

**Introduction :**

M1 Series are pressure sensors based on microfused technology which employs micromachined silicon piezoresistive strain gages fused with high temperature glass to a stainless steel diaphragm.

The sensor body is machined from a solid piece of 17-4PH stainless steel, All welded structure without O-ring allowing a leak-proof.

All the key processes were operated in our 10,000 class cleaning room.

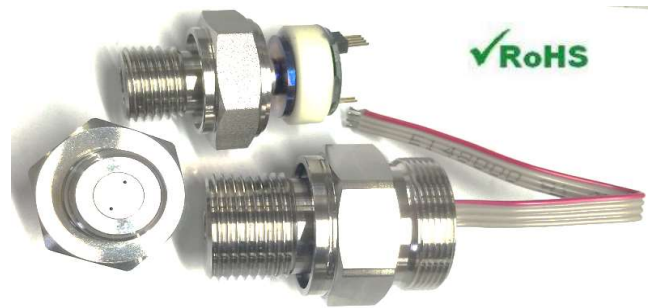
Each sensor was strictly temperature compensated for both zero and span. Various pressure ports are available; For maximum meeting customer's needs, Special design will be provided if required.

**Features:**

- Standard output 0-100mV
- Welded structure without O-ring
- Medium / High pressure (0-3.5Mpa...100Mpa)
- 5X burst pressure
- Compatible with corrosive media

**Applications:**

- Process control
- Pressure transmitters



**Specifications:** Excitation: 5VDC, (25°C)

Parameters	Min.	Typical	Max.
<b>Accuracy (%FS)</b>			
Non-Linearity <sup>1</sup>		±0.15	±0.25
Hysteresis		±0.1	±0.15
Repeatability		±0.1	±0.15
<b>Output (mV)</b>			
Zero	-2	±1	2
Span (FS)	97	100±1	103
<b>Temp. characters</b>			
Operation Temp. (°C) <sup>2</sup>	-40		125
Compensation Temp (°C)	-10		70
Zero Temp. error (%FS) <sup>3</sup>		±0.75	±1
Span Temp. error (%FS) <sup>3</sup>		±1	±1.5
<b>Long term Stability</b>			
Zero (±%FS annual)		0.2	
Span (±%FS annual)		0.2	
<b>Supply Voltage</b>		5	10
<b>Input Resistance</b>	5.0	6.6	8.0
<b>Output Resistance</b>	3.5	4.4	5.5
<b>Insulation Resistance(100V)<sup>4</sup></b>	100MΩ		
<b>Fastening Torque</b>	<b>Recommended</b>	≤50Mpa: 40Nm; > 50Mpa:70Nm	
	<b>Maximum</b>	80Nm	
<b>Pressure Range</b>	0-3.5Mpa...100Mpa		
<b>Pressure overload</b>	2X or 130Mpa whichever is less		
<b>Pressure burst</b>	5X or 130Mpa whichever is less		
<b>Pressure Media</b>	Liquids and Gases compatible with 17-4PH and 304 Stainless Steel		

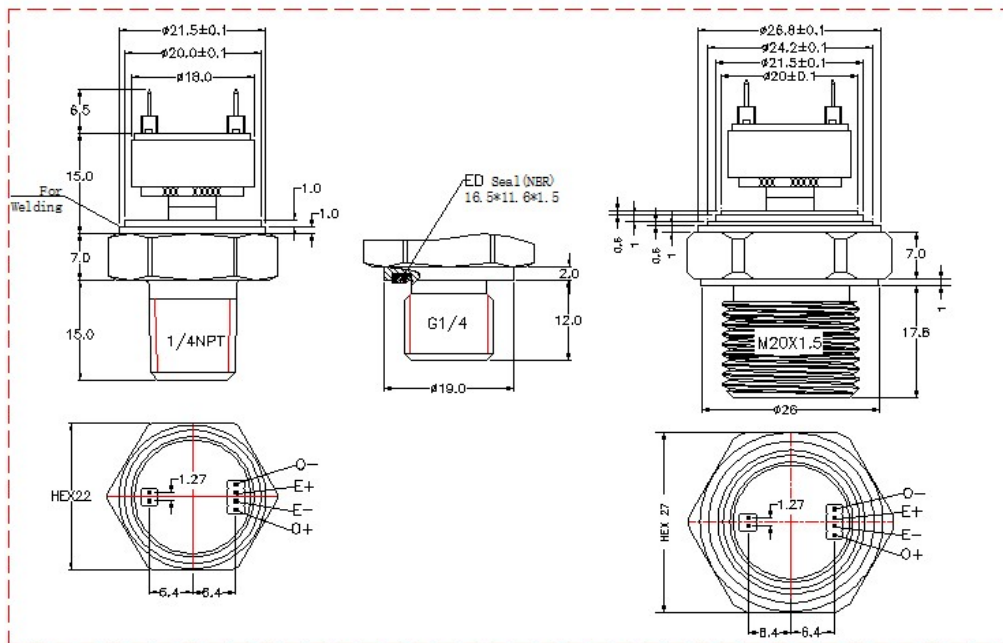
※注:

1. Best fit straight line.
2. Maximum temperature range for product with standard cable is -20° C to +105° C.
3. Over the compensated temperature range with respect to 25° C.
4. Between case and sensing element.

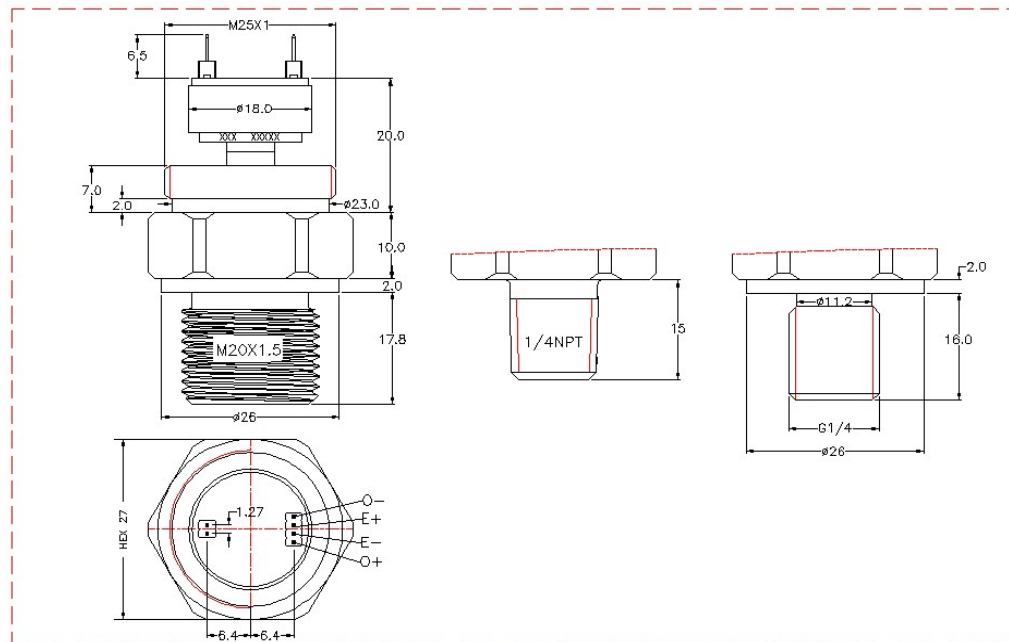
Dimensions (mm) :

Remark: Ribbon Cable or Connect Pins are optional for all models

**A Type (Housing weldable)**



**B Type**







**Ordering Information**

Model	Description					
M1	Microfused pressure sensor					
	Code	Pressure Range				
	3.5M	3.5Mpa				
	7M	7Mpa				
	10M	10Mpa				
	20M	20Mpa				
	35M	35Mpa				
	50M	50Mpa				
	70M	70Mpa				
	100M	100Mpa				
	XX	Special				
	Code	Housing mate options				
	A	A type				
	B	B type				
	C	C type				
	X	Special				
	Code	Thread of pressure port				
	1	1/4-18NPT				
	2	G1/4				
	3	M20X1.5				
	X	Special				
	Code	Electrical Connection				
	1	Connect Pins				
	2	Ribbon Cable(90mm as default)				
	X	Special				
	Code	Snubber				
	S	With snubber				

**Example:**

M1	35M	C	2	1	S	
	0-35Mpa	C type	G1/4	Pins	with snubber	Model: M1-35M-C2-1S