

NOTES

- REFERENCE CONDITIONS (UNLESS OTHERWISE NOTED): SUPPLY VOLTAGE, $V_s = 5 \text{ Vdc} \pm 0.1 \text{ Vdc}$
- $T_A = 25^\circ\text{C}$, COMMON MODE LINE PRESSURE = 0 PSIG. PRESSURE MEASUREMENTS ARE WITH PRESSURE APPLIED TO PORT 2
- H/LO SPAN IS THE ALGEBRAIC DIFFERENCE BETWEEN OFFSET OUTPUT AND HI OR LO OUTPUTS SHIFT IS WITHIN THE FIRST HOUR OF EXCITATION APPLIED TO THE DEVICE
- LINEARITY IS DETERMINED USING BEST STRAIGHT LINE CURVE FIT THROUGH ZERO, 1/2 FULL SCALE, AND FULL SCALE; HYSTERESIS IS MECHANICAL ONLY
- SPAN IS THE ALGEBRAIC DIFFERENCE OF OUTPUT END POINTS (OUTPUT AT SPECIFIED HI AND LOW OUTPUT LIMITS)
- TOTAL ERROR INCLUDES OFFSET & SPAN ERRORS, ZERO CALIBRATION, TEMPERATURE EFFECT ON ZERO AND SPAN, NONLINEARITY, HYSTERESIS, REPEATABILITY AND STABILITY OVER COMPENSATED TEMPERATURE RANGE.
- ACCURACY INCLUDES NONLINEARITY, HYSTERESIS AND REPEATABILITY.

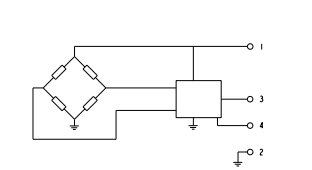
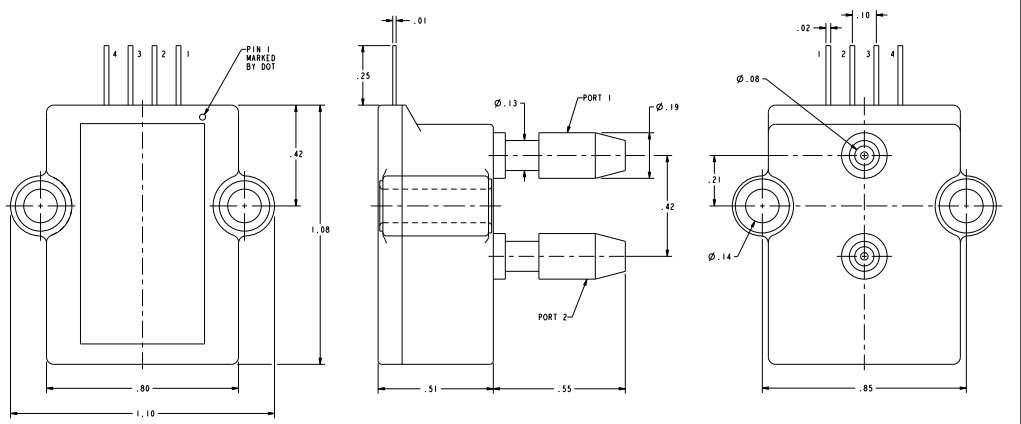
ELECTRICAL SPECIFICATIONS					
PARAMETER	PRESSURE RANGE (mbar)	MIN	NOM	MAX	UNITS
DIFFERENTIAL	OFFSET VOLTAGE (NULL AT 0 in H2O)		2.250		V
	SPAN (HI SPAN - LO SPAN)		4.250		
	SPAN (P1 > P2)	ALL	-2.000		
	SPAN (P2 > P1)		2.000		
GAGE	OFFSET VOLTAGE (NULL AT 0 in H2O)		0.250		V
	FULL SCALE OUTPUT (P2 > P1)		4.250		
	SPAN (FULL SCALE OUTPUT - OFFSET)		4.000		
	TOTAL ERROR	2.5	+/- 2	+/- 3	
	10, 25, 50, 75	+/- 1.5	+/- 2.5	%SPAN	
OFFSET WARM-UP SHIFT	2.5, 05	20		mV	
OFFSET POSITION SENSITIVITY (+/- 1g)	2.5, 05	10		mV	
	10	5		mV	
	25, 50, 75	1		mV	
OFFSET LONG TERM DRIFT (ONE YEAR)	ALL	100		mV	
ACCURACY	ALL	0.05		%FS	

MAXIMUM RATINGS				
PARAMETER	PRESSURE RANGE (mbar)	MIN	MAX	UNITS
OPERATING TEMPERATURE RANGE		-25	85	$^\circ\text{C}$
STORAGE TEMPERATURE	ALL	-45	125	$^\circ\text{C}$
PROOF PRESSURE (VERIFIED BY TEST)	ALL	5		PSIG
BURST PRESSURE (VERIFIED BY DESIGN)	2.5		125	mbar
	05		250	
	10, 25		375	
	50		750	
	75		1125	
EXCITATION VOLTAGE	ALL	3	16	V
COMMON MODE PRESSURE	ALL		50	PSIG

MEDIA CAPABILITY, WETTED MATERIALS
(APPLY CLEAN DRY AIR ONLY)

PRESSURE: SILICON DIAPHRAGM, GLASS FILLED
PORT 2: NYLON AND ALUMINA CERAMIC,
(HIGH) PRESSURE MEASURING POST

PRESSURE: SILICON DIAPHRAGM, GLASS FILLED
PORT 1: NYLON AND ALUMINA CERAMIC,
(LOW) THE VENT PORT



CATALOG LISTINGS

DC005BDC4
DC005BDC4
DC010BDC4
DC010BDC4
DC075BDC4
DC205BDC4
DC205BDC4
DC010BDC4
DC050BDC4
DC050BDC4

EQUIVALENT CIRCUIT

PIN OUT	
1	Excitation
2	Common
3	Output
4	NOT FOR CUSTOMER USE. DO NOT CONNECT.

PRESSURE COMPATIBILITY:
MEASURES DIFFERENTIAL OR GAGE PRESSURE ONLY WITH POSITIVE PRESSURE TO PORT 2. THERE WILL BE A SMALL OUTPUT VOLTAGE BETWEEN THE ACTUAL OFFSET VOLTAGE AND GROUND PROPORTIONAL TO VACUUM IF APPLIED TO PORT 2

RATIOMETRIC OUTPUT:
THE OUTPUT VOLTAGE OF THE SENSOR IS NOMINALLY RATIOMETRIC, PROPORTIONAL TO THE EXCITATION VOLTAGE. FOR THIS MODEL SENSOR ALL SPECIFICATIONS WILL CHANGE PROPORTIONALLY TO ANY CHANGES IN THE EXCITATION VOLTAGE. THE EXCITATION MAY VARY BETWEEN 3 TO 16 VOLTS. ALL SPECIFICATIONS WILL NOMINALLY BE CHANGED BY A RATIO OF $V_{excitation}/5.0$ VOLTS. FOR EXAMPLE: IF THE EXCITATION VOLTAGE IS 3.0 VOLTS THEN BOTH THE FULL SCALE OUTPUT VOLTAGE AND THE OFFSET VOLTAGE WOULD BE 3/5TH THE SPECIFIED VALUE

DESIGN UNITS: INCH

TOLERANCES UNLESS NOTED:

NO PLACES	± .005	CHECK	CMH	11 OCT 06
ONE PLACE	± .004			
TWO PLACES	± .003			
THREE PLACES	± .002			
FOUR PLACES	± .001			
ANGLES	± .0001			

THIRD ANGLE PROJECTION

INTERPRET PER ASME Y14.5M-1994
OTHER HONEYWELL ENGINEERING STANDARDS MAY APPLY

PRO/ENGINEER

SCALE: 5:1

1 SHEET 1 OF 1

Honeywell

PRESSURE SENSOR

DC SERIES CHART 2