

# 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 4 and 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)

P671 : Max. 4 MPa

P672 and P673 : 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

¼" NPT(F)

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

### Standard accessories

Mounting bracket for 2" pipe

mounting with silver gray finished steel

### 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

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| P670 Series\_01

**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

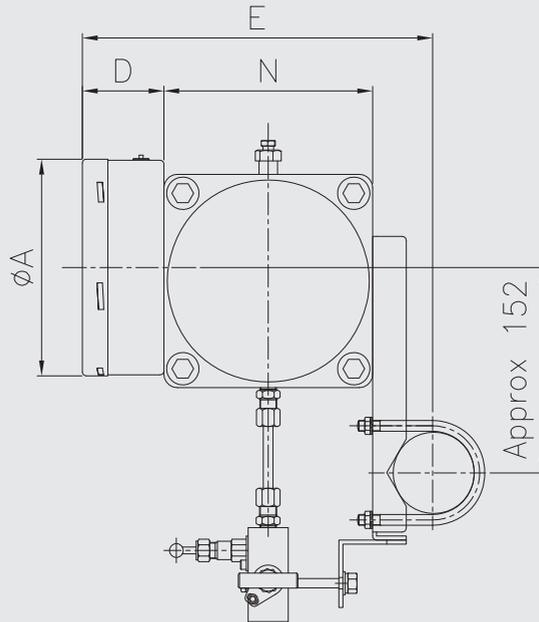
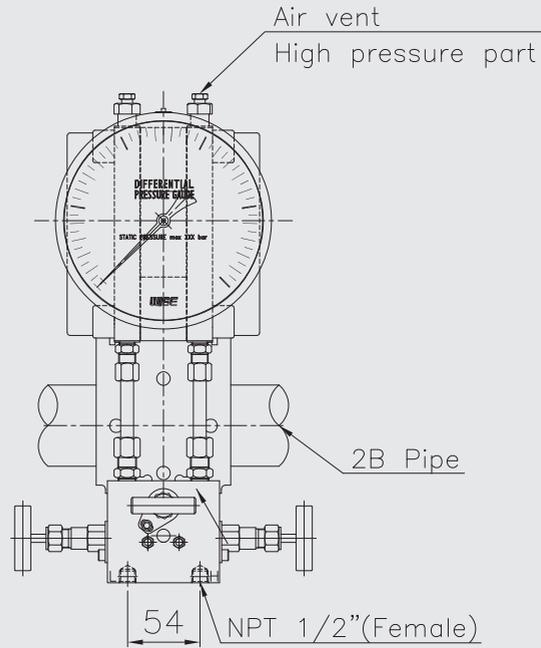
**10. Option**

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

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

**P67X : Type of mounting (1/3)**

Code:(D) P671



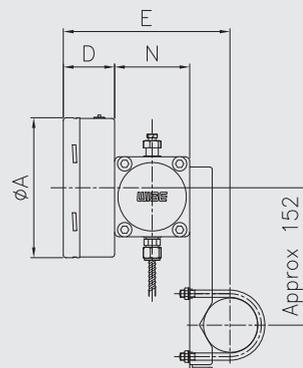
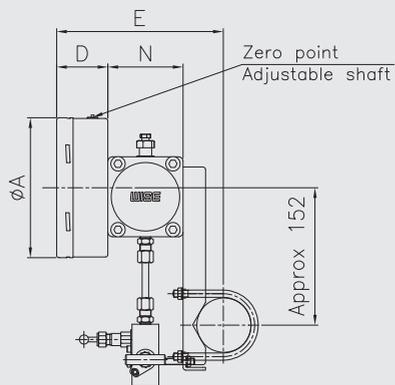
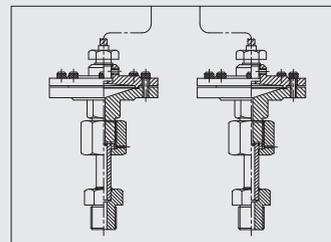
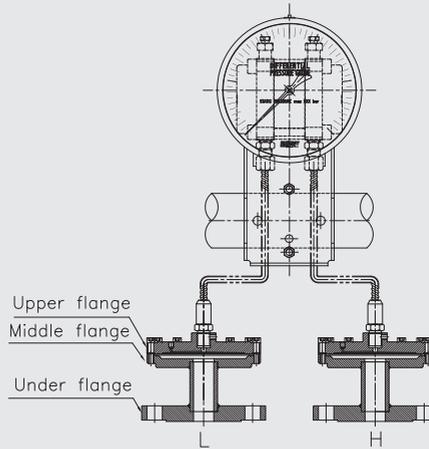
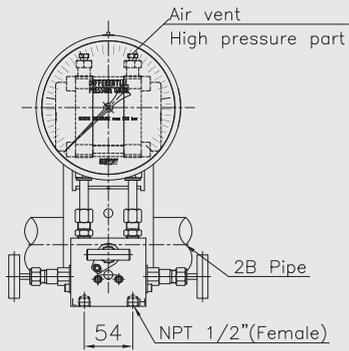
dimensions(mm)

Model	Range	Dial size	A	D±2	E±2	N
P671	≤ 10kPa	ø100	101.3	58	260	155
		ø160	160.6	60.5	262.5	

## P67X : Type of mounting (2/3)

Code:(D) P672, P673

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



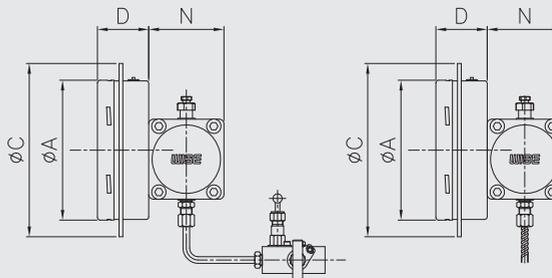
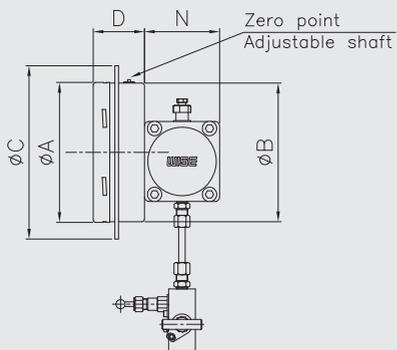
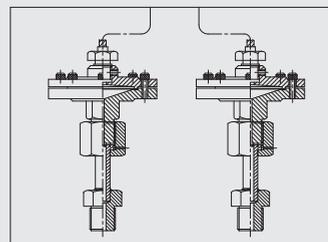
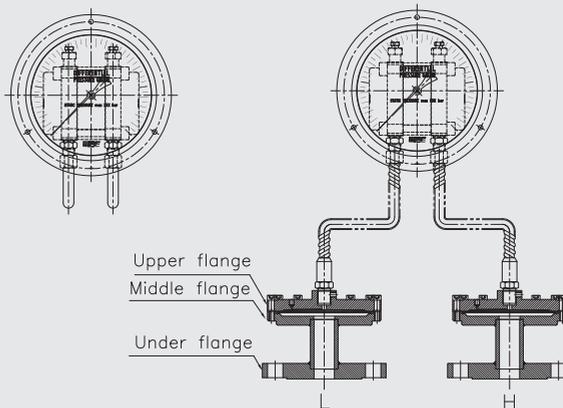
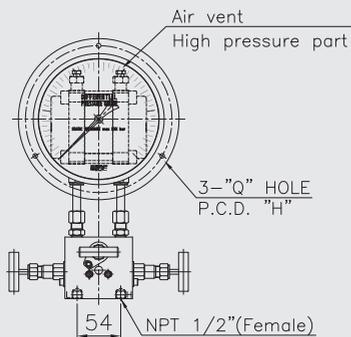
dimensions(mm)

Model	Range	Dial size	A	D ±2	E ±2	N
P672, P673	> 10kPa	φ100	101.3	58	187.5	83.5
		φ160	160.6	60.5	190	

## P67X : Type of mounting (3/3)

Code:(L) P672, P673

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



dimensions(mm)

Model	Range	Dial size	A	B $\pm 2$	C	D $\pm 2$	N	H	Q
P672, P673	> 10kPa	$\phi 100$	101.3	101	132	58	83.5	115~116	4.8
		$\phi 160$	160.6	162	192	60.5		175.5~176.5	5.5

## Pressure unit and range table

Range and code	Unit and code					Model	Max. static pressure
	J : kPa	S : mbar	H : bar	I : MPa			
065	0 ~ 4	0 ~ 40	X	X		P671	4 MPa
067	0 ~ 6	0 ~ 60	X	X			
070	0 ~ 10	0 ~ 100	X	X			
118	0 ~ 25	0 ~ 250	X	X		P672	10 MPa
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		P673	10 MPa
134	0 ~ 250	X	0 ~ 2.5	0 ~ 0.25			
044	0 ~ 400	X	0 ~ 4	0 ~ 0.4			
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