



PRELIMINARY

PERFORMANCE CHARACTERISTICS

($V_s = 5.0 V_{DC}$, $T_A = 25^\circ C$, analog output signal is **ratiometric** to V_s , digital output signal is **not ratiometric** to V_s)

Characteristics	Min.	Typ.	Max.	Units
Total accuracy (-20...85 °C) ⁴			±1.5	%FSS
Response delay ^{5, 6}		2		ms
A/D resolution ⁶		13		bit
D/A resolution			11	
Current consumption ⁷		5		mA
ANALOGUE PERFORMANCE CHARACTERISTIC				
Output at min. specified pressure	0.44	0.50	0.56	V
Full scale span (FSS) ³		4.00		
Full scale output	4.44	4.50	4.56	
DIGITAL PERFORMANCE CHARACTERISTIC				
Output at min. specified pressure	2883	3277	3670	counts
Full scale span (FSS) ³		26214		
Full scale output	29097	29490	29883	

Specification notes:

1. Proof pressure is the maximum pressure which may be applied without causing durable shifts of the electrical parameters of the sensing element.
2. Burst pressure is the maximum pressure which may be applied without causing damage to the sensing element or leaks to the housing.
3. Full Scale Span (FSS) is the algebraic difference between the output signal for the highest and lowest specified pressure.
4. Total accuracy is the combined error from offset and span calibration, linearity, pressure hysteresis, and temperature effects. Linearity is the measured deviation based on a straight line. Hysteresis is the maximum output difference at any point within the operating pressure range for increasing and decreasing pressure. Calibration errors include the deviation of offset and full scale from nominal values.
5. Max. delay time between pressure change at the pressure die and signal change at the output.
6. The response time depends on the adjusted internal A/D resolution of the sensor. For 13 bit it is typ. 2 ms. Other A/D resolutions and response time are available on request. Please contact Sensortechincs for further information.
7. Sensors with lower current consumption are available on request. Please contact Sensortechincs for further information.