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1865-05G-KDN



Actual product appearance may vary.

1865 Series force/pressure transducer, compensated, 0 psi to 25 psi pressure range

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Features

Silicon pressure/force interface diaphragm
 Force measurement for infusion pump applications
 Pressure measurement for liquid media
 Medical-grade materials
 8-pin DIP electrical connection
 Laser trimmed
 Choice of voltage or constant current excitation

Potential Applications

Infusion pumps
 Anesthesia monitors
 Non-corrosive, non-pressurized media-level sensors
 Ventilation systems
 Blood pressure equipment
 Syringe pumps
 Drug delivery systems

Description

The 1865 Series is a high-performance transducer specifically designed to address the needs of medical and specialized OEM applications. Offering laser-trimmed compensation, these products may be specified to operate with either a constant current or voltage supply.

These products employ a solid state piezoresistive pressure transducer mounted in a plastic package. For applications where force is applied by a flexible membrane to the sensor, such as found in infusion pumps, the precision height silicon diaphragm provides long life and is a reliable replacement for older force or load cell transducers. Using a silicon rubber diaphragm, this product is compatible with some liquid media applications.

The 1865 Series provides access to important safety features in critical care medical instrumentation, such as occlusion pressure or infiltration detection. The pressure data can provide medical personnel with useful diagnostic information regarding the condition of a patient's circulatory system. These force/pressure transducers can also be used with other medical dispensing devices, such as syringe pumps, to improve safety and accuracy.

Supporting Documentation

[Dimensions](#)

Product Specifications	
Sensitivity	Laser trimmed outputs: 38 mV min., 40 mV typ., 42 mV max.
Operating Force (O.F.)	25 psi
Supply Voltage	10.0 Vdc typ., 15.0 Vdc max.
Null Offset	0 m Vdc ± 2 m Vdc
Linearity	0.10 typ., 0.25 max. %FS, Best Fit Straight Line
Null Shift over Temperature	0.2mV max. over comp range, ref to 27 °C
Sensitivity Shift over Temperature	0.2 mV max. over comp range, ref to 27 °C
Input Resistance	8.0 kOhm min., 40 kOhm max.
Output Resistance	3.5 kOhm min., 6.0 kOhm max.
Overforce	60 psi
Compensated Temperature Range	-1 °C to 54 °C [30 °F to 129 °F]
Operating Temperature Range	-28 °C to 54 °C [30 °F to 129 °F]
Vibration	11 Hz to 2 kHz, 10 g, sine
Shock	100 g, 11 ms, half sine
Availability	Global
UNSPSC Code	411121
UNSPSC Commodity	411121 Transducers
Series Name	1865

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