

# PNEUMATICS PREUMATICS PREUMATICS



Part No. GVP-311CL-24D



Part No. GVP-321CL-12D

Features

(sold separately).

- 10mm and 15mm valve widths
- 3-way normally closed configuration

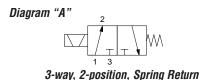
NITRA pneumatic latching solenoid valves will stay open after being momentarily energized thus saving power consumption and reducing heat. Valves must be mounted to a GM-3 series manifold

- Reversing polarity changes state
- GM-3 series manifolds sold separately





See <u>for</u> a wide variety of fitting options



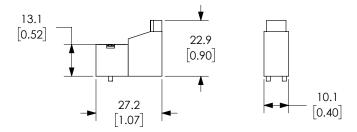
| GVP Series Miniature Latching Solenoid Valves |   |   |  |  |  |
|---|---|---|--|--|--|
| Model   | GVP-311CL-24D   | GVP-321CL-12D   |  |  |  |
| Price   |   |   |  |  |  |
| Weight (lbs)                                  | 0.05  | 0.1   |  |  |  |
| Size  | 10mm  | 15mm  |  |  |  |
| Valve Type                                    | 3-way, 2-position, Normally Closed                    | 3-way, 2-position, Normally Closed                          |  |  |  |
| Acting  | Single latching solenoid spri                         | ng return poppet  |  |  |  |
| Diagram                                       | А   | А   |  |  |  |
| Fluid   | Air or Inert Gas (to be filtered by                   | Air or Inert Gas (to be filtered by $40\mu$ filter element) |  |  |  |
| Min. / Max. Pressure                          | 0 to 105 psi (0 to 7.24 bar)                          |   |  |  |  |
| Flow (Cv)                                     | 0.013   | 0.047   |  |  |  |
| Port  | Requires GM type 10mm or 15mm manifolds for operation |   |  |  |  |
| Voltage                                       | 24VDC   | 12VDC   |  |  |  |
| Continuous ON Power                           | 1.3 W   | 1.6 W   |  |  |  |
| Expected Life                                 | 50,000,000 cycles at max 2                            | 2 cycles/second   |  |  |  |
| Wiring  | Connector Receptacle (Wire connector required)        | 18" Flying Leads  |  |  |  |
| Response Time                                 | 6ms (on), 8ms (off)                                   |   |  |  |  |
| Indication                                    | LED   |   |  |  |  |
| Temperature - Operation<br>and Storage        | 14~122°F (-10~50°C)                                   |   |  |  |  |
| Lubrication                                   | Not Required  |   |  |  |  |
| Body  | Glass-filled nylon                                    |   |  |  |  |
| Protection                                    | n/a   |   |  |  |  |



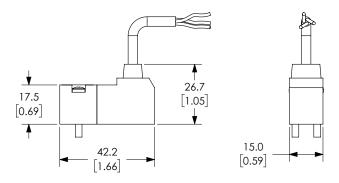
# Pheumatic GVP Series Miniature Latching Solenoid Valves

### **Dimensions**

mm [inches]



GVP-x11CL-xxD



GPV-x21CL-xxD

See our website <u>for complete Engineering d</u>rawings.



## Pneumatic GVP Series Miniature Solenoid Valve Manifolds



**NITRA** manifolds designed to work with 10mm wide GVP series valves.

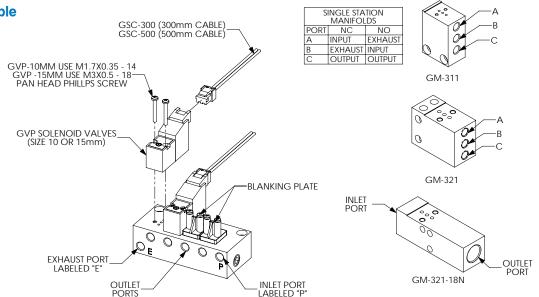
- Single to 6 stations
- #10-32 female threaded ports
- Precision machined
- Compact
- Anodized aluminum for corrosion resistance
- Made in USA





| Nitra Pneumatic GVP Series 10mm Miniature Solenoid Valve Manifolds |          |   |                  |       |                 |
|--|----------|---|------------------|-------|-----------------|
| Item   | Part No. | Description   | A<br>inches [mm] | Price | Weight<br>(lbs) |
| ***  | GM-311   | NITRA pneumatic valve manifold, anodized aluminum, rectangular, (1) station, #10-32 female threaded inlet(s), #10-32 female threaded outlet(s), #10-32 female threaded exhaust(s). For use with GVP-21 and GVP-31 series solenoid valves. | N/A              |       | 0.05            |
|  | GM-312   | NITRA pneumatic valve manifold, anodized aluminum, rectangular, (2) stations, #10-32 female threaded inlet(s), #10-32 female threaded exhaust(s). For use with GVP-21 and GVP-31 series solenoid valves.                                  | 1.42 [36.1]      |       | 0.05            |
| 2.000  | GM-314   | NITRA pneumatic valve manifold, anodized aluminum, rectangular, (4) stations, #10-32 female threaded inlet(s), #10-32 female threaded exhaust(s). For use with GVP-21 and GVP-31 series solenoid valves.                                  | 2.25 [78.2]      |       | 0.10            |
|  | GM-316   | NITRA pneumatic valve manifold, anodized aluminum, rectangular, (6) stations, #10-32 female threaded inlet(s), #10-32 female threaded exhaust(s). For use with GVP-21 and GVP-31 series solenoid valves.                                  | 3.08 [78.2]      |       | 0.15            |

## Assembly Example





### **Pneumatic GVP Series Miniature** PNEUMATICS Solenoid Valve Manifolds



NITRA manifolds designed to work with 15mm wide GVP series valves.

- Single to 4 stations
- #10-32 threaded or 1/8in NPT female
- Precision machined
- Compact
- Anodized aluminum for corrosion
- Made in USA





| Nitra Pneumatic GVP Series 15mm Miniature Solenoid Valve Manifolds |            |   |                  |       |                 |
|--|------------|---|------------------|-------|-----------------|
| Item   | Part No.   | Description   | A<br>inches [mm] | Price | Weight<br>(lbs) |
|  | GM-321     | NITRA pneumatic valve manifold, anodized aluminum, rectangular, (1) station, #10-32 female threaded inlet(s), #10-32 female threaded outlet(s), #10-32 female threaded exhaust(s). For use with GVP-22 and GVP-32 series solenoid valves. | N/A              |       | 0.05            |
| 20.01  | GM-322     | NITRA pneumatic valve manifold, anodized aluminum, rectangular, (2) stations, 1/8in female NPT inlet(s), #10-32 female threaded outlet(s), 1/8in female NPT exhaust(s). For use with GVP-22 and GVP-32 series solenoid valves.            | 2.13 [54.0]      |       | 0.15            |
| 81.1.1.1   | GM-324     | NITRA pneumatic valve manifold, anodized aluminum, rectangular, (4) stations, 1/8in female NPT inlet(s), #10-32 female threaded outlet(s), 1/8in female NPT exhaust(s). For use with GVP-22 and GVP-32 series solenoid valves.            | 3.37 [85.7]      |       | 0.25            |
|  | GM-321-18N | NITRA pneumatic valve manifold, anodized aluminum, rectangular, (1) station, 1/8in female NPT inlet(s), 1/8in female NPT outlet(s), vent hole exhaust(s). For use with GVP-22 and GVP-32 series solenoid valves.                          | N/A              |       | 0.6             |

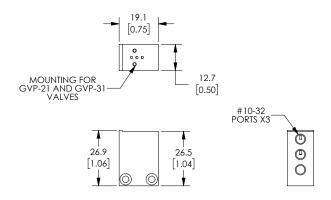
#### **Assembly Example** SINGLE STATION MANIFOLDS GSC-300 (300mm CABLE) GSC-500 (500mm CABLE) NC INPUT EXHAUST EXHAUST INPUT OUTPUT OUTPUT GVP-10MM USE M1.7X0.35 - 14 GVP -15MM USE M3X0.5 - 18-PAN HEAD PHILLPS SCREW GM-311 GVP SOLENOID VALVES (SIZE 10 OR 15mm) GM-321 BLANKING PLATE INLET PORT EXHAUST PORT LABELED "E" OUTLET GM-321-18N OUTLET PORTS INLET PORT LABELED "P"



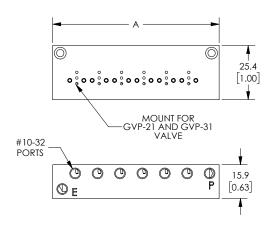
## Pneumatic GVP Series Miniature Solenoid Valve Manifolds

### **Dimensions**

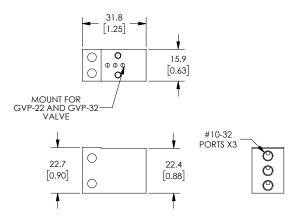
#### mm [inches]



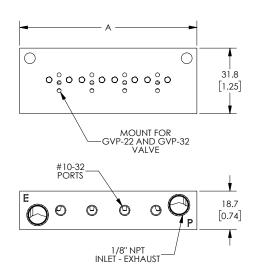
Part No. GM-311



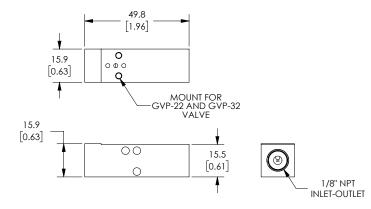
Part No. GM-312, GM-314, GM-316



Part No. GM-321



Part No. GM-322, GM-324



Part No. GM-321-18N



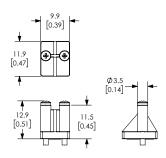
### **Pneumatic GVP Series Miniature** Solenoid Manifold Accessories



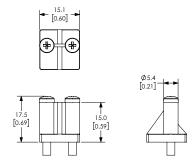
| Nitra Pneumatic GVP Series Miniature Solenoid Valve Manifold Accessories |          |  |       |                 |  |
|--|----------|--|-------|-----------------|--|
| Item   | Part No. | Description  | Price | Weight<br>(lbs) |  |
|  | GM-31BP  | NITRA blanking plate, nylon. For use with GM-31 series manifolds. Gasket and mounting screws included.                         |       | 0.05            |  |
|  | GM-32BP  | NITRA blanking plate, nylon. For use with GM-32 series manifolds. Gasket and mounting screws included.                         |       | 0.05            |  |
|  | GSC-300  | NITRA solenoid valve cable, miniature pin plug to pigtail, 11.8in/300mm cable length. For use with GVP series solenoid valves. |       | 0.05            |  |
| No.  | GSC-500  | NITRA solenoid valve cable, miniature pin plug to pigtail, 19.6in/500mm cable length. For use with GVP series solenoid valves. |       | 0.05            |  |

### **Dimensions**

### mm [inches]



Part No. GM-31BP



Part No. GM-32BP