



## ESI - PR3800 - FLUSH DIAPHRAGM PRESSURE SENSOR

PR3820BV001BV  
4-20mA, -1..0 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

<b>Ambient temperature</b>	-20..85°C
<b>Electrical connection</b>	M12
<b>EMC</b>	EN61000-6-4, EN61000-6-2
<b>Linearity</b>	≤±0.3% BSFL
<b>Material of wetted parts</b>	Stainless steel
<b>Media temperature</b>	-20..85°C
<b>Output</b>	4-20 mA
<b>Overpressure protection</b>	2 bar
<b>Pressure range max</b>	0 bar
<b>Pressure range min</b>	-1 bar

<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