

# 2800 Series High Performance Industrial Pressure Transmitters

PRESSURE  
SENSORS

CVD TECHNOLOGY

PRESSURE TRANSDUCERS

- ▶ 1% Error band over -30° to 100°C
- ▶ Customised options
- ▶ Ranges from 0.5 to 400bar
- ▶ Choice of outputs

The 2800 series features stability and enhanced accuracy in a variety of enclosure options for demanding submersible and industrial applications. The 2800 features proven CVD sensing technology, an ASIC and modular packaging to provide a sensor with high performance over a wide temperature range. Modular construction allows customised options to be easily accommodated

## Specifications

Input	
<b>Pressure Range</b>	Vacuum to 400bar G (6000psi) 0 - 25bar Absolute
<b>Proof Pressure</b>	2 x Full Scale (FS) (1.5 x Fs for 400bar, >= 5000psi)
<b>Burst Pressure</b>	>35 x FS <= 6bar (100psi) >20 x FS >=60bar (1000psi) >5 x FS <= 400bar (6000psi)
<b>Fatigue Life</b>	Designed for more than 100 million FS cycles
Performance	
<b>Long Term Drift</b>	0.2% FS/year (non-cumulative)
<b>Accuracy</b>	0.1% FS max.
<b>Thermal Error</b>	1% FS max.*
<b>Compensated Temperatures</b>	-30° to +100°C (-20° to +212°F)
<b>Operating Temperatures</b>	-40° to 125°C (-40° to 260°F) for elec. codes C and D -20° to 50°C (-5° to 125°F) for elec. code M
<b>Zero Tolerance</b>	1% of span
<b>Span Tolerance</b>	1% of span
Mechanical Configuration	
<b>Pressure Port</b>	See ordering chart
<b>Wetted Parts</b>	17-4 PH Stainless Steel
<b>Electrical Connection</b>	See ordering chart
<b>Enclosure</b>	316 ss, 17-4 PH ss IP40 for elec. code C Gauge Datum IP65 for elec. code C Absolute Datum IP66 for elec. code D IP68 for elec. code M
<b>Vibration</b>	35g peak sinusoidal, 5 to 2000Hz
<b>Acceleration</b>	100g steady acceleration in any direction 0.032% FS/g for 1bar (15psi) range decreasing logarithmically to 0.0007% FS/g for 400bar (6000psi) range.
<b>Shock</b>	Withstands free fall to IEC 68-2-32 procedure 1
<b>Approvals</b>	CE
<b>Weight</b>	Approx. 100grams (additional cable; 75g/m)

\* Standard ranges only

## Individual Specifications

Voltage Output units	
<b>Output</b>	See ordering chart
<b>Supply Voltage (Vs)</b>	1.5Vdc above FS output to 35Vdc @ 6mA
<b>Supply Voltage Sensitivity</b>	0.01% FS/Volt
<b>Min. Load Resistance</b>	(FS output / 2) Kohms
<b>Current Consumption</b>	approx 6mA at 7.5V output
Current Output units	
<b>Output</b>	4-20mA (2 wire)
<b>Supply Voltage (Vs)</b>	24Vdc, (7-35Vdc) Above 100°C supply limited to 24Vdc
<b>Supply Voltage Sensitivity</b>	0.01% FS/Volt
<b>Max. Loop Resistance</b>	(Vs-7) x 50ohms



Connection Code		Current units (4-20mA)			Voltage units				
		(+)	(-)	EARTH	IN+	COM	OUT+	EARTH	
C	"10-6 Bayonet"	PIN	A	B	E	A	C	B	E
D	"Cable"		R	BL	DRAIN	R	W	Y	DRAIN
M	"Immersible"		R	BL	DRAIN	R	W	Y	DRAIN

**Cable Legend:** R = Red  
BL = Blue  
W = White  
Y = Yellow

**How to Order**

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

**2800 B G A60 01 A 3 005 A**

**Series** \_\_\_\_\_ **2800**

**Output** \_\_\_\_\_

**B** - 4-20mA      **C** - 1-6V      **J** - 0.5-5.5V  
**D** - 1-11V      **R** - 0-5V  
**H** - 1-5V      **S** - 0-10V

**Pressure Datum** \_\_\_\_\_

**A\*** - Absolute      **G** - Gauge  
\*Max absolute range is 25bar.

**Pressure Range** - bar (additional intermediate pressure ranges available - consult factory)

<b>A10</b> - 0-1	<b>B25</b> - 0-25	<b>Vac</b> = -1 bar
<b>A16</b> - 0-1.6	<b>B40</b> - 0-40	<b>1A0</b> - Vac-0
<b>A25</b> - 0-2.5	<b>B60</b> - 0-60	<b>1A6</b> - Vac-0.6
<b>A40</b> - 0-4	<b>C10</b> - 0-100	<b>2A5</b> - Vac-1.5
<b>A60</b> - 0-6	<b>C16</b> - 0-160	<b>4A0</b> - Vac-3
<b>B10</b> - 0-10	<b>C25</b> - 0-250	<b>6A0</b> - Vac-5
<b>B16</b> - 0-16	<b>C40</b> - 0-400	<b>1B0</b> - Vac-9
		<b>1B6</b> - Vac-15
		<b>2B5</b> - Vac-24
		<b>4B0</b> - Vac-39

**Pressure Port** \_\_\_\_\_

<b>01</b> - G1/4 External	<b>08</b> - 1/8-27 NPT External
<b>02</b> - 1/4-18 NPT External	<b>09</b> - G1/8 Internal
<b>03</b> - G1/2 Manometer	<b>00</b> - G1/4 Internal
<b>04</b> - 7/16-20UNF to SAE J514	<b>0A</b> - R1/4 External
<b>05</b> - G1/4 Ext. Soft Seal	<b>19</b> - Nose Cone
	others - consult factory

**Electrical Connection** \_\_\_\_\_

**C** - Fixed Plug Size 10-6 Mating Plug Not Supplied  
**D** - Weatherproof cable IP66  
**M** - Immersible Max depth 200 metres

**Performance Code**  
Accuracy/Thermal  
**A** - 0.1%/1%

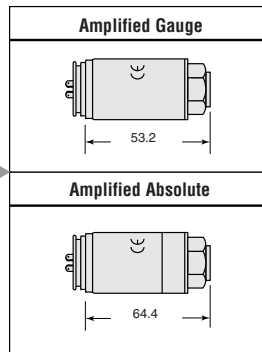
**Cable Length**  
001 = 1 metre cable  
099 = 99 metres cable  
Applies to code D & M electrical connection only  
Code C = 000

**Apparatus Protection**  
RFI Protected CE Mark

**Dimensions (in mm)**

**2800 Series**

<b>10-6 or 8-4 Mil-C Connector</b>	
10-6 Code "C"	
8-4 Code "1"	
<b>IP66 Cable</b>	
Code "D"	
<b>Immersible Cable</b>	
Code "M"	



Maximum diameter 27.3mm

<b>G 1/4 Internal</b>	
Code "00"	
<b>G 1/4 External</b>	
Code "01"	
<b>1/4 - 1/8 NPT</b>	
Code "02"	
<b>G 1/2 Manometer</b>	
Code "03"	
<b>7/16-20 UNF-2A</b>	
Code "04"	
<b>G 1/4 Soft Seal</b>	
Code "05"	
<b>1/8-27 NPT</b>	
Code "08"	
<b>R 1/4</b>	
Code "0A"	
<b>G 1/8 Internal</b>	
Code "09"	

<b>Nose Cone - Black Acetal</b>	
Code "19"	
<b>Nose Cone Sink Weight</b>	
Code "29"	

Others - Consult factory

Code "M"