

2800 Series High Performance Industrial Pressure Transmitters

- ▶ 1% Error Band over -30° to 100°C
- ▶ Customised Options
- ▶ Ranges from 0.5 to 400 bar
- ▶ 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 | |
|---------------------------------|---|
| 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 |
| Performance | |
| Long Term Drift | 0.2% FS/year (non-cumulative) |
| Accuracy | 0.10% FS max. |
| Thermal Error | 1% FS max. |
| Compensated Temperatures | -30° to +100°C (-20° to +212° F) |
| Operating Temperatures | -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 Amplified units >100°C maximum 24 Vdc supply |
| Zero Tolerance | 1% of span |
| Span Tolerance | 1% of span |
| Mechanical Configuration | |
| Pressure Port | see ordering chart |
| Wetted Parts | 17-4 PH Stainless Steel |
| Electrical Connection | see ordering chart |
| Enclosure | 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 |
| 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

| Voltage Output units | |
|-----------------------------------|-------------------------------------|
| 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 |
| Current Output units | |
| 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 |



| 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 | BK | DRAIN | R | BK | W | DRAIN |
| M | "Immersible" | | R | BL | DRAIN | R | W | Y | DRAIN |

Cable Legend: R = Red
 BL = Blue
 BK = Black
 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 U 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 25 bar.

Pressure Range - bar

| | | |
|--------------------|--------------------|----------------------|
| 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 2)

| | | |
|--------------------|----------------------|----------------------|
| 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
05 - G1/4 Ext. Soft Seal **19** - Nose Cone

Electrical Connection **C** - Fixed Plug Size 10-6 Mating Plug Not Supplied
D - Weatherproof cable IP66 (see note 1)
M - Moulded Cable Immersible Max. (See Note 1)

Performance Code
 Accuracy/Thermal **A** - .010%/1%

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

Apparatus Protection
 RFI Protected CE Mark

- Notes:
- Where electrical connections **D** or **M** are specified, customer must select cable length from Table 1.
 - Additional Pressure Ranges are available. Please consult factory.

Table 1 - Cable Units

| Code | Length (M) | Code | Length (M) | Code | Length (M) | Code | Length (M) |
|------|-----------------|------|------------|------|------------|------|------------|
| U | No Cable Fitted | F | 5 | K | 25 | P | 75 |
| | | G | 10 | L | 30 | O | 100 |
| D | 1 | H | 15 | M | 40 | R | 125 |
| E | 3 | J | 20 | N | 50 | S | 150 |

Dimensions
2800 Series

| | |
|------------------------------------|--|
| 10-6 or 8-4 Mil-C Connector | |
| 10-6 Code "C" | |
| 8-4 Code "1" | |
| IP66 Cable | |
| Code "D" | |
| Moulded, Immersible Cable | |
| Code "M" | |

| | |
|---------------------------|--|
| Amplified Gauge | |
| Amplified Absolute | |

Maximum diameter 27.3 mm (1.07")

| | |
|---------------------------------|-----------|
| G 1/4 Internal | Code "00" |
| G 1/4 External | Code "01" |
| 1/4 - 1/8 NPT | Code "02" |
| G 1/2 Manometer | Code "03" |
| 7/16-20 UNF-2A | Code "04" |
| G 1/4 Soft Seal | Code "05" |
| 1/8-27 NPT | Code "08" |
| R 1/4 | Code "0A" |
| G 1/8 Internal | Code "09" |
| Nose Cone - Black Acetal | Code "19" |
| Nose Cone Sink Weight | Code "29" |

Code "M"

Immersible