

HONEYWELL

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REV	DOCUMENT	CHANGED BY	CHECK
4	0036649	SS 18JAN08	BLR

SERIES
 AMPLIFIED
 (4V SPAN)

DESIGNATES PRESSURE
 L - LOW PRESSURE (IN H₂O)
 - NO DESIGNATION (PSI)

PRESSURE RANGE Δ
 004, 010 IN H₂O
 00.3 01, 05, 15, 30,
 60, 100, 150 PSI

PACKAGE TYPE
 N - PLASTIC

PRESSURE REFERENCE
 G - GAGE
 D - DIFFERENTIAL
 A - ABSOLUTE* ≥ 5 PSIA

NOTES

$\Delta 1$ ALL PARAMETERS ARE MEASURED AT 5.0 VOLT EXCITATION, FOR THE NOMINAL FULL SCALE PRESSURE AND ROOM TEMPERATURE UNLESS OTHERWISE SPECIFIED. PRESSURE MEASUREMENTS ARE WITH POSITIVE PRESSURE APPLIED TO PORT 2 OR VACUUM TO PORT 1. FOR ABSOLUTE DEVICES PRESSURE IS APPLIED TO PORT 1

$\Delta 2$ SHIFT IS RELATIVE TO 25°C

$\Delta 3$ LINEARITY IS DETERMINED USING BEST STRAIGHT LINE CURVE FIT THROUGH ZERO, 1/2 FULL SCALE, AND FULL SCALE; HYSTERESIS IS MECHANICAL ONLY

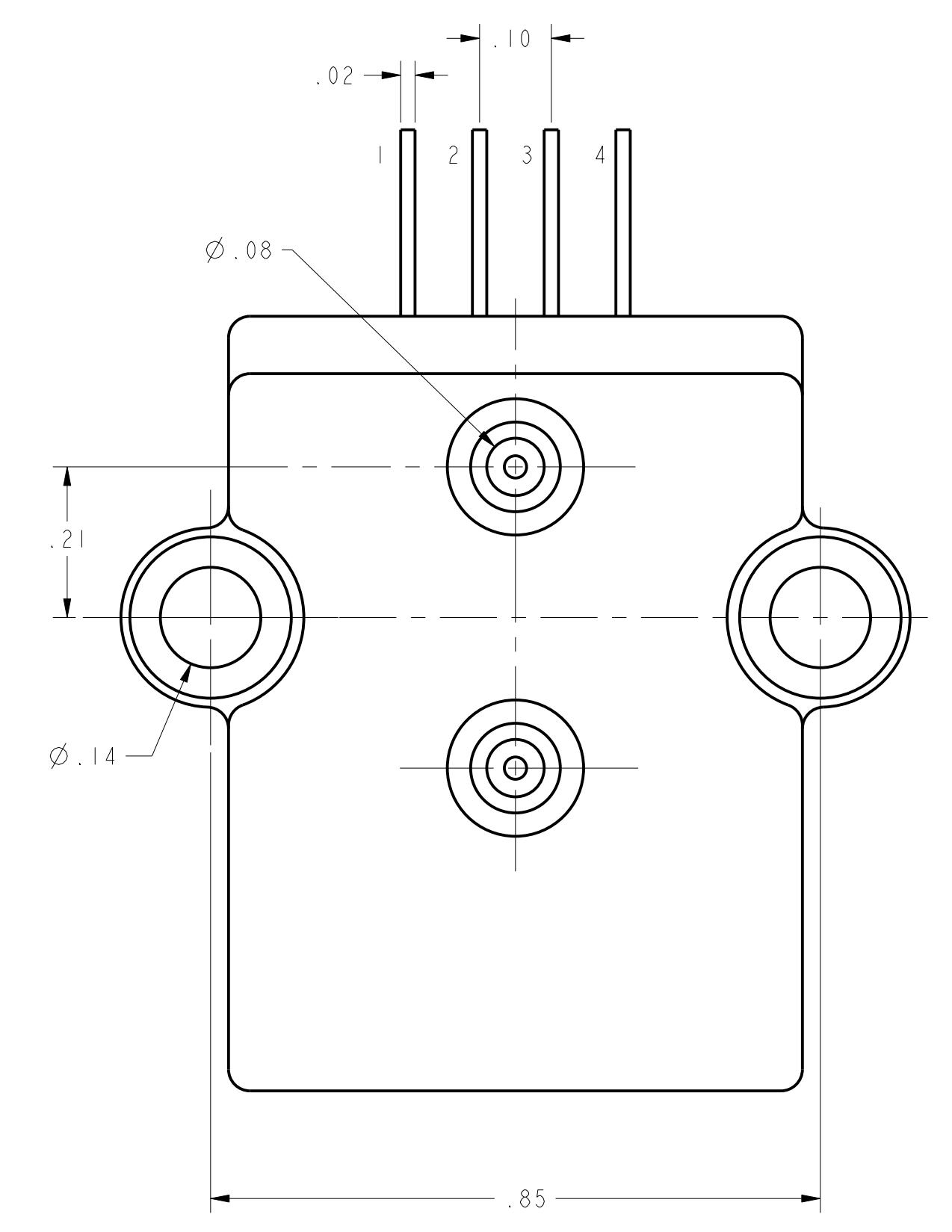
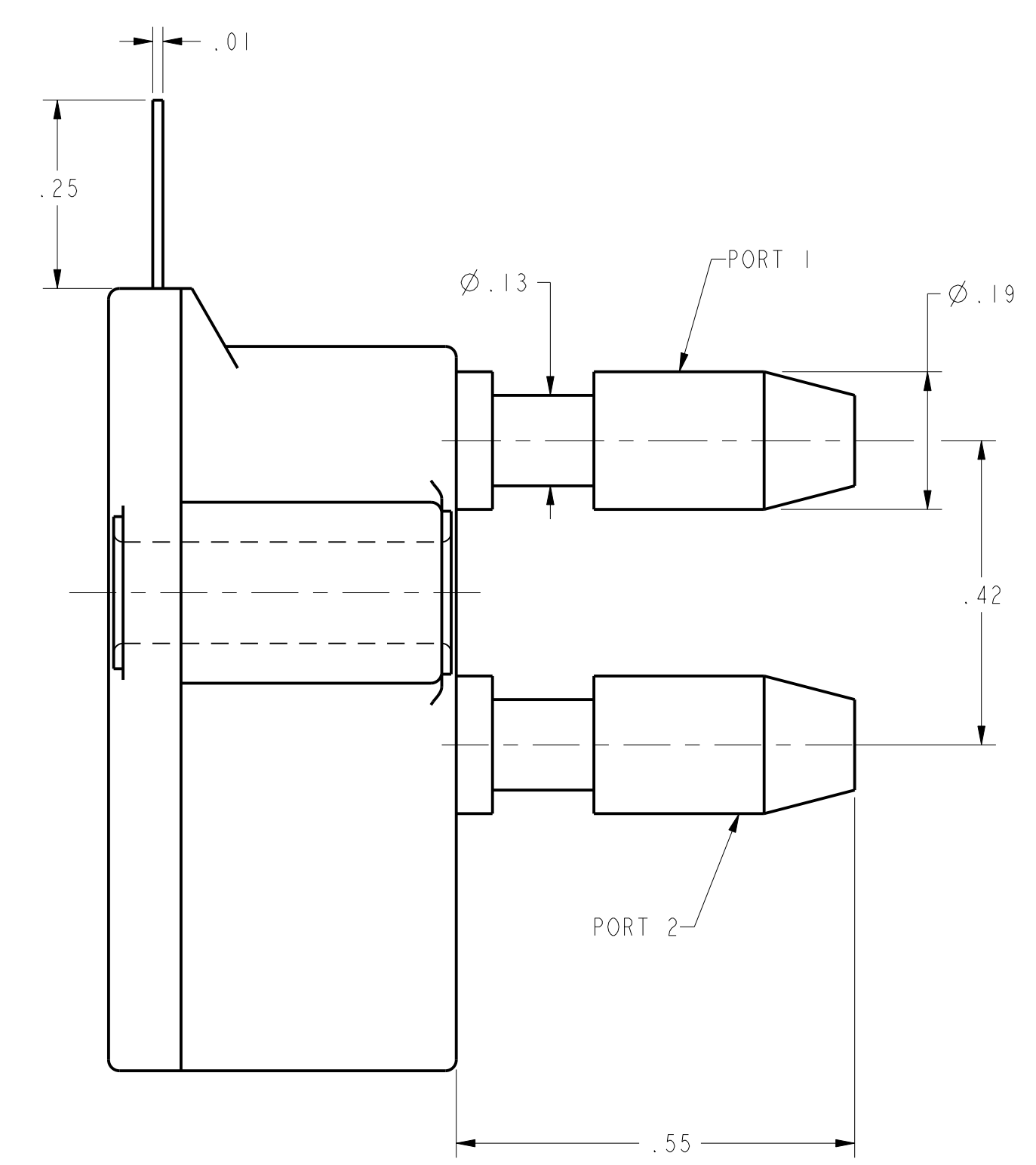
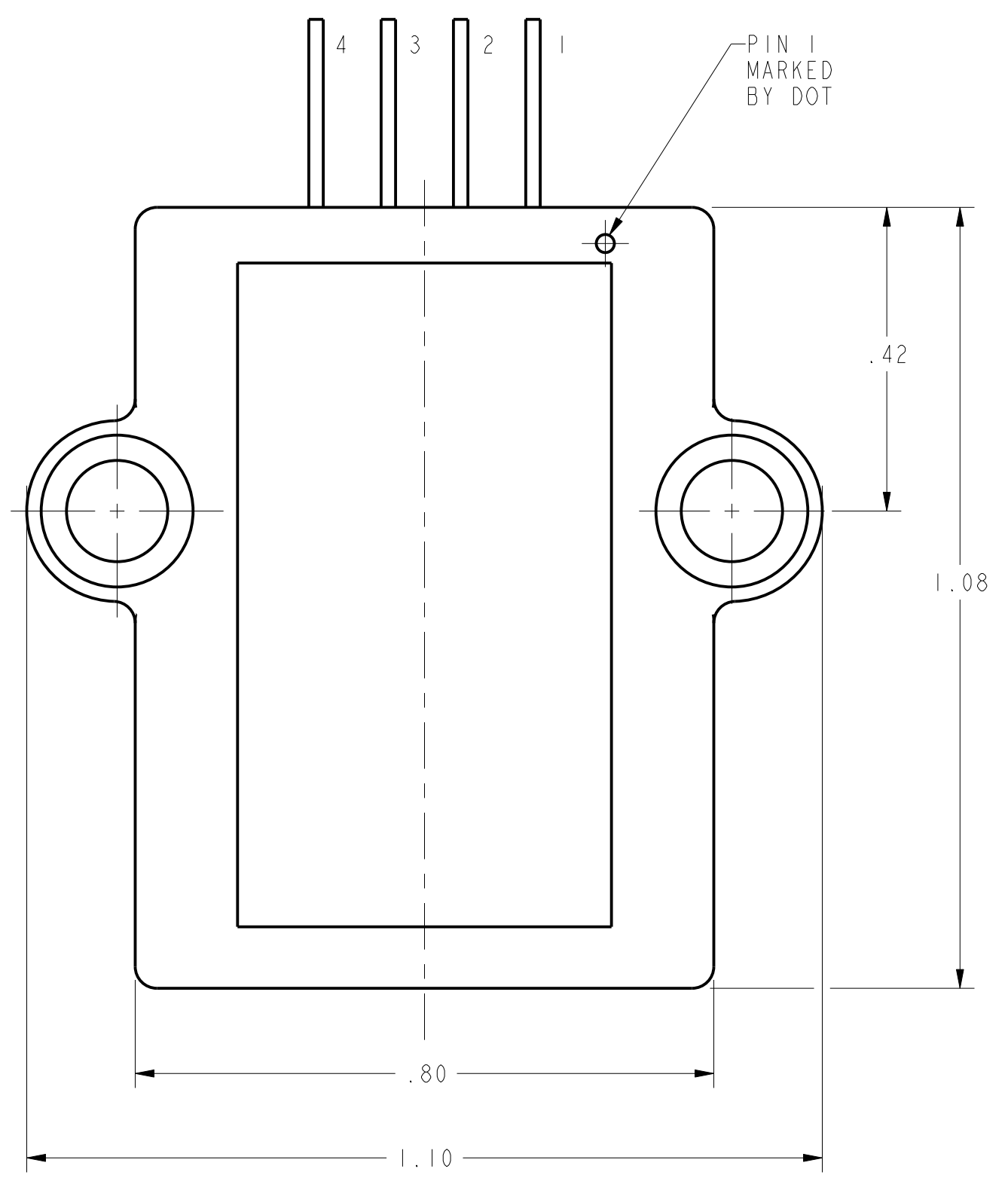
$\Delta 4$ PROOF PRSSURE SHOULD NOT EXCEED 100 PSI AND BURST PRSSURE SHOULD NOT EXCEED 300 PSI

$\Delta 5$ HI/LO SPAN IS THE ALGEBRAIC DIFFERENCE OF OFFSET VOLTAGE AND HI OR LO OUTPUTS

$\Delta 6$ SPAN IS THE ALGEBRAIC DIFFERENCE OF OUTPUT END POINTS

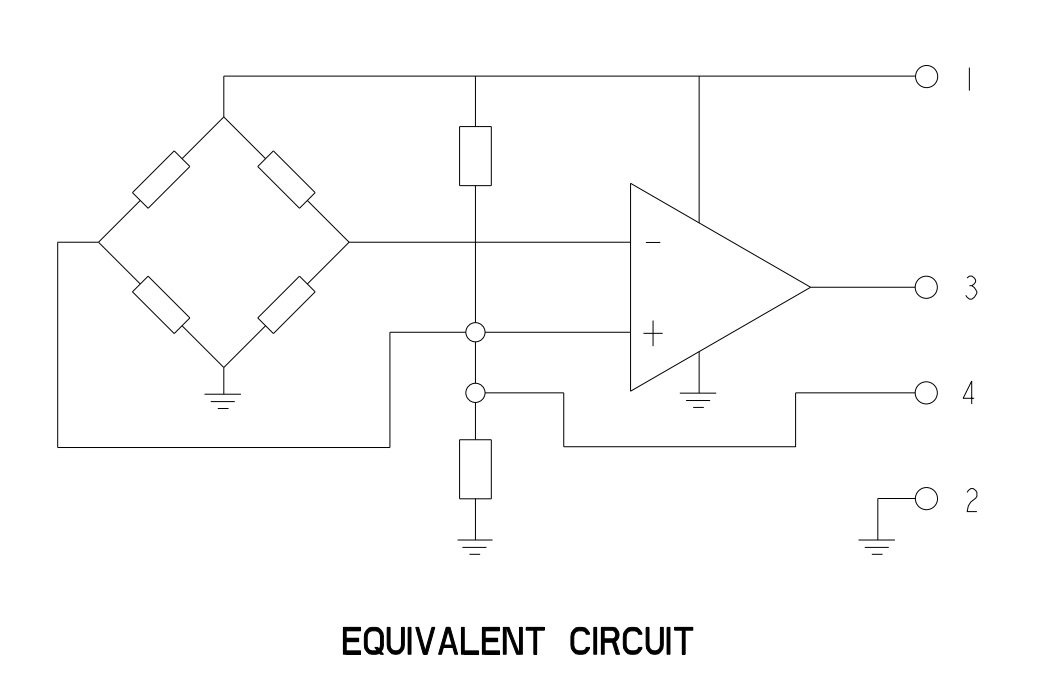
$\Delta 7$ PRESSURE RANGE DEPICTS THE FULL SCALE PRESSURE OF THE SENSOR

$\Delta 8$ FS REPRESENTS THE OUTPUT VALUE AT FULL SCALE PRESSURE



SPECIFICATIONS					
PARAMETER Δ		MIN	NOM	MAX	UNITS
DIFFERENTIAL	OFFSET VOLTAGE (OUTPUT AT 0 PSID)	2.200	2.250	2.300	V
	HI SPAN ($P_2 > P_1$) $\Delta 5$	1.950	2.000	2.050	
	LO SPAN ($P_1 > P_2$) $\Delta 5$	-1.950	-2.000	-2.050	
	SPAN (HI SPAN - LO SPAN) $\Delta 6$	---	4.000	---	
GAGE	OFFSET VOLTAGE (OUTPUT AT 0 PSIG)	0.200	0.250	0.300	V
	SPAN ($P_2 > P_1$) $\Delta 6$	3.900	4.000	4.100	
ABSOLUTE	OFFSET VOLTAGE (OUTPUT AT 0 PSIA)	0.200	0.250	0.300	V
	SPAN (PRESSURE APPLIED TO P1) $\Delta 6$	3.900	4.000	4.100	
EXCITATION VOLTAGE		3.0	5.0	16.0	V
TC SPAN (0°C-50°C) $\Delta 2$		---	± 0.6	± 1.0	%FS
TC OFFSET (0°C-50°C) $\Delta 2$		---	± 0.6	± 1.0	%FS
LINEARITY AND HYSTERESIS $\Delta 3$		---	± 0.3	± 0.5	%FS
REPEATABILITY		---	± 0.1	---	%FS
STORAGE TEMPERATURE RANGE		-40	---	125	°C
PROOF PRESSURE (VERIFIED BY DESIGN) $\Delta 4$		---	3X	---	FS
BURST PRESSURE (VERIFIED BY DESIGN) $\Delta 4$		---	5X	---	FS

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



PIN OUT	
1	V _{EXCITATION}
2	COMMON
3	V _{OUTPUT}
4	V _{OFFSET}

CATALOG LISTINGS	
③	XCA400.3GN
③	XCA401GN
	XCA405GN
	XCA415GN
③	XCA460GN
	XCA4100GN
	XCA4150GN
	XCA405AN
	XCA415AN
	XCA430AN
	XCA460AN
	XCA4100AN
	XCA4150AN
	XCAL4004DN
	XCAL4010DN
④	XCA401DN
	XCA405DN
	XCA415DN
	XCA430DN
	XCA460DN
	XCA4100DN
	XCA4150DN

UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:	<input checked="" type="checkbox"/> INCHES	<input type="checkbox"/> METRIC	DRAWN	SAV	04OCT00
NO PLACE	X	$\pm .040$	CHECK	SAV	04OCT00
ONE PLACE	.X	$\pm .030$	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	$\pm .015$			
THREE PLACE	.XXX	$\pm .005$			
ANGLES		\pm			
RAW MATERIAL - COMMERCIAL STANDARD		\pm	THIRD ANGLE PROJECTION		
DIMENSIONS ARE TO BE MET BEFORE PROTECTIVE COATINGS ARE APPLIED.			SCALE	5:1	WEIGHT
PTC 3D ASME Y14.5M-1994			SHEET 1 OF 1		

Honeywell

TITLE: **PRESSURE SENSOR -**

DWG TYPE: **I** DRAWING NAME: **XCA4/XCAL4 SERIES CHART 1** REV: **4**