

# Differential pressure gauge with diaphragm element

## Model: P660 series

Spec. sheet no. PD06-08

### Service intended

P660 gauge series are differential pressure gauge is designed to measure differential pressure from 4 kPa to 2.5 MPa at static pressure of 10, 25 MPa. A set of two stainless steel diaphragm 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, mbar)

0 ~ 4 kPa to 0 ~ 40 kPa

Flange size / DN 140, Max. static / 10 and 25 MPa

0 ~ 60 kPa to 0 ~ 2.5MPa

Flange size / DN80, Max. static / 25 MPa

### Static pressure

Max. 25 MPa

### 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 (Flange)

Stainless steel (316L SS)

### Element

Diaphragm

316 Ti : Flange size / DN140 (Low side and high side)

316L SS : Flange size / DN80 (Low side )  
/ Duratherm 600 (High side)

### 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 manifold valve and  
5-way manifold valve

### Standard accessories

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

### Optional

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

**WISE**<sup>®</sup>

**1. Base model**

- P661** Differential pressure gauge (Static pressure : 10 MPa) (DN 140)  
**P662** Differential pressure gauge (Static pressure : 25 MPa) (DN 80)

**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**

- 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**

	Element	Flange
<b>1</b>	Standard	316SS
<b>2</b>	Standard	Monel

**10. Options**

- 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
P661	6	D	4	E	D	H	XXX	1	0

Sample  
ordering code

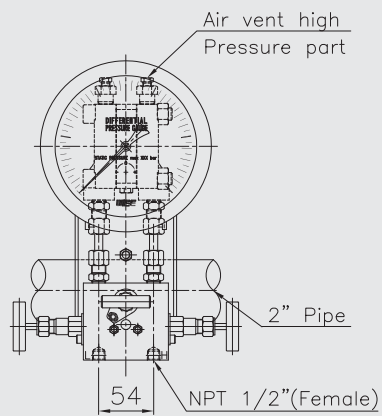
## Pressure unit and range table

Range and code	Unit and code					Flange size	Max. static pressure
	J : kPa	S : mbar	H : bar	I : MPa			
464	0 ~ 4	0 ~ 40	X	X	DN 140	10 and 25 MPa	
466	0 ~ 6	0 ~ 60	X	X			
469	0 ~ 10	0 ~ 100	X	X			
517	0 ~ 25	0 ~ 250	X	X			
121	0 ~ 40	0 ~ 400	X	X			
131	0 ~ 60	0 ~ 600	X	X			
041	0 ~ 100	X	0 ~ 1	0 ~ 0.1	DN 80	25 MPa	
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			
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			
052	X	X	0 ~ 25	0 ~ 2.5			

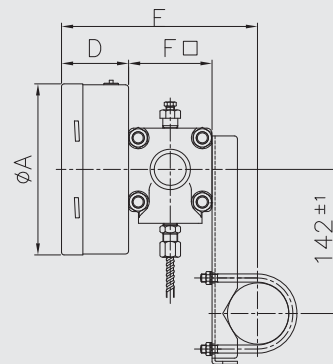
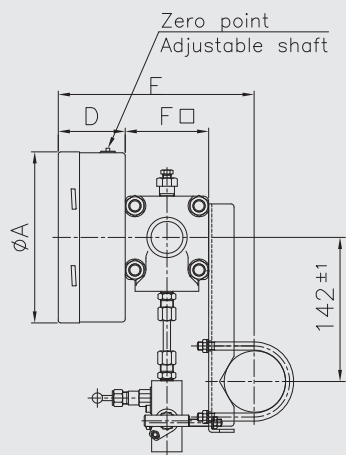
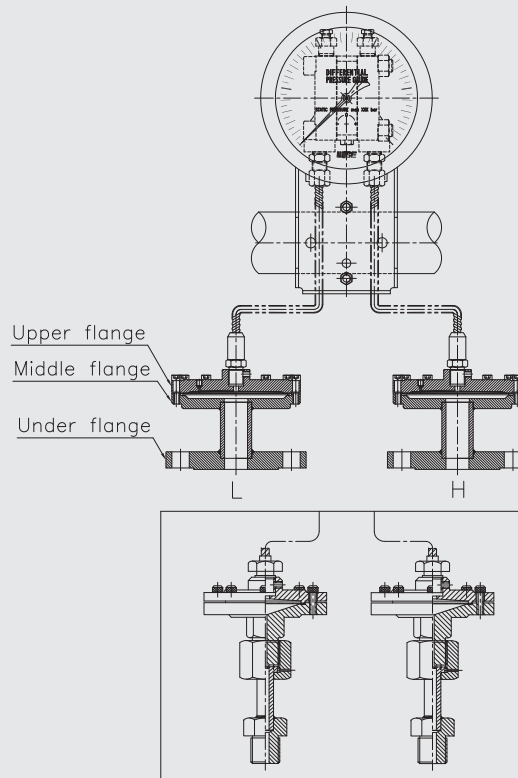
O : Available    X : Not available

## P66X : Type of mounting (1/2)

Code:(D) P660



Code:(D) P660(Remote seal)



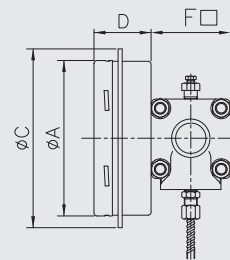
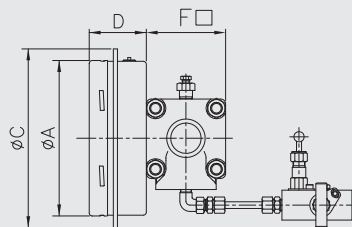
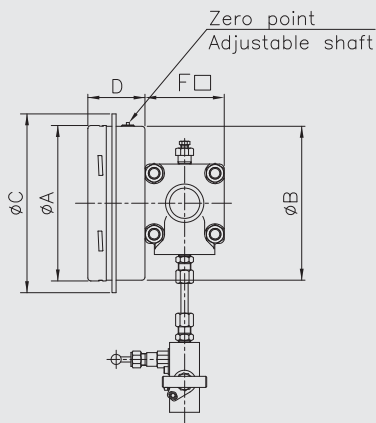
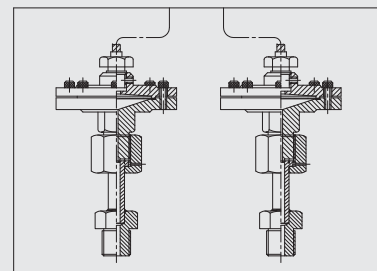
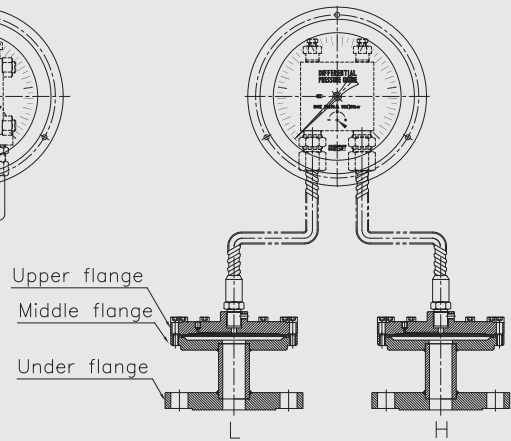
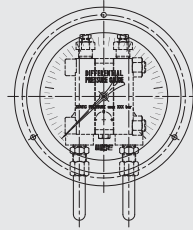
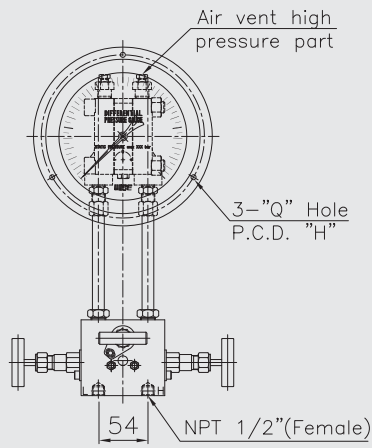
Dial size	Pressure range	Dimensions (mm)±2				
		A	D	E	F □ (P661,P662)	F □ (P663)
ø100	≤ 40kPa	101.3	63	245	137	—
	> 40kPa			194	86	86
ø160	≤ 40kPa	160.6	65	248	137	—
	< 40kPa			197	86	86

PN : Nominal pressure for static.

## P66X : Type of mounting (2/2)

Code:(L) P660

Code:(L) P660(Remote seal)



Dial size	Pressure range	Dimensions (mm) $\pm 2$							
		A	B	C	D	H	Q	F□(P661, P662)	F□(P663)
$\phi 100$	$\leq 40\text{kPa}$	101.3	99	132	63	115~116	$\phi 4.8$	137	—
	$> 40\text{kPa}$							86	86
$\phi 160$	$\leq 40\text{kPa}$	160.6	159	192	65	178	$\phi 5.5$	137	—
	$< 40\text{kPa}$							86	86

PN : Nominal pressure for static.