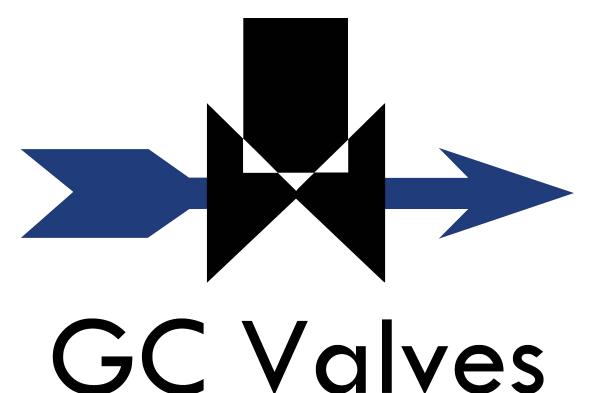
Revision 11, August, 2024



A DEMA Company

NSF Approved Solenoid Valves



GC Valves, LLC. 456 Crompton Street Charlotte, North Carolina 28273 Ph: (800)-828-0484, Fx: (704)-973-9526

GC Valves

True Union Solenoid Valves

Nylon-6 • ½" & ¾" NPT Pipe Size

Applications

Water treatment (ozone, UV, reverse osmosis, sterilizers), drinking water, car wash, food & beverage (bottling, craft beverages, produce mister, cleaning), clean-in-place (CIP), commercial buildings, hospitals, medical facilities, and agricultural.

Features

- Allows for compact piping arrangements
- Easy removal for cleaning and servicing in the field
- Wrench flats on fittings help protect valve from damage during install/removal
- NSF approved options
- UL recognized, CSA, and CE options
- Great for OEMs looking to reduce plumbing complexity and footprint

Construction

| Wetted Components | | | | | | |
|---------------------|----------------------------|--|--|--|--|--|
| Body | Nylon-6 + 30% Glass Fill | | | | | |
| End Fittings | 300 Series Stainless Steel | | | | | |
| Operator Tube | 300 Series Stainless Steel | | | | | |
| Plunger & Tube Head | 400 Series Stainless Steel | | | | | |
| Springs | 300 Series Stainless Steel | | | | | |
| Shading Ring | Copper (Std.), Silver | | | | | |
| Seals | EPDM or FKM | | | | | |

Coil Housing

T20 & T21 Series (See Drawing #1 and #3) •½" NPT Conduit Hub with 24" Lead Wires (NEMA 4/4X, IP65)

•DIN - 18mm Form A (NEMA 4/4X, IP65)

•Junction Box (Single or Dual Knockouts)

TP3 Series (See Drawing #2)

- •18" Lead Wires (IP65)
- •DIN 11mm Form B (IP65)
- *All Coils Rated for 100% Duty Cycle

*See Engineering Guide for Additional Coil Housings and Dimensions



Ambient Temperature (Nominal)

•32°F to 125°F (0°C to 52°C)

Maximum Fluid Temperature

•180°F (82°C)

Approvals

- UL Recognized (T20 & T21 Series)
- cURus (TP3 Series)
- CSA Certified (T20 & T21 Series)

*Add suffix "E" to part number for CSA Certification

CE Certified

• NSF 61-G: Drinking Water System Components (includes Lead Free requirements)

NSF 372: Drinking Water System
 Components (Lead Content Certification)
 *Add prefix "N" to part number for NSF
 Certification





True Union Solenoid Valves

Nylon-6 • ½" & ¾" NPT Pipe Size

NSF Certified Valve Specifications

| *Pa | art numbe | ers shown | as NS | F Certi | fied, 1 | 20vAC, w | ith EPDI | M seals. See Part | Number Selection | for mo | re optic | ons.* | |
|-----------------------|--|------------|------------------------|----------|-------------|------------|----------|-------------------|------------------|----------------|----------|---------------|--------------|
| | | | Opera | ting Pre | ssure D | ifferentia | l (PSI) | Part Nu | umber* | | | | |
| Pipe Size (NPT) | Orifice Size (in) | Factor | Flow Factor (Cv) | Min. | Ma (Air/ | | | ax. iter) | DIN Coil | Lead Wire Coil | _ | wer mption | Drawing # |
| () | | | | AC | DC | AC | DC | | | AC | DC | | |
| Normally | Normally Closed (Closed when de-energized) | | | | | | | | | | | | |
| | 3/4 | 4.3 | 0 | - | - | 140 | 90 | NT201YH02CPD2 | NT201GH02CPD2 | 10W | 10W | 1 | |
| 1/2" | 3/4 | 4.3 | 4 | - | - | 150 | 100 | NT211YH02CPD2 | NT211GH02CPD2 | 8W | 10W | 1 | |
| , | 3/4 | 4.3 | 5 | - | - | 150 | 80 | NTP31YH02CPD2 | NTP31GH02CPD2 | 6.5vA | 8W | 2 | |
| | 3/4 | 6.7 | 0 | - | - | 140 | 90 | NT201YH02CPE2 | NT201GH02CPE2 | 10W | 10W | 1 | |
| 3/4" | 3/4 | 6.7 | 4 | - | - | 150 | 100 | NT211YH02CPE2 | NT211GH02CPE2 | 8W | 10W | 1 | |
| | 3/4 | 6.7 | 5 | - | - | 150 | 80 | NTP31YH02CPE2 | NTP31GH02CPE2 | 6.5vA | 8W | 2 | |
| Normally | y Open (Op | en when de | e-energi | zed) | | | | | | | | | |
| 1/2" | 3/4 | 4.3 | 0 | - | - | 200 | 125 | NT202YH02CPD2 | NT202GH02CPD2 | 11W | 10W | 3 | |
| 1/2 | 3/4 | 4.3 | 4 | - | - | 200 | 125 | NT212YH02CPD2 | NT212GH02CPD2 | 11W | 10W | 3 | |
| 3/4" | 3/4 | 6.7 | 0 | - | - | 200 | 125 | NT202YH02CPE2 | NT202GH02CPE2 | 11W | 10W | 3 | |
| 5/4 | 3/4 | 6.7 | 4 | - | - | 150 | 140 | NT212YH02CPE2 | NT212GH02CPE2 | 11W | 10W | 3 | |

NSF

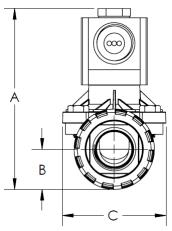
NSF Certified Part Number Selection

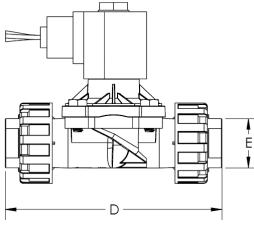
| Ν | T20 | 1 | G | Н | 02 | С | Ρ | D | 2 | (blank) |
|---|--------|-----------------|--------------------|------------|----------------------|----------|----------|-------------------|-----------------|--------------|
| Prefix | True | Operating | Housing | Coil Class | Voltage ③ | Seal | Body | Pipe | Number | Optional |
| | Union | Mode(1) | | | | Material | Material | Connection | of | Suffix |
| | Series | | | | | | | | Unions | |
| N: NSF | T20 | 1 : 2WNC | G: Lead | H: H Class | 02 :110v/50Hz | C: EPDM | P: Nylon | D : ½" NPT | 0 : No | (blank): |
| Certified ④ | T21 | 2 : 2WNO | Wires ² | | 120v/60Hz | | | E: ¾″ NPT | Unions | No Option |
| | TP3 | | Y: DIN | | 04 :220v/50Hz | | | | 2 : Both | E: CSA Cert. |
| | | | | | 240v/60Hz | | | | Unions | K: Mounting |
| | | | | | 24 : 24v/50- | | | | | Bracket |
| | | | | | 60Hz | | | | | P: Nickel |
| | | | | | 15 : 12vDC | | | | | Plating |
| | | | | | 16: 24vDC | | | | | |
| Normally open variation not available for TP3 series G Housing for T20 &T21 Series has ½" Conduit Hub with 24" Leads, TP3 Series has 18" Leads | | | | | | | | | | |
| ③See Engineering Guide for additional voltages, variations, and options | | | | | | | | | | |
| - U | • | | | 0, | on ("N" prefix) | • | | | | |
| | | | | | | | | | | |



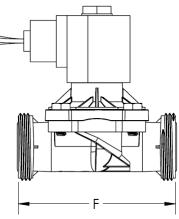
True Union Solenoid Valves

Nylon-6 • ½" & ¾" NPT Pipe Size



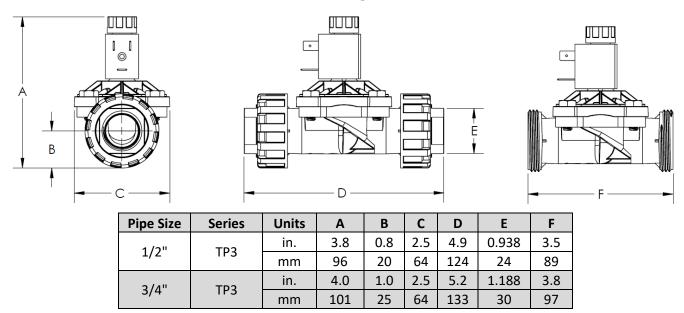


Drawing #1



| Pipe Size | Series | Units | Α | | В | С | D | E | F |
|-----------|--------|-------|----------|----------|-----|-----|-----|-------|-----|
| 1/2" | T201 | in. | 4 | 4.2 | | 2.5 | 4.9 | 0.938 | 3.5 |
| 1/2 | | mm | 1 | 06 | 20 | 64 | 124 | 24 | 89 |
| 1/2" | T211 | in. | 3.9 (AC) | 4.2 (DC) | 0.8 | 2.5 | 4.9 | 0.938 | 3.5 |
| 1/2 | | mm | 100 | 106 | 20 | 64 | 124 | 24 | 89 |
| 2/4" | T204 | in. | 4.4 | | 1.0 | 2.5 | 5.2 | 1.188 | 3.8 |
| 3/4" | T201 | mm | 1 | 11 | 25 | 64 | 133 | 30 | 97 |
| 2/4" | T014 | in. | 4.1 (AC) | 4.4 (DC) | 1.0 | 2.5 | 5.2 | 1.188 | 3.8 |
| 3/4" | T211 | mm | 104 | 111 | 25 | 64 | 133 | 30 | 97 |

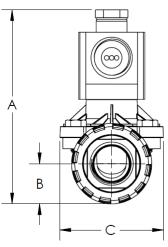
Drawing #2

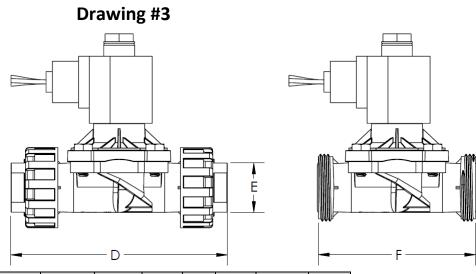




True Union Solenoid Valves

Nylon-6 • ½" & ¾" NPT Pipe Size





| Pipe Size | Series | Units | Α | В | С | D | E | F |
|-----------|--------|-------|-----|-----|-----|-----|-------|-----|
| 1/2" | T202 & | in. | 4.7 | 0.8 | 2.5 | 4.9 | 0.938 | 3.5 |
| 1/2 | T212 | mm | 119 | 20 | 64 | 124 | 24 | 89 |
| 3/4" | T202 & | in. | 4.7 | 1.0 | 2.5 | 5.2 | 1.188 | 3.8 |
| 3/4 | T212 | mm | 119 | 25 | 64 | 133 | 30 | 97 |



Solenoid Valves For Drinking Water

S20 & S21 Series

Stainless Steel & Noryl Solenoid Valves



GC Valves rugged, time-proven designs have been certified to meet the most demanding standards for drinking water. Common ac and dc voltages are available with the full array of electrical housings. The DIN coil (on S201 at right) is shown with an optional connector.

GC Valves is manufacturing and shipping solenoid valves that meet state and federal requirements for drinking water. These valves are fully certified to NSF/ANSI 61 and NSF/ANSI 372, making it easier for OEMs to have their systems approved and assuring installers and end users that they comply with all current standards.

The NSF valves also meet "Lead Free"

legislation that California, Vermont, Maryland and Louisiana have enacted. A major amendment to the U.S. Safe Drinking Water Act, which takes effect January 2014, will make the "Lead Free" standard a national requirement.

Application Data

- 2-way Normally Closed & Normally Open operation
- 3/8" through 2" NPT ports
- Maximum OPD to 150 psi on Normally Closed (200 psi on NO)
- Cv as high as 28
- All common electrical housings and ac and dc voltages
- Coils intended for continuous duty (100% duty cycle)
- 316 Stainless Steel or Nylon bodies
- Santoprene or EPDM diaphragm with EPDM seals

NSF/ANSI Standard 61 Drinking Water System Components -Health Effects

establishes minimum health effects requirements for materials, components, products, or systems that contact drinking water or drinking water treatment chemicals

Annex G

establishes an evaluation procedure for use when product is required to meet a $\leq 0.25\%$ weighted average lead content requirement

NSF/ANSI Standard 372

establishes an evaluation procedure for use when product is required to meet a $\leq 0.25\%$ weighted average lead content requirement

To learn more,

Locate your Region Sales Office at **www.gcvalves.com**

GC Valves Customer Service: service@gcvalves.com East Coast: 800-828-0484



NS301 Series

- 1/8" NPT
- Stainless Steel Body
- 2-Way Direct Acting
- Normally Closed

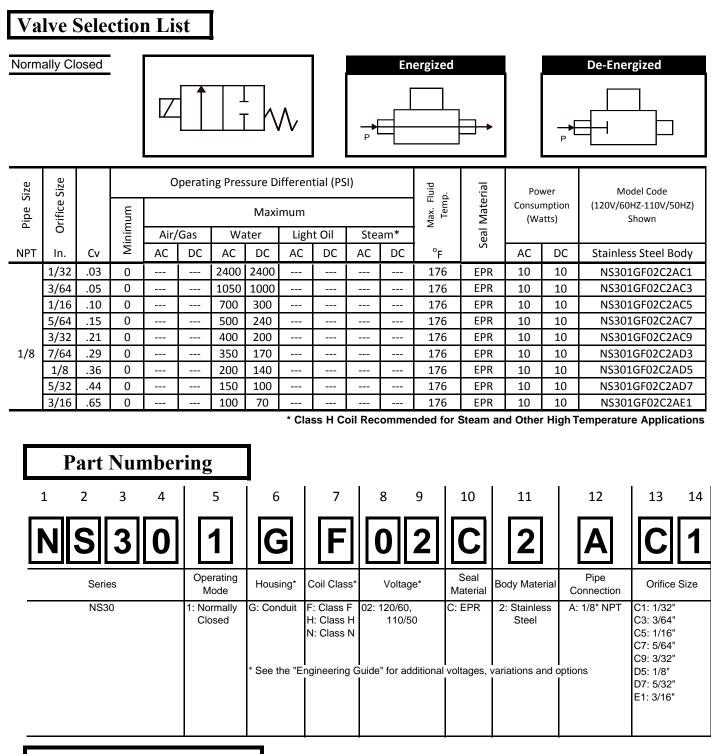


| Materials | Seals: | NSF Approved EPDM |
|-----------------------------------|-----------------------|---|
| | Orifice: | Stainless Steel |
| Electrical | Standard Housing: | NEAM 4/4X Encapsulated - 1/2" Conduit |
| | Optional Housings: | Contact GC Valves Customer Service for available |
| | | options. |
| | Standard Voltages: | 24, 120, 240, AC, 60 and/or 50 Hz. Available |
| | | 6, 12, 24 DC |
| | | Contact GC Valves Customer Svc. For Additional |
| | | Voltages |
| | Voltage Tolerance: | <u>+</u> 10% of applicable volltage |
| | Coil Classes: | F, H, N |
| | Standard Lead Length: | 24 inches |
| Operating Temperature | Ambient (Nominal): | 32° F to 125° F |
| Mounting | Position: | Any |
| Approvals* | Agency: | NSF/ANSI - 61-G / NSF-372 / UR Recognized |
| Dimension Weight (Lbs.) 1.1 | ns / Weight | 2.39" -1.79" -1.86" -1.18" -1.18" -1.18" -1.18" -1.18" -1.18" |
| | | 0.69" 0.34" 0.91" 0.59" 0.59" 0.59" 0.59" 0.59" 0.30" 0.25" |

GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

1/8-S-NS301-1

NS301 - 1/8" NPT, Stainless Steel Body, Normally Closed



Coil Data

| | Coil Family | | Frequency (Hz) | | 60 | 50 |
|---|-------------|------|--------------------|---------|----|----|
| - | Туре | Size | Nominal Power (VA) | Inrush | 46 | 46 |
| - | All | S4 | | Holding | 18 | 19 |

NS31 Series



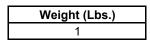
- 1/8" NPT
- 303 Stainless Steel Body
- 2-Way Zero Differential
- Direct Acting
- Normally Closed

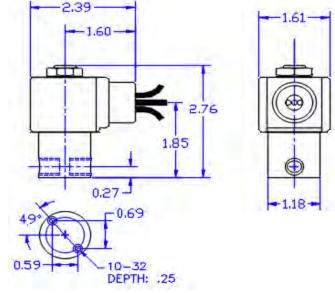


| Materials | Seals: | NSF Approved Ethylene Propylene |
|---------------------------------------|-----------------------|--|
| | Orifice: | Stainless Steel |
| Electrical | Standard Housing: | Encapsulated Waterproof Conduit (NEMA 4X) |
| | Optional Housings: | Metal Conduit, Explosion-Proof (NEMA 7), Grommet |
| | | Open Frame, Junction Box (single or dual knockouts), |
| | | DIN, Contact GC Valves Customer Svc. For others. |
| | Standard Voltages: | 24, 120, 240, AC, 60 and/or 50 Hz. Available |
| | | 6, 12, 24 DC |
| | | Contact GC Valves Customer Svc. For Additional |
| | | Voltages |
| | Voltage Tolerance: | <u>+</u> 10% of applicable volltage |
| | Coil Classes: | F, H, N |
| | Standard Lead Length: | 24 inches |
| Operating Temperature | Ambient (Nominal): | 32° F to 125° F |
| Mounting | Position: | Any |
| Approvals* | Agency: | NSF/ANSI - 61/ NSF-372/ UR -CSA Recognized |
| * Nist and the late for all south the | | |

* Not available for all variations

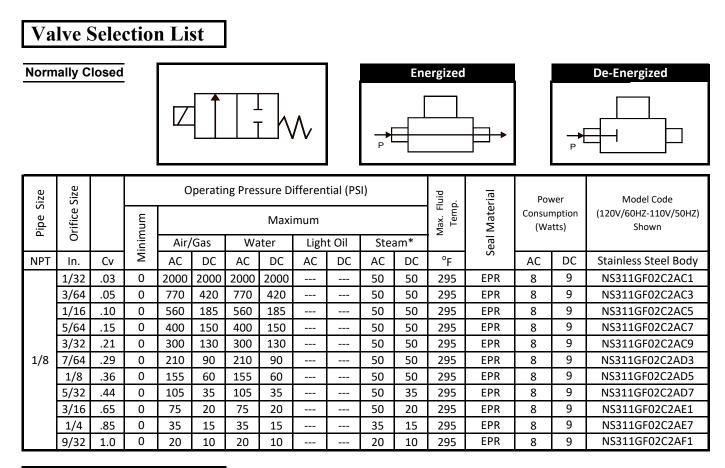
Dimensions / Weight





GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

NS311 - 1/8" NPT, Stainless Steel Body, Normally Closed



Part Numbering

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|-----|------|---|-------------------|---|--------------------------|---|-----------------------|------------|------------|-----------|--------|--------|
| NS | 3 | 1 | 1 | G | F | 0 | 2 | С | 2 | Α | С | 9 |
| Sei | ries | | Operating Mode | Hsg | Coil | Voltage | 5 | Seal Mat'l | Body Mat'l | Pipe Size | Orific | e Size |
| NS | NS31 | | 1: N.C. | G: Conduit Y: DIN A: Conduit U: J-Box P Opn Frame | F: F Class H: H Class | 02: 120/60 1 04: 240/60 2 24: 24/60 2 15: 12 V 16: 24 V | 220/50 24/50 DC | C: EPDM | 2: 303 SS | A: 1/8" | See A | Above |

Coil Data

| Coil F | amily | Frequency (Hz) | 60 | 50 | |
|--------|-------|--------------------|---------|----|----|
| Туре | Size | Nominal Power (VA) | Inrush | 36 | 36 |
| All | S3 | Nominal Power (VA) | Holding | 13 | 14 |

GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

1-8-S-NS311-2

NS312 Series



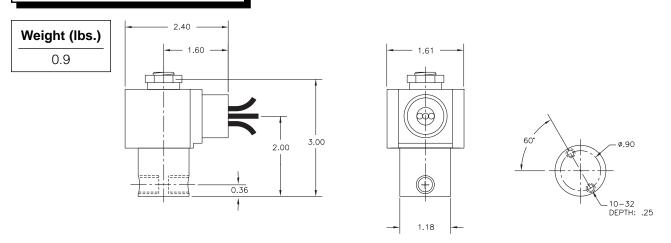
1/8" NPTStainless Steel2-Way Direct ActingNormally Open



| Materials | Seals: | NSF Approved EPDM | | | | | |
|-----------------------|-----------------------|---|--|--|--|--|--|
| | Orifice: | Stainless Steel | | | | | |
| Electrical | Standard Housing: | NEAM 4/4X Encapsulated - 1/2" Conduit | | | | | |
| | Optional Housings: | Contact GC Valves Customer Service for available options. | | | | | |
| | Standard Voltages: | 24, 120, 240 AC 60 Hz; 50 Hz available 6, 12, 24 DC; 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: | NSF/ANSI - 61-G / NSF-372 / UR Recognized | | | | | |

* Not available for all variations

Dimensions/Weight



GC Valves Customer Service: 800-828-0484 (7:30am to 4pm ET) or 800-582-4232 (7:30am to 4pm PT) Page 7 1/8-S-NS312-1

NS312 – 1/8" NPT, Stainless Steel Body, Normally Open

Valve Selection List Energized **De-Energized** Normally Open Ρ Ρ Operating Pressure Differential (psi) Size Max Fluid Temp. Model Code Power Size Materia Maximum Consumption Orifice : 120V/60HZ - 110V/50HZ Minimum Pipe (Watts) Shown Air/Gas Steam* Water Light Oil Seal C_{v} AC AC DC AC DC AC DC DC Stainless Steel Body AC DC °F NPT in. 1/32 0 2000 2000 EPR 8 9 .03 176 NS312GF02C2AC1 3/64 350 350 EPR 9 .05 0 176 8 NS312GF02C2AC3 1/16 .10 0 200 200 176 EPR 8 9 NS312GF02C2AC5 5/64 .15 0 140 140 176 EPR 8 9 NS312GF02C2AC7 1/8 3/32 .22 0 105 105 176 EPR 8 9 NS312GF02C2AC9 176 9 7/64 .25 0 80 80 EPR 8 NS312GF02C2AD3 1/8 30 0 60 60 176 EPR 8 9 NS312GF02C2AD5 3/16 .65 0 30 30 176 EPR 8 9 NS312GF02C2AE1 * Class H Coil Recommended for Steam and Other High Temperature Applications **Part Numbering** 1 2 3 12 4 5 6 7 8 9 10 11 13 14 2 3 2 2 1 1 (; 0 4 Operating Seal Body Pipe Coil Class Housing* Voltage* **Orifice Size** Series Material Material Connection Mode **NS31** 2: Normally G: Conduit F: Class F 02: 120/60 C: EPR 2: Stainless A: 1/8" NPT C1: 1/32" Open H: Class H 110/50 Steel C3: 3/64" C5: 1/16" C7: 5/64' C9: 3/32" D3: 7/64" D5: 1/8" * See the "Engineering Guide" for additional voltages, variations and options E1: 3/16"

Coil Data

| | Coil Family | | Frequency (Hz) | | 60 | 50 |
|---|-------------|------------|--------------------|---------|----|----|
| _ | Type All | Size S3 | Nominal Power (VA) | Inrush | 36 | 36 |
| | | | | Holding | 18 | 19 |

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

NS30 Series



- 1/4" NPT
- 303 Stainless Steel Body
- 2-Way Zero Differential
- Direct Acting
- Normally Closed

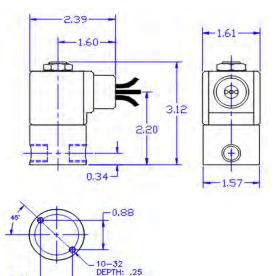


| Materials | Seals: | NSF Approved Ethylene Propylene |
|-----------------------|-----------------------|--|
| | Orifice: | Stainless Steel |
| Electrical | Standard Housing: | Encapsulated Waterproof Conduit (NEMA 4X) |
| | Optional Housings: | Metal Conduit, Explosion-Proof (NEMA 7), Grommet |
| | | Open Frame, Junction Box (single or dual knockouts), |
| | | DIN, Contact GC Valves Customer Svc. For others. |
| | Standard Voltages: | 24, 120, 240, AC, 60 and/or 50 Hz. Available |
| | | 6, 12, 24 DC |
| | | Contact GC Valves Customer Svc. For Additional |
| | | Voltages |
| | Voltage Tolerance: | <u>+</u> 10% of applicable volltage |
| | Coil Classes: | F, H, N |
| | Standard Lead Length: | 24 inches |
| Operating Temperature | Ambient (Nominal): | 32° F to 125° F |
| Mounting | Position: | Any |
| Approvals* | Agency: | NSF/ANSI - 61/ NSF-372/ UR -CSA Recognized |

* Not available for all variations

Dimensions / Weight

| Weight (Lbs.) | |
|---------------|--|
| 1.2 | |

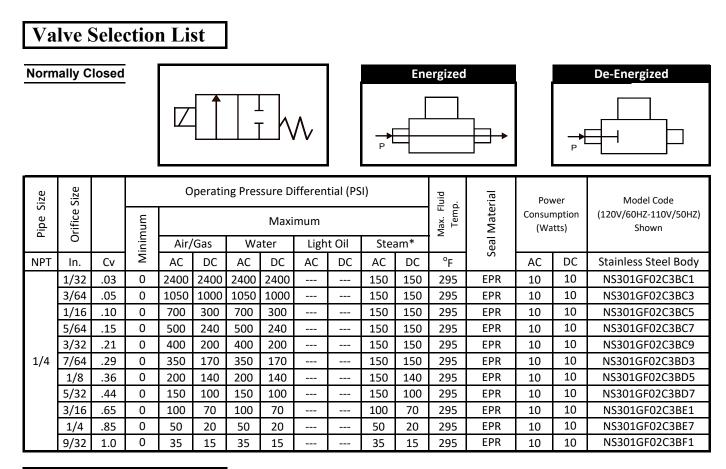


GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

0.88-

1-4-S-NS301-1

NS301 - 1/4" NPT, Stainless Steel Body, Normally Closed



Part Numbering

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|-----|------|---|-------------------|---|--------------------------|---|---|------------|------------|-----------|--------|--------|
| NS | 3 | 0 | 1 | G | F | 0 | 2 | С | 3 | В | С | 9 |
| Sei | ries | | Operating Mode | Hsg | Coil | Voltage | | Seal Mat'l | Body Mat'l | Pipe Size | Orific | e Size |
| NS | 530 | | 1: N.C. | G: Conduit Y: DIN A: Conduit U: J-Box P Opn Frame | F: F Class H: H Class | 02: 120/60 110/50 04: 240/60 220/50 24: 24/60 24/50 15: 12 VDC 16: 24 VDC | | C: EPDM | 3: 303 SS | B: 1/4" | See A | Above |

Coil Data

| Coil F | amily | Frequency (Hz) | 60 | 50 | |
|--------|-------|---------------------|---------|----|----|
| Туре | Size | Neminal Dower ()(A) | Inrush | 46 | 46 |
| All | S4 | Nominal Power (VA) | Holding | 18 | 19 |

GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

1-4-S-NS301-2

NS311 Series



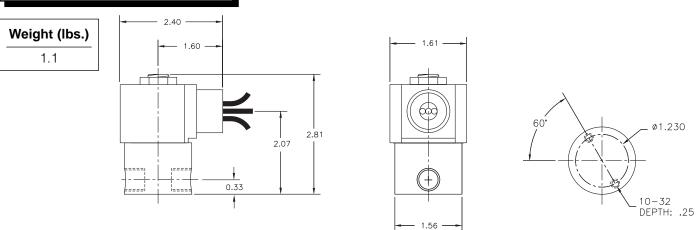
1/4" NPTStainless Steel Body2-Way Direct ActingNormally Closed



| Materials | Seals: | NSF Approved EPDM |
|-----------------------|-----------------------|---|
| | Orifice: | Stainless Steel |
| Electrical | Standard Housing: | NEAM 4/4X Encapsulated - 1/2" Conduit |
| | Optional Housings: | Contact GC Valves Customer Service for available options. |
| | Standard Voltages: | 24, 120, 240 AC 60 Hz; 50 Hz available 6, 12, 24 DC; 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: | NSF/ANSI - 61-G / NSF-372 / UR Recognized |

* Not available for all variations

Dimensions/Weight



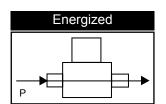
GC Valves Customer Service: 800-828-0484 (7:30am to 4pm ET) or 800-582-4232 (7:30am to 4pm PT) Page 11 1/4-S-NS311-1

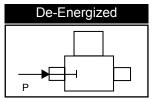
NS311 – 1/4" NPT, Stainless Steel Body, Normally Closed

Valve Selection List

Normally Closed

| | _ |
|---|-----|
| | |
| | 700 |
| P | |





| Size | • Size ce Size | | (| Opera | ating | Pres | sure Maxi | | | al (ps | i) | Max Fluid Temp. | erial | - | wer mption | Model Code (120V/60HZ — 110V/50HZ) | | |
|--------|-------------------|---------------------------|---------|-------|-------|------|--------------|----------------|--------|--------|-----|--------------------|---------------|---------|---------------|---------------------------------------|---|----------------|
| Pipe (| Orifice | | Minimum | Air/ | Gas | Wa | ater | Ligh | it Oil | Ste | am* | Fluid | Seal Material | (Watts) | | (1207/00/12 - 1107/30/12) Shown | | |
| NPT | in. | Cv | Min | AC | DC | AC | DC | AC | DC | AC | DC | °F | F v AC DC | | DC | Stainless Steel Body | | |
| | 1/32 | .03 | 0 | _ | _ | 2000 | 2000 | _ | | _ | | 176 | EPR | 8 | 9 | NS311GF02C3BC1 | | |
| | 3/64 | .05 | 0 | | | 770 | 420 | — | | | | 176 | EPR | 8 | 9 | NS311GF02C3BC3 | | |
| | 1/16 | .10 | 0 | — | — | 560 | 185 | — | — | _ | — | 176 | EPR | 8 | 9 | NS311GF02C3BC5 | | |
| | 5/64 | .15 | 0 | | — | 400 | 150 | — | _ | | — | 176 | EPR | 8 | 9 | NS311GF02C3BC7 | | |
| | 3/32 | .21 | 0 | | — | 300 | 130 | — | | _ | | 176 | EPR | 8 | 9 | NS311GF02C3BC9 | | |
| 1/4 | 7/64 | .14 | 0 | | _ | 210 | 90 | — | | | | 176 | EPR | 8 | 9 | NS311GF02C3BD3 | | |
| | 1/8 | .32 | 0 | | — | 155 | 60 | — | | | | 176 | EPR | 8 | 9 | NS311GF02C3BD5 | | |
| | 5/32 | .43 | 0 | | _ | 105 | 35 | | | | | 176 | EPR | 8 | 9 | NS311GF02C3BD7 | | |
| | 3/16 .4 | | | .49 | 0 | _ | | 75 | 20 | | | | _ | 176 | EPR | 8 | 9 | NS311GF02C3BE1 |
| | 1/4 | 4 .85 0 — — 50 20 — — — — | | 176 | EPR | 8 | 9 | NS311GF02C3BE7 | | | | | | | | | | |
| | 9/32 | 1.0 | 0 | — | — | 35 | 15 | — | _ | _ | _ | 176 | EPR | 8 | 9 | NS311GF02C3BF1 | | |

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

Part Numbering

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 14 |
|---|-----|-----|---|--------------------|----------------|--------------------------|----------------|----------------|--------------------|-----------------------|--------------------|---|
| Ν | S | 3 | 1 | 1 | G | F | 0 | 2 | C | 3 | B | C 1 |
| | Ser | ies | | Operatir Mode | g Housing* | Coil Class* | Vol | tage* | Seal Material | Body Material | Pipe Connection | Orifice Size |
| | NS | 31 | | 1: Norma Closec | · · · | F: Class F H: Class H | - | 20/60 10/50 | C: EPR | 3: Stainless Steel | B: 1/4" NPT | C1: 1/32" C3: 3/64" C5: 1/16" C7: 5/64" C9: 3/32" D3: 7/64" D5: 1/8" D5: 1/8" D5: 5/32" |
| | | | | * | See the "Engir | eering Guide | e" for ad I | ditional v | oltages, vari I | ations and op | otions | E1: 3/16" E7: 1/4" F1: 9/32" |

Coil Data

| | Coil Family | Frequency (Hz) | 60 | 50 |
|------|--------------|---------------------------|----|----|
| Type | e Size S3 | Nominal Power (VA) Inrush | 36 | 36 |
| | | Holding | 13 | 14 |

GC Valves Customer Service: 800-828-0484 (7:30am to 4pm ET) or 800-582-4232 (7:30am to 4pm PT) 1/4-S-NS311-2

NS302 Series



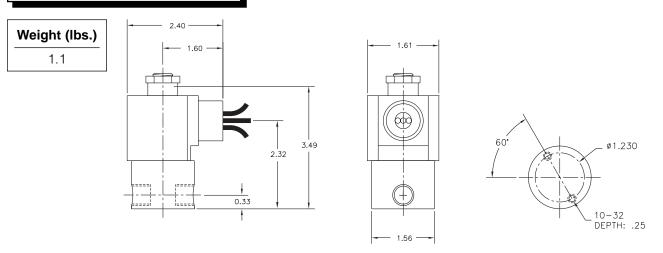
1/4" NPTStainless Steel Body2-Way Direct ActingNormally Open



| Materials | Seals: | NSF Approved EPDM |
|-----------------------|-----------------------|---|
| | Orifice: | Stainless Steel |
| Electrical | Standard Housing: | NEAM 4/4X Encapsulated - 1/2" Conduit |
| | Optional Housings: | Contact GC Valves Customer Service for available options. |
| | Standard Voltages: | 24, 120, 240 AC 60 Hz; 50 Hz available 6, 12, 24 DC; 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: | NSF/ANSI - 61-G / NSF-372 / UR Recognized |

* Not available for all variations

Dimensions/Weight



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

NS302 – 1/4" NPT, Stainless Steel Body, Normally Open

| | | re Se | _ | etio | on | Li | st | | | | | | | Ene | rgize | 4 | | | De-Ene | raized | |
|-----|-----------|--------------|-----|------------|-----------------|-------------|-------|-------|-------|--------|--------|----------|--------------------|-----|---------------|-------|------------------|------|---------------------------|---|---|
| INO | rmali | y Open | _ | | | | | P | | ^ | | | P | | | | | - | | | -> |
| | ۵ | Size | | | Opera | ating | Pres | sure | Diffe | rentia | al (ps | i) | .dr | | - | Po | wer | | Model Co | de | |
| | Size | e S | | _ | | | | Maxi | mum | 1 | | | Ten | | teria | Consu | Imption | (12 | 0V/60HZ — 11 | 0V/50H | z) |
| | Pipe Size | Orifice | | Minimum | Air/ | Gas | Wa | ater | Ligh | t Oil | Ste | am* | Max Fluid Temp. | | Seal Material | (Wa | atts) | l | Shown | |) |
| Ν | IPT | in. | Cv | Mini | AC | DC | AC | DC | AC | DC | AC | DC | °F | | Sea | AC | DC | | Stainless Stee | el Body | |
| | | 1/32 | .03 | 0 | _ | _ | 2400 | 2400 | _ | _ | _ | _ | 176 | E | PR | 11 | 10 | | NS302GF02 | C3BC1 | |
| | | 3/64 | .05 | 0 | _ | _ | 600 | 600 | | | | _ | 176 | E | PR | 11 | 10 | | NS302GF02 | C3BC3 | |
| | | 1/16 | .10 | 0 | | | 325 | | — | — | | | 176 | E | PR | 11 | 10 | | NS302GF02 | C3BC5 | |
| | 1/4 | 5/64 | .15 | 0 | | | | 235 | — | — | _ | | 176 | | PR | 11 | 10 | | NS302GF02 | | |
| | 1/4 | 3/32 | .20 | 0 | | | 150 | 150 | — | — | _ | | 176 | | PR | 11 | 10 | | NS302GF02 | | |
| | - | 7/64 | .25 | 0 | | — | 125 | 125 | — | — | | <u> </u> | 176 | | PR | 11 | 10 | | NS302GF02 | | |
| | | 1/8 | .30 | 0 | - | - | 100 | 100 | — | — | | <u> </u> | 176 | | PR | 11 | 10 | | NS302GF02 | | |
| | - | 5/32 | .43 | 0 | - | | 60 | 60 | | — | | <u> </u> | 176 | | PR | 11 | 10 | | NS302GF02 | | |
| | | 3/16 | .65 | 0 | | | 40 | 40 | | | _ | — | 176 | | PR | 11 | 10 | | NS302GF02 emperature A | | |
|] | 2 2 | ³ | 4 | ו m | 5 | ri r | (| 3 | | 7 | - | 8 | 9 | | 1 | 0 | 11 | 7 | 12 | 13 | 1 |
| | 5 | 3 | 0 | | 2 | | | 5 | | | | U | | | | • | 3 | | B | C | Ľ |
| | Se | ries | | | beratii Mode | | Hous | sing* | Co | il Cla | SS* | Vo | oltage* | | Se Mate | | Bod Mater | | Pipe Connection | Orific | e Si |
| | NS | 530 | | 2: 1 | Norma Open | ally | G: Co | | H: | Clas | s H | | 120/60 110/50 |) | C: EP | R | 3: Stain Stee | less | B: 1/4" NPT | C1: 1/ C3: 3/ C5: 1/ C7: 5/ C9: 3/3 D3: 7/6 D5: 1/8 D7: 5/ E1: 3/ | 64" 16" 64" 32" 34" 32" 32" |
| | | Coil | Da | nta | 1 | | | | | | | | | | | | | | | | |
| | | Coil | Eam | ilv | | | | | | у (Ц- | | | | | | | | | 60 | 50 | _ |

| Coil F | Family | Frequency (Hz) | Frequency (Hz) | | | | | |
|--------|--------|----------------------|----------------|----|----|--|--|--|
| Туре | Size | | | | | | | |
| All | S4 | — Nominal Power (VA) | Inrush | 46 | 46 | | | |
| | | | Holding | 22 | 25 | | | |

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

NS312 Series



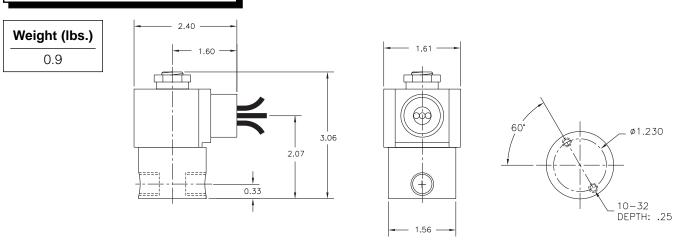
1/4" NPTStainless Steel2-Way Direct ActingNormally Open



| Materials | Seals: | NSF Approved EPDM | | | | | | |
|-----------------------|-----------------------|---|--|--|--|--|--|--|
| | Orifice: | Stainless Steel | | | | | | |
| Electrical | Standard Housing: | NEAM 4/4X Encapsulated - 1/2" Conduit | | | | | | |
| | Optional Housings: | Contact GC Valves Customer Service for available options. | | | | | | |
| | Standard Voltages: | 24, 120, 240 AC 60 Hz; 50 Hz available 6, 12, 24 DC; 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: | NSF/ANSI - 61-G / NSF-372 / UR Recognized | | | | | | |

* Not available for all variations

Dimensions/Weight



GC Valves Customer Service: 800-828-0484 (7:30am to 4pm ET) or 800-582-4232 (7:30am to 4pm PT) Page 15

NS312 – 1/4" NPT, Stainless Steel Body, Normally Open

| lormall | y Open | | | | | | P | `\ ' | ~ | | | P | | | | De-Energized | |
|-----------|--------------|-----|---------|---|----|------|------|---------|----|----|-----------|-------------|---------------|-------------------------|----|--|--|
| Pipe Size | Orifice Size | | | Operating Pressure Differential (psi Maximum Air/Gas Water Light Oil Stea | | | | | | | i) am* | Fluid Temp. | Seal Material | Powe Consum (Watt | | Model Code (120V/60HZ — 110V/50HZ) Shown | |
| ∩ NPT | o in. | Cv | Minimum | AC | DC | AC | DC | AC | DC | AC | DC | ۰F | ee | AC | DC | Stainless Steel Body | |
| | 1/32 | .03 | 0 | | _ | 2000 | 2000 | | | | _ | 176 | EPR | 8 | 9 | NS312GF02C2BC1 | |
| | 3/64 | .05 | 0 | _ | _ | 350 | 350 | _ | _ | _ | | 176 | EPR | 8 | 9 | NS312GF02C3BC3 | |
| | 1/16 | .10 | 0 | | _ | 200 | 200 | _ | _ | _ | | 176 | EPR | 8 | 9 | NS312GF02C3BC5 | |
| 1/4 | 5/64 | .15 | 0 | — | _ | 140 | 140 | _ | — | _ | — | 176 | EPR | 8 | 9 | NS312GF02C3BC7 | |
| 1/4 | 3/32 | .22 | 0 | _ | _ | 105 | 105 | — | _ | _ | _ | 176 | EPR | 8 | 9 | NS312GF02C3BC9 | |
| | 7/64 | .25 | 0 | — | _ | 80 | 80 | _ | _ | | — | 176 | EPR | 8 | 9 | NS312GF02C3BD3 | |
| | 1/8 | .30 | 0 | | | 60 | 60 | | | _ | | 176 | EPR | 8 | 9 | NS312GF02C3BD5 | |
| | 3/16 | .65 | 0 | | | 30 | 30 | | | _ | | 176 | EPR | 8 | 9 | NS312GF02C3BE1 | |

Part Numbering

| 1 2 3 4 | 5 6 | 7 | 89 | 10 | 11 | 12 | 13 14 |
|---------|--------------------------|-----------------|--------------------------------------|------------------|--|--------------------|---|
| N S 3 1 | 2 G | | 02 | С | 3 | B | C 1 |
| Series | Operating Mode Housin | ng* Coil Class* | Voltage* | Seal Material | Body Material | Pipe Connection | Orifice Size |
| NS31 | Open | | it F: Class F 02: 120/60 C: EPR 3: 5 | | 3: Stainless Steel ations and op | B: 1/4" NPT | C1: 1/32" C3: 3/64" C5: 1/16" C7: 5/64" C9: 3/32" D3: 7/64" D5: 1/8" E1: 3/16" |

Coil Data

| Coil | Family | Frequency (Hz) | | 60 | 50 |
|-------------|------------|--------------------|---------|----|----|
| Type All | Size S3 | Nominal Power (VA) | Inrush | 36 | 36 |
| | | | Holding | 18 | 19 |

GC Valves Customer Service: 800-828-0484 (7:30am to 4pm ET) or 800-582-4232 (7:30am to 4pm PT) 1/4-S-NS312-2 Page 16



- 3/8" NPT
- 316 SS Body
- 2-Way Zero Differential Piloted Diaphragm
 Normally Closed

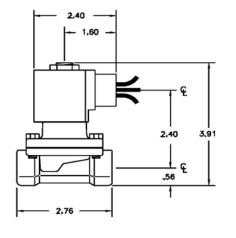


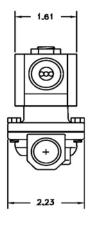
| Materials | Seals: | | Santoprene/NSF Approved EPDM | | | |
|-----------------------|-----------------|---------|---|--|--|--|
| | Orifice: | Pilot | Stainless Steel | | | |
| | | Main | Stainless Steel | | | |
| Electrical | Housing: | | NEMA 4/4X Encapsulated - 1/2" Conduit | | | |
| | Optional Housir | ngs: | Contact GC Valves Customer Svc. for available | | | |
| | | | options. | | | |
| | Voltage: | | 24,120,240, VAC, 60 and/or 50 Hz. Available. | | | |
| | | | 6, 12, 24 VDC | | | |
| | | | Contact GC Valves Customer Svc. for available | | | |
| | | | options. | | | |
| | Voltage Tolerar | nce: | <u>+</u> 10% of applicable voltage | | | |
| | Coil Classes: | | F, H, N | | | |
| | Standard Lead | Length: | 24 inches | | | |
| Operating Temperature | Ambient (Nomir | nal): | 32° F to 125° F | | | |
| Mounting | Position: | | Any | | | |
| Approvals* | Agency: | | NSF/ANSI - 61-G / NSF-372 / UR Recognized | | | |

* Not available for all variations

Dimensions / Weight





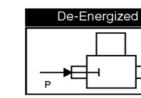


Valve Selection List

| Normal | ly | Cl | osed |
|--------|----|----|------|
|--------|----|----|------|

| | | \sim |
|--|---|--------|
| | Ρ | |

| Energized |
|-----------|
| → |



| Size | Size | | С | pera | ting F | | ure [ximu | | ential | (psi) | k emp. | al | Pov Consu | | Model Code | | |
|---------------|---------|-----|-------|------|--------|-----|---------------|------|--------|--------|-----------|--------------|--------------|-------------|--------------------------------------|--|--|
| Pipe Si | Orifice | | m | Air/ | Gas | Wa | ater | Ligh | t Oil | Steam* | 그 | Material | (Wa | · · · · · · | (120V/60HZ — 110V/50HZ) Shown) | | |
| n ∎ NPT | O IN | cv | Minim | AC | DC | AC | DC | AC | DC | AC | °F | Seal N | AC | DC | Stainless Steel Body Type 316 | | |
| 3/8" | 5/8 | 4.3 | 0 | - | | 100 | 90 | - | - | | 295 | Santo EPR | 10 | 10 | NS201GF02F7CG4 | | |

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

Part Numbering

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 9 | 10 | 11 | 12 | 13 14 |
|---|-----|-----|---|---|------------------------------------|---------------------------|------------------|--------------------|--------------|----|------------|
| Ν | S | 2 | 0 | 1 | G | F | 0 2 | F 7 | | C | G 4 |
| | Ser | ies | es Operating Housing* Coil Class* | | Voltage* | Seal Material | Body Material | Pipe Connection | Orifice Size | | |
| | NS | 20 | 1: Normally G: 1/2" F: Class F 02: 110/1 Closed Conduit N: Class N 50.60 | | 02: 110/120 50/60 Hz 10 Watt | F: Santoprene/ EPDM | 7: S. Steel | C: 3/8" | G4: 5/8" | | |
| | | | | 1 | | | | | | | |

| Coil | Data | | | | | |
|------|--------|--------------------|---------|----|----|--|
| Coil | Family | Frequency (Hz) | | 60 | 50 | |
| Туре | Size | | 1000 | | | |
| All | S4 | Nominal Power (VA) | Inrush | 46 | 46 | |
| | | | Holding | 18 | 23 | |





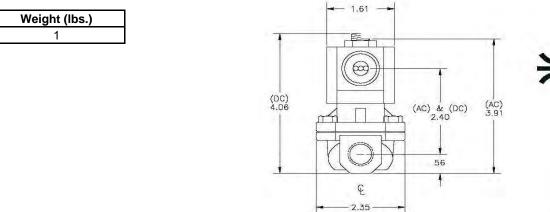
- 3/8" NPT
- Nylon Body
- 2-Way Zero Differential Piloted Diaphragm
 Normally Closed

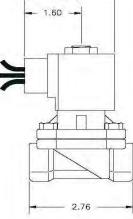


| Materials | Seals: | | Santoprene/NSF Approved EPDM | | | | |
|-----------------------|-----------------|---------|---|--|--|--|--|
| | Orifice: | Pilot | Stainless Steel | | | | |
| | | Main | Noryl | | | | |
| Electrical | Housing: | | NEMA 4/4X Encapsulated - 1/2" Conduit | | | | |
| | Optional Housir | igs: | Contact GC Valves Customer Svc. for available | | | | |
| | | | options. | | | | |
| | Voltage: | | 24,120,240, VAC, 60 and/or 50 Hz. Available. | | | | |
| | | | 6, 12, 24 VDC | | | | |
| | | | Contact GC Valves Customer Svc. for available | | | | |
| | | | options. | | | | |
| | Voltage Toleran | ice: | <u>+</u> 10% of applicable voltage | | | | |
| | Coil Classes: | | F, H, N | | | | |
| | Standard Lead | Length: | 24 inches | | | | |
| Operating Temperature | Ambient (Nomir | nal): | 32° F to 125° F | | | | |
| Mounting | Position: | | Any | | | | |
| Approvals* | Agency: | | NSF/ANSI - 61-G / NSF-372 / UR Recognized | | | | |

* Not available for all variations

Dimensions / Weight





2.40

Valve Selection List Energized **De-Energized** Normally Closed Ρ Р P Operating Pressure Differential (psi) Model Code Orifice Size Max Fluid Temp. Power Pipe Size Maximum Seal Material Consumption 120V/60HZ - 110V/50HZ (Watts) Water Light Oil Steam* Minimum Air/Gas Shown Noryl Body AC DC AC DC AC DC AC AC DC Cv NPT °F IN

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

10

NS201GF02FPCG4

Santo EPR

295

Part Numbering

4.3 0 100 90

3/8"

5/8

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 9 | 10 | 11 | 12 | 13 14 |
|---|-----|-----|---|-----------------------|----------|--------------------------|------------------------------------|---------------------------|------------------|--------------------|--------------|
| Ν | S | 2 | 0 | 1 | G | F | 02 | F | Ρ | C | G 4 |
| | Ser | ies | | Operating Mode | Housing* | Coil Class* | Voltage* | Seal Material | Body Material | Pipe Connection | Orifice Size |
| | NS: | 20 | | 1: Normally Closed | | F: Class F N: Class N | 02: 110/120 50/60 Hz 10 Watt | F: Santoprene/ EPDM | P: Noryl | C: 3/8" | G4: 5/8" |
| | | | | | | | | | | | |

Coil Data

| Coll | Family | Frequency (Hz) | | 60 | 50 |
|------|--------|--------------------|---------|----|----|
| Туре | Size | | 1000 | 1 | |
| All | S4 | Nominal Power (VA) | Inrush | 46 | 46 |
| | | | Holding | 18 | 23 |





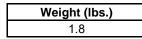
- 3/8" NPT
- 316 SS Body
- 2-Way Piloted Diaphragm Normally Closed

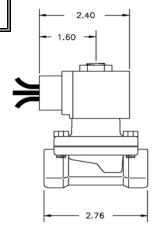


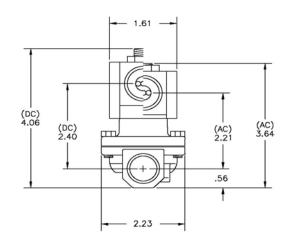
| Materials | Seals: | | Santoprene/NSF Approved EPDM |
|-----------------------|-----------------|---------|---|
| | Orifice: | Pilot | Stainless Steel |
| | | Main | Stainless Steel |
| Electrical | Housing: | | NEMA 4/4X Encapsulated - 1/2" Conduit |
| | Optional Housir | igs: | Contact GC Valves Customer Svc. for available |
| | | | options. |
| | Voltage: | | 24,120,240, VAC, 60 and/or 50 Hz. Available. |
| | | | 6, 12, 24 VDC |
| | | | Contact GC Valves Customer Svc. for available |
| | | | options. |
| | Voltage Toleran | ice: | <u>+</u> 10% of applicable voltage |
| | Coil Classes: | | F, H, N |
| | Standard Lead | Length: | 24 inches |
| Operating Temperature | Ambient (Nomir | nal): | 32° F to 125° F |
| Mounting | Position: | | Any |
| Approvals* | Agency: | | NSF/ANSI - 61-G / NSF-372 / UR Recognized |

* Not available for all variations

Dimensions / Weight







| Valv | ve Se | elec | tic | n | Li | st | | | | | | | | | | |
|-----------|---------|------|---------|-------|--------|-----|----------------|--------------|--------|---------|--------------------|---------------|--|---------------|-----------------------------|------|
| Normall | y Close | ed | | L | ┲ | 1 | L T P | \mathbb{V} | ~ | | P | | |]→ | De-Ene | |
| ze | Size | | C |)pera | ting I | | ure C ximui | | entia | l (psi) | k emp. | al | Conversion BANK | wer mption | Model Cod | |
| Pipe Size | Orifice | | ш | Air/ | Gas | Wa | ater | Ligh | nt Oil | Steam* | Max Fluid Temp. | Aateri | 19 19 19 19 19 19 19 19 19 19 19 19 19 1 | atts) | (1207/60H2 — 110 Shown |) |
| ⊂ NPT | O IN | cv | Minimum | AC | DC | AC | DC | AC | DC | AC | °F | Seal Material | AC | DC | Stainless Steel Type 316 | |
| 3/8" | 5/8" | 4.3 | 4 | - | - | 150 | 100 | _ | _ | - | 295 | Santo EPR | 8 | 10 | NS211GF02F | 7CG4 |

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

| Part Numbe | ering | | | | | | | |
|------------|-----------------------|--------------------|--------------------------|------------------------------------|---------------------------|------------------|--------------------|--------------|
| 1 2 3 4 | 5 | 6 | 7 | 8 9 | 10 | 11 | 12 | 13 14 |
| N S 2 1 | 1 | G | F | 0 2 | F | 7 | С | G 4 |
| Series | Operating Mode | Housing* | Coil Class* | Voltage* | Seal Material | Body Material | Pipe Connection | Orifice Size |
| NS21 | 1: Normally Closed | G: 1/2" Conduit | F: Class F N: Class N | 02: 110/120 50/60 Hz 10 Watt | F: Santoprene/ EPDM | 7: S. Steel | C: 3/8" | G4: 5/8" |
| | | | | | | | | |

| Coil | Data | | | | |
|------|--------|--|---------|----|----|
| Coil | Family | Frequency (Hz) | | 60 | 50 |
| Туре | Size | | - 1 | | |
| AC | S3 | Nominal Power (VA) | Inrush | 46 | 46 |
| DC | S4 | | Holding | 18 | 23 |





- 3/8" NPT
- Nylon Body
- 2-Way Piloted Diaphragm Normally Closed

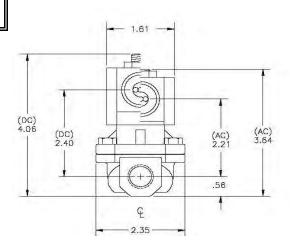


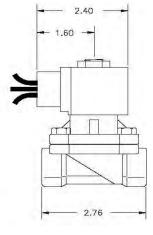
| Materials | Seals: | | Santoprene/NSF Approved EPDM |
|-----------------------|-----------------|---------|---|
| | Orifice: | Pilot | Stainless Steel |
| | | Main | Noryl |
| Electrical | Housing: | | NEMA 4/4X Encapsulated - 1/2" Conduit |
| | Optional Housir | igs: | Contact GC Valves Customer Svc. for available |
| | | | options. |
| | Voltage: | | 24,120,240, VAC, 60 and/or 50 Hz. Available. |
| | | | 6, 12, 24 VDC |
| | | | Contact GC Valves Customer Svc. for available |
| | | | options. |
| | Voltage Toleran | ce: | <u>+</u> 10% of applicable voltage |
| | Coil Classes: | | F, H, N |
| | Standard Lead | Length: | 24 inches |
| Operating Temperature | Ambient (Nomir | nal): | 32° F to 125° F |
| Mounting | Position: | | Any |
| Approvals* | Agency: | | NSF/ANSI - 61-G / NSF-372 / UR Recognized |

* Not available for all variations

Dimensions / Weight

| Weight (lbs.) | |
|---------------|--|
| 0.9 | |





| Valv | ve Se | elec | etic |)n | Li | st | | | | | | | | | | |
|-----------|---------|------|---------|------|--------|-----|----------------|--------------|--------|---------|--------------------|---------------|---|------------------|------|---------------------------------|
| Normall | y Close | ed | | | ∕ | 1 | I T P | \mathbf{k} | ~ | | P | | gized | ∃→ | | De-Energized |
| az | Size | | C | pera | ting I | | sure [ximu | | entia | l (psi) | mp. | al | 1 | wer | 1 | Model Code |
| Pipe Size | Orifice | | ш | Air/ | Gas | Wa | ater | Ligh | nt Oil | Steam* | Max Fluid Temp. | Seal Material | 111111111111111111111111111111111111111 | imption atts) | (12 | 20V/60HZ — 110V/50HZ) Shown |
| n ■ | | cv | Minimum | AC | DC | AC | DC | AC | DC | AC | °F | Seal N | AC | DC | | Noryl Body |
| 3/8" | 5/8" | 4.3 | 4 | - | - | 150 | 100 | _ | - | _ | 295 | Santo EPR | 8 | 10 | | NS211GF02FPCG4 |

| | Pa | art 1 | Nui | nbe | ring |] | | | | | | | |
|---|----|-------|-----|-----|------|--------------------|-------------|----------|-------------|----------|---------|-----------|------|
| Series Operating Mode Housing* Coil Class* Voltage* Seal Material Body Material Pipe Connection Orifice Size NS21 1: Normally Closed G: 1/2" F: Class F 02: 110/120 F: 50/60 Hz P: Noryl C: 3/8" G4: 5/8" | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 9 | 10 | 11 | 12 | 13 | 14 |
| Mode Housing Con class Voltage Material Material Connection Onlice Size NS21 1: Normally G: 1/2" F: Class F 02: 110/120 F: Solo Hz F: Santoprene/ P: Noryl C: 3/8" G4: 5/8" | Ν | S | 2 | 1 | 1 | G | F | 0 2 | F | P | С | G | 4 |
| Closed Conduit N: Class N 50/60 Hz Santoprene/ | | Seri | es | | | Housing* | Coil Class* | Voltage* | | | | Orifice S | Size |
| | | NS | 21 | | | G: 1/2" Conduit | | 50/60 Hz | Santoprene/ | P: Noryl | C: 3/8" | G4: 5/ | 8" |

| Coil | Data | | | | |
|------|--------|--|---------|----|----|
| Coil | Family | Frequency (Hz) | | 60 | 50 |
| Туре | Size | | 1.000 | | |
| AC | S3 | Nominal Power (VA) | Inrush | 46 | 46 |
| DC | S4 | | Holding | 18 | 23 |

NS301 Series



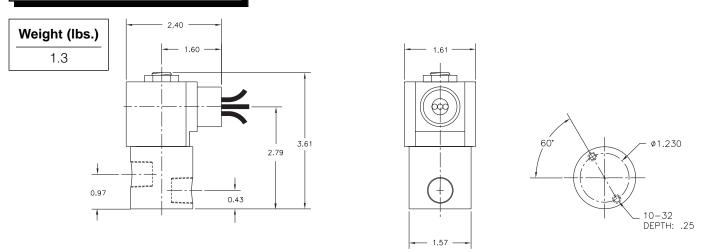
3/8" NPTStainless Steel Body2-Way Direct ActingNormally Closed



| Materials | Seals: | NSF Approved EPDM |
|-----------------------|-----------------------|---|
| | Orifice: | Stainless Steel |
| Electrical | Standard Housing: | NEAM 4/4X Encapsulated - 1/2" Conduit |
| | Optional Housings: | Contact GC Valves Customer Service for available options. |
| | Standard Voltages: | 24, 120, 240 AC 60 Hz; 50 Hz available 6, 12, 24 DC; 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: | NSF/ANSI - 61-G / NSF-372 / UR Recognized |

* Not available for all variations

Dimensions/Weight



GC Valves Customer Service: 800-828-0484 (7:30am to 4pm ET) or 800-582-4232 (7:30am to 4pm PT) Page 25

NS301 – 3/8" NPT, Stainless Steel Body, Normally Closed

Energized **De-Energized** Normally Closed Ρ Р Ρ **Operating Pressure Differential (psi)** Size Max Fluid Temp. Model Code Power Size Seal Material Maximum Consumption Orifice : 120V/60HZ — 110V/50HZ Minimum Pipe (Watts) Shown Air/Gas Water Light Oil Steam* Cv AC DC AC DC AC DC AC DC AC DC Stainless Steel Body °F NPT in. 1/8 .36 0 200 140 176 EPR 10 10 NS301GF02C3CD5 ____ ____ 3/16 100 .65 0 70 EPR 10 10 ____ ____ 176 NS301GF02C3CE1 1/4 3/8 .85 0 50 20 176 EPR 10 10 NS301GF02C3CE7 9/32 15 EPR 10 10 1.0 0 35 176 NS301GF02C3CF1 EPR 3/8 1.3 0 20 5 176 10 10 NS301GF02C3CF5 * Class H Coil Recommended for Steam and Other High Temperature Applications **Part Numbering** 2 1 3 4 5 8 9 10 11 12 13 14 6 7 3 2 3 5 S 1 0 U G Operating Seal Body Pipe Series Housing* Coil Class* Voltage* Orifice Size Mode Material Material Connection 1: Normally G: Conduit F: Class F 02: 120/60 C: EPR 3: Stainless C: 3/8" NPT D5: 1/8" NS30 Closed H: Class H 110/50 E1: 3/16" Steel E7: 1/4" F1: 9/32" F5: 3/8"

* See the "Engineering Guide" for additional voltages, variations and options

Coil Data

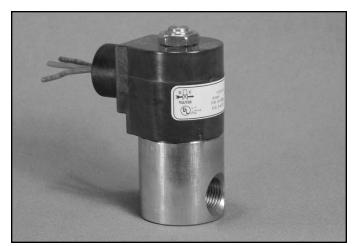
Valve Selection List

| | Coil Family | | Frequency (Hz) | Frequency (Hz) | | | | | |
|----------|-------------|------------|--------------------|----------------|----|----|--|--|--|
| Ty Al | /pe II | Size S4 | Nominal Power (VA) | Inrush | 46 | 46 | | | |
| | | | | Holding | 18 | 19 | | | |

NS301 Series



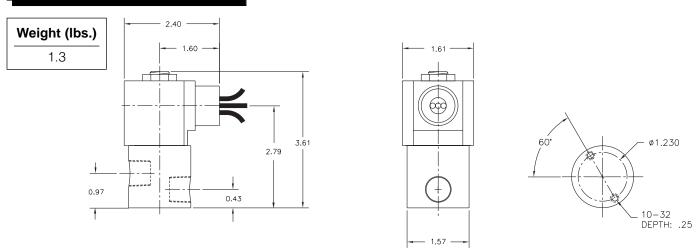
3/8" NPTStainless Steel Body2-Way Direct ActingNormally Closed



| Materials | Seals: | NSF Approved EPDM |
|-----------------------|-----------------------|---|
| | Orifice: | Stainless Steel |
| Electrical | Standard Housing: | NEAM 4/4X Encapsulated - 1/2" Conduit |
| | Optional Housings: | Contact GC Valves Customer Service for available options. |
| | Standard Voltages: | 24, 120, 240 AC 60 Hz; 50 Hz available 6, 12, 24 DC; 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: | NSF/ANSI - 61-G / NSF-372 / UR Recognized |

* Not available for all variations

Dimensions/Weight



GC Valves Customer Service: 800-828-0484 (7:30am to 4pm ET) or 800-582-4232 (7:30am to 4pm PT) Page 27

NS301 – 3/8" NPT, Stainless Steel Body, Normally Closed

Energized **De-Energized** Normally Closed Ρ Р Ρ **Operating Pressure Differential (psi)** Size Max Fluid Temp. Model Code Power Size Seal Material Maximum Consumption Orifice : 120V/60HZ — 110V/50HZ Minimum Pipe (Watts) Shown Air/Gas Water Light Oil Steam* Cv AC DC AC DC AC DC AC DC AC DC Stainless Steel Body °F NPT in. 1/8 .36 0 200 140 176 EPR 10 10 NS301GF02C3CD5 ____ ____ 3/16 100 .65 0 70 EPR 10 10 ____ ____ 176 NS301GF02C3CE1 1/4 3/8 .85 0 50 20 176 EPR 10 10 NS301GF02C3CE7 9/32 15 EPR 10 10 1.0 0 35 176 NS301GF02C3CF1 EPR 3/8 1.3 0 20 5 176 10 10 NS301GF02C3CF5 * Class H Coil Recommended for Steam and Other High Temperature Applications **Part Numbering** 2 1 3 4 5 8 9 10 11 12 13 14 6 7 3 2 3 5 S 1 0 U G Operating Seal Body Pipe Series Housing* Coil Class* Voltage* Orifice Size Mode Material Material Connection 1: Normally G: Conduit F: Class F 02: 120/60 C: EPR 3: Stainless C: 3/8" NPT D5: 1/8" NS30 Closed H: Class H 110/50 E1: 3/16" Steel E7: 1/4" F1: 9/32" F5: 3/8"

* See the "Engineering Guide" for additional voltages, variations and options

Coil Data

Valve Selection List

| Coil | Family | Frequency (Hz) | Frequency (Hz) | | | | | |
|-------------|------------|--------------------|----------------|-----------|----|--|--|--|
| Type All | Size S4 | Nominal Power (VA) | Inrush | Inrush 46 | | | | |
| | | | Holding | 18 | 19 | | | |





- 3/8" NPT

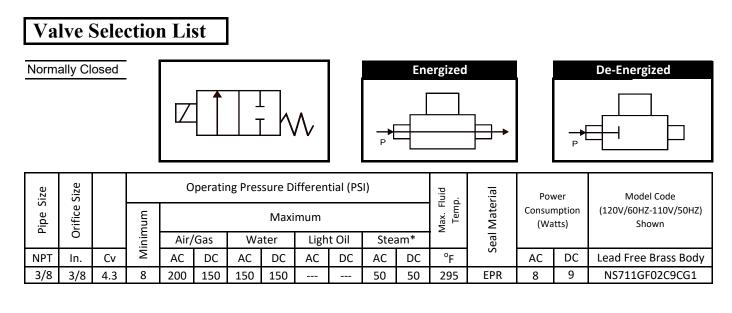
- Lead Free Brass Body
- 2-Way Piloted Diaphragm
- Normally Closed



| Materials | Seals: | NSF Approved Ethylene Propylene | | | | | |
|-----------------------------------|-----------------------|--|--|--|--|--|--|
| | Orifice: | Lead Free Brass | | | | | |
| Electrical | Standard Housing: | Encapsulated Waterproof Conduit (NEMA 4X) | | | | | |
| | Optional Housings: | Metal Conduit, Explosion-Proof (NEMA 7), Grommet | | | | | |
| | | Open Frame, Junction Box (single or dual knockouts), | | | | | |
| | | DIN, Contact GC Valves Customer Svc. For others. | | | | | |
| | Standard Voltages: | 24, 120, 240, AC, 60 and/or 50 Hz. Available | | | | | |
| | | 6, 12, 24 DC | | | | | |
| | | Contact GC Valves Customer Svc. For Additional | | | | | |
| | | Voltages | | | | | |
| | Voltage Tolerance: | <u>+</u> 10% of applicable volltage | | | | | |
| | Coil Classes: | F, H, N | | | | | |
| | Standard Lead Length: | 24 inches | | | | | |
| Operating Temperature | Ambient (Nominal): | 32° F to 125° F | | | | | |
| Mounting | Position: | Upright and Vertical | | | | | |
| Approvals* | Agency: | NSF/ANSI - 61/ NSF-372/ UR -CSA Recognized | | | | | |
| Dimension Weight (Lbs.) 2.5 | ns / Weight | | | | | | |
| | | | | | | | |

3-8-B-NS711-1

NS711 - 3/8" NPT, Lead Free Brass Body, Normally Closed



Part Numbering

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|--------|------|---|-------------------|---|--------------------------|---|-----------------------|------------|-----------------------|-----------|--------|--------|
| NS | 7 | 1 | 1 | G | F | 0 | 2 | С | 9 | С | G | 1 |
| Series | | | Operating Mode | Hsg | Coil | Voltage | | Seal Mat'l | Body Mat'l | Pipe Size | Orific | e Size |
| NS | NS71 | | 1: N.C. | G: Conduit Y: DIN A: Conduit U: J-Box P Opn Frame | F: F Class H: H Class | 02: 120/60 1 04: 240/60 2 24: 24/60 2 15: 12 V 16: 24 V | 220/50 24/50 DC | C: EPDM | 9: Brass Lead Free | C: 3/8" | G1: | 1/2" |

Coil Data

| Coil Family | | | | | | |
|-------------|------|--|--|--|--|--|
| Туре | Size | | | | | |
| All | S3 | | | | | |

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

NS202 Series

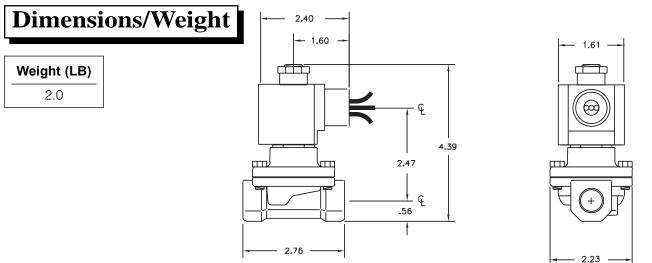


- 3/8" NPT
- Stainless Steel Body Type 316
- 2-Way Zero Differential Piloted Diaphragm
- Normally Open



| Seals: | Santoprene/NSF Approved EPDM |
|-------------------|--|
| | |
| Standard Housing | NEAM 4/4X Encapsulated - 1/2" Conduit |
| Optional Housing | Contact GC Valves Customer Service for available options. |
| Standard Voltage | 24, 120, 240 AC 60 Hz; 50 Hz available 6, 12, 24 DC; Contact GC Valves Customer Service for Additional Voltages. |
| Voltage Tolerance | ±10% of applicable voltage |
| Coil Classes: | F, H, N |
| Standard Lead Lo | gth: 24 inch |
| Ambient (Nomina | 32°F to 125°F |
| Position: | Any |
| Agency: | NSF/ANSI - 61-G / NSF-372 / UR Recognized |
| | Orifice: Pilot Main Standard Housing: Optional Housings: Standard Voltages: Standard Voltages: Voltage Tolerance: Coil Classes: Standard Lead Len Ambient (Nominal): Position: |

* Not available for all variations



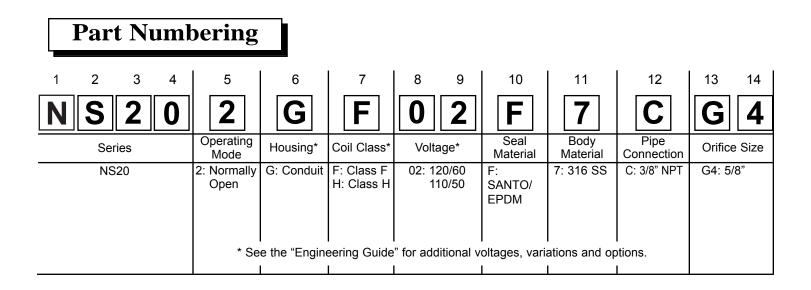
GC Valves Customer Service: 800-828-0484 (7:30am to 4pm ET) or 800-582-4232 (7:30am to 4pm PT) Page 31

NS202 – 3/8" NPT, Stainless Steel Body-Type 316, Normally Open

Valve Selection List

| Normally Open | | | | | 7 | L T | P | `\ ' | \sim | P | Energ | ized | | De-Energized |
|---------------|----------------|-----|----------|--|---|---------------|---------------|---------|------------------------------|--|--------------|------|----|----------------|
| AA Pipe Size | Z Orifice Size | Cv | Viinimum | Operating Pressure Differentia Maximum Air/Gas Water Light Oil | | т Fluid Temp. | Seal Material | Consu | wer mption atts) DC | Model Code (120V/60HZ — 110V/50HZ) Shown) Stainless Steel Body Type 316 | | | | |
| 3/8 | 5/8 | 3.3 | 0 | | | 200 | 125 | | — | 176 | EPR SANTO | 11 | 10 | NS202GF02F7CG4 |

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



Coil Data

| Coil F | amily | Frequency (Hz) | Frequency (Hz) | | | | | |
|-------------|------------|--------------------|----------------|----|----|--|--|--|
| Type All | Size S4 | Nominal Power (VA) | Inrush | 46 | 46 | | | |
| | | | Holding | 22 | 25 | | | |

NS202 Series



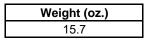
- 3/8" NPT
- Nylon Body
- 2-Way Zero Differential Piloted Diaphragm
- Normally Open

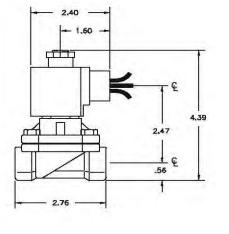


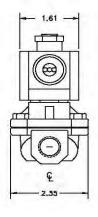
| Materials | Seals: | | Santoprene/NSF Approved EPDM | | | |
|-----------------------|------------------|--------|--|--|--|--|
| | Orifice: | Pilot | Stainless Steel | | | |
| | | Main | Nylon 5/8" Diameter | | | |
| Electrical | Standard Housir | ıg: | NEAM 4/4X Encapsulated - 1/2" Conduit | | | |
| | Optional Housing | gs: | Contact GC Valves Customer Service for available | | | |
| | | | options. | | | |
| | Standard Voltag | es: | 24, 120, 240, AC, 60 and/or 50 Hz. Available | | | |
| | | | 6, 12, 24 DC | | | |
| | | | Contact GC Valves Customer Svc. For Additional | | | |
| | | | Voltages | | | |
| | Voltage Tolerand | ce: | <u>+</u> 10% of applicable volltage | | | |
| | Coil Classes: | | F, H, N | | | |
| | Standard Lead L | ength: | 24 inches | | | |
| Operating Temperature | Ambient (Nomin | al): | 32° F to 125° F | | | |
| Mounting | Position: | | Any | | | |
| Approvals* | Agency: | | NSF/ANSI - 61-G / NSF-372 / UR Recognized | | | |

* Not available for all variations

Dimensions / Weight







GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

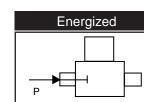
3/8-P-NS202-1

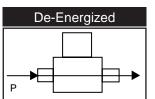
NS202 – 3/8" NPT, Nylon Body, Normally Open

Valve Selection List

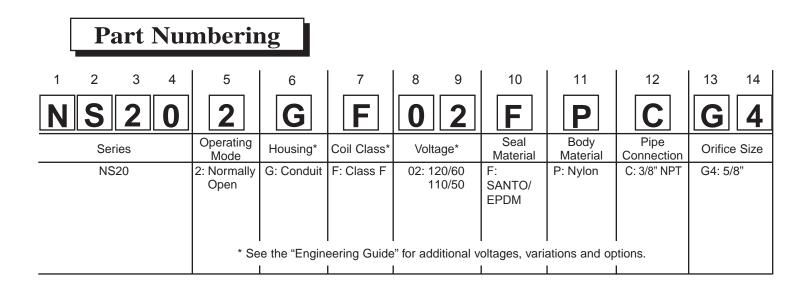
Normally Open

| Γ | T | |
|-----------|---|---|
| \square | Т | ∿ |





| Size | e Size | | 0 | perating Pressure Differential (psi) Maximum | | | | Max uid Temp. | erial | Power Consumption | | Model Code 120V/60HZ — 110V/50HZ | |
|--------|---------|-----|-------|---|-----|----------|-----|------------------------------|--------------|----------------------|----|-------------------------------------|--|
| Pipe (| Drifice | | unu | Air/ | Gas | as Water | | Max -Iuid Ten Material | | (Watts) | | Shown | |
| NPT | IN | Cv | Minim | AC | DC | AC | DC | °F | Seal I | AC | DC | Nylon Body | |
| 3/8 | 5/8 | 3.3 | 0 | - | - | 200 | 125 | 176 | EPR SANTO | 11 | 10 | NS202GF02FPCG4 | |



| | Coil F | amily | Frequency (Hz) | | 60 | 50 |
|---|-------------|------------|--------------------|---------|----|----|
| _ | Type All | Size S4 | Nominal Power (VA) | Inrush | 46 | 46 |
| | | | | Holding | 22 | 25 |

NS212 Series

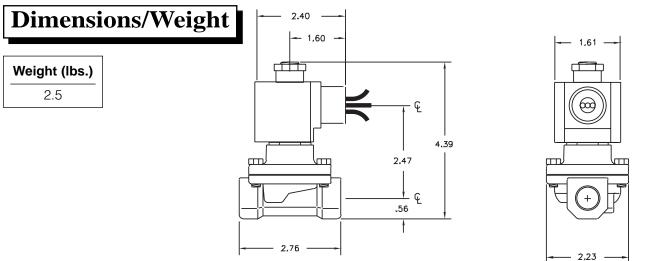


- 3/8" NPT
- Stainless Steel Body Type 316
- 2-Way Piloted Diaphragm
- Normally Open



| Materials | Seals: | Santoprene/NSF Approved EPDM |
|-----------------------|------------------------|---|
| | Orifice: Pilot Main | Stainless Steel Stainless Steel Ø 5/8" |
| Electrical | Standard Housing: | NEAM 4/4X Encapsulated - 1/2" Conduit |
| | Optional Housings: | Contact GC Valves Customer Service for available options. |
| | Standard Voltages: | 24, 120, 240 AC 60 Hz; 50 Hz available 6, 12, 24 DC; 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: | NSF/ANSI - 61-G / NSF-372 / UR Recognized |

* Not available for all variations



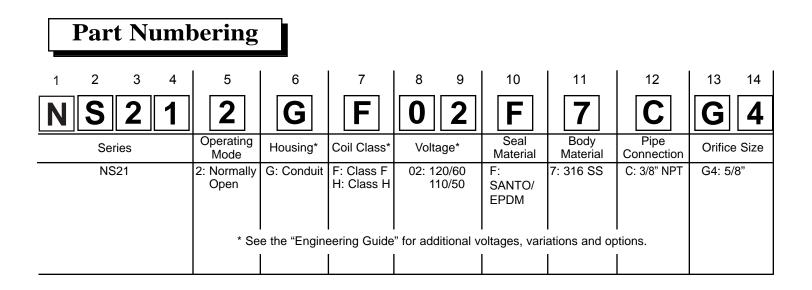
GC Valves Customer Service: 800-828-0484 (7:30am to 4pm ET) or 800-582-4232 (7:30am to 4pm PT) Page 35

NS212 – 3/8" NPT, Stainless Steel Body, Type 316, Normally Open

Valve Selection List

| Normally Open | | | | | | | | | | De-Energized | | | | | | |
|---------------|---------|-----|---------|--|-----|-----|------|------|--------------------|--------------|-------|--------|---|-----|----------------------------------|----------------|
| Size | e Size | | 0 | Operating Pressure Differential (psi) Maximum | | | | i) | Max Fluid Temp. | rial | Consu | • | Model Code (120V/60HZ — 110V/50HZ) | | | |
| Pipe (| Orifice | | mn | Air/ | Gas | Wa | ater | Ligh | nt Oil | Ste | am* | -Iuid | Material | (Wa | atts) | Shown / |
| NPT | IN | Cv | Minimum | AC | DC | AC | DC | AC | AC DC AC DC | | | Seal I | AC | DC | Stainless Steel Body Type 316 | |
| 3/8 | 5/8 | 3.3 | 3 | _ | _ | 200 | 125 | _ | _ | _ | _ | 176 | EPR SANTO | 11 | 10 | NS212GF02F7CG4 |

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



| Coil F | amily | Frequency (Hz) | | 60 | 50 |
|-------------|------------|--------------------|---------|----|----|
| Type ALL | Size S4 | Nominal Power (VA) | Inrush | 46 | 46 |
| | | | Holding | 22 | 25 |

NS212 Series



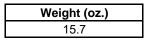
- 3/8" NPT
- Nylon Body
- 2-Way Piloted Diaphragm Normally Open

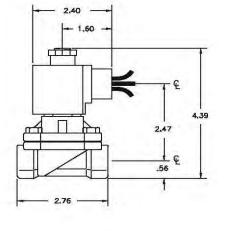


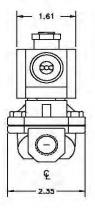
| Materials | Seals: | | Santoprene/NSF Approved EPDM | | | | |
|-----------------------|-------------------|--------|--|--|--|--|--|
| | Orifice: | Pilot | Stainless Steel | | | | |
| | | Main | Nylon 5/8" Diameter | | | | |
| Electrical | Standard Housing | g: | NEAM 4/4X Encapsulated - 1/2" Conduit | | | | |
| | Optional Housing | s: | Contact GC Valves Customer Service for available | | | | |
| | | | options. | | | | |
| | Standard Voltage | s: | 24, 120, 240, AC, 60 and/or 50 Hz. Available | | | | |
| | | | 6, 12, 24 DC | | | | |
| | | | Contact GC Valves Customer Svc. For Additional | | | | |
| | | | Voltages | | | | |
| | Voltage Tolerance | e: | <u>+</u> 10% of applicable volltage | | | | |
| | Coil Classes: | | F, H, N | | | | |
| | Standard Lead Le | ength: | 24 inches | | | | |
| Operating Temperature | Ambient (Nomina | I): | 32° F to 125° F | | | | |
| Mounting | Position: | | Any | | | | |
| Approvals* | Agency: | | NSF/ANSI - 61-G / NSF-372 / UR Recognized | | | | |

* Not available for all variations

Dimensions / Weight







GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

3/8-P-NS212-1

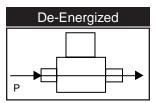
NS212 – 3/8" NPT, Nylon Body, Normally Open

Valve Selection List

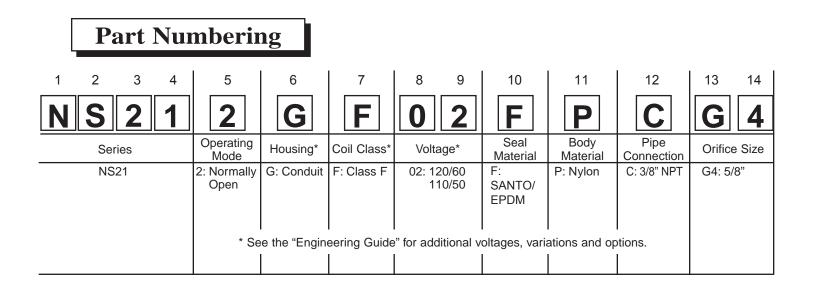
Normally Open

| L T | | \wedge |
|--------|---|----------|
| | Р | |

Energized



| Size | Size | | 0 | perating I | emp. | ial | Power Consumption | | Model Code (120V/60HZ — 110V/50HZ) | | | |
|--------|---------|-----|-------|------------|------|-------|----------------------|--------------------|---|-----|-------|-------------------------------------|
| Pipe S | Orifice | | mnr | Air/Gas | | Water | | Max Fluid Temp. | Material | (Wa | atts) | (1200/00112 — 1100/30112) Shown |
| NPT | IN | Cv | Minim | AC | DC | AC | DC | °F | Seal | AC | DC | Nylon Body |
| 3/8 | 5/8 | 3.3 | 3 | - | - | 200 | 125 | 176 | EPR SANTO | 11 | 10 | NS212GF02FPCG4 |



| Coil F | amily | Frequency (Hz) | | 60 | 50 |
|----------------|------------|--------------------|---------|----|----|
| ype ALL | Size S4 | Nominal Power (VA) | Inrush | 46 | 46 |
| | | | Holding | 22 | 25 |





- 3/8" NPT

- Lead Free Brass Body
- 2-Way Piloted Diaphragm
- Normally Open

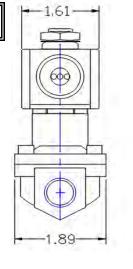


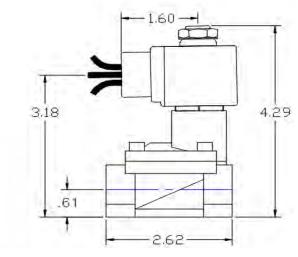
| Materials | Seals: | NSF Approved Ethylene Propylene | | | | |
|-----------------------|-----------------------|--|--|--|--|--|
| | Orifice: | Lead Free Brass | | | | |
| Electrical | Standard Housing: | Encapsulated Waterproof Conduit (NEMA 4X) | | | | |
| | Optional Housings: | Metal Conduit, Explosion-Proof (NEMA 7), Grommet | | | | |
| | | Open Frame, Junction Box (single or dual knockouts), | | | | |
| | | DIN, Contact GC Valves Customer Svc. For others. | | | | |
| | Standard Voltages: | 24, 120, 240, AC, 60 and/or 50 Hz. Available | | | | |
| | | 6, 12, 24 DC Contact GC Valves Customer Svc. For Additional | | | | |
| | | | | | | |
| | | Voltages | | | | |
| | Voltage Tolerance: | <u>+</u> 10% of applicable volltage | | | | |
| | Coil Classes: | F, H, N | | | | |
| | Standard Lead Length: | 24 inches | | | | |
| Operating Temperature | Ambient (Nominal): | 32° F to 125° F | | | | |
| Mounting | Position: | Upright and Vertical | | | | |
| Approvals* | Agency: | NSF/ANSI - 61/ NSF-372/ UR -CSA Recognized | | | | |

* Not available for all variations

Dimensions / Weight

| Weight (Lbs.) | |
|---------------|--|
| 2.5 | |

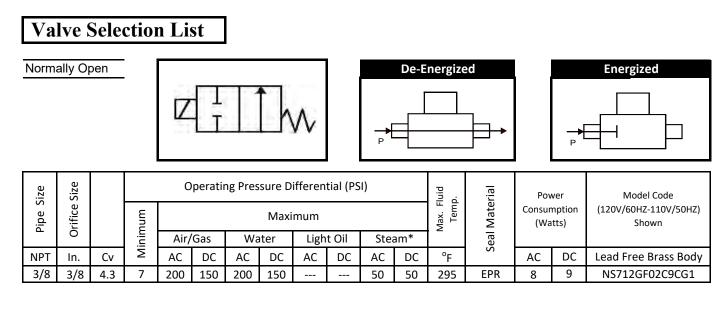




GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

3-8-B-NS712-1

NS712 - 3/8" NPT, Lead Free Brass Body, Normally Open



Part Numbering

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|-----|------|---|-------------------|---|--------------------------|---|---------|-----------------------|------------|-----------|--------|--------|
| NS | 7 | 1 | 2 | G | F | 0 | 2 | С | 9 | С | G | 1 |
| Sei | ries | | Operating Mode | Hsg | Coil | Voltage | 2 | Seal Mat'l | Body Mat'l | Pipe Size | Orific | e Size |
| NS | 571 | | 2: N.O. | G: Conduit Y: DIN A: Conduit U: J-Box P Opn Frame | F: F Class H: H Class | 02: 120/60 1 04: 240/60 2 24: 24/60 2 15: 12 VI 16: 24 VI | C: EPDM | 9: Brass Lead Free | C: 3/8" | G1: | 1/2" | |

Coil Data

| Coil F | amily |
|--------|-------|
| Туре | Size |
| All | S3 |

| Frequency (Hz) | | 60 | 50 |
|---------------------|---------|----|----|
| Nominal Power ()(A) | Inrush | 36 | 36 |
| Nominal Power (VA) | Holding | 18 | 19 |



- 1/2" NPT
- 316 SS Body
- 2-Way Zero Differential Piloted Diaphragm
 Normally Closed

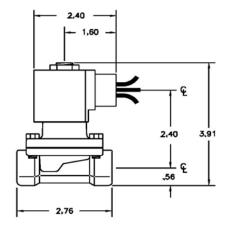


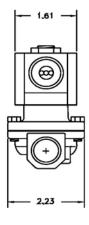
| Materials | Seals: | | Santoprene/NSF Approved EPDM |
|-----------------------|-----------------|---------|---|
| | Orifice: | Pilot | Stainless Steel |
| | | Main | Stainless Steel |
| Electrical | Housing: | | NEMA 4/4X Encapsulated - 1/2" Conduit |
| | Optional Housi | ngs: | Contact GC Valves Customer Svc. for available |
| | | | options. |
| | Voltage: | | 24,120,240, VAC, 60 and/or 50 Hz. Available. |
| | | | 6, 12, 24 VDC |
| | | | Contact GC Valves Customer Svc. for available |
| | | | options. |
| | Voltage Tolerar | nce: | <u>+</u> 10% of applicable voltage |
| | Coil Classes: | | F, H, N |
| | Standard Lead | Length: | 24 inches |
| Operating Temperature | Ambient (Nomi | nal): | 32° F to 125° F |
| Mounting | Position: | | Any |
| Approvals* | Agency: | | NSF/ANSI - 61-G / NSF-372 / UR Recognized |

* Not available for all variations

Dimensions / Weight





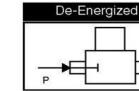


Valve Selection List

Normally Closed

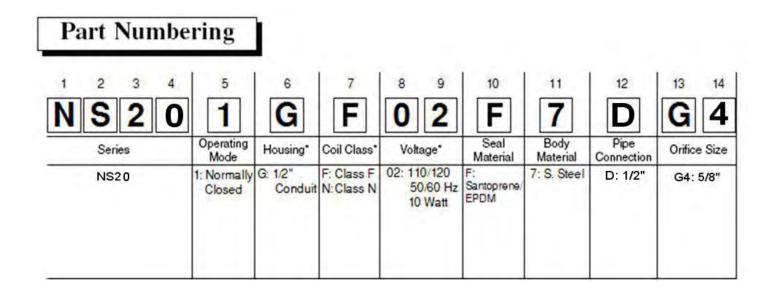
| | T | 1 |
|--|---|--------|
| | т | \sim |
| | Р | |

| Energized |
|-----------|
| |



| Size | Size | | C | perat | ting F | | ure [ximu | | entia | l (psi) | c emp. | al | | wer mption | Model Code |
|---------|---------|-----|-------|-------|--------|-----|---------------|------|--------|---------|-------------------|----------|----|---------------|----------------------------------|
| Pipe Si | Orifice | | mn | Air/(| Gas | Wa | ater | Ligh | nt Oil | Steam* | Max Iuid Temp. | Material | | atts) | (120V/60HZ — 110V/50HZ Shown |
| | IN U | cv | Minim | AC | DC | AC | DC | AC | DC | AC | °F | Seal I | AC | DC | Stainless Steel Body Type 316 |
| 1/2 | 5/8 | 4.3 | 0 | - | — | 100 | 90 | — | - | | 295 | | 10 | 10 | NS201GF02F7DG4 |

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



| Con Data | | Coil | Data |
|----------|--|------|------|
|----------|--|------|------|

| Coil | Family | Frequency (Hz) | | 60 | 50 |
|------|--------|------------------------------|-------------------|----|----|
| Туре | Size | a state of the second second | The second second | | |
| All | S4 | Nominal Power (VA) | Inrush | 46 | 46 |
| | | | Holding | 18 | 23 |





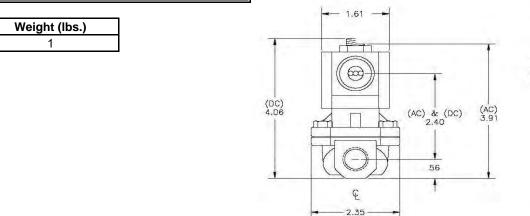
- 1/2" NPT
- Nylon Body
- 2-Way Zero Differential Piloted Diaphragm
- Normally Closed

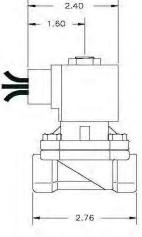


| Materials | Seals: | | Santoprene/NSF Approved EPDM |
|-----------------------|-----------------|---------|---|
| | Orifice: | Pilot | Stainless Steel |
| | | Main | Noryl |
| Electrical | Housing: | | NEMA 4/4X Encapsulated - 1/2" Conduit |
| | Optional Housir | ngs: | Contact GC Valves Customer Svc. for available |
| | | | options. |
| | Voltage: | | 24,120,240, VAC, 60 and/or 50 Hz. Available. |
| | | | 6, 12, 24 VDC |
| | | | Contact GC Valves Customer Svc. for available |
| | | | options. |
| | Voltage Tolerar | ice: | <u>+</u> 10% of applicable voltage |
| | Coil Classes: | | F, H, N |
| | Standard Lead | Length: | 24 inches |
| Operating Temperature | Ambient (Nomir | nal): | 32° F to 125° F |
| Mounting | Position: | | Any |
| Approvals* | Agency: | | NSF/ANSI - 61-G / NSF-372 / UR Recognized |

* Not available for all variations

Dimensions / Weight





| Valv | Valve Selection List | | | | | | | | | | | | | | | |
|-----------|----------------------|-----|---------|----|-----|-----|-------------|------|-------------|---------|--------------------|---------------|-------|---------------|---|---------------------------------------|
| Normal | ly Close | d | | | Z | 1 | L T P | | ∿ | | P | | |]→ | | De-Energized |
| Pipe Size | e Size | | | É | | Ma | ximu | m | | l (psi) | Max Fluid Temp. | erial | Consu | wer mption | (| Model Code 120V/60HZ — 110V/50HZ) |
| Pipe | Orifice | | Minimum | | Gas | wa | ater | Ligr | nt Oil I | Steam* | Fluid | Seal Material | (Wa | atts) | 1 | Shown / |
| NPT | IN | cv | Min | AC | DC | AC | DC | AC | DC | AC | °F | | AC | DC | | Noryl Body |
| 1/2" | 5/8 | 4.3 | 0 | _ | - | 100 | 90 | - | - | _ | 295 | Santo EPR | 10 | 10 | | NS201GF02FPDG4 |

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

| Pa | art l | Nur | nbe | ring | | | | | | | |
|----|-------|-----|-----|-----------------------|----------|--------------------------|------------------------------------|---------------------------|------------------|--------------------|--------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 9 | 10 | 11 | 12 | 13 14 |
| Ν | S | 2 | 0 | 1 | G | F | 0 2 | F | Ρ | D | G 4 |
| | Seri | es | | Operating Mode | Housing* | Coil Class* | Voltage* | Seal Material | Body Material | Pipe Connection | Orifice Size |
| | NS | 20 | | 1: Normally Closed | | F: Class F N: Class N | 02: 110/120 50/60 Hz 10 Watt | F: Santoprene/ EPDM | P: Noryl | D: 1/2" | G4: 5/8" |
| | | | | | | | | | | | |

| Coil | Data | | | | |
|------|--------|--|-------------------|----|----|
| Coil | Family | Frequency (Hz) | | 60 | 50 |
| Туре | Size | and the second sec | The second second | | |
| All | S4 | Nominal Power (VA) | Inrush | 46 | 46 |
| | | | Holding | 18 | 23 |



- 1/2" NPT
- 316 SS Body
- 2-Way Piloted Diaphragm Normally Closed

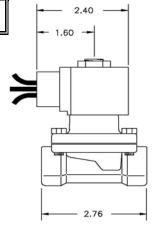


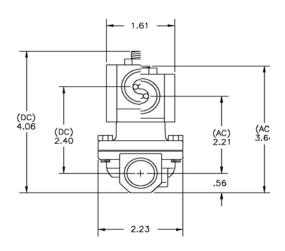
| Materials | Seals: | | Santoprene/NSF Approved EPDM |
|-----------------------|-----------------|---------|--|
| | Orifice: | Pilot | Stainless Steel |
| | | Main | Stainless Steel |
| Electrical | Housing: | | NEMA 4/4X Encapsulated - 1/2" Conduit |
| | Optional Housi | ngs: | Contact GC Valves Customer Svc. for available options. |
| | Voltage: | | 24,120,240, VAC, 60 and/or 50 Hz. Available. |
| | | | 6, 12, 24 VDC |
| | | | Contact GC Valves Customer Svc. for available |
| | | | options. |
| | Voltage Tolerar | nce: | <u>+</u> 10% of applicable voltage |
| | Coil Classes: | | F, H, N |
| | Standard Lead | Length: | 24 inches |
| Operating Temperature | Ambient (Nomi | nal): | 32° F to 125° F |
| Mounting | Position: | | Any |
| Approvals* | Agency: | | NSF/ANSI - 61-G / NSF-372 / UR Recognized |

* Not available for all variations

Dimensions / Weight

| Weight (lbs.) | |
|---------------|--|
| 1.8 | |





| ormall | y Close | ed | | Г | | | | | | | | Energ | jized | | De-Energized |
|--------------|-----------|-----|---------|------|--------|----|-------------|------|----------|---------|--------------------|---------------|-------|---------------|----------------------------------|
| | | | | | | | L T P | | ^ | l (poi) | P | | | | |
| ze | Size | | C | pera | ting i | | ximu | | entia | l (psi) | du | 8 | | wer mption | Model Code |
| | 8 | | ε | Air/ | Gas | Wa | ater | Ligh | nt Oil | Steam* | Max Fluid Temp. | Seal Material | 1 | atts) | (120V/60HZ — 110V/50HZ Shown |
| ipe Si | rific | 1 1 | 3 | | | | | | | | 표 | 2 | | | 01.1.1.01.1.0.1 |
| Ld Pipe Size | Z Orifice | Cv | Minimum | AC | DC | AC | DC | AC | DC | AC | °F | Sea | AC | DC | Stainless Steel Body Type 316 |

1

| 7 8 9 10 11 | 12 13 14 |
|--|---------------------------------|
| i F 0 2 F 7 | DG4 |
| ng* Coil Class* Voltage* Seal Body Material Material Co | Pipe Connection Orifice Size |
| nduit N: Class N 50/60 Hz 10 Watt EPDM 7: S. Steel | D: 1/2" G4: 5/8" |
| | |

| Coil | Data | | | | |
|------|--------|--|-----------|----|----|
| Coil | Family | Frequency (Hz) | | 60 | 50 |
| Туре | Size | | a familie | | |
| AC | S3 | Nominal Power (VA) | Inrush | 46 | 46 |
| DC | S4 | | Holding | 18 | 23 |





- 1/2" NPT
- Nylon Body
- 2-Way Piloted Diaphragm Normally Closed

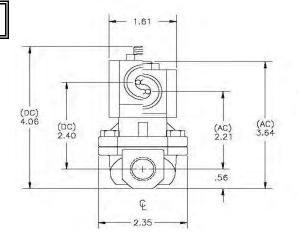


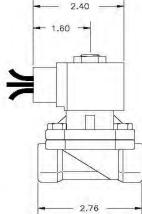
| Materials | Seals: | | Santoprene/NSF Approved EPDM |
|-----------------------|-----------------|---------|---|
| | Orifice: | Pilot | Stainless Steel |
| | | Main | Noryl |
| Electrical | Housing: | | NEMA 4/4X Encapsulated - 1/2" Conduit |
| | Optional Housi | ngs: | Contact GC Valves Customer Svc. for available |
| | | | options. |
| | Voltage: | | 24,120,240, VAC, 60 and/or 50 Hz. Available. |
| | | | 6, 12, 24 VDC |
| | | | Contact GC Valves Customer Svc. for available |
| | | | options. |
| | Voltage Tolerar | nce: | <u>+</u> 10% of applicable voltage |
| | Coil Classes: | | F, H, N |
| | Standard Lead | Length: | 24 inches |
| Operating Temperature | Ambient (Nomi | nal): | 32° F to 125° F |
| Mounting | Position: | | Any |
| Approvals* | Agency: | | NSF/ANSI - 61-G / NSF-372 / UR Recognized |

* Not available for all variations

Dimensions / Weight

| Weight (Ibs.) | |
|---------------|--|
| 0.9 | |





| Valv | ve Se | elec | tic | n | Li | st | | | | | | | | | |
|-----------|---------|------|---------|------|--------|-----|---------------|------|--------|---------|--------------------|---------------|----|---------------|---|
| Normall | y Close | ed | | | 7 | 1 | L T P | h | ~ | | P | | | → | De-Energized |
| ze | Size | | C | pera | ting f | | ure D ximu | | entia | l (psi) | emp. | al | | wer mption | Model Code (120V/60HZ — 110V/50HZ) |
| Pipe Size | Orifice | | mm | Air/ | Gas | Wa | ater | Ligh | nt Oil | Steam* | Max Fluid Temp. | Seal Material | | atts) | (1200/80H2 - 1100/50H2) Shown |
| | IN | cv | Minimum | AC | DC | AC | DC | AC | DC | AC | °F | Seal | AC | DC | Noryl Body |
| 1/2 | 5/8 | 4.3 | 4 | - | - | 150 | 100 | - | - | - | 295 | Santo EPR | 8 | 10 | NS211GF02FPDG4 |

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

| Mode Material Material Connection | | | | | | | | | | | | Ì | ring | bei | m | Nu | rt l | Pa |
|--|-------------|---|---------|---------|---------|-----|-------|-------|--------|--------|-----------------|---|------|-----|---|----|---------------|----|
| Series Operating Mode Housing* Coil Class* Voltage* Seal Material Body Material Pipe Connection Operating Connection NS21 1: Normally Closed G: 1/2" Conduit F: Class F Conduit 02: 110/120 50/60 Hz F: Santoprene/ P: Noryl D: 1/2" C | 3 14 3 4 | 1 | | | 10 F | ۱ſ | | 8 | 7 | | - | | 5 | 4 | | 3 | 2 S | |
| Closed Conduit N: Class N 50/60 Hz Santoprene/ | ifice Size | 0 | | | | | age" | Volta | Class* | Coil (| | H | | | | 95 | Serie | |
| | 64: 5/8" | | D: 1/2" | : Noryl | oprene/ | San | 60 Hz | 50 | | | 1/2" Conduit | G | | | | 1 | NS2 | |

| Coil | Data | | | | |
|------|--------|--|---------|----|----|
| Coil | Family | Frequency (Hz) | | 60 | 50 |
| Туре | Size | | - 1 | | |
| AC | S3 | Nominal Power (VA) | Inrush | 46 | 46 |
| DC | S4 | | Holding | 18 | 23 |





- 1/2" NPT

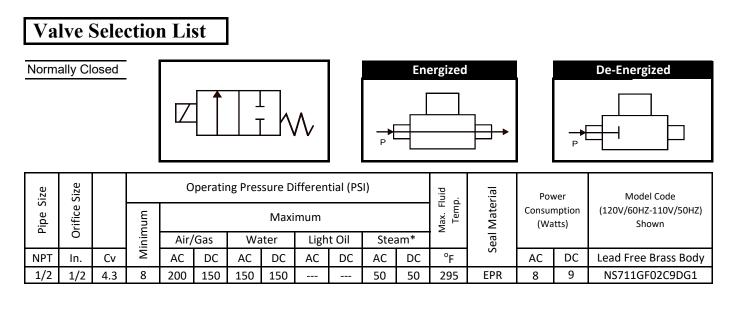
- Lead Free Brass Body
- 2-Way Piloted Diaphragm
- Normally Closed



| Materials | Seals: | NSF Approved Ethylene Propylene | | | | |
|-----------------------------------|-----------------------|--|--|--|--|--|
| | Orifice: | Lead Free Brass | | | | |
| Electrical | Standard Housing: | Encapsulated Waterproof Conduit (NEMA 4X) | | | | |
| | Optional Housings: | Metal Conduit, Explosion-Proof (NEMA 7), Grommet | | | | |
| | | Open Frame, Junction Box (single or dual knockouts), | | | | |
| | | DIN, Contact GC Valves Customer Svc. For others. | | | | |
| | Standard Voltages: | 24, 120, 240, AC, 60 and/or 50 Hz. Available | | | | |
| | | 6, 12, 24 DC | | | | |
| | | Contact GC Valves Customer Svc. For Additional | | | | |
| | | Voltages | | | | |
| | Voltage Tolerance: | <u>+</u> 10% of applicable volltage | | | | |
| | Coil Classes: | F, H, N | | | | |
| | Standard Lead Length: | 24 inches | | | | |
| Operating Temperature | Ambient (Nominal): | 32° F to 125° F | | | | |
| Mounting | Position: | Upright and Vertical | | | | |
| Approvals* | Agency: | NSF/ANSI - 61/ NSF-372/ UR -CSA Recognized | | | | |
| Dimension Weight (Lbs.) 2.5 | ns / Weight | | | | | |
| | | | | | | |

1-2-B-NS711-1

NS711 - 1/2" NPT, Lead Free Brass Body, Normally Closed



Part Numbering

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|----|------|---|-------------------|---|--------------------------|---|-----------------------|------------|-----------------------|-----------|--------|--------|
| NS | 7 | 1 | 1 | G | F | 0 | 2 | С | 9 | D | G | 1 |
| Se | ries | | Operating Mode | Hsg | Coil | Voltage | 5 | Seal Mat'l | Body Mat'l | Pipe Size | Orific | e Size |
| NS | 571 | | 1: N.C. | G: Conduit Y: DIN A: Conduit U: J-Box P Opn Frame | F: F Class H: H Class | 02: 120/60 1 04: 240/60 2 24: 24/60 2 15: 12 V 16: 24 V | 220/50 24/50 DC | C: EPDM | 9: Brass Lead Free | D: 1/2" | G1: | 1/2" |

| Coil Family | | | | | |
|-------------|------|--|--|--|--|
| Туре | Size | | | | |
| All | S3 | | | | |

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

NS202 Series

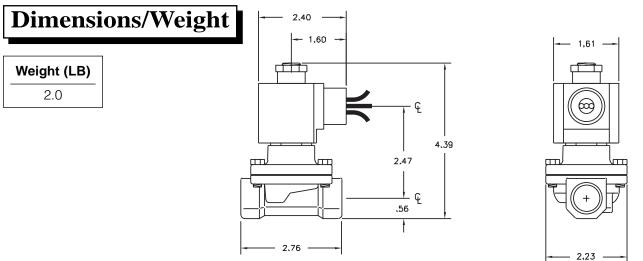


- 1/2" NPT
- Stainless Steel Body Type 316
- 2-Way Zero Differential Piloted Diaphragm
- Normally Open



| Materials | Seals: | Santoprene/NSF Approved EPDM |
|-----------------------|---------------------|---|
| | Orifice: Pilo Ma | Stainless Steel Stainless Steel Ø 5/8" |
| Electrical | Standard Housing | NEAM 4/4X Encapsulated - 1/2" Conduit |
| | Optional Housings | Contact GC Valves Customer Service for available options. |
| | Standard Voltages | 24, 120, 240 AC 60 Hz; 50 Hz available 6, 12, 24 DC; Contact GC Valves Customer Service for Additional Voltages. |
| | Voltage Tolerance | ±10% of applicable voltage |
| | Coil Classes: | F, H, N |
| | Standard Lead Le | gth: 24 inch |
| Operating Temperature | Ambient (Nominal | 32°F to 125°F |
| Mounting | Position: | Any |
| Approvals* | Agency: | NSF/ANSI - 61-G / NSF-372 / UR Recognized |

* Not available for all variations

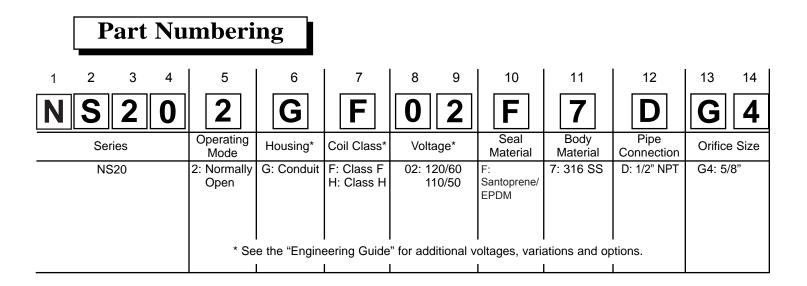


GC Valves Customer Service: 800-828-0484 (7:30am to 4pm ET) or 800-582-4232 (7:30am to 4pm PT) Page 51

Valve Selection List

| Normall | y Open | _ | | | | | | P | Energ | ized | | De-Energized | | | |
|-----------|--------------|-----|---------|----|---------------|----------------|------------------------|-------|--------|-----------------|--------------------|----------------------------------|-------|-------------------------|--|
| Pipe Size | Orifice Size | | | | ting F Gas | N | ure [Maxir ater | num | | (psi) Steam* | Max Fluid Temp. | Seal Material | Consu | wer Imption atts) | Model Code (120V/60HZ — 110V/50HZ) Shown) |
| تة NPT | Ō | Cv | Minimum | AC | DC | AC DC AC DC AC | | ۰F | Seal N | AC | DC | Stainless Steel Body Type 316 | | | |
| 1/2 | 5/8 | 4.3 | 0 | _ | _ | 200 | 125 | _ | _ | _ | 176 | EPR SANTO | 11 | 10 | NS202GF02F7DG4 |

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



| Coil I | amily | Frequency (Hz) | | 60 | 50 |
|-------------|------------|--------------------|---------|----|----|
| Type All | Size S4 | Nominal Power (VA) | Inrush | 46 | 46 |
| | | | Holding | 22 | 25 |

NS202 Series



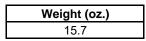
- 1/2" NPT
- Nylon Body
- 2-Way Zero Differential Piloted Diaphragm
- Normally Open

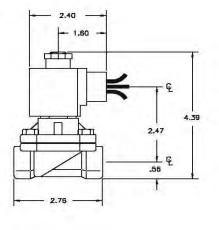


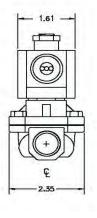
| Materials | Seals: | | Santoprene/NSF Approved EPDM | | | |
|-----------------------|-----------------|---------|--|--|--|--|
| | Orifice: | Pilot | Stainless Steel | | | |
| | | Main | Nylon 5/8" Diameter | | | |
| Electrical | Standard Housi | ng: | NEAM 4/4X Encapsulated - 1/2" Conduit | | | |
| | Optional Housin | gs: | Contact GC Valves Customer Service for available | | | |
| | | | options. | | | |
| | Standard Voltag | es: | 24, 120, 240, AC, 60 and/or 50 Hz. Available | | | |
| | | | 6, 12, 24 DC | | | |
| | | | Contact GC Valves Customer Svc. For Additional | | | |
| | | | Voltages | | | |
| | Voltage Toleran | ce: | <u>+</u> 10% of applicable volltage | | | |
| | Coil Classes: | | F, H, N | | | |
| | Standard Lead I | _ength: | 24 inches | | | |
| Operating Temperature | Ambient (Nomin | al): | 32° F to 125° F | | | |
| Mounting | Position: | | Any | | | |
| Approvals* | Agency: | | NSF/ANSI - 61-G / NSF-372 / UR Recognized | | | |

* Not available for all variations

Dimensions / Weight







GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

1/2-P-NS202-1

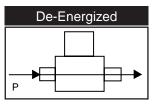
NS202 – 1/2" NPT, Nylon Body, Normally Open

Valve Selection List

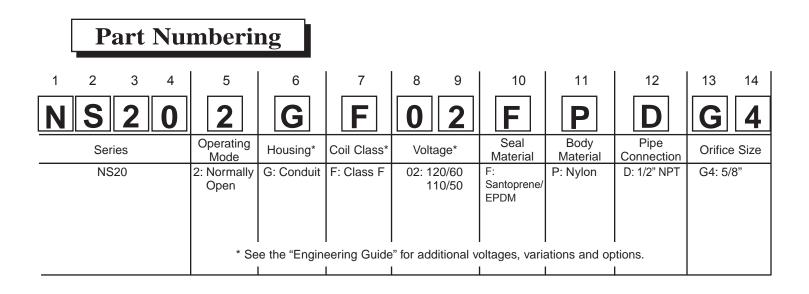
Normally Open

| | T | | 7 |
|-----------|---|---|---|
| \square | т | | |
| | | Ρ | |

Energized



| e Size | rifice Size | | | | | ure Differential (psi) Maximum Water | | | Material | Power Consumption (Watts) | | Model Code (120V/60HZ — 110V/50HZ) Shown | |
|-------------|-------------|-----|---------|----|----|--|-----|----------------------|--------------|---------------------------------|----|--|--|
| Pipe NPT | N Orif | Cv | Minimum | AC | DC | AC | DC | ⊸ Max Fluid Temp. | Seal Ma | AC | DC | Nylon Body | |
| 1/2 | 5/8 | 4.3 | 0 | - | - | 200 | 125 | 176 | EPR SANTO | 11 | 10 | NS202GF02FPDG4 | |



| | Coil F | amily | Frequency (Hz) | Frequency (Hz) | | | | | |
|---|-------------|------------|--------------------|----------------|----|----|--|--|--|
| _ | Type All | Size S4 | Nominal Power (VA) | Inrush | 46 | 46 | | | |
| | | | | Holding | 22 | 25 | | | |

NS212 Series

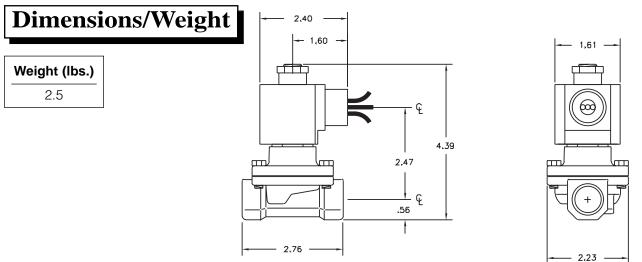


- 1/2" NPT
- Stainless Steel Body Type 316
- 2-Way Piloted Diaphragm
- Normally Open



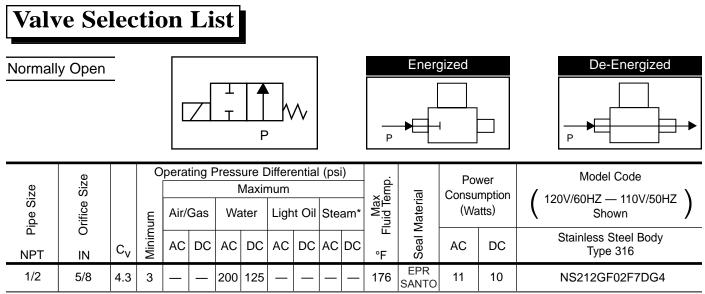
| Materials | Seals: | Santoprene/NSF Approved EPDM | | | |
|-----------------------|------------------------|---|--|--|--|
| | Orifice: Pilot Main | Stainless Steel Stainless Steel Ø 5/8" | | | |
| Electrical | Standard Housing: | NEAM 4/4X Encapsulated - 1/2" Conduit | | | |
| | Optional Housings: | Contact GC Valves Customer Service for available options. | | | |
| | Standard Voltages: | 24, 120, 240 AC 60 Hz; 50 Hz available 6, 12, 24 DC; 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: | NSF/ANSI - 61-G / NSF-372 / UR Recognized | | | |

* Not available for all variations

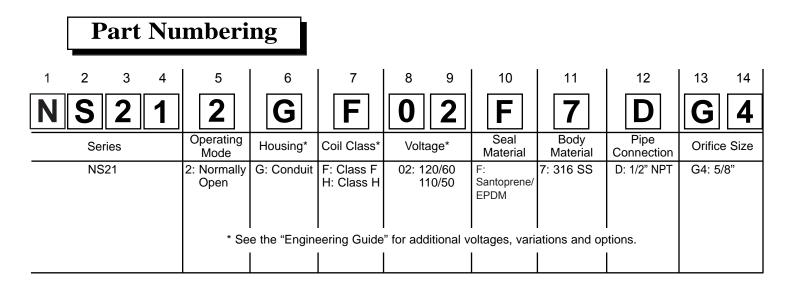


GC Valves Customer Service: 800-828-0484 (7:30am to 4pm ET) or 800-582-4232 (7:30am to 4pm PT) Page 55

NS212 – 1/2" NPT, Stainless Steel Body, Type 316, Normally Open



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



| Coil F | amily | Frequency (Hz) | | 60 | 50 |
|-------------|------------|--------------------|---------|----|----|
| Type ALL | Size S4 | Nominal Power (VA) | Inrush | 46 | 46 |
| | | | Holding | 22 | 25 |

NS212 Series



- 1/2" NPT
- Nylon Body
- 2-Way

Piloted Diaphragm

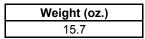
- Normally Open

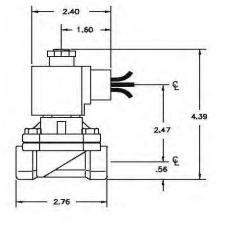


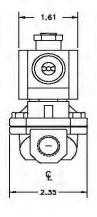
| Materials | Seals: | | Santoprene/NSF Approved EPDM |
|-----------------------|------------------|--------|--|
| | Orifice: | Pilot | Stainless Steel |
| | | Main | Nylon 5/8" Diameter |
| Electrical | Standard Housing | g: | NEAM 4/4X Encapsulated - 1/2" Conduit |
| | Optional Housing | S: | Contact GC Valves Customer Service for available |
| | | | options. |
| | Standard Voltage | es: | 24, 120, 240, AC, 60 and/or 50 Hz. Available |
| | | | 6, 12, 24 DC |
| | | | Contact GC Valves Customer Svc. For Additional |
| | | | Voltages |
| | Voltage Toleranc | e: | <u>+</u> 10% of applicable volltage |
| | Coil Classes: | | F, H, N |
| | Standard Lead Le | ength: | 24 inches |
| Operating Temperature | Ambient (Nomina | al): | 32° F to 125° F |
| Mounting | Position: | | Any |
| Approvals* | Agency: | | NSF/ANSI - 61-G / NSF-372 / UR Recognized |

* Not available for all variations

Dimensions / Weight







GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

1/2-P-NS212-1

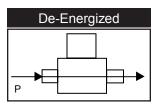
NS212 – 1/2" NPT, Nylon Body, Normally Open

Valve Selection List

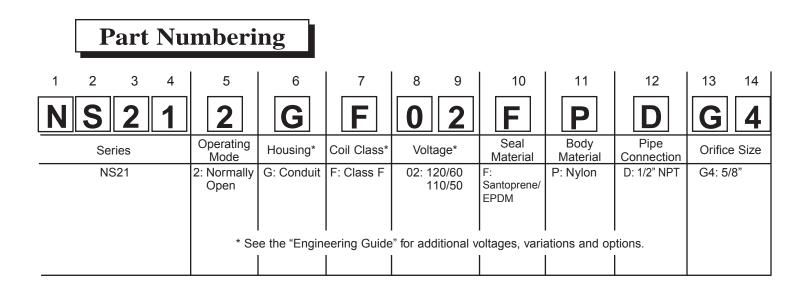
Normally Open

| L T | | |
|--------|---|--|
| | P | |

Energized



| e Size | rifice Size | | | perating f | Pressure I Maxii Gas | mum | ıl (psi) | Max luid Temp. | Material | Consu | wer mption atts) | Model Code (120V/60HZ — 110V/50HZ) Shown |
|-------------|-------------|-----|---------|------------|----------------------------|-----|----------|-------------------|--------------|-------|------------------------|--|
| Pipe NbL | N | Cv | Minimum | AC | DC | AC | DC | °F | Seal Ma | AC | DC | Nylon Body |
| 1/2 | 5/8 | 3.3 | 3 | - | - | 200 | 125 | 176 | EPR SANTO | 11 | 10 | NS212GF02FPDG4 |



| | Coil F | amily | Frequency (Hz) | | 60 | 50 |
|---|-------------|------------|--------------------|---------|----|----|
| _ | Type ALL | Size S4 | Nominal Power (VA) | Inrush | 46 | 46 |
| | | | | Holding | 22 | 25 |





- 1/2" NPT

- Lead Free Brass Body
- 2-Way Piloted Diaphragm
- Normally Open

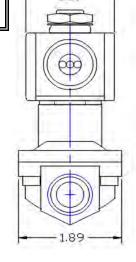


| Materials | Seals: | NSF Approved Ethylene Propylene |
|-----------------------|-----------------------|--|
| | Orifice: | Lead Free Brass |
| Electrical | Standard Housing: | Encapsulated Waterproof Conduit (NEMA 4X) |
| | Optional Housings: | Metal Conduit, Explosion-Proof (NEMA 7), Grommet |
| | | Open Frame, Junction Box (single or dual knockouts), |
| | | DIN, Contact GC Valves Customer Svc. For others. |
| | Standard Voltages: | 24, 120, 240, AC, 60 and/or 50 Hz. Available |
| | | 6, 12, 24 DC |
| | | Contact GC Valves Customer Svc. For Additional |
| | | Voltages |
| | Voltage Tolerance: | <u>+</u> 10% of applicable volltage |
| | Coil Classes: | F, H, N |
| | Standard Lead Length: | 24 inches |
| Operating Temperature | Ambient (Nominal): | 32° F to 125° F |
| Mounting | Position: | Upright and Vertical |
| Approvals* | Agency: | NSF/ANSI - 61/ NSF-372/ UR -CSA Recognized |
| | | |

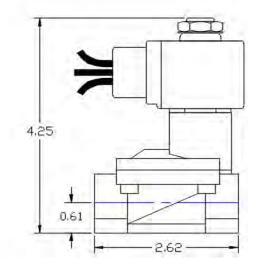
* Not available for all variations

Dimensions / Weight

| Weight (Lbs.) | |
|---------------|--|
| 2.5 | |



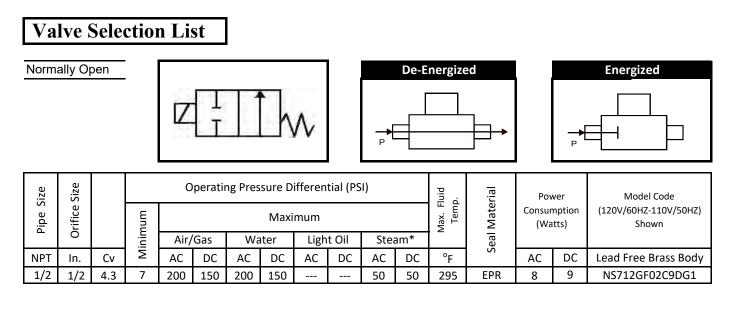
1.61



GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

1-2-B-NS712-1

NS712 - 1/2" NPT, Lead Free Brass Body, Normally Open



Part Numbering

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|-----|------|---|-------------------|---|--------------------------|---|---------------------|------------|-----------------------|-----------|--------|--------|
| NS | 7 | 1 | 2 | G | F | 0 | 2 | С | 9 | D | G | 1 |
| Sei | ries | | Operating Mode | Hsg | Coil | Voltage | 2 | Seal Mat'l | Body Mat'l | Pipe Size | Orific | e Size |
| NS | 571 | | 2: N.O. | G: Conduit Y: DIN A: Conduit U: J-Box P Opn Frame | F: F Class H: H Class | 02: 120/60 1 04: 240/60 2 24: 24/60 2 15: 12 VI 16: 24 VI | 20/50 4/50 DC | C: EPDM | 9: Brass Lead Free | D: 1/2" | G1: | 1/2" |

Coil Data

| Coil F | amily |
|--------|-------|
| Туре | Size |
| All | S3 |

| Frequency (Hz) | | 60 | 50 |
|--------------------|---------|----|----|
| Nominal Power (VA) | Inrush | 36 | 36 |
| Normal Power (VA) | Holding | 18 | 19 |



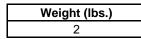
- 3/4" NPT
- 316 SS Body
- 2-Way Zero Differential Piloted Diaphragm
- Normally Closed

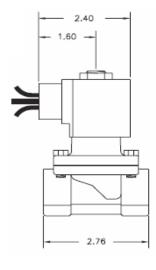


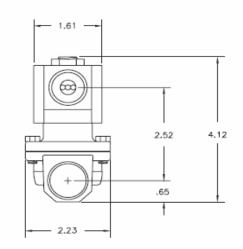
| Materials | Seals: | | Santoprene/NSF Approved EPDM |
|-----------------------|-----------------|---------|---|
| | Orifice: | Pilot | Stainless Steel |
| | | Main | Stainless Steel |
| Electrical | Housing: | | NEMA 4/4X Encapsulated - 1/2" Conduit |
| | Optional Housir | ngs: | Contact GC Valves Customer Svc. for available |
| | | | options. |
| | Voltage: | | 24,120,240, VAC, 60 and/or 50 Hz. Available. |
| | | | 6, 12, 24 VDC |
| | | | Contact GC Valves Customer Svc. for available |
| | | | options. |
| | Voltage Tolerar | ice: | <u>+</u> 10% of applicable voltage |
| | Coil Classes: | | F, H, N |
| | Standard Lead | Length: | 24 inches |
| Operating Temperature | Ambient (Nomir | nal): | 32° F to 125° F |
| Mounting | Position: | | Any |
| Approvals* | Agency: | | NSF/ANSI - 61-G / NSF-372 / UR Recognized |

* Not available for all variations

Dimensions / Weight







| ormal | y Close | ed | | | 7 | 1 | Т | ٦. | | | | Energ | jized | 1 | | De-Energized |
|--------------|----------------|----|---------|--------|--------|-----------|------|----|-------|---------|------------------|---------------|-------|------------------------|---|--|
| | | | | | ing Di | rossu | P | | V | l (psi) | P | | F | +• | | |
| ze | Size | | | perati | ing Pi | _ | (imu | | anna | . (PS.) | đ | - | | wer | 1 | Model Code |
| pe Size | ilice Size | | | Air/G | | _ | (imu | m | _ | Steam* | Max uid Temp. | laterial | Consu | wer mption atts) | (| Model Code 120V/60HZ — 110V/50HZ Shown |
| Ld Pipe Size | Z Orifice Size | Cv | Minimum | Air/G | as | Max Wa | (imu | m | t Oil | | т Fluid Temp. | Seal Material | Consu | mption | (| 120V/60HZ - 110V/50HZ |

| | Pa | art I | Nur | nbe | ring | | | | | | | |
|---|---------------|-----------|----------------------|---------------|-----------------------|--------------------|-------------------------|------------------------------------|-----------------------------|------------------------------------|--------------------------|------------------------------|
| | 1 N | 2 Seri | 3 2 ies | 4 0 | 5 Derating Mode | 6 G Housing* | 7 F Coil Class* | 8 9 0 2 Voltage* | 10 F Seal Material | 11 7 Body Material | 12 Pipe Connection | 13 14 G 5 Orifice Size |
| _ | | NS | 20 | | 1: Normally Closed | G: 1/2" Conduit | F: Class F N:Class N | 02: 110/120 50/60 Hz 10 Watt | F: Santoprene/ EPDM | | E: 3/4" NPT | G5: 3/4" |

| Coil | Data | | | | |
|------|--------|-----------------------|---------|----|----|
| Coil | Family | Frequency (Hz) | | 60 | 50 |
| Туре | Size | and the second second | 1.5.5 | | |
| All | S4 | Nominal Power (VA) | Inrush | 46 | 46 |
| | | | Holding | 18 | 23 |





- 3/4" NPT

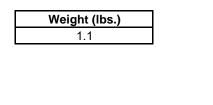
- Nylon Body
- 2-Way Zero Differential Piloted Diaphragm
- Normally Closed

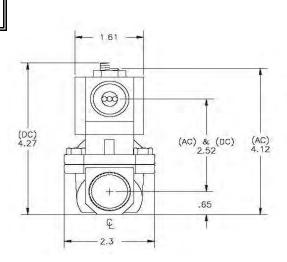


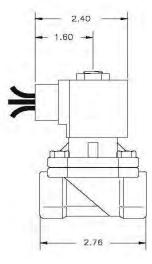
| Materials | Seals: | | Santoprene/NSF Approved EPDM |
|-----------------------|-----------------|---------|---|
| | Orifice: | Pilot | Stainless Steel |
| | | Main | Noryl |
| Electrical | Housing: | | NEMA 4/4X Encapsulated - 1/2" Conduit |
| | Optional Housir | ngs: | Contact GC Valves Customer Svc. for available |
| | | | options. |
| | Voltage: | | 24,120,240, VAC, 60 and/or 50 Hz. Available. |
| | | | 6, 12, 24 VDC |
| | | | Contact GC Valves Customer Svc. for available |
| | | | options. |
| | Voltage Tolerar | ice: | <u>+</u> 10% of applicable voltage |
| | Coil Classes: | | F, H, N |
| | Standard Lead | Length: | 24 inches |
| Operating Temperature | Ambient (Nomir | nal): | 32° F to 125° F |
| Mounting | Position: | | Any |
| Approvals* | Agency: | | NSF/ANSI - 61-G / NSF-372 / UR Recognized |

* Not available for all variations

Dimensions / Weight





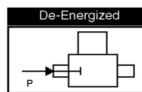


Valve Selection List

Normally Closed

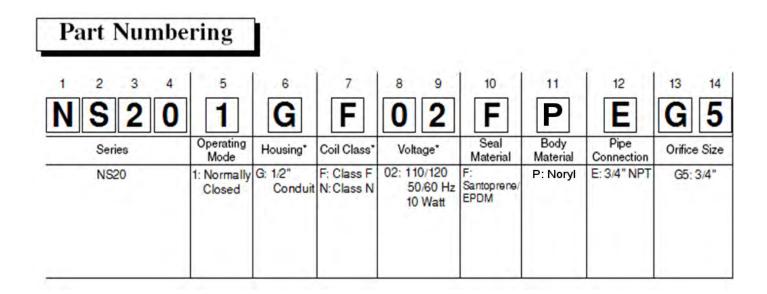
| Р | |
|---|--|

| | E | nergi | zed | |
|---|---|-------|-----|---|
| | ¥ | | | → |
| Р | | | | |



| Size | Size | | С | pera | ting F | | ure [ximu | | entia | l (psi) | emp. | al | Pov | wer mption | Model Code (120V/60HZ — 110V/50HZ) |
|---------|---------|-----|-------|------|--------|-----|---------------|------|--------|---------|-------------------|--------------|-----|---------------|---|
| Pipe SI | Orifice | | unu | Air/ | Gas | Wa | ater | Ligh | nt Oil | Steam* | Max Iuid Temp. | Material | (Wa | | (Shown) |
| NPT | IN | cv | Minim | AC | DC | AC | DC | AC | DC | AC | °F | Seal | AC | DC | Noryl Body |
| 3/4 | 3/4 | 6.7 | 0 | - | - | 100 | 90 | - | - | | 295 | Santo EPR | 10 | 10 | NS201GF02FPEG5 |

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



| Coil | Data | | | | |
|------|--------|--------------------|---------|----|----|
| Coil | Family | Frequency (Hz) | | 60 | 50 |
| Туре | Size | The second second | 1.5.6 | - | |
| All | S4 | Nominal Power (VA) | Inrush | 46 | 46 |
| | | | Holding | 18 | 23 |



- 3/4" NPT
- 316 SS Body
- 2-Way **Piloted Diaphragm**
- Normally Closed

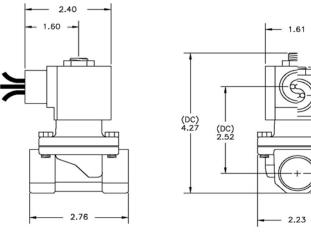


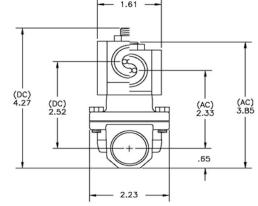
| Materials | Seals: | | Santoprene/NSF Approved EPDM |
|-----------------------|-----------------|---------|---|
| | Orifice: | Pilot | Stainless Steel |
| | | Main | Stainless Steel |
| Electrical | Housing: | | NEMA 4/4X Encapsulated - 1/2" Conduit |
| | Optional Housi | ngs: | Contact GC Valves Customer Svc. for available |
| | | | options. |
| | Voltage: | | 24,120,240, VAC, 60 and/or 50 Hz. Available. |
| | | | 6, 12, 24 VDC |
| | | | Contact GC Valves Customer Svc. for available |
| | | | options. |
| | Voltage Tolerar | nce: | <u>+</u> 10% of applicable voltage |
| | Coil Classes: | | F, H, N |
| | Standard Lead | Length: | 24 inches |
| Operating Temperature | Ambient (Nomi | nal): | 32° F to 125° F |
| Mounting | Position: | | Any |
| Approvals* | Agency: | | NSF/ANSI - 61-G / NSF-372 / UR Recognized |

* Not available for all variations

Dimensions / Weight

| Weight (lbs.) | |
|---------------|--|
| 1.9 | |





| Valv | ve Se | lec | etic | n | Li | st | | | | | | | | | | |
|-----------|---------|-----|---------|------|--------|-----|---------------|--------------|--------|---------|--------------------|---------------|-------------------|---------------|----------------------------------|----------|
| Normall | y Close | d | | C | Я | 1 | L T P | \mathbb{V} | ~ | | P | | | | | |
| ze | Size | | C | pera | ting f | | ure D ximu | | entia | l (psi) | emp. | ଅ | anteroni BAUSA | wer mption | Model Code (120V/60HZ — 110) | |
| Pipe Size | Orifice | | ш | Air/ | Gas | Wa | ater | Ligh | nt Oil | Steam* | Max Fluid Temp. | Aateri | 19 10 10 10 10 10 | atts) | (1200/60H2 - 1100 Shown | //5UHZ) |
| ۹ NPT | O IN | cv | Minimum | AC | DC | AC | DC | AC | DC | AC | ۰F | Seal Material | AC | DC | Stainless Steel E Type 316 | Body |
| 3/4" | 3/4" | 6.7 | 4 | - | - | 150 | 100 | _ | - | - | 295 | Santo EPR | 8 | 10 | NS211GF02F7 | EG5 |

ons

| NS21 1 G F 02 F 7 E G S Series Operating Mode Housing* Coil Class* Voltage* Seal Material Body Pipe Connection Orifice Siz | Pa | art | Nur | nbe | ering | | | | | | | |
|--|----|-----|-----|-----|-------|--------------------|-------------|----------|-------------|-------------|---------|--------------|
| Series Operating Mode Housing* Coil Class* Voltage* Seal Material Body Material Pipe Connection Orifice Siz NS21 1: Normally Closed G: 1/2" F: Class F 02: 110/120 F: 50/60 Hz 7: S. Steel E: 3/4" G5: 3/4" | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 9 | 10 | 11 | 12 | 13 14 |
| Mode Housing Coll class Voltage Material Material Connection Onlice Size NS21 1: Normally G: 1/2" F: Class F 02: 110/120 F: 7: S. Steel E: 3/4" G5: 3/4" Closed Conduit N: Class N 50/60 Hz Santoprene/ Santoprene/ F: 3/4" G5: 3/4" | Ν | S | 2 | 1 | 1 | G | F | 0 2 | F | 7 | E | G 5 |
| Closed Conduit N: Class N 50/60 Hz Santoprene/ | | Ser | ies | | | Housing* | Coil Class* | Voltage* | | | | Orifice Size |
| | | NS: | 21 | | | G: 1/2" Conduit | | 50/60 Hz | Santoprene/ | 7: S. Steel | E: 3/4" | G5: 3/4" |

| Coil | Data | | | | |
|------|--------|--|---------|----|----|
| Coil | Family | Frequency (Hz) | | 60 | 50 |
| Туре | Size | | - 1 | | |
| AC | S3 | Nominal Power (VA) | Inrush | 46 | 46 |
| DC | S4 | | Holding | 18 | 23 |

NS211 Series

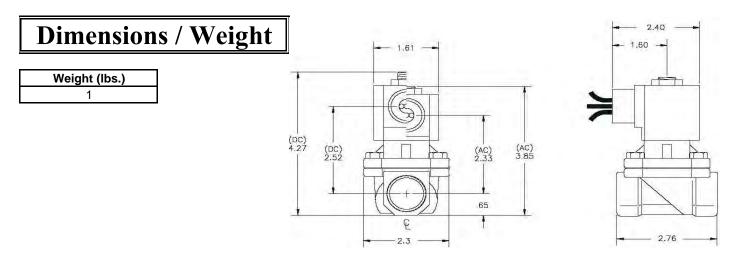


- 3/4" NPT
- Nylon Body
- 2-Way
 Piloted Diaphragm
 Normally Closed



| Materials | Seals: | | Santoprene/NSF Approved EPDM |
|-----------------------|-----------------|---------|---|
| | Orifice: | Pilot | Stainless Steel |
| | | Main | Noryl |
| Electrical | Housing: | | NEMA 4/4X Encapsulated - 1/2" Conduit |
| | Optional Housir | ngs: | Contact GC Valves Customer Svc. for available |
| | | | options. |
| | Voltage: | | 24,120,240, VAC, 60 and/or 50 Hz. Available. |
| | | | 6, 12, 24 VDC |
| | | | Contact GC Valves Customer Svc. for available |
| | | | options. |
| | Voltage Toleran | ice: | <u>+</u> 10% of applicable voltage |
| | Coil Classes: | | F, H, N |
| | Standard Lead | Length: | 24 inches |
| Operating Temperature | Ambient (Nomir | nal): | 32° F to 125° F |
| Mounting | Position: | | Any |
| Approvals* | Agency: | | NSF/ANSI - 61-G / NSF-372 / UR Recognized |
| *** | | | |

* Not available for all variations



Valve Selection List

| Normall | y Close | d | | | Я | 1 | I T P | \mathbf{h} | ~ | | P | | | ₽ | De-Energized | |
|-----------|---------|-----|---------|--|----|-------|-------------|--------------|--------|---------|--------------------|---------------|--|--------|--------------------------------------|--|
| ze | Size | | | Operating Pressure Differential (psi) Maximum | | | | | | l (psi) | k emp. | al | Power Consumption | | Model Code | |
| Pipe Size | Orifice | | | Air/Gas | | Water | | Light Oil | | Steam* | Max Fluid Temp. | Seal Material | 1. | atts) | (120V/60HZ — 110V/50HZ) Shown) | |
| NPT | IN | cv | Minimum | AC | DC | AC | DC | AC | DC | AC | °F | Seal | AC | DC | Noryl Body | |
| 3/4" | 3/4" | 6.7 | 4 | - | - | 150 | 100 | - | - | - | 295 | Santo EPR | 8 | 10 | NS211GF02FPEG5 | |
| | | | | | | * | Clas | s H (| Coil F | Recomm | nended | for Ste | am an | d Othe | r High Temperature Applications | |

| Part | Nur | nbe | ring | | | | | | | |
|--------|-----|-------------------|-----------------------|--------------------|--------------------------|------------------------------------|---------------------------|--------------------|--------------|------------|
| 1 2 | 3 | 4 | 5 | 6 | 7 | 8 9 | 10 | 11 | 12 | 13 14 |
| NS | 2 | 1 | 1 | G | F | 0 2 | F | Ρ | E | G 5 |
| Series | | Operating Mode | Housing* | Coil Class* | Voltage* | Seal Material | Body Material | Pipe Connection | Orifice Size | |
| NS | 521 | | 1: Normally Closed | G: 1/2" Conduit | F: Class F N: Class N | 02: 110/120 50/60 Hz 10 Watt | F: Santoprene/ EPDM | P: Noryl | E: 3/4" | G5: 3/4" |
| | | | | | | | | | | |

| Coil Data Coil Family | | | | | |
|--------------------------|------|--|---------|----|----|
| | | Frequency (Hz) | 60 | 50 | |
| Туре | Size | | 1.000 | | |
| AC | S3 | Nominal Power (VA) | Inrush | 46 | 46 |
| DC | S4 | | Holding | 18 | 23 |





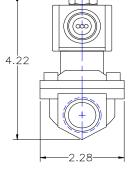
- 3/4" NPT

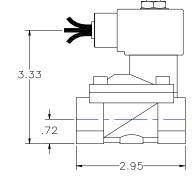
- Lead Free Brass Body
- 2-Way Piloted Diaphragm
- Normally Closed



| Materials | Seals: | NSF Approved Ethylene Propylene | | | | |
|-----------------------|-----------------------|--|--|--|--|--|
| | Orifice: | Lead Free Brass | | | | |
| Electrical | Standard Housing: | Encapsulated Waterproof Conduit (NEMA 4X) | | | | |
| | Optional Housings: | Metal Conduit, Explosion-Proof (NEMA 7), Grommet | | | | |
| | | Open Frame, Junction Box (single or dual knockouts), | | | | |
| | | DIN, Contact GC Valves Customer Svc. For others. | | | | |
| | Standard Voltages: | 24, 120, 240, AC, 60 and/or 50 Hz. Available | | | | |
| | | 6, 12, 24 DC | | | | |
| | | Contact GC Valves Customer Svc. For Additional | | | | |
| | | Voltages | | | | |
| | Voltage Tolerance: | <u>+</u> 10% of applicable volltage | | | | |
| | Coil Classes: | F, H, N | | | | |
| | Standard Lead Length: | 24 inches | | | | |
| Operating Temperature | Ambient (Nominal): | 32° F to 125° F | | | | |
| Mounting | Position: | Upright and Vertical | | | | |
| Approvals* | Agency: | NSF/ANSI - 61/ NSF-372/ UR -CSA Recognized | | | | |
| -ppi ovais | | | | | | |



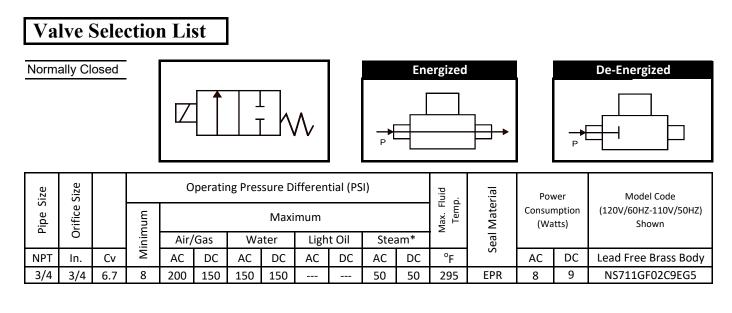




GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

3-4-B-NS711-1

NS711 - 3/4" NPT, Lead Free Brass Body, Normally Closed



Part Numbering

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|----|------|---|-------------------|---|--------------------------|---|-----------------------|------------|-----------------------|-----------|--------|--------|
| NS | 7 | 1 | 1 | G | F | 0 | 2 | С | 9 | Ε | G | 5 |
| Se | ries | | Operating Mode | Hsg | Coil | Voltage | | Seal Mat'l | Body Mat'l | Pipe Size | Orific | e Size |
| NS | 571 | | 1: N.C. | G: Conduit Y: DIN A: Conduit U: J-Box P Opn Frame | F: F Class H: H Class | 02: 120/60 1 04: 240/60 2 24: 24/60 2 15: 12 V 16: 24 V | 220/50 24/50 DC | C: EPDM | 9: Brass Lead Free | E: 3/4" | G5: | 3/4" |

| Coil F | amily |
|--------|-------|
| Туре | Size |
| All | S3 |

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





- 3/4" NPT
- 316 SS Body
- 2-Way Zero Differential Piloted Diaphragm
- Normally Open

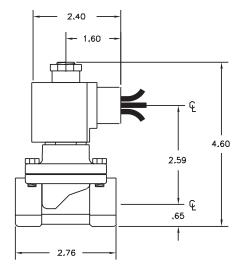


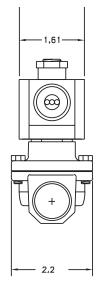
| Materials | Seals: | | Santoprene/NSF Approved EPDM | | | | | |
|-----------------------|------------------|-------|---|--|--|--|--|--|
| | Orifice: | Pilot | Stainless Steel | | | | | |
| | | Main | Stainless Steel | | | | | |
| Electrical | Housing: | | NEAM 4/4X Encapsulated - 1/2" Conduit | | | | | |
| | Optional Housing | S: | Contact GC Valves Customer Svc. for available | | | | | |
| | | | options. | | | | | |
| | Voltage: | | 120 VAC 50/60 Hz | | | | | |
| | | | Contact GC Valves Customer Svc. for available | | | | | |
| | | | options. | | | | | |
| | Voltage Toleranc | e: | <u>+</u> 10% of applicable voltage | | | | | |
| | Coil Classes: | | F, H, N | | | | | |
| Operating Temperature | Ambient (Nomina | l): | 32° F to 125° F | | | | | |
| Mounting | Position: | | Any | | | | | |
| Approvals* | Agency: | | NSF/ANSI - 61-G / NSF-372 / UR Recognized | | | | | |

* Not available for all variations

Dimensions / Weight

| Weight (lbs.) |
|---------------|
| 2.2 |





GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

| Valv | e Se | lec | etic |)n | Li | st | | | | | | | | | | |
|-----------|---------|-----|---------|-------|--------|--------|----------------|------------|--------|---------|--------------------|--------------|------------|---------------|-------------------------|--------|
| Normall | y Open | | | | ∕ | L T | P | <u>`</u> \ | ~ | | P | Energ | gized | | De-E | |
| Size | e Size | | 0 | perat | ting F | | ure E Maxin | | entia | l (psi) | Max Fluid Temp. | rial | 1222 State | wer mption | Model C 120V/60HZ — | |
| Pipe Size | Orifice | | unu | Air/0 | Gas | Wa | ater | Ligh | nt Oil | Steam* | Min | Material | (Wa | atts) | \ Show | n / |
| ∟ NPT | 0 IN | cv | Minimum | AC | DC | AC | DC | AC | DC | AC | °F | Seal 1 | AC | DC | Stainless Ste Type 3 | |
| 3/4 | 3/4 | 6.7 | 0 | | - | 200 | 125 | | a— | | 295 | EPR Santo | 11 | 10 | NS202GF02 | PE7EG5 |

| Part Numb | oering | | | | | | | |
|------------------------|-----------------------------|----------|--|--|--|----------------------------|--------------------|------------------|
| 1 2 3 4 NS20 | 5 2 | 6 G | 7 F | ⁸ 9 0 2 | 10 F | 11 7 | 12 E | 13 14 G 5 |
| Series | Operating Mode | Housing* | Coil Class* | Voltage* | Seal Material | Body Material | Pipe Connection | Orifice Size |
| NS20 | 2: Normally Open * Se | Conduit | F: Class F H: Class H eering Guide | 02: 120/60 110/50 " for additional v | F: Santo/ EPDM roltages, vari | 7: 316 SS ations and or | E: 3/4" NPT | G5: 3/4" |

Coil Data

| Coil I | amily | Frequency (Hz) | 60 | 50 | |
|--------|-------|--------------------|---------|----|----|
| Туре | Size | | | 46 | |
| ALL | S4 | Nominal Power (VA) | Inrush | | 46 |
| | | | Holding | 22 | 25 |

GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

NS202 Series



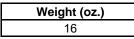
- 3/4" NPT
- Nylon Body
- 2-Way Zero Differential Piloted Diaphragm
- Normally Open

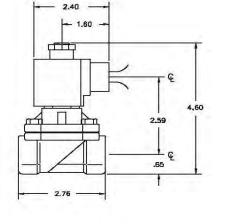


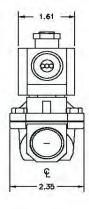
| Materials | Seals: | | Santoprene/NSF Approved EPDM | | | | |
|-----------------------|-----------------|--------|--|--|--|--|--|
| | Orifice: | Pilot | Stainless Steel | | | | |
| | | Main | Nylon 3/4" Diameter | | | | |
| Electrical | Standard Housir | ng: | NEAM 4/4X Encapsulated - 1/2" Conduit | | | | |
| | Optional Housin | gs: | Contact GC Valves Customer Service for | | | | |
| | | | available options. | | | | |
| | Standard Voltag | es: | 24, 120, 240, AC, 60 and/or 50 Hz. Available | | | | |
| | | | 6, 12, 24 DC | | | | |
| | | | Contact GC Valves Customer Svc. For Additional | | | | |
| | | | Voltages | | | | |
| | Voltage Toleran | ce: | <u>+</u> 10% of applicable volltage | | | | |
| | Coil Classes: | | F, H, N | | | | |
| | Standard Lead L | ength: | 24 inches | | | | |
| Operating Temperature | Ambient (Nomin | al): | 32° F to 125° F | | | | |
| Mounting | Position: | | Any | | | | |
| Approvals* | Agency: | | NSF/ANSI - 61-G / NSF-372 / UR Recognized | | | | |

* Not available for all variations

Dimensions / Weight







GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

3/4-P-NS202-1

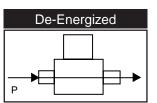
NS202 – 3/4" NPT, Nylon Body, Normally Open

Valve Selection List

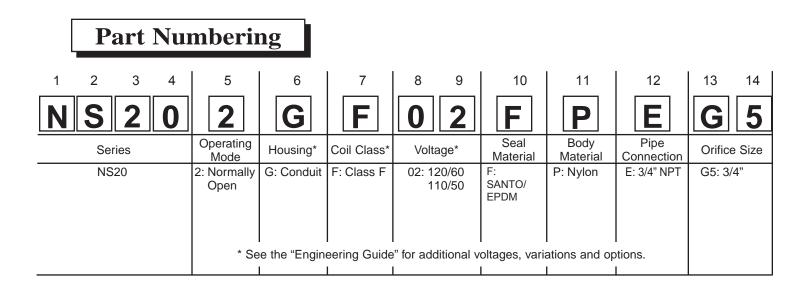
Normally Open

| L | | 7 |
|---|---|----------|
| Т | P | <u>_</u> |

Energized



| Size | e Size | | 0 | Operating Pressure Differential (psi) Maximum | | | | | rial | Power Consumption | | Model Code 120V/60HZ — 110V/50HZ | |
|--------|---------|-----|-------|--|-----|-----|------|--------------------|--------------|----------------------|-------|-------------------------------------|--|
| Pipe S | Drifice | | mu | Air/ | Gas | Wa | iter | Max Fluid Temp. | Mater | (Wa | atts) | Shown | |
| NPT | IN | Cv | Minim | AC | DC | AC | DC | °F | Seal I | | | Nylon Body | |
| 3/4 | 3/4 | 6.7 | 0 | - | - | 200 | 125 | 176 | EPR SANTO | 11 | 10 | NS202GF02FPEG5 | |



| | Coil F | amily | Frequency (Hz) | Frequency (Hz) | | | | | |
|---|-------------|------------|--------------------|----------------|----|----|--|--|--|
| - | Type All | Size S4 | Nominal Power (VA) | Inrush | 46 | 46 | | | |
| | | | | Holding | 22 | 25 | | | |

NS212 Series

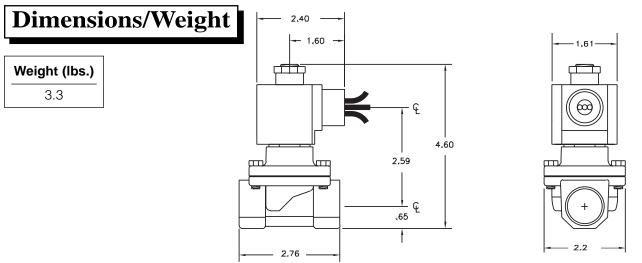


- 3/4" NPT
- Stainless Steel Body **Type 316**
- 2-Way Piloted Diaphragm
- Normally Open

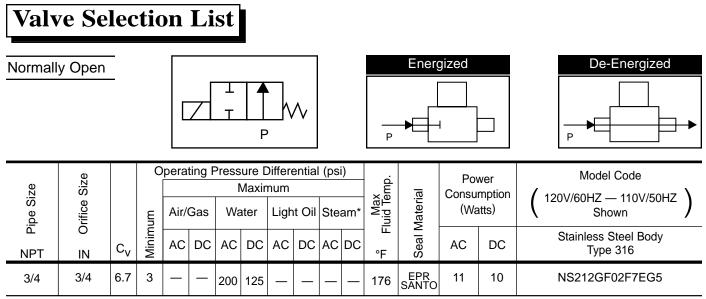


| Seals: | Santoprene/NSF Approved EPDM | | | | |
|-----------------------|---|--|--|--|--|
| Orifice: Pilot | Stainless Steel | | | | |
| Main | Stainless Steel Ø 3/4" | | | | |
| Standard Housing: | NEAM 4/4X Encapsulated - 1/2" Conduit | | | | |
| Optional Housings: | Contact GC Valves Customer Service for available options. | | | | |
| Standard Voltages: | 24, 120, 240 AC 60 Hz; 50 Hz available 6, 12, 24 DC; Contact GC Valves Customer Service for Additional Voltages. | | | | |
| Voltage Tolerance: | ±10% of applicable voltage | | | | |
| Coil Classes: | F, H, N | | | | |
| Standard Lead Length: | 24 inch | | | | |
| Ambient (Nominal): | 32°F to 125°F | | | | |
| Position: | Any | | | | |
| Agency: | NSF/ANSI - 61-G / NSF-372 / UR Recognized | | | | |
| | Orifice: Pilot Main Standard Housing: Optional Housings: Optional Housings: Standard Voltages: Standard Voltages: Standard Voltages: Voltage Tolerance: Coil Classes: Standard Lead Length: Ambient (Nominal): Position: Formation (Nominal) | | | | |

* Not available for all variations



NS212 – 3/4" NPT, Stainless Steel Body, Type 316, Normally Open



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

| Part Numb | pering | | | | | | | |
|-----------|-------------------|--------------------------|----------------------|----------------------|------------------|------------------|--------------------|--------------|
| 1 2 3 4 | 5 | 6 | 7 | 89 | 10 | 11 | 12 | 13 14 |
| N S 2 1 | 2 | G | F | 02 | F | 7 | Ε | G 5 |
| Series | Operating Mode | Housing* | Coil Class* | Voltage* | Seal Material | Body Material | Pipe Connection | Orifice Size |
| NS21 | G: Conduit | F: Class F H: Class H | 02: 120/60 110/50 | F: Santo/ EPDM | 7: 316 SS | E: 3/4" NPT | G5: 3/4" | |
| | * See | e the "Engine | eering Guide | " for additional v | oltages, vari | ations and op | otions. | |

| Coil Family | | Frequency (Hz) | Frequency (Hz) | | | | | |
|-----------------|------------|--------------------|----------------|----|----|--|--|--|
| Type ALL | Size S4 | Nominal Power (VA) | Inrush | 46 | 46 | | | |
| | | | Holding | 22 | 25 | | | |

NS212 Series



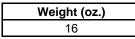
- 3/4" NPT
- Nylon Body
- 2-Way Piloted Diaphragm
- Normally Open

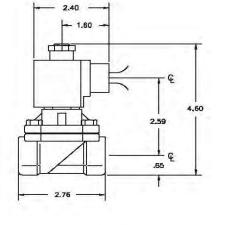


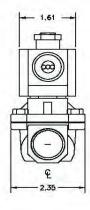
| Materials | Seals: | | Santoprene/NSF Approved EPDM | | | | |
|-----------------------|------------------|--------|--|--|--|--|--|
| | Orifice: | Pilot | Stainless Steel | | | | |
| | | Main | Nylon 3/4" Diameter | | | | |
| Electrical | Standard Housin | g: | NEAM 4/4X Encapsulated - 1/2" Conduit | | | | |
| | Optional Housing | js: | Contact GC Valves Customer Service for | | | | |
| | | | available options. | | | | |
| | Standard Voltage | es: | 24, 120, 240, AC, 60 and/or 50 Hz. Available | | | | |
| | | | 6, 12, 24 DC | | | | |
| | | | Contact GC Valves Customer Svc. For Additional | | | | |
| | | | Voltages | | | | |
| | Voltage Tolerand | e: | <u>+</u> 10% of applicable volltage | | | | |
| | Coil Classes: | | F, H, N | | | | |
| | Standard Lead L | ength: | 24 inches | | | | |
| Operating Temperature | Ambient (Nomina | al): | 32° F to 125° F | | | | |
| Mounting | Position: | | Any | | | | |
| Approvals* | Agency: | | NSF/ANSI - 61-G / NSF-372 / UR Recognized | | | | |

* Not available for all variations

Dimensions / Weight



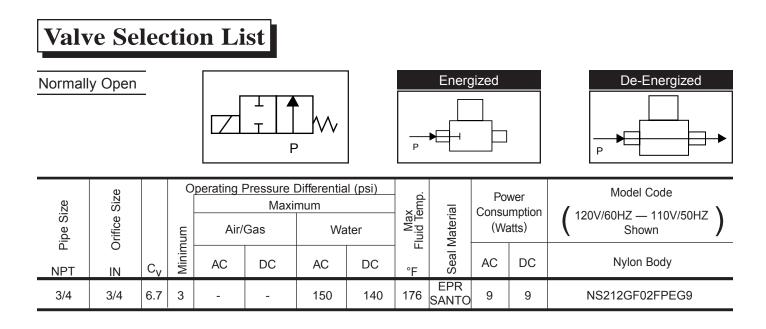


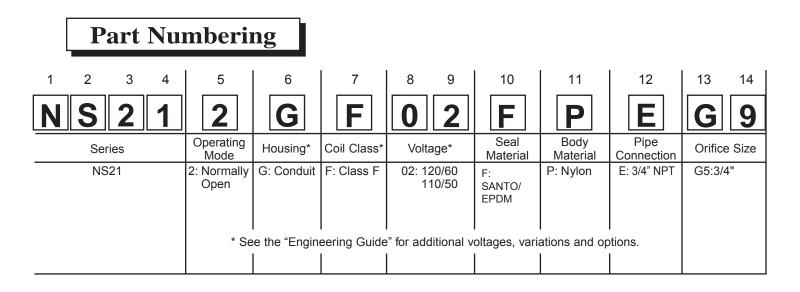


GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

3/4-P-NS212-1

NS212 – 3/4" NPT, Nylon Body, Normally Open





| Coil F | amily | Frequency (Hz) | Frequency (Hz) | | | | | |
|-------------|------------|--------------------|----------------|----|----|--|--|--|
| Type ALL | Size S3 | Nominal Power (VA) | Inrush | 46 | 46 | | | |
| | | | Holding | 22 | 25 | | | |

NS202 Series



- 3/4" NPT
- 316 SS Body
- 2-Way Zero Differential Piloted Diaphragm
 Normally Open

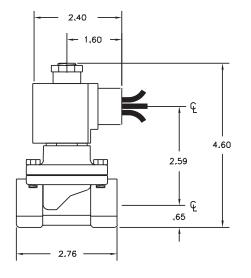


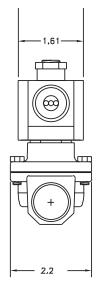
| Materials | Seals: | | Santoprene/NSF Approved EPDM | | | | |
|-----------------------|--------------------|-------|---|--|--|--|--|
| | Orifice: | Pilot | Stainless Steel | | | | |
| | | Main | Stainless Steel | | | | |
| Electrical | Housing: | | NEAM 4/4X Encapsulated - 1/2" Conduit | | | | |
| | Optional Housings: | | Contact GC Valves Customer Svc. for available | | | | |
| | | | options. | | | | |
| | Voltage: | | 120 VAC 50/60 Hz | | | | |
| | | | Contact GC Valves Customer Svc. for available | | | | |
| | | | options. | | | | |
| | Voltage Tolerance: | | <u>+</u> 10% of applicable voltage | | | | |
| | Coil Classes: | | F, H, N | | | | |
| Operating Temperature | Ambient (Nominal): | | 32° F to 125° F | | | | |
| Mounting | Position: | | Any | | | | |
| Approvals* | Agency: | | NSF/ANSI - 61-G / NSF-372 / UR Recognized | | | | |

* Not available for all variations

Dimensions / Weight

| Weight (lbs.) | |
|---------------|--|
| 2.2 | |





GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

| Valv | e Se | lec | etic |)n | Li | st | | | | | | | | | | |
|-----------|---------|-----|---------|-------|-------------------|--------|----------------|------------|--------|---------|--------------------|-------------------------|------------|---------------|------------------------|--------|
| Normall | y Open | | | | ∕ | L T | P | <u>`</u> \ | ~ | | P | Energ | gized | | De-E | |
| Size | e Size | | 0 | perat | ting F | | ure E Maxin | | entia | l (psi) | Max Fluid Temp. | rial | 1222 State | wer mption | Model C 120V/60HZ — | |
| Pipe Size | Orifice | | unu | Air/0 | Gas | Wa | ater | Ligh | nt Oil | Steam* | Min | Material | (Wa | atts) | \ Show | n / |
| ∟ NPT | 0 IN | cv | Minimum | AC | AC DC AC DC AC DC | | AC | °F | Seal 1 | AC | DC | Stainless Ste Type 3 | | | | |
| 3/4 | 3/4 | 6.7 | 0 | | - | 200 | 125 | | a— | | 295 | EPR Santo | 11 | 10 | NS202GF02 | PE7EG5 |

| Part Numb | oering | | | | | | | |
|------------------------|-----------------------------|----------|--|--|--|----------------------------|--------------------|------------------|
| 1 2 3 4 NS20 | 5 2 | 6 G | 7 F | ⁸ 9 0 2 | 10 F | 11 7 | 12 E | 13 14 G 5 |
| Series | Operating Mode | Housing* | Coil Class* | Voltage* | Seal Material | Body Material | Pipe Connection | Orifice Size |
| NS20 | 2: Normally Open * Se | Conduit | F: Class F H: Class H eering Guide | 02: 120/60 110/50 " for additional v | F: Santo/ EPDM roltages, vari | 7: 316 SS ations and or | E: 3/4" NPT | G5: 3/4" |

Coil Data

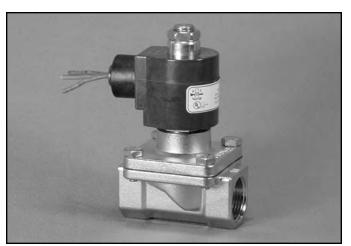
| Coil F | amily | Frequency (Hz) | 60 | 50 | |
|--------|-------|--------------------|---------|----|----|
| Туре | Size | | | | |
| ALL | S4 | Nominal Power (VA) | Inrush | 46 | 46 |
| | | | Holding | 22 | 25 |

GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

NS212 Series

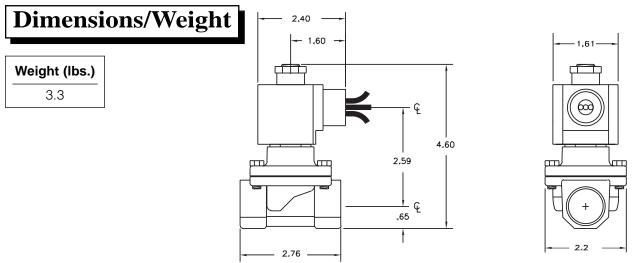


- 3/4" NPT
- Stainless Steel Body **Type 316**
- 2-Way Piloted Diaphragm
- Normally Open



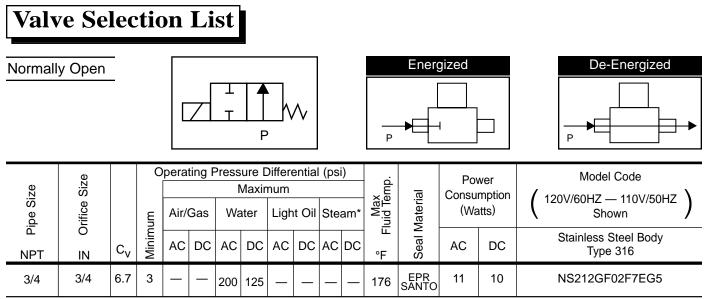
| Seals: | | Santoprene/NSF Approved EPDM | | | | |
|---------------|--|---|--|--|--|--|
| Orifice: | Pilot Main | Stainless Steel Stainless Steel Ø 3/4" | | | | |
| Standard Ho | using: | NEAM 4/4X Encapsulated - 1/2" Conduit | | | | |
| Optional Hou | isings: | Contact GC Valves Customer Service for available options. | | | | |
| Standard Vol | tages: | 24, 120, 240 AC 60 Hz; 50 Hz available 6, 12, 24 DC; Contact GC Valves Customer Service for Additional Voltages. | | | | |
| Voltage Toler | ance: | ±10% of applicable voltage | | | | |
| Coil Classes: | : | F, H, N | | | | |
| Standard Lea | ad Length: | 24 inch | | | | |
| Ambient (Nor | minal): | 32°F to 125°F | | | | |
| Position: | | Any | | | | |
| Agency: | | NSF/ANSI - 61-G / NSF-372 / UR Recognized | | | | |
| | Orifice: Standard Ho Optional Hou Standard Vol Voltage Toler Coil Classes Standard Lea Ambient (No Position: | Orifice: Pilot Main Standard Housing: Optional Housings: Optional Housings: Standard Voltages: Standard Voltages: Standard Voltages: Voltage Tolerance: Coil Classes: Standard Lead Length: Ambient (Nominal): Position: Voltage | | | | |

* Not available for all variations



GC Valves Customer Service: 800-828-0484 (7:30am to 4pm ET) or 800-582-4232 (7:30am to 4pm PT) Page 81

NS212 – 3/4" NPT, Stainless Steel Body, Type 316, Normally Open



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

| Part Num | bering | | | | | | | |
|----------|---------------------|---------------|--------------------------|----------------------|----------------------|------------------|--------------------|--------------|
| 1 2 3 4 | 5 | 6 | 7 | 8 9 | 10 | 11 | 12 | 13 14 |
| N S 2 1 | 2 | G | F | 02 | F | 7 | E | G 5 |
| Series | Operating Mode | Housing* | Coil Class* | Voltage* | Seal Material | Body Material | Pipe Connection | Orifice Size |
| NS21 | 2: Normally Open | G: Conduit | F: Class F H: Class H | 02: 120/60 110/50 | F: Santo/ EPDM | 7: 316 SS | E: 3/4" NPT | G5: 3/4" |
| | * See | e the "Engine | ering Guide | " for additional v | oltages, vari | ations and op | otions. | |

| Coil Family | | Frequency (Hz) | | 60 | 50 |
|-----------------|------------|--------------------|---------|----|----|
| Type ALL | Size S4 | Nominal Power (VA) | Inrush | 46 | 46 |
| | | | Holding | 22 | 25 |

NS202 Series



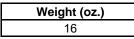
- 3/4" NPT
- Nylon Body
- 2-Way Zero Differential Piloted Diaphragm
- Normally Open

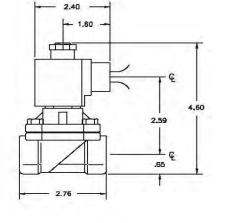


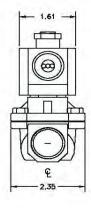
| Materials | Seals: | | Santoprene/NSF Approved EPDM |
|-----------------------|------------------|--------|--|
| | Orifice: | Pilot | Stainless Steel |
| | Main | | Nylon 3/4" Diameter |
| Electrical | Standard Housin | g: | NEAM 4/4X Encapsulated - 1/2" Conduit |
| | Optional Housing | js: | Contact GC Valves Customer Service for |
| | | | available options. |
| | Standard Voltage | es: | 24, 120, 240, AC, 60 and/or 50 Hz. Available |
| | | | 6, 12, 24 DC |
| | | | Contact GC Valves Customer Svc. For Additional |
| | | | Voltages |
| | Voltage Tolerand | e: | <u>+</u> 10% of applicable volltage |
| | Coil Classes: | | F, H, N |
| | Standard Lead L | ength: | 24 inches |
| Operating Temperature | Ambient (Nomina | al): | 32° F to 125° F |
| Mounting | Position: | | Any |
| Approvals* | Agency: | | NSF/ANSI - 61-G / NSF-372 / UR Recognized |

* Not available for all variations

Dimensions / Weight







GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

3/4-P-NS202-1

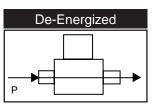
NS202 – 3/4" NPT, Nylon Body, Normally Open

Valve Selection List

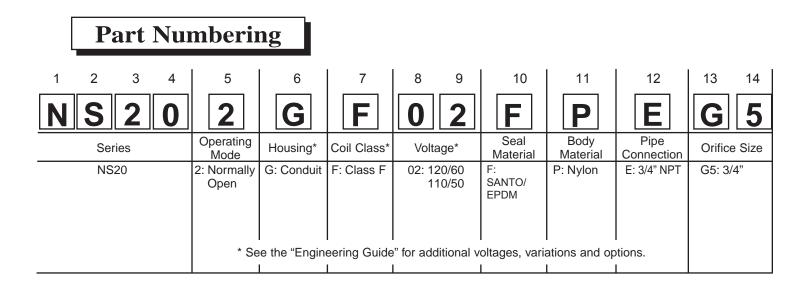
Normally Open

| T | | 7 |
|---|---|---|
| Т | | |
| | Ρ | |

Energized



| Size | e Size | | 0 | perating I | Pressure I Maxii | | ıl (psi) | Max Fluid Temp. | rial | Pov Consu | wer mption | Model Code (120V/60HZ — 110V/50HZ) | |
|--------|---------|-----|-------|------------|---------------------|-----|----------|--------------------|--------------|--------------|---------------|---|--|
| Pipe S | Drifice | | mu | Air/ | Gas | Wa | iter | Ma | Mater | (Wa | atts) | Shown | |
| NPT | IN | Cv | Minim | AC | DC | AC | DC | °F | Seal I | AC DC | | Nylon Body | |
| 3/4 | 3/4 | 6.7 | 0 | - | - | 200 | 125 | 176 | EPR SANTO | 11 | 10 | NS202GF02FPEG5 | |



| | Coil Family | | Frequency (Hz) | Frequency (Hz) | | | | |
|---|-------------|------------|--------------------|----------------|----|----|--|--|
| _ | Type All | Size S4 | Nominal Power (VA) | Inrush | 46 | 46 | | |
| | | | | Holding | 22 | 25 | | |

NS212 Series



- 3/4" NPT
- Nylon Body
- 2-Way

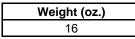
Piloted Diaphragm - Normally Open

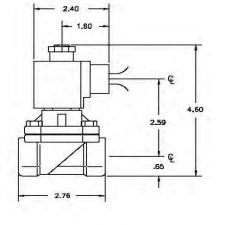


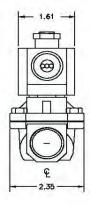
| Materials | Seals: | | Santoprene/NSF Approved EPDM | |
|-----------------------|-----------------------|-------|--|--|
| | Orifice: | Pilot | Stainless Steel | |
| | Main | | Nylon 3/4" Diameter | |
| Electrical | Standard Housir | ng: | NEAM 4/4X Encapsulated - 1/2" Conduit | |
| | Optional Housin | gs: | Contact GC Valves Customer Service for | |
| | | | available options. | |
| | Standard Voltag | es: | 24, 120, 240, AC, 60 and/or 50 Hz. Available | |
| | | | 6, 12, 24 DC | |
| | | | Contact GC Valves Customer Svc. For Additional | |
| | | | Voltages | |
| | Voltage Toleran | ce: | <u>+</u> 10% of applicable volltage | |
| | Coil Classes: | | F, H, N | |
| | Standard Lead Length: | | 24 inches | |
| Operating Temperature | Ambient (Nomin | al): | 32° F to 125° F | |
| Mounting | Position: | | Any | |
| Approvals* | Agency: | | NSF/ANSI - 61-G / NSF-372 / UR Recognized | |

* Not available for all variations

Dimensions / Weight



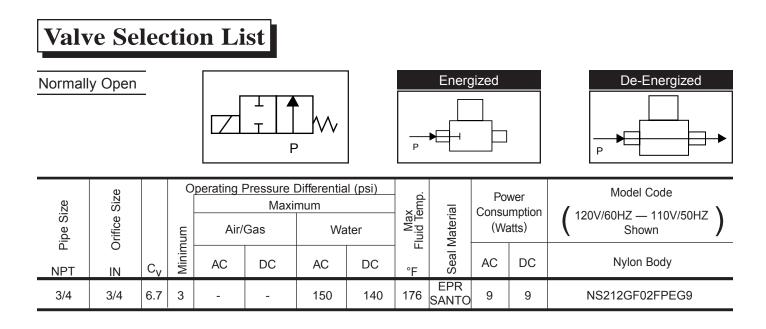


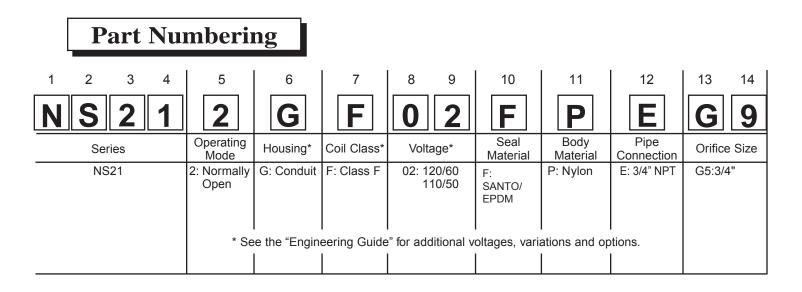


GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

3/4-P-NS212-1

NS212 – 3/4" NPT, Nylon Body, Normally Open





| Coil F | amily | Frequency (Hz) | | 60 | 50 |
|-------------|------------|--------------------|---------|----|----|
| Type ALL | Size S3 | Nominal Power (VA) | Inrush | 46 | 46 |
| | | | Holding | 22 | 25 |





- 3/4" NPT

- Lead Free Brass Body
- 2-Way Piloted Diaphragm
- Normally Open

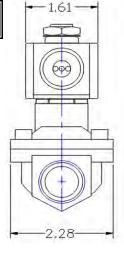


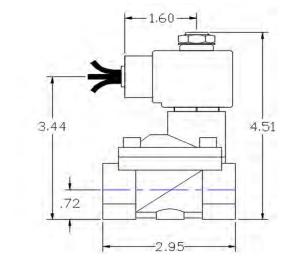
| Materials | Seals: | NSF Approved Ethylene Propylene |
|-----------------------|-----------------------|--|
| | Orifice: | Lead Free Brass |
| Electrical | Standard Housing: | Encapsulated Waterproof Conduit (NEMA 4X) |
| | Optional Housings: | Metal Conduit, Explosion-Proof (NEMA 7), Grommet |
| | | Open Frame, Junction Box (single or dual knockouts), |
| | | DIN, Contact GC Valves Customer Svc. For others. |
| | Standard Voltages: | 24, 120, 240, AC, 60 and/or 50 Hz. Available |
| | | 6, 12, 24 DC |
| | | Contact GC Valves Customer Svc. For Additional |
| | | Voltages |
| | Voltage Tolerance: | <u>+</u> 10% of applicable volltage |
| | Coil Classes: | F, H, N |
| | Standard Lead Length: | 24 inches |
| Operating Temperature | Ambient (Nominal): | 32° F to 125° F |
| Mounting | Position: | Upright and Vertical |
| Approvals* | Agency: | NSF/ANSI - 61/ NSF-372/ UR -CSA Recognized |

* Not available for all variations

Dimensions / Weight



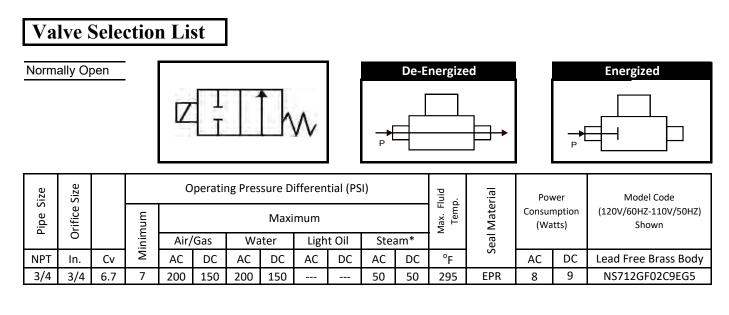




GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

3-4-B-NS712-1

NS712 - 3/4" NPT, Lead Free Brass Body, Normally Open



Part Numbering

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|-----|------|---|-------------------|---|--------------------------|---|---------------------|------------|-----------------------|-----------|--------|--------|
| NS | 7 | 1 | 2 | G | F | 0 | 2 | С | 9 | Ε | G | 5 |
| Sei | ries | | Operating Mode | Hsg | Coil | Voltage | 2 | Seal Mat'l | Body Mat'l | Pipe Size | Orific | e Size |
| NS | 571 | | 2: N.O. | G: Conduit Y: DIN A: Conduit U: J-Box P Opn Frame | F: F Class H: H Class | 02: 120/60 1 04: 240/60 2 24: 24/60 2 15: 12 VI 16: 24 VI | 20/50 4/50 DC | C: EPDM | 9: Brass Lead Free | E: 3/4" | G5: | 3/4" |

Coil Data

| Coil Family | | | | | |
|-------------|------|--|--|--|--|
| Туре | Size | | | | |
| All | S3 | | | | |

| Frequency (Hz) | 60 | 50 | |
|---------------------|---------|----|----|
| Nominal Dowor ()(A) | Inrush | 36 | 36 |
| Nominal Power (VA) | Holding | 18 | 19 |

GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

NS20 Series



- 1" NPT

- 316 Stainless Steel Body
- 2-Way Zero Differential Piloted Diaphragm
 - Normally Closed

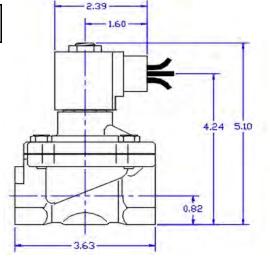


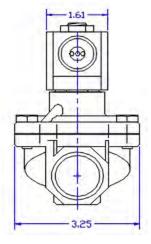
| Materials | Seals: | NSF Approved Ethylene Propylene |
|-----------------------|-----------------------|--|
| | Orifice: | Stainless Steel |
| Electrical | Standard Housing: | Encapsulated Waterproof Conduit (NEMA 4X) |
| | Optional Housings: | Metal Conduit, Explosion-Proof (NEMA 7), Grommet |
| | | Open Frame, Junction Box (single or dual knockouts), |
| | | DIN, Contact GC Valves Customer Svc. For others. |
| | Standard Voltages: | 24, 120, 240, AC, 60 and/or 50 Hz. Available |
| | | 6, 12, 24 DC |
| | | Contact GC Valves Customer Svc. For Additional |
| | | Voltages |
| | Voltage Tolerance: | <u>+</u> 10% of applicable volltage |
| | Coil Classes: | F, H, N |
| | Standard Lead Length: | 24 inches |
| Operating Temperature | Ambient (Nominal): | 32° F to 125° F |
| Mounting | Position: | Upright and Vertical |
| Approvals* | Agency: | NSF/ANSI - 61/ NSF-372/ UR -CSA Recognized |

* Not available for all variations

Dimensions / Weight

| Weight (Lbs.) | |
|---------------|--|
| 4.0 | |





GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

1-S-NS201-1

NS201 - 1" NPT, Stainless Steel Body, Normally Closed

Valve Selection List Normally Closed Energized **De-Energized Operating Pressure Differential (PSI) Orifice Size** Max. Fluid Temp. Size Seal Material Power Model Code Consumption (120V/60HZ-110V/50HZ) Pipe Minimum Maximum (Watts) Shown Air/Gas Water Light Oil Steam* NPT °F Stainless Steel Body Cv AC DC AC DC AC DC AC DC AC DC In. 1 11 0 100 100 100 100 -------50 50 295 EPR 10 10 NS201GF02C7FG9 1

Part Numbering

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|-----|------|---|-------------------|---|--------------------------|---|---------------------|------------|------------|-----------|--------|--------|
| NS | 2 | 0 | 1 | G | F | 0 | 2 | С | 7 | F | G | 9 |
| Sei | ries | | Operating Mode | Hsg | Coil | Voltage | 2 | Seal Mat'l | Body Mat'l | Pipe Size | Orific | e Size |
| NS | 520 | | 1: N.C. | G: Conduit Y: DIN A: Conduit U: J-Box P Opn Frame | F: F Class H: H Class | 02: 120/60 1 04: 240/60 2 24: 24/60 2 15: 12 VI 16: 24 VI | 20/50 4/50 DC | C: EPDM | 7: 316 SS | F: 1" | G9 | : 1" |

| Coil Family | | | | |
|-------------|--|--|--|--|
| Type Size | | | | |
| All S4 | | | | |

| Frequency (Hz) | 60 | 50 | |
|---------------------|---------|----|----|
| Nominal Power ()(A) | Inrush | 46 | 46 |
| Nominal Power (VA) | Holding | 18 | 19 |

NS20 Series



- 1" NPT
- Nylon Body
- 2-Way Zero Differential
- Piloted Diaphragm
- Normally Closed

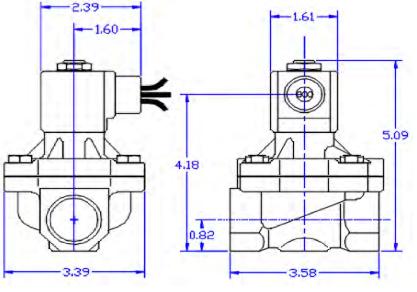


| Materials | Seals: | NSF Approved Ethylene Propylene |
|-----------------------|-----------------------|--|
| | Orifice: | Nylon |
| Electrical | Standard Housing: | Encapsulated Waterproof Conduit (NEMA 4X) |
| | Optional Housings: | Metal Conduit, Explosion-Proof (NEMA 7), Grommet |
| | | Open Frame, Junction Box (single or dual knockouts), |
| | | DIN, Contact GC Valves Customer Svc. For others. |
| | Standard Voltages: | 24, 120, 240, AC, 60 and/or 50 Hz. Available |
| | | 6, 12, 24 DC |
| | | Contact GC Valves Customer Svc. For Additional |
| | | Voltages |
| | Voltage Tolerance: | <u>+</u> 10% of applicable volltage |
| | Coil Classes: | F, H, N |
| | Standard Lead Length: | 24 inches |
| Operating Temperature | Ambient (Nominal): | 32° F to 125° F |
| Mounting | Position: | Upright and Vertical |
| Approvals* | Agency: | NSF/ANSI - 61/ NSF-372/ UR -CSA Recognized |

* Not available for all variations

Dimensions / Weight

| Weight (Lbs.) | |
|---------------|--|
| 3.8 | |



GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

1-P-NS201-1

NS201 - 1" NPT, Nylon Body, Normally Closed

Valve Selection List Normally Closed Energized **De-Energized** ax. Fluid Temp. **Operating Pressure Differential (PSI) Orifice Size** Pipe Size Seal Material Power Model Code (120V/60HZ-110V/50HZ) Consumption Minimum Max. Maximum (Watts) Shown Light Oil Air/Gas Water Steam* NPT In. Cv AC DC AC DC AC DC AC DC °F AC DC Nylon Body 0 10 NS201GF02CPFG9 100 100 295 EPR 10 1 1 11 100 100 --------------

Part Numbering

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|-----|------|---|-------------------|---|--------------------------|---|-----------------------|------------|------------|-----------|--------|--------|
| NS | 2 | 0 | 1 | G | F | 0 | 2 | С | Ρ | F | G | 9 |
| Sei | ries | | Operating Mode | Hsg | Coil | Voltage | 2 | Seal Mat'l | Body Mat'l | Pipe Size | Orific | e Size |
| NS | 520 | | 1: N.C. | G: Conduit Y: DIN A: Conduit U: J-Box P Opn Frame | F: F Class H: H Class | 02: 120/60 1 04: 240/60 2 24: 24/60 2 15: 12 V 16: 24 V | 220/50 24/50 DC | C: EPDM | P: Nylon | F: 1" | G9 | : 1" |

| Coil Family | | | | |
|-------------|----|--|--|--|
| Type Size | | | | |
| All | S4 | | | |

| Frequency (Hz) | 60 | 50 | |
|---------------------|---------|----|----|
| Neminal Dewar ()(A) | Inrush | 46 | 46 |
| Nominal Power (VA) | Holding | 18 | 19 |

NS21 Series



- 1" NPT
- 316 Stainless Steel Body
- 2-Way Piloted Diaphragm
- Normally Closed

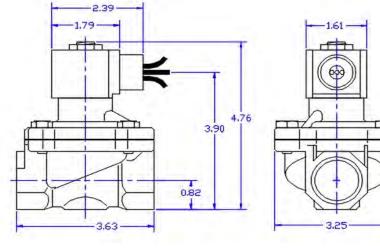


| Materials | Seals: | NSF Approved Ethylene Propylene |
|-----------------------|-----------------------|--|
| | Orifice: | Stainless Steel |
| Electrical | Standard Housing: | Encapsulated Waterproof Conduit (NEMA 4X) |
| | Optional Housings: | Metal Conduit, Explosion-Proof (NEMA 7), Grommet |
| | | Open Frame, Junction Box (single or dual knockouts), |
| | | DIN, Contact GC Valves Customer Svc. For others. |
| | Standard Voltages: | 24, 120, 240, AC, 60 and/or 50 Hz. Available |
| | | 6, 12, 24 DC |
| | | Contact GC Valves Customer Svc. For Additional |
| | | Voltages |
| | Voltage Tolerance: | <u>+</u> 10% of applicable volltage |
| | Coil Classes: | F, H, N |
| | Standard Lead Length: | 24 inches |
| Operating Temperature | Ambient (Nominal): | 32° F to 125° F |
| Mounting | Position: | Upright and Vertical |
| Approvals* | Agency: | NSF/ANSI - 61/ NSF-372/ UR -CSA Recognized |

* Not available for all variations

Dimensions / Weight

| Weight (Lbs.) | |
|---------------|--|
| 3.9 | |



GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

1-S-NS211-1

NS211 - 1" NPT, Stainless Steel Body, Normally Closed

Valve Selection List **De-Energized** Normally Closed Energized **Operating Pressure Differential (PSI) Orifice Size** Max. Fluid Temp. Size Seal Material Power Model Code Consumption (120V/60HZ-110V/50HZ) Pipe Minimum Maximum (Watts) Shown Air/Gas Water Light Oil Steam* NPT °F DC Stainless Steel Body Cv AC DC AC DC AC DC AC DC AC In. 1 13 5 200 150 150 150 -------50 50 295 EPR 8 9 NS211GF02C7FG9 1

Part Numbering

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|-----|------|---|-------------------|---|--------------------------|---|---|------------|------------|-----------|--------|--------|
| NS | 2 | 1 | 1 | G | F | 0 | 2 | С | 7 | F | G | 9 |
| Sei | ries | | Operating Mode | Hsg | Coil | Voltage | | Seal Mat'l | Body Mat'l | Pipe Size | Orific | e Size |
| NS | 521 | | 1: N.C. | G: Conduit Y: DIN A: Conduit U: J-Box P Opn Frame | F: F Class H: H Class | 02: 120/60 110/50 04: 240/60 220/50 24: 24/60 24/50 15: 12 VDC 16: 24 VDC | | C: EPDM | 7: 316 SS | F: 1" | G9 | : 1" |

| Coil Family | | | | | |
|-------------|------|--|--|--|--|
| Туре | Size | | | | |
| All | S3 | | | | |

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





- 1" NPT
- Nylon Body
- 2-Way
- Piloted Diaphragm
- Normally Closed

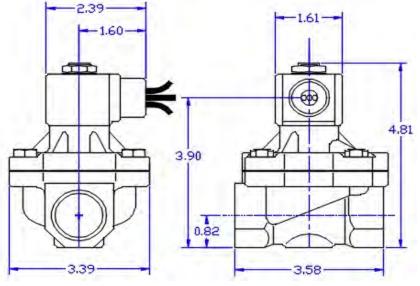


| Materials | Seals: | NSF Approved Ethylene Propylene | | | | |
|-----------------------|-----------------------|--|--|--|--|--|
| | Orifice: | Nylon | | | | |
| Electrical | Standard Housing: | Encapsulated Waterproof Conduit (NEMA 4X) | | | | |
| | Optional Housings: | Metal Conduit, Explosion-Proof (NEMA 7), Grommet | | | | |
| | | Open Frame, Junction Box (single or dual knockouts), | | | | |
| | | DIN, Contact GC Valves Customer Svc. For others. | | | | |
| | Standard Voltages: | 24, 120, 240, AC, 60 and/or 50 Hz. Available | | | | |
| | | 6, 12, 24 DC | | | | |
| | | Contact GC Valves Customer Svc. For Additional | | | | |
| | | Voltages | | | | |
| | Voltage Tolerance: | <u>+</u> 10% of applicable volltage | | | | |
| | Coil Classes: | F, H, N | | | | |
| | Standard Lead Length: | 24 inches | | | | |
| Operating Temperature | Ambient (Nominal): | 32° F to 125° F | | | | |
| Mounting | Position: | Upright and Vertical | | | | |
| Approvals* | Agency: | NSF/ANSI - 61/ NSF-372/ UR -CSA Recognized | | | | |

* Not available for all variations

Dimensions / Weight

| Weight (Lbs.) |
|---------------|
| 1.7 |



GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

1-P-NS211-1

NS211 - 1" NPT, Nylon Body, Normally Closed

Valve Selection List Normally Closed Energized **De-Energized** ax. Fluid Temp. **Operating Pressure Differential (PSI) Orifice Size** Pipe Size Seal Material Power Model Code (120V/60HZ-110V/50HZ) Consumption Minimum Max. Maximum (Watts) Shown Light Oil Air/Gas Water Steam* NPT In. Cv AC DC AC DC AC DC AC DC °F AC DC Nylon Body 5 EPR 9 NS211GF02CPFG9 200 150 295 1 1 13 150 150 ---------8 ----

Part Numbering

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|----|------|---|-------------------|---|--------------------------|---|---------------------|------------|------------|-----------|--------|--------|
| NS | 2 | 1 | 1 | G | F | 0 | 2 | С | Ρ | F | G | 9 |
| Se | ries | | Operating Mode | Hsg | Coil | Voltage | | Seal Mat'l | Body Mat'l | Pipe Size | Orific | e Size |
| NS | 521 | | 1: N.C. | G: Conduit Y: DIN A: Conduit U: J-Box P Opn Frame | F: F Class H: H Class | 02: 120/60 1 04: 240/60 2 24: 24/60 2 15: 12 V 16: 24 V | 20/50 4/50 DC | C: EPDM | P: Nylon | F: 1" | G9 | : 1" |

| Coil Family | | | | | | |
|-------------|------|--|--|--|--|--|
| Туре | Size | | | | | |
| All | S3 | | | | | |

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

NS21 Series



- 1" NPT
- 316 Stainless Steel Body
- 2-Way Piloted Diaphragm
- Normally Open

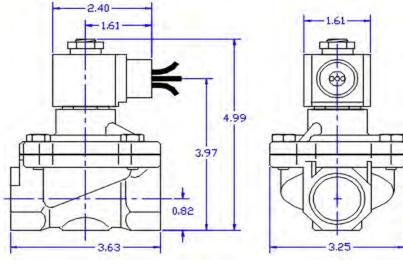


| eals:)rifice: tandard Housing: | NSF Approved Ethylene Propylene Stainless Steel | | | | |
|---------------------------------------|---|--|--|--|--|
| | Stainless Steel | | | | |
| tandard Housing: | | | | | |
| lanuaru nousiny. | Encapsulated Waterproof Conduit (NEMA 4X) | | | | |
| ptional Housings: | Metal Conduit, Explosion-Proof (NEMA 7), Grommet | | | | |
| | Open Frame, Junction Box (single or dual knockouts), | | | | |
| | DIN, Contact GC Valves Customer Svc. For others. | | | | |
| tandard Voltages: | 24, 120, 240, AC, 60 and/or 50 Hz. Available | | | | |
| | 6, 12, 24 DC Contact GC Valves Customer Svc. For Additional | | | | |
| | | | | | |
| | Voltages | | | | |
| oltage Tolerance: | <u>+</u> 10% of applicable volltage | | | | |
| coil Classes: | F, H, N | | | | |
| tandard Lead Length: | 24 inches | | | | |
| mbient (Nominal): | 32° F to 125° F | | | | |
| osition: | Upright and Vertical | | | | |
| gency: | NSF/ANSI - 61/ NSF-372/ UR -CSA Recognized | | | | |
| | tandard Voltages: oltage Tolerance: oil Classes: tandard Lead Length: mbient (Nominal): osition: | | | | |

* Not available for all variations

Dimensions / Weight

| Weight (Lbs.) | |
|---------------|--|
| 3.9 | |



GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

1-S-NS212-1

NS212 - 1" NPT, Stainless Steel Body, Normally Open

Valve Selection List Normally Open **De-Energized** Energized ax. Fluid Temp. **Operating Pressure Differential (PSI) Orifice Size** Pipe Size Seal Material Power Model Code Consumption (120V/60HZ-110V/50HZ) Minimum Max. Maximum (Watts) Shown Air/Gas Water Light Oil Steam* NPT In. Cv AC DC AC DC AC DC AC DC °F AC DC Stainless Steel Body 5 9 NS212GF02C7FG9 200 150 50 EPR 9 1 1 13 150 150 ---50 295 ----

Part Numbering

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|----|------|---|-------------------|---|--------------------------|---|-----------------------|------------|------------|-----------|--------|--------|
| NS | 2 | 1 | 2 | G | F | 0 | 2 | С | 7 | F | G | 9 |
| Se | ries | | Operating Mode | Hsg | Coil | Voltage | | Seal Mat'l | Body Mat'l | Pipe Size | Orific | e Size |
| NS | 521 | | 1: N.O. | G: Conduit Y: DIN A: Conduit U: J-Box P Opn Frame | F: F Class H: H Class | 02: 120/60 1 04: 240/60 2 24: 24/60 2 15: 12 V 16: 24 V | 220/50 24/50 DC | C: EPDM | 7: 316 SS | F: 1" | G9 | : 1" |

| Coil Family | | | | | | |
|-------------|------|--|--|--|--|--|
| Туре | Size | | | | | |
| All | S3 | | | | | |

| Frequency (Hz) | 60 | 50 | |
|---------------------|---------|----|----|
| Nominal Power (VA)- | Inrush | 36 | 36 |
| | Holding | 18 | 19 |

NS21 Series



- 1" NPT
- Nylon Body
- 2-Way
- Piloted Diaphragm
- Normally Open

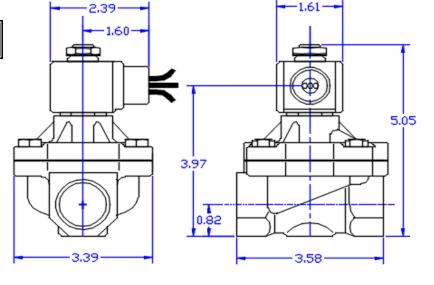


| Materials | Seals: | NSF Approved Ethylene Propylene |
|-----------------------|-----------------------|--|
| | Orifice: | Nylon |
| Electrical | Standard Housing: | Encapsulated Waterproof Conduit (NEMA 4X) |
| | Optional Housings: | Metal Conduit, Explosion-Proof (NEMA 7), Grommet |
| | | Open Frame, Junction Box (single or dual knockouts), |
| | | DIN, Contact GC Valves Customer Svc. For others. |
| | Standard Voltages: | 24, 120, 240, AC, 60 and/or 50 Hz. Available |
| | | 6, 12, 24 DC |
| | | Contact GC Valves Customer Svc. For Additional |
| | | Voltages |
| | Voltage Tolerance: | <u>+</u> 10% of applicable volltage |
| | Coil Classes: | F, H, N |
| | Standard Lead Length: | 24 inches |
| Operating Temperature | Ambient (Nominal): | 32° F to 125° F |
| Mounting | Position: | Upright and Vertical |
| Approvals* | Agency: | NSF/ANSI - 61/ NSF-372/ UR -CSA Recognized |

* Not available for all variations

Dimensions / Weight

| Weight (Lbs.) | |
|---------------|--|
| 1.7 | |



GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

1-P-NS212-1

NS212 - 1" NPT, Nylon Body, Normally Open

Valve Selection List Normally Closed **De-Energized** Energized ax. Fluid Temp. **Operating Pressure Differential (PSI) Orifice Size** Pipe Size Seal Material Power Model Code (120V/60HZ-110V/50HZ) Consumption Minimum Max. Maximum (Watts) Shown Light Oil Air/Gas Water Steam* NPT In. Cv AC DC AC DC AC DC AC DC °F AC DC Nylon Body 5 9 NS212GF02CPFG9 200 150 50 295 EPR 9 1 1 13 150 150 ------50

Part Numbering

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|-----|------|---|-------------------|---|--------------------------|---|---|------------|------------|-----------|--------|--------|
| NS | 2 | 1 | 2 | G | F | 0 | 2 | С | Ρ | F | G | 9 |
| Sei | ries | | Operating Mode | Hsg | Coil | Voltage | | Seal Mat'l | Body Mat'l | Pipe Size | Orific | e Size |
| NS | 521 | | 2: N.O. | G: Conduit Y: DIN A: Conduit U: J-Box P Opn Frame | F: F Class H: H Class | 02: 120/60 110/50 04: 240/60 220/50 24: 24/60 24/50 15: 12 VDC 16: 24 VDC | | C: EPDM | P: Nylon | F: 1" | G9 | : 1" |

| Coil Family | | | | | | |
|-------------|------|--|--|--|--|--|
| Туре | Size | | | | | |
| All | S3 | | | | | |

| Frequency (Hz) | 60 | 50 | |
|--------------------|---------|----|----|
| Nominal Power (VA) | Inrush | 36 | 36 |
| | Holding | 18 | 19 |





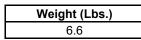
- 1" NPT
- Lead Free Brass Body
- 2-Way Piloted Diaphragm
- Normally Closed

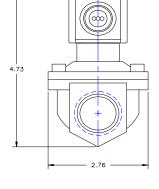


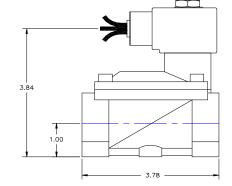
| Materials | Seals: | NSF Approved Ethylene Propylene |
|-----------------------|-----------------------|--|
| | Orifice: | Lead Free Brass |
| Electrical | Standard Housing: | Encapsulated Waterproof Conduit (NEMA 4X) |
| | Optional Housings: | Metal Conduit, Explosion-Proof (NEMA 7), Grommet |
| | | Open Frame, Junction Box (single or dual knockouts), |
| | | DIN, Contact GC Valves Customer Svc. For others. |
| | Standard Voltages: | 24, 120, 240, AC, 60 and/or 50 Hz. Available |
| | | 6, 12, 24 DC |
| | | Contact GC Valves Customer Svc. For Additional |
| | | Voltages |
| | Voltage Tolerance: | <u>+</u> 10% of applicable volltage |
| | Coil Classes: | F, H, N |
| | Standard Lead Length: | 24 inches |
| Operating Temperature | Ambient (Nominal): | 32° F to 125° F |
| Mounting | Position: | Upright and Vertical |
| Approvals* | Agency: | NSF/ANSI - 61/ NSF-372/ UR -CSA Recognized |

* Not available for all variations

Dimensions / Weight

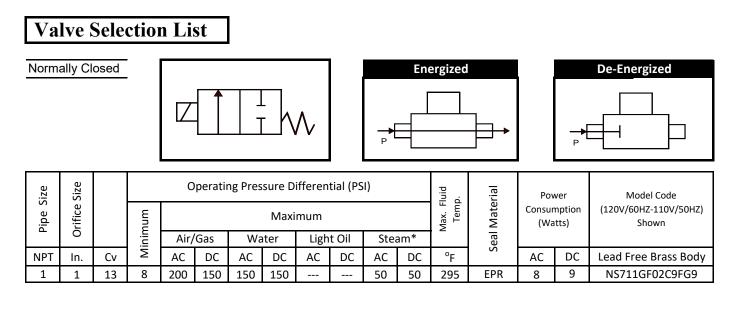






GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

NS711 - 1" NPT, Lead Free Brass Body, Normally Closed



Part Numbering

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | | |
|-----|------|---|-------------------|---|--------------------------|---|---|---------|-----------------------|------------|------------|-----------|--------|--------|
| NS | 7 | 1 | 1 | G | F | 0 | 2 | С | 9 | F | G | 9 | | |
| Sei | ries | | Operating Mode | Hsg | Coil | Voltage | | Voltage | | Seal Mat'l | Body Mat'l | Pipe Size | Orific | e Size |
| NS | 571 | | 1: N.C. | G: Conduit Y: DIN A: Conduit U: J-Box P Opn Frame | F: F Class H: H Class | 02: 120/60 110/50 04: 240/60 220/50 24: 24/60 24/50 15: 12 VDC 16: 24 VDC | | C: EPDM | 9: Brass Lead Free | F: 1" | G9 | : 1" | | |

| Coil Family | | | | | | |
|-------------|------|--|--|--|--|--|
| Туре | Size | | | | | |
| All | S3 | | | | | |

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

NS71 Series

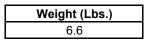


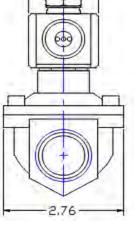
- 1" NPT
- Lead Free Brass Body
- 2-Way Piloted Diaphragm
- Normally Open

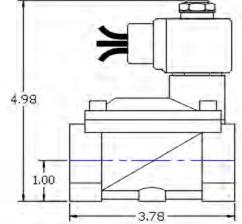


| Materials | Seals: | NSF Approved Ethylene Propylene |
|-----------------------|-----------------------|--|
| | Orifice: | Lead Free Brass |
| Electrical | Standard Housing: | Encapsulated Waterproof Conduit (NEMA 4X) |
| | Optional Housings: | Metal Conduit, Explosion-Proof (NEMA 7), Grommet |
| | | Open Frame, Junction Box (single or dual knockouts), |
| | | DIN, Contact GC Valves Customer Svc. For others. |
| | Standard Voltages: | 24, 120, 240, AC, 60 and/or 50 Hz. Available |
| | | 6, 12, 24 DC |
| | | Contact GC Valves Customer Svc. For Additional |
| | | Voltages |
| | Voltage Tolerance: | <u>+</u> 10% of applicable volltage |
| | Coil Classes: | F, H, N |
| | Standard Lead Length: | 24 inches |
| Operating Temperature | Ambient (Nominal): | 32° F to 125° F |
| Mounting | Position: | Upright and Vertical |
| Approvals* | Agency: | NSF/ANSI - 61/ NSF-372/ UR -CSA Recognized |

Dimensions / Weight







GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

1-B-NS712-1

NS712 - 1" NPT, Lead Free Brass Body, Normally Open

Valve Selection List Normally Open **De-Energized** Energized ax. Fluid Temp. **Operating Pressure Differential (PSI) Orifice Size** Size Seal Material Power Model Code Consumption (120V/60HZ-110V/50HZ) Pipe Minimum Max. Maximum (Watts) Shown Light Oil Air/Gas Steam* Water AC NPT In. Cv AC DC AC DC AC DC DC °F AC DC Lead Free Brass Body 7 9 NS712GF02C9FG9 200 EPR 1 1 13 200 150 150 ------50 50 295 8

Part Numbering

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|-----|------|---|-------------------|---|--------------------------|---|---|------------|-----------------------|-----------|--------|--------|
| NS | 7 | 1 | 2 | G | F | 0 | 2 | С | 9 | F | G | 9 |
| Sei | ries | | Operating Mode | Hsg | Coil | Voltage | | Seal Mat'l | Body Mat'l | Pipe Size | Orific | e Size |
| NS | 571 | | 2: N.O. | G: Conduit Y: DIN A: Conduit U: J-Box P Opn Frame | F: F Class H: H Class | 02: 120/60 110/50 04: 240/60 220/50 24: 24/60 24/50 15: 12 VDC 16: 24 VDC | | C: EPDM | 9: Brass Lead Free | F: 1" | G9 | : 1" |

Coil Data

| Coil Family | | |
|-------------|------|--|
| Туре | Size | |
| All | S3 | |

| Frequency (Hz) | | 60 | 50 |
|--------------------|---------|----|----|
| Nominal Power (VA) | Inrush | 36 | 36 |
| | Holding | 18 | 19 |

GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

NS20 Series



- 1 1/4" NPT
- 316 Stainless Steel Body
- 2-Way Zero Differential Piloted Diaphragm
 Normally Closed

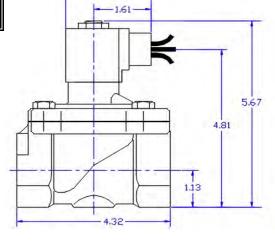


| Materials | Seals: | NSF Approved Ethylene Propylene |
|-----------------------|-----------------------|--|
| | Orifice: | Stainless Steel |
| Electrical | Standard Housing: | Encapsulated Waterproof Conduit (NEMA 4X) |
| | Optional Housings: | Metal Conduit, Explosion-Proof (NEMA 7), Grommet |
| | | Open Frame, Junction Box (single or dual knockouts), |
| | | DIN, Contact GC Valves Customer Svc. For others. |
| | Standard Voltages: | 24, 120, 240, AC, 60 and/or 50 Hz. Available |
| | | 6, 12, 24 DC |
| | | Contact GC Valves Customer Svc. For Additional |
| | | Voltages |
| | Voltage Tolerance: | <u>+</u> 10% of applicable volltage |
| | Coil Classes: | F, H, N |
| | Standard Lead Length: | 24 inches |
| Operating Temperature | Ambient (Nominal): | 32° F to 125° F |
| Mounting | Position: | Upright and Vertical |
| Approvals* | Agency: | NSF/ANSI - 61/ NSF-372/ UR -CSA Recognized |

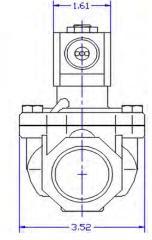
* Not available for all variations

Dimensions / Weight

| Weight (Lbs.) | |
|---------------|--|
| 6.2 | |



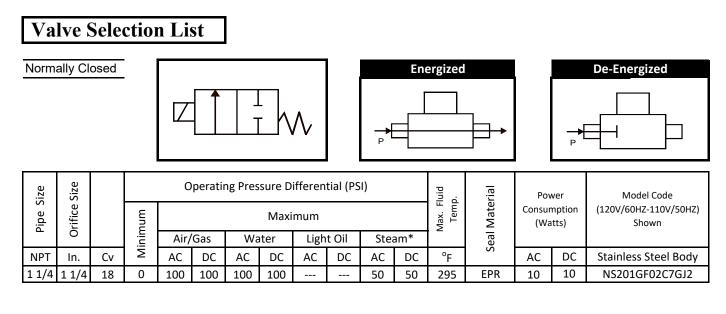
2.40



GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

1.25-S-NS201-1

NS201 - 1 1/4" NPT, Stainless Steel Body, Normally Closed



Part Numbering

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|----|------|---|-------------------|---|--------------------------|---|---|------------|------------|-----------|--------|--------|
| NS | 2 | 0 | 1 | G | F | 0 | 2 | С | 7 | G | J | 2 |
| Se | ries | | Operating Mode | Hsg | Coil | Voltage | 2 | Seal Mat'l | Body Mat'l | Pipe Size | Orific | e Size |
| NS | 520 | | 1: N.C. | G: Conduit Y: DIN A: Conduit U: J-Box P Opn Frame | F: F Class H: H Class | 02: 120/60 110/50 04: 240/60 220/50 24: 24/60 24/50 15: 12 VDC 16: 24 VDC | | C: EPDM | 7: 316 SS | G: 1 1/4" | J2: 1 | . 1/4" |

| Coil Family | | | | |
|-------------|--|--|--|--|
| Type Size | | | | |
| All S4 | | | | |

| Frequency (Hz) | 60 | 50 | |
|---------------------|---------|----|----|
| Nominal Dower ()(A) | Inrush | 46 | 46 |
| Nominal Power (VA) | Holding | 18 | 19 |





- 1 1/4" NPT
- 316 Stainless Steel Body
- 2-Way Piloted Diaphragm
- Normally Closed

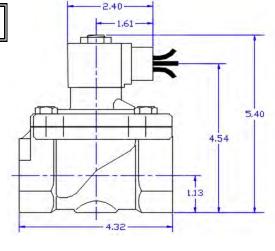


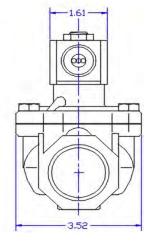
| Materials | Seals: | NSF Approved Ethylene Propylene | |
|-----------------------|-----------------------|--|--|
| | Orifice: | Stainless Steel | |
| Electrical | Standard Housing: | Encapsulated Waterproof Conduit (NEMA 4X) | |
| | Optional Housings: | Metal Conduit, Explosion-Proof (NEMA 7), Grommet | |
| | | Open Frame, Junction Box (single or dual knockouts), | |
| | | DIN, Contact GC Valves Customer Svc. For others. | |
| | Standard Voltages: | 24, 120, 240, AC, 60 and/or 50 Hz. Available | |
| | 6, 12, 24 DC | | |
| | | Contact GC Valves Customer Svc. For Additional | |
| | | Voltages | |
| | Voltage Tolerance: | <u>+</u> 10% of applicable volltage | |
| | Coil Classes: | F, H, N | |
| | Standard Lead Length: | 24 inches | |
| Operating Temperature | Ambient (Nominal): | 32° F to 125° F | |
| Mounting | Position: | Upright and Vertical | |
| Approvals* | Agency: | NSF/ANSI - 61/ NSF-372/ UR -CSA Recognized | |

* Not available for all variations

Dimensions / Weight

| Weight (Lbs.) | |
|---------------|--|
| 6.1 | |

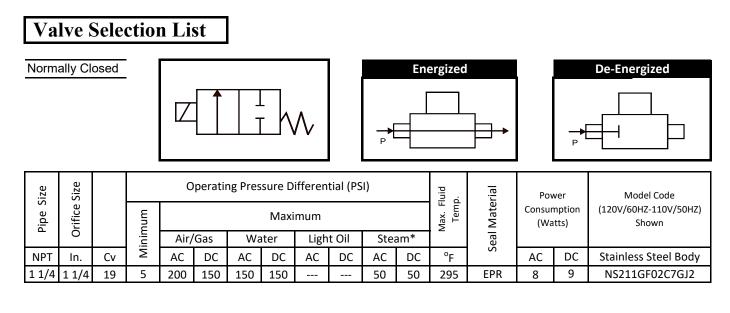




GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

1.25-S-NS211-1

NS211 - 1 1/4" NPT, Stainless Steel Body, Normally Closed



Part Numbering

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|-----|------|---|-------------------|---|--------------------------|---|---|------------|------------|-----------|--------|--------|
| NS | 2 | 1 | 1 | G | F | 0 | 2 | С | 7 | G | J | 2 |
| Sei | ries | | Operating Mode | Hsg | Coil | Voltage | 5 | Seal Mat'l | Body Mat'l | Pipe Size | Orific | e Size |
| NS | 521 | | 1: N.C. | G: Conduit Y: DIN A: Conduit U: J-Box P Opn Frame | F: F Class H: H Class | 02: 120/60 110/50 04: 240/60 220/50 24: 24/60 24/50 15: 12 VDC 16: 24 VDC | | C: EPDM | 7: 316 SS | G: 1 1/4" | J2: 1 | . 1/4" |

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

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

NS21 Series



- 1 1/4" NPT
- 316 Stainless Steel Body
- 2-Way Piloted Diaphragm
- Normally Open

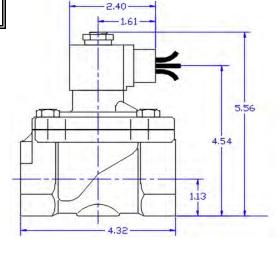


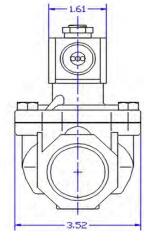
| Materials | Seals: | NSF Approved Ethylene Propylene |
|-----------------------|-----------------------|--|
| | Orifice: | Stainless Steel |
| Electrical | Standard Housing: | Encapsulated Waterproof Conduit (NEMA 4X) |
| | Optional Housings: | Metal Conduit, Explosion-Proof (NEMA 7), Grommet |
| | | Open Frame, Junction Box (single or dual knockouts), |
| | | DIN, Contact GC Valves Customer Svc. For others. |
| | Standard Voltages: | 24, 120, 240, AC, 60 and/or 50 Hz. Available |
| | | 6, 12, 24 DC |
| | | Contact GC Valves Customer Svc. For Additional |
| | | Voltages |
| | Voltage Tolerance: | <u>+</u> 10% of applicable volltage |
| | Coil Classes: | F, H, N |
| | Standard Lead Length: | 24 inches |
| Operating Temperature | Ambient (Nominal): | 32° F to 125° F |
| Mounting | Position: | Upright and Vertical |
| Approvals* | Agency: | NSF/ANSI - 61/ NSF-372/ UR -CSA Recognized |

* Not available for all variations

Dimensions / Weight

| Weight (Lbs.) | |
|---------------|--|
| 6.1 | |

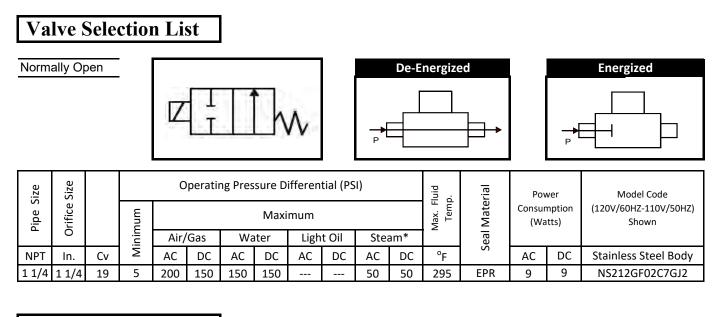




GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

1.25-S-NS212-1

NS212 - 1 1/4" NPT, Stainless Steel Body, Normally Open



Part Numbering

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|-----|------|---|-------------------|---|--------------------------|---|-----------------------|------------|------------|-----------|--------|--------|
| NS | 2 | 1 | 2 | G | F | 0 | 2 | С | 7 | G | J | 2 |
| Sei | ries | | Operating Mode | Hsg | Coil | Voltage | 5 | Seal Mat'l | Body Mat'l | Pipe Size | Orific | e Size |
| NS | 521 | | 1: N.O. | G: Conduit Y: DIN A: Conduit U: J-Box P Opn Frame | F: F Class H: H Class | 02: 120/60 1 04: 240/60 2 24: 24/60 2 15: 12 VI 16: 24 VI | 220/50 24/50 DC | C: EPDM | 7: 316 SS | G: 1 1/4" | J2: 1 | . 1/4" |

| Coil Family | | | | | | |
|-------------|------|--|--|--|--|--|
| Туре | Size | | | | | |
| All | S3 | | | | | |

| Frequency (Hz) | 60 | 50 | |
|---------------------|---------|----|----|
| Nominal Power ()(A) | Inrush | 36 | 36 |
| Nominal Power (VA) | Holding | 18 | 19 |





- 1 1/4" NPT
- Lead Free Brass Body
- 2-Way Piloted Diaphragm
- Normally Closed

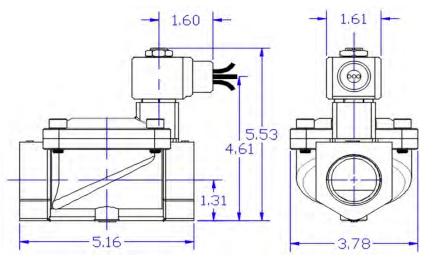


| Materials | Seals: | NSF Approved Ethylene Propylene | | | | | |
|-----------------------|-----------------------|--|--|--|--|--|--|
| | Orifice: | Lead Free Brass | | | | | |
| Electrical | Standard Housing: | Encapsulated Waterproof Conduit (NEMA 4X) | | | | | |
| | Optional Housings: | Metal Conduit, Explosion-Proof (NEMA 7), Grommet | | | | | |
| | | Open Frame, Junction Box (single or dual knockouts), | | | | | |
| | | DIN, Contact GC Valves Customer Svc. For others. | | | | | |
| | Standard Voltages: | 24, 120, 240, AC, 60 and/or 50 Hz. Available | | | | | |
| | | 6, 12, 24 DC | | | | | |
| | | Contact GC Valves Customer Svc. For Additional | | | | | |
| | | Voltages | | | | | |
| | Voltage Tolerance: | <u>+</u> 10% of applicable volltage | | | | | |
| | Coil Classes: | F, H, N | | | | | |
| | Standard Lead Length: | 24 inches | | | | | |
| Operating Temperature | Ambient (Nominal): | 32° F to 125° F | | | | | |
| Mounting | Position: | Upright and Vertical | | | | | |
| Approvals* | Agency: | NSF/ANSI - 61/ NSF-372/ UR -CSA Recognized | | | | | |

* Not available for all variations

Dimensions / Weight

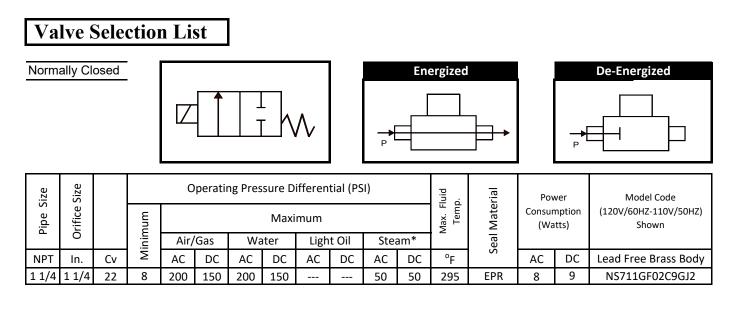
| Weight (Lbs.) |
|---------------|
| 6.2 |



GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

1-1-4-B-NS711-1

NS711 - 1 1/4" NPT, Lead Free Brass Body, Normally Closed



Part Numbering

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|-----|------|---|-------------------|---|--------------------------|---|---------------------|------------|-----------------------|-----------|--------|--------|
| NS | 7 | 1 | 1 | G | F | 0 | 2 | С | 9 | G | J | 2 |
| Sei | ries | | Operating Mode | Hsg | Coil | Voltage | 5 | Seal Mat'l | Body Mat'l | Pipe Size | Orific | e Size |
| NS | 571 | | 1: N.C. | G: Conduit Y: DIN A: Conduit U: J-Box P Opn Frame | F: F Class H: H Class | 02: 120/60 1 04: 240/60 2 24: 24/60 2 15: 12 VI 16: 24 VI | 20/50 4/50 DC | C: EPDM | 9: Lead Free Brass | G: 1 1/4" | J2: 1 | . 1/4" |

| Coil Family | | | | | | |
|-------------|------|--|--|--|--|--|
| Туре | Size | | | | | |
| All | S3 | | | | | |

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

NS71 Series



- 1 1/4" NPT
- Lead Free Brass Body
- 2-Way Piloted Diaphragm
- Normally Open

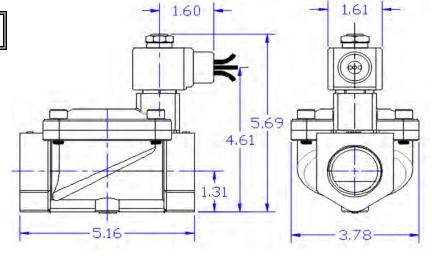


| Materials | Seals: | NSF Approved Ethylene Propylene | | | | |
|-----------------------|-----------------------|--|--|--|--|--|
| | Orifice: | Lead Free Brass | | | | |
| Electrical | Standard Housing: | Encapsulated Waterproof Conduit (NEMA 4X) | | | | |
| | Optional Housings: | Metal Conduit, Explosion-Proof (NEMA 7), Grommet | | | | |
| | | Open Frame, Junction Box (single or dual knockouts), | | | | |
| | | DIN, Contact GC Valves Customer Svc. For others. | | | | |
| | Standard Voltages: | 24, 120, 240, AC, 60 and/or 50 Hz. Available | | | | |
| | | 6, 12, 24 DC Contact GC Valves Customer Svc. For Additional | | | | |
| | | | | | | |
| | | Voltages | | | | |
| | Voltage Tolerance: | <u>+</u> 10% of applicable volltage | | | | |
| | Coil Classes: | F, H, N | | | | |
| | Standard Lead Length: | 24 inches | | | | |
| Operating Temperature | Ambient (Nominal): | 32° F to 125° F | | | | |
| Mounting | Position: | Upright and Vertical | | | | |
| Approvals* | Agency: | NSF/ANSI - 61/ NSF-372/ UR -CSA Recognized | | | | |

* Not available for all variations

Dimensions / Weight

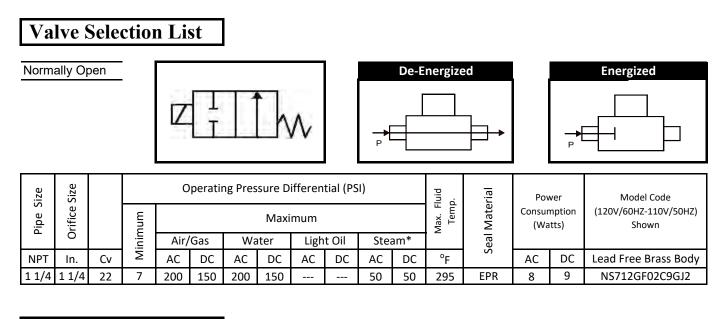
| Weight (Lbs.) | |
|---------------|--|
| 6.2 | |



GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

1-1-4-B-NS712-1

NS712 - 1 1/4" NPT, Lead Free Brass Body, Normally Open



Part Numbering

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|-----|------|---|-------------------|---|--------------------------|---|---------------------|------------|-----------------------|-----------|--------|--------|
| NS | 7 | 1 | 2 | G | F | 0 | 2 | С | 9 | G | J | 2 |
| Sei | ries | | Operating Mode | Hsg | Coil | Voltage | 5 | Seal Mat'l | Body Mat'l | Pipe Size | Orific | e Size |
| NS | 571 | | 2: N.O. | G: Conduit Y: DIN A: Conduit U: J-Box P Opn Frame | F: F Class H: H Class | 02: 120/60 1 04: 240/60 2 24: 24/60 2 15: 12 VI 16: 24 VI | 20/50 4/50 DC | C: EPDM | 9: Lead Free Brass | G: 1 1/4" | J2: 1 | . 1/4" |

Coil Data

| Coil Family | | | | | | |
|-------------|------|--|--|--|--|--|
| Туре | Size | | | | | |
| All | S3 | | | | | |

| Frequency (Hz) | 60 | 50 | |
|---------------------|---------|----|----|
| Nominal Dowor ()(A) | Inrush | 36 | 36 |
| Nominal Power (VA) | Holding | 18 | 19 |

GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

NS20 Series



- 1 1/2" NPT

- 316 Stainless Steel Body
- 2-Way Zero Differential Piloted Diaphragm
 Normally Closed

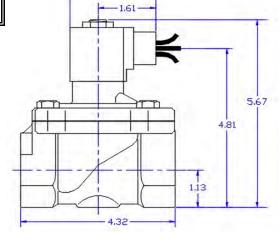


| Materials | Seals: | NSF Approved Ethylene Propylene |
|-----------------------|-----------------------|--|
| | Orifice: | Stainless Steel |
| Electrical | Standard Housing: | Encapsulated Waterproof Conduit (NEMA 4X) |
| | Optional Housings: | Metal Conduit, Explosion-Proof (NEMA 7), Grommet |
| | | Open Frame, Junction Box (single or dual knockouts), |
| | | DIN, Contact GC Valves Customer Svc. For others. |
| | Standard Voltages: | 24, 120, 240, AC, 60 and/or 50 Hz. Available |
| | | 6, 12, 24 DC |
| | | Contact GC Valves Customer Svc. For Additional |
| | | Voltages |
| | Voltage Tolerance: | <u>+</u> 10% of applicable volltage |
| | Coil Classes: | F, H, N |
| | Standard Lead Length: | 24 inches |
| Operating Temperature | Ambient (Nominal): | 32° F to 125° F |
| Mounting | Position: | Upright and Vertical |
| Approvals* | Agency: | NSF/ANSI - 61/ NSF-372/ UR -CSA Recognized |

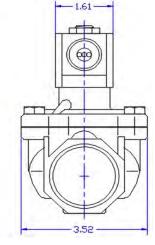
* Not available for all variations

Dimensions / Weight

| Weight (Lbs.) | |
|---------------|--|
| 6.1 | |



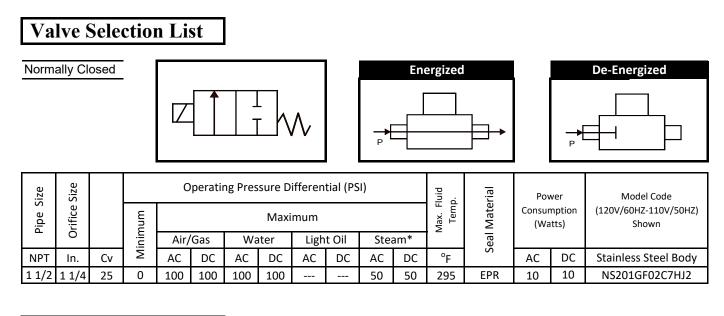
2.40



GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

1.5-S-NS201-1

NS201 - 1 1/2" NPT, Stainless Steel Body, Normally Closed



Part Numbering

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|----|------|---|-------------------|---|--------------------------|---|-----------------------|------------|------------|-----------|--------|--------|
| NS | 2 | 0 | 1 | G | F | 0 | 2 | С | 7 | Η | J | 2 |
| Se | ries | | Operating Mode | Hsg | Coil | Voltage | 2 | Seal Mat'l | Body Mat'l | Pipe Size | Orific | e Size |
| NS | 520 | | 1: N.C. | G: Conduit Y: DIN A: Conduit U: J-Box P Opn Frame | F: F Class H: H Class | 02: 120/60 1 04: 240/60 2 24: 24/60 2 15: 12 V 16: 24 V | 220/50 24/50 DC | C: EPDM | 7: 316 SS | H: 1 1/2" | J2: 1 | . 1/4" |

| Coil Family | | | |
|-------------|----|--|--|
| Type Size | | | |
| All | S4 | | |

| Frequency (Hz) | 60 | 50 | |
|---------------------|---------|----|----|
| Nominal Dowor ()(A) | Inrush | 46 | 46 |
| Nominal Power (VA) | Holding | 18 | 19 |

NS21 Series



- 1 1/2" NPT
- 316 Stainless Steel Body
- 2-Way Piloted Diaphragm
- Normally Closed

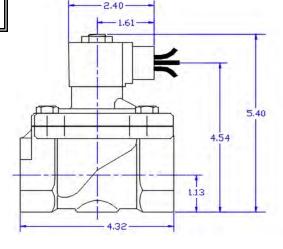


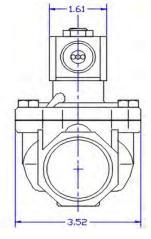
| Materials | Seals: | NSF Approved Ethylene Propylene | | |
|-----------------------|-----------------------|--|--|--|
| | Orifice: | Stainless Steel | | |
| Electrical | Standard Housing: | Encapsulated Waterproof Conduit (NEMA 4X) | | |
| | Optional Housings: | Metal Conduit, Explosion-Proof (NEMA 7), Grommet | | |
| | | Open Frame, Junction Box (single or dual knockouts), | | |
| | | DIN, Contact GC Valves Customer Svc. For others. | | |
| | Standard Voltages: | 24, 120, 240, AC, 60 and/or 50 Hz. Available | | |
| | | 6, 12, 24 DC | | |
| | | Contact GC Valves Customer Svc. For Additional | | |
| | | Voltages | | |
| | Voltage Tolerance: | <u>+</u> 10% of applicable volltage | | |
| | Coil Classes: | F, H, N | | |
| | Standard Lead Length: | 24 inches | | |
| Operating Temperature | Ambient (Nominal): | 32° F to 125° F | | |
| Mounting | Position: | Upright and Vertical | | |
| Approvals* | Agency: | NSF/ANSI - 61/ NSF-372/ UR -CSA Recognized | | |

* Not available for all variations

Dimensions / Weight

| Weight (Lbs.) | |
|---------------|--|
| 6.0 | |

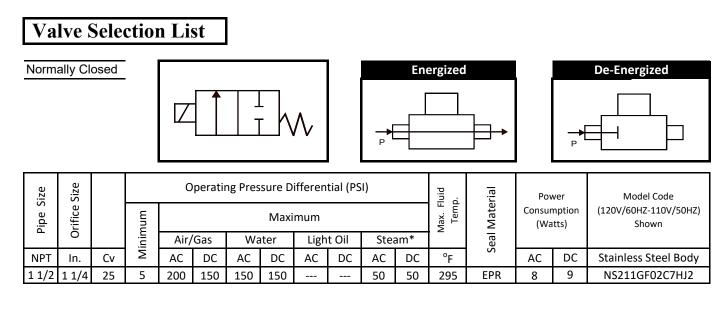




GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

1.5-S-NS211-1

NS211 - 1 1/2" NPT, Stainless Steel Body, Normally Closed



Part Numbering

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|-----|------|---|-------------------|---|--------------------------|---|---------------------|------------|------------|-----------|--------|--------|
| NS | 2 | 1 | 1 | G | F | 0 | 2 | С | 7 | Η | J | 2 |
| Sei | ries | | Operating Mode | Hsg | Coil | Voltage | 5 | Seal Mat'l | Body Mat'l | Pipe Size | Orific | e Size |
| NS | 521 | | 1: N.C. | G: Conduit Y: DIN A: Conduit U: J-Box P Opn Frame | F: F Class H: H Class | 02: 120/60 1 04: 240/60 2 24: 24/60 2 15: 12 VI 16: 24 VI | 20/50 4/50 DC | C: EPDM | 7: 316 SS | H: 1 1/2" | J2: 1 | . 1/4" |

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

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

NS21 Series



- 1 1/2" NPT
- 316 Stainless Steel Body
- 2-Way Piloted Diaphragm
- Normally Open

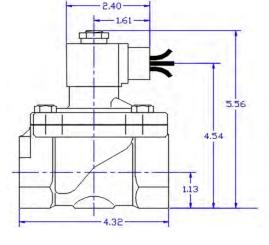


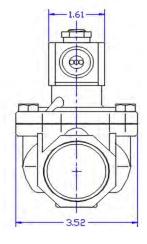
| Materials | Seals: | NSF Approved Ethylene Propylene | |
|-----------------------|-----------------------|--|--|
| | Orifice: | Stainless Steel | |
| Electrical | Standard Housing: | Encapsulated Waterproof Conduit (NEMA 4X) | |
| | Optional Housings: | Metal Conduit, Explosion-Proof (NEMA 7), Grommet | |
| | | Open Frame, Junction Box (single or dual knockouts), | |
| | | DIN, Contact GC Valves Customer Svc. For others. | |
| | Standard Voltages: | 24, 120, 240, AC, 60 and/or 50 Hz. Available | |
| | | 6, 12, 24 DC | |
| | | Contact GC Valves Customer Svc. For Additional | |
| | | Voltages | |
| | Voltage Tolerance: | <u>+</u> 10% of applicable volltage | |
| | Coil Classes: | F, H, N | |
| | Standard Lead Length: | 24 inches | |
| Operating Temperature | Ambient (Nominal): | 32° F to 125° F | |
| Mounting | Position: | Upright and Vertical | |
| Approvals* | Agency: | NSF/ANSI - 61/ NSF-372/ UR -CSA Recognized | |

* Not available for all variations

Dimensions / Weight

| Weight (Lbs.) | |
|---------------|--|
| 6.0 | |

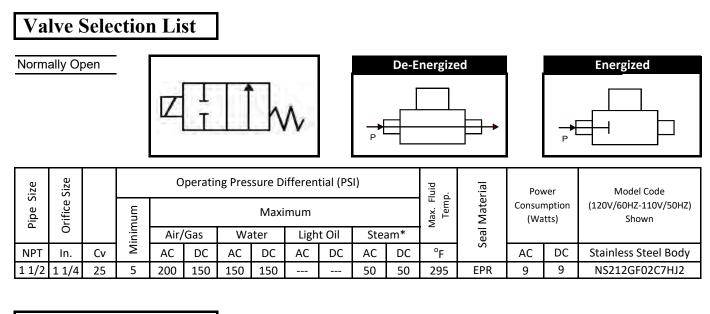




GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

1.5-S-NS212-1

NS212 - 1 1/2" NPT, Stainless Steel Body, Normally Open



Part Numbering

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | | |
|-----|------|---|-------------------|---|--------------------------|---|---|---------|-----------|------------|------------|-----------|--------|--------|
| NS | 2 | 1 | 2 | G | F | 0 | 2 | С | 7 | Η | J | 2 | | |
| Sei | ries | | Operating Mode | Hsg | Coil | Voltage | | Voltage | | Seal Mat'l | Body Mat'l | Pipe Size | Orific | e Size |
| NS | 521 | | 1: N.O. | G: Conduit Y: DIN A: Conduit U: J-Box P Opn Frame | F: F Class H: H Class | 02: 120/60 110/50 04: 240/60 220/50 24: 24/60 24/50 15: 12 VDC 16: 24 VDC | | C: EPDM | 7: 316 SS | H: 1 1/2" | J2: 1 | . 1/4" | | |

| Coil Family | | | | | | |
|-------------|------|--|--|--|--|--|
| Туре | Size | | | | | |
| All | S3 | | | | | |

| Frequency (Hz) | 60 | 50 | |
|--------------------|---------|----|----|
| Nominal Power (VA) | Inrush | 36 | 36 |
| Nominal Power (VA) | Holding | 18 | 19 |





- 1 1/2" NPT
- Lead Free Brass Body
- 2-Way Piloted Diaphragm
- Normally Closed

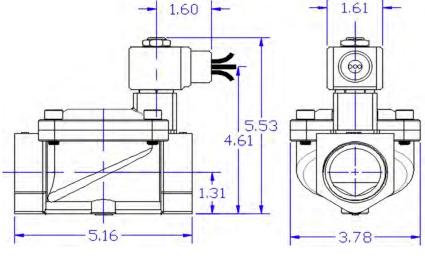


| Materials | Seals: | NSF Approved Ethylene Propylene | | | | |
|-----------------------|-----------------------|--|--|--|--|--|
| | Orifice: | Lead Free Brass | | | | |
| Electrical | Standard Housing: | Encapsulated Waterproof Conduit (NEMA 4X) | | | | |
| | Optional Housings: | Metal Conduit, Explosion-Proof (NEMA 7), Grommet | | | | |
| | | Open Frame, Junction Box (single or dual knockouts), | | | | |
| | | DIN, Contact GC Valves Customer Svc. For others. | | | | |
| | Standard Voltages: | 24, 120, 240, AC, 60 and/or 50 Hz. Available | | | | |
| | | 6, 12, 24 DC | | | | |
| | | Contact GC Valves Customer Svc. For Additional | | | | |
| | | Voltages | | | | |
| | Voltage Tolerance: | <u>+</u> 10% of applicable volltage | | | | |
| | Coil Classes: | F, H, N | | | | |
| | Standard Lead Length: | 24 inches | | | | |
| Operating Temperature | Ambient (Nominal): | 32° F to 125° F | | | | |
| Mounting | Position: | Upright and Vertical | | | | |
| Approvals* | Agency: | NSF/ANSI - 61/ NSF-372/ UR -CSA Recognized | | | | |

* Not available for all variations

Dimensions / Weight

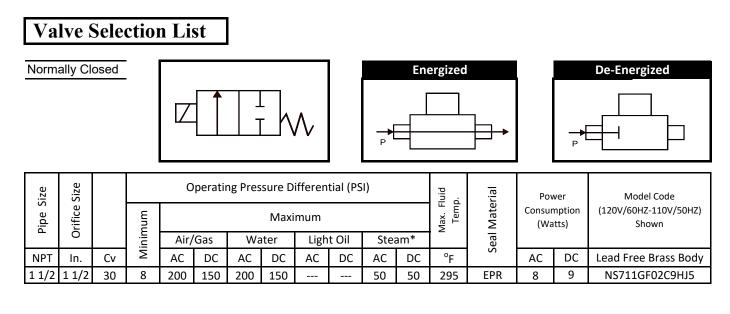
| Weight (Lbs.) |
|---------------|
| 6 |



GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

1-1-2-B-NS711-1

NS711 - 1 1/2" NPT, Lead Free Brass Body, Normally Closed



Part Numbering

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | | |
|-----|------|---|-------------------|---|--------------------------|---|---|---------|-----------------------|------------|------------|-----------|--------|--------|
| NS | 7 | 1 | 1 | G | F | 0 | 2 | С | 9 | Η | J | 5 | | |
| Sei | ries | | Operating Mode | Hsg | Coil | Voltage | | Voltage | | Seal Mat'l | Body Mat'l | Pipe Size | Orific | e Size |
| NS | 571 | | 1: N.C. | G: Conduit Y: DIN A: Conduit U: J-Box P Opn Frame | F: F Class H: H Class | 02: 120/60 110/50 04: 240/60 220/50 24: 24/60 24/50 15: 12 VDC 16: 24 VDC | | C: EPDM | 9: Lead Free Brass | H: 1 1/2" | J5: 1 | 1/2" | | |

| Coil Family | | | | | | |
|-------------|------|--|--|--|--|--|
| Туре | Size | | | | | |
| All | S3 | | | | | |

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

NS71 Series



- 1 1/2" NPT
- Lead Free Brass Body
- 2-Way Piloted Diaphragm
- Normally Open

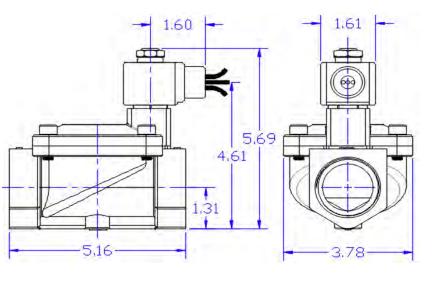


| Materials | Seals: | NSF Approved Ethylene Propylene |
|-----------------------|-----------------------|--|
| iviale riais | | |
| | Orifice: | Lead Free Brass |
| Electrical | Standard Housing: | Encapsulated Waterproof Conduit (NEMA 4X) |
| | Optional Housings: | Metal Conduit, Explosion-Proof (NEMA 7), Grommet |
| | | Open Frame, Junction Box (single or dual knockouts), |
| | | DIN, Contact GC Valves Customer Svc. For others. |
| | Standard Voltages: | 24, 120, 240, AC, 60 and/or 50 Hz. Available |
| | | 6, 12, 24 DC |
| | | Contact GC Valves Customer Svc. For Additional |
| | | Voltages |
| | Voltage Tolerance: | <u>+</u> 10% of applicable volltage |
| | Coil Classes: | F, H, N |
| | Standard Lead Length: | 24 inches |
| Operating Temperature | Ambient (Nominal): | 32° F to 125° F |
| Mounting | Position: | Upright and Vertical |
| Approvals* | Agency: | NSF/ANSI - 61/ NSF-372/ UR -CSA Recognized |

* Not available for all variations

Dimensions / Weight

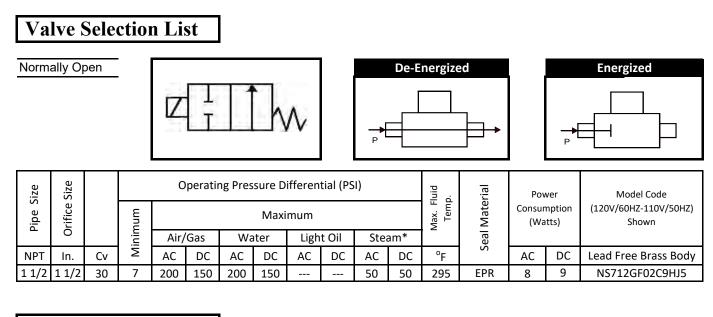
| Weight (Lbs.) | |
|---------------|--|
| 6 | |



GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

1-1-2-B-NS712-1

NS712 - 1 1/2" NPT, Lead Free Brass Body, Normally Open



Part Numbering

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | | |
|-----|------|---|-------------------|---|--------------------------|---|---|---------|-----------------------|------------|------------|-----------|--------|--------|
| NS | 7 | 1 | 2 | G | F | 0 | 2 | С | 9 | Η | J | 5 | | |
| Sei | ries | | Operating Mode | Hsg | Coil | Voltage | | Voltage | | Seal Mat'l | Body Mat'l | Pipe Size | Orific | e Size |
| NS | 571 | | 2: N.O. | G: Conduit Y: DIN A: Conduit U: J-Box P Opn Frame | F: F Class H: H Class | 02: 120/60 110/50 04: 240/60 220/50 24: 24/60 24/50 15: 12 VDC 16: 24 VDC | | C: EPDM | 9: Lead Free Brass | H: 1 1/2" | J5: 1 | . 1/2" | | |

Coil Data

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

| Frequency (Hz) | 60 | 50 | |
|--------------------|---------|----|----|
| | Inrush | 36 | 36 |
| Nominal Power (VA) | Holding | 18 | 19 |

GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

NS21 Series



- 2" NPT
- 316 Stainless Steel Body
- 2-Way Piloted Diaphragm
- Normally Closed

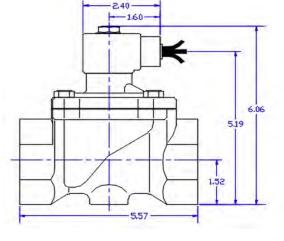


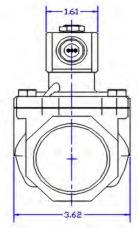
| Materials | Seals: | NSF Approved Ethylene Propylene |
|-----------------------|-----------------------|--|
| | Orifice: | Stainless Steel |
| Electrical | Standard Housing: | Encapsulated Waterproof Conduit (NEMA 4X) |
| | Optional Housings: | Metal Conduit, Explosion-Proof (NEMA 7), Grommet |
| | | Open Frame, Junction Box (single or dual knockouts), |
| | | DIN, Contact GC Valves Customer Svc. For others. |
| | Standard Voltages: | 24, 120, 240, AC, 60 and/or 50 Hz. Available |
| | | 6, 12, 24 DC |
| | | Contact GC Valves Customer Svc. For Additional |
| | | Voltages |
| | Voltage Tolerance: | <u>+</u> 10% of applicable volltage |
| | Coil Classes: | F, H, N |
| | Standard Lead Length: | 24 inches |
| Operating Temperature | Ambient (Nominal): | 32° F to 125° F |
| Mounting | Position: | Upright and Vertical |
| Approvals* | Agency: | NSF/ANSI - 61/ NSF-372/ UR -CSA Recognized |

* Not available for all variations

Dimensions / Weight

| Weight (Lbs.) | |
|---------------|--|
| 9.0 | |

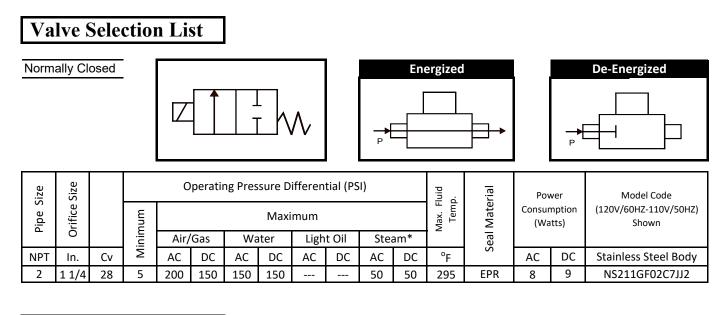




GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

2-S-NS211-1

NS211 - 2" NPT, Stainless Steel Body, Normally Closed



Part Numbering

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|-----|------|---|-------------------|---|--------------------------|---|---------------------|------------|------------|-----------|--------|--------|
| NS | 2 | 1 | 1 | G | F | 0 | 2 | С | 7 | J | J | 2 |
| Sei | ries | | Operating Mode | Hsg | Coil | Voltage | 5 | Seal Mat'l | Body Mat'l | Pipe Size | Orific | e Size |
| NS | 521 | | 1: N.C. | G: Conduit Y: DIN A: Conduit U: J-Box P Opn Frame | F: F Class H: H Class | 02: 120/60 1 04: 240/60 2 24: 24/60 2 15: 12 V 16: 24 V | 20/50 4/50 DC | C: EPDM | 7: 316 SS | J: 2" | J2: 1 | . 1/4" |

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

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

NS21 Series



- 2" NPT
- 316 Stainless Steel Body
- 2-Way Piloted Diaphragm
- Normally Open

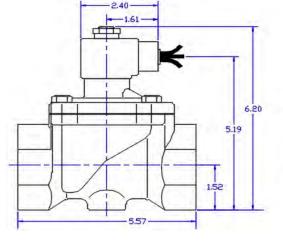


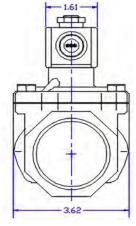
| Materials | Seals: | NSF Approved Ethylene Propylene |
|-----------------------|-----------------------|--|
| | Orifice: | Stainless Steel |
| Electrical | Standard Housing: | Encapsulated Waterproof Conduit (NEMA 4X) |
| | Optional Housings: | Metal Conduit, Explosion-Proof (NEMA 7), Grommet |
| | | Open Frame, Junction Box (single or dual knockouts), |
| | | DIN, Contact GC Valves Customer Svc. For others. |
| | Standard Voltages: | 24, 120, 240, AC, 60 and/or 50 Hz. Available |
| | | 6, 12, 24 DC |
| | | Contact GC Valves Customer Svc. For Additional |
| | | Voltages |
| | Voltage Tolerance: | <u>+</u> 10% of applicable volltage |
| | Coil Classes: | F, H, N |
| | Standard Lead Length: | 24 inches |
| Operating Temperature | Ambient (Nominal): | 32° F to 125° F |
| Mounting | Position: | Upright and Vertical |
| Approvals* | Agency: | NSF/ANSI - 61/ NSF-372/ UR -CSA Recognized |

* Not available for all variations

Dimensions / Weight

| Weight (Lbs.) | |
|---------------|--|
| 9.0 | |





GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

2-S-NS212-1

NS212 - 2" NPT, Stainless Steel Body, Normally Open

Valve Selection List Normally Open **De-Energized** Energized ax. Fluid Temp. **Operating Pressure Differential (PSI) Orifice Size** Pipe Size Seal Material Power Model Code Consumption (120V/60HZ-110V/50HZ) Minimum Max. Maximum (Watts) Shown Air/Gas Water Light Oil Steam* NPT In. Cv AC DC AC DC AC DC AC DC °F AC DC Stainless Steel Body 5 EPR 9 NS212GF02C7JJ2 2 200 150 50 295 9 1 1/4 28 150 150 -------50

Part Numbering

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|-----|------|---|-------------------|---|--------------------------|---|-----------------------|------------|------------|-----------|--------|--------|
| NS | 2 | 1 | 2 | G | F | 0 | 2 | С | 7 | J | J | 2 |
| Sei | ries | | Operating Mode | Hsg | Coil | Voltage | 9 | Seal Mat'l | Body Mat'l | Pipe Size | Orific | e Size |
| NS | 521 | | 1: N.O. | G: Conduit Y: DIN A: Conduit U: J-Box P Opn Frame | F: F Class H: H Class | 02: 120/60 1 04: 240/60 2 24: 24/60 2 15: 12 V 16: 24 V | 220/50 24/50 DC | C: EPDM | 7: 316 SS | J: 2" | J2: 1 | . 1/4" |

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

| Frequency (Hz) | 60 | 50 | |
|--------------------|---------|----|----|
| Nominal Power (VA) | Inrush | 36 | 36 |
| Nominal Power (VA) | Holding | 18 | 19 |





- 2" NPT
- Lead Free Brass Body
- 2-Way Piloted Diaphragm
- Normally Closed

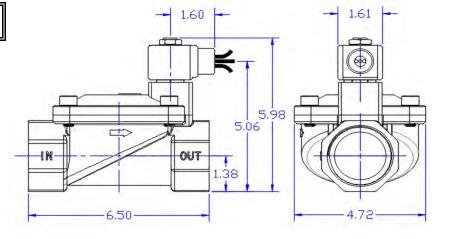


| Materials | Seals: | NSF Approved Ethylene Propylene | | |
|-----------------------|-----------------------|--|--|--|
| | Orifice: | Lead Free Brass | | |
| Electrical | Standard Housing: | Encapsulated Waterproof Conduit (NEMA 4X) | | |
| | Optional Housings: | Metal Conduit, Explosion-Proof (NEMA 7), Grommet | | |
| | | Open Frame, Junction Box (single or dual knockouts), | | |
| | | DIN, Contact GC Valves Customer Svc. For others. | | |
| | Standard Voltages: | 24, 120, 240, AC, 60 and/or 50 Hz. Available | | |
| | | 6, 12, 24 DC Contact GC Valves Customer Svc. For Additional | | |
| | | | | |
| | | Voltages | | |
| | Voltage Tolerance: | <u>+</u> 10% of applicable volltage | | |
| | Coil Classes: | F, H, N | | |
| | Standard Lead Length: | 24 inches | | |
| Operating Temperature | Ambient (Nominal): | 32° F to 125° F | | |
| Mounting | Position: | Upright and Vertical | | |
| Approvals* | Agency: | NSF/ANSI - 61/ NSF-372/ UR -CSA Recognized | | |

* Not available for all variations

Dimensions / Weight

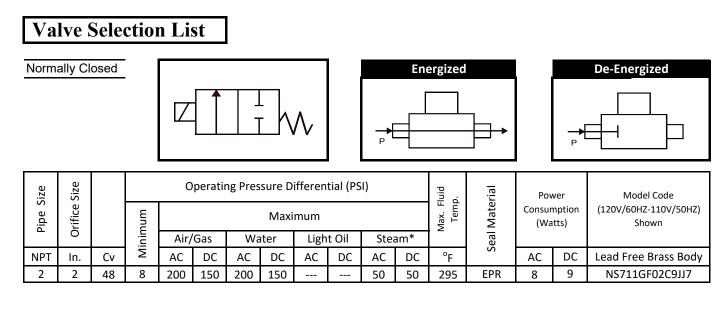
| Weight (Lbs.) | |
|---------------|--|
| 8.8 | |



GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

2-B-NS711-1

NS711 - 2" NPT, Lead Free Brass Body, Normally Closed



Part Numbering

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|----|------|---|-------------------|---|--------------------------|---|---------------------|------------|-----------------------|-----------|--------|--------|
| NS | 7 | 1 | 1 | G | F | 0 | 2 | С | 9 | J | J | 7 |
| Se | ries | | Operating Mode | Hsg | Coil | Voltage | 5 | Seal Mat'l | Body Mat'l | Pipe Size | Orific | e Size |
| NS | 571 | | 1: N.C. | G: Conduit Y: DIN A: Conduit U: J-Box P Opn Frame | F: F Class H: H Class | 02: 120/60 1 04: 240/60 2 24: 24/60 2 15: 12 V 16: 24 V | 20/50 4/50 DC | C: EPDM | 9: Lead Free Brass | J: 2" | J7 | : 2" |

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

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





- 2" NPT
- Lead Free Brass Body
- 2-Way Piloted Diaphragm
- Normally Open

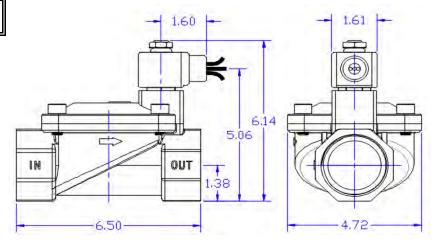


| Materials | Seals: | NSF Approved Ethylene Propylene |
|-----------------------|-----------------------|--|
| | Orifice: | Lead Free Brass |
| Electrical | Standard Housing: | Encapsulated Waterproof Conduit (NEMA 4X) |
| | Optional Housings: | Metal Conduit, Explosion-Proof (NEMA 7), Grommet |
| | | Open Frame, Junction Box (single or dual knockouts), |
| | | DIN, Contact GC Valves Customer Svc. For others. |
| | Standard Voltages: | 24, 120, 240, AC, 60 and/or 50 Hz. Available |
| | | 6, 12, 24 DC |
| | | Contact GC Valves Customer Svc. For Additional |
| | | Voltages |
| | Voltage Tolerance: | <u>+</u> 10% of applicable volltage |
| | Coil Classes: | F, H, N |
| | Standard Lead Length: | 24 inches |
| Operating Temperature | Ambient (Nominal): | 32° F to 125° F |
| Mounting | Position: | Upright and Vertical |
| Approvals* | Agency: | NSF/ANSI - 61/ NSF-372/ UR -CSA Recognized |

* Not available for all variations

Dimensions / Weight

| Weight (Lbs.) | |
|---------------|--|
| 8.8 | |



GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

2-B-NS712-1

NS712 - 2" NPT, Lead Free Brass Body, Normally Open

Valve Selection List Normally Open **De-Energized** Energized ax. Fluid Temp. **Operating Pressure Differential (PSI) Orifice Size** Size Seal Material Power Model Code Consumption (120V/60HZ-110V/50HZ) Pipe Minimum Max. Maximum (Watts) Shown Light Oil Air/Gas Steam* Water NPT In. Cv AC DC AC DC AC DC AC DC °F AC DC Lead Free Brass Body 7 9 NS712GF02C9JJ7 2 200 200 EPR 2 48 150 150 ---50 50 295 8 ----

Part Numbering

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|----|------|---|-------------------|---|--------------------------|---|-----------------------|------------|-----------------------|-----------|--------|---------|
| NS | 7 | 1 | 2 | G | F | 0 | 2 | С | 9 | J | J | 7 |
| Se | ries | | Operating Mode | Hsg | Coil | Voltage | 2 | Seal Mat'l | Body Mat'l | Pipe Size | Orific | ce Size |
| NS | 571 | | 2: N.O. | G: Conduit Y: DIN A: Conduit U: J-Box P Opn Frame | F: F Class H: H Class | 02: 120/60 1 04: 240/60 2 24: 24/60 2 15: 12 V 16: 24 V | 220/50 24/50 DC | C: EPDM | 9: Lead Free Brass | J: 2" | J7 | : 2" |

Coil Data

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

| Frequency (Hz) | 60 | 50 | |
|--------------------|---------|----|----|
| | Inrush | 36 | 36 |
| Nominal Power (VA) | Holding | 18 | 19 |

GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

NS201(AC) -- Service and Installation --

DESCRIPTION

The NS201 Series Solenoid Valves are 2-way, normally closed, piloted, zero differential general purpose valves specifically designed for drinking water and other food products. All stainless steel or Noryl construction with synthetic seating and sealing materials make them suitable for use with a variety of liquids, oils and gases.

Valves may be mounted in any positions. A spring loaded plunger assures positive shutoff. The S4 solenoid coil is rated at 10 watts.

OPERATION

NS201 Valves are normally closed (N.C.) and open when electrically energized.

SPECIFICATIONS

Use NS201 Valves within the specified operating ranges as indicated on the nameplate and in the complete Catalog Number. (min./max. psi, voltage, hz, maximum media temperature at F ambient, Cv factor, etc.).

OPERATING TEMPERATURES

| Ambient 32 ° - 125° F | Fluid | 32° - 295° F |
|-----------------------|-------|--------------|
|-----------------------|-------|--------------|

For other applications, consult the factory.

INSTALLATION

Check valve specifications to make sure of proper application.

- 1. Clear all lines of foreign matter .
- 2. Valves are multipoised and may be mounted in any position. Flow must be in direction indicated on the valve body. If sediment is a problem, install a fine mesh strainer having adequate capacity ahead of the valve.
- Do not use the solenoid housing as a handle. Apply thread seal to the male threads only.
- 4. Provide a clearance for solenoid removal.
- 5. Wire in accordance with applicable local and national electrical codes.

MAINTENANCE

COIL REPLACEMENT

Turn off the electrical power supply to the solenoid before disconnecting the coil lead wires.

Incorrect coil reassembly can cause coil burnout. At all times, take care not to nick, dent, or damage the plunger tube.

It is not necessary to remove the valve from the pipeline. Follow Steps 1, 2 and 3 under **VALVE DISASSEMBLY**. Disassemble solenoid, taking care to note the exact order of placement and quantity parts.

Incorrect reassembly can cause coil burnout. At all times take are not to nick, dent or damage plunger tube.

PARTS

The charts which follow cover replaceable coil part numbers, Repair and Rebuild kits for most NS201 valves.

When ordering parts/kits, specify Catalog Number, Serial Number, and Part Name. If your valve's Catalog Number is not listed, obtain the complete Serial Number and consult the factory.

REBUILD KIT

The Rebuild Kit contains a plunger/spring/seat disc assembly, plunger tube assembly, O-rings and adapter ring.

REPAIR KIT

The Repair Kit contains a seat disc, diaphragm assembly and O-rings.

REBUILD & REPAIR KIT CHART

| Valve | Rebuild Kits | Repair K its |
|----------------|-------------------|--------------|
| NS201YF16FPCG4 | KS201AF15G4-NSF k | 201G4-NSF |
| NS201YF16FPDG4 | KS201AF15G4-NSF | 201G4-NSF |
| NS201YF16FPEG5 | KS201AF15G5-NSF k | 201G5-NSF |
| NS201YF16F7CG4 | KS201AF15G4-NSF | 201G4-NSF |
| NS201YF16F7DG4 | KS201AF15G4-NSF | 201G4-NSF |
| NS201YF16F7EG5 | KS201AF15G5-NSF k | 201G5-NSF |

| Valve | Voltage | DIN Coil | Conduit Coil |
|----------------|---------|----------|--------------|
| NS201YF16FPCG4 | 24V DC | HS4YN16 | HS4GN16A24 |
| NS201YF16FPDG4 | 24V DC | HS4YN16 | HS4GN16A24 |
| NS201YF16FPEG5 | 24V DC | HS4YN16 | HS4GN16A24 |
| NS201YF16F7CG4 | 24V DC | HS4YN16 | HS4GN16A24 |
| NS201YF16F7DG4 | 24V DC | HS4YN16 | HS4GN16A24 |
| NS201YF16F7EG5 | 24V DC | HS4YN16 | HS4GN16A24 |

Cleaning

Cleaning fluid must be compatible with all valve components.

It is recommended that NS201 Series Valves be cleaned on a routine basis by qualified personnel. Valves should be cleaned where flow media or service conditions may determine life of valve. Apply correct voltage. If excessive leakage occurs or if the operation is sluggish, the unit must be cleaned.

SERVICE Disassembly

WARNING

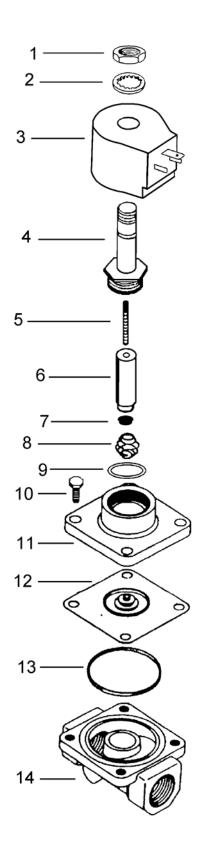
Disassembly, reassembly or internal adjustment without factory test may result in hazardous condition. If valve does not operate properly after following the INSTALLATION and MAINTENANCE instructions, complete valve must be replaced by a trained and experienced service-person.

- 1. Unscrew the hex nut (1). Remove with lockwasher (2).
- 2. Lift off the coil (3) from the plunger tube.
- 3. Do not damage the solenoid assembly.
- 4. Use a 1" spanner to remove solenoid base nut and plunger tube (4). Do not nick, dent, or damage plunger tube (4) or valve seating surfaces.
- 5. Carefully hold plunger tube (4) in position when removing from valve bonnet (11) to prevent loss of internal parts.
- 6. Remove return spring (5) from plunger assembly (6),
- 7. Remove four bonnet bolts (10) and separate the valve bonnet (11) from the valve body (14).
- 8. Carefully remove connecting spring (8) from the diaphragm (12) and plunger (6) assemblies.
- 9. Check seat disc (7) and diaphragm assembly (12) for damage or wear.
- 10. Replace O-rings (9 & 13), diaphragm assembly (12), seat disc (7) and other parts as necessary.
- 11. Re-assemble in reverse order from above taking care to properly re-install the seat disc (7) and connecting spring (8).
- 12. Tighten Tube Base Nut (4) to 18 to 24 in/lbs. and bonnet bolts (10) to 40 to 45 in/lbs.
- 13. Re-connect electrical and test for proper operation.

TROUBLE-SHOOTING

If valve fails to open check voltage against rating on nameplate, check voltage at solenoid lead connections, check control circuit and solenoid coil for burnout. If valve fails to close, check condition of synthetic seat insert. Check for damaged spring. Valve must be free of dirt to insure tight shutoff. If dirt is a problem, install a fine mesh straher to insure proper closing and trouble-free operation

Buzzing or chattering can be caused by low voltage or dirt or chips between top of plunger and tube head. Check voltage--clean plunger and interior of tube and base assembly.



GC Valves, LLC. 456 Crompton St., Charlotte, NC 28241 Ph: 704-588-3300, Fx: 704-973-9526, <u>Service@gcvalves.com</u>

NS201(DC) -- Service and Installation --

DESCRIPTION

The NS201 Series Solenoid Valves are 2-way, normally closed, piloted, zero differential general purpose valves specifically designed for drinking water and other food products. All stainless steel or Noryl construction with synthetic seating and sealing materials make them suitable for use with a variety of liquids, oils and gases.

Valves may be mounted in any positions. A spring loaded plunger assures positive shutoff. The S4 solenoid coil is rated at 10 watts.

OPERATION

NS201 Valves are normally closed (N.C.) and open when electrically energized.

SPECIFICATIONS

Use NS201 Valves within the specified operating ranges as indicated on the nameplate and in the complete Catalog Number. (min./max. psi, voltage, hz, maximum media temperature at F ambient, Cv factor, etc.).

OPERATING TEMPERATURES

| Ambient 32 ° - 125° F | Fluid | 32° - 295° F |
|-----------------------|-------|--------------|
|-----------------------|-------|--------------|

For other applications, consult the factory.

INSTALLATION

Check valve specifications to make sure of proper application.

- 1. Clear all lines of foreign matter .
- 2. Valves are multipoised and may be mounted in any position. Flow must be in direction indicated on the valve body. If sediment is a problem, install a fine mesh strainer having adequate capacity ahead of the valve.
- Do not use the solenoid housing as a handle. Apply thread seal to the male threads only.
- 4. Provide a clearance for solenoid removal.
- 5. Wire in accordance with applicable local and national electrical codes.

MAINTENANCE

COIL REPLACEMENT

Turn off the electrical power supply to the solenoid before disconnecting the coil lead wires.

Incorrect coil reassembly can cause coil burnout. At all times, take care not to nick, dent, or damage the plunger tube.

It is not necessary to remove the valve from the pipeline. Follow Steps 1, 2 and 3 under **VALVE DISASSEMBLY**. Disassemble solenoid, taking care to note the exact order of placement and quantity parts.

Incorrect reassembly can cause coil burnout. At all times take are not to nick, dent or damage plunger tube.

PARTS

The charts which follow cover replaceable coil part numbers, Repair and Rebuild kits for most NS201 valves.

When ordering parts/kits, specify Catalog Number, Serial Number, and Part Name. If your valve's Catalog Number is not listed, obtain the complete Serial Number and consult the factory.

REBUILD KIT

The Rebuild Kit contains a plunger/spring/seat disc assembly, plunger tube assembly, O-rings and adapter ring.

REPAIR KIT

The Repair Kit contains a seat disc, diaphragm assembly and O-rings.

REBUILD & REPAIR KIT CHART

| Valve | Rebuild Kits | Repair K its |
|----------------|-------------------|--------------|
| NS201YF16FPCG4 | KS201AF15G4-NSF | 201G4-NSF |
| NS201YF16FPDG4 | KS201AF15G4-NSF | 201G4-NSF |
| NS201YF16FPEG5 | KS201AF15G5-NSF k | 201G5-NSF |
| NS201YF16F7CG4 | KS201AF15G4-NSF | 201G4-NSF |
| NS201YF16F7DG4 | KS201AF15G4-NSF | 201G4-NSF |
| NS201YF16F7EG5 | KS201AF15G5-NSF k | 201G5-NSF |

| ~~~ | | cп | ART | |
|-----|------------|----|-----|--|
| | L ' | сп | | |

| Voltage | DIN Coil | Conduit Coil | | |
|---------|---|--|--|--|
| 24V DC | HS4YN16 | HS4GN16A24 | | |
| 24V DC | HS4YN16 | HS4GN16A24 | | |
| 24V DC | HS4YN16 | HS4GN16A24 | | |
| 24V DC | HS4YN16 | HS4GN16A24 | | |
| 24V DC | HS4YN16 | HS4GN16A24 | | |
| 24V DC | HS4YN16 | HS4GN16A24 | | |
| | Voltage 24V DC 24V DC 24V DC 24V DC 24V DC 24V DC | Voltage DIN Coil 24V DC HS4YN16 24V DC HS4YN16 | | |

Cleaning

Cleaning fluid must be compatible with all valve components.

It is recommended that NS201 Series Valves be cleaned on a routine basis by qualified personnel. Valves should be cleaned where flow media or service conditions may determine life of valve. Apply correct voltage. If excessive leakage occurs or if the operation is sluggish, the unit must be cleaned.

SERVICE Disassembly

WARNING

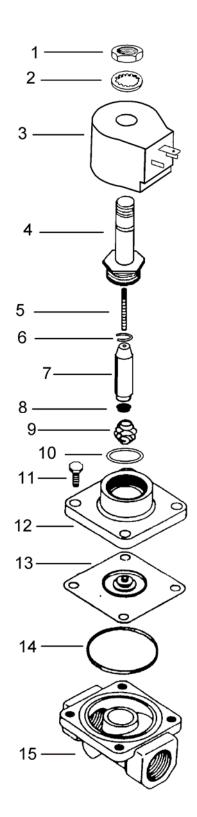
Disassembly, reassembly or internal adjustment without factory test may result in hazardous condition. If valve does not operate properly after following the INSTALLATION and MAINTENANCE instructions, complete valve must be replaced by a trained and experienced service-person.

- Unscrew the hex nut (1). Remove with lockwasher (2).
- 2. Lift off the coil (3) from the plunger tube.
- 3. Do not damage the solenoid assembly.
- 4. Use a 1" spanner to remove solenoid base nut and plunger tube (4). Do not nick, dent, or damage plunger tube (4) or valve seating surfaces.
- Carefully hold plunger tube (4) in position when removing from valve bonnet (12) to prevent loss of internal parts.
- 6. Remove return spring (5) plunger assembly (7),
- 7. Remove four bonnet bolts (11) and separate the valve bonnet (12) from the valve body (15).
- 8. Carefully remove connecting spring (9) from the diaphragm (13) and plunger (7) assemblies.
- 9. Check seat disc (8) and diaphragm assembly (13) for damage or wear.
- 10. Replace O-rings (10 & 14), diaphragm assembly (13), seat disc (8) and other parts as necessary.
- 11. Re-assemble in reverse order from above taking care to properly re-install the seat disc (8) and connecting spring (9).
- 12. Tighten tube base nut (4) to 18 to 24 in/lbs and bonnet bolts 11) to 40 to 45 in/lbs.
- 13. Re-connect electrical and test for proper operation.

TROUBLE-SHOOTING

If valve fails to open check voltage against rating on nameplate, check voltage at solenoid lead connections, check control circuit and solenoid coil for burnout. If valve fails to close, check condition of synthetic seat insert. Check for damaged spring. Valve must be free of dirt to insure tight shutoff. If dirt is a problem, install a fine mesh straher to insure proper closing and trouble-free operation

Buzzing or chattering can be caused by low voltage or dirt or chips between top of plunger and tube head. Check voltage--clean plunger and interior of tube and base assembly.



GC Valves, LLC. 456 Crompton St., Charlotte, NC 28241 Ph: 704-588-3300, Fx: 704-973-9526, <u>Service@gcvalves.com</u>

NS201 F, G, & H (AC) -- Service and Installation --

DESCRIPTION

The NS201 Series Solenoid Valves are 2-way, normally closed, piloted, zero differential general purpose valves. All stainless steel or brass construction with synthetic seating and sealing materials make them suitable for use with a variety of liquids, oils and gases.

Valves should be mounted with the coil in a vertical and upright position. A spring loaded plunger assures positive shutoff. The S4 solenoid coil is rated at 10 watts.

OPERATION

NS201 Valves are normally closed (N.C.) and open when electrically energized.

SPECIFICATIONS

Use NS201 Valves within the specified operating ranges as indicated on the nameplate and in the complete Catalog Number. (min./max. psi, voltage, hz, maximum media temperature at F ambient, Cv factor, etc.).

| Ambient | Elastomer | Fluid |
|--------------|-----------|--------------|
| 32º - 125º F | EPR | 32° - 295° F |

For other applications, consult the factory.

INSTALLATION

Check valve specifications to make sure of proper application.

- 1. Clear all lines of foreign matter.
- 2. Valves should be mounted with the operator in a vertical/upright position. Flow must be in direction indicated on the valve body. If sediment is a problem, install a fine mesh strainer having adequate capacity ahead of the valve.
- Do not use the solenoid housing as a handle. Apply thread seal to the male threads only.
- 4. Provide a clearance for solenoid removal.
- 5. Wire in accordance with applicable local and national electrical codes.

MAINTENANCE

COIL REPLACEMENT

Turn off the electrical power supply to the solenoid before disconnecting the coil lead wires.

Incorrect coil reassembly can cause coil burnout. At all times, take care not to nick, dent, or damage the plunger tube.

It is not necessary to remove the valve from the pipeline. Follow Steps 1, 2 and 3 under **VALVE DISASSEMBLY**. Disassemble solenoid, taking care to note the exact order of placement and quantity parts.

Incorrect reassembly can cause coil burnout. At all times take care not to nick, dent or damage plunger tube.

PARTS

The charts which follow cover replaceable coil part numbers, Repair and Rebuild kits for most NS201 valves.

When ordering parts/kits, specify Catalog Number, Serial Number, and Part Name. If your valve's Catalog Number is not listed, obtain the complete Serial Number and consult the factory.

REBUILD KIT

The Rebuild Kit contains a plunger/spring/seat disc assembly, plunger tube assembly, O-rings and adapter ring.

REPAIR KIT

The Repair Kit contains a seat disc, diaphragm assembly and O-rings.

REBUILD & REPAIR KIT CHART

| Valve | Rebuild Kits | Repair Kits |
|----------------|-----------------|-------------|
| NS201GF02C7FG9 | KS201AF02G9-NSF | K201G9-NSF |
| NS201GF02C7GJ2 | KS201AF02J2-NSF | K201J2-NSF |
| NS201GF02C7HJ2 | KS201AF02J2-NSF | K201J2-NSF |

COIL CHART

| Valve | Voltage | DIN Coil | Conduit Coil |
|----------------|------------|----------|--------------|
| NS201GF02C7FG9 | 120V 50/60 | HS4YN02 | HS4GN02A24 |
| NS201GF02C7GJ2 | 120V 50/60 | HS4YN02 | HS4GN02A24 |
| NS201GF02C7HJ2 | 120V 50/60 | HS4YN02 | HS4GN02A24 |
| NS201GF03C7FG9 | 208V 50/60 | HS4YN03 | HS4GN03A24 |
| NS201GF03C7GJ2 | 208V 50/60 | HS4YN03 | HS4GN03A24 |
| NS201GF03C7HJ2 | 208V 50/60 | HS4YN03 | HS4GN03A24 |
| NS201GF04C7FG9 | 240V 50/60 | HS4YN04 | HS4GN04A24 |
| NS201GF04C7GJ2 | 240V 50/60 | HS4YN04 | HS4GN04A24 |
| NS201GF04C7HJ2 | 240V 50/60 | HS4YN04 | HS4GN04A24 |
| NS201GF24C7FG9 | 24V 50/60 | HS4YN24 | HS4GN24A24 |
| NS201GF24C7GJ2 | 24V 50/60 | HS4YN24 | HS4GN24A24 |
| NS201GF24C7HJ2 | 24V 50/60 | HS4YN24 | HS4GN24A24 |

Cleaning

Cleaning fluid must be compatible with all valve components.

It is recommended that NS201 Series Valves be cleaned on a routine basis by qualified personnel. Valves should be cleaned where flow media or service conditions may determine life of valve. Apply correct voltage. If excessive leakage occurs or if the operation is sluggish, the unit must be cleaned.

SERVICE Disassembly

WARNING

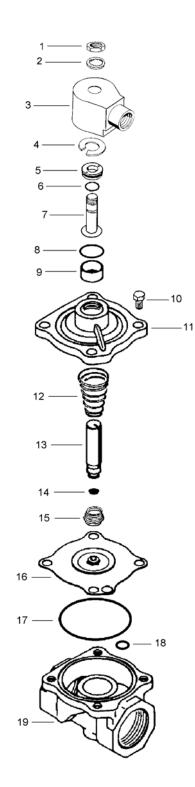
Disassembly, reassembly or internal adjustment without factory test may result in hazardous condition. If valve does not operate properly after following the INSTALLATION and MAINTENANCE instructions, complete valve must be replaced by a trained and experienced service-person.

- 1. Unscrew the hex nut (1). Remove with lockwasher (2).
- 2. Lift off the coil (3) from the plunger tube.
- 3. Do not damage the solenoid assembly.
- 4. Use a 1" spanner nut 106198E to remove solenoid base nut (5) and plunger tube (7). Do not nick, dent, or damage plunger tube (7) or valve seating surfaces.
- Carefully hold plunger tube (7) in position when removing from valve bonnet (11) to prevent loss of internal parts.
- 6. Remove return spring (12) from plunger assembly (13),
- 7. Remove four bonnet bolts (10) and separate the valve bonnet (11) from the valve body (19).
- 8. Carefully remove connecting spring (15) from the diaphragm (16) and plunger (13) assemblies.
- 9. Check seat disc (14) and diaphragm assembly (16) for damage or wear.
- 10. Replace O-rings (6, 8, 17 & 18), diaphragm assembly (16), seat disc (14) and other parts as necessary.
- 11. Re-assemble in reverse order from above taking care to properly re-install the seat disc (14) and connecting spring (15).
- 12. Tighten Tube Base Nut (5) to 18 to 24 in/lbs. and bonnet bolts (10) to 40 to 45 in/lbs.
- 13. Re-connect electrical and test for proper operation.

TROUBLE-SHOOTING

If valve fails to open check voltage against rating on nameplate, check voltage at solenoid lead connections, check control circuit and solenoid coil for burnout. If valve fails to close, check condition of synthetic seat insert. Check for damaged spring. Valve must be free of dirt to insure tight shutoff. If dirt is a problem, install a fine mesh strainer to insure proper closing and trouble-free operation

Buzzing or chattering can be caused by low voltage or dirt or chips between top of plunger and tube head. Check voltage--clean plunger and interior of tube and base assembly.



GC Valves, LLC. 456 Crompton St., Charlotte, NC 28241 Ph: 704-588-3300, Fx: 704-973-9526, <u>Service@gcvalves.com</u>

NS201 F, G, & H (DC) -- Service and Installation --

DESCRIPTION

The NS201 Series Solenoid Valves are 2-way, normally closed, piloted, zero differential general purpose valves. All stainless steel or brass construction with synthetic seating and sealing materials make them suitable for use with a variety of liquids, oils and gases.

Valves should be mounted with the coil in a vertical and upright position. A spring loaded plunger assures positive shutoff. The S4 solenoid coil is rated at 10 watts.

OPERATION

NS201 Valves are normally closed (N.C.) and open when electrically energized.

SPECIFICATIONS

Use NS201 Valves within the specified operating ranges as indicated on the nameplate and in the complete Catalog Number. (min./max. psi, voltage, hz, maximum media temperature at F ambient, Cv factor, etc.).

OPERATING TEMPERATURES

| Ambient | Elastomer | Fluid |
|--------------|-----------|--------------|
| 32° - 125° F | EPR | 32° - 295° F |

For other applications, consult the factory.

INSTALLATION

Check valve specifications to make sure of proper application.

- 1. Clear all lines of foreign matter.
- 2. Valves should be mounted with the operator in a vertical/upright position. Flow must be in direction indicated on the valve body. If sediment is a problem, install a fine mesh strainer having adequate capacity ahead of the valve.
- Do not use the solenoid housing as a handle. Apply thread seal to the male threads only.
- Provide a clearance for solenoid removal.
- 5. Wire in accordance with applicable local and national electrical codes.

MAINTENANCE

COIL REPLACEMENT

Turn off the electrical power supply to the solenoid before disconnecting the coil lead wires.

Incorrect coil reassembly can cause coil burnout. At all times, take care not to nick, dent, or damage the plunger tube.

It is not necessary to remove the valve from the pipeline. Follow Steps 1, 2 and 3 under **VALVE DISASSEMBLY**. Disassemble solenoid, taking care to note the exact order of placement and quantity parts.

Incorrect reassembly can cause coil burnout. At all times take care not to nick, dent or damage plunger tube.

PARTS

The charts which follow cover replaceable coil part numbers, Repair and Rebuild kits for most NS201 valves.

When ordering parts/kits, specify Catalog Number, Serial Number, and Part Name. If your valve's Catalog Number is not listed, obtain the complete Serial Number and consult the factory.

REBUILD KIT

The Rebuild Kit contains a plunger/spring/seat disc assembly, plunger tube assembly, O-rings and adapter ring.

REPAIR KIT

The Repair Kit contains a seat disc, diaphragm assembly and O-rings.

REBUILD & REPAIR KIT CHART

| Valve | Rebuild Kits | Repair Kits |
|----------------|-----------------|-------------|
| NS201GF16C7FG9 | KS201AF15G9-NSF | K201G9-NSF |
| NS201GF16C7GJ2 | KS201AF15J2-NSF | K201J2-NSF |
| NS201GF16C7HJ2 | KS201AF15J2-NSF | K201J2-NSF |

COIL CHART

| Valve | Voltage | DIN Coil | Conduit Coil |
|----------------|---------|----------|--------------|
| NS201GF15C7FG9 | 12 VDC | HS4YN15 | HS4GN15A24 |
| NS201GF15C7GJ2 | 12 VDC | HS4YN15 | HS4GN15A24 |
| NS201GF15C7HJ2 | 12 VDC | HS4YN15 | HS4GN15A24 |
| NS201GF16C7FG9 | 24 VDC | HS4YN16 | HS4GN16A24 |
| NS201GF16C7GJ2 | 24 VDC | HS4YN16 | HS4GN16A24 |
| NS201GF16C7HJ2 | 24 VDC | HS4YN16 | HS4GN16A24 |
| NS201GF18C7FG9 | 120 VDC | HS4YN18 | HS4GN18A24 |
| NS201GF18C7GJ2 | 120 VDC | HS4YN18 | HS4GN18A24 |
| NS201GF18C7HJ2 | 120 VDC | HS4YN18 | HS4GN18A24 |
| NS201GF33C7FG9 | 48 VDC | HS4YN33 | HS4GN33A24 |
| NS201GF33C7GJ2 | 48 VDC | HS4YN33 | HS4GN33A24 |
| NS201GF33C7HJ2 | 48 VDC | HS4YN33 | HS4GN33A24 |

Cleaning

Cleaning fluid must be compatible with all valve components.

It is recommended that NS201 Series Valves be cleaned on a routine basis by qualified personnel. Valves should be cleaned where flow media or service conditions may determine life of valve. Apply correct voltage. If excessive leakage occurs or if the operation is sluggish, the unit must be cleaned.

SERVICE Disassembly

WARNING

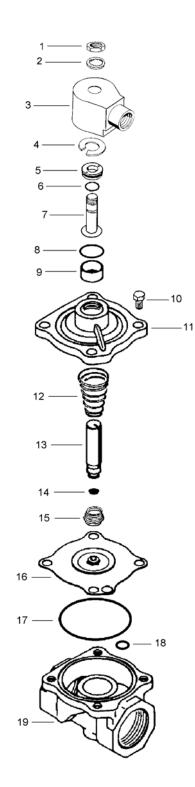
Disassembly, reassembly or internal adjustment without factory test may result in hazardous condition. If valve does not operate properly after following the INSTALLATION and MAINTENANCE instructions, complete valve must be replaced by a trained and experienced service-person.

- 1. Unscrew the hex nut (1). Remove with lockwasher (2).
- 2. Lift off the coil (3) from the plunger tube.
- 3. Do not damage the solenoid assembly.
- 4. Use a 1" spanner nut 106198E to remove solenoid base nut (5) and plunger tube (7). Do not nick, dent, or damage plunger tube (7) or valve seating surfaces.
- Carefully hold plunger tube (7) in position when removing from valve bonnet (11) to prevent loss of internal parts.
- 6. Remove return spring (12) from plunger assembly (13),
- 7. Remove four bonnet bolts (10) and separate the valve bonnet (11) from the valve body (19).
- 8. Carefully remove connecting spring (15) from the diaphragm (16) and plunger (13) assemblies.
- 9. Check seat disc (14) and diaphragm assembly (16) for damage or wear.
- 10. Replace O-rings (6, 8, 17 & 18), diaphragm assembly (16), seat disc (14) and other parts as necessary.
- 11. Re-assemble in reverse order from above taking care to properly re-install the seat disc (14) and connecting spring (15).
- 12. Tighten Tube Base Nut (5) to 18 to 24 in/lbs. and bonnet bolts (10) to 40 to 45 in/lbs.
- 13. Re-connect electrical and test for proper operation.

TROUBLE-SHOOTING

If valve fails to open check voltage against rating on nameplate, check voltage at solenoid lead connections, check control circuit and solenoid coil for burnout. If valve fails to close, check condition of synthetic seat insert. Check for damaged spring. Valve must be free of dirt to insure tight shutoff. If dirt is a problem, install a fine mesh strainer to insure proper closing and trouble-free operation

Buzzing or chattering can be caused by low voltage or dirt or chips between top of plunger and tube head. Check voltage--clean plunger and interior of tube and base assembly.



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NS211(AC) -- Service and Installation --

DESCRIPTION

The NS211 Series Solenoid Valves are 2-way, normally closed, piloted, general purpose valves specifically designed for drinking water and other food products. All stainless steel or Noryl construction with synthetic seating and sealing materials make them suitable for use with a variety of liquids, oils and gases.

Valves may be mounted in any positions. A spring loaded plunger assures positive shutoff. The S4 solenoid coil is rated at 10 watts.

OPERATION

NS211 Valves are normally closed (N.C.) and open when electrically energized.

SPECIFICATIONS

Use NS211 Valves within the specified operating ranges as indicated on the nameplate and in the complete Catalog Number. (min./max. psi, voltage, hz, maximum media temperature at F ambient, Cv factor, etc.).

OPERATING TEMPERATURES

| Ambient 32 ° - 125° F | Fluid | 32° - 295° F |
|-----------------------|-------|--------------|
|-----------------------|-------|--------------|

For other applications, consult the factory.

INSTALLATION

Check valve specifications to make sure of proper application.

- 1. Clear all lines of foreign matter .
- Valves are multipoised and may be mounted in any position. Flow must be in direction indicated on the valve body. If sediment is a problem, install a fine mesh strainer having adequate capacity ahead of the valve.
- Do not use the solenoid housing as a handle. Apply thread seal to the male threads only.
- 4. Provide a clearance for solenoid removal.
- 5. Wire in accordance with applicable local and national electrical codes.

MAINTENANCE

COIL REPLACEMENT

Turn off the electrical power supply to the solenoid before disconnecting the coil lead wires.

Incorrect coil reassembly can cause coil burnout. At all times, take care not to nick, dent, or damage the plunger tube.

It is not necessary to remove the valve from the pipeline. Follow Steps 1, 2 and 3 under **VALVE DISASSEMBLY**. Disassemble solenoid, taking care to note the exact order of placement and quantity parts.

Incorrect reassembly can cause coil burnout. At all times take are not to nick, dent or damage plunger tube.

PARTS

The charts which follow cover replaceable coil part numbers, Repair and Rebuild kits for most NS211 valves.

When ordering parts/kits, specify Catalog Number, Serial Number, and Part Name. If your valve's Catalog Number is not listed, obtain the complete Serial Number and consult the factory.

REBUILD KIT

The Rebuild Kit contains a plunger/spring/seat disc assembly, plunger tube assembly, O-rings and adapter ring.

REPAIR KIT

The Repair Kit contains a seat disc, diaphragm assembly and O-rings.

REBUILD & REPAIR KIT CHART

| Valve | Rebuild Kits | Repair K its |
|------------------|-------------------|--------------|
| NS211YF02FPCG4 K | S211AF02G4-NSF | K211G4-NSF |
| NS211YF02FPDG4 K | S211AF02G4-NSF | K211G4-NSF |
| NS211YF02FPEG5 K | S211AF02G5-NSF | K211G5-NSF |
| NS211YF24FPCG4 | KS211AF02G4-NSF | 211G4-NSF |
| NS211YF24FPDG4 | KS211AF02G4-NSF | 211G4-NSF |
| NS211YF24FPEG5 | KS211AF02G5-NSF K | 211G5-NSF |
| NS211YF02F7CG4 | KS211AF02G4-NSF | 211G4-NSF |
| NS211YF02F7DG4 | KS211AF02G4-NSF | 211G4-NSF |
| NS211YF02F7EG5 | KS211AF02G5-NSF K | 211G5-NSF |
| NS211YF24F7CG4 | KS211AF02G4-NSF | 211G4-NSF |
| NS211YF24F7DG4 | KS211AF02G4-NSF | 211G4-NSF |
| NS211YF24F7EG5 | KS211AF02G5-NSF | 211G5-NSF |

COIL CHART

| Valve | Voltage | DIN Coil | Conduit Coil |
|----------------|---------------|-----------|--------------|
| NS211YF02FPCG4 | 120V 50/60 | HS3YN02 H | 53 GN02A24 |
| NS211YF02FPDG4 | 120V 50/60 | HS3YN02 H | 53 GN02A24 |
| NS211YF02FPEG5 | 120V 50/60 | HS3YN02 H | 53 GN02A24 |
| NS211YF24FPCG4 | 24V 50/60 | HS3YN24 H | 53 GN24A24 |
| NS211YF24FPDG4 | 24V 50/60 | HS3YN24 H | 53 GN24A24 |
| NS211YF24FPEG5 | 24V 50/60 | HS3YN24 H | 53 GN24A24 |
| NS211YF02F7CG4 | 120V 50/60 | HS3YN02 H | 53 GN02A24 |
| NS211YF02F7DG4 | 120V 50/60 | HS3YN02 H | 53 GN02A24 |
| NS211YF02F7EG5 | 120V 50/60 | HS3YN02 H | 53 GN02A24 |
| NS211YF24F7CG4 | 24V 50/60 | HS3YN24 H | 53 GN24A24 |
| NS211YF24F7DG4 | 24V 50/60 | HS3YN24 H | 53 GN24A24 |
| NS211YF24F7EG5 | 24V 50/60 | HS3YN24 H | 63 GN24A24 |

Cleaning

Cleaning fluid must be compatible with all valve components.

It is recommended that NS211 Series Valves be cleaned on a routine basis by qualified personnel. Valves should be cleaned where flow media or service conditions may determine life of valve. Apply correct voltage. If excessive leakage occurs or if the operation is sluggish, the unit must be cleaned.

WARNING

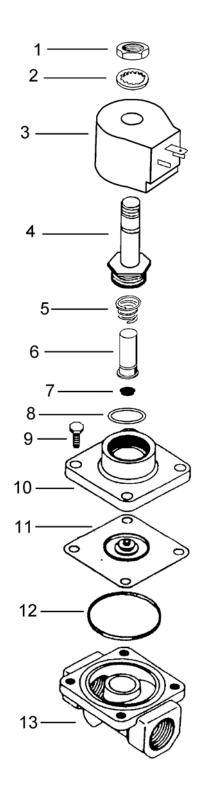
Disassembly, reassembly or internal adjustment without factory test may result in hazardous condition. If valve does not operate properly after following the INSTALLATION and MAINTENANCE instructions, complete valve must be replaced by a trained and experienced service-person.

- Unscrew the hex nut (1). Remove with lockwasher (2).
- 2. Lift off the coil (3) from the plunger tube.
- 3. Do not damage the solenoid assembly.
- 4. Use a 1" spanner to remove solenoid base nut and plunger tube (4). Do not nick, dent, or damage plunger tube (4) or valve seating surfaces.
- Carefully hold plunger tube (4) in position when removing from valve bonnet (10) to prevent loss of internal parts.
- 6. Remove plunger/spring assembly (5, 6, & 7),
- 7. Remove four bonnet bolts (10) and separate the valve bonnet (10) from the valve body (13).
- 8. Check seat disc (7) and diaphragm assembly (11) for damage or wear.
- 9. Replace O-rings (8 & 12), diaphragm assembly (11), seat disc (7) and other parts as necessary.
- 10. Re-assemble in reverse order from above taking care to properly re-install the seat disc (7).
- 11. Tighten tube base nut (4) to 18 to 24 in/lbs and bonnet bolts (9) to 40 to 45 in/lbs.
- 12. Re-connect electrical and test for proper operation.

TROUBLE-SHOOTING

If valve fails to open check voltage against rating on nameplate, check voltage at solenoid lead connections, check control circuit and solenoid coil for burnout. If valve fails to close, check condition of synthetic seat insert. Check for damaged spring. Valve must be free of dirt to insure tight shutoff. If dirt is a problem, install a fine mesh straher to insure proper closing and trouble-free operation

Buzzing or chattering can be caused by low voltage or dirt or chips between top of plunger and tube head. Check voltage--clean plunger and interior of tube and base assembly.



NS211(DC) -- Service and Installation --

DESCRIPTION

The NS211 Series Solenoid Valves are 2-way, normally closed, piloted, general purpose valves specifically designed for drinking water and other food products. All stainless steel or Noryl construction with synthetic seating and sealing materials make them suitable for use with a variety of liquids, oils and gases.

Valves may be mounted in any positions. A spring loaded plunger assures positive shutoff. The S4 solenoid coil is rated at 10 watts.

OPERATION

NS211 Valves are normally closed (N.C.) and open when electrically energized.

SPECIFICATIONS

Use NS211 Valves within the specified operating ranges as indicated on the nameplate and in the complete Catalog Number. (min./max. psi, voltage, hz, maximum media temperature at F ambient, Cv factor, etc.).

OPERATING TEMPERATURES

| Ambient 32 ° - 125° F | Fluid | 32° - 295° F |
|-----------------------|-------|--------------|
|-----------------------|-------|--------------|

For other applications, consult the factory.

INSTALLATION

Check valve specifications to make sure of proper application.

- 1. Clear all lines of foreign matter .
- Valves are multipoised and may be mounted in any position. Flow must be in direction indicated on the valve body. If sediment is a problem, install a fine mesh strainer having adequate capacity ahead of the valve.
- Do not use the solenoid housing as a handle. Apply thread seal to the male threads only.
- 4. Provide a clearance for solenoid removal.
- 5. Wire in accordance with applicable local and national electrical codes.

MAINTENANCE

COIL REPLACEMENT

Turn off the electrical power supply to the solenoid before disconnecting the coil lead wires.

Incorrect coil reassembly can cause coil burnout. At all times, take care not to nick, dent, or damage the plunger tube.

It is not necessary to remove the valve from the pipeline. Follow Steps 1, 2 and 3 under **VALVE DISASSEMBLY**. Disassemble solenoid, taking care to note the exact order of placement and quantity parts.

Incorrect reassembly can cause coil burnout. At all times take are not to nick, dent or damage plunger tube.

PARTS

The charts which follow cover replaceable coil part numbers, Repair and Rebuild kits for most NS211 valves.

When ordering parts/kits, specify Catalog Number, Serial Number, and Part Name. If your valve's Catalog Number is not listed, obtain the complete Serial Number and consult the factory.

REBUILD KIT

The Rebuild Kit contains a plunger/spring/seat disc assembly, plunger tube assembly, O-rings and adapter ring.

REPAIR KIT

The Repair Kit contains a seat disc, diaphragm assembly and O-rings.

REBUILD & REPAIR KIT CHART

| Valve | Rebuild Kits | Repair K its |
|----------------|-------------------|--------------|
| NS211YF16FPCG4 | KS211AF15G4-NSF K | 211G415-NSF |
| NS211YF16FPDG4 | KS211AF15G4-NSF K | 211G415-NSF |
| NS211YF16FPEG5 | KS211AF15G5-NSF K | 211G515-NSF |
| NS211YF16F7CG4 | KS211AF15G4-NSF K | 211G415-NSF |
| NS211YF16F7DG4 | KS211AF15G4-NSF K | 211G415-NSF |
| NS211YF16F7EG5 | KS211AF15G5-NSF K | 211G515-NSF |

COIL CHART

| Valve | Voltage | DIN Coil | Conduit Coil |
|----------------|---------|----------|--------------|
| NS211YF16FPCG4 | 24V DC | HS4YN16 | HS4GN16A24 |
| NS211YF16FPDG4 | 24V DC | HS4YN16 | HS4GN16A24 |
| NS211YF16FPEG5 | 24V DC | HS4YN16 | HS4GN16A24 |
| NS211YF16F7CG4 | 24V DC | HS4YN16 | HS4GN16A24 |
| NS211YF16F7DG4 | 24V DC | HS4YN16 | HS4GN16A24 |
| NS211YF16F7EG5 | 24V DC | HS4YN16 | HS4GN16A24 |

Cleaning

Cleaning fluid must be compatible with all valve components.

It is recommended that NS211 Series Valves be cleaned on a routine basis by qualified personnel. Valves should be cleaned where flow media or service conditions may determine life of valve. Apply correct voltage. If excessive leakage occurs or if the operation is sluggish, the unit must be cleaned.

WARNING

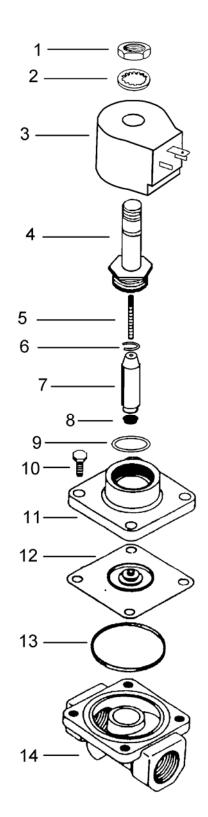
Disassembly, reassembly or internal adjustment without factory test may result in hazardous condition. If valve does not operate properly after following the INSTALLATION and MAINTENANCE instructions, complete valve must be replaced by a trained and experienced service-person.

- 1. Unscrew the hex nut (1). Remove with lockwasher (2).
- 2. Lift off the coil (3) from the plunger tube.
- 3. Do not damage the solenoid assembly.
- 4. Use a 1" spanner to remove solenoid base nut and plunger tube (4). Do not nick, dent, or damage plunger tube (4) or valve seating surfaces.
- Carefully hold plunger tube (4) in position when removing from valve bonnet (11) to prevent loss of internal parts.
- 6. Remove return spring (5) plunger assembly (7),
- 7. Remove four bonnet bolts (10) and separate the valve bonnet (11) from the valve body (14).
- 8. Check seat disc (8) snap ring (6) and diaphragm assembly (12) for damage or wear.
- 9. Replace O-rings (9 & 13), diaphragm assembly (12), seat disc (8) and other parts as necessary.
- 10. Re-assemble in reverse order from above taking care to properly re-install the seat disc (8).
- 11. Tighten tube base nut (4) to 18 to 24 in/lbs and bonnet bolts (10) to 40 to 45 in/lbs.
- 12. Re-connect electrical and test for proper operation.

TROUBLE-SHOOTING

If valve fails to open check voltage against rating on nameplate, check voltage at solenoid lead connections, check control circuit and solenoid coil for burnout. If valve fails to close, check condition of synthetic seat insert. Check for damaged spring. Valve must be free of dirt to insure tight shutoff. If dirt is a problem, install a fine mesh straher to insure proper closing and trouble-free operation

Buzzing or chattering can be caused by low voltage or dirt or chips between top of plunger and tube head. Check voltage--clean plunger and interior of tube and base assembly.



NS211 F,G,H, & J -- Service and Installation --

DESCRIPTION

The NS211 Series Solenoid Valves are 2-way, normally closed, piloted, general purpose valves. Stainless steel or Brass construction with synthetic seating and sealing materials make them suitable for use with a variety of liquids, oils and gases.

Valves should be mounted with the operator in a vertical position

OPERATION

NS211 Valves are normally closed (N.C.) and open when electrically energized.

SPECIFICATIONS

Use NS211 Valves within the specified operating ranges as indicated on the nameplate and in the complete Catalog Number. (min./max. psi, voltage, hz, maximum media temperature at F ambient, Cv factor, etc.).

OPERATING TEMPERATURES

| Ambient | Elastomer | Fluid |
|--------------|-----------|--------------|
| 32° - 125° F | EPR | 32° - 295° F |

For other applications, consult the factory.

INSTALLATION

Check valve specifications to make sure of proper application.

- Clear all lines of foreign matter.
 Valves should be mounted with the operator in a vertical/upright position. Flow must be in direction indicated on the valve body. If sediment is a problem, install a fine mesh strainer having adequate capacity ahead of the valve.
- Do not use the solenoid housing as a handle. Apply thread seal to the male threads only.
- 4. Provide a clearance for solenoid coil removal.
- 5. Wire in accordance with applicable local and national electrical codes.

MAINTENANCE

COIL REPLACEMENT

Turn off the electrical power supply to the solenoid before disconnecting the coil lead wires.

Incorrect coil reassembly can cause coil burnout.

It is not necessary to remove the valve from the pipeline. Follow Steps 1, 2 and 3 under **DISASSEMBLY**. Disassemble solenoid, taking care to note the exact order of placement and quantity parts.

Incorrect reassembly can cause coil burnout. At all times take care not to nick, dent or damage plunger tube.

PARTS

The charts which follow cover replaceable coil part numbers, Repair and Rebuild kits for most NS211 valves.

When ordering parts/kits, specify Catalog Number, Serial Number, and Part Name. If your valve's Catalog Number is not listed, consult the factory.

REBUILD KIT

The Rebuild Kit contains a plunger/seat disc assembly, spring, diaphragm assembly, plunger tube assembly and O-rings.

REPAIR KIT

The Repair Kit contains a seat disc, O-rings and diaphragm assembly.

REBUILD & REPAIR KIT CHART

| Valve | Rebuild Kits | Repair Kits |
|----------------|-----------------|-------------|
| NS211GF02C7FG9 | KS211AF02G9-NSF | K211G9-NSF |
| NS211GF02C7GJ2 | KS211AF02J2-NSF | K211J2-NSF |
| NS211GF02C7HJ2 | KS211AF02J2-NSF | K211J2-NSF |
| NS211GF02C7JJ2 | KS211AF02J2-NSF | K211J2-NSF |
| NS211GF16C7FG9 | KS211AF15G9-NSF | K211G9-NSF |
| NS211GF16C7GJ2 | KS211AF15J2-NSF | K211J2-NSF |
| NS211GF16C7HJ2 | KS211AF15J2-NSF | K211J2-NSF |
| NS211GF16C7JJ2 | KS211AF15J2-NSF | K211J2-NSF |

COIL CHART

| Valve | Voltage | DIN Coil | Conduit Coil |
|----------------|------------|----------|--------------|
| NS211GF02C7FG9 | 120V 50/60 | HS3YN02 | HS3GN02A24 |
| NS211GF02C7GJ2 | 120V 50/60 | HS3YN02 | HS3GN02A24 |
| NS211GF02C7HJ2 | 120V 50/60 | HS3YN02 | HS3GN02A24 |
| NS211GF02C7JJ2 | 120V 50/60 | HS3YN02 | HS3GN02A24 |
| NS211GF16C7FG9 | 24 VDC | HS3YN16 | HS3GN16A24 |
| NS211GF16C7GJ2 | 24 VDC | HS3YN16 | HS3GN16A24 |
| NS211GF16C7HJ2 | 24 VDC | HS3YN16 | HS3GN16A24 |
| NS211GF16C7JJ2 | 24 VDC | HS3YN16 | HS3GN16A24 |

Cleaning

Cleaning fluid must be compatible with all valve components.

It is recommended that NS211 Series Valves be cleaned on a routine basis by qualified personnel. Valves should be cleaned where flow media or service conditions may determine life of valve. Apply correct voltage. If excessive leakage occurs or if the operation is sluggish, the unit must be cleaned.

WARNING

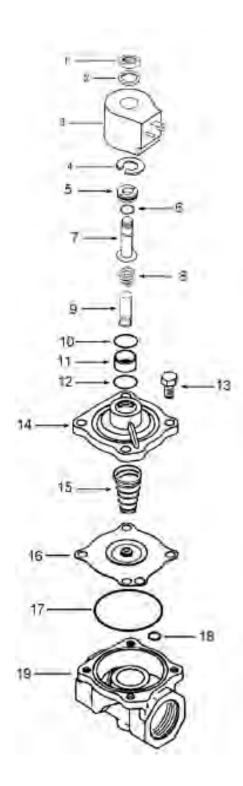
Disassembly, reassembly or internal adjustment without factory test may result in hazardous condition. If valve does not operate properly after following the INSTALLATION and MAINTENANCE instructions, complete valve must be replaced by a trained and experienced service-person.

- 1. Disconnect electrical connections and remove the retaining nut (1). Remove with lockwasher (2).
- 2. Lift off the coil housing (3) and split washer (4) from the plunger tube (7)
- 3. Do not damage the solenoid assembly.
- 4. Use a GC Valves Spanner Nut (106198E) to remove gland nut (5) and plunger tube (7). Do not nick, dent, or damage plunger tube (7) or valve seating surfaces.
- Carefully hold plunger tube (7) in position when removing from valve bonnet (12) to prevent loss of internal parts.
- 6. Remove return spring (8) plunger assembly (9),
- 7. Remove four bonnet bolts (13) and separate the valve bonnet (14) from the valve body (19).
- Carefully remove seat insert (11) from the bonnet (14) by pressing the seat insert out from the underside of the bonnet (14). This must be done to replace the seat insert O-rings (10 & 12)
- 9. Check plunger seat disc (9) and diaphragm assembly (16) for damage or wear.
- 10. Replace O-rings (10, 12, 17, & 18), diaphragm assembly (16), plunger seat disc (9) and other parts as necessary.
- 11. Re-assemble in reverse order from above taking care to properly re-install all items as removed.
- 12. Tighten Gland Nut (5) 18 to 24 in/lbs, and bonnet bolts (13) to 40 to 45 in/lbs.
- 13. Re-connect electrical and test for proper operation.

TROUBLE-SHOOTING

If valve fails to open check voltage against rating on nameplate, check voltage at solenoid lead connections, check control circuit and solenoid coil for burnout. If valve fails to close, check condition of synthetic seat insert. Check for damaged spring. Valve must be free of dirt to insure tight shutoff. If dirt is a problem, install a fine mesh strainer to insure proper closing and trouble-free operation

Buzzing or chattering can be caused by low voltage or dirt or chips between top of plunger and tube head. Check voltage--clean plunger and interior of tube and base assembly.



NS212 F,G,H, & J -- Service and Installation --

DESCRIPTION

The NS212 Series Solenoid Valves are 2-way, normally open, piloted, general purpose valves specifically designed for drinking water and other food products. All stainless steel construction with synthetic seating and sealing materials make them suitable for use with a variety of food grade liquids, and gases.

Valves should be mounted with the operator in a vertical position

OPERATION

NS212 Valves are normally open (N.O.) and closes when electrically energized.

SPECIFICATIONS

Use NS212 Valves within the specified operating ranges as indicated on the nameplate and in the complete Catalog Number. (min./max. psi, voltage, hz, maximum media temperature at F ambient, Cv factor, etc.).

OPERATING TEMPERATURES

| Ambient | Elastomer | Fluid |
|--------------|-----------|--------------|
| 32° - 125° F | EPR | 32° - 295° F |

For other applications, consult the factory.

INSTALLATION

Check valve specifications to make sure of proper application.

- 1. Clear all lines of foreign matter.
- 2. Valves should be mounted with the operator in a vertical/upright position. Flow must be in direction indicated on the valve body. If sediment is a problem, install a fine mesh strainer having adequate capacity ahead of the valve.
- Do not use the solenoid housing as a handle. Apply thread seal to the male threads only.
- Provide a clearance for solenoid coil removal.
 Wire in accordance with applicable local and
- national electrical codes.

MAINTENANCE

COIL REPLACEMENT

Turn off the electrical power supply to the solenoid before disconnecting the coil lead wires.

Incorrect coil reassembly can cause coil burnout.

It is not necessary to remove the valve from the pipeline. Follow Steps 1, 2 and 3 under **DISASSEMBLY**. Disassemble solenoid, taking care to note the exact order of placement and quantity parts.

Incorrect reassembly can cause coil burnout. At all times take care not to nick, dent or damage plunger tube.

PARTS

The charts which follow cover replaceable coil part numbers, Repair and Rebuild kits for most NS212 valves.

When ordering parts/kits, specify Catalog Number, Serial Number, and Part Name. If your valve's Catalog Number is not listed, consult the factory.

REBUILD KIT

The Rebuild Kit contains a plunger/seat disc assembly, spring, diaphragm assembly, plunger tube assembly and O-rings.

REPAIR KIT

The Repair Kit contains a seat disc, O-rings and diaphragm assembly.

REBUILD & REPAIR KIT CHART

| Valve | Rebuild Kits | Repair Kits |
|------------|-----------------|-------------|
| NS212C7FG9 | KS212AF02G9-NSF | K212G9-NSF |
| NS212C7GJ2 | KS212AF02J2-NSF | K212J2-NSF |
| NS212C7HJ2 | KS212AF02J2-NSF | K212J2-NSF |
| NS212C7JJ2 | KS212AF02J2-NSF | K212J2-NSF |

COIL CHART

| Valve | Voltage | DIN Coil | Conduit Coil |
|--------------------|------------|----------|--------------|
| NS212GF02C7FG9-JJ2 | 120V 50/60 | HS3YN02 | HS3GN02A24 |
| NS212GF15C7FG9-JJ2 | 12 VDC | HS3YN15 | HS3GN15A24 |
| NS212GF16C7FG9-JJ2 | 24 VDC | HS3YN16 | HS3GN16A24 |
| NS212GF24C7FG9-JJ2 | 24V 50/60 | HS3YN24 | HS3GN24A24 |

Cleaning

Cleaning fluid must be compatible with all valve components.

It is recommended that NS212 Series Valves be cleaned on a routine basis by qualified personnel. Valves should be cleaned where flow media or service conditions may determine life of valve. Apply correct voltage. If excessive leakage occurs or if the operation is sluggish, the unit must be cleaned.

WARNING

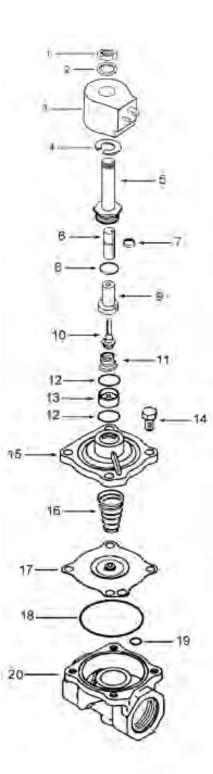
Disassembly, reassembly or internal adjustment without factory test may result in hazardous condition. If valve does not operate properly after following the INSTALLATION and MAINTENANCE instructions, complete valve must be replaced by a trained and experienced service-person.

- 1. Disconnect electrical connections and remove the retaining nut (1). Remove with lockwasher (2).
- 2. Lift off the coil housing (3) and split washer (4) from the plunger tube (7)
- 3. Do not damage the solenoid assembly.
- Use a 1" Deep Socket to remove plunger tube (5). Do not nick, dent, or damage plunger tube (5) or valve seating surfaces.
- Carefully hold plunger tube (5) in position when removing from valve bonnet (15) to prevent loss of internal parts.
- 6. Remove plunger assembly (6), tube head (9), seat retainer (10), and return spring (11).
- 7. Remove four bonnet bolts (14) and separate the valve bonnet (15) from the valve body (20).
- Carefully remove seat insert (13) from the bonnet (15) by pressing the seat insert out from the underside of the bonnet (15). This must be done to replace the seat insert O-rings (12).
- 9. Check seat retainer seat disc (10) and diaphragm assembly (17) for damage or wear.
- 10. Replace O-rings (8, 12, 18, & 19), diaphragm assembly (17), plunger seat disc (10) and other parts as necessary.
- 11. Re-assemble in reverse order from above taking care to properly re-install all items as removed.
- 12. Tighten plunger tube (5) 24 in/lbs, and bonnet bolts (14) to 40 to 45 in/lbs.
- 13. Re-connect electrical and test for proper operation.

TROUBLE-SHOOTING

If valve fails to open check voltage against rating on nameplate, check voltage at solenoid lead connections, check control circuit and solenoid coil for burnout. If valve fails to close, check condition of synthetic seat insert. Check for damaged spring. Valve must be free of dirt to insure tight shutoff. If dirt is a problem, install a fine mesh strainer to insure proper closing and trouble-free operation

Buzzing or chattering can be caused by low voltage or dirt or chips between top of plunger and tube head. Check voltage--clean plunger and interior of tube and base assembly.



DESCRIPTION

The NS301 Series Solenoid Valves are 2-way, normally closed, direct acting, general purpose valves specifically designed for drinking water and other food products. All stainless steel construction with synthetic seating and sealing materials make them suitable for use with a variety of liquids, oils and gases.

Valves may be mounted in any positions. A spring loaded plunger assures positive shutoff. The S4 solenoid coil is rated at 10 watts.

OPERATION

NS301 Valves are normally closed (N.C.) and open when electrically energized.

SPECIFICATIONS

Use NS301 Valves within the specified operating ranges as indicated on the nameplate and in the complete Catalog Number. (min./max. psi, voltage, cycle, maximum media temperature at F ambient, Cv factor, etc.).

OPERATING TEMPERATURES

| Ambient 32 ° - 125° F | Fluid | 32° - 295° F |
|-----------------------|-------|--------------|
|-----------------------|-------|--------------|

For other applications, consult the factory.

INSTALLATION

Check valve specifications to make sure of proper application. 1. Clear all lines of foreign matter .

- Valves are multipoised and may be mounted in any position. Flow must be in direction indicated on the valve body. If sediment is a problem, install a fine mesh strainer having adequate capacity ahead of the valve.
- 3. Do not use the solenoid housing as a handle. Apply thread seal to the male threads only.
- 4. Provide a clearance for solenoid removal.
- 5. Wire in accordance with applicable local and national electrical codes.

MAINTENANCE

Cleaning

Cleaning fluid must be compatible with all valve components.

It is recommended that NS301 Series Valves be cleaned on a routine basis by qualified personnel. Valves should be cleaned where flow media or service conditions may determine life of valve. Apply correct voltage. If excessive leakage occurs or if the operation is sluggish, the unit must be cleaned.

PARTS

The charts which follow cover replaceable coil part numbers, Repair and Rebuild kits for most NS301 valves.

When ordering parts/kits, specify Catalog Number, Serial Number, and Part Name. If your valve's Catalog Number is not listed, obtain the complete Serial Number and consult the factory.

08/20/2024

COIL REPLACEMENT

Turn off the electrical power supply to the solenoid before disconnecting the coil lead wires.

Incorrect coil reassembly can cause coil burnout. At all times, take care not to nick, dent, or damage the plunger tube.

It is not necessary to remove the valve from the pipeline. Follow Steps 1, 2 and 3 under **VALVE DISASSEMBLY**. Disassemble solenoid, taking care to note the exact order of placement and quantity parts.

Incorrect reassembly can cause coil burnout. At all times take are not to nick, dent or damage plunger tube.

REBUILD KIT

The Rebuild Kit contains a plunger/spring/seat disc assembly, plunger tube assembly, O-rings and adapter ring.

REPAIR KIT

The Repair Kit contains a seat disc, and O-rings.

REBUILD & REPAIR KIT CHART

| Valve | Rebuild Kits | Repair K its |
|------------------|-----------------|--------------|
| NS301YF02C3BE7 K | S301AF02E7-NSF | K301E7-NSF |
| NS301YF02C3BD5 K | S301AF02C3-NSF | K301C3-NSF |
| NS301YF02C3BC9 K | S301AF02C3-NSF | K301C3-NSF |
| NS301YF24C3BE7 | KS301AF02E7-NSF | K301E7-NSF |
| NS301YF24C3BD5 | KS301AF02C3-NSF | K301C3-NSF |
| NS301YF24C3BC9 | KS301AF02C3-NSF | K301C3-NSF |
| NS301YF16C3BE7 | KS301AF02E7-NSF | K301E7-NSF |
| NS301YF16C3BD5 | KS301AF02C3-NSF | K301C3-NSF |
| NS301YF16C3BC9 | KS301AF02C3-NSF | K301C3-NSF |

COIL CHART

| Valve | Voltage | DIN Coil | Conduit Coil |
|-------------------|-----------|----------|--------------|
| NS301YF02C3BE7 12 | 0V 50/60 | HS4YN02 | HS4GN02A24 |
| NS301YF02C3BD5 12 | 0V 50/60 | HS4YN02 | HS4GN02A24 |
| NS301YF02C3BC9 12 | 0V 50/60 | HS4YN02 | HS4GN02A24 |
| NS301YF24C3BE7 | 24V 50/60 | HS4YN24 | HS4GN24A24 |
| NS301YF24C3BD5 | 24V 50/60 | HS4YN24 | HS4GN24A24 |
| NS301YF24C3BC9 | 24V 50/60 | HS4YN24 | HS4GN24A24 |
| NS301YF16C3BE7 | 24 VDC | HS4YN16 | HS4GN16A24 |
| NS301YF16C3BD5 | 24 VDC | HS4YN16 | HS4GN16A24 |
| NS301YF16C3BC9 | 24 VDC | HS4YN16 | HS4GN16A24 |

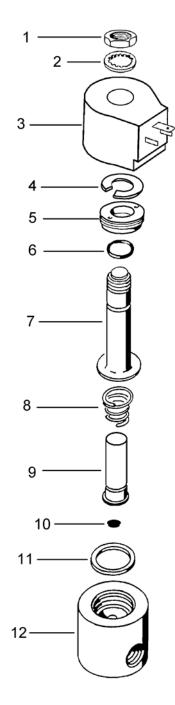
SERVICE

DISASSEMBLY AND REPAIR KIT INSTALLATION

WARNING

Disassembly, reassembly or internal adjustment without factory test may result in hazardous condition. If valve does not operate properly after following the INSTALLATION and MAINTENANCE instructions, complete valve must be replaced by a trained and experienced service-person.

- 1. Unscrew the hex nut (1). Remove with lockwasher (2).
- 2. Lift off the coil (3) from the plunger tube.
- 3. Do not damage the solenoid assembly.
- Use GC Valves spanner nut (106198E) or similar tool to remove solenoid base nut (5) and plunger tube (7). Do not nick dent or damage plunger tube (7) or valve seating surfaces.
- 5. Hold plunger tube (7) in position when removing from valve body (12) to prevent loss of internal parts.
- 6. Carefully remove the plunger/spring/seat disc assembly (8, 9 & 10),
- 7. Check seating surfaces on the seat disc (10) and valve body (12) for damage or wear.
- 8. Replace seat disc (10) body O-ring (11) and other parts as necessary.
- 9. Re-assemble in reverse order from above taking care to properly install the seat disc (10), plunger (9) and plunger tube (7).
- 10. Tighten solenoid base nut (5) to 25 In/Lbs.
- 11. Re-connect electrical and test for proper operation.



REBUILD KIT INSTALLATION AND ASSEMBLY

WARNING

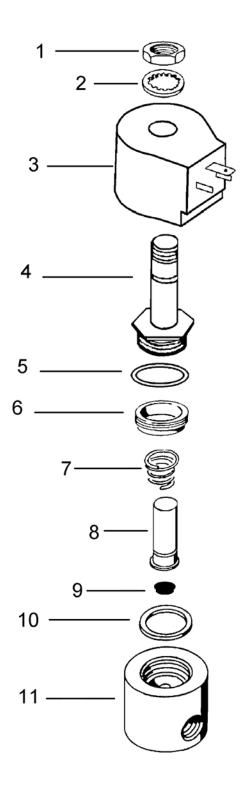
Disassembly, reassembly or internal adjustment without factory test may result in hazardous condition. If valve does not operate properly after following the INSTALLATION and MAINTENANCE instructions, complete valve must be replaced by a trained and experienced service-person.

- 1. Carefully install seat disc (9) and spring (7) on the plunger (8).
- 2. Place body O-ring (10) in valve body (11) operator cavity..
- 3. Place tube O-ring (5) on plunger tube (4) base.
- 4. Thread adapter ring (6) on plunger tube (4) base.
- 5. Place plunger assembly (7, 8 & 9) in valve body (11) cavity.
- 6. Carefully thread plunger tube assembly (4, 5 & 6) into valve body (11).
- Use a 1" spanner to tighten solenoid base nut and plunger tube (4). Do not nick, dent, or damage plunger tube (4) or valve seating surfaces.
- 8. Tighten plunger tube base nut (4) to 24 In/Lbs.
- 9. Replace coil (3), lockwasher (2) and top nut (1). Tighten to approximately 25 In/Lbs.
- 11. Re-connect electrical and test for proper operation.

TROUBLE-SHOOTING

If valve fails to open check voltage against rating on nameplate, check voltage at solenoid lead connections, check control circuit and solenoid coil for burnout. If valve fails to close, check condition of synthetic seat insert. Check for damaged spring. Valve must be free of dirt to insure tight shutoff. If dirt is a problem, install a fine mesh straher to insure proper closing and trouble-free operation

Buzzing or chattering can be caused by low voltage or dirt or chips between top of plunger and tube head. Check voltage--clean plunger and interior of tube and base assembly.



DESCRIPTION

The NS311 Series Solenoid Valves are 2-way, normally closed, direct acting, general purpose valves specifically designed for drinking water and other food products. All stainless steel construction with synthetic seating and sealing materials make them suitable for use with a variety of liquids, oils and gases.

Valves may be mounted in any positions. A spring loaded plunger assures positive shutoff. The S3 solenoid coil is rated at 8 watts.

OPERATION

NS311 Valves are normally closed (N.C.) and open when electrically energized.

SPECIFICATIONS

Use NS311 Valves within the specified operating ranges as indicated on the nameplate (<u>Adhere Label Products, MM2005</u> <u>TC329</u>, <u>Ribbon/Ink – Dainippon R510HF</u>, <u>Adhere UL File –</u> <u>MH62109</u>) and in the complete Catalog Number. (max. psi, voltage, cycle, max. media temperature at F ambient, Cv factor, etc.).

OPERATING TEMPERATURES

| Ambient 32° - 125° | Fluid (EPR) | 32° - 295° F |
|--------------------|----------------|--------------|
|--------------------|----------------|--------------|

For other applications, consult the factory.

INSTALLATION

Check valve specifications to make sure of proper application.

- 1. Clear all lines of foreign matter.
- 2. Valves are multi-poised and may be mounted in any position. Flow must be in direction indicated on the valve body. If sediment is a problem, install a fine mesh strainer having adequate capacity ahead of the valve.
- Do not use the solenoid housing as a handle. Apply thread seal to the male threads only.
- 4. Provide a clearance for solenoid removal.
- 5. Wire in accordance with applicable local and national electrical codes.

MAINTENANCE

Cleaning

Cleaning fluid must be compatible with all valve components.

It is recommended that NS311 Series Valves be cleaned on a routine basis by qualified personnel. Valves should be cleaned where flow media or service conditions may determine life of valve. Apply correct voltage. If excessive leakage occurs or if the operation is sluggish, the unit must be cleaned.

PARTS

The charts which follow cover replaceable coil part numbers, Repair and Rebuild kits for most NS311 valves.

When ordering parts/kits, specify Catalog Number, Serial Number, and Part Name. If your valve's Catalog Number is not listed, obtain the complete Serial Number and consult the factory.

COIL REPLACEMENT

Turn off the electrical power supply to the solenoid before disconnecting the coil lead wires.

It is not necessary to remove the valve from the pipeline. Follow Steps 1, 2 and 3 under **VALVE DISASSEMBLY**. Disassemble solenoid, taking care to note the exact order of placement and quantity parts.

Incorrect reassembly can cause coil burnout. At all times take care not to nick, dent or damage plunger tube.

REBUILD KIT

The Rebuild Kit contains a plunger/spring/seat disc assembly, plunger tube assembly, O-rings and adapter ring.

REPAIR KIT

The Repair Kit contains a seat disc, and O-rings.

REBUILD & REPAIR KIT CHART

| Valve | | Rebuild Kits | Repair Kits |
|-------|----------|-----------------|-------------|
| NS311 | C3BC3-E1 | KS311AF02C3-NSF | K311C3-NSF |
| NS311 | C3BE7-F1 | KS311AF02E7-NSF | K311E7-NSF |

COIL CHART

| Valve | Voltage | DIN Coil | Conduit Coil |
|-----------|------------|----------|--------------|
| NS311GF02 | 120V 50/60 | HS3YN02 | HS3GN02A24 |
| NS311GF24 | 24V 50/60 | HS3YN24 | HS3GN24A24 |
| NS311GF15 | 12 VDC | HS3YN15 | HS3GN15A24 |
| NS311GF16 | 24 VDC | HS3YN16 | HS3GN16A24 |

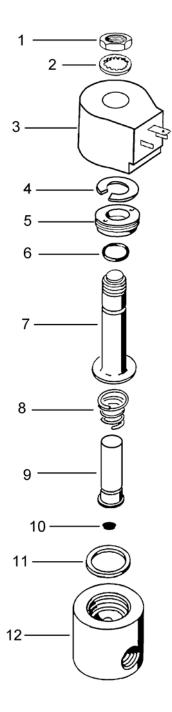
SERVICE

DISASSEMBLY AND REPAIR KIT INSTALLATION

WARNING

Disassembly, reassembly or internal adjustment without factory test may result in hazardous condition. If valve does not operate properly after following the **INSTALLATION and MAINTENANCE instructions,** complete valve must be replaced by a trained and experienced service-person.

- 1. Unscrew the hex nut (1). Remove with lockwasher (2).
- Lift off the coil (3) from the plunger tube. 2.
- Do not damage the solenoid assembly. 3.
- 4. Remove split washer (4).
- 5. Use GC Valves spanner nut (106198E) or similar tool to remove solenoid base nut (5) and plunger tube (7). Do not nick dent or damage plunger tube (7) or valve seating surfaces.
- 6. Hold plunger tube (7) in position when removing from valve body (12) to prevent loss of internal parts.
- Carefully remove the plunger/spring/seat disc 7. assembly (8, 9 & 10),
- Check seating surfaces on the seat disc (10) and 8. valve body (12) for damage or wear.
- 9. Replace seat disc (10) body O-ring (11) and other parts as necessary.
- 10. Re-assemble in reverse order from above taking care to properly install the seat disc (10), plunger (9) and plunger tube (7).
- 11. Tighten solenoid base nut (5) to 25 In/Lbs.
- 12. Re-connect electrical and test for proper operation.



REBUILD KIT INSTALLATION AND ASSEMBLY

WARNING

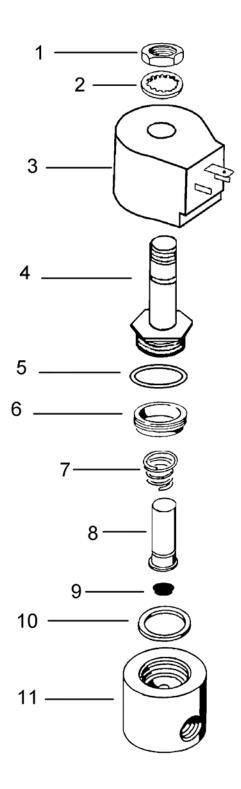
Disassembly, reassembly or internal adjustment without factory test may result in hazardous condition. If valve does not operate properly after following the INSTALLATION and MAINTENANCE instructions, complete valve must be replaced by a trained and experienced service-person.

- 1. Carefully install seat disc (9) and spring (7) on the plunger (8).
- 2. Place body O-ring (10) in valve body (11) operator cavity..
- 3. Place tube O-ring (5) on plunger tube (4) base.
- 4. Thread adapter ring (6) on plunger tube (4) base.
- 5. Place plunger assembly (7, 8 & 9) in valve body (11) cavity.
- 6. Carefully thread plunger tube assembly (4, 5 & 6) into valve body (11).
- Use a 1" spanner to tighten solenoid base nut and plunger tube (4). Do not nick, dent, or damage plunger tube (4) or valve seating surfaces.
- 8. Tighten plunger tube base nut (4) to 24 In/Lbs.
- 9. Replace coil (3), lockwasher (2) and top nut (1). Tighten to approximately 25 ln/Lbs.
- 11. Re-connect electrical and test for proper operation.

TROUBLE-SHOOTING

If valve fails to open check voltage against rating on nameplate, check voltage at solenoid lead connections, check control circuit and solenoid coil for burnout. If valve fails to close, check condition of synthetic seat insert. Check for damaged spring. Valve must be free of dirt to insure tight shutoff. If dirt is a problem, install a fine mesh strainer to insure proper closing and trouble-free operation

Buzzing or chattering can be caused by low voltage or dirt or chips between top of plunger and tube head. Check voltage-clean plunger and interior of tube and base assembly.



NS711 -- Service and Installation --

DESCRIPTION

The NS711 Series Solenoid Valves are 2-way, normally closed, piloted, general purpose valves specifically designed for drinking water and other food products. All lead-free brass construction with synthetic seating and sealing materials make them suitable for use with a variety of liquids, and gases.

Valves may be mounted in any positions. A spring loaded plunger assures positive shutoff. The S3 solenoid coil is rated at 8 watts.

OPERATION

NS711 Valves are normally closed (N.C.) and open when electrically energized.

SPECIFICATIONS

Use NS711 Valves within the specified operating ranges as indicated on the nameplate and in the complete Catalog Number. (min./max. psi, voltage, hz, maximum media temperature at F ambient, Cv factor, etc.).

OPERATING TEMPERATURES

| Ambient 32° - 125° F | Fluid | 32° - 295° F |
|----------------------|-------|--------------|
|----------------------|-------|--------------|

For other applications, consult the factory.

INSTALLATION

Check valve specifications to make sure of proper application.

- 1. Clear all lines of foreign matter.
- 2. Valves are multi-poised and may be mounted in any position. Flow must be in direction indicated on the valve body. If sediment is a problem, install a fine mesh strainer having adequate capacity ahead of the valve.
- 3. Do not use the solenoid housing as a handle. Apply thread seal to the male threads only.
- 4. Provide a clearance for solenoid removal.
- 5. Wire in accordance with applicable local and national electrical codes.

MAINTENANCE

COIL REPLACEMENT

Turn off the electrical power supply to the solenoid before disconnecting the coil lead wires.

Incorrect coil reassembly can cause coil burnout. At all times, take care not to nick, dent, or damage the plunger tube.

It is not necessary to remove the valve from the pipeline. Follow Steps 1, 2 and 3 under **VALVE DISASSEMBLY**. Disassemble solenoid, taking care to note the exact order of placement and quantity parts.

Incorrect reassembly can cause coil burnout. At all times take care not to nick, dent or damage plunger tube.

PARTS

The charts which follow cover replaceable coil part numbers, Repair and Rebuild kits for most NS711 valves.

When ordering parts/kits, specify Catalog Number, Serial Number, and Part Name. If your valve's Catalog Number is not listed, obtain the complete Serial Number and consult the factory.

REBUILD KIT

The Rebuild Kit contains a plunger/spring/seat disc assembly, plunger tube assembly, diaphragm assembly, O-rings and adapter ring.

REPAIR KIT

The Repair Kit contains a seat disc, diaphragm assembly and O-rings.

REBUILD & REPAIR KIT CHART

| Valve | Rebuild Kits | Repair Kits |
|------------|-----------------|-------------|
| NS711C9CG1 | KS711AF02G1-NSF | K711G1-NSF |
| NS711C9DG1 | KS711AF02G1-NSF | K711G1-NSF |
| NS711C9EG5 | KS711AF02G5-NSF | K711G5-NSF |
| NS711C9FG9 | KS711AF02G9-NSF | K711G9-NSF |
| NS711C9GJ2 | KS711AF02J2-NSF | K711J2-NSF |
| NS711C9HJ5 | KS711AF02J5-NSF | K7 11J5-NSF |
| NS711C9JJ7 | KS711AF02J7-NSF | K711J7-NSF |

COIL CHART

| Valve | Voltage | DIN Coil | Conduit Coil |
|------------------|------------|----------|--------------|
| NS711GF02C9G1-J7 | 120V 50/60 | HS3YN02 | HS3GN02A24 |
| NS711GF15C9G1-J7 | 12 VDC | HS3YN15 | HS3GN15A24 |
| NS711GF16C9G1-J7 | 24 VDC | HS3YN16 | HS3GN16A24 |
| NS711GF24C9G1-J7 | 24V 50/60 | HS3YN24 | HS3GN24A24 |

Cleaning

Cleaning fluid must be compatible with all valve components.

It is recommended that NS711 Series Valves be cleaned on a routine basis by qualified personnel. Valves should be cleaned where flow media or service conditions may determine life of valve. Apply correct voltage. If excessive leakage occurs or if the operation is sluggish, the unit must be cleaned.

WARNING

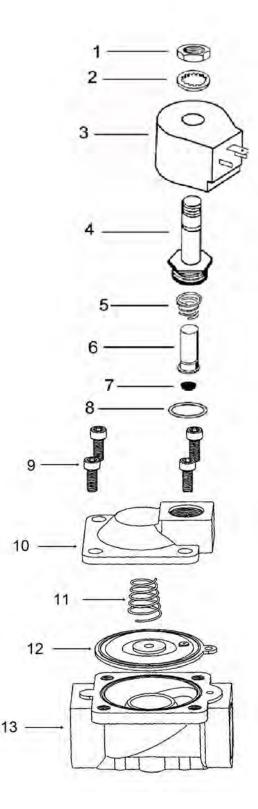
Disassembly, reassembly or internal adjustment without factory test may result in hazardous condition. If valve does not operate properly after following the INSTALLATION and MAINTENANCE instructions, complete valve must be replaced by a trained and experienced service-person.

- 1. Unscrew the hex nut (1). Remove with lockwasher (2).
- 2. Lift off the coil (3) from the plunger tube.
- 3. Do not damage the solenoid assembly.
- 4. Use a 1" spanner to remove solenoid base nut and plunger tube (4). Do not nick, dent, or damage plunger tube (4) or valve seating surfaces.
- Carefully hold plunger tube (4) in position when removing from valve bonnet (10) to prevent loss of internal parts.
- 6. Remove plunger/spring assembly (5, 6, & 7),
- 7. Remove four bonnet bolts (9) and separate the valve bonnet (10) from the valve body (13).
- Check seat disc (7) and diaphragm assembly (12) for damage or wear.
- 9. Replace O-ring (8), diaphragm assembly (12), seat disc (7) and other parts as necessary.
- 10. Re-assemble in reverse order from above taking care to properly re-install the seat disc (7).
- 11. Tighten tube base nut (4) to 18 to 24 in/lbs and bonnet bolts (9) to 40 to 45 in/lbs.
- 12. Re-connect electrical and test for proper operation.

TROUBLE-SHOOTING

If valve fails to open check voltage against rating on nameplate, check voltage at solenoid lead connections, check control circuit and solenoid coil for burnout. If valve fails to close, check condition of synthetic seat insert. Check for damaged spring. Valve must be free of dirt to insure tight shutoff. If dirt is a problem, install a fine mesh strainer to insure proper closing and trouble-free operation

Buzzing or chattering can be caused by low voltage or dirt or chips between top of plunger and tube head. Check voltage-clean plunger and interior of tube and base assembly.



NS712 -- Service and Installation --

DESCRIPTION

The NS712 Series Solenoid Valves are 2-way, normally open, piloted, general purpose valves specifically designed for drinking water and other food products. All lead-free brass construction with synthetic seating and sealing materials make them suitable for use with a variety of liquids, and dases.

Valves may be mounted in any positions. A spring loaded plunger assures positive shutoff. The S3 solenoid coil is rated at 8 watts.

OPERATION

NS712 Valves are normally open (N.O.) and close when electrically energized.

SPECIFICATIONS

Use NS712 Valves within the specified operating ranges as indicated on the nameplate and in the complete Catalog Number. (min./max. psi, voltage, hz, maximum media temperature at F ambient, Cv factor, etc.).

OPERATING TEMPERATURES

| Ambient | 32° - 125° F | Fluid | 32° - 295° F |
|---------|--------------|-------|--------------|

For other applications, consult the factory.

INSTALLATION

Check valve specifications to make sure of proper application.

- Clear all lines of foreign matter. 1 Valves are multi-poised and may be mounted in 2. any position. Flow must be in direction indicated on the valve body. If sediment is a problem, install a fine mesh strainer having adequate capacity ahead of the valve.
- 3 Do not use the solenoid housing as a handle. Apply thread seal to the male threads only.
- 4. Provide a clearance for solenoid removal.
- Wire in accordance with applicable local and 5 national electrical codes.

MAINTENANCE

COIL REPLACEMENT

Turn off the electrical power supply to the solenoid before disconnecting the coil lead wires.

Incorrect coil reassembly can cause coil burnout. At all times, take care not to nick, dent, or damage the plunger tube.

It is not necessary to remove the valve from the pipeline. Follow Steps 1, 2 and 3 under VALVE DISASSEMBLY. Disassemble solenoid, taking care to note the exact order of placement and quantity parts.

Incorrect reassembly can cause coil burnout. At all times take care not to nick, dent or damage plunger tube.

The charts which follow cover replaceable coil part numbers, Repair and Rebuild kits for most NS712 valves.

When ordering parts/kits, specify Catalog Number, Serial Number, and Part Name. If your valve's Catalog Number is not listed, obtain the complete Serial Number and consult the factory.

REBUILD KIT

The Rebuild Kit contains a plunger/spring/seat disc assembly, plunger tube assembly, diaphragm assembly, O-rings and adapter ring.

REPAIR KIT

The Repair Kit contains a seat disc, diaphragm assembly and O-rings.

| REBUILD & REPAIR KIT CHART | | | |
|----------------------------|-----------------|-------------|--|
| Valve | Rebuild Kits | Repair Kits | |
| NS712C9CG1 | KS712AF02G1-NSF | K712G1-NSF | |
| NS712C9DG1 | KS712AF02G1-NSF | K712G1-NSF | |
| NS712C9EG5 | KS712AF02G5-NSF | K712G5-NSF | |
| NS712C9FG9 | KS712AF02G9-NSF | K712G9-NSF | |
| NS712C9GJ2 | KS712AF02J2-NSF | K712J2-NSF | |
| NS712C9HJ5 | KS712AF02J5-NSF | K712J5-NSF | |
| NS712C9JJ7 | KS712AF02J7-NSF | K712J7-NSF | |

COIL CHART

| Valve | Voltage | DIN Coil | Conduit Coil |
|------------------|------------|----------|--------------|
| NS712GF02C9G1-J7 | 120V 50/60 | HS3YN02 | HS3GN02A24 |
| NS712GF15C9G1-J7 | 12 VDC | HS3YN15 | HS3GN15A24 |
| NS712GF16C9G1-J7 | 24 VDC | HS3YN16 | HS3GN16A24 |
| NS712GF24C9G1-J7 | 24V 50/60 | HS3YN24 | HS3GN24A24 |

Cleaning

Cleaning fluid must be compatible with all valve components.

It is recommended that NS712 Series Valves be cleaned on a routine basis by qualified personnel. Valves should be cleaned where flow media or service conditions may determine life of valve. Apply correct voltage. If excessive leakage occurs or if the operation is sluggish, the unit must be cleaned

WARNING

Disassembly, reassembly or internal adjustment without factory test may result in hazardous condition. If valve does not operate properly after following the INSTALLATION and MAINTENANCE instructions, complete valve must be replaced by a trained and experienced service-person.

- 1. Unscrew the hex nut (1). Remove with lockwasher (2) and spacer (3).
- 2. Lift off the coil (4) from the plunger tube (5).
- 3. Do not damage the solenoid assembly.
- 4. Use a 1" wrench to remove plunger tube and base assembly (5). Do not nick, dent, or damage plunger tube (5) or valve seating surfaces.
- Carefully hold plunger tube (5) in position when removing from valve bonnet (15) to prevent loss of internal parts.
- 6. Remove plunger (6), PTFE glide strip (7), tube head (9), seat retainer assembly (10 &11) and return spring (12).
- 7. Remove four bonnet bolts (14) and separate the valve bonnet (15) from the valve body (18).
- 8. Check seat disc (11) and diaphragm assembly (17) for damage or wear.
- 9. Replace O-rings (8, & 13), diaphragm assembly (17), seat disc (11) and other parts as necessary.
- 10. Re-assemble in reverse order from above taking care to properly re-install the seat disc (11).
- 11. Tighten plunger tube and base nut assembly (5) to 18 to 24 in/lbs. and bonnet bolts (14) to 40 to 45 in/lbs.
- 12. Re-connect electrical and test for proper operation.

TROUBLE-SHOOTING

If valve fails to close check voltage against rating on nameplate, check voltage at solenoid lead connections, check control circuit and solenoid coil for burnout. If valve fails to open, check condition of synthetic seat insert. Check for damaged spring. Valve must be free of dirt to insure tight shutoff. If dirt is a problem, install a fine mesh strainer to insure proper closing and trouble-free operation

Buzzing or chattering can be caused by low voltage or dirt or chips between the plunger and tube head. Check voltage-clean plunger and interior of tube and base assembly.

