



# 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).

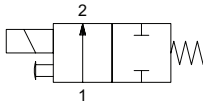
## Features

- 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



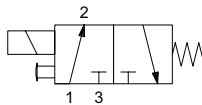
See [www.AutomationDirect.com](http://www.AutomationDirect.com) for a wide variety of fitting options

Diagram "A"



2-way, 2-position, Spring Return

Diagram "B"



3-way, 2-position, Spring Return

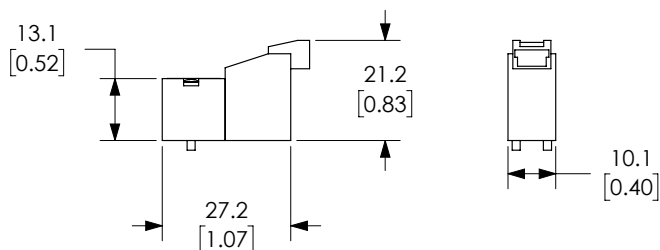
| GVP Series Miniature Solenoid Valves |                                                         |                                     |                                     |                                     |                                     |                                     |                                     |
|--------------------------------------|---------------------------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| Models                               | <a href="#"><u>GVP-211C-12D</u></a>                     | <a href="#"><u>GVP-211C-24D</u></a> | <a href="#"><u>GVP-311C-12D</u></a> | <a href="#"><u>GVP-311C-24D</u></a> | <a href="#"><u>GVP-221C-12D</u></a> | <a href="#"><u>GVP-321C-12D</u></a> | <a href="#"><u>GVP-321C-24D</u></a> |
| Price                                | \$41.00                                                 | \$41.00                             | \$41.00                             | \$41.00                             | \$36.00                             | \$36.00                             | \$36.00                             |
| 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                                                   |                                     |                                     |                                     | 2.3 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                                                     |                                     |                                     |                                     | No LED                              |                                     |                                     |
| Temperature - Operation and Storage  | 14~122°F (-10~50°C)                                     |                                     |                                     |                                     |                                     |                                     |                                     |
| Lubrication                          | Not Required                                            |                                     |                                     |                                     |                                     |                                     |                                     |
| Body                                 | Glass-filled nylon                                      |                                     |                                     |                                     |                                     |                                     |                                     |
| Protection                           | n/a                                                     |                                     |                                     |                                     |                                     |                                     |                                     |



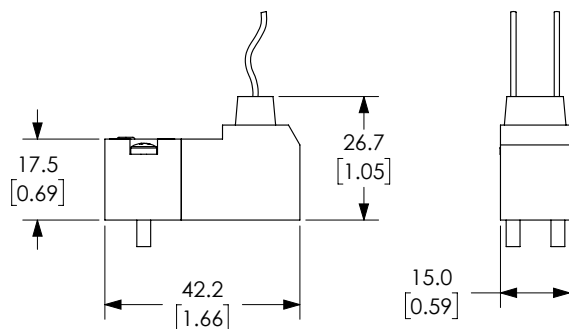
# Pneumatic GVP Series Miniature Solenoid Valves

## Dimensions

mm [inches]



**GVP-x11C-xxD**



**GVP-x21C-xxD**

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# Pneumatic GVP Series Miniature Solenoid Valve Manifolds



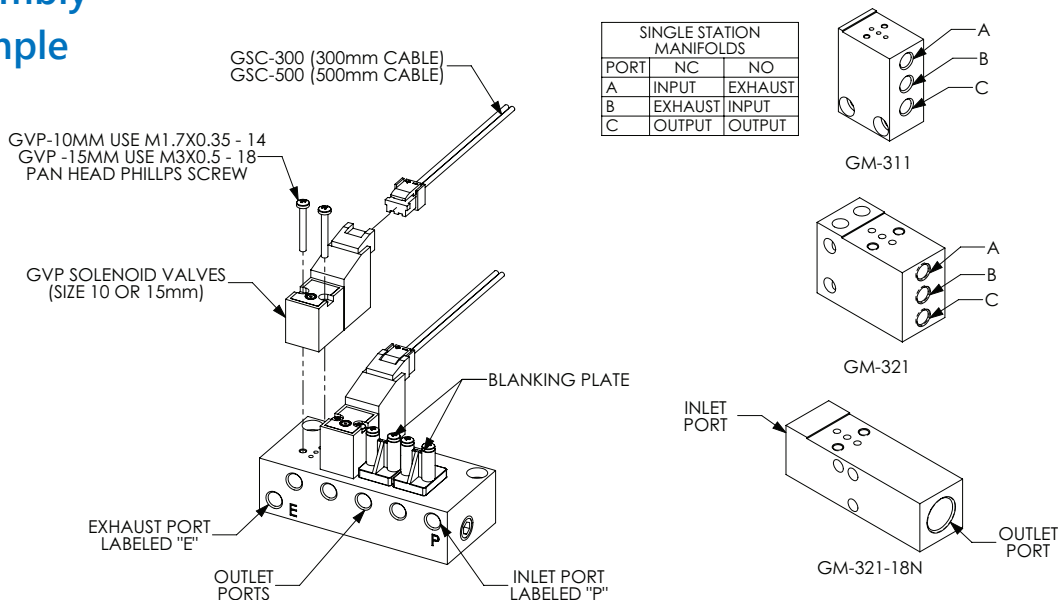
NITRA manifolds designed to work with 10mm wide GVP series valves.

- 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) |
|    | <a href="#"><u>GM-311</u></a> | NITRA pneumatic valve manifold, anodized aluminum, white, rectangular, (1) station, #10-32 female UNF inlet(s), #10-32 female UNF outlet(s), #10-32 female threaded exhaust(s). For use with GVP-21 and GVP-31 series solenoid valves.  | N/A           | \$24.50 | 0.05         |
|    | <a href="#"><u>GM-312</u></a> | NITRA pneumatic valve manifold, anodized aluminum, white, rectangular, (2) stations, #10-32 female UNF inlet(s), #10-32 female UNF outlet(s), #10-32 female threaded exhaust(s). For use with GVP-21 and GVP-31 series solenoid valves. | 1.42 [36.1]   | \$34.00 | 0.05         |
|  | <a href="#"><u>GM-314</u></a> | NITRA pneumatic valve manifold, anodized aluminum, white, rectangular, (4) stations, #10-32 female UNF inlet(s), #10-32 female UNF outlet(s), #10-32 female threaded exhaust(s). For use with GVP-21 and GVP-31 series solenoid valves. | 2.25 [78.2]   | \$38.00 | 0.10         |
|  | <a href="#"><u>GM-316</u></a> | NITRA pneumatic valve manifold, anodized aluminum, white, rectangular, (6) stations, #10-32 female UNF inlet(s), #10-32 female UNF outlet(s), #10-32 female threaded exhaust(s). For use with GVP-21 and GVP-31 series solenoid valves. | 3.08 [78.2]   | \$45.00 | 0.15         |

## Assembly Example





# Pneumatic GVP Series Miniature Solenoid Valve Manifolds



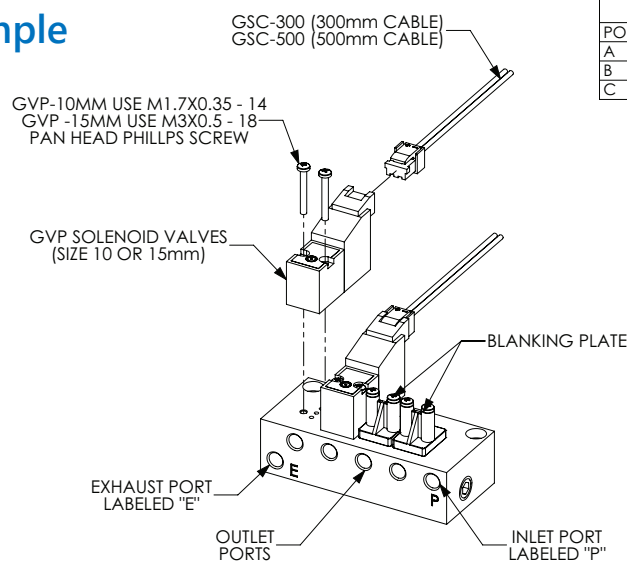
NITRA manifolds designed to work with 15mm wide GVP series valves.

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

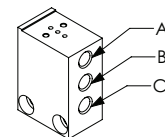


| Nitra Pneumatic GVP Series 15mm Miniature Solenoid Valve Manifolds                  |                          |                                                                                                                                                                                                                                        |                  |         |                 |
|-------------------------------------------------------------------------------------|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|---------|-----------------|
| Item                                                                                | Part No.                 | Description                                                                                                                                                                                                                            | A<br>inches [mm] | Price   | Weight<br>(lbs) |
|    | <b><u>GM-321</u></b>     | NITRA pneumatic valve manifold, anodized aluminum, white, rectangular, (1) station, #10-32 female UNF inlet(s), #10-32 female UNF outlet(s), #10-32 female threaded exhaust(s). For use with GVP-22 and GVP-32 series solenoid valves. | N/A              | \$24.50 | 0.05            |
|    | <b><u>GM-322</u></b>     | NITRA pneumatic valve manifold, anodized aluminum, white, rectangular, (2) stations, 1/8in female NPT inlet(s), #10-32 female UNF outlet(s), 1/8in female NPT exhaust(s). For use with GVP-22 and GVP-32 series solenoid valves.       | 2.13 [54.0]      | \$31.00 | 0.15            |
|  | <b><u>GM-324</u></b>     | NITRA pneumatic valve manifold, anodized aluminum, white, 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]      | \$42.50 | 0.25            |
|  | <b><u>GM-321-18N</u></b> | NITRA pneumatic valve manifold, anodized aluminum, black, 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              | \$29.50 | 0.6             |

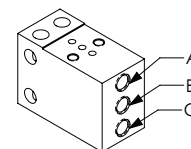
## Assembly Example



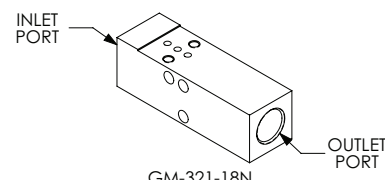
| SINGLE STATION MANIFOLDS |         |         |
|--------------------------|---------|---------|
| PORT                     | NC      | NO      |
| A                        | INPUT   | EXHAUST |
| B                        | EXHAUST | INPUT   |
| C                        | OUTPUT  | OUTPUT  |



GM-311



GM-321



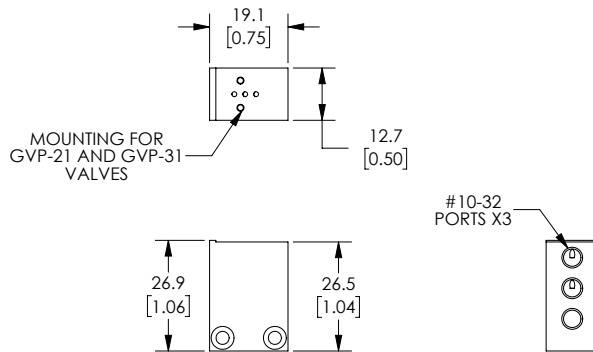
GM-321-18N



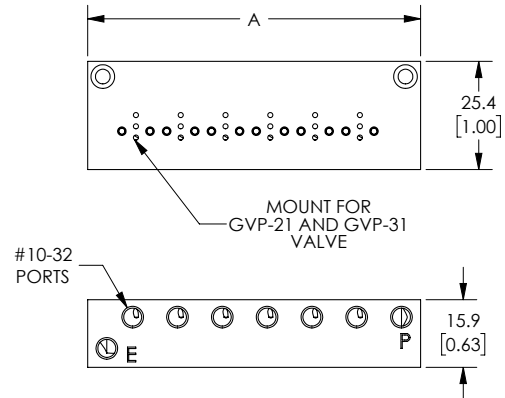
# Pneumatic GVP Series Miniature Solenoid Valve Manifolds

## Dimensions

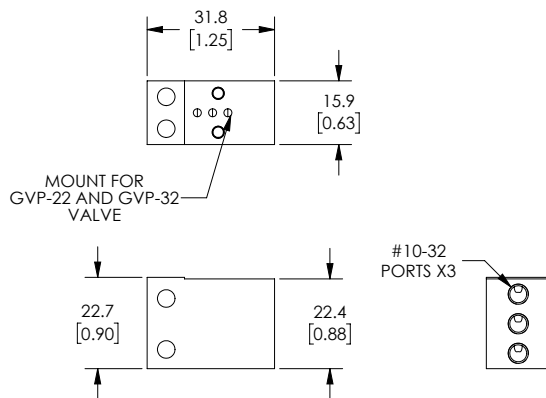
mm [inches]



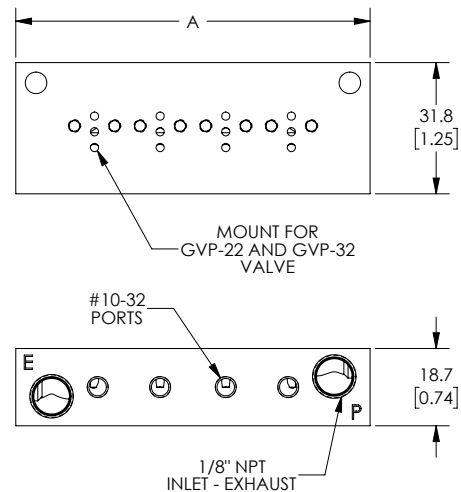
Part No. GM-311



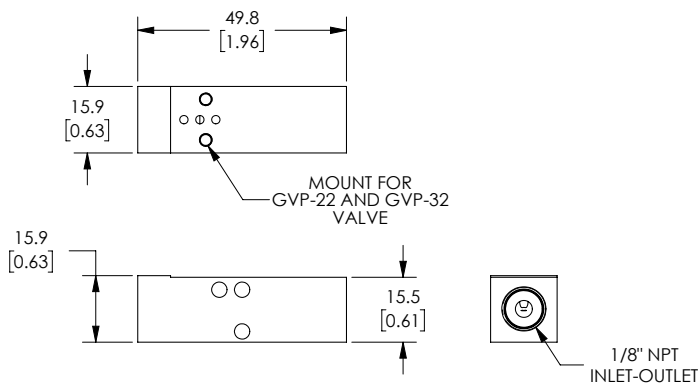
Part No. GM-312, GM-314, GM-316



Part No. GM-321



Part No. GM-322, GM-324



Part No. GM-321-18N

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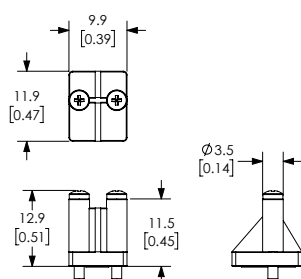
# Pneumatic GVP Series Miniature Solenoid Manifold Accessories



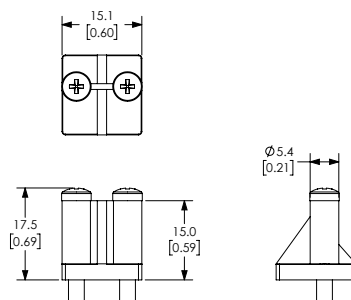
| Nitra Pneumatic GVP Series Miniature Solenoid Valve Manifold Accessories           |                                |                                                                                                                                |        |              |
|------------------------------------------------------------------------------------|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------|--------|--------------|
| Item                                                                               | Part No.                       | Description                                                                                                                    | Price  | Weight (lbs) |
|   | <a href="#"><u>GM-31BP</u></a> | NITRA blanking plate, nylon. For use with GM-31 series manifolds. Gasket and mounting screws included.                         | \$6.00 | 0.05         |
|   | <a href="#"><u>GM-32BP</u></a> | NITRA blanking plate, nylon. For use with GM-32 series manifolds. Gasket and mounting screws included.                         | \$5.75 | 0.05         |
|   | <a href="#"><u>GSC-300</u></a> | NITRA solenoid valve cable, miniature pin plug to pigtail, 11.8in/300mm cable length. For use with GVP series solenoid valves. | \$5.75 | 0.05         |
|  | <a href="#"><u>GSC-500</u></a> | NITRA solenoid valve cable, miniature pin plug to pigtail, 19.6in/500mm cable length. For use with GVP series solenoid valves. | \$6.00 | 0.05         |

## Dimensions

mm [inches]



Part No. [GM-31BP](#)



Part No. [GM-32BP](#)

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