



- UP TO 300°C MEDIA TEMPERATURE
- 1/2" BSP WITH FLUSH DIAPHRAGM
- 316L STAINLESS STEEL MEMBRANE
- HIGH STABILITY AND REPEATABILITY
- SUPPLY VOLTAGE 13-36VDC
- ALL STAINLESS STEEL HOUSING
- 4-20 mA TWO-WIRE OUTPUT
- ZERO + SPAN ADJUSTMENT ON-SITE
- RANGES 0-10bar TO 0-400bar
- INTRINSICALLY SAFE MODELS
- CE MARKED

DESCRIPTION

The PR3860 pressure transmitter has been designed to meet the requirements of the majority of industrial pressure measurement applications where a hygienic flush diaphragm connection is required.

Robustly constructed from stainless steel this range of pressure transmitters incorporates the latest strain gauge technology together with a custom IC amplifier offering excellent stability and accuracy over a long service life. Output options include 0-5Vdc, 0-10Vdc and 0-20mA.

This transmitter is particularly suitable for use with high viscosity materials. Typical applications include food processing, pharmaceutical, petrochemical, waste water and slurry handling. The flush membrane can be easily cleaned for long term reliability and outstanding performance.

The PR3860 offers a stable and accurate output signal of 4-20mA with options for 0-5Vdc, 0-10Vdc, 0-20mA and other output signals.

Electrical connection is via a detachable DIN connector allowing easy access to zero and span adjustment.

In addition to the standard 1/2"BSP connection optional 1" BSP and 1/2"NPT male flush diaphragm process connections are also available.

Pressure ranges available from 0-10bar to 0-400bar.

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SPECIFICATION

PRESSURE RANGES:

0 to 10bar through to 400 barG, see table below for list of all standard pressure ranges.

OVERPRESSURE:

Pressure can be exceeded by 1.5x full scale range with no damage or change in calibration greater than ±0.5%FS.

OUTPUT SIGNAL:

4-20 mA (2 wire configuration) as standard. 0-5V and 0-10V available on request.

ZERO OFFSET AND SPAN SETTING:

±0.08mA (at room temperature)
±5%FS zero adjustment with easy access trimming potentiometers.

SUPPLY VOLTAGE:

Measured across supply terminals on connector plug
13-36Vdc for 4-20mA versions

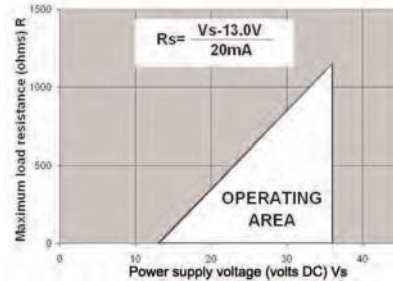
REVERSAL OF SUPPLY VOLTAGE:

Protected against supply voltage reversal up to 50Vdc

LOAD DRIVING CAPABILITY

(4-20mA version only):

Calculate maximum load see chart below.
e.g. with supply voltage load of 36vdc, maximum load is 1150ohms.



COMBINED NON-LINEARITY AND HYSTERESIS:

± 0.30 % FS best fit straight line definition.

REPEATABILITY:

± 0.1 % FS defined as maximum error between 3 consecutive pressure cycles.

LONG TERM STABILITY:

± 0.2 % FS/year non-cumulative

PRESSURE MEDIA:

All fluids compatible with 316L stainless steel.

OPERATING TEMPERATURE RANGE:

Media: 0°C to 300°C

Sensor and electronics thermally insulated from media temperature.

Operating : -20° to +85°C

Storage: 5° to +40°C

TEMPERATURE EFFECTS:

±2.5%FS total error band for -20° to 70°C

Typical thermal zero and span coefficients

±0.04%FS/°C

ELECTROMAGNETIC-COMPATIBILITY:

Emissions EN61000-6-4

Immunity EN61000-6-2

Certification CE marked

PRESSURE CONNECTION:

1/2" BSP Male with flush 316L diaphragm.

ELECTRICAL CONNECTION:

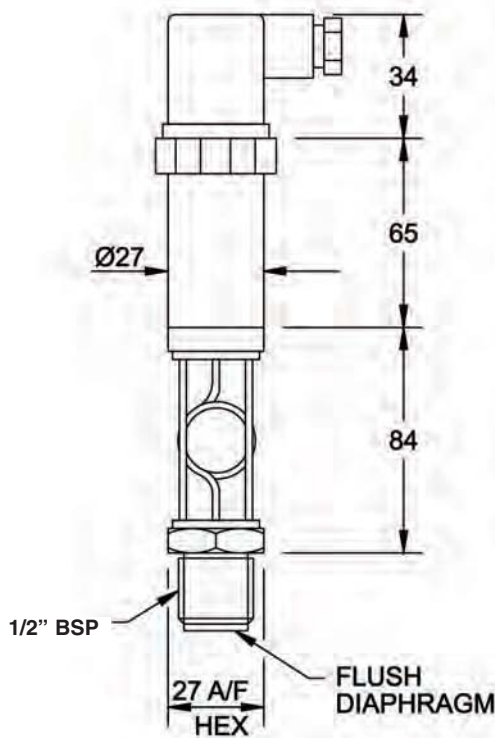
Mating socket with screw terminal connections to DIN 43650, rated IP65.

Option: flying lead with optional cable length

WEIGHT:

260 grams for standard unit with DIN43650 socket fitted.

DIMENSIONS (in mm)



ELECTRICAL CONNECTION

Pin No.	Designation
1	+supply
2	4-20mA signal
3	earth

ORDER DETAILS

State model number and pressure range required:-
e.g. PR3860 0-10barg

Model No.	DESCRIPTION
PR3860	4-20mA, 2 WIRE

PRESSURE RANGES

0 - 10 barg	0 - 100 barg
0 - 16 barg	0 - 160 barg
0 - 25 barg	0 - 250 barg
0 - 40 barg	0 - 400 barg
0 - 60 barg	

CALIBRATION

All products manufactured by Ellison Sensors are calibrated using precision calibration equipment with traceability to international standards.

Ellison Sensors operates a policy of continuous product development. We reserve the right to change specification without prior notice.

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