

## 2200 Series / 2600 Series- Universal Industrial 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 while not sacrificing high performance.

### Specifications

<b>Input</b>	
Pressure Range	Vacuum to 400 bar (6000 psi)
Proof Pressure	2 x Full Scale (FS) (1.5 x Fs for 400 bar, >= 5000 psi)
Burst Pressure	>35 x FS <= 6 bar (100 psi); >20 x FS >=60 bar (1000 psi); >5 x FS <= 400 bar (6000 psi)
Fatigue Life	Designed for more than 100 million FS cycles
<b>Performance</b>	
Long Term Drift	0.2% FS/year (non-cumulative)
Accuracy	0.25 % FS typical (optional 0.15% FS)
Thermal Error	1.5% FS typical (optional 1% FS)
Compensated Temperatures	-20° to 80° C (-5° to 180° F)
Operating Temperatures	-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 Amplified units >100°C maximum 24 Vdc supply
Zero Tolerance	1% of span
Span Tolerance	1% of span
<b>Mechanical Configuration</b>	
Pressure Port	see ordering chart
Wetted Parts	17-4 PH Stainless Steel
Electrical Connection	see ordering chart
Enclosure	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. codes M, P IP30 for elec. code "3" with flying leads
Vibration	35g peak sinusoidal, 5 to 2000 Hz
Acceleration	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.
Shock	Withstands free fall to IEC 68-2-32 procedure 1
Approvals	CE
Weight	approx. 100 grams (additional cable; 75 g/m)

### Individual Specifications

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



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Connection Code		mV Units				Current units (4-20mA)				Voltage units			
		IN+	OUT+	OUT-	IN-	(+)	(-)	EARTH	IN+	COM	OUT+	EARTH	
A, B, G	"DIN"	PIN	1	2	3	E	1	2	4	1	2	3	4
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	BL	DRAIN	R	B	W	DRAIN
M, P	"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

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

Pressure Range - psi (see note 3)  
**F15** - 0-15        **G60** - 0-600      **Vac** = -15 psi  
**F30** - 0-30        **H10** - 0-1,000    **1F5** - Vac-0  
**F60** - 0-60        **H15** - 0-1,500    **3F0** - Vac-15  
**G10** - 0-100      **H20** - 0-2,000    **6F0** - Vac-45  
**G15** - 0-150      **H30** - 0-3,000    **1G0** - Vac-85  
**G20** - 0-200      **H40** - 0-4,000    **1G5** - Vac-135  
**G30** - 0-300      **H50** - 0-5,000    **2G0** - Vac-185  
**G50** - 0-500      **H60** - 0-6,000    **3G0** - Vac-285

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        **Others** - Consult  
**05** - G1/4 Ext. Soft Seal        **19** - Nose Cone (2600 Only)    Factory

Electrical Connection  
 2200 Series  
**A** - Mini 4 PIN DIN (Micro) Mating Connector Supplied  
**B** - 4 PIN DIN (Micro) Mating Connector Not Supplied  
**2** - Cable Nema 4 USA  
**D** - Cable Weatherproof IP65 Europe  
**F** - Cable Gland Metal IP67

2600 Series  
**C** - Fixed Plug Size 10-6 Mating Plug Not Supplied  
**G** - Fixed Plug To DIN 43650 Mating Plug Supplied  
**M** - Moulded Cable Immersible Max. (See Note 1)  
**P** - Moulded Detachable Immersible Cable (See note 1/2)  
**1** - Fixed Plug Size 8-4 Mating Plug Not Supplied  
**3** - Conduit Connector 1/2NPT Ext. 1M Cable (See Note 2)

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

Cable Length  
**U** - No Cable Fitted (See Notes 1 and 2)  
**D** - 1 Metre (3 feet)  
**E** - 3 Metres (9 feet)  
**F** - 5 Metres (16 feet)  
**G** - 10 Metres (32 feet)

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

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**Notes:**

- Where electrical connection -**M** is specified, customer must select cable length from Table 1.
- Where electrical connection -**3** or **P** and cable length -**U** occur in part number, the unit will be supplied with flying leads (IP30).
- Additional Pressure Ranges are available. Minimum range 500mb - please consult factory.

**Table 1 - Cable Units**

(2600 Series) (2200 Series select "U" through "G")

Code	Length (M)	Code	Length (M)	Code	Length (M)	Code	Length (M)	Code	Length (M)
U	No Cable Fitted	F	5	K	25	P	75	4	170
		G	10	L	30	Q	100	5	200
D	1	H	15	M	40	R	125	6	225
E	3	J	20	N	50	S	150		

## Dimensions

### 2200 Series

<b>Mini 4 Pin Connector</b>	
Code "B"	
<b>Mini 4 Pin Connector (mate supplied)</b>	
Code "A"	
<b>IP67 Cable</b>	
Code "F"	
<b>IP65 or NEMA4 Cable</b>	
Code "D" or "2"	

### 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>	
Code "3" with length "U" 1/2" NPT	
<b>Moulded, Immersible Cable</b>	
Code "M"	
<b>Detachable Moulded, Immersible Cable</b>	
Code "P"	

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

Maximum diameter 27.3 mm (1.07")

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

Maximum diameter 27.3 mm (1.07")

<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"

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Others - Consult factory