

# SensorsX SX-PGAAC Series

Mechanical Pressure Gauge

Industrial Process Measurement | Gauge | Absolute | Differential



|                                          |                                                      |                                            |
|------------------------------------------|------------------------------------------------------|--------------------------------------------|
| <b>CL 1.0 / CL 1.6</b><br>Accuracy Class | <b>Higher ranges up to 160 MPa</b><br>Pressure Range | <b>EN 837-1 / ASME B40.100</b><br>Standard |
| <b>IP65</b><br>Ingress Protection        | <b>RoHS / CE</b><br>Certifications                   | <b>63 mm / 100 mm</b><br>Dial Diameter     |

Industrial Process Measurement | Gauge | Absolute | Differential

## ■ PRODUCT OVERVIEW

The SX-PGAAC Series Mechanical Pressure Gauge uses high-quality stainless steel Bourdon tubes, movements, and process connections to support gauge pressure, absolute pressure, and differential pressure measurement applications. Suitable for liquid and gas media, including corrosive service depending on material selection, conforming to the requirements and test conditions of EN 837-1 and ASME B40.100.



## ■ KEY FEATURES

- |                                                                                 |                                               |
|---------------------------------------------------------------------------------|-----------------------------------------------|
| ◆ Robust welded construction                                                    | ◆ 100% overpressure tested at 1.3× full scale |
| ◆ Multiple Form Factors Multiple configurations available                       | ◆ Wide Range of Applications                  |
| ◆ Compatible with common gauge accessories for process isolation and protection |                                               |

## ■ TYPICAL APPLICATIONS

### Industries Served

|                       |                     |                   |
|-----------------------|---------------------|-------------------|
| • Oil & Gas           | • Basic Materials   | • Chemical        |
| • Hydraulic Equipment | • Power Generation  | • Food & Beverage |
| • Water Treatment     | • Biopharmaceutical | • Pulp & Paper    |

- Industrial Gas

## ■ PERFORMANCE SPECIFICATIONS

### Measurement

|                  |                                                          |
|------------------|----------------------------------------------------------|
| Measurement Type | Gauge pressure, absolute pressure, differential pressure |
| Dial Diameter    | 63 mm (2.5 in) / 100 mm (4 in)                           |
| Measuring Range  | Vacuum / Compound / 0 to 100 MPa (0 to 14,504 psi)       |

### Accuracy

|                |                                        |
|----------------|----------------------------------------|
| Accuracy Class | CL 1.0 (DN 100 mm) / CL 1.6 (DN 63 mm) |
|----------------|----------------------------------------|

### Environmental

|                     |                                                                                            |
|---------------------|--------------------------------------------------------------------------------------------|
| Ambient Temperature | -40 to +65 °C (-40 to +149 °F) (dry gauge)   -20 to +65 °C (-4 to +149 °F) (liquid-filled) |
|---------------------|--------------------------------------------------------------------------------------------|

### Standards & Protection

|                    |                         |
|--------------------|-------------------------|
| Standards          | EN 837-1 / ASME B40.100 |
| Ingress Protection | IP65 per IEC 60529      |

## ■ PROCESS CONNECTIONS & WETTED MATERIALS

### Pressure Connection

|                   |                                                                                |
|-------------------|--------------------------------------------------------------------------------|
| Available Threads | G 1/4 Male / M20 x 1.5 Male / 1/4"-18 NPT Male / G 1/2 Male / 1/2"-14 NPT Male |
|-------------------|--------------------------------------------------------------------------------|

### Wetted Materials

|                 |                                         |
|-----------------|-----------------------------------------|
| System Material | 316L stainless steel / Bronze-Brass     |
| Fill Fluid      | Dry (no fill) / Silicone oil / Glycerin |

## ■ CERTIFICATIONS & APPROVALS

### General Compliance

|            |                |
|------------|----------------|
| RoHS       | RoHS compliant |
| CE Marking | CE marked      |

### Material Certificates

|              |           |
|--------------|-----------|
| EN 10204 2.2 | Available |
| EN 10204 3.1 | Available |
| NACE MR0175  | Available |
| PMI          | Available |

※ Certificate availability depends on specific product configuration and order quantity. Contact SensorsX Technology Inc. for the applicable certificates for your order.

## ■ ACCESSORIES

|                          |                       |
|--------------------------|-----------------------|
| ◆ Diaphragm Seal         | ◆ Capillary           |
| ◆ Valve Manifold         | ◆ Flushing Ring       |
| ◆ Siphon Tube            | ◆ Snubber / Damper    |
| ◆ Overpressure Protector | ◆ Adapter / Reducer   |
| ◆ Heat Dissipation Tower | ◆ Compression Fitting |

※ Accessories are available as options. Contact SensorsX Technology Inc. for compatibility and availability.

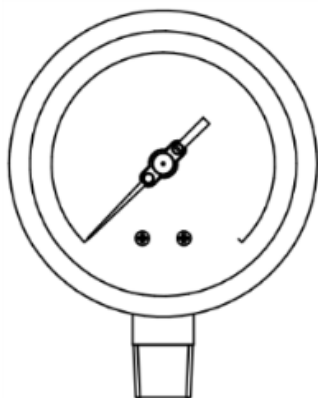
## ■ MECHANICAL DIMENSIONS

※ All dimensions in mm. Drawings show standard gauge configurations. See Ordering Information for mounting and connection variants.

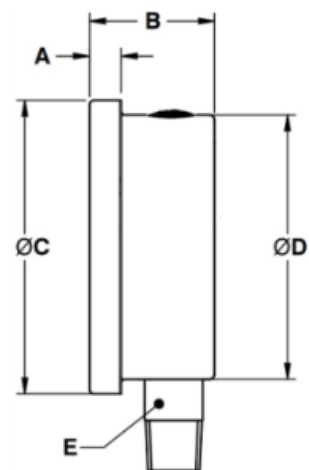
### Radial Mounting (code LC — Lower Mount, Crimped Ring / code LB — Lower Mount, Bayonet Ring)

DN 63 / DN 100 — LC - Radial Front View

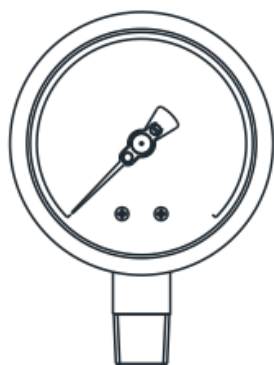
DN 63 / DN 100 — LC - Radial Side View



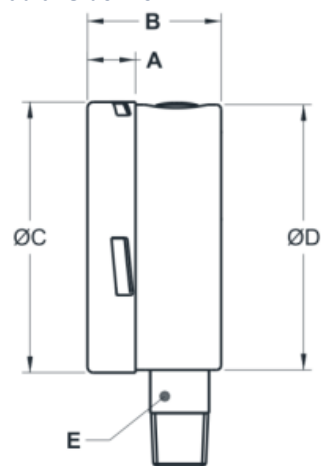
**DN 100 — LB - Radial Front View**



**DN 100 — LB - Radial Side View**

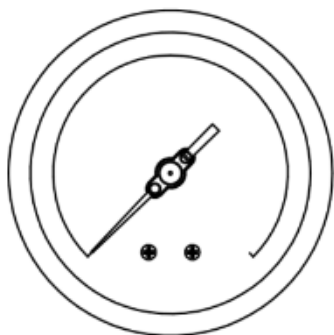


**DN 63 / DN 100 — BC - Back Front View**

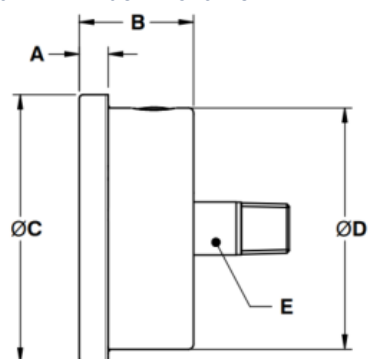


**DN 63 / DN 100 —BC - Back Front View**

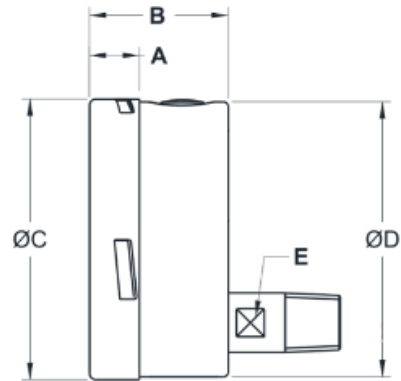
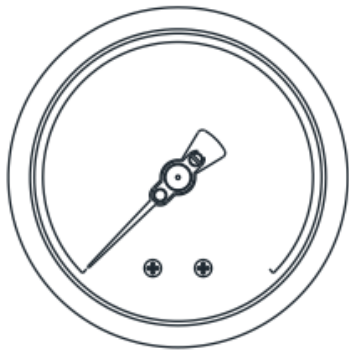
**Back Mounting (code BC — Back Mount, Crimped Ring / code BB — Back Mount, Bayonet Ring)**



**DN 100 — BB - Back Front View**



**DN 100 —BB - Back Front View**



**Dimension Reference Table**

| Type                 | DN  | A (mm) | B (mm) | ØC (mm) | ØD (mm) | E    | Weight |
|----------------------|-----|--------|--------|---------|---------|------|--------|
| All-steel (code LB)  | 100 | 16.5   | 50     | 101     | 99      | SQ22 | 540 g  |
| All-steel (code BB)  | 100 | 16.5   | 50     | 101     | 99      | SQ22 | 520 g  |
| Semi-steel (code LC) | 100 | 7      | 36     | 109     | 99      | SW22 | 312 g  |
| Semi-steel (code LC) | 63  | 7      | 32     | 68      | 62      | SQ14 | 127 g  |
| All-steel (code LC)  | 63  | 6      | 33     | 69      | 62      | SQ14 | 138 g  |
| Semi-steel (code BC) | 63  | 7      | 32     | 68      | 62      | SQ14 | 135 g  |
| All-steel (code BC)  | 63  | 6      | 33     | 69      | 62      | SQ14 | 144 g  |

## ■ ORDERING INFORMATION

**Complete model number example: SX-PGAAC-60SDN12MLB07**

SX-PGAAC = Series | 60 = 63 mm dial | S = 316L stainless steel | D = Dry (no fill) | N12M = 1/2-14 NPT | LB = Lower Mount, Bayonet Ring | 07 = 0-10 bar

### Dial Diameter (Field 5)

|            |                |
|------------|----------------|
| <b>60</b>  | 63 mm (2.5 in) |
| <b>100</b> | 100 mm (4 in)  |

### System Material (Field 6)

|          |                      |
|----------|----------------------|
| <b>S</b> | 316L stainless steel |
| <b>B</b> | Bronze / Brass       |

### Liquid Fill Type (Field 7)

|           |                   |
|-----------|-------------------|
| <b>D</b>  | Dry (no fill)     |
| <b>SF</b> | Silicone oil fill |
| <b>GF</b> | Glycerin fill     |

### Pressure Connection (Field 8)

|             |                                        |
|-------------|----------------------------------------|
| <b>G14M</b> | G 1/4 Male (ISO 228-1 parallel thread) |
| <b>M20</b>  | M20 x 1.5 Male (ISO 261 metric thread) |
| <b>N14M</b> | 1/4"-18 NPT Male (ASME B1.20.1)        |
| <b>G12M</b> | G 1/2 Male (ISO 228-1 parallel thread) |
| <b>N12M</b> | 1/2"-14 NPT Male (ASME B1.20.1)        |

### Mounting Orientation (Field 9)

|           |                           |
|-----------|---------------------------|
| <b>LC</b> | Lower Mount, Crimped Ring |
| <b>BC</b> | Back Mount, Crimped Ring  |
| <b>LB</b> | Lower Mount, Bayonet Ring |
| <b>BB</b> | Back Mount, Bayonet Ring  |

### Pressure Range (Fields 10 + 11 — two-character code)

|                                      |                                                                 |
|--------------------------------------|-----------------------------------------------------------------|
| 01                                   | -1 ... 0 bar (gauge)   -100 ... 0 kPa   -14.50 ... 0 psi        |
| 02                                   | -1 ... 1 bar (gauge)   -100 ... 100 kPa   -14.50 ... +14.50 psi |
| 03                                   | 0 ... 1 bar (gauge)   0 ... 100 kPa   0 ... 14.50 psi           |
| 04                                   | 0 ... 1.6 bar (gauge)   0 ... 160 kPa   0 ... 23.2 psi          |
| 05                                   | 0 ... 4 bar (gauge)   0 ... 400 kPa   0 ... 58.0 psi            |
| 06                                   | 0 ... 10 bar (gauge)   0 ... 1 MPa   0 ... 145 psi              |
| 07                                   | 0 ... 16 bar (gauge)   0 ... 1.6 MPa   0 ... 232 psi            |
| 08                                   | 0 ... 25 bar (gauge)   0 ... 2.5 MPa   0 ... 363 psi            |
| 09                                   | 0 ... 40 bar (gauge)   0 ... 4 MPa   0 ... 580 psi              |
| 0A                                   | 0 ... 60 bar (gauge)   0 ... 6 MPa   0 ... 870 psi              |
| 0B                                   | 0 ... 100 bar (gauge)   0 ... 10 MPa   0 ... 1,450 psi          |
| 0C                                   | 0 ... 160 bar (gauge)   0 ... 16 MPa   0 ... 2,321 psi          |
| 0D                                   | 0 ... 200 bar (gauge)   0 ... 20 MPa   0 ... 2,901 psi          |
| 0E                                   | 0 ... 250 bar (gauge)   0 ... 25 MPa   0 ... 3,626 psi          |
| 0F                                   | 0 ... 400 bar (gauge)   0 ... 40 MPa   0 ... 5,802 psi          |
| 0G                                   | 0 ... 600 bar (gauge)   0 ... 60 MPa   0 ... 8,702 psi          |
| 0H                                   | 0 ... 700 bar (gauge)   0 ... 70 MPa   0 ... 10,153 psi         |
| <b>Additional Options (Field 12)</b> |                                                                 |
| TW                                   | Tag plate                                                       |
| SG                                   | Safety glass                                                    |
| PM                                   | Front flange (panel mount)                                      |
| UC                                   | U-bracket                                                       |
| DS                                   | Dual scale                                                      |
| SW                                   | 316L stainless steel housing                                    |
| <b>Customized (Custom field)</b>     |                                                                 |
| D                                    | Customized — specify requirements in order remarks              |