



# ESI - PR3800 - FLUSH DIAPHRAGM PRESSURE SENSOR

PR3820-V001BV  
4-20mA, -1..0 bar, SMS 40mm female, DIN

- 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                |
| 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                  |
| Overpressure protection | 2 bar                    |
| Pressure Range Max      | 0                        |
| Pressure Range Min      | -1                       |

|                            |   |
|----------------------------|---|
| <b>Pressure reference</b>  | Gauge   |
| <b>Process connection</b>  | SMS 40mm  |
| <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  |