

## Model Description Code

### Pressure Range

100 = 100 psig	007 = 7 bar
250 = 250 psig	017 = 17 bar
500 = 500 psig	035 = 35 bar
01K = 1000 psig	070 = 70 bar
2K5 = 2500 psig	175 = 175 bar
05K = 5000 psig	350 = 350 bar
10K = 10000 psig	700 = 700 bar

### Pressure Units

P = psi  
B = Bar

### Electrical Output

1 = 0 to 50 mVdc
2 = 0 to 100 mVdc
3 = 0.5 to 4.5 Vdc
4 = 1.0 to 5.0 Vdc
5 = 4-20 mAdc

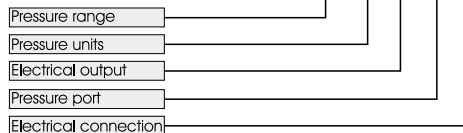
### Pressure Port

N = 1/4" NPT
A = 1/8" NPT
B = 1/4" BSP
D = 7/16"-20 UNF
G = M14x1.0 mm
H = 1/8" FNPT
I = 1/4" FNPT

### Electrical Connection

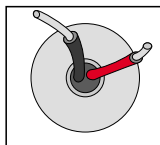
1 = 2 ft. Cable
2 = 4 ft. Cable
3 = 10 ft. Cable

**EXAMPLE: MSP-300-500-P-3-N-1**



### Output Type - 1 & -2

Red = + Supply  
Black = GND  
White = -Output  
Green = +Output



### Output Type -5

Red = + Supply  
Black = Output  
White = Not used  
Green = Not used

### Output Type -3 & -4

Red = + Supply  
Black = GND  
White = Output  
Green = Not used

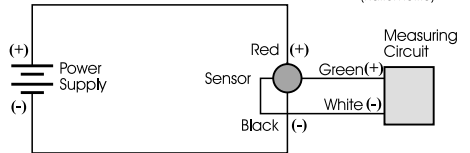
### Output Type -5

## WARNING: READ BEFORE INSTALLATION

When using this transducer, care should be taken when installing and operating this product. Be sure to observe the correct electrical connections and power requirements as noted in this instruction sheet and avoid exposing the transducer to pressure spikes in excess of the rated over pressure specification. Failure to do so may result in permanent damage to the transducer.

### Output Type - 1 & Type - 2

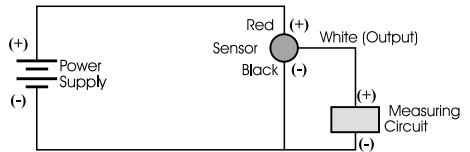
Supply 5 Vdc (4.75-5.25) Output 0-50 mVdc & 0-100 mVdc (Ratiometric)



Millivolt Output Sensor Wiring Configuration (Differential/Non-Amplified Output)

### Output Type - 3

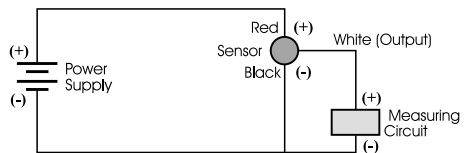
Supply 5 Vdc (4.75-5.25) Output 0.5 - 4.5 Vdc (ratiometric)



Voltage Output Sensor Wiring Configuration (Single-Ended/Amplified Output)

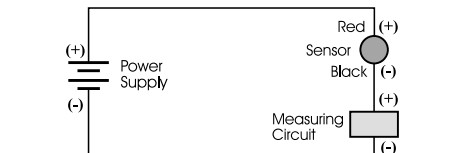
### Output Type - 4

Supply 10-30 Vdc Output 1-5 Vdc (Fixed)



Voltage Output Sensor Wiring Configuration (Single-Ended/Amplified Output)

Supply 10-30 Vdc Output 4-20 mAdc (Two-Wire)



Current Output Sensor Wiring Configuration

## Performance Specifications

Accuracy (combined linearity, hysteresis and repeatability)	< ±1% of FS Span
Media compatibility	17-4 PH stainless steel, (316 stainless steel available upon request)
Pressure overload	2x rated pressure
Burst pressure	5x or 20,000 psi, whichever is less
Long term stability (1 year)	±0.25% of FS Span (Typical)

## Electrical

Zero Offset	±3% of FS Span for millivolt outputs / ±2% for all other outputs
Span tolerance	±2% of FS Span for millivolt outputs / ±2% for all other outputs
Load Impedance	For voltage output configurations use: 1M Ohms for millivolt output; for all others > 100 K Ohms for quoted performance For 4-20 mA configuration use 0.05 * (Vsupply-10) K Ohms for max loop resistance
Bandwidth (-3dB)	DC to 1KHz - for amplified
Operating temperature range	-4° to 185°F (-20° to 85°C)
Compensated temperature range	32° to 130°F (0° to 55°C)
Zero thermal error	< ±2% of FS Span
Span thermal error	< ±2% of FS Span
Storage temperature range	-40° to 185°F (-40° to 85°C)
Shock	50g, 11 msec half sine shock per MIL-STD- 202F, method 213B, condition A
Vibration	±20g MIL-STD-810C, Procedure 514.2, Figure 514.2-2, curve L

Note: All performance and electrical specifications are referenced to 25°C, unless otherwise indicated.

Dear Valued Customer:

The enclosed pressure transducer has been manufactured, tested and inspected in accordance with all applicable procedures and practices as established in our registered ISO 9000 quality system. We certify that this sensor is in full conformance with all written specifications as contained in this instruction sheet.

Signature: Charlie Chen  
Title: Quality Manager, MSI/JL