

# 4000 Series - High Temperature, High Performance, Long Term Stability Pressure Transducers

PRESSURE TRANSDUCERS

SPUTTERED THIN FILM

- ▶ Sealed and absolute models
- ▶ Suitable in temperatures up to 230°C (450°F)
- ▶ High stability achieved by sputtered sensing element

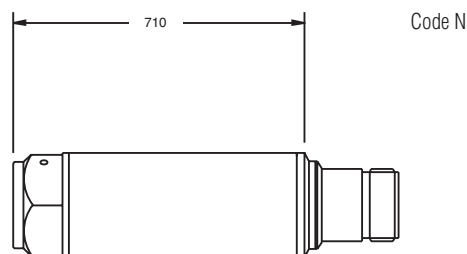
The high temp 4000 series provides exceptional levels of stability and other performance specifications while under excessive temperatures in harsh environments. Using a sputtered sensing element, which achieves a molecular fusion of a strain gauge material, an insulating material, and the 17-4 PH ss sensing element, generates the most stable sensor construction possible. These sputtered sensors are packaged for harsh applications requiring long term service where precise laboratory type measurements are required.



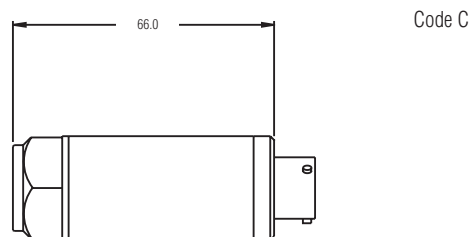
## Specifications

<b>Input</b>	
<b>Pressure Range</b>	0 to 1 - 0 to 690bar
<b>Proof Pressure</b>	2 x Full Scale (FS)
<b>Burst Pressure</b>	>35 x Fs <= 10bar ranges >15 x FS <= 100bar ranges >8 FS <= 690bar ranges
<b>Fatigue Life</b>	3 million FS cycles
<b>Performance</b>	
<b>Output</b>	25 to 38mV (certificate supplied)
<b>Supply Voltage (Vs)</b>	10Vdc Regulated (15Vdc max)
<b>Long Term Drift</b>	0.06% per year non-cumulative
<b>Accuracy</b>	0.1 % FS typical
<b>Thermal Zero Error</b>	.01 %FS/C (.005%/F) typical
<b>Thermal Span Error</b>	.01 %FS/C (.005%/F) typical
<b>Compensated Temperatures</b>	-54° to 200°C (-65° to 390°F)
<b>Operating Temperatures</b>	-54° to 230°C (-65° to 450°F) Conn. Code N -54° to 195°C (-65° to 385°F) Conn. Code C
<b>Zero Tolerance</b>	0mV +/- 10% FS
<b>Bridge Resistance</b>	590-1510 ohms
<b>Mechanical Configuration</b>	
<b>Pressure Port</b>	See ordering chart
<b>Wetted Parts</b>	17-4 PH ss [17-4 PH and 15-7 Mo Stainless Steel <= 1.6bar]
<b>Electrical Connection</b>	Code "N" 5 pins size 10 conn., Code "C" 6 pins size 10 conn.
<b>Enclosure</b>	321 ss, IP65
<b>Vibration</b>	35g peak sinusoidal, 5 to 2000 Hz
<b>Shock</b>	Withstands free fall to EIC 68-2-32 proc. 1
<b>Weight</b>	130grams max

## Dimensions (in mm)



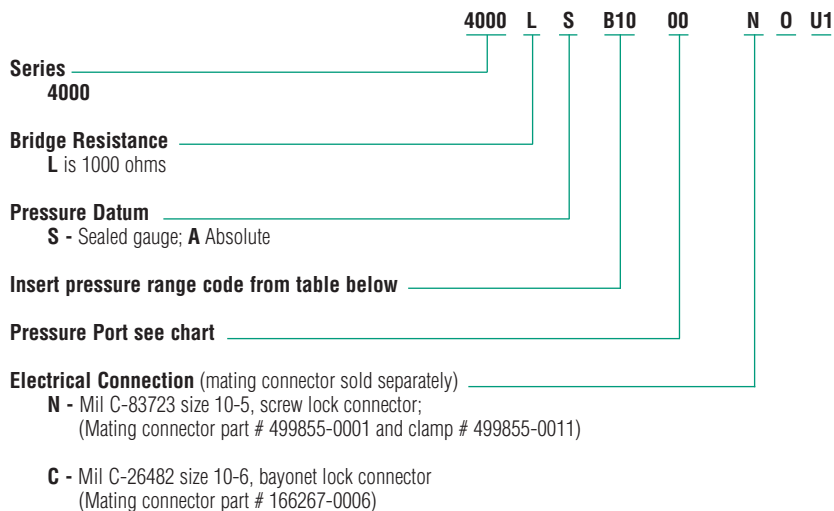
Maximum diameter 25.7mm



Electrical connection	Voltage units	Voltage units				Case Earth
		IN+	OUT+	OUT-	IN-	
C "10-6 Bayonet"	A	B	C	D	F	
N "10-5 Screw"	1	2	3	4	5	

## How to Order

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



4000 Model Bar Ranges	Range Code	Absolute (A) Sealed (S)
0 to 1	<b>A10</b>	<b>A</b>
0 to 1.6	<b>A16</b>	<b>A</b>
0 to 2.5	<b>A25</b>	<b>A</b>
0 to 4	<b>A40</b>	<b>A</b>
0 to 6	<b>A60</b>	<b>A</b>
0 to 10	<b>B10</b>	<b>S, A</b>
0 to 16	<b>B16</b>	<b>S, A</b>
0 to 25	<b>B25</b>	<b>S, A</b>
0 to 40	<b>B40</b>	<b>S, A</b>
0 to 60	<b>B60</b>	<b>S, A</b>
0 to 100	<b>C10</b>	<b>S, A</b>
0 to 160	<b>C16</b>	<b>S, A</b>
0 to 250	<b>C25</b>	<b>S, A</b>
0 to 400	<b>C40</b>	<b>S, A</b>
0 to 600	<b>C60</b>	<b>S, A</b>
0 to 690	<b>C69</b>	<b>S, A</b>

Diaphragm and internal port Inconel, external adaptors are available in stainless steel or Inconel

### Pressure Ports

Code		
SS	Inconel	Description
<b>00</b>	<b>OK</b>	G 1/4 internal
<b>AO</b>	<b>AK</b>	G 1/4 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>	G 1/2 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 33656E4