ESI - PR3800 - FLUSH DIAPHRAGM PRESSURE SENSOR

PR3820EX0001BR
4-20mA, 0..1 bar, DIN11851 32mm female, 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
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
Overpressure protection	1.5 bar

Pressure Range Max	1
Pressure Range Min	0
Pressure reference	Gauge
Process connection	DIN 11851
Sensor technology	Ceramic thick film or Isolated Piezoresistive Silicon
Storage temperature	5..40°C
Supply voltage	13-36 V DC