

MIOF-19CV Series
Media Isolated, Oil Filled, 19mm
mV Output, Temperature Compensated
Constant Voltage Supply



DESCRIPTION

Advanced Sensor MIOF-19CV Series sensor is a media isolated pressure sensor designed for corrosive gases and liquids compatible with stainless 316L. The sensor design utilizes silicon oil to transfer pressure from the 316L diaphragm to the sensing element. The rugged design is compatible with a wide range of harsh media including refrigerants, compressed air, and hydraulic fluids. The design's superior performance provides low thermal errors across a wide temperature range of -10 to 70°C.

Available in gage and absolute pressures with a flexible O-ring pressure port these sensors are ideal for OEM customer with ranges up to 70MPa.

APPLICATIONS

- Process Controls
- Waste Water Measurements
- Medical equipment/instrumentation
- Pressure Transmitters
- Environmental controls
- Pneumatic controls

FEATURES

- Constant Voltage Excitation
- Compatible with Corrosive media
- High Level Signal Output
- Wide selection of ports
- Absolute or Gage pressures
- Temperature Compensated
- Linear High Output
- Normalized 100mV Output

SPECIFICATIONS

	Symbol	Min	Typical	Max	Unit	Note
Performance Characteristic						
Supply Voltage			10.00		V	
Bridge Resistance, Input		3.0		25.0	kΩ	
Bridge Resistance, Output		3.5		6.0	kΩ	
Zero Pressure Offset			±1.0	±3.0	mV	
Pressure Non Linearity		-0.30	±0.20	+0.30	%FSS	
Pressure Hysteresis & Repeatability		-0.1	±0.05	+0.1	%FSS	
Full Scale Span	FSS	98		102	mV	
Temperature Hysteresis, Offset & Span		-	±0.1	±0.2	%FSS	
Thermal Error of Span				±1.5	%FSS	3
Thermal Error of Offset				±1.5	%FSS	3
Response Time			100		μS	
Insulation Resistance		100			M Ω	4
Long Term Stability, Offset & Span			±0.2	±0.3	%FSS	5
Compensated Temperature			0 to 70		°C	
Operating Temperatures			-40 to 125		°C	

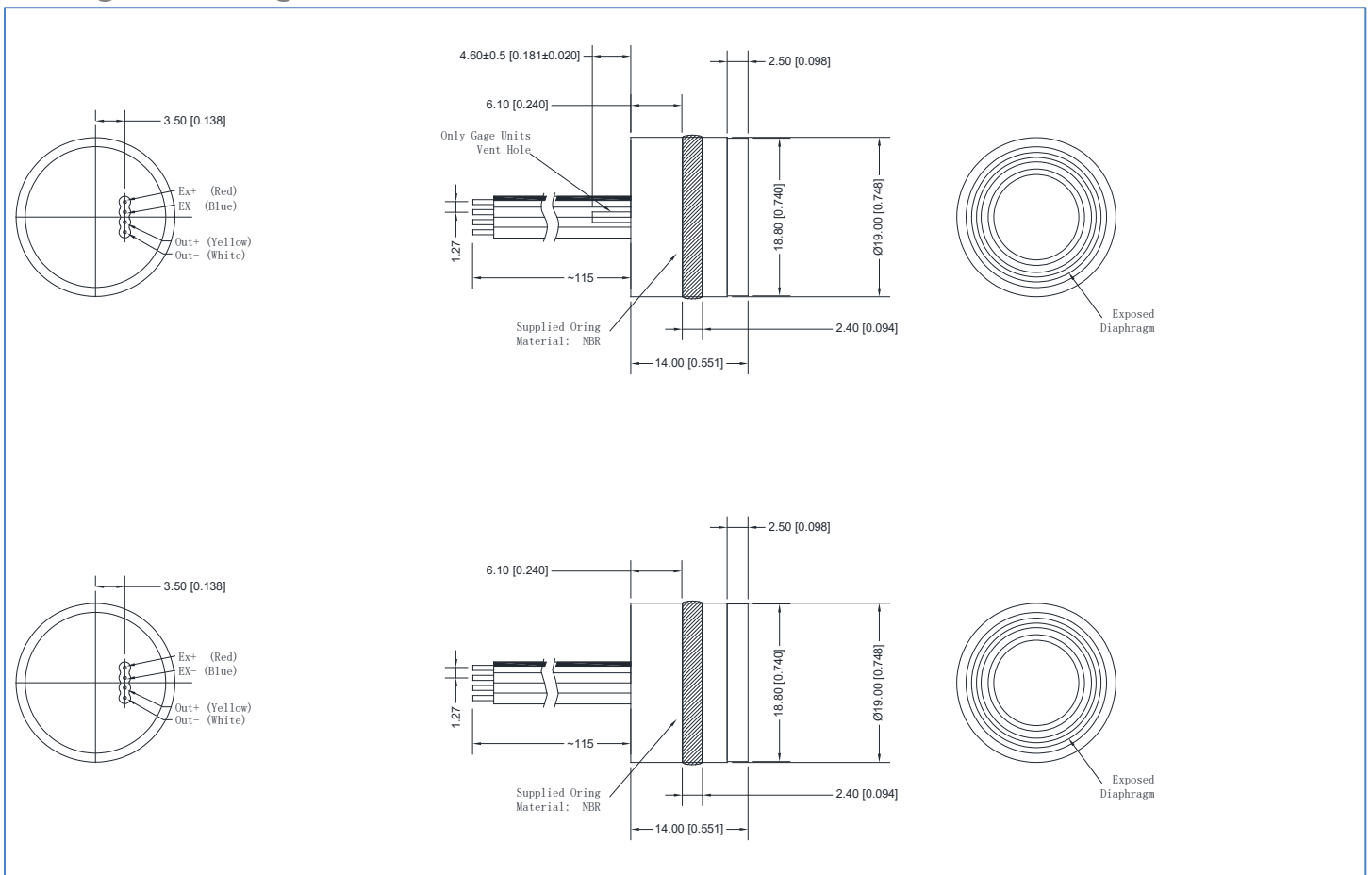
SPECIFICATIONS	Symbol	Min	Typical	Max	Unit	Note
Absolute Maximum Conditions						6
Supply Voltage				14	Vdc	
Storage Temperature		-40		125	°C	
Overage Pressure				1.5x	Range	
Media Compatibility		Liquids and Gases compatible with 316L Stainless Steel, NBR Oring				

Reference Conditions: Vsupply: 10.00 Vdc, Ta=25°C. Pressure applied to top side of pressure port.

1. All specification at reference conditions unless otherwise noted. Output is ratio metric to supply voltage.
2. ½ Terminal Base Non Linearity (Measured at 0, 50% and 100% FS) measured from front side.
3. Deviation over compensated temperature range expressed as percentage of reading at 25°C.
4. Measured between case and any output pin.
5. Deviation after 1 year period measured at reference conditions.
6. Exceeding Absolute Maximum Specification may damage the device. Extended exposure beyond the operating conditions may affect device reliability.

MECHANICAL DIMENSIONS Units =mm [Inches]

Package 1, O-Ring Cell



PART NUMBERING FOR ORDERS

Series	Port Style	Pressure Range	Pressure Units	Pressure Type (Range Availability) [Package Availability]	Electrical Source	Electrical Connector
MIOF-19CV	P1= O-Ring, Cell	01.0 01.6 02.5 04.0 06.0 10.0 25.0 60.0	M=MPa	G=Gauge (All Ranges through 3.5MPa) A=Absolute (All Ranges, except 35kPa) S=Sealed (Only Ranges 7MPa and above)	V=10 Vdc	RC=Ribbon Cable
		035 100 160 250 600	K=KPa			

Part Number Example: MIOF-19CV P1 02.0MA VRC 0-2MPa Absolute, O-Ring Cell Pressure Port, 10Vdc Supply Voltage, Ribbon Cable

WARRANTY

Pressure sensors have a limited one-year warranty to the original purchaser. AVSensors will repair or replace, at its option, without charge those items it finds defective. This is the buyer's sole remedy and is in lieu of all other warranties, expressed or implied, including those of merchantability and fitness for a particular purpose. In no event shall AVSensors be liable for consequential, special, or indirect damages. This warranty does not apply to units that have been modified, misused, neglected or installed where the application exceeds published ratings. Specifications may change without notice. The information supplied is believed to be accurate and reliable as of this printing, however, we assume no responsibility for its use.