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## ESI - PR3800 - FLUSH DIAPHRAGM PRESSURE SENSOR

PR3822-V001BV 0-10V, -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).

## **TECHNICAL DATA**

| Ambient temperature      | -2085°C                  |
|--------------------------|--------------------------|
| Electrical connection    | DIN A 43650              |
| EMC                      | EN61000-6-4, EN61000-6-2 |
| Linearity                | ≤±0.3% BSFL              |
| Material of wetted parts | Stainless steel          |
| Media temperature        | -2085°C                  |
| Output                   | 0-10V                    |
| Overpressure protection  | 2 bar                    |
| Pressure range max       | 0 bar                    |
| Pressure range min       | -1 bar                   |

| Pressure reference  | Gauge   |
|---------------------|---|
| Process connection  | SMS 40mm  |
| Sensor technology   | Ceramic thick film or Isolated Piezoresistive Silicon |
| Storage temperature | 540°C   |
| Supply voltage      | 13-30 V DC  |