



# Pneumatic GVP Series Miniature Solenoid Valves



Part No. GVP-211C-12D



Part No. GVP-321C-12D

NITRA™ pneumatic miniature solenoid valves are an excellent choice for many automation applications with low flow requirements. Valves must be mounted to a GM-3 series manifold (sold separately).

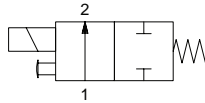
## Features

- 10mm and 15mm valve widths
- Available in 2-way or 3-way normally closed configurations
- 12 or 24 VDC solenoids
- GM-3 series manifolds sold separately



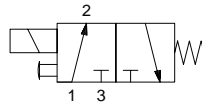
See for a wide variety of fitting options

Diagram "A"



2-way, 2-position, Spring Return

Diagram "B"



3-way, 2-position, Spring Return

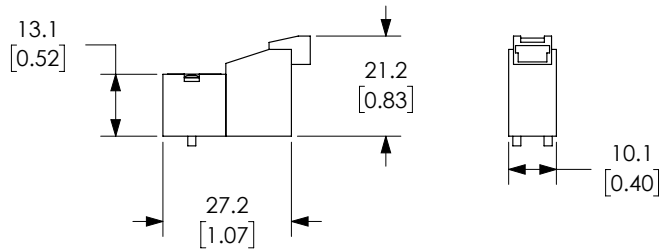
| GVP Series Miniature Solenoid Valves |   |              |                                    |              |                                    |                                    |              |
|--------------------------------------|---|--------------|------------------------------------|--------------|------------------------------------|------------------------------------|--------------|
| Models                               | GVP-211C-12D  | GVP-211C-24D | GVP-311C-12D                       | GVP-311C-24D | GVP-221C-12D                       | GVP-321C-12D                       | GVP-321C-24D |
| Price                                |   |              |                                    |              |                                    |                                    |              |
| Weight (lbs)                         | 0.05  |              |                                    |              | 0.1                                |                                    |              |
| Size                                 | 10mm  |              |                                    |              | 15mm                               |                                    |              |
| Valve Type                           | 2-way, 2-position, Normally Closed                      |              | 3-way, 2-position, Normally Closed |              | 2-way, 2-position, Normally Closed | 3-way, 2-position, Normally Closed |              |
| Acting                               | Single solenoid spring return poppet                    |              |                                    |              |                                    |                                    |              |
| Diagram                              | A   |              | B                                  |              | A                                  | B                                  |              |
| Fluid                                | Air or Inert Gas (to be filtered by 40µ filter element) |              |                                    |              |                                    |                                    |              |
| Min. / Max. Pressure                 | 0 to 105 psi (0 to 7.24 bar)                            |              |                                    |              |                                    |                                    |              |
| Flow (Cv)                            | 0.013   | 0.013        | 0.013                              | 0.013        | 0.047                              | 0.047                              | 0.047        |
| Port                                 | Requires GM type 10mm or 15mm manifolds for operation   |              |                                    |              |                                    |                                    |              |
| Voltage                              | 12VDC   | 24VDC        | 12VDC                              | 24VDC        | 12VDC                              | 12VDC                              | 24VDC        |
| Continuous ON Power                  | 1.3 W   |              |                                    |              | 1.6 W                              |                                    |              |
| Expected Life                        | 50,000,000 cycles at max 3 cycles/second                |              |                                    |              |                                    |                                    |              |
| Wiring                               | Connector Receptacle (Wire connector required)          |              |                                    |              | 18" Flying Leads                   |                                    |              |
| Response Time                        | 6ms (on), 8ms (off)                                     |              |                                    |              |                                    |                                    |              |
| Indication                           | LED   |              |                                    |              |                                    |                                    |              |
| Temperature - Operation and Storage  | 14-122°F (-10-50°C)                                     |              |                                    |              |                                    |                                    |              |
| Lubrication                          | Not Required  |              |                                    |              |                                    |                                    |              |
| Body                                 | Glass-filled nylon                                      |              |                                    |              |                                    |                                    |              |
| Protection                           | n/a   |              |                                    |              |                                    |                                    |              |



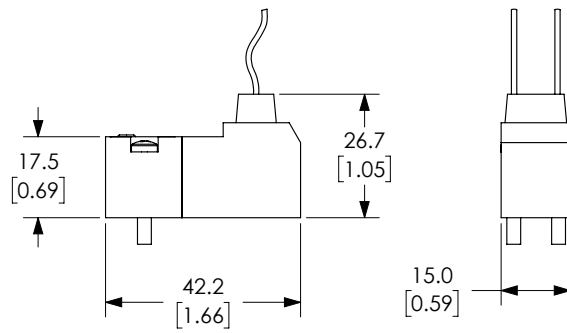
# Pneumatic GVP Series Miniature Solenoid Valves

## Dimensions

mm [inches]



**GVP-x11C-xxD**



**GVP-x21C-xxD**

See our website [for complete Engineering drawings.](#)







# Pneumatic GVP Series Miniature Solenoid Valve Manifolds



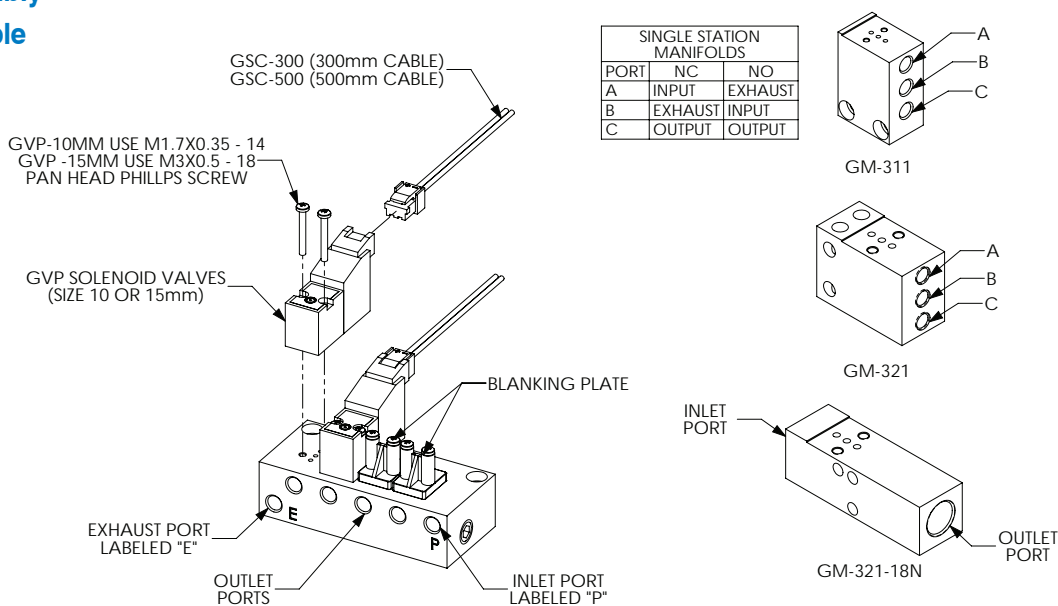
NITRA manifolds designed to work with 10mm wide GVP series valves.

- 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 inches [mm] | Price | Weight (lbs) |
|    | <b>GM-311</b> | 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         |
|    | <b>GM-312</b> | NITRA pneumatic valve manifold, anodized aluminum, rectangular, (2) stations, #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. | 1.42 [36.1]   |       | 0.05         |
|  | <b>GM-314</b> | NITRA pneumatic valve manifold, anodized aluminum, rectangular, (4) stations, #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. | 2.25 [78.2]   |       | 0.10         |
|  | <b>GM-316</b> | NITRA pneumatic valve manifold, anodized aluminum, rectangular, (6) stations, #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. | 3.08 [78.2]   |       | 0.15         |

## Assembly Example









# Pneumatic GVP Series Miniature Solenoid Valve Manifolds



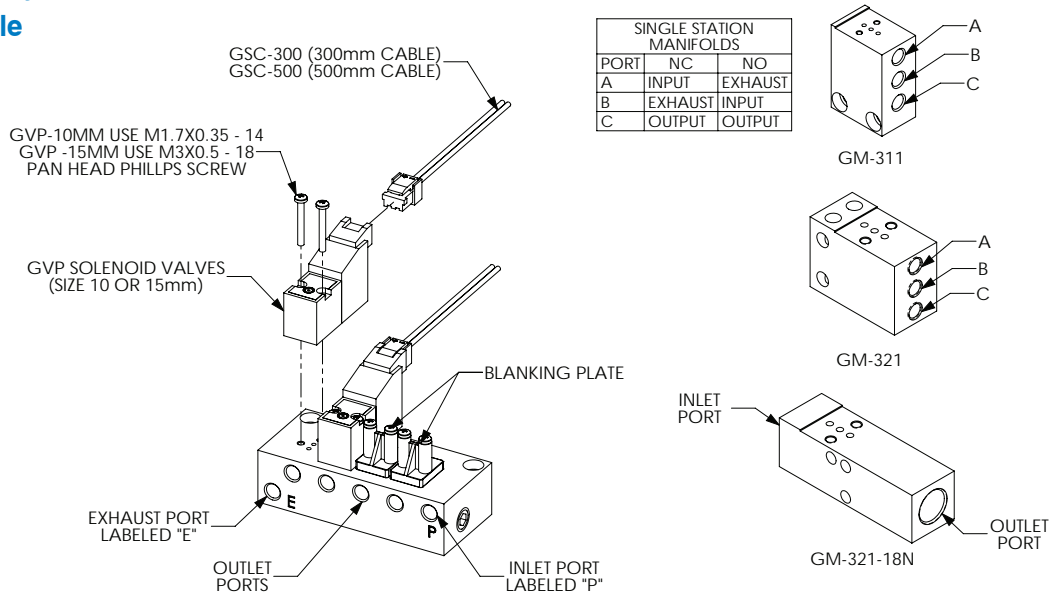
NITRA manifolds designed to work with 15mm wide GVP series valves.

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



| Nitra Pneumatic GVP Series 15mm Miniature Solenoid Valve Manifolds                  |                   |   |               |       |              |
|---|-------------------|---|---------------|-------|--------------|
| Item  | Part No.          | Description   | A inches [mm] | Price | Weight (lbs) |
|    | <b>GM-321</b>     | 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         |
|    | <b>GM-322</b>     | 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         |
|  | <b>GM-324</b>     | 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         |
|  | <b>GM-321-18N</b> | 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

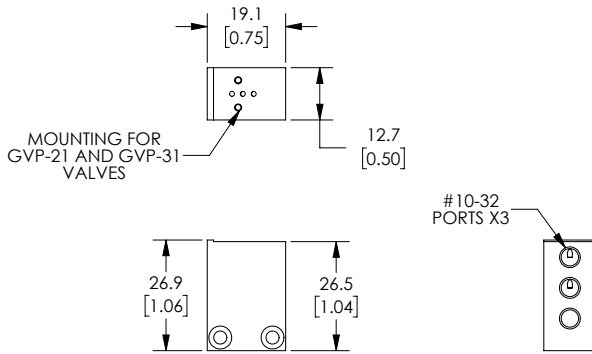




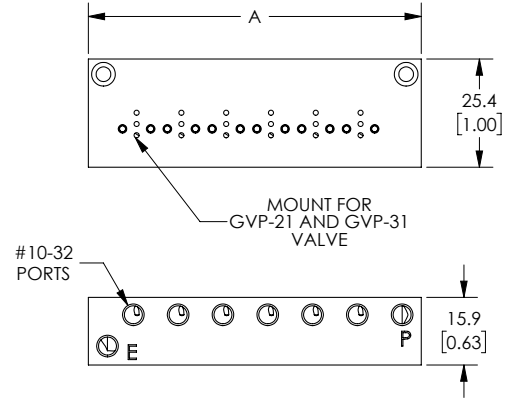
# Pneumatic GVP Series Miniature Solenoid Valve Manifolds

## Dimensions

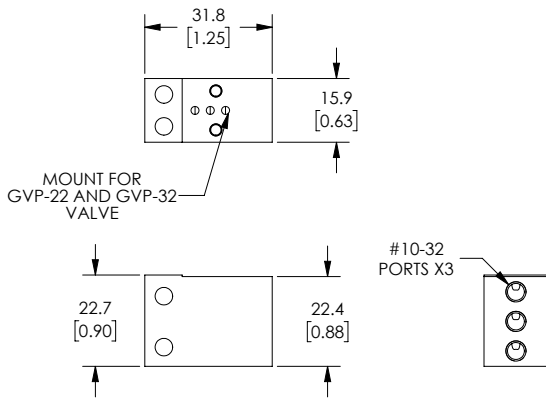
mm [inches]



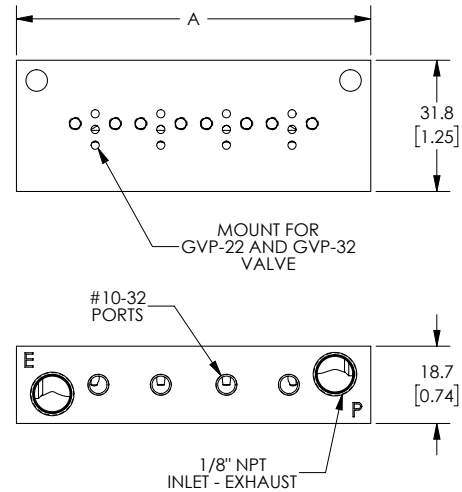
**Part No. GM-311**



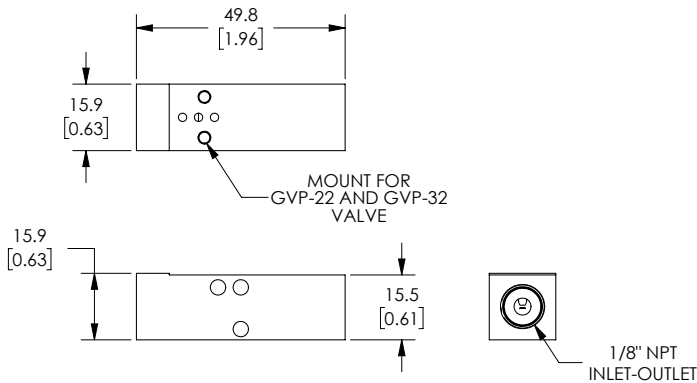
**Part No. GM-312, GM-314, GM-316**



**Part No. GM-321**



**Part No. GM-322, GM-324**







**Part No. GM-321-18N**

See our website for complete Engineering drawings.



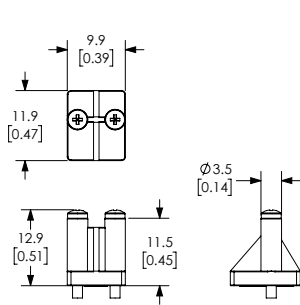
# Pneumatic GVP Series Miniature Solenoid Manifold Accessories



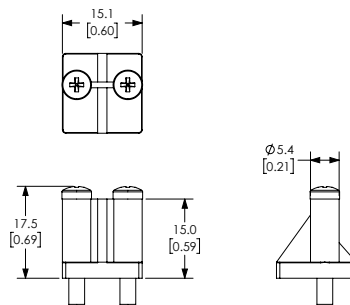
| Nitra Pneumatic GVP Series Miniature Solenoid Valve Manifold Accessories           |                |  |       |              |
|--|----------------|--|-------|--------------|
| Item   | Part No.       | Description  | Price | Weight (lbs) |
|   | <b>GM-31BP</b> | NITRA blanking plate, nylon. For use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

See our website for complete Engineering drawings.