



# ESI - PR3800 - FLUSH DIAPHRAGM PRESSURE SENSOR

PR3800EXV001BG  
4-20mA, -1..0 bar, Tri-clover 1.5", DIN, Ex

- Thick film sensor technology for long service life
- Pressure ranges up to 400 bar
- Up to 250°C media temperature option
- Easy clean flush membrane to prevent clogging



### Product description

Robustly constructed from stainless steel, the PR3800 series incorporates the latest strain gauge technology together with a custom IC amplifier offering excellent stability and accuracy over a long service life. The range offers a stable and accurate output signal of 4-20 mA with options for 0-5 V and 0-10 V. Typical applications include food processing, pharmaceutical, petrochemical, waste water and slurry handling. In these installations the process media may corrode the sensing diaphragm or clog the narrow pressure inlet on a standard transmitter. The flush membrane can be easily cleaned for long term reliability and outstanding performance. For hygienic applications the PR3800 series provides a sanitary grade pressure fitting. Seals are available in a variety of forms and materials for a wide range of applications and can be directly attached to the proposed connection or remotely via stainless steel capillary. Pressure ranges available from 0-200 mbar to

An optional ATEX and IECEx approved versions of this range are available for explosion protection for flammable gases (zone 0), dusts (zone 20) and mining areas (group I M1).

### Specifications

|                        |   |
|------------------------|---|
| Ambient temperature    | -20..85°C   |
| Approvals              | CE, IEC   |
| Atex Approvals         | Ex II 1 D Ex ia IIIC T135 °C Da, Ex II 1 G Ex ia IIC T4 Ga, Ex I M 1 Ex ia I Ma |
| Atex approved          | Yes   |
| Electrical connection  | DIN A 43650   |
| EMC                    | EN61000-6-4, EN61000-6-2  |
| Linearity              | ≤±0.3% BSFL   |
| Materials Wetted Parts | Stainless steel   |
| Media temperature      | -20..85°C   |
| Output                 | 4-20 mA   |

|                                |   |
|--------------------------------|---|
| <b>Overpressure protection</b> | 2 bar   |
| <b>Pressure Range Max</b>      | 0   |
| <b>Pressure Range Min</b>      | -1  |
| <b>Pressure reference</b>      | Gauge   |
| <b>Process connection</b>      | Pipe clamp (tri-clover) 1.5"                          |
| <b>Sensor technology</b>       | Ceramic thick film or Isolated Piezoresistive Silicon |
| <b>Storage temperature</b>     | 5..40°C   |
| <b>Supply voltage</b>          | 13-36 V DC  |