ ... 60℃

Display
LCD, switchable backlight button

Voltage supply
DC 16-30 V

Output signal
None, 4-20mA & 0-10V, RS485

Relay
2 SPDT RELAY 3A@250VAC/30VDC

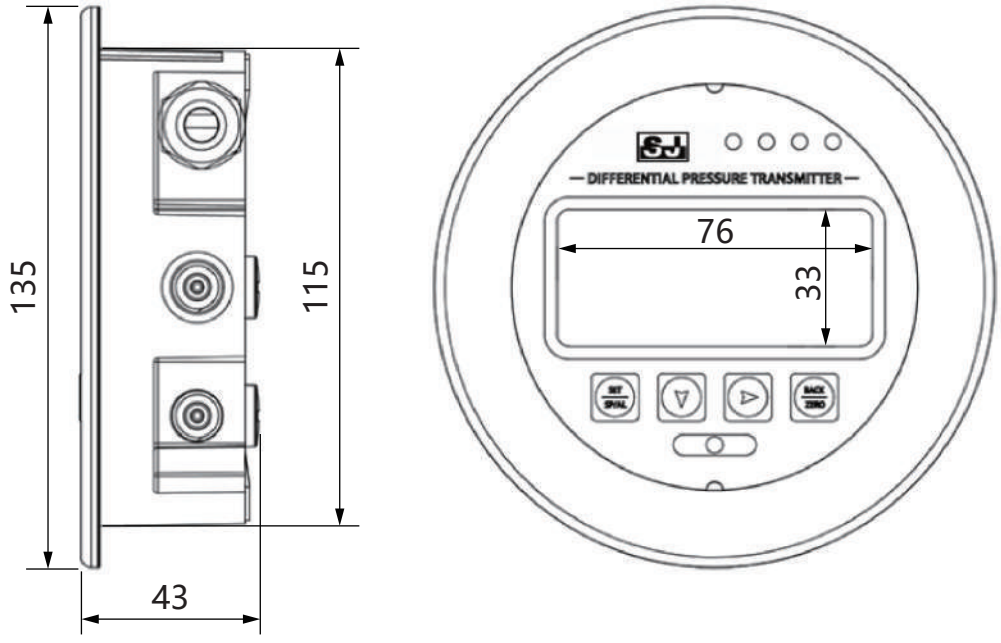
Control signal
None, 2 SPDT RELAYS

Power consumption
≦ 2.5W

Protection level
IP 54

Weight
360 g

Dimensions

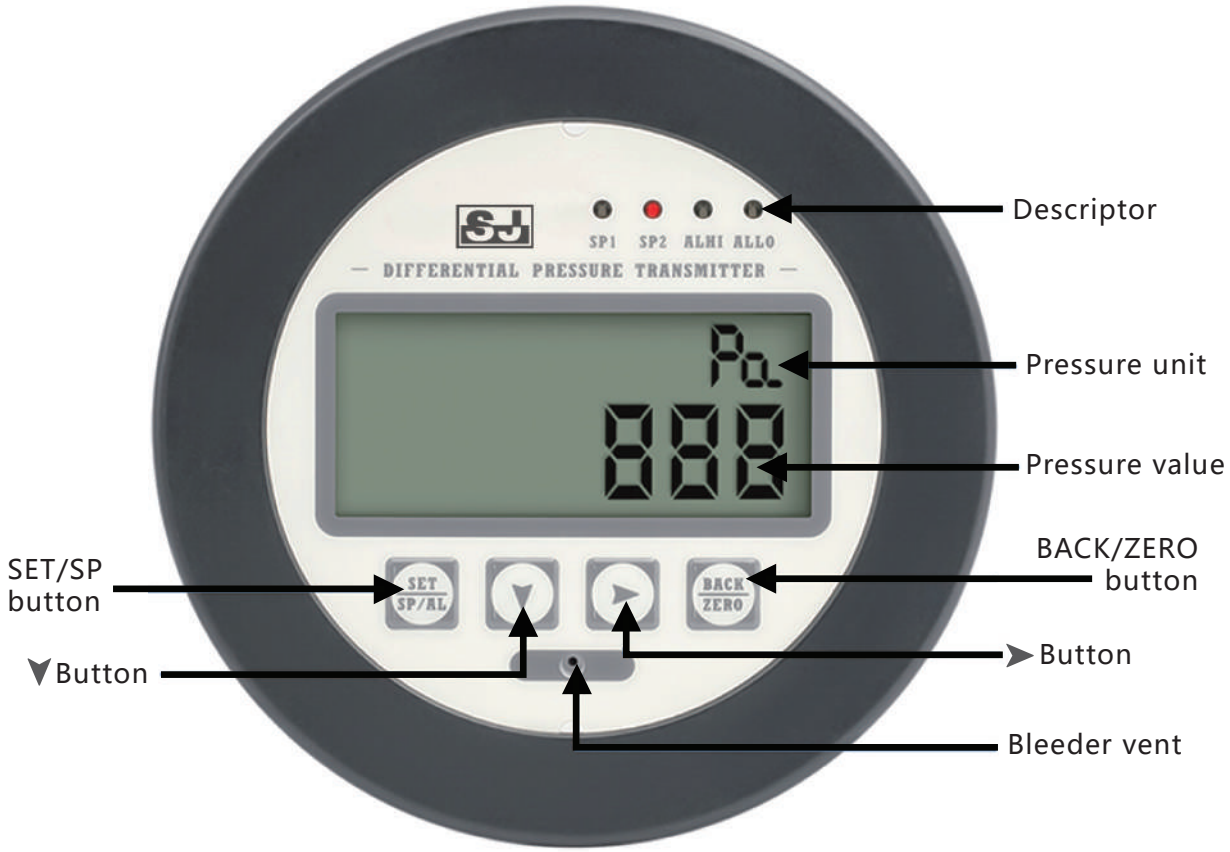


Unit: mm

Differential Pressure Controller
Model: TWM30

Operation Manual

Panel Display



Menu Instruction

	Pressure Display	Main Menu	Sub-menu
SET / SP/AL	1. Press to enter the main menu 2. Press and hold to enter the control point setting and alarm point setting	Press to enter the sub-menu	1. Enter the sub-menu function setting 2. Save the parameter setting (the parameter flashes during setting)
▽	Eliminate the buzzer alarm sound	Scroll down the main menu to switch the sub-menu function switch	1. Decrease the value 2. Move the setting button
▷	Backlight switch	X	Increase the value
BACK / ZERO	1. Press to cancel the alarm status 2. Press and hold to reset the setting	Back to Main Menu	1. Return to the previous main menu 2. Press and hold to return to the main menu

※ Note: Press and hold for 3 seconds.

■ Set point and alarm setting sort display:

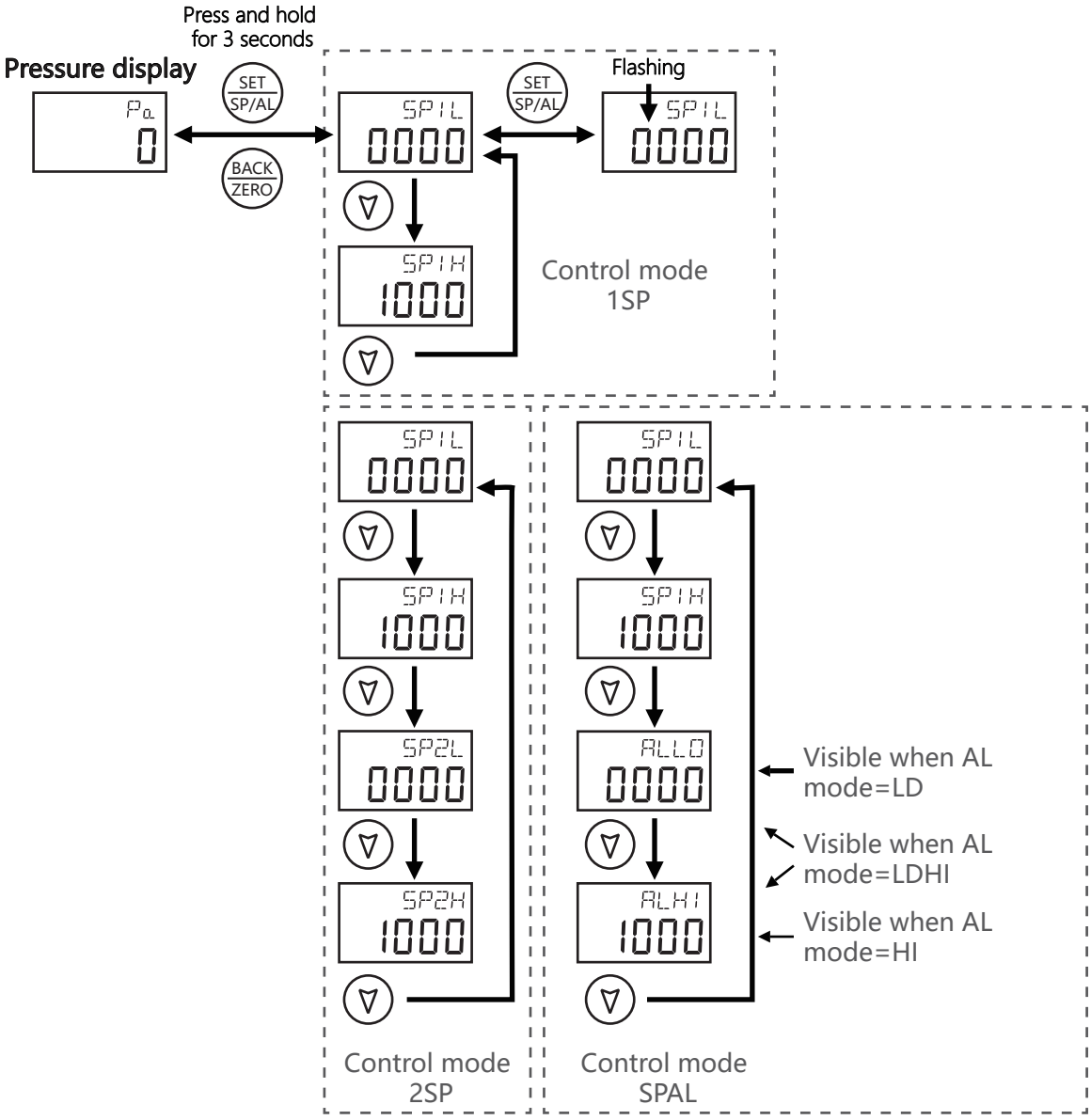
Press and hold SET / SP/AL to enter the relay control point and alarm point setting menu. This menu display is based on the control mode selection in the submenu. 3 control modes are set separately:

(1) ISP: Control relay works alone
(2) 2SP: Control relay and alarm relay work independently
(3) SPAL: Control relay work and alarm relay is used as alarm function output

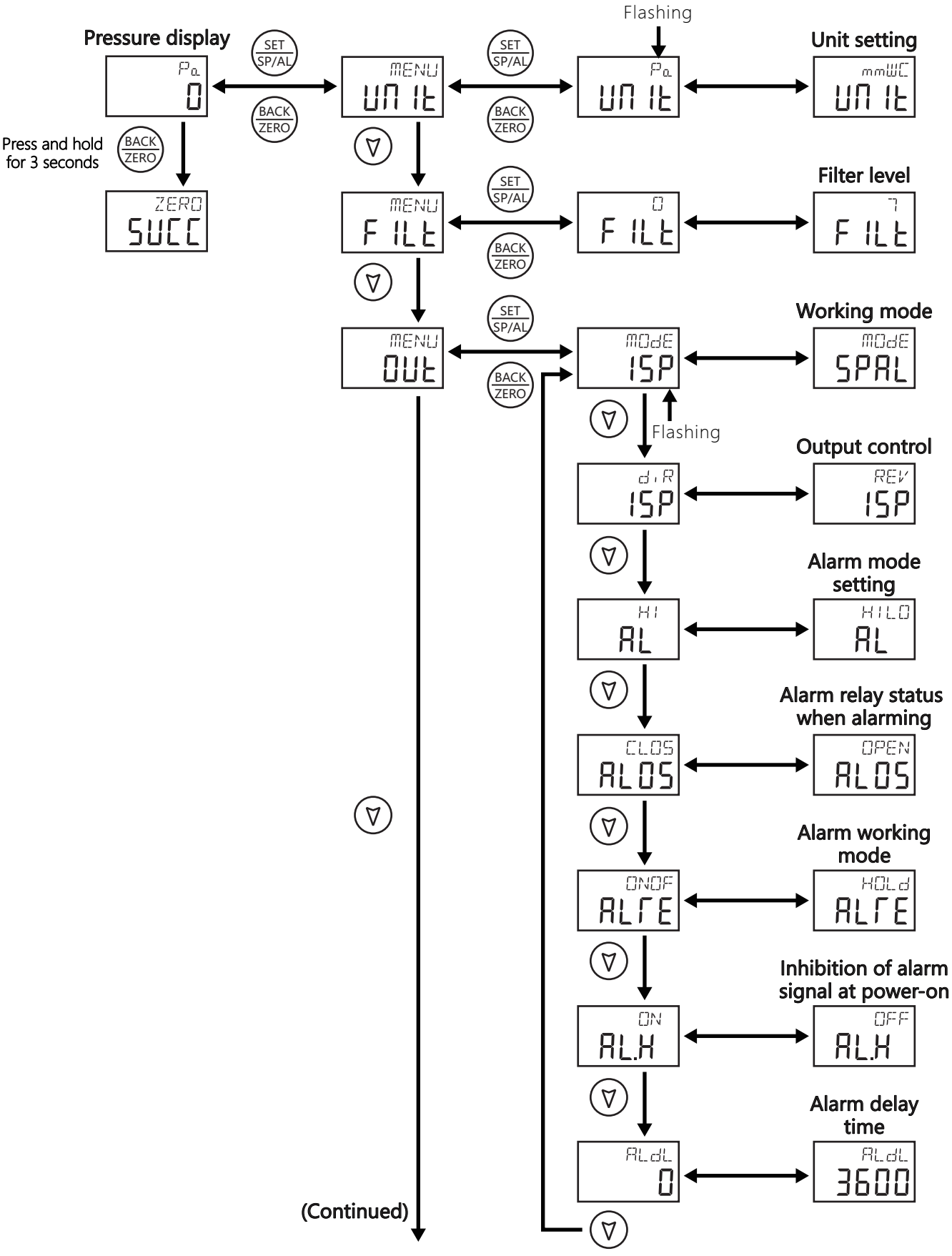
In the 2SP mode, the alarm relay works; in the control mode, SP2H and SP2L are the high and low points of its control action respectively; for specific control logic, please refer to P6 "Out output". In the SPAL mode, the alarm relay works in the alarm state output mode, ALHI and ALLO are respectively the high and low points of its alarm signal output.

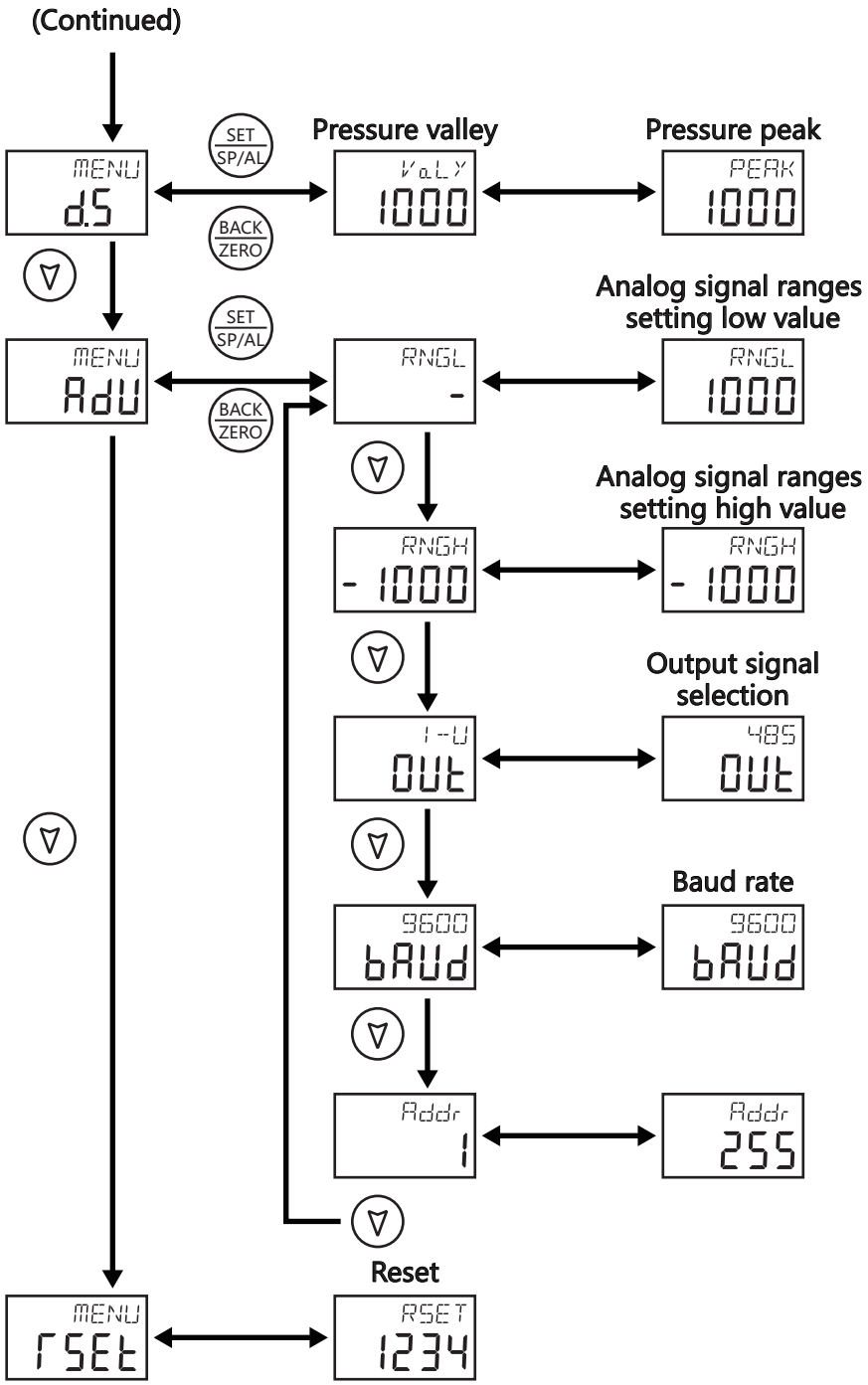
■ Menu navigation:

control point setting and alarm pont setting



■ **Menu navigation: main menu**





Instruction of Main Menu Functions

■ UNIt pressure unit

Used for pressure unit selection and setting.
Pascal (Pa), kilopascal (kPa), Millibar (mbar), millimeters of mercury (mmHG), inches of water column (inWC), millimeters of water column (mmWC)
Among them, only Pa, mmWC, mbar three units can be selected when the range is -100 ... 100 Pa.

■ FILt pressure filter level

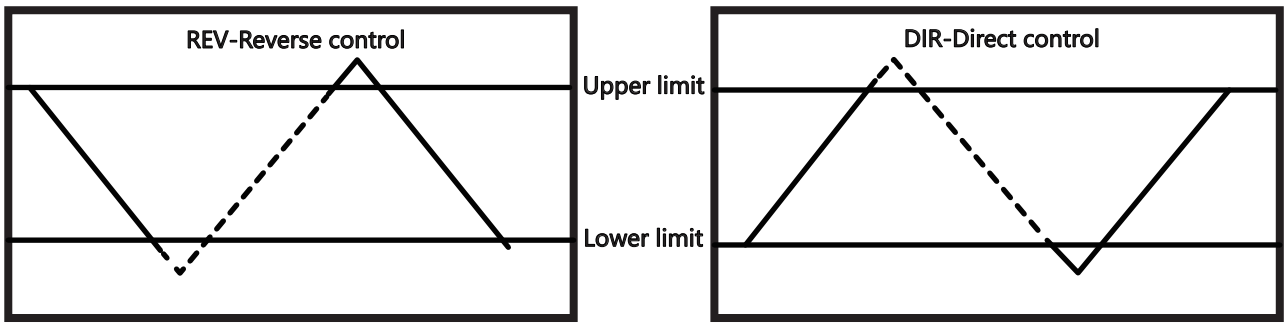
A total of 0~7 filter levels can be used. Used to adjust the air pressure detection sensitivity.

■ OUt output

Used to set the working mode setting, 1 control output, 2 control output or 2 control and alarm output mode.

(1) MODE submenu (working mode setting):
1sp: 1 relay control output
2sp: 2 relay control output
Spal: 1 relay control output, alarm relay status output

(2) 1SP submenu (for 1 relay control direction):



(3) AL submenu (alarm mode setting):
HI-high pressure alarm, Lo-low pressure alarm, Hilo-high and low pressure alarm

(4) ALOS sub-menu (alarm relay status when alarming):
Clos-The alarm relay will act on when it alarms;
Open-When alarming, the alarm relay action is disconnected;

(5) ALrE sub-menu (alarm working mode):
Onof-Alarm automatically turns on and off
Hold-Alarm status is maintained until the alarm is manually cancelled

(6) AL.H sub-menu (inhibition of alarm signal at power-on):
N-Turn on the power-on alarm signal suppression; eliminate the low-voltage alarm when starting up
Off-Turn off the suppression of the power-on alarm signal; the low-voltage alarm is directly output when the power is turned on

(7) ALdL submenu (alarm delay time):
0-3600: The maximum delay is 3600 seconds

■ d.S display

Peak: Pressure peak; valy: pressure valley

■ AdU more settings

Output signal control and RS485 control parameter settings.
(1) RNGL: analog signal range setting low value;
(2) RNGH: analog signal range setting high value;
(3) Out: output signal selection
I: Single current signal output U: Single voltage signal output
I-u: current and voltage signal output 485: 485 signal output
(4) bAUd: RS485 communication baud rate setting
(5) Addr: RS485 communication address ID setting

■ rSEt reset

Enter the number 1234 to confirm the factory reset.

System Error Remark

Errl : Zero clearing failed
Err2: Failed to set the max limit (the max limit must be greater than the min limit)
Err3: Failed to set the min limit (the max limit must be greater than the min limit)
Err4: The password for restoring factory settings is entered incorrectly
Err5: Pressure sensor error

Electrical Connections

■ **Cable outlet type:** connect according to the corresponding wire color.

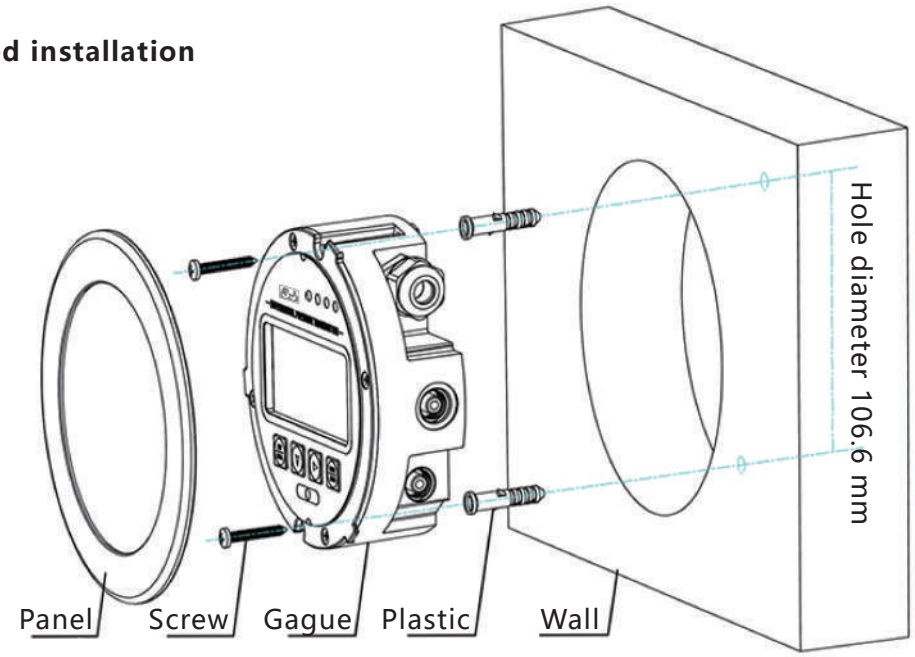
Connection	Cable outlet	Description		
M10	Power +	DC power cord interface		
	Power -			
	4~20mA Output	Current output port, connect to the positive end of the multimeter, and the other end to Power-		
	0~10V Output	Voltage output port, connect to the positive end of the multimeter, and the other end to Power-		
	RS485_A	RS485 Communication interface		
	RS485_B			
Connection	Cable outlet	Cable description	Cable outlet function	Cable description
M16	SP1 RELAY N/O	Normal open	SP2 or Alarm RELAY N/O	Normal open
	SP1 RELAY COM	Common	SP2 or Alarm RELAY COM	Common
	SP1 RELAY N/C	Normal close	SP2 or Alarm RELAY N/C	Normal close

■ **Trachea connection**

The back of the product supports side and back air intake; the back and the side vents are connected; therefore, after using one of the vents, you need to plug the vent on the other side with a plug; the + hole connects the trachea to the high pressure area to be measured;- Connect the trachea to the low pressure area to be measured.

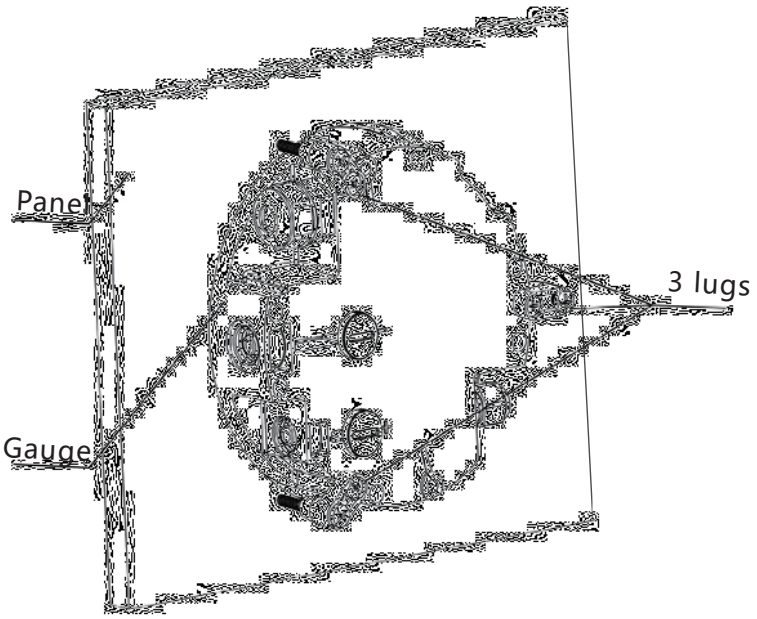
Installation

■ **Embedded installation**



■ **Panel installation**

Open a 120mm diameter hole on the panel to be installed, insert the product from the front of the panel, and finally install the lug on the back, and then fix it on the panel from the back with ST3.5x30 screws. The pressure port and the air pipe are connected reliably, pay attention to the difference between the high and low pressure ports.



■ **Accessories**

Static pressure tips, plastic lug, self-modified screw, wall head, expansion tube, PU tube

Frequently Asked Questions

■ The pressure display or output value does not change after pressurization (mostly displayed as 0 or FULL) or the change is not accurate.

(1) Whether the loading pressure exceeds the burst pressure and directly breaks the pressure core.
(2) Whether the medium used is corrosive or differs from the applicable medium of the purchased product.
(3) Check whether the intake hose is blocked by foreign matter (particulate matter or water column) or leaks.
(4) Whether the use environment temperature exceeds the compensation temperature range.
(5) Whether there is a misoperation of clearing during pressurization, if any, clear again after confirming that there is no input pressure.

■ A slight drift in the zero pressure value

After the drift is stable, perform the reset operation.

■ Attention

(1) The power supply should be disconnected during the installation process, and the power interface should not be short-circuited, otherwise it will bring unpredictable consequences and even damage the product.
(2) Please use within the rated voltage range.
(3) Do not make the pressure exceed the withstand pressure value, otherwise it may damage the product and safety.
(4) Some unused output wires need to be wrapped with insulating tape to avoid possible short circuits.

MEDIDORES DE PRESION

INTERRUPTOR DE CONTACTO

Small size Multi-purpose Pressure Switch

Model：MPS

Feature of Product

- Able to choose Automatic reset or manual reset
- Wide pressure range, Be applicable to multi work situation
- Application to air、water pressure control, Indoor air conditioner system or more...

Product Specification

Pressure range
0~45 bar

Burst pressure
5000 psi

Thread size
1/8", 1/4", other sise is able to customize

Thread type
PT, PF, NPT, UNF, other type is able to customize

Thread material
Brass,Stainless steel

Electrical connections
6.35x4.8,4.8x0.8; Electric cableconnect

Switch type
Single Pole Single Throw（normal open / normal close)
Single Pole Double Throw

Reset pattern
Automatic reset, Manual reset

Electrical parameters
120Vac 6FLA, 40.2LRA;
240Vac 4FLA, 26LRA;
120/240Vac 375VA; 36Vdc 3A

Permissible temperature
Low pressure：-30~65℃；High pressure：-35~120℃
Medium temperature：-50~120℃

Service life
100000 time

Dimensions

Type A

Insert type,Brass thread bolt

Type B

Insert type,Stainless steel thread bolt

Type C

Insert type,No thread bolt

Type D

Electric cable（Customized Length is able)
Copper thread bolt

Code for Custom Order Configurations

Ex:	MPS -	A	A+	BR	1NPT	A1
Switch type		63				
A	- Single Pole Single Throw (normal open)					
B	- Single Pole Single Throw (normal close)					
C	- Single Pole Double Throw					
Reset pattern			A+			
A+	- Automatic reset					
B+	- Manual reset					
Thread material				BR		
BR	- Brass					
SUS	- Stainless steel					
Thread type					1NPT	
1NPT	- 1/8NPT					
2NPT	- 1/4NPT					
1PT	- 1/8PT					
2PT	- 1/4PT					
1G	- 1/8PF					
2G	- 1/4PF					
2	- 1/4 Copper Tube					
7/16	- 7/16UNF external thread					
7/16	- 7/16UNF internal thread					
7/16	- 7/16UNF internal thread+valve core					
other	- other					
Electrical connections						A1
A1	- 6.35x0.8					
B1	- 4.8x0.8					
C1	- 18AWG Electric cable					

Electric Contact Pressure Gauge: 3" Magnetic Snap-action

Mechanical Pressure Gauge

Model: PRE3

Product Description

- Suitable for observation and automatic control
- Adjustable magnetic strength to avoid frequent, accidental collision of contacts due to vibration
- A variety of contact types to choose from

Product Specification

Connection location
Bottom mount, back mount, back mount with flange

Electrical connections
Cable outlet

Nominal size
3"

Scale ranges
0 ... 1 kg/cm² to 0 ... 1000 kg/cm² or other equivalent units of pressure, vacuum or compound.

Accuracy
±3.0% F.S.

Process connection
316L SS
1/4", 3/8", 1/2"; PT, G, NPT

Window
PC

Movement
Copper alloy

Bourdon tube
316 SS

Pressure limitation
Steady: full scale value
Fluctuating: 0.9 x full scale value

Product Specification

Ambient temperature
-20℃ ... 70℃

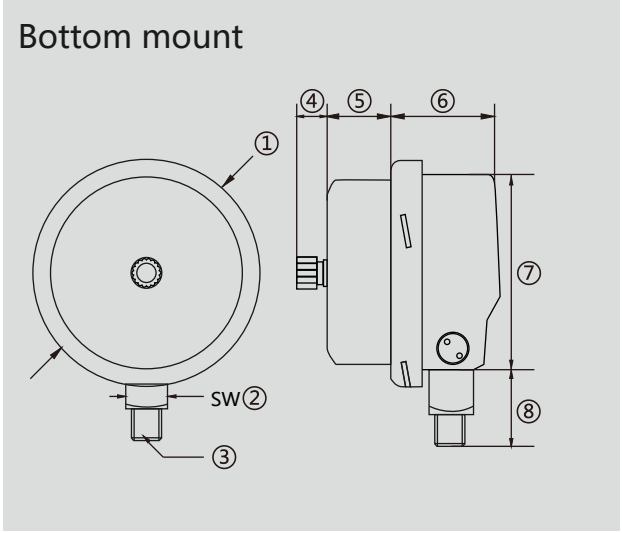
Medium temperature
-20℃ ... 150℃

Contact
Version:
Magnetic snap-action contact
Type:
Single contact N.O.
Single contact N.C.
Double contacts N.O. (3-wire/4-wire)
Double contacts N.O. + N.C. (3-wire/4-wire)
Double contacts N.C. (3-wire)

Electrical contact specification
Rated voltage: 250 V (Max.)
Contact capacity: 30 W ~ 50 VA (Max.)
Starting current: 1.0 A (Max.)
Persistent current: 0.6 A (Max.)
Switching voltage: 24 V (Min.)

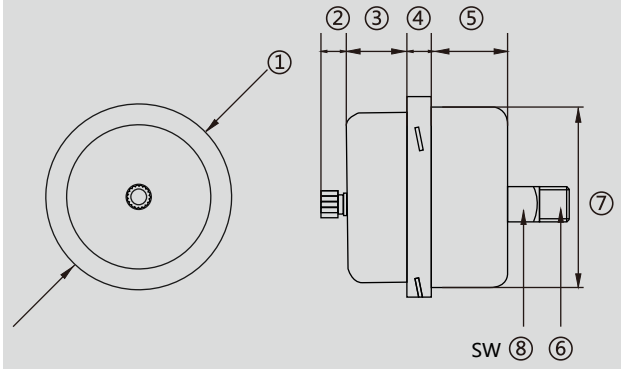
Dimensions

Bottom mount



Dimensions (mm)								
NS	①	②	③	④	⑤	⑥	⑦	⑧
3"	84	17	3/8"	27	35	46.5	75	35

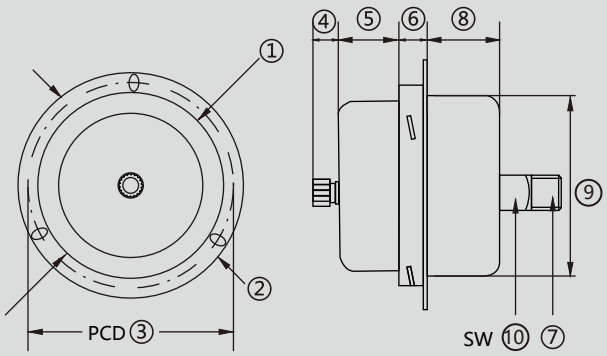
Back mount



Dimensions (mm)								
NS	①	②	③	④	⑤	⑥	⑦	⑧
3"	85	28	34	10	36	3/8"	75.5	17

Dimensions

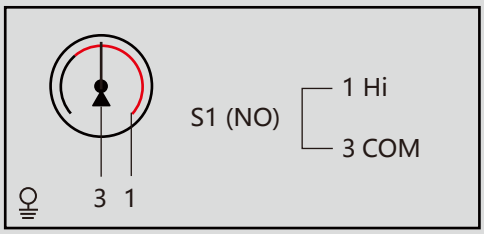
Back mount with flange



Dimensions (mm)										
NS	①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩
3"	85	102	90	28	34	10.5	3/8"	36	75.5	17

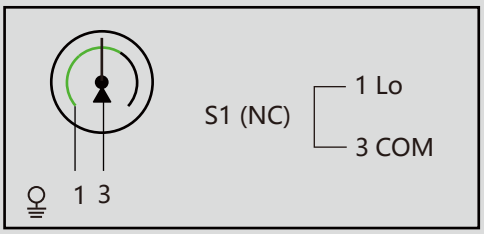
Contact Type

2R Single contact N.O.



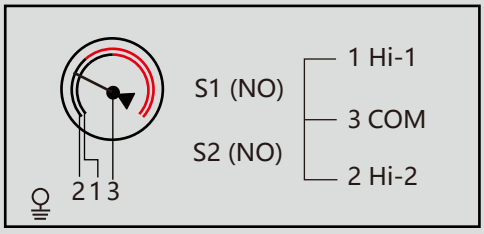
S1 contact makes when the pointer reaches the set point.

2G Single contact N.C.



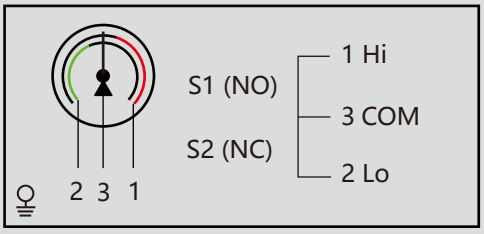
S1 contact breaks when the pointer reaches the set point.

3RR Double contacts N.O. (3-wire)



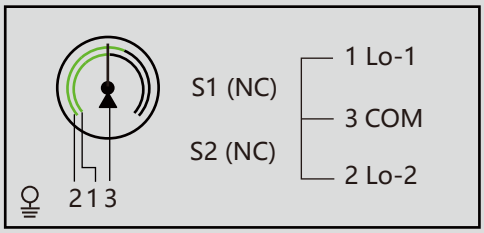
S1 and S2 contact make when the pointer reaches the set point.

3RG Double contacts N.O. + N.C. (3-wire)



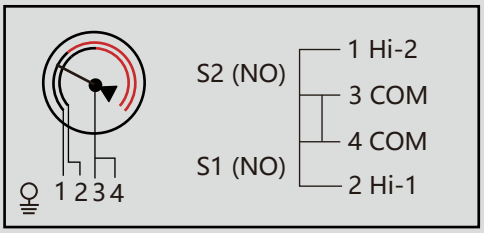
S1 contact makes and S2 contact breaks when the pointer reaches the set point.

3GG Double contacts N.C. (3-wire)



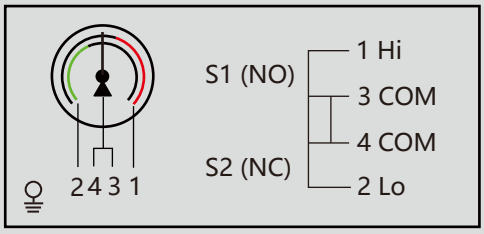
S1 and S2 contact braek when the pointer reaches the set point.

4RR Double contacts N.O. (4-wire)



S1 and S2 contact make when the pointer reaches the set point.

4RG Double contacts N.O. + N.C. (4-wire)



S1 contact makes and S2 contact breaks when the pointer reaches the set point.

※ Note:

When the pressure is positive, the pointer is clockwise. If it is a vacuum (counterclockwise), the makes and the breaks are in opposite directions.

Switch Contact Pressure Gauge, Euro Warning/Alarm Contact

Mechanical Pressure Gauge

Model: PRE4.H

Product Description

- Stainless steel bezel with glass window, beautiful but still durable
- A variety of contact types to choose from
- Used in chemical, petroleum, metallurgy, machinery and other industries
- Same specifications as WIKA-PGS23

Fig. Up: Lower mount
Fig. Down : Back mount

Product Specification

Connection location
Bottom mount,
back mount with flange,
back mount without flange

Electrical connections
Cable terminal box

Nominal size
4", 6"

Scale ranges
-76 cmHg ... 1000 kg/cm2,
or other equivalent units of pressure,
vacuum or compound

Accuracy
CL 1.6

Process connection
304 SS (standard), 316 SS
1/4", 3/8", 1/2"
PT, G, NPT

Case/Ring
304 SS (standard), 316 SS

Window
Flat instrument glass

Pointer
Aluminum alloy, black scale on white

Bourdon tube
316 SS

Product Specification

Filling liquid
Without, silicone oil

Movement
304 SS

Ambient temperature
20°C ... 70°C

Medium temperature
200°C (Max.) (unfilled)
100°C (Max.) (silicone oil filled)

Contact
Switch type:
Magnetic snap-action contact
Material:
Silver nickel alloy
Type:
Single contact N.O., Single contact N.C., Double contacts N.O.x2, Double contacts N.O.+N.C., Double contacts N.C.x2

Switch contact specifications
Rated operating voltage: 380 V (Max.)
Switching power Max.: 30 W / 50 VA (Max.)
Switch-on current: 1.0 A (Max.)
Switch-off current: 1.0 A (Max.)
Continuous current: 0.6 A (Max.)

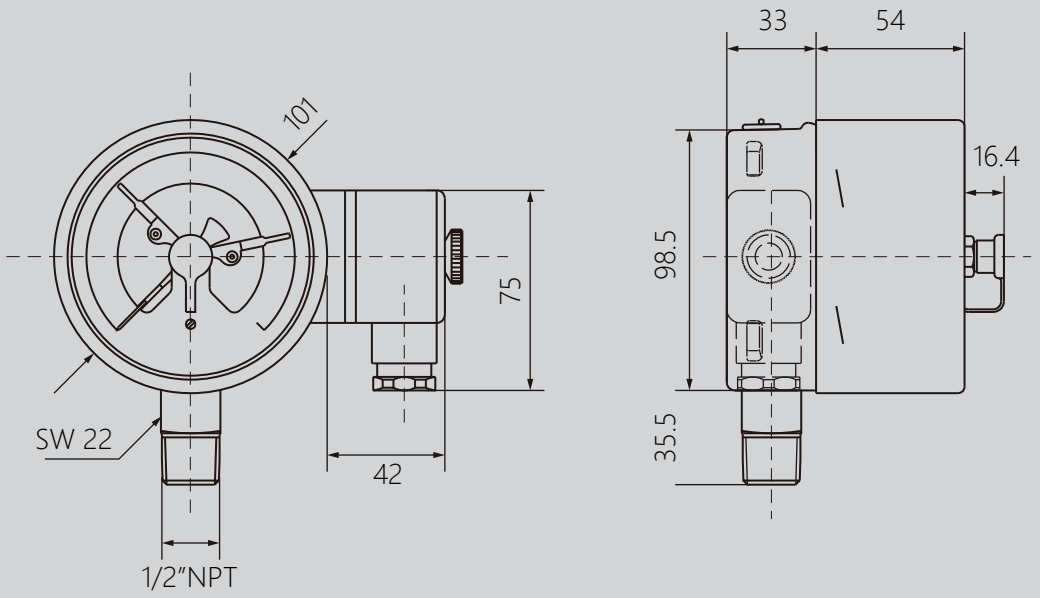
IP Rating
IP 65

Adjustment lock
with/ without removable adjustment key

Others
Contacts with separate circuits(2 separate circuits), SPDT Change-over contacts (break or make simultaneously at the set point)

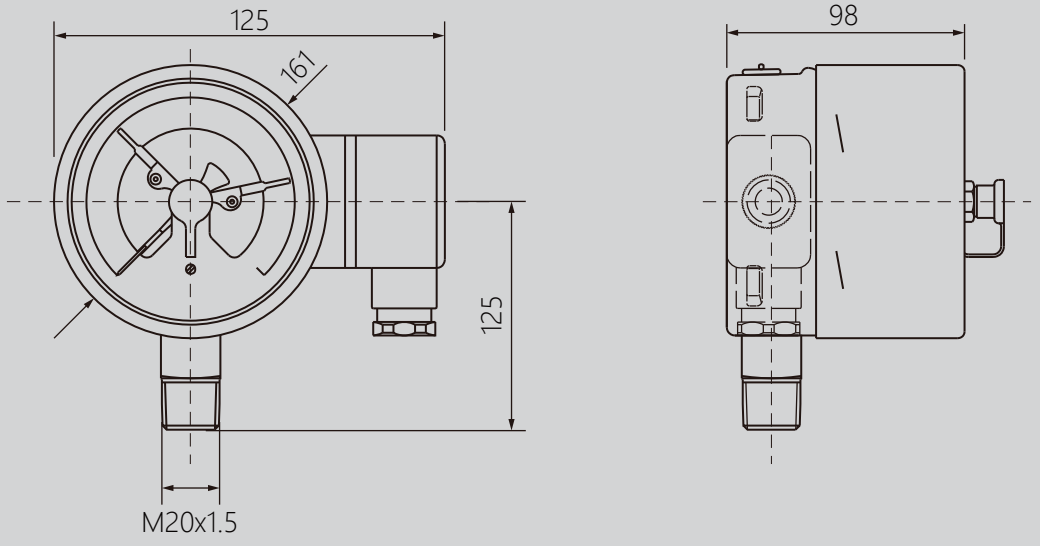
Dimensions

A 4"-Bottom mount



Unit: mm

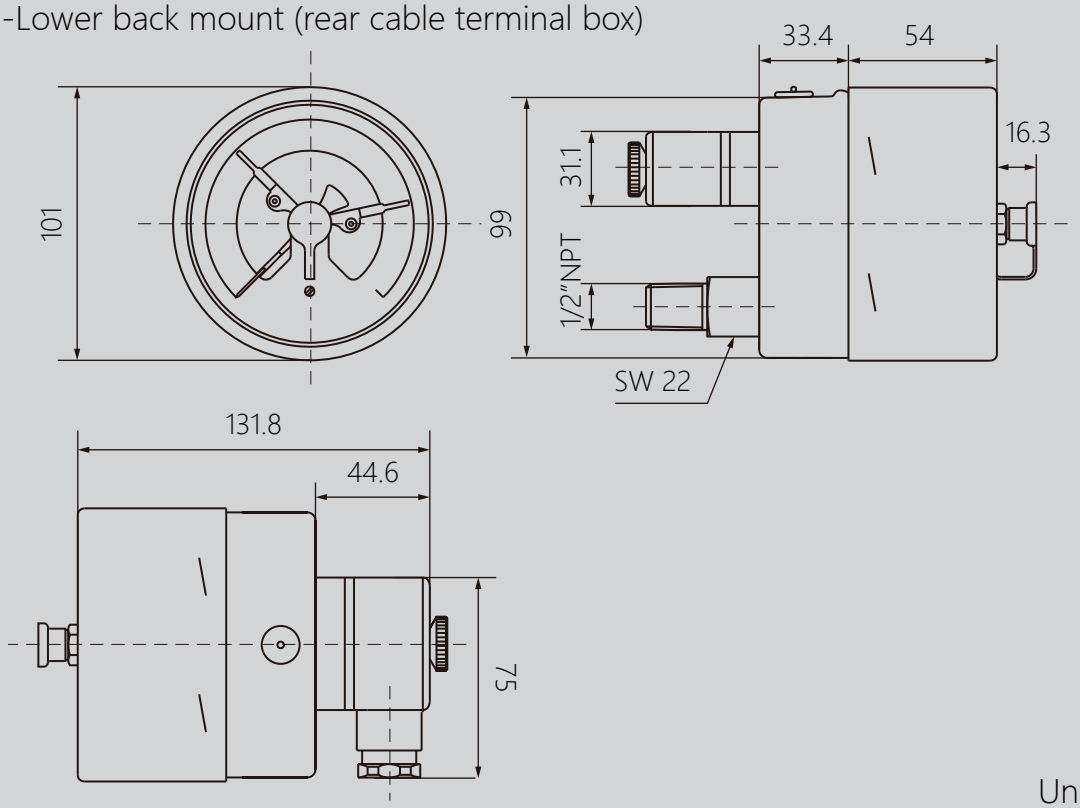
A 6"-Bottom mount



Unit: mm

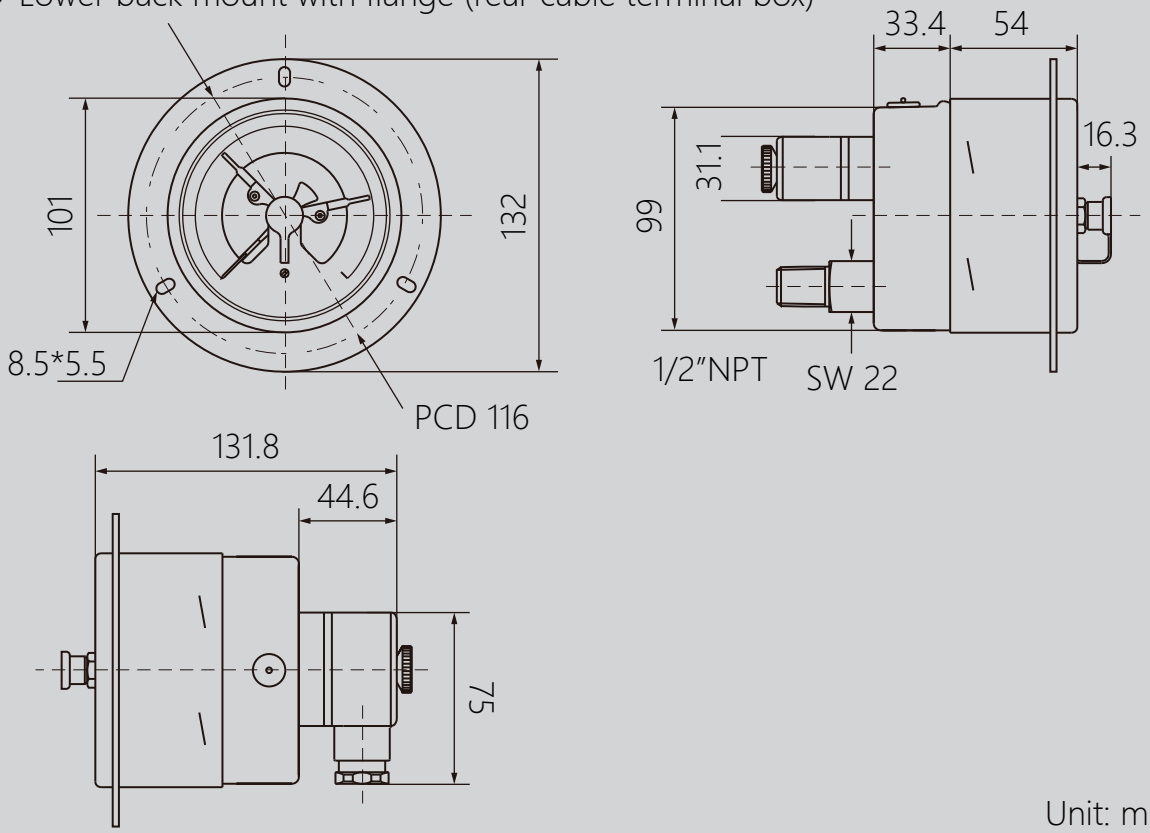
Dimensions

AD-Lower back mount (rear cable terminal box)



Unit: mm

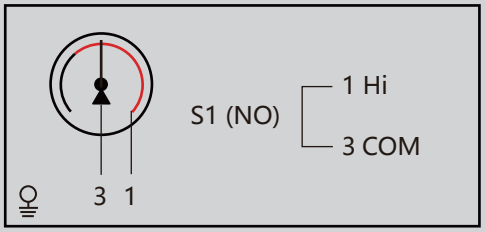
BD-Lower back mount with flange (rear cable terminal box)



Unit: mm

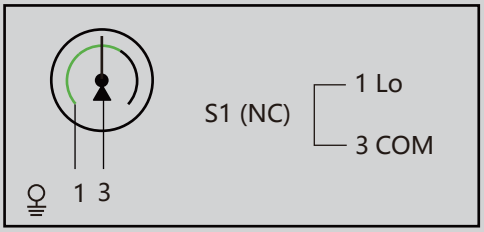
Contact type

2R Single contact N.O.



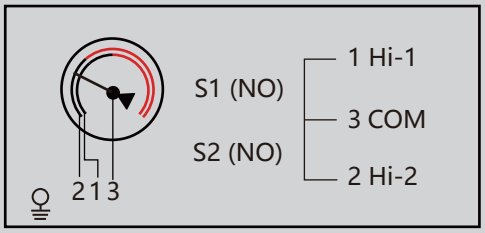
S1 contact makes when the pointer reaches the set point.

2G Single contact N.C.



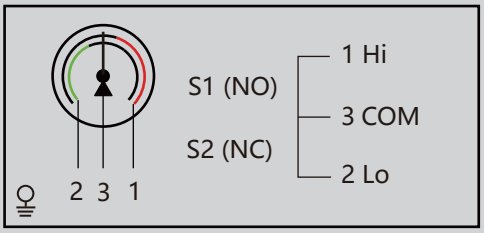
S1 contact breaks when the pointer reaches the set point.

3RR Double contacts N.O.



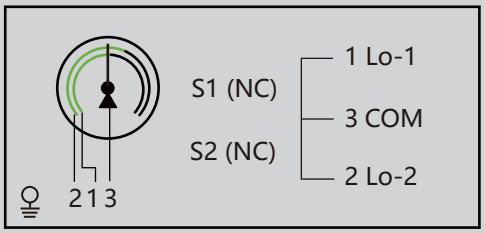
S1 and S2 contact make when the pointer reaches the set point.

3RG Double contacts N.O. + N.C.



S1 contact makes and S2 contact breaks when the pointer reaches the set point.

3GG Double contacts N.C.



S1 and S2 contact break when the pointer reaches the set point.

※ Note:
When the pressure is positive, the pointer is clockwise. If it is a vacuum (counterclockwise), the makes and the breaks are in opposite directions.

MEDIDORES DE PRESION

DIFERENCIAL DE PRESIÓN

Miniature differential pressure gauge

Model: PRMDS

Product Description

- Small size with simple construction
- Removable lens and rear-housing
- Used in air conditioners, medical respiratory equipment and filters

Product Specification

Nominal size
2.5"

Scale ranges
0 ... 12 mmH_2O to 0 ... 3500 mmH_2O
, or other equivalent units of pressure or compound

Accuracy
5%

Process connection
1/8”
NPT

Case
Glass filled nylon

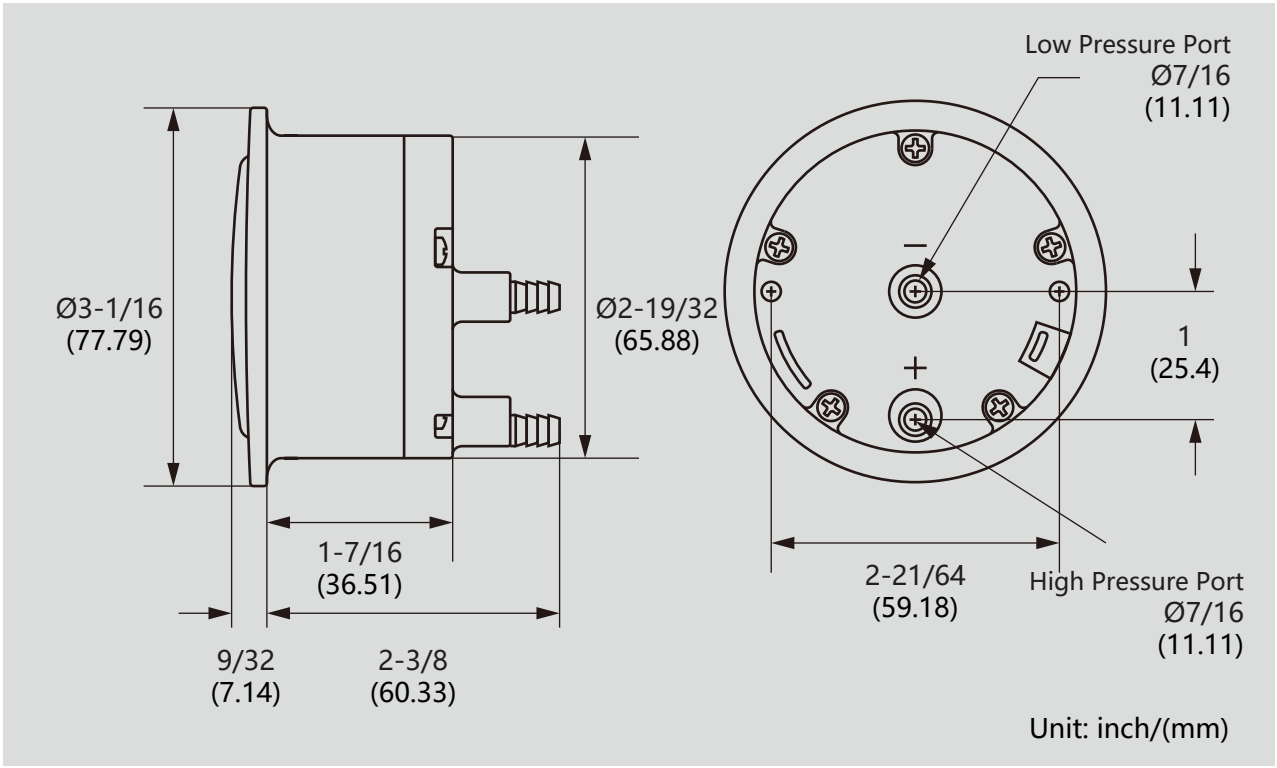
Window
PC

Pressure limitation
30psi

Medium temperature
-6℃ ... 49℃

Accessories
U-clampset, pointer

Dimensions



Low Differential Pressure Switch

Model: PRSMD

Product Description

- Easy installation and no power supply needed
- Easily set the differential pressure switch values on site
- Limited to non-flammable and non-corrosive gases
- Usually used in filter, fan and duct pressure monitoring in building auto-mation systems in the HVAC

Product Specification

Electrical connections
Screw terminal

Scale ranges

Scale range	Switch hysteresis (average)
20 ... 200 Pa	10 Pa
30 ... 300 Pa	10 Pa
40 ... 400 Pa	20 Pa
50 ... 500 Pa	20 Pa
100 ... 1000 Pa	50 Pa
200 ... 1000 Pa	100 Pa
500 ... 2500 Pa	150 Pa
1000 ... 5000 Pa	250 Pa

Accuracy
±2% F.S.

Process connection
6.0 mm pipe; P1 high pressure port, P2 low pressure port

Material
Main body: PC; cover: PC; dia-phragm: silicone; contact: silver

Accessories
Equipped with a set of standard pressure connection components, including 1.5 m transparent plastic hose, 2 plastic connectors and 4 self-tapping screws.

Ambient temperature
-40℃ ... 85℃

Product Specification

Medium temperature
-20℃ ... 85℃

Contact type
SPDT
AC type max.: 1.5 A/250 VAC
DC type max.: 1 A/30 VDC

Maximum switching frequency
6 times/minute

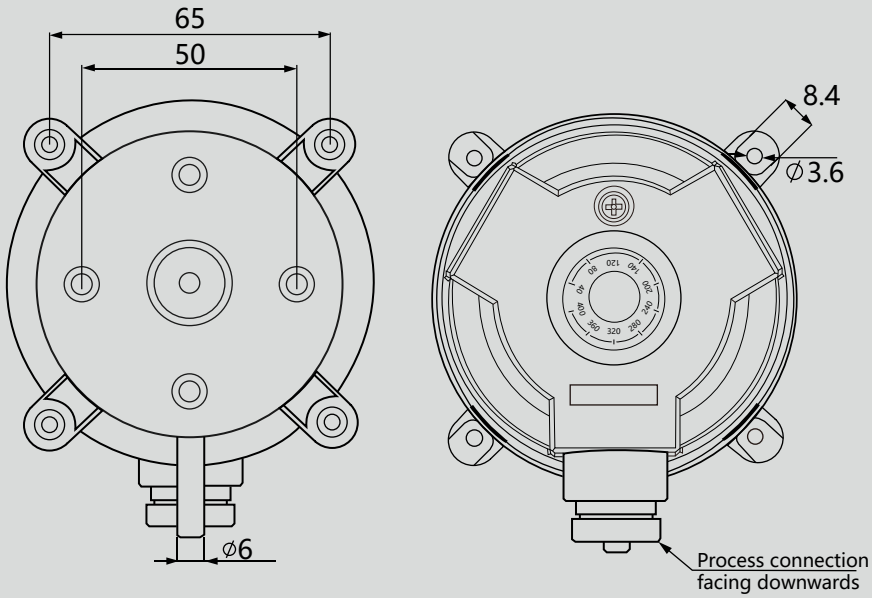
Service life
Switch more than 10^6 times

Protection level
IP 54

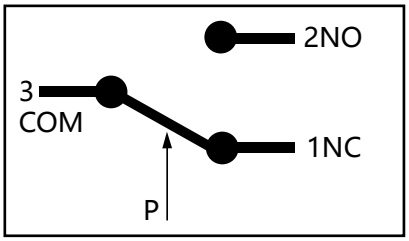
Weight
With mounting bracket: 140 g
Without mounting bracket: 90 g

Dimensions

Vertical installation



※ Generally installed vertically on the wall. For horizontal installation, the set point needs to be 0.2 mbar above the scale point (cover up) or 0.1 mbar below the scale range (cover down).



Differential Pressure Transmitter: Analog Signal Output

Model: DRM108

Product Description

- Analog output 4-20mA for remote monitoring
- Limited to non-corrosive gases
- Usually used in filter, fan and duct pressure monitoring in building auto-mation systems in the HVAC
- For RS-485 output signal please refer to TWM11

Product Specification

Electrical conncetions
For cable Ø8 mm maximum

Scale ranges

Unidirectional	
0 ... 100 Pa	0 ... 200 Pa
0 ... 500 Pa	0 ... 1000 Pa
0 ... 2500 Pa	0 ... 5000 Pa
0 ... 10000 Pa	
Bidirectional	
0 ... ±50 Pa	0 ... ±100 Pa
0 ... ±250 Pa	0 ... ±500 Pa
0 ... ±1000 Pa	0 ... ±2500 Pa
0 ... ±5000 Pa	0 ... ±10000 Pa

Accuracy
±1.0% F.S.

Process connection
PH quick coupler Ø6.2 mm

Case/Ring
Industrial plastic,
fire resistance level per UL94-V0

Pressure limitation
X15

Medium temperature
-40℃ ... 85℃

Product Specification

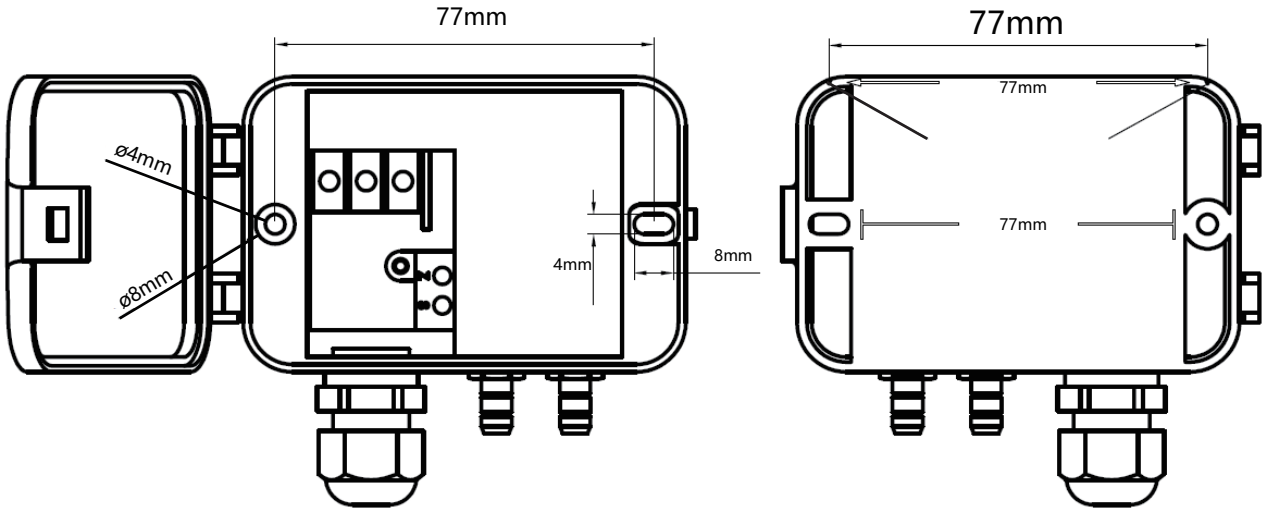
Voltage supply
2-wire: 10-30VDC/VAC
3-wire: 16-30VDC

Output signal
4-20mA (2-wire), 0-5VDC (3-wire),
0-10VDC (3-wire)

Electrical load
2-wire: ≦ 250Ω
3-wire: ≧ 50KΩ

Weight
140 g

Dimensions



Analog Output
Model: DRM108

Operation Manual

Installation

Locate position for installation then drill holes (30 mm depth with 6mm diameter). Place expand plug inside the holes before install the transmitter. There are two holes for screwing after Uncovering the transmitter (expand plugs and screws for installation would be provided by the manufacturer).

Functions

1. Analog signal output

Both 0-5VDC & 0-10VDC and 4~20mA output are selectable. 3-wire for voltage output (follow the wiring diagram) while 2-wire for current output.

2. Zero button

Push the zero button to calibrate when the differential pressure between positive port and vacuum port reach to zero (the LED would light when the button be pushed).

3. Setting button

Calibration of pressure values with the use of precision instruments to provide the pressure source. (customers are not encouraged to use)

4. Response time setting

Set the response time by adjusting the dial-up switches:

Response time	0.5 s	1 s	2 s	4 s
Dial-up switch				

Duplex Pressure Gauge

Model : PRDD

Product Description

- The pressure gauges are equipped with two independently working bourdon tube measuring systems
- LED lighting for operating voltages of DC24V or AC110V
- Typically used in filters and rail braking systems

Product Specification

Connection location
Lower back mount

Nominal size
4"

Scale ranges
0 ... 25bar, or other equivalent units of pressure, vacuum or compound

Accuracy
±1.6% F.S.

Process connection
M14 x 1.5

Case/Ring
Carbon steel

Window
Glass

Dial
Aluminum, white, black lettering

Pointer
Aluminum, black and red

Movement
Copper alloy

Bourdon tube
Copper alloy

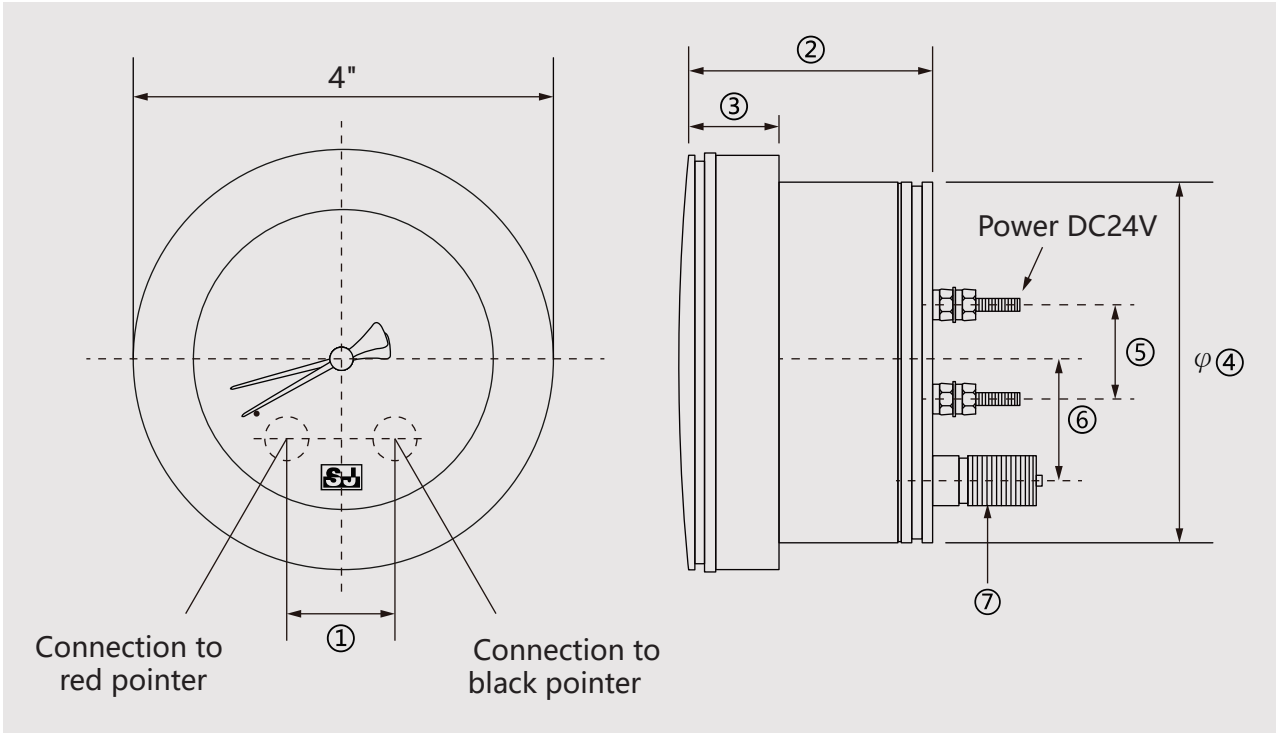
Ambient temperature
-29℃ ... 93℃

Product Specification

Medium temperature
-30℃ ... 70℃

Lighting power supply
DC24V, AC110V

Dimensions



Dimensions (mm)							
NS	①	②	③	④	⑤	⑥	⑦
4"	34	65	28	100	25	29	M14x1.5

Differential Pressure Gauge, Double Diaphragm

Model: PRHD

Product Description

- High working pressure (static pressure) and high overload safety, selectable ranges up to 30 MPa
- The use of high-quality stainless steel materials and the robust design are geared to applications in the chemical and process engineering industries
- Suitable for liquid and gaseous media in aggressive environments
- Equivalent specifications that closely match the WIKA 732.14

Product Specification

Nominal size
4", 6"

Scale ranges
0 ... 10 kPa to 0 ... 600 kPa

Static pressure
Max. working pressure 10 ... 30 MPa
on either side
according to the scale range

Accuracy
±2.5% F.S (standard), ±1.6% F.S

Process connection
M20 x 1.5, G 1/2, 1/2" NPT

Case/ ring
304 SS (standard), 316 SS

Window
Flat instrument glass

Dial
Aluminium, white, black lettering

Pointer
Aluminium, black

Movement
304 SS

Wetted part
304 SS (standard), 316 SS

Product Specification

Ambient temperature
-20°C ... +60 °C

Medium temperature
+180 °C Max.

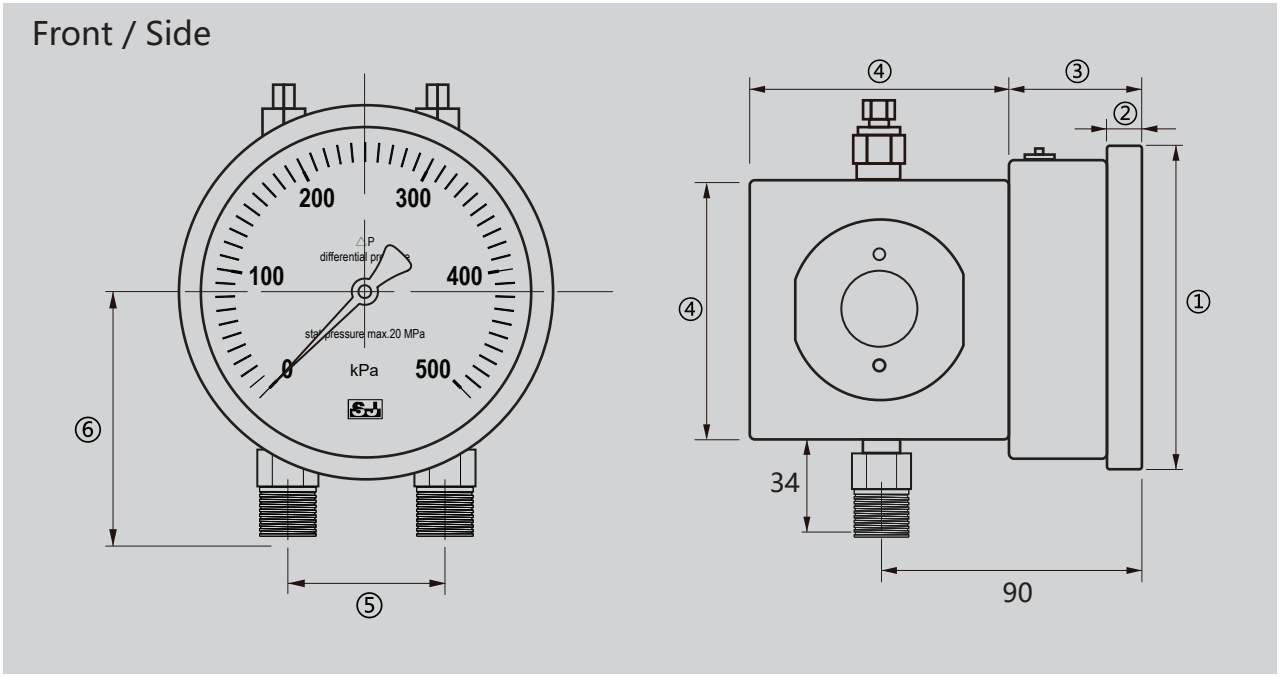
IP rating
IP56 (standard), IP67

Zero adjustment
Insert a Hex Key (included in delivery) into the funnel guide, which is situated at the 4 o'clock point on the case circumference, is accessible by removing the sealing cap

Accessories (Options)
Mounting bracket for wall or pipe mounting, liquid filling, other process connections, valve manifolds, differential pressure gauge with switch contacts

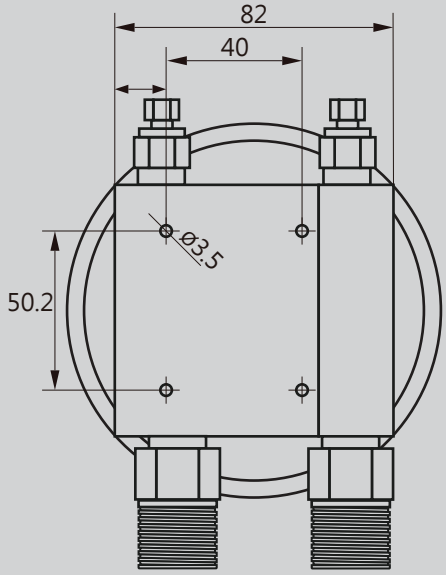
Dimensions

Front / Side



Dimensions (mm)						
NS	①	②	③	④	⑤	⑥
100	110	13	50	74	54	70
150	149	18	52	74	54	70

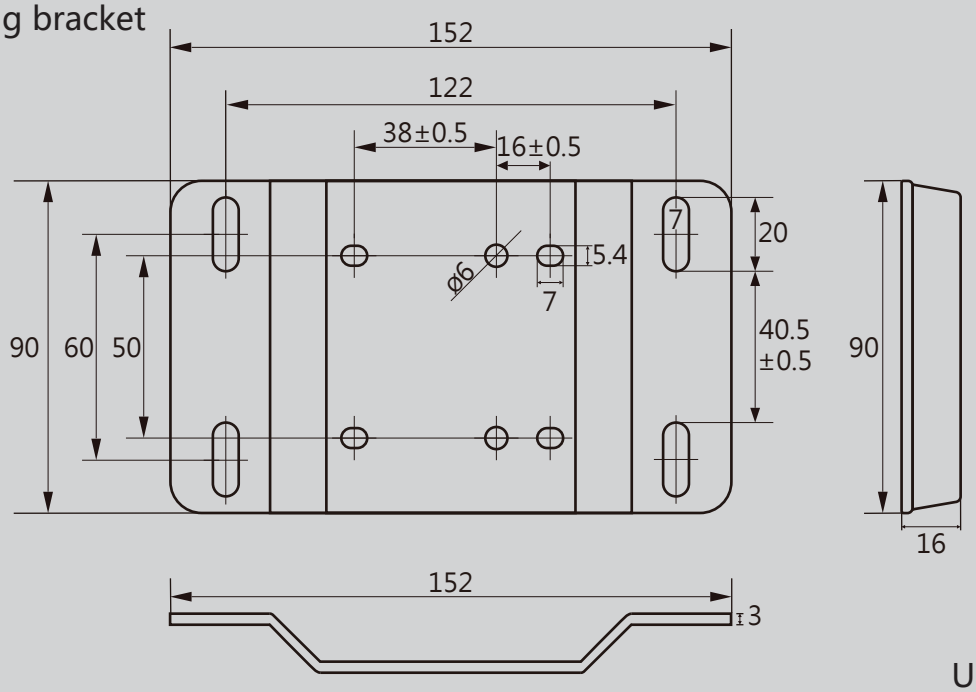
Back



Unit: mm

Dimensions

Mounting bracket



Unit: mm

Accessories

Accessories
4"、6": Mounting bracket

Differential Pressure Gauge, Cryogenic Tanks

Model: PRLD

Product Description

- Supports cryotechnology; applicable for measuring low-temperature mediums
- Oil free is available for measuring special gases such as flammable and explosive gases
- Commonly used to measure closed tank truck liquid levels for oil, liquid nitrogen and other materials; also useful for filter monitoring

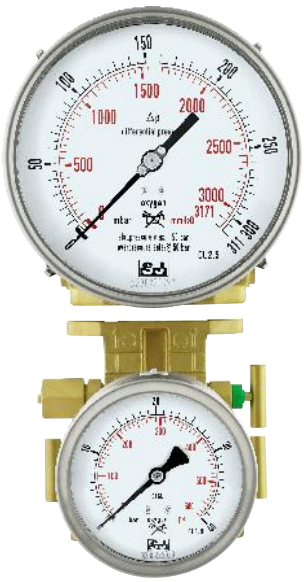


Fig. top: Differential pressure gauge model PRLD
Fig. bottom: Option valve manifold with working pressure indication

Product Specification

Nominal size
6"

Scale range
0 ... 4 kPa to 0 ... 400 kPa

Static pressure
Max. working pressure 50 bar on either side
(according to the scale range)

Accuracy
±2.5% F.S.， ±1.6% F.S.， ±1.0% F.S.

Process connection
2 x G 1/4 (F), centre distance 37 mm

Wetted part
Measuring cell flanges: copper alloy
Compression spring: 304 SS
Separating diaphragm: NBR
Transmission parts: 304 SS

Case/ring
304 SS

Window
Polycarbonate (PC)

Dial
Aluminum, black scale on white

Pointer
Adjustable pointer, black aluminium

Product Specification

Movement
304 SS

IP rating
IP 65

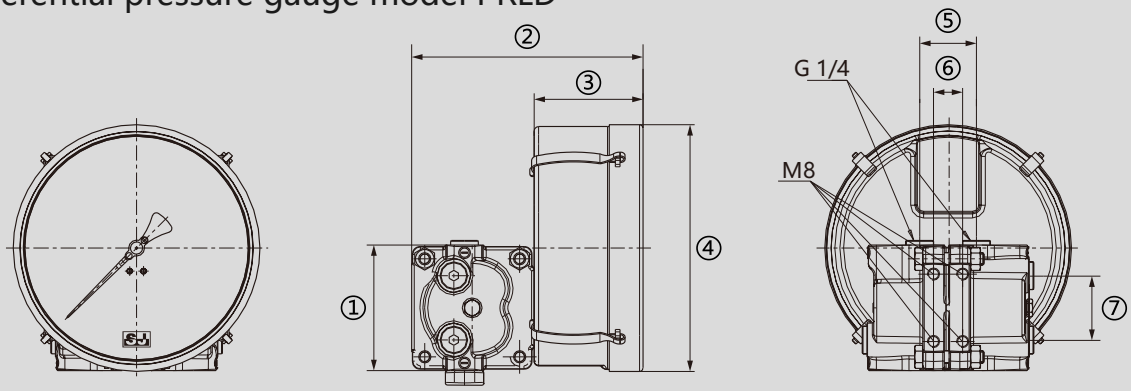
Medium temperature
-40°C ... +60°C with oxygen
-40°C ... +80°C

Ambient temperature
-40°C ... +60°C with oxygen
-40°C ... +80°C

Accessories (Options)
Valve manifold (wetted) with 4" or 6" working pressure indication, switch contacts, oxygen application, adapter for process connection

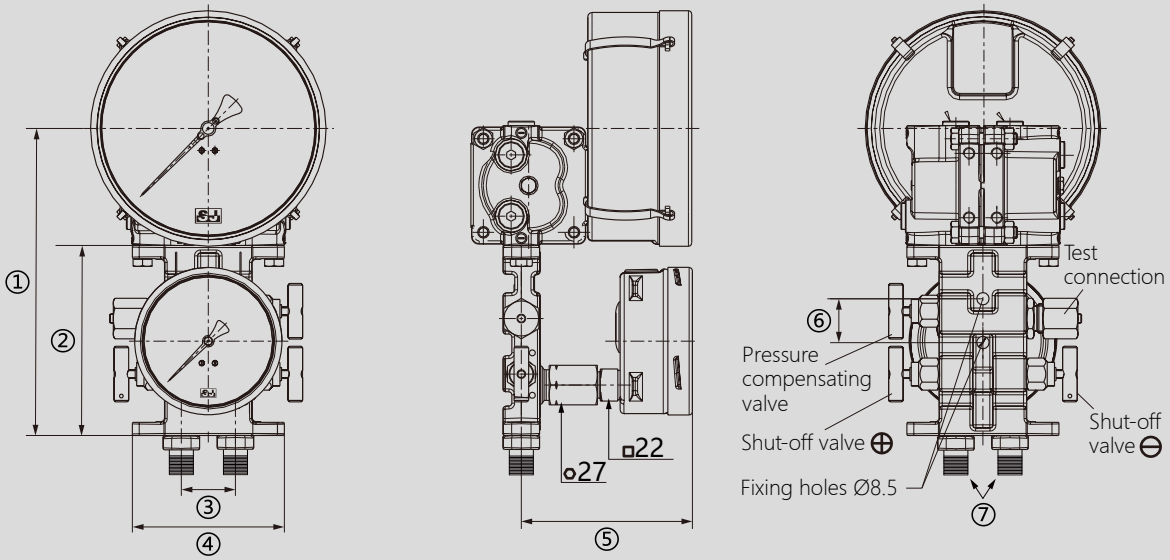
Dimensions

Differential pressure gauge model PRLD



Dimensions (mm)							
NS	①	②	③	④	⑤	⑥	⑦
6"	82	71	197	161	37	19	42

Option valve manifold with working pressure indication



Dimensions (mm)							
Option	①	②	③	④	⑤	⑥	⑦
	210	130	37	104	117	30	G 1/4

Low Differential Pressure Gauge

Model: PRMD

Product Description

- Measures the small pressure difference between two pressure sources
- Only suitable for measuring gases, can not measure liquid
- Used in hospitals, laboratories, factories, gas stations and storage tanks
- Same specifications as Series 2000 magnehelic®

Product Specification

Nominal size
4.5"

Scale ranges
0 ... 3 mmH_2O to 0 ... 5000 mmH_2O, or other equivalent units of pressure or compound

Accuracy
±2% F.S. to ±4% F.S., upon scale range

Process connection
1/8" female NPT

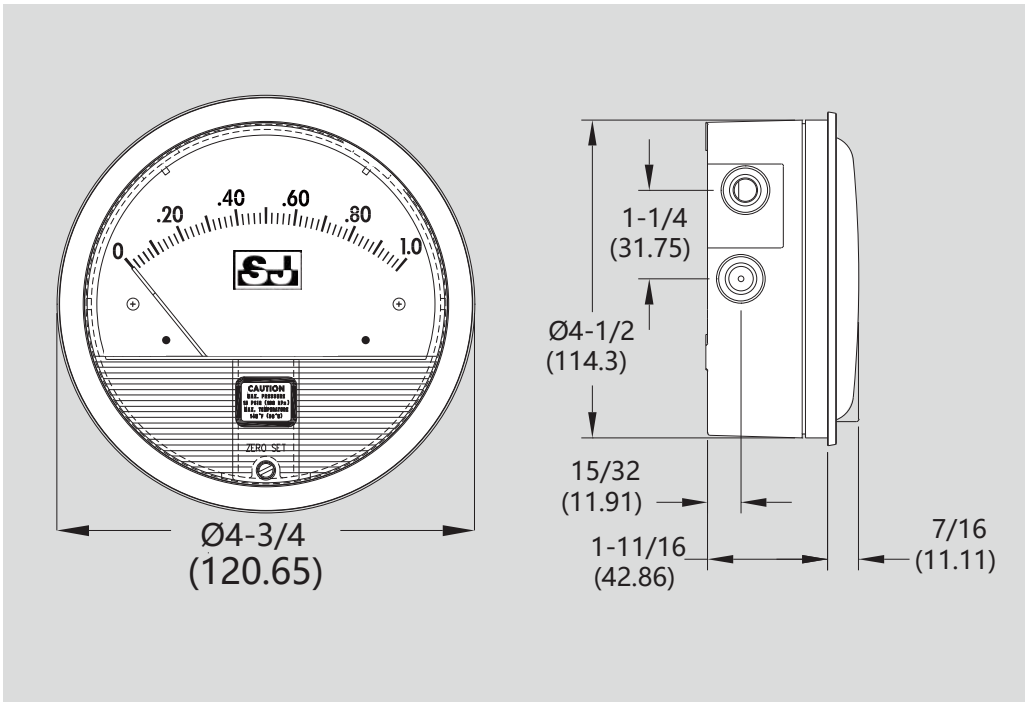
Window
Acrylic

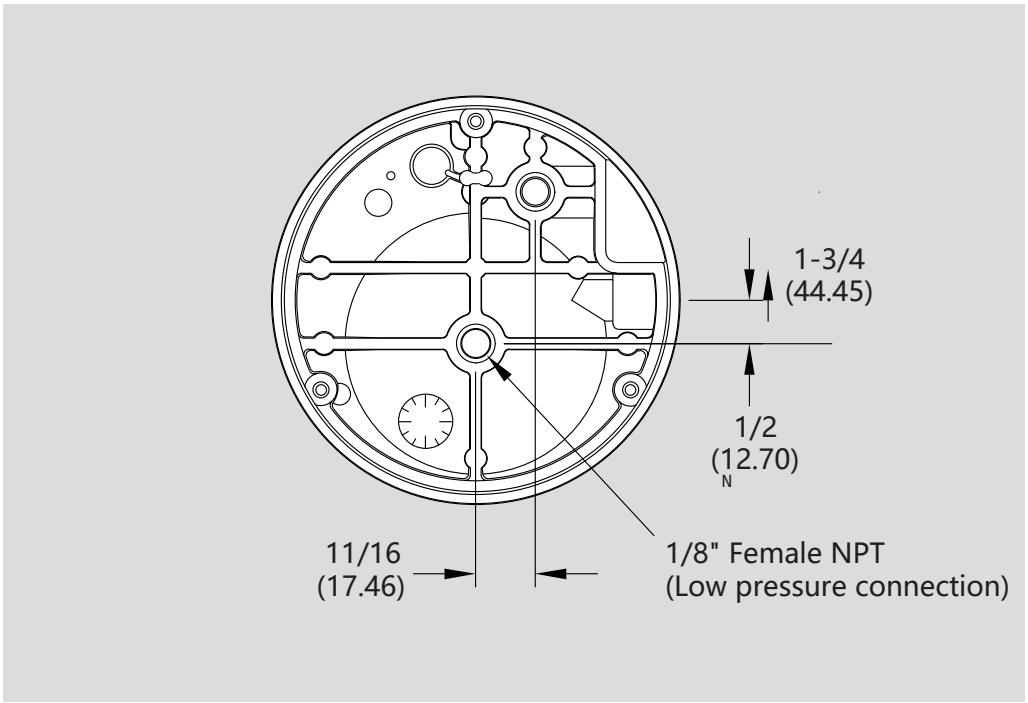
Case/Ring
Die-cast aluminum

Pressure limitation
-20 inHg ... 15 psi

Medium temperature
-7°C ... 60°C

Dimensions





Accessories

Accessory kits (standard)

Screws, connection fittings

Option

Pipe mounting plate

Option

Stainless steel flush mount bracket A

Option

Stainless steel flush mount bracket B

Low Differential Pressure Gauge
Model: PRMD

Operation Manual

Measurement Operation

- Positive pressure:
  Please plug one of the two high pressure holes, connect the other high-pressure hole with the pipeline to be measured, and do not plug the other two low-pressure holes to balance with the atmospheric pressure.

- Negative pressure:
  Please plug one of the two low pressure holes, connect the other low-pressure hole to the pipeline to be measured, and the other two high-pressure holes are not plugged, and balance with the atmospheric pressure.

- Differential pressure:
  Install the differential pressure gauge on the U-clamp. There are high and low pressure holes on the back and sides of the gauge. If you want to take over the measurement from the side, the two holes on the back need to be plugged with the screw plugs of the accessory kit. If you want to measure from the back, perform the reverse operation.

Accessory

- Standard accessories:
  1. Red, green and yellow adjustable warning pointer
  2. 1/8"NPT Hole plug x2
  3. Two connectors, one end is 1/8"NPT, the other end is PU hose
  4. Long and short thread x3

- Purchase accessories:
  Round back plate, stainless steel U-clamp, stainless steel L mount bracket

Maintenance method

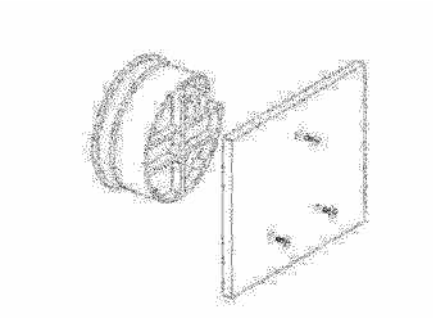
- No lubrication or regular maintenance is required. Keep the housing and upper cover clean. Occasionally untie the pressure line to vent both sides of the gage to the atmosphere and reset it to zero. The optional exhaust valve should be used for permanent installation. The PRMD series cannot be repaired on site and should be returned if repair is required (onsite repair should not be attempted, which may invalidate the warranty). Be sure to provide a brief description of the problem and any related application instructions. Please contact customer service before shipping.

Other matters attention

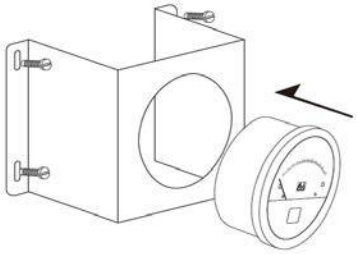
- Choose a working environment where the temperature does not exceed 140° F (60° C). In addition, please be sure to avoid direct sunlight, otherwise it will accelerate the discoloration of the transparent plastic cover. The plastic hose can be lengthened according to the needs of use. Longer pipe lengths will not affect accuracy, but will slightly increase response time. If the pulsating pressure or vibration causes the pointer to vibrate too much, please consult the factory to provide additional damping.
- Overpressure protection:
  The standard differential pressure gauge has a maximum rated pressure of 15 psig and should not be used beyond this limit. The model uses a rubber plug at the rear. When the pressure reaches about 25 psig, the red rubber plug at the rear will pop open.
- Zero adjustment:
  After vertical installation, there is a ZERO SET on the differential pressure gauge, which can be adjusted to zero.

Installation Instructions

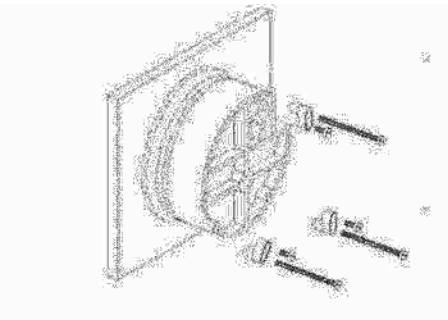
■ Flat mounting type



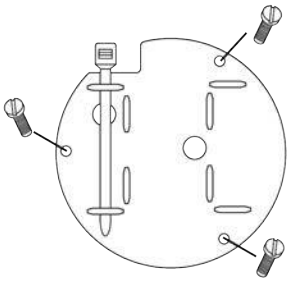
■ U-clamp



■ Embedded



■ Round back version installation type



MEDIDORES DE PRESION

BAJA PRESIÓN

Low Pressure Gauge

Model: PRM

Product Description

- For dry and non-aggressive pressure medium, such as gas
- Zero-point correction available
- Iron- or chromium-plated and stainless steel: PRSM, PRSSM.DC

Product Specification

Nominal size
2.5", 3", 4"

Scale ranges
0 ... 300 mmAq to 0 ... 5000 mmAq, or other equivalent units of pressure, vacuum or compound

Accuracy
ASME B40.1 grade B ±3/2/3%

Process connection
Chromium-plated copper
1/4", 3/8", 1/2"; PT, G, NPT

Case/Ring
Iron,
2.5" Bottom mount: Black plating
2.5" Back mount: All chromium-plated case, black iron case and chromium-plated bayonet ring
3", 4": All chromium-plated case

Window
2.5": acrylic; 3", 4": glass

Dial
Aluminum alloy, black scale on white

Pointer
Black aluminum alloy

Product Specification

Movement
Copper alloy

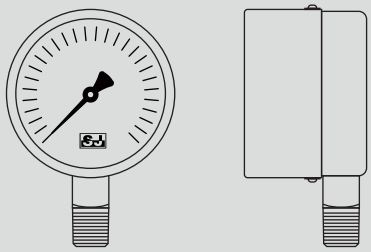
Capsule element
Copper alloy

Medium temperature
-20°C ... 60°C

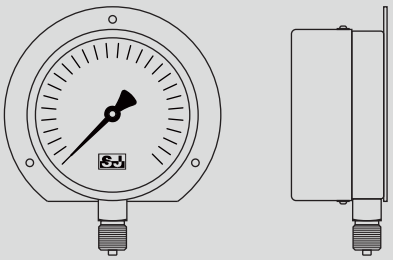
Pressure limitation
Steady: 0.75 x full scale value
Fluctuating: 0.6 x full scale value

Connection Location

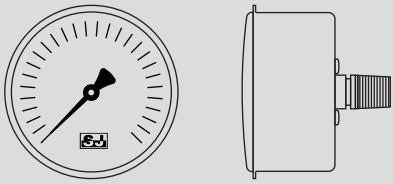
A-Bottom mount



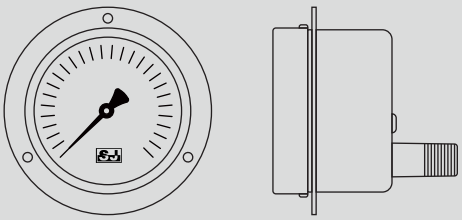
B-Bottom mount with flange



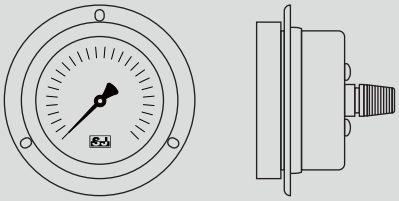
ADC-Center back mount



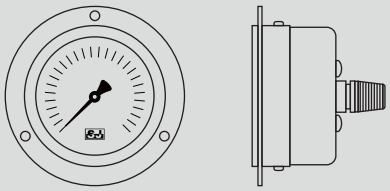
BDL-Lower back mount with flange



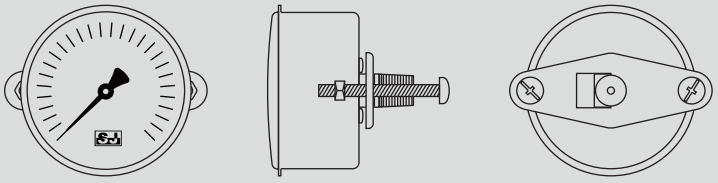
BDC-A Center back mount with flange (all chromium plated case)



BDC-B Center back mount with flange (black iron case and chromium plated bayonet ring)



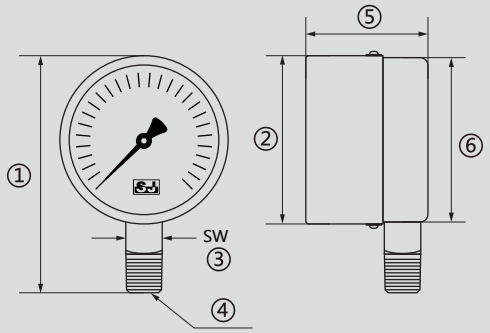
UDC-Center back mount with U-clamp



Connection location							
NS	A	B	ADC	BDL	BDC-A	BDC-B	UDC
2.5"	V	-	V	-	V	V	V
3"	V	-	-	V	V	-	-
4"	V	V	V	-	V	-	-

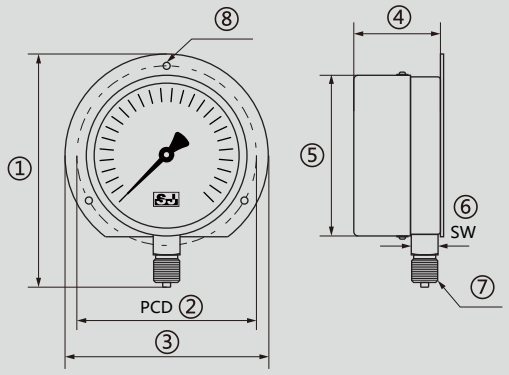
Dimensions

A-Bottom mount



Dimensions (mm)						
NS	①	②	③	④	⑤	⑥
2.5"	86.6	65.5	14	1/4"	47	65.3
3"	110	78.5	17	3/8"	56.7	76.7
4"	135	102	17	3/8"	54.5	100

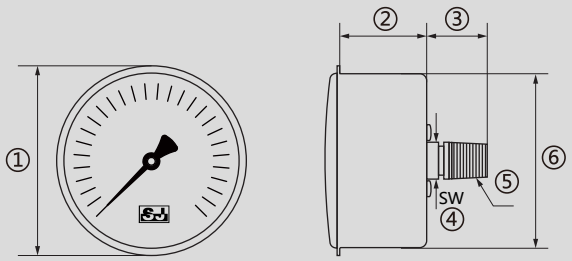
B-Bottom mount with flange



Dimensions (mm)								
NS	①	②	③	④	⑤	⑥	⑦	⑧
4"	147	114	129	55	102	17	3/8"	Φ4.5

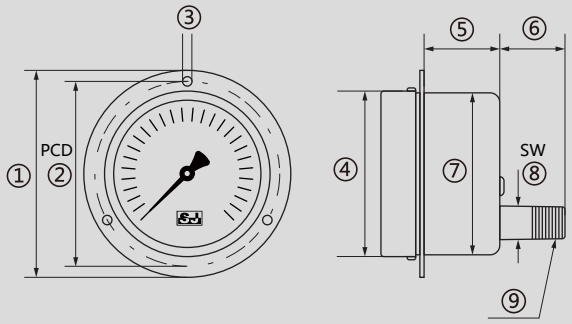
Dimensions

ADC-Center back mount with flange



Dimensions (mm)						
NS	①	②	③	④	⑤	⑥
2.5"	72	33.5	22.5	14	1/4"	63
4"	111	31	29	22	1/2"	99.5

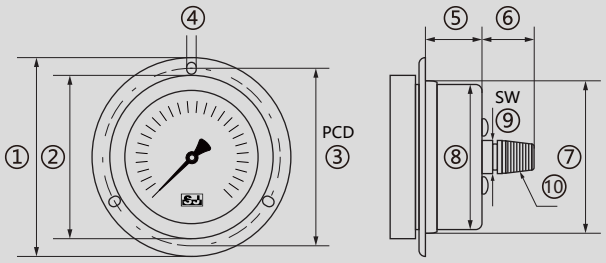
BDL-Lower back mount with flange



Dimensions (mm)									
NS	①	②	③	④	⑤	⑥	⑦	⑧	⑨
3"	98.4	87.9	Φ4.5	78.7	36	31	77	16	1/4"

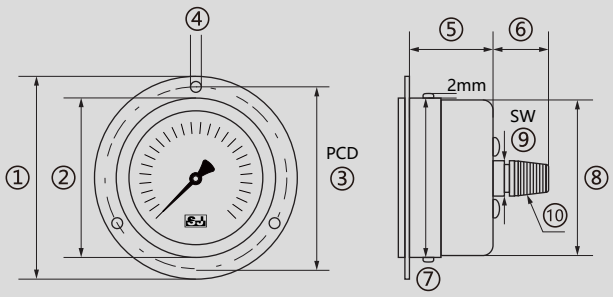
Dimensions

BDC-A Center back mount with flange (all chromium plated case)



Dimensions (mm)										
NS	①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩
2.5"	84	69	75	4*5	23.9	22	64.4	61.3	14	1/4"
3"	104.3	84.6	91.8	4.4*6.5	29	27.5	78	76	17	3/8"
4"	131.5	111	118	6*7.5	27	24	103	99.5	17	3/8"

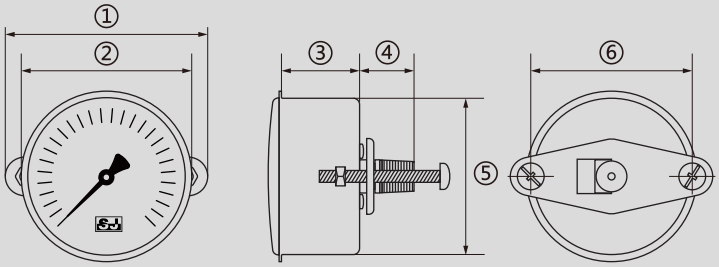
BDC-B Center back mount with flange (black iron case and chromium plated bayonet ring)



Dimensions (mm)										
NS	①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩
2.5"	80.3	63.1	72	4.3	33.1	22	63.1	61.6	14	1/4"

Dimensions

UDC-Center back mount with U-clamp



Dimensions (mm)						
NS	①	②	③	④	⑤	⑥
2.5"	85.5	72	33.5	22.5	63	62

Low Pressure Gauge - Stainless Steel Case

Model: PRSM

Product Description

- For gaseous or liquid pressure medium that are compatible with copper alloy parts
- Zero-point correction available for troubleshooting
- Stainless steel case — other different materials available: PRM, PRSSM.DC

Product Specification

Nomonal size
2.5", 3", 4"

Scale ranges
0 ... 300 mmAq to 0 ... 5000 mmAq, or other equivalent units of pressure, vacuum or compound

Accuracy
ASME B40.1 grade B ±3/2/3%

Process connection
Chrominum-plated copper
1/4", 3/8", 1/2"; PT, G, NPT

Case/Ring
304 SS

Window
2.5": acrylic; 3", 4": glass

Dial
Aluminum alloy, black scale on white

Pointer
Black aluminum alloy

Movement
Copper alloy

Capsule element
Copper alloy

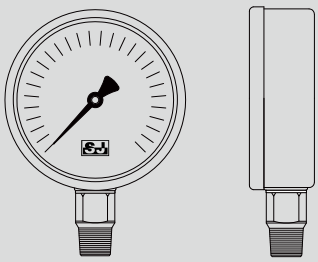
Medium temperature
-20°C ... 60°C

Product Specification

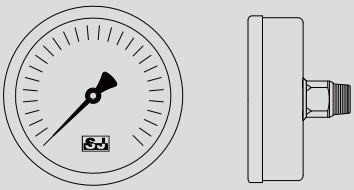
Permissible pressure
Steady: 0.75 x full scale value
Fluctuating: 0.6 x full scale value

Connection Location

A-Bottom mount



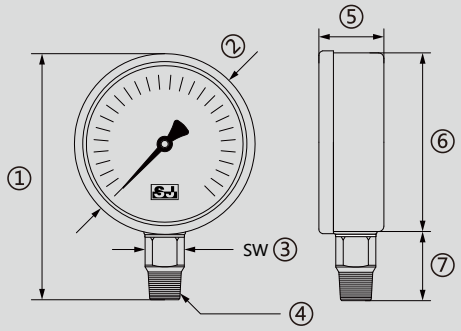
ADC-Center back mount



Connection location		
NS	A	ADC
2.5"	V	V
3"	V	-
4"	V	-

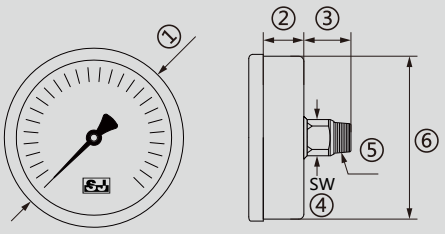
Dimensions

A-Bottom mount



Dimensions (mm)							
NS	①	②	③	④	⑤	⑥	⑦
2.5"	90	66	14	1/4"	45	66	21
3"	110	79	17	1/4"	55	79	32
4"	137	111	22	1/2"	43	132	33

ADC-Center back mount



Dimensions (mm)						
NS	①	②	③	④	⑤	⑥
2.5"	72	33	13	14	1/2"	65

Low Pressure Gauge, Stainless Steel

Model: PRSSM.TU

Product Description

- Can only be used to measure the pressure of non-liquid media
- For gaseous, dry and aggressive media, as well as adverse environments
- The liquid-filled case design is suitable for highly dynamic pressure loads and vibrations

Product Specification

Connection location
Bottom mount, back mount, without/with flange, back mount with U-clamp

Nominal size
2.5", 4", 6"

Scale ranges
2.5":
unfilled: 0 ... 2.5 kPa to 0 ... 100 kPa
4":
unfilled: 0 ... 1 kPa to 0 ... 100 kPa
filled: 0 ... 4 kPa to 0 ... 100 kPa
6":
unfilled: 0 ... 0.5 kPa to 0 ... 100 kPa
filled: 0 ... 2.5 kPa to 0 ... 100 kPa

Accuracy
±2.5% F.S. (standard), ±1.6% F.S., ±1.0% F.S.

Process connection
1/4", 3/8", 1/2"
PT, G, NPT

Case/Ring
304 SS (standard), 316 SS

Window
Flat instrument glass, laminated safety glass

Dial

Product Specification

Aluminum, white, black lettering

Pointer

Aluminum, black

Movement

304 SS

Case filling

Without, silicone oil

Wetted part

316L SS

Pressure limitation

Steady: Full scale value

Fluctuating: 0.9 x full scale value

Ambient temperature

-20℃ ... 60℃

Medium temperature

≤100℃

IP rating

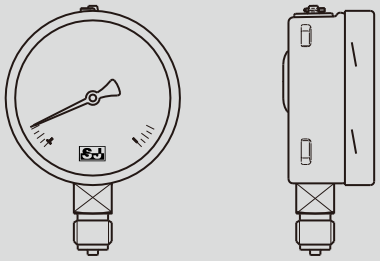
IP 65

Zero point setting

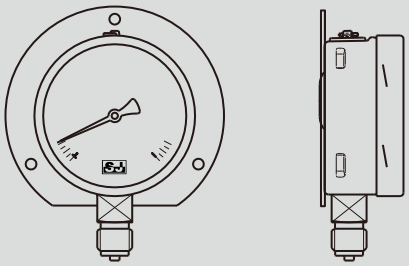
In front, after opening the bayonet ring

Connection Location

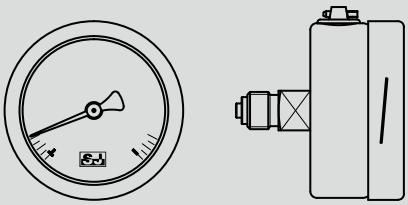
A-Bottom mount



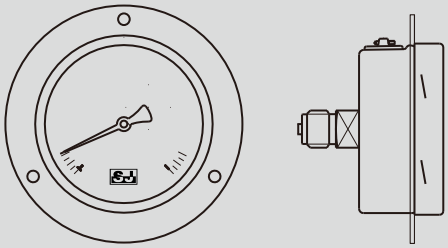
B-Bottom mount with flange



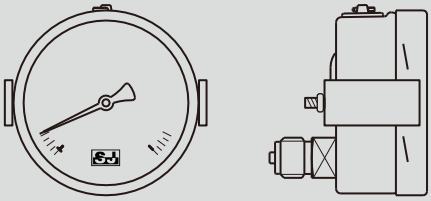
ADC-Center back mount



BDC-Center back mount with flange



UAD-Back mount with U-clamp



Connection location					
NS	A	B	ADC	BDC	UAD
2.5"	V	-	V	V	-
4"	V	V	V	V	V
6"	V	V	V	V	-

Diaphragm Low Pressure Gauge

Model: PRSSM-LD

Product Description

- Corrugated diaphragm design used for measuring small pressure ranges within corrosive, crystalized or viscous pressure media
- Pressure connections include threaded and flange mounting options, or electric contacts
- Suitable for applications in the chemical, petrochemical, oil and gas industries as well as power engineering

Fig. left: Male thread with contacts
Fig. middle: Flange type
Fig. right: Male thread

Product Specification

Connection location
Male thread, male thread with contacts, flange type, flange type with contact

Nominal size
4", 6"

Scale ranges
0 ... 1 kPa to 0 ... 60 kPa or other equivalent units of pressure, vacuum or compound

Accuracy
±2.5% F.S. (standard), ±1.6% F.S.

Ambient temperature
-20℃ ... 60℃

Medium temperature
Maximum +100℃

Case/Ring
Stainless steel

Window
Glass, safety glass

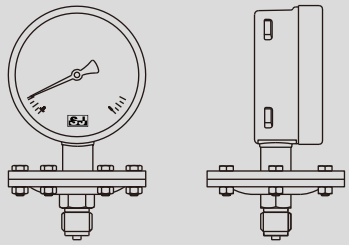
Dial
Aluminum alloy, black scale on white

Pointer
Black aluminum alloy

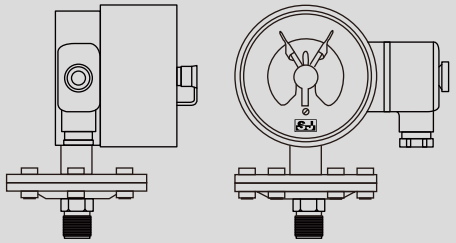
Sensor element
316L SS (standard), hastelloy alloy, PTFE

Connection location

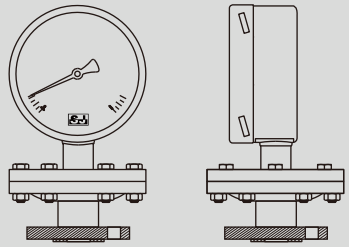
A-Male thread



B-Male thread with contacts



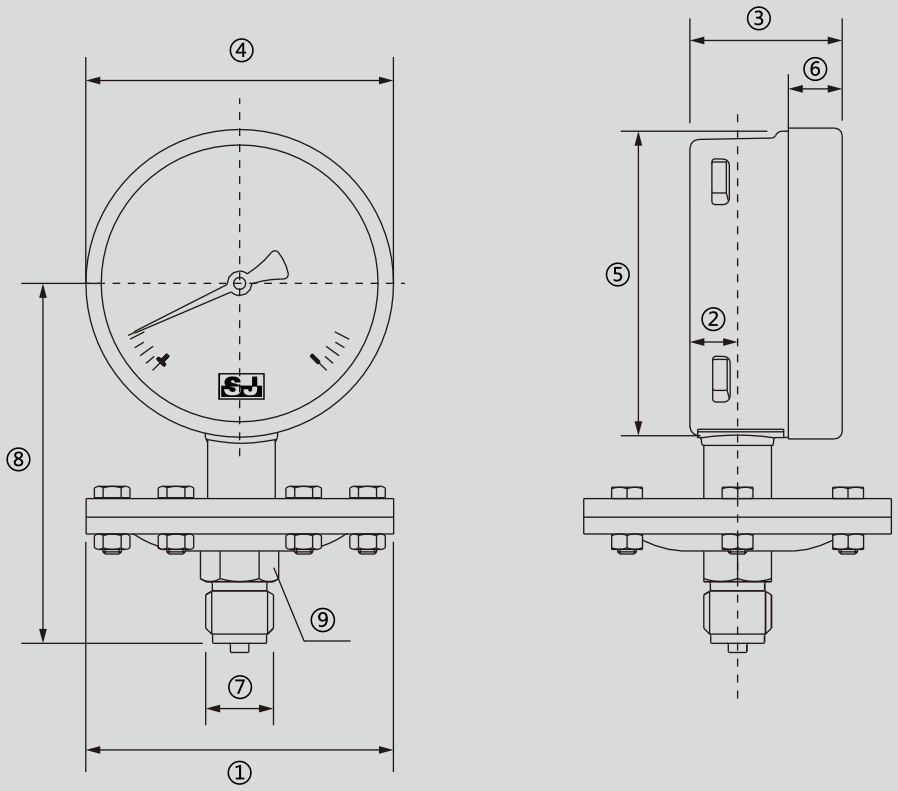
C-Flange type



Connection location			
NS	A	B	C
4"	V	V	V

Dimensions

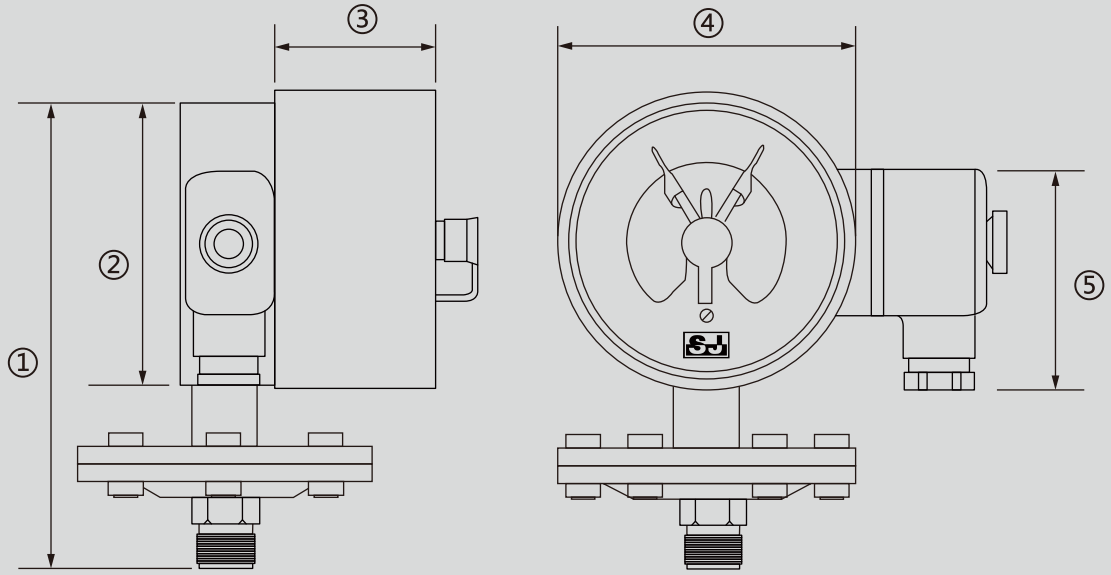
A-Male thread



Dimensions (mm)										
NS	Scale range	①	②	③	④	⑤	⑥	⑦	⑧	⑨
4"	≦ 0.25 bar	160	15.5	49.5	101	99	17.5	1/2"	119	22
	> 0.25 bar	100	15.5	49.5	101	99	17.5	1/2"	117	22

Dimensions

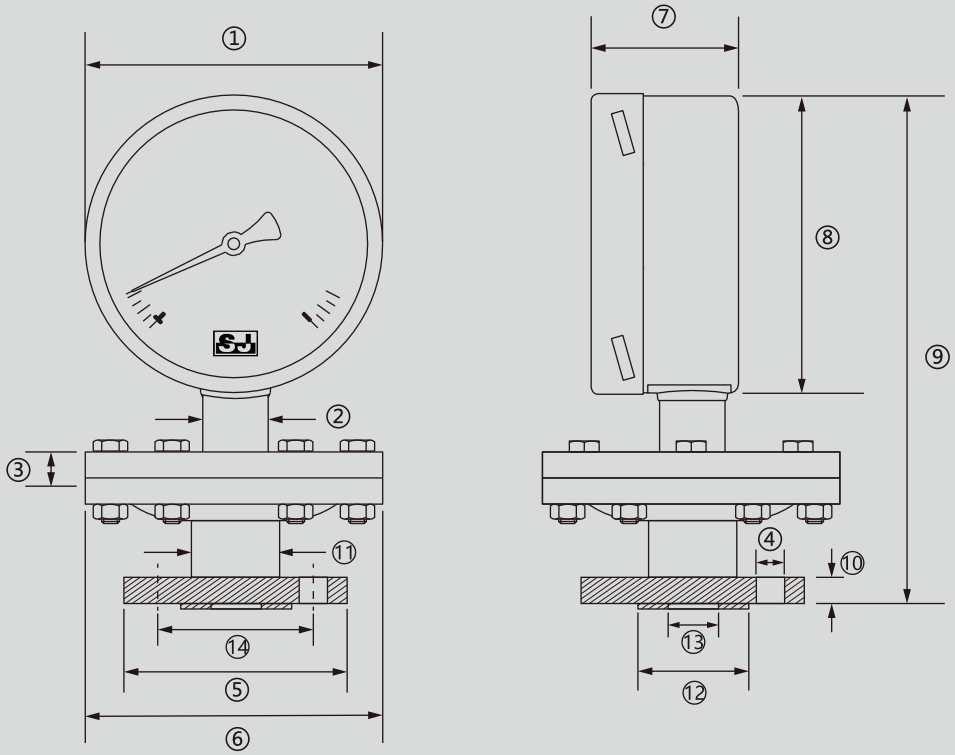
B-Male thread with contacts



Dimensions (mm)					
NS	①	②	③	④	⑤
4"	250	150.2	87.7	101.5	75.3

Dimensions

C-Flange type



Dimensions (mm)							
NS	①	②	③	④	⑤	⑥	⑦
4"	101	22.5	20.3	16	110	161.5	50

NS	⑧	⑨	⑩	⑪	⑫	⑬	⑭
4"	99	216	14.2	36.3	51	26	78

MEDIDORES DE PRESION

DE ACERO INOXIDABLE

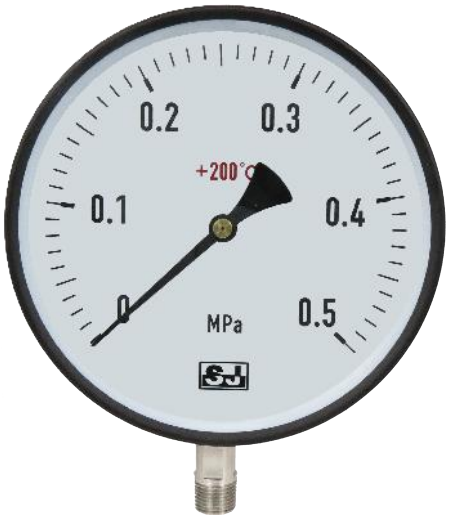
Stainless Steel Pressure Gauge, High Temperature / Boiler

Mechanical Pressure Gauge

Model : PRST

Product Description

- Use 304 SS wetted parts for high-temperature applications
- Design for plants and equipment where measured values must be read from a distance
- Referred to as" Boiler Gauge " or" Steam Gauge" in the industry



Product Specification

Nominal size
8", 10"

Scale ranges
0 ... 1 bar to 0 ... 1000 bar, or other equivalent units of pressure or compound

Accuracy
±1.6%F.S.

Process Connection
1/4", 3/8", 1/2"; PT, G, NPT

Case / Ring
Iron; with black anti-corrosion coating

Window
Flat instrument glass

Dial
Aluminum alloy (single or double scale)

Pointer
Black aluminum alloy

Bourdon Tube
304 SS

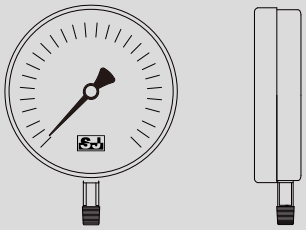
Movement
304 SS

Medium temperature
Max. 200℃

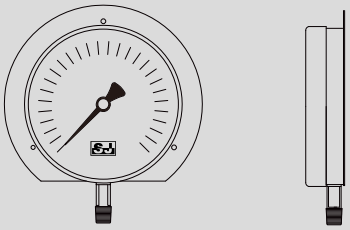
Accessories (Options)
Stainless steel rear flange

Dimensions

A Bottom mount



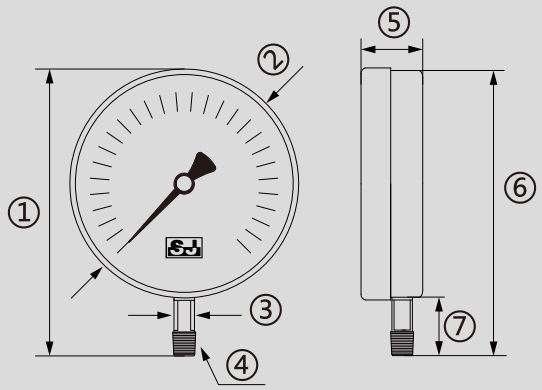
B Bottom mount with rear flange



NS \ Code	A Bottom mount	B Bottom mount with rear flange
8"	✓	✓
10"	✓	–

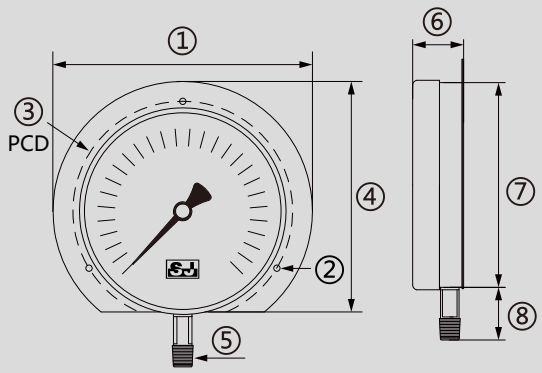
Dimensions

A Bottom mount



Dimension (mm)							
NS	①	②	③	④	⑤	⑥	⑦
8"	238	199	S19	1/2"PT	47	238	41
10"	295	250	17	1/2"PT	48	295	48

B Bottom mount with rear flange



Dimension (mm)								
NS	①	②	③	④	⑤	⑥	⑦	⑧
8"	253	4.7	217	216	1/2"PT	G1/2B	197	41

All stainless steel pressure gauge

Model: PRSS

Product Description

- For gaseous and liquid pressure media that are not highly viscous or crystallizing
- Liquid filled type available to avoid hard observation from pointer vibration
- Ideal for food and beverage, or other process engineering industries

Product Specification

Nominal size
2.5", 3", 4"

Scale ranges
0 ... 1 kg/cm² to 0 ... 1000 kg/cm², or other equivalent units of pressure, vacuum or compound

Accuracy
±1.6% F.S.

Process connection
316L SS
1/8", 1/4", 3/8", 1/2"
PT, G, NPT

Case/Ring
304 SS

Window
Polycarbonate (standard),
glass

Dial
Aluminum alloy, black scale on white

Pointer
Black aluminum alloy

Movement
Copper alloy

Bourdon tube
316L SS

Product Specification

Filling liquid
Without, glycerine, silicone oil

Accessories
2.5", 4": adjustable set pointer (options)

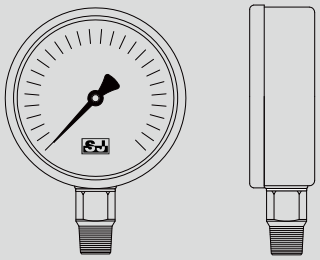
Pressure limitation
Steady: full scale value
Fluctuating: 0.9 x full scale value

Ambient temperature
-40°C ... 60°C (unfilled or silicone oil filled)
-20°C ... 60°C (glycerine filled)

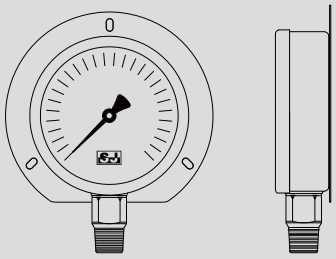
Medium temperature
-40°C ... 150°C (unfilled)
-20°C ... 100°C (glycerine filled)
-40°C ... 100°C (silicone oil filled)

Connection Location

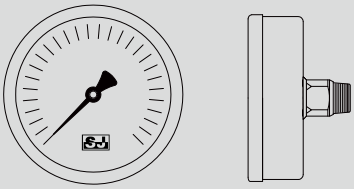
A-Bottom mount



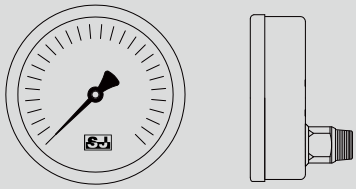
B-Bottom mount with flange



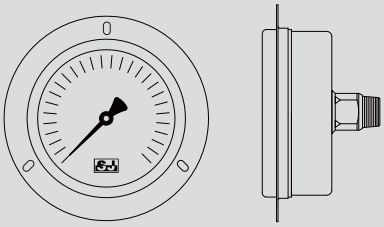
ADC-Center back mount



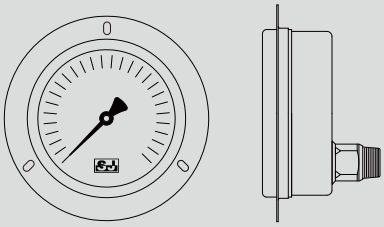
ADL-Lower back mount



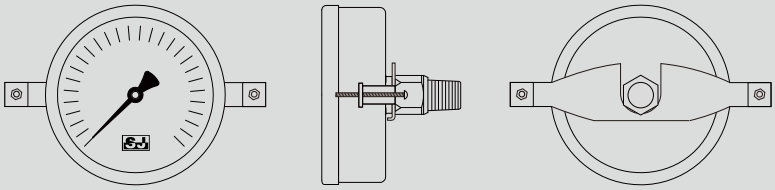
BDC-Center back mount with flange



BDL-Lower back mount with flange



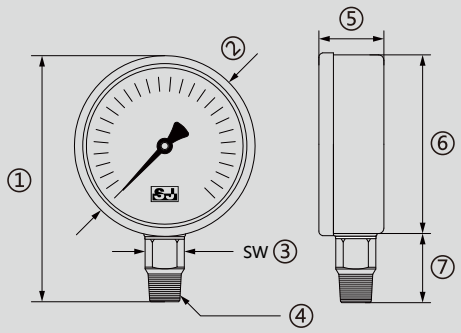
UDC-Center back mount with U-clamp



Connection location							
NS	A	B	ADC	ADL	BDC	BDL	UDC
2.5"	V	V	V	-	V	-	V
3"	V	V	V	-	V	-	V
4"	V	V	V	V	V	V	V

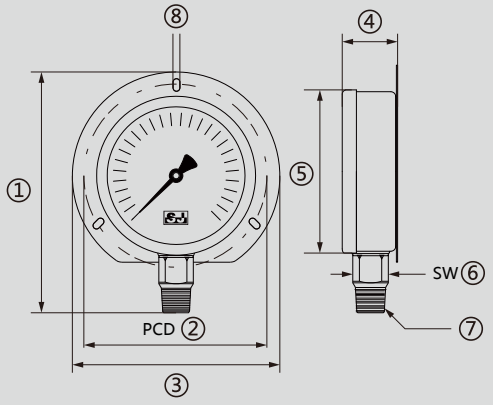
Dimensions

A-Bottom mount



Dimensions (mm)							
NS	①	②	③	④	⑤	⑥	⑦
2.5"	92	71	14	1/4"	34	63	26
3"	118.2	85.2	18	3/8"	32	77.5	30
4"	140	110	22	1/2"	45	98.5	38

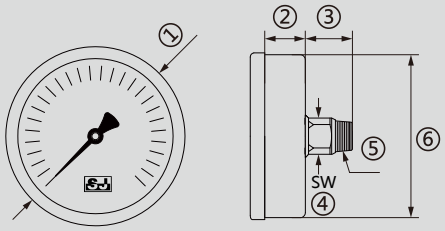
B-Bottom mount with flange



Dimensions (mm)								
NS	①	②	③	④	⑤	⑥	⑦	⑧
2.5"	107	82.4	99.5	34	71	14	1/4"	6*4.4
3"	111.5	94	106.1	33	82.5	18	3/8"	6*7.5
4"	150.5	117	130	46.5	110	22	1/2"	4*3

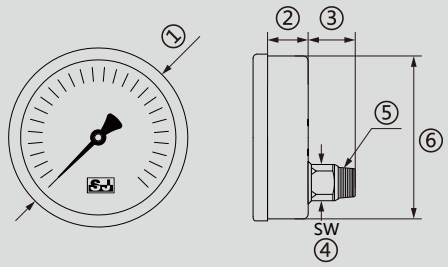
Dimensions

ADC-Center back mount



Dimensions (mm)						
NS	①	②	③	④	⑤	⑥
2.5"	71	25	26	14	1/4"	63.5
3"	85.1	32	30	18	3/8"	77.5
4"	110	28	38	22	1/2"	98.5

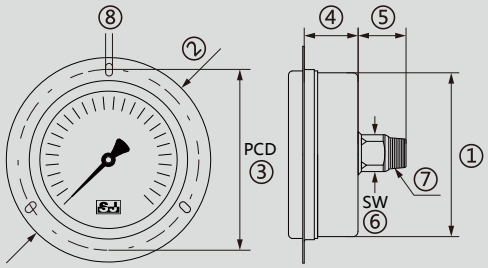
ADL-Lower back mount



Dimensions (mm)						
NS	①	②	③	④	⑤	⑥
4"	110	28	38	22	1/2"	98.5

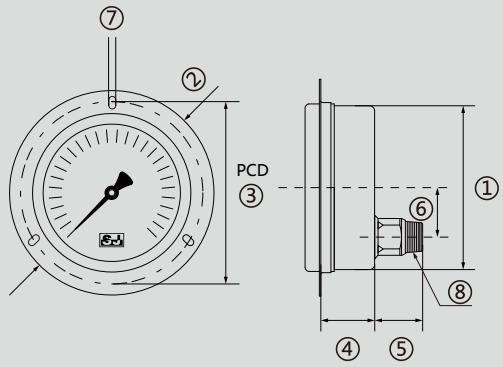
Dimensions

BDC-Center back mount with flange



Dimensions (mm)								
NS	①	②	③	④	⑤	⑥	⑦	⑧
2.5"	65	87.5	80.5	25	26	14	1/4"	4.5*3
3"	80	110	96	23	30	18	1/4"	4.5*3
4"	101	132.5	117	28	38	22	1/2"	6*3

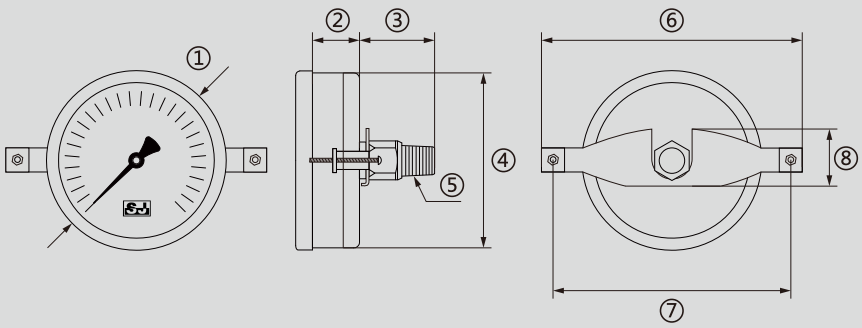
BDL-Lower back mount with flange



Dimensions (mm)								
NS	①	②	③	④	⑤	⑥	⑦	⑧
4"	101	132.5	117	30	35	22.5	8*3	1/2"

Dimensions

UDC-Center back mount with U-clamp



Dimensions (mm)								
NS	①	②	③	④	⑤	⑥	⑦	⑧
2.5"	71	25	26	63.5	1/4"	96	88	28.5
3"	85.1	32	35	80	1/4"	135	127	44
4"	110	28	38	98.5	1/2"	135	127	44

All Stainless Steel: Laser-welding type

Model: PRDR.W

Product Description

- Integrally formed without any seams to avoid leakage effectively
- Vent valve and blow-out device (plug) for improved safety
- Used in petrochemical industry, power engineering and sewage treatment
- Same specifications as WIKA-232.50/233.50

Product Specification

Connection location
Bottom mount, back mount, with/without flange

Nominal size
2.5", 4", 6"

Scale ranges
0 ... 0.6 kg/cm² to 1600 kg/cm² , or other equivalent units of pressure, vacuum or compound

Accuracy
2.5": ±1.6% F.S.
4", 6": ±1.0% F.S.

Process connection
316L SS
1/4", 3/8", 1/2"; PT, G, NPT

Case/Ring
304 SS, 316 SS
With blow-out device at case circumference, vent valve

Window
Safety glass

Dial
Aluminum alloy, black scale on white

Product Specification

Vent-plug
Scale ranges ≤ 0 ... 16 kg/cm^2 with compensating valve to vent and reseal case

Pointer
Black aluminum alloy
2.5": normal; 4", 6": adjustable

Filling liquid
Without, glycerine, silicone oil

Accessories (options)
4", 6": Drag pointer
4": Adjustable set pointer

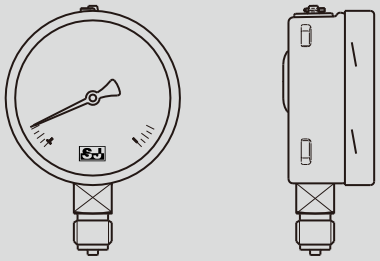
Ambient temperature
-40℃ ... 60℃ (non-liquid-filled)
-20℃ ... 60℃ (liquid-filled)

Medium temperature
Maximum 200℃ (non-liquid-filled)
Maximum 100℃ (liquid-filled)

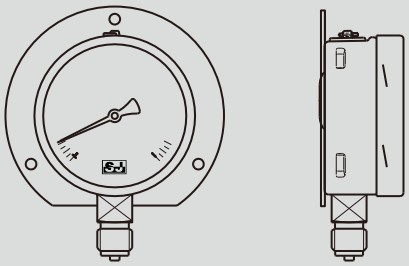
Protection level
IP65

Connection Location

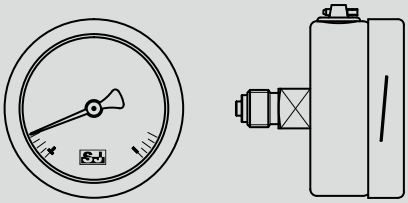
A-Bottom mount



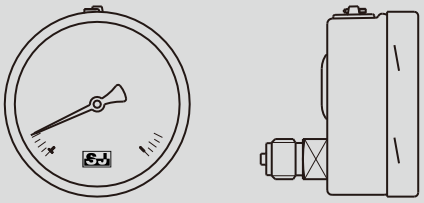
B-Bottom mount with flange



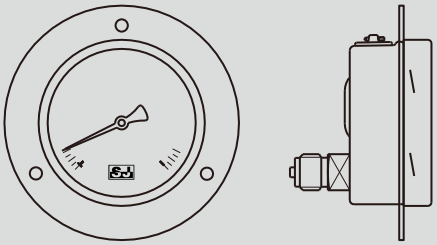
ADC-Center back mount



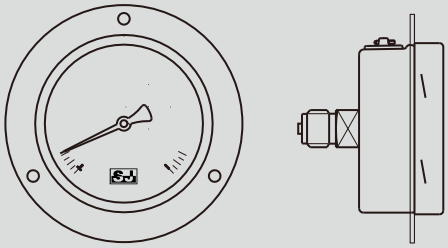
ADL-Lower back mount



BDL-Lower back mount with flange



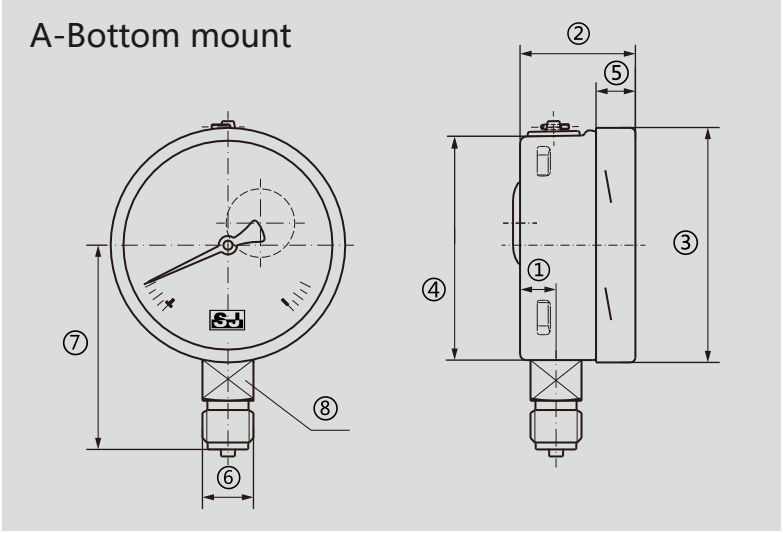
BDC-Center back mount with flange



Connection location						
NS	A	B	ADC	ADL	BDL	BDC
2.5"	V	-	V	-	V	V
4"	V	V	-	V	V	-
6"	V	-	-	V	V	-

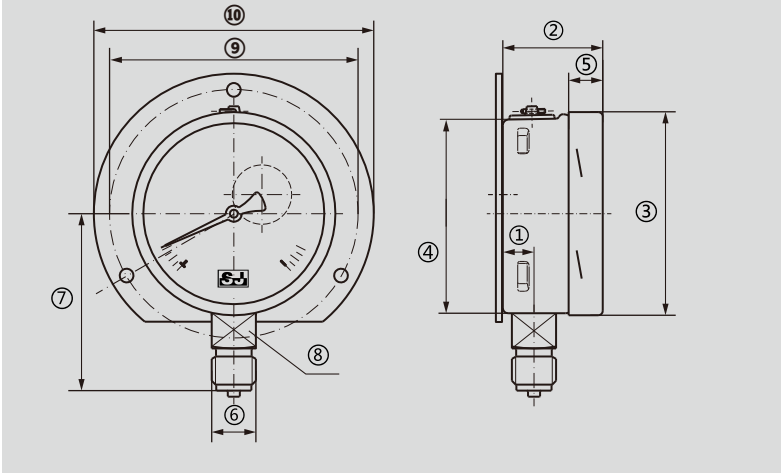
Dimensions

A-Bottom mount



Dimensions (mm)								
NS	①	②	③	④	⑤	⑥	⑦	⑧
2.5"	9.5	33	63	62	11.5	1/4"	54	14
4"	15.5	49.5	101	99	17.5	1/2"	87	22
6"	14	49.5	160	156	16.9	1/2"	118	22

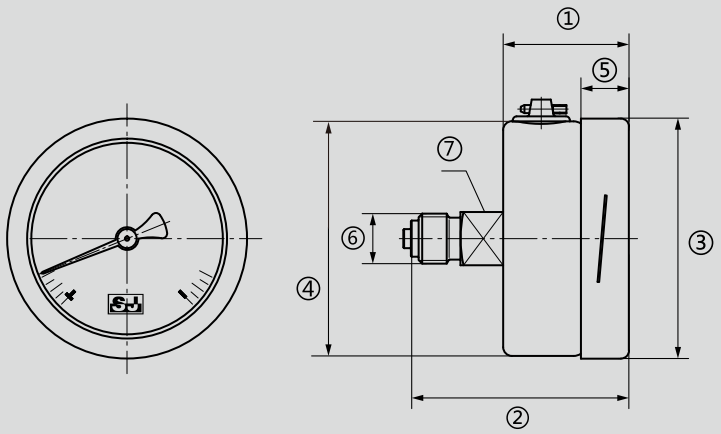
B-Bottom mount with flange



Dimensions (mm)										
NS	①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩
4"	15.5	49.5	101	99	17.5	1/2"	87	22	118	132

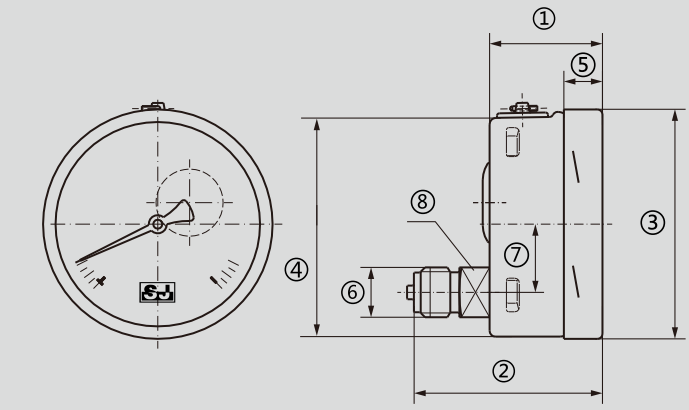
Dimensions

ADC-Center back mount



Dimensions (mm)							
NS	①	②	③	④	⑤	⑥	⑦
2.5"	33	57	63	62	11.5	1/4"	14

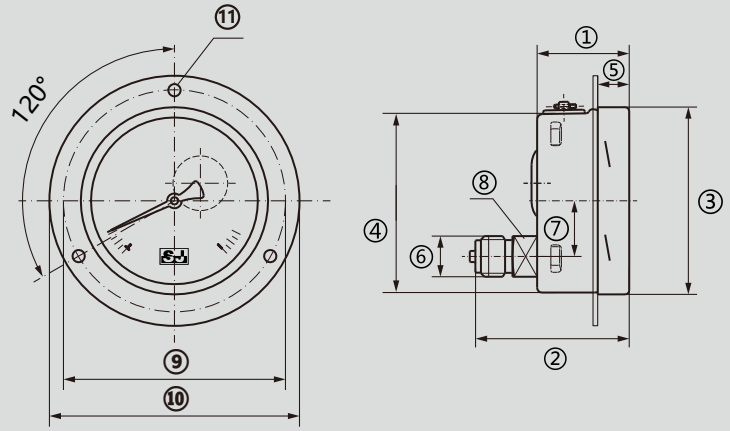
ADL-Lower back mount



Dimensions (mm)								
NS	①	②	③	④	⑤	⑥	⑦	⑧
4"	49.5	83	101	99	17.5	1/2"	30	22
6"	49.5	83	161	159	17.5	1/2"	50	22

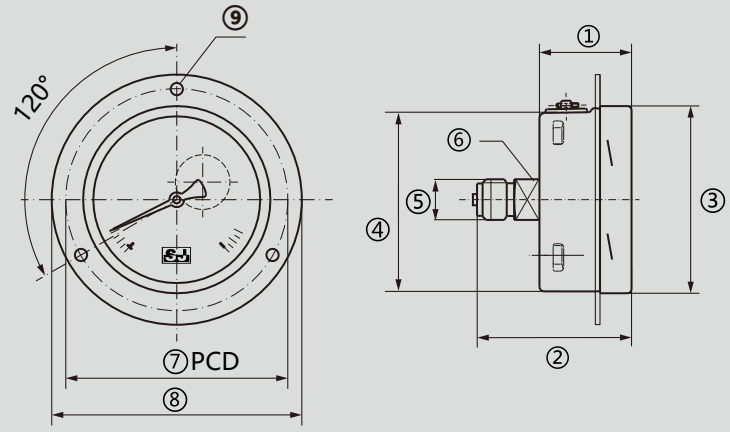
Dimensions

BDL-Lower back mount with flange



Dimensions (mm)											
NS	①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩	⑪
2.5"	33	60	64.4	62	17.5	1/4"	30	14	80	90	6.6x4.4
4"	49.5	83	101	99	17.5	1/2"	30	22	118	132	Φ4.8
6"	50	91	160	158	17.5	1/2"	29	22	178	198	Φ6

BDC-Center back mount with flange



Dimensions (mm)									
NS	①	②	③	④	⑤	⑥	⑦	⑧	⑨
2.5"	33.5	61	64.4	64	1/4"	14	76.4	90	6.6x4.4

Accessories

Accessories

4"、6": Drag pointer

Accessories

4": Adjustable set pointer

Stainless Steel Case Pressure Gauge

Model: PRS

Product Description

- For liquid or gaseous pressure media that will not attack copper alloy parts
- Prepared for liquid filling for applications with high dynamic pressure loads or vibrations
- Suitable for pumps, compressors, hydraulics or other indoor and outdoor applications

Product Specification

Nominal size
1.5", 2", 2.5", 3", 4"

Scale ranges
0 ... 1kg/cm² to 0 ... 1000kg/cm², or other equivalent units of pressure, vacuum or compound

Accuracy
1.5", 2": ±2% F.S.
2.5", 3", 4": ±1.6% F.S.

Process connection
Brass or chromium plated brass
1/8", 1/4", 3/8", 1/2"
PT, G, NPT

Case/Ring
304 SS

Window
Polycarbonate (standard),
glass

Dial
Aluminum alloy, black scale on white

Pointer
Black aluminum alloy

Movement
Copper alloy

Bourdon tube
Copper alloy

Product Specification

Filling liquid
Without, glycerine, silicone oil

Accessories
2.5", 4": adjustable set pointer (options)

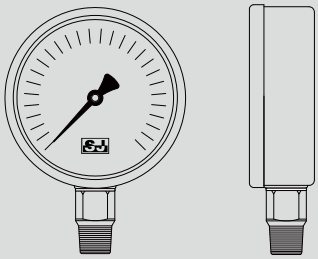
Pressure limitation
Steady: full scale value
Fluctuating: 0.9 x full scale value

Ambient temperature
-40°C ... 60°C (unfilled or silicone oil filled)
-20°C ... 60°C (glycerine filled)

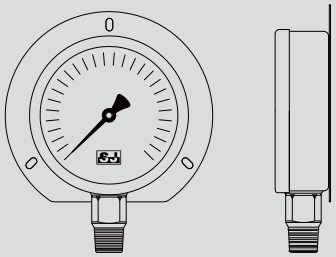
Medium temperature
60°C maximum

Connection Location

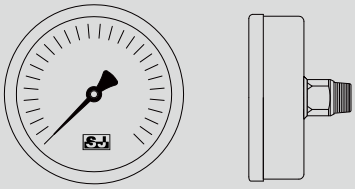
A-Bottom mount



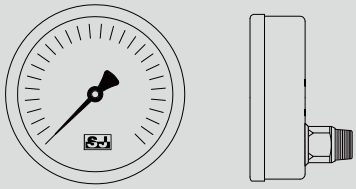
B-Bottom mount with flange



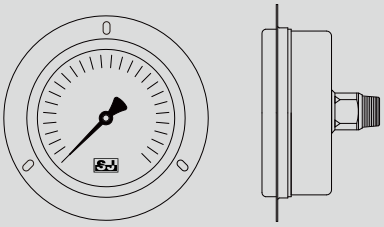
ADC-Center back mount



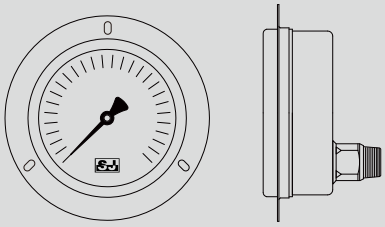
ADL-Lower back mount



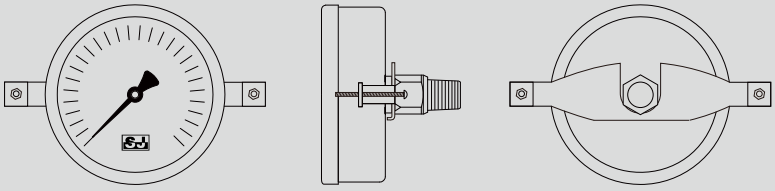
BDC-Center back mount with flange



BDL-Lower back mount with flange



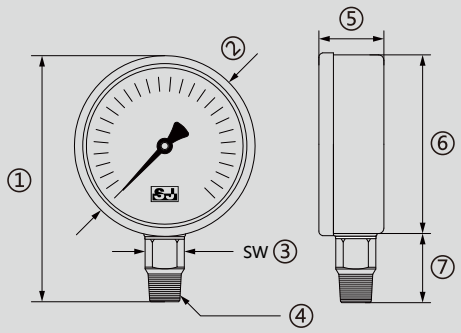
UDC-Center back mount with U-clamp



Connection location							
NS	A	B	ADC	ADL	BDC	BDL	UDC
1.5"	V	-	V	-	V	-	V
2"	V	-	V	-	V	-	V
2.5"	V	V	V	-	V	-	V
3"	V	V	V	-	V	-	V
4"	V	V	V	V	V	V	V

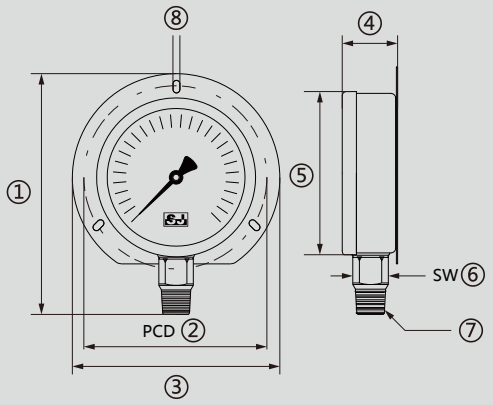
Dimensions

A-Bottom mount



Dimensions (mm)							
NS	①	②	③	④	⑤	⑥	⑦
1.5"	60	48	12	1/8"	28	41.8	16
2"	78.5	57	14	1/4"	29.5	50.5	25
2.5"	92	71	14	1/4"	34	63	26
3"	118.2	85.2	18	3/8"	32	77.5	30
4"	140	110	22	1/2"	45	98.5	38

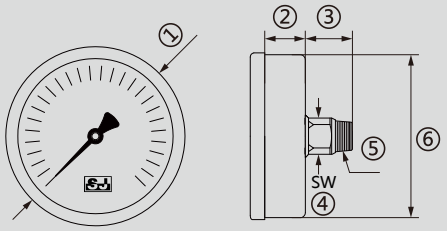
B-Bottom mount with flange



Dimensions (mm)								
NS	①	②	③	④	⑤	⑥	⑦	⑧
2.5"	107	82.4	99.5	34	71	14	1/4"	6*4.4
3"	111.5	94	106.1	33	82.5	18	3/8"	6*7.5
4"	150.5	117	130	46.5	110	22	1/2"	4*3

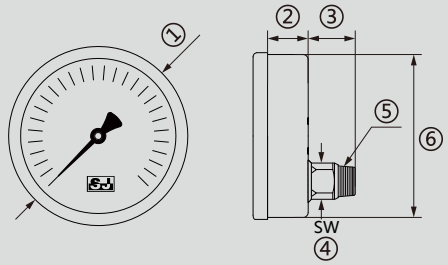
Dimensions

ADC-Center back mount



Dimensions (mm)						
NS	①	②	③	④	⑤	⑥
1.5"	48	22	16	12	1/8"	41.8
2"	57	22	21	14	1/4"	50.5
2.5"	71	25	26	14	1/4"	63.5
3"	85.1	32	30	18	3/8"	77.5
4"	110	28	38	22	1/2"	98.5

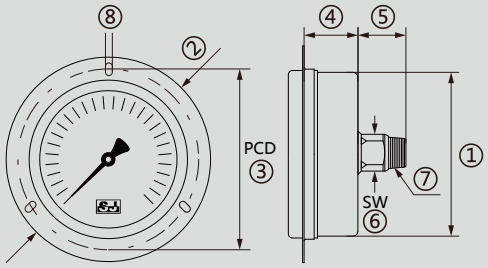
ADL-Lower back mount



Dimensions (mm)						
NS	①	②	③	④	⑤	⑥
4"	110	28	38	22	1/2"	98.5

Dimensions

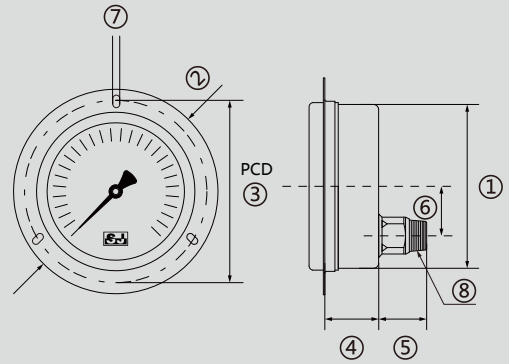
BDC-Center back mount with flange



Dimensions (mm)								
NS	①	②	③	④	⑤	⑥	⑦	⑧
1.5"	44	62.7	55.5	22	16	12	1/8"	4*3
2"	52.5	71.5	64.5	21	22	14	1/4"	4*4
2.5"	65	87.5	80.5	25	26	14	1/4"	4.5*3
3"	80	110	96	23	30	18	1/4"	4.5*3
4"	101	132.5	117	28	38	22	1/2"	6*3

① The width of the overlap between the edge and the shell is included.

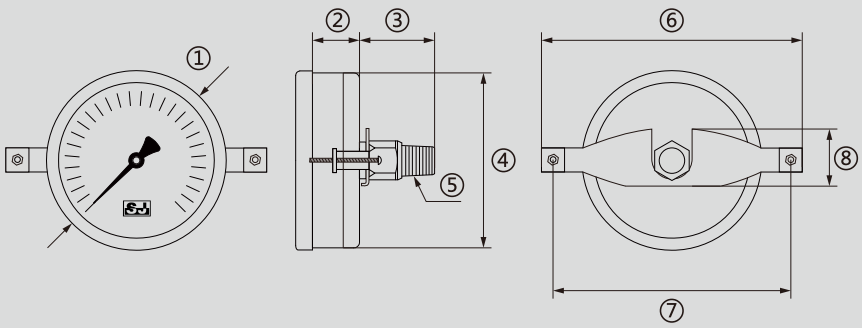
BDL-Lower back mount with flange



Dimensions (mm)								
NS	①	②	③	④	⑤	⑥	⑦	⑧
4"	101	132.5	117	30	35	22.5	8*3	1/2"

Dimensions

UDC-Center back mount with U-clamp



Dimensions (mm)								
NS	①	②	③	④	⑤	⑥	⑦	⑧
1.5"	48	22	21	41.8	1/4"	70	62	27.5
2"	57	22	21	50.5	1/4"	80	72	28
2.5"	71	25	26	63.5	1/4"	96	88	28.5
3"	85.1	32	35	80	1/4"	135	127	44
4"	110	28	38	98.5	1/2"	135	127	44

Phenolic Pressure Gauge

Model: PRPC

Product Description

- Phenolic case is resistant to heat and high acid, and also provides good insulation
- Solid barrier on the front and pressure relief system on the back for safer measuring

Product Specification

Connection location
Bottom mount, back mount

Nominal size
115 mm

Scale ranges
0 ... 6 kPa to 0 ... 100 MPa,
or other equivalent units of pressure, vacuum or compound

Accuracy
±1.0% F.S. , ±1.6% F.S. , ±2.5% F.S.

Process connection
316L SS
1/4", 3/8", 1/2"
PT, G, NPT

Case
Phenol, with solid baffle wall (solid-front) and blow-out back

Window
Safety glass

Dial
Aluminum alloy, black scale on white

Pointer
Black aluminum alloy

Movement
304 SS

Bourdon tube
316L SS

Product Specification

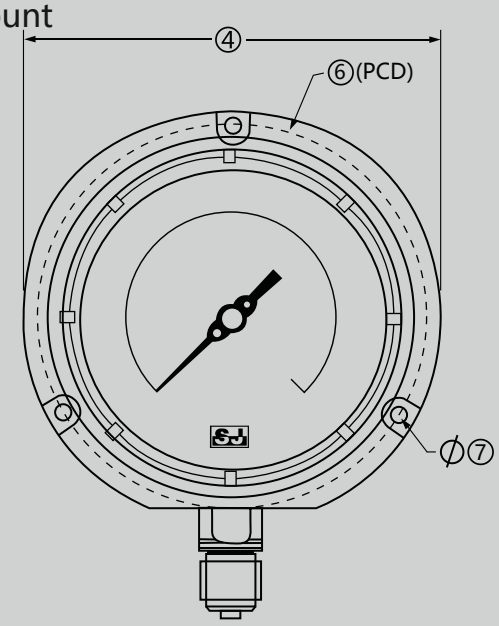
Accessories (options)
Silicone dampened movement

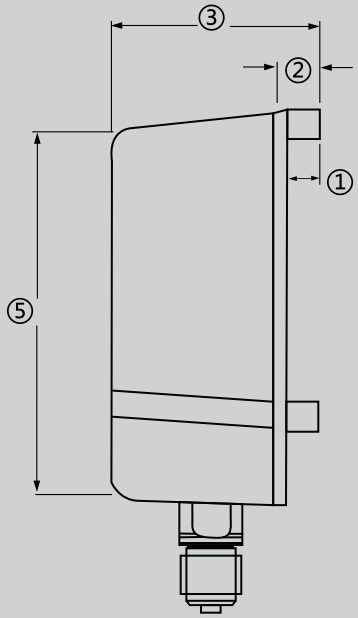
Ambient temperature
-20 ℃ ... 60 °C

Medium temperature
-20 ℃ ... 100 °C

Dimensions

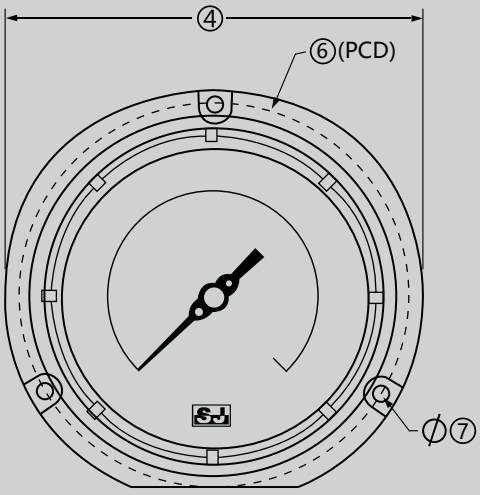
Bottom mount

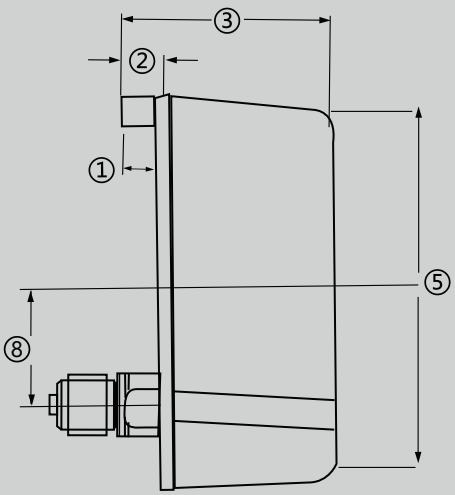




Dimensions (mm)							
NS	①	②	③	④	⑤	⑥	⑦
115	11.5	12.5	83	151	141	119	8

Back mount





Dimensions (mm)								
NS	①	②	③	④	⑤	⑥	⑦	⑧
115	11.5	12.5	83	151	141	119	8	30.5

4ManPro

Elements For Manufacturing Processes

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