

## Hygienic Pressure gauge with electrical outputs

### Alfa Laval Electronical Pressure Gauge

6.6

**Application**

The Alfa Laval electronic pressure gauge (EPG) is designed to fulfil the demands of a hygienic pressure gauge with electrical output capabilities in the hygienic and pharmaceutical industry. Main features:

- Turnable scale in order to compensate for alternative mounting (350°)
- Adjustable pressure switch feature
- Analogue output (4-20 mA)
- Imbedded led indicator in scale
- Pressure-pulsation and -trend monitoring feature
- Integrated push buttons and digital display for easy setup



**TECHNICAL DATA**

Accuracy: . . . . . Class 0.5 (±0.5% of FS)  
 Protection class: . . . . . IP67

**Measuring ranges**

- 1 to 1.5 bar
- 0 to 2.5 bar
- 1 to 3 bar
- 0 to 4 bar
- 0 to 6 bar
- 0 to 10 bar
- 0 to 16 bar
- 0 to 40 bar

**Electrical data**

The integrated electronics features short circuit, reverse polarity and overload protection.

Power supply: . . . . . 18-36 Vdc  
 Power consumption: . . . . . < 70 mA  
 Electrical connection: . . . . . 4 pin M12 plug

Digital output: . . . . . logic digital, PNP or NPN  
 Max output current: . . . . . 50 mA  
 Response time: . . . . . > 9 ms

Analogue output: . . . . . 4-20 mA, 3 wire  
 Response time: . . . . . > 28 ms

**Certificates**

- 3.1 certificate (option)
- FDA conformity declaration (option)
- Calibration Certificate, 4 points (option)

**PHYSICAL DATA**

**Materials**

Wetted parts: . . . . . AISI 316L  
 Fieldhousing: . . . . . AISI 316L  
 Glass: . . . . . Safety glass 4 mm  
 Filling: . . . . . FDA approved silicone oil

**Operating temperature**

Wetted parts: . . . . . -25 to 85°C (140°C < 1 hour)  
 Field housing: . . . . . -20 to 80°C  
 Compensated temp. range: . . . 0 to 70°C

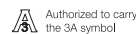
**Weight:** . . . . . Approx. 500 gr.

**Process connection**

Clamp DN38 (ISO2852) / Clamp DN40 (DIN32676)

**Pressure**

| Measuring range | Max. over pressure |
|-----------------|--------------------|
| -1 to 1.5 bar   | 10 bar             |
| 0 to 2.5 bar    | 10 bar             |
| -1 to 3 bar     | 30 bar             |
| 0 to 4 bar      | 30 bar             |
| 0 to 6 bar      | 50 bar             |
| 0 to 10 bar     | 50 bar             |
| 0 to 16 bar     | 80 bar             |
| 0 to 40 bar     | 80 bar             |



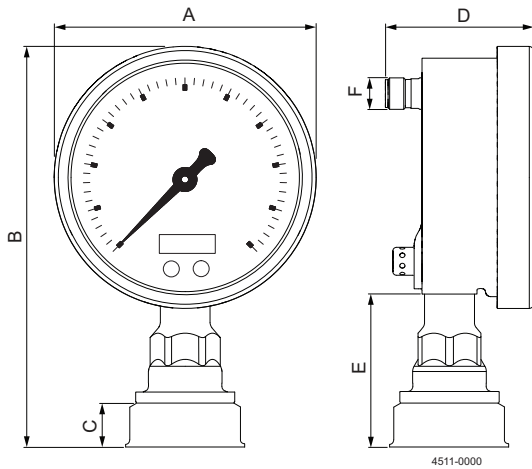
**Standard range**

The Alfa Laval EPG is as standard offered with a DN38 connection, a turnable scale and a digital display with two push buttons for easy setup. Setup is done through the two push buttons and the digital display, this offers the user the possibility to customize the digital and analogue output from the sensor making the EPG ideal for more than just simple pressure monitoring but also pressure switch and pump monitoring applications. Especially in these applications the unique led indication, imbedded in the outer circumference of the scale, offers the possibility to display pressure pulsation, pressure trends and actual set point of the pressure switch locally.

**Working principle**

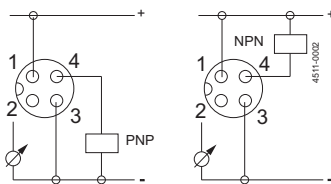
The Alfa Laval EPG is based on a internal ceramic pressure sensor which together with the metal diaphragm ensures a proper hygienic process connection. In order to offer the many advanced setup possibilities and the intelligent scale the EPG uses an advanced microprocessor. The Microprocessor controls the embedded led indication in the scale, the output signals and as well the movement of the physical dial. The turn able dial is approved for IP69K, which ensures maximum tightness between the dial and the housing, offering a life time tight closure.

**Dimensions (mm)**



| A   | B   | C  | D  | E    | F        |
|-----|-----|----|----|------|----------|
| 100 | 181 | 20 | 57 | 87.5 | M12 Plug |

**Electrical connections**

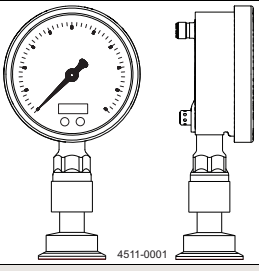


|              |   |
|--------------|---|
| PIN 1        | Ub+                                       |
| PIN 2        | Ub-                                       |
| PIN 4 (OUT1) | Binary switching output pressure moniting |
| PIN 2 (OUT2) | Analogue output for system pressure       |

Core colours of sockets:

1 = BN (brown), 2 = WH (white), 3 = BU (blue), 4 = BK (black)

Product code: 5634

| Item No.   | PPL<br>EUR | Description                                    |   |
|--|------------|--|---|
| <b>Electronical Pressure gauge with Clamp DN38 (ISO2852) / Clamp DN40 (DIN32676) bottom connection</b> |            |  |   |
| TE67Q111111140   | 876        | -1 to 1.5 bar, dial size 100 mm                |  |
| TE67Q811111140   | 876        | 0 to 2.5 bar, dial size 100 mm                 |   |
| TE67Q711111140   | 876        | -1 to 3 bar, dial size 100 mm                  |   |
| TE67Q211111140   | 903        | 0 to 4 bar, dial size 100 mm                   |   |
| TE67Q911111140   | 876        | 0 to 6 bar, dial size 100 mm                   |   |
| TE67Q311111140   | 876        | 0 to 10 bar, dial size 100 mm                  |   |
| TE67Q411111140   | 876        | 0 to 16 bar, dial size 100 mm                  |   |
| TE67Q511111140   | 876        | 0 to 40 bar, dial size 100 mm                  |   |
| <b>Add-on prices</b>   |            |  | <b>Optional features</b>  |
| TE67Qxxxxxxx1  | 111        | Calibration Certificate                        |   |
| TE67Qxxxxxxx2  | 16         | 3.1 Certificate                                |   |
| TE67Qxxxxxxx3  | 16         | 3.1 Certificate + 3A                           |   |
| TE67Qxxxxxxx4  | 0          | 3A Certificate                                 |   |
| TE67Qxxxxxxx5  | 111        | Calibration Certificate + 3A                   |   |
| TE67Qxxxxxxx6  | 130        | Calibration Certificate + 3.1 Certificate      |   |
| TE67Qxxxxxxx7  | 130        | Calibration Certificate + 3.1 Certificate + 3A |   |