

# Euro gauge

## Liquid filled industrial pressure gauge

### Model : P258 series

Spec. sheet no. PD02-13

#### Service intended

P258 series are suitable for corrosive environments. Typical application includes : Chemical, petro-chemical, refining process, power generation, marine and food industry. The filled liquid absorbs vibration and pulsation.

#### Nominal diameter

63, 80, 100 and 160 mm

#### Accuracy

P2582 (63 mm) and P2583 (80 mm) :  $\pm 1.6$  % of full scale  
P2584 (100 mm) and P2586 (160 mm) :  $\pm 0.5$  % of full scale  
 $\pm 1.0$  % of full scale

#### Scale range (MPa, kPa, bar)

63 and 80 mm : 0.1 ~ 0 to 0 ~ 100 MPa  
100 and 160 mm : 0.1 ~ 0 to 0 ~ 200 MPa

#### Working pressure

Steady : 75 % of full scale (63 and 80 mm)  
100 % of full scale (100 and 160 mm)  
Over range protection : 130 % of full scale

#### Filling liquid

Glycerin

#### Working temperature

Ambient : -20 ~ 65 °C (With glycerin filling)  
-40 ~ 65 °C (With silicone filling)  
Fluid : Max. 100 °C (With glycerin filling)  
Max. 100 °C (With silicone filling)

#### Degree of protection

EN60529/IEC529/IP67  
EN60529/IEC529/IP66

#### 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

Stainless steel (316SS)

#### Element

Stainless steel (316SS),  
Model : P2584 (100 mm) and P2586 (160 mm)  
<10 MPa : C type bourdon tube  
 $\geq 10$  MPa : Helical type bourdon tube  
Model : P2582 (63 mm) and P2583 (80 mm)  
<6 MPa : C type bourdon tube  
 $\geq 6$  MPa : Helical type bourdon tube

#### Blowout protection

Back, Rubber disc for 80, 100 and 160 mm  
Top, Rubber disc for 63 mm

#### Case

Stainless steel (304SS)

#### Cover

Stainless steel (304SS)  
Bayonet type

#### Window

Laminated safety glass

#### Movement

Stainless steel

#### Dial

White aluminium with black graduations

#### Pointer

Black painted aluminium alloy

#### Process connection

63 mm :  $\frac{1}{8}$ ",  $\frac{1}{4}$ " PT, NPT and PF  
80 mm :  $\frac{1}{4}$ ",  $\frac{3}{8}$ " PT, NPT and PF  
100 and 160 mm :  $\frac{1}{4}$ ",  $\frac{3}{8}$ ",  $\frac{1}{2}$ " PT, NPT and PF

#### Certificates

ATEX Ex II GD c IIc TX  
Pressure equipment directive (2014/68/EU)-Annex III Module H

#### Option

Zero adjustable pointer  
(Only available with diameter 100 and 160 mm)  
Zero adjustment (External) : 100 and 160 mm  
Pressure connection and element : Monel  
(Only available with diameter 100 and 160 mm)  
Silicone filling  
Maximum Pointer  
(Not applicable to under 3 bar, Only available with diameter 100 mm)

**WISE**<sup>®</sup>

**1. Base model**

**P258** Liquid filled industrial pressure gauge

**2. Nominal diameter (mm)**

|          |     |
|----------|-----|
| <b>2</b> | 63  |
| <b>3</b> | 80  |
| <b>4</b> | 100 |
| <b>6</b> | 160 |

**3. Type of mounting**

|          |   |
|----------|---|
| <b>A</b> | Bottom connection, direct   |
| <b>B</b> | Bottom connection, surface, case mounting plate   |
| <b>C</b> | Bottom connection, flush, cover mounting plate  |
| <b>F</b> | Center back connection, direct, only available with diameter 63 mm  |
| <b>G</b> | Lower back connection, direct   |
| <b>H</b> | Center back connection, flush, case center mounting plate, only available with diameter 63 mm             |
| <b>I</b> | Center back connection, flush, case center mounting plate with bracket only available with diameter 63 mm |
| <b>J</b> | Center back connection, flush, cover mounting plate, only available with diameter 63 mm                   |
| <b>L</b> | Lower back connection, flush, case center mounting plate  |
| <b>M</b> | Lower back connection, flush, case center mounting bracket  |
| <b>N</b> | Lower back connection, flush, cover mounting plate  |
| <b>V</b> | Center back connection, flush, cover mounting bracket, only available with diameter 63 mm                 |
| <b>W</b> | Lower back connection, flush, cover mounting bracket  |

**4. Accuracy**

|          |   |
|----------|---|
| <b>2</b> | ±0.5 % of full scale, only available with diameter 100 and 160 mm, not available with range 0.4 and 0.5 bar |
| <b>3</b> | ±1.0 % of full scale, not available with diameter 63 and 80 mm  |
| <b>4</b> | ±1.6 % of full scale, only available with diameter 63 and 80 mm   |

**5. Process connection**

|          |  |
|----------|--|
| <b>B</b> | 1/8"   |
| <b>C</b> | 1/4"   |
| <b>D</b> | 3/8", not available with diameter 63 mm        |
| <b>E</b> | 1/2", not available with diameter 63 and 80 mm |

**6. Connection type**

|          |         |
|----------|---------|
| <b>B</b> | PF      |
| <b>C</b> | PT      |
| <b>D</b> | NPT     |
| <b>F</b> | BSPT    |
| <b>G</b> | BSP (G) |
| <b>Z</b> | Other   |

**7. Unit**

|          |       |
|----------|-------|
| <b>H</b> | bar   |
| <b>I</b> | MPa   |
| <b>J</b> | kPa   |
| <b>Z</b> | Other |

**8. Range**

**XXX** Refer to pressure unit and range table

**9. Pressure connection material and dial color**

|          |   |
|----------|---|
| <b>3</b> | 316SS and 2 colors                                  |
| <b>4</b> | 316L SS and 2 colors                                |
| <b>7</b> | 316SS and 3 colors                                  |
| <b>8</b> | 316L SS and 3 colors                                |
| <b>Z</b> | Monel (Only available with diameter 100 and 160 mm) |

**10. Option**

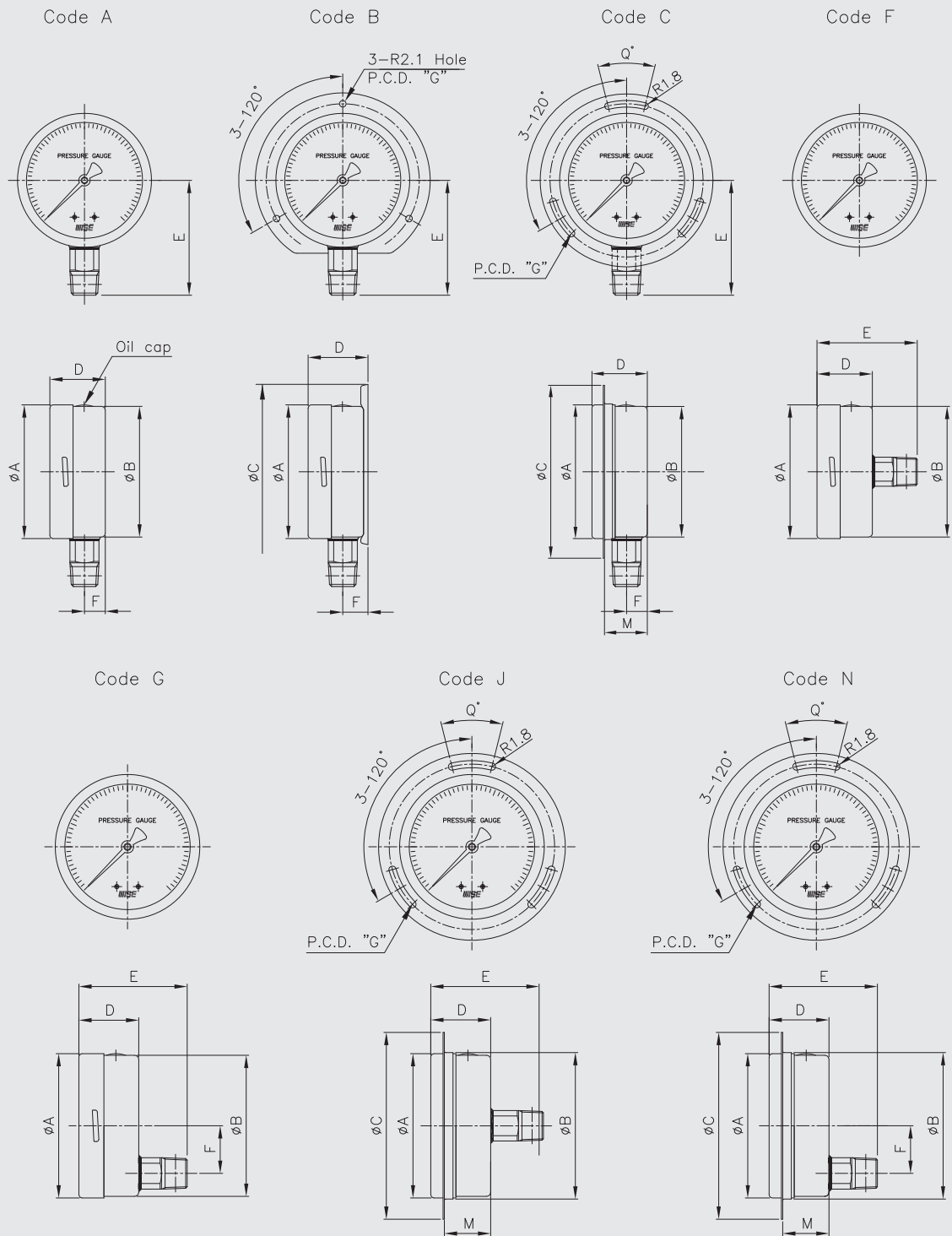
|          |                                  |
|----------|----------------------------------|
| <b>0</b> | None                             |
| <b>1</b> | Accessories                      |
| <b>2</b> | Silicone filling                 |
| <b>3</b> | Accessories and silicone filling |

**11. Adjustable pointer**

|          |                          |
|----------|--------------------------|
| <b>0</b> | None                     |
| <b>1</b> | Zero adjustable pointer  |
| <b>2</b> | External zero adjustment |

|      |   |   |   |   |   |   |     |   |    |    |                            |
|------|---|---|---|---|---|---|-----|---|----|----|----------------------------|
| 1    | 2 | 3 | 4 | 5 | 6 | 7 | 8   | 9 | 10 | 11 | Sample<br>ordering<br>code |
| P258 | 4 | A | 3 | C | D | H | XXX | 3 | 0  | 1  |                            |

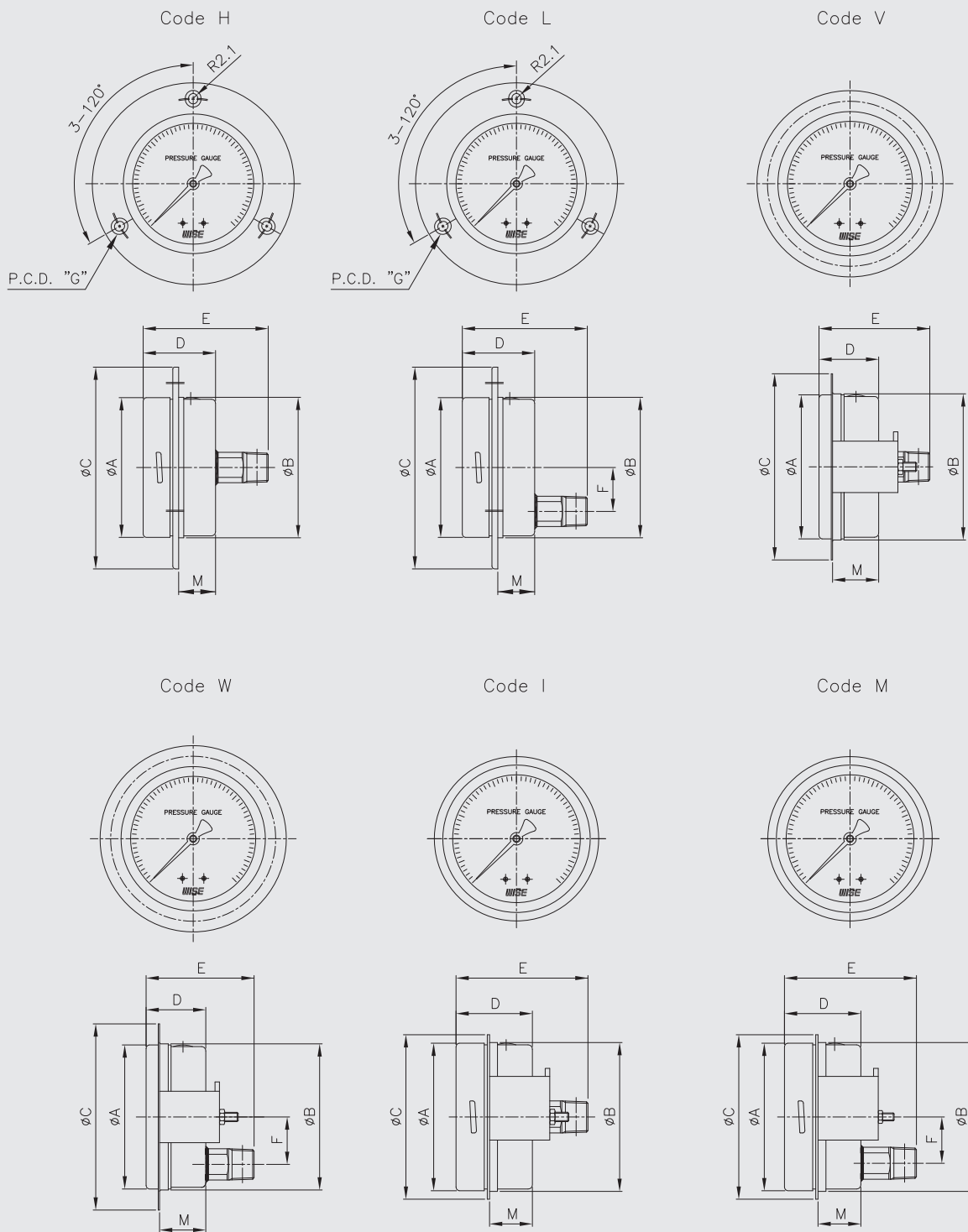
## P258 : Type of mounting (1/3)



Dimensions (mm)

| Dial size | Available code | A  | B  | C  | D±2 | E±2 | F±1 | M  | G     | H | Q  |
|-----------|----------------|----|----|----|-----|-----|-----|----|-------|---|----|
| 63        | A              | 64 | 62 |    | 34  | 61  | 11  |    |       |   |    |
|           | B              | 64 |    | 85 | 37  | 61  | 15  |    | 74~75 |   |    |
|           | C              | 64 | 62 | 86 | 34  | 61  | 11  | 28 | 75    |   | 15 |
|           | F              | 64 | 62 |    | 34  | 64  |     |    |       |   |    |
|           | G              | 64 | 62 |    | 34  | 64  | 13  |    |       |   |    |
|           | J              | 64 | 66 | 86 | 34  | 64  |     | 28 | 75    |   | 15 |
|           | N              | 64 | 66 | 86 | 34  | 64  | 13  | 28 | 75    |   | 15 |

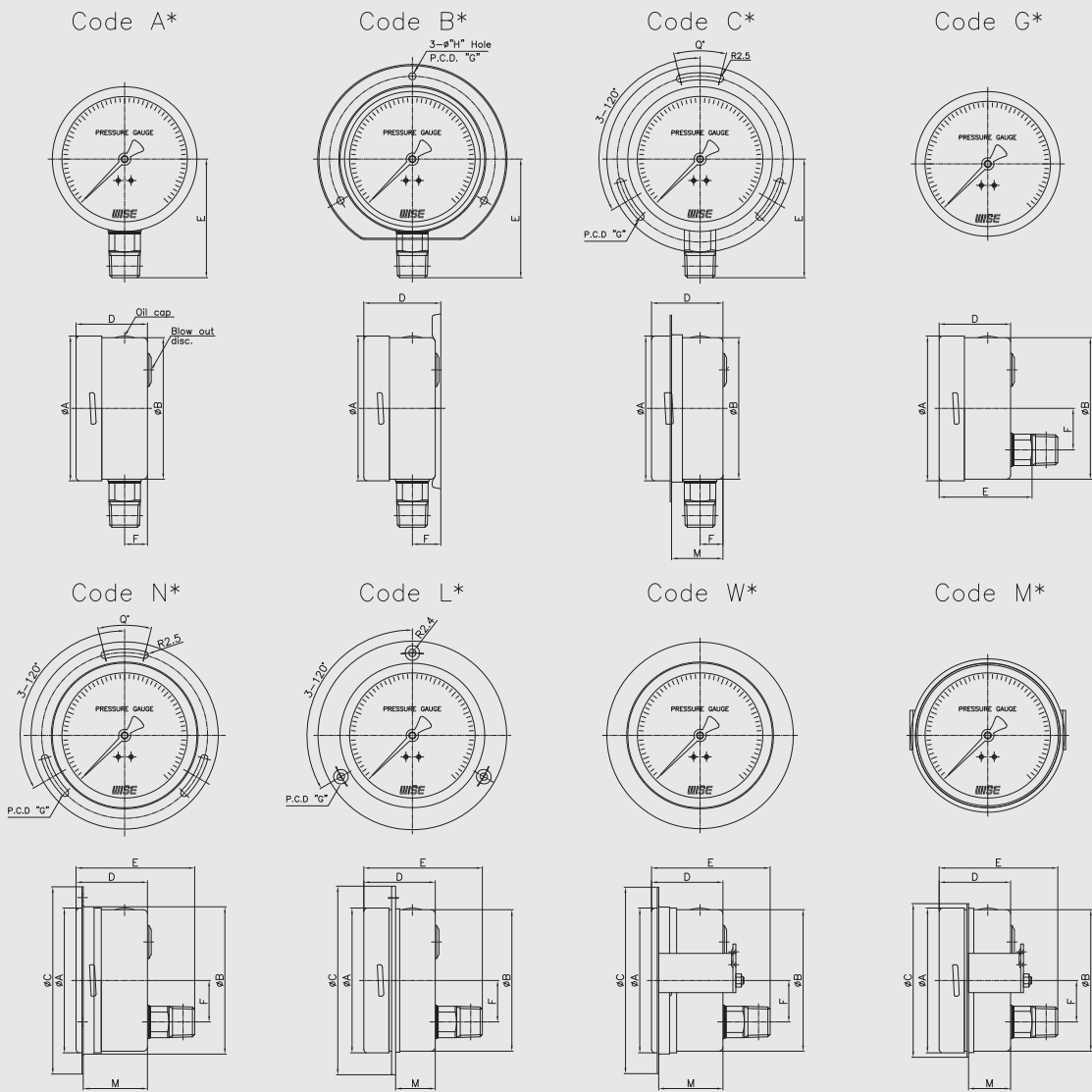
## P258 : Type of mounting (2/3)



Dimensions (mm)

| Dial size | Available code | A  | B    | C  | D $\pm 2$ | E $\pm 2$ | F $\pm 1$ | M    | G     |
|-----------|----------------|----|------|----|-----------|-----------|-----------|------|-------|
| 63        | H              | 64 | 64.5 | 92 | 34        | 64        |           | 16.8 | 77~78 |
|           | L              | 64 | 64.5 | 92 | 34        | 64        | 13        | 16.8 | 77~78 |
|           | V              | 64 | 66   | 86 | 34        | 64        |           |      | 28    |
|           | W              | 64 | 66   | 86 | 34        | 64        | 13        |      | 28    |
|           | I              | 64 | 64.5 | 71 | 34        | 64        |           |      | 18.5  |
|           | M              | 64 | 64.5 | 71 | 34        | 64        | 13        |      | 18.5  |

## P258 : Type of mounting (3/3)



| Dial size | Available code | Dimensions (mm) |       |       |       |          |       |          |       |          |       |          |             |      |    |
|-----------|----------------|-----------------|-------|-------|-------|----------|-------|----------|-------|----------|-------|----------|-------------|------|----|
|           |                | A               | B     | C     | D ±2  |          | E ±2  |          | F ±1  |          | M     |          | G           | H    | Q  |
|           |                |                 |       |       | S.T.D | External | S.T.D | External | S.T.D | External | S.T.D | External |             |      |    |
| 80        | A*             | 81.2            | 78.5  |       | 39.5  | —        | 71.5  | —        | 12    | —        |       |          |             |      |    |
|           | B*             | 81.2            |       | 108   | 43    | —        | 71.5  | —        | 15.5  | —        |       |          | 95          | 5    |    |
|           | C*             | 81.2            | 78.5  | 108   | 39.5  | —        | 71.5  | —        | 12    | —        | 35    | —        | 95          |      | 10 |
|           | G*             | 81.2            | 78.5  |       | 39.5  | —        | 74.5  | —        | 22    | —        |       |          |             |      |    |
|           | N*             | 81.2            | 83.2  | 108   | 39.5  | —        | 74.5  | —        | 22    | —        | 35    | —        | 95          |      | 10 |
|           | L*             | 81.2            | 80.8  | 112   | 39.5  | —        | 74.5  | —        | 22    | —        | 21.8  | —        | 94.5~95.5   |      |    |
|           | M*             | 81.2            | 81.5  | 88    | 39.5  | —        | 74.5  | —        | 22    | —        | 22.5  | —        |             |      |    |
| 100       | A*             | 101.3           | 99    |       | 50    | 63       |       | 88       | 16    | 30.6     |       |          |             |      |    |
|           | B*             | 101.3           |       | 133   | 54.4  | 67.4     |       | 88       | 19.4  | 34       |       |          | 116         | R2.5 |    |
|           | C*             | 101.3           | 99    | 131   | 50    | 63       |       | 88       | 16    | 30.6     | 45    | 58       | 116         |      | 28 |
|           | G*             | 101.3           | 99    |       | 50    | 63       | 88    | 101.5    |       | 29       |       |          |             |      |    |
|           | N*             | 101.3           | 103.1 | 131   | 50    | 63       | 88    | 101.5    |       | 29       | 45    | 58       | 116         |      | 28 |
|           | L*             | 101.3           | 100.4 | 132   | 50    | 63       | 88    | 101.5    |       | 29       | 27.7  | 40.7     | 115~116     |      |    |
|           | M*             | 101.3           | 101   | 107.5 | 50    | 63       | 88    | 101.5    |       | 29       | 29.5  | 42.5     |             |      |    |
| 160       | A*             | 160.6           | 159   |       | 52.5  | 66       |       | 117      | 15.8  | 29.3     |       |          |             |      |    |
|           | B*             | 160.6           |       | 196   | 56    | 69.5     |       | 117      | 19.4  | 32.9     |       |          | 178         | 5.8  |    |
|           | C*             | 160.6           | 159   | 192   | 52.5  | 66       |       | 117      | 15.8  | 29.3     | 47.5  | 61       | 178         |      | 18 |
|           | G*             | 160.6           | 159   |       | 52.5  | 66       | 90.5  | 104      |       | 29       |       |          |             |      |    |
|           | N*             | 160.6           | 164   | 192   | 52.5  | 66       | 90.5  | 104      |       | 29       | 47.5  | 61       | 178         |      | 18 |
|           | L*             | 160.6           | 162   | 192   | 52.5  | 66       | 90.5  | 104      |       | 29       | 28    | 41.5     | 175.5~176.5 |      |    |
|           | M*             | 160.6           | 162   | 172   | 52.5  | 66       | 90.5  | 104      |       | 29       | 47.5  | 61       |             |      |    |

## Pressure unit and range table

| Range and code | Unit and code |             |                | Nominal diameter |       |        |        |
|----------------|---------------|-------------|----------------|------------------|-------|--------|--------|
|                | H : bar       | I : MPa     | J : kPa        | 63 mm            | 80 mm | 100 mm | 160 mm |
| 026            | -1 ~ 0        | -0.1 ~ 0    | -100 ~ 0       | O                | O     | O      | O      |
| 123            | 0 ~ 0.4       | 0 ~ 0.04    | 0 ~ 40         | X                | X     | O      | Δ      |
| 040            | 0 ~ 0.5       | 0 ~ 0.05    | 0 ~ 50         | X                | X     | O      | Δ      |
| 041            | 0 ~ 1         | 0 ~ 0.1     | 0 ~ 100        | O                | O     | O      | O      |
| 133            | 0 ~ 1.6       | 0 ~ 0.16    | 0 ~ 160        | X                | X     | O      | O      |
| 042            | 0 ~ 2         | 0 ~ 0.2     | 0 ~ 200        | O                | O     | O      | O      |
| 134            | 0 ~ 2.5       | 0 ~ 0.25    | 0 ~ 250        | X                | X     | O      | O      |
| 043            | 0 ~ 3         | 0 ~ 0.3     | 0 ~ 300        | O                | O     | O      | O      |
| 044            | 0 ~ 4         | 0 ~ 0.4     | 0 ~ 400        | O                | O     | O      | O      |
| 045            | 0 ~ 6         | 0 ~ 0.6     | 0 ~ 600        | O                | O     | O      | O      |
| 047            | 0 ~ 10        | 0 ~ 1       | 0 ~ 1,000      | O                | O     | O      | O      |
| 050            | 0 ~ 15        | 0 ~ 1.5     | X              | O                | O     | O      | O      |
| 143            | 0 ~ 16        | 0 ~ 1.6     | X              | O                | O     | O      | O      |
| 051            | 0 ~ 20        | 0 ~ 2       | X              | O                | O     | O      | O      |
| 052            | 0 ~ 25        | 0 ~ 2.5     | X              | O                | O     | O      | O      |
| 054            | 0 ~ 35        | 0 ~ 3.5     | X              | O                | O     | O      | O      |
| 151            | 0 ~ 40        | 0 ~ 4       | X              | O                | O     | O      | O      |
| 055            | 0 ~ 50        | 0 ~ 5       | X              | O                | O     | O      | O      |
| 056            | 0 ~ 60        | 0 ~ 6       | X              | O                | O     | O      | O      |
| 057            | 0 ~ 70        | 0 ~ 7       | X              | O                | O     | O      | O      |
| 058            | 0 ~ 100       | 0 ~ 10      | X              | O                | O     | O      | O      |
| 059            | 0 ~ 150       | 0 ~ 15      | X              | O                | O     | O      | O      |
| 060            | 0 ~ 160       | 0 ~ 16      | X              | O                | O     | O      | O      |
| 062            | 0 ~ 250       | 0 ~ 25      | X              | O                | O     | O      | O      |
| 064            | 0 ~ 350       | 0 ~ 35      | X              | O                | O     | O      | O      |
| 065            | 0 ~ 400       | 0 ~ 40      | X              | O                | O     | O      | O      |
| 066            | 0 ~ 500       | 0 ~ 50      | X              | O                | O     | O      | O      |
| 067            | 0 ~ 600       | 0 ~ 60      | X              | O                | O     | O      | O      |
| 068            | 0 ~ 700       | 0 ~ 70      | X              | O                | O     | O      | O      |
| 070            | 0 ~ 1,000     | 0 ~ 100     | X              | O                | O     | O      | O      |
| 074            | 0 ~ 1,600     | 0 ~ 160     | X              | X                | X     | O      | O      |
| 075            | 0 ~ 2,000     | 0 ~ 200     | X              | X                | X     | O      | O      |
| 006            | -1 ~ 0.6      | -0.1 ~ 0.06 | -100 ~ 60      | X                | X     | O      | O      |
| 027            | -1 ~ 1        | -0.1 ~ 0.1  | -100 ~ 100     | O                | O     | O      | O      |
| 007            | -1 ~ 1.5      | -0.1 ~ 0.15 | -100 ~ 150     | X                | X     | O      | O      |
| 028            | -1 ~ 2        | -0.1 ~ 0.2  | -100 ~ 200     | O                | O     | O      | O      |
| 029            | -1 ~ 3        | -0.1 ~ 0.3  | -100 ~ 300     | O                | O     | O      | O      |
| 030            | -1 ~ 4        | -0.1 ~ 0.4  | -100 ~ 400     | O                | O     | O      | O      |
| 010            | -1 ~ 5        | -0.1 ~ 0.5  | -100 ~ 500     | O                | O     | O      | O      |
| 031            | -1 ~ 6        | -0.1 ~ 0.6  | -100 ~ 600     | O                | O     | O      | O      |
| 014            | -1 ~ 9        | -0.1 ~ 0.9  | -100 ~ 900     | O                | O     | O      | O      |
| 032            | -1 ~ 10       | -0.1 ~ 1    | -100 ~ 1,000   | O                | O     | O      | O      |
| 033            | -1 ~ 15       | -0.1 ~ 1.5  | -100 ~ 1.5 MPa | O                | O     | O      | O      |
| 034            | -1 ~ 20       | -0.1 ~ 2    | -100 ~ 2 MPa   | O                | O     | O      | O      |
| 017            | -1 ~ 24       | -0.1 ~ 2.4  | -100 ~ 2.4 MPa | O                | O     | O      | O      |
| 035            | -1 ~ 25       | -0.1 ~ 2.5  | -100 ~ 2.5 MPa | O                | O     | O      | O      |

O : Available    X : Not available    Δ : Not available with ±0.5 % of full scale