

# Differential pressure gauge with diaphragm element

## Model: P660 series

Spec. sheet no. PD06-04

### Service intended

P660 gauge series are differential pressure gauge is designed to measure differential pressure from 4 kPa to 2.5 MPa at Max. working 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 ~ 2.5 MPa

Flange size / DN80, Max. static / 25 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 (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

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)

**WISE®**

**1. Base model**

- P661** Differential pressure gauge  
(Max.working pressure : 10 and 25 MPa) (DN 140)
- P662** Differential pressure gauge  
(Max.working 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** 1/4" NPT(F)
- E** 1/2" 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 | 316L SS |
| <b>2</b> | Standard | Monel   |

**10. Option**

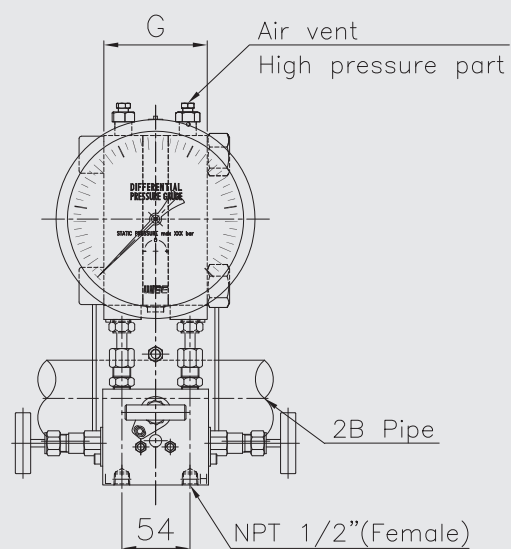
- 0** None
- 1** Manifold valve
- 6** Silicone filling
- 7** Manifold valve and silicone filling

**Sample ordering code**

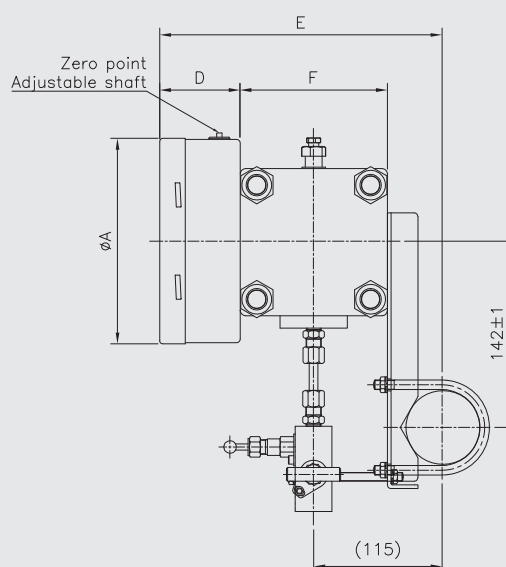
1	2	3	4	5	6	7	8	9	10
P661	6	D	4	E	D	H	XXX	1	0

## P661 : Type of mounting

Code:(D) P661



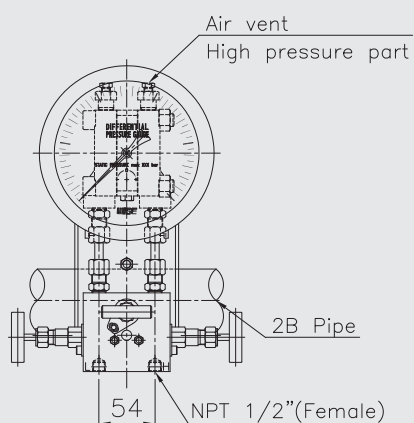
Static(MPa)	G
10	83.5
25	118.5



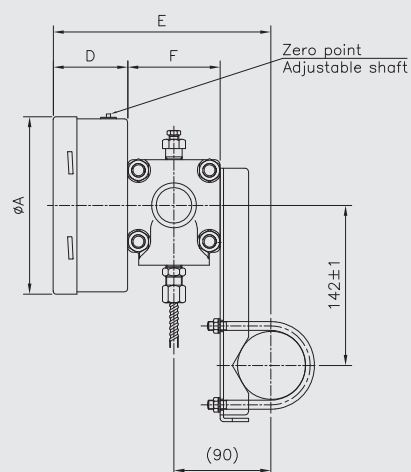
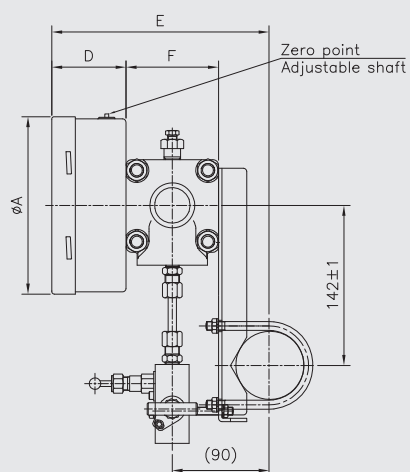
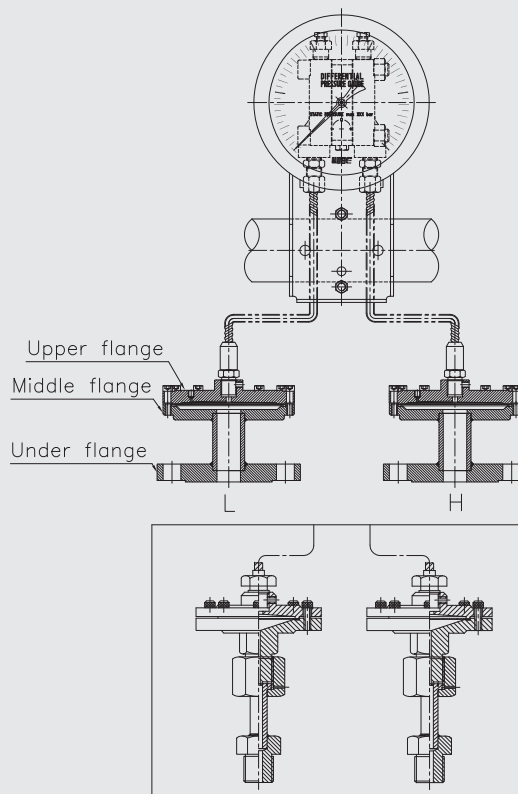
Model	Dial size	Pressure range	dimensions (mm)±2			
			A	D	E	F
P661	ø100	Less than 40kPa	101.3	63	245	137
	ø160		160.6	65	248	

## P662 : Type of mounting (1/2)

Code:(D) P662



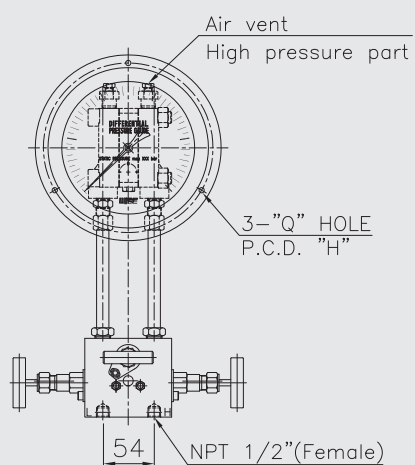
Code:(D) P662(Remote seal)



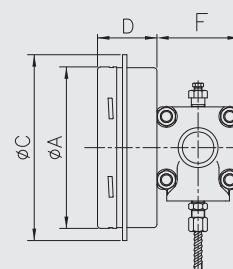
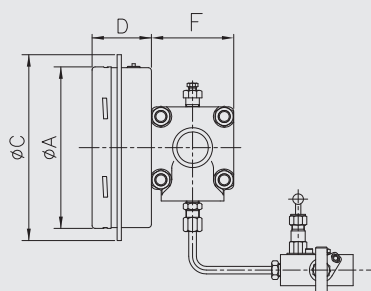
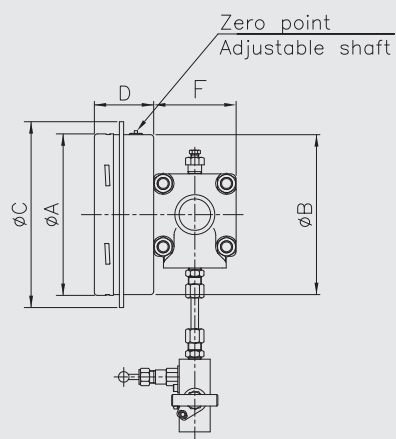
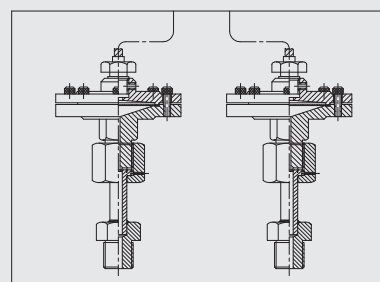
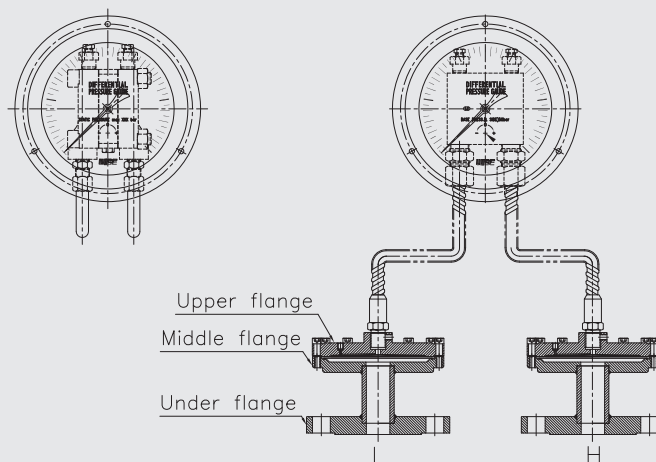
Model	Dial size	Pressure range	dimensions (mm)±2			
			A	D	E	F
P662	ø100	Over 40kPa	101.3	63	194	86
	ø160		160.6	65	197	

## P662 : Type of mounting (2/2)

Code:(L) P662



Code:(L) P662(Remote seal)



Model	Dial size	Pressure range	dimensions (mm)±2					
			A	B	C	D	F	H
P662	ø100	Over 40kPa	101.3	99	132	63	86	116
	ø160		160.6	159	192	65		175.5~176.5

## Pressure unit and range table

Range and code	Unit and code					
	J : kPa	S : mbar	H : bar	I : MPa	Flange size	Max. static pressure
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	DN 80	25 MPa
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		
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		
052	X	X	0 ~ 25	0 ~ 2.5		

X : Not available