



ESI - PR3800 - FLUSH DIAPHRAGM PRESSURE SENSOR

PR3822B0010BV
0-10V, 0..10 bar, SMS 40mm female, M12

- 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).

TECHNICAL DATA

| | |
|--------------------------|--------------------------|
| Ambient temperature | -20..85°C |
| Electrical connection | M12 |
| EMC | EN61000-6-4, EN61000-6-2 |
| Linearity | ≤±0.3% BSFL |
| Material of wetted parts | Stainless steel |
| Media temperature | -20..85°C |
| Output | 0-10V |
| Overpressure protection | 15 bar |
| Pressure range max | 10 bar |
| Pressure range min | 0 bar |

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|----------------------------|-------------------------------------------------------|
| Pressure reference | Gauge |
| Process connection | SMS 40mm |
| Sensor technology | Ceramic thick film or Isolated Piezoresistive Silicon |
| Storage temperature | 5..40°C |
| Supply voltage | 13-30 V DC |