Revision 2, January 28, 2017

NSF Approved Solenoid Valves

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

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 ≤0.25% weighted average lead content requirement

NSF/ANSI Standard 372
establishes an evaluation procedure for use when product is required to meet a ≤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

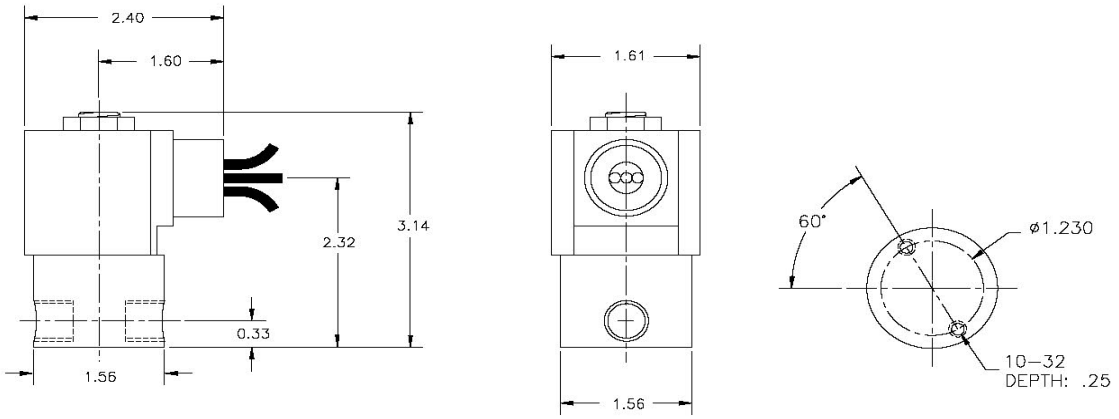
- 1/4" NPT
- 303 SS Body
- 2-Way Zero Differential
- Normally Closed

Materials	Seals:	NSF Approved EPDM
	Orifice:	Stainless Steel
Electrical	Housing:	NEMA 4/4X Encapsulated - 1/2" Conduit
	Optional Housings:	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 Tolerance:	± 10% of applicable voltage
	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

* Not available for all variations

Dimensions / Weight

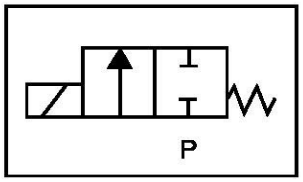
Weight (lbs.)
1.2

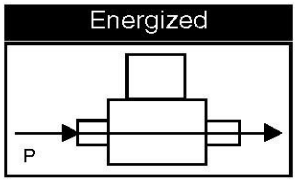


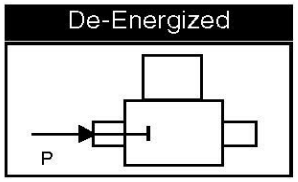
GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

Valve Selection List

Normally Closed







Pipe Size	Orifice Size	C_V	Operating Pressure Differential (psi)								Max Fluid Temp.	Seal Material	Power Consumption (Watts)		Model Code (120V/60HZ — 110V/50HZ Shown)
			Minimum	Maximum											
				Air/Gas		Water		Light Oil		Steam*					
NPT	in.			AC	DC	AC	DC	AC	DC	AC	DC	°F		AC	DC	Stainless Steel Body
1/4	1/32	.03	0	—	—	2400	2400	—	—	—	—	295	EPR	10	10	NS301GF02C3BC1
	3/64	.05	0	—	—	1050	1000	—	—	—	—	295	EPR	10	10	NS301GF02C3BC3
	1/16	.10	0	—	—	700	300	—	—	—	—	295	EPR	10	10	NS301GF02C3BC5
	5/64	.15	0	—	—	500	240	—	—	—	—	295	EPR	10	10	NS301GF02C3BC7
	3/32	.21	0	—	—	400	200	—	—	—	—	295	EPR	10	10	NS301GF02C3BC9
	7/64	.29	0	—	—	350	170	—	—	—	—	295	EPR	10	10	NS301GF02C3BD3
	1/8	.36	0	—	—	200	140	—	—	—	—	295	EPR	10	10	NS301GF02C3BD5
	5/32	.44	0	—	—	150	100	—	—	—	—	295	EPR	10	10	NS301GF02C3BD7
	3/16	.65	0	—	—	100	70	—	—	—	—	295	EPR	10	10	NS301GF02C3BE1
	1/4	.85	0	—	—	50	20	—	—	—	—	295	EPR	10	10	NS301GF02C3BE7
	9/32	1.0	0	—	—	35	15	—	—	—	—	295	EPR	10	10	NS301GF02C3BF1

*** 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
N	S	3	0	1	G	F	0	2	C	3	B	C	1
Series				Operating Mode	Housing*	Coil Class*	Voltage*		Seal Material	Body Material	Pipe Connection	Orifice Size	
S30				1: Normally Closed	G: Conduit	F: Class F H: Class H	02: 120/60 110/50		C: EPR	3: Stainless Steel	B: 1/4" NPT	C1: 1/32" C3: 3/64" C5: 1/16" C7: 5/64" C9: 3/32" D5: 1/8" D7: 5/32" E1: 3/16" E7: 1/4" F1: 9/32"		

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

Coil Data

Coil Family	
Type	Size
All	S4

Frequency (Hz)		60	50
Nominal Power (VA)	Inrush	46	46
	Holding	18	23

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

NS201 Series

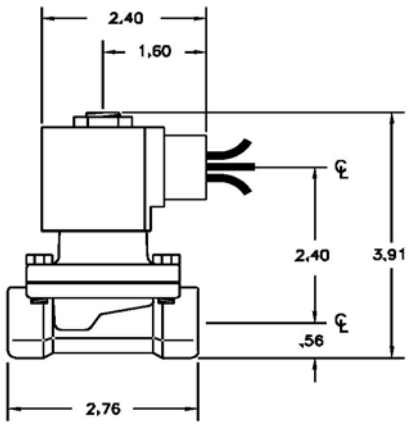
- 3/8" NPT
- 316 SS Body
- 2-Way Zero Differential Piloted Diaphragm
- Normally Closed

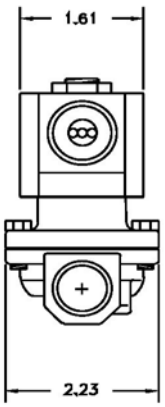
Materials	Seals:		Santoprene/NSF Approved EPDM
	Orifice:	Pilot	Stainless Steel
		Main	Stainless Steel
Electrical	Housing:		NEMA 4/4X Encapsulated - 1/2" Conduit
	Optional Housings:		Contact GC Valves Customer Svc. for available options.
	Voltage:		24,120,240, VAC, 60 and/or 50 Hz. Available. 6, 12, 24 VDC Contact GC Valves Customer Svc. for available options.
	Voltage Tolerance:		± 10% of applicable voltage
	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

* Not available for all variations

Dimensions / Weight

Weight (lbs.)
1.9





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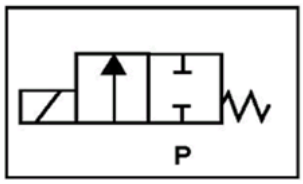
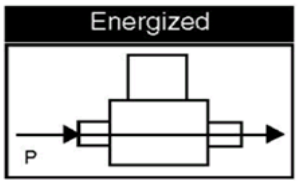
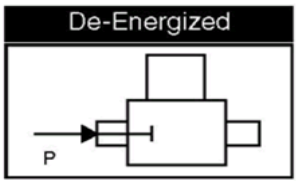
Valve Selection List

Normally Closed







Pipe Size NPT	Orifice Size IN	C_V	Operating Pressure Differential (psi) Minimum	Maximum Air/Gas AC	Air/Gas DC	Water AC	Water DC	Light Oil AC	Light Oil DC	Steam* AC	Max Fluid Temp. °F	Seal Material	Power Consumption (Watts) AC	Power Consumption (Watts) DC	Model Code (120V/60HZ — 110V/50HZ Shown) 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
N S 2 0	1	G	F	0 2	F	7	C	G 4
Series	Operating Mode	Housing*	Coil Class*	Voltage*	Seal Material	Body Material	Pipe Connection	Orifice Size
NS20	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

Type	Size
All	S4

		60	50
Frequency (Hz)			
Nominal Power (VA)	Inrush	46	46
	Holding	18	23

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

NS201 Series

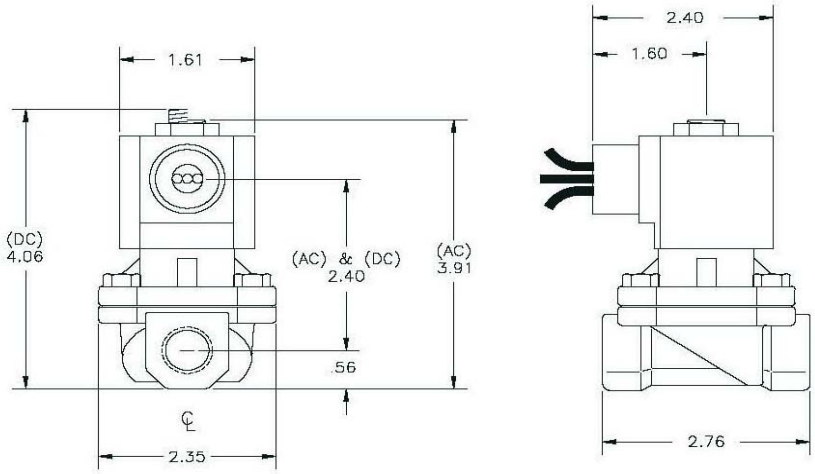
- 3/8" NPT
- Noryl Body
- 2-Way Zero Differential Piloted Diaphragm
- Normally Closed

Materials	Seals:		Santoprene/NSF Approved EPDM
	Orifice:	Pilot	Stainless Steel
		Main	Noryl
Electrical	Housing:		NEMA 4/4X Encapsulated - 1/2" Conduit
	Optional Housings:		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 Tolerance:		± 10% of applicable voltage
	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

* Not available for all variations

Dimensions / Weight

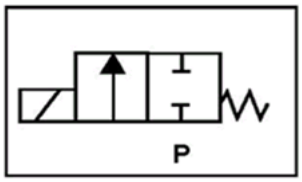
Weight (lbs.)
1



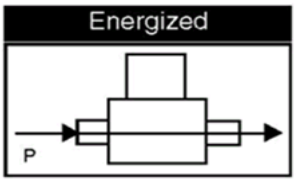
GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

Valve Selection List

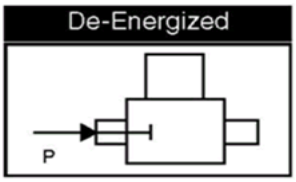
Normally Closed



Energized



De-Energized



Pipe Size NPT	Orifice Size IN	C_V	Operating Pressure Differential (psi) Minimum	Maximum Air/Gas AC	Air/Gas DC	Water AC	Water DC	Light Oil AC	Light Oil DC	Steam* AC	Max Fluid Temp. °F	Seal Material	Power Consumption (Watts) AC	Power Consumption (Watts) DC	Model Code (120V/60HZ — 110V/50HZ Shown) Noryl Body
3/8"	5/8	4.3	0	—	—	100	90	—	—	—	295	Santo EPR	10	10	NS201GF02FPCG4

* 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
N S 2 0	1	G	F	0 2	F	P	C	G 4
Series	Operating Mode	Housing*	Coil Class*	Voltage*	Seal Material	Body Material	Pipe Connection	Orifice Size
NS20	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	C: 3/8"	G4: 5/8"

Coil Data

Coil Family

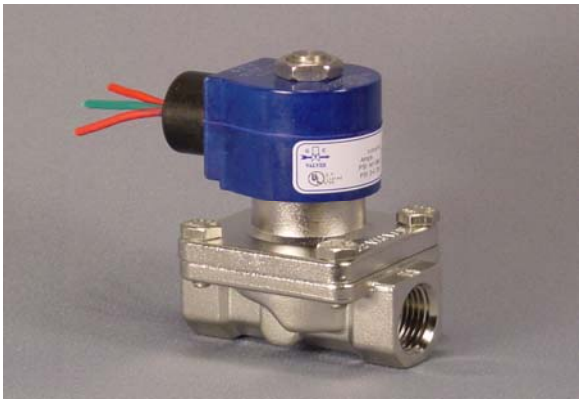
Type	Size
All	S4

Frequency (Hz)		60	50
Nominal Power (VA)	Inrush	46	46
	Holding	18	23

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

NS211 Series

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

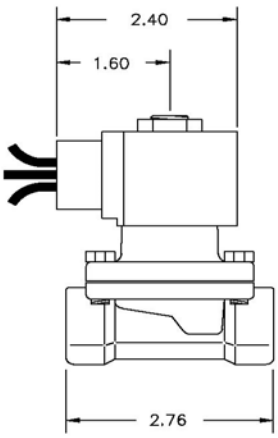


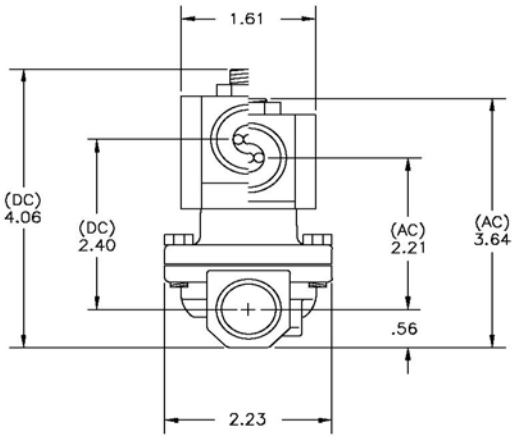
Materials	Seals:		Santoprene/NSF Approved EPDM
	Orifice:	Pilot	Stainless Steel
		Main	Stainless Steel
Electrical	Housing:		NEMA 4/4X Encapsulated - 1/2" Conduit
	Optional Housings:		Contact GC Valves Customer Svc. for available options.
	Voltage:		24,120,240, VAC, 60 and/or 50 Hz. Available. 6, 12, 24 VDC Contact GC Valves Customer Svc. for available options.
	Voltage Tolerance:		± 10% of applicable voltage
	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

* Not available for all variations

Dimensions / Weight

Weight (lbs.)
1.8





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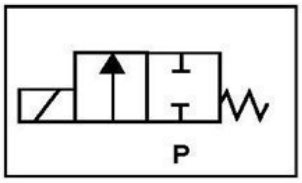
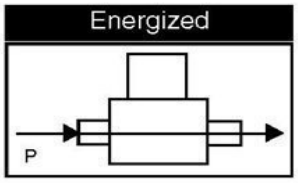
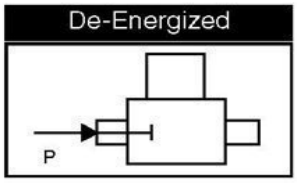
Valve Selection List

Normally Closed







Pipe Size NPT	Orifice Size IN	C_V	Operating Pressure Differential (psi) Minimum	Maximum Air/Gas AC	Air/Gas DC	Water AC	Water DC	Light Oil AC	Light Oil DC	Steam* AC	Max Fluid Temp. °F	Seal Material	Power Consumption (Watts) AC	Power Consumption (Watts) DC	Model Code (120V/60HZ — 110V/50HZ Shown) Stainless Steel Body Type 316
3/8"	5/8"	4.3	4	—	—	150	100	—	—	—	295	Santo EPR	8	10	NS211GF02F7CG4

* 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
N S 2 1	1	G	F	0 2	F	7	C	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

Type	Size
AC	S3
DC	S4

		60	50
Frequency (Hz)			
Nominal Power (VA)	Inrush	46	46
	Holding	18	23

NS211 Series

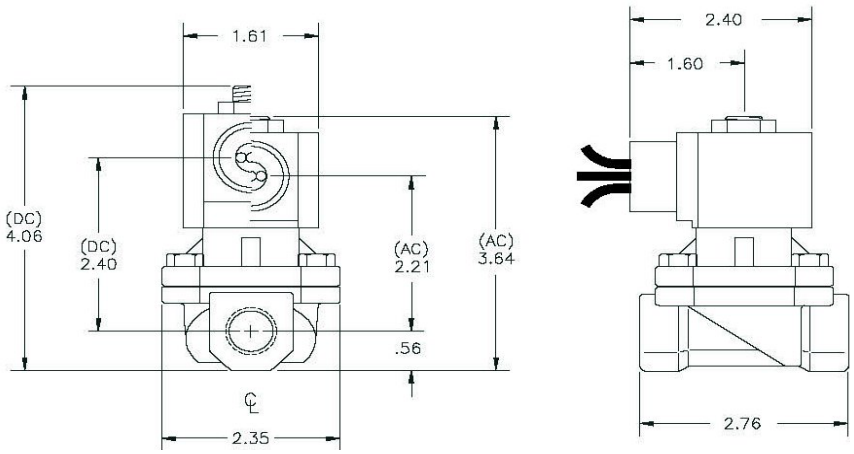
- 3/8" NPT
- Noryl Body
- 2-Way
  Piloted Diaphragm
- Normally Closed

Materials	Seals:		Santoprene/NSF Approved EPDM
	Orifice:	Pilot	Stainless Steel
		Main	Noryl
Electrical	Housing:		NEMA 4/4X Encapsulated - 1/2" Conduit
	Optional Housings:		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 Tolerance:		± 10% of applicable voltage
	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

* Not available for all variations

Dimensions / Weight

Weight (lbs.)
0.9



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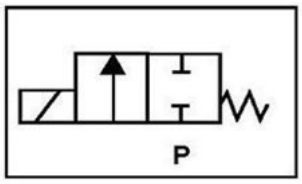
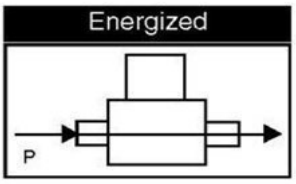
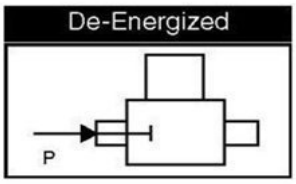
Valve Selection List

Normally Closed







Pipe Size NPT	Orifice Size IN	C_V	Operating Pressure Differential (psi) Minimum	Maximum Air/Gas AC	Air/Gas DC	Water AC	Water DC	Light Oil AC	Light Oil DC	Steam* AC	Max Fluid Temp. °F	Seal Material	Power Consumption (Watts) AC	Power Consumption (Watts) DC	Model Code (120V/60HZ — 110V/50HZ Shown) Noryl Body
3/8"	5/8"	4.3	4	—	—	150	100	—	—	—	295	Santo EPR	8	10	NS211GF02FPCG4

* 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
N S 2 1	1	G	F	0 2	F	P	C	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	P: Noryl	C: 3/8"	G4: 5/8"

Coil Data

Coil Family

Type	Size
AC	S3
DC	S4

		60	50
Frequency (Hz)			
Nominal Power (VA)	Inrush	46	46
	Holding	18	23

NS201 Series

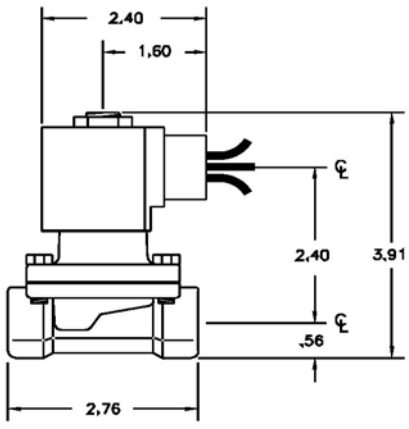
- 1/2" NPT
- 316 SS Body
- 2-Way Zero Differential Piloted Diaphragm
- Normally Closed

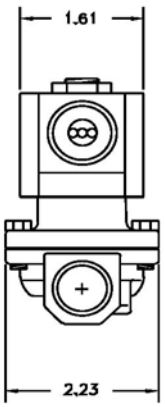
Materials	Seals:		Santoprene/NSF Approved EPDM
	Orifice:	Pilot	Stainless Steel
		Main	Stainless Steel
Electrical	Housing:		NEMA 4/4X Encapsulated - 1/2" Conduit
	Optional Housings:		Contact GC Valves Customer Svc. for available options.
	Voltage:		24,120,240, VAC, 60 and/or 50 Hz. Available. 6, 12, 24 VDC Contact GC Valves Customer Svc. for available options.
	Voltage Tolerance:		± 10% of applicable voltage
	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

* Not available for all variations

Dimensions / Weight

Weight (lbs.)
1.9

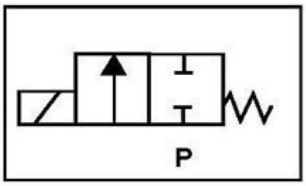


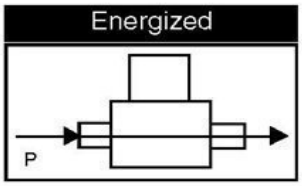


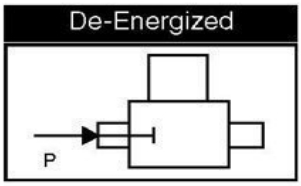
GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

Valve Selection List

Normally Closed







Pipe Size	Orifice Size		Operating Pressure Differential (psi)									Max Fluid Temp.	Seal Material	Power Consumption (Watts)		Model Code (120V/60HZ — 110V/50HZ Shown)
			Minimum	Maximum												
				Air/Gas		Water		Light Oil		Steam*						
NPT	IN	C_V		AC	DC	AC	DC	AC	DC	AC		°F		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

Part Numbering

1 2 3 4	5	6	7	8 9	10	11	12	13 14
N S 2 0	1	G	F	0 2	F	7	D	G 4
Series	Operating Mode	Housing*	Coil Class*	Voltage*	Seal Material	Body Material	Pipe Connection	Orifice Size
NS20	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	D: 1/2"	G4: 5/8"

Coil Data

Coil Family

Type	Size
All	S4

Frequency (Hz)		60	50
Nominal Power (VA)	Inrush	46	46
	Holding	18	23

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

NS201 Series

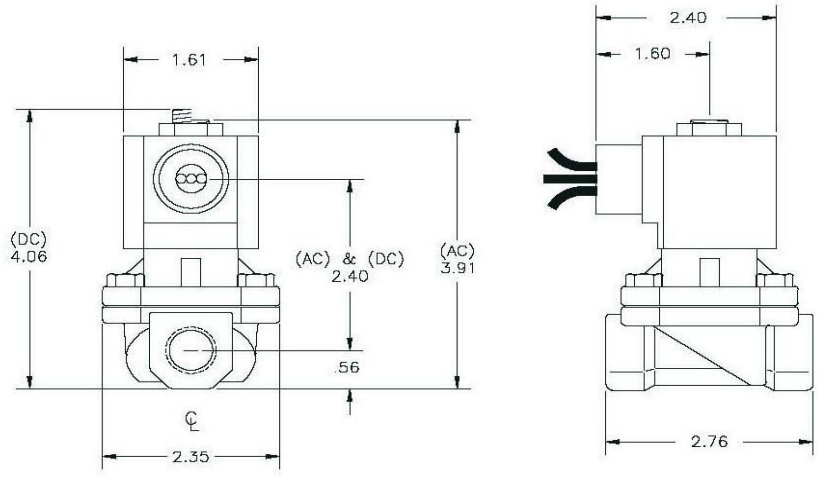
- 1/2" NPT
- Noryl Body
- 2-Way Zero Differential Piloted Diaphragm
- Normally Closed

Materials	Seals:		Santoprene/NSF Approved EPDM
	Orifice:	Pilot	Stainless Steel
		Main	Noryl
Electrical	Housing:		NEMA 4/4X Encapsulated - 1/2" Conduit
	Optional Housings:		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 Tolerance:		± 10% of applicable voltage
	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

* Not available for all variations

Dimensions / Weight

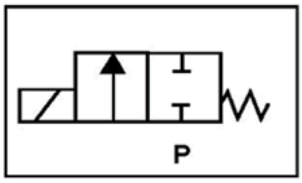
Weight (lbs.)
1

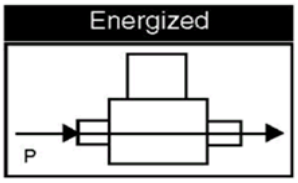


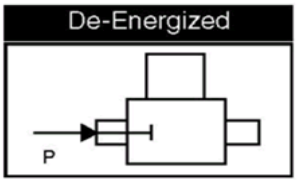
GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

Valve Selection List

Normally Closed







Pipe Size NPT	Orifice Size IN	C_V	Operating Pressure Differential (psi) Minimum	Maximum Air/Gas AC	Air/Gas DC	Water AC	Water DC	Light Oil AC	Light Oil DC	Steam* AC	Max Fluid Temp. °F	Seal Material	Power Consumption (Watts) AC	Power Consumption (Watts) DC	Model Code (120V/60HZ — 110V/50HZ Shown) 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

Part Numbering

1 2 3 4	5	6	7	8 9	10	11	12	13 14
N S 2 0	1	G	F	0 2	F	P	D	G 4
Series	Operating Mode	Housing*	Coil Class*	Voltage*	Seal Material	Body Material	Pipe Connection	Orifice Size
NS20	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	D: 1/2"	G4: 5/8"

Coil Data

Coil Family

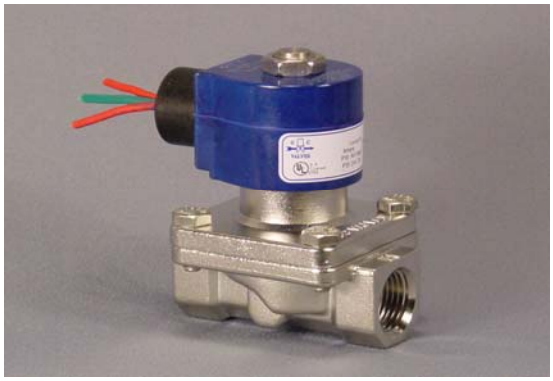
Type	Size
All	S4

		60	50
Frequency (Hz)			
Nominal Power (VA)	Inrush	46	46
	Holding	18	23

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

NS211 Series

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

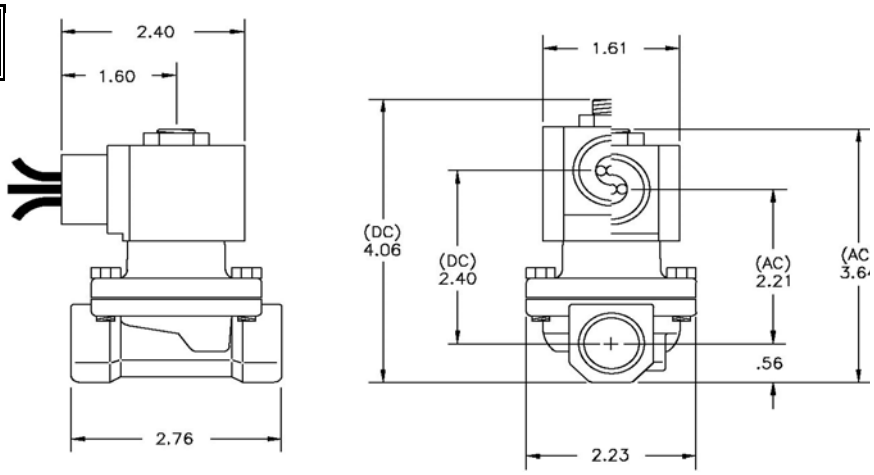


Materials	Seals:		Santoprene/NSF Approved EPDM
	Orifice:	Pilot	Stainless Steel
		Main	Stainless Steel
Electrical	Housing:		NEMA 4/4X Encapsulated - 1/2" Conduit
	Optional Housings:		Contact GC Valves Customer Svc. for available options.
	Voltage:		24,120,240, VAC, 60 and/or 50 Hz. Available. 6, 12, 24 VDC Contact GC Valves Customer Svc. for available options.
	Voltage Tolerance:		± 10% of applicable voltage
	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

* Not available for all variations

Dimensions / Weight

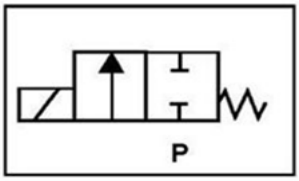
Weight (lbs.)
1.8



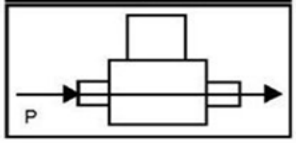
GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

Valve Selection List

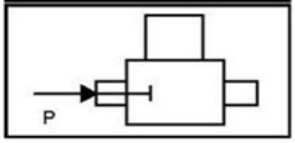
Normally Closed



Energized



De-Energized



Pipe Size	Orifice Size		Operating Pressure Differential (psi)									Max Fluid Temp.	Seal Material	Power Consumption (Watts)		Model Code (120V/60HZ — 110V/50HZ Shown)
			Minimum	Maximum												
				Air/Gas		Water		Light Oil		Steam*						
NPT	IN	C_V		AC	DC	AC	DC	AC	DC	AC		°F		AC	DC	Stainless Steel Body Type 316
1/2	5/8	4.3	4	—	—	150	100	—	—	—		295	Santo EPR	8	10	NS211GF02F7DG4

*** 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
N	S	2	1	1	G	F	0	2	F	7	D	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	D: 1/2"	G4: 5/8"	

Coil Data

Coil Family

Type	Size
AC	S3
DC	S4

Frequency (Hz)		60	50
Nominal Power (VA)	Inrush	46	46
	Holding	18	23

NS211 Series

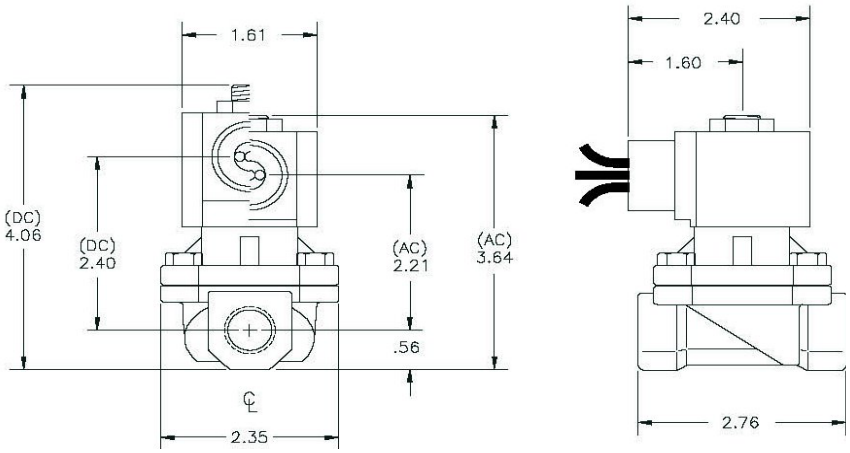
- 1/2" NPT
- Noryl Body
- 2-Way
  Piloted Diaphragm
- Normally Closed

Materials	Seals:		Santoprene/NSF Approved EPDM
	Orifice:	Pilot	Stainless Steel
		Main	Noryl
Electrical	Housing:		NEMA 4/4X Encapsulated - 1/2" Conduit
	Optional Housings:		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 Tolerance:		± 10% of applicable voltage
	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

* Not available for all variations

Dimensions / Weight

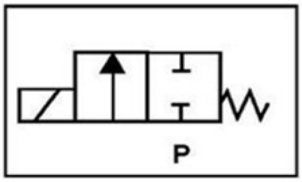
Weight (lbs.)
0.9



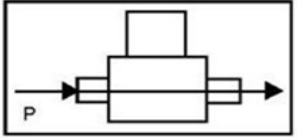
GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

Valve Selection List

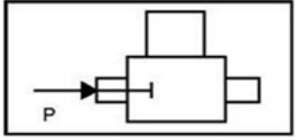
Normally Closed



Energized



De-Energized



Pipe Size	Orifice Size		Operating Pressure Differential (psi)									Max Fluid Temp.	Seal Material	Power Consumption (Watts)		Model Code (120V/60HZ — 110V/50HZ Shown)
			Minimum	Maximum												
				Air/Gas		Water		Light Oil		Steam*						
NPT	IN	C_V		AC	DC	AC	DC	AC	DC	AC		°F		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

Part Numbering

1 2 3 4	5	6	7	8 9	10	11	12	13 14
N S 2 1	1	G	F	0 2	F	P	D	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	P: Noryl	D: 1/2"	G4: 5/8"

Coil Data

Coil Family

Type	Size
AC	S3
DC	S4

Frequency (Hz)		60	50
Nominal Power (VA)	Inrush	46	46
	Holding	18	23

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

NS201 Series

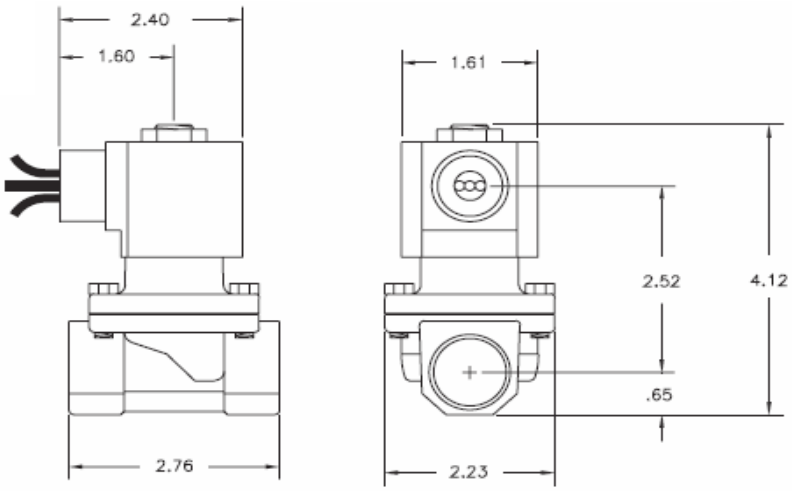
- 3/4" NPT
- 316 SS Body
- 2-Way Zero Differential Piloted Diaphragm
- Normally Closed

Materials	Seals:		Santoprene/NSF Approved EPDM
	Orifice:	Pilot	Stainless Steel
		Main	Stainless Steel
Electrical	Housing:		NEMA 4/4X Encapsulated - 1/2" Conduit
	Optional Housings:		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 Tolerance:		± 10% of applicable voltage
	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

* Not available for all variations

Dimensions / Weight

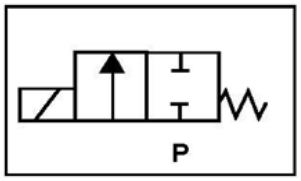
Weight (lbs.)
2



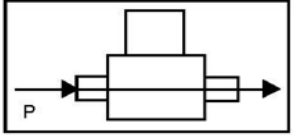
GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

Valve Selection List

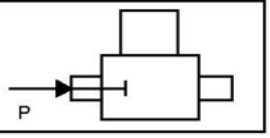
Normally Closed



Energized



De-Energized



Pipe Size NPT	Orifice Size IN	C_V	Operating Pressure Differential (psi) Minimum	Maximum Air/Gas AC	Air/Gas DC	Water AC	Water DC	Light Oil AC	Light Oil DC	Steam* AC	Max Fluid Temp. °F	Seal Material	Power Consumption (Watts) AC	Power Consumption (Watts) DC	Model Code (120V/60HZ — 110V/50HZ Shown) Stainless Steel Body Type 316
3/4	3/4	6.7	0	—	—	100	90	—	—	—	295	Santo EPR	10	10	NS201GF02F7EG5

*** 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
N	S	2	0	1	G	F	0	2	F	7	E	G	5
Series				Operating Mode	Housing*	Coil Class*	Voltage*		Seal Material	Body Material	Pipe Connection	Orifice Size	
NS20				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	E: 3/4" NPT	G5: 3/4"	

Coil Data

Coil Family

Type	Size
All	S4

		60	50
Frequency (Hz)			
Nominal Power (VA)	Inrush	46	46
	Holding	18	23

NS201 Series

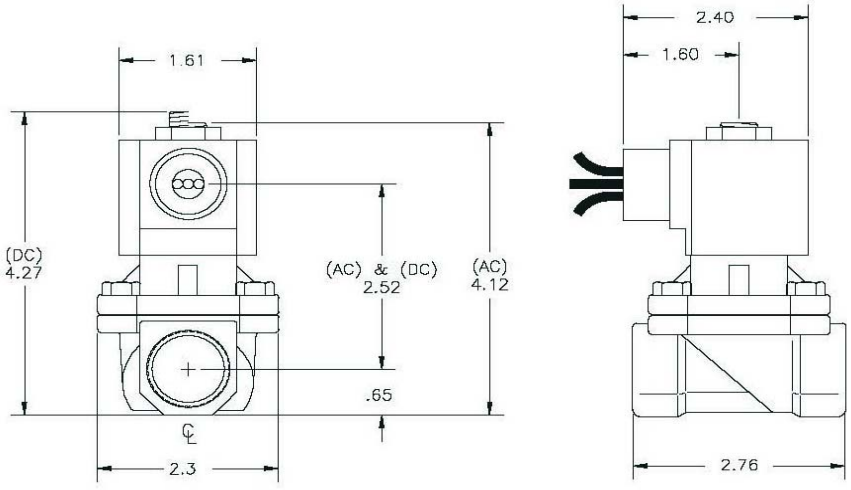
- 3/4" NPT
- Noryl Body
- 2-Way Zero Differential Piloted Diaphragm
- Normally Closed

Materials	Seals:		Santoprene/NSF Approved EPDM
	Orifice:	Pilot	Stainless Steel
		Main	Noryl
Electrical	Housing:		NEMA 4/4X Encapsulated - 1/2" Conduit
	Optional Housings:		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 Tolerance:		± 10% of applicable voltage
	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

* Not available for all variations

Dimensions / Weight

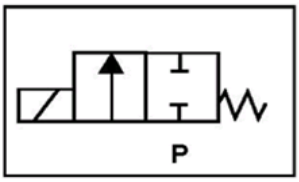
Weight (lbs.)
1.1

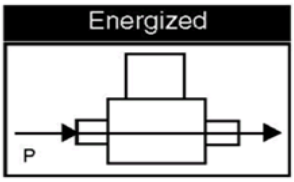


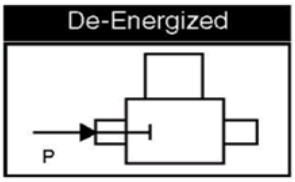
GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

Valve Selection List

Normally Closed







Pipe Size NPT	Orifice Size IN	C_V	Operating Pressure Differential (psi) Minimum	Maximum Air/Gas AC	Air/Gas DC	Water AC	Water DC	Light Oil AC	Light Oil DC	Steam* AC	Max Fluid Temp. °F	Seal Material	Power Consumption (Watts) AC	Power Consumption (Watts) DC	Model Code (120V/60HZ — 110V/50HZ Shown) 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**

Part Numbering

1 2 3 4	5	6	7	8 9	10	11	12	13 14
N S 2 0	1	G	F	0 2	F	P	E	G 5
Series	Operating Mode	Housing*	Coil Class*	Voltage*	Seal Material	Body Material	Pipe Connection	Orifice Size
NS20	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" NPT	G5: 3/4"

Coil Data

Coil Family

Type	Size
All	S4

Frequency (Hz)		60	50
Nominal Power (VA)	Inrush	46	46
	Holding	18	23

NS211 Series

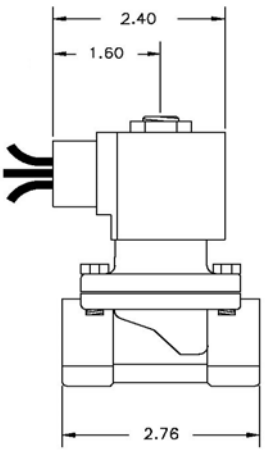
- 3/4" NPT
- 316 SS Body
- 2-Way
  Piloted Diaphragm
- Normally Closed

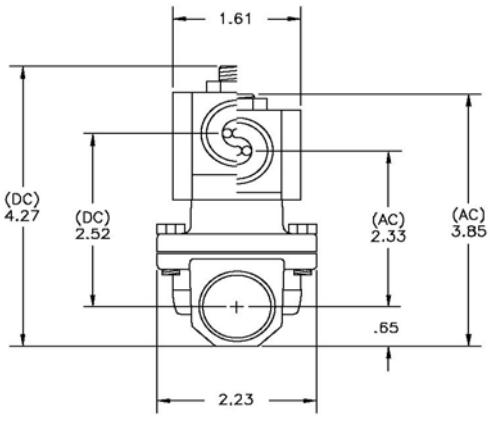
Materials	Seals:		Santoprene/NSF Approved EPDM
	Orifice:	Pilot	Stainless Steel
		Main	Stainless Steel
Electrical	Housing:		NEMA 4/4X Encapsulated - 1/2" Conduit
	Optional Housings:		Contact GC Valves Customer Svc. for available options.
	Voltage:		24,120,240, VAC, 60 and/or 50 Hz. Available. 6, 12, 24 VDC Contact GC Valves Customer Svc. for available options.
	Voltage Tolerance:		± 10% of applicable voltage
	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

* Not available for all variations

Dimensions / Weight

Weight (lbs.)
1.9

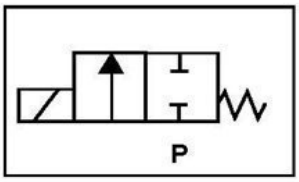


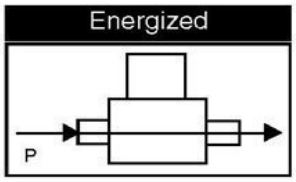


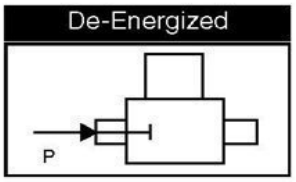
GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

Valve Selection List

Normally Closed







Pipe Size	Orifice Size		Operating Pressure Differential (psi)								Max Fluid Temp.	Seal Material	Power Consumption (Watts)		Model Code (120V/60HZ — 110V/50HZ Shown)
			Minimum	Maximum											
				Air/Gas		Water		Light Oil		Steam*					
NPT	IN	C_V		AC	DC	AC	DC	AC	DC	AC	°F		AC	DC	Stainless Steel Body Type 316
3/4"	3/4"	6.7	4	—	—	150	100	—	—	—	295	Santo EPR	8	10	NS211GF02F7EG5

*** 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
N	S	2	1	1	G	F	0	2	F	7	E	G	5
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	E: 3/4"	G5: 3/4"	

Coil Data

Coil Family

Type	Size
AC	S3
DC	S4

Frequency (Hz)		60	50
Nominal Power (VA)	Inrush	46	46
	Holding	18	23

NS211 Series

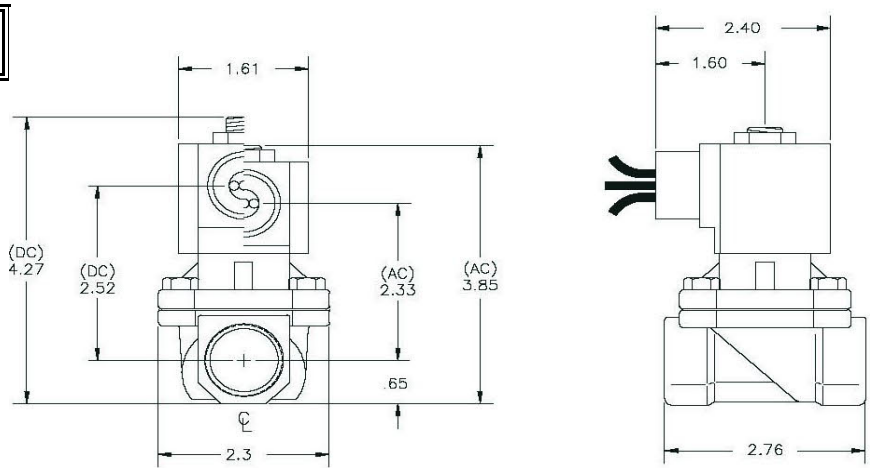
- 3/4" NPT
- Noryl Body
- 2-Way
  Piloted Diaphragm
- Normally Closed

Materials	Seals:		Santoprene/NSF Approved EPDM
	Orifice:	Pilot	Stainless Steel
		Main	Noryl
Electrical	Housing:		NEMA 4/4X Encapsulated - 1/2" Conduit
	Optional Housings:		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 Tolerance:		± 10% of applicable voltage
	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

* Not available for all variations

Dimensions / Weight

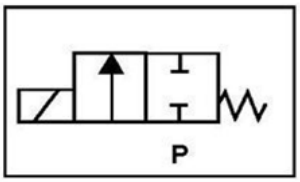
Weight (lbs.)
1

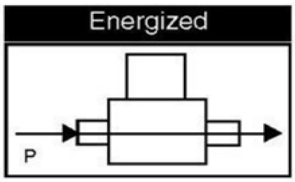


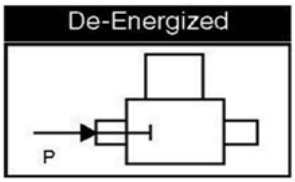
GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

Valve Selection List

Normally Closed







Pipe Size	Orifice Size	C_V	Operating Pressure Differential (psi) Minimum	Maximum Air/Gas AC	Maximum Air/Gas DC	Maximum Water AC	Maximum Water DC	Maximum Light Oil AC	Maximum Light Oil DC	Maximum Steam* AC	Max Fluid Temp. °F	Seal Material	Power Consumption (Watts) AC	Power Consumption (Watts) DC	Model Code (120V/60HZ — 110V/50HZ Shown) Noryl Body
NPT	IN														
3/4"	3/4"	6.7	4	—	—	150	100	—	—	—	295	Santo EPR	8	10	NS211GF02FPEG5

* 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
N	S	2	1	1	G	F	0	2	F	P	E	G	5
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	P: Noryl	E: 3/4"	G5: 3/4"	

Coil Data

Coil Family

Type	Size
AC	S3
DC	S4

		60	50
Frequency (Hz)			
Nominal Power (VA)	Inrush	46	46
	Holding	18	23

GC Valves

A DEMA Engineering Company

NS20 Series

Certified to NSF/ANSI 61-G

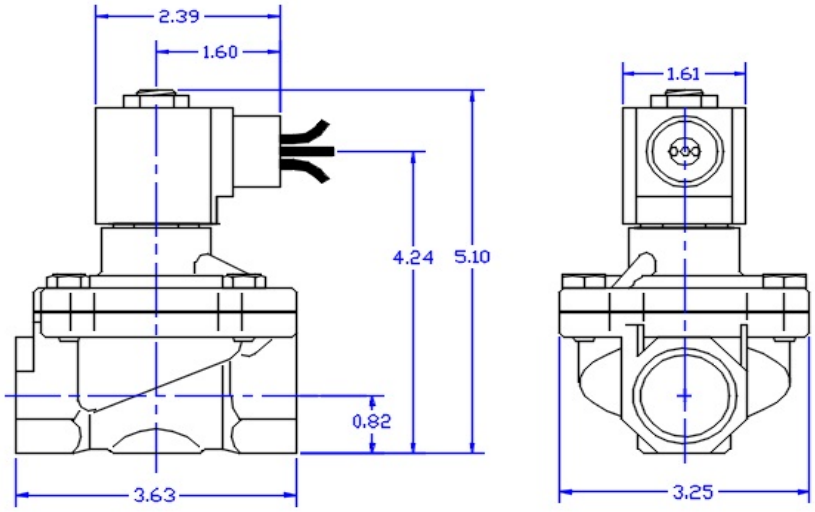
- 1" NPT
- 316 Stainless Steel Body
- 2-Way Zero Differential Piloted Diaphragm
- Normally Closed

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:	± 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

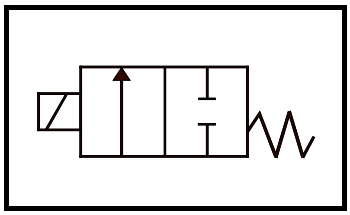


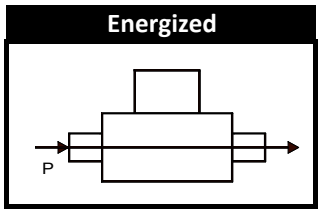
GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

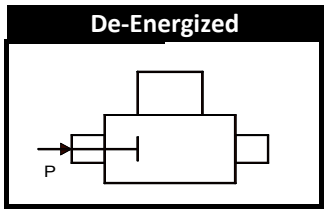
NS201 - 1" NPT, Stainless Steel Body, Normally Closed

Valve Selection List

Normally Closed







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

Part Numbering

1	2	3	4	5	6	7	8	9	10	11	12	13
NS	2	0	1	G	F	0	2	C	7	F	G	9
Series			Operating Mode	Hsg	Coil	Voltage		Seal Mat'l	Body Mat'l	Pipe Size	Orifice Size	
NS20			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 Data

Coil Family	
Type	Size
All	S4

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

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

A DEMA Engineering Company

NS21 Series

Certified to NSF/ANSI 61-G

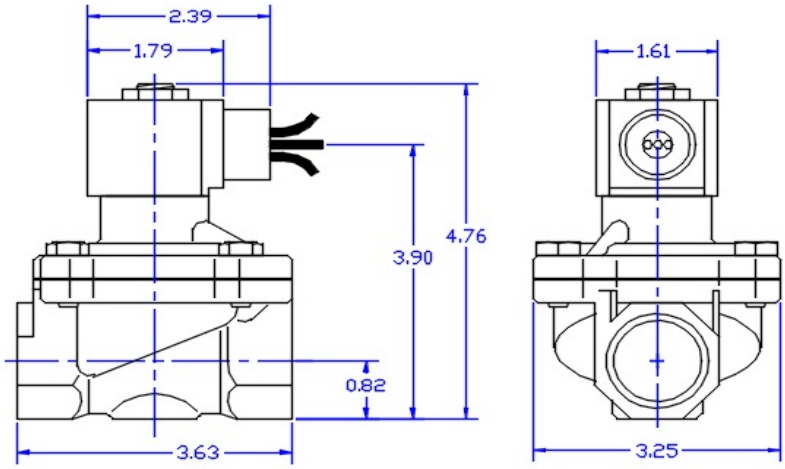
- 1" NPT
- 316 Stainless Steel Body
- 2-Way Piloted Diaphragm
- Normally Closed

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:	± 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

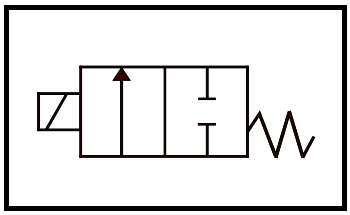


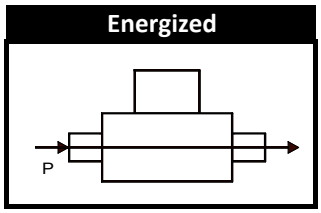
GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

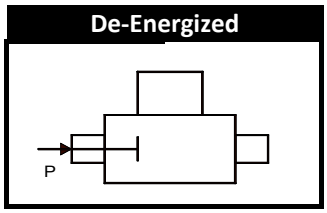
NS211 - 1" NPT, Stainless Steel Body, Normally Closed

Valve Selection List

Normally Closed







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

Part Numbering

1	2	3	4	5	6	7	8	9	10	11	12	13
NS	2	1	1	G	F	0	2	C	7	F	G	9
Series			Operating Mode	Hsg	Coil	Voltage		Seal Mat'l	Body Mat'l	Pipe Size	Orifice Size	
NS21			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 Data

Coil Family	
Type	Size
All	S3

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

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

A DEMA Engineering Company

NS20 Series

Certified to NSF/ANSI 61-G

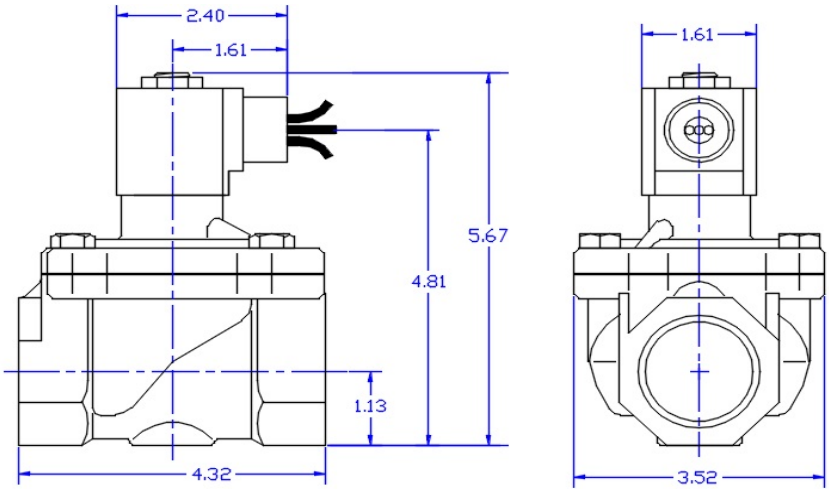
- 1 1/4" NPT
- 316 Stainless Steel Body
- 2-Way Zero Differential Piloted Diaphragm
- Normally Closed

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:	± 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

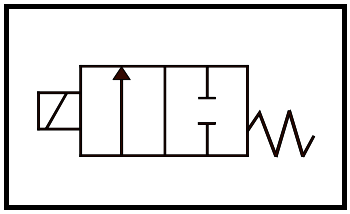


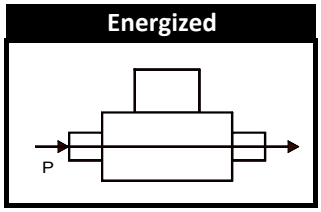
GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

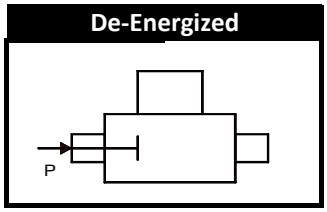
NS201 - 1 1/4" NPT, Stainless Steel Body, Normally Closed

Valve Selection List

Normally Closed







Pipe Size	Orifice Size		Operating Pressure Differential (PSI)									Max. Fluid Temp.	Seal Material	Power Consumption (Watts)		Model Code (120V/60HZ-110V/50HZ) Shown
			Minimum	Maximum												
				Air/Gas		Water		Light Oil		Steam*						
NPT	In.	Cv		AC	DC	AC	DC	AC	DC	AC	DC	°F		AC	DC	Stainless Steel Body
1 1/4	1 1/4	18	0	100	100	100	100	---	---	50	50	295	EPR	10	10	NS201GF02C7GJ2

Part Numbering

1	2	3	4	5	6	7	8	9	10	11	12	13
NS	2	0	1	G	F	0	2	C	7	G	J	2

Series	Operating Mode	Hsg	Coil	Voltage	Seal Mat'l	Body Mat'l	Pipe Size	Orifice Size
NS20	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 Data

Coil Family	
Type	Size
All	S4

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

A DEMA Engineering Company

NS21 Series

Certified to NSF/ANSI 61-G

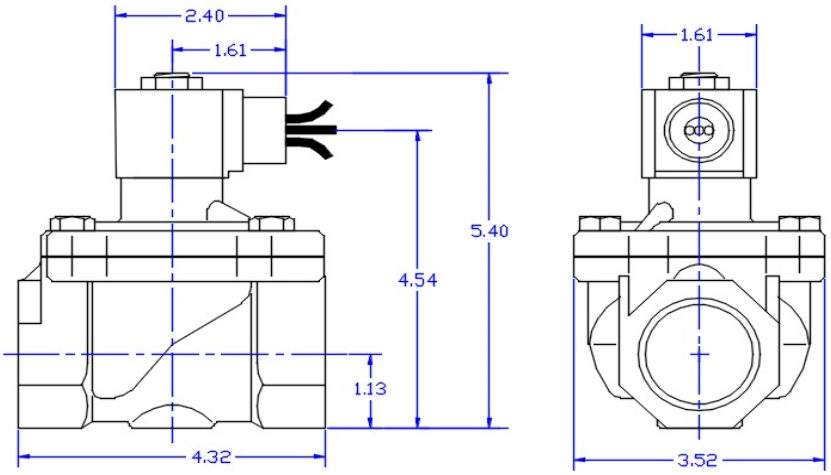
- 1 1/4" NPT
- 316 Stainless Steel Body
- 2-Way Piloted Diaphragm
- Normally Closed

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:	± 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

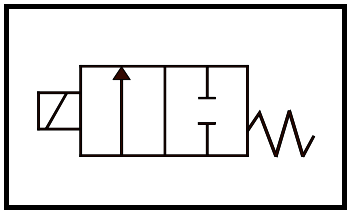


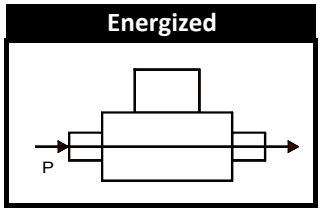
GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

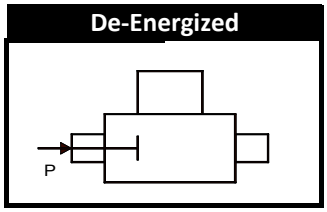
NS211 - 1 1/4" NPT, Stainless Steel Body, Normally Closed

Valve Selection List

Normally Closed







Pipe Size	Orifice Size		Operating Pressure Differential (PSI)								Max. Fluid Temp.	Seal Material	Power Consumption (Watts)		Model Code (120V/60HZ-110V/50HZ) Shown
			Minimum	Maximum											
				Air/Gas		Water		Light Oil		Steam*					
NPT	In.	Cv		AC	DC	AC	DC	AC	DC	AC	DC	°F		AC	DC	Stainless Steel Body
1 1/4	1 1/4	13	5	200	150	150	150	---	---	50	50	295	EPR	8	9	NS211GF02C7GJ2

Part Numbering

1	2	3	4	5	6	7	8	9	10	11	12	13
NS	2	1	1	G	F	0	2	C	7	G	J	2
Series			Operating Mode	Hsg	Coil	Voltage		Seal Mat'l	Body Mat'l	Pipe Size	Orifice Size	
NS21			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 Data

Coil Family	
Type	Size
All	S3

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

GC Valves

A DEMA Engineering Company

NS20 Series

Certified to NSF/ANSI 61-G

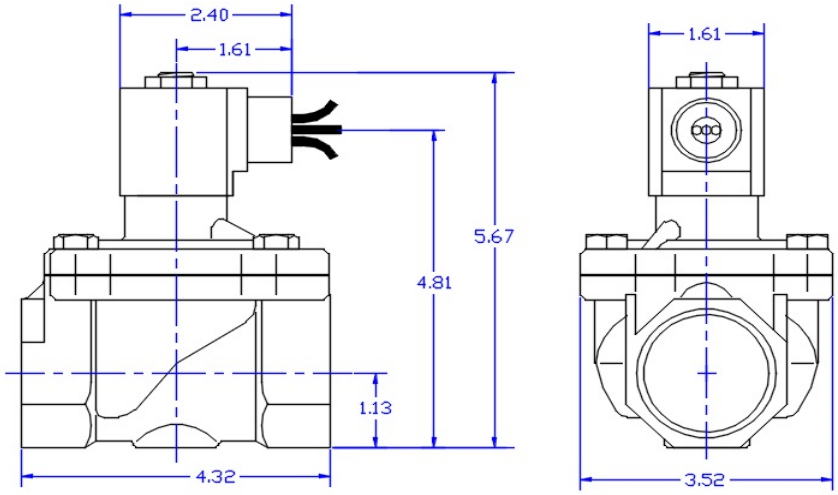
- 1 1/2" NPT
- 316 Stainless Steel Body
- 2-Way Zero Differential Piloted Diaphragm
- Normally Closed

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:	± 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

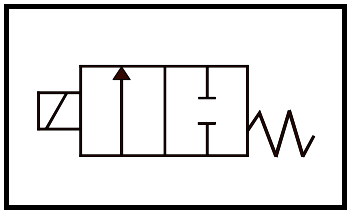


GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

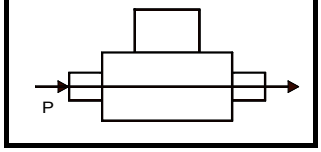
NS201 - 1 1/2" NPT, Stainless Steel Body, Normally Closed

Valve Selection List

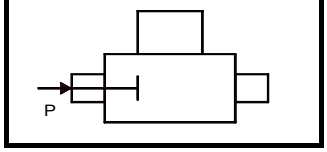
Normally Closed



Energized



De-Energized



Pipe Size	Orifice Size		Operating Pressure Differential (PSI)									Max. Fluid Temp.	Seal Material	Power Consumption (Watts)		Model Code (120V/60HZ-110V/50HZ) Shown
			Minimum	Maximum												
				Air/Gas		Water		Light Oil		Steam*						
NPT	In.	Cv		AC	DC	AC	DC	AC	DC	AC	DC	°F		AC	DC	Stainless Steel Body
1 1/2	1 1/4	18	0	100	100	100	100	---	---	50	50	295	EPR	10	10	NS201GF02C7HJ2

Part Numbering

1	2	3	4	5	6	7	8	9	10	11	12	13
NS	2	0	1	G	F	0	2	C	7	H	J	2

Series	Operating Mode	Hsg	Coil	Voltage	Seal Mat'l	Body Mat'l	Pipe Size	Orifice Size
NS20	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	H: 1 1/2"	J2: 1 1/4"

Coil Data

Coil Family	
Type	Size
All	S4

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

A DEMA Engineering Company

NS21 Series

Certified to NSF/ANSI 61-G

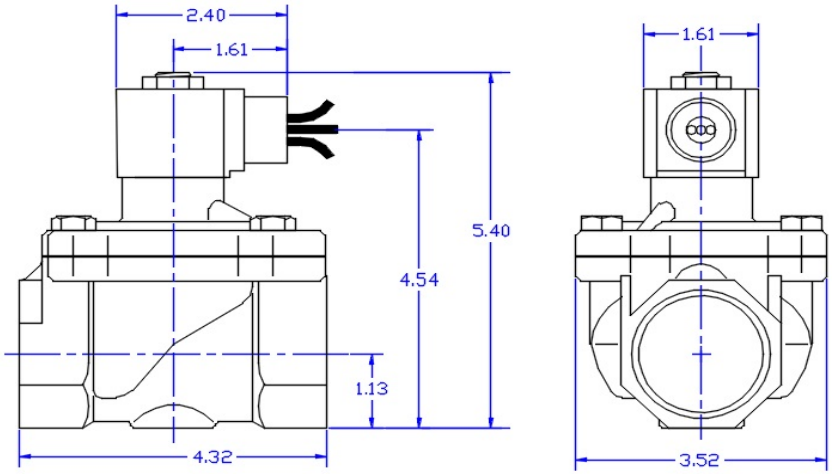
- 1 1/2" NPT
- 316 Stainless Steel Body
- 2-Way Piloted Diaphragm
- Normally Closed

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:	± 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

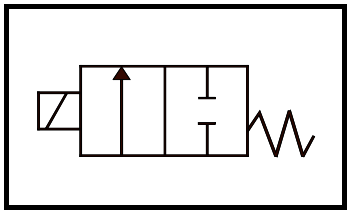


GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

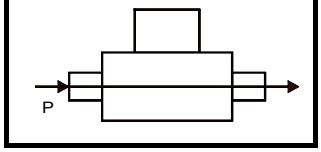
NS211 - 1 1/2" NPT, Stainless Steel Body, Normally Closed

Valve Selection List

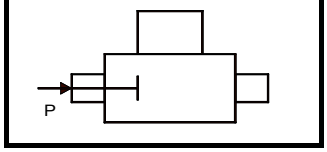
Normally Closed



Energized



De-Energized



Pipe Size	Orifice Size		Operating Pressure Differential (PSI)								Max. Fluid Temp.	Seal Material	Power Consumption (Watts)		Model Code (120V/60HZ-110V/50HZ) Shown
			Minimum	Maximum											
				Air/Gas		Water		Light Oil		Steam*					
NPT	In.	Cv		AC	DC	AC	DC	AC	DC	AC	DC	°F		AC	DC	Stainless Steel Body
1 1/2	1 1/4	13	5	200	150	150	150	---	---	50	50	295	EPR	8	9	NS211GF02C7HJ2

Part Numbering

1	2	3	4	5	6	7	8	9	10	11	12	13
NS	**2**	**1**	**1**	**G**	**F**	**0**	**2**	**C**	**7**	**H**	**J**	**2**

Series	Operating Mode	Hsg	Coil	Voltage	Seal Mat'l	Body Mat'l	Pipe Size	Orifice Size
NS21	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	H: 1 1/2"	J2: 1 1/4"

Coil Data

Coil Family	
Type	Size
All	S3

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

A DEMA Engineering Company

NS21 Series

Certified to NSF/ANSI 61-G

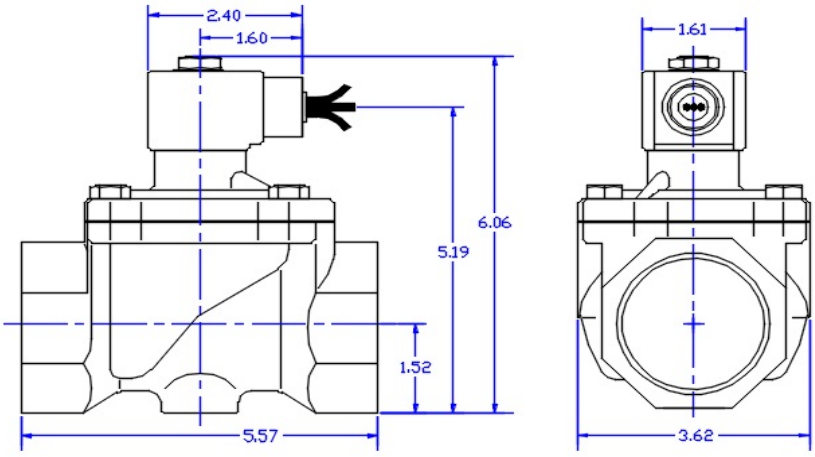
- 2" NPT
- 316 Stainless Steel Body
- 2-Way Piloted Diaphragm
- Normally Closed

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:	± 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

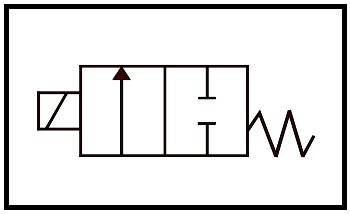


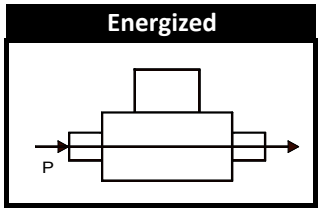
GC Valves Customer Service: 800-828-0484 (7:30 AM to 5:00 PM ET)

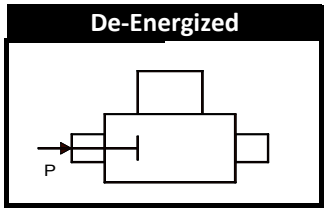
NS211 - 2" NPT, Stainless Steel Body, Normally Closed

Valve Selection List

Normally Closed







Pipe Size	Orifice Size		Operating Pressure Differential (PSI)								Max. Fluid Temp.	Seal Material	Power Consumption (Watts)		Model Code (120V/60HZ-110V/50HZ) Shown
			Minimum	Maximum											
				Air/Gas		Water		Light Oil		Steam*					
NPT	In.	Cv		AC	DC	AC	DC	AC	DC	AC	DC	°F		AC	DC	Stainless Steel Body
2	1 1/4	13	5	200	150	150	150	---	---	50	50	295	EPR	8	9	NS211GF02C7JJ2

Part Numbering

1	2	3	4	5	6	7	8	9	10	11	12	13
NS	2	1	1	G	F	0	2	C	7	J	J	2
Series			Operating Mode	Hsg	Coil	Voltage		Seal Mat'l	Body Mat'l	Pipe Size	Orifice Size	
NS21			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	J: 2"	J2: 1 1/4"	

Coil Data

Coil Family	
Type	Size
All	S3

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

NS201(AC) -- Service and Installation --

12/14/2016

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 Nαyl 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.
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 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 K	201G4-NSF
NS201YF16FPEG5	KS201AF15G5-NSF K	201G5-NSF
NS201YF16F7CG4	KS201AF15G4-NSF K	201G4-NSF
NS201YF16F7DG4	KS201AF15G4-NSF K	201G4-NSF
NS201YF16F7EG5	KS201AF15G5-NSF K	201G5-NSF

COIL CHART

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.

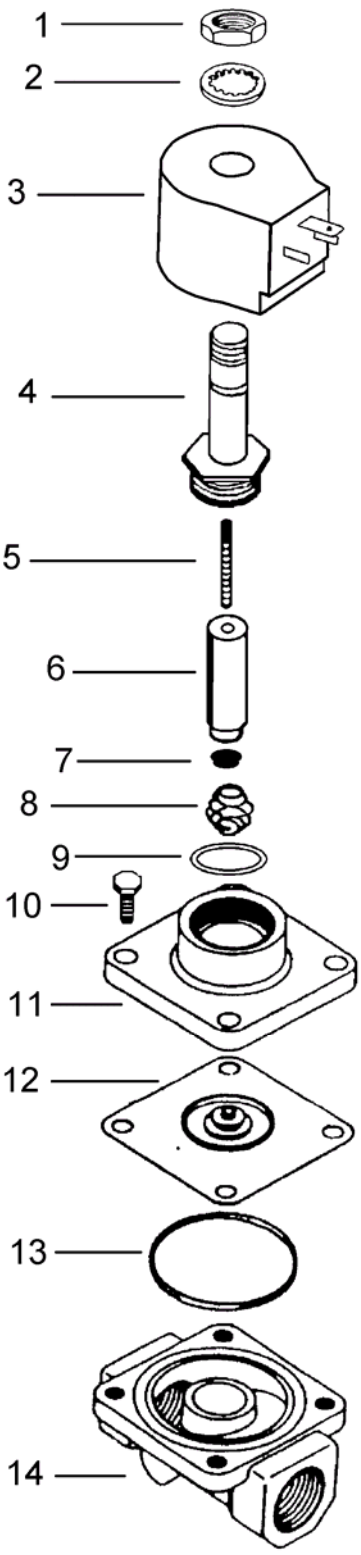
---

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 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.



NS201(DC) -- Service and Installation --

12/14/2016

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 Nαyl 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.
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 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 K	201G4-NSF
NS201YF16FPEG5	KS201AF15G5-NSF K	201G5-NSF
NS201YF16F7CG4	KS201AF15G4-NSF K	201G4-NSF
NS201YF16F7DG4	KS201AF15G4-NSF K	201G4-NSF
NS201YF16F7EG5	KS201AF15G5-NSF K	201G5-NSF

COIL CHART

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.

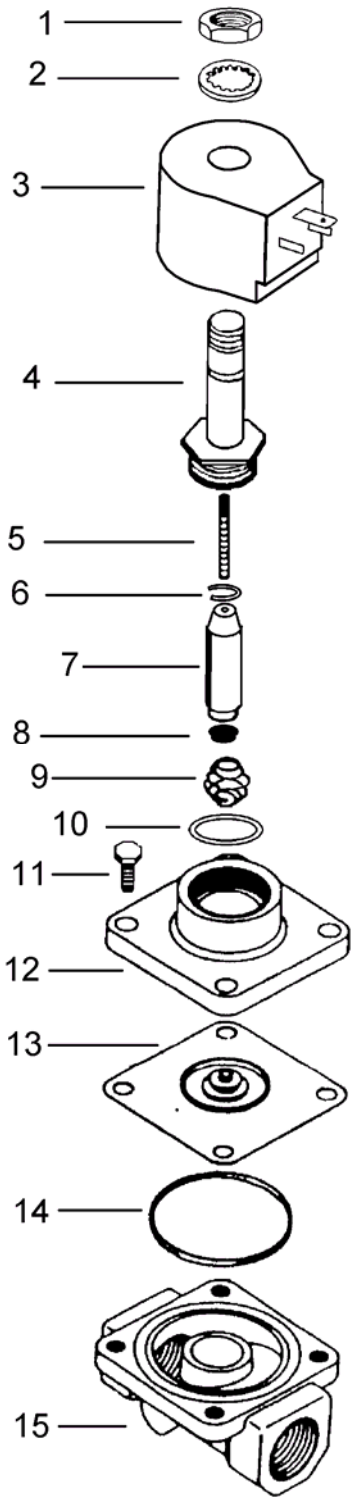
---

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 (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 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.



NS211(AC) -- Service and Installation --

12/14/2016

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 .
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.
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 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 K	211G4-NSF
NS211YF24FPDG4	KS211AF02G4-NSF K	211G4-NSF
NS211YF24FPEG5	KS211AF02G5-NSF K	211G5-NSF
NS211YF02F7CG4	KS211AF02G4-NSF K	211G4-NSF
NS211YF02F7DG4	KS211AF02G4-NSF K	211G4-NSF
NS211YF02F7EG5	KS211AF02G5-NSF K	211G5-NSF
NS211YF24F7CG4	KS211AF02G4-NSF K	211G4-NSF
NS211YF24F7DG4	KS211AF02G4-NSF K	211G4-NSF
NS211YF24F7EG5	KS211AF02G5-NSF K	211G5-NSF

COIL CHART

Valve	Voltage	DIN Coil	Conduit Coil
NS211YF02FPCG4	120V 50/60	HS3YN02 HS3	GN02A24
NS211YF02FPDG4	120V 50/60	HS3YN02 HS3	GN02A24
NS211YF02FPEG5	120V 50/60	HS3YN02 HS3	GN02A24
NS211YF24FPCG4	24V 50/60	HS3YN24 HS3	GN24A24
NS211YF24FPDG4	24V 50/60	HS3YN24 HS3	GN24A24
NS211YF24FPEG5	24V 50/60	HS3YN24 HS3	GN24A24
NS211YF02F7CG4	120V 50/60	HS3YN02 HS3	GN02A24
NS211YF02F7DG4	120V 50/60	HS3YN02 HS3	GN02A24
NS211YF02F7EG5	120V 50/60	HS3YN02 HS3	GN02A24
NS211YF24F7CG4	24V 50/60	HS3YN24 HS3	GN24A24
NS211YF24F7DG4	24V 50/60	HS3YN24 HS3	GN24A24
NS211YF24F7EG5	24V 50/60	HS3YN24 HS3	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.

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.

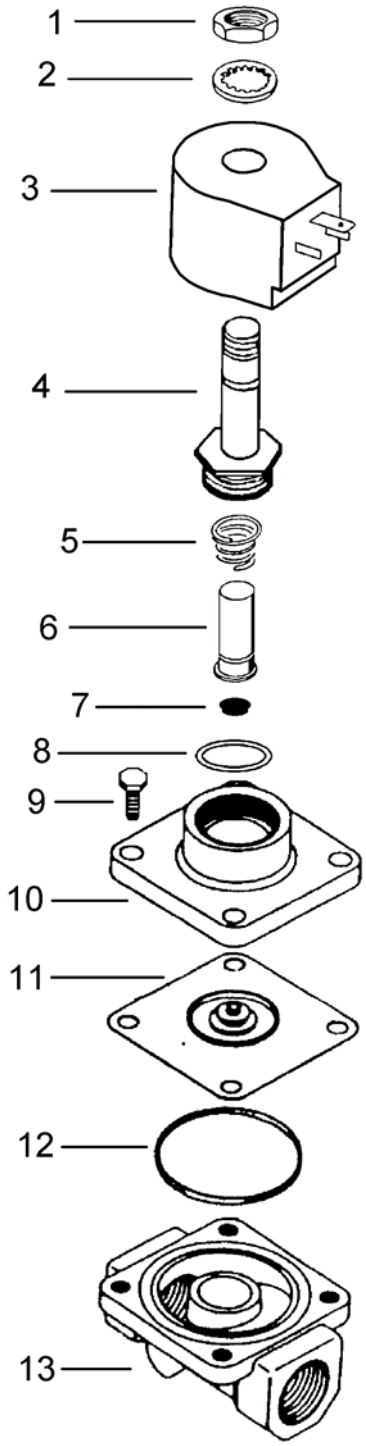
---

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 (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 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.



NS211(DC) -- Service and Installation --

12/14/2016

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 .
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.
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 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.

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.

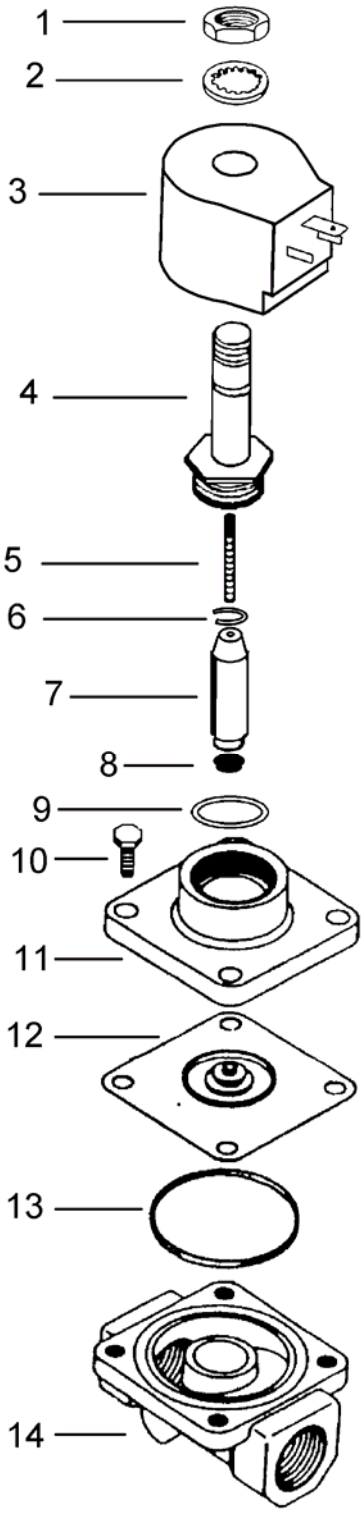
---

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) 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 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.



NS301 - Service and Installation -

12/14/2016

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 .
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.
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.

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	120V 50/60	HS4YN02	HS4GN02A24
NS301YF02C3BD5	120V 50/60	HS4YN02	HS4GN02A24
NS301YF02C3BC9	120V 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.

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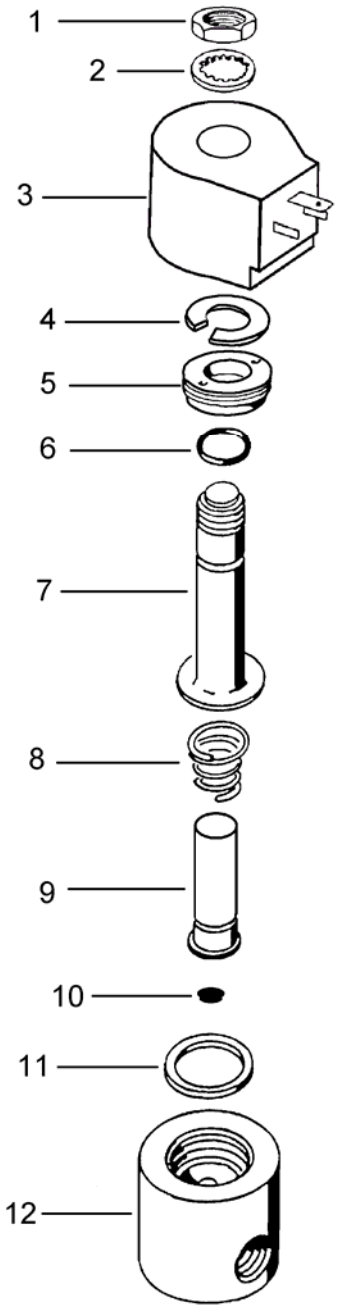
1. Unscrew the hex nut (1). Remove with lockwasher (2).
2. Lift off the coil (3) from the plunger tube.
3. Do not damage the solenoid assembly.
4. Use GC Valves spanner nut (106198E) or similar tool to remove solenoid base nut (5) and plunger tube (7). Do not nick dent or damage plunger tube (7) or valve 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.

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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).
7. 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 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.