



# PRODUCT MANUAL

## WNK811

Hefei WNK Smart Technology Co., Ltd.

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# PRODUCT INTRODUCTION

WNK811-A is a high performance miniature pressure sensor. It adopts ASIC signal conditioning chip and 316L diaphragm type ceramic pressure sensor. It is anti-corrosion, anti-wear, shock and vibration resistant. The accuracy is up to 1%FS.

WNK811-B is a high performance mini pressure sensor. It uses ASIC signal conditioning chip and 316L diaphragm diffusion silicon oil filled pressure sensor. It is resistant to corrosion, abrasion, shock and vibration. The accuracy is up to 0.5%FS.

SIL



**WNK811-A**  
**Range: 0~6MPa**  
**Accuracy: 1%**  
**Ceramic core**



**WNK811-B**  
**Range: -100KPa~60MPa**  
**Accuracy: 0.5%**  
**Diffusion Silicon Core**



## APPLICATION



**WATER  
PRESSURE**



**AIR  
PRESSURE**



**OIL  
PRESSURE**



**AGRICULTURAL  
IRRIGATION**



**FOOD**



**PUMP**



**HVAC**



**REFRIGERANT**

## FEATURES

- Multiple Process Connection Options – Ease of installation.
- 0.5% Typical Accuracy – Offers superior accuracy which can work well for critical applications.
- Factory Calibrated – No need for field calibration. Plug and play reliability.
- Rugged, Compact Design – Easy to package or install.
- OEM/ODM Available – Adaptable to special needs.
- IP65 UL listed, RoHS, and CE compliant.
- 12 Months warranty.



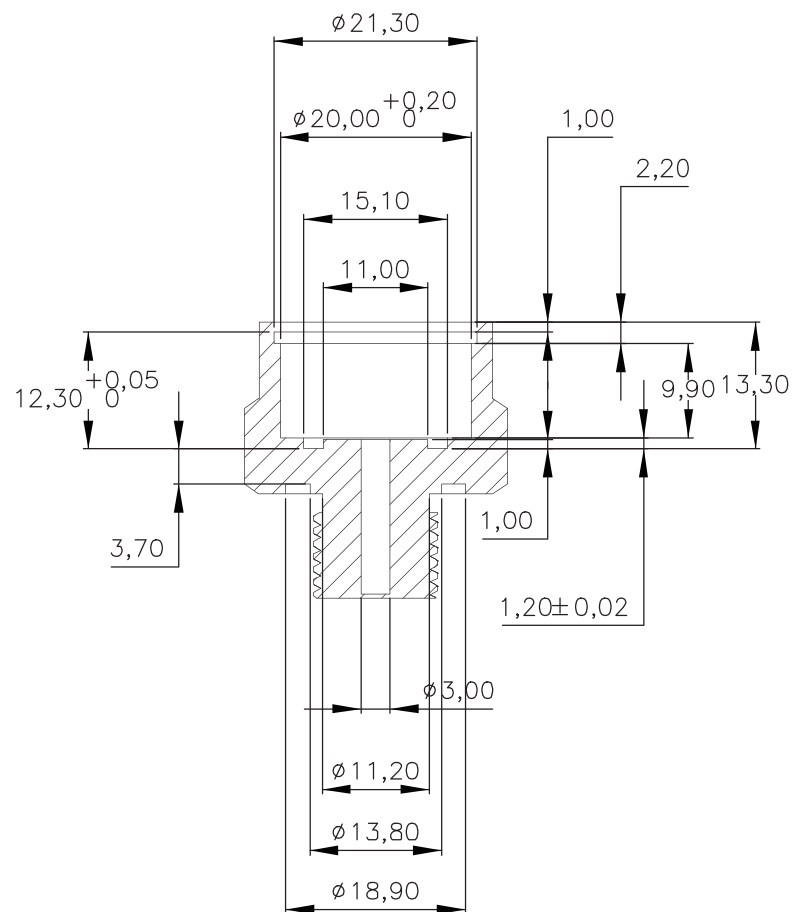
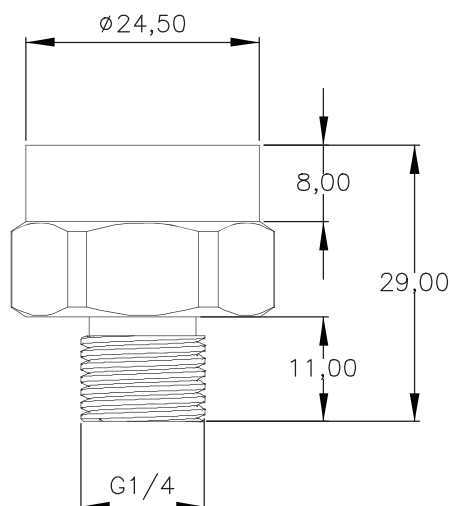
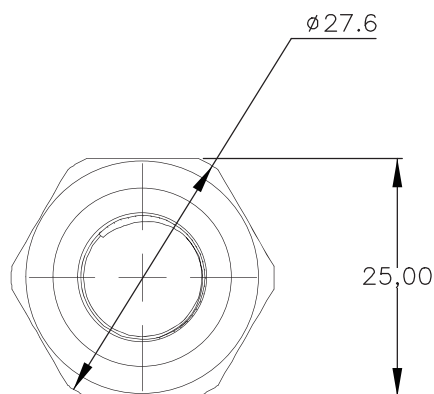
## SPECIFICATION PARAMETERS

|                               |                                                |        |         |       |              |
|-------------------------------|------------------------------------------------|--------|---------|-------|--------------|
| Model                         | WNK811                                         |        |         |       |              |
| Type                          | Gauge pressure Seal pressure Absolute pressure |        |         |       |              |
| Range                         | 0~6MPa、-100KPa~60Mpa                           |        |         |       |              |
| Overload pressure             | 150%                                           |        |         |       |              |
| Failure pressure              | 200%                                           |        |         |       |              |
| Signal output                 | 0.5-4.5V                                       | I2C    | 4-20mA  | 0-5V  | 0-10V Others |
| Scope of power supply         | 5V                                             | 3.3-5V | 12-30V  | 9-30V | 12-30V       |
| Zero temperature drift        | 2%                                             |        |         |       |              |
| Accuracy                      | 0.5%FS、1%FS                                    |        |         |       |              |
| Working temperature           | -45 to 85°C                                    |        |         |       |              |
| Compensation temperature      | -45 to 85°C                                    |        |         |       |              |
| Zero temperature drift        | $\leq \pm 0.5\%$ F.S. (-20~+70)°C              |        |         |       |              |
| Sensitivity temperature drift | $\leq \pm 0.5\%$ F.S. (-20~+70)°C              |        |         |       |              |
| Protection level              | IP65                                           |        |         |       |              |
| O-Ring material               | Viton                                          |        |         |       |              |
| Process connection            | G1/4                                           | 1/4NPT | M20x1.5 |       |              |
|                               | M10x1                                          | G1/8   | 1/8NPT  |       |              |
|                               | Others                                         |        |         |       |              |

|                |            |        |        |       |        |
|----------------|------------|--------|--------|-------|--------|
| Output         | 0.5-4.5v   | I2C    | 4-20mA | 0-5V  | 0-10V  |
| Supply Voltage | 4.75-5.25v | 3.3-5V | 8-30V  | 9-30V | 12-30V |

## PRODUCT SIZE

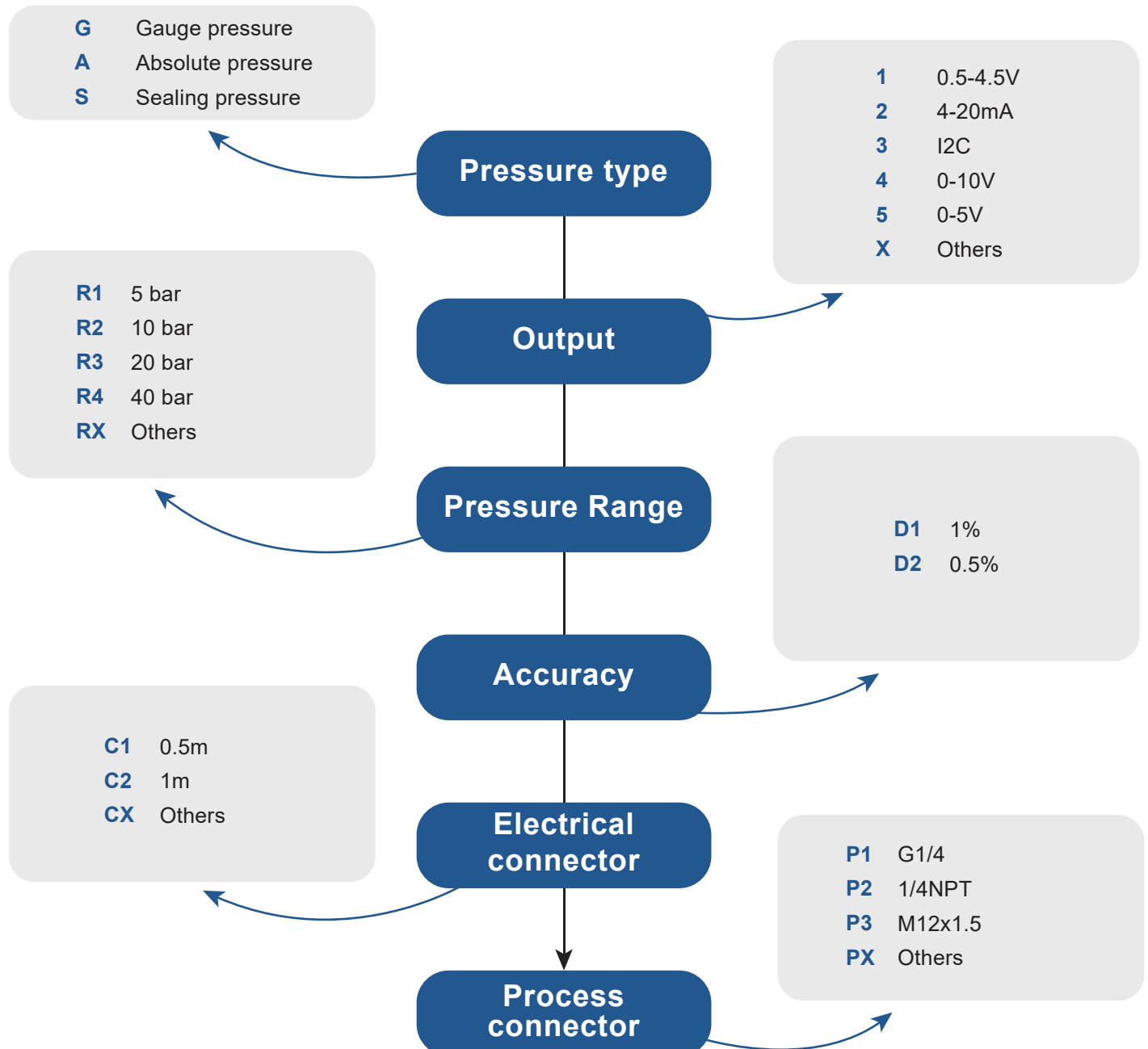
Unit:mm



**Pressure sensors with diffusion silicon cores  
are 5 mm higher in size**



## SELECTION GUIDE



Please select your selection code : **WNK811-G-2-R3-D1-C1-P1**