

Indicating type differential pressure switch

Model: P631 series

Spec. sheet no. PD06-05

Service intended

The P631 series are designed to measure a differential pressure from 30 kPa to 1.5 MPa at static pressure up to 5 and 25 MPa and have electrical contact. These models are designed to control and alarm for a differential pressure, providing a right time to replace air and sludge filter during the process.



Nominal diameter

150 mm

Accuracy

±1.0% of full scale

±1.5% of full scale

Scale range (MPa, kPa, bar)

0 ~ 30 kPa to 0 ~ 50 kPa

0 ~ 0.1 MPa to 0 ~ 1.5 MPa

Static pressure

5 MPa : Model P63X1

25 MPa : Model P63X2

Working temperature

Ambient : -20 ~ 65°C

Fluid : Max. 100°C

Degree of protection

EN60529/IEC529/IP65

Temperature effect

Accuracy at temperature above and below the reference temperature (20°C) will be effected by approximately ±0.5% per 10°C of full scale



Standard features

Pressure connection

Stainless steel (316SS)

Element

Bellows

Stainless steel (316L SS)

Case

Black finished aluminium

Bezel ring

ALDC12.1, Black painted

Screwed type

Window

Safety glass

Dial

White aluminium with black graduations

Pointer

Black painted aluminium alloy

Process connection

¼" NPT(F)

½" NPT(F) at 3-way manifold valve and 5-way manifold valve

Standard accessories

Mounting bracket for 2" pipe mounting with silver gray finished steel

Optional

■ Remote seal

■ ½" (N)PT female conduit connection

■ ¾" (N)PT female conduit connection

■ Mounting bracket with 316SS for 2" pipe mounting

■ 3-way manifold valve (316SS, Monel)

■ 5-way manifold valve (316SS, Monel)

Conduit connection

M20 x 1.5

Contact

Contact rating : AC 250 V 3 A / 125 V 5 A

DC 250 V 0.2 A / 125 V 0.4 A / 30 V 4 A

Dielectric strength : AC 500 V / MIN

Type : Micro contact

WISE®

1. Base model

- P631** High alarm contact differential pressure switch
P632 High and low alarm contact differential pressure switch
P633 Low alarm contact differential pressure switch
P634 High and hi/high alarm contact differential pressure switch
P635 Low and lo/low alarm contact differential pressure switch

2. Static pressure

- 1** 5 MPa
2 25 MPa

3. Type of mounting

- D** Bottom connection, mounting bracket for 2" pipe

4. Accuracy

- 3** ±1.0% of full scale
4 ±1.5% of full scale

5. Process connection

- C** ¼" NPT(F)
E ½" NPT(F) (Only at 3-way and 5-way manifold valve)

6. Mounting bracket

- D** Standard bracket
E 304SS mounting bracket
F 316SS mounting bracket
W Wall mounting bracket (316SS)
N None

7. Unit

- H** bar
I MPa
J kPa
S mbar

8. Range

- 041** 0 ~ 0.1 MPa
042 0 ~ 0.2 MPa
043 0 ~ 0.3 MPa
044 0 ~ 0.4 MPa
045 0 ~ 0.6 MPa
047 0 ~ 1 MPa
050 0 ~ 1.5 MPa
518 0 ~ 30 kPa, not available with remote seal type
040 0 ~ 50 kPa

9. Dial color

- 3** 2 colors

10. Options

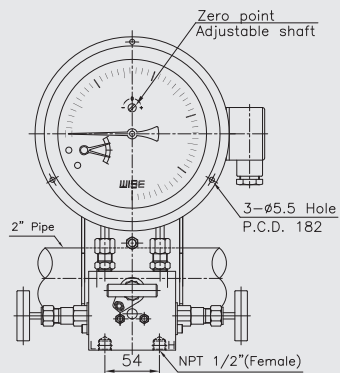
- 0** None
1 Manifold valve
8 ½" or ¾" NPT(F) conduit connection

1	2	3	4	5	6	7	8	9	10
P631	1	D	4	E	D	I	047	3	1

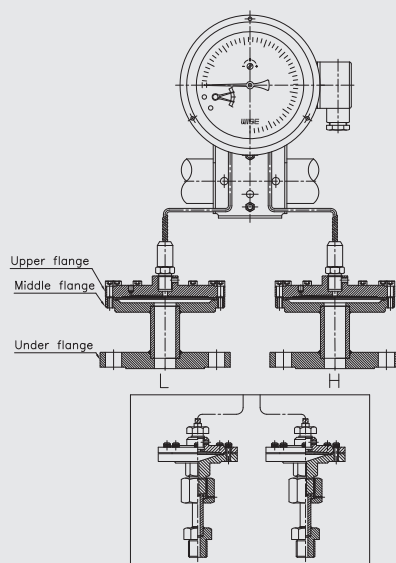
Sample
ordering code

P63X : Type of mounting

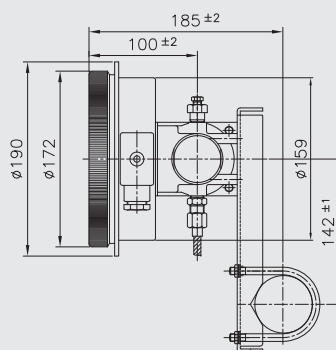
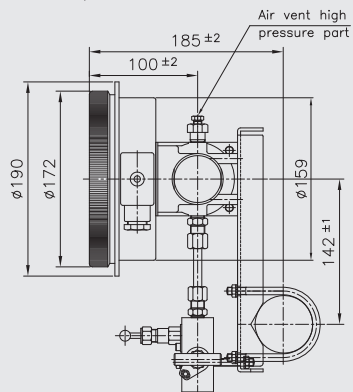
Code P631, 632, 633, 634, 635



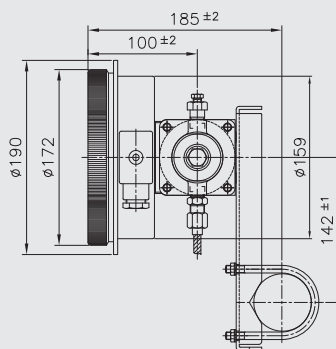
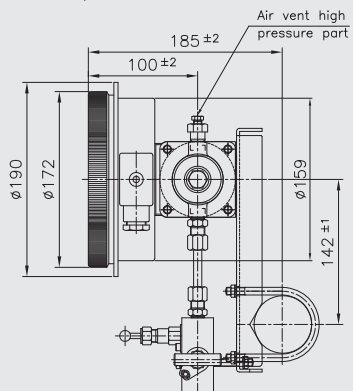
Code P631, 632, 633, 634, 635(Remote seal)



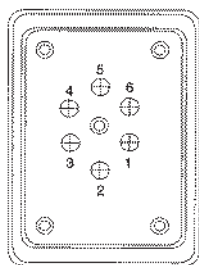
Static pressure : 5 MPa



Static pressure : 25 MPa



Terminal block arrangement



1. P631 (High alarm)

- ① Normal open
- ② Common
- ③ Normal close

2. P632 (High and low alarm)

High alarm

- ① Normal open
- ② Common
- ③ Normal close

Low alarm

- ④ Normal open
- ⑤ Common
- ⑥ Normal close

3. P633 (Low alarm)

- ① Normal open
- ② Common
- ③ Normal close

4. P634 (High and h/High alarm)

High alarm

- ① Normal open
- ② Common
- ③ Normal close

High and high alarm

- ④ Normal open
- ⑤ Common
- ⑥ Normal close

5. P635 (Low and l/Low alarm)

High alarm

- ① Normal open
- ② Common
- ③ Normal close

Low and low alarm

- ④ Normal open
- ⑤ Common
- ⑥ Normal close