



ESI - PR3800 - FLUSH DIAPHRAGM PRESSURE SENSOR

PR3800EXV001BH
4-20mA, -1..0 bar, Tri-clover 2", 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

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|------------------------|---|
| 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 |

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