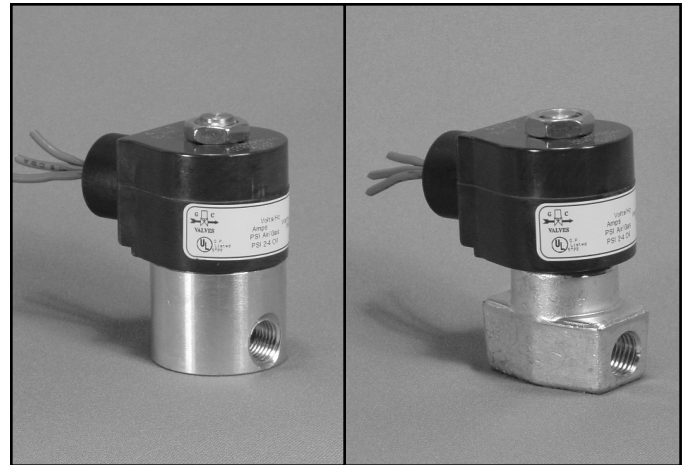


## 1/4" NPT Brass Body 2-Way Direct Acting Normally Closed

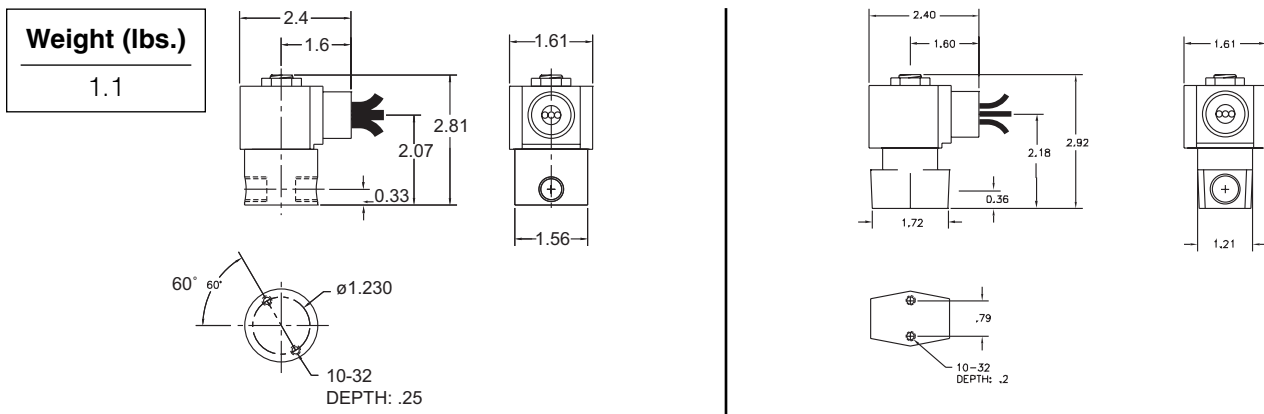


|                       |                       |                                                                                                                                                               |
|-----------------------|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Materials             | Seals:                | Nitrile, Viton®, Ethylene Propylene, Teflon®, Rulon                                                                                                           |
|                       | Orifice:              | Stainless Steel                                                                                                                                               |
| Electrical            | Standard Housing:     | Encapsulated Waterproof Conduit (NEMA 4/4X)                                                                                                                   |
|                       | Optional Housings:    | Metallic Conduit, Explosion-proof (NEMA 7), Grommet, Open Frame, Junction Box (single or dual knockouts), DIN; Contact GC Valves Customer Service for others. |
|                       | Standard Voltages:    | 24, 120, 240 AC 60 Hz; 50 Hz available<br>6, 12, 24 DC;<br>Contact GC Valves Customer Service for Additional Voltages.                                        |
|                       | Voltage Tolerance:    | ±10% of applicable voltage                                                                                                                                    |
|                       | Coil Classes:         | F, H, N                                                                                                                                                       |
|                       | Standard Lead Length: | 24 inch                                                                                                                                                       |
| Operating Temperature | Ambient (Nominal):    | 32°F to 125°F                                                                                                                                                 |
| Mounting              | Position:             | Any                                                                                                                                                           |
| Approvals*            | Agency:               | UL Safety Shutoff, UL Listed, UL Recognized, CSA Approved, FM Certified                                                                                       |

\* Not available for all variations

® Registered Trademark of DuPont Co.

## Dimensions/Weight



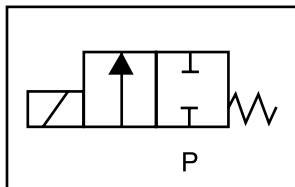
GC Valves Customer Service: 800-828-0484 (7:30am to 4pm ET) or 800-582-4232 (7:30am to 4pm PT)



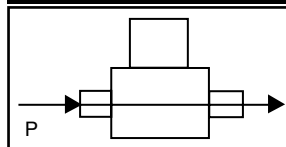
# S311 – 1/4" NPT, Brass Body, Normally Closed

## Valve Selection List

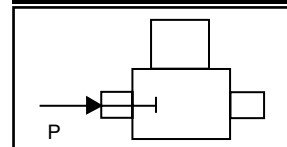
Normally Closed



Energized



De-Energized



| Pipe Size<br><br>NPT | Orifice Size<br><br>in. | C <sub>v</sub> | Minimum | Operating Pressure Differential (psi) |      |       |      |           |      |        |      | Max<br>Fluid Temp.<br><br>°F | Seal Material | Power<br>Consumption<br>(Watts) |    | Model Code<br><br>( 120V/60HZ — 110V/50HZ )<br>Shown |
|----------------------|-------------------------|----------------|---------|---------------------------------------|------|-------|------|-----------|------|--------|------|------------------------------|---------------|---------------------------------|----|------------------------------------------------------|
|                      |                         |                |         | Maximum                               |      |       |      |           |      |        |      |                              |               | AC                              | DC | Brass Body                                           |
|                      |                         |                |         | Air/Gas                               |      | Water |      | Light Oil |      | Steam* |      |                              |               |                                 |    |                                                      |
|                      |                         |                |         | AC                                    | DC   | AC    | DC   | AC        | DC   | AC     | DC   |                              |               |                                 |    |                                                      |
| 1/4                  | 1/32                    | .03            | 0       | 2000                                  | 2000 | 2000  | 2000 | —         | —    | 150*   | 150* | 295                          | EPR           | 8                               | 9  | S311GF02C8AC1                                        |
|                      | 3/64                    | .05            | 0       | 770                                   | 420  | 770   | 420  | —         | —    | 150*   | 150* | 295                          | EPR           | 8                               | 9  | S311GF02C8BC3                                        |
|                      | 1/16                    | .10            | 0       | 560                                   | 185  | 560   | 185  | —         | —    | 150*   | 150* | 295                          | EPR           | 8                               | 9  | S311GF02C8BC5                                        |
|                      | 5/64                    | .15            | 0       | 400                                   | 150  | 400   | 150  | —         | —    | 150*   | 150* | 295                          | EPR           | 8                               | 9  | S311GF02C8BC7                                        |
|                      | 3/32                    | .21            | 0       | 300                                   | 130  | 300   | 130  | —         | —    | 150*   | 130* | 295                          | EPR           | 8                               | 9  | S311GF02C8BC9                                        |
|                      | 7/64                    | .29            | 0       | 210                                   | 90   | 210   | 90   | —         | —    | 150*   | 90*  | 295                          | EPR           | 8                               | 9  | S311GF02C8BD3                                        |
|                      | 1/8                     | .32            | 0       | 155                                   | 60   | 155   | 60   | —         | —    | 150*   | 60*  | 295                          | EPR           | 8                               | 9  | S311GF02C8BD5                                        |
|                      | 5/32                    | .43            | 0       | 105                                   | 35   | 105   | 35   | —         | —    | 105*   | 35*  | 295                          | EPR           | 8                               | 9  | S311GF02C8BD7                                        |
|                      | 3/16                    | .49            | 0       | 75                                    | 20   | 75    | 20   | —         | —    | 75*    | 20*  | 295                          | EPR           | 8                               | 9  | S311GF02C8BE1                                        |
|                      | 1/4                     | .85            | 0       | 35                                    | 15   | 35    | 15   | —         | —    | 35*    | 15*  | 295                          | EPR           | 8                               | 9  | S311GF02C9BE7                                        |
|                      | 9/32                    | 1.0            | 0       | 20                                    | 10   | 20    | 10   | —         | —    | 20*    | 10*  | 295                          | EPR           | 8                               | 9  | S311GF02C9BF1                                        |
|                      | 3/8                     | 1.1            | 0       | 15                                    | 5    | 15    | 5    | —         | —    | 15*    | 5*   | 295                          | EPR           | 8                               | 9  | S311GF02C9BF5                                        |
| 1/4                  | 1/32                    | .03            | 0       | 2000                                  | 2000 | 2000  | 2000 | 2000      | 2000 | —      | —    | 180                          | Nitrile       | 8                               | 9  | S311GF02N8AC1                                        |
|                      | 3/64                    | .05            | 0       | 770                                   | 420  | 770   | 420  | 770       | 420  | —      | —    | 180                          | Nitrile       | 8                               | 9  | S311GF02N8BC3                                        |
|                      | 1/16                    | .10            | 0       | 560                                   | 185  | 560   | 185  | 560       | 185  | —      | —    | 180                          | Nitrile       | 8                               | 9  | S311GF02N8BC5                                        |
|                      | 5/64                    | .15            | 0       | 400                                   | 150  | 400   | 150  | 400       | 150  | —      | —    | 180                          | Nitrile       | 8                               | 9  | S311GF02N8BC7                                        |
|                      | 3/32                    | .21            | 0       | 300                                   | 130  | 300   | 130  | 300       | 130  | —      | —    | 180                          | Nitrile       | 8                               | 9  | S311GF02N8BC9                                        |
|                      | 7/64                    | .29            | 0       | 210                                   | 90   | 210   | 90   | 210       | 90   | —      | —    | 180                          | Nitrile       | 8                               | 9  | S311GF02N8BD3                                        |
|                      | 1/8                     | .32            | 0       | 155                                   | 60   | 155   | 60   | 155       | 60   | —      | —    | 180                          | Nitrile       | 8                               | 9  | S311GF02N8BD5                                        |
|                      | 5/32                    | .43            | 0       | 105                                   | 35   | 105   | 35   | 105       | 35   | —      | —    | 180                          | Nitrile       | 8                               | 9  | S311GF02N8BD7                                        |
|                      | 3/16                    | .49            | 0       | 75                                    | 20   | 75    | 20   | 75        | 20   | —      | —    | 180                          | Nitrile       | 8                               | 9  | S311GF02N8BE1                                        |
|                      | 1/4                     | .85            | 0       | 35                                    | 15   | 35    | 15   | 35        | 15   | —      | —    | 180                          | Nitrile       | 8                               | 9  | S311GF02N9BE7                                        |
|                      | 9/32                    | 1.0            | 0       | 20                                    | 10   | 20    | 10   | 20        | 10   | —      | —    | 180                          | Nitrile       | 8                               | 9  | S311GF02N9BF1                                        |
|                      | 3/8                     | 1.1            | 0       | 15                                    | 5    | 15    | 5    | 15        | 5    | —      | —    | 180                          | Nitrile       | 8                               | 9  | S311GF02N9BF5                                        |
| 1/4                  | 1/32                    | .03            | 0       | 2000                                  | 2000 | 2000  | 2000 | 2000      | 2000 | —      | —    | 230                          | Viton         | 8                               | 9  | S311GF02V8AC1                                        |
|                      | 3/64                    | .05            | 0       | 770                                   | 420  | 770   | 420  | 770       | 420  | —      | —    | 230                          | Viton         | 8                               | 9  | S311GF02V8BC3                                        |
|                      | 1/16                    | .10            | 0       | 560                                   | 185  | 560   | 185  | 560       | 185  | —      | —    | 230                          | Viton         | 8                               | 9  | S311GF02V8BC5                                        |
|                      | 5/64                    | .15            | 0       | 400                                   | 150  | 400   | 150  | 400       | 150  | —      | —    | 230                          | Viton         | 8                               | 9  | S311GF02V8BC7                                        |
|                      | 3/32                    | .21            | 0       | 300                                   | 130  | 300   | 130  | 300       | 130  | —      | —    | 230                          | Viton         | 8                               | 9  | S311GF02V8BC9                                        |
|                      | 7/64                    | .29            | 0       | 210                                   | 90   | 210   | 90   | 210       | 150  | —      | —    | 230                          | Viton         | 8                               | 9  | S311GF02V8BD3                                        |
|                      | 1/8                     | .32            | 0       | 155                                   | 60   | 155   | 60   | 155       | 60   | —      | —    | 230                          | Viton         | 8                               | 9  | S311GF02V8BD5                                        |
|                      | 5/32                    | .43            | 0       | 105                                   | 35   | 105   | 35   | 105       | 35   | —      | —    | 230                          | Viton         | 8                               | 9  | S311GF02V8BD7                                        |
|                      | 3/16                    | .49            | 0       | 75                                    | 20   | 75    | 20   | 75        | 20   | —      | —    | 230                          | Viton         | 8                               | 9  | S311GF02V8BE1                                        |
|                      | 1/4                     | .85            | 0       | 35                                    | 15   | 35    | 15   | 35        | 15   | —      | —    | 230                          | Viton         | 8                               | 9  | S311GF02V9BE7                                        |
|                      | 9/32                    | 1.0            | 0       | 20                                    | 10   | 20    | 10   | 20        | 10   | —      | —    | 230                          | Viton         | 8                               | 9  | S311GF02V9BF1                                        |
|                      | 3/8                     | 1.1            | 0       | 15                                    | 5    | 15    | 5    | 15        | 5    | —      | —    | 230                          | Viton         | 8                               | 9  | S311GF02V9BF5                                        |

\* Class H Coil Recommended for Steam and Other High Temperature Applications

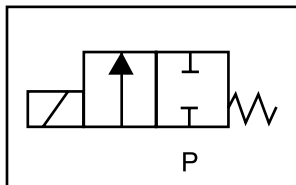
GC Valves Customer Service: 800-828-0484 (7:30am to 4pm ET) or 800-582-4232 (7:30am to 4pm PT)

# S311 – 1/4" NPT, Brass Body, Normally Closed

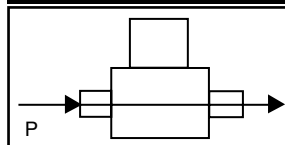


## Valve Selection List

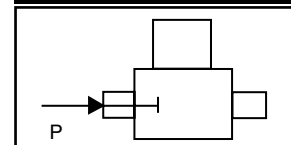
Normally Closed



Energized



De-Energized



| Pipe Size<br><br>NPT | Orifice Size<br><br>in. | C <sub>v</sub> | Minimum | Operating Pressure Differential (psi) |      |       |      |           |      |        |      | Max<br>Fluid Temp.<br><br>°F | Seal Material | Power<br>Consumption<br>(Watts) |    | Model Code<br><br>（120V/60HZ — 110V/50HZ）<br>Shown |
|----------------------|-------------------------|----------------|---------|---------------------------------------|------|-------|------|-----------|------|--------|------|------------------------------|---------------|---------------------------------|----|----------------------------------------------------|
|                      |                         |                |         | Maximum                               |      |       |      |           |      |        |      |                              |               | AC                              | DC | Brass Body                                         |
|                      |                         |                |         | Air/Gas                               |      | Water |      | Light Oil |      | Steam* |      |                              |               |                                 |    |                                                    |
|                      |                         |                |         | AC                                    | DC   | AC    | DC   | AC        | DC   | AC     | DC   |                              |               |                                 |    |                                                    |
| 1/4                  | 1/32                    | .03            | 0       | 2000                                  | 2000 | 2000  | 2000 | 2000      | 2000 | 150*   | 150* | 366                          | Rulon         | 8                               | 9  | S311GF02R8AC1                                      |
|                      | 3/64                    | .05            | 0       | 770                                   | 420  | 770   | 420  | 770       | 420  | 150*   | 150* | 366                          | Rulon         | 8                               | 9  | S311GF02R8BC3                                      |
|                      | 1/16                    | .10            | 0       | 560                                   | 185  | 560   | 185  | 560       | 185  | 150*   | 150* | 366                          | Rulon         | 8                               | 9  | S311GF02R8BC5                                      |
|                      | 5/64                    | .15            | 0       | 400                                   | 150  | 400   | 150  | 400       | 150  | 150*   | 150* | 366                          | Rulon         | 8                               | 9  | S311GF02R8BC7                                      |
|                      | 3/32                    | .21            | 0       | 300                                   | 130  | 300   | 130  | 300       | 130  | 150*   | 130* | 366                          | Rulon         | 8                               | 9  | S311GF02R8BC9                                      |
|                      | 7/64                    | .29            | 0       | 210                                   | 90   | 210   | 90   | 210       | 90   | 150*   | 90*  | 366                          | Rulon         | 8                               | 9  | S311GF02R8BD3                                      |
|                      | 1/8                     | .32            | 0       | 155                                   | 60   | 155   | 60   | 155       | 60   | 150*   | 60*  | 366                          | Rulon         | 8                               | 9  | S311GF02R8BD5                                      |
|                      | 5/32                    | .43            | 0       | 105                                   | 35   | 105   | 35   | 105       | 35   | 105*   | 35*  | 366                          | Rulon         | 8                               | 9  | S311GF02R8BD7                                      |
|                      | 3/16                    | .49            | 0       | 75                                    | 20   | 75    | 20   | 75        | 20   | 75*    | 20*  | 366                          | Rulon         | 8                               | 9  | S311GF02R8BE1                                      |
|                      | 1/4                     | .85            | 0       | 35                                    | 15   | 35    | 15   | 35        | 15   | 35*    | 15*  | 366                          | Rulon         | 8                               | 9  | S311GF02R9BE7                                      |
|                      | 9/32                    | 1.0            | 0       | 20                                    | 10   | 20    | 10   | 20        | 10   | 20*    | 10*  | 366                          | Rulon         | 8                               | 9  | S311GF02R9BF1                                      |
|                      | 3/8                     | 1.1            | 0       | 15                                    | 5    | 15    | 5    | 15        | 5    | 15*    | 5*   | 366                          | Rulon         | 8                               | 9  | S311GF02R9BF5                                      |
| 1/4                  | 1/32                    | .03            | 0       | 2000                                  | 2000 | 2000  | 2000 | 2000      | 2000 | 150*   | 150* | 366                          | Teflon        | 8                               | 9  | S311GF02T8AC1                                      |
|                      | 3/64                    | .05            | 0       | 770                                   | 420  | 770   | 420  | 770       | 420  | 150*   | 150* | 366                          | Teflon        | 8                               | 9  | S311GF02T8BC3                                      |
|                      | 1/16                    | .10            | 0       | 560                                   | 185  | 560   | 185  | 560       | 185  | 150*   | 150* | 366                          | Teflon        | 8                               | 9  | S311GF02T8BC5                                      |
|                      | 5/64                    | .15            | 0       | 400                                   | 150  | 400   | 150  | 400       | 150  | 150*   | 150* | 366                          | Teflon        | 8                               | 9  | S311GF02T8BC7                                      |
|                      | 3/32                    | .21            | 0       | 300                                   | 130  | 300   | 130  | 300       | 130  | 150*   | 130* | 366                          | Teflon        | 8                               | 9  | S311GF02T8BC9                                      |
|                      | 7/64                    | .29            | 0       | 210                                   | 90   | 210   | 90   | 210       | 90   | 150*   | 90*  | 366                          | Teflon        | 8                               | 9  | S311GF02T8BD3                                      |
|                      | 1/8                     | .32            | 0       | 155                                   | 60   | 155   | 60   | 155       | 60   | 150*   | 60*  | 366                          | Teflon        | 8                               | 9  | S311GF02T8BD5                                      |
|                      | 5/32                    | .43            | 0       | 105                                   | 35   | 105   | 35   | 105       | 35   | 105*   | 35*  | 366                          | Teflon        | 8                               | 9  | S311GF02T8BD7                                      |
|                      | 3/16                    | .49            | 0       | 75                                    | 20   | 75    | 20   | 75        | 20   | 75*    | 20*  | 366                          | Teflon        | 8                               | 9  | S311GF02T8BE1                                      |
|                      | 1/4                     | .85            | 0       | 35                                    | 15   | 35    | 15   | 35        | 15   | 35*    | 15*  | 366                          | Teflon        | 8                               | 9  | S311GF02T9BE7                                      |
|                      | 9/32                    | 1.0            | 0       | 20                                    | 10   | 20    | 10   | 20        | 10   | 20*    | 10*  | 366                          | Teflon        | 8                               | 9  | S311GF02T9BF1                                      |
|                      | 3/8                     | 1.1            | 0       | 15                                    | 5    | 15    | 5    | 15        | 5    | 15*    | 5*   | 366                          | Teflon        | 8                               | 9  | S311GF02T9BF5                                      |

\* Class H Coil Recommended for Steam and Other High Temperature Applications



# S311 – 1/4" NPT, Brass Body, Normally Closed

## Part Numbering

| 1                                                                              | 2            | 3            | 4                  | 5            | 6                        | 7                    | 8            | 9                                                         | 10                          | 11              | 12                                                                                                                                                    | 13           |
|--------------------------------------------------------------------------------|--------------|--------------|--------------------|--------------|--------------------------|----------------------|--------------|-----------------------------------------------------------|-----------------------------|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| <div>S</div>                                                                   | <div>3</div> | <div>1</div> | <div>1</div>       | <div>G</div> | <div>F</div>             | <div>0</div>         | <div>2</div> | <div>C</div>                                              | <div>8</div>                | <div>B</div>    | <div>C</div>                                                                                                                                          | <div>1</div> |
| Series                                                                         |              |              | Operating Mode     | Housing*     | Coil Class*              | Voltage*             |              | Seal Material                                             | Body Material               | Pipe Connection | Orifice Size                                                                                                                                          |              |
| S31                                                                            |              |              | 1: Normally Closed | G: Conduit   | F: Class F<br>H: Class H | 02: 120/60<br>110/50 |              | C: EPR<br>N: Nitrile<br>V: Viton<br>R: Rulon<br>T: Teflon | 8: Brass<br>9: Forged Brass | B: 1/4" NPT     | C1: 1/32"<br>C3: 3/64"<br>C5: 1/16"<br>C7: 5/64"<br>C9: 3/32"<br>D3: 7/64"<br>D5: 1/8"<br>D7: 5/32"<br>E1: 3/16"<br>E7: 1/4"<br>F1: 9/32"<br>F5: 3/8" |              |
| * See the "Engineering Guide" for additional voltages, variations and options. |              |              |                    |              |                          |                      |              |                                                           |                             |                 |                                                                                                                                                       |              |

\*Brass

## Coil Data

| Coil Family |      |
|-------------|------|
| Type        | Size |
| All         | S3   |

|                    |         |    |
|--------------------|---------|----|
| Frequency (Hz)     | 60      | 50 |
| Nominal Power (VA) | Inrush  | 36 |
|                    | Holding | 13 |
|                    |         | 14 |

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