

# 9000 Series CANbus Digital Output Pressure Transducer

PRESSURE TRANSDUCERS

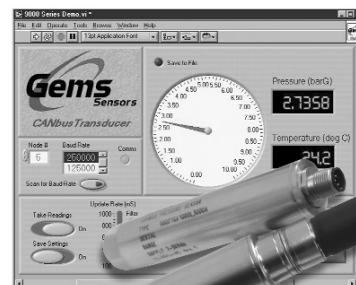
HIGHLY ACCURATE

- ▶ High accuracy over wide operating temperature range  
T.E.B.  $\pm 0.2\%$  Span,  $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$
- ▶ Excellent long term stability  $<0.05\%$  per year, non-cumulative
- ▶ Small size: 25mm diameter, 120mm length
- ▶ Isolated high speed CAN interface - ISO11898
- ▶ Programmable update rate
- ▶ Standard application interface - CANopen DS301 & DSP404
- ▶ In system programmable
- ▶ Self diagnostics - bridge fault detection, hours in service, watchdog, last calibration date, next calibration date
- ▶ Unsurpassed customer support - Rapid Development Kit

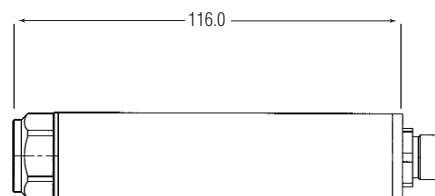
The 9000 CANBUS pressure transducer meets the demands of the test and measurement industry, including automotive and marine applications, with high levels of accuracy over a wide temperature range. The digital output in engineering units eliminates the need for user system calibration.

Designed to have a wide input voltage range, input to output isolation, immunity to noise and self-diagnostics the 9000 is ideal for electrically noisy environments or applications where earthing or grounding can be a problem.

Through the standard CANopen protocol multiple devices can be used on a single bus reducing user cabling.



## Dimensions (in mm)



## Specifications

### Input

<b>Pressure Range</b>	0 to 1 - 0 to 690bar Gauge or Absolute
<b>Proof Pressure</b>	2 x FS (ranges $<400b$ ) 1.5 x FS ( $\geq 400b$ )
<b>Burst Pressure</b>	$>35$ x FS for ranges $\leq 6bar$ $>15$ x FS for ranges $\geq 100bar$ $>4$ x FS for ranges $\leq 690bar$

**Supply Voltage** 7-30Vdc, 0.6W

### Performance

<b>Long Term Stability</b>	Zero drift $<0.05\%$ Full range out put non cumulative
<b>Accuracy</b>	$\pm 0.1\%$ Full Scale
<b>Total Error Band</b>	$\pm 0.2\%$ Full Scale
<b>Compensated Temperature</b>	$-40^{\circ}$ to $85^{\circ}\text{C}$
<b>Operating Temperature</b>	$-40^{\circ}$ to $85^{\circ}\text{C}$

### Mechanical Configuration

<b>Pressure Port</b>	(see table below)
<b>Wetted Parts</b>	17-4 PH or Inconel
<b>Electrical Connection</b>	5 pin M12 x 1, cable to IP68, others on request
<b>Enclosure</b>	SS
<b>Vibration</b>	$<0.08\%$ FRO/g 20Hz to 2000Hz, 35g
<b>Shock</b>	Withstands free fall to IEC 68-2-32 procedure 1
<b>Approvals</b>	CE Emissions EN 61000-6-4, Immunity EN 61000-6-2
<b>Weight</b>	$<180$ grams

### Connection Code

L	M12	(+)	(-)	Shield	CAN Hi	CAN Lo	
		2	3	1	4	5	

**How to Order**

Use the **bold** characters from the chart below to construct a product code

Series **9000** 1 G B10 OK L 3 000 A

Output 1 - Canbus

Datum G - Gauge  
A - Absolute  
S - Sealed Gauge

Pressure Ranges - bar

<b>A10</b>	1	<b>B10</b>	10	<b>C10</b>	100
<b>A16</b>	1.6	<b>B16</b>	16	<b>C16</b>	160
<b>A25</b>	2.5	<b>B25</b>	25	<b>C25</b>	250
<b>A40</b>	4	<b>B40</b>	40	<b>C40</b>	400
<b>A60</b>	6	<b>B60</b>	60	<b>C60</b>	600
				<b>C69</b>	690

Pressure Adaptor

Performance Code Static/Thermal 0.05/0.2

CE Marked

Electrical Connection L - M12 Industrial 5 pin

Stainless Steel	Inconel	Description
<b>00</b>	<b>OK</b>	G1/4 Internal
<b>AO</b>	<b>AK</b>	G1/4 AT External
<b>KO</b>	<b>KK</b>	7/16-20 UNF-3A External
<b>MO</b>	<b>MK</b>	M14 x 1.5 External
<b>PO</b>	<b>PK</b>	G1/2 AT External
<b>BO</b>	<b>BK</b>	1/4-18 NPT External
<b>GO</b>	<b>GK</b>	1/2-14 NPT External
<b>SO</b>	<b>SK</b>	7/16-20 UNJF-3A, MS 33656F4

**Accessories**

Order Code	Description
557002	Restrictor Kit
499877-1000	Saddle Mounting Kit
562320-02M0	2m, unscreened, 5 core, cable - Terminated to M12 male connector
562320-05M0	5m, unscreened, 5 core, cable - Terminated to M12 male connector
562321	Rapid Development Kit - including 9V battery, M12 to 9 way D type cable terminated assembly, USB to CAN Interface, Gems start up CD ROM
562293	User manual
557749	M12, 5 pole duo field wireable connector with screw terminals