



# PRODUCT MANUAL

## **W N K 8 1 M A**

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# PRODUCT INTRODUCTION

WNK81MA is piezoresistive pressure transducer, using imported ASCI signal conditioning chip and diffused silicon oil filled sensor core. Unlike ordinary pressure sensors, which can only measure gauge pressure, this product can also measure absolute pressure. The transducer is automatically tested and temperature compensated by laser resistance adjustment technology. It has features of anti-corrosion, anti-wear, shock resistance and vibration resistance. With long-term stability and high accuracy, it widely used in the pressure measurement and control fields of HVAC, Auto, Pumping, water treatment and etc.

SIL



## APPLICATION



**PIPELINE SYSTEM  
AUTOMATIC PUMPING**



**WATER  
TREATMENT**



**OIL  
PRESSURE**



**AGRICULTURAL  
IRRIGATION**



**AUTO PARTS**



**PUMP**



**HVAC PRESSURE  
SYSTEM CONTROL**



**REFRIGERANT**

## FEATURES

- Compact size,easy to install
- Imported Chip,temperature compensation,high accuracy
- Strong overload
- Long time stable
- Wide range of application



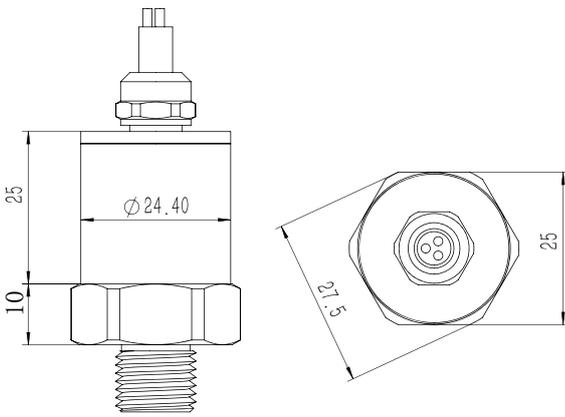
## SPECIFICATION PARAMETERS

Model	WNK81MA
Type	Gauge pressure Seal pressure Absolute pressure
Range	-1~700Bar
Overload pressure	150%
Failure pressure	200%
Signal output	0.5-4.5V I2C 4-20mA 0-5V 0-10V 0-100mV Others
Scope of power supply	5V 3.3-5V 12-30V 9-30V 10V 12-30V
Zero temperature drift	2%
Accuracy	0.25%~0.5%
Acquisition frequency	2.4KHZ
Start time	150ms
Working temperature	-20~70℃
Storage temperature	-20~70℃
Protection level	IP65
Electrical connection	Cable outlet Mini DIN43650 GX12-3 Packard M12 4Pin
Process connection	G1/4 1/4NPT M20x1.5 M10x1 G1/8 1/8NPT 7/16-20UNF Female Other

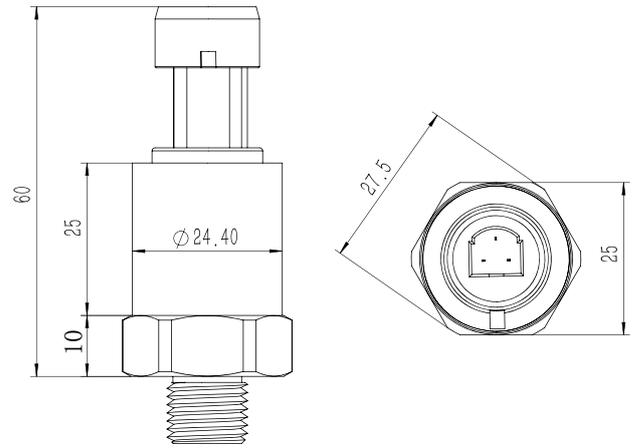
Output	0.5-4.5v	I2C	4-20mA	0-5V	0-100mV	0-10V
Supply Voltage	4.75-5.25v	3.3-5V	8-30V	9-30V	10V	12-30V

# PRODUCT SIZE

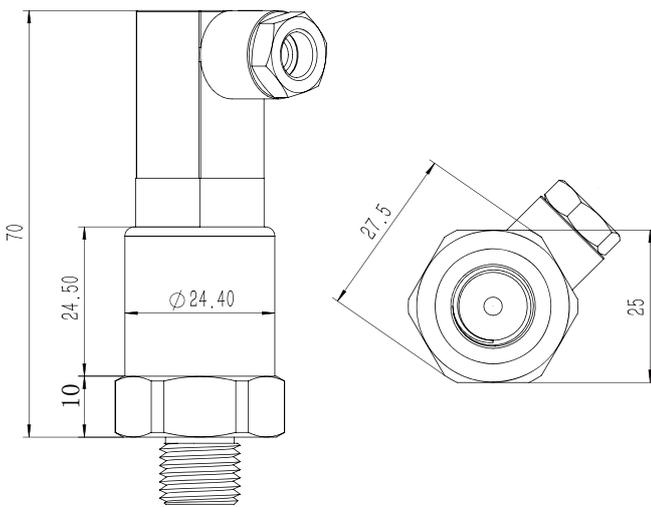
Unit:mm



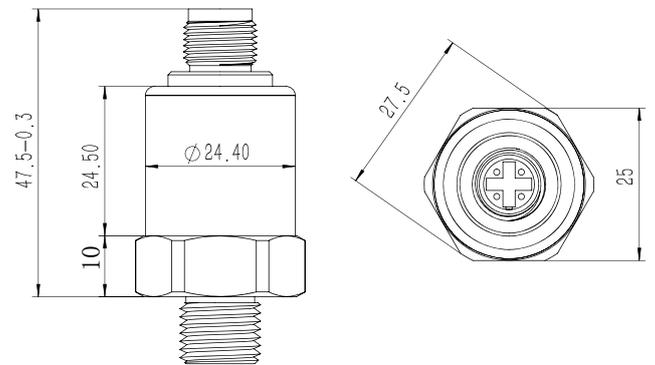
Cable outlet



Packard



Mini DIN43650



M12 4Pin

# ELECTRICAL CONNECTION

Packard		M12 4Pin		Cable Outlet			Mini DIN43650		
C1		C2		C3			C4		
4-20mA	Voltage	4-20mA	Voltage	4-20mA	Voltage	I2C	4-20mA	Voltage	
Red/Pin1 VCC Black/Pin2 GND	Red/Pin1 VCC Black/Pin2 GND Yellow/Pin3 VOUT	Brown/Pin1 VCC White/Pin2 GND	Brown/Pin1 VCC White/Pin2 GND Blue/Pin3 VOUT	Red VCC Black GND	Red VCC Black GND Yellow VOUT	Red VCC Yellow SCL Black GND White SDA	Red/Pin1 VCC Black/Pin2 GND	Red/Pin1 VCC Black/Pin2 GND Yellow/Pin3 VOUT	
		I2C	Brown/Pin1 VCC White/Pin2 SCL Blue/Pin3 GND Black/Pin4 SDA						

# PROCESS CONNECTION

Thread	G1/4	1/4 NPT	G 1/8
Unit:mm The hexagon is 25mm			
Number	P1	P2	P3

Thread	1/8 NPT	M12x1.5	M10x1	7/16-20UNF Female
Unit:mm The hexagon is 25mm				
Number	P4	P5	P6	P7



# SELECTION GUIDE

## Pressure Type

Gauge pressrue	G
Absolute pressure	K
Sealing pressure	S

## Range

10KPa	B1
40KPa	B2
100KPa	B3
500KPa	B4
10Bar	B5
16Bar	B6
20Bar	B7
100Bar	B8
400Bar	B9
others	BX

## Electrical Connector

Packard	C1
M12 4pin	C2
Cable outlet	C3
Mini DIN43650	C4
GX12-3	C5
Others	CX

## Output

0.5-4.5V	1
4-20mA	2
I2C	3
0-10V	4
0-5V	5
0-100mV	6
Others	X

## Process Connection

G1/4	P1
1/4 NPT	P2
G1/8	P3
1/8 NPT	P4
M12x1.5	P5
M10x1	P6
7/16-20UNF Female	P7
Others	PX

Code:           G-B2-C1-1-P1