# 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  $^{\circ}$ C) will be effected by approximately  $\pm 0.5$  % per 10  $^{\circ}$ 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

### 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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# Main order

# **Ordering information**

10. Option

None

Manifold valve

Glycerin filling

Silicone filling

Manifold valve and glycerin filling

Manifold valve and silicone filling

0

1

2

3

6

### 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** 1/4" NPT(F)
- E 1/2" NPT(F), only at 3-way and 5-way manifold valve

# 6. Mounting bracket

- 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

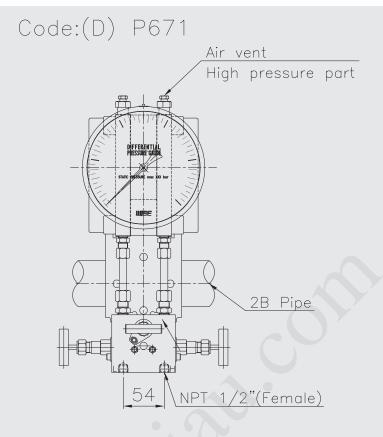
- 1 316L SS
- 2 Monel
- 3 Hastelloy-C

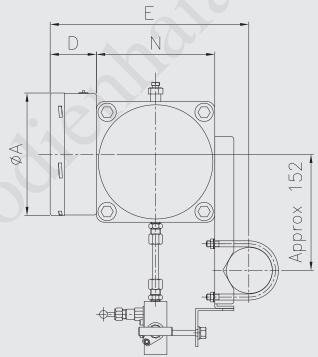
#### Sample ordering code

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



# P67X: Type of mounting (1/3)





# dimensions(mm)

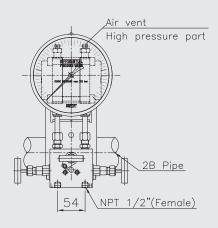
Model	Range	Dial size	А	D±2	E±2	N
P671	  ≤ 10kPa	Ø100	101.3	58	260	155
1 071	S TUKPU	ø160	160.6	60.5	262.5	133

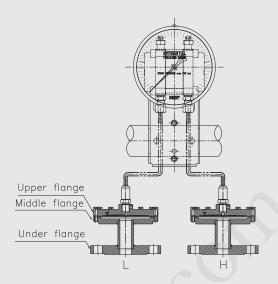
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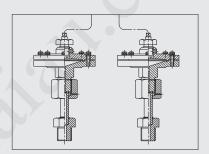
# P67X: Type of mounting (2/3)

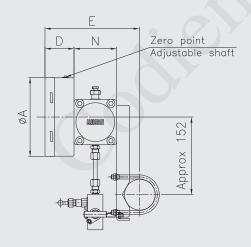
Code:(D) P672, P673

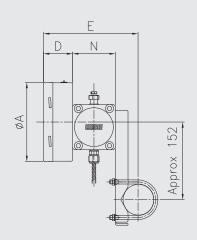
Code:(D) P672, P673(Remote seal)











# dimensions(mm)

Model	Range	Dial size	А	D ±2	E ±2	N	
P672, P673	> 10kPa	Ø100	101.3	58	187.5	83.5	
1072, 1073	/ TOKI U	ø160	160.6	60.5	190	00.0	

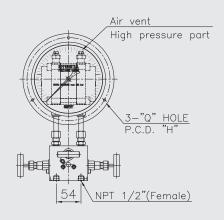


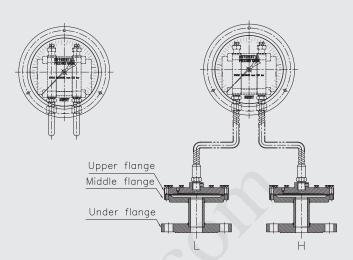
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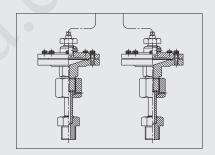
# P67X: Type of mounting (3/3)

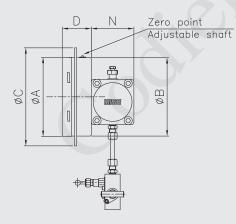
Code:(L) P672, P673

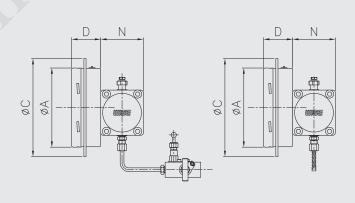
Code:(L) P672, P673(Remote seal)











# dimensions(mm)

Model	Range	Dial size	А	B±2	С	D±2	Ν	Н	Q
P672, P673	> 10kPa	Ø100	101.3	101	132	58	83.5	115~116	4.8
10/2, F0/3	/ TOKFU	Ø160	160.6	162	192	60.5	00.0	175.5~176.5	5.5

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# Pressure unit and range table

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

X : Not available



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