

Differential pressure gauge with bellows element

Model: P670 series

Spec. sheet no. PD06-05

Service intended

P670 differential pressure gauge series are designed to measure differential pressure from 4 kPa to 2.0 MPa at Max. working pressure of 10 MPa.

A set of two stainless steel bellows mounted on a force balance allows direct reading of the actual differential pressure.



Nominal diameter

100 and 160 mm

Accuracy

±1.0 % of full scale

±1.6 % of full scale

Scale range (MPa, kPa, bar)

0 ~ 4 kPa, 6 kPa, 10 kPa (P671 model)

0 ~ 25 kPa to 0 ~ 0.25 MPa (P672 model)

0 ~ 0.4 MPa to 0 ~ 2.0 MPa (P673 model)

Max. working pressure (Static pressure)

Max. 10 MPa

Working temperature

Ambient: -20~65 °C

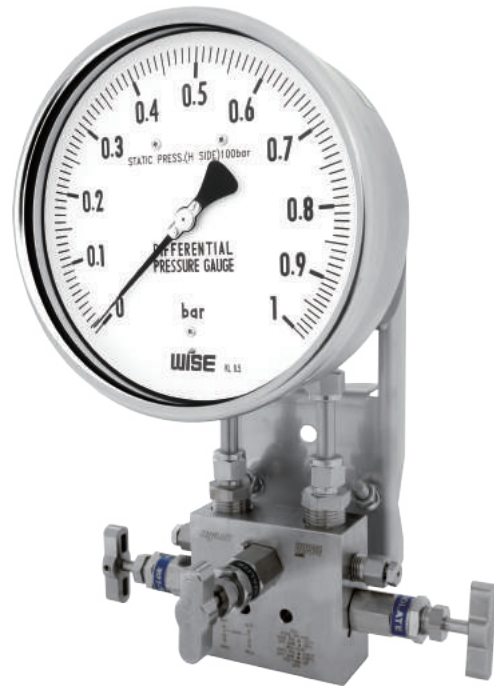
Fluid: Max. 100 °C

Degree of protection

EN60529/IEC529/IP67

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 (316L SS), Monel and Hastelloy-C

Element

Bellows

Stainless steel (316L SS), Monel and Hastelloy-C

Case and cover

Stainless steel (304SS)

Window

Safety glass

Dial

White aluminium with black graduations

Filling liquid for differential cell

Silicone oil

Pointer

Black painted aluminium alloy (Zero adjustable)

Process connection

1/4" NPT(F)

1/2" NPT(F) at 3-way and 5-way manifold valve

Standard accessories

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

Certificates

ATEX II 2G Ex h IIC T6...T1 Gb

ATEX II 2D Ex h IIIC T85°C...T450°C Db

Option

- Remote seal - Not available with less than 40 kPa of differential pressure range
- Mounting bracket with 316SS for 2" pipe
- 3-way and 5-way manifold valve
- 3-way and 5-way manifold valve (Monel)
- Accuracy ±0.5 % of full scale

WISE®

1. Base model

- P671** Lower range differential pressure gauge
(4, 6 and 10 kPa)
- P672** Higher range differential pressure gauge
(25 kPa ~ 0.25 MPa)
- P673** Higher range differential pressure gauge
(0.4 MPa ~ 2.0 MPa)

2. Nominal diameter (mm)

- 4** 100
- 6** 160

3. Type of mounting

- D** Bottom connection, mounting bracket for 2" pipe
- L** Bottom connection, flush, case center mounting plate

4. Accuracy

- 2** ±0.5 % of full scale (Optional)
- 3** ±1.0 % of full scale (Optional)
- 4** ±1.6 % of full scale (Standard)

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

- XXX** Refer to pressure unit and range table

9. Element and flange material

- 1** 316L SS
- 2** Monel
- 3** Hastelloy-C

10. Option

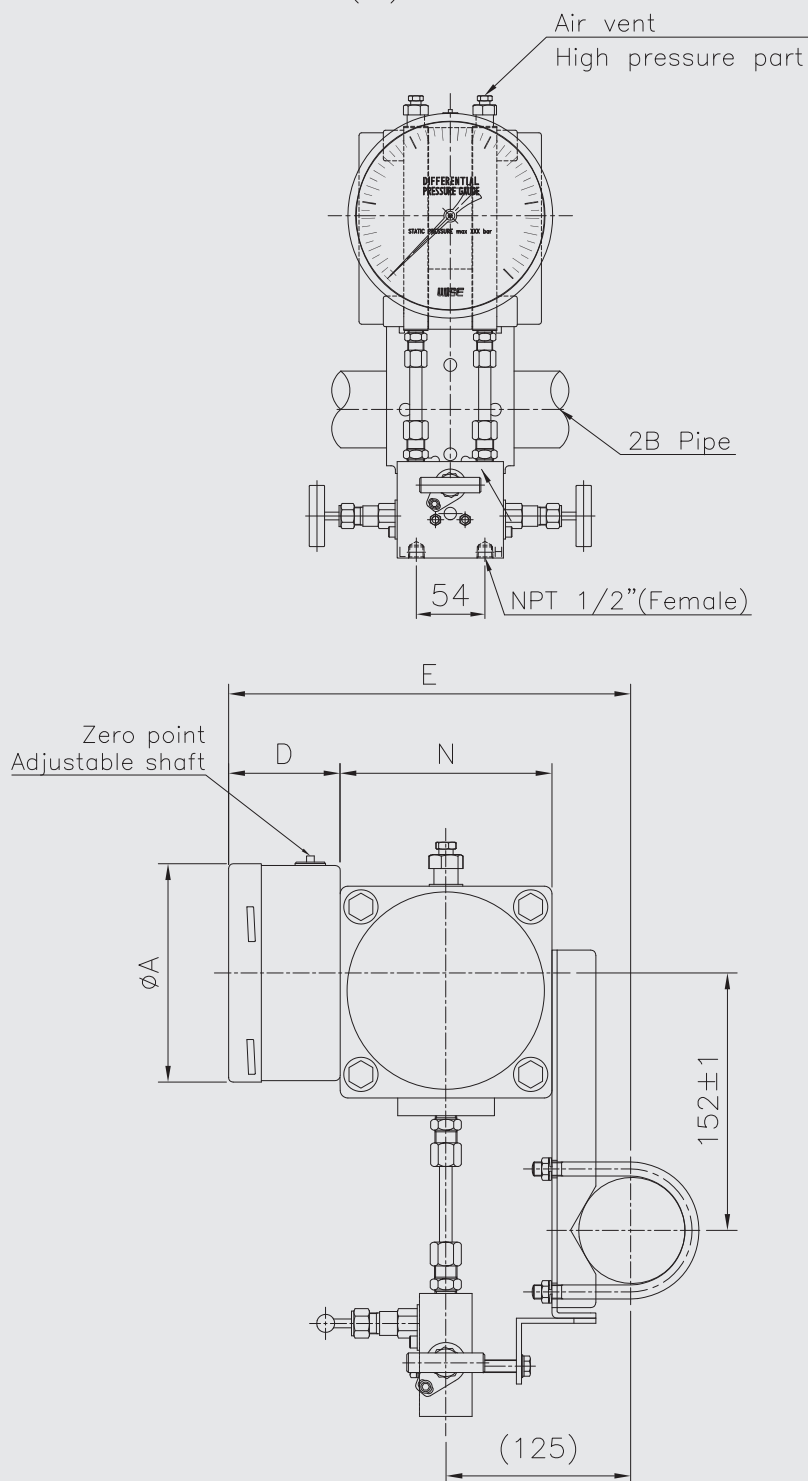
- 0** None
- 1** Manifold valve
- 2** Glycerin filling
- 3** Manifold valve and glycerin filling
- 6** Silicone filling
- 7** Manifold valve and silicone filling

Sample ordering code

1	2	3	4	5	6	7	8	9	10
P671	6	D	4	E	D	H	XXX	1	0

P67X : Type of mounting (1/3)

Code:(D) P671

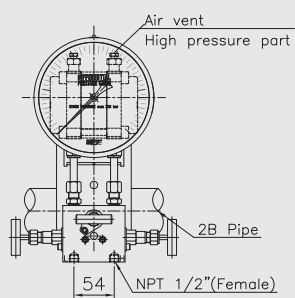


dimensions(mm)

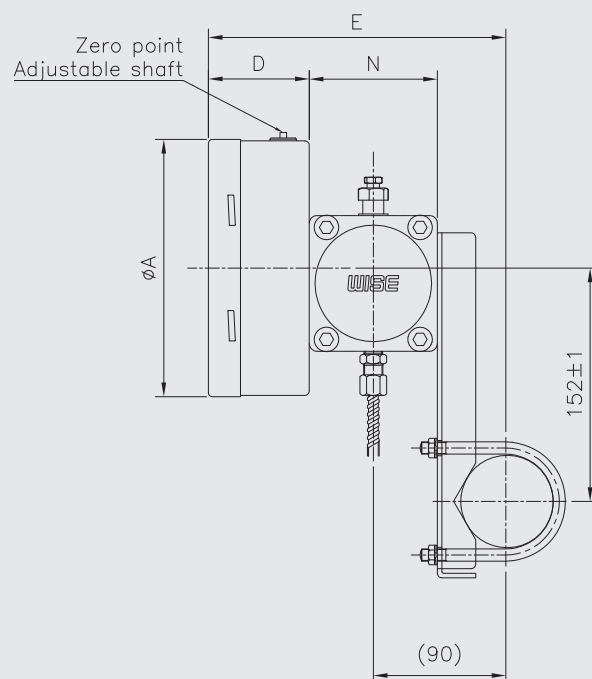
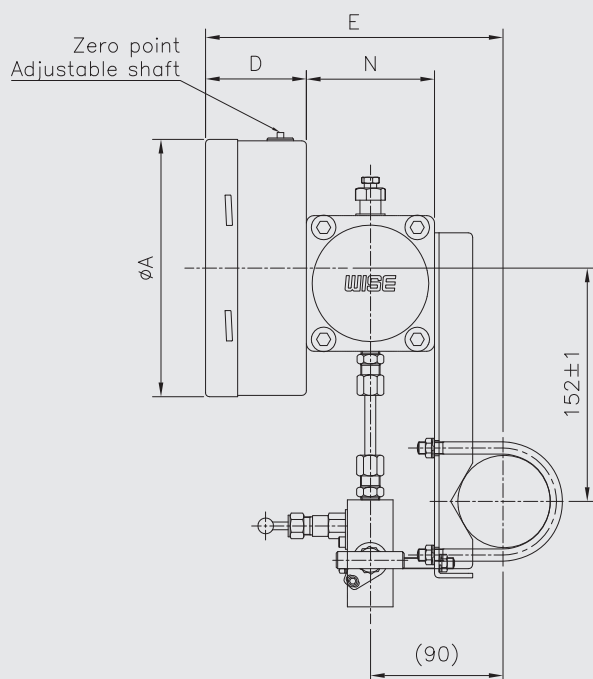
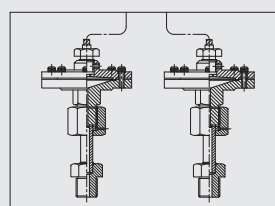
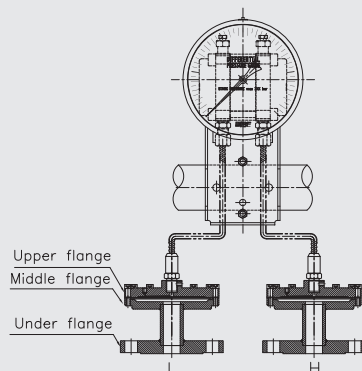
Model	Dial size	A	D±2	E±2	N
P671	φ100	101.3	58	187.5	83.5
	φ160	160.6	60.5	190	

P67X : Type of mounting (2/3)

Code:(D) P672, P673



Code:(D) P672, P673(Remote seal)



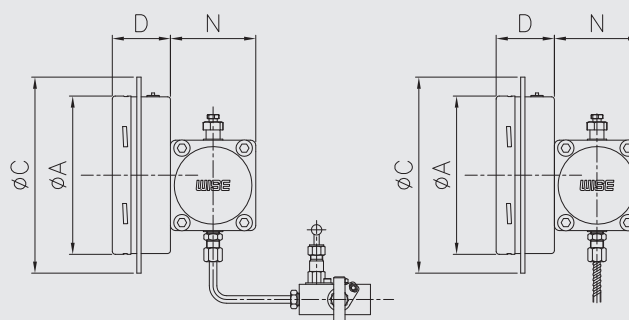
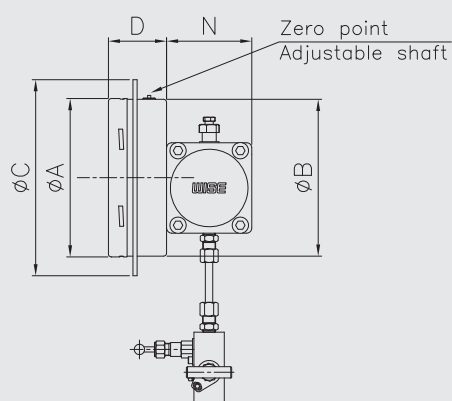
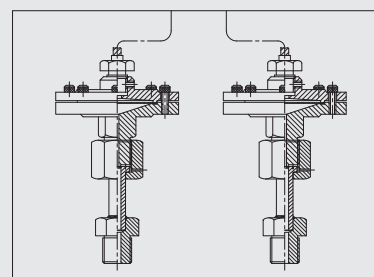
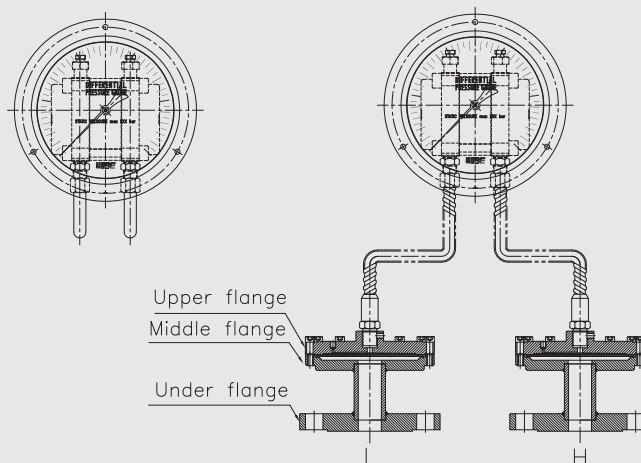
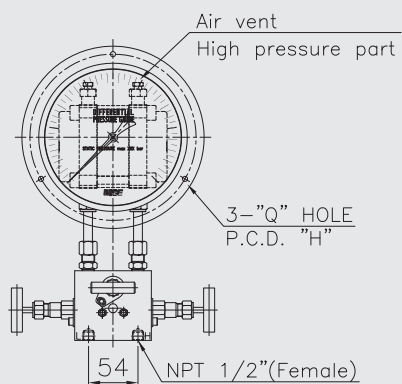
dimensions(mm)

Model	Dial size	A	D ± 2	E ± 2	N
P672, P673	$\phi 100$	101.3	58	187.5	83.5
	$\phi 160$	160.6	60.5	190	

P67X : Type of mounting (3/3)

Code:(L) P672, P673

Code:(L) P672, P673(Remote seal)



dimensions(mm)

Model	Dial size	A	B±2	C	D±2	N	H	Q
P672, P673	ø100	101.3	101	132	58	83.5	115~116	4.8
	ø160	160.6	160.6	192	60.5		175.5~176.5	5.5

Pressure unit and range table

Range and code	Unit and code					Max. static pressure
	J : kPa	S : mbar	H : bar	I : MPa	Model	
065	0 ~ 4	0 ~ 40	X	X	P671	10 MPa
067	0 ~ 6	0 ~ 60	X	X		
070	0 ~ 10	0 ~ 100	X	X		
118	0 ~ 25	0 ~ 250	X	X	P672	
121	0 ~ 40	0 ~ 400	X	X		
125	0 ~ 60	0 ~ 600	X	X		
041	0 ~ 100	X	0 ~ 1	0 ~ 0.1		
133	0 ~ 160	X	0 ~ 1.6	0 ~ 0.16		
042	0 ~ 200	X	0 ~ 2	0 ~ 0.2		
134	0 ~ 250	X	0 ~ 2.5	0 ~ 0.25		
044	0 ~ 400	X	0 ~ 4	0 ~ 0.4	P673	
045	0 ~ 600	X	0 ~ 6	0 ~ 0.6		
047	0 ~ 1,000	X	0 ~ 10	0 ~ 1		
143	X	X	0 ~ 16	0 ~ 1.6		
051	X	X	0 ~ 20	0 ~ 2		

X : Not available