

# Military Purpose Pressure Sensor

## Advantages

- High precision pressure transducer for military applications
- Measuring ranges form 0 to 250psi
- Compact design
- Voltage output
- Wide operating temperature range(-55~175°C)
- MEMS technology for superior linearity and low hysteresis
- Excellent performance
- Wide operating Voltage/DC 18~32V



## Applications

The transducer can be used for a wide range of applications in process control, automatic machinery and hydraulic or pneumatic system design

- Standard hydraulic and pneumatic equipments
- Machine tools and automatic machinery
- Air and gas compressors
- Pump pressure control
- ECAS system
- Process control
- Industrial engines
- Automotive systems
- Military systems

## Description

MPPS series Pressure transducer are for measuring pressure of gases and liquids in military applications. It is also suitable for high pressure measurement and precise measurement. Piezoresistive resistors are attached to the cell and connected into a Wheatstone bridge configuration. The output signal of this bridge is converted into a standardized current or voltage output signal.

Specifications		
<b>Input</b>		
Model	MPPS series	
Technology	Semiconductor pressure sensor	
Pressure ranges	0~250 Psi	
<b>Output</b>		
	Voltage Output	
Electrical connection type	3-wire(PTIH-8-4P Connector)	
Zero measured output	200mVDC	±50mV
Full measured output	5.00VDC	±3%
	Other signals available on request	
<b>Electrical Specifications</b>		
Excitation voltage	18~32V	
Output	200mV to 5.00V	
Consumption current	below 25mA	
Output Impedance	100 Ohms(Typ.)	
Response time	≤ 1ms(Typ.)	
Insulation resistance	over 100Mohm at 50VDC	

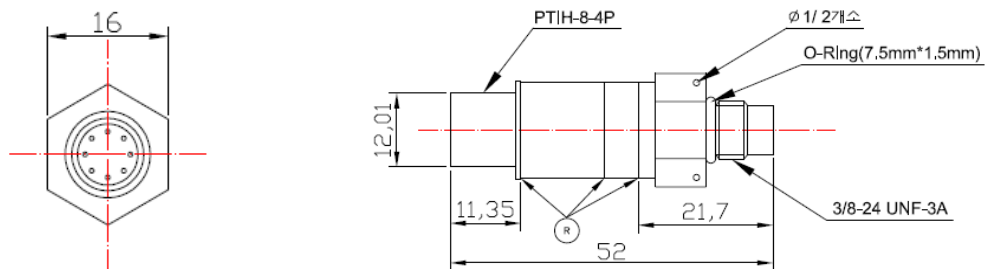
<b>Performance Specifications</b>	
Combined Non- Linearity/Hysteresis/Repeatability	±0.25%FS (Typ.)
Thermal Zero Shift	±1%FS(Typ.)(55°C)
Thermal Sensitivity Shift	±1%FS(Typ.)(55°C)
Long term stability	±0.3% FSO per annum
Reference temperature	25°C(±3°C)
Operating temperature range	-55~175°C

<b>Physical Specifications</b>	
Proof pressure	2×full scale
Burst pressure	3×full scale
Pressure port	3/8-24 UNF-3A
Mounting torque	87.4Kgf-cm(8.6Nm)~92Kgf-cm(9Nm)
Pressure resistance	No defect after 10 seconds in 30kgf/cm2
Durability test condition	1,480,000 cycle
Weight	Approx. (32.5g)

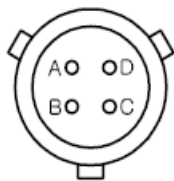
Note

- ① Available customer designed high pressure transducer on request
- ② Connector version: PTIH-8-4P, 4Connector

### Dimensions(mm)



### Electrical connection



PIN	DESIGNATION
A	Input
B	Input
C	Output
D	N/C(Signal)

### Internal Circuit Diagram

