



Pressure Sensor, 0-100kPa, Gauge, 3.3VDC, I2C signal

## PS8808 Series IOT Pressure Sensors Technical Data Sheet

**PS8808-100k3CBNG**

### Features

- Pressure range 0-100kPa
- Gauge pressure sensor
- Constant current / Constant Voltage power supply
- Output in I<sup>2</sup>C interface and protocol
- Stainless Steel 316L

### Applications

- Industrial process control
- Gas, liquid pressure measurement
- Pressure checking meter
- Pressure calibrator
- Cooling equipment and air conditioning system
- Aviation and navigation inspection

### Description

PS8808-100k3CBNG Digital Output Pressure Transducer is a piezoresistive pressure sensor with 316L stainless steel corrugated diaphragm and isolated oil-filling construction. The sensing package utilizes silicone oil to transfer pressure from the 316L stainless steel diaphragm to the sensing die. The pressure is transformed to an analog electrical signal. With an integrated circuit for temperature compensation and nonlinear correction, it provides output data conforming to I<sup>2</sup>C interface protocol. It is widely used for various liquid pressure measurements compatible with stainless steel and viton.

### Product Configuration

Application:	Pressure Sensor
Pressure Type:	Gauge
Electrical Connector:	5-pin PH2.0

### General Specifications

Description	Minimum	Typical	Maximum	Unit
Pressure Range	0		100	kPa
Accuracy (Pressure)		±0.5		%Full Scale
Accuracy (Temperature)		±1.5		°C
Long Term Stability		±0.3		%FullScale/year
Overpressure		1.5		xFull Scale

### Electrical Specifications

Description	Minimum	Typical	Maximum	Unit
Output Signal		5%-95%		
Power Supply/Excitation Level		3.3±0.1		VDC
Power Supply Current		2.5		mA
Sampling Interval			1.5	msec



an INFINIT® brand



Pressure Sensor, 0-100kPa, Gauge, 3.3VDC, I2C signal

## PS8808 Series IOT Pressure Sensors Technical Data Sheet

PS8808-100k3CBNG

### Material Specifications

Description	Material
Diaphragm	Stainless Steel 316L
Plug Housing	Stainless Steel 316L

### Mechanical Specifications

#### Electrical Connection

Wire Color	(I <sup>2</sup> C) Standard Mode
Black	-IN
Red	+IN
Blue	SCL
White	SDA
Yellow	NULL



### Environmental Specifications

Temperature (Operating)	-10°C to 80°C
Temperature (Storage)	-40°C to 125°C
Shock	10g, 20Hz-2000Hz
Impact	100g, 11ms
Certifications	ROHS Compliant CE Compliant

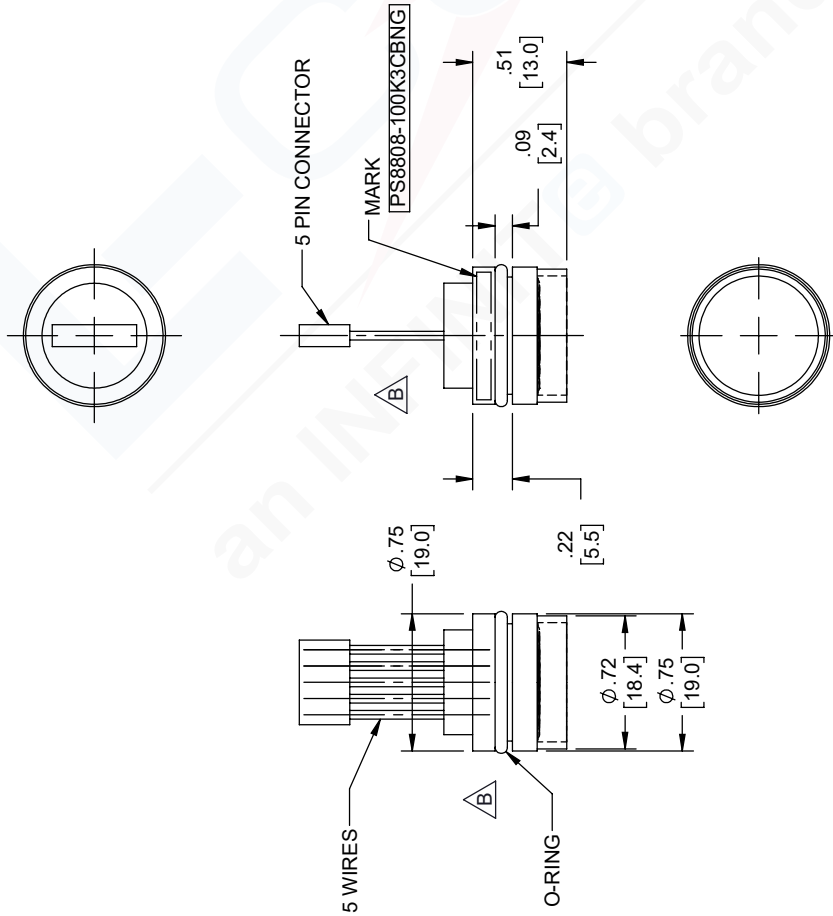
The Infinite Electronics portfolio includes coaxial cable assemblies, connectors, adapters and custom products, as well as our wireless product line which includes antennas, RF amplifiers, lightning and surge protectors, and NEMA rated enclosures.

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. L-com reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. L-com does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and L-com does not assume any liability arising out of the use of any part or documentation.

# PS8808-100k3CBNG CAD Drawing

Pressure Sensor, 0-100kPa, Gauge, 3.3VDC, I2C signal

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
B	ECN 10065; DELETED DIM [4.0] & [14.5]	08/28/19	TOZA




UNLESS OTHERWISE SPECIFIED  
 LEADING DIMENSIONS PRECEDING  
 DIMENSIONS IN [ ] ARE MILLIMETERS

TOLERANCES:  
 .X±.2 [5.08] | FRACTIONS ± 1/32  
 .XX±.01 [25] | ANGLES ± 1°  
 .XXX±.005 [13] |

ALL DIMENSIONS SHOWN  
 ARE FOR REFERENCE ONLY.  
 THIRD-ANGLE PROJECTION



 <p>an INFINITI brand                  50 High Street, West Mill, 3rd Floor, Suite #30                  North Andover, MA 01845 USA                  Phone: 1 800 341 5266   1 978 682 6936                  Fax: 1 978 689 9484                  www.L-com.com   e-mail: CustomerService@L-com.com</p>		THE INFORMATION AND DESIGN IN THIS DOCUMENT IS THE PROPERTY OF L-COM. ALL RIGHTS RESERVED. SHEET 1 OF 1 SCALE N/A
SIZE [CAGE] DRAWN BY A 43321 DZINN	PART NUMBER PS8808-100K3CBNG	REV B

THESE COMMODITIES, TECHNOLOGY OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.