# Pi600R Series PRESSURE SENSOR

## **Stainless Steel Pressure Transducer**



- Pressure Ranges –1 to 700bar
- Gauge or Absolute Versions
- Sealed to IP67 with M12 connector
- Excellent Chemical
- and Abrasion Resistance
- Rugged Construction
- Wide Choice of Electrical Outputs
- Excellent Performance/Price Ratio

#### **Options Available**

Interim Pressure Ranges (Consult Factory)

Manufactured from Different Materials for Different Application Compatibility

Special Output Scaling (Consult Factory)

M12 Connector

Improved accuracy (NL&H) - <±0.10% or <±0.05%/span BFSL

Improved accuracy (TZS) - <±0.02% or <±0.01% /span/ ${\rm C}$  (Thermal Zero Shift)

Supplied With Any Instrumentation and Calibrated as a Complete System with Traceable Certificate

### DESCRIPTION

The Pi600R series of pressure sensors has been engineered for the measurement of liquid and gas pressures in a diverse range of industrial and specialised applications, including:- Hydraulics, Pneumatics, Agriculture, Marine, Sewage, Gas, Medical, Chemical, Food Processing, Barometers, Dataloggers etc.

Pressure ranges between -1 and 700bar are available in gauge or absolute models with a wide choice of electrical output signals to meet operational requirements.

Constructed from stainless steel with a ceramic diaphragm, the Pi600R series of transducers are extremely rugged yet of compact design.



Construments IIIIII. Messurement > Control > Data Acquisition UK / Europe / Office Tel: +44 (0)845 9000 601 Fax: +44 (0)845 9000 602 info@omniinstruments.co.uk East Kingsway Business Centre, Mid Craigie RD, Dundee, Scotland UK.

USA / Canada Office Tel +1-866-849-3441 Fax +1-866-628-8055 info@omniinstruments.net PO Box 84 Arroyo Grande California, 93420 Australia / Asia Pacific Office Tel +61 (0)282 442 363 Fax +61 (0)294 751 278 info@omniinstruments.com.au 18 Welcome Street Parkes NSW 2870

www.omniinstruments.co.uk

## Pi600R Series PRESSURE SENSOR

### **SPECIFICATION**

Characteristics	Pi	605	Pi642	Units
Pressure Ranges:	-1, -1 - +1, 2 , 5 , 6 , 10 , 16 , 20 , 40 , 60 , 100 , 150 , 200 , 300 , 400 , 500 , 600 , 700			Bar gauge
Rated Output	0.5-4.5V		4-20mA	
Excitation Voltage	5V(regulated		10-32 (unregulated)	VDC
Input Current	<3		N/a	mA
Output Config	3 wire		2 wire	No. of wires
Accuracy	0.25	(<0.10 or <0.05	optional )	+/- % of rated O/P
Zero balance	<0.1			+/- % of rated O/P
Safe Overpressure	150			Of Pressure Range
Temperature range	Compensated +20 to +80			C
	Operating	-20 to +100		C
Temperature Effect	On Span <0.010			+/- of Output/℃
	On Zero	<0.040(<0.020	Or<0.010 optional)	+/- of Rated Output/℃
Stability	<0.1 over 12 months			+/- of Rated Output
Input Resistance	1100		n/a	ohms
Output Resistance	1100		n/a	ohms
Insulation	>500			Meg ohms at 50vDC
Media Compatability	Any media Compatible with 316 L St St, Alumina & Seal of choice			
Weight	100			Grams
Protection	I.P. 67 with M12 connector			

#### Pi605R M12 Connections Rear View



The connection above shows the rear view of the connector with screw terminals. If a yellow 2 metre lead is supplied then the brown wire is used for the +ve supply and the blue wire for the 0.5-4.5v signal. The white wire is connected to the common or ground.





The connection above shows the rear view of the connector with screw terminals. If a yellow 2 metre lead is supplied then the brown wire is used for the supply and the white for the signal.

In a typical 4-20mA loop the Pin1 +V sup is connected to the positive side of the power supply. Pin 2 4-20mA O/P is connected to the +ve input terminal of the data logger or display, and the negative input terminal of the logger/ display is connect to the -ve side of the power supply. Some devices may need a shunt resistor across the input terminals. A 249 ohm shunt resistor will convert a 4-20mA signal to a 1-5v signal.



www.omniinstruments.co.uk

UK / Europe / Office Tel: +44 (0)845 9000 601 Fax: +44 (0)845 9000 602 info@omniinstruments.co.uk East Kingsway Business Centre, Mid Craigie RD, Dundee, Scotland UK. USA / Canada Office Tel +1-866-849-3441 Fax +1-866-628-8055 info@omniinstruments.net PO Box 84 Arroyo Grande California, 93420 Australia / Asia Pacific Office Tel +61 (0)282 442 363 Fax +61 (0)294 751 278 info@omniinstruments.com.au 18 Welcome Street Parkes NSW 2870