



|         |             |                    |          |
|---------|-------------|--------------------|----------|
| Version | Change Mark | Change Description | Date     |
| A1      |             | Initial Release    | 20241027 |

Technical description

|                           |   |
|---------------------------|---|
| Working Voltage           | 3-16 VDC  |
| Working Current           | <3 mA, Typical Value: 1.5 mA  |
| Pressure Range            | 0-5 BarG  |
| Overload Pressure         | 2xFS  |
| Burst Pressure            | 5xFS  |
| Output Signal             | IIC ( 10%*2 <sup>23</sup> ~ 90%*2 <sup>23</sup> )                       |
| Operating temperature     | -20°C ~ +85°C(Wire), -20°C ~ +105°C(Pressure sensor)                    |
| Storage temperature       | -20°C ~ +85°C   |
| Output Accuracy           | ±0.5%FS@15C -35C , ±2%FS@-20C ~ +105C                                   |
| Temperature Accuracy      | ±3C @-20C ~ 105C  |
| Response Time             | < 10ms  |
| Maximum Withstand Voltage | ± 20V DC  |
| ESD                       | Contact discharge: >8kV, Air discharge: >15kV                           |
| Cycle Life                | >2 Million Pressure Cycles @ 2-5Hz, 0 ~ full scale Pressure 0, 15 - 35C |
| Long-term Stability       | Zero @25°C: <0.25% FSO (No Time Accumulation)                           |
| Operating Medium          | Water, gas, oil and their mixtures                                      |
| Waterproof & Dustproof    | IP6K8K  |

//IIC default wildcard register address: 0xFE/0xFF  
 //IIC pressure reading routine: By STM32F103C8T6  
 IIC\_Write\_Byte(0x30, 0x09);  
 delay\_ms(50);  
 IIC\_Read\_3Byte(0x06, REG\_Data);  
 Cal\_PData = REG\_Data[0]\*65536+REG\_Data[1]\*256+REG\_Data[2];  
 Cal\_PDataB=Cal\_PData;  
 if (Cal\_PData>8388608)  
 Cal\_PData = (Cal\_PData-16777216)/8388608\*FULLSCALE;//FULLSCALE = full scale range  
 else  
 Cal\_PData=(Cal\_PData-838861)/(6710886/FULLSCALE);

|     |                      |                                       |               |      |      |
|-----|----------------------|---------------------------------------|---------------|------|------|
| 3   | O-Ring Seal          | Φ11.2 ID * Φ1.8 / FKM / 75A           | 1             |      |      |
| 2   | Metal Housing        | 6061-T6 Aluminum Alloy                | 1             |      |      |
| 1   | Electrical Connector | XH2. 54-4P( Red, White, Yellow, Blue) | 1             |      |      |
| No. | Drawing No.          | Name                                  | Specification | Qty. | Rem. |

|  |              |  |   |
|--|--------------|--|---|
|  Dongguan HXL Science and Technology Co., Ltd<br><a href="http://www.gdhltech.com">www.gdhltech.com</a> |              | Weight: 15g  | Product Name:<br>5Bar Pressure Sensor<br>(IIC Digital Output)   |
| The copyright of this drawing belongs to Dongguan HXL Science and Technology Co., Ltd. and shall not be reproduced or used for the sale of related products without permission.              |              | Material: T6061  | Drawing No.:<br>HXL-A000-RS123-CP03   |
| Designed by:   | ZYM 20241027 | Key Parameters: ※<br>Unspecified tolerance dimensions:<br>0.5-3 (±0.1) 30-120 (±0.3)<br>3-6 (±0.1) 120-400 (±0.5)<br>6-30 (±0.2) 400-1000 (±0.8) | View:  Version: A1 |
| Reviewed by:   | LHJ 20241027 |  | Unspecified chamfer: 0.3 Unspecified angle: ±0.5<br>Unspecified roughness: Ra 0.8 Unit: mm              |
| Approved by:   | XCQ 20241027 |  |   |

A  
B  
C  
D  
E  
F

