

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 flushing from the system to prevent any contamination.

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

Standard features

Upper flange (Gauge side)

Stainless steel (304SS, 316SS)

Diaphragm

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

Under flange and process flange

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

Option

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



Model : P761



Model : P762



Model : P763

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

Sample ordering code

1	2	3	4	5	6	7	8	9
P761	D	8B	B	XXX	A	I	XXX	1



© WISE Control Inc. All rights reserved. ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

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

Sample ordering code

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

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

Sample ordering code

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

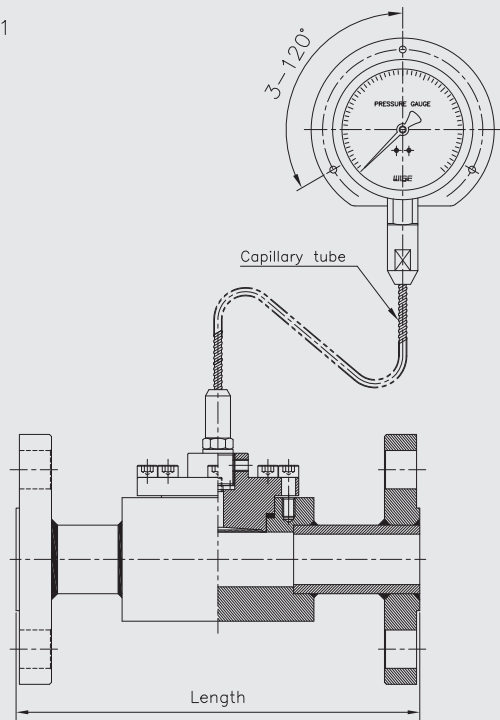
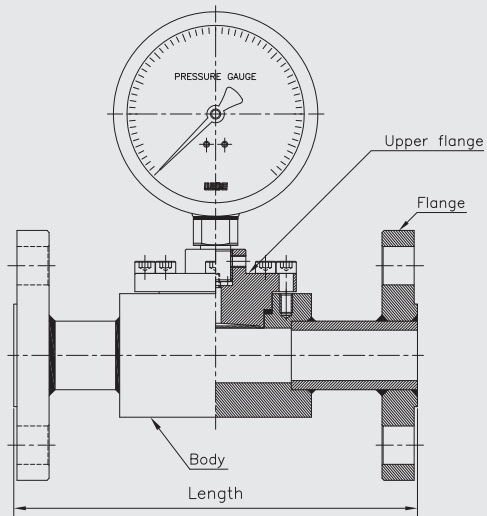


© WISE Control Inc. All rights reserved. ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

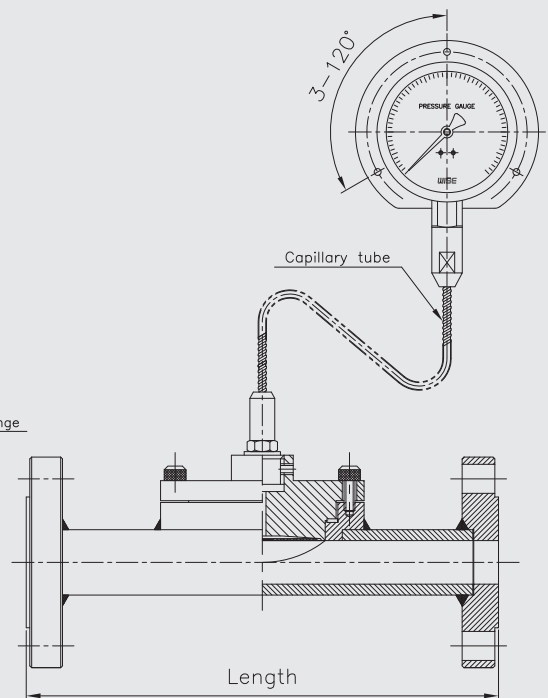
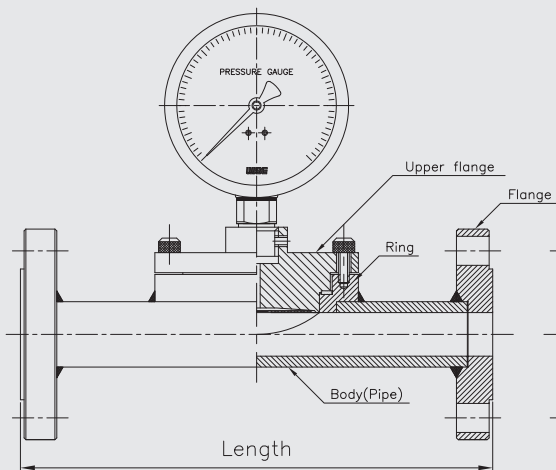
P761 : Type of mounting (1/2)

Code P761

Pipe size : $\leq 1''$

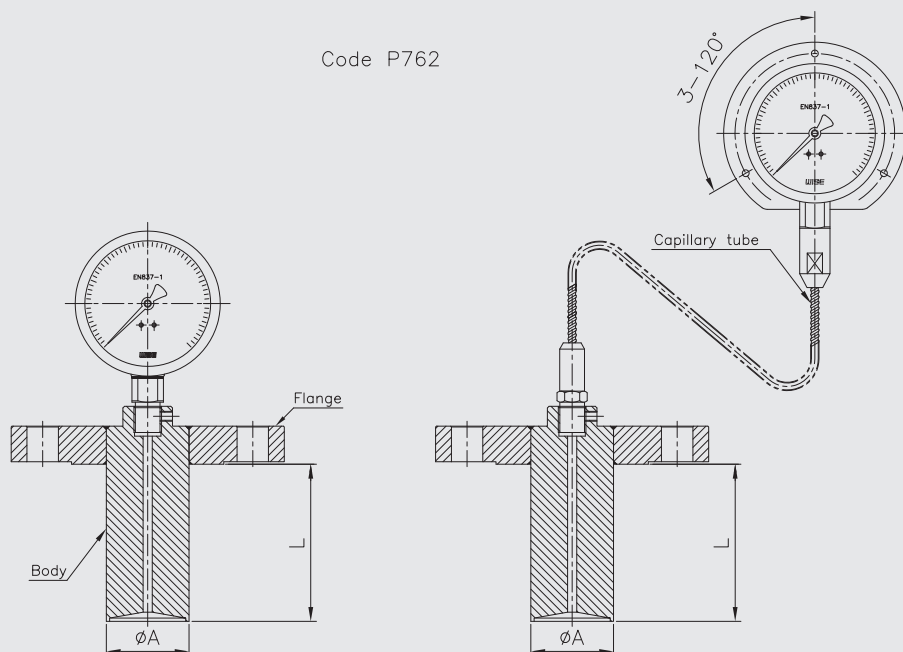


Pipe size : $> 1''$

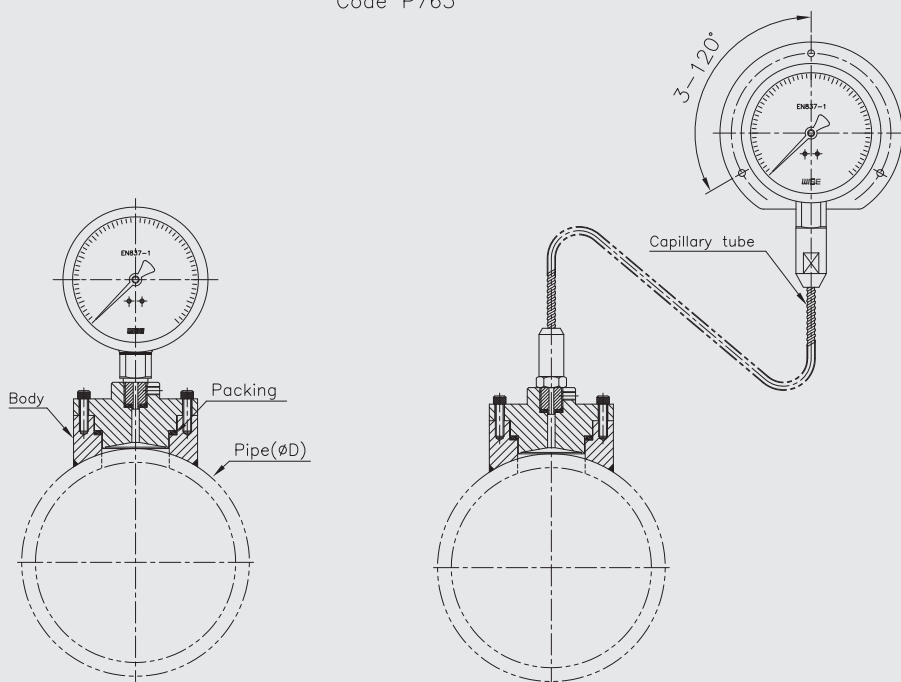


P762, P763 : Type of mounting (2/2)

Code P762



Code P763



Process connection type table (For P761 model)

Code	9 th character	10 th , 11 th 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 th character		10 th , 11 th 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