





Protran®PR3800

SERIES PRESSURE TRANSMITTER
WITH BARRIER SEAL



The PR3800 series offer a range pressure transmitters with integrated or remote barrier seals for applications where direct media contact must be prevented.

In these installations the process media may corrode the sensing diaphragm or clog the narrow pressure inlet on a standard transmitter. For hygienic application the seal 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. Please contact our sales department for information on our full range of process connections.

An optional ATEX certified version of this product is available approved for explosion protection for flammable gases (zone 0), dusts (zone 20) and mining areas (group I M1).

- THICK FILM SENSOR TECHNOLOGY
- PRESSURE RANGES
 0-200mbar TO 0-1000bar
- 4-20mA TWO WIRE OUTPUT
- ACCURACY 0.30% NLHR
- OPTIONAL ATEX APPROVED VERSION (4-20mA ONLY)
- REMOTE CAPILLARY SENSING MODELS
- LARGE FLUSH FACE STAINLESS STEEL MEDIA DIAPHRAGM
- HYGIENIC MODELS FOR FOOD INDUSTRY









PRESSURE RANGES

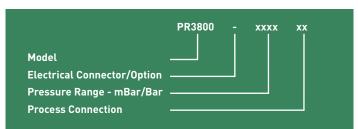
0 - 1bar vac through to 0 - 1000bar, see table below for list of all standard pressure ranges.

Range (bar	Order Code	Range (bar)	Order Code
0-1 Vac	V001	0-25	0025
0-0.2	00.2	0-40	0040
0-0.5	00.5	0-60	0060
0-1	0001	0-100	0100
0-2.5	02.5	0-160	0160
0-4	0004	0-250	0250
0-6	0006	0-400	0400
0-10	0010	0-600	0600
0-16	0016	0-1000	1000

DIMENSIONS (in mm)



ORDERING INFORMATION



ELECTRICAL CONNECTION/OPTION

DIN 43650 plug and socket ATEX certified with DIN43650 plug and socket

PROCESS CONNECTION

BG Pipe Clamp (Tri-clover) 1.5" 316L S/Steel PR3800 ВH Pipe Clamp (Tri-clover) 2" 316L S/Steel PR3800 BJ RJT 38mm female 316L S/St PR3820 DIN11851 female 32mm 316L S/St PR3820 BR SMS 40mm female 316L S/St PR3820 ΒV Homogeniser High Pressure 316L S/St PR3840 ΒZ

EXAMPLE

Output signal 4-20mA DIN 43650 plug and socket Pressure range 0-10barg Pressure connection 1.5" Pipe Clamp flush diaphragm

Correct Part Number

For options not listed contact sales team

Order Code

FX

Order Code

Order Code

PR3800 0010 BG

PR3800-0010BG

SPECIFICATION

PRESSURE REFERENCE

Gauge

OVERPRESSURE

Pressure can exceed the rated pressure range by the multiple below with no damage or change in calibration greater than ±0.5%FS.

1.5x ranges 0-200mbar to 400bar 1.2x ranges 0-600bar to 1000bar

OUTPUT SIGNAL

4-20 mA (2 wire configuration) as standard. Optional outputs available are: 0-5 Vdc (4 wire),

0-10 Vdc (4 wire)

ZERO OFFSET AND SPAN TOLERANCE

±5%FS zero adjustment with easy access trimming potentiometers.

SUPPLY VOLTAGE

Measured across supply terminals on connector plug 13-36Vdc for 4-20mA versions 13-30Vdc for 0-5Vdc and 0-10Vdc versions

PROTECTION OF SUPPLY VOLTAGE

Protected against supply voltage reversal up to 50Vdc

ACCURACY (NON LINEARITY, HYSTERESIS & REPEATABILITY)

±0.30% FS. Typical max. Best fit straight line.

PRESSURE MEDIA

All fluids compatible with 316L stainless steel.

OPERATING TEMPERATURE RANGE

Ambient/Media: -20°C to +85°C Storage: +5°C to +40°C

TEMPERATURE FEFECTS

±2.5%FS total error band for -20°C to +70°C Typical thermal zero and span coefficients ±0.04%FS/°C

ATEX APPROVAL (4-20mA version only)

Ex II 1 G Ex ia IIC T4 Ga (zone 0) Ex II 1 D Ex ia IIIC T135°C Da (zone 20) EX I M 1 Ex ia I Ma (group I M1)

ATEX SAFETY VALUES

Ui = 28V Ii = 119mAPi = 0.65WLi = 0.1Ci = 62nF

Temperature range = -20°C to +70°C

Max. cable length = 105m

ELECTROMAGNETIC COMPATABILITY

Emissions: EN61000-6-4 Immunity: EN61000-6-2

PRESSURE CONNECTION

Please contact our sales department for information on our full range of process connections.

ELECTRICAL CONNECTION

Mating socket with screw terminal connections to DIN 43650, rated IP65. Option: flying lead with optional cable length

DISCLAIMER: ESI Technology Ltd operates a policy of continuous product development. We reserve the right to change specification without prior notice. All products manufactured by ESI Technology Ltd are calibrated using precision calibration equipment with traceability to international standards

