

## 2200 Series / 2600 Series - Universal Industrial Pressure Transducers

PRESSURE  
SENSORS

CVD TECHNOLOGY

PRESSURE TRANSDUCERS

- ▶ Gauge, absolute, vacuum and compound pressure models available
- ▶ Submersible, general purpose and wash down enclosures
- ▶ High stability achieved by CVD sensing element
- ▶ Millivolt, voltage and current output models

The 2200 series features stability and accuracy in a variety of enclosure options. The 2600 series extends the packaging options via an all welded stainless steel back end for demanding submersible and industrial applications. The 2200 and the 2600 feature proven CVD sensing technology, an ASIC (amplified units), and modular packaging to provide a sensor line that fits most applications and can easily accommodate specials whilst not sacrificing high performance.

### Specifications

<b>Input</b>	
<b>Pressure Range</b>	Vacuum to 400 bar G (6000 psi) 0 - 25 bar Absolute
<b>Proof Pressure</b>	2 x Full Scale (FS) (1.5 x Fs for 400 bar, >= 5000 psi)
<b>Burst Pressure</b>	>35 x FS <= 6 bar (100 psi); >20 x FS >=60 bar (1000 psi); >5 x FS <= 400 bar (6000 psi)
<b>Fatigue Life</b>	Designed for more than 100 million FS cycles
<b>Performance</b>	
<b>Long Term Drift</b>	0.2% FS/year (non-cumulative)
<b>Accuracy</b>	0.25 % FS typical (optional 0.15% FS)
<b>Thermal Error</b>	1.5% FS typical (optional 1% FS)
<b>Compensated Temperatures</b>	-20° to 80° C (-5° to 180° F)
<b>Operating Temperatures</b>	-40° to 125° C (-40° to 260° F) for elec. codes A, B, C, 1 -20° to 80° C (-5° to 180° F) for elec. codes 2, D, G, 3 -20° to 50° C (-5° to 125° F) for elec. codes F, M, P
<b>Zero Tolerance</b>	1% of span
<b>Span Tolerance</b>	1% of span
<b>Mechanical Configuration</b>	
<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 IP65 for elec. codes A, B, C, D, G, 1, 2, 3 IP67 for elec. code "F" IP68 for elec. code M IP30 for elec. code "3" with flying leads
<b>Vibration</b>	35g peak sinusoidal, 5 to 2000 Hz
<b>Acceleration</b>	100g steady acceleration in any direction 0.032% FS/g for 1 bar (15 psi) range decreasing logarithmically to 0.0007% FS/g for 400 bar (6000 psi) range.
<b>Shock</b>	Withstands free fall to IEC 68-2-32 procedure 1
<b>Approvals</b>	CE
<b>Weight</b>	approx. 100 grams (additional cable; 75 g/m)



CE

UL US



CE

UL US

### Individual Specifications

<b>Millivolt Output units</b>	
<b>Output</b>	100 mV +/-1 mV
<b>Supply Voltage (Vs)</b>	10 Vdc (15 Vdc max.) Regulated
<b>Bridge resistance</b>	2600-6000 ohms
<b>Voltage Output units</b>	
<b>Output</b>	See ordering chart
<b>Supply Voltage (Vs)</b>	1.5 Vdc above FS output to 35 Vdc @ 6 mA
<b>Supply Voltage Sensitivity</b>	0.01% FS/Volt
<b>Min. Load Resistance</b>	(FS output / 2) Kohms
<b>Current Consumption</b>	approx 6 mA at 7.5V output
<b>Current Output units</b>	
<b>Output</b>	4-20 mA (2 wire)
<b>Supply Voltage (Vs)</b>	24 Vdc, (7-35 Vdc) Above 100°C supply limited to 24 Vdc
<b>Supply Voltage Sensitivity</b>	0.01% FS/Volt
<b>Max. Loop Resistance</b>	(Vs-7) x 50 ohms

**ISO**  
9001

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Connection Code			mV Units				Current units (4-20mA)			Voltage units			
A, B, G	Industrial DIN	PIN	IN+	OUT+	OUT-	IN-	(+)	(-)	EARTH	IN+	COM	OUT+	EARTH
C	"10-6 Bayonet"	PIN	A	B	C	D	A	B	E	A	C	B	E
D	"cable"		R	Y	BL	G	R	BK	DRAIN	R	BK	W	DRAIN
F	"IP 67 cable"		R	Y	BL	G	R	BK	DRAIN	R	BK	W	DRAIN
M	"Immersible"		R	Y	BL	W	R	BL	DRAIN	R	W	Y	DRAIN
1	"8-4 Bayonet"	PIN	A	B	C	D	A	B	D	A	C	B	D
2	"cable"		R	W	G	BK	R	BK	DRAIN	R	BK	W	DRAIN
3	"conduit & cable"		R	W	G	BK	R	BK	DRAIN	R	BK	W	DRAIN

**Cable Legend:**

R = Red  
BL = Blue  
BK = Black  
W = White  
G = Green  
Y = Yellow

**How to Order**

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

**2200**   **B**   **G**   **A60**   **01**   **A**   **3**   **U**   **A**

Series 2200   2600

Output A - 100 mV   C - 1-6V   J - 0.5-5.5V  
B - 4-20mA   D - 1-11V   R - 0-5V  
H - 1-5V   S - 0-10V

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

Pressure Range - bar (Additional intermediate pressure ranges available.  
 Please 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 01 - G1/4 External   08 - 1/8-27 NPT External  
02 - 1/4-18 NPT External   09 - G1/8 Internal  
03 - G1/2 Manometer   00 - G1/4 Internal  
04 - 7/16-20UNF to SAE J514   0A - R1/4 External  
05 - G1/4 Ext. Soft Seal   19 - Nose Cone (2600 Only)

Others - Consult Factory

Electrical Connection 2200 Series   2600 Series  
**A** - Industrial DIN Mating Connector Supplied  
**B** - Industrial DIN Mating Connector Not Supplied  
**2** - Cable Nema 4 USA  
**D** - Cable Weatherproof IP65 Europe  
**F** - Cable Gland Metal IP67  
**C** - Fixed Plug Size 10-6 Mating Plug Not Supplied  
**G** - Fixed Plug To DIN 43650 Mating Plug Supplied  
**M** - Immersible Max. depth 200 metres  
**1** - Fixed Plug Size 8-4 Mating Plug Not Supplied  
**3** - Conduit Connector 1/2NPT Ext. 1M Cable  
 Where electrical connection **-3** and cable length **-U** occur in part number, the unit will be supplied with flying leads (IP30)

Apparatus Protection  
**2** - mV Transient Protection CE Mark  
**3** - Amplified RFI Protected CE Mark


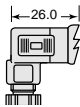
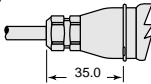
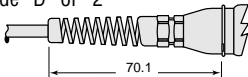
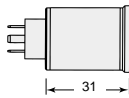
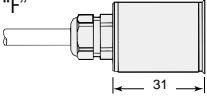
Performance Code  
 Accuracy/Thermal  
**A** - .25%/1.5%  
**B** - .15%/1.0%

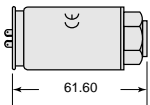
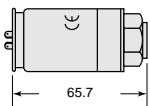
Cable Length  
 (Max length on 2200  
 G - 10 metres)  
**U** - No Cable Fitted  
**D** - 1 Metre  
**E** - 3 Metres  
**F** - 5 Metres  
**G** - 10 Metres  
**H** - 15 Metres  
**J** - 20 Metres  
**K** - 25 Metres  
**L** - 30 Metres  
**M** - 40 Metres  
**N** - 50 Metres  
**P** - 75 Metres  
**Q** - 100 Metres  
**R** - 125 Metres  
**S** - 150 Metres

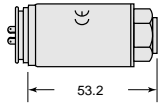

Code	Length (M)
4	170
5	200
6	225

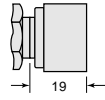
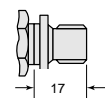
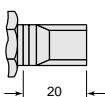
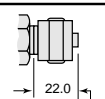
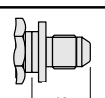
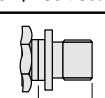
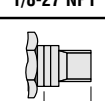
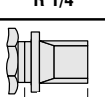

## Dimensions (in mm)


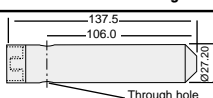
### 2200 Series

<b>Industrial DIN Connector</b>
Code "B"

<b>Industrial DIN Connector (mate supplied)</b>
Code "A"

<b>IP67 Cable</b>
Code "F"

<b>IP65 or NEMA4 Cable</b>
Code "D" or "2"

<b>Micro DIN Connector</b>
Code "T"

Code "F"




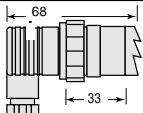
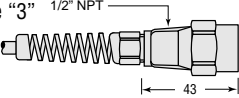
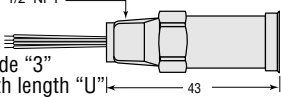

<b>mV Gauge/Absolute Amplified Gauge</b>

<b>Amplified Absolute</b>

Maximum diameter 27.3 mm

<b>mV Gauge/Absolute Amplified Gauge</b>

<b>Amplified Absolute</b>

Maximum diameter 27.3 mm

<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"

### 2600 Series

<b>10-6 or 8-4 Mil-C Connector</b>
10-6 Code "C"

8-4 Code "1"

<b>Large DIN 43650 Plug (mate supplied)</b>
Code "G"

<b>Conduit Connector with Cable</b>
Code "3" 1/2" NPT

<b>Conduit Connector with Flying Leads</b>
1/2" NPT
Code "3" with length "U"

<b>Immersible Cable</b>
Code "M"


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Others - Consult factory