

Diffused Silicon I2C Output Pressure Sensors

Description

XDB103-8 series diffused silicon I2C output pressure sensor uses metal membrane to isolate oil-filled pressure sensor core. The product has built-in temperature compensation sensor, which can compensate the zero error and temperature drift of sensor signal, sensitivity error, temperature drift and nonlinearity error in real time, and output pressure and temperature data in accordance with the I2C interface protocol.

Features

- ◆ CE conformity
- ◆ Measuring Range: 0kPa ~ 100kPa...60MPa
- ◆ 24-bit high precision analog to digital conversion
- ◆ Real-time compensation
- ◆ Output: 15%~85%, I2C Bus protocol
- ◆ Provide OEM, flexible customization

Typical applications

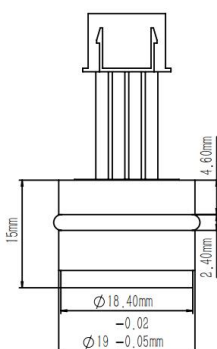
- ◆ Low power, smart device
- ◆ Medicine, food processing, packaging equipment
- ◆ IoT



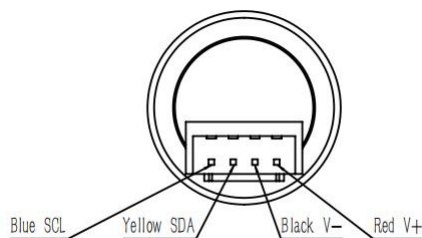
Specifications

Range	0~100kPa...60MPa
Over pressure	1.5 times full scale
Pressure type	Gauge/Absolute
Accuracy	±0.5%F.S. BFSL@25℃
Total error	±1%F.S.(including calibration errors and temperature drift effects)
Working Temperature	-10℃~80℃
Storage	-40℃~125℃
Power	1.8-3.6V DC
Output	15%~85% (I ² C Bus Protocol)
Electric current	≤0.3mA
Stability	±0.3%F.S . Per year

Dimension (unit: mm)



Electrical connection



Item	Definition	Wire color
1	V+	Red
2	V-	Black
3	SDA	Yellow
4	SCL	Blue

Output conversion

Percentage output(%)	Digital quantity(decimal)	Digital quantity(hexadecimal)
0	0	0x000000
10	1677722	0x19999A
15	2516582	0x266666
85	14260633	0xD99999
90	15099494	0xE66666
100	16777215	0xFFFFF

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