

Installation Instructions for the Compensated/Calibrated and Uncompensated/Uncalibrated Board Mount Pressure Sensors CPC/CPCL Series and CPXL Series

ISSUE 3
PK 80156

GENERAL INFORMATION

The CPC/CPCL and the CPXL Series sensors integrate silicon micromachined sensing technology, temperature compensation and calibration in a complete family of low-cost packages. These piezoresistive pressure sensors use micromachined silicon chips mounted on a ceramic and protected with a plastic cap. Several tube arrangements with nylon housings are available for various pressure applications.

Gage pressure is measured with respect to ambient pressure. When applied pressure increases, the differential voltage between the two output pins increases. As pressure decreases, differential voltage decreases.

Table 1. Performance Characteristics (At 12.0 ± 0.01 Vdc Excitation, 25 °C)

Characteristic	Min.	Typ.	Max.	Unit
Excitation (CPXL)	–	5	12	Vdc
Excitation (CPCL, CPC)	3.0	12	16	Vdc
Input resistance	–	3	–	kOhm
Output resistance	–	3	–	kOhm
Weight	–	2	–	g

Table 2. Environmental Specifications

Characteristic	Parameter
Operating temperature	-25 °C to 85 °C [-13 °F to 185 °F]
Storage temperature	-40 °C to 125 °C [-40 °F to 257 °F]
Media compatibility	P1 Port (Dry Gases Only): Media must be compatible with epoxy based adhesive.

SOLDERING

Limit soldering to 315 °C [600 °F] maximum, with duration of five seconds maximum.

Figure 1. Equivalent Circuit

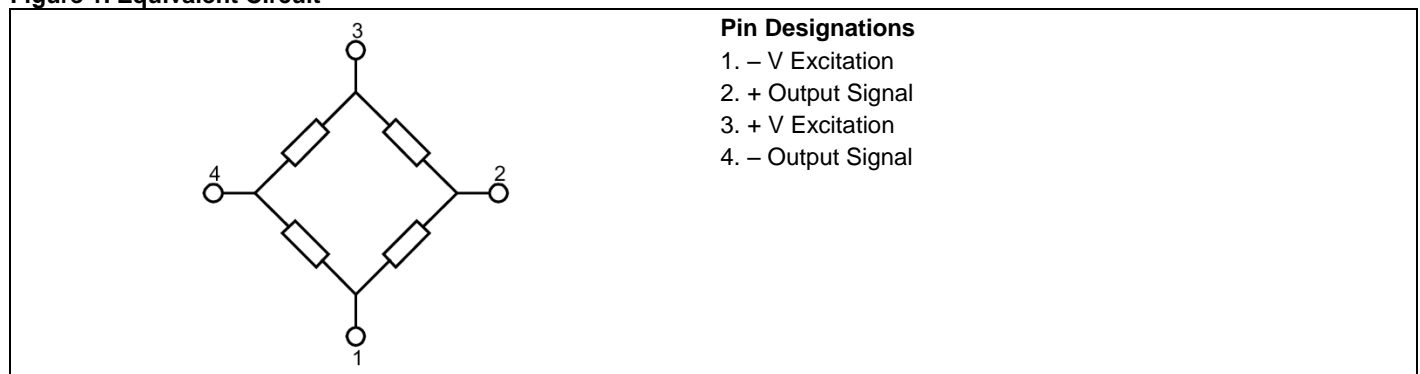
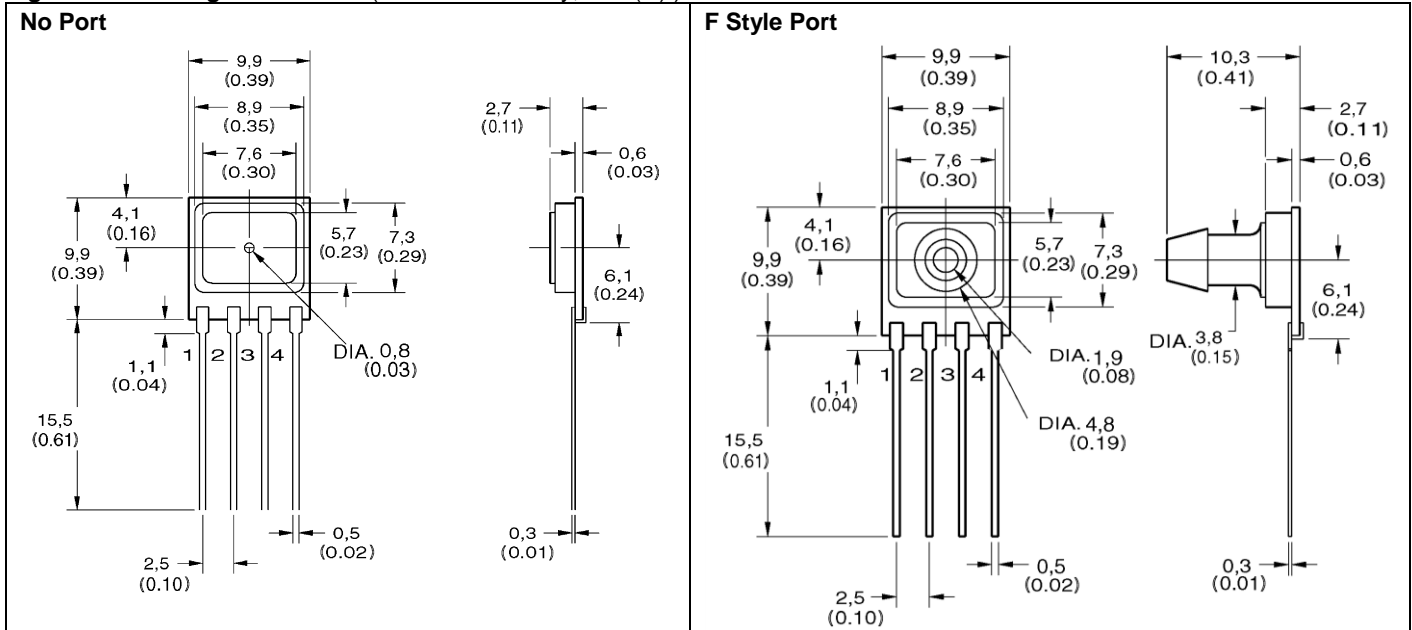


Figure 2. Mounting Dimensions (For reference only, mm/(in).)



⚠ WARNING
PERSONAL INJURY
 DO NOT USE these products as safety or emergency stop devices or in any other application where failure of the product could result in personal injury.
Failure to comply with these instructions could result in death or serious injury.

WARRANTY/REMEDY
 Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship. Honeywell's standard product warranty applies unless agreed to otherwise by Honeywell in writing; please refer to your order acknowledgement or consult your local sales office for specific warranty details. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace, at its option, without charge those items it finds defective. **The foregoing is buyer's sole remedy and is in lieu of all other warranties, expressed or implied, including those of merchantability and fitness for a particular purpose. In no event shall Honeywell be liable for consequential, special, or indirect damages.**

While we provide application assistance personally, through our literature and the Honeywell web site, it is up to the customer to determine the suitability of the product in the application.

Specifications may change without notice. The information we supply is believed to be accurate and reliable as of this printing. However, we assume no responsibility for its use.

⚠ WARNING
MISUSE OF DOCUMENTATION

- The information presented in this application note is for reference only. Do not use this document as a product installation guide.
- Complete installation, operation, and maintenance information is provided in the instructions supplied with each product.

Failure to comply with these instructions could result in death or serious injury.

SALES AND SERVICE
 Honeywell serves its customers through a worldwide network of sales offices, representatives and distributors. For application assistance, current specifications, pricing or name of the nearest Authorized Distributor, contact your local sales office or:

E-mail: info.sc@honeywell.com

Internet: www.honeywell.com/sensing

Phone and Fax:

Asia Pacific	+65 6355-2828
	+65 6445-3033 Fax
Europe	+44 (0) 1698 481481
	+44 (0) 1698 481676 Fax
Latin America	+1-305-805-8188
	+1-305-883-8257 Fax
USA/Canada	+1-800-537-6945
	+1-815-235-6847
	+1-815-235-6545 Fax

Sensing and Control
 Honeywell
 1985 Douglas Drive North
 Golden Valley, MN 55422
www.honeywell.com/sensing

