

# S-PT-81MA

## PRESSURE TRANSMITTER



## OPERATING MANUAL

## Specifications

### Performance

Input	
Pressure type	Gauge pressure, sealing pressure, absolute pressure
Measuring range	-0.1~60MPa
Output	
Analog	0.5...4.5V, 4...20mA, 1...5V, 0...10V
Analog	I <sup>2</sup> C, SPI
Accuracy	
0.2%	Linearity, hysteresis, repetitiveness: <0.2% sensor full range
0.5%	Linearity, hysteresis, repetitiveness: <0.5% sensor full range
Overload	
2.5X pressure sensor full scale	
Housing Info.	
Housing Material	SS 304, Cu, Al
Wetting Material	SS316L
Ingress Protection	IP67

### Power Supply

Supply voltage	5V \24VDCregulated power supply,
Supply voltage effect	<p>5V supply voltage effect: min.3V/max.5.5V</p> <ul style="list-style-type: none"> <li>● For 0.5...4.5V output sensor, voltage has no effect for linearity and temperature compensation, voltage is proportional to LRV and FRV.</li> <li>● For I<sup>2</sup>C and SPI digital output sensor, voltage has no effect for linearity, LRV, URV and compensation temperature.</li> </ul> <p>24V supply power effect: min.9V/max30V</p> <ul style="list-style-type: none"> <li>● For 4...20mA current output sensor, voltage has no effect for linearity, LRV, URV and compensation temperature.</li> </ul>

### Operating condition: Temperature

Environment	-40 to 85°C
Storage	-45 to 85°C

## Electrical connection

Packard		M12*4P			Cable Outlet	Mini DIN43650		GX12-3		
C1		C2			C3	C4		C5		
Current (2 wire)	Voltage (3 wire)	Current (2 wire)	Voltage (3 wire)	I2C (4 wire)	Current (2 wire)	Voltage (3 wire)	Current (2 wire)	Voltage (3 wire)	Current (2 wire)	Voltage (3 wire)
Pin1: Supply V+ Pin2: Output Pin3: N/A	Pin1: Supply V+ Pin2: Common Pin3: Output	Pin1: Supply V+ Pin2: Output Pin3: N/A Pin4: N/A	Pin1: Vcc+ Pin2: GND Pin3: signal (0-10V) Pin4: not used	Pin1: Supply V+ Pin2: SCL Pin3: Common Pin4: SDA	Red: Supply V+ Green: Output	Red: Supply V+ Green: Common Yellow: Output	Pin1: Supply V+ Pin2: Output Pin3: N/A	Pin1: Supply V+ Pin2: Common Pin3: Output	Pin1: Supply V+ Pin2: Output Pin3: N/A	Pin1: Supply V+ Pin2: Common Pin3: Output

## Process connection

Thread	G1/4	1/4-18NPT	1/8-27NPT
Units in mm Hexagon is 25mm			
Code	P1	P2	P3

Thread	M14×1.5	M12×1.5	1/4-19PT	7/16-20UNF(female)
Units in mm Hexagon is 25mm				
Code	P4	P5	P6	P7

## Ordering Info

Model	Product description		
WNK81MA	Pressure Transmitter		
CODE	Pressure Type		
A	Absolute Pressure		
G	Gauge pressure		
S	Sealing pressure		
CODE	Accuracy		
5	0.5%FS		
CODE	Sensor range		
A	0.1bar	E	10 bar
B	0.5 bar	F	50 bar
C	1 bar	G	100 bar
D	5bar	H	600 bar
Other ranges are in developing			
CODE	Output		
1	0.5...4.5V DC		
2	4...20mA		
3	I <sup>2</sup> C		
4	SPI		
5	0...10V DC		
6	1...5V DC		
X	Customization		
CODE	Electrical connector		
C1	Packard		
C2	M12		
C3	Cable outlet ( pls put down cable length, such as 01 for 1 meters )		
C4	Mini DIN43650		
C5	GX12-3		
CX	Customization		
CODE	Process connector		
P1	G1/4	P5	M12×1.5
P2	1/4-18NPT	P6	1/4-19PT
P3	1/8-27NPT	P7	7/16-20UF(female)
P4	M14×1.5	PX	Customization
Pls contact WNK for other process connectors			
<b>Typical ordering code:</b> WNK81MA GC2 C1 P1			
WNK81MA GC2 C310 P1_____ C3 direct cable outlet length is 1 meter.			

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