

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

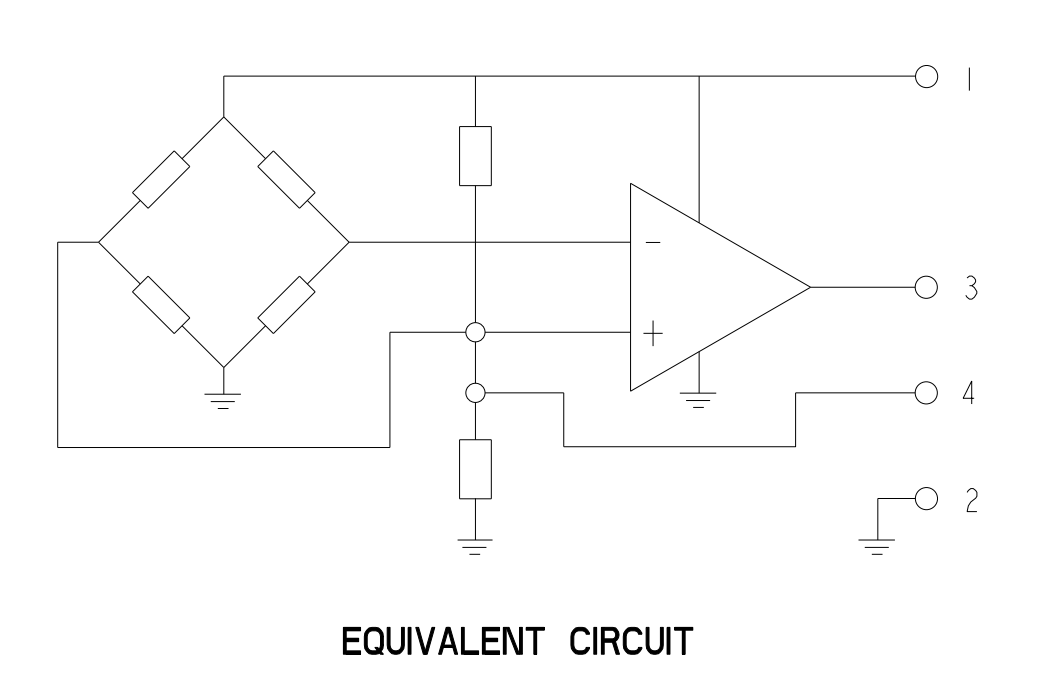
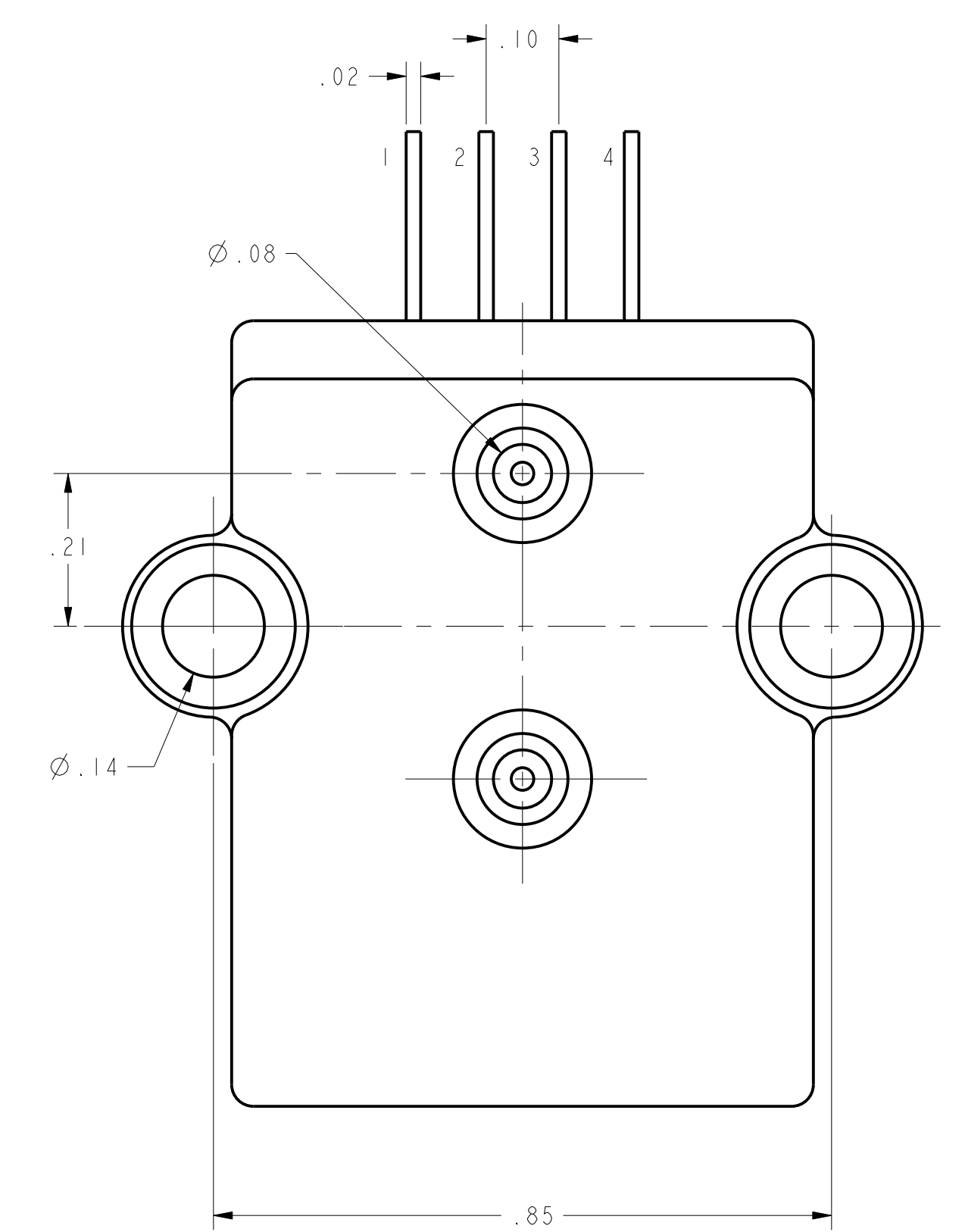
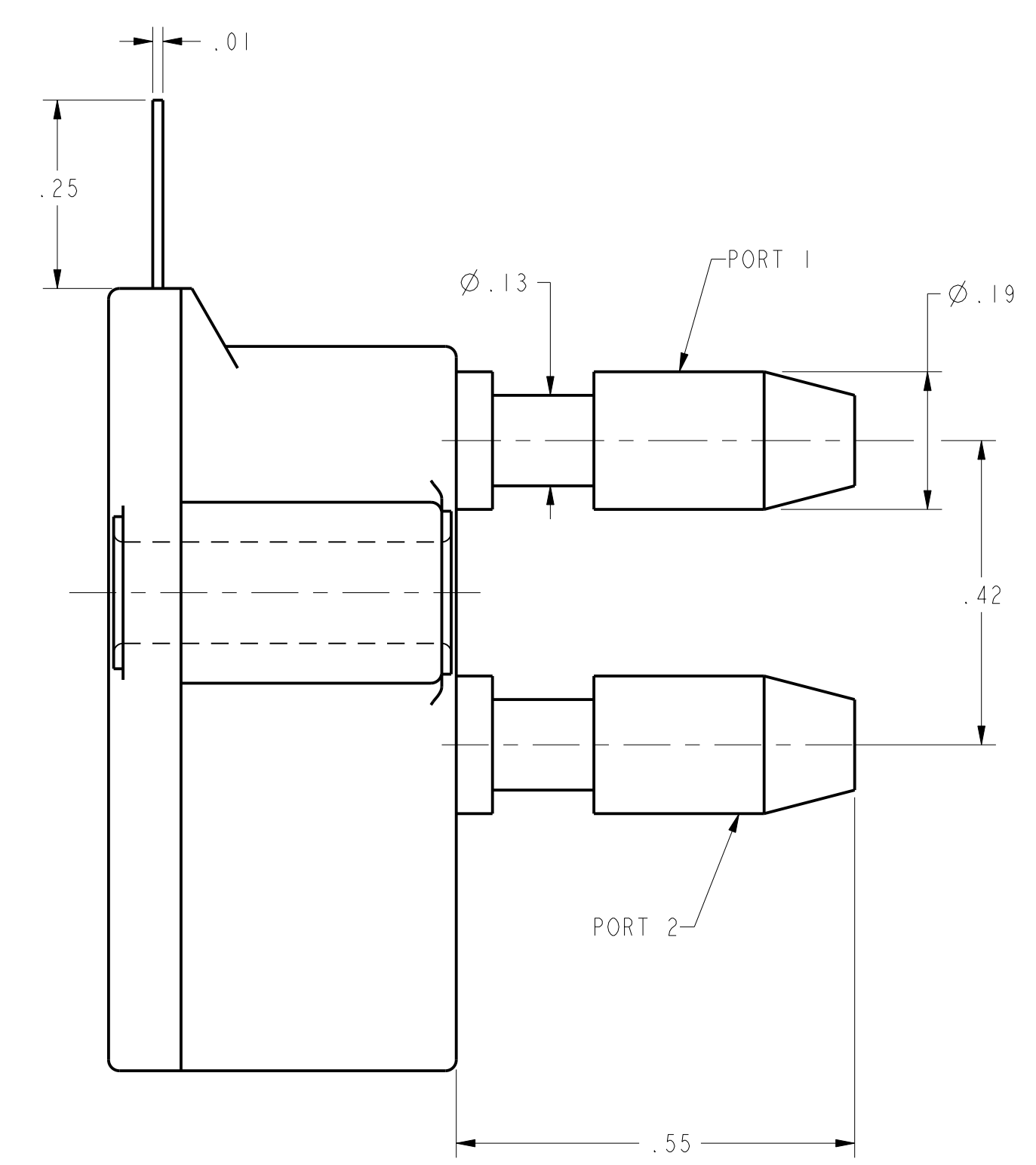
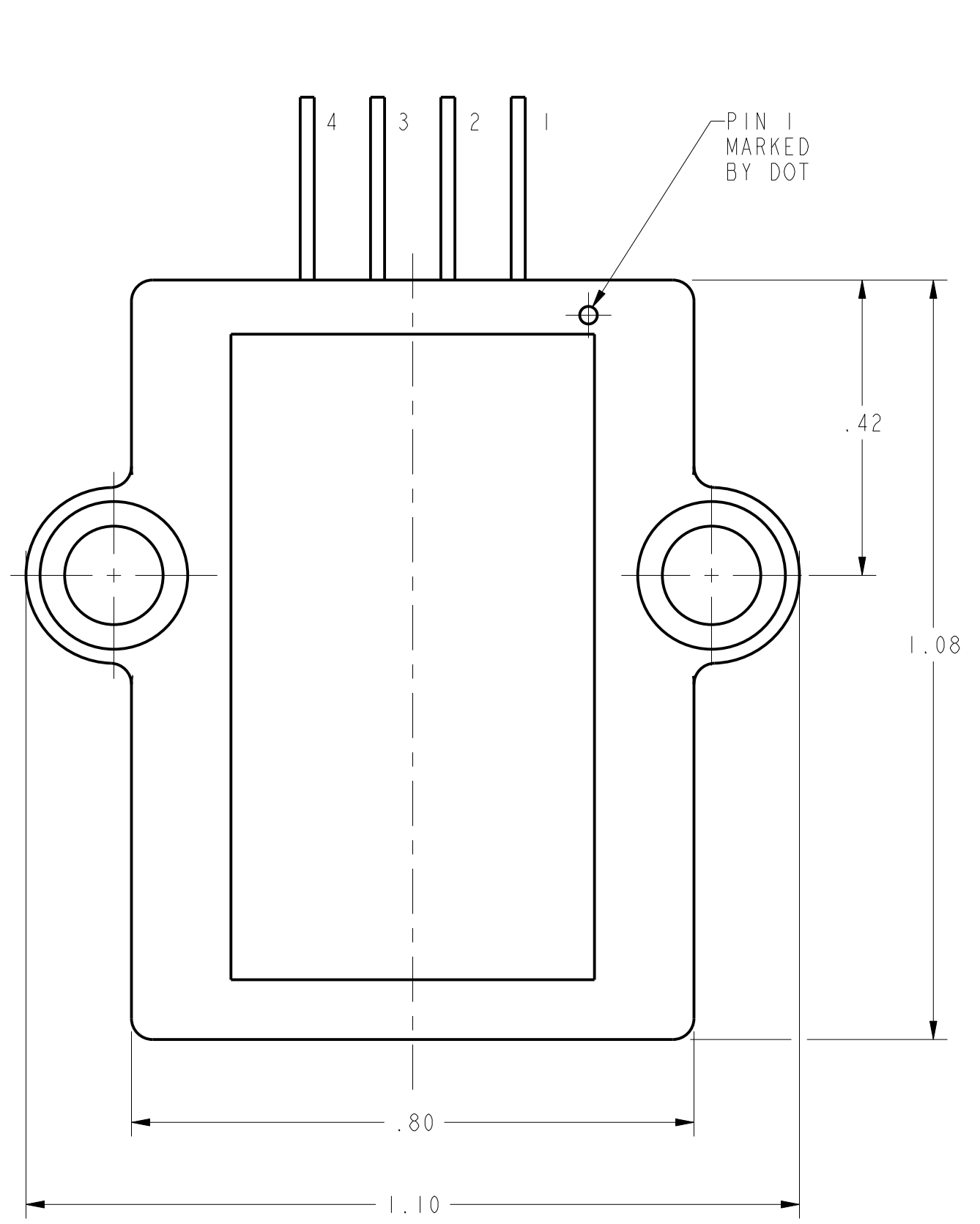
$\Delta 6$ SPAN IS THE ALGEBRAIC DIFFERENCE OF OUTPUT END POINTS

$\Delta 7$ 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



EQUIVALENT CIRCUIT

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

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

UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:	<input checked="" type="checkbox"/> INCHES	<input type="checkbox"/> METRIC	DRAWN	SAV	04OCT00	
NO PLACE	X	± 0.40	± 1	CHECK	SAV	04OCT00
ONE PLACE	.X	± 0.30	± 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	± 0.15	± 0.15	DIMENSIONS ARE TO BE MET BEFORE PROTECTIVE COATINGS ARE APPLIED.		
THREE PLACE	.XXX	± 0.05	\pm	PTC	3D	ASME Y14.5M-1994
ANGLES		\pm	\pm	SCALE	5:1	WEIGHT
RAW MATERIAL - COMMERCIAL STANDARD	THIRD ANGLE PROJECTION		DRAWING NAME		REV	
			XCA4/XCAL4 SERIES CHART 1		4	
TITLE			PRESSURE SENSOR -			
SHEET			1 OF 1			