



# 301 Series Water Valves (Stainless Steel)



**NS301YF24C3BC9**  
Valve Shown

GC Valves 301 Series water valves are an excellent choice for potable water applications up to 400psi. Valves have 303 stainless steel bodies with 1/4 inch NPT ports. They are available with three orifice sizes and solenoid voltages of 120VAC, 24VAC or 24VDC solenoids.

## Features

- 2-Ports (2-way), 2-position
- Normally closed (N.C.) configuration
- Direct acting operator
- Zero differential action
- 18mm (DIN 43650A) style wiring plug
- 1/4" NPT ports
- 120VAC, 24VAC or 24VDC solenoids
- Made in the USA



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Certified to  
NSF/ANSI 61



**Made  
in the  
USA**

| 301 Series Water Valves |                                                                            |                         |                         |                   |                   |                   |                |                |                |
|-------------------------|----------------------------------------------------------------------------|-------------------------|-------------------------|-------------------|-------------------|-------------------|----------------|----------------|----------------|
| Model                   | NS301YF02C3BE7                                                             | NS301YF02C3BD5          | NS301YF02C3BC9          | NS301YF24C3BE7    | NS301YF24C3BD5    | NS301YF24C3BC9    | NS301YF16C3BE7 | NS301YF16C3BD5 | NS301YF16C3BC9 |
| Price                   | \$122.00                                                                   | \$121.00                | \$121.00                | \$122.00          | \$121.00          | \$121.00          | \$122.00       | \$121.00       | \$121.00       |
| Weight (lbs)            | 1.2                                                                        | 1.2                     | 1.2                     | 1.2               | 1.2               | 1.2               | 1.2            | 1.2            | 1.2            |
| Valve Type              | 2-Ports (2-way), 2-position                                                |                         |                         |                   |                   |                   |                |                |                |
| Acting                  | Direct acting, normally closed                                             |                         |                         |                   |                   |                   |                |                |                |
| Port Size               | 1/4" FNPT                                                                  | 1/4" FNPT               | 1/4" FNPT               | 1/4" FNPT         | 1/4" FNPT         | 1/4" FNPT         | 1/4" FNPT      | 1/4" FNPT      | 1/4" FNPT      |
| Orifice Size            | 1/4"                                                                       | 1/8"                    | 3/32"                   | 1/4"              | 1/8"              | 3/32"             | 1/4"           | 1/8"           | 3/32"          |
| Cv                      | 0.85                                                                       | 0.36                    | 0.21                    | 0.85              | 0.36              | 0.21              | 0.85           | 0.36           | 0.21           |
| Media                   | Water                                                                      |                         |                         |                   |                   |                   |                |                |                |
| Pressure Range          | 0-50 psi                                                                   | 0-200 psi               | 0-400 psi               | 0-50 psi          | 0-200 psi         | 0-400 psi         | 0-20 psi       | 0-140 psi      | 0-200 psi      |
| Voltage<br>(± 10%)      | 120/110 VAC<br>50/60 Hz                                                    | 120/110 VAC<br>50/60 Hz | 120/110 VAC<br>50/60 Hz | 24VAC<br>50/60 Hz | 24VAC<br>50/60 Hz | 24VAC<br>50/60 Hz | 24VDC          | 24VDC          | 24VDC          |
| Inrush AC               | 54VA                                                                       |                         |                         |                   |                   |                   | -              |                |                |
| Power Consumption       | 10W                                                                        | 10W                     | 10W                     | 10W               | 10W               | 10W               | 10W            | 10W            | 10W            |
| Max Freq                | Cannot be used in PWM (pulse width modulation) applications                |                         |                         |                   |                   |                   |                |                |                |
| Insulation              | Class N (200°C - 392°F)                                                    |                         |                         |                   |                   |                   |                |                |                |
| Min Response            | 5-15 ms                                                                    |                         |                         |                   |                   |                   | 8-23 ms        |                |                |
| Temperature             | 32°F to 125°F (0°C to 51.7°C); Max. Fluid Temp. 295°F (146.1°C)            |                         |                         |                   |                   |                   |                |                |                |
| Lubrication             | Not required                                                               |                         |                         |                   |                   |                   |                |                |                |
| Protection              | NEMA 4/4X Encapsulated                                                     |                         |                         |                   |                   |                   |                |                |                |
| Connection              | 18mm (DIN 43650A) terminal                                                 |                         |                         |                   |                   |                   |                |                |                |
| Construction            | 303 Stainless steel body; NSF Approved EPDM seals; Stainless Steel orifice |                         |                         |                   |                   |                   |                |                |                |
| Life Cycle              | 5 Million                                                                  |                         |                         |                   |                   |                   |                |                |                |
| Agency Approvals        | NSF/ANSI - 61-G/NSF-372, CE, CSA, UL Recognized                            |                         |                         |                   |                   |                   |                |                |                |

\*To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific part number's web page.

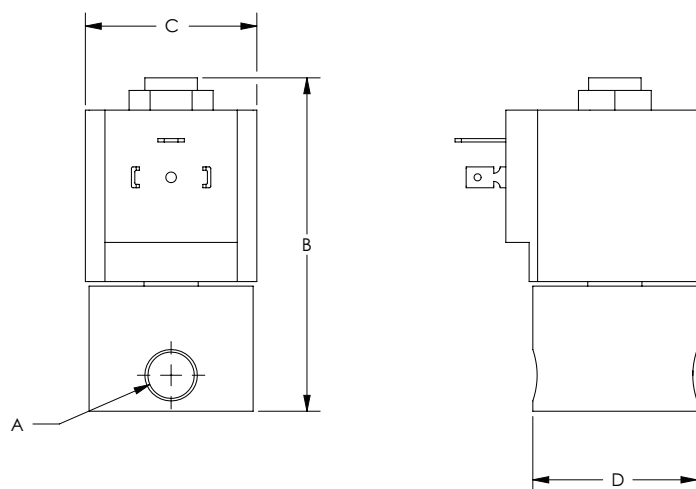


# 301 Series Water Valves (Stainless Steel)

## Dimensions

inches [mm]

| 301 Series Water Valve Dimensions     |         |             |             |             |
|---------------------------------------|---------|-------------|-------------|-------------|
| Part No.                              | A       | B           | C           | D           |
| <a href="#"><u>NS301YF02C3BE7</u></a> | 1/4 NPT | 3.15 [80.0] | 1.62 [41.1] | 1.55 [39.4] |
| <a href="#"><u>NS301YF02C3BD5</u></a> | 1/4 NPT | 3.15 [80.0] | 1.62 [41.1] | 1.55 [39.4] |
| <a href="#"><u>NS301YF02C3BC9</u></a> | 1/4 NPT | 3.15 [80.0] | 1.62 [41.1] | 1.55 [39.4] |
| <a href="#"><u>NS301YF24C3BE7</u></a> | 1/4 NPT | 3.15 [80.0] | 1.62 [41.1] | 1.55 [39.4] |
| <a href="#"><u>NS301YF24C3BD5</u></a> | 1/4 NPT | 3.15 [80.0] | 1.62 [41.1] | 1.55 [39.4] |
| <a href="#"><u>NS301YF24C3BC9</u></a> | 1/4 NPT | 3.15 [80.0] | 1.62 [41.1] | 1.55 [39.4] |
| <a href="#"><u>NS301YF16C3BE7</u></a> | 1/4 NPT | 3.22 [81.8] | 1.62 [41.1] | 1.55 [39.4] |
| <a href="#"><u>NS301YF16C3BD5</u></a> | 1/4 NPT | 3.22 [81.8] | 1.62 [41.1] | 1.55 [39.4] |
| <a href="#"><u>NS301YF16C3BC9</u></a> | 1/4 NPT | 3.22 [81.8] | 1.62 [41.1] | 1.55 [39.4] |



See our website [www.AutomationDirect.com](http://www.AutomationDirect.com) for complete Engineering drawings.

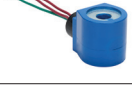
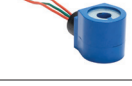


# 301 Series Water Valve Accessories

| 301 Series Water Valve Accessories                                                |                               |                                                                                                                                                                        |              |                     |
|-----------------------------------------------------------------------------------|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|---------------------|
| <i>Kit Photo</i>                                                                  | <i>Part No.</i>               | <i>Description</i>                                                                                                                                                     | <i>Price</i> | <i>Weight (lbs)</i> |
|  | <b><u>KS301AF02E7-NSF</u></b> | GC Valves rebuild kit, for use with NS301 series valves ending BE7, includes plunger-seat disc-spring assembly, plunger tube, operator o-ring and body o-ring.         | \$44.50      | 0.3                 |
|  | <b><u>KS301AF02C3-NSF</u></b> | GC Valves rebuild kit, for use with NS301 series valves ending BC9 and BD5, includes plunger-seat disc-spring assembly, plunger tube, operator o-ring and body o-ring. | \$43.00      | 0.3                 |



# GCV Valves Replacement Coils

| Water Valve Accessory Coils                                                         |                                   |                |              |                           |                                        |              |                                                                |         |              |
|-------------------------------------------------------------------------------------|-----------------------------------|----------------|--------------|---------------------------|----------------------------------------|--------------|----------------------------------------------------------------|---------|--------------|
| Coil Photo                                                                          | Part No.                          | Voltage Rating | Power Rating | Insulation                | Connection                             | Cable Length | Fits Valve Series                                              | Price   | Weight (lbs) |
|    | <a href="#"><u>HS4YN02</u></a>    | 120VAC         | 10W          | Class H:<br>180°C (356°F) | 18mm (DIN 43650A)<br>style wiring plug | N/A          | S201, NS201, S301<br>and NS301 valves                          | \$51.00 | 0.6          |
|    | <a href="#"><u>HS4YN04</u></a>    | 240VAC         | 10W          | Class H:<br>180°C (356°F) | 18mm (DIN 43650A)<br>style wiring plug | N/A          | S201, NS201, S301<br>and NS301 valves                          | \$51.00 | 0.6          |
|    | <a href="#"><u>HS4YN24</u></a>    | 24VAC          | 10W          | Class H:<br>180°C (356°F) | 18mm (DIN 43650A)<br>style wiring plug | N/A          | S201, NS201, S301<br>and NS301 valves                          | \$51.00 | 0.6          |
|    | <a href="#"><u>HS4YN16</u></a>    | 24VDC          | 10W          | Class H:<br>180°C (356°F) | 18mm (DIN 43650A)<br>style wiring plug | N/A          | S201, NS201, S211<br>DC, NS211 DC,<br>S301 and NS301<br>valves | \$51.00 | 0.6          |
|    | <a href="#"><u>HS4GN02A24</u></a> | 120VAC         | 10W          | Class H:<br>180°C (356°F) | 1/2 in conduit<br>24in 18AWG pigtail   | 24.0 in      | S201, NS201, S301<br>and NS301 valves                          | \$51.00 | 0.6          |
|   | <a href="#"><u>HS4GN04A24</u></a> | 240VAC         | 10W          | Class H:<br>180°C (356°F) | 1/2 in conduit<br>24in 18AWG pigtail   | 24.0 in      | S201, NS201, S301<br>and NS301 valves                          | \$51.00 | 0.6          |
|  | <a href="#"><u>HS4GN24A24</u></a> | 24VAC          | 10W          | Class H:<br>180°C (356°F) | 1/2 in conduit<br>24in 18AWG pigtail   | 24.0 in      | S201, NS201, S301<br>and NS301 valves                          | \$51.00 | 0.6          |
|  | <a href="#"><u>HS4GN16A24</u></a> | 24VDC          | 10W          | Class H:<br>180°C (356°F) | 1/2 in conduit<br>24in 18AWG pigtail   | 24.0 in      | S201, NS201, S211<br>DC, NS211 DC,<br>S301 and NS301<br>valves | \$51.00 | 0.6          |
|  | <a href="#"><u>HS3YN02</u></a>    | 120VAC         | 8W           | Class H:<br>180°C (356°F) | 18mm (DIN 43650A)<br>style wiring plug | N/A          | S211 and NS211 AC<br>valves                                    | \$42.50 | 0.5          |
|  | <a href="#"><u>HS3YN04</u></a>    | 240VAC         | 8W           | Class H:<br>180°C (356°F) | 18mm (DIN 43650A)<br>style wiring plug | N/A          | S211 and NS211 AC<br>valves                                    | \$42.50 | 0.5          |
|  | <a href="#"><u>HS3YN24</u></a>    | 24VAC          | 8W           | Class H:<br>180°C (356°F) | 18mm (DIN 43650A)<br>style wiring plug | N/A          | S211 and NS211 AC<br>valves                                    | \$42.50 | 0.5          |
|  | <a href="#"><u>HS3GN02A24</u></a> | 120VAC         | 88W          | Class H:<br>180°C (356°F) | 1/2 in conduit<br>24in 18AWG pigtail   | 24.0 in      | S211 and NS211 AC<br>valves                                    | \$42.50 | 0.5          |
|  | <a href="#"><u>HS3GN04A24</u></a> | 240VAC         | 8W           | Class H:<br>180°C (356°F) | 1/2 in conduit<br>24in 18AWG pigtail   | 24.0 in      | S211 and NS211 AC<br>valves                                    | \$42.50 | 0.5          |
|  | <a href="#"><u>HS3GN24A24</u></a> | 24VAC          | 8W           | Class H:<br>180°C (356°F) | 1/2 in conduit<br>24in 18AWG pigtail   | 24.0 in      | S211 and NS211 AC<br>valves                                    | \$42.50 | 0.5          |