

# VSO-GC Flow Control Module

## Pressure Controllers



The VSO-GC, Electronic Pressure Control (EPC) Unit, converts a variable electrical control signal into a variable pneumatic output. By providing integral closed loop control, it replaces manual regulators, costly multiple function control valves, and needle valves. This product uses Parker Hannifin's patented VSO® proportional valve and offers application-specific integrated pneumatic pressure control for Gas Chromatography (GC) applications.

Typical applications include:

- Column Head Pressure Control
- Split Flow Control
- Carrier Gas Flow Control

### Features

- Silent operation
- Long life
- High accuracy
- Unparalleled resolution
- GC-specific proportional valve
- Internal closed loop control
- Pressure signal output
- Analog control

### Physical Properties

<b>Valve Technology:</b>
Thermally compensated proportional valve
<b>Media:</b>
Non-corrosive gases
<b>Operating Environment:</b>
0 to 50°C (32 to 122°F)
<b>Storage Temperature:</b>
-40 to 65°C (-40 to 149°F)
<b>Length:</b>
2.25 in (57.15 mm)
<b>Width:</b>
2.25 in (57.15 mm)
<b>Height:</b>
1.25 in (31.75 mm)
<b>Porting:</b>
10-32 female ports

### Electrical

<b>Power:</b>
24 VDC $\pm$ 10%
<b>Input Control Signal:</b>
0-5 VDC standard 4-20 mA available
<b>Monitor Output Voltage:</b>
0-5 volts
<b>Current Requirement:</b>
<400 mA max
<b>Electrical Connector:</b>
RJ-45

### Performance Characteristics

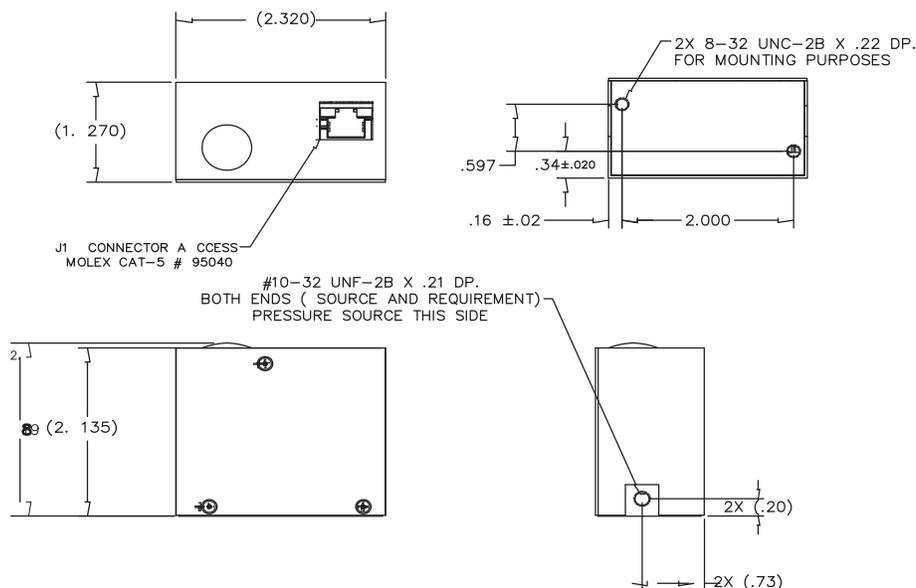
<b>Pressure Ranges:</b>
0-15 psig      0-2 psig 0-50 psig      0-100 psig
<b>Pressure Accuracy:</b>
$\pm$ 0.2% FS typical* $\pm$ 1.5% FS max
<b>Response:</b>
<15 msec (Response time to target pressure is output volume dependent)
<b>Linearity:</b>
< $\pm$ 1.5% FS
*Contact factory for details.

VSO is a registered trademark of Parker Hannifin Corporation.

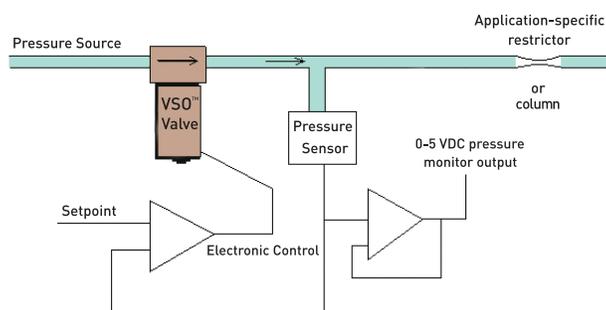


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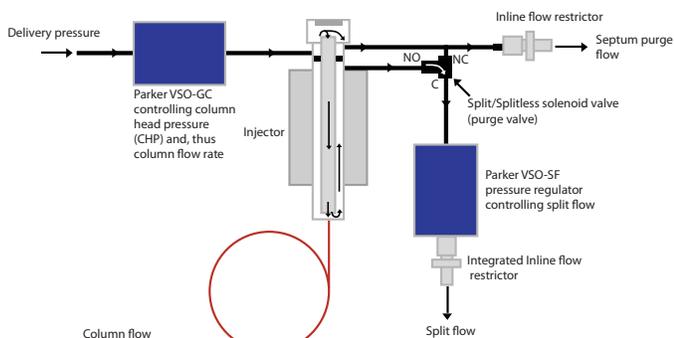
### Dimensions



### Configuration



VSO-GC Block Diagram Representation



CAT 5e Plug-in (RJ-45) Connector (included)

Signal	RJ-45 Pin # Color
Main Power, 24 VDC	1 White w/ Orange
Input Control Signal, 0-5 VDC	2 Solid Orange
Monitor Signal Output, 0-5 VDC	3 White w/ Green
System Ground	4 Solid Blue

### Ordering Information

Part Number	990-005020-002	990-005021-015	990-005021-050	990-005021-100	990-005023-015	990-005023-050	990-005023-100
Family	VSO-GC						
Effective Orifice	0.003	0.01	0.01	0.01	0.03	0.03	0.03
Power	24 vdc						
Control Voltage	0-5 vdc						
Pressure Range	0-2 psig	0-15 psig	0-50 psig	0-100 psig	0-15 psig	0-50 psig	0-100 psig
Buy Online	N	N	N	N	N	N	N

Control starts at approximately 10% of full scale control voltage and pressure rating allowing for positive shutoff. Pressure control may not be possible below 10% of full scale rating.

NOTE: Please consult Parker Precision Fluidics for other considerations. For more detailed information, visit us on the Web, or call and refer to Performance Spec. #790-002202-002 and Drawing #890-003146-002.

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For more information call 1.800.525.2857 or email [ppfinfo@parker.com](mailto:ppfinfo@parker.com)  
Visit [www.parker.com/precisionfluidics](http://www.parker.com/precisionfluidics)

