

O
N
M
L
K
J
I
H
G
F
E
D
C
B
A

SERIES

AMPLIFIED
(5V SPAN)

DESIGNATES PRESSURE

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

PRESSURE RANGE

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

XCA

5

N

NOTES

1 ALL PARAMETERS ARE MESURED AT 8.0 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

2 SHIFT IS RELATIVE TO 25°C

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

4 PROOF PRSSURE SHOULD NOT EXCEED 100 PSI AND BURST PRSSURE SHOULD NOT EXCEED 300 PSI

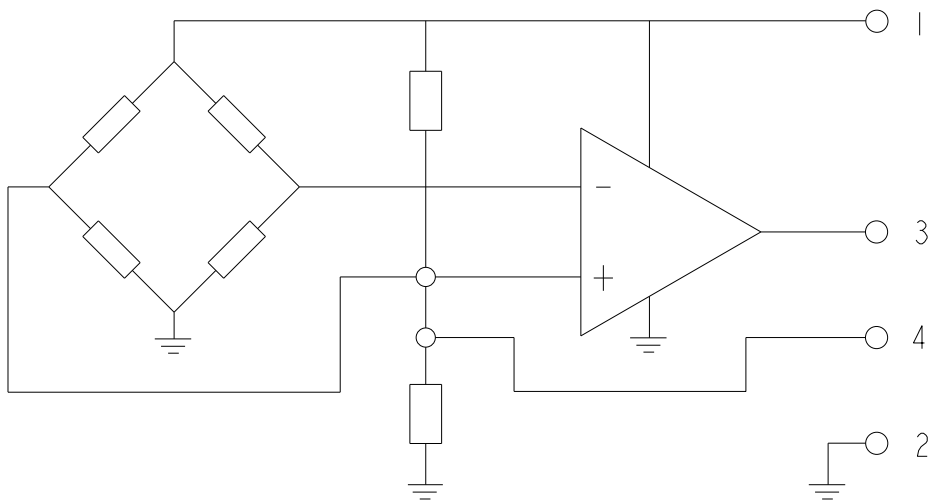
5 HI/LO SPAN IS THE ALGEBRAIC DIFFERENCE OF OFFSET VOLTAGE AND HI OR LO OUTPUTS

6 SPAN IS THE ALGEBRAIC DIFFERENCE OF OUTPUT END POINTS

7 PRESSURE RANGE DEPICTS THE FULL SCALE PRESSURE OF THE SENSOR

8 FS REPRESENTS THE OUTPUT VALUE AT FULL SCALE PRESSURE

SPECIFICATIONS					
PARAMETER		MIN	NOM	MAX	UNITS
DIFFERENTIAL	OFFSET VOLTAGE (OUTPUT AT 0 PSID)	3.450	3.500	3.550	V
	HI SPAN (P ₂ > P ₁)	2.450	2.500	2.550	
	LO SPAN (P ₁ > P ₂)	-2.450	-2.500	-2.550	
	SPAN (HI SPAN - LO SPAN)	---	5.000	---	
GAGE	OFFSET VOLTAGE (OUTPUT AT 0 PSIG)	0.950	1.000	1.050	V
	SPAN (P ₂ > P ₁)	4.900	5.000	5.100	
ABSOLUTE	OFFSET VOLTAGE (OUTPUT AT 0 PSIA)	0.950	1.000	1.050	V
	SPAN (PRESSURE APPLIED TO P1)	4.900	5.000	5.100	
EXCITATION VOLTAGE		3.0	8.0	16.0	V
TC SPAN (0°C-50°C)		---	±0.6	±1.0	%FS
TC OFFSET (0°C-50°C)		---	±0.6	±1.0	%FS
LINEARITY AND HYSTERESIS		---	±0.3	±0.5	%FS
REPEATABILITY		---	±0.1	---	%FS
STORAGE TEMPERATURE RANGE		-40	---	125	°C
PROOF PRESSURE (VERIFIED BY DESIGN)		---	3X	---	FS
BURST PRESSURE (VERIFIED BY DESIGN)		---	5X	---	FS



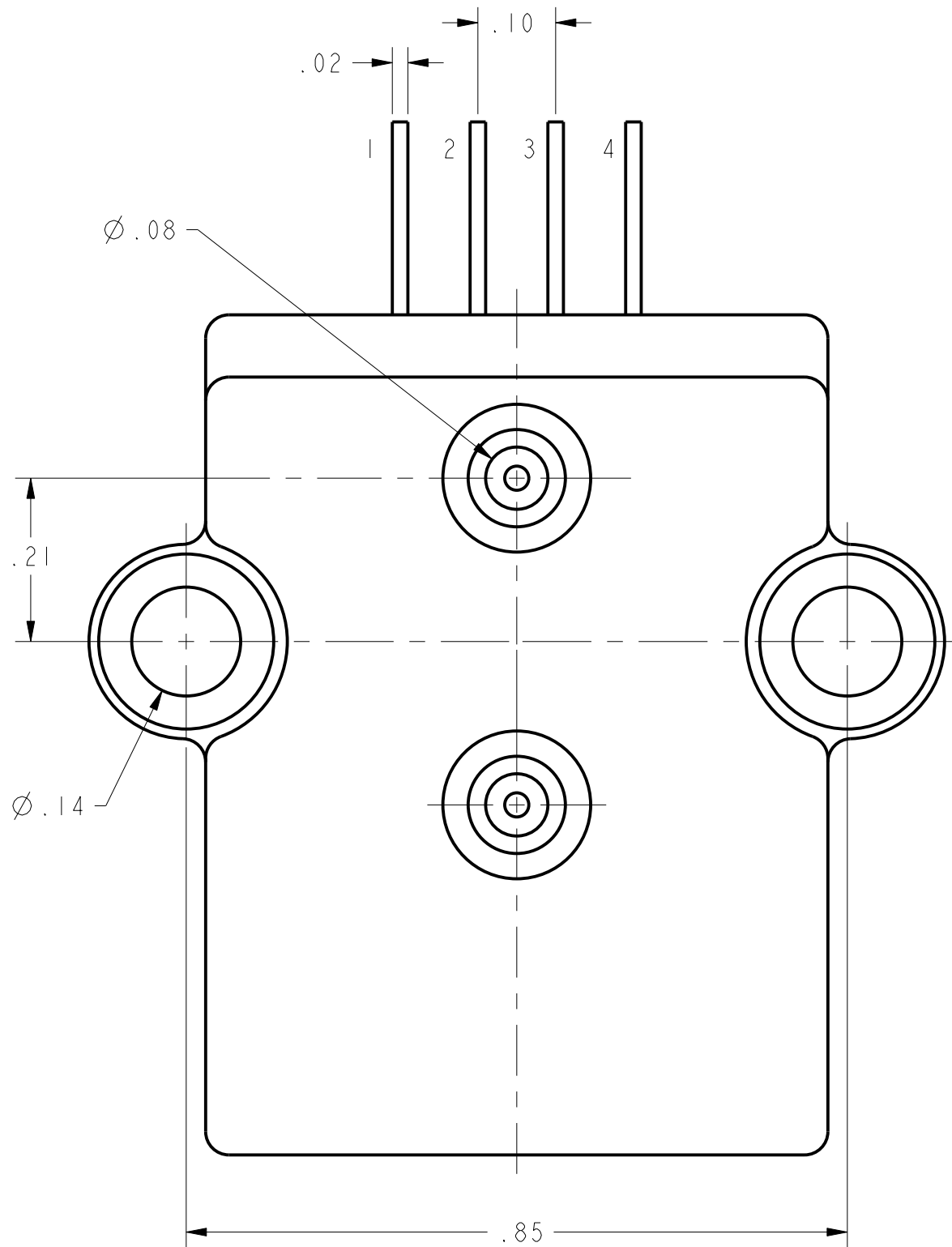
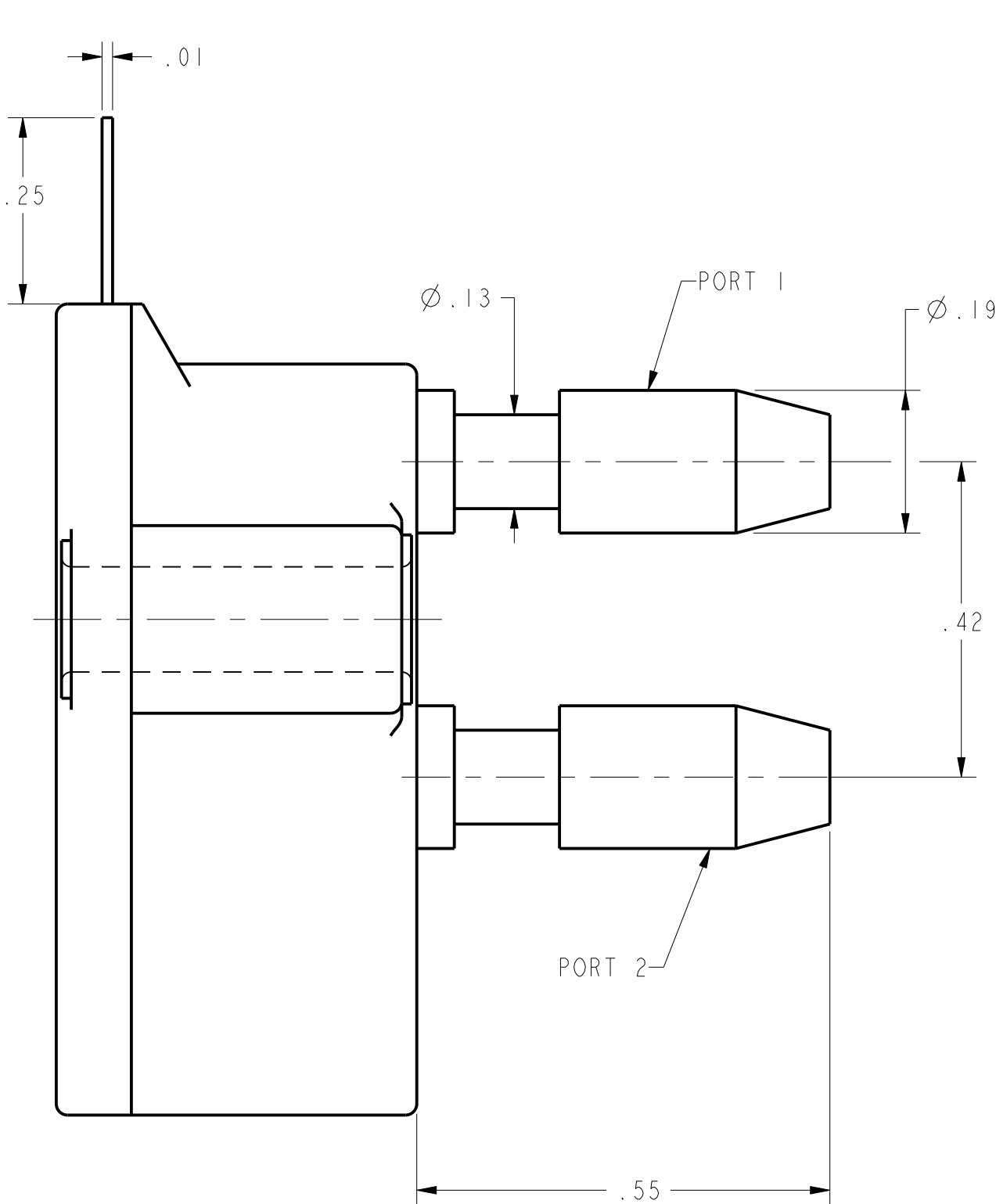
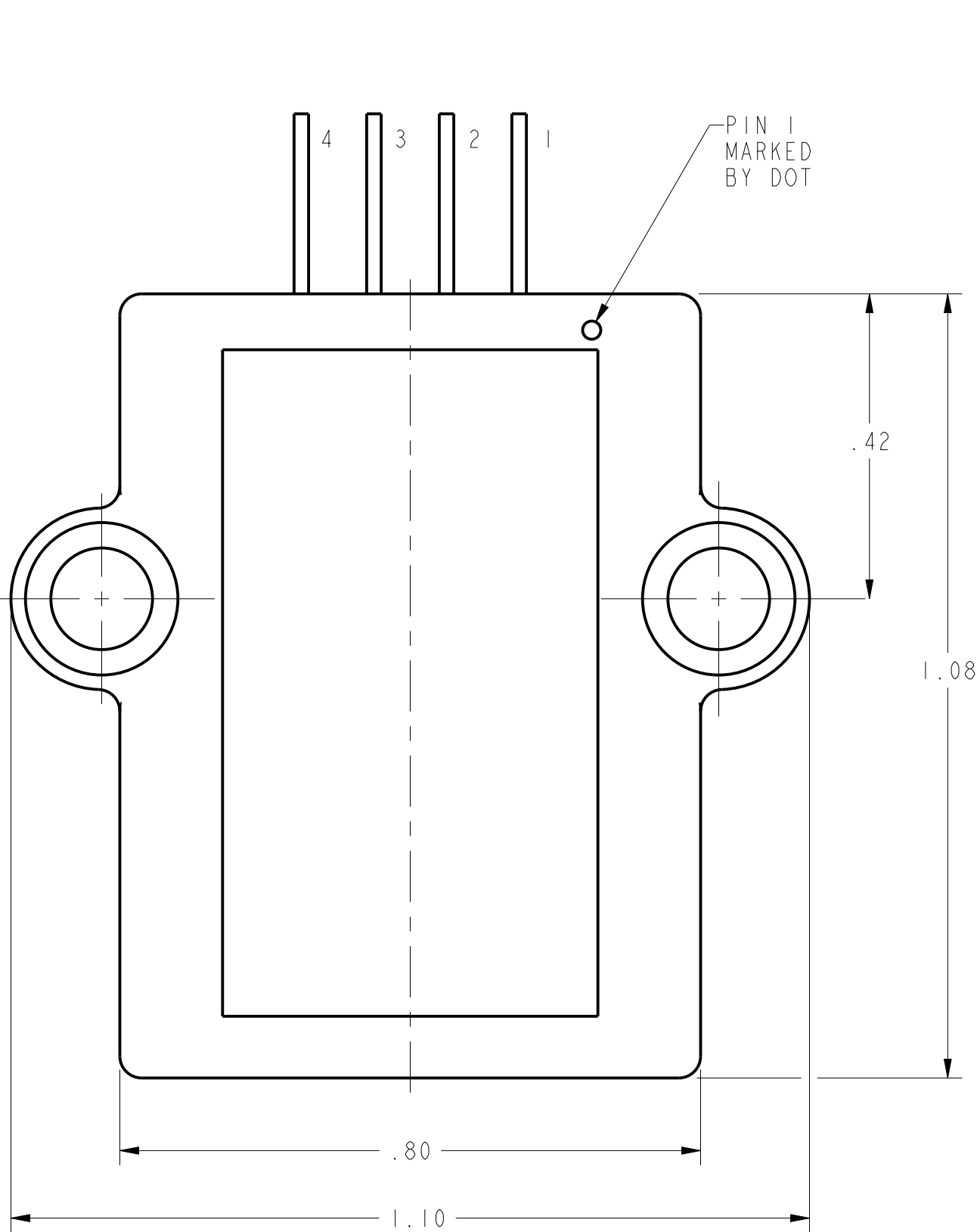
EQUIVALENT CIRCUIT


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

CATALOG LISTINGS
XCA500.3DN
2
XCA501DN
2
XCA505DN
XCA505GN
2
2
XCA515AN
XCA515DN
XCA515GN
XCA530GN
2
2
2
XCA530AN
2
2
XCAL5010DN
XCAL5010GN

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



UNLESS OTHERWISE SPECIFIED TOLERANCES ARE: NO PLACE .X ONE PLACE .XX TWO PLACE .XX THREE PLACE .XXX ANGLES . RAW MATERIAL-COMMERCIAL STANDARD	<input checked="" type="checkbox"/> INCHES CUSTOMARY	<input type="checkbox"/> METRIC	DRAWN LJK 14AUG02	<div>Honeywell</div>		
			CHECK SAV 14AUG02			
	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.			TITLE		
	THIRD ANGLE PROJECTION			PRESSURE SENSOR		
				SIZE D	DWG TYPE M	DRAWING NAME XCA5 SERIES CHART 1
PTC 3D ASME Y14.5M-1994			SCALE 5:1	WEIGHT		SHEET 1 OF 1

Mouser Electronics

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