

| REV | DOCUMENT | CHANGED BY  | CHECK |
|-----|----------|-------------|-------|
| 8   | 0032662  | DDN 31JUL07 | CMH   |

**SERIES** ——— **CPC** ——— **D** ———

**DESIGNATES PRESSURE**

**L** - LOW PRESSURE (IN H<sub>2</sub>O)  
 - NO DESIGNATION (PSI)

**PRESSURE RANGE**

**04, 10** IN H<sub>2</sub>O  
**0.3, 01, 05, 15, 30** PSI

**ACCURACY GRADE**

**C** - COMMERCIAL GRADE  
**H** - HIGH GRADE

**PORT OPTION**

**F** - AXIAL  
 - MODULAR

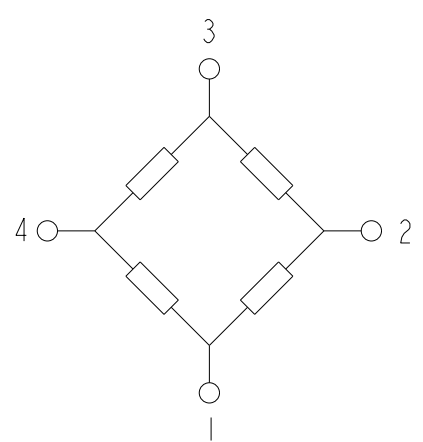
**PRESSURE REFERENCE**

**D** - DIFFERENTIAL

| CATALOG LISTINGS |
|------------------|
| CPCL04DFC        |
| CPCL10DFC        |
| CPC0.3DFC        |
| CPC01DFC         |
| CPC05DFC         |
| CPC15DFC         |
| CPC30DFC         |
| CPCL04DC         |
| CPC0.3DFH        |
| ⑦                |
| CPC150DFC        |
| CPC01DFH         |
| CPC60DFC         |

| D - STYLE (DIFF)  | PERFORMANCE AT 25°C AND 12±0.01 Vdc (UNLESS OTHERWISE STATED) |      |     |         |      |      | UNITS  | FULL SCALE PRESSURE PSI | OVER PRESSURE PSI |
|---|---|------|-----|---------|------|------|--------|-------------------------|-------------------|
|   | C-GRADE   |      |     | H-GRADE |      |      |        |                         |                   |
|   | MIN   | NOM  | MAX | MIN     | NOM  | MAX  |        |                         |                   |
| NULL OFFSET (0 PSIG) (L04 LISTING)  | -2  | 0    | 2   | N/A     | N/A  | N/A  | mV     |                         |                   |
| NULL OFFSET (0 PSIG), ALL LISTINGS EXCEPT L04                             | -1  | 0    | 1   | -0.5    | 0    | 0.5  | mV     |                         |                   |
| 4 IN H <sub>2</sub> O (P1>P2) (L04 LISTING)                               | 23  | 25   | 27  | N/A     | N/A  | N/A  | mVdc   | 4 IN H <sub>2</sub> O   | 3                 |
| 4 IN H <sub>2</sub> O (P1>P2) (SCDA121 CPCL04GFC)                         | 23  | 25   | 27  | N/A     | N/A  | N/A  | mVdc   | 4 IN H <sub>2</sub> O   | 5                 |
| 10 IN H <sub>2</sub> O (P1>P2) (L10 LISTING)                              | 19  | 20   | 21  | 19.5    | 20   | 20.5 | mVdc   | 10 IN H <sub>2</sub> O  | 5                 |
| 0.3 PSI SPAN (P1>P2)  | 19  | 20   | 21  | 19.5    | 20   | 20.5 | mVdc   | 0.3                     | 5                 |
| 1 PSI SPAN (P1>P2)  | 17  | 18   | 19  | 17.8    | 18   | 18.2 | mVdc   | 1                       | 5                 |
| 5 PSI SPAN (P1>P2)  | 57  | 60   | 63  | 59      | 60   | 61   | mVdc   | 5                       | 15                |
| 15 PSI SPAN (P1>P2)   | 85  | 90   | 95  | 89      | 90   | 91   | mVdc   | 15                      | 45                |
| 30 PSI SPAN (P1>P2)   | 85  | 90   | 95  | 89      | 90   | 91   | mVdc   | 30                      | 90                |
| 60 PSI SPAN (P1>P2)   | 85  | 90   | 95  | 89      | 90   | 91   | mVdc   | 60                      | 180               |
| 100 PSI SPAN (P1>P2)  | 95  | 100  | 105 | 99      | 100  | 101  | mVdc   | 100                     | 250               |
| 150 PSI SPAN (P1>P2)  | 85  | 90   | 95  | 89      | 90   | 91   | mVdc   | 150                     | 250               |
| NULL SHIFT OVER TEMPERATURE (0-25, 25-70 °C) <sup>2</sup> / <sub>10</sub> | ---   | ---  | ±1  | ---     | ---  | ±.5  | mV     |                         |                   |
| SPAN SHIFT OVER TEMPERATURE (0-25, 25-70 °C) <sup>2</sup> / <sub>10</sub> | ---   | ---  | ±2  | ---     | ---  | ±.1  | % SPAN |                         |                   |
| COMBINED LINEARITY AND HYSTERESIS <sup>3</sup> / <sub>1</sub>             | ---   | 0.25 | 1   | ---     | 0.25 | 0.5  | % SPAN |                         |                   |

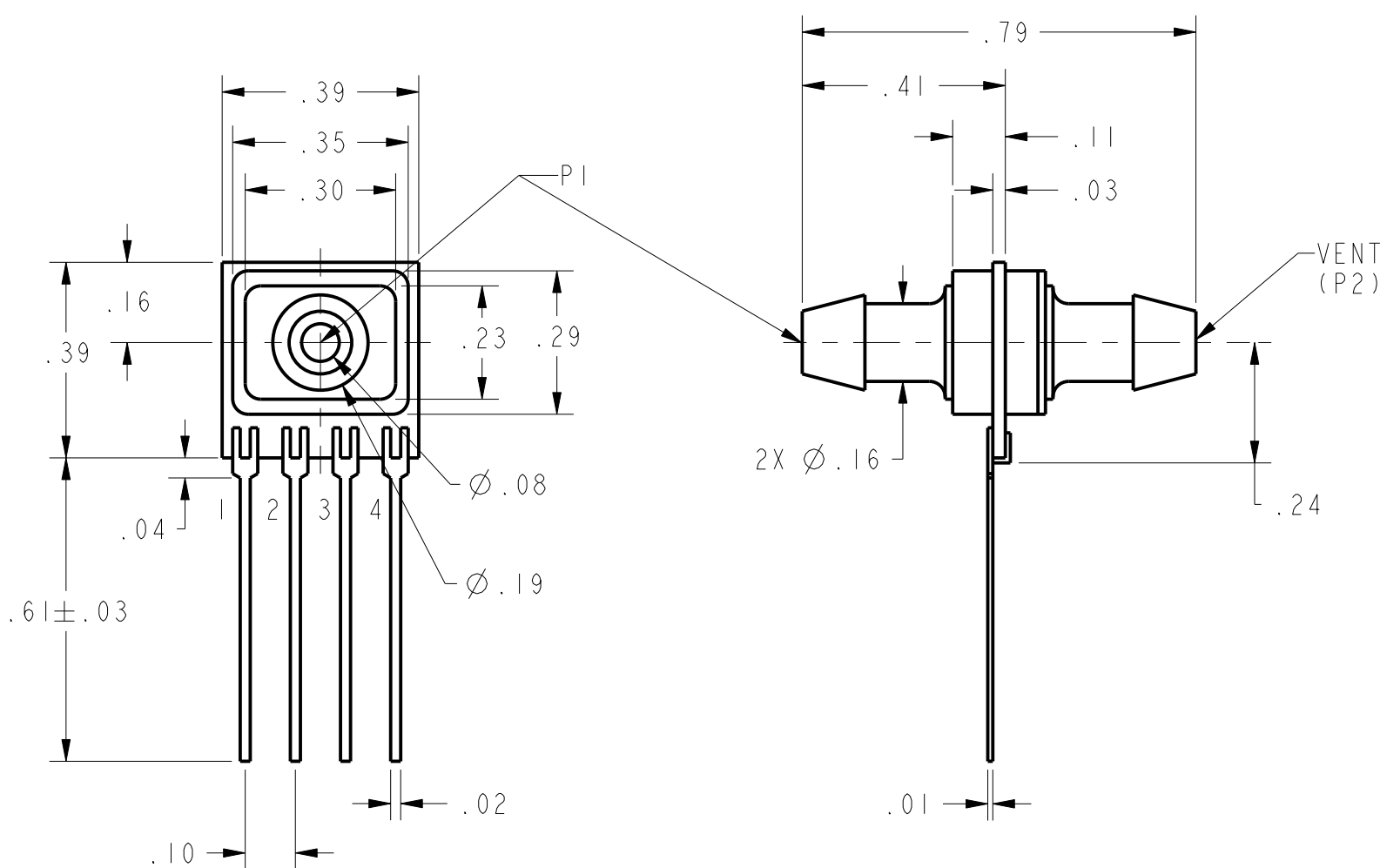
| GENERAL OPERATING CHARACTERISTICS | ALL PRESSURES |     |     | UNITS  |
|-----------------------------------|---------------|-----|-----|--------|
|                                   | MIN           | NOM | MAX |        |
| EXCITATION VOLTAGE                | 3             | 12  | 16  | Vdc    |
| SUPPLY CURRENT                    | ---           | --- | 3.5 | mA     |
| INPUT RESISTANCE                  | 5             | --- | --- | K-OHMS |
| OUTPUT RESISTANCE                 | ---           | 3   | --- | K-OHMS |
| OPERATING TEMPERATURE             | -25           | --- | 85  | °C     |
| STORAGE TEMPERATURE               | -40           | --- | 125 | °C     |



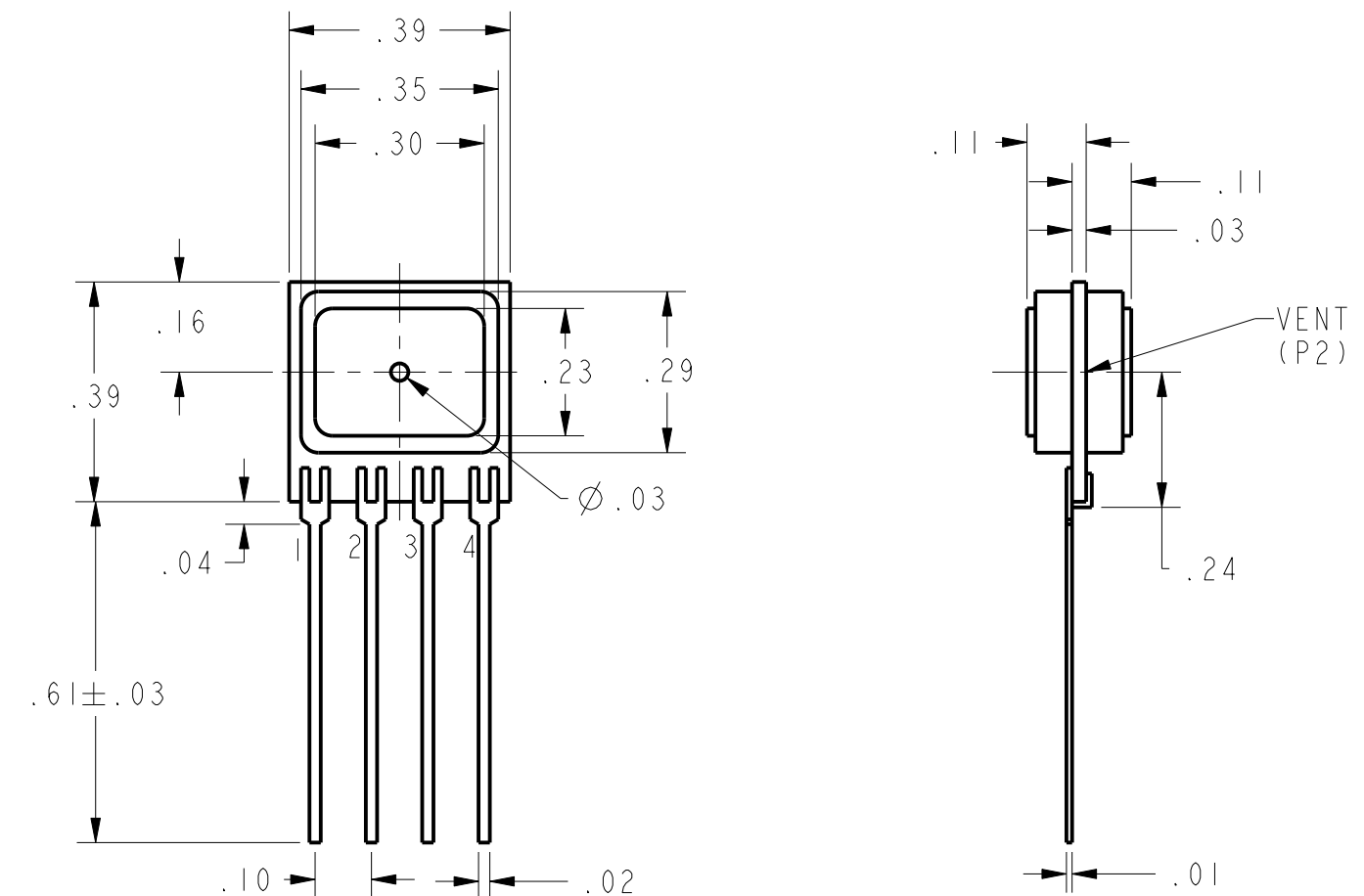
EQUIVALENT CIRCUIT

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

- NOTES**
- SPAN IS THE ALGEBRAIC DIFFERENCE BETWEEN THE OUTPUT AT FULL SCALE PRESSURE AND THE OFFSET OUTPUT
  - TEMPERATURE ERROR IS CALCULATED WITH RESPECT TO 25°C
  - LINEARITY IS MEASURED AT 1/2 FULL SCALE PRESSURE USING BEST STRAIGHT LINE FIT
  - THE OUTPUT OF THE SENSOR IS PROPORTIONAL, RATIO-METRIC, TO THE EXCITATION VOLTAGE. THE EXCITATION MAY VARY BETWEEN 3 TO 16 Vdc. ALL SPECIFICATIONS WILL NOMINALLY BE CHANGED BY THE RATIO OF V<sub>EXCITATION</sub>/12.0 Vdc
  - LIMIT SOLDERING TO 315°C FOR LESS THAN 10 SECONDS
  - PIN 1 IS IDENTIFIED BY THE DOT ON THE HOUSING AS SHOWN ON THE VARIOUS DRAWINGS
  - APPLY PRESSURE TO PORT INDICATED ON THE DRAWINGS SHOWN
  - SENSORS ARE OPERATIONAL OVER VACUUM PRESSURE RANGE
  - INPUT MEDIA RESTRICTED TO DRY GASES ONLY
  - THE L04 LISTING HAS A TEMPERATURE SHIFT RANGE FROM 0 TO 25°C AND 25 TO 50°C



DF HOUSING



D HOUSING

|   |   |   |                  |          |              |                        |
|---|---|---|------------------|----------|--------------|------------------------|
| UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:<br>NO PLACE X ±.040 ±1<br>ONE PLACE .X ±.030 ±0.4<br>TWO PLACE .XX ±.015 ±0.15<br>THREE PLACE .XXX ±.005 ±<br>ANGLES ±<br>RAW MATERIAL-COMMERCIAL STANDARD | <input checked="" type="checkbox"/> US (inch) CUSTOMARY | <input type="checkbox"/> SI (mm) METRIC | DRAWN            | TSM      | 6FEB03       | <b>Honeywell</b>       |
|   | THIRD ANGLE PROJECTION                                  |   |                  | CHECK    | CMH          |                        |
| 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            |          |              | <b>PRESSURE SENSOR</b> |
| DIMENSIONS ARE TO BE MET BEFORE PROTECTIVE COATINGS ARE APPLIED   |   |   | SIZE             | DWG TYPE | DRAWING NAME |                        |
| 3D PTC  |   |   | ASME Y14.5M-1994 | SCALE    | 3:1          | WEIGHT                 |
|   |   |   | SHEET            |          |              | 1 OF 1                 |