

REV	DOCUMENT	CHANGED BY	CHECK
5	0033379	PRS 04SEP07	CMH

**SERIES** **DUXL** **D** **ET**  
 ULTRALOW PRESSURE UNCALIBRATED (mV)  
**EPI TIED HIGH PRESSURE REFERENCE**  
**D** - DIFFERENTIAL

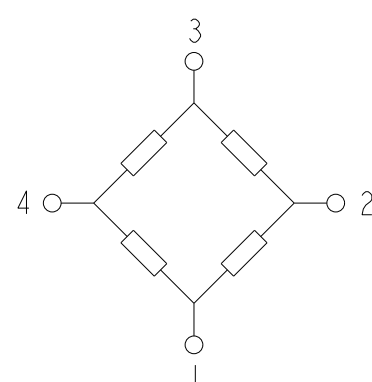
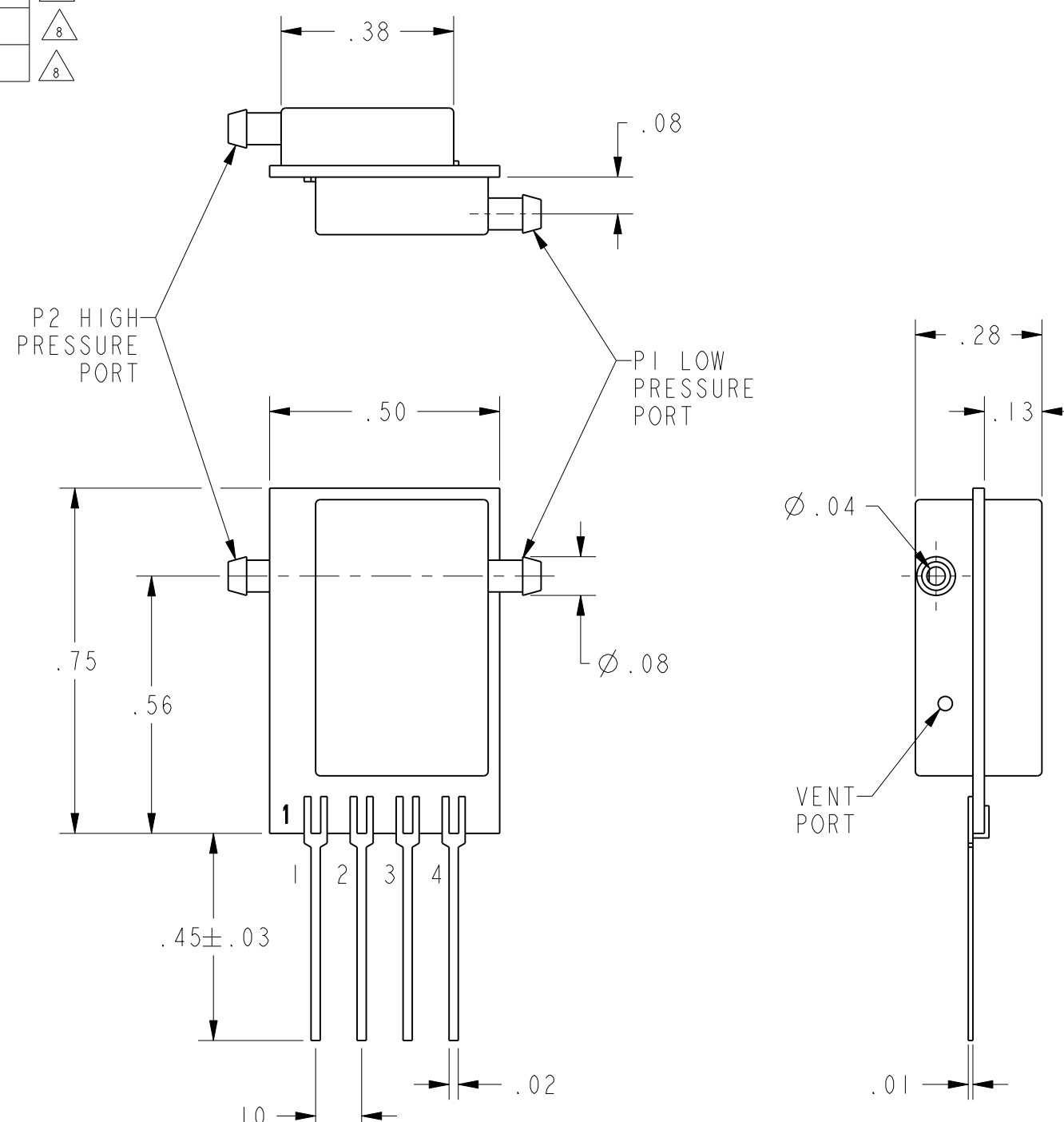
**PRESSURE RANGE**  $\triangle 6$   
 01, 05, 10, 20, 30 IN H<sub>2</sub>O

CATALOG LISTINGS	CATALOG LISTINGS
DUXLOID	DUXLOIDET $\triangle 8$
DUXL05D	$\triangle 5$ $\triangle 8$
DUXL10D	$\triangle 5$ $\triangle 8$
DUXL20D	$\triangle 5$ $\triangle 8$
DUXL30D	$\triangle 5$ $\triangle 8$

- NOTES**
- $\triangle 1$  ALL PARAMETERS ARE MEASURED AT 4.5 Vdc EXCITATION, AND ROOM TEMPERATURE UNLESS OTHERWISE SPECIFIED. PRESSURE MEASUREMENTS ARE WITH PRESSURE APPLIED TO PORT 2
  - $\triangle 2$  SHIFT IS RELATIVE TO 25°C
  - $\triangle 3$  DETERMINED WITH CONSANT CURRENT EXCITATION
  - $\triangle 4$  LINEARITY IS DETERMINED USING BEST STRAIGHT LINE CURVE FIT THROUGH ZERO, 1/2 FULL SCALE, AND FULL SCALE; HYSTERESIS IS MECHANICAL ONLY
  - $\triangle 5$  SPAN IS THE ALGEBRAIC DIFFERENCE BETWEEN OFFSET AND OUTPUT AT FULL SCALE PRESSURE
  - $\triangle 6$  PRESSURE RANGE DEPICTS THE FULL SCALE PRESSURE OF THE SENSOR
  - $\triangle 7$  FS REPRESENTS THE OUTPUT AT FULL SCALE PRESSURE
  - $\triangle 8$  SAME AS DUXL'S EXCEPT WITH EPI TIED HIGH

**SPECIFICATIONS**

PARAMETER $\triangle 1$	PRESSURE RANGE (in H <sub>2</sub> O)	MIN	NOM	MAX	UNITS
OFFSET VOLTAGE (0 in H <sub>2</sub> O DIFF)	ALL	-10.0	0.0	10.0	mV
SPAN (P <sub>2</sub> > P <sub>1</sub> ) $\triangle 5$	01	4.0	6.0	8.0	mV
	05	15.0	22.5	30	
	10, 20, 30	15.0	30.0	45.0	
OFFSET POSITION SENSITIVITY (+/-1g)	01, 05	---	0.015	---	mV
	10	---	0.010	---	
	20, 30	---	0.005	---	
COMBINED LINEARITY AND HYSTERESIS $\triangle 4$	ALL	---	0.1	0.5	%FS $\triangle 7$
INPUT RESISTANCE	ALL	1	---	3	k $\Omega$
TEMPERATURE ERROR ON OFFSET (0°-50°C) $\triangle 2$	ALL	---	0.1	---	mV
TEMPERATURE ERROR ON SPAN (0°-50°C) $\triangle 2/\triangle 3$	ALL	---	0.1	---	mV
TEMPERATURE COEFFICIENT OF RESISTANCE	ALL	---	2600	---	ppm/C
TEMPERATURE COEFFICIENT OF SENSITIVITY	ALL	---	-2200	---	ppm/C
EXCITATION VOLTAGE	ALL	---	4.5	8	VDC
OPERATING TEMPERATURE RANGE	ALL	-25	---	85	°C
STORAGE TEMPERATURE RANGE	ALL	-40	---	125	°C
RELATIVE HUMIDITY (NON CONDENSING)	ALL	0	---	95	%RH
SHOCK (DURATION 11 msec, ANY AXIS)	ALL	---	---	10	g
OVER PRESSURE	01, 05	---	---	3	PSI
	10	---	---	5	
	20	---	---	5	
	30	---	---	5	
COMMON MODE PRESSURE	ALL	---	---	50	PSIG



**EQUIVALENT CIRCUIT**

PIN OUT	
1	-V EXCITATION
2	+ OUTPUT SIGNAL
3	+V EXCITATION
4	- OUTPUT SIGNAL

MEDIA CAPABILITY, WETTED MATERIALS (APPLY CLEAN DRY AIR ONLY)	
PORT 2 (HIGH)	BACK SIDE OF SILICON DIAPHRAGM, GLASS FILLED NYLON, AND ALUMINA CERAMIC
PORT 1 (LOW)	FRONT SIDE OF SILICON DIAPHRAGM, GLASS FILLED NYLON, AND ALUMINA CERAMIC

**PRESSURE COMPATIBILITY:**  
 MEASURES DIFFERENTIAL OR GAGE PRESSURE AND VACUUM. PRESSURE MAY BE APPLIED TO EITHER PORT. FOR PRESSURE TO THE LOW PRESSURE PORT THE OUTPUT POLARITY IS REVERSED

UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:		<input checked="" type="checkbox"/> US (inch) CUSTOMARY	<input type="checkbox"/> SI (mm) METRIC	DRAWN	TRF	03OCT00	<b>Honeywell</b>
NO PLACE	X	±.040	±1	CHECK	SAV	03OCT00	
ONE PLACE	.X	±.030	±0.4	THIS DRAWING COVERS A PROPRIETARY ITEM AND IS THE PROPERTY OF HONEYWELL. THIS DRAWING IS NOT TO BE COPIED OR USED WITHOUT THE PERMISSION OF HONEYWELL.			
TWO PLACE	.XX	±.015	±0.15				
THREE PLACE	.XXX	±.005	±				
ANGLES				DIMENSIONS ARE TO BE MET BEFORE PROTECTIVE COATINGS ARE APPLIED			
RAW MATERIAL-COMMERCIAL STANDARD				3D PTC			
THIRD ANGLE PROJECTION				ASME Y14.5M-1994			
				DRAWING NAME		REV	TITLE <b>PRESSURE SENSOR</b>
				<b>DUXL SERIES CHART 1</b>		<b>5</b>	
SCALE		3:1		WEIGHT		SHEET 1 OF 1	