

## Pressure gauge with diaphragm seal

**Model: P761 (Pressure gauge with inline type diaphragm seal)**

**P762 (Pressure gauge with extension type diaphragm seal)**

**P763 (Pressure gauge with pad type diaphragm seal)**

Spec. sheet no. PD07-08

### Service intended

Pressure gauge with diaphragm seal are suitable for the situation where the process medium would corrode the instrument connection and pressure sensing element. Furthermore, this type of gauge is suitable for corrosive, highly viscous, crystallising or hot pressure media. Additionally, it is recommended to be used where the process medium might freeze or solidify the instrument connection and pressure sensing element due to the ambient or process temperature change and where the process medium requires the flusing from the system to prevent any contamination.

EAC

### Design

Internal diaphragm

### Accuracy

Refer to gauge model

### Suitable pressure range (MPa, kPa, bar)

-0.1 ~ 0 to -0.1 ~ 2.5 MPa

0 ~ 0.1 to 0 ~ 35 MPa

### Filling liquid

Silicone oil

### Working temperature

Temperature rating of the diaphragm seals depends on the fill fluid, the diaphragm material and the lower housing material. Standard fill fluids are available for temperature range -20 ~ 200 °C

### Diaphragm material

Diaphragms are available in many corrosion resistant materials. Compatibility of selected material and process fluid is the responsibility of user

### Temperature effect

Accuracy at temperature above and below the reference temperature (20 °C) will be effected by approximately  $\pm 0.5$  % per 10 °C of full scale



Model : P761



Model : P762



Model : P763

### Standard features

#### Upper flange (Gauge side)

Stainless steel (304SS, 316SS)

#### Under flange and process flange

Stainless steel (304SS, 304L SS, 316SS, 316L SS)  
Monel, Hastelloy-C, Titanium, Nickel

#### Diaphragm

316L SS, Monel, Hastelloy-C  
Titanium, Tantalum, Nickel, Alloy20

#### Option

Diaphragm and under flange are available in PTFE coating  
Under flange (Process side) are available in purging plug or heating/cooling jacket

## Main order

## Ordering information

### 1. Base model

**P761** Pressure gauge with inline type diaphragm seal

### 2. Gauge mounting type

- D** Direct
- R** Remote with capillary tube
- P** Remote with PVC jacketed capillary tube

### 3. Gauge model

- 8A** P252 100A
- 8B** P252 100B
- 8P** P258 100A (Glycerin filling)
- 8Q** P258 100B (Glycerin filling)
- 8V** P258 100A (Silicone filling)
- 8W** P258 100B (Silicone filling)

### 4. Upper flange / Diaphragm material

- B** 304SS / 316L SS
- E** 316L SS / 316L SS
- J** 316SS / 316L SS
- K** 316SS / Monel
- L** 316SS / Hastelloy-C
- M** 316L SS / Monel
- N** 316SS / Tantalum
- R** Titanium / Titanium
- S** 316L SS / Tantalum
- X** 316L SS / Hastelloy-C

### 5. Process connection

**XXX** Refer to process connection type table

### 6. Process flange and pipe material

- A** 304SS
- B** 304L SS
- C** 316SS
- D** 316L SS
- E** 316L SS with PTFE coating
- F** 304SS with PTFE coating
- G** 316SS with PTFE coating

### 7. Unit

- H** bar
- I** MPa
- J** kPa

### 8. Range table

**XXX** Refer to pressure range table

### 9. Option

- 0** None (Direct mounting)
- 1** Capillary length 2 meter
- 2** Capillary length 3 meter
- 3** Capillary length 10 meter
- 4** Teflon coating

|      |   |    |   |     |   |   |     |   |                         |
|------|---|----|---|-----|---|---|-----|---|-------------------------|
| 1    | 2 | 3  | 4 | 5   | 6 | 7 | 8   | 9 | Sample<br>ordering code |
| P761 | D | 8B | B | XXX | A | I | XXX | 1 |                         |

## Main order

## Ordering information

### 1. Base model

**P762** Pressure gauge extension diaphragm seal

### 2. Gauge mounting type

- D** Direct
- R** Remote with capillary tube
- P** Remote with PVC jacketed capillary tube

### 3. Gauge model

- 8A** P252 100A
- 8B** P252 100B
- 8P** P258 100A (Glycerin filling)
- 8Q** P258 100B (Glycerin filling)
- 8V** P258 100A (Silicone filling)
- 8W** P258 100B (Silicone filling)

### 4. Flange / Diaphragm material

- B** 304SS / 316L SS
- E** 316L SS / 316L SS
- J** 316SS / 316L SS
- K** 316SS / Monel
- L** 316SS / Hastelloy-C
- M** 316L SS / Monel
- N** 316SS / Tantalum
- R** Titanium / Titanium
- S** 316L SS / Tantalum
- X** 316L SS / Hastelloy-C

### 5. Process connection

**XXX** Refer to process connection type table

### 6. Diaphragm extension length (mm)

- 02** Flat
- 03** 50
- 04** 100
- 05** 150
- 06** 200
- 07** 250
- 08** 300
- ZZ** Other

### 7. Unit

- H** bar
- I** MPa
- J** kPa

### 8. Range table

**XXX** Refer to pressure range table

### 9. Option

- 0** None (Direct mounting)
- 1** Capillary length 2 meter
- 2** Capillary length 3 meter
- 3** Capillary length 10 meter
- 4** Teflon coating

|      |   |    |   |     |    |   |     |   |
|------|---|----|---|-----|----|---|-----|---|
| 1    | 2 | 3  | 4 | 5   | 6  | 7 | 8   | 9 |
| P762 | D | 8B | B | XXX | 03 | H | XXX | 0 |

Sample  
ordering code

**WISE®**

## Main order

## Ordering information

### 1. Base model

**P763** Pressure gauge with pad type diaphragm seal

### 2. Gauge mounting type

- D** Direct
- R** Remote with capillary tube
- P** Remote with PVC jacketed capillary tube

### 3. Gauge model

- 8A** P252 100A
- 8B** P252 100B
- 8P** P258 100A (Glycerin filling)
- 8Q** P258 100B (Glycerin filling)
- 8V** P258 100A (Silicone filling)
- 8W** P258 100B (Silicone filling)

### 4. Upper flange / Diaphragm material

- B** 304SS / 316L SS
- E** 316L SS / 316L SS
- J** 316SS / 316L SS
- K** 316SS / Monel
- L** 316SS / Hastelloy-C
- M** 316L SS / Monel
- N** 316SS / Tantalum
- R** Titanium / Titanium
- S** 316L SS / Tantalum
- X** 316L SS / Hastelloy-C

### 5. Retainer flange and pipe size (inch)

- 02** 2
- 03** 3
- 04** 4
- 05** 5
- 06** 6
- 07** 8
- 08** 10
- ZZ** Other

### 6. Process flange and pipe material

- BX** 304SS
- DX** 304L SS
- CX** 316SS
- EX** 316L SS
- LX** Monel
- KX** Hastelloy-C
- MX** Titanium
- 51** 316L SS with PTFE coating
- RX** 304SS with PTFE coating
- SX** 316SS with PTFE coating

### 7. Unit

- H** bar
- I** MPa
- J** kPa

### 8. Range table

**XXX** Refer to pressure range table

### 9. Option

- 0** None (Direct mounting)
- 1** Capillary length 2 meter
- 2** Capillary length 3 meter
- 3** Capillary length 10 meter
- 4** Teflon coating

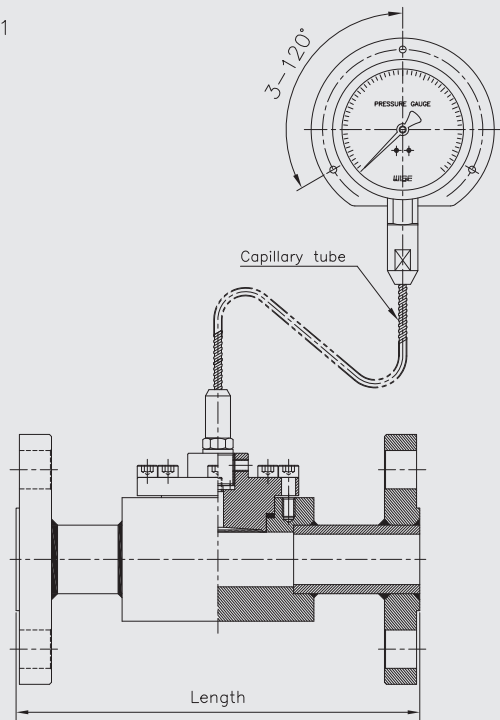
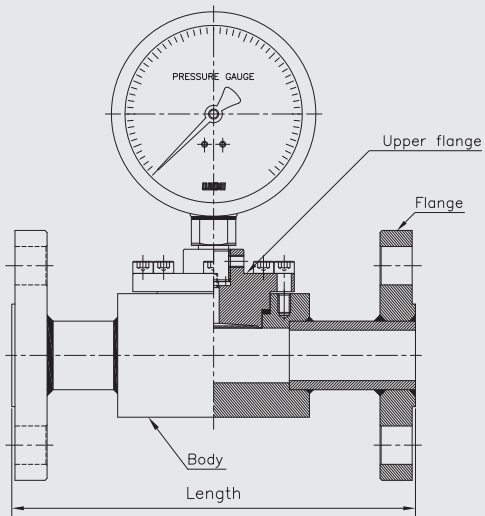
|      |   |    |   |    |    |   |     |   |
|------|---|----|---|----|----|---|-----|---|
| 1    | 2 | 3  | 4 | 5  | 6  | 7 | 8   | 9 |
| P763 | D | 8B | B | 03 | BX | H | XXX | 0 |

Sample  
ordering code

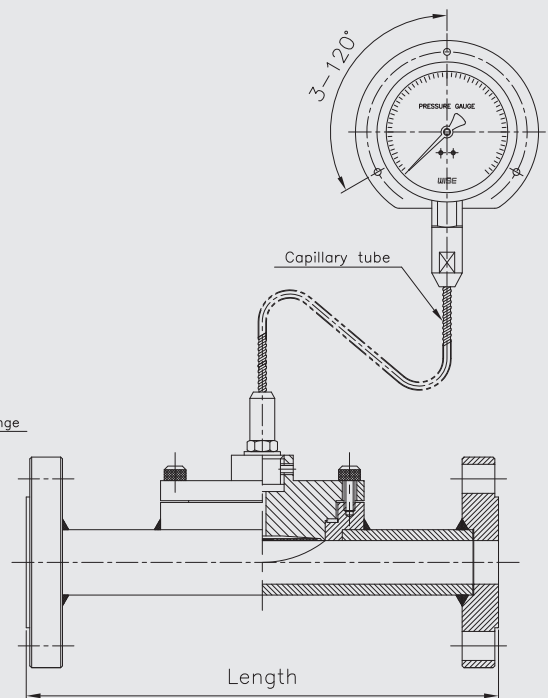
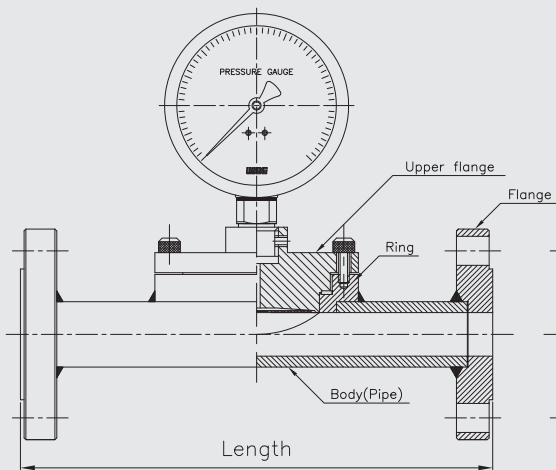
## P761 : Type of mounting (1/2)

Code P761

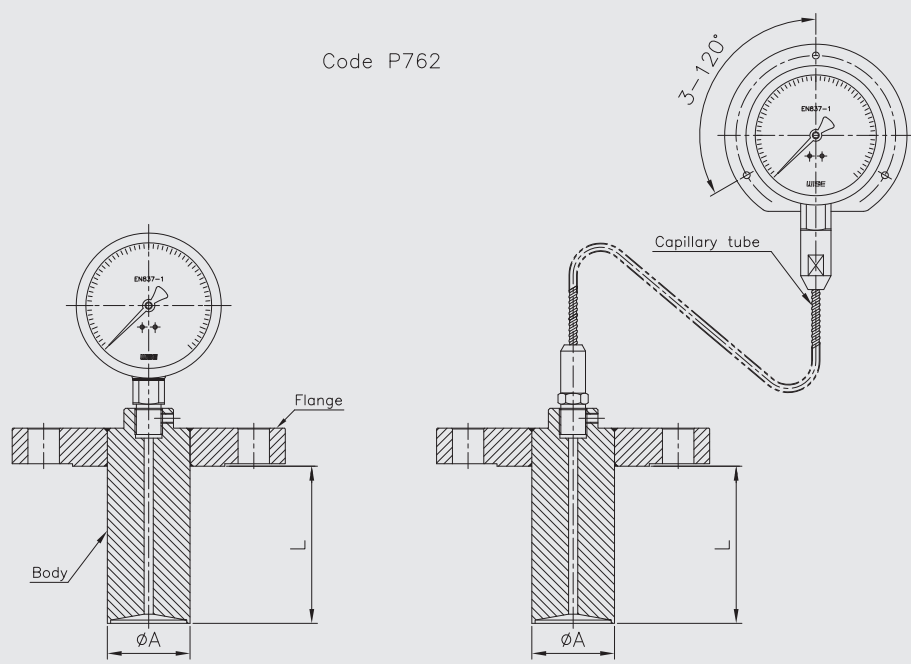
Pipe size :  $\leq 1''$



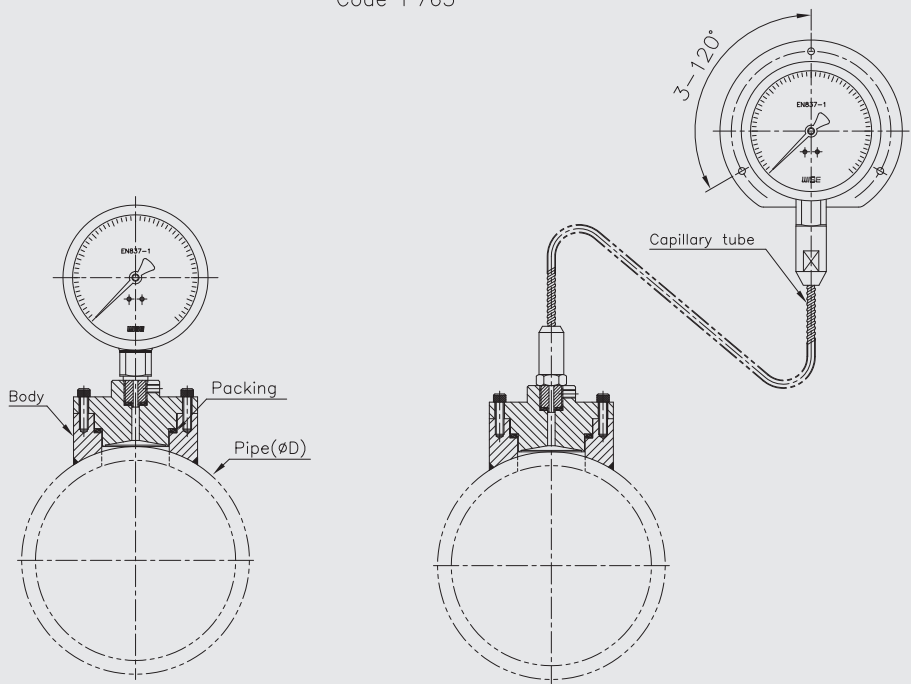
Pipe size :  $> 1''$



Code P762



Code P763



## Process connection type table (For P761 model)

| Code | 9 <sup>th</sup> character | 10 <sup>th</sup> , 11 <sup>th</sup> character |                        |
|------|---------------------------|-----------------------------------------------|------------------------|
|      | Connection size           | Code                                          | Flange rating          |
| D    | 3/8" (10A)                | KA                                            | JIS 5K RF              |
| E    | 1/2" (15A)                | AC                                            | B16.5 Class 150 RF     |
| F    | 3/4" (20A)                | AE                                            | B16.5 Class 150 FF     |
| G    | 1" (25A)                  | AD                                            | B16.5 Class 150 RFSF   |
| H    | 1 1/4" (32A)              | AF                                            | B16.5 Class 300 RF     |
| J    | 1 1/2" (40A)              | AH                                            | B16.5 Class 300 FF     |
| K    | 2" (50A)                  | AG                                            | B16.5 Class 300 RFSF   |
| L    | 2 1/2" (65A)              | AJ                                            | B16.5 Class 600 RF     |
| M    | 3" (80A)                  | KT                                            | JIS 5K FF              |
| N    | 4" (100A)                 | AL                                            | B16.5 Class 600 FF     |
| Z    | Other                     | AK                                            | B16.5 Class 600 RFSF   |
|      |                           | KL                                            | JIS 10K RF             |
|      |                           | KN                                            | JIS 10K FF             |
|      |                           | KM                                            | JIS 10K RFSF           |
|      |                           | KP                                            | JIS 20K RF             |
|      |                           | KR                                            | JIS 20K FF             |
|      |                           | KQ                                            | JIS 20K RFSF           |
|      |                           | KC                                            | JIS 30K RF             |
|      |                           | KU                                            | JIS 30K FF             |
|      |                           | KJ                                            | JIS 30K RFSF           |
|      |                           | AS                                            | B16.5 Class 900 RF     |
|      |                           | KD                                            | JIS 40K RF             |
|      |                           | KV                                            | JIS 40K FF             |
|      |                           | A8                                            | B16.5 Class 150 RTJ    |
|      |                           | A9                                            | B16.5 Class 300 RTJ    |
|      |                           | AV                                            | B16.5 Class 600 RTJ    |
|      |                           | AT                                            | B16.5 Class 1,500 RF   |
|      |                           | AN                                            | B16.5 Class 1,500 FF   |
|      |                           | AB                                            | B16.5 Class 1,500 RFSF |
|      |                           | AX                                            | B16.5 Class 1,500 RTJ  |
|      |                           | AY                                            | B16.5 Class 2,500 RTJ  |
|      |                           | ZZ                                            | Other                  |

## Process connection type table (For P762 model)

| 9 <sup>th</sup> character |                 | 10 <sup>th</sup> , 11 <sup>th</sup> character |                        |
|---------------------------|-----------------|-----------------------------------------------|------------------------|
| Code                      | Connection size | Code                                          | Flange rating          |
| G                         | 1" (25A)        | AC                                            | B16.5 Class 150 RF     |
| H                         | 1¼" (32A)       | AE                                            | B16.5 Class 150 FF     |
| J                         | 1½" (40A)       | AD                                            | B16.5 Class 150 RFSF   |
| K                         | 2" (50A)        | AF                                            | B16.5 Class 300 RF     |
| L                         | 2½" (65A)       | AH                                            | B16.5 Class 300 FF     |
| M                         | 3" (80A)        | AG                                            | B16.5 Class 300 RFSF   |
| N                         | 4" (100A)       | AJ                                            | B16.5 Class 600 RF     |
| Z                         | Other           | AL                                            | B16.5 Class 600 FF     |
|                           |                 | AK                                            | B16.5 Class 600 RFSF   |
|                           |                 | KL                                            | JIS 10K RF             |
|                           |                 | KN                                            | JIS 10K FF             |
|                           |                 | KM                                            | JIS 10K RFSF           |
|                           |                 | KP                                            | JIS 20K RF             |
|                           |                 | KR                                            | JIS 20K FF             |
|                           |                 | KQ                                            | JIS 20K RFSF           |
|                           |                 | KC                                            | JIS 30K RF             |
|                           |                 | KU                                            | JIS 30K FF             |
|                           |                 | KJ                                            | JIS 30K RFSF           |
|                           |                 | AS                                            | B16.5 Class 900 RF     |
|                           |                 | KD                                            | JIS 40K RF             |
|                           |                 | KV                                            | JIS 40K FF             |
|                           |                 | A8                                            | B16.5 Class 150 RTJ    |
|                           |                 | A9                                            | B16.5 Class 300 RTJ    |
|                           |                 | AV                                            | B16.5 Class 600 RTJ    |
|                           |                 | AT                                            | B16.5 Class 1,500 RF   |
|                           |                 | AN                                            | B16.5 Class 1,500 FF   |
|                           |                 | AB                                            | B16.5 Class 1,500 RFSF |
|                           |                 | AX                                            | B16.5 Class 1,500 RTJ  |
|                           |                 | AY                                            | B16.5 Class 2,500 RTJ  |
|                           |                 | ZZ                                            | Other                  |