General service pressure gauge with economic design diaphragm seal Model : P170 series

Spec. sheet no. PD01-07

Service intended

P170 series are designed to withstand corrosive, contaminated, or heterogeneous pressure media by employing the welded bellows. Especially, it can be used for water treatment process machines and sludge water lines.



Nominal diameter

75 and 100 mm

Accuracy ±1.5% of full scale

Scale range (MPa, kPa, bar) -0.1 ~ 0 to 0 ~ 2.5 MPa

Working pressure Steady : 75% of full scale Over range protection : 130% of full scale

Working temperature Ambient : -20 ~ 65°C Fluid : Max. 100°C

Special features Design with internal diaphragm, upper and lower housing welded Excellent cost-performance ratio

Temperature effect

Accuracy at temperature above and below the reference temperature (20°C) will be effected by approximately $\pm 0.4\%$ per 10°C of full scale

Standard features

Pressure connection Upper and Under flange : 304SS

Element Diaphragm : 316L SS

Case Black painted steel

Cover Black painted steel

Window Glass



Movement Brass

Pointer Black painted aluminium alloy

Process connection ¼" PT. NPT and PF

%" PT, NPT and PF %" PT, NPT and PF

Option Dial size : 60 and 75 mm Another process connection size and type



Main order

1. Base model

P170 General service pressure gauge with screwed diaphragm seal assembly

2. Nominal diameter (mm)

- **3** 75
- **4** 100

3. Type of mounting

- A Bottom connection, direct
- F Center back connection, direct

4. Accuracy

4 ±1.5% of full scale

5. Process connection

- **C** 1⁄4"
- D 3/8"

6. Connection type

- B PF
- C PT
- D NPT

7. Unit

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

8. Range

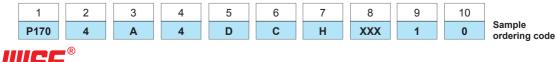
XXX Refer to pressure unit and range table

9. Dial color

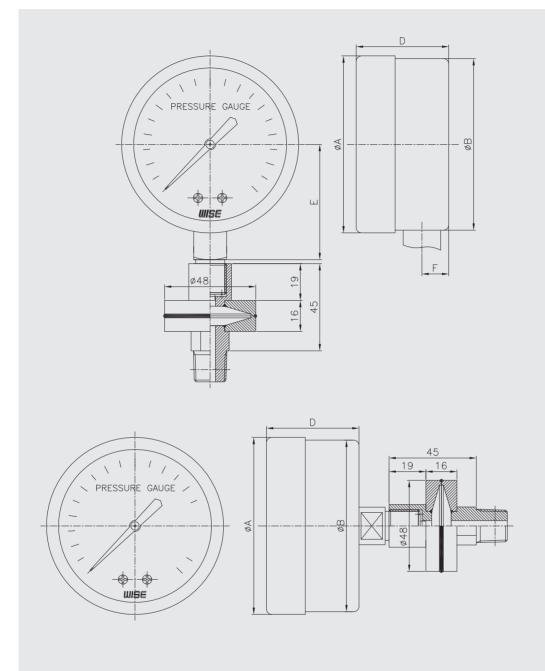
- 1 2 colors
- 5 3 colors

10. Option

- 0 None
- 1 Accessories



P170 : Type of mounting



| Dimensions (| (mm) |
|--------------|------|
| | |

| Dial size | Available code | А | в | D ±2 | E±2 | F±1 |
|--------------|----------------|-----|-----|------|------|------|
| 75 | A | 78 | 77 | 35 | 52 | 12.7 |
| | F | 78 | 82 | 35 | 47 | |
| 100 | A | 106 | 105 | 35.5 | 64.5 | 12.5 |
| | F | 106 | 105 | 35.5 | 47 | |



Pressure unit and range table

| Range and code | | Unit and code | 75 | 100 mm | |
|----------------|---------|---------------|---------------|--------|--------|
| | H : bar | I : MPa | J : kPa | 75 mm | 100 mm |
| 042 | 0~2 | 0 ~ 0.2 | 0 ~ 200 | 0 | 0 |
| 043 | 0~3 | 0~0.3 | 0 ~ 300 | 0 | 0 |
| 044 | 0~4 | 0~0.4 | 0~400 | 0 | 0 |
| 045 | 0~6 | 0~0.6 | 0 ~ 600 | 0 | 0 |
| 047 | 0~10 | 0~1 | 0 ~ 1,000 | 0 | 0 |
| 050 | 0~15 | 0~1.5 | X | 0 | 0 |
| 051 | 0~20 | 0~2 | X | 0 | 0 |
| 052 | 0 ~ 25 | 0~2.5 | X | 0 | 0 |
| 028 | -1 ~ 2 | -0.1 ~ 0.2 | -100 ~ 200 | 0 | 0 |
| 029 | -1 ~ 3 | -0.1 ~ 0.3 | -100 ~ 300 | 0 | 0 |
| 030 | -1 ~ 4 | -0.1 ~ 0.4 | -100 ~ 400 | 0 | 0 |
| 031 | -1 ~ 6 | -0.1 ~ 0.6 | -100 ~ 600 | 0 | 0 |
| 032 | -1 ~ 10 | -0.1 ~ 1 | -100 ~ 1,000 | 0 | 0 |
| 033 | -1 ~ 15 | -0.1 ~ 1.5 | -100 ~ 1.5MPa | 0 | 0 |
| 034 | -1 ~ 20 | -0.1 ~ 2 | -100 ~ 2MPa | 0 | 0 |

O : Available X : Not available

