

# VSO-EP™ / VSO-EV™

## Electronic pressure controllers

### FEATURES

- Offers silent operation
- Ensures high accuracy and unparalleled resolution
- Tested for long life
- Offers internal closed loop control and external pressure sensor capability\*
- OEM application-specific configurations available
- Includes thermally compensated proportional VSO® valve

\* Accessory required



### MEDIA COMPATIBILITY

Non-corrosive gases

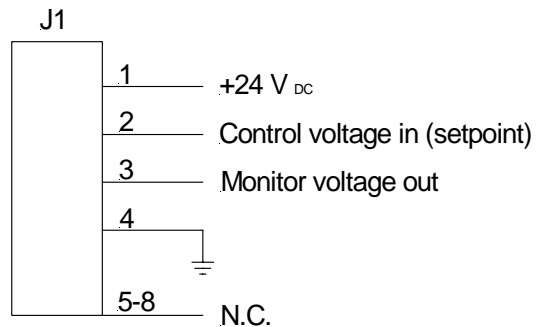
### ELECTRICAL

|                        |  |
|------------------------|--|
| Power                  | 24 V <sub>DC</sub> ± 10%<br>(12 V <sub>DC</sub> available) |
| Input control signal   | 0...5 V <sub>DC</sub><br>(4...20 mA available)             |
| Monitor output voltage | 0...5 V <sub>DC</sub>                                      |
| Current requirement    | <150 mA  |
| Electrical connector   | RJ-45, accepts Cat 5e<br>cables up to 100 feet             |

### PHYSICAL PROPERTIES

|                       |                        |
|-----------------------|------------------------|
| Operating environment | 0 to 55 °C             |
| Storage temperature   | -40 to 55 °C           |
| Porting               | 10-32 UNF female ports |

### ELECTRICAL CONNECTION



#### CAT 5e plug-in (RJ-45) connector (included)

| Signal                                 | RJ-45 pin # color |
|--|-------------------|
| Main power, 24 V <sub>DC</sub>         | 1 White w/ orange |
| Input control, 0 to 5 V <sub>DC</sub>  | 2 Solid orange    |
| Monitor output, 0 to 5 V <sub>DC</sub> | 3 White w/ green  |
| System ground                          | 4 Solid blue      |

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### PRESSURE RANGES CHARACTERISTICS

| Part no.      | Pressure range*        | Maximum supply pressure            |
|---------------|------------------------|------------------------------------|
| VSOEP...0-15  | 0...15 psig            | 150% of pressure transducer rating |
| VSOEP...0-30  | 0...30 psig            |                                    |
| VSOEP...0-50  | 0...50 psig            |                                    |
| VSOEP...0-100 | 0...100 psig           |                                    |
| VSOEV...0-150 | 0...-150 mbar (Vacuum) |                                    |
| VSOEV...0-345 | 0...-345 mbar (Vacuum) |                                    |

\* Custom ranges available (including 0...2, 0...5, 0...7, 0...70 psig and vacuum ranges)

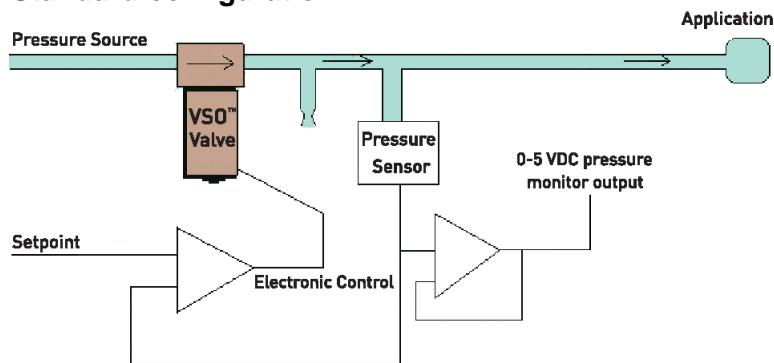
### PERFORMANCE CHARACTERISTICS

| Characteristics   | Min. | Typ. | Max. | Unit |
|-------------------|------|------|------|------|
| Pressure accuracy |      | ±0.2 | ±1.5 | %FS  |
| Non-linearity     |      |      | ±1.0 |      |
| Response time*    |      |      | 15   | ms   |

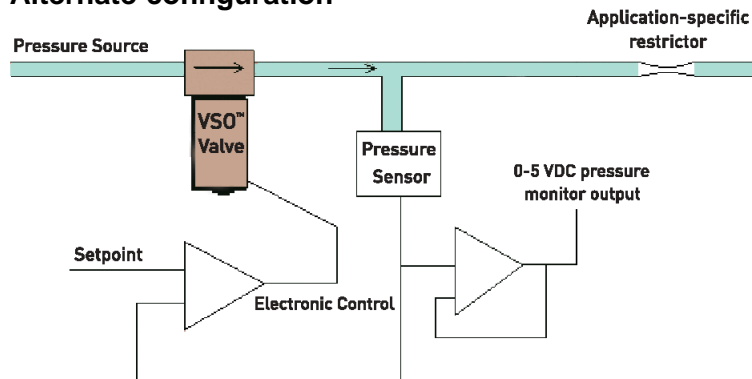
\* Response time to target pressure is output volume dependent

### CONFIGURATIONS

#### Pressure control: Standard configuration



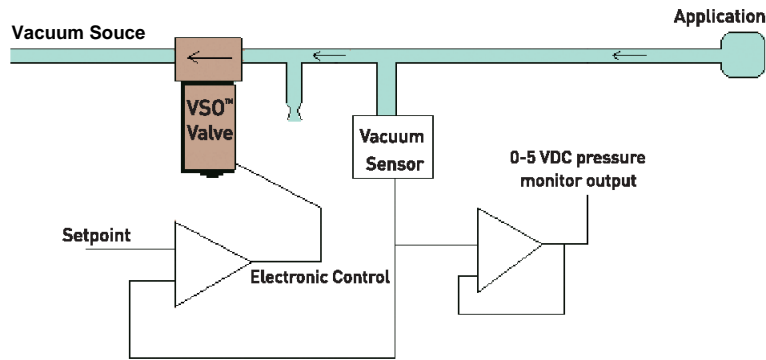
#### Pressure control: Alternate configuration



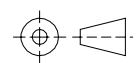
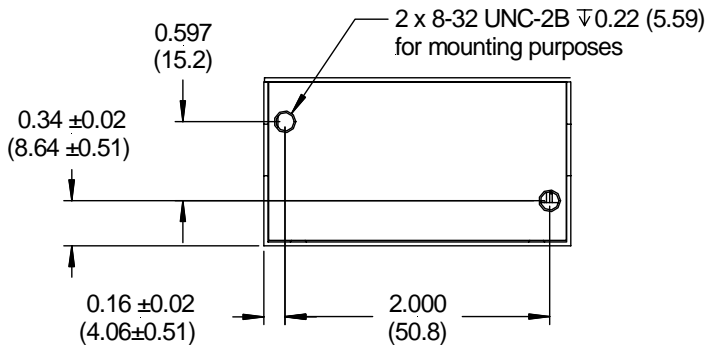
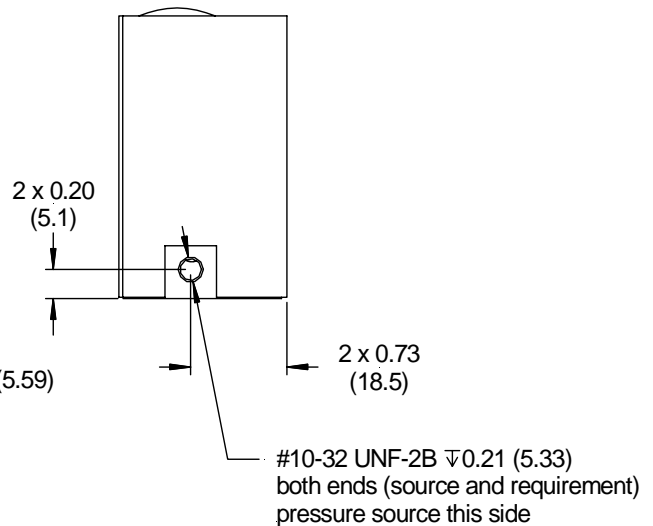
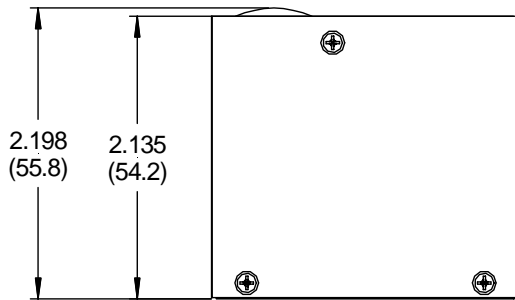
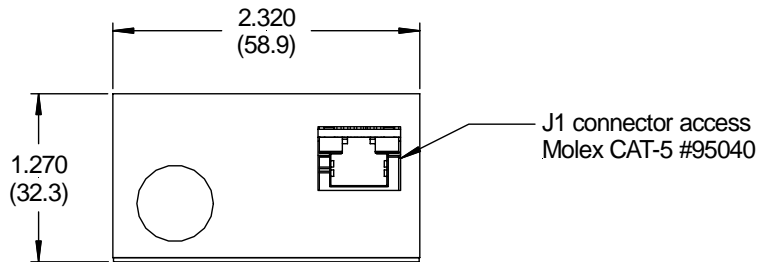
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## CONFIGURATIONS (cont.)

### Vacuum control: Standard configuration



## PHYSICAL DIMENSIONS



third angle projection

mass: approx. 150 g

dimensions in inches (mm)

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### ORDERING INFORMATION

#### VSO-EP (pressure controllers)

| Series  |       | Configuration |                            | Valve orifice |        | Electrical input |                       | Pneumatic range* |             |
|---------|-------|---------------|----------------------------|---------------|--------|------------------|-----------------------|------------------|-------------|
| Options | VSOEP | S:            | Standard pressure control  | 1:            | 0.01 " | 0-5:             | 0...5 V <sub>DC</sub> | 0-15:            | 0...15 psi  |
|         |       | A:            | Alternate pressure control | 3:            | 0.03 " |                  |                       | 0-30:            | 0...30 psi  |
|         |       |               |                            |               |        |                  |                       | 0-50:            | 0...50 psi  |
|         |       |               |                            |               |        |                  |                       | 0-100:           | 0...100 psi |

\* consult Sensortechincs for custom pressure ranges

#### Available listings:

VSOEPS10-50-15  
VSOEPS10-50-50  
VSOEPS10-50-100  
VSOEPS30-50-15  
VSOEPS30-50-50  
VSOEPS30-50-100  
VSOEPA10-50-15  
VSOEPA10-50-50  
VSOEPA10-50-100  
VSOEPA30-50-30

#### VSO-EV (vacuum controllers)

| Series  |       | Configuration |                         | Valve orifice |        | Electrical input |                       | Pneumatic range* |               |
|---------|-------|---------------|-------------------------|---------------|--------|------------------|-----------------------|------------------|---------------|
| Options | VSOEV | E:            | Standard vaccum control | 1:            | 0.01 " | 0-5:             | 0...5 V <sub>DC</sub> | 0-150:           | 0...-150 mbar |
|         |       |               |                         | 3:            | 0.03 " |                  |                       | 0-345:           | 0...-345 mbar |

\* consult Sensortechincs for custom vacuum ranges

#### Available listings:

VSOEVE10-50-150  
VSOEVE30-50-345

**CUSTOM PRESSURE RANGES AND CONFIGURATIONS ARE AVAILABLE.  
PLEASE CONTACT YOUR NEAREST SENSORTECHNICS SALES OFFICE.**

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