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

- Sealed and Absolute Models
- Suitable in Temperatures up to 230°C (450°F)
- High Stability Achieved by Sputtered Sensing Element

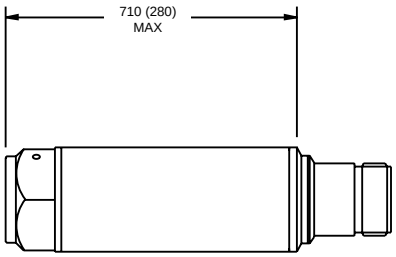
The high temp 4000 series provides exceptional levels of stability and other performance specifications while under excessive temperatures in harsh environments. Using a sputtered sensing element, which achieves a molecular fusion of a strain gauge material, an insulating material, and the 17-4 PH ss 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

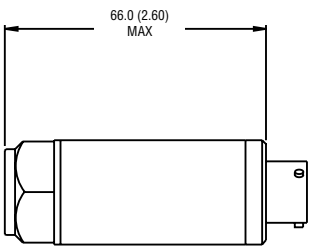
Input	
Pressure Range	4000 series; 1 to 400 bar
Proof Pressure	2 x Full Scale (FS)
Burst Pressure	>35 x Fs <= 10 bar ranges >15 x FS <= 100 bar ranges >8 FS <= 690 bar ranges
Fatigue Life	3 million FS cycles
Performance	
Output	25 to 38mV (certificate supplied)
Supply Voltage (Vs)	10 Vdc Regulated (15 Vdc max)
Long Term Drift	0.06% per year non-cumulative
Accuracy	0.1 % FS typical
Thermal Zero Error	.01 %FS/C (.005%/F) typical
Thermal Span Error	.01 %FS/C (.005%/F) typical
Compensated Temperatures	-54° to 200° C (-65° to 390° F)
Operating Temperatures	-54° to 230° C (-65° to 450° F) Conn. Code N -54° to 195° C (-65° to 385° F) Conn. Code C
Zero Tolerance	0 mV +/- 10% FS
Bridge Resistance	590-1510 ohms
Mechanical Configuration	
Pressure Port	see ordering chart
Wetted Parts	17-4 PH ss [17-4 PH and 15-7 Mo Stainless Steel <= 1.6 bar]
Electrical Connection	Code “N” 5 pins size 10 conn., Code “C” 6 pins size 10 conn.
Enclosure	321 ss, IP65
Vibration	35g peak sinusoidal, 5 to 2000 Hz
Shock	Withstands free fall to EIC 68-2-32 proc. 1
Weight	130 grams max

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

Dimensions mm (in.)



Code N



Code C

Maximum diameter 25.7 mm (1”)

How to Order

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

SELECT: **4000 L S B10 00 N O U1**

1. **4000** series
2. Bridge Resistance: **L** is 1000 ohms
3. Pressure Datum:
   S sealed gauge; **A** absolute
4. Insert pressure range code from table below
5. Pressure Port see chart
6. Electrical Connection (mating connector sold separately)
   N Mil C-83723 size 10-5, screw lock connector; (Mating connector part # 499855-0001 and clamp # 499855-0011)
   C Mil C-26482 size 10-6, bayonet lock connector (Mating connector part # 166267-0006)

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

Pressure Ports	**Description**
Code	
OO	G 1/4 internal
AO	G 1/4 AT external
KO	7/16-20 UNF-3A external
MO	M14 x 1.5 external
PO	G1/2 AT external
BO	1/4-18 NPT external
GO	1/2-14 NPT external
SO	7/16-20 UNJF-3A, MS 33656E4

*For Pressure Port dimensions see page 39